

July 3, 2020

Rob Olsen, REHS
Tacoma - Pierce County Health Department
Environmental Health Specialist
3629 South D Street
Tacoma, WA 98418-6813

Re: Birds Eye Foods Boiler Room Site
Summary Report for 2020 Q1 Semi-Annual Groundwater Monitoring Event

Dear Rob:

Pacific Groundwater Group (PGG) is pleased to present this letter report on behalf of our client, Conagra Brands, to summarize semi-annual groundwater monitoring performed in the first quarter 2020 (2020 Q1) at the former Birds Eye Foods facility located at 3303 South 35th Street, Tacoma, Washington. Petroleum-related contamination in soil has been identified in a portion of the facility, referred to as the “Boiler Room Site,” which was the subject of a 2011 Remedial Investigation/Feasibility Study (2011 RI/FS) (PGG 2011).

Tacoma – Pierce County Health Department (TPCHD) regulates the Boiler Room Site as an open Underground Storage Tank (UST) Site. Due to the presence of contaminated soil below the water table at the Boiler Room Site, TPCHD requires ongoing semi-annual groundwater monitoring to assess the efficacy of remedial actions and to monitor for potential contaminant migration (Marek, undated; received June 13, 2013). The semi-annual monitoring events shall be performed in spring and fall and shall involve sampling from two (2) shallow and deep well pairs generally located upgradient and downgradient of contaminated soil (Marek, undated; received June 13, 2013). In the absence of evidence of contaminant migration, TPCHD will not require remedial action other than the preferred *Soil Containment and Natural Source Zone Depletion* remedy identified in the 2011 RI/FS (Marek, undated; received June 13, 2013).

The semi-annual monitoring program required by TPCHD is in addition to, and does not alter, the long-term groundwater monitoring program (PGG 2012) required by the *Soil Containment and Natural Source Zone Depletion* remedy that was authorized by the Washington State Department of Ecology (Ecology) and incorporated into the Environmental Restrictive Covenant and No Further Action (Ecology 2013). The long-term groundwater monitoring events are performed every 18 months. The most recent long-term monitoring

event was performed in March 2019 (2019 Q1) and the next event will be September 2020 (2020 Q3)¹.

Analytical results for groundwater samples collected in 2020 Q1 indicate that the preferred remedial alternative identified in the 2011 RI/FS is effective; the petroleum contamination in soil is not resulting in a dissolved plume with concentrations of site contaminants of concern exceeding the Model Toxics Control Act (MTCA) Method A cleanup levels.

This work was performed, and this report prepared, in accordance with hydrogeologic practices generally accepted at this time and in this area for the exclusive use of the former Birds Eye Foods facility, for specific application to the project site. No other warranty, express or implied, is made.

2020 Q1 SEMI-ANNUAL GROUNDWATER SAMPLING SUMMARY

The 2020 Q1 groundwater sampling event was performed in compliance with TPCHD requirements (Marek, undated; received June 13, 2013) and the Semi-Annual Groundwater Monitoring Plan (PGG 2013). Groundwater samples were collected from the Boiler Room Site semi-annual well network on March 20, 2020 by representatives of PGG. The semi-annual monitoring well network is presented in Figure 1 and construction details are summarized in Table 1.

The monitoring wells were purged and sampled using new, disposable tubing and peristaltic pumps. Low-flow purging and sampling techniques were used to minimize turbidity in the groundwater samples. During purging, field meters were used to monitor pH, specific conductance, temperature, and turbidity. Samples were collected when these field parameters had stabilized or after a minimum of three casing volumes had been purged. Purge water was drummed onsite prior to anticipated disposal offsite by Marine Vacuum Services, Inc. of Seattle, WA.

CHEMICALS OF CONCERN AND SITE CLEANUP LEVELS

Groundwater samples were received by Analytical Resources, Inc. (ARI), a Washington State certified laboratory, on March 20, 2020. Samples were stored and delivered in ice chests following standard chain-of-custody procedures.

Groundwater samples were analyzed according to Ecology and/or U.S. Environmental Protection Agency (EPA) methods for the following parameters:

- Northwest Total Petroleum Hydrocarbons – Gasoline Range Organics (NWTPH-G), and Diesel-Range and Heavy Oil-Range Organics (NWTPH-Dx) with silica gel cleanup.

¹ The 2019 Q3 Summary Report (PGG 2019) erroneously stated that the next long-term groundwater monitoring program required by the *Soil Containment and Natural Source Zone Depletion* remedy was due in March 2020 (2020 Q1) instead of September 2020 Q3.

- BTEX Compounds – Benzene, Toluene, Ethylbenzene, and Xylenes (EPA Method 8260).
- PAHs – Polynuclear Aromatic Hydrocarbons (EPA Method 8270D with selected ion monitoring modification to achieve required reporting limits).

As described in the 2011 RI/FS (PGG 2011) and Semi-Annual Groundwater Monitoring Plan (PGG 2013), standard MTCA (Ecology 2007) Method A Unrestricted Land Use cleanup levels are applicable to the Boiler Room Site to evaluate the relative chemical effects from soil contamination at the Site on groundwater quality. MTCA Method A cleanup levels meet the criteria of WAC 173-340-704(1) because there are few hazardous substances at the Site and numerical Method A standards have been established. Groundwater cleanup levels presented in Table 2 are consistent with the 2011 RI/FS.

ANALYTICAL RESULTS

The 2020 Q1 groundwater monitoring analytical results are summarized in Table 2 and the analytical lab report is presented in Appendix A. Site contaminants of concern were not detected in the groundwater samples. The analytical reporting limits were less than corresponding Site cleanup levels.

The 2020 Q1 groundwater analytical results indicate that the preferred remedial alternative identified in the 2011 RI/FS is effective; the petroleum contamination in soil is not resulting in a dissolved plume with concentrations exceeding MTCA Method A cleanup levels.

Quality assurance/quality control (QA/QC) data associated with the Boiler Room Site 2020 Q1 groundwater samples were reviewed by PGG. All requested analyses were performed, and the QA/QC assessments indicated acceptable results with the following notations:

- Laboratory Control Samples and Laboratory Control Sample Duplicates (LCS/LCSD) are types of internal laboratory QA/QC samples. They are analyzed to assess the laboratory performance to successfully recover target analytes from a purified sample material, like deionized water. Recovering the target analytes in the LCS assesses whether the analytical procedure is in control and evaluates the lab's capability to report unbiased measurements. The LCSD is a replicate of the LCS and monitors the accuracy and precision of the analytical process on a purified material. Multiple PAH compounds were recovered below control limits from the LCS and two of those same compounds were recovered below control limits from the LCSD. Since PAHs were not detected in the 2020 Q1 groundwater samples and only two compounds were out of control low in both the LCS and LCSD (Bottom 2020) no corrective actions were required, and the data are considered acceptable for purposes of the monitoring program without qualification.
- Matrix Spikes (MS) and Matrix Spike Duplicates (MSD) are similar to LCS/LCSD except that instead of adding known spikes of the target analytes to *purified media*, they are added by the lab to *field samples*. MS are analyzed to assess the effects of interferences cause by the specific sample matrix. Matrix Spike Duplicates (MSDs)

are replicates of the MS to check for precision and bias of a method for a specific sample matrix. Multiple PAH compounds were recovered below laboratory control limits from the MS and MSD. Since MS/MSD recovery limits are advisory only and PAHs were not detected in the 2020 Q1 samples, no corrective actions were required, and the data are considered acceptable for purposes of the monitoring program without qualification.

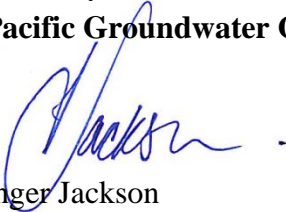
Field QA/QC included a blind field duplicate labeled MW-22S that was collected at well MW-12S and analyzed for the semi-annual sampling analytical suite to evaluate analytical precision. No Site chemicals of concern were detected in the 2020 Q1 MW-12S sample or the field duplicate MW-22S.

CLOSING

We hope this data contributes to your understanding of the Site and groundwater monitoring data. Please contact Inger Jackson at PGG with questions.

Sincerely,

Pacific Groundwater Group



Inger Jackson
Senior Hydrogeologist

2020Q1_BEFSummaryReport_Final

Cc: René Rimelspach, Conagra Brands

Panjini Balaraju, Washington State Department of Ecology Southwest Regional Office

Attachments: Table 1. Semi-Annual Monitoring Well Network Construction Details, Birds Eye Boiler Room Site

Table 2. Summary of Groundwater Quality Data, Birds Eye Foods, TPCHD Monitoring Event, 2020 Q1

Figure 1. Boiler Room Site Semi-Annual Monitoring Well Network

Appendix A. ARI Lab Report 20C0276

REFERENCES

- Bottem, K. 2020. Email Re: Final report, invoice and EDD 20C0276. Email from Kelly Bottem, ARI, to Inger Jackson, PGG. May 11, 2020.
- Marek, undated. Birds Eye Foods – UST Site Tacoma, WA. Letter from Mr. Steve Marek, Director Environmental Health Division Tacoma – Pierce County Health Department to Mr. Scott Fehseke, Pinnacle Foods, LLC. Digital version of letter received by Pinnacle Foods, LLC via email on June 13, 2013.
- Pacific Groundwater Group. 2011. Birds Eye Foods Tacoma, WA 2011 Remedial Investigation/Feasibility Study. Consultant's report prepared for Pinnacle Foods Group, LLC. December 16, 2011.
- Pacific Groundwater Group. 2012. Birds Eye Foods, Tacoma Boiler Room Site Long-Term Groundwater Monitoring Plan VCP Site Number SW1187. Consultant's report prepared for Pinnacle Foods Group, LLC. October 23, 2012.
- Pacific Groundwater Group. 2013. Birds Eye Foods UST Site Proposed Semi-Annual Groundwater Monitoring Plan. Consultant's report prepared for Pinnacle Foods Group, LLC. March 17, 2013.
- Pacific Groundwater Group. 2019. Birds Eye Foods Boiler Room Site Summary Report for 2019 Q3 Semi-Annual Groundwater Monitoring Event. Consultant's report prepared for Conagra Brands. December 18, 2019.
- Washington State Department of Ecology. 2007. Model Toxics Control Act Statute and Regulation. WAC 173-340. Publication No. 94-06. Revised November 2007.
- Washington State Department of Ecology. 2013. Re: No Further Action at the following Site: Birds Eye Foods 3303 S 35th Street, Tacoma WA 98409-4701 Facility/Site No. 1328, Cleanup Site ID No.: 5012, VCP Project No.: SW1187. Letter from T. Middleton, Department of Ecology SWRO Toxics Cleanup Program to S. Fehseke, Pinnacle Foods.

Table 1. Semi-Annual Monitoring Well Network Construction Details, Birds Eye Boiler Room Site

Units, Datum*		MW-9S	MW-9D	MW-12S	MW-12D
Unique Well ID (UWID)		Not available	Not available	BHL 104	BHL 103
Location Information					
Township/Range-Section		21N/R3E-07	21N/R3E-07	21N/R3E-07	21N/R3E-07
Northing	feet, NAD 83/91 WA South	697261.9	697257.9	697590.9	697585.0
Easting	feet, NAD 83/91 WA South	1148195.0	1148194.9	1148259.2	1148259.1
Ground Surface Elevation	feet, NAVD 88	247.67	247.64	248.24	248.19
Measuring Point Elevation	feet, NAVD 88	246.99	247.14	247.86	247.90
Construction Information					
Date Completed		10/22/1991	8/24/1992	4/23/2012	4/23/2012
Diameter	inches	2	2	2	2
Depth Drilled	feet bgs	37	82	35	75
Top of Screen	feet bgs	22	77	20	63
Bottom of Screen	feet bgs	37	82	35	73
Depth Completed	feet bgs	37	82	35	73
Monument Type		← Sherwood High Traffic Flush Monument →			

* Vertical and Horizontal Datums use the Washington State Reference Network

Table 2. Summary of Groundwater Quality Data, Birds Eye Foods, TPCHD Monitoring Event, 2020 Q1

CONSTITUENT	UNITS	Site Cleanup Levels*	MW-9S	MW-9D	MW-12S	MW-12D
Field Parameters						
Depth to Water	feet		16.71	17.18	17.79	17.94
pH, Field	std. units		6.63	6.81	7.02	7.32
Specific Conductance, Field	umhos/cm		328.2	388.8	777.6	631.5
Temperature (C)	C		14.5	14.9	14.8	15.1
Turbidity, Field	NTU		1.7	1.17	13.7	5.25
NWTPH Analytes						
Diesel Range Organics	mg/L	0.5	0.1 U	0.1 U	0.1 U	0.1 U
Gasoline Range Organics	mg/L	0.8	0.1 U	0.1 U	0.1 U	0.1 U
Oil Range Organics	mg/L	0.5	0.2 U	0.2 U	0.2 U	0.2 U
BTEX (EPA 8260)						
Benzene	ug/L	5	0.2 U	0.2 U	0.2 U	0.2 U
Ethylbenzene	ug/L	700	0.2 U	0.2 U	0.2 U	0.2 U
Toluene	ug/L	1000	0.2 U	0.2 U	0.2 U	0.2 U
o-Xylene	ug/L		0.2 U	0.2 U	0.2 U	0.2 U
Xylene Isomers, m+p	ug/L		0.4 U	0.4 U	0.4 U	0.4 U
Carcinogenic PAHs						
Benzo(a)anthracene	ug/L		0.1 U	0.1 U	0.1 U	0.1 U
Benzo(a)pyrene	ug/L	0.1	0.1 U	0.1 U	0.1 U	0.1 U
Chrysene	ug/L		0.1 U	0.1 U	0.1 U	0.1 U
Dibenzo(a,h)anthracene	ug/L		0.1 U	0.1 U	0.1 U	0.1 U
Indeno(1,2,3-cd)pyrene	ug/L		0.1 U	0.1 U	0.1 U	0.1 U
Non-Carcinogenic PAHs						
Acenaphthene	ug/L		0.1 U	0.1 U	0.1 U	0.1 U
Acenaphthylene	ug/L		0.1 U	0.1 U	0.1 U	0.1 U
Anthracene	ug/L		0.1 U	0.1 U	0.1 U	0.1 U
Benzo(g,h,i)perylene	ug/L		0.1 U	0.1 U	0.1 U	0.1 U
Fluoranthene	ug/L		0.1 U	0.1 U	0.1 U	0.1 U
Fluorene	ug/L		0.1 U	0.1 U	0.1 U	0.1 U
Naphthalene	ug/L	160	0.1 U	0.1 U	0.1 U	0.1 U
Phenanthrene	ug/L		0.1 U	0.1 U	0.1 U	0.1 U
Pyrene	ug/L		0.1 U	0.1 U	0.1 U	0.1 U

*Cleanup Levels based on MTCA Method A, consistent with Birds Eye Foods Tacoma, WA 2011 Remedial Investigation/Feasibility Study

MTCA Cleanup Levels: Gasoline Range Organics 0.8 mg/L if benzene present, 1.0 mg/L if benzene not present; Xylenes 1000 ug/L (individual cleanup levels for m+p xylenes and o-xylenes not established); Benzo(a)pyrene 0.1 ug/L, this represents the total concentration that all carcinogenic PAHs must meet using the toxicity equivalency method in WAC 173-340-708(8).

NWTPH-Dx analysis with silica gel cleanup, consistent with historical site analyses

Lower case qualifiers assigned by PGG QA/QC data reviewer.

Upper case qualifiers assigned by lab.

Bold text indicates constituent detected at or above method reporting limit.

U - Compound not detected

J - Concentration estimated

B - Compound detected in blank



- Semi-Annual Monitoring Well Network
- ▨ 2011 Delineated Petroleum Contaminated Soil Areas

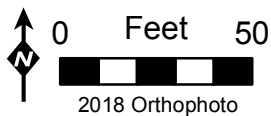


Figure 1
Semi-Annual Monitoring
Well Network



Analytical Resources, Incorporated
Analytical Chemists and Consultants

13 April 2020

Inger Jackson
Pacific Groundwater Group
2377 Eastlake Ave. E. Suite 200
Seattle, WA 98102

RE: Birds Eye

Please find enclosed sample receipt documentation and analytical results for samples from the project referenced above.

Sample analyses were performed according to ARI's Quality Assurance Plan and any provided project specific Quality Assurance Plan. Each analytical section of this report has been approved and reviewed by an analytical peer, the appropriate Laboratory Supervisor or qualified substitute, and a technical reviewer.

Should you have any questions or problems, please feel free to contact us at your convenience.

Associated Work Order(s)
20C0276

Associated SDG ID(s)
N/A

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed in the enclose Narrative. ARI, an accredited laboratory, certifies that the report results for which ARI is accredited meets all the requirements of the accrediting body. A list of certified analyses, accreditations, and expiration dates is included in this report.

Release of the data contained in this hardcopy data package has been authorized by the Laboratory Manager or his/her designee, as verified by the following signature.

Analytical Resources, Inc.

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.



Chain of Custody Record & Laboratory Analysis Request

ARI Assigned Number: 2060076	Turn-around Requested: Standard	Page: 1 of
ARI Client Company: Pacific Groundwater Group	Phone: 206-329-0141	Date: 3/20/20
Client Contact: Inger, Jacksm		Ice Present? Yes
Client Project Name: Birds Eye		No. of Coolers: 2
Client Project #: IL1001-10	Samplers: Jacksm / N. Mehr	Cooler Temps: 9.5, 11.8



Analytical Resources, Incorporated
 Analytical Chemists and Consultants
 4611 South 134th Place, Suite 100
 Tukwila, WA 98168
 206-695-6200 206-695-6201 (fax)
 www.arilabs.com

Sample ID	Date	Time	Matrix	No. Containers	Analysis Requested			Notes/Comments			
					BTEX+G	NWTPH-Dx	SIM PAHs				
MW-12S	3/20/20	1055	GW	9	5	2	2				
MW-12D (+MS/MSD)	}	1230	}	27	15	6	6				
MW-9S		1550		9	5	2	2				
MW-9D		1600		9	5	2	2				
MW-22S		1105		9	5	2	2				
Trip Blank					6						
Comments/Special Instructions EDD in "PGG" and EIM format	Relinquished by: (Signature)	Received by: (Signature)			Relinquished by: (Signature)			Received by: (Signature)			
	Printed Name: Inger Jacksm	Printed Name: Kenny Dang			Printed Name:			Printed Name:			
	Company: Pacific Groundwater Group, ARI	Company:			Company:			Company:			
	Date & Time: 3/20/20 1800	Date & Time: 3/20/2020 1800			Date & Time:			Date & Time:			

Limits of Liability: ARI will perform all requested services in accordance with appropriate methodology following ARI Standard Operating Procedures and the ARI Quality Assurance Program. This program meets standards for the industry. The total liability of ARI, its officers, agents, employees, or successors, arising out of or in connection with the requested services, shall not exceed the Invoiced amount for said services. The acceptance by the client of a proposal for services by ARI release ARI from any liability in excess thereof, notwithstanding any provision to the contrary in any contract, purchase order or co-signed agreement between ARI and the Client.

Sample Retention Policy: All samples submitted to ARI will be appropriately discarded no sooner than 90 days after receipt or 60 days after submission of hardcopy data, whichever is longer, unless alternate retention schedules have been established by work-order or contract.



Pacific Groundwater Group
2377 Eastlake Ave. E. Suite 200
Seattle WA, 98102

Project: Birds Eye
Project Number: Birds Eye
Project Manager: Inger Jackson

Reported:
13-Apr-2020 08:50

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
MW-12S	20C0276-01	Water	20-Mar-2020 10:55	20-Mar-2020 18:00
MW-12D	20C0276-02	Water	20-Mar-2020 12:30	20-Mar-2020 18:00
MW-9S	20C0276-03	Water	20-Mar-2020 15:50	20-Mar-2020 18:00
MW-9D	20C0276-04	Water	20-Mar-2020 16:00	20-Mar-2020 18:00
MW-22S	20C0276-05	Water	20-Mar-2020 16:00	20-Mar-2020 18:00
Trip Blank	20C0276-06	Water	20-Mar-2020 10:55	20-Mar-2020 18:00



Pacific Groundwater Group
2377 Eastlake Ave. E. Suite 200
Seattle WA, 98102

Project: Birds Eye
Project Number: Birds Eye
Project Manager: Inger Jackson

Reported:
13-Apr-2020 08:50

Work Order Case Narrative

Gasoline by NWTPH-g (GC/MS)

The sample(s) were analyzed within the recommended holding times.

Initial and continuing calibrations were within method requirements.

Internal standard areas were within limits.

The surrogate percent recoveries were within control limits.

The method blank(s) were clean at the reporting limits.

The LCS/LCSD percent recoveries and RPD were within control limits.

The matrix spike/matrix spike duplicate recoveries and RPD were within limits.

Volatiles - EPA Method SW8260C

The sample(s) were analyzed within the recommended holding times.

Initial and continuing calibrations were within method requirements.

Internal standard areas were within limits.

The surrogate percent recoveries were within control limits.

The method blank(s) were clean at the reporting limits.

The LCS/LCSD percent recoveries and RPD were within control limits.

The matrix spike/matrix spike duplicate recoveries and RPD were within limits.

Polynuclear Aromatic Hydrocarbons (PAH) - EPA Method SW8270D-SIM

The sample(s) were extracted and analyzed within the recommended holding times.

Initial and continuing calibrations were within method requirements with the exception of all associated "Q" flagged analytes which are out of control high in the CCAL. All associated samples that contain analyte have been flagged with a "Q" qualifier.

Internal standard areas were within limits.



Pacific Groundwater Group
2377 Eastlake Ave. E. Suite 200
Seattle WA, 98102

Project: Birds Eye
Project Number: Birds Eye
Project Manager: Inger Jackson

Reported:
13-Apr-2020 08:50

The surrogate percent recoveries were within control limits.

The method blank(s) were clean at the reporting limits.

The LCS percent recoveries were within control limits with the exception of analytes flagged on the associated forms.

The matrix spike/matrix spike duplicate recoveries and RPD were within limits with the exception of analytes flagged on the associated forms.

Diesel/Heavy Oil Range Organics - WA-Ecology Method NW-TPHDx

The sample(s) were extracted and analyzed within the recommended holding times.

Initial and continuing calibrations were within method requirements.

The surrogate percent recoveries were within control limits.

The method blank(s) were clean at the reporting limits.

The LCS percent recoveries were within control limits.

The matrix spike/matrix spike duplicate recoveries and RPD were within limits.



WORK ORDER

20C0276

Client: Pacific Groundwater Group

Project Manager: Kelly Bottem

Project: Birds Eye

Project Number: Birds Eye

Preservation Confirmation

Container ID	Container Type	pH
20C0276-01 A	Glass NM, Amber, 500 mL	
20C0276-01 B	Glass NM, Amber, 500 mL	
20C0276-01 C	Glass NM, Amber, 500 mL	
20C0276-01 D	Glass NM, Amber, 500 mL	
20C0276-01 E	VOA Vial, Clear, 40 mL, HCL	Bubble
20C0276-01 F	VOA Vial, Clear, 40 mL, HCL	Bubble
20C0276-01 G	VOA Vial, Clear, 40 mL, HCL	Bubble
20C0276-01 H	VOA Vial, Clear, 40 mL, HCL	
20C0276-01 I	VOA Vial, Clear, 40 mL, HCL	
20C0276-02 A	Glass NM, Amber, 500 mL	
20C0276-02 AA	VOA Vial, Clear, 40 mL, HCL	
20C0276-02 B	Glass NM, Amber, 500 mL	
20C0276-02 C	Glass NM, Amber, 500 mL	
20C0276-02 D	Glass NM, Amber, 500 mL	
20C0276-02 E	Glass NM, Amber, 500 mL	
20C0276-02 F	Glass NM, Amber, 500 mL	
20C0276-02 G	Glass NM, Amber, 500 mL	
20C0276-02 H	Glass NM, Amber, 500 mL	
20C0276-02 I	Glass NM, Amber, 500 mL	
20C0276-02 J	Glass NM, Amber, 500 mL	
20C0276-02 K	Glass NM, Amber, 500 mL	
20C0276-02 L	Glass NM, Amber, 500 mL	
20C0276-02 M	VOA Vial, Clear, 40 mL, HCL	
20C0276-02 N	VOA Vial, Clear, 40 mL, HCL	
20C0276-02 O	VOA Vial, Clear, 40 mL, HCL	
20C0276-02 P	VOA Vial, Clear, 40 mL, HCL	
20C0276-02 Q	VOA Vial, Clear, 40 mL, HCL	
20C0276-02 R	VOA Vial, Clear, 40 mL, HCL	
20C0276-02 S	VOA Vial, Clear, 40 mL, HCL	
20C0276-02 T	VOA Vial, Clear, 40 mL, HCL	
20C0276-02 U	VOA Vial, Clear, 40 mL, HCL	
20C0276-02 V	VOA Vial, Clear, 40 mL, HCL	
20C0276-02 W	VOA Vial, Clear, 40 mL, HCL	
20C0276-02 X	VOA Vial, Clear, 40 mL, HCL	
20C0276-02 Y	VOA Vial, Clear, 40 mL, HCL	



WORK ORDER

20C0276

Client: Pacific Groundwater Group

Project Manager: Kelly Bottem

Project: Birds Eye

Project Number: Birds Eye

20C0276-02 Z	VOA Vial, Clear, 40 mL, HCL
20C0276-03 A	Glass NM, Amber, 500 mL
20C0276-03 B	Glass NM, Amber, 500 mL
20C0276-03 C	Glass NM, Amber, 500 mL
20C0276-03 D	Glass NM, Amber, 500 mL
20C0276-03 E	VOA Vial, Clear, 40 mL, HCL
20C0276-03 F	VOA Vial, Clear, 40 mL, HCL
20C0276-03 G	VOA Vial, Clear, 40 mL, HCL
20C0276-03 H	VOA Vial, Clear, 40 mL, HCL
20C0276-03 I	VOA Vial, Clear, 40 mL, HCL
20C0276-04 A	Glass NM, Amber, 500 mL
20C0276-04 B	Glass NM, Amber, 500 mL
20C0276-04 C	Glass NM, Amber, 500 mL
20C0276-04 D	Glass NM, Amber, 500 mL
20C0276-04 E	VOA Vial, Clear, 40 mL, HCL
20C0276-04 F	VOA Vial, Clear, 40 mL, HCL
20C0276-04 G	VOA Vial, Clear, 40 mL, HCL
20C0276-04 H	VOA Vial, Clear, 40 mL, HCL
20C0276-04 I	VOA Vial, Clear, 40 mL, HCL
20C0276-05 A	Glass NM, Amber, 500 mL
20C0276-05 B	Glass NM, Amber, 500 mL
20C0276-05 C	Glass NM, Amber, 500 mL
20C0276-05 D	Glass NM, Amber, 500 mL
20C0276-05 E	VOA Vial, Clear, 40 mL, HCL
20C0276-05 F	VOA Vial, Clear, 40 mL, HCL
20C0276-05 G	VOA Vial, Clear, 40 mL, HCL
20C0276-05 H	VOA Vial, Clear, 40 mL, HCL
20C0276-05 I	VOA Vial, Clear, 40 mL, HCL
20C0276-06 A	VOA Vial, Clear, 40 mL, HCL
20C0276-06 B	VOA Vial, Clear, 40 mL, HCL
20C0276-06 C	VOA Vial, Clear, 40 mL, HCL
20C0276-06 D	VOA Vial, Clear, 40 mL, HCL
20C0276-06 E	VOA Vial, Clear, 40 mL, HCL
20C0276-06 F	VOA Vial, Clear, 40 mL, HCL

Bubble

Bubble



Preservation Confirmed By



Date



Analytical Resources, Incorporated
Analytical Chemists and Consultants

Cooler Receipt Form

ARI Client: PGG

Project Name: Bird Eye

COC No(s): _____ (NA)

Delivered by: Fed-Ex UPS Courier Hand Delivered Other: _____

Assigned ARI Job No: 2000276

Tracking No: _____ (NA)

Preliminary Examination Phase:

Were intact, properly signed and dated custody seals attached to the outside of the cooler? YES (NO)

Were custody papers included with the cooler? YES NO

Were custody papers properly filled out (ink, signed, etc.) YES NO

Temperature of Cooler(s) (°C) (recommended 2.0-6.0 °C for chemistry)

Time 1800 9.5 11.8

If cooler temperature is out of compliance fill out form 00070F

Temp Gun ID#: DOO 5206

Cooler Accepted by: KD Date: 3/20/20 Time: 1800

Complete custody forms and attach all shipping documents

Log-In Phase:

Was a temperature blank included in the cooler? YES (NO)

What kind of packing material was used? ... Bubble Wrap Wet Ice Gel Packs Baggies Foam Block Paper Other: _____

Was sufficient ice used (if appropriate)? NA YES (NO)

How were bottles sealed in plastic bags? Individually Grouped (Not)

Did all bottles arrive in good condition (unbroken)? YES NO

Were all bottle labels complete and legible? YES NO

Did the number of containers listed on COC match with the number of containers received? YES NO

Did all bottle labels and tags agree with custody papers? YES NO

Were all bottles used correct for the requested analyses? YES NO

Do any of the analyses (bottles) require preservation? (attach preservation sheet, excluding VOCs) ... (NA) YES NO

Were all VOC vials free of air bubbles? NA YES (NO)

Was sufficient amount of sample sent in each bottle? YES NO

Date VOC Trip Blank was made at ARI: (NA)

Were the sample(s) split by ARI? (NA) YES Date/Time: _____ Equipment: _____ Split by: _____

Samples Logged by: JS Date: 03/21/2020 Time: 1219 Labels checked by: JS

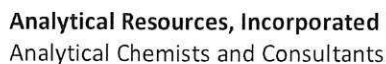
**** Notify Project Manager of discrepancies or concerns ****

Sample ID on Bottle	Sample ID on COC	Sample ID on Bottle	Sample ID on COC

Additional Notes, Discrepancies, & Resolutions:

vials w/ air bubbles marked on pres. sheet,
lab to determine size

By: JS Date: 03/21/2020



Cooler Temperature Compliance Form

Version 000
3/3/09



Pacific Groundwater Group
2377 Eastlake Ave. E. Suite 200
Seattle WA, 98102

Project: Birds Eye
Project Number: Birds Eye
Project Manager: Inger Jackson

Reported:
13-Apr-2020 08:50

MW-12S
20C0276-01 (Water)

Volatile Organic Compounds

Method: EPA 8260C

Sampled: 03/20/2020 10:55

Instrument: NT2 Analyst: LH

Analyzed: 03/26/2020 15:14

Sample Preparation:

Preparation Method: EPA 5030 (Purge and Trap)

Extract ID: 20C0276-01 H

Preparation Batch: BIC0561

Sample Size: 10 mL

Prepared: 03/26/2020

Final Volume: 10 mL

Analyte	CAS Number	Dilution	Reporting Limit	Result	Units	Notes
Benzene	71-43-2	1	0.20	ND	ug/L	U
Toluene	108-88-3	1	0.20	ND	ug/L	U
Ethylbenzene	100-41-4	1	0.20	ND	ug/L	U
m,p-Xylene	179601-23-1	1	0.40	ND	ug/L	U
o-Xylene	95-47-6	1	0.20	ND	ug/L	U
Surrogate: Toluene-d8			80-120 %	95.0	%	
Surrogate: 4-Bromofluorobenzene			80-120 %	89.3	%	
Surrogate: 1,2-Dichlorobenzene-d4			80-120 %	105	%	



Pacific Groundwater Group
2377 Eastlake Ave. E. Suite 200
Seattle WA, 98102

Project: Birds Eye
Project Number: Birds Eye
Project Manager: Inger Jackson

Reported:
13-Apr-2020 08:50

MW-12S
20C0276-01 (Water)

Volatile Organic Compounds

Method: NWTPHg	Sampled: 03/20/2020 10:55
Instrument: NT2 Analyst: LH	Analyzed: 03/26/2020 15:14
Sample Preparation:	Extract ID: 20C0276-01 H
Preparation Method: EPA 5030 (Purge and Trap)	
Preparation Batch: BIC0561	Sample Size: 10 mL
Prepared: 03/26/2020	Final Volume: 10 mL

Analyte	CAS Number	Dilution	Reporting Limit	Result	Units	Notes
Gasoline Range Organics (Tol-Nap)	GRO	1	100	ND	ug/L	U
Surrogate: Toluene-d8			80-120 %	95.0	%	
Surrogate: 4-Bromofluorobenzene			80-120 %	86.9	%	



Pacific Groundwater Group
2377 Eastlake Ave. E. Suite 200
Seattle WA, 98102

Project: Birds Eye
Project Number: Birds Eye
Project Manager: Inger Jackson

Reported:
13-Apr-2020 08:50

MW-12S
20C0276-01 (Water)

Semivolatile Organic Compounds - SIM

Method: EPA 8270D-SIM
Instrument: NT8 Analyst: JZ

Sampled: 03/20/2020 10:55

Analyzed: 04/01/2020 14:00

Sample Preparation: Preparation Method: EPA 3520C (Liq Liq)
Preparation Batch: BIC0579 Sample Size: 500 mL
Prepared: 03/26/2020 Final Volume: 0.5 mL

Extract ID: 20C0276-01 B 01

Analyte	CAS Number	Dilution	Reporting Limit	Result	Units	Notes
Naphthalene	91-20-3	1	0.10	ND	ug/L	U
Acenaphthylene	208-96-8	1	0.10	ND	ug/L	U
Acenaphthene	83-32-9	1	0.10	ND	ug/L	U
Fluorene	86-73-7	1	0.10	ND	ug/L	U
Phenanthrene	85-01-8	1	0.10	ND	ug/L	U
Anthracene	120-12-7	1	0.10	ND	ug/L	U
Fluoranthene	206-44-0	1	0.10	ND	ug/L	U
Pyrene	129-00-0	1	0.10	ND	ug/L	U
Benzo(a)anthracene	56-55-3	1	0.10	ND	ug/L	U
Chrysene	218-01-9	1	0.10	ND	ug/L	U
Benzo(a)anthracene, Total		1	0.20	ND	ug/L	U
Benzo(a)pyrene	50-32-8	1	0.10	ND	ug/L	U
Indeno(1,2,3-cd)pyrene	193-39-5	1	0.10	ND	ug/L	U
Dibenzo(a,h)anthracene	53-70-3	1	0.10	ND	ug/L	U
Benzo(g,h,i)perylene	191-24-2	1	0.10	ND	ug/L	U
Surrogate: 2-Methylnaphthalene-d10			31-120 %	40.1	%	
Surrogate: Dibenzo[a,h]anthracene-d14			10-125 %	86.9	%	



Pacific Groundwater Group
2377 Eastlake Ave. E. Suite 200
Seattle WA, 98102

Project: Birds Eye
Project Number: Birds Eye
Project Manager: Inger Jackson

Reported:
13-Apr-2020 08:50

MW-12S
20C0276-01RE1 (Water)

Petroleum Hydrocarbons

Method: NWTPH-Dx
Instrument: FID4 Analyst: CTO

Sampled: 03/20/2020 10:55

Analyzed: 04/03/2020 10:53

Sample Preparation: Preparation Method: EPA 3510C SepF
Preparation Batch: BIC0570
Prepared: 03/27/2020

Sample Size: 500 mL
Final Volume: 1 mL

Extract ID: 20C0276-01RE1 A 01

Sample Cleanup: Cleanup Method: Silica Gel
Cleanup Batch: CID0007
Cleaned: 03-Apr-2020

Initial Volume: 1 mL
Final Volume: 1 mL

Extract ID: 20C0276-01RE1 A 01

Sample Cleanup: Cleanup Method: Sulfuric Acid
Cleanup Batch: CID0006
Cleaned: 03-Apr-2020

Initial Volume: 1 mL
Final Volume: 1 mL

Extract ID: 20C0276-01RE1 A 01

Analyte	CAS Number	Dilution	Reporting Limit	Result	Units	Notes
Diesel Range Organics (C12-C24)	DRO	1	0.100	ND	mg/L	U
Motor Oil Range Organics (C24-C38)	RRO	1	0.200	ND	mg/L	U
Surrogate: o-Terphenyl			50-150 %	78.1	%	



Pacific Groundwater Group
2377 Eastlake Ave. E. Suite 200
Seattle WA, 98102

Project: Birds Eye
Project Number: Birds Eye
Project Manager: Inger Jackson

Reported:
13-Apr-2020 08:50

MW-12D
20C0276-02 (Water)

Volatile Organic Compounds

Method: EPA 8260C
Instrument: NT2 Analyst: LH

Sampled: 03/20/2020 12:30

Analyzed: 03/26/2020 15:35

Sample Preparation: Preparation Method: EPA 5030 (Purge and Trap)
Preparation Batch: BIC0561 Sample Size: 10 mL
Prepared: 03/26/2020 Final Volume: 10 mL

Extract ID: 20C0276-02 V

Analyte	CAS Number	Dilution	Reporting Limit	Result	Units	Notes
Benzene	71-43-2	1	0.20	ND	ug/L	U
Toluene	108-88-3	1	0.20	ND	ug/L	U
Ethylbenzene	100-41-4	1	0.20	ND	ug/L	U
m,p-Xylene	179601-23-1	1	0.40	ND	ug/L	U
o-Xylene	95-47-6	1	0.20	ND	ug/L	U
Surrogate: Toluene-d8			80-120 %	98.4	%	
Surrogate: 4-Bromofluorobenzene			80-120 %	91.8	%	
Surrogate: 1,2-Dichlorobenzene-d4			80-120 %	102	%	



Pacific Groundwater Group
2377 Eastlake Ave. E. Suite 200
Seattle WA, 98102

Project: Birds Eye
Project Number: Birds Eye
Project Manager: Inger Jackson

Reported:
13-Apr-2020 08:50

MW-12D
20C0276-02 (Water)

Volatile Organic Compounds

Method: NWTPHg	Sampled: 03/20/2020 12:30
Instrument: NT2 Analyst: LH	Analyzed: 03/26/2020 15:35
Sample Preparation:	Extract ID: 20C0276-02 V
Preparation Method: EPA 5030 (Purge and Trap)	
Preparation Batch: BIC0561	Sample Size: 10 mL
Prepared: 03/26/2020	Final Volume: 10 mL

Analyte	CAS Number	Dilution	Reporting Limit	Result	Units	Notes
Gasoline Range Organics (Tol-Nap)	GRO	1	100	ND	ug/L	U
Surrogate: Toluene-d8			80-120 %	98.4	%	
Surrogate: 4-Bromofluorobenzene			80-120 %	91.8	%	



Pacific Groundwater Group
2377 Eastlake Ave. E. Suite 200
Seattle WA, 98102

Project: Birds Eye
Project Number: Birds Eye
Project Manager: Inger Jackson

Reported:
13-Apr-2020 08:50

MW-12D
20C0276-02 (Water)

Semivolatile Organic Compounds - SIM

Method: EPA 8270D-SIM
Instrument: NT8 Analyst: JZ

Sampled: 03/20/2020 12:30

Analyzed: 04/01/2020 14:25

Sample Preparation: Preparation Method: EPA 3520C (Liq Liq)
Preparation Batch: BIC0579 Sample Size: 500 mL
Prepared: 03/26/2020 Final Volume: 0.5 mL

Extract ID: 20C0276-02 D 01

Analyte	CAS Number	Dilution	Reporting Limit	Result	Units	Notes
Naphthalene	91-20-3	1	0.10	ND	ug/L	U
Acenaphthylene	208-96-8	1	0.10	ND	ug/L	U
Acenaphthene	83-32-9	1	0.10	ND	ug/L	U
Fluorene	86-73-7	1	0.10	ND	ug/L	U
Phenanthrene	85-01-8	1	0.10	ND	ug/L	U
Anthracene	120-12-7	1	0.10	ND	ug/L	U
Fluoranthene	206-44-0	1	0.10	ND	ug/L	U
Pyrene	129-00-0	1	0.10	ND	ug/L	U
Benzo(a)anthracene	56-55-3	1	0.10	ND	ug/L	U
Chrysene	218-01-9	1	0.10	ND	ug/L	U
Benzo(a)fluoranthene, Total		1	0.20	ND	ug/L	U
Benzo(a)pyrene	50-32-8	1	0.10	ND	ug/L	U
Indeno(1,2,3-cd)pyrene	193-39-5	1	0.10	ND	ug/L	U
Dibenzo(a,h)anthracene	53-70-3	1	0.10	ND	ug/L	U
Benzo(g,h,i)perylene	191-24-2	1	0.10	ND	ug/L	U
Surrogate: 2-Methylnaphthalene-d10			31-120 %	38.1	%	
Surrogate: Dibenzo[a,h]anthracene-d14			10-125 %	79.0	%	



Pacific Groundwater Group
2377 Eastlake Ave. E. Suite 200
Seattle WA, 98102

Project: Birds Eye
Project Number: Birds Eye
Project Manager: Inger Jackson

Reported:
13-Apr-2020 08:50

MW-12D
20C0276-02RE1 (Water)

Petroleum Hydrocarbons

Method: NWTPH-Dx
Instrument: FID4 Analyst: CTO

Sampled: 03/20/2020 12:30

Analyzed: 04/03/2020 11:13

Sample Preparation: Preparation Method: EPA 3510C SepF
Preparation Batch: BIC0570
Prepared: 03/27/2020

Sample Size: 500 mL
Final Volume: 1 mL

Extract ID: 20C0276-02RE1 A 01

Sample Cleanup: Cleanup Method: Silica Gel
Cleanup Batch: CID0007
Cleaned: 03-Apr-2020

Initial Volume: 1 mL
Final Volume: 1 mL

Extract ID: 20C0276-02RE1 A 01

Sample Cleanup: Cleanup Method: Sulfuric Acid
Cleanup Batch: CID0006
Cleaned: 03-Apr-2020

Initial Volume: 1 mL
Final Volume: 1 mL

Extract ID: 20C0276-02RE1 A 01

Analyte	CAS Number	Dilution	Reporting Limit	Result	Units	Notes
Diesel Range Organics (C12-C24)	DRO	1	0.100	ND	mg/L	U
Motor Oil Range Organics (C24-C38)	RRO	1	0.200	ND	mg/L	U
Surrogate: o-Terphenyl			50-150 %	74.2	%	



Pacific Groundwater Group
2377 Eastlake Ave. E. Suite 200
Seattle WA, 98102

Project: Birds Eye
Project Number: Birds Eye
Project Manager: Inger Jackson

Reported:
13-Apr-2020 08:50

MW-9S
20C0276-03 (Water)

Volatile Organic Compounds

Method: EPA 8260C
Instrument: NT2 Analyst: LH

Sampled: 03/20/2020 15:50

Analyzed: 03/26/2020 15:55

Sample Preparation: Preparation Method: EPA 5030 (Purge and Trap)
Preparation Batch: BIC0561 Sample Size: 10 mL
Prepared: 03/26/2020 Final Volume: 10 mL

Extract ID: 20C0276-03 E

Analyte	CAS Number	Dilution	Reporting Limit	Result	Units	Notes
Benzene	71-43-2	1	0.20	ND	ug/L	U
Toluene	108-88-3	1	0.20	ND	ug/L	U
Ethylbenzene	100-41-4	1	0.20	ND	ug/L	U
m,p-Xylene	179601-23-1	1	0.40	ND	ug/L	U
o-Xylene	95-47-6	1	0.20	ND	ug/L	U
Surrogate: Toluene-d8			80-120 %	96.3	%	
Surrogate: 4-Bromofluorobenzene			80-120 %	88.4	%	
Surrogate: 1,2-Dichlorobenzene-d4			80-120 %	100	%	



Pacific Groundwater Group
2377 Eastlake Ave. E. Suite 200
Seattle WA, 98102

Project: Birds Eye
Project Number: Birds Eye
Project Manager: Inger Jackson

Reported:
13-Apr-2020 08:50

MW-9S
20C0276-03 (Water)

Volatile Organic Compounds

Method: NWTPHg	Sampled: 03/20/2020 15:50
Instrument: NT2 Analyst: LH	Analyzed: 03/26/2020 15:55
Sample Preparation:	Extract ID: 20C0276-03 E
Preparation Method: EPA 5030 (Purge and Trap)	
Preparation Batch: BIC0561	Sample Size: 10 mL
Prepared: 03/26/2020	Final Volume: 10 mL

Analyte	CAS Number	Dilution	Reporting Limit	Result	Units	Notes
Gasoline Range Organics (Tol-Nap)	GRO	1	100	ND	ug/L	U
Surrogate: Toluene-d8			80-120 %	96.3	%	
Surrogate: 4-Bromofluorobenzene			80-120 %	88.4	%	



Pacific Groundwater Group
2377 Eastlake Ave. E. Suite 200
Seattle WA, 98102

Project: Birds Eye
Project Number: Birds Eye
Project Manager: Inger Jackson

Reported:
13-Apr-2020 08:50

MW-9S
20C0276-03 (Water)

Semivolatile Organic Compounds - SIM

Method: EPA 8270D-SIM
Instrument: NT8 Analyst: JZ

Sampled: 03/20/2020 15:50

Analyzed: 04/01/2020 15:43

Sample Preparation: Preparation Method: EPA 3520C (Liq Liq)
Preparation Batch: BIC0579 Sample Size: 500 mL
Prepared: 03/26/2020 Final Volume: 0.5 mL

Extract ID: 20C0276-03 B 01

Analyte	CAS Number	Dilution	Reporting Limit	Result	Units	Notes
Naphthalene	91-20-3	1	0.10	ND	ug/L	U
Acenaphthylene	208-96-8	1	0.10	ND	ug/L	U
Acenaphthene	83-32-9	1	0.10	ND	ug/L	U
Fluorene	86-73-7	1	0.10	ND	ug/L	U
Phenanthrene	85-01-8	1	0.10	ND	ug/L	U
Anthracene	120-12-7	1	0.10	ND	ug/L	U
Fluoranthene	206-44-0	1	0.10	ND	ug/L	U
Pyrene	129-00-0	1	0.10	ND	ug/L	U
Benzo(a)anthracene	56-55-3	1	0.10	ND	ug/L	U
Chrysene	218-01-9	1	0.10	ND	ug/L	U
Benzo(a)anthracene, Total		1	0.20	ND	ug/L	U
Benzo(a)pyrene	50-32-8	1	0.10	ND	ug/L	U
Indeno(1,2,3-cd)pyrene	193-39-5	1	0.10	ND	ug/L	U
Dibenzo(a,h)anthracene	53-70-3	1	0.10	ND	ug/L	U
Benzo(g,h,i)perylene	191-24-2	1	0.10	ND	ug/L	U
Surrogate: 2-Methylnaphthalene-d10			31-120 %	44.0	%	
Surrogate: Dibenzo[a,h]anthracene-d14			10-125 %	91.3	%	



Pacific Groundwater Group
2377 Eastlake Ave. E. Suite 200
Seattle WA, 98102

Project: Birds Eye
Project Number: Birds Eye
Project Manager: Inger Jackson

Reported:
13-Apr-2020 08:50

MW-9S
20C0276-03RE1 (Water)

Petroleum Hydrocarbons

Method: NWTPH-Dx
Instrument: FID4 Analyst: CTO

Sampled: 03/20/2020 15:50

Analyzed: 04/03/2020 12:11

Sample Preparation: Preparation Method: EPA 3510C SepF
Preparation Batch: BIC0570
Prepared: 03/27/2020

Sample Size: 500 mL
Final Volume: 1 mL

Extract ID: 20C0276-03RE1 A 01

Sample Cleanup: Cleanup Method: Silica Gel
Cleanup Batch: CID0007
Cleaned: 03-Apr-2020

Initial Volume: 1 mL
Final Volume: 1 mL

Extract ID: 20C0276-03RE1 A 01

Sample Cleanup: Cleanup Method: Sulfuric Acid
Cleanup Batch: CID0006
Cleaned: 03-Apr-2020

Initial Volume: 1 mL
Final Volume: 1 mL

Extract ID: 20C0276-03RE1 A 01

Analyte	CAS Number	Dilution	Reporting Limit	Result	Units	Notes
Diesel Range Organics (C12-C24)	DRO	1	0.100	ND	mg/L	U
Motor Oil Range Organics (C24-C38)	RRO	1	0.200	ND	mg/L	U
Surrogate: o-Terphenyl			50-150 %	71.0	%	



Pacific Groundwater Group
2377 Eastlake Ave. E. Suite 200
Seattle WA, 98102

Project: Birds Eye
Project Number: Birds Eye
Project Manager: Inger Jackson

Reported:
13-Apr-2020 08:50

MW-9D
20C0276-04 (Water)

Volatile Organic Compounds

Method: EPA 8260C
Instrument: NT2 Analyst: LH

Sampled: 03/20/2020 16:00

Analyzed: 03/26/2020 16:16

Sample Preparation: Preparation Method: EPA 5030 (Purge and Trap)
Preparation Batch: BIC0561 Sample Size: 10 mL
Prepared: 03/26/2020 Final Volume: 10 mL

Extract ID: 20C0276-04 F

Analyte	CAS Number	Dilution	Reporting Limit	Result	Units	Notes
Benzene	71-43-2	1	0.20	ND	ug/L	U
Toluene	108-88-3	1	0.20	ND	ug/L	U
Ethylbenzene	100-41-4	1	0.20	ND	ug/L	U
m,p-Xylene	179601-23-1	1	0.40	ND	ug/L	U
o-Xylene	95-47-6	1	0.20	ND	ug/L	U
Surrogate: Toluene-d8			80-120 %	98.6	%	
Surrogate: 4-Bromofluorobenzene			80-120 %	87.2	%	
Surrogate: 1,2-Dichlorobenzene-d4			80-120 %	104	%	



Pacific Groundwater Group
2377 Eastlake Ave. E. Suite 200
Seattle WA, 98102

Project: Birds Eye
Project Number: Birds Eye
Project Manager: Inger Jackson

Reported:
13-Apr-2020 08:50

MW-9D
20C0276-04 (Water)

Volatile Organic Compounds

Method: NWTPHg	Sampled: 03/20/2020 16:00
Instrument: NT2 Analyst: LH	Analyzed: 03/26/2020 16:16
Sample Preparation:	Extract ID: 20C0276-04 F
Preparation Method: EPA 5030 (Purge and Trap)	
Preparation Batch: BIC0561	Sample Size: 10 mL
Prepared: 03/26/2020	Final Volume: 10 mL

Analyte	CAS Number	Dilution	Reporting Limit	Result	Units	Notes
Gasoline Range Organics (Tol-Nap)	GRO	1	100	ND	ug/L	U
Surrogate: Toluene-d8			80-120 %	98.6	%	
Surrogate: 4-Bromofluorobenzene			80-120 %	87.2	%	



Pacific Groundwater Group
2377 Eastlake Ave. E. Suite 200
Seattle WA, 98102

Project: Birds Eye
Project Number: Birds Eye
Project Manager: Inger Jackson

Reported:
13-Apr-2020 08:50

MW-9D
20C0276-04 (Water)

Semivolatile Organic Compounds - SIM

Method: EPA 8270D-SIM
Instrument: NT8 Analyst: JZ

Sampled: 03/20/2020 16:00

Analyzed: 04/01/2020 16:09

Sample Preparation: Preparation Method: EPA 3520C (Liq Liq)
Preparation Batch: BIC0579 Sample Size: 500 mL
Prepared: 03/26/2020 Final Volume: 0.5 mL

Extract ID: 20C0276-04 B 01

Analyte	CAS Number	Dilution	Reporting Limit	Result	Units	Notes
Naphthalene	91-20-3	1	0.10	ND	ug/L	U
Acenaphthylene	208-96-8	1	0.10	ND	ug/L	U
Acenaphthene	83-32-9	1	0.10	ND	ug/L	U
Fluorene	86-73-7	1	0.10	ND	ug/L	U
Phenanthrene	85-01-8	1	0.10	ND	ug/L	U
Anthracene	120-12-7	1	0.10	ND	ug/L	U
Fluoranthene	206-44-0	1	0.10	ND	ug/L	U
Pyrene	129-00-0	1	0.10	ND	ug/L	U
Benzo(a)anthracene	56-55-3	1	0.10	ND	ug/L	U
Chrysene	218-01-9	1	0.10	ND	ug/L	U
Benzo(a)anthracene, Total		1	0.20	ND	ug/L	U
Benzo(a)pyrene	50-32-8	1	0.10	ND	ug/L	U
Indeno(1,2,3-cd)pyrene	193-39-5	1	0.10	ND	ug/L	U
Dibenzo(a,h)anthracene	53-70-3	1	0.10	ND	ug/L	U
Benzo(g,h,i)perylene	191-24-2	1	0.10	ND	ug/L	U
Surrogate: 2-Methylnaphthalene-d10			31-120 %	42.9	%	
Surrogate: Dibenzo[a,h]anthracene-d14			10-125 %	91.5	%	



Pacific Groundwater Group
2377 Eastlake Ave. E. Suite 200
Seattle WA, 98102

Project: Birds Eye
Project Number: Birds Eye
Project Manager: Inger Jackson

Reported:
13-Apr-2020 08:50

MW-9D
20C0276-04RE1 (Water)

Petroleum Hydrocarbons

Method: NWTPH-Dx
Instrument: FID4 Analyst: CTO

Sampled: 03/20/2020 16:00

Analyzed: 04/03/2020 12:30

Sample Preparation: Preparation Method: EPA 3510C SepF
Preparation Batch: BIC0570
Prepared: 03/27/2020

Sample Size: 500 mL
Final Volume: 1 mL

Extract ID: 20C0276-04RE1 A 01

Sample Cleanup: Cleanup Method: Silica Gel
Cleanup Batch: CID0007
Cleaned: 03-Apr-2020

Initial Volume: 1 mL
Final Volume: 1 mL

Extract ID: 20C0276-04RE1 A 01

Sample Cleanup: Cleanup Method: Sulfuric Acid
Cleanup Batch: CID0006
Cleaned: 03-Apr-2020

Initial Volume: 1 mL
Final Volume: 1 mL

Extract ID: 20C0276-04RE1 A 01

Analyte	CAS Number	Dilution	Reporting Limit	Result	Units	Notes
Diesel Range Organics (C12-C24)	DRO	1	0.100	ND	mg/L	U
Motor Oil Range Organics (C24-C38)	RRO	1	0.200	ND	mg/L	U
Surrogate: o-Terphenyl			50-150 %	77.4	%	



Pacific Groundwater Group
2377 Eastlake Ave. E. Suite 200
Seattle WA, 98102

Project: Birds Eye
Project Number: Birds Eye
Project Manager: Inger Jackson

Reported:
13-Apr-2020 08:50

MW-22S
20C0276-05 (Water)

Volatile Organic Compounds

Method: EPA 8260C
Instrument: NT2 Analyst: LH

Sampled: 03/20/2020 16:00

Analyzed: 03/26/2020 16:35

Sample Preparation: Preparation Method: EPA 5030 (Purge and Trap)
Preparation Batch: BIC0561 Sample Size: 10 mL
Prepared: 03/26/2020 Final Volume: 10 mL

Extract ID: 20C0276-05 G

Analyte	CAS Number	Dilution	Reporting Limit	Result	Units	Notes
Benzene	71-43-2	1	0.20	ND	ug/L	U
Toluene	108-88-3	1	0.20	ND	ug/L	U
Ethylbenzene	100-41-4	1	0.20	ND	ug/L	U
m,p-Xylene	179601-23-1	1	0.40	ND	ug/L	U
o-Xylene	95-47-6	1	0.20	ND	ug/L	U
Surrogate: Toluene-d8			80-120 %	98.3	%	
Surrogate: 4-Bromofluorobenzene			80-120 %	85.0	%	
Surrogate: 1,2-Dichlorobenzene-d4			80-120 %	103	%	



Pacific Groundwater Group
2377 Eastlake Ave. E. Suite 200
Seattle WA, 98102

Project: Birds Eye
Project Number: Birds Eye
Project Manager: Inger Jackson

Reported:
13-Apr-2020 08:50

MW-22S
20C0276-05 (Water)

Volatile Organic Compounds

Method: NWTPHg	Sampled: 03/20/2020 16:00
Instrument: NT2 Analyst: LH	Analyzed: 03/26/2020 16:35
Sample Preparation:	Extract ID: 20C0276-05 G
Preparation Method: EPA 5030 (Purge and Trap)	
Preparation Batch: BIC0561	Sample Size: 10 mL
Prepared: 03/26/2020	Final Volume: 10 mL

Analyte	CAS Number	Dilution	Reporting Limit	Result	Units	Notes
Gasoline Range Organics (Tol-Nap)	GRO	1	100	ND	ug/L	U
Surrogate: Toluene-d8			80-120 %	98.3	%	
Surrogate: 4-Bromofluorobenzene			80-120 %	85.0	%	



Pacific Groundwater Group
2377 Eastlake Ave. E. Suite 200
Seattle WA, 98102

Project: Birds Eye
Project Number: Birds Eye
Project Manager: Inger Jackson

Reported:
13-Apr-2020 08:50

MW-22S
20C0276-05 (Water)

Semivolatile Organic Compounds - SIM

Method: EPA 8270D-SIM
Instrument: NT8 Analyst: JZ

Sampled: 03/20/2020 16:00

Analyzed: 04/01/2020 16:34

Sample Preparation: Preparation Method: EPA 3520C (Liq Liq)
Preparation Batch: BIC0579 Sample Size: 500 mL
Prepared: 03/26/2020 Final Volume: 0.5 mL

Extract ID: 20C0276-05 B 01

Analyte	CAS Number	Dilution	Reporting Limit	Result	Units	Notes
Naphthalene	91-20-3	1	0.10	ND	ug/L	U
Acenaphthylene	208-96-8	1	0.10	ND	ug/L	U
Acenaphthene	83-32-9	1	0.10	ND	ug/L	U
Fluorene	86-73-7	1	0.10	ND	ug/L	U
Phenanthrene	85-01-8	1	0.10	ND	ug/L	U
Anthracene	120-12-7	1	0.10	ND	ug/L	U
Fluoranthene	206-44-0	1	0.10	ND	ug/L	U
Pyrene	129-00-0	1	0.10	ND	ug/L	U
Benzo(a)anthracene	56-55-3	1	0.10	ND	ug/L	U
Chrysene	218-01-9	1	0.10	ND	ug/L	U
Benzo(a)fluoranthene, Total		1	0.20	ND	ug/L	U
Benzo(a)pyrene	50-32-8	1	0.10	ND	ug/L	U
Indeno(1,2,3-cd)pyrene	193-39-5	1	0.10	ND	ug/L	U
Dibenzo(a,h)anthracene	53-70-3	1	0.10	ND	ug/L	U
Benzo(g,h,i)perylene	191-24-2	1	0.10	ND	ug/L	U
Surrogate: 2-Methylnaphthalene-d10			31-120 %	39.7	%	
Surrogate: Dibenzo[a,h]anthracene-d14			10-125 %	89.1	%	



Pacific Groundwater Group
2377 Eastlake Ave. E. Suite 200
Seattle WA, 98102

Project: Birds Eye
Project Number: Birds Eye
Project Manager: Inger Jackson

Reported:
13-Apr-2020 08:50

MW-22S
20C0276-05RE1 (Water)

Petroleum Hydrocarbons

Method: NWTPH-Dx
Instrument: FID4 Analyst: CTO

Sampled: 03/20/2020 16:00

Analyzed: 04/03/2020 12:50

Sample Preparation: Preparation Method: EPA 3510C SepF
Preparation Batch: BIC0570
Prepared: 03/27/2020

Sample Size: 500 mL
Final Volume: 1 mL

Extract ID: 20C0276-05RE1 A 01

Sample Cleanup: Cleanup Method: Silica Gel
Cleanup Batch: CID0007
Cleaned: 03-Apr-2020

Initial Volume: 1 mL
Final Volume: 1 mL

Extract ID: 20C0276-05RE1 A 01

Sample Cleanup: Cleanup Method: Sulfuric Acid
Cleanup Batch: CID0006
Cleaned: 03-Apr-2020

Initial Volume: 1 mL
Final Volume: 1 mL

Extract ID: 20C0276-05RE1 A 01

Analyte	CAS Number	Dilution	Reporting Limit	Result	Units	Notes
Diesel Range Organics (C12-C24)	DRO	1	0.100	ND	mg/L	U
Motor Oil Range Organics (C24-C38)	RRO	1	0.200	ND	mg/L	U
Surrogate: o-Terphenyl			50-150 %	80.4	%	



Pacific Groundwater Group
2377 Eastlake Ave. E. Suite 200
Seattle WA, 98102

Project: Birds Eye
Project Number: Birds Eye
Project Manager: Inger Jackson

Reported:
13-Apr-2020 08:50

Trip Blank
20C0276-06 (Water)

Volatile Organic Compounds

Method: EPA 8260C	Sampled: 03/20/2020 10:55
Instrument: NT2 Analyst: LH	Analyzed: 03/26/2020 11:47
Sample Preparation:	Extract ID: 20C0276-06 E
Preparation Method: EPA 5030 (Purge and Trap)	
Preparation Batch: BIC0561	Sample Size: 10 mL
Prepared: 03/26/2020	Final Volume: 10 mL

Analyte	CAS Number	Dilution	Reporting Limit	Result	Units	Notes
Benzene	71-43-2	1	0.20	ND	ug/L	U
Toluene	108-88-3	1	0.20	ND	ug/L	U
Ethylbenzene	100-41-4	1	0.20	ND	ug/L	U
m,p-Xylene	179601-23-1	1	0.40	ND	ug/L	U
o-Xylene	95-47-6	1	0.20	ND	ug/L	U
Surrogate: Toluene-d8			80-120 %	97.3	%	
Surrogate: 4-Bromofluorobenzene			80-120 %	94.5	%	
Surrogate: 1,2-Dichlorobenzene-d4			80-120 %	100	%	



Pacific Groundwater Group
2377 Eastlake Ave. E. Suite 200
Seattle WA, 98102

Project: Birds Eye
Project Number: Birds Eye
Project Manager: Inger Jackson

Reported:
13-Apr-2020 08:50

Trip Blank
20C0276-06 (Water)

Volatile Organic Compounds

Method: NWTPHg	Sampled: 03/20/2020 10:55
Instrument: NT2 Analyst: LH	Analyzed: 03/26/2020 11:47
Sample Preparation:	Extract ID: 20C0276-06 E
Preparation Method: EPA 5030 (Purge and Trap)	
Preparation Batch: BIC0561	Sample Size: 10 mL
Prepared: 03/26/2020	Final Volume: 10 mL

Analyte	CAS Number	Dilution	Reporting Limit	Result	Units	Notes
Gasoline Range Organics (Tol-Nap)	GRO	1	100	ND	ug/L	U
Surrogate: Toluene-d8			80-120 %	97.3	%	
Surrogate: 4-Bromofluorobenzene			80-120 %	94.5	%	



Pacific Groundwater Group
2377 Eastlake Ave. E. Suite 200
Seattle WA, 98102

Project: Birds Eye
Project Number: Birds Eye
Project Manager: Inger Jackson

Reported:
13-Apr-2020 08:50

Volatile Organic Compounds - Quality Control

Batch BIC0561 - EPA 5030 (Purge and Trap)

Instrument: NT2 Analyst: LH

QC Sample/Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Blank (BIC0561-BLK1) Prepared: 26-Mar-2020 Analyzed: 26-Mar-2020 11:06										
Gasoline Range Organics (Tol-Nap)	ND	100	ug/L							U
Surrogate: Toluene-d8	4.75		ug/L	5.00		95.0	80-120			
Surrogate: 4-Bromofluorobenzene	4.71		ug/L	5.00		94.2	80-120			
Blank (BIC0561-BLK2) Prepared: 26-Mar-2020 Analyzed: 26-Mar-2020 11:06										
Benzene	ND	0.20	ug/L							U
Toluene	ND	0.20	ug/L							U
Ethylbenzene	ND	0.20	ug/L							U
m,p-Xylene	ND	0.40	ug/L							U
o-Xylene	ND	0.20	ug/L							U
Surrogate: Toluene-d8	4.75		ug/L	5.00		95.0	80-120			
Surrogate: 4-Bromofluorobenzene	4.71		ug/L	5.00		94.2	80-120			
Surrogate: 1,2-Dichlorobenzene-d4	5.19		ug/L	5.00		104	80-120			
LCS (BIC0561-BS1) Prepared: 26-Mar-2020 Analyzed: 26-Mar-2020 08:50										
Gasoline Range Organics (Tol-Nap)	972	100	ug/L	1000		97.2	72-128			
Surrogate: Toluene-d8	5.02		ug/L	5.00		100	80-120			
Surrogate: 4-Bromofluorobenzene	5.20		ug/L	5.00		104	80-120			
LCS (BIC0561-BS2) Prepared: 26-Mar-2020 Analyzed: 26-Mar-2020 09:24										
Benzene	10.2	0.20	ug/L	10.0		102	80-120			
Toluene	10.2	0.20	ug/L	10.0		102	80-120			
Ethylbenzene	10.3	0.20	ug/L	10.0		103	80-120			
m,p-Xylene	21.4	0.40	ug/L	20.0		107	80-121			
o-Xylene	11.0	0.20	ug/L	10.0		110	80-121			
Surrogate: Toluene-d8	5.00		ug/L	5.00		100	80-120			
Surrogate: 4-Bromofluorobenzene	5.14		ug/L	5.00		103	80-120			
Surrogate: 1,2-Dichlorobenzene-d4	4.90		ug/L	5.00		98.1	80-120			
LCS Dup (BIC0561-BSD1) Prepared: 26-Mar-2020 Analyzed: 26-Mar-2020 09:45										
Gasoline Range Organics (Tol-Nap)	946	100	ug/L	1000		94.6	72-128	2.70	30	
Surrogate: Toluene-d8	5.01		ug/L	5.00		100	80-120			
Surrogate: 4-Bromofluorobenzene	5.12		ug/L	5.00		102	80-120			



Pacific Groundwater Group
2377 Eastlake Ave. E. Suite 200
Seattle WA, 98102

Project: Birds Eye
Project Number: Birds Eye
Project Manager: Inger Jackson

Reported:
13-Apr-2020 08:50

Volatile Organic Compounds - Quality Control

Batch BIC0561 - EPA 5030 (Purge and Trap)

Instrument: NT2 Analyst: LH

QC Sample/Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
LCS Dup (BIC0561-BSD2)		Prepared: 26-Mar-2020 Analyzed: 26-Mar-2020 10:05								
Benzene	10.0	0.20	ug/L	10.0		100	80-120	2.20	30	
Toluene	10.1	0.20	ug/L	10.0		101	80-120	1.45	30	
Ethylbenzene	10.3	0.20	ug/L	10.0		103	80-120	0.39	30	
m,p-Xylene	21.0	0.40	ug/L	20.0		105	80-121	2.22	30	
o-Xylene	10.4	0.20	ug/L	10.0		104	80-121	5.43	30	
Surrogate: Toluene-d8	5.07		ug/L	5.00		101	80-120			
Surrogate: 4-Bromofluorobenzene	5.05		ug/L	5.00		101	80-120			
Surrogate: 1,2-Dichlorobenzene-d4	4.91		ug/L	5.00		98.1	80-120			

Matrix Spike (BIC0561-MS1)		Source: 20C0276-02		Prepared: 26-Mar-2020 Analyzed: 26-Mar-2020 18:23						
Benzene	9.37	0.20	ug/L	10.0	ND	93.7	80-120			
Toluene	9.52	0.20	ug/L	10.0	ND	95.2	80-120			
Ethylbenzene	9.37	0.20	ug/L	10.0	ND	93.7	80-120			
m,p-Xylene	19.2	0.40	ug/L	20.0	ND	96.0	80-121			
o-Xylene	9.35	0.20	ug/L	10.0	ND	93.5	80-121			
Surrogate: Toluene-d8	5.09		ug/L	5.00	4.92	102	80-120			
Surrogate: 4-Bromofluorobenzene	4.96		ug/L	5.00	4.59	99.1	80-120			
Surrogate: 1,2-Dichlorobenzene-d4	4.89		ug/L	5.00	5.11	97.8	80-120			

Recovery limits for target analytes in MS/MSD QC samples are advisory only.

Matrix Spike (BIC0561-MS2)		Source: 20C0276-02		Prepared: 26-Mar-2020 Analyzed: 26-Mar-2020 19:03						
Gasoline Range Organics (Tol-Nap)	778	100	ug/L	1000	ND	77.8	72-128			
Surrogate: Toluene-d8	5.08		ug/L	5.00	4.92	102	80-120			
Surrogate: 4-Bromofluorobenzene	4.74		ug/L	5.00	4.59	94.7	80-120			

Recovery limits for target analytes in MS/MSD QC samples are advisory only.

Matrix Spike Dup (BIC0561-MSD1)		Source: 20C0276-02		Prepared: 26-Mar-2020 Analyzed: 26-Mar-2020 18:43						
Benzene	8.93	0.20	ug/L	10.0	ND	89.3	80-120	4.78	30	
Toluene	8.99	0.20	ug/L	10.0	ND	89.9	80-120	5.72	30	
Ethylbenzene	8.79	0.20	ug/L	10.0	ND	87.9	80-120	6.37	30	
m,p-Xylene	17.9	0.40	ug/L	20.0	ND	89.7	80-121	6.78	30	
o-Xylene	8.74	0.20	ug/L	10.0	ND	87.4	80-121	6.66	30	
Surrogate: Toluene-d8	5.09		ug/L	5.00	4.92	102	80-120			
Surrogate: 4-Bromofluorobenzene	4.97		ug/L	5.00	4.59	99.4	80-120			



Pacific Groundwater Group
2377 Eastlake Ave. E. Suite 200
Seattle WA, 98102

Project: Birds Eye
Project Number: Birds Eye
Project Manager: Inger Jackson

Reported:
13-Apr-2020 08:50

Volatile Organic Compounds - Quality Control

Batch BIC0561 - EPA 5030 (Purge and Trap)

Instrument: NT2 Analyst: LH

QC Sample/Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Matrix Spike Dup (BIC0561-MSD1)		Source: 20C0276-02		Prepared: 26-Mar-2020		Analyzed: 26-Mar-2020 18:43				
Surrogate: 1,2-Dichlorobenzene-d4	4.97		ug/L	5.00	5.11	99.3	80-120			

Recovery limits for target analytes in MS/MSD QC samples are advisory only.

Matrix Spike Dup (BIC0561-MSD2)		Source: 20C0276-02		Prepared: 26-Mar-2020		Analyzed: 26-Mar-2020 19:23				
Gasoline Range Organics (Tol-Nap)	796	100	ug/L	1000	ND	79.6	72-128	2.37	30	
Surrogate: Toluene-d8	5.13		ug/L	5.00	4.92	103	80-120			
Surrogate: 4-Bromofluorobenzene	4.95		ug/L	5.00	4.59	99.0	80-120			

Recovery limits for target analytes in MS/MSD QC samples are advisory only.



Pacific Groundwater Group
2377 Eastlake Ave. E. Suite 200
Seattle WA, 98102

Project: Birds Eye
Project Number: Birds Eye
Project Manager: Inger Jackson

Reported:
13-Apr-2020 08:50

Semivolatile Organic Compounds - SIM - Quality Control

Batch BIC0579 - EPA 3520C (Liq Liq)

Instrument: nt8 Analyst: JZ

QC Sample/Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Blank (BIC0579-BLK1)		Prepared: 26-Mar-2020 Analyzed: 01-Apr-2020 12:42								
Naphthalene	ND	0.10	ug/L							U
Acenaphthylene	ND	0.10	ug/L							U
Acenaphthene	ND	0.10	ug/L							U
Fluorene	ND	0.10	ug/L							U
Phenanthrene	ND	0.10	ug/L							U
Anthracene	ND	0.10	ug/L							U
Fluoranthene	ND	0.10	ug/L							U
Pyrene	ND	0.10	ug/L							U
Benzo(a)anthracene	ND	0.10	ug/L							U
Chrysene	ND	0.10	ug/L							U
Benzo(a)pyrene	ND	0.10	ug/L							U
Indeno(1,2,3-cd)pyrene	ND	0.10	ug/L							U
Dibenzo(a,h)anthracene	ND	0.10	ug/L							U
Benzo(g,h,i)perylene	ND	0.10	ug/L							U
Surrogate: 2-Methylnaphthalene-d10	1.20		ug/L	3.00		40.1	31-120			
Surrogate: Dibenzo[a,h]anthracene-d14	2.66		ug/L	3.00		88.8	10-125			
LCS (BIC0579-BS1)		Prepared: 26-Mar-2020 Analyzed: 01-Apr-2020 13:08								
Naphthalene	1.07	0.10	ug/L	3.00		35.7	33-120			
Acenaphthylene	0.79	0.10	ug/L	3.00		26.3	32-120			*
Acenaphthene	1.00	0.10	ug/L	3.00		33.5	38-120			*
Fluorene	1.07	0.10	ug/L	3.00		35.7	41-120			*
Phenanthrene	1.22	0.10	ug/L	3.00		40.6	49-120			*
Anthracene	1.01	0.10	ug/L	3.00		33.8	39-120			*
Fluoranthene	1.33	0.10	ug/L	3.00		44.3	48-120			*
Pyrene	1.29	0.10	ug/L	3.00		43.0	48-120			*
Benzo(a)anthracene	1.14	0.10	ug/L	3.00		37.9	37-120			
Chrysene	1.32	0.10	ug/L	3.00		43.9	48-120			*
Benzo(a)pyrene	1.41	0.10	ug/L	3.00		46.9	25-120			
Indeno(1,2,3-cd)pyrene	2.21	0.10	ug/L	3.00		73.8	32-120			
Dibenzo(a,h)anthracene	2.44	0.10	ug/L	3.00		81.4	21-120			
Benzo(g,h,i)perylene	2.83	0.10	ug/L	3.00		94.3	28-120			Q



Pacific Groundwater Group
2377 Eastlake Ave. E. Suite 200
Seattle WA, 98102

Project: Birds Eye
Project Number: Birds Eye
Project Manager: Inger Jackson

Reported:
13-Apr-2020 08:50

Semivolatile Organic Compounds - SIM - Quality Control

Batch BIC0579 - EPA 3520C (Liq Liq)

Instrument: nt8 Analyst: JZ

QC Sample/Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
LCS (BIC0579-BS1)		Prepared: 26-Mar-2020 Analyzed: 01-Apr-2020 13:08								
Surrogate: 2-Methylnaphthalene-d10	1.26		ug/L	3.00		42.1	31-120			
Surrogate: Dibenzo[a,h]anthracene-d14	3.05		ug/L	3.00		102	10-125			
LCS Dup (BIC0579-BSD1)		Prepared: 26-Mar-2020 Analyzed: 01-Apr-2020 13:34								
Naphthalene	1.19	0.10	ug/L	3.00		39.8	33-120	10.90	30	
Acenaphthylene	0.98	0.10	ug/L	3.00		32.7	32-120	21.70	30	
Acenaphthene	1.25	0.10	ug/L	3.00		41.5	38-120	21.50	30	
Fluorene	1.35	0.10	ug/L	3.00		44.9	41-120	22.80	30	
Phenanthrene	1.44	0.10	ug/L	3.00		48.0	49-120	16.50	30	*
Anthracene	1.15	0.10	ug/L	3.00		38.2	39-120	12.30	30	*
Fluoranthene	1.56	0.10	ug/L	3.00		51.9	48-120	15.90	30	
Pyrene	1.52	0.10	ug/L	3.00		50.5	48-120	16.00	30	
Benzo(a)anthracene	1.39	0.10	ug/L	3.00		46.2	37-120	19.60	30	
Chrysene	1.63	0.10	ug/L	3.00		54.5	48-120	21.50	30	
Benzo(a)fluoranthene, Total	7.91	0.20	ug/L	9.00		87.9	46-120	9.68	30	
Benzo(a)pyrene	1.62	0.10	ug/L	3.00		54.1	25-120	14.20	30	
Indeno(1,2,3-cd)pyrene	2.49	0.10	ug/L	3.00		83.1	32-120	11.90	30	
Dibenzo(a,h)anthracene	2.69	0.10	ug/L	3.00		89.8	21-120	9.83	30	
Benzo(g,h,i)perylene	3.07	0.10	ug/L	3.00		102	28-120	8.13	30	Q
Surrogate: 2-Methylnaphthalene-d10	1.44		ug/L	3.00		48.0	31-120			
Surrogate: Dibenzo[a,h]anthracene-d14	3.22		ug/L	3.00		107	10-125			
Matrix Spike (BIC0579-MS1)		Source: 20C0276-02 Prepared: 26-Mar-2020 Analyzed: 01-Apr-2020 14:51								
Naphthalene	1.07	0.10	ug/L	3.00	ND	35.6	33-120			
Acenaphthylene	0.95	0.10	ug/L	3.00	ND	31.7	32-120			*
Acenaphthene	1.24	0.10	ug/L	3.00	ND	41.2	38-120			
Fluorene	1.25	0.10	ug/L	3.00	ND	41.7	41-120			
Phenanthrene	1.31	0.10	ug/L	3.00	ND	43.8	49-120			*
Anthracene	1.11	0.10	ug/L	3.00	ND	36.9	39-120			*
Fluoranthene	1.43	0.10	ug/L	3.00	ND	47.7	48-120			*
Pyrene	1.46	0.10	ug/L	3.00	ND	48.7	48-120			
Benzo(a)anthracene	1.35	0.10	ug/L	3.00	ND	44.9	37-120			
Chrysene	1.44	0.10	ug/L	3.00	ND	48.1	48-120			
Benzo(a)fluoranthene, Total	5.98	0.20	ug/L	9.00	ND	66.4	46-120			
Benzo(a)pyrene	1.44	0.10	ug/L	3.00	ND	48.1	25-120			



Pacific Groundwater Group
2377 Eastlake Ave. E. Suite 200
Seattle WA, 98102

Project: Birds Eye
Project Number: Birds Eye
Project Manager: Inger Jackson

Reported:
13-Apr-2020 08:50

Semivolatile Organic Compounds - SIM - Quality Control

Batch BIC0579 - EPA 3520C (Liq Liq)

Instrument: NT8 Analyst: JZ

QC Sample/Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Matrix Spike (BIC0579-MS1)		Source: 20C0276-02		Prepared: 26-Mar-2020		Analyzed: 01-Apr-2020 14:51				
Indeno(1,2,3-cd)pyrene	1.99	0.10	ug/L	3.00	ND	66.2	32-120			
Dibenzo(a,h)anthracene	2.15	0.10	ug/L	3.00	ND	71.8	21-120			
Benzo(g,h,i)perylene	2.46	0.10	ug/L	3.00	ND	81.9	28-120			Q
<i>Surrogate: 2-Methylnaphthalene-d10</i>	1.34		ug/L	3.00	1.14	44.7	31-120			
<i>Surrogate: Dibenzo[a,h]anthracene-d14</i>	2.78		ug/L	3.00	2.37	92.8	10-125			

Recovery limits for target analytes in MS/MSD QC samples are advisory only.

Matrix Spike Dup (BIC0579-MSD1)		Source: 20C0276-02		Prepared: 26-Mar-2020		Analyzed: 01-Apr-2020 15:17				
Naphthalene	1.13	0.10	ug/L	3.00	ND	37.7	33-120	5.75	30	
Acenaphthylene	0.88	0.10	ug/L	3.00	ND	29.5	32-120	7.23	30	*
Acenaphthene	1.14	0.10	ug/L	3.00	ND	37.9	38-120	8.42	30	*
Fluorene	1.17	0.10	ug/L	3.00	ND	38.9	41-120	6.94	30	*
Phenanthrene	1.29	0.10	ug/L	3.00	ND	43.2	49-120	1.51	30	*
Anthracene	1.11	0.10	ug/L	3.00	ND	37.1	39-120	0.61	30	*
Fluoranthene	1.38	0.10	ug/L	3.00	ND	46.1	48-120	3.36	30	*
Pyrene	1.36	0.10	ug/L	3.00	ND	45.2	48-120	7.41	30	*
Benzo(a)anthracene	1.31	0.10	ug/L	3.00	ND	43.8	37-120	2.45	30	
Chrysene	1.46	0.10	ug/L	3.00	ND	48.7	48-120	1.31	30	
Benzo(a)fluoranthene, Total	6.03	0.20	ug/L	9.00	ND	67.0	46-120	0.93	30	
Benzo(a)pyrene	1.46	0.10	ug/L	3.00	ND	48.7	25-120	1.22	30	
Indeno(1,2,3-cd)pyrene	1.94	0.10	ug/L	3.00	ND	64.7	32-120	2.27	30	
Dibenzo(a,h)anthracene	2.13	0.10	ug/L	3.00	ND	71.0	21-120	1.12	30	
Benzo(g,h,i)perylene	2.49	0.10	ug/L	3.00	ND	83.0	28-120	1.39	30	Q
<i>Surrogate: 2-Methylnaphthalene-d10</i>	1.31		ug/L	3.00	1.14	43.7	31-120			
<i>Surrogate: Dibenzo[a,h]anthracene-d14</i>	2.61		ug/L	3.00	2.37	87.0	10-125			

Recovery limits for target analytes in MS/MSD QC samples are advisory only.



Pacific Groundwater Group
2377 Eastlake Ave. E. Suite 200
Seattle WA, 98102

Project: Birds Eye
Project Number: Birds Eye
Project Manager: Inger Jackson

Reported:
13-Apr-2020 08:50

Petroleum Hydrocarbons - Quality Control

Batch BIC0570 - EPA 3510C SepF

Instrument: FID4 Analyst: CTO

QC Sample/Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Blank (BIC0570-BLK1)				Prepared: 27-Mar-2020 Analyzed: 31-Mar-2020 09:27						
Diesel Range Organics (C12-C24)	ND	0.100	mg/L							U
Motor Oil Range Organics (C24-C38)	ND	0.200	mg/L							U
Surrogate: o-Terphenyl	0.172		mg/L	0.225		76.6	50-150			
Blank (BIC0570-BLK2)				Prepared: 27-Mar-2020 Analyzed: 03-Apr-2020 09:56						
Diesel Range Organics (C12-C24)	ND	0.100	mg/L							U
Motor Oil Range Organics (C24-C38)	ND	0.200	mg/L							U
Surrogate: o-Terphenyl	0.169		mg/L	0.225		75.2	50-150			
LCS (BIC0570-BS1)				Prepared: 27-Mar-2020 Analyzed: 31-Mar-2020 09:46						
Diesel Range Organics (C12-C24)	2.34	0.100	mg/L	3.00		78.2	56-120			
Surrogate: o-Terphenyl	0.188		mg/L	0.225		83.4	50-150			
LCS (BIC0570-BS2)				Prepared: 27-Mar-2020 Analyzed: 03-Apr-2020 10:15						
Diesel Range Organics (C12-C24)	2.30	0.100	mg/L	3.00		76.7	56-120			
Surrogate: o-Terphenyl	0.182		mg/L	0.225		81.1	50-150			
LCS Dup (BIC0570-BSD1)				Prepared: 27-Mar-2020 Analyzed: 31-Mar-2020 10:06						
Diesel Range Organics (C12-C24)	2.41	0.100	mg/L	3.00		80.3	56-120	2.67	30	
Surrogate: o-Terphenyl	0.193		mg/L	0.225		85.8	50-150			
LCS Dup (BIC0570-BSD2)				Prepared: 27-Mar-2020 Analyzed: 03-Apr-2020 10:34						
Diesel Range Organics (C12-C24)	2.31	0.100	mg/L	3.00		76.9	56-120	0.23	30	
Surrogate: o-Terphenyl	0.187		mg/L	0.225		83.2	50-150			
Matrix Spike (BIC0570-MS2)				Source: 20C0276-02RE1 Prepared: 27-Mar-2020 Analyzed: 03-Apr-2020 11:32						
Diesel Range Organics (C12-C24)	2.04	0.100	mg/L	3.00	ND	68.1	56-120			
Surrogate: o-Terphenyl	0.159		mg/L	0.225	0.167	70.8	50-150			
Recovery limits for target analytes in MS/MSD QC samples are advisory only.										
Matrix Spike Dup (BIC0570-MSD2)				Source: 20C0276-02RE1 Prepared: 27-Mar-2020 Analyzed: 03-Apr-2020 11:51						
Diesel Range Organics (C12-C24)	2.16	0.100	mg/L	3.00	ND	72.1	56-120	5.72	30	
Surrogate: o-Terphenyl	0.159		mg/L	0.225	0.167	70.5	50-150			



Pacific Groundwater Group
2377 Eastlake Ave. E. Suite 200
Seattle WA, 98102

Project: Birds Eye
Project Number: Birds Eye
Project Manager: Inger Jackson

Reported:
13-Apr-2020 08:50

Petroleum Hydrocarbons - Quality Control

Batch BIC0570 - EPA 3510C SepF

Instrument: FID4 Analyst: CTO

QC Sample/Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
-------------------	--------	--------------------	-------	----------------	------------------	------	----------------	-----	--------------	-------

Recovery limits for target analytes in MS/MSD QC samples are advisory only.



Pacific Groundwater Group
2377 Eastlake Ave. E. Suite 200
Seattle WA, 98102

Project: Birds Eye
Project Number: Birds Eye
Project Manager: Inger Jackson

Reported:
13-Apr-2020 08:50

Certified Analyses included in this Report

Analyte	Certifications
EPA 8260C in Water	
Chloromethane	DoD-ELAP,ADEC,NELAP,CALAP,WADOE
Vinyl Chloride	DoD-ELAP,ADEC,NELAP,CALAP,WADOE
Bromomethane	DoD-ELAP,ADEC,NELAP,CALAP,WADOE
Chloroethane	DoD-ELAP,ADEC,NELAP,CALAP,WADOE
Trichlorofluoromethane	DoD-ELAP,ADEC,NELAP,CALAP,WADOE
Acrolein	DoD-ELAP,NELAP,CALAP,WADOE
1,1,2-Trichloro-1,2,2-Trifluoroethane	DoD-ELAP,ADEC,NELAP,CALAP,WADOE
Acetone	DoD-ELAP,ADEC,NELAP,CALAP,WADOE
1,1-Dichloroethene	DoD-ELAP,ADEC,NELAP,CALAP,WADOE
Bromoethane	DoD-ELAP,NELAP,CALAP,WADOE
Iodomethane	DoD-ELAP,NELAP,CALAP,WADOE
Methylene Chloride	DoD-ELAP,ADEC,NELAP,CALAP,WADOE
Acrylonitrile	DoD-ELAP,NELAP,CALAP,WADOE
Carbon Disulfide	DoD-ELAP,NELAP,CALAP,WADOE
trans-1,2-Dichloroethene	DoD-ELAP,ADEC,NELAP,CALAP,WADOE
Vinyl Acetate	DoD-ELAP,NELAP,CALAP,WADOE
1,1-Dichloroethane	DoD-ELAP,ADEC,NELAP,CALAP,WADOE
2-Butanone	DoD-ELAP,NELAP,CALAP,WADOE
2,2-Dichloropropane	DoD-ELAP,ADEC,NELAP,CALAP,WADOE
cis-1,2-Dichloroethene	DoD-ELAP,ADEC,NELAP,CALAP,WADOE
Chloroform	DoD-ELAP,ADEC,NELAP,CALAP,WADOE
Bromochloromethane	DoD-ELAP,ADEC,NELAP,CALAP,WADOE
1,1,1-Trichloroethane	DoD-ELAP,ADEC,NELAP,CALAP,WADOE
1,1-Dichloropropene	DoD-ELAP,ADEC,NELAP,CALAP,WADOE
Carbon tetrachloride	DoD-ELAP,ADEC,NELAP,CALAP,WADOE
1,2-Dichloroethane	DoD-ELAP,ADEC,NELAP,CALAP,WADOE
Benzene	DoD-ELAP,ADEC,NELAP,CALAP,WADOE
Trichloroethene	DoD-ELAP,ADEC,NELAP,CALAP,WADOE
1,2-Dichloropropane	DoD-ELAP,ADEC,NELAP,CALAP,WADOE
Bromodichloromethane	DoD-ELAP,ADEC,NELAP,CALAP,WADOE
Dibromomethane	DoD-ELAP,ADEC,NELAP,CALAP,WADOE
2-Chloroethyl vinyl ether	DoD-ELAP,ADEC,NELAP,CALAP,WADOE
4-Methyl-2-Pentanone	DoD-ELAP,NELAP,CALAP,WADOE
cis-1,3-Dichloropropene	DoD-ELAP,ADEC,NELAP,CALAP,WADOE
Toluene	DoD-ELAP,ADEC,NELAP,CALAP,WADOE



Pacific Groundwater Group
2377 Eastlake Ave. E. Suite 200
Seattle WA, 98102

Project: Birds Eye
Project Number: Birds Eye
Project Manager: Inger Jackson

Reported:
13-Apr-2020 08:50

trans-1,3-Dichloropropene	DoD-ELAP,ADEC,NELAP,CALAP,WADOE
2-Hexanone	DoD-ELAP,NELAP,CALAP,WADOE
1,1,2-Trichloroethane	DoD-ELAP,ADEC,NELAP,CALAP,WADOE
1,3-Dichloropropane	DoD-ELAP,ADEC,NELAP,CALAP,WADOE
Tetrachloroethene	DoD-ELAP,ADEC,NELAP,CALAP,WADOE
Dibromochloromethane	DoD-ELAP,ADEC,NELAP,CALAP,WADOE
1,2-Dibromoethane	DoD-ELAP,NELAP,CALAP,WADOE
Chlorobenzene	DoD-ELAP,ADEC,NELAP,CALAP,WADOE
Ethylbenzene	DoD-ELAP,ADEC,NELAP,CALAP,WADOE
1,1,1,2-Tetrachloroethane	DoD-ELAP,ADEC,NELAP,CALAP,WADOE
m,p-Xylene	DoD-ELAP,ADEC,NELAP,CALAP,WADOE
o-Xylene	DoD-ELAP,ADEC,NELAP,CALAP,WADOE
Styrene	DoD-ELAP,NELAP,CALAP,WADOE
Bromoform	DoD-ELAP,NELAP,CALAP,WADOE
1,1,2,2-Tetrachloroethane	DoD-ELAP,ADEC,NELAP,CALAP,WADOE
1,2,3-Trichloropropane	DoD-ELAP,ADEC,NELAP,CALAP,WADOE
trans-1,4-Dichloro 2-Butene	DoD-ELAP,ADEC,NELAP,CALAP,WADOE
n-Propylbenzene	DoD-ELAP,NELAP,CALAP,WADOE
Bromobenzene	DoD-ELAP,NELAP,CALAP,WADOE
Isopropyl Benzene	DoD-ELAP,NELAP,CALAP,WADOE
2-Chlorotoluene	DoD-ELAP,ADEC,NELAP,CALAP,WADOE
4-Chlorotoluene	DoD-ELAP,ADEC,NELAP,CALAP,WADOE
t-Butylbenzene	DoD-ELAP,NELAP,CALAP,WADOE
1,3,5-Trimethylbenzene	DoD-ELAP,NELAP,CALAP,WADOE
1,2,4-Trimethylbenzene	DoD-ELAP,NELAP,CALAP,WADOE
s-Butylbenzene	DoD-ELAP,NELAP,CALAP,WADOE
4-Isopropyl Toluene	DoD-ELAP,NELAP,CALAP,WADOE
1,3-Dichlorobenzene	DoD-ELAP,ADEC,NELAP,CALAP,WADOE
1,4-Dichlorobenzene	DoD-ELAP,ADEC,NELAP,CALAP,WADOE
n-Butylbenzene	DoD-ELAP,NELAP,CALAP,WADOE
1,2-Dichlorobenzene	DoD-ELAP,ADEC,NELAP,CALAP,WADOE
1,2-Dibromo-3-chloropropane	DoD-ELAP,ADEC,NELAP,CALAP,WADOE
1,2,4-Trichlorobenzene	DoD-ELAP,ADEC,NELAP,CALAP,WADOE
Hexachloro-1,3-Butadiene	DoD-ELAP,ADEC,NELAP,CALAP,WADOE
Naphthalene	DoD-ELAP,ADEC,NELAP,CALAP,WADOE
1,2,3-Trichlorobenzene	DoD-ELAP,ADEC,NELAP,CALAP,WADOE
Dichlorodifluoromethane	DoD-ELAP,ADEC,NELAP,CALAP,WADOE
Methyl tert-butyl Ether	DoD-ELAP,ADEC,NELAP,CALAP,WADOE
n-Hexane	WADOE
2-Pentanone	WADOE



Pacific Groundwater Group
2377 Eastlake Ave. E. Suite 200
Seattle WA, 98102

Project: Birds Eye
Project Number: Birds Eye
Project Manager: Inger Jackson

Reported:
13-Apr-2020 08:50

EPA 8270D-SIM in Water

Naphthalene	DoD-ELAP
2-Methylnaphthalene	DoD-ELAP
1-Methylnaphthalene	DoD-ELAP
2-Chloronaphthalene	DoD-ELAP
Biphenyl	DoD-ELAP
2,6-Dimethylnaphthalene	DoD-ELAP
Acenaphthylene	DoD-ELAP
Acenaphthene	DoD-ELAP
Dibenzofuran	DoD-ELAP
2,3,5-Trimethylnaphthalene	DoD-ELAP
Fluorene	DoD-ELAP
Dibenzothiophene	DoD-ELAP
Phenanthrene	DoD-ELAP
Anthracene	DoD-ELAP
Carbazole	DoD-ELAP
1-Methylphenanthrene	DoD-ELAP
Fluoranthene	DoD-ELAP
Pyrene	DoD-ELAP
Benzo(a)anthracene	DoD-ELAP
Chrysene	DoD-ELAP
Benzo(b)fluoranthene	DoD-ELAP
Benzo(k)fluoranthene	DoD-ELAP
Benzo(j)fluoranthene	DoD-ELAP
Benzofluoranthenes, Total	DoD-ELAP
Benzo(e)pyrene	DoD-ELAP
Benzo(a)pyrene	DoD-ELAP
Perylene	DoD-ELAP
Indeno(1,2,3-cd)pyrene	DoD-ELAP
Dibenzo(a,h)anthracene	DoD-ELAP
Benzo(g,h,i)perylene	DoD-ELAP
Benzo(b)thiophene	DoD-ELAP

NWTPH-Dx in Water

Diesel Range Organics (C12-C24)	DoD-ELAP,NELAP,WADOE
Diesel Range Organics (C10-C25)	DoD-ELAP,NELAP,WADOE
Diesel Range Organics (Tol-C18)	DoD-ELAP,NELAP,WADOE
Diesel Range Organics (C10-C24)	DoD-ELAP,NELAP,WADOE
Diesel Range Organics (C10-C28)	DoD-ELAP,NELAP,WADOE
Diesel Range Organics (C12-C22)	DoD-ELAP



Pacific Groundwater Group
2377 Eastlake Ave. E. Suite 200
Seattle WA, 98102

Project: Birds Eye
Project Number: Birds Eye
Project Manager: Inger Jackson

Reported:
13-Apr-2020 08:50

Diesel Range Organics (C12-C25)	DoD-ELAP
Motor Oil Range Organics (C24-C38)	DoD-ELAP,NELAP,WADOE
Motor Oil Range Organics (C25-C36)	DoD-ELAP,NELAP,WADOE
Motor Oil Range Organics (C24-C40)	DoD-ELAP,NELAP,WADOE
Residual Range Organics (C23-C32)	DoD-ELAP
Mineral Spirits Range Organics (Tol-C12)	DoD-ELAP,NELAP,WADOE
Mineral Oil Range Organics (C16-C28)	DoD-ELAP,NELAP,WADOE
Kerosene Range Organics (Tol-C18)	DoD-ELAP,NELAP,WADOE
JP8 Range Organics (C8-C18)	DoD-ELAP,NELAP,WADOE
JP5 Range Organics (C10-C16)	DoD-ELAP,NELAP,WADOE
JP4 Range Organics (Tol-C14)	DoD-ELAP,NELAP,WADOE
Jet-A Range Organics (C10-C18)	DoD-ELAP,NELAP,WADOE
Creosote Range Organics (C12-C22)	DoD-ELAP,NELAP,WADOE
Bunker C Range Organics (C10-C38)	DoD-ELAP,NELAP,WADOE
Stoddard Range Organics (C8-C12)	DoD-ELAP,NELAP,WADOE
Transformer Oil Range Organics (C12-C28)	DoD-ELAP,NELAP,WADOE

NWTPHg in Water

Gasoline Range Organics (Tol-Nap)	WADOE,DoD-ELAP
Gasoline Range Organics (2MP-TMB)	WADOE,DoD-ELAP
Gasoline Range Organics (Tol-C12)	WADOE,DoD-ELAP
Gasoline Range Organics (C6-C10)	WADOE,ADEC,DoD-ELAP
Gasoline Range Organics (C5-C12)	WADOE,DoD-ELAP

Code	Description	Number	Expires
ADEC	Alaska Dept of Environmental Conservation	17-015	01/31/2021
CALAP	California Department of Public Health CAELAP	2748	06/30/2019
DoD-ELAP	DoD-Environmental Laboratory Accreditation Program	66169	01/01/2021
NELAP	ORELAP - Oregon Laboratory Accreditation Program	WA100006-012	05/12/2020
WADOE	WA Dept of Ecology	C558	06/30/2019
WA-DW	Ecology - Drinking Water	C558	06/30/2019



Pacific Groundwater Group
2377 Eastlake Ave. E. Suite 200
Seattle WA, 98102

Project: Birds Eye
Project Number: Birds Eye
Project Manager: Inger Jackson

Reported:
13-Apr-2020 08:50

Notes and Definitions

*	Flagged value is not within established control limits.
D	The reported value is from a dilution
E	The analyte concentration exceeds the upper limit of the calibration range of the instrument established by the initial calibration (ICAL)
Q	Indicates a detected analyte with an initial or continuing calibration that does not meet established acceptance criteria (<20% RSD, <20% drift or minimum RRF)
U	This analyte is not detected above the reporting limit (RL) or if noted, not detected above the limit of detection (LOD).
DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference
[2C]	Indicates this result was quantified on the second column on a dual column analysis.

P 206.329.0141 | F 206.329.6968

2377 Eastlake Avenue East | Seattle, WA 98102

www.pgwg.com

