

Tacoma-Pierce County Health Department Attn: Keith Johnston, RS Environmental Health Specialist Supervisor -Environmental Health Division 3629 South D Street Tacoma, WA 98418-6813

#### Your Reference

Facility Name: Former Nalley's Fine Foods/ Bird's Eye Site, Permit #RO0001775

#### Our Reference

518300040-003

Mott MacDonald 1601 5th Avenue Suite 800 Seattle WA 98101 United States of America

T +1 (206) 838 2886 mottmac.com

# Former Birds Eye Foods Tacoma, Third Quarter 2024 Groundwater Monitoring Event Summary Report

November 14, 2024

Dear Keith:

This letter report summarizes groundwater monitoring performed in the third quarter 2024 (2024 Q3) at the former Birds Eye Foods facility located at 3403 South 35th Street, Tacoma, Washington. The 2024 Q3 sampling event was performed, and this summary report was prepared, to satisfy semi-annual groundwater monitoring required by the Tacoma Pierce County Health Department (TPCHD).

In 1990, petroleum-related contamination in soil was identified in a portion of the facility, referred to as the "Boiler Room Site" (Site), which was the subject of a 2011 Remedial Investigation/Feasibility Study (2011 RI/FS) (Pacific Groundwater Group 2011). The preferred remedial alternative identified in the 2011 RI/FS includes an environmental restrictive covenant and long-term groundwater quality monitoring. In 2013 the Washington State Department of Ecology (Ecology) determined that no further remedial action is necessary to clean up contamination at the Boiler Room Site, dependent on the continued performance and effectiveness of the post-cleanup controls and groundwater quality monitoring. Ecology issued the 2013 no further action to Pinnacle Foods LLC, the property owner at that time. Subsequently the property was sold although Pinnacle Foods maintained responsibility for groundwater quality monitoring. Conagra Brands acquired Pinnacle Foods in 2018.

The Boiler Room Site is jointly regulated by TPCHD and Ecology. 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. As it is an open UST site, TPCHD requires ongoing semi-annual groundwater monitoring at the Boiler Room Site to assess the efficacy of remedial actions and to monitor for potential contamination migration (Marek undated; received June 13, 2013). The semi-

annual monitoring events are performed in the spring<sup>1</sup> and fall and involve sampling from two (2) shallow and deep well pairs generally located upgradient and downgradient of contaminated soil. 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 groundwater monitoring program required by TPCHD is described in the Semi-Annual Groundwater Monitoring Plan (Pacific Groundwater Group 2013). The semi-annual groundwater monitoring program required by TPCHD is in addition to, and does not alter, the long-term groundwater monitoring program (Pacific Groundwater Group 2012) required by the *Soil Containment and Natural Source Zone Depletion* remedy identified in the 2011 RI/FS that was authorized by Ecology and incorporated into the Environmental Restrictive Covenant and No Further Action (Ecology 2013).

Analytical results for groundwater samples collected in 2024 Q3 indicate that the preferred remedial alternative identified in the 2011 RI/FS continues to be effective; the petroleum contamination in soil is not resulting in a dissolved plume with concentrations 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 Conagra Brands, for specific application to the project Site. No other warranty, express or implied, is made.

#### 1 2024 Q3 Semi-Annual Groundwater Sampling Summary

The 2024 Q3 groundwater sampling event was performed in compliance with TPCHD requirements (Marek undated; received June 13, 2013) and the Semi-Annual Groundwater Monitoring Plan (Pacific Groundwater Group 2013). Groundwater samples were collected from the Boiler Room Site semi-annual well network on September 13, 2024 by representatives of Mott MacDonald (formerly Pacific Groundwater Group). 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.

#### 1.1 Chemicals of Concern and Site Cleanup Levels

Groundwater samples were delivered to Analytical Resources, Inc. (ARI), a Washington State certified laboratory, on September 13, 2024. Samples were stored and delivered in ice chests following standard chain-of-custody procedures.

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<sup>&</sup>lt;sup>1</sup> As we discussed on May 21, 2024 (personal communication K. Johnston, TPCHD, and I. Jackson, Mott MacDonald), the 2024 Q1 groundwater sampling event was not performed due to a contracting delay between Conagra Brands and Mott MacDonald that was subsequently resolved.

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 (NTWPH-Dx) with silica gel cleanup.
- BTEX Compounds Benzene, Toluene, Ethylbenzene, and Xylenes (EPA Method SW8260D).
- PAHs Polycyclic Aromatic Hydrocarbons (EPA SW8270E with select ion monitoring modification to achieve required reporting limits).

As described in the 2011 RI/FS and Semi-Annual Groundwater Monitoring Plan (Pacific Groundwater Group 2011 and 2013, respectively), standard MTCA 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 are appropriate for the Site as the Site meets 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 (Ecology 2007). Groundwater cleanup levels presented in Table 2 are consistent with the 2011 RI/FS.

#### 1.2 Quality Assurance/Quality Control

Quality assurance/quality control (QA/QC) data associated with the Boiler Room Site 2024 Q3 groundwater samples were reviewed by Mott MacDonald. All requested analyses were performed, and the QA/QC assessments indicate that the data are considered usable for the intended purpose of the project. The following notable results were identified during the QA/QC review:

- 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 suite to evaluate analytical precision. No site chemicals of concern were detected in MW-12S or the field duplicate, MW-22S.
- Surrogate spikes are known quantities of analytes that the lab "adds to" and
  "recovers from" samples for quality control purposes to measure the laboratory's
  ability to detect target substances in the sample. Surrogate percent recoveries
  associated with the 2024 Q3 samples were within control limits for all analytical
  methods performed.
- Matrix Spikes (MS) and Matrix Spike Duplicates (MSD) are types of internal laboratory QA/QC samples. The lab prepares the MS/MSDs by adding known spikes of target analytes to samples collected in the field. Recoveries of the spikes from the MS assess the effects of interferences caused by the specific sample matrix. MSDs are replicates of the MS to check for precision and bias of a method for a specific sample matrix. MS/MSD percent recoveries and relative percent difference associated with the 2024 Q3 samples were within advisory control limits.
- Calibration of specific conductance failed for the field meter used during purging
  of MW-9D and MW-12S. While the specific conductance values were still helpful
  for the purposes of monitoring stabilization in these wells and the 2024 Q3
  values are within the historic ranges for the individual wells, the MW-9D and
  MW-12S specific conductance values reported in Table 2 are considered
  estimates and are flagged "J" because the meter was not calibrated.

#### 1.3 Analytical Results

The 2024 Q3 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 2024 Q3 groundwater analytical results indicate that the preferred remedial alternative identified in the 2011 RI/FS continues to be effective; the petroleum contamination in soil is not resulting in a dissolved groundwater plume with concentrations exceeding MTCA Method A cleanup levels.

#### 2 References

- 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.
- Washington State Department of Ecology (Ecology). 2007. Model Toxics Control Act Statute and Regulation. WAC 173-340. Publication No. 94-06. Revised November 2007.
- Ecology. 2013. Model Restrictive (Environmental) Covenant. Assessor's Property Tax Parcel 0320073062. March 2013.

#### 3 Closing

We hope this data contributes to your understanding of the Site and groundwater monitoring data. Please contact Eric Cutler at Mott MacDonald with questions.

Sincerely,

Eric Cutler, PG, LHG Senior Project Manager

650-823-4947

Eric.cutler@mottmac.com

cc Allison Torrence Conagra Brands

Andrew Smith Washington State Department of

**Ecology** 

#### **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, 2024 Q3

Figure 1. Semi-Annual Monitoring Well Network

Appendix A. ARI Lab Report 24I0304

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		avanabic	available	DITE 104	DITE 103
		24 N / D 2 E . 0 7	2411/025.07	2411/025 07	2411/025-07
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
<b>Ground Surface Elevation</b>	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		<b>←</b> Sherw	ood High Traff	ic Flush Monu	ment -

<sup>\*</sup> Vertical and Horizontal Datums use the Washington State Reference Network

Table 2. Summary of Groundwater Quality Data, Birds Eye Foods, TPCHD Monitoring Event, 2024 Q3

		Site Cleanup				
CONSTITUENT	UNITS	Levels*	MW-9S	MW-9D	MW-12S	MW-12D
Field Parameters						
Depth to Water	feet		19.09	19.37	20.06	20.16
pH, Field	std. units		6.86	7.31	6.83	7.6
Specific Conductance, Field	umhos/cm		418.1	444.8 J	970.1 J	513
Temperature (C)	C		17.5	16	15.2	15.6
Turbidity, Field	NTU		4.92	5.95	20.8	17.4
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
Benzo(b)fluoranthene	ug/L		0.1 U	0.1 U	0.1 U	0.1 U
Benzo(k)fluoranthene	ug/L		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

<sup>\*</sup>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).

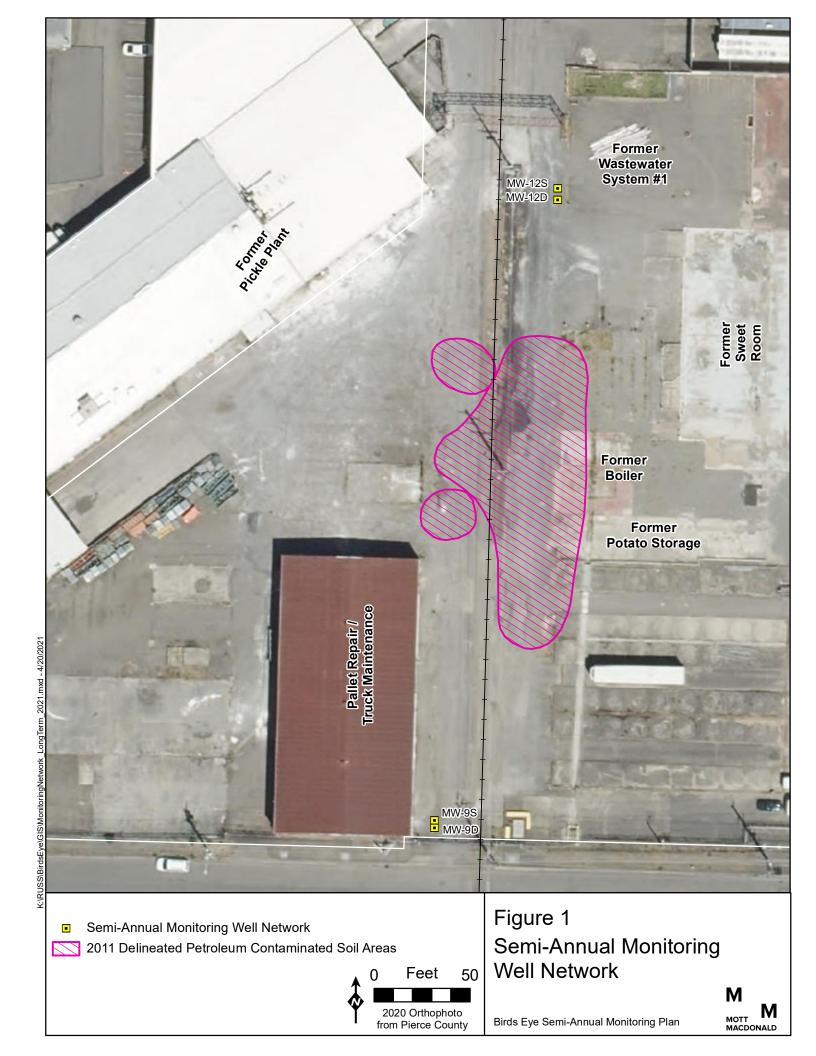
NWTPH-Dx analysis with silica gel cleanup, consistent with historical site analyses

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

 $<sup>{\</sup>it B}$  - Compound detected in blank





Appendix A Analytical Lab Report



01 October 2024

Inger Jackson Mott MacDonald 1601 5th Avenue Suite 800 Seattle, WA 98101

RE: Birds Eye (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)

24I0304

Associated SDG ID(s)

N/A

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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, LLC

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.

Kelly Bottem, Client Services Manager

#### Chain of Custody Record & Laboratory Analysis Request

ARI Assigned Number: 2410304	Turn-	around	Requested:	Turn-around Requested: Standard Page: 1 of 1		Page:	of	1			al Resources, LLC al Chemists and Consultants		
ARI Client Company: Moth Mac	Dor	nald	Phone:	2-329.	0138	Date:		Ice Prese	nt?	5		4611 So	uth 134th Place, Suite 100 WA 98168
	450					No. of Coolers:	2	Coole Temps	19.2	156			6-6200 206-695-6201 (fax)
Client Project Name: —	Eye					,		200	Analysis F	Requested			Notes/Comments
Client Project #: 5\8300040-008	Samp	olers:	Parkhum	st/Cheu	enne Stie	H-9/	H-Dx	PNAS		2			
Sample ID	D	ate	Time	Matrix	No. Containers	NUTPH BTEX	NWTPH-DX	SIM	8				
MW-95	9/13	124	1330	W	9	X	X	X					
MW-9d			1415	W	9	X	人	X			a a		
MW-125			0930	W	9	X	X	X					
MW-225	1		0935	W	9	4	4	7					
MW-12d	٠,		1000	W	27	X	*	×					MS/MSD volumes
		%		No recognition of the second									
Comments/Special Instructions	Relinqu (Signat	uished by: ture)	AV)	0	Received by: (Signature)	5 55		>	Relinquished (Signature)	l by:		Received by (Signature)	
EDD in PGG	Printed	Name:	Parkhu	rst	Printed Name:	·c 53	ewar	-B-	Printed Nam	e:		Printed Nam	e:
format and EIM format	Compa	iny:	MacDona		Company:	Axu	c		Company:			Company:	
P.O. BANDL	Date &	Time: 3/24	15:3		Date & Time:		1534	l	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, not withstanding any provision to the contrary in any contract, purchase order or cosigned 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.



Mott MacDonaldProject: Birds Eye1601 5th Avenue Suite 800Project Number: Birds EyeReported:Seattle WA, 98101Project Manager: Inger Jackson01-Oct-2024 16:07

#### ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
MW-9s	24I0304-01	Water	13-Sep-2024 13:30	13-Sep-2024 15:34
MW-9d	24I0304-02	Water	13-Sep-2024 14:15	13-Sep-2024 15:34
MW-12s	24I0304-03	Water	13-Sep-2024 09:30	13-Sep-2024 15:34
MW-22s	24I0304-04	Water	13-Sep-2024 09:35	13-Sep-2024 15:34
MW-12d	24I0304-05	Water	13-Sep-2024 10:20	13-Sep-2024 15:34
Trip Blanks	24I0304-06	Water	13-Sep-2024 09:30	13-Sep-2024 15:34



Mott MacDonald Project: Birds Eye
1601 5th Avenue Suite 800 Project Number: Birds Eye
Seattle WA, 98101 Project Manager: Inger Jackson

**Reported:** 01-Oct-2024 16:07

#### **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 blank spike and blank spike duplicate (BS/LCS and BSD/LCSD) spike recoveries and relative percent difference (RPD) were within control limits.

The matrix spike/matrix spike duplicate (MS/MSD) spike recoveries and relative percent difference (RPD) were within advisory control limits.

#### Volatiles - EPA Method SW8260D

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 blank spike and blank spike duplicate (BS/LCS and BSD/LCSD) spike recoveries and relative percent difference (RPD) were within control limits.

The matrix spike/matrix spike duplicate (MS/MSD) spike recoveries and relative percent difference (RPD) were within advisory control limits.

#### Polynuclear Aromatic Hydrocarbons (PAH) - EPA Method SW8270E-SIM

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

Initial and continuing calibrations were within method requirements.

Internal standard areas were within limits.



Reported:

01-Oct-2024 16:07



Mott MacDonald Project: Birds Eye
1601 5th Avenue Suite 800 Project Number: Birds Eye
Seattle WA, 98101 Project Manager: Inger Jackson

The surrogate percent recoveries were within control limits.

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

The blank spike (BS/LCS) percent recoveries were within control limits.

The matrix spike/matrix spike duplicate (MS/MSD) percent recoveries and relative percent difference (RPD) were within advisory control limits.

#### 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 blank spike (BS/LCS) percent recoveries were within control limits.

The matrix spike/matrix spike duplicate (MS/MSD) percent recoveries and relative percent difference (RPD) were within advisory control limits



# **Cooler Receipt Form**

	G 9	4			
ARI Client: Moft N COC No(s):	racporda	Project Name: Birds	Exe		
COC No(s):	NA	Delivered by: Fed-Ex UPS Courj		Other:	on Fig.
Assigned ARI Job No: 2410	304	Tracking No:			NA
Preliminary Examination Phase:					
Were intact, properly signed and d	ated custody seals attached to th	ne outside of the cooler?	YES	s (	NO
Were custody papers included with	n the cooler?		YE	s)	NO
Were custody papers properly fille	d out (ink, signed, etc.)		(YE	S	NO
Temperature of Cooler(s) (°C) (rec	ommended 2.0-6.0 °C for chemis	stry)			
Time		(91415.6)			
If cooler temperature is out of com	pliance fill out form 00070F		Temp Gun ID#:	9708	
Cooler Accepted by:	IN ES	Date: 9/13/24 Time:	1>54		
-	Complete custody forms an	d attach all shipping documents			
Log-In Phase:					
Was a temperature blank include	ad in the cooler?			YES	(NO
		p Wet Ice Gel Packs Baggies Foam	Block Paner Othe		NO
A Paragraphic Control of the Control	priate)?		NA	YES	NO
3 784 3	ic bags?		Individually	Grouped	Not
The state of the s	dition (unbroken)?		William Wilestein von Ground Strafferstein.	YES	NO
				YES	NO
Did the number of containers list	ed on COC match with the numb	er of containers received?	54	(YES)	NO
Did all bottle labels and tags agre	ee with custody papers?		9/16/	24 (ES)	NO
Were all bottles used correct for	the requested analyses?			YES	NO
Do any of the analyses (bottles)	require preservation? (attach pre	servation sheet, excluding VOCs)	NA	YES	NO
Were all VOC vials free of air bul	bbles?		NA	ES	NO
Was sufficient amount of sample	sent in each bottle?			YES	NO
Date VOC Trip Blank was made	at ARI	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	NA	1	- 57
Were the sample(s) split by ARI?	A YES Date/Time:	Equipment:		Split by:	
Solid Contract Solid Sol	54 9/11	lau ogez		51	
Samples Logged by:		124 Time: 0953 La	bels checked by:	377	
	** Notify Project Manager o	of discrepancies or concerns **			
	0	Commis ID on Dottle	Commis	ID COC	
Sample ID on Bottle	Sample ID on COC	Sample ID on Bottle	Sample	ID on COC	
Additional Notes, Discrepanci	es, & Resolutions:		224	9945	
Trip	blanks not li	sted on loc, acc	ideal to	end	
OF	work order.				
	With Will Hall				
	2 II N				
ву: 5А р	ate: 9/16/24				



# **Cooler Temperature Compliance Form**

ARI Work	Order: _	241030	34		
Cooler#:			Tempe	erature(°C): 19	2, 15.6
Sample ID				Bottle Count	Bottle Type
	Can ala	a box	Q_		
	300010)	CC 00.			
	6 C				
	1176				
01 "			T.	100	
Cooler#:_			rempe	erature(°C):	Dettle Time
Sample ID				Bottle Count	Bottle Type
Cooler#:			Tempe	erature(°C):	
Sample ID				<b>Bottle Count</b>	Bottle Type
				3	
	<u> </u>				
Cooler#:			Tempe	erature(°C):	
Sample ID	Part Victoria Company			Bottle Count	Bottle Type
		1			
Completed by	۸.	1/6	_	Dat	e. 9/13/29 Time: 15-34



Mott MacDonald Project: Birds Eye
1601 5th Avenue Suite 800 Project Number: Birds Eye
Seattle WA, 98101 Project Manager: Inger Jackson

**Reported:** 01-Oct-2024 16:07

Extract ID: 24I0304-01 E

#### MW-9s 24I0304-01 (Water)

**Volatile Organic Compounds** 

 Method: EPA 8260D
 Sampled: 09/13/2024 13:30

 Instrument: NT20 Analyst: LN
 Analyzed: 09/16/2024 15:34

Sample Preparation: Preparation Method: EPA 5030C (Purge and Trap)

Preparation Batch: BMI0357 Sample Size: 10 mL

Prepared: 09/16/2024 Final Volume: 10 mL

			Reporting			
Analyte	CAS Number	Dilution	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: 1,2-Dichloroethane-d4			80-129 %	99.3	%	
Surrogate: Toluene-d8			80-120 %	97.7	%	
Surrogate: 4-Bromofluorobenzene			80-120 %	95.9	%	
Surrogate: 1,2-Dichlorobenzene-d4			80-120 %	101	%	



Mott MacDonald Project: Birds Eye 1601 5th Avenue Suite 800 Project Number: Birds Eye Seattle WA, 98101 Project Manager: Inger Jackson

Reported: 01-Oct-2024 16:07

Extract ID: 24I0304-01 E

U

#### MW-9s 24I0304-01 (Water)

**Volatile Organic Compounds** 

Method: NWTPHg Sampled: 09/13/2024 13:30 Instrument: NT20 Analyst: LN Analyzed: 09/16/2024 15:34

Sample Preparation: Preparation Method: EPA 5030C (Purge and Trap)

Preparation Batch: BMI0357

Sample Size: 10 mL

Prepared: 09/16/2024 Final Volume: 10 mL Reporting CAS Number Dilution Limit Units Analyte Result Notes

Gasoline Range Organics (Tol-Nap) GRO 100 ND ug/L Surrogate: Toluene-d8 80-120 % 97.7 % Surrogate: 4-Bromofluorobenzene 80-120 % 95.9 %





Mott MacDonald Project: Birds Eye
1601 5th Avenue Suite 800 Project Number: Birds Eye
Seattle WA, 98101 Project Manager: Inger Jackson

**Reported:** 01-Oct-2024 16:07

Extract ID: 24I0304-01 B 01

#### MW-9s 24I0304-01 (Water)

Semivolatile Organic Compounds - SIM

 Method: EPA 8270E-SIM
 Sampled: 09/13/2024 13:30

 Instrument: NT17
 Analyst: JZ

 Analyzed: 09/24/2024 17:42

Sample Preparation: Preparation Method: EPA 3520C (Liq Liq)

Preparation Batch: BMI0367 Sample Size: 500 mL Prepared: 09/19/2024 Final Volume: 0.5 mL

Reporting CAS Number Limit Units Analyte Dilution Result Notes 91-20-3 ND Naphthalene 0.10 ug/L U 2-Methylnaphthalene 91-57-6 0.10 ND U ug/L 1-Methylnaphthalene 90-12-0 0.10 ND U ug/L 208-96-8 Acenaphthylene 0.10 ND IJ ug/L Acenaphthene 83-32-9 ND IJ 0.10ug/L Dibenzofuran 132-64-9 0.10 ND ug/L U Fluorene 86-73-7 0.10 ND U ug/L Phenanthrene 85-01-8 0.10 ND ug/L U 120-12-7 0.10 ND U Anthracene ug/L U 206-44-0 0.10 ND Fluoranthene ug/L U Pyrene 129-00-0 0.10ND ug/L Benzo(a)anthracene 56-55-3 0.10 ND U ug/L Chrysene 218-01-9 0.10 ND ug/L U Benzo(b)fluoranthene 205-99-2 0.10 ND U ug/L 207-08-9 Benzo(k)fluoranthene 0.10 ND ug/L IJ Benzo(j)fluoranthene 205-82-3 0.10ND ug/L IJ Benzofluoranthenes, Total 0.30 ND ug/L U Benzo(a)pyrene 50-32-8 ND U 0.10 ug/L Indeno(1,2,3-cd)pyrene 193-39-5 U 0.10 ND ug/L 53-70-3 ND U Dibenzo(a,h)anthracene 0.10 1 ug/L 191-24-2 ND U 0.10Benzo(g,h,i)perylene ug/L

 Surrogate: 2-Methylnaphthalene-d10
 31-120 %
 66.8
 %

 Surrogate: Dibenzo[a,h]anthracene-d14
 10-125 %
 15.5
 %



Mott MacDonald Project: Birds Eye
1601 5th Avenue Suite 800 Project Number: Birds Eye
Seattle WA, 98101 Project Manager: Inger Jackson

**Reported:** 01-Oct-2024 16:07

#### MW-9s 24I0304-01 (Water)

**Petroleum Hydrocarbons** 

 Method: NWTPH-Dx
 Sampled: 09/13/2024 13:30

 Instrument: FID4 Analyst: JGR
 Analyzed: 09/28/2024 21:34

Sample Preparation: Preparation Method: EPA 3510C SepF Extract ID: 24I0304-01 A 01

Preparation Batch: BMI0366 Sample Size: 500 mL Prepared: 09/19/2024 Final Volume: 1 mL

Reporting CAS Number Dilution Limit Units Analyte Result Notes DRO Diesel Range Organics (C12-C24) 0.100 ND U mg/L Motor Oil Range Organics (C24-C38) 0.200 ND U mg/L Surrogate: o-Terphenyl 50-150 % 107



Mott MacDonald Project: Birds Eye 1601 5th Avenue Suite 800 Project Number: Birds Eye Seattle WA, 98101 Project Manager: Inger Jackson

Reported: 01-Oct-2024 16:07

Extract ID: 24I0304-02 E

#### MW-9d 24I0304-02 (Water)

**Volatile Organic Compounds** 

Method: EPA 8260D Sampled: 09/13/2024 14:15 Instrument: NT20 Analyst: LN Analyzed: 09/16/2024 15:57

Sample Preparation: Preparation Method: EPA 5030C (Purge and Trap)

Preparation Batch: BMI0357

Sample Size: 10 mL Prepared: 09/16/2024 Final Volume: 10 mL

			Reporting			
Analyte	CAS Number	Dilution	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: 1,2-Dichloroethane-d4			80-129 %	99.8	%	
Surrogate: Toluene-d8			80-120 %	99.0	%	
Surrogate: 4-Bromofluorobenzene			80-120 %	95.8	%	
Surrogate: 1,2-Dichlorobenzene-d4			80-120 %	101	%	



Mott MacDonald Project: Birds Eye 1601 5th Avenue Suite 800 Project Number: Birds Eye Seattle WA, 98101 Project Manager: Inger Jackson

Reported: 01-Oct-2024 16:07

Extract ID: 24I0304-02 E

#### MW-9d 24I0304-02 (Water)

**Volatile Organic Compounds** 

Method: NWTPHg Sampled: 09/13/2024 14:15 Instrument: NT20 Analyst: LN Analyzed: 09/16/2024 15:57

Sample Preparation: Preparation Method: EPA 5030C (Purge and Trap)

Preparation Batch: BMI0357

Sample Size: 10 mL Prepared: 09/16/2024 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 %	99.0	%	
Surrogate: 4-Bromofluorobenzene			80-120 %	95.8	%	





Mott MacDonald Project: Birds Eye
1601 5th Avenue Suite 800 Project Number: Birds Eye
Seattle WA, 98101 Project Manager: Inger Jackson

**Reported:** 01-Oct-2024 16:07

Extract ID: 24I0304-02 B 01

#### MW-9d 24I0304-02 (Water)

Semivolatile Organic Compounds - SIM

 Method: EPA 8270E-SIM
 Sampled: 09/13/2024 14:15

 Instrument: NT17
 Analyst: JZ

 Analyzed: 09/24/2024 18:12

Sample Preparation: Preparation Method: EPA 3520C (Liq Liq)

Preparation Batch: BMI0367 Sample Size: 500 mL Prepared: 09/19/2024 Final Volume: 0.5 mL

1 Teparea: 05/15/2024	t mai volume. 0.5 m.						
Analyte	CAS Number	Dilution	Reporting Limit	Result	Units	Notes	
Naphthalene	91-20-3	1	0.10	ND	ug/L	U	
2-Methylnaphthalene	91-57-6	1	0.10	ND	ug/L	U	
1-Methylnaphthalene	90-12-0	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	
Dibenzofuran	132-64-9	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(b)fluoranthene	205-99-2	1	0.10	ND	ug/L	U	
Benzo(k)fluoranthene	207-08-9	1	0.10	ND	ug/L	U	
Benzo(j)fluoranthene	205-82-3	1	0.10	ND	ug/L	U	
Benzofluoranthenes, Total		1	0.30	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 %	65.9	%		

 Surrogate: 2-Methylnaphthalene-d10
 31-120 %
 65.9
 %

 Surrogate: Dibenzo[a,h]anthracene-d14
 10-125 %
 84.6
 %



Mott MacDonald Project: Birds Eye
1601 5th Avenue Suite 800 Project Number: Birds Eye
Seattle WA, 98101 Project Manager: Inger Jackson

**Reported:** 01-Oct-2024 16:07

Extract ID: 24I0304-02 A 01

#### MW-9d 24I0304-02 (Water)

**Petroleum Hydrocarbons** 

Method: NWTPH-Dx Sampled: 09/13/2024 14:15
Instrument: FID4 Analyst: JGR Analyzed: 09/28/2024 21:54

Sample Preparation: Preparation Method: EPA 3510C SepF

Preparation Batch: BMI0366 Sample Size: 500 mL Prepared: 09/19/2024 Final Volume: 1 mL

Reporting CAS Number Dilution Limit Units Analyte Result Notes DRO Diesel Range Organics (C12-C24) 0.100 ND U mg/L Motor Oil Range Organics (C24-C38) 0.200 ND U mg/L Surrogate: o-Terphenyl 50-150 % 90.4



Mott MacDonald Project: Birds Eye
1601 5th Avenue Suite 800 Project Number: Birds Eye
Seattle WA, 98101 Project Manager: Inger Jackson

**Reported:** 01-Oct-2024 16:07

Extract ID: 24I0304-03 E

#### MW-12s 24I0304-03 (Water)

**Volatile Organic Compounds** 

 Method: EPA 8260D
 Sampled: 09/13/2024 09:30

 Instrument: NT20 Analyst: LN
 Analyzed: 09/16/2024 16:21

Sample Preparation: Preparation Method: EPA 5030C (Purge and Trap)

Preparation Batch: BMI0357 Sample Size: 10 mL Prepared: 09/16/2024 Final Volume: 10 mL

Reporting CAS Number Dilution Limit Units Analyte Result Notes 71-43-2 ND Benzene 0.20 ug/L U Toluene 108-88-3 0.20 ND ug/L U 1 Ethylbenzene 100-41-4 0.20 ND U 1 ug/L 179601-23-1 ND U m,p-Xylene 0.40 1 ug/L o-Xylene 95-47-6 0.20 ND U 1 ug/L Surrogate: 1,2-Dichloroethane-d4 80-129 % 99.3 % Surrogate: Toluene-d8 80-120 % 98.6 % Surrogate: 4-Bromofluorobenzene 80-120 % 96.0 % Surrogate: 1,2-Dichlorobenzene-d4 80-120 % 99.5 %



Mott MacDonald Project: Birds Eye 1601 5th Avenue Suite 800 Project Number: Birds Eye Seattle WA, 98101 Project Manager: Inger Jackson

Reported: 01-Oct-2024 16:07

Extract ID: 24I0304-03 E

#### MW-12s 24I0304-03 (Water)

**Volatile Organic Compounds** 

Method: NWTPHg Sampled: 09/13/2024 09:30 Instrument: NT20 Analyst: LN Analyzed: 09/16/2024 16:21

Sample Preparation: Preparation Method: EPA 5030C (Purge and Trap)

Preparation Batch: BMI0357 Sample Size: 10 mL

Prepared: 09/16/2024 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 %	96.0	%	





Mott MacDonald Project: Birds Eye
1601 5th Avenue Suite 800 Project Number: Birds Eye
Seattle WA, 98101 Project Manager: Inger Jackson

**Reported:** 01-Oct-2024 16:07

Extract ID: 24I0304-03 B 01

#### MW-12s 24I0304-03 (Water)

Semivolatile Organic Compounds - SIM

 Method: EPA 8270E-SIM
 Sampled: 09/13/2024 09:30

 Instrument: NT17
 Analyset: JZ

 Analyzed: 09/24/2024 18:48

Sample Preparation: Preparation Method: EPA 3520C (Liq Liq)

Preparation Batch: BMI0367 Sample Size: 500 mL Prepared: 09/19/2024 Final Volume: 0.5 mL

Reporting CAS Number Limit Units Analyte Dilution Result Notes 91-20-3 ND Naphthalene 0.10 ug/L U 2-Methylnaphthalene 91-57-6 0.10 ND U ug/L 1-Methylnaphthalene 90-12-0 0.10 ND U ug/L 208-96-8 Acenaphthylene 0.10 ND IJ ug/L Acenaphthene 83-32-9 ND IJ 0.10ug/L Dibenzofuran 132-64-9 0.10 ND ug/L U Fluorene 86-73-7 0.10 ND U ug/L Phenanthrene 85-01-8 0.10 ND ug/L U 120-12-7 0.10 ND U Anthracene ug/L U 206-44-0 0.10 ND Fluoranthene ug/L U Pyrene 129-00-0 0.10ND ug/L Benzo(a)anthracene 56-55-3 0.10 ND U ug/L Chrysene 218-01-9 0.10 ND ug/L U Benzo(b)fluoranthene 205-99-2 0.10 ND U ug/L 207-08-9 Benzo(k)fluoranthene 0.10 ND ug/L IJ Benzo(j)fluoranthene 205-82-3 0.10ND ug/L IJ Benzofluoranthenes, Total 0.30 ND ug/L U Benzo(a)pyrene 50-32-8 ND U 0.10 ug/L Indeno(1,2,3-cd)pyrene 193-39-5 U 0.10 ND ug/L 53-70-3 ND U Dibenzo(a,h)anthracene 0.10 1 ug/L 191-24-2 U 0.10ND Benzo(g,h,i)perylene ug/L 31-120 % 55.7 % Surrogate: 2-Methylnaphthalene-d10

 Surrogate: 2-Methylnaphthalene-d10
 31-120 %
 55.7
 %

 Surrogate: Dibenzo[a,h]anthracene-d14
 10-125 %
 14.9
 %



Mott MacDonald Project: Birds Eye
1601 5th Avenue Suite 800 Project Number: Birds Eye
Seattle WA, 98101 Project Manager: Inger Jackson

**Reported:** 01-Oct-2024 16:07

#### MW-12s 24I0304-03 (Water)

**Petroleum Hydrocarbons** 

Method: NWTPH-Dx Sampled: 09/13/2024 09:30
Instrument: FID4 Analyst: JGR Analysed: 09/28/2024 22:14

Sample Preparation: Preparation Method: EPA 3510C SepF Extract ID: 24I0304-03 A 01

Preparation Batch: BMI0366 Sample Size: 500 mL Prepared: 09/19/2024 Final Volume: 1 mL

Reporting CAS Number Dilution Limit Units Analyte Result Notes DRO Diesel Range Organics (C12-C24) 0.100 ND U mg/L Motor Oil Range Organics (C24-C38) 0.200 ND U mg/L Surrogate: o-Terphenyl 50-150 % 90.4



Mott MacDonald Project: Birds Eye
1601 5th Avenue Suite 800 Project Number: Birds Eye
Seattle WA, 98101 Project Manager: Inger Jackson

**Reported:** 01-Oct-2024 16:07

Extract ID: 24I0304-04 E

#### MW-22s 24I0304-04 (Water)

**Volatile Organic Compounds** 

 Method: EPA 8260D
 Sampled: 09/13/2024 09:35

 Instrument: NT20 Analyst: LN
 Analyzed: 09/16/2024 16:44

Sample Preparation: Preparation Method: EPA 5030C (Purge and Trap)

Preparation Batch: BMI0357 Sample Size: 10 mL Prepared: 09/16/2024 Final Volume: 10 mL

Reporting CAS Number Dilution Limit Units Analyte Result Notes 71-43-2 ND Benzene 0.20 ug/L U Toluene 108-88-3 0.20 ND ug/L U 1 Ethylbenzene 100-41-4 0.20 ND U 1 ug/L 179601-23-1 ND U m,p-Xylene 0.40 1 ug/L o-Xylene 95-47-6 ND 0.20 U 1 ug/L 101 Surrogate: 1,2-Dichloroethane-d4 80-129 % % Surrogate: Toluene-d8 80-120 % 98.7 % Surrogate: 4-Bromofluorobenzene 80-120 % 96.6 % Surrogate: 1,2-Dichlorobenzene-d4 80-120 % 99.1 %



Mott MacDonald Project: Birds Eye 1601 5th Avenue Suite 800 Project Number: Birds Eye Seattle WA, 98101 Project Manager: Inger Jackson

Reported: 01-Oct-2024 16:07

Extract ID: 24I0304-04 E

#### **MW-22s** 24I0304-04 (Water)

**Volatile Organic Compounds** 

Method: NWTPHg Sampled: 09/13/2024 09:35 Instrument: NT20 Analyst: LN Analyzed: 09/16/2024 16:44

Sample Preparation: Preparation Method: EPA 5030C (Purge and Trap)

Preparation Batch: BMI0357 Sample Size: 10 mL

Prepared: 09/16/2024 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 %	98.7	%	
Surrogate: 4-Bromofluorobenzene			80-120 %	96.6	%	





Mott MacDonald Project: Birds Eye
1601 5th Avenue Suite 800 Project Number: Birds Eye
Seattle WA, 98101 Project Manager: Inger Jackson

**Reported:** 01-Oct-2024 16:07

Extract ID: 24I0304-04 B 01

#### MW-22s 24I0304-04 (Water)

Semivolatile Organic Compounds - SIM

 Method: EPA 8270E-SIM
 Sampled: 09/13/2024 09:35

 Instrument: NT17
 Analyst: JZ

 Analyzed: 09/24/2024 19:19

Sample Preparation: Preparation Method: EPA 3520C (Liq Liq)

Preparation Batch: BMI0367 Sample Size: 500 mL Prepared: 09/19/2024 Final Volume: 0.5 mL

Reporting CAS Number Limit Units Analyte Dilution Result Notes 91-20-3 ND Naphthalene 0.10 ug/L U 2-Methylnaphthalene 91-57-6 0.10 ND U ug/L 1-Methylnaphthalene 90-12-0 0.10 ND U ug/L 208-96-8 Acenaphthylene 0.10 ND IJ ug/L Acenaphthene 83-32-9 ND IJ 0.10ug/L Dibenzofuran 132-64-9 0.10 ND ug/L U Fluorene 86-73-7 0.10 ND U ug/L Phenanthrene 85-01-8 0.10 ND ug/L U 120-12-7 0.10 ND U Anthracene ug/L U 206-44-0 0.10 ND Fluoranthene ug/L U Pyrene 129-00-0 0.10ND ug/L Benzo(a)anthracene 56-55-3 0.10 ND U ug/L Chrysene 218-01-9 0.10 ND ug/L U Benzo(b)fluoranthene 205-99-2 0.10 ND U ug/L 207-08-9 Benzo(k)fluoranthene 0.10 ND ug/L IJ Benzo(j)fluoranthene 205-82-3 0.10ND ug/L IJ Benzofluoranthenes, Total 0.30 ND ug/L U Benzo(a)pyrene 50-32-8 ND U 0.10 ug/L Indeno(1,2,3-cd)pyrene 193-39-5 U 0.10 ND ug/L 53-70-3 ND U Dibenzo(a,h)anthracene 0.10 1 ug/L 191-24-2 ND U 0.10Benzo(g,h,i)perylene ug/L 31-120 % % Surrogate: 2-Methylnaphthalene-d10 63.8

 Surrogate: 2-Methylnaphthalene-d10
 31-120 %
 63.8
 %

 Surrogate: Dibenzo[a,h]anthracene-d14
 10-125 %
 88.3
 %



Mott MacDonald Project: Birds Eye
1601 5th Avenue Suite 800 Project Number: Birds Eye
Seattle WA, 98101 Project Manager: Inger Jackson

**Reported:** 01-Oct-2024 16:07

Extract ID: 24I0304-04 A 01

#### MW-22s 24I0304-04 (Water)

**Petroleum Hydrocarbons** 

Method: NWTPH-Dx Sampled: 09/13/2024 09:35
Instrument: FID4 Analyst: JGR Analyzed: 09/28/2024 22:34

Sample Preparation: Preparation Method: EPA 3510C SepF

Preparation Batch: BMI0366 Sample Size: 500 mL Prepared: 09/19/2024 Final Volume: 1 mL

Reporting CAS Number Dilution Limit Units Analyte Result Notes DRO Diesel Range Organics (C12-C24) 0.100 ND U mg/L Motor Oil Range Organics (C24-C38) 0.200 ND U mg/L Surrogate: o-Terphenyl 50-150 % 83.7



Mott MacDonald Project: Birds Eye 1601 5th Avenue Suite 800 Project Number: Birds Eye Seattle WA, 98101 Project Manager: Inger Jackson

Reported: 01-Oct-2024 16:07

Extract ID: 24I0304-05 E

#### MW-12d 24I0304-05 (Water)

**Volatile Organic Compounds** 

Method: EPA 8260D Sampled: 09/13/2024 10:20 Instrument: NT20 Analyst: LN Analyzed: 09/16/2024 17:08

Sample Preparation: Preparation Method: EPA 5030C (Purge and Trap)

Preparation Batch: BMI0357

Sample Size: 10 mL Prepared: 09/16/2024 Final Volume: 10 mL

Analyte	Reporting							
	CAS Number	Dilution	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: 1,2-Dichloroethane-d4			80-129 %	97.4	%			
Surrogate: Toluene-d8			80-120 %	98.6	%			
Surrogate: 4-Bromofluorobenzene			80-120 %	96.0	%			
Surrogate: 1,2-Dichlorobenzene-d4			80-120 %	98.6	%			



Mott MacDonald Project: Birds Eye
1601 5th Avenue Suite 800 Project Number: Birds Eye
Seattle WA, 98101 Project Manager: Inger Jackson

**Reported:** 01-Oct-2024 16:07

Extract ID: 24I0304-05 E

#### MW-12d 24I0304-05 (Water)

**Volatile Organic Compounds** 

 Method: NWTPHg
 Sampled: 09/13/2024 10:20

 Instrument: NT20 Analyst: LN
 Analyzed: 09/16/2024 17:08

Sample Preparation: Preparation Method: EPA 5030C (Purge and Trap)

Preparation Batch: BMI0357 Sample Size: 10 mL

Prepared: 09/16/2024 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 %	96.0	%	





Mott MacDonald Project: Birds Eye
1601 5th Avenue Suite 800 Project Number: Birds Eye
Seattle WA, 98101 Project Manager: Inger Jackson

**Reported:** 01-Oct-2024 16:07

Extract ID: 24I0304-05 J 01

#### MW-12d 24I0304-05 (Water)

Semivolatile Organic Compounds - SIM

 Method: EPA 8270E-SIM
 Sampled: 09/13/2024 10:20

 Instrument: NT17
 Analyst: JZ

 Analyzed: 09/24/2024 19:49

Sample Preparation: Preparation Method: EPA 3520C (Liq Liq)

Preparation Batch: BMI0367 Sample Size: 500 mL Prepared: 09/19/2024 Final Volume: 0.5 mL

Reporting CAS Number Limit Units Analyte Dilution Result Notes 91-20-3 ND Naphthalene 0.10 ug/L U 2-Methylnaphthalene 91-57-6 0.10 ND U ug/L 1-Methylnaphthalene 90-12-0 0.10 ND U ug/L 208-96-8 Acenaphthylene 0.10 ND IJ ug/L Acenaphthene 83-32-9 ND IJ 0.10ug/L Dibenzofuran 132-64-9 0.10 ND ug/L U Fluorene 86-73-7 0.10 ND U ug/L Phenanthrene 85-01-8 0.10 ND ug/L U 120-12-7 0.10 ND U Anthracene ug/L U 206-44-0 0.10 ND Fluoranthene ug/L U Pyrene 129-00-0 0.10ND ug/L Benzo(a)anthracene 56-55-3 0.10 ND U ug/L Chrysene 218-01-9 0.10 ND ug/L U Benzo(b)fluoranthene 205-99-2 0.10 ND U ug/L 207-08-9 Benzo(k)fluoranthene 0.10 ND ug/L IJ Benzo(j)fluoranthene 205-82-3 0.10ND ug/L IJ Benzofluoranthenes, Total 0.30 ND ug/L U Benzo(a)pyrene 50-32-8 ND U 0.10 ug/L Indeno(1,2,3-cd)pyrene 193-39-5 U 0.10 ND ug/L 53-70-3 ND U Dibenzo(a,h)anthracene 0.10 1 ug/L 191-24-2 U 0.10ND Benzo(g,h,i)perylene ug/L 31-120 % 56.7 % Surrogate: 2-Methylnaphthalene-d10

 Surrogate: 2-Methylnaphthalene-d10
 31-120 %
 56.7
 %

 Surrogate: Dibenzo[a,h]anthracene-d14
 10-125 %
 65.7
 %



Mott MacDonald Project: Birds Eye
1601 5th Avenue Suite 800 Project Number: Birds Eye
Seattle WA, 98101 Project Manager: Inger Jackson

**Reported:** 01-Oct-2024 16:07

#### MW-12d 24I0304-05 (Water)

**Petroleum Hydrocarbons** 

Method: NWTPH-Dx

Instrument: FID4 Analyst: JGR

Sampled: 09/13/2024 10:20

Analyzed: 09/28/2024 22:54

Sample Preparation: Preparation Method: EPA 3510C SepF Extract ID: 24I0304-05 A 01

Preparation Batch: BMI0366 Sample Size: 500 mL Prepared: 09/19/2024 Final Volume: 1 mL

Reporting CAS Number Dilution Limit Units Analyte Result Notes DRO Diesel Range Organics (C12-C24) 0.100 ND U mg/L Motor Oil Range Organics (C24-C38) 0.200 ND U mg/L Surrogate: o-Terphenyl 50-150 % 90.6



Mott MacDonald Project: Birds Eye
1601 5th Avenue Suite 800 Project Number: Birds Eye
Seattle WA, 98101 Project Manager: Inger Jackson

**Reported:** 01-Oct-2024 16:07

Extract ID: 24I0304-06 A

# Trip Blanks 24I0304-06 (Water)

**Volatile Organic Compounds** 

 Method: EPA 8260D
 Sampled: 09/13/2024 09:30

 Instrument: NT20 Analyst: LN
 Analyzed: 09/16/2024 15:10

Sample Preparation: Preparation Method: EPA 5030C (Purge and Trap)

Preparation Batch: BMI0357 Sample Size: 10 mL Prepared: 09/16/2024 Final Volume: 10 mL

Reporting CAS Number Dilution Limit Units Analyte Result Notes 71-43-2 ND Benzene 0.20 ug/L U Toluene 108-88-3 0.20 ND ug/L U 1 Ethylbenzene 100-41-4 0.20 ND U 1 ug/L 179601-23-1 ND U m,p-Xylene 0.40 1 ug/L o-Xylene 95-47-6 0.20 ND U 1 ug/L Surrogate: 1,2-Dichloroethane-d4 80-129 % 94.9 % Surrogate: Toluene-d8 80-120 % 98.6 % Surrogate: 4-Bromofluorobenzene 80-120 % 97.4 % Surrogate: 1,2-Dichlorobenzene-d4 80-120 % 96.2 %



Mott MacDonald Project: Birds Eye
1601 5th Avenue Suite 800 Project Number: Birds Eye
Seattle WA, 98101 Project Manager: Inger Jackson

**Reported:** 01-Oct-2024 16:07

Extract ID: 24I0304-06 A

## Trip Blanks 24I0304-06 (Water)

**Volatile Organic Compounds** 

 Method: NWTPHg
 Sampled: 09/13/2024 09:30

 Instrument: NT20
 Analyst: LN

 Analyzed: 09/16/2024 15:10

Sample Preparation: Preparation Method: EPA 5030C (Purge and Trap)

Preparation Batch: BMI0357 Sample Size: 10 mL

Prepared: 09/16/2024 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 %	97.4	%	



**Reported:** 01-Oct-2024 16:07

#### Analysis by: Analytical Resources, LLC

## **Volatile Organic Compounds - Quality Control**

#### Batch BMI0357 - EPA 8260D

QC Sample/Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Blank (BMI0357-BLK1)			Prepa	red: 16-Sep	-2024 Ana	lyzed: 16-S	Sep-2024 10	:39		
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: 1,2-Dichloroethane-d4	4.99		ug/L	5.00		99.8	80-129			
Surrogate: Toluene-d8	4.97		ug/L	5.00		99.4	80-120			
Surrogate: 4-Bromofluorobenzene	4.78		ug/L	5.00		95.6	80-120			
Surrogate: 1,2-Dichlorobenzene-d4	5.04		ug/L	5.00		101	80-120			



Mott MacDonald Project: Birds Eye
1601 5th Avenue Suite 800 Project Number: Birds Eye
Seattle WA, 98101 Project Manager: Inger Jackson

**Reported:** 01-Oct-2024 16:07

#### Analysis by: Analytical Resources, LLC

## **Volatile Organic Compounds - Quality Control**

#### Batch BMI0357 - NWTPHg

QC Sample/Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Blank (BMI0357-BLK2)			Prep	ared: 16-Sep	-2024 Ana	lyzed: 16-S	Sep-2024 10	):39		
Gasoline Range Organics (Tol-Nap)	ND	100	ug/L							U
Surrogate: Toluene-d8	4.97		ug/L	5.00		99.4	80-120			
Surrogate: 4-Bromofluorobenzene	4.78		ug/L	5.00		95.6	80-120			



**Reported:** 01-Oct-2024 16:07

#### Analysis by: Analytical Resources, LLC

## **Volatile Organic Compounds - Quality Control**

#### Batch BMI0357 - EPA 8260D

QC Sample/Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
LCS (BMI0357-BS1)			Prepa	ared: 16-Sep	-2024 Ana	alyzed: 16-S	Sep-2024 09	9:30		
Benzene	9.14	0.20	ug/L	10.0		91.4	80-120			
Toluene	8.27	0.20	ug/L	10.0		82.7	80-120			
Ethylbenzene	9.42	0.20	ug/L	10.0		94.2	80-120			
m,p-Xylene	18.6	0.40	ug/L	20.0		93.1	80-121			
o-Xylene	9.43	0.20	ug/L	10.0		94.3	80-121			
Surrogate: 1,2-Dichloroethane-d4	4.80		ug/L	5.00		95.9	80-129			
Surrogate: Toluene-d8	5.05		ug/L	5.00		101	80-120			
Surrogate: 4-Bromofluorobenzene	5.01		ug/L	5.00		100	80-120			
Surrogate: 1,2-Dichlorobenzene-d4	4.83		ug/L	5.00		96.5	80-120			



Mott MacDonald Project: Birds Eye
1601 5th Avenue Suite 800 Project Number: Birds Eye
Seattle WA, 98101 Project Manager: Inger Jackson

**Reported:** 01-Oct-2024 16:07

#### Analysis by: Analytical Resources, LLC

## **Volatile Organic Compounds - Quality Control**

#### Batch BMI0357 - NWTPHg

QC Sample/Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
LCS (BMI0357-BS2)			Prep	ared: 16-Sep	-2024 Ana	lyzed: 16-S	Sep-2024 08	3:22		
Gasoline Range Organics (Tol-Nap)	821	100	ug/L	1000		82.1	72-128			
Surrogate: Toluene-d8	5.05		ug/L	5.00		101	80-120			
Surrogate: 4-Bromofluorobenzene	4.87		ug/L	5.00		97.4	80-120			



**Reported:** 01-Oct-2024 16:07

#### Analysis by: Analytical Resources, LLC

## **Volatile Organic Compounds - Quality Control**

#### Batch BMI0357 - EPA 8260D

QC Sample/Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
LCS Dup (BMI0357-BSD1)			Prepa	ared: 16-Sep	-2024 Ana	lyzed: 16-9	Sep-2024 09	):53		
Benzene	9.00	0.20	ug/L	10.0		90.0	80-120	1.46	30	
Toluene	8.11	0.20	ug/L	10.0		81.1	80-120	1.90	30	
Ethylbenzene	9.46	0.20	ug/L	10.0		94.6	80-120	0.33	30	
m,p-Xylene	18.5	0.40	ug/L	20.0		92.5	80-121	0.72	30	
o-Xylene	9.33	0.20	ug/L	10.0		93.3	80-121	1.06	30	
Surrogate: 1,2-Dichloroethane-d4	4.83		ug/L	5.00		96.5	80-129			
Surrogate: Toluene-d8	5.06		ug/L	5.00		101	80-120			
Surrogate: 4-Bromofluorobenzene	5.10		ug/L	5.00		102	80-120			
Surrogate: 1,2-Dichlorobenzene-d4	4.87		ug/L	5.00		97.5	80-120			



Mott MacDonald Project: Birds Eye
1601 5th Avenue Suite 800 Project Number: Birds Eye
Seattle WA, 98101 Project Manager: Inger Jackson

**Reported:** 01-Oct-2024 16:07

#### Analysis by: Analytical Resources, LLC

## **Volatile Organic Compounds - Quality Control**

## Batch BMI0357 - NWTPHg

QC Sample/Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
LCS Dup (BMI0357-BSD2)			Prep	ared: 16-Sep	-2024 Ana	lyzed: 16-S	Sep-2024 09	0:07		
Gasoline Range Organics (Tol-Nap)	904	100	ug/L	1000		90.4	72-128	9.61	30	
Surrogate: Toluene-d8	5.01		ug/L	5.00		100	80-120			
Surrogate: 4-Bromofluorobenzene	4.86		ug/L	5.00		97.1	80-120			



**Reported:** 01-Oct-2024 16:07

#### Analysis by: Analytical Resources, LLC

#### **Volatile Organic Compounds - Quality Control**

#### Batch BMI0357 - EPA 8260D

Instrument: NT20 Analyst: LN

QC Sample/Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Matrix Spike (BMI0357-MS1)	Source: 2	2410304-05	Prepa	ared: 16-Sep	-2024 Ana	lyzed: 16-9	Sep-2024 20	):38		
Benzene	9.98	0.20	ug/L	10.0	ND	99.8	80-120			
Toluene	8.96	0.20	ug/L	10.0	ND	89.6	80-120			
Ethylbenzene	10.3	0.20	ug/L	10.0	ND	103	80-120			
m,p-Xylene	20.4	0.40	ug/L	20.0	ND	102	80-121			
o-Xylene	10.2	0.20	ug/L	10.0	ND	102	80-121			
Surrogate: 1,2-Dichloroethane-d4	5.06		ug/L	5.00	4.87	101	80-129			
Surrogate: Toluene-d8	4.95		ug/L	5.00	4.93	99.0	80-120			
Surrogate: 4-Bromofluorobenzene	5.06		ug/L	5.00	4.80	101	80-120			
Surrogate: 1,2-Dichlorobenzene-d4	4.52		ug/L	5.00	4.93	90.4	80-120			

**Reported:** 01-Oct-2024 16:07

#### Analysis by: Analytical Resources, LLC

#### **Volatile Organic Compounds - Quality Control**

## Batch BMI0357 - NWTPHg

Instrument: NT20 Analyst: LN

QC Sample/Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Matrix Spike (BMI0357-MS2)	Source:	2410304-05	Prep	ared: 16-Sep	-2024 Ana	alyzed: 16-5	Sep-2024 17	<b>'</b> :32		
Gasoline Range Organics (Tol-Nap)	872	100	ug/L	1000	ND	87.2	72-128			
Surrogate: Toluene-d8	4.89		ug/L	5.00	4.93	97.8	80-120			
Surrogate: 4-Bromofluorobenzene	4.91		ug/L	5.00	4.80	98.1	80-120			



**Reported:** 01-Oct-2024 16:07

#### Analysis by: Analytical Resources, LLC

#### **Volatile Organic Compounds - Quality Control**

#### Batch BMI0357 - EPA 8260D

Instrument: NT20 Analyst: LN

QC Sample/Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Matrix Spike Dup (BMI0357-MSD1)	Source:	2410304-05	Prepa	ared: 16-Sep	-2024 Ana	lyzed: 16-	Sep-2024 21	:01		
Benzene	9.61	0.20	ug/L	10.0	ND	96.1	80-120	3.85	30	
Toluene	8.69	0.20	ug/L	10.0	ND	86.9	80-120	3.02	30	
Ethylbenzene	10.3	0.20	ug/L	10.0	ND	103	80-120	0.06	30	
m,p-Xylene	20.4	0.40	ug/L	20.0	ND	102	80-121	0.11	30	
o-Xylene	10.2	0.20	ug/L	10.0	ND	102	80-121	0.06	30	
Surrogate: 1,2-Dichloroethane-d4	5.00		ug/L	5.00	4.87	100	80-129			
Surrogate: Toluene-d8	4.95		ug/L	5.00	4.93	98.9	80-120			
Surrogate: 4-Bromofluorobenzene	4.99		ug/L	5.00	4.80	99.7	80-120			
Surrogate: 1,2-Dichlorobenzene-d4	4.59		ug/L	5.00	4.93	91.9	80-120			



**Reported:** 01-Oct-2024 16:07

#### Analysis by: Analytical Resources, LLC

#### **Volatile Organic Compounds - Quality Control**

### Batch BMI0357 - NWTPHg

Instrument: NT20 Analyst: LN

QC Sample/Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Matrix Spike Dup (BMI0357-MSD2)	Source:	2410304-05	Prepa	ared: 16-Sep	-2024 Ana	alyzed: 16-5	Sep-2024 17	7:55		
Gasoline Range Organics (Tol-Nap)	900	100	ug/L	1000	ND	90.0	72-128	3.14	30	
Surrogate: Toluene-d8	4.92		ug/L	5.00	4.93	98.5	80-120			
Surrogate: 4-Bromofluorobenzene	5.06		ug/L	5.00	4.80	101	80-120			



**Reported:** 01-Oct-2024 16:07

#### Analysis by: Analytical Resources, LLC

#### **Semivolatile Organic Compounds - SIM - Quality Control**

#### Batch BMI0367 - EPA 8270E-SIM

Instrument: NT17 Analyst: JZ

		Reporting		Spike	Source		%REC		RPD	
QC Sample/Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Blank (BMI0367-BLK1)			Prepa	red: 19-Sep	-2024 Ana	lyzed: 24-S	Sep-2024 14	:15		
Naphthalene	ND	0.10	ug/L							U
2-Methylnaphthalene	ND	0.10	ug/L							U
1-Methylnaphthalene	ND	0.10	ug/L							U
Acenaphthylene	ND	0.10	ug/L							U
Acenaphthene	ND	0.10	ug/L							U
Dibenzofuran	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(b)fluoranthene	ND	0.10	ug/L							U
Benzo(k)fluoranthene	ND	0.10	ug/L							U
Benzo(j)fluoranthene	ND	0.10	ug/L							U
Benzofluoranthenes, Total	ND	0.30	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	2.57		ug/L	3.00		85.6	31-120			
Surrogate: Dibenzo[a,h]anthracene-d14	2.96		ug/L	3.00		98.8	10-125			



**Reported:** 01-Oct-2024 16:07

#### Analysis by: Analytical Resources, LLC

#### **Semivolatile Organic Compounds - SIM - Quality Control**

#### Batch BMI0367 - EPA 8270E-SIM

Instrument: NT17 Analyst: JZ

QC Sample/Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
LCS (BMI0367-BS1)			Prepa	ared: 19-Sep	-2024 Ana	ılyzed: 24-S	Sep-2024 17	:12		
Naphthalene	1.47	0.10	ug/L	3.00		49.1	18-120			
2-Methylnaphthalene	1.54	0.10	ug/L	3.00		51.4	23-120			
1-Methylnaphthalene	1.52	0.10	ug/L	3.00		50.7	25-120			
Acenaphthylene	1.28	0.10	ug/L	3.00		42.6	15-120			
Acenaphthene	1.59	0.10	ug/L	3.00		52.9	23-120			
Dibenzofuran	1.70	0.10	ug/L	3.00		56.7	26-120			
Fluorene	1.71	0.10	ug/L	3.00		57.0	27-120			
Phenanthrene	1.81	0.10	ug/L	3.00		60.4	27-120			
Anthracene	1.69	0.10	ug/L	3.00		56.5	20-120			
Fluoranthene	2.11	0.10	ug/L	3.00		70.3	32-120			
Pyrene	2.15	0.10	ug/L	3.00		71.6	26-120			
Benzo(a)anthracene	1.95	0.10	ug/L	3.00		65.1	25-120			
Chrysene	1.96	0.10	ug/L	3.00		65.4	31-120			
Benzo(b)fluoranthene	2.35	0.10	ug/L	3.00		78.5	31-150			
Benzo(k)fluoranthene	2.57	0.10	ug/L	3.00		85.5	34-144			
Benzo(j)fluoranthene	2.34	0.10	ug/L	3.00		78.1	33-153			
Benzofluoranthenes, Total	7.18	0.30	ug/L	9.00		79.7	33-148			
Benzo(a)pyrene	1.74	0.10	ug/L	3.00		58.1	20-120			
Indeno(1,2,3-cd)pyrene	2.62	0.10	ug/L	3.00		87.2	46-130			
Dibenzo(a,h)anthracene	3.07	0.10	ug/L	3.00		102	43-146			
Benzo(g,h,i)perylene	2.92	0.10	ug/L	3.00		97.3	40-144			
Surrogate: 2-Methylnaphthalene-d10	1.88		ug/L	3.00		62.8	31-120			
Surrogate: Dibenzo[a,h]anthracene-d14	2.98		ug/L	3.00		99.4	10-125			



**Reported:** 01-Oct-2024 16:07

#### Analysis by: Analytical Resources, LLC

#### **Semivolatile Organic Compounds - SIM - Quality Control**

#### Batch BMI0367 - EPA 8270E-SIM

Instrument: NT17 Analyst: JZ

QC Sample/Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Matrix Spike (BMI0367-MS1)	Source	: 2410304-05	Prepa	ared: 19-Sep	-2024 Ana	alyzed: 24-S	Sep-2024 20	:20		
Naphthalene	1.43	0.10	ug/L	3.00	ND	47.8	18-120			
2-Methylnaphthalene	1.51	0.10	ug/L	3.00	ND	50.4	23-120			
1-Methylnaphthalene	1.50	0.10	ug/L	3.00	ND	50.0	25-120			
Acenaphthylene	1.19	0.10	ug/L	3.00	ND	39.6	15-120			
Acenaphthene	1.57	0.10	ug/L	3.00	ND	52.2	23-120			
Dibenzofuran	1.66	0.10	ug/L	3.00	ND	55.4	26-120			
Fluorene	1.70	0.10	ug/L	3.00	ND	56.7	27-120			
Phenanthrene	1.82	0.10	ug/L	3.00	ND	60.6	27-120			
Anthracene	1.62	0.10	ug/L	3.00	ND	54.1	20-120			
Fluoranthene	2.02	0.10	ug/L	3.00	ND	67.2	32-120			
Pyrene	2.01	0.10	ug/L	3.00	ND	67.1	26-120			
Benzo(a)anthracene	1.86	0.10	ug/L	3.00	ND	61.9	25-120			
Chrysene	1.86	0.10	ug/L	3.00	ND	62.2	31-120			
Benzo(b)fluoranthene	2.19	0.10	ug/L	3.00	ND	73.0	31-150			
Benzo(k)fluoranthene	2.40	0.10	ug/L	3.00	ND	79.9	34-144			
Benzo(j)fluoranthene	2.21	0.10	ug/L	3.00	ND	73.5	33-153			
Benzofluoranthenes, Total	6.62	0.30	ug/L	9.00	ND	73.6	33-148			
Benzo(a)pyrene	1.69	0.10	ug/L	3.00	ND	56.5	20-120			
Indeno(1,2,3-cd)pyrene	2.60	0.10	ug/L	3.00	ND	86.5	46-130			
Dibenzo(a,h)anthracene	2.96	0.10	ug/L	3.00	ND	98.8	43-146			
Benzo(g,h,i)perylene	2.87	0.10	ug/L	3.00	ND	95.6	40-144			
Surrogate: 2-Methylnaphthalene-d10	1.86		ug/L	3.00	1.70	62.1	31-120			
Surrogate: Dibenzo[a,h]anthracene-d14	2.87		ug/L	3.00	1.97	95.6	10-125			





**Reported:** 01-Oct-2024 16:07

#### Analysis by: Analytical Resources, LLC

#### **Semivolatile Organic Compounds - SIM - Quality Control**

#### Batch BMI0367 - EPA 8270E-SIM

Instrument: NT17 Analyst: JZ

QC Sample/Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Matrix Spike Dup (BMI0367-MSD1)	Source	: 2410304-05	Prepa	Prepared: 19-Sep-2024 Analyzed: 24-Sep-2024 20:50						
Naphthalene	1.46	0.10	ug/L	3.00	ND	48.5	18-120	1.57	30	
2-Methylnaphthalene	1.56	0.10	ug/L	3.00	ND	51.9	23-120	2.96	30	
1-Methylnaphthalene	1.55	0.10	ug/L	3.00	ND	51.5	25-120	3.07	30	
Acenaphthylene	1.21	0.10	ug/L	3.00	ND	40.4	15-120	2.09	30	
Acenaphthene	1.58	0.10	ug/L	3.00	ND	52.6	23-120	0.87	30	
Dibenzofuran	1.67	0.10	ug/L	3.00	ND	55.7	26-120	0.52	30	
Fluorene	1.73	0.10	ug/L	3.00	ND	57.7	27-120	1.67	30	
Phenanthrene	1.81	0.10	ug/L	3.00	ND	60.5	27-120	0.21	30	
Anthracene	1.61	0.10	ug/L	3.00	ND	53.7	20-120	0.84	30	
Fluoranthene	2.03	0.10	ug/L	3.00	ND	67.8	32-120	0.84	30	
Pyrene	2.02	0.10	ug/L	3.00	ND	67.5	26-120	0.53	30	
Benzo(a)anthracene	1.88	0.10	ug/L	3.00	ND	62.8	25-120	1.39	30	
Chrysene	1.89	0.10	ug/L	3.00	ND	62.9	31-120	1.17	30	
Benzo(b)fluoranthene	2.25	0.10	ug/L	3.00	ND	74.9	31-150	2.63	30	
Benzo(k)fluoranthene	2.46	0.10	ug/L	3.00	ND	81.9	34-144	2.48	30	
Benzo(j)fluoranthene	2.23	0.10	ug/L	3.00	ND	74.2	33-153	0.97	30	
Benzofluoranthenes, Total	6.78	0.30	ug/L	9.00	ND	75.4	33-148	2.38	30	
Benzo(a)pyrene	1.72	0.10	ug/L	3.00	ND	57.5	20-120	1.81	30	
Indeno(1,2,3-cd)pyrene	2.60	0.10	ug/L	3.00	ND	86.7	46-130	0.22	30	
Dibenzo(a,h)anthracene	2.99	0.10	ug/L	3.00	ND	99.5	43-146	0.78	30	
Benzo(g,h,i)perylene	2.88	0.10	ug/L	3.00	ND	95.9	40-144	0.32	30	
Surrogate: 2-Methylnaphthalene-d10	1.91		ug/L	3.00	1.70	63.5	31-120			
Surrogate: Dibenzo[a,h]anthracene-d14	2.89		ug/L	3.00	1.97	96.4	10-125			



Mott MacDonald Project: Birds Eye
1601 5th Avenue Suite 800 Project Number: Birds Eye
Seattle WA, 98101 Project Manager: Inger Jackson

**Reported:** 01-Oct-2024 16:07

#### Analysis by: Analytical Resources, LLC

## **Petroleum Hydrocarbons - Quality Control**

#### Batch BMI0366 - NWTPH-Dx

Instrument: FID4 Analyst: JGR

QC Sample/Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Blank (BMI0366-BLK1)			Prepa	red: 19-Sep	-2024 Ana	ılyzed: 28-S	Sep-2024 20	):14		
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	0.211		mg/L	0.225		93.8	50-150			



Mott MacDonald Project: Birds Eye
1601 5th Avenue Suite 800 Project Number: Birds Eye
Seattle WA, 98101 Project Manager: Inger Jackson

**Reported:** 01-Oct-2024 16:07

#### Analysis by: Analytical Resources, LLC

#### **Petroleum Hydrocarbons - Quality Control**

#### Batch BMI0366 - NWTPH-Dx

Instrument: FID4 Analyst: JGR

QC Sample/Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
LCS (BMI0366-BS1)			Prepa	ared: 19-Sep	-2024 Ana	lyzed: 28-S	Sep-2024 20	):34		
Diesel Range Organics (C12-C24)	3.15	0.100	mg/L	3.00		105	56-120			
Surrogate: o-Terphenyl	0.219		mg/L	0.225		97.4	50-150			

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#### **Petroleum Hydrocarbons - Quality Control**

#### Batch BMI0366 - NWTPH-Dx

Instrument: FID4 Analyst: JGR

QC Sample/Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Matrix Spike (BMI0366-MS1)	Source:	24I0304-05	Prepa	ared: 19-Sep	-2024 Ana	lyzed: 28-5	Sep-2024 20	):54		
Diesel Range Organics (C12-C24)	3.05	0.100	mg/L	3.00	ND	102	56-120			
Surrogate: o-Terphenyl	0.219		mg/L	0.225	0.204	97.2	50-150			

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#### **Petroleum Hydrocarbons - Quality Control**

#### Batch BMI0366 - NWTPH-Dx

Instrument: FID4 Analyst: JGR

QC Sample/Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Matrix Spike Dup (BMI0366-MSD1)	Source:	24I0304-05	Prepa	ared: 19-Sep	-2024 Ana	alyzed: 28-	Sep-2024 21	:14		
Diesel Range Organics (C12-C24)	3.08	0.100	mg/L	3.00	ND	103	56-120	0.67	30	
Surrogate: o-Terphenyl	0.222		mg/L	0.225	0.204	98.5	50-150			





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## **Certified Analyses included in this Report**

Analyte	Certifications
EPA 8260D in Water	
Benzene	DoD-ELAP,ADEC,NELAP,WADOE
Toluene	DoD-ELAP,ADEC,NELAP,WADOE
Ethylbenzene	DoD-ELAP,ADEC,NELAP,WADOE
m,p-Xylene	DoD-ELAP,ADEC,NELAP,WADOE
o-Xylene	DoD-ELAP,ADEC,NELAP,WADOE
EPA 8270E-SIM in Water	
Naphthalene	DoD-ELAP
2-Methylnaphthalene	DoD-ELAP
1-Methylnaphthalene	DoD-ELAP
Acenaphthylene	DoD-ELAP
Acenaphthene	DoD-ELAP
Dibenzofuran	DoD-ELAP
Fluorene	DoD-ELAP
Phenanthrene	DoD-ELAP
Anthracene	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(a)pyrene	DoD-ELAP
Indeno(1,2,3-cd)pyrene	DoD-ELAP
Dibenzo(a,h)anthracene	DoD-ELAP
Benzo(g,h,i)perylene	DoD-ELAP
NWTPH-Dx in Water	

Diesel Range Organics (C12-C2 DoD-ELAP, NELAP, WADOE



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Motor Oil Range Organics (C24-

DoD-ELAP, NELAP, WADOE

NWTPHg in Water

Gasoline Range Organics (Tol-N WADOE, DoD-ELAP

Code	Description	Number	Expires
ADEC	Alaska Dept of Environmental Conservation	17-015	03/28/2025
DoD-ELAP	DoD-Environmental Laboratory Accreditation Program, PJLA Testing	66169	02/28/2025
NELAP	ORELAP - Oregon Laboratory Accreditation Program	WA100006-012	05/12/2025
WADOE	WA Dept of Ecology	C558	06/30/2025
WA-DW	Ecology - Drinking Water	C558	06/30/2025



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#### **Notes and Definitions**

D	The reported value is from a dilution
D	The reported value is from a unation

E The analyte concentration exceeds the upper limit of the calibration range of the instrument established by the initial calibration (ICAL)

H Hold time violation - Hold time was exceeded.

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.