NW Natural®

250 SW Taylor Street
Portland, OR 97204

503-226-4211
nwnatural.com

May 8, 2020

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

Re: 1200-Z Permit Third Quarter 2019–2020 Discharge Monitoring Report
NW Natural Gasco Property
DEQ File Number 62231

Dear Ms. Greene,

Attached please find the Discharge Monitoring Report, as well as the laboratory report, chain of custody, and field sheet, for the NW Natural Gasco Property for the 1200-Z third quarter reporting period.

All benchmarks and impairment pollutant concentrations were met for the 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,

Kathryn Williams
Vice President of Public Affairs
NW Natural

Oregon Department of Environmental Quality
Stormwater Program

State of Oregon Department of Environmental Quality

# 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 Novembe to the appropriate DEQ regional or agent office. 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
Facility City, Zip: Portland, OR 97210
Reporting Year: 2019 to 2020
Geo-Region: ☐ Columbia Slough ☐ Columbia River ☑ Portland Harbor ☐ Regional
2nd Geo-Region ☐ Columbia Slough ☐ Columbia River ☐ Portland Harbor ☐ Regional
Administrated by: ☐ DEQ ☐ 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.

| | | | |
|---|---|---|---|
| n/a | | | |
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## 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: Kathryn M. Williams
Date: May 5, 2020
Printed Name: Kathryn Williams
Legally Authorized Representative
Title: Vice President of Public Affairs
Email: kathryn.williams@nwnatural.com
Telephone : 503.220.2370



NWN-PCI0781247

Oregon Department of Environmental Quality
Stormwater Program

# Discharge Monitoring Report

## 1200-Z Permit

*For official use only:*
Legal Name: Northwest Natural Gas Company
DEQ File No: 62231

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### Portland Harbor Benchmarks

| Monitoring Location(s) | Sample Date | pH | Total Suspended Solids | Total Oil & Grease | Total Copper | Total Lead | Total Zinc | E. coli * |
|---|---|---|---|---|---|---|---|---|
| | | s.u. | mg/L | mg/L | mg/L | mg/L | mg/L | counts/ 100 ml |
| 001 | 01/29/20 | 6.02 | 5 | ND (4.95) | 0.0058 | 0.00129 | 0.037 | |
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| Geometric Mean | | | 5 | 2 | 0.006 | 0.001 | 0.04 | |
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| **Portland Harbor Benchmarks** | | **5.5-9.0** | **30** | **10** | **0.020** | **0.040** | **0.12** | **406** |

* E. coli only required for landfills and sewage treatment plants.

**Oregon Department of Environmental Quality**
**Stormwater Program**

State of Oregon Department of Environmental Quality

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**Impairment Pollutants and Reference Concentrations**
**(see permit assignment letter for identification of required parameters)**

| Monitoring Location(s) | Sample Date | Aldrin | Ammonia | Arsenic. Total Recoverable | $BOD_5$ | Cadmium, Dissolved | Chlordane | Chlorpyrifos | Chromium III, Dissolved |
|---|---|---|---|---|---|---|---|---|---|
| | | mg/L | mg/L | mg/L | mg/L | mg/L | mg/L | mg/L | mg/L |
| 001 | 01/29/20 | ND(0.0000297) | | | | ND (0.000366) | | | |
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| Geometric Mean | | 0.000 | | | | | 0.0002 | | |
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| **Impairment Ref. Concentration** | **0.003** | **1.0** | **0.34** | **30** | **See Letter** | **0.0024** | **0.000083** | **See Letter** |

Oregon Department of Environmental Quality
Stormwater Program

# Discharge Monitoring Report
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**Impairment Pollutants and Reference Concentrations**
**(see permit assignment letter for identification of required parameters)**

| Monitoring Location(s) | Sample Date | Copper, Dissolved | Cyanide | DDT or DDT+ metabolites | DDE | Dieldrin | E. Coli | Endrin Aldehyde | Endosulfan |
|---|---|---|---|---|---|---|---|---|---|
| | | mg/L | mg/L | mg/L | mg/L | mg/L | counts/ 100 ml | mg/L | mg/L |
| 001 | 01/29/20 | 0.00235 | 0.0205 | ND(0.0000297) | ND(0.00000495 | ND (0.0000297) | | | |
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| **Impairment Ref. Concentration** | **See Letter** | **0.022** | **0.0011** | **0.00001** | **0.00024** | **406** | **0.00003** | **0.00022** |
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Oregon Department of Environmental Quality
Stormwater Program

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**Impairment Pollutants and Reference Concentrations**
**(see permit assignment letter for identification of required parameters)**

| Monitoring Location(s) | Sample Date | Guthion | Heptachlor | Hexachlo-robenzene | Iron, Total | Lead, Dissolved | Malathion | Mercury, Total | Nickel, Dissolved |
|---|---|---|---|---|---|---|---|---|---|
| | | mg/L | mg/L | mg/L | mg/L | mg/L | mg/L | mg/L | mg/L |
| 001 | 01/29/20 | | | ND (0.000196) | 1.01 | 0.000111 | | ND(0.00005) | |
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| **Impairment Ref. Concentration** | **0.001** | **0.00052** | **0.001** | **1.0** | **See Letter** | **0.0002** | **0.0024** | **See Letter** |

**Oregon Department of Environmental Quality**
**Stormwater Program**

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**Impairment Pollutants and Reference Concentrations**
**(see permit assignment letter for identification of required parameters)**

| Monitoring Location(s) | Sample Date | Nitrate + Nitrite Nitrogen | Parathion | PCBs | pH | Phosphorous | Silver, Dissolved | Tetrachloroethylene | Thallium | Trichloroethylene |
|---|---|---|---|---|---|---|---|---|---|---|
| | | mg/L | mg/L | mg/L | s.u. | mg/L | mg/L | mg/L | mg/L | mg/L |
| 001 | 01/29/20 | | | ND(0.0000481 | 6.02 | | | | | |
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| **Impairment Ref. Concentration** | **10.0** | **0.010** | **0.002** | **See Letter** | **2.0** | **See Letter** | **0.0005** | **0.0001** | **0.0014** |

Oregon Department of Environmental Quality
Stormwater Program

State of Oregon Department of Environmental Quality

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**Impairment Pollutants and Reference Concentrations**
**(see permit assignment letter for identification of required parameters)**

| Monitoring Location(s) | Sample Date | Turbidity | Zinc, Dissolved | Acenaphthene | Anthracene | Benzo(a) anthracene | Benzo(a) pyrene | Benzo(b) fluoranthene 3,4 | Benzo(k) fluoranthene |
|---|---|---|---|---|---|---|---|---|---|
| | | mg/L | mg/L | mg/L | mg/L | mg/L | mg/L | mg/L | mg/L |
| 001 | 01/29/20 | | | ND(0.000196) | ND(0.000196) | ND (0.000196) | ND(0.000294) | ND(0.000294) | ND(0.000294) |
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| Geometric Mean | | | | 0.000 | 0.0 | 0.000 | 0.000 | 0.000 | 0.000 |
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| **Impairment Ref. Concentration** | **100** | **See Letter** | **0.095** | **2.9** | **0.001** | **0.001** | **0.001** | **0.001** |

Oregon Department of Environmental Quality
Stormwater Program

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**Impairment Pollutants and Reference Concentrations**
**(see permit assignment letter for identification of required parameters)**

| Monitoring Location(s) | Sample Date | Chrysene | Dibenz(a,h) anthracene | Fluoranthene | Fluorene | Indeno (1,2,3-cd) pyrene | Pyrene | |
|---|---|---|---|---|---|---|---|---|
| | | mg/L | mg/L | mg/L | mg/L | mg/L | mg/L | |
| 001 | 01/29/20 | ND(0.000196) | ND(0.000196) | ND(0.000196) | ND(0.000196) | ND(0.000196) | ND(0.00196) | |
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| Geometric Mean | | 0.000 | 0.000 | 0.000 | 0.00 | 0.000 | 0.00 | |
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| **Impairment Ref. Concentration** | **0.001** | **0.001** | **0.014** | **0.39** | **0.001** | **0.29** | |
|---|---|---|---|---|---|---|---|

**Apex Laboratories, LLC**
6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
EPA ID: OR01039

Friday, March 6, 2020

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

RE: A0A0981 - Gasco - 1200Z - 2020 - 000029-02.63 Task 14

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 A0A0981, which was received by the laboratory on 1/29/2020 at 3:30:00PM.

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, 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.

---

Cooler Receipt Information

(See Cooler Receipt Form for details)

Cooler#1 2.1 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.

---

Apex Laboratories

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Darwin Thomas, Business Development Director

**Apex Laboratories, LLC**

6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
EPA ID: OR01039

| | | |
|---|---|---|
| **Anchor QEA, LLC** | Project: **Gasco - 1200Z - 2020** | |
| 6720 SW Macadam Ave. Suite 125 | Project Number: **000029-02.63 Task 14** | **Report ID:** |
| Portland, OR 97219 | Project Manager: **Cindy Fields** | **A0A0981 - 03 06 20 1200** |

# ANALYTICAL REPORT FOR SAMPLES

## SAMPLE INFORMATION

| Client Sample ID | Laboratory ID | Matrix | Date Sampled | Date Received |
|---|---|---|---|---|
| 0107-03-012920 | A0A0981-01 | Water | 01/29/20 11:30 | 01/29/20 15:30 |
| TB-012920 | A0A0981-02 | Water | 01/29/20 11:50 | 01/29/20 15:30 |

Apex Laboratories

Darwin Thomas, Business Development Director

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

**Apex Laboratories, LLC**
6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
EPA ID: OR01039

| | | |
|---|---|---|
| **Anchor QEA, LLC** | Project: **Gasco - 1200Z - 2020** | |
| **6720 SW Macadam Ave. Suite 125** | Project Number: **000029-02.63 Task 14** | **Report ID:** |
| **Portland, OR 97219** | Project Manager: **Cindy Fields** | **A0A0981 - 03 06 20 1200** |

## ANALYTICAL SAMPLE RESULTS

### Purgeable Organic Compounds by EPA 624.1

| Analyte | Sample Result | Detection Limit | Reporting Limit | Units | Dilution | Date Analyzed | Method Ref. | Notes |
|---|---|---|---|---|---|---|---|---|
| **0107-03-012920 (A0A0981-01)** | | | | **Matrix: Water** | | **Batch: 0010936** | | |
| **Benzene** | **0.00163** | 0.000125 | 0.000250 | mg/L | 1 | 01/30/20 11:50 | EPA 624 | |
| Toluene | ND | 0.000500 | 0.00100 | mg/L | 1 | 01/30/20 11:50 | EPA 624 | |
| Xylenes, total | ND | 0.000750 | 0.00150 | mg/L | 1 | 01/30/20 11:50 | EPA 624 | |
| *Surrogate: 1,4-Difluorobenzene (Surr)* | | *Recovery:* | *111 %* | *Limits: 80-120 %* | *1* | *01/30/20 11:50* | *EPA 624* | |
| *Toluene-d8 (Surr)* | | | *100 %* | *80-120 %* | *1* | *01/30/20 11:50* | *EPA 624* | |
| *4-Bromofluorobenzene (Surr)* | | | *103 %* | *80-120 %* | *1* | *01/30/20 11:50* | *EPA 624* | |
| **TB-012920 (A0A0981-02)** | | | | **Matrix: Water** | | **Batch: 0010936** | | **A-01, V-17** |
| **Benzene** | **0.000613** | 0.000125 | 0.000250 | mg/L | 1 | 01/30/20 11:22 | EPA 624 | |
| **Toluene** | **0.00731** | 0.000500 | 0.00100 | mg/L | 1 | 01/30/20 11:22 | EPA 624 | |
| **Xylenes, total** | **0.00435** | 0.000750 | 0.00150 | mg/L | 1 | 01/30/20 11:22 | EPA 624 | |
| *Surrogate: 1,4-Difluorobenzene (Surr)* | | *Recovery:* | *110 %* | *Limits: 80-120 %* | *1* | *01/30/20 11:22* | *EPA 624* | |
| *Toluene-d8 (Surr)* | | | *101 %* | *80-120 %* | *1* | *01/30/20 11:22* | *EPA 624* | |
| *4-Bromofluorobenzene (Surr)* | | | *103 %* | *80-120 %* | *1* | *01/30/20 11:22* | *EPA 624* | |

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## ANALYTICAL SAMPLE RESULTS

### Polychlorinated Biphenyls by EPA 608

| Analyte | Sample Result | Detection Limit | Reporting Limit | Units | Dilution | Date Analyzed | Method Ref. | Notes |
|---|---|---|---|---|---|---|---|---|
| **0107-03-012920 (A0A0981-01)** | | | | **Matrix: Water** | | **Batch: 0010951** | | C-07 |
| Aroclor 1016 | ND | 0.0000481 | 0.0000962 | mg/L | 1 | 01/30/20 18:35 | 608 PCB | |
| Aroclor 1221 | ND | 0.0000481 | 0.0000962 | mg/L | 1 | 01/30/20 18:35 | 608 PCB | |
| Aroclor 1232 | ND | 0.0000481 | 0.0000962 | mg/L | 1 | 01/30/20 18:35 | 608 PCB | |
| Aroclor 1242 | ND | 0.0000481 | 0.0000962 | mg/L | 1 | 01/30/20 18:35 | 608 PCB | |
| Aroclor 1248 | ND | 0.0000481 | 0.0000962 | mg/L | 1 | 01/30/20 18:35 | 608 PCB | |
| Aroclor 1254 | ND | 0.0000481 | 0.0000962 | mg/L | 1 | 01/30/20 18:35 | 608 PCB | |
| Aroclor 1260 | ND | 0.0000481 | 0.0000962 | mg/L | 1 | 01/30/20 18:35 | 608 PCB | |
| Aroclor 1262 | ND | 0.0000481 | 0.0000962 | mg/L | 1 | 01/30/20 18:35 | 608 PCB | |
| Aroclor 1268 | ND | 0.0000481 | 0.0000962 | mg/L | 1 | 01/30/20 18:35 | 608 PCB | |
| *Surrogate: Decachlorobiphenyl (Surr)* | | *Recovery: 107 %* | | *Limits: 40-135 %* | *1* | *01/30/20 18:35* | *608 PCB* | |

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## ANALYTICAL SAMPLE RESULTS

### Organochlorine Pesticides by EPA 608

| Analyte | Sample Result | Detection Limit | Reporting Limit | Units | Dilution | Date Analyzed | Method Ref. | Notes |
|---|---|---|---|---|---|---|---|---|
| **0107-03-012920 (A0A0981-01RE1)** | | | | **Matrix: Water** | | **Batch: 0011020** | | **C-05** |
| Aldrin | ND | 0.0000297 | 0.0000594 | mg/L | 1 | 02/06/20 20:15 | 608 Pest | |
| 4,4'-DDD | ND | 0.0000297 | 0.0000594 | mg/L | 1 | 02/06/20 20:15 | 608 Pest | |
| 4,4'-DDE | ND | 0.00000495 | 0.00000990 | mg/L | 1 | 02/06/20 20:15 | 608 Pest | |
| 4,4'-DDT | ND | 0.0000297 | 0.0000594 | mg/L | 1 | 02/06/20 20:15 | 608 Pest | |
| Dieldrin | ND | 0.0000297 | 0.0000594 | mg/L | 1 | 02/06/20 20:15 | 608 Pest | |
| Chlordane (Technical) | ND | 0.000366 | 0.000743 | mg/L | 1 | 02/06/20 20:15 | 608 Pest | |
| *Surrogate: 2,4,5,6-TCMX (Surr)* | | *Recovery:* | *69 %* | *Limits: 25-140 %* | *1* | *02/06/20 20:15* | *608 Pest* | |
| *Decachlorobiphenyl (Surr)* | | | *96 %* | *30-135 %* | *1* | *02/06/20 20:15* | *608 Pest* | |

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## ANALYTICAL SAMPLE RESULTS

### Semivolatile Organic Compounds by EPA 625

| Analyte | Sample Result | Detection Limit | Reporting Limit | Units | Dilution | Date Analyzed | Method Ref. | Notes |
|---|---|---|---|---|---|---|---|---|
| **0107-03-012920 (A0A0981-01)** | | | | **Matrix: Water** | | **Batch: 0010933** | | |
| Naphthalene | ND | 0.000392 | 0.000784 | mg/L | 4 | 01/30/20 15:10 | EPA 625 | |
| 2-Methylnaphthalene | ND | 0.000392 | 0.000784 | mg/L | 4 | 01/30/20 15:10 | EPA 625 | |
| Acenaphthene | ND | 0.000196 | 0.000392 | mg/L | 4 | 01/30/20 15:10 | EPA 625 | |
| Acenaphthylene | ND | 0.000196 | 0.000392 | mg/L | 4 | 01/30/20 15:10 | EPA 625 | |
| Fluorene | ND | 0.000196 | 0.000392 | mg/L | 4 | 01/30/20 15:10 | EPA 625 | |
| Phenanthrene | ND | 0.000196 | 0.000392 | mg/L | 4 | 01/30/20 15:10 | EPA 625 | |
| Anthracene | ND | 0.000196 | 0.000392 | mg/L | 4 | 01/30/20 15:10 | EPA 625 | |
| Fluoranthene | ND | 0.000196 | 0.000392 | mg/L | 4 | 01/30/20 15:10 | EPA 625 | |
| Pyrene | ND | 0.000196 | 0.000392 | mg/L | 4 | 01/30/20 15:10 | EPA 625 | |
| Chrysene | ND | 0.000196 | 0.000392 | mg/L | 4 | 01/30/20 15:10 | EPA 625 | |
| Benz(a)anthracene | ND | 0.000196 | 0.000392 | mg/L | 4 | 01/30/20 15:10 | EPA 625 | |
| Benzo(b)fluoranthene | ND | 0.000294 | 0.000588 | mg/L | 4 | 01/30/20 15:10 | EPA 625 | |
| Benzo(k)fluoranthene | ND | 0.000294 | 0.000588 | mg/L | 4 | 01/30/20 15:10 | EPA 625 | |
| Benzo(a)pyrene | ND | 0.000294 | 0.000588 | mg/L | 4 | 01/30/20 15:10 | EPA 625 | |
| Hexachlorobenzene | ND | 0.000196 | 0.000392 | mg/L | 4 | 01/30/20 15:10 | EPA 625 | |
| Indeno(1,2,3-cd)pyrene | ND | 0.000196 | 0.000392 | mg/L | 4 | 01/30/20 15:10 | EPA 625 | |
| Dibenz(a,h)anthracene | ND | 0.000196 | 0.000392 | mg/L | 4 | 01/30/20 15:10 | EPA 625 | |
| **Benzo(g,h,i)perylene** | **0.000238** | 0.000196 | 0.000392 | mg/L | 4 | 01/30/20 15:10 | EPA 625 | J |
| *Surrogate: Nitrobenzene-d5 (Surr)* | | *Recovery:* | *76 %* | *Limits: 35-120 %* | *4* | *01/30/20 15:10* | *EPA 625* | |
| *2-Fluorobiphenyl (Surr)* | | | *77 %* | *45-120 %* | *4* | *01/30/20 15:10* | *EPA 625* | |
| *Phenol-d6 (Surr)* | | | *18 %* | *10-120 %* | *4* | *01/30/20 15:10* | *EPA 625* | |
| *p-Terphenyl-d14 (Surr)* | | | *69 %* | *30-125 %* | *4* | *01/30/20 15:10* | *EPA 625* | |
| *2-Fluorophenol (Surr)* | | | *34 %* | *20-120 %* | *4* | *01/30/20 15:10* | *EPA 625* | |
| *2,4,6-Tribromophenol (Surr)* | | | *66 %* | *35-125 %* | *4* | *01/30/20 15:10* | *EPA 625* | |

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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 |
|---|---|---|---|---|---|---|---|---|
| **0107-03-012920 (A0A0981-01)** | | | | **Matrix: Water** | | | | |
| Batch: 0020035 | | | | | | | | |
| **Copper** | **0.00580** | 0.000500 | 0.00100 | mg/L | 1 | 02/05/20 15:16 | EPA 200.8 | |
| **Iron** | **1.01** | 0.0250 | 0.0500 | mg/L | 1 | 02/05/20 15:16 | EPA 200.8 | |
| **Lead** | **0.00129** | 0.000100 | 0.000200 | mg/L | 1 | 02/05/20 15:16 | EPA 200.8 | |
| **Zinc** | **0.0370** | 0.00200 | 0.00400 | mg/L | 1 | 02/05/20 15:16 | EPA 200.8 | |

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## ANALYTICAL SAMPLE RESULTS

### Dissolved Metals by EPA 200.8 (ICPMS)

| Analyte | Sample Result | Detection Limit | Reporting Limit | Units | Dilution | Date Analyzed | Method Ref. | Notes |
|---|---|---|---|---|---|---|---|---|
| **0107-03-012920 (A0A0981-01)** | | | | **Matrix: Water** | | | | |
| Batch: 0020020 | | | | | | | | |
| **Copper** | **0.00235** | 0.000500 | 0.00100 | mg/L | 1 | 02/03/20 22:30 | EPA 200.8 (Diss) | |
| **0107-03-012920 (A0A0981-01RE1)** | | | | **Matrix: Water** | | | | |
| Batch: 0020183 | | | | | | | | |
| **Lead** | **0.000111** | 0.000100 | 0.000200 | mg/L | 1 | 02/06/20 20:25 | EPA 200.8 (Diss) | **J** |

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## ANALYTICAL SAMPLE RESULTS

### HEM (Oil and Grease) and SGT-HEM by EPA 1664A

| Analyte | Sample Result | Detection Limit | Reporting Limit | Units | Dilution | Date Analyzed | Method Ref. | Notes |
|---|---|---|---|---|---|---|---|---|
| **0107-03-012920 (A0A0981-01)** | | | | **Matrix: Water** | | **Batch: 0020029** | | |
| HEM (Oil and Grease) | ND | 4.95 | 4.95 | mg/L | 1 | 02/05/20 09:04 | EPA 1664A | O-01 |

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## ANALYTICAL SAMPLE RESULTS

### Free Cyanide by Microdiffusion/Colorimetric Spectrophotometry

| Analyte | Sample Result | Detection Limit | Reporting Limit | Units | Dilution | Date Analyzed | Method Ref. | Notes |
|---|---|---|---|---|---|---|---|---|
| **0107-03-012920 (A0A0981-01)** | | | | **Matrix: Water** | | **Batch: 0020027** | | |
| **Free Cyanide** | **0.0205** | 0.00250 | 0.00500 | mg/L | 1 | 02/03/20 17:13 | D4282-02 | |

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## ANALYTICAL SAMPLE RESULTS

### Weak Acid Dissociable (WAD) Cyanide by Flow Analysis (Aqueous)

| Analyte | Sample Result | Detection Limit | Reporting Limit | Units | Dilution | Date Analyzed | Method Ref. | Notes |
|---|---|---|---|---|---|---|---|---|
| **0107-03-012920 (A0A0981-01)** | | | | **Matrix: Water** | | **Batch: 0011002** | | |
| **WAD Cyanide** | **0.0256** | 0.00500 | 0.00500 | mg/L | 1 | 01/31/20 14:13 | SM 4500-CN I | |

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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 |
|---|---|---|---|---|---|---|---|---|
| **0107-03-012920 (A0A0981-01)** | | | | **Matrix: Water** | | | | |
| Batch: 0020019 | | | | | | | | |
| **Total Suspended Solids** | **5.00** | 5.00 | 5.00 | mg/L | 1 | 02/04/20 11:49 | SM 2540 D | |

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## Weck Laboratories, Inc.

## ANALYTICAL SAMPLE RESULTS (Subcontracted)

### Metals by EPA 200 Series Methods

| Analyte | Sample Result | Detection Limit | Reporting Limit | Units | Dilution | Date Analyzed | Method Ref. | Notes |
|---|---|---|---|---|---|---|---|---|
| **0107-03-012920 (A0A0981-01)** | | | | **Matrix: Water** | | **Batch: W0B0009** | | |
| Batch: W0B0009 | | | | | | | | |
| Mercury, Total | ND | --- | 0.000050 | mg/l | 1 | 02/09/20 12:29 | EPA 245.1 | |

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## QUALITY CONTROL (QC) SAMPLE RESULTS

### Purgeable Organic Compounds by EPA 624.1

| Analyte | Result | Detection Limit | Reporting Limit | Units | Dilution | Spike Amount | Source Result | % REC | % REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch 0010936 - EPA 5030B** | | | | | | | **Water** | | | | | |
| **Blank (0010936-BLK1)** | | | Prepared: 01/30/20 09:30 Analyzed: 01/30/20 10:55 | | | | | | | | | |
| EPA 624 | | | | | | | | | | | | |
| Benzene | ND | 0.000125 | 0.000250 | mg/L | 1 | --- | --- | --- | --- | --- | --- | |
| Bromodichloromethane | ND | 0.000500 | 0.00100 | mg/L | 1 | --- | --- | --- | --- | --- | --- | |
| Bromoform | ND | 0.00100 | 0.00200 | mg/L | 1 | --- | --- | --- | --- | --- | --- | |
| Bromomethane | ND | 0.00500 | 0.00500 | mg/L | 1 | --- | --- | --- | --- | --- | --- | |
| Carbon tetrachloride | ND | 0.000500 | 0.00100 | mg/L | 1 | --- | --- | --- | --- | --- | --- | |
| Chlorobenzene | ND | 0.000250 | 0.000500 | mg/L | 1 | --- | --- | --- | --- | --- | --- | |
| Chloroethane | ND | 0.00500 | 0.00500 | mg/L | 1 | --- | --- | --- | --- | --- | --- | EST |
| Chloroform | ND | 0.000500 | 0.00100 | mg/L | 1 | --- | --- | --- | --- | --- | --- | |
| Chloromethane | ND | 0.00250 | 0.00500 | mg/L | 1 | --- | --- | --- | --- | --- | --- | |
| Dibromochloromethane | ND | 0.000500 | 0.00100 | mg/L | 1 | --- | --- | --- | --- | --- | --- | |
| 1,2-Dichlorobenzene | ND | 0.000250 | 0.000500 | mg/L | 1 | --- | --- | --- | --- | --- | --- | |
| 1,3-Dichlorobenzene | ND | 0.000250 | 0.000500 | mg/L | 1 | --- | --- | --- | --- | --- | --- | |
| 1,4-Dichlorobenzene | ND | 0.000250 | 0.000500 | mg/L | 1 | --- | --- | --- | --- | --- | --- | |
| 1,1-Dichloroethane | ND | 0.000250 | 0.000500 | mg/L | 1 | --- | --- | --- | --- | --- | --- | |
| 1,2-Dichloroethane (EDC) | ND | 0.000250 | 0.000500 | mg/L | 1 | --- | --- | --- | --- | --- | --- | |
| 1,1-Dichloroethene | ND | 0.000250 | 0.000500 | mg/L | 1 | --- | --- | --- | --- | --- | --- | |
| trans-1,2-Dichloroethene | ND | 0.000250 | 0.000500 | mg/L | 1 | --- | --- | --- | --- | --- | --- | |
| 1,2-Dichloropropane | ND | 0.000250 | 0.000500 | mg/L | 1 | --- | --- | --- | --- | --- | --- | |
| cis-1,3-Dichloropropene | ND | 0.000500 | 0.00100 | mg/L | 1 | --- | --- | --- | --- | --- | --- | |
| trans-1,3-Dichloropropene | ND | 0.000500 | 0.00100 | mg/L | 1 | --- | --- | --- | --- | --- | --- | |
| Ethylbenzene | ND | 0.000250 | 0.000500 | mg/L | 1 | --- | --- | --- | --- | --- | --- | |
| Methyl tert-butyl ether (MTBE) | ND | 0.000500 | 0.00100 | mg/L | 1 | --- | --- | --- | --- | --- | --- | |
| Methylene chloride | ND | 0.00250 | 0.00500 | mg/L | 1 | --- | --- | --- | --- | --- | --- | |
| 1,1,2,2-Tetrachloroethane | ND | 0.000250 | 0.000500 | mg/L | 1 | --- | --- | --- | --- | --- | --- | |
| Tetrachloroethene (PCE) | ND | 0.000250 | 0.000500 | mg/L | 1 | --- | --- | --- | --- | --- | --- | |
| Toluene | ND | 0.000500 | 0.00100 | mg/L | 1 | --- | --- | --- | --- | --- | --- | |
| 1,1,1-Trichloroethane | ND | 0.000250 | 0.000500 | mg/L | 1 | --- | --- | --- | --- | --- | --- | |
| 1,1,2-Trichloroethane | ND | 0.000250 | 0.000500 | mg/L | 1 | --- | --- | --- | --- | --- | --- | |
| Trichloroethene (TCE) | ND | 0.000250 | 0.000500 | mg/L | 1 | --- | --- | --- | --- | --- | --- | |
| Trichlorofluoromethane | ND | 0.00100 | 0.00200 | mg/L | 1 | --- | --- | --- | --- | --- | --- | |
| Vinyl chloride | ND | 0.000250 | 0.000500 | mg/L | 1 | --- | --- | --- | --- | --- | --- | |
| Acrylonitrile | ND | 0.00100 | 0.00200 | mg/L | 1 | --- | --- | --- | --- | --- | --- | |
| Xylenes, total | ND | 0.000750 | 0.00150 | mg/L | 1 | --- | --- | --- | --- | --- | --- | |

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## QUALITY CONTROL (QC) SAMPLE RESULTS

### Purgeable Organic Compounds by EPA 624.1

| Analyte | Result | Detection Limit | Reporting Limit | Units | Dilution | Spike Amount | Source Result | % REC | % REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch 0010936 - EPA 5030B** | | | | | | | **Water** | | | | | |
| **Blank (0010936-BLK1)** | | | Prepared: 01/30/20 09:30 Analyzed: 01/30/20 10:55 | | | | | | | | | |
| *Surr: 1,4-Difluorobenzene (Surr)* | | | *Recovery: 110 %* | *Limits: 80-120 %* | | | | *Dilution: 1x* | | | | |
| *Toluene-d8 (Surr)* | | | *102 %* | *80-120 %* | | | | *"* | | | | |
| *4-Bromofluorobenzene (Surr)* | | | *104 %* | *80-120 %* | | | | *"* | | | | |
| **LCS (0010936-BS1)** | | | Prepared: 01/30/20 09:30 Analyzed: 01/30/20 10:01 | | | | | | | | | |
| **EPA 624** | | | | | | | | | | | | |
| Benzene | 0.0206 | 0.000125 | 0.000250 | mg/L | 1 | 0.0200 | --- | 103 | 37-151% | --- | --- | |
| Bromodichloromethane | 0.0230 | 0.000500 | 0.00100 | mg/L | 1 | 0.0200 | --- | 115 | 35-155% | --- | --- | |
| Bromoform | 0.0245 | 0.00100 | 0.00200 | mg/L | 1 | 0.0200 | --- | 122 | 45-169% | --- | --- | |
| Bromomethane | 0.0282 | 0.00500 | 0.00500 | mg/L | 1 | 0.0200 | --- | 141 | 5-242% | --- | --- | |
| Carbon tetrachloride | 0.0235 | 0.000500 | 0.00100 | mg/L | 1 | 0.0200 | --- | 117 | 70-140% | --- | --- | |
| Chlorobenzene | 0.0209 | 0.000250 | 0.000500 | mg/L | 1 | 0.0200 | --- | 104 | 37-160% | --- | --- | |
| Chloroethane | 0.0213 | 0.00500 | 0.00500 | mg/L | 1 | 0.0200 | --- | 106 | 14-230% | --- | --- | EST |
| Chloroform | 0.0219 | 0.000500 | 0.00100 | mg/L | 1 | 0.0200 | --- | 110 | 51-138% | --- | --- | |
| Chloromethane | 0.0187 | 0.00250 | 0.00500 | mg/L | 1 | 0.0200 | --- | 94 | 5-273% | --- | --- | |
| Dibromochloromethane | 0.0257 | 0.000500 | 0.00100 | mg/L | 1 | 0.0200 | --- | 128 | 53-149% | --- | --- | |
| 1,2-Dichlorobenzene | 0.0213 | 0.000250 | 0.000500 | mg/L | 1 | 0.0200 | --- | 107 | 18-190% | --- | --- | |
| 1,3-Dichlorobenzene | 0.0220 | 0.000250 | 0.000500 | mg/L | 1 | 0.0200 | --- | 110 | 59-156% | --- | --- | |
| 1,4-Dichlorobenzene | 0.0214 | 0.000250 | 0.000500 | mg/L | 1 | 0.0200 | --- | 107 | 18-190% | --- | --- | |
| 1,1-Dichloroethane | 0.0203 | 0.000250 | 0.000500 | mg/L | 1 | 0.0200 | --- | 102 | 59-155% | --- | --- | |
| 1,2-Dichloroethane (EDC) | 0.0208 | 0.000250 | 0.000500 | mg/L | 1 | 0.0200 | --- | 104 | 49-155% | --- | --- | |
| 1,1-Dichloroethene | 0.0209 | 0.000250 | 0.000500 | mg/L | 1 | 0.0200 | --- | 104 | 5-234% | --- | --- | |
| trans-1,2-Dichloroethene | 0.0200 | 0.000250 | 0.000500 | mg/L | 1 | 0.0200 | --- | 100 | 54-156% | --- | --- | |
| 1,2-Dichloropropane | 0.0200 | 0.000250 | 0.000500 | mg/L | 1 | 0.0200 | --- | 100 | 5-210% | --- | --- | |
| cis-1,3-Dichloropropene | 0.0199 | 0.000500 | 0.00100 | mg/L | 1 | 0.0200 | --- | 100 | 5-227% | --- | --- | |
| trans-1,3-Dichloropropene | 0.0212 | 0.000500 | 0.00100 | mg/L | 1 | 0.0200 | --- | 106 | 17-183% | --- | --- | |
| Ethylbenzene | 0.0195 | 0.000250 | 0.000500 | mg/L | 1 | 0.0200 | --- | 98 | 37-162% | --- | --- | |
| Methyl tert-butyl ether (MTBE) | 0.0200 | 0.000500 | 0.00100 | mg/L | 1 | 0.0200 | --- | 100 | 70-130% | --- | --- | |
| Methylene chloride | 0.0204 | 0.00250 | 0.00500 | mg/L | 1 | 0.0200 | --- | 102 | 5-221% | --- | --- | |
| 1,1,2,2-Tetrachloroethane | 0.0215 | 0.000250 | 0.000500 | mg/L | 1 | 0.0200 | --- | 108 | 46-157% | --- | --- | |
| Tetrachloroethene (PCE) | 0.0214 | 0.000250 | 0.000500 | mg/L | 1 | 0.0200 | --- | 107 | 64-148% | --- | --- | |
| Toluene | 0.0191 | 0.000500 | 0.00100 | mg/L | 1 | 0.0200 | --- | 96 | 47-150% | --- | --- | |
| 1,1,1-Trichloroethane | 0.0217 | 0.000250 | 0.000500 | mg/L | 1 | 0.0200 | --- | 108 | 52-162% | --- | --- | |
| 1,1,2-Trichloroethane | 0.0218 | 0.000250 | 0.000500 | mg/L | 1 | 0.0200 | --- | 109 | 52-150% | --- | --- | |

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Darwin Thomas, Business Development Director

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| | | |
|---|---|---|
| **Anchor QEA, LLC** | Project: **Gasco - 1200Z - 2020** | |
| 6720 SW Macadam Ave. Suite 125 | Project Number: **000029-02.63 Task 14** | **Report ID:** |
| Portland, OR 97219 | Project Manager: **Cindy Fields** | **A0A0981 - 03 06 20 1200** |

## QUALITY CONTROL (QC) SAMPLE RESULTS

### Purgeable Organic Compounds by EPA 624.1

| Analyte | Result | Detection Limit | Reporting Limit | Units | Dilution | Spike Amount | Source Result | % REC | % REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch 0010936 - EPA 5030B** | | | | | | | **Water** | | | | | |
| **LCS (0010936-BS1)** | | | | Prepared: 01/30/20 09:30 | Analyzed: 01/30/20 10:01 | | | | | | | |
| Trichloroethene (TCE) | 0.0222 | 0.000250 | 0.000500 | mg/L | 1 | 0.0200 | --- | 111 | 71-157% | --- | --- | |
| Trichlorofluoromethane | 0.0295 | 0.00100 | 0.00200 | mg/L | 1 | 0.0200 | --- | 147 | 17-181% | --- | --- | |
| Vinyl chloride | 0.0217 | 0.000250 | 0.000500 | mg/L | 1 | 0.0200 | --- | 109 | 5-251% | --- | --- | |
| Acrylonitrile | 0.0210 | 0.00100 | 0.00200 | mg/L | 1 | 0.0200 | --- | 105 | 70-130% | --- | --- | |
| Xylenes, total | 0.0577 | 0.000750 | 0.00150 | mg/L | 1 | 0.0600 | --- | 96 | 70-130% | --- | --- | |
| *Surr: 1,4-Difluorobenzene (Surr)* | | | *Recovery: 107 %* | *Limits: 80-120 %* | | *Dilution: 1x* | | | | | | |
| *Toluene-d8 (Surr)* | | | *98 %* | *80-120 %* | | *"* | | | | | | |
| *4-Bromofluorobenzene (Surr)* | | | *95 %* | *80-120 %* | | *"* | | | | | | |
| **Duplicate (0010936-DUP1)** | | | | Prepared: 01/30/20 10:51 | Analyzed: 01/30/20 13:40 | | | | | | | |
| **QC Source Sample: Non-SDG (A0A0992-01)** | | | | | | | | | | | | |
| Benzene | **0.275** | 0.0125 | 0.0250 | mg/L | 100 | --- | 0.267 | --- | --- | 3 | 30% | |
| Bromodichloromethane | ND | 0.0500 | 0.100 | mg/L | 100 | --- | ND | --- | --- | --- | 30% | |
| Bromoform | ND | 0.100 | 0.200 | mg/L | 100 | --- | ND | --- | --- | --- | 30% | |
| Bromomethane | ND | 0.500 | 0.500 | mg/L | 100 | --- | ND | --- | --- | --- | 30% | |
| Carbon tetrachloride | ND | 0.0500 | 0.100 | mg/L | 100 | --- | ND | --- | --- | --- | 30% | |
| Chlorobenzene | ND | 0.0250 | 0.0500 | mg/L | 100 | --- | ND | --- | --- | --- | 30% | |
| Chloroethane | ND | 0.500 | 0.500 | mg/L | 100 | --- | ND | --- | --- | --- | 30% | EST |
| Chloroform | ND | 0.0500 | 0.100 | mg/L | 100 | --- | ND | --- | --- | --- | 30% | |
| Chloromethane | ND | 0.250 | 0.500 | mg/L | 100 | --- | ND | --- | --- | --- | 30% | |
| Dibromochloromethane | ND | 0.0500 | 0.100 | mg/L | 100 | --- | ND | --- | --- | --- | 30% | |
| 1,2-Dichlorobenzene | ND | 0.0250 | 0.0500 | mg/L | 100 | --- | ND | --- | --- | --- | 30% | |
| 1,3-Dichlorobenzene | ND | 0.0250 | 0.0500 | mg/L | 100 | --- | ND | --- | --- | --- | 30% | |
| 1,4-Dichlorobenzene | ND | 0.0250 | 0.0500 | mg/L | 100 | --- | ND | --- | --- | --- | 30% | |
| 1,1-Dichloroethane | ND | 0.0250 | 0.0500 | mg/L | 100 | --- | ND | --- | --- | --- | 30% | |
| 1,2-Dichloroethane (EDC) | ND | 0.0250 | 0.0500 | mg/L | 100 | --- | ND | --- | --- | --- | 30% | |
| 1,1-Dichloroethene | ND | 0.0250 | 0.0500 | mg/L | 100 | --- | ND | --- | --- | --- | 30% | |
| trans-1,2-Dichloroethene | ND | 0.0250 | 0.0500 | mg/L | 100 | --- | ND | --- | --- | --- | 30% | |
| 1,2-Dichloropropane | ND | 0.0250 | 0.0500 | mg/L | 100 | --- | ND | --- | --- | --- | 30% | |
| cis-1,3-Dichloropropene | ND | 0.0500 | 0.100 | mg/L | 100 | --- | ND | --- | --- | --- | 30% | |
| trans-1,3-Dichloropropene | ND | 0.0500 | 0.100 | mg/L | 100 | --- | ND | --- | --- | --- | 30% | |
| Ethylbenzene | **0.141** | 0.0250 | 0.0500 | mg/L | 100 | --- | 0.142 | --- | --- | 0.07 | 30% | |
| Methyl tert-butyl ether (MTBE) | **0.0522** | 0.0500 | 0.100 | mg/L | 100 | --- | 0.0513 | --- | --- | 2 | 30% | J |
| Methylene chloride | **0.308** | 0.250 | 0.500 | mg/L | 100 | --- | 0.312 | --- | --- | 1 | 30% | J |

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Darwin Thomas, Business Development Director

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|---|---|---|
| **Anchor QEA, LLC** | Project: **Gasco - 1200Z - 2020** | |
| **6720 SW Macadam Ave. Suite 125** | Project Number: **000029-02.63 Task 14** | **Report ID:** |
| **Portland, OR 97219** | Project Manager: **Cindy Fields** | **A0A0981 - 03 06 20 1200** |

## QUALITY CONTROL (QC) SAMPLE RESULTS

### Purgeable Organic Compounds by EPA 624.1

| Analyte | Result | Detection Limit | Reporting Limit | Units | Dilution | Spike Amount | Source Result | % REC | % REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch 0010936 - EPA 5030B** | | | | | | | **Water** | | | | | |
| **Duplicate (0010936-DUP1)** | | | Prepared: 01/30/20 10:51 | | Analyzed: 01/30/20 13:40 | | | | | | | |
| **QC Source Sample: Non-SDG (A0A0992-01)** | | | | | | | | | | | | |
| 1,1,2,2-Tetrachloroethane | ND | 0.0250 | 0.0500 | mg/L | 100 | --- | ND | --- | --- | --- | 30% | |
| Tetrachloroethene (PCE) | ND | 0.0250 | 0.0500 | mg/L | 100 | --- | ND | --- | --- | --- | 30% | |
| Toluene | **1.38** | 0.0500 | 0.100 | mg/L | 100 | --- | 1.40 | --- | --- | 2 | 30% | |
| 1,1,1-Trichloroethane | ND | 0.0250 | 0.0500 | mg/L | 100 | --- | ND | --- | --- | --- | 30% | |
| 1,1,2-Trichloroethane | ND | 0.0250 | 0.0500 | mg/L | 100 | --- | ND | --- | --- | --- | 30% | |
| Trichloroethene (TCE) | ND | 0.0250 | 0.0500 | mg/L | 100 | --- | ND | --- | --- | --- | 30% | |
| Trichlorofluoromethane | ND | 0.100 | 0.200 | mg/L | 100 | --- | ND | --- | --- | --- | 30% | |
| Vinyl chloride | ND | 0.0250 | 0.0500 | mg/L | 100 | --- | ND | --- | --- | --- | 30% | |
| Acrylonitrile | ND | 0.100 | 0.200 | mg/L | 100 | --- | ND | --- | --- | --- | 30% | |
| Xylenes, total | **0.819** | 0.0750 | 0.150 | mg/L | 100 | --- | 0.820 | --- | --- | 0.2 | 30% | |
| *Surr: 1,4-Difluorobenzene (Surr)* | | | *Recovery: 109 %* | | *Limits: 80-120 %* | | | | *Dilution: 1x* | | | |
| *Toluene-d8 (Surr)* | | | *98 %* | | *80-120 %* | | | | *"* | | | |
| *4-Bromofluorobenzene (Surr)* | | | *100 %* | | *80-120 %* | | | | *"* | | | |
| **Matrix Spike (0010936-MS1)** | | | Prepared: 01/30/20 10:51 | | Analyzed: 01/30/20 12:17 | | | | | | | |
| **QC Source Sample: 0107-03-012920 (A0A0981-01)** | | | | | | | | | | | | |
| **EPA 624** | | | | | | | | | | | | |
| Benzene | 0.0237 | 0.000125 | 0.000250 | mg/L | 1 | 0.0200 | 0.00163 | 110 | 37-151% | --- | --- | |
| Bromodichloromethane | 0.0235 | 0.000500 | 0.00100 | mg/L | 1 | 0.0200 | ND | 118 | 35-155% | --- | --- | |
| Bromoform | 0.0244 | 0.00100 | 0.00200 | mg/L | 1 | 0.0200 | ND | 122 | 45-169% | --- | --- | |
| Bromomethane | 0.0300 | 0.00500 | 0.00500 | mg/L | 1 | 0.0200 | ND | 150 | 5-242% | --- | --- | |
| Carbon tetrachloride | 0.0257 | 0.000500 | 0.00100 | mg/L | 1 | 0.0200 | ND | 129 | 70-140% | --- | --- | |
| Chlorobenzene | 0.0211 | 0.000250 | 0.000500 | mg/L | 1 | 0.0200 | ND | 106 | 37-160% | --- | --- | |
| Chloroethane | 0.0211 | 0.00500 | 0.00500 | mg/L | 1 | 0.0200 | ND | 106 | 14-230% | --- | --- | EST |
| Chloroform | 0.0233 | 0.000500 | 0.00100 | mg/L | 1 | 0.0200 | ND | 117 | 51-138% | --- | --- | |
| Chloromethane | 0.0199 | 0.00250 | 0.00500 | mg/L | 1 | 0.0200 | ND | 100 | 5-273% | --- | --- | |
| Dibromochloromethane | 0.0252 | 0.000500 | 0.00100 | mg/L | 1 | 0.0200 | ND | 126 | 53-149% | --- | --- | |
| 1,2-Dichlorobenzene | 0.0208 | 0.000250 | 0.000500 | mg/L | 1 | 0.0200 | ND | 104 | 18-190% | --- | --- | |
| 1,3-Dichlorobenzene | 0.0218 | 0.000250 | 0.000500 | mg/L | 1 | 0.0200 | ND | 109 | 59-156% | --- | --- | |
| 1,4-Dichlorobenzene | 0.0214 | 0.000250 | 0.000500 | mg/L | 1 | 0.0200 | ND | 107 | 18-130% | --- | --- | |
| 1,1-Dichloroethane | 0.0212 | 0.000250 | 0.000500 | mg/L | 1 | 0.0200 | ND | 106 | 59-155% | --- | --- | |
| 1,2-Dichloroethane (EDC) | 0.0213 | 0.000250 | 0.000500 | mg/L | 1 | 0.0200 | ND | 107 | 49-155% | --- | --- | |
| 1,1-Dichloroethene | 0.0223 | 0.000250 | 0.000500 | mg/L | 1 | 0.0200 | ND | 112 | 5-234% | --- | --- | |

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|---|---|---|
| **Anchor QEA, LLC** | Project: **Gasco - 1200Z - 2020** | |
| **6720 SW Macadam Ave. Suite 125** | Project Number: **000029-02.63 Task 14** | **Report ID:** |
| **Portland, OR 97219** | Project Manager: **Cindy Fields** | **A0A0981 - 03 06 20 1200** |

## QUALITY CONTROL (QC) SAMPLE RESULTS

### Purgeable Organic Compounds by EPA 624.1

| Analyte | Result | Detection Limit | Reporting Limit | Units | Dilution | Spike Amount | Source Result | % REC | % REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch 0010936 - EPA 5030B** | | | | | | | **Water** | | | | | |
| **Matrix Spike (0010936-MS1)** | | | | Prepared: 01/30/20 10:51 | | Analyzed: 01/30/20 12:17 | | | | | | |
| **QC Source Sample: 0107-03-012920 (A0A0981-01)** | | | | | | | | | | | | |
| trans-1,2-Dichloroethene | 0.0215 | 0.000250 | 0.000500 | mg/L | 1 | 0.0200 | ND | 108 | 54-156% | --- | --- | |
| 1,2-Dichloropropane | 0.0209 | 0.000250 | 0.000500 | mg/L | 1 | 0.0200 | ND | 104 | 5-210% | --- | --- | |
| cis-1,3-Dichloropropene | 0.0191 | 0.000500 | 0.00100 | mg/L | 1 | 0.0200 | ND | 95 | 5-227% | --- | --- | |
| trans-1,3-Dichloropropene | 0.0206 | 0.000500 | 0.00100 | mg/L | 1 | 0.0200 | ND | 103 | 17-183% | --- | --- | |
| Ethylbenzene | 0.0201 | 0.000250 | 0.000500 | mg/L | 1 | 0.0200 | ND | 100 | 37-162% | --- | --- | |
| Methyl tert-butyl ether (MTBE) | 0.0198 | 0.000500 | 0.00100 | mg/L | 1 | 0.0200 | ND | 99 | 70-130% | --- | --- | |
| Methylene chloride | 0.0204 | 0.00250 | 0.00500 | mg/L | 1 | 0.0200 | ND | 102 | 5-221% | --- | --- | |
| 1,1,2,2-Tetrachloroethane | 0.0208 | 0.000250 | 0.000500 | mg/L | 1 | 0.0200 | ND | 104 | 46-157% | --- | --- | |
| Tetrachloroethene (PCE) | 0.0227 | 0.000250 | 0.000500 | mg/L | 1 | 0.0200 | ND | 114 | 64-148% | --- | --- | |
| Toluene | 0.0199 | 0.000500 | 0.00100 | mg/L | 1 | 0.0200 | ND | 100 | 47-150% | --- | --- | |
| 1,1,1-Trichloroethane | 0.0229 | 0.000250 | 0.000500 | mg/L | 1 | 0.0200 | ND | 115 | 52-162% | --- | --- | |
| 1,1,2-Trichloroethane | 0.0215 | 0.000250 | 0.000500 | mg/L | 1 | 0.0200 | ND | 107 | 52-150% | --- | --- | |
| Trichloroethene (TCE) | 0.0233 | 0.000250 | 0.000500 | mg/L | 1 | 0.0200 | ND | 117 | 71-157% | --- | --- | |
| Trichlorofluoromethane | 0.0333 | 0.00100 | 0.00200 | mg/L | 1 | 0.0200 | ND | 167 | 17-181% | --- | --- | |
| Vinyl chloride | 0.0244 | 0.000250 | 0.000500 | mg/L | 1 | 0.0200 | ND | 122 | 5-251% | --- | --- | |
| Acrylonitrile | 0.0212 | 0.00100 | 0.00200 | mg/L | 1 | 0.0200 | ND | 106 | 70-130% | --- | --- | |
| Xylenes, total | 0.0598 | 0.000750 | 0.00150 | mg/L | 1 | 0.0600 | ND | 100 | 70-130% | --- | --- | |
| *Surr: 1,4-Difluorobenzene (Surr)* | | | *Recovery: 109 %* | | *Limits: 80-120 %* | | | *Dilution: 1x* | | | | |
| *Toluene-d8 (Surr)* | | | *96 %* | | *80-120 %* | | | *"* | | | | |
| *4-Bromofluorobenzene (Surr)* | | | *94 %* | | *80-120 %* | | | *"* | | | | |

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|---|---|---|
| **Anchor QEA, LLC** | Project: **Gasco - 1200Z - 2020** | |
| **6720 SW Macadam Ave. Suite 125** | Project Number: **000029-02.63 Task 14** | **Report ID:** |
| **Portland, OR 97219** | Project Manager: **Cindy Fields** | **A0A0981 - 03 06 20 1200** |

## QUALITY CONTROL (QC) SAMPLE RESULTS

### Purgeable Organic Compounds by EPA 624.1

| Analyte | Result | Detection Limit | Reporting Limit | Units | Dilution | Spike Amount | Source Result | % REC | % REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch 0010986 - EPA 5030B** | | | | | | | **Water** | | | | | |
| **Duplicate (0010986-DUP2)** | | | Prepared: 01/31/20 11:44 Analyzed: 01/31/20 21:59 | | | | | | | | | |
| **QC Source Sample: Non-SDG (A0A1018-14)** | | | | | | | | | | | | |
| *Surr: 4-Bromofluorobenzene (Surr)* | | | *Recovery: 104 %* | *Limits: 80-120 %* | | | *Dilution: 1x* | | | | | |
| **Matrix Spike (0010986-MS1)** | | | Prepared: 01/31/20 11:44 Analyzed: 01/31/20 17:26 | | | | | | | | | |
| **QC Source Sample: Non-SDG (A0A1041-03)** | | | | | | | | | | | | |
| **EPA 624** | | | | | | | | | | | | |
| Benzene | 0.0218 | 0.000125 | 0.000250 | mg/L | 1 | 0.0200 | ND | 109 | 37-151% | --- | --- | |
| Toluene | 0.0197 | 0.000500 | 0.00100 | mg/L | 1 | 0.0200 | ND | 98 | 47-150% | --- | --- | |
| Xylenes, total | 0.0601 | 0.000750 | 0.00150 | mg/L | 1 | 0.0600 | ND | 100 | 70-130% | --- | --- | |
| *Surr: 1,4-Difluorobenzene (Surr)* | | | *Recovery: 109 %* | *Limits: 80-120 %* | | | *Dilution: 1x* | | | | | |
| *Toluene-d8 (Surr)* | | | *97 %* | *80-120 %* | | | *"* | | | | | |
| *4-Bromofluorobenzene (Surr)* | | | *96 %* | *80-120 %* | | | *"* | | | | | |

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| 6720 SW Macadam Ave. Suite 125 | Project Number: **000029-02.63 Task 14** | **Report ID:** |
| Portland, OR 97219 | Project Manager: **Cindy Fields** | **A0A0981 - 03 06 20 1200** |

## QUALITY CONTROL (QC) SAMPLE RESULTS

### Polychlorinated Biphenyls by EPA 608

| Analyte | Result | Detection Limit | Reporting Limit | Units | Dilution | Spike Amount | Source Result | % REC | % REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch 0010951 - EPA 3510C (Neutral pH)** | | | | | | | **Water** | | | | | |
| **Blank (0010951-BLK1)** | | | Prepared: 01/30/20 11:47 | | Analyzed: 01/30/20 17:42 | | | | | | | **C-07** |
| **608 PCB** | | | | | | | | | | | | |
| Aroclor 1016 | ND | 0.00000909 | 0.0000182 | mg/L | 1 | --- | --- | --- | --- | --- | --- | |
| Aroclor 1221 | ND | 0.00000909 | 0.0000182 | mg/L | 1 | --- | --- | --- | --- | --- | --- | |
| Aroclor 1232 | ND | 0.00000909 | 0.0000182 | mg/L | 1 | --- | --- | --- | --- | --- | --- | |
| Aroclor 1242 | ND | 0.00000909 | 0.0000182 | mg/L | 1 | --- | --- | --- | --- | --- | --- | |
| Aroclor 1248 | ND | 0.00000909 | 0.0000182 | mg/L | 1 | --- | --- | --- | --- | --- | --- | |
| Aroclor 1254 | ND | 0.00000909 | 0.0000182 | mg/L | 1 | --- | --- | --- | --- | --- | --- | |
| Aroclor 1260 | ND | 0.00000909 | 0.0000182 | mg/L | 1 | --- | --- | --- | --- | --- | --- | |
| *Surr: Decachlorobiphenyl (Surr)* | | | *Recovery: 90 %* | | *Limits: 40-135 %* | | | *Dilution: 1x* | | | | |
| **LCS (0010951-BS1)** | | | Prepared: 01/30/20 11:47 | | Analyzed: 01/30/20 18:00 | | | | | | | **C-07** |
| **608 PCB** | | | | | | | | | | | | |
| Aroclor 1016 | 0.000677 | 0.0000100 | 0.0000200 | mg/L | 1 | 0.00125 | --- | 54 | 50-140% | --- | --- | |
| Aroclor 1260 | 0.000801 | 0.0000100 | 0.0000200 | mg/L | 1 | 0.00125 | --- | 64 | 8-140% | --- | --- | |
| *Surr: Decachlorobiphenyl (Surr)* | | | *Recovery: 77 %* | | *Limits: 40-135 %* | | | *Dilution: 1x* | | | | |
| **LCS Dup (0010951-BSD1)** | | | Prepared: 01/30/20 11:47 | | Analyzed: 01/30/20 18:17 | | | | | | | **C-07, Q-19** |
| **608 PCB** | | | | | | | | | | | | |
| Aroclor 1016 | 0.000762 | 0.0000100 | 0.0000200 | mg/L | 1 | 0.00125 | --- | 61 | 50-140% | 12 | 36% | |
| Aroclor 1260 | 0.000924 | 0.0000100 | 0.0000200 | mg/L | 1 | 0.00125 | --- | 74 | 8-140% | 14 | 38% | |
| *Surr: Decachlorobiphenyl (Surr)* | | | *Recovery: 93 %* | | *Limits: 40-135 %* | | | *Dilution: 1x* | | | | |

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Darwin Thomas, Business Development Director

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|---|---|---|
| **Anchor QEA, LLC** | Project: **Gasco - 1200Z - 2020** | |
| 6720 SW Macadam Ave. Suite 125 | Project Number: **000029-02.63 Task 14** | **Report ID:** |
| Portland, OR 97219 | Project Manager: **Cindy Fields** | **A0A0981 - 03 06 20 1200** |

## QUALITY CONTROL (QC) SAMPLE RESULTS

### Organochlorine Pesticides by EPA 608

| Analyte | Result | Detection Limit | Reporting Limit | Units | Dilution | Spike Amount | Source Result | % REC | % REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch 0011020 - EPA 3510C (Neutral pH)/3640A (GPC)** | | | | | | | **Water** | | | | | |
| **Blank (0011020-BLK1)** | | | Prepared: 01/30/20 07:05 | | Analyzed: 02/05/20 12:53 | | | | | | | **C-05** |
| **608 Pest** | | | | | | | | | | | | |
| Aldrin | ND | 0.0000273 | 0.0000545 | mg/L | 1 | --- | --- | --- | --- | --- | --- | |
| 4,4'-DDD | ND | 0.0000273 | 0.0000545 | mg/L | 1 | --- | --- | --- | --- | --- | --- | |
| 4,4'-DDE | ND | 0.00000455 | 0.00000909 | mg/L | 1 | --- | --- | --- | --- | --- | --- | |
| 4,4'-DDT | ND | 0.0000273 | 0.0000545 | mg/L | 1 | --- | --- | --- | --- | --- | --- | |
| Dieldrin | ND | 0.0000273 | 0.0000545 | mg/L | 1 | --- | --- | --- | --- | --- | --- | |
| Chlordane (Technical) | ND | 0.000336 | 0.000682 | mg/L | 1 | --- | --- | --- | --- | --- | --- | |
| *Surr: 2,4,5,6-TCMX (Surr)* | | | *Recovery: 59 %* | | *Limits: 25-140 %* | | | | *Dilution: 1x* | | | |
| *Decachlorobiphenyl (Surr)* | | | *60 %* | | *30-135 %* | | | | *"* | | | |
| **LCS (0011020-BS1)** | | | Prepared: 01/30/20 07:05 | | Analyzed: 02/05/20 13:11 | | | | | | | **C-05** |
| **608 Pest** | | | | | | | | | | | | |
| Aldrin | 0.000353 | 0.0000300 | 0.0000600 | mg/L | 1 | 0.000500 | --- | 71 | 42-140% | --- | --- | |
| 4,4'-DDD | 0.000542 | 0.0000300 | 0.0000600 | mg/L | 1 | 0.000500 | --- | 108 | 31-141% | --- | --- | |
| 4,4'-DDE | 0.000480 | 0.00000500 | 0.0000100 | mg/L | 1 | 0.000500 | --- | 96 | 30-145% | --- | --- | |
| 4,4'-DDT | 0.000644 | 0.0000300 | 0.0000600 | mg/L | 1 | 0.000500 | --- | 129 | 25-160% | --- | --- | |
| Dieldrin | 0.000520 | 0.0000300 | 0.0000600 | mg/L | 1 | 0.000500 | --- | 104 | 36-146% | --- | --- | |
| *Surr: 2,4,5,6-TCMX (Surr)* | | | *Recovery: 74 %* | | *Limits: 25-140 %* | | | | *Dilution: 1x* | | | |
| *Decachlorobiphenyl (Surr)* | | | *106 %* | | *30-135 %* | | | | *"* | | | |
| **LCS Dup (0011020-BSD1)** | | | Prepared: 01/30/20 07:05 | | Analyzed: 02/05/20 13:28 | | | | | | | **C-05, Q-19** |
| **608 Pest** | | | | | | | | | | | | |
| Aldrin | 0.000311 | 0.0000300 | 0.0000600 | mg/L | 1 | 0.000500 | --- | 62 | 42-140% | 13 | 35% | |
| 4,4'-DDD | 0.000538 | 0.0000300 | 0.0000600 | mg/L | 1 | 0.000500 | --- | 108 | 31-141% | 0.7 | 39% | |
| 4,4'-DDE | 0.000464 | 0.00000500 | 0.0000100 | mg/L | 1 | 0.000500 | --- | 93 | 30-145% | 3 | 35% | |
| 4,4'-DDT | 0.000647 | 0.0000300 | 0.0000600 | mg/L | 1 | 0.000500 | --- | 129 | 25-160% | 0.4 | 42% | |
| Dieldrin | 0.000492 | 0.0000300 | 0.0000600 | mg/L | 1 | 0.000500 | --- | 98 | 36-146% | 6 | 49% | |
| *Surr: 2,4,5,6-TCMX (Surr)* | | | *Recovery: 63 %* | | *Limits: 25-140 %* | | | | *Dilution: 1x* | | | |
| *Decachlorobiphenyl (Surr)* | | | *103 %* | | *30-135 %* | | | | *"* | | | |

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| **6720 SW Macadam Ave. Suite 125** | Project Number: **000029-02.63 Task 14** | **Report ID:** |
| **Portland, OR 97219** | Project Manager: **Cindy Fields** | **A0A0981 - 03 06 20 1200** |

## QUALITY CONTROL (QC) SAMPLE RESULTS

### Semivolatile Organic Compounds by EPA 625

| Analyte | Result | Detection Limit | Reporting Limit | Units | Dilution | Spike Amount | Source Result | % REC | % REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch 0010933 - EPA 3510C (Acid Extraction)** | | | | | | | **Water** | | | | | |
| **Blank (0010933-BLK1)** | | | Prepared: 01/30/20 07:07 Analyzed: 01/30/20 12:46 | | | | | | | | | |
| **EPA 625** | | | | | | | | | | | | |
| Naphthalene | ND | 0.0000909 | 0.000182 | mg/L | 1 | --- | --- | --- | --- | --- | --- | |
| 2-Methylnaphthalene | ND | 0.0000909 | 0.000182 | mg/L | 1 | --- | --- | --- | --- | --- | --- | |
| Acenaphthene | ND | 0.0000455 | 0.0000909 | mg/L | 1 | --- | --- | --- | --- | --- | --- | |
| Acenaphthylene | ND | 0.0000455 | 0.0000909 | mg/L | 1 | --- | --- | --- | --- | --- | --- | |
| Fluorene | ND | 0.0000455 | 0.0000909 | mg/L | 1 | --- | --- | --- | --- | --- | --- | |
| Phenanthrene | ND | 0.0000455 | 0.0000909 | mg/L | 1 | --- | --- | --- | --- | --- | --- | |
| Anthracene | ND | 0.0000455 | 0.0000909 | mg/L | 1 | --- | --- | --- | --- | --- | --- | |
| Fluoranthene | ND | 0.0000455 | 0.0000909 | mg/L | 1 | --- | --- | --- | --- | --- | --- | |
| Pyrene | ND | 0.0000455 | 0.0000909 | mg/L | 1 | --- | --- | --- | --- | --- | --- | |
| Chrysene | ND | 0.0000455 | 0.0000909 | mg/L | 1 | --- | --- | --- | --- | --- | --- | |
| Benz(a)anthracene | ND | 0.0000455 | 0.0000909 | mg/L | 1 | --- | --- | --- | --- | --- | --- | |
| Benzo(b)fluoranthene | ND | 0.0000682 | 0.000136 | mg/L | 1 | --- | --- | --- | --- | --- | --- | |
| Benzo(k)fluoranthene | ND | 0.0000682 | 0.000136 | mg/L | 1 | --- | --- | --- | --- | --- | --- | |
| Benzo(a)pyrene | ND | 0.0000682 | 0.000136 | mg/L | 1 | --- | --- | --- | --- | --- | --- | |
| Hexachlorobenzene | ND | 0.0000455 | 0.0000909 | mg/L | 1 | --- | --- | --- | --- | --- | --- | |
| Indeno(1,2,3-cd)pyrene | ND | 0.0000455 | 0.0000909 | mg/L | 1 | --- | --- | --- | --- | --- | --- | |
| Dibenz(a,h)anthracene | ND | 0.0000455 | 0.0000909 | mg/L | 1 | --- | --- | --- | --- | --- | --- | |
| Benzo(g,h,i)perylene | ND | 0.0000455 | 0.0000909 | mg/L | 1 | --- | --- | --- | --- | --- | --- | |
| *Surr: Nitrobenzene-d5 (Surr)* | | | *Recovery: 94 %* | | *Limits: 35-120 %* | | | *Dilution: 1x* | | | | |
| *2-Fluorobiphenyl (Surr)* | | | *81 %* | | *45-120 %* | | | *"* | | | | |
| *Phenol-d6 (Surr)* | | | *29 %* | | *10-120 %* | | | *"* | | | | |
| *p-Terphenyl-d14 (Surr)* | | | *96 %* | | *30-125 %* | | | *"* | | | | |
| *2-Fluorophenol (Surr)* | | | *42 %* | | *20-120 %* | | | *"* | | | | |
| *2,4,6-Tribromophenol (Surr)* | | | *74 %* | | *35-125 %* | | | *"* | | | | |
| **LCS (0010933-BS1)** | | | Prepared: 01/30/20 07:07 Analyzed: 01/30/20 13:22 | | | | | | | | | |
| **EPA 625** | | | | | | | | | | | | |
| Naphthalene | 0.00626 | 0.000100 | 0.000200 | mg/L | 1 | 0.00800 | --- | 78 | 21-133% | --- | --- | |
| 2-Methylnaphthalene | 0.00643 | 0.000100 | 0.000200 | mg/L | 1 | 0.00800 | --- | 80 | 40-121% | --- | --- | |
| Acenaphthene | 0.00697 | 0.0000500 | 0.000100 | mg/L | 1 | 0.00800 | --- | 87 | 47-145% | --- | --- | |
| Acenaphthylene | 0.00745 | 0.0000500 | 0.000100 | mg/L | 1 | 0.00800 | --- | 93 | 33-145% | --- | --- | |
| Fluorene | 0.00723 | 0.0000500 | 0.000100 | mg/L | 1 | 0.00800 | --- | 90 | 59-121% | --- | --- | |
| Phenanthrene | 0.00731 | 0.0000500 | 0.000100 | mg/L | 1 | 0.00800 | --- | 91 | 54-120% | --- | --- | |

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| 6720 SW Macadam Ave. Suite 125 | Project Number: **000029-02.63 Task 14** | **Report ID:** |
| Portland, OR 97219 | Project Manager: **Cindy Fields** | **A0A0981 - 03 06 20 1200** |

## QUALITY CONTROL (QC) SAMPLE RESULTS

### Semivolatile Organic Compounds by EPA 625

| Analyte | Result | Detection Limit | Reporting Limit | Units | Dilution | Spike Amount | Source Result | % REC | % REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch 0010933 - EPA 3510C (Acid Extraction)** | | | | | | | **Water** | | | | | |
| **LCS (0010933-BS1)** | | | Prepared: 01/30/20 07:07 | Analyzed: 01/30/20 13:22 | | | | | | | | |
| Anthracene | 0.00765 | 0.0000500 | 0.000100 | mg/L | 1 | 0.00800 | --- | 96 | 27-133% | --- | --- | |
| Fluoranthene | 0.00761 | 0.0000500 | 0.000100 | mg/L | 1 | 0.00800 | --- | 95 | 26-137% | --- | --- | |
| Pyrene | 0.00751 | 0.0000500 | 0.000100 | mg/L | 1 | 0.00800 | --- | 94 | 52-115% | --- | --- | |
| Chrysene | 0.00772 | 0.0000500 | 0.000100 | mg/L | 1 | 0.00800 | --- | 97 | 17-168% | --- | --- | |
| Benz(a)anthracene | 0.00776 | 0.0000500 | 0.000100 | mg/L | 1 | 0.00800 | --- | 97 | 33-143% | --- | --- | |
| Benzo(b)fluoranthene | 0.00839 | 0.0000750 | 0.000150 | mg/L | 1 | 0.00800 | --- | 105 | 24-159% | --- | --- | |
| Benzo(k)fluoranthene | 0.00791 | 0.0000750 | 0.000150 | mg/L | 1 | 0.00800 | --- | 99 | 11-162% | --- | --- | |
| Benzo(a)pyrene | 0.00814 | 0.0000750 | 0.000150 | mg/L | 1 | 0.00800 | --- | 102 | 17-163% | --- | --- | |
| Hexachlorobenzene | 0.00663 | 0.0000500 | 0.000100 | mg/L | 1 | 0.00800 | --- | 83 | 5-152% | --- | --- | |
| Indeno(1,2,3-cd)pyrene | 0.00755 | 0.0000500 | 0.000100 | mg/L | 1 | 0.00800 | --- | 94 | 5-171% | --- | --- | |
| Dibenz(a,h)anthracene | 0.00782 | 0.0000500 | 0.000100 | mg/L | 1 | 0.00800 | --- | 98 | 5-227% | --- | --- | |
| Benzo(g,h,i)perylene | 0.00801 | 0.0000500 | 0.000100 | mg/L | 1 | 0.00800 | --- | 100 | 5-219% | --- | --- | |
| *Surr: Nitrobenzene-d5 (Surr)* | | | *Recovery: 80 %* | *Limits: 35-120 %* | | | *Dilution: 1x* | | | | | |
| *2-Fluorobiphenyl (Surr)* | | | *82 %* | *45-120 %* | | | *"* | | | | | |
| *Phenol-d6 (Surr)* | | | *31 %* | *10-120 %* | | | *"* | | | | | |
| *p-Terphenyl-d14 (Surr)* | | | *85 %* | *30-125 %* | | | *"* | | | | | |
| *2-Fluorophenol (Surr)* | | | *51 %* | *20-120 %* | | | *"* | | | | | |
| *2,4,6-Tribromophenol (Surr)* | | | *81 %* | *35-125 %* | | | *"* | | | | | |
| **LCS Dup (0010933-BSD1)** | | | Prepared: 01/30/20 07:07 | Analyzed: 01/30/20 13:58 | | | | | | | | Q-19 |
| EPA 625 | | | | | | | | | | | | |
| Naphthalene | 0.00597 | 0.000100 | 0.000200 | mg/L | 1 | 0.00800 | --- | 75 | 21-133% | 5 | 30% | |
| 2-Methylnaphthalene | 0.00627 | 0.000100 | 0.000200 | mg/L | 1 | 0.00800 | --- | 78 | 40-121% | 3 | 30% | |
| Acenaphthene | 0.00714 | 0.0000500 | 0.000100 | mg/L | 1 | 0.00800 | --- | 89 | 47-145% | 2 | 30% | |
| Acenaphthylene | 0.00758 | 0.0000500 | 0.000100 | mg/L | 1 | 0.00800 | --- | 95 | 33-145% | 2 | 30% | |
| Fluorene | 0.00775 | 0.0000500 | 0.000100 | mg/L | 1 | 0.00800 | --- | 97 | 59-121% | 7 | 30% | |
| Phenanthrene | 0.00785 | 0.0000500 | 0.000100 | mg/L | 1 | 0.00800 | --- | 98 | 54-120% | 7 | 30% | |
| Anthracene | 0.00840 | 0.0000500 | 0.000100 | mg/L | 1 | 0.00800 | --- | 105 | 27-133% | 9 | 30% | |
| Fluoranthene | 0.00909 | 0.0000500 | 0.000100 | mg/L | 1 | 0.00800 | --- | 114 | 26-137% | 18 | 30% | |
| Pyrene | 0.00891 | 0.0000500 | 0.000100 | mg/L | 1 | 0.00800 | --- | 111 | 52-115% | 17 | 30% | |
| Chrysene | 0.00817 | 0.0000500 | 0.000100 | mg/L | 1 | 0.00800 | --- | 102 | 17-168% | 6 | 30% | |
| Benz(a)anthracene | 0.00840 | 0.0000500 | 0.000100 | mg/L | 1 | 0.00800 | --- | 105 | 33-143% | 8 | 30% | |
| Benzo(b)fluoranthene | 0.00903 | 0.0000750 | 0.000150 | mg/L | 1 | 0.00800 | --- | 113 | 24-159% | 7 | 30% | |
| Benzo(k)fluoranthene | 0.00854 | 0.0000750 | 0.000150 | mg/L | 1 | 0.00800 | --- | 107 | 11-162% | 8 | 30% | |

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## QUALITY CONTROL (QC) SAMPLE RESULTS

### Semivolatile Organic Compounds by EPA 625

| Analyte | Result | Detection Limit | Reporting Limit | Units | Dilution | Spike Amount | Source Result | % REC | % REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch 0010933 - EPA 3510C (Acid Extraction)** | | | | | | | **Water** | | | | | |
| **LCS Dup (0010933-BSD1)** | | | Prepared: 01/30/20 07:07 | | Analyzed: 01/30/20 13:58 | | | | | | | Q-19 |
| Benzo(a)pyrene | 0.00893 | 0.0000750 | 0.000150 | mg/L | 1 | 0.00800 | --- | 112 | 17-163% | 9 | 30% | |
| Hexachlorobenzene | 0.00722 | 0.0000500 | 0.000100 | mg/L | 1 | 0.00800 | --- | 90 | 5-152% | 8 | 30% | |
| Indeno(1,2,3-cd)pyrene | 0.00785 | 0.0000500 | 0.000100 | mg/L | 1 | 0.00800 | --- | 98 | 5-171% | 4 | 30% | |
| Dibenz(a,h)anthracene | 0.00821 | 0.0000500 | 0.000100 | mg/L | 1 | 0.00800 | --- | 103 | 5-227% | 5 | 30% | |
| Benzo(g,h,i)perylene | 0.00819 | 0.0000500 | 0.000100 | mg/L | 1 | 0.00800 | --- | 102 | 5-219% | 2 | 30% | |
| *Surr: Nitrobenzene-d5 (Surr)* | | | *Recovery: 92 %* | | *Limits: 35-120 %* | | *Dilution: 1x* | | | | | |
| *2-Fluorobiphenyl (Surr)* | | | *84 %* | | *45-120 %* | | *"* | | | | | |
| *Phenol-d6 (Surr)* | | | *30 %* | | *10-120 %* | | *"* | | | | | |
| *p-Terphenyl-d14 (Surr)* | | | *90 %* | | *30-125 %* | | *"* | | | | | |
| *2-Fluorophenol (Surr)* | | | *42 %* | | *20-120 %* | | *"* | | | | | |
| *2,4,6-Tribromophenol (Surr)* | | | *87 %* | | *35-125 %* | | *"* | | | | | |

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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 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch 0020035 - EPA 3015A** | | | | | | | **Water** | | | | | |
| **Blank (0020035-BLK1)** | | | Prepared: 02/03/20 12:29 | | Analyzed: 02/05/20 14:01 | | | | | | | |
| EPA 200.8 | | | | | | | | | | | | |
| Copper | ND | 0.000500 | 0.00100 | 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 | --- | --- | --- | --- | --- | --- | |
| **LCS (0020035-BS1)** | | | Prepared: 02/03/20 12:29 | | Analyzed: 02/05/20 14:06 | | | | | | | |
| EPA 200.8 | | | | | | | | | | | | |
| Copper | 0.0560 | 0.000500 | 0.00100 | mg/L | 1 | 0.0556 | --- | 101 | 85-115% | --- | --- | |
| Iron | 2.75 | 0.0250 | 0.0500 | mg/L | 1 | 2.78 | --- | 99 | 85-115% | --- | --- | |
| Lead | 0.0521 | 0.000100 | 0.000200 | mg/L | 1 | 0.0556 | --- | 94 | 85-115% | --- | --- | |
| Zinc | 0.0541 | 0.00200 | 0.00400 | mg/L | 1 | 0.0556 | --- | 97 | 85-115% | --- | --- | |
| **Duplicate (0020035-DUP1)** | | | Prepared: 02/03/20 12:29 | | Analyzed: 02/05/20 14:38 | | | | | | | |
| QC Source Sample: Non-SDG (A0A0928-01) | | | | | | | | | | | | |
| Copper | **0.0196** | 0.000500 | 0.00100 | mg/L | 1 | --- | 0.0192 | --- | --- | 2 | 20% | |
| Iron | **2.02** | 0.0250 | 0.0500 | mg/L | 1 | --- | 2.12 | --- | --- | 5 | 20% | |
| Lead | **0.00727** | 0.000100 | 0.000200 | mg/L | 1 | --- | 0.00691 | --- | --- | 5 | 20% | |
| Zinc | **0.159** | 0.00200 | 0.00400 | mg/L | 1 | --- | 0.155 | --- | --- | 2 | 20% | |
| **Matrix Spike (0020035-MS1)** | | | Prepared: 02/03/20 12:29 | | Analyzed: 02/05/20 14:43 | | | | | | | |
| QC Source Sample: Non-SDG (A0A0928-01) | | | | | | | | | | | | |
| EPA 200.8 | | | | | | | | | | | | |
| Copper | 0.0743 | 0.000500 | 0.00100 | mg/L | 1 | 0.0556 | 0.0192 | 99 | 70-130% | --- | --- | |
| Iron | 5.03 | 0.0250 | 0.0500 | mg/L | 1 | 2.78 | 2.12 | 105 | 70-130% | --- | --- | |
| Lead | 0.0582 | 0.000100 | 0.000200 | mg/L | 1 | 0.0556 | 0.00691 | 92 | 70-130% | --- | --- | |
| Zinc | 0.209 | 0.00200 | 0.00400 | mg/L | 1 | 0.0556 | 0.155 | 96 | 70-130% | --- | --- | |
| **Matrix Spike (0020035-MS2)** | | | Prepared: 02/03/20 12:29 | | Analyzed: 02/05/20 16:16 | | | | | | | |
| QC Source Sample: Non-SDG (A0A1018-10) | | | | | | | | | | | | |
| EPA 200.8 | | | | | | | | | | | | |
| Copper | 0.0599 | 0.000500 | 0.00100 | mg/L | 1 | 0.0556 | 0.00669 | 96 | 70-130% | --- | --- | |
| Iron | 21.0 | 0.0250 | 0.0500 | mg/L | 1 | 2.78 | 9.15 | **425** | **70-130%** | --- | --- | Q-03 |

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| **6720 SW Macadam Ave. Suite 125** | Project Number: **000029-02.63 Task 14** | **Report ID:** |
| **Portland, OR 97219** | Project Manager: **Cindy Fields** | **A0A0981 - 03 06 20 1200** |

## 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 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch 0020035 - EPA 3015A** | | | | | | | **Water** | | | | | |
| **Matrix Spike (0020035-MS2)** | | | Prepared: 02/03/20 12:29 | | Analyzed: 02/05/20 16:16 | | | | | | | |
| **QC Source Sample: Non-SDG (A0A1018-10)** | | | | | | | | | | | | |
| Lead | 0.0509 | 0.000100 | 0.000200 | mg/L | 1 | 0.0556 | 0.00472 | 83 | 70-130% | --- | --- | |
| Zinc | 0.0567 | 0.00200 | 0.00400 | mg/L | 1 | 0.0556 | 0.00706 | 89 | 70-130% | --- | --- | |

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## QUALITY CONTROL (QC) SAMPLE RESULTS

### Dissolved 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 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch 0020020 - Matrix Matched Direct Inject** | | | | | | | **Water** | | | | | |
| **Blank (0020020-BLK1)** | | | Prepared: 02/03/20 10:37 | | Analyzed: 02/03/20 21:16 | | | | | | | |
| EPA 200.8 (Diss) | | | | | | | | | | | | |
| Copper | ND | 0.000500 | 0.00100 | mg/L | 1 | --- | --- | --- | --- | --- | --- | |
| **Blank (0020020-BLK2)** | | | Prepared: 02/03/20 10:37 | | Analyzed: 02/04/20 16:07 | | | | | | | |
| EPA 200.8 (Diss) | | | | | | | | | | | | |
| Lead | **0.000186** | 0.000100 | 0.000200 | mg/L | 1 | --- | --- | --- | --- | --- | --- | J, B-02, Q-16 |
| **LCS (0020020-BS1)** | | | Prepared: 02/03/20 10:37 | | Analyzed: 02/03/20 21:30 | | | | | | | |
| EPA 200.8 (Diss) | | | | | | | | | | | | |
| Copper | 0.0512 | 0.000500 | 0.00100 | mg/L | 1 | 0.0556 | --- | 92 | 85-115% | --- | --- | |
| **LCS (0020020-BS2)** | | | Prepared: 02/03/20 10:37 | | Analyzed: 02/04/20 16:21 | | | | | | | |
| EPA 200.8 (Diss) | | | | | | | | | | | | |
| Lead | 0.0545 | 0.000100 | 0.000200 | mg/L | 1 | 0.0556 | --- | 98 | 85-115% | --- | --- | B-02, Q-16 |
| **Duplicate (0020020-DUP1)** | | | Prepared: 02/03/20 10:37 | | Analyzed: 02/03/20 21:53 | | | | | | | |
| QC Source Sample: Non-SDG (A0A0928-01) | | | | | | | | | | | | |
| Copper | **0.00367** | 0.000500 | 0.00100 | mg/L | 1 | --- | 0.00359 | --- | --- | 2 | 20% | |
| **Duplicate (0020020-DUP2)** | | | Prepared: 02/03/20 10:37 | | Analyzed: 02/04/20 16:40 | | | | | | | |
| QC Source Sample: Non-SDG (A0A0928-01RE1) | | | | | | | | | | | | |
| Lead | **0.000483** | 0.000100 | 0.000200 | mg/L | 1 | --- | 0.000484 | --- | --- | 0.2 | 20% | B-02, Q-16 |
| **Matrix Spike (0020020-MS1)** | | | Prepared: 02/03/20 10:37 | | Analyzed: 02/03/20 21:58 | | | | | | | |
| QC Source Sample: Non-SDG (A0A0928-01) | | | | | | | | | | | | |
| EPA 200.8 (Diss) | | | | | | | | | | | | |
| Copper | 0.0527 | 0.000500 | 0.00100 | mg/L | 1 | 0.0556 | 0.00359 | 88 | 70-130% | --- | --- | |
| **Matrix Spike (0020020-MS2)** | | | Prepared: 02/03/20 10:37 | | Analyzed: 02/03/20 23:36 | | | | | | | |
| QC Source Sample: Non-SDG (A0A1018-11) | | | | | | | | | | | | |
| EPA 200.8 (Diss) | | | | | | | | | | | | |
| Copper | 0.0488 | 0.000500 | 0.00100 | mg/L | 1 | 0.0556 | 0.000990 | 86 | 70-130% | --- | --- | |

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| Portland, OR 97219 | Project Manager: **Cindy Fields** | **A0A0981 - 03 06 20 1200** |

## QUALITY CONTROL (QC) SAMPLE RESULTS

### Dissolved 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 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch 0020020 - Matrix Matched Direct Inject** | | | | | | | **Water** | | | | | |
| **Matrix Spike (0020020-MS2)** | | | Prepared: 02/03/20 10:37 | | Analyzed: 02/03/20 23:36 | | | | | | | |
| **QC Source Sample: Non-SDG (A0A1018-11)** | | | | | | | | | | | | |
| Lead | 0.0519 | 0.000100 | 0.000200 | mg/L | 1 | 0.0556 | ND | 93 | 70-130% | --- | --- | B-02 |
| **Matrix Spike (0020020-MS3)** | | | Prepared: 02/03/20 10:37 | | Analyzed: 02/04/20 16:47 | | | | | | | |
| **QC Source Sample: Non-SDG (A0A0928-01RE1)** | | | | | | | | | | | | |
| **EPA 200.8 (Diss)** | | | | | | | | | | | | |
| Lead | 0.0595 | 0.000100 | 0.000200 | mg/L | 1 | 0.0556 | 0.000484 | 106 | 70-130% | --- | --- | B-02, Q-16 |

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## QUALITY CONTROL (QC) SAMPLE RESULTS

### Dissolved 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 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch 0020183 - Matrix Matched Direct Inject** | | | | | | | **Water** | | | | | |
| **Blank (0020183-BLK1)** | | | Prepared: 02/06/20 09:25 | | Analyzed: 02/06/20 19:48 | | | | | | | |
| EPA 200.8 (Diss) | | | | | | | | | | | | |
| Lead | ND | 0.000100 | 0.000200 | mg/L | 1 | --- | --- | --- | --- | --- | --- | |
| **LCS (0020183-BS1)** | | | Prepared: 02/06/20 09:25 | | Analyzed: 02/06/20 19:53 | | | | | | | |
| EPA 200.8 (Diss) | | | | | | | | | | | | |
| Lead | 0.0516 | 0.000100 | 0.000200 | mg/L | 1 | 0.0556 | --- | 93 | 85-115% | --- | --- | |
| **Duplicate (0020183-DUP1)** | | | Prepared: 02/06/20 09:25 | | Analyzed: 02/06/20 20:34 | | | | | | | |
| QC Source Sample: Non-SDG (A0A1018-01RE1) | | | | | | | | | | | | |
| Lead | **0.000654** | 0.000100 | 0.000200 | mg/L | 1 | --- | 0.000645 | --- | --- | 1 | 20% | |
| **Matrix Spike (0020183-MS1)** | | | Prepared: 02/06/20 09:25 | | Analyzed: 02/06/20 20:39 | | | | | | | |
| QC Source Sample: Non-SDG (A0A1018-01RE1) | | | | | | | | | | | | |
| EPA 200.8 (Diss) | | | | | | | | | | | | |
| Lead | 0.0501 | 0.000100 | 0.000200 | mg/L | 1 | 0.0556 | 0.000645 | 89 | 70-130% | --- | --- | |

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## QUALITY CONTROL (QC) SAMPLE RESULTS

### HEM (Oil and Grease) and SGT-HEM by EPA 1664A

| Analyte | Result | Detection Limit | Reporting Limit | Units | Dilution | Spike Amount | Source Result | % REC | % REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch 0020029 - EPA 1664** | | | | | | | **Water** | | | | | |
| **Blank (0020029-BLK1)** | | | Prepared: 02/04/20 08:00 | | Analyzed: 02/05/20 09:04 | | | | | | | |
| EPA 1664A | | | | | | | | | | | | |
| HEM (Oil and Grease) | ND | 4.55 | 4.55 | mg/L | 1 | --- | --- | --- | --- | --- | --- | |
| **LCS (0020029-BS1)** | | | Prepared: 02/04/20 08:00 | | Analyzed: 02/05/20 09:04 | | | | | | | |
| EPA 1664A | | | | | | | | | | | | |
| HEM (Oil and Grease) | 40.3 | | | mg/L | 1 | 40.0 | --- | 101 | 78-114% | --- | --- | |
| **Matrix Spike (0020029-MS1)** | | | Prepared: 02/04/20 08:00 | | Analyzed: 02/05/20 09:04 | | | | | | | |
| QC Source Sample: Non-SDG (A0A1059-01) | | | | | | | | | | | | |
| EPA 1664A | | | | | | | | | | | | |
| HEM (Oil and Grease) | 30.7 | | | mg/L | 1 | 39.2 | ND | 78 | 78-114% | --- | --- | |

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## QUALITY CONTROL (QC) SAMPLE RESULTS

### Free Cyanide by Microdiffusion/Colorimetric Spectrophotometry

| Analyte | Result | Detection Limit | Reporting Limit | Units | Dilution | Spike Amount | Source Result | % REC | % REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch 0020027 - Method Prep: Aq** | | | | | | | **Water** | | | | | |
| **Blank (0020027-BLK1)** | | | Prepared: 02/03/20 12:10 | | Analyzed: 02/03/20 17:05 | | | | | | | |
| D4282-02 | | | | | | | | | | | | |
| Free Cyanide | ND | 0.00250 | 0.00500 | mg/L | 1 | --- | --- | --- | --- | --- | --- | |
| **LCS (0020027-BS1)** | | | Prepared: 02/03/20 12:10 | | Analyzed: 02/03/20 17:05 | | | | | | | |
| D4282-02 | | | | | | | | | | | | |
| Free Cyanide | 0.0638 | 0.00250 | 0.00500 | mg/L | 1 | 0.0667 | --- | 96 | 85-115% | --- | --- | |
| **LCS Dup (0020027-BSD1)** | | | Prepared: 02/03/20 12:10 | | Analyzed: 02/03/20 17:05 | | | | | | | |
| D4282-02 | | | | | | | | | | | | |
| Free Cyanide | 0.0670 | 0.00250 | 0.00500 | mg/L | 1 | 0.0667 | --- | 100 | 85-115% | 5 | 10% | |
| **Duplicate (0020027-DUP1)** | | | Prepared: 02/03/20 12:10 | | Analyzed: 02/03/20 17:13 | | | | | | | |
| QC Source Sample: 0107-03-012920 (A0A0981-01) | | | | | | | | | | | | |
| D4282-02 | | | | | | | | | | | | |
| Free Cyanide | **0.0204** | 0.00250 | 0.00500 | mg/L | 1 | --- | 0.0205 | --- | --- | 0.6 | 20% | |
| **Matrix Spike (0020027-MS1)** | | | Prepared: 02/03/20 12:10 | | Analyzed: 02/03/20 17:13 | | | | | | | |
| QC Source Sample: 0107-03-012920 (A0A0981-01) | | | | | | | | | | | | |
| D4282-02 | | | | | | | | | | | | |
| Free Cyanide | 0.0849 | 0.00250 | 0.00500 | mg/L | 1 | 0.0667 | 0.0205 | 97 | 80-120% | --- | --- | |

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## QUALITY CONTROL (QC) SAMPLE RESULTS

### Weak Acid Dissociable (WAD) Cyanide by Flow Analysis (Aqueous)

| Analyte | Result | Detection Limit | Reporting Limit | Units | Dilution | Spike Amount | Source Result | % REC | % REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch 0011002 - Lachat Micro Dist - aqueous** | | | | | | | **Water** | | | | | |
| **Blank (0011002-BLK1)** | | | Prepared: 01/31/20 11:39 | | Analyzed: 01/31/20 14:05 | | | | | | | |
| SM 4500-CN I | | | | | | | | | | | | |
| WAD Cyanide | ND | 0.00500 | 0.00500 | mg/L | 1 | --- | --- | --- | --- | --- | --- | |
| **LCS (0011002-BS1)** | | | Prepared: 01/31/20 11:39 | | Analyzed: 01/31/20 14:07 | | | | | | | |
| SM 4500-CN I | | | | | | | | | | | | |
| WAD Cyanide | 0.250 | 0.00500 | 0.00500 | mg/L | 1 | 0.250 | --- | 100 | 85-115% | --- | --- | |
| **Duplicate (0011002-DUP1)** | | | Prepared: 01/31/20 11:39 | | Analyzed: 01/31/20 14:15 | | | | | | | |
| QC Source Sample: 0107-03-012920 (A0A0981-01) | | | | | | | | | | | | |
| SM 4500-CN I | | | | | | | | | | | | |
| WAD Cyanide | **0.0233** | 0.00500 | 0.00500 | mg/L | 1 | --- | 0.0256 | --- | --- | 9 | 20% | |
| **Matrix Spike (0011002-MS1)** | | | Prepared: 01/31/20 11:39 | | Analyzed: 01/31/20 14:17 | | | | | | | |
| QC Source Sample: 0107-03-012920 (A0A0981-01) | | | | | | | | | | | | |
| SM 4500-CN I | | | | | | | | | | | | |
| WAD Cyanide | 0.266 | 0.00500 | 0.00500 | mg/L | 1 | 0.250 | 0.0256 | 96 | 80-120% | --- | --- | |

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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 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch 0020019 - Total Suspended Solids** | | | | | | | **Water** | | | | | |
| **Blank (0020019-BLK1)** | | | Prepared: 02/03/20 10:34 | | Analyzed: 02/04/20 11:49 | | | | | | | |
| SM 2540 D | | | | | | | | | | | | |
| Total Suspended Solids | ND | 5.00 | 5.00 | mg/L | 1 | --- | --- | --- | --- | --- | --- | |
| **Duplicate (0020019-DUP1)** | | | Prepared: 02/03/20 10:34 | | Analyzed: 02/04/20 11:49 | | | | | | | |
| QC Source Sample: Non-SDG (A0A0929-01) | | | | | | | | | | | | |
| Total Suspended Solids | **7.00** | 5.00 | 5.00 | mg/L | 1 | --- | ND | --- | --- | | **10%** | Q-05 |
| **Duplicate (0020019-DUP2)** | | | Prepared: 02/03/20 10:34 | | Analyzed: 02/04/20 11:49 | | | | | | | |
| QC Source Sample: Non-SDG (A0A1045-01) | | | | | | | | | | | | |
| Total Suspended Solids | **8.00** | 5.00 | 5.00 | mg/L | 1 | --- | 8.00 | --- | --- | 0 | 10% | |
| **Reference (0020019-SRM1)** | | | Prepared: 02/03/20 10:34 | | Analyzed: 02/04/20 11:49 | | | | | | | |
| SM 2540 D | | | | | | | | | | | | |
| Total Suspended Solids | 109 | | | mg/L | 1 | 100 | | 109 | 77.1-110% | --- | --- | |

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## Weck Laboratories, Inc.

## QUALITY CONTROL (QC) SAMPLE RESULTS

### Metals by EPA 200 Series Methods

| Analyte | Result | Detection Limit | Reporting Limit | Units | Dilution | Spike Amount | Source Result | % REC | % REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch W0B0009 - EPA 245.1** | | | | | | | **Water** | | | | | |
| **Blank (W0B0009-BLK1)** | | | Prepared: 02/04/20 11:40 | | Analyzed: 02/09/20 11:36 | | | | | | | |
| EPA 245.1 | | | | | | | | | | | | |
| Mercury, Total | ND | --- | 0.000050 | mg/l | 1 | --- | --- | --- | --- | --- | --- | |
| **LCS (W0B0009-BS1)** | | | Prepared: 02/04/20 11:40 | | Analyzed: 02/09/20 11:38 | | | | | | | |
| EPA 245.1 | | | | | | | | | | | | |
| Mercury, Total | 0.00112 | --- | 0.000050 | mg/l | 1 | 0.00100 | --- | 112 | 85-115% | --- | --- | |
| **Matrix Spike (W0B0009-MS1)** | | | Prepared: 02/04/20 11:40 | | Analyzed: 02/09/20 11:47 | | | | | | | |
| QC Source Sample: Non-SDG (0A29084-02) | | | | | | | | | | | | |
| EPA 245.1 | | | | | | | | | | | | |
| Mercury, Total | 0.00108 | --- | 0.000050 | mg/l | 1 | 0.00100 | ND | 108 | 70-130% | --- | --- | |
| **Matrix Spike (W0B0009-MS2)** | | | Prepared: 02/04/20 11:40 | | Analyzed: 02/09/20 12:13 | | | | | | | |
| QC Source Sample: Non-SDG (0A29085-04) | | | | | | | | | | | | |
| EPA 245.1 | | | | | | | | | | | | |
| Mercury, Total | 0.00107 | --- | 0.000050 | mg/l | 1 | 0.00100 | ND | 107 | 70-130% | --- | --- | |
| **Matrix Spike Dup (W0B0009-MSD1)** | | | Prepared: 02/04/20 11:40 | | Analyzed: 02/09/20 11:48 | | | | | | | |
| QC Source Sample: Non-SDG (0A29084-02) | | | | | | | | | | | | |
| Mercury, Total | 0.00109 | --- | 0.000050 | mg/l | 1 | 0.00100 | ND | 109 | 70-130% | 0.9 | 20% | |
| **Matrix Spike Dup (W0B0009-MSD2)** | | | Prepared: 02/04/20 11:40 | | Analyzed: 02/09/20 12:15 | | | | | | | |
| QC Source Sample: Non-SDG (0A29085-04) | | | | | | | | | | | | |
| Mercury, Total | 0.00104 | --- | 0.000050 | mg/l | 1 | 0.00100 | ND | 104 | 70-130% | 3 | 20% | |

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| | | |
|---|---|---|
| **Anchor QEA, LLC** | Project: **Gasco - 1200Z - 2020** | |
| **6720 SW Macadam Ave. Suite 125** | Project Number: **000029-02.63 Task 14** | **Report ID:** |
| **Portland, OR 97219** | Project Manager: **Cindy Fields** | **A0A0981 - 03 06 20 1200** |

## SAMPLE PREPARATION INFORMATION

### Purgeable Organic Compounds by EPA 624.1

Prep: EPA 5030B

| Lab Number | Matrix | Method | Sampled | Prepared | Sample Initial/Final | Default Initial/Final | RL Prep Factor |
|---|---|---|---|---|---|---|---|
| Batch: 0010936 | | | | | | | |
| A0A0981-01 | Water | EPA 624 | 01/29/20 11:30 | 01/30/20 10:51 | 5mL/5mL | 5mL/5mL | 1.00 |
| A0A0981-02 | Water | EPA 624 | 01/29/20 11:50 | 01/30/20 10:51 | 5mL/5mL | 5mL/5mL | 1.00 |

### Polychlorinated Biphenyls by EPA 608

Prep: EPA 3510C (Neutral pH)

| Lab Number | Matrix | Method | Sampled | Prepared | Sample Initial/Final | Default Initial/Final | RL Prep Factor |
|---|---|---|---|---|---|---|---|
| Batch: 0010951 | | | | | | | |
| A0A0981-01 | Water | 608 PCB | 01/29/20 11:30 | 01/30/20 11:47 | 1040mL/5mL | 1000mL/5mL | 0.96 |

### Organochlorine Pesticides by EPA 608

Prep: EPA 3510C (Neutral pH)/3640A (GPC)

| Lab Number | Matrix | Method | Sampled | Prepared | Sample Initial/Final | Default Initial/Final | RL Prep Factor |
|---|---|---|---|---|---|---|---|
| Batch: 0011020 | | | | | | | |
| A0A0981-01RE1 | Water | 608 Pest | 01/29/20 11:30 | 01/30/20 11:25 | 1010mL/10mL | 1000mL/5mL | 1.98 |

### Semivolatile Organic Compounds by EPA 625

Prep: EPA 3510C (Acid Extraction)

| Lab Number | Matrix | Method | Sampled | Prepared | Sample Initial/Final | Default Initial/Final | RL Prep Factor |
|---|---|---|---|---|---|---|---|
| Batch: 0010933 | | | | | | | |
| A0A0981-01 | Water | EPA 625 | 01/29/20 11:30 | 01/30/20 07:07 | 1020mL/5mL | 1000mL/1mL | 4.90 |

### Total Metals by EPA 200.8 (ICPMS)

Prep: EPA 3015A

| Lab Number | Matrix | Method | Sampled | Prepared | Sample Initial/Final | Default Initial/Final | RL Prep Factor |
|---|---|---|---|---|---|---|---|
| Batch: 0020035 | | | | | | | |
| A0A0981-01 | Water | EPA 200.8 | 01/29/20 11:30 | 02/03/20 12:29 | 45mL/50mL | 45mL/50mL | 1.00 |

### Dissolved Metals by EPA 200.8 (ICPMS)

Prep: Matrix Matched Direct Inject

| Lab Number | Matrix | Method | Sampled | Prepared | Sample Initial/Final | Default Initial/Final | RL Prep Factor |
|---|---|---|---|---|---|---|---|
| Batch: 0020020 | | | | | | | |

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Darwin Thomas, Business Development Director

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Tigard, OR 97223
503-718-2323
EPA ID: OR01039

| | | |
|---|---|---|
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| **6720 SW Macadam Ave. Suite 125** | Project Number: **000029-02.63 Task 14** | **Report ID:** |
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## SAMPLE PREPARATION INFORMATION

### Dissolved Metals by EPA 200.8 (ICPMS)

Prep: Matrix Matched Direct Inject

| Lab Number | Matrix | Method | Sampled | Prepared | Sample Initial/Final | Default Initial/Final | RL Prep Factor |
|---|---|---|---|---|---|---|---|
| A0A0981-01 | Water | EPA 200.8 (Diss) | 01/29/20 11:30 | 02/03/20 10:37 | 45mL/50mL | 45mL/50mL | 1.00 |
| Batch: 0020183 | | | | | | | |
| A0A0981-01RE1 | Water | EPA 200.8 (Diss) | 01/29/20 11:30 | 02/06/20 09:25 | 45mL/50mL | 45mL/50mL | 1.00 |

### HEM (Oil and Grease) and SGT-HEM by EPA 1664A

Prep: EPA 1664

| Lab Number | Matrix | Method | Sampled | Prepared | Sample Initial/Final | Default Initial/Final | RL Prep Factor |
|---|---|---|---|---|---|---|---|
| Batch: 0020029 | | | | | | | |
| A0A0981-01 | Water | EPA 1664A | 01/29/20 11:30 | 02/04/20 08:00 | | | NA |

### Free Cyanide by Microdiffusion/Colorimetric Spectrophotometry

Prep: Method Prep: Aq

| Lab Number | Matrix | Method | Sampled | Prepared | Sample Initial/Final | Default Initial/Final | RL Prep Factor |
|---|---|---|---|---|---|---|---|
| Batch: 0020027 | | | | | | | |
| A0A0981-01 | Water | D4282-02 | 01/29/20 11:30 | 02/03/20 12:10 | 3mL/3mL | 3mL/3mL | 1.00 |

### Weak Acid Dissociable (WAD) Cyanide by Flow Analysis (Aqueous)

Prep: Lachat Micro Dist - aqueous

| Lab Number | Matrix | Method | Sampled | Prepared | Sample Initial/Final | Default Initial/Final | RL Prep Factor |
|---|---|---|---|---|---|---|---|
| Batch: 0011002 | | | | | | | |
| A0A0981-01 | Water | SM 4500-CN I | 01/29/20 11:30 | 01/31/20 11:39 | 6mL/6mL | 6mL/6mL | 1.00 |

### Solid and Moisture Determinations

Prep: Total Suspended Solids

| Lab Number | Matrix | Method | Sampled | Prepared | Sample Initial/Final | Default Initial/Final | RL Prep Factor |
|---|---|---|---|---|---|---|---|
| Batch: 0020019 | | | | | | | |
| A0A0981-01 | Water | SM 2540 D | 01/29/20 11:30 | 02/03/20 10:34 | | | NA |

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## Weck Laboratories, Inc.

### SAMPLE PREPARATION INFORMATION

Metals by EPA 200 Series Methods

Prep: EPA 245.1

| Lab Number | Matrix | Method | Sampled | Prepared | Sample Initial/Final | Default Initial/Final | RL Prep Factor |
|---|---|---|---|---|---|---|---|
| Batch: W0B0009 | | | | | | | |
| A0A0981-01 | Water | EPA 245.1 | 01/29/20 11:30 | 02/04/20 11:40 | 50ml/50ml | 50ml/50ml | 1.00 |

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## QUALIFIER DEFINITIONS

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

**Apex Laboratories**

| | |
|---|---|
| **A-01** | Returned Trip Blank not provided by Apex Labs. |
| **B-02** | Analyte detected in an associated blank at a level between one-half the MRL and the MRL. (See Notes and Conventions below.) |
| **C-05** | Extract has undergone a GPC (Gel-Permeation Chromatography) cleanup per EPA 3640A. Reporting levels may be raised due to dilution necessary for cleanup. Sample Final Volume includes the GPC dilution factor, see the Prep page for details. |
| **C-07** | Extract has undergone Sulfuric Acid Cleanup by EPA 3665A, Sulfur Cleanup by EPA 3660B, and Florisil Cleanup by EPA 3620B in order to minimize matrix interference. |
| **EST** | Result reported as an Estimated Value. Results estimated. Initial Calibration Verification Standard (ICV) failed low. |
| **J** | Estimated Result. Result detected below the lowest point of the calibration curve, but above the specified MDL. |
| **O-01** | Result for total Hexane Extractable Material (HEM) is below reporting level for this sample. Silica Gel Treatment (HEM-SGT) analysis was therefore not performed. |
| **Q-03** | Spike recovery and/or RPD is outside control limits due to the high concentration of analyte present in the sample. |
| **Q-05** | Analyses are not controlled on RPD values from sample and duplicate concentrations that are below 5 times the reporting level. |
| **Q-16** | Reanalysis of an original Batch QC sample. |
| **Q-19** | Blank Spike Duplicate (BSD) sample analyzed in place of Matrix Spike/Duplicate samples due to limited sample amount available for analysis. |
| **V-17** | Sample was collected in an unverified client container and may not comply with Apex Quality System and method requirments. |

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## 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. In addition, sample matrix spikes are required for some analyses, and sufficient volume must be provided, and billable site specific QC requested, if this is required. All regulatory permits should be reviewed to ensure that these requirements are being met.

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. Apex Laboratories will qualify these analytes according to the most stringent requirements, however results for samples that are for non-regulatory purposes may be acceptable.

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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| **6720 SW Macadam Ave. Suite 125** | Project Number: **000029-02.63 Task 14** | **Report ID:** |
| **Portland, OR 97219** | Project Manager: **Cindy Fields** | **A0A0981 - 03 06 20 1200** |

## LABORATORY ACCREDITATION INFORMATION

### TNI 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**

| 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 provded by the client or sampler, and fall outside of Apex Laboratories' Scope of Accreditation.

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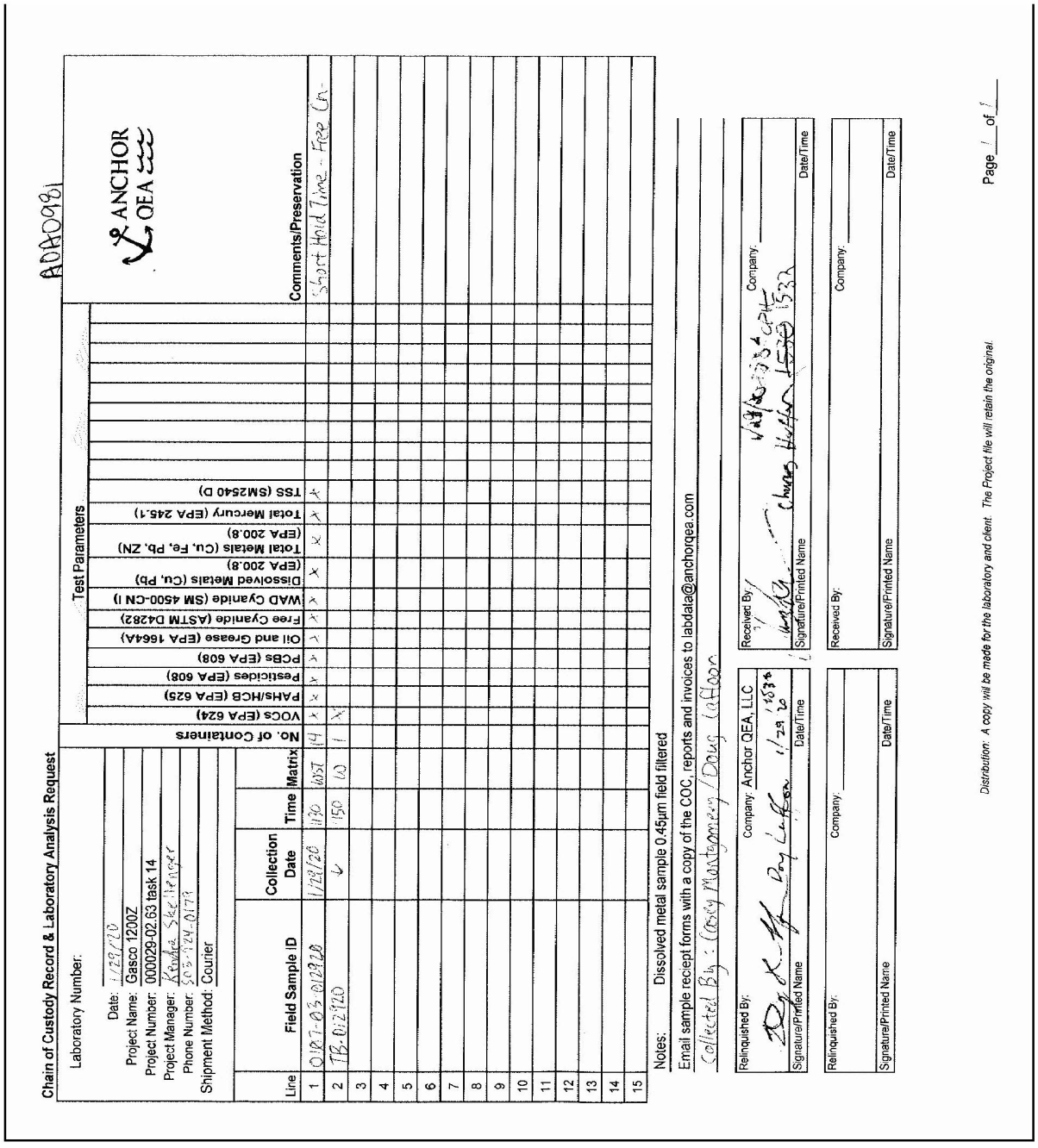
| **Portland, OR 97219** | Project Manager: **Cindy Fields** | **A0A0981 - 03 06 20 1200** |



Chain of Custody Record & Laboratory Analysis Request

A0A0981

ANCHOR QEA

Laboratory Number:

Date: 1/27/20
Project Name: Gasco 1200Z
Project Number: 000029-02.63 task 14
Project Manager: Kinsie Shellenger
Phone Number: 503-924-8171
Shipment Method: Courier

| Line | Field Sample ID | Collection Date | Time | Matrix | No. of Containers | VOCs (EPA 624) | PAHs/HCB (EPA 625) | Pesticides (EPA 608) | PCBs (EPA 608) | Oil and Grease (EPA 1664A) | Free Cyanide (ASTM D4282) | WAD Cyanide (SM 4500-CN I) | Dissolved Metals (Cu, Pb) (EPA 200.8) | Total Metals (Cu, Fe, Pb, ZN) (EPA 200.8) | Total Mercury (EPA 245.1) | TSS (SM2540 D) | Comments/Preservation |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | OUR1-03-012320 | 1/23/20 | 1130 | WST | 14 | X | | | | | | | | X | X | X | Short Hold Time - Free Cn- |
| 2 | TB-012320 | ↓ | 1500 | W | 1 | X | | | | | | | | | | | |
| 3 | | | | | | | | | | | | | | | | | |
| 4 | | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | |
| 6 | | | | | | | | | | | | | | | | | |
| 7 | | | | | | | | | | | | | | | | | |
| 8 | | | | | | | | | | | | | | | | | |
| 9 | | | | | | | | | | | | | | | | | |
| 10 | | | | | | | | | | | | | | | | | |
| 11 | | | | | | | | | | | | | | | | | |
| 12 | | | | | | | | | | | | | | | | | |
| 13 | | | | | | | | | | | | | | | | | |
| 14 | | | | | | | | | | | | | | | | | |
| 15 | | | | | | | | | | | | | | | | | |

Notes: Dissolved metal sample 0.45µm field filtered

Email sample reciept forms with a copy of the COC, reports and invoices to labdata@anchorqea.com

Collected By: Cindy Montgomery / Doug Lufkin

Relinquished By: Company: Anchor QEA, LLC
Signature/Printed Name: Doug Lufkin Date/Time: 1/29/20 1030

Received By: Company:
Signature/Printed Name: Date/Time: 1532

Relinquished By: Company:
Signature/Printed Name: Date/Time:

Received By: Company:
Signature/Printed Name: Date/Time:

Distribution: A copy will be made for the laboratory and client. The Project file will retain the original.

Page 1 of 1

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NWN-PCI0781297

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| **Portland, OR 97219** | Project Manager: **Cindy Fields** | **A0A0981 - 03 06 20 1200** |

## APEX LABS COOLER RECEIPT FORM

**Client:** Anchor Element WO#: A0A0981

**Project/Project #:** Gasco 1200Z 000029-02.63 task 14

**Delivery Info:**

Date/time received: 1/28/20 @ 1532 By: aPH

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

**Cooler Inspection** Date/time inspected: 1/29/20 @ 1706 By: GZH

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

Signed/dated by client? Yes X No ___

Signed/dated by Apex? Yes X No ___

| | Cooler #1 | Cooler #2 | Cooler #3 | Cooler #4 | Cooler #5 | Cooler #6 | Cooler #7 |
|---|---|---|---|---|---|---|---|
| Temperature (°C) | 2.1 | | | | | | |
| Received on ice? (Y/N) | Y | | | | | | |
| Temp. blanks? (Y/N) | Y | | | | | | |
| Ice type: (Gel/Real/Other) | Real | | | | | | |
| Condition: | Good | | | | | | |

Cooler out of temp? (Y/N) Possible reason why: ___

If some coolers are in temp and some out, were green dots applied to out of temperature samples? Yes/No/NA

Out of temperature samples form initiated? Yes/No/NA

**Samples Inspection:** Date/time inspected: 1/29/20 @ 17:11 By: TMT

All samples intact? Yes ___ No ___ Comments: ___

Bottle labels/COCs agree? Yes ___ No ___ Comments: ___

COC/container discrepancies form initiated? Yes ___ No ___ NA X

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

Do VOA vials have visible headspace? Yes ___ No ___ NA X

Comments ___

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

Comments: ___

Additional information: SUBsampled TMT witness JS

Labeled by: TMT Witness: JN Cooler Inspected by: TMT See Project Contact Form: Y

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# FIELD SAMPLING DATA SHEET

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

| | | | |
|---|---|---|---|
| **PROJECT NAME:** | 1200Z Stormwater Monitoring 000029-02.58 | **Location ID:** | Outfall 107 |
| **SITE ADDRESS:** | 7900 NW St Helens Rd, Portland, OR | **BLIND ID:** | O107-03-012920 |

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

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **WIND FROM:** | N | NE | E | SE | S | SW | W | NW | LIGHT | MEDIUM | HEAVY |
| **WEATHER:** | SUNNY | | PRTLY CLDY | | CLOUDY | | RAIN | | No Wind | **TEMPERATURE:** | 49 °F |

## YSI Calibration

| | | | |
|---|---|---|---|
| **Date:** | 1-29-20 | | |
| **Probe S/N:** | 13E100075 | | |
| **Calibration Solution** | **Initial** | **Final** | **Temperature** |
| **pH 4.01** | 4.05 | 4.00 | 17.9 |
| **pH 7.0** | 7.09 | 7.04 | 17.6 |

## Water Quality Data

| | |
|---|---|
| **Sampling Method:** | Grab |
| **Time (24 hour):** | 1125 |
| **pH (SU):** | 6.02 |

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

## STORMWATER SAMPLING

**Date:** 11-29-20 **Time:** 1130 Method

| Bottle Type | | | # | Volume | Preservative [circle] | Ice | Filter | pH | [√ if used] √ |
|---|---|---|---|---|---|---|---|---|---|
| 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 | | | 1 | 250ml | $HNO_3$ | YES | NO | --- | ✓ |
| Red Poly-dissolved** | | | 1 | 250ml | $HNO_3$ | YES | YES | --- | ✓ |
| White Poly** | | | 1 | 250ml | None | YES | NO | --- | ✓ |
| Amber Glass* | | | 2 | 1L | HCl | YES | NO | --- | ✓ |
| Total Bottles (include duplicate count): | | | 14 | | **VOA Trip Blank** (circle if collected) | | | | |

| 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 = 9.72

**SAMPLER:** Casey Montgomery / Doug Laffoon (PRINTED NAME) Casey Montgomery / (SIGNATURE)

NWN-PCI0781299