



City of Bothell™

July 7, 2020

Jerome Cruz, Ecology Site Manager
Department of Ecology,
Northwest Regional Office Toxic Cleanup Program
3190 160th Avenue SE
Bellevue, Washington 98008-5452

Re: Quarterly Progress Report for period ending June 2020

Site Name: **BOTHELL SERVICE CENTER/ SIMON & SON**
Site Address: 18107 Bothell Way NE, Bothell WA 98011
Parcel Numbers: 237420-0065
Facility/Site No.: 33215922
Consent Decree No.: 18-2-02852-3 SEA (Effective date February 2, 2018)

Reporting Period: April – June 2020

Summary:

City of Bothell (PLP) continues to make progress on work being performed for the Bothell Service Center site (BSCSS), in accordance with the Consent Decree (CD) with the Department of Ecology.

Per the requirements of Section XI of the Consent Decree “Progress Reports”, the attached quarterly progress report has been prepared for the three-month period preceding this submittal to satisfy the terms described in the Consent Decree.

During this period the work has been geared towards continued operation of the bio-remediation system and quarterly groundwater sampling.

The attached progress report provides an update on work accomplished for the period ending June 30, 2020. Please contact me if you have any questions.

Sincerely,

A handwritten signature in blue ink that reads "Nduta Mbuthia".

Nduta Mbuthia
Project Coordinator, City of Bothell

Public Works Department
18415 101st Ave NE
Bothell, WA 98011
425.806.6800
www.bothellwa.gov



City of Bothell™

Reporting Period: Apr - Jun 2020
 Date submitted (electronically): July 7, 2020
 Date mailed (certified w/return receipt): *(deferred due to COVID-19 Stay at Home Order)*
 Prepared by: Nduta Mbuthia, Project Coordinator
 City of Bothell, Public Works Department
 Phone: 425.806.6829
 Email: nduta.mbuthia@bothellwa.gov

CONTENTS

A. A list of on-site activities that have taken place during this quarter

- Continued operation of the bio-remediation system
- Groundwater sampling was completed in April 2020; analytical data sent to Ecology
- Sent a courtesy email to Ecology site manager indicating that the City has received a letter of interest from a prospective buyer/developer for Lot D (where BSC, Hertz & Wexler sites are located), and per the terms of the Consent Decree (and Agreed Order) a formal notification letter will be sent to Ecology upon successful negotiation of a Purchase and Sale agreement for the property (at a later date)

B. Detailed description of any deviations from required tasks not otherwise documented in project plans or amendment requests:

Received Ecology’s concurrence to temporarily shut down the bio-remediation system in order to proceed with the new water line alignment through the northern portion of the BSC site. The system was shut-down on May 15, 2020 and restarted again on June 11, 2020. This deviation was related to the incident involving damage to a live water main in the vicinity of the Wexler excavation work (refer to previous QPRs)

C. Description of all deviations from the CAP (Exhibit C) and Schedule (Exhibit D) during the current quarter and any planned deviations in the upcoming quarter:

N/A

D. For any deviations in schedule, a plan for recovering lost time and maintaining compliance with the schedule:

None. The GW compliance monitoring schedule below received Ecology site manager’s concurrence:-

- Q1 - Winter 2019: March 5, 2019 - March 15, 2019*
- Q2 - Spring 2019: May 20, 2019 - June 3, 2019*
- Q3 - Summer 2019: July 15, 2019 - August 5, 2019*
- Q4 - Fall 2019: October 7, 2019 - October 25, 2019*
- Q5 - Winter 2020: January 6, 2020 - January 20, 2020*
- Q6 - Spring 2020: Week of April 6, 2020 through week of April 20, 2020*
- Q7 - Summer 2020: Week of July 6, 2020 through week of July 20, 2020*
- Q8 - Fall 2020: Week of October 5, 2020 through week of October 19, 2020*

E. All raw data (including laboratory analyses) received by Defendants during the past quarter and an identification of the source of the sample:

GW monitoring quarter sampling results attached

F. A list of deliverables for the upcoming quarter if different from the schedule:
Same as the updated schedule

Attachments

- Updated Exhibit D from the CD (8-13-19)
- Finalized and recorded the Environmental Covenant for Lot D related to BSCSS site and Hertz site (Deliverables D.1 & D.2)
- Groundwater sampling table and data

Exhibit D
Site Schedule of Work and Deliverables

Deliverables		Due (Calendar Days)
A. Administrative		
A.1	Consent Decree entered by the King County Superior Court (Effective Date of the CD)	Within 5 days of the execution by the Parties
A.2	Notification of selected contractor name and qualifications	Within 5 days of the effective date of Consent Decree (A.1)
A.3	Progress Reports	Quarterly on the 10 th of the month beginning after the effective date of the Consent Decree (A.1)
A.4	Financial Assurances – submit cost estimate for Ecology review and approval	Within 60 days of the effective date of Consent Decree
A.5	Financial Assurances - provide proof of financial assurances	Within 60 days after Ecology approves cost estimate (A.4)
B. Design		
B.1	Draft Pre-Remedial Design (PRDI) Project Plans ²	Within 5 days of the effective date of Consent Decree (A.1)
B.2	Draft PRDI Data Report and Draft Engineering Design Report (EDR) ³	Within 5 days of Ecology approval of Final PRDI Project Plans (B.1)
B.3	Final PRDI Data Report and EDR Report	Within 5 days of receipt of Ecology's comments on the Draft PRDI Data and EDR Reports (B.2)
B.4	90 % Plans and Specs [per WAC 173-340-400(4)(b)]	Within 5 days of receipt of Ecology comments on Final EDR Report (B.3)
B.5	100 % Plans and Specs	Within 5 days of receipt of Ecology comments on 90 % plans and specifications (B.4)
C. Field Construction		
C.1	Complete Construction Procurement	Within 5 days of completion of the 100% plans and specifications (B.1)
C.2	ERH System installation	Within 2 months of the effective date of Consent Decree
	ERH Operation	Within 6 to 8 months of the effective date of Consent Decree
C.3	Start install and begin operation of bioremediation-groundwater recirculation/SVE systems	Within 2 months of the effective date of Consent Decree
C.4	Install compliance monitoring well network	Within 2 months of the effective date of Consent Decree
C.5	Complete Construction	Within 2 months of the effective date of Consent Decree
C.6	ERH soil performance sampling	Within 6 to 8 months of the effective date of Consent Decree
C.7	Contingent soil excavation in ERH treatment area	Within 6 to 9 months of the ERH system shutdown

C.8	Decommission ERH; install and operate SVE system	Within 4 to 6 weeks of ERH system final shutdown. SVE system operation beginning March 2019.
C.9	Cleanup Action Report and As-Built Drawings and Report; Draft Environmental Covenant(s); and an updated Title Report	Within 60 days of decommission of SVE systems
D. Post Construction Work		
D.1	Final Environmental Covenant(s)	Within 30 days of receipt of Ecology comments on the Draft Environmental Covenant(s).
D.2	Record Final Environmental Covenant(s) with King County Auditor	Within 5 days after completion of the Final Environmental Covenant or Ecology's signature as grantee of the Final Environmental Covenant(s), whichever occurs last.
D.3	Performance Groundwater Monitoring Quarterly Performance Monitoring Biannual Performance Monitoring	Quarterly performance monitoring for one year starting Summer 2019; Biannual performance monitoring until PCE, and its breakdown products reach their applicable cleanup levels in the selected performance monitoring wells provided in CAP
D.4	Decommission Bioremediation/Groundwater Recirculation system	Upon attainment of cleanup levels in performance monitoring wells
D.5	Indoor Air Sampling (two rounds)	1st round - post-construction and pre-occupation of buildings 2nd round - upon completion of Groundwater Closure report per Section 7.0 of the BSCSS Final CAP
D.6	Groundwater Confirmation Monitoring Quarterly Compliance Monitoring	Quarterly for two years following completion of performance monitoring. As described in CAP, contingency of an additional year of quarterly sampling if cleanup levels not attained. After one additional year, if COC groundwater cleanup levels have not been reached, include a 5-year compliance sampling event for the duration of the environmental covenant.
D.7	As Built Drawings and Report of vapor intrusion mitigation measures (vapor barrier and passive venting systems), and other engineering and institutional controls (if any).	Within 30 days of the City's receipt from the developer
D.8	Five Year Compliance Monitoring and Periodic Review reports	To follow Groundwater compliance monitoring (D.6). Groundwater monitoring required once every five years for the duration of the institutional controls on groundwater (if present) under the environmental covenant.

- 1) *Schedule is in calendar days. Deliverable due date may be modified with Ecology concurrence without amendment to the Consent Decree.*
- 2) *Project Plans include the following: Work Plan, Sampling and Analysis Plan, Quality Assurance Project Plan, and Health and Safety Plan, to be submitted for Ecology review and approval. All plans will include a schedule for implementation as applicable.*
- 3) *The Engineering Design Report includes: a Construction Quality Assurance Project Plan, a Compliance Monitoring and Contingency Response Plan, Proposed Best Management Practices, Water Quality Monitoring Plan, and Substantive Requirements of Procedurally Exempt Permits. Ecology will not approve the Final EDR until the required permits have been obtained.*

After Recording Return
Original Signed Covenant to:
Jerome Cruz, Ph.D.
Toxics Cleanup Program
Department of Ecology
Northwest Regional Office
3190 - 160th Ave. SE
Bellevue, WA 98008

Environmental Covenant

Grantor: City of Bothell

Grantee: State of Washington, Department of Ecology (hereafter "Ecology")

Brief Legal Description: King County Tax Parcel 9457200050 [Parcel #7 of City of Bothell Boundary Line Adjustment No. 2015-07556 recorded under King County Recording No. 20150819900001] and tax parcel 2374200065;

Tax Parcel Nos.: 9457200050, 2374200065

Cross Reference: Bothell Former Hertz Site Agreed Order No. DE 15747 (May 31, 2018); Bothell Service Center Simon and Sons Site First Amended Consent Decree, No. 18-2-02852-3 SEA.

RECITALS

#981111
⑨

THIS DOCUMENT IS RECORDED AS A COURTESY ONLY. FIRST AMERICAN TITLE INSURANCE CO. ASSUMES NO LIABILITY FOR SUFFICIENCY, VALIDITY OR ACCURACY

- a. This document is an environmental (restrictive) covenant (hereafter "Covenant") executed pursuant to the Model Toxics Control Act ("MTCA"), chapter 70.105D RCW, and Uniform Environmental Covenants Act ("UECA"), chapter 64.70 RCW.
- b. The Property that is the subject of this Covenant is part of the Bothell Hertz Site (Facility Site ID No. 11687976), the Bothell Service Center Simon and Sons Site (BSCSS) (Facility Site ID No. 33215922), and the Al's Auto Bothell Wexler Property Site (Wexler) (Facility Site ID No. 63618231). The Wexler contamination is being addressed along with the BSCSS contamination under the Bothell Service Center Amended Consent Decree. The Hertz contamination is being addressed under Agreed Order No. DE 15747.
- c. The Property consists of King County Tax parcels 9457200050 and 2374200065 and is depicted on Exhibit A (hereafter "Property"). If there are differences between the legal descriptions and illustrations in the Exhibit, the legal description shall prevail.
- d. The Bothell Former Hertz Site also includes portions of Bothell Way NE, and King County Tax parcel No. 9457200015, which are addressed separately. The Bothell Service Center Site also extends to parcel number 2374200091, the Right-of-Way west of parcel 2374200091, and portions of 98th Avenue NE, which are addressed separately.

e. The Property is the subject of remedial action conducted under MTCA. This Covenant is required because residual contamination remains on portions of the Property. Specifically, the following principal contaminants remain on the Property:

Medium	Principal Contaminants Present
Groundwater	Petroleum hydrocarbons, Arsenic, Tetrachloroethene (PCE), Trichloroethene (TCE), Cis-1,2 Dichloroethene (DCE), Vinyl Chloride (VC), benzene
Soil	Tetrachloroethene (PCE), Trichloroethene (TCE), Cis-1,2 Dichloroethene (DCE), and Vinyl Chloride (VC), gasoline, ethylbenzene, xylenes, naphthalene

f. It is the purpose of this Covenant to restrict certain activities and uses of the Property to protect human health and the environment and the integrity of remedial actions conducted at the site. Records describing the extent of residual contamination and remedial actions conducted are available through Ecology, including Cleanup Action Plans for the above-described sites.

g. This Covenant grants Ecology certain rights under UECA and as specified in this Covenant. As a Holder of this Covenant under UECA, Ecology has an interest in real property, however, this is not an ownership interest which equates to liability under MTCA or the Comprehensive Environmental Response, Compensation, and Liability Act, 42 U.S.C. § 9601 *et seq.* The rights of Ecology as an “agency” under UECA, other than its rights as a holder, are not an interest in real property.

COVENANT

The City of Bothell, as Grantor and fee simple owner of the Property and easement holder, hereby grants to the Washington State Department of Ecology, and its successors and assignees, the following covenants. Furthermore, it is the intent of the Grantor that such covenants shall supersede any prior interests the Grantor has in the property and run with the land and be binding on all current and future owners of any portion of, or interest in, the Property.

Section 1. General Restrictions and Requirements.

The following general restrictions and requirements shall apply to the Property:

a. **Interference with Remedial Action.** The Grantor shall not engage in any activity on the Property that may impact or interfere with the remedial action and any operation, maintenance, inspection or monitoring of that remedial action without prior written approval from Ecology.

b. **Protection of Human Health and the Environment.** The Grantor shall not engage in any activity on the Property that may threaten continued protection of human health or the environment without prior written approval from Ecology. This includes, but is not limited to, any activity that results in the release of residual contamination that was contained as a part of the remedial action or that exacerbates or creates a new exposure to residual contamination remaining on the Property.

c. **Continued Compliance Required.** Grantor shall not convey any interest in any portion of the Property without providing for the continued adequate and complete operation, maintenance and monitoring of remedial actions and continued compliance with this Covenant.

d. Leases. Grantor shall restrict any lease for any portion of the Property to uses and activities consistent with this Covenant and notify all lessees of the restrictions on the use of the Property. Any lease shall provide reasonable access for the purposes stated in Section 3 (Access).

e. Preservation of Reference Monuments. Grantor shall make a good faith effort to preserve any reference monuments and boundary markers used to define the areal extent of coverage of this Covenant. Should a monument or marker be damaged or destroyed, Grantor shall have it replaced by a licensed professional surveyor within 30 days of discovery of the damage or destruction.

Section 2. Specific Prohibitions and Requirements.

In addition to the general restrictions in Section 1 of this Covenant, the following additional specific restrictions and requirements shall apply to the Property.

a. Containment of soil. The remedial action for the Hertz Site is not based on containing contaminated soil under a cap, but the northern portion of the Property is impacted by BSCSS and Wexler contamination. Any activity the Property that may disturb contaminated soil is prohibited without prior written approval by Ecology. Examples of such activity include: drilling; digging; excavation; or installation of underground utilities.

b. Groundwater use. The groundwater beneath the Property remains contaminated and shall not be extracted for any purpose other than temporary construction dewatering, investigation, monitoring or remediation. This covenant allows investigation, monitoring or remediation necessary to implement remedial action or monitoring for the above-listed sites. Drilling of a well for any water supply purpose is strictly prohibited on the Property. Groundwater extracted from the Property for any purpose shall be considered potentially contaminated and any discharge of this water shall be done in accordance with state and federal law.

c. Equipment & Ongoing Remediation. Several groundwater monitoring wells are located on the Property to monitor the performance of the remedial actions. The Grantor shall maintain clear access to these devices and protect them from damage. The Grantor shall report to Ecology within forty-eight (48) hours of the discovery of any damage to any monitoring device. Unless Ecology approves of an alternative plan in writing, the Grantor shall promptly repair the damage and submit a report documenting this work to Ecology within thirty (30) days of completing the repairs.

A bioremediation/ recirculation system (consisting of injection wells, extraction and monitoring wells, piping, pumps, tanks, and other treatment system components) is located on the Property. The system's purpose is to extract and treat contaminated groundwater, add bioremediation agent, and reinject it to remediate the solvent plume. The Grantor shall maintain clear access to system components and protect them from damage. The Grantor shall report to Ecology within forty-eight (48) hours of the discovery of any damage to the system.

The Grantor may not decommission, modify, or relocate wells or other components of the remediation system without Ecology's approval. Substantial changes from the Cleanup Action Plan(s) must receive public notice and comment.

d. Vapor Controls. The Property is impacted by volatile compounds which may generate harmful vapors. Unless and until data from the remedial actions show achievement of cleanup

levels sufficient to protect indoor air from vapor intrusion, a developer must mitigate for potential vapor intrusion. As such, the following restrictions shall apply to the Property to minimize the potential for exposure to these vapors:

1. No building or other enclosed structure shall be constructed unless vapor mitigation measures have been approved by Ecology.
2. Buildings or other enclosed structures shall be constructed with vapor barriers and venting systems that are operated and maintained to prevent the migration of vapors into the building or structure, unless an alternative approach is approved by Ecology.
3. Indoor air may be sampled in accordance with the Cleanup Action Plans for BSCSS and/or Wexler, as applicable. Grantor will provide access to parties under order, or their authorized representatives, to perform sampling as provided below.

Section 3. Access.

- a. The Grantor shall maintain clear access to all remedial action components necessary to construct, operate, inspect, monitor and maintain the remedial action.
- b. The Grantor freely and voluntarily grants Ecology and its authorized representatives, and parties under a cleanup order and their authorized representatives, upon reasonable notice, the right to enter the Property at reasonable times to evaluate the effectiveness of this Covenant and associated remedial actions, and enforce compliance with this Covenant and those actions, including the right to take samples, inspect any remedial actions conducted on the Property, and to inspect related records.

Section 4. Notice Requirements.

- a. **Conveyance of Any Interest.** The Grantor, when conveying any interest in any part of the Property, including but not limited to title, easement, leases, and security or other interests, must:
 - i. Provide written notice to Ecology of the intended conveyance at least thirty (30) days in advance of the conveyance.
 - ii. Include in the conveying document a notice in substantially the following form, as well as a complete copy of this Covenant:

NOTICE: THIS PROPERTY IS SUBJECT TO AN ENVIRONMENTAL COVENANT GRANTED TO THE WASHINGTON STATE DEPARTMENT OF ECOLOGY ON _____, 2020 AND RECORDED WITH THE KING COUNTY AUDITOR UNDER RECORDING NUMBER _____. USES AND ACTIVITIES ON THIS PROPERTY MUST COMPLY WITH THAT COVENANT, A COMPLETE COPY OF WHICH IS ATTACHED TO THIS DOCUMENT.
 - iii. Unless otherwise agreed to in writing by Ecology, provide Ecology with a complete copy of the executed document within thirty (30) days of the date of execution of such document.

b. Reporting Violations. Should the Grantor become aware of any violation of this Covenant, Grantor shall promptly report such violation in writing to Ecology.

c. Emergencies. For any emergency or significant change in site conditions due to Acts of Nature (for example, flood or fire) resulting in a violation of this Covenant, the Grantor is authorized to respond to such an event in accordance with state and federal law. The Grantor must notify Ecology in writing of the event and response actions planned or taken as soon as practical but no later than within 24 hours of the discovery of the event.

d. Notification procedure. Any required written notice, approval, reporting or other communication shall be personally delivered or sent by first class mail to the following persons. Any change in this contact information shall be submitted in writing to all parties to this Covenant. Upon mutual agreement of the parties to this Covenant, an alternative to personal delivery or first class mail, such as e-mail or other electronic means, may be used for these communications.

Jennifer Phillips City Manager City of Bothell 18415 101st Avenue NE Bothell, WA 98011 (425) 806-6100 jennifer.phillips@bothellwa.gov	Environmental Covenants Coordinator Washington State Department of Ecology Toxics Cleanup Program P.O. Box 47600 Olympia, WA 98504 – 7600 (360) 407-6000 ToxicsCleanupProgramHQ@ecy.wa.gov
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Section 5. Modification or Termination.

a. Grantor must provide written notice and obtain approval from Ecology at least sixty (60) days in advance of any proposed activity or use of the Property in a manner that is inconsistent with this Covenant. For any proposal that is inconsistent with this Covenant and permanently modifies an activity or use restriction at the site:

i. Ecology must issue a public notice and provide an opportunity for the public to comment on the proposal; and

ii. If Ecology approves of the proposal, the Covenant must be amended to reflect the change before the activity or use can proceed.

b. If the conditions at the site requiring a Covenant have changed or no longer exist, then the Grantor may submit a request to Ecology that this Covenant be amended or terminated. Any amendment or termination of this Covenant must follow the procedures in MTCA and UECA and any rules promulgated under these chapters.

Section 6. Enforcement and Construction.

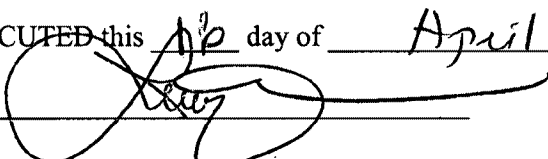
a. This Covenant is being freely and voluntarily granted by the Grantor.

b. Within ten (10) days of execution of this Covenant, Grantor shall provide Ecology with an original signed Covenant and proof of recording and a copy of the Covenant and proof of recording to others required by RCW 64.70.070.

- c. Ecology shall be entitled to enforce the terms of this Covenant by resort to specific performance or legal process. All remedies available in this Covenant shall be in addition to any and all remedies at law or in equity, including MTCA and UECA. Enforcement of the terms of this Covenant shall be at the discretion of Ecology, and any forbearance, delay or omission to exercise its rights under this Covenant in the event of a breach of any term of this Covenant is not a waiver by Ecology of that term or of any subsequent breach of that term, or any other term in this Covenant, or of any rights of Ecology under this Covenant.
- d. The Grantor shall be responsible for all costs associated with implementation of this Covenant. Furthermore, the Grantor, upon request by Ecology, shall be obligated to pay for Ecology's costs to process a request for any modification or termination of this Covenant and any approval required by this Covenant.
- e. This Covenant shall be liberally construed to meet the intent of MTCA and UECA.
- f. The provisions of this Covenant shall be severable. If any provision in this Covenant or its application to any person or circumstance is held invalid, the remainder of this Covenant or its application to any person or circumstance is not affected and shall continue in full force and effect as though such void provision had not been contained herein.
- g. A heading used at the beginning of any section or paragraph or exhibit of this Covenant may be used to aid in the interpretation of that section or paragraph or exhibit but does not override the specific requirements in that section or paragraph.

The undersigned Grantor warrants that the City of Bothell holds the title to the Property and the authority to execute this Covenant.

EXECUTED this 16 day of April, 2020.



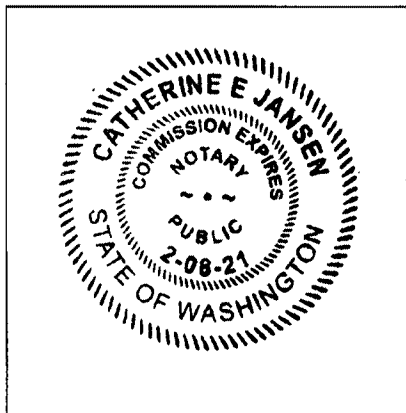
By: Jennifer Phillips

Title: City Manager

STATE OF WASHINGTON

COUNTY OF KING

This record was acknowledged before me on April 16, 2020 by Jennifer Phillips as the City Manager of the City of Bothell.



(Stamp)

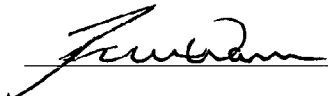
Catherine E. Jansen
(Signature of notary public)

Notary Public
(Title of office)

My Commission Expires: 2-8-21
(Date)

The Department of Ecology, hereby accepts the status as GRANTEE and HOLDER of the above Environmental Covenant.

STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY



By: ROBERT W. WARREN

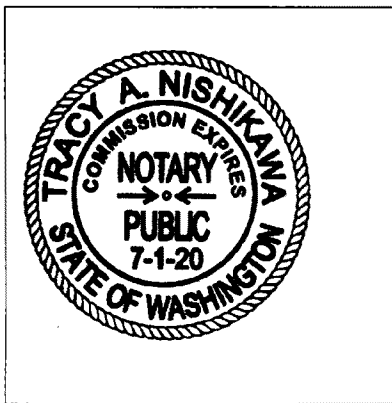
Title: SECTION MANAGER

Dated: 5/1/2020

STATE OF Washington

COUNTY OF King

This record was acknowledged before me on May 1st, 2020 by Robert W. Warren
as the TCD Section Manager of the Dept. of Ecology

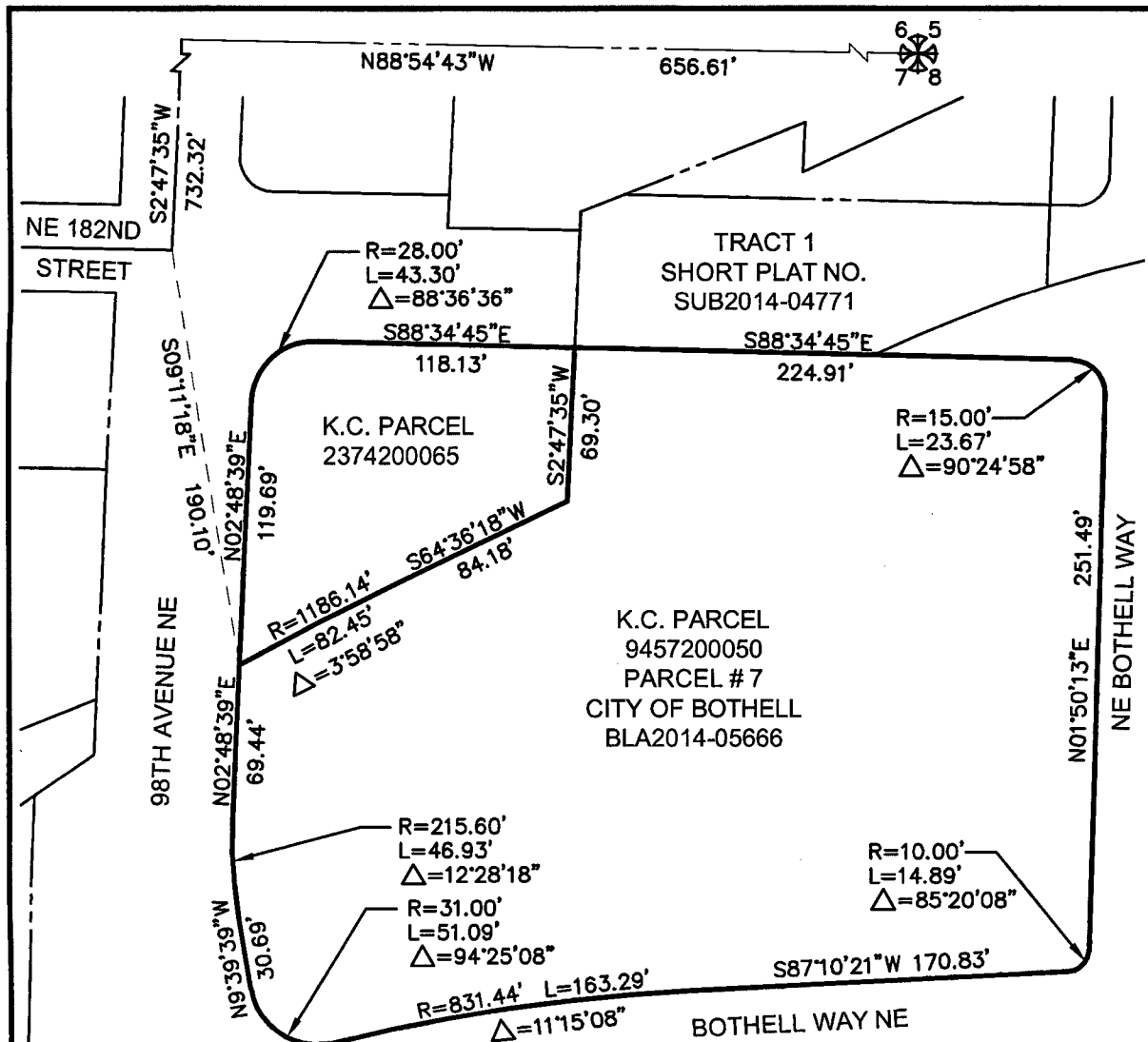


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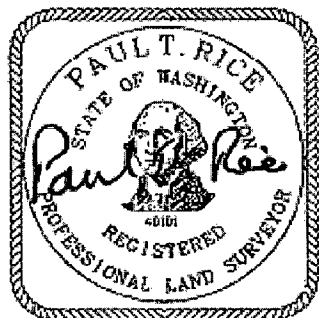
Tracy A. Nishikawa
(Signature of notary public)

Notary Public
(Title of office)

My Commission Expires: 7/1/2020
(Date)



2020-04-08



DOWL
 WWW.DOWL.COM
 8420 154th Avenue NE
 Redmond, Washington 98052
 425-869-2670

ENVIRONMENTAL COVENANT AREA BOTHELL, WA

PROJECT	13836-08
DATE	04/08/2020
SCALE	1"=80'

EXHIBIT A

Table 1
Bothell Service Center Simon Son
Groundwater Analytical Results

Well	Well Type and Water Bearing Zone	Screened Depth, (ft bgs)	Top of Casing (TOC) Elevation (feet)*	Date Sampled	Depth to Water (ft below TOC)	GW Elevation (feet)	Sampled By	PCE (µg/L)	TCE (µg/L)	(cis) 1,2-DCE (µg/L)	Vinyl Chloride (µg/L)	pH (units)	Temp (°C)	Conductivity (µS)	Dissolved Oxygen (mg/L)	Oxidation Reduction Potential (mV)	Dissolved Iron (ug/L)	Sulfate (mg/L)	Chloride (mg/L)	Ammonia as N (mg/L)	Methane (mg/L)	Ethane (mg/L)	Ethene (mg/L)	Total Organic Carbon (mg/L)				
MW-1	Shallow Decommissioned	5 to 20	46.952	3/16/01			ERM	113	38.3	28.1	<1.0																	
				7/13/01			ERM	23.7	10.3	4.82	<1.0																	
				10/26/01			ERM	8.71	2.84	1.29	<1.0																	
				12/2/02			ERM	239	380	1,200	<1.0																	
				10/1/02			Farallon	6.8	6.4	17				6.5			196.0	1.14	13.8									
				4/27/05			Farallon	2,600	80	53				6.7			201.0	3.02	97.6									
				8/15/05			Farallon	12,000	<50	<50																		
				8/14/06			Farallon	18,000	<200	<200				5.9			284.0	0.9	499									
				5/14/07			Farallon	12,000	<50	63				6.1			249.0	2.27	448									
				11/27/07			Farallon	11,000	<100	<100				6.6			233.0	4.87	135									
				8/26/08			Farallon	23,000	<200	<200				6.3			189.0	1.87	175		22			13.1	<1.2	<1.1	3.25	
				1/9/09			Farallon	450	10	6.6				6.3			88.0	10.5	120		8.8			<0.5	<0.5	<0.5	2.95	
				6/11/09			Farallon	17,000	<100	<100				6.1			242.0	2.32	80.1		18			8.6	<0.5	<0.5	2.2	
				9/14/09			Farallon	31,000	<200	<200				6.3			328.0	0.74	158		21			28	<2.5	<2.5	3.7	
				5/27/10			Farallon	23,000	<100	<100	<100			6.4			200.0	2.26	58.4									
				9/9/10			Farallon	24,000	<200	<200	<200			6.8			249.0	0.38	0.3		20			14	<1.0	<1.0	2.6	
				6/10/11			Farallon	1,900	42	52	<10			6			141.0	5.6	39.3		13			1.1	<0.5	<0.5	4.3	
				3/21/13			DOF	8,000	56	81	<0.2			6.7			203.0	5.5	68.4					4.5	<1.2	<1.1	11.8	
				4/4/14			DOF	270	16	49	<0.02			7.1			117.0	5.5	-14					<0.7	<1.2	<1.1	8.28	
				10/10/14			DOF	28,000	160	140	<2.0 U			6.3			348.0	0.3	18.6					36.8	<1.2 U	<1.1 U	3.15	
11/11/15	10.07	36.92	HWA	14,000	92	87	<50			6.06			341.0	3.89	80.4		19			0.76	<0.50	<0.50	2.9					
9/21/16	9.14	37.81	Kane	6,700	170	610	160			6.29			325.0															
10/25/16	7.72	39.23	Kane	160	6.6	16	<2.0			6.33	18.4		202.0															
MW-2	Shallow Decommissioned	5 to 20	48.897	3/16/01			ERM	13,800	834	106 ES	<1.0																	
				7/13/01			ERM	419	16.4	<1.0	<1.0																	
				10/26/01			ERM	532	<20.0	<20.0	<20.0																	
				2/12/02			ERM	81.5	8.08	<1.0	<1.0																	
				10/1/02			Farallon	18	0.65	<0.2	<0.2		6.4			319.0	0.89	-30										
				4/27/05			Farallon	2,600	44	<10	<10		5.8			319.0	0.42	149.2										
				8/15/05			Farallon	29,000	<200	<200	<200																	
				8/14/06			Farallon	32,000	300	240				5.8			317.0	0.97	478.5									
				5/14/07			Farallon	6,100	40	38				6			264.0	0.7	479.8									
				11/27/07			Farallon	38,000	<200	<200	<200			6.5			300.0	1.18	117.8									
				8/26/08			Farallon	500	200	2,300				6.4			286.0	2.26	-69.2		5.3			1330	<1.2	<1.1	25.9	
				1/8/09			Farallon	270	550	290				6.5			296.0	0.56	24.7		7.3			500	<50	<50	6.36	
				6/11/09			Farallon	1,100	1,400	1,700				6.3			294.0	0.73	60.9		8.5			4400	<500	<500	6.4	
				9/14/09			Farallon	1,700	2,200	7,800				6.3			323.0	0.68	147.5		12			3800	<500	<500	13	
				5/27/10			Farallon	240	<60	12,000	70			6.1			512.0	0.31	-15.9									
				9/9/10			Farallon	<200	<200	6,400	<200			6.5			420.0	0.21	-49.3		<5				9700	<500	<500	39
				6/10/11			Farallon	150	1,100	11,000	3,200			6.2			809.0	0.34	-101.4		<10				5200	<380	680	71
				3/20/13			DOF	540	690	14,000	830 ES			7.4			561.0	0.31	-111					15900	<1.2	1240	27	
				4/7/14			DOF	390	630	5,300	850			7.2			320.0	0.3	-352					14500	<1.2	388	8.26	
				10/10/14			DOF	320	93	8,900	1,900			6.2			382.0	0.2	-117					9760	<1.2 U	349	7.49	
11/11/15	10.17	38.74	HWA	2,400	4,100	15,000	1,200			5.78			463.0	0.00	-85.9		39			5900	<380	580	11					
9/23/16	9.89	39.01	Kane	8	6.6	8.1	6.6			6.59			241.0															
11/1/16	8.31	40.59	Kane	8.3	6.1	10	11			6.31	15.3		244.0															
MW-3	Shallow	5 to 20	47.957	3/16/01			ERM	<1.0	<1.0	<1.0	<1.0																	
				10/26/01			ERM	<1.0	<1.0	<1.0	<1.0																	
				2/12/02			ERM	<1.0	<1.0	<1.0	<1.0																	
				10/1/02			Farallon	0.37	<0.2	<0.2	<0.2		5.9			284.0	1.12	30.8										
				4/27/05			Farallon	<0.2	<0.2	<0.2	<0.2		5.5			275.0	0.96	132										
				8/14/06			Farallon	<0.2	<0.2	<0.2	<0.2		5.8			307.0	1.95	456										
				5/14/07			Farallon	<1.0	<0.2	<0.2	<0.2		5.7			264.0	1.75	408										
				11/27/07			Farallon	<1.0	<0.2	<0.2	<0.2		6.2			330.0	0.76	78									2.47	
				8/25/08			Farallon	<0.2	<0.2	<0.2	<0.2		5.9			172.0	2.88	374		18				<1	<1.2	<1.1	2.58	
				4/7/14			DOF	<0.2	<0.2	<0.2	<0.02		6.4			192.0	0.7	-71						2960	<1.2	<1.1	4.17	
				10/10/14			DOF	0.39	<0.2 U	<0.2 U	<0.02 U		5.7			339.0	0.3	-0.9						1570	<1.2 U	<1.1 U	9.82	
				9/23/16	8.26	39.70	Kane	0.22	<0.20	<0.20	<0.20		6.10			243.0												
				11/1/16	6.87	41.09	Kane	<0.20	<0.20	<0.20	<0.20		6.00	16.1		305.0												
7/17/18	7.95	40.01	Kane	<1.00	<0.50	<1.00	<0.20		6.30	17.2		144.0	11.37															
9/11/18	8.69	39.27	Kane	<1.00	<0.50	<1.00	<0.20		6.20	18.9		118.0	6.23	116.9	<100	19	2.94	<0.100	<0.00863	<0.0162	<0.0151	2.37						

Table 1
Bothell Service Center Simon Son
Groundwater Analytical Results

Well	Well Type and Water Bearing Zone	Screened Depth, (ft bgs)	Top of Casing (TOC) Elevation (feet)*	Date Sampled	Depth to Water (ft below TOC)	GW Elevation (feet)	Sampled By	PCE (µg/L)	TCE (µg/L)	(cis) 1,2-DCE (µg/L)	Vinyl Chloride (µg/L)	pH (units)	Temp (°C)	Conductivity (µS)	Dissolved Oxygen (mg/L)	Oxidation Reduction Potential (mV)	Dissolved Iron (ug/L)	Sulfate (mg/L)	Chloride (mg/L)	Ammonia as N (mg/L)	Methane (mg/L)	Ethane (mg/L)	Ethene (mg/L)	Total Organic Carbon (mg/L)					
				12/5/18	7.93	40.03	Kane	<1.00	<0.50	<1.00	<0.20	5.90	15.3	62.5	38.7	6.94	<100	3.18	2.79	<0.100	<0.00863	<0.0162	<0.0151	2.7					
				2/12/19	7.79	40.167	Kane	<1.0	<0.50	<1.0	<0.20	6.03	12	57.5	8.2	141.5	<100	4.16	3	<0.10	<0.00863	<0.0162	<0.0151	2.36					
				6/4/19	7.96	39.997	Kane	0.72	<0.20	<0.20	<0.20	6.35	15.5	62.1	9.97	3.6	<56	<5.0	3.4	<0.05	<0.001	<0.0005	<0.0005	2.1					
MW-4	Shallow	10 to 25	45.717	7/13/01			ERM	9,390	58.8 ES	86ES	<1.0																		
				10/26/01			ERM	8,960	74.7 ES	103 ES	<1.0																		
				2/12/02			ERM	11,000	93.4 ES	133 ES	<1.0																		
				10/1/02			Farallon	21,000	230	400		6.6		282.0	0.98	101													
				4/28/05			Farallon	6,700	160	110		6.6		305.0	0.83	97.4													
				8/15/06			Farallon	8,500	210	250		5.7		311.0	0.79	504													
				5/14/07			Farallon	8,600	370	160		6.1		319.0	0.64	449													
				11/27/07			Farallon	5,400	220	120		6.8		299.0	1.09	114													
				8/26/08			Farallon	11,000	790	270		6.2		248.0	2.91	159				26				5.5	<1.2	<1.1	1.59		
				1/9/09			Farallon	5,200	250	180		6.7		289.0	0.57	25.6				24				51	<5	<5	2.47		
				6/11/09			Farallon	1,600	2,000	240		6.3		285.0	0.63	61.7				15				310	<25	<25	2.1		
				9/14/09			Farallon	10,000	890	510		6.1		290.0	0.59	167				17				5400	<500	<500	1.8		
				5/27/10			Farallon	5,800	310	1,200	<50	6.7		255.0	0.32	-32.1													
				9/10/10			Farallon	4,700	310	620	<20	7		239.0	0.33	-10.2				19					4200	<500	<500	1.4	
				6/10/11			Farallon	3,300	160	970	<20	6.8		287.0	0.34	-30.3				19					4100	<500	<500	1.7	
				3/21/13			DOF	1,400	140	530	0.85	6.8		337.0	1.1	45.6									16400	<1.2	<1.1	5.68	
				4/4/14			DOF	1,500	160	1,900	5.6	6.8		290.0	0.5	-53									15200	<1.2	<1.1	1.63	
				10/10/14			DOF	2,000	140	240	<1.0 U	6		306.0	0.1	4.8									14400	<1.2 U	<1.1 U	1.75	
				11/11/15	9.28	36.46	HWA	960	120	1,100	<10	6.12		342.0	0.00	-54.4				15					3300	<250	<16	1.4	
				9/22/16	8.51	37.21	Kane	380	71	1,300	<10	6.28		433.0															
				10/31/16	6.91	38.81	Kane	3,800	900	7,400	<50	6.52	16.2	364.0															
				9/17/18	8.89	36.83	Kane	4,060	360	1,740	11.9	6.59	16.7	312.0	0.09	16.8	977	16.3	15.4	<0.100	3.79	<0.0162	<0.0151	3.94					
				11/30/18	7.67	38.05	Kane	4,370	373	1,720	<10	6.35	16.2	347.4	0.12	50	604	18.8	16	<0.100	0.721	<0.162	<0.0151	3.1					
2/22/19	7.23	38.49	Kane	4,080	343	1790	9.72	6.49	13.9	311.5	0.22	19.9	<100	16.2	16.5	<0.10	4.12	<0.0162	<0.0151	1.94									
5/23/19	7.59	38.13	Kane	5,500	370	1,100	<30	6.57	19.5	353.5	0.12	27.4	2100	17	16	<0.050	9.5	<0.50	<0.50	2.9									
7/16/19	8.13	37.59	Kane	3,700	590	1,400	9.1	6.26	20	354.3	0.06	-69	6,300	15	15	<0.050	5.2	<0.0005	<0.0005	2.3									
10/18/19	8.04	37.68	Kane	1,900	390	940	7.5	6.14	20.3	321.2	0.04	15.4	5,400	12	15	<0.050	11	<0.0005	<0.0005	3.7									
1/27/20	7.15	38.57	Kane	1,600	250	760	6.7	6.49	18.2	316.4	0.04	23.6	3,300	11	14	<0.050	8.0	<0.00022	<0.00029	2.1									
4/22/20	7.38	38.34	Kane	1,600	210	760	14	6.47	17	377.4	0.29	32.9	1,300	12	13	<0.050	8.3	<0.00022	<0.00029	1.6									
MW-5	Shallow	10 to 25	44.297	7/13/01			ERM	2,650	14.5	31.1	<1.0																		
				10/26/01			ERM	1,670	<100	<100	<1.0																		
				2/12/02			ERM	1,310	18.2	38.5	<1.0																		
				10/1/02			Farallon	3,900	72	170		6.2		185.0	0.84	70.6													
				4/28/05			Farallon	2,200	56	76		5.6		262.0	1.25	150													
				8/15/05			Farallon	640	12	20																			
				8/14/06			Farallon	10,000	240	270		5.7		259.0	0.91	470													
				5/14/07			Farallon	650	16	23		5.7		290.0	1.63	448													
				11/27/07			Farallon	1,300	25	31		6		262.0	7.09	128													
				8/26/08			Farallon	21,000	660	630		6		203.0	3.29	273				32					5.7	<1.2	<1.1	1.95	
				5/27/10			Farallon	6,600	400	240	<50	6		198.0	0.55	109													
				3/21/13			DOF	3,100	220	180	<0.2	6.4		304.0	0.4	69.8									5940	<1.2	<1.1	3.94	
				4/4/14			DOF	1,300	79	65	0.03	6.7		257.0	0.1	-35									2570	<1.2	<1.1	1.59	
				10/10/14			DOF	7,600	220	140	<10 U	5.8		163.0	0.1	13.7									3260	<1.2 U	<1.1 U	1.78	
				11/11/15	9.04	35.30	HWA	2,200	93	76	<20	5.87		170.0	1.87	29.6				20					3200	<250	<21	<1.0	
				9/21/16	8.11	36.19	Kane	910	39	35	<10	5.96		170.0															
10/24/16	6.38	37.92	Kane	590	26	29	<4.0	6.22	16.1	291.0																			
9/14/18	8.27	36.03	Kane	2,220	33.9	24	<0.20	5.88	16.4	193.0	0.37	166	<100	17.7	14.6	<0.100	0.303	<0.0162	<0.0151	3.1									
12/3/18	6.29	38.01	Kane	58.5	13.6	1.13	<0.20	6.05	15.1	325.0	0.08	19.5	1,810	15.7	7.48	<0.100	<0.00863	<0.0162	<0.0151	3.79									
6/10/19	6.93	37.37	Kane	140	81	280	4.1	6.53	16.4	548.0	0.22	-6.2	20,000	6.6	12.0	1.8	1.6	<0.250	<0.250	3.8									
MW-6	Shallow	10 to 25	47.142	7/13/01			ERM	30,000	618	231 ES	<1.0																		
				10/26/01			ERM	13,500	<400	<400	<1.0																		
				2/12/02			ERM	21,800	1,110 ES	406 ES	<1.0																		
				10/1/02			Farallon	27,000	1,100	470		6.6		201.0	0.92	95.2													
				4/27/05			Farallon	15,000	1,100	460																			

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Groundwater Analytical Results

Well	Well Type and Water Bearing Zone	Screened Depth, (ft bgs)	Top of Casing (TOC) Elevation (feet)*	Date Sampled	Depth to Water (ft below TOC)	GW Elevation (feet)	Sampled By	PCE (µg/L)	TCE (µg/L)	(cis) 1,2-DCE (µg/L)	Vinyl Chloride (µg/L)	pH (units)	Temp (°C)	Conductivity (µS)	Dissolved Oxygen (mg/L)	Oxidation Reduction Potential (mV)	Dissolved Iron (ug/L)	Sulfate (mg/L)	Chloride (mg/L)	Ammonia as N (mg/L)	Methane (mg/L)	Ethane (mg/L)	Ethene (mg/L)	Total Organic Carbon (mg/L)	
				8/26/08			Farallon	25,000	1,200	1,200		6.1		256.0	2.34	273		23			8.2	<1.2	<1.1	3.12	
				1/9/09			Farallon	12,000	610	440		6.5		190.0	4.94	115		15			2.9	<0.5	<0.5	2.54	
				6/11/09			Farallon	20,000	780	710		6		270.0	1.96	98		20			8	<0.5	<0.5	2.1	
				9/14/09			Farallon	23,000	1,200	870		6.3		315.0	0.74	158		23			8.8	<0.5	<0.5	3.1	
				2/25/10			Farallon	17,000	730	450	<100	6.4		176.0	2.49	170									
				5/27/10			Farallon	13,000	480	320	<60	6.6		250.0	0.3	38.1									
				9/10/10			Farallon	860	430	8,300	<50	6.6		492.0	0.34	-67.2		<5			64	<6.0	<6.0	19	
				6/10/11			Farallon	460	72	2,100	<20	6.5		561.0	0.44	-178		<5			490	<50	<50	33	
				3/20/13			DOF	500	140	9,600	56 ES	7.3		444.0	0	-144					5790	<1.2	2	12.3	
				4/4/14			DOF	950	220	240	19	6.8		243.0	0.4	-142					1620	<1.2	<1.1	1.93	
				10/10/14			DOF	73	28	6,600	2,700	6.6		623.0	0.3	-139					6220	<1.2 U	1200	12.9	
				11/11/15	10.23	36.98	HWA	26	<20	3,800	2,900	6.37		749.0	0.00	-110.1		<10			3400	<250	850	11	
				9/23/16	9.31	37.83	Kane	240	69	10,000	2,400	6.81		559.0											
				10/27/16	7.87	39.27	Kane	<50	<50	9,500	1,900	6.60	17.5	410.0											
				7/17/18	8.92	38.22	Kane	27.4	14.3	4,480	851	6.91	20.3	365.0	0.00										
				9/18/18	9.51	37.63	Kane	738	238	2,620	472	6.39	34.8	383.0	0.07	-42.6	6,340	20.1	14.2	0.162	0.666	<0.062	0.0596	9.01	
				12/21/18	8.79	38.35	Kane	2,670	1,000	2,560	25.5	5.96	49.4	378.0	0.23	-65.4	5,260	8.68	11.2	0.413	0.0808	<0.162	<0.151	14.3	
				2/22/19	7.79	39.35	Kane	1,820	568	1040	14	6.16	42.6	295.1	0.15	-52	5,800	13	7.69	<0.10	0.706	<0.0162	<0.0151	13.2	
				5/22/19	8.46	38.68	Kane	3,800	1,800	750	<20	6.14	43.7	407.0	0.04	-70.8	8,800	<5.0	14	0.16	1	0.0012	<0.0005	20	
				7/25/19	9.06	38.08	Kane	3,600	1,100	490	7.4	6.16	41.5	401.0	0.04	-108.1	9,200	<5.0	14	0.18	0.73	<0.0005	0.019	22	
				10/21/19	8.76	38.38	Kane	74	38	1,200	3.2	6.08	31.3	562.0	0.04	-74.6	13,000	<5.0	16	0.12	2.3	<0.0005	0.00094	19	
				1/22/20	7.77	39.37	Kane	10	5	170	74	6.62	20.9	364.9	--	-77.8	12,000	<5.0	10	0.11	4.3	<0.00022	<0.00029	8.4	
				4/18/20	8.19	38.95	Kane	23	7	38	50	6.46	22.1	360.7	0.12	-7.4	1,500	13	6.3	0.1	0.76	<0.00022	0.015	10	
MW-7	Shallow	10 to 25	45.527	7/13/01			ERM	10,100	35	30	<1.0														
				10/26/01			ERM	4,880	15	13.8	<1.0														
				2/12/02			ERM	3,800	10.5	9.28	<1.0														
				10/1/02			Farallon	9,600	<100	<100		6.7		214.0	0.71	-22.6									
				4/28/05			Farallon	1,100	<10	<10		6.2		315.0	0.84	126									
				8/15/05			Farallon	4,900	27	<20															
				8/14/06			Farallon	4,000	<40	<40		6.1		303.0	0.82	386									
				5/14/07			Farallon	320	2.7	<2.0		6.2		352.0	0.54	437									
				11/27/07			Farallon	1,200	<10	<10		6.9		336.0	0.38	76.6									
				8/26/08			Farallon	4,300	43	43		6.5		240.0	2.74	116		25			42.6	<1.2	<1.1	2.1	
				1/8/09			Farallon	760	7.8	4.8		6.7		330.0	0.7	84.3		27			110	<5.0	<5.0	3.6	
				6/11/09			Farallon	2,100	34	33		6.5		340.0	0.62	62.3		25			140	<10.0	<10.0	2.3	
				9/14/09			Farallon	6,300	120	79		6.3		318.0	0.72	170		24			23	<2.5	<2.5	1.9	
				5/27/10			Farallon	830	18	14	<10	6.6		289.0	0.63	-22.6									
				9/9/10			Farallon	5,400	110	55	<50	6.8		295.0	0.31	-21.4		24			190	<25.0	<25.0	1.7	
				6/10/11			Farallon	810	24	16	<4.0	6.7		346.0	0.52	-43.5		16			240	<10.0	<10.0	2.4	
				3/21/13			DOF	3,300	140	240	0.28	7		385.0	0.21	-3.6					741	<1.2	<1.1	6.29	
				4/4/14			DOF	2,100	130	750	2.3	7.1		329.0	0.6	-47					989	<1.2	<1.1	2.57	
				10/11/14			DOF	6,200	380	3,400	10	6.3		391.0	0.1	-27					6580	<1.2 U	<1.1 U	2.44	
				11/11/15	10.12	35.45	HWA	950	42	240	<10	6.32		282.0	0.00	12.5		16			290	<25	<2.0	2.5	
				9/21/16	8.92	36.61	Kane	3,800	160	1,300	<20	6.32		350.0											
				10/25/16	8.21	37.32	Kane	450	32	280	<4.0	6.88	15.7	323.0											
				10/26/16	7.3	38.23	Kane					6.62	14.9	316.0				22		<0.050				2.8	
				9/18/18	9.12	36.41	Kane	1,370	78.1	673	5.85	6.69	15.8	369.0	0.12	17.3	2,620	37	5.48	<0.100	1.29	<0.0162	<0.0151	3.84	
				11/30/18	8.9	36.63	Kane	2,670	305	1,440	<10	6.41	15.1	411.3	0.11	30.8	1,620	35	8.5	<0.100	0.197	<0.162	<0.151	4.18	
				5/24/19	7.96	37.57	Kane	1,000	84	240	<10	6.68	13.6	409.5	0.16	-9.2	3,900	37	6.1	<0.050	0.049	<0.003	<0.003	2.3	
MW-8	Deep	45 to 50	47.387	10/1/02			Farallon	51	0.98	0.88		7		487.0	0.73	-355									
				4/28/05			Farallon	6.4	<0.2	<0.2		6.3		186.0	0.97	104									
				8/15/06			Farallon	0.44	<0.2	<0.2		6.2		167.0	2.43	447									
				5/14/07			Farallon	4.3	<0.2	<0.2		6.1		145.0	2.89	419									
				11/27/07			Farallon	2.2	<0.2	<0.2		6.7		164.0	0.54	80.7									
				5/22/08			Farallon	79	7.2	12		6.2		139.0	5.8	153									
				8/25/08			Farallon	93	4.8	4.4		6.3		118.0	2.1	391		12			<0.7	<1.2	<1.1	<1.5	
				3/20/13			DOF	33	1	2	<0.02	6.7		218.0	0.06	10.1					649	<1.2	<1.1	6.04	
				4/4/14			DOF	130	37	41	<0.02	6.8		181.0	1	-44					<0.7	<1.2	<1.1	1.98	
				10/11/14			DOF	150	37	140	0.2	6.2		190.0	0.9	49.1					43.3	<1.2U	<1.1U	1.99	
				11/11/15	10.82	36.63	HWA	180	50	160	<1.0	6.06		225.0	0.85	-26.8		13			19	<1.0	0.59	2.2	
				9/22/16	9.71	37.68	Kane	50	6.2	25	<0.20	6.33		229.0											

Table 1
Bothell Service Center Simon Son
Groundwater Analytical Results

Well	Well Type and Water Bearing Zone	Screened Depth, (ft bgs)	Top of Casing (TOC) Elevation (feet)*	Date Sampled	Depth to Water (ft below TOC)	GW Elevation (feet)	Sampled By	PCE (µg/L)	TCE (µg/L)	(cis) 1,2-DCE (µg/L)	Vinyl Chloride (µg/L)	pH (units)	Temp (°C)	Conductivity (µS)	Dissolved Oxygen (mg/L)	Oxidation Reduction Potential (mV)	Dissolved Iron (ug/L)	Sulfate (mg/L)	Chloride (mg/L)	Ammonia as N (mg/L)	Methane (mg/L)	Ethane (mg/L)	Ethene (mg/L)	Total Organic Carbon (mg/L)				
				10/26/16	8.48	38.91	Kane	5.8	1.3	3.1	<0.20	6.43	15	246.0				12		<0.050				1.4				
				7/17/18	9.7	37.69	Kane	8.75	1.59	4.21	<0.20	6.81	15.8	173.0	0.32													
				9/17/18	10.33	37.06	Kane	14.8	2.14	8.25	<0.20	6.56	20.1	187.0	0.16	70.9	<100	6.05	7.92	<0.100	0.0246	<0.0162	<0.0151			3.36		
				12/20/18	10.05	37.34	Kane	14.5	4.37	9.38	<0.20	6.13	24.1	197.6	0.28	30	<100	4.13	6.53	<0.100	<0.00863	<0.0162	<0.0151			1.66		
				2/22/19	8.75	38.64	Kane	4.98	2.9	7.33	<0.20	6.28	28.8	183.2	0.24	65	<100	4.95	7.14	<0.10	0.0173	<0.0162	<0.0151			1.82		
				5/22/19	8.99	38.40	Kane	3.1	1	1.3	<0.20	6.3	32.9	212.0	0.16	-8.4	300	5.8	7.8	<0.050	0.036	<0.005	<0.005			2		
				7/22/19	9.65	37.74	Kane	1.9	0.48	0.53	<0.020	6.04	34.4	221.5	0.11	54.2	450	7.5	8.4	<0.050	0.14	<0.0005	<0.0005			2.1		
				10/21/19	9.54	37.85	Kane	1.0	0.35	0.41	<0.020	6.06	25.8	222.7	0.14	101.3	460	9.6	9.4	<0.050	0.49	<0.0005	<0.0005			2.6		
				1/28/20	8.83	38.56	Kane	4.5	1.7	1	<0.020	6.2	18.8	216.5	0.28	65.2	210	12	8	<0.050	0.16	0.00028	<0.00029			2.7		
				4/17/20	8.82	38.57	Kane	0.9	0.3	0.47	0.024	6.3	23.1	234.5	0.32	17.9	150	13	6.6	<0.050	0.009	0.00028	<0.00029			2.7		
MW-9	Deep Decommissioned	45 to 50	49.857	10/1/02			Farallon	250	<2.0	<2.0		7.3		373.0	0.91	-197												
				4/27/05			Farallon	53,000	<100	<100		6.9		246.0	1.02	78.7												
				8/15/05			Farallon	140,000	<200	<200																		
				11/27/07			Farallon	13,000	<100	<100					7.5		117.0	7.5	148									
				5/22/08			Farallon	8,800	<50	<50					7.4		191.0	1.1	68.9									
				8/26/08			Farallon	6,000	3,400	<50					7.2		166.0	1.2	102		<5			982	<1.2	<1.1	1.65	
				1/9/09			Farallon	160,000	<1,000	<1,000					7.5		213.0	1.4	78.9		<5			530	<50	<50	1.79	
				6/11/09			Farallon	43,000	<300	<300					6.6		98.0	7.7	83.3		<5			84	<5	<0.5	<1.0	
				9/14/09			Farallon	21,000	<200	<200					6.7		139.0	3.01	167		<5			2.2	<0.5	<0.5	1.4	
				2/25/10			Farallon	16,000	<100	<100	<100				7.5		63.0	5.97	148									
				9/10/10			Farallon	6,500	36	<30	<30				7.7		147.0	2.91	-63.7		<5			4.3	<0.5	<0.5	<1.0	
				6/10/11			Farallon	21,000	<200	<200	<200				7.6		218.0	0.39	63.2		<5			1400	<100	<100	1.3	
				3/20/13			DOF	DNAPL	DNAPL	DNAPL	DNAPL																	
				4/7/14			DOF	15,000	46	22	<0.02				7		194.0	0.4	-98						2200	<1.2	<1.1	1.89
				10/11/14			DOF	3,300	96	54	<2.0 U				6.5		168.0	0.1	-38						757	<1.2 U	<1.1 U	1.63
				11/11/15	11.9	38.00	HWA	890	560	680	<10				5.90		139.0	0.00	45.6		<5.0				190	<15	6.1	<1.0
9/22/16	11.2	38.66	Kane	53,000	<500	<500	<500				7.41		222.0															
10/26/16	9.71	40.15	Kane	42,000	<300	<300	<300				7.54	14.8	254.0					3,300		0.44				<1.0				
MW-10	Shallow Decommissioned	5 to 25		4/27/05			Farallon	3	<0.2	<0.2																		
MW-10R	Shallow Decommissioned	15 to 25	49.392	9/19/16	9.98	39.41	Kane	1.6	<0.20	<0.20	<0.20	6.61		188.0														
				11/1/16	8.34	41.05	Kane	1.3	<0.20	<0.20	<0.20	6.78	15.4	212.0														
MW-11	Intermediate	25 to 33	47.207	11/28/07			Farallon	28	0.26	<0.2		6.6		176.0	1.26	165												
				5/22/08			Farallon	23	0.24	<0.2		6.2		174.0	0.84	132												
				8/25/08			Farallon	27	0.53	<0.2		6.3		142.0	1.46	238				18				29.8	<1.2	<1.1	1.71	
				3/20/13			DOF	5.6	0.2	0.26	<0.02	6.6		296.0	0.1	-50.6								5770	<1.2	<1.1	6.53	
				4/4/14			DOF	5.6	<0.2	<0.2	<0.02	6.8		298.0	0.2	-107								3500	<1.2	<1.1	2.61	
				10/11/14			DOF	4.8	0.18 J	0.13 J	<0.02 U	6.1		371.0	0.4	16.8								2150	<1.2 U	<1.1 U	2.72	
				11/11/15	10.34	36.91	HWA	4.1	0.4	<0.20	<0.20	6.28		594.0	0.67	-82.8				18				840	<50	<7.0	4.5	
				9/23/16	9.42	37.79	Kane	9.9	<0.2	0.42	<0.20	6.29		408.0														
				10/26/16	7.98	39.23	Kane	2.0	<0.20	<0.20	<0.20	6.38	16.5	376.0													4.2	
				7/17/18	9.02	38.19	Kane	11.2	2.12	3.73	<0.20	6.58	20.4	295.0	0.16													
				9/17/18	9.82	37.39	Kane	35.8	29.6	27.6	<0.20	6.24	34.8	357.0	0.06	-4.5	1,140	42.5	22.9	<0.100	0.158	<0.0162	<0.0151			9.07		
				12/20/18	8.56	38.65	Kane	41	11.5	4.92	<0.20	5.72	45.7	287.0	0.16	14.3	611	37.4	13.5	<0.100	0.109	<0.162	<0.151			8.99		
				2/21/19	7.9	39.31	Kane	16.9	14.6	9.58	<0.20	5.96	47.2	316.3	0.16	-70	1,240	10.3	14.4	<0.10	0.87	<0.0162	<0.0151			23.7		
				5/22/19	8.48	38.73	Kane	75	69	14	<0.40	6.13	45.7	468.0	0.04	-18	810	13	13	<0.050	0.49	<0.0005	<0.0005			27		
				7/25/19	9.12	38.09	Kane	39	41	7.7	0.34	6.2	40.8	407.0	0.04	-43.8	660	10	11	0.068	1.1	<0.0005	<0.0005			26		
				10/21/19	8.92	38.29	Kane	3.5	3.8	220	1.5	6.33	27.8	522.0	0.08	-59.4	1,500	<5.0	15	<0.050	1	<0.0005	<0.0005			34		
1/22/20	8.09	39.12	Kane	2.5	2.7	230	70	6.66	20.4	388.6	1.1	-35.1	4,500	<5.0	12	1.3	2	<0.00022	<0.00029			11						
4/17/20	8.49	38.71	Kane	8	20	130	140	6.79	22.5	515.3	0.2	-15.1	580	62	8.9	0.25	0.062	<0.00022	0.0068			17						
MW-12	Intermediate	25 to 33	45.467	11/28/07			Farallon	2,300	30	39		6.9		326.0	1.48	165												
				5/22/08			Farallon	2,800	53	61		6.5		277.0	1.51	132										2.02		
				8/26/08			Farallon	1,600	<10	<10		6.3		227.0	2.12	4.6		19			<0.7	<1.2	<1.1		5.04			
				1/8/09			Farallon	3,200	88	44		6.5		309.0	0.77	70		22			16	<1.0	<1.0		3.11			
				6/11/09			Farallon	2,500	53	29		6.2		293.0	0.62	75.4		22			30	<3.0	<3.0		1.7			
				9/14/09			Farallon	700	5.1	<4		6.2		263.0	0.77	168		20			4.8	<0.5	<0.5		2.4			
				5/27/10			Farallon	2,800	240	80	<20	6.5		265.0	0.32	8.7												
				9/9/10			Farallon	1,500	22	<20	<20	6.8		226.0	0.32	9.5		15						490	<50	<50	1.1	
				6/10/11			Farallon	5,800	270	180	<30	6.5		348.0	0.49	-14.6		19						1000	<100	<100	2.5	
				3/20/13			DOF	4,800	210	920	1.6	6.8		392.0	0.05	-18.8												

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Well	Well Type and Water Bearing Zone	Screened Depth, (ft bgs)	Top of Casing (TOC) Elevation (feet)*	Date Sampled	Depth to Water (ft below TOC)	GW Elevation (feet)	Sampled By	PCE (µg/L)	TCE (µg/L)	(cis) 1,2-DCE (µg/L)	Vinyl Chloride (µg/L)	pH (units)	Temp (°C)	Conductivity (µS)	Dissolved Oxygen (mg/L)	Oxidation Reduction Potential (mV)	Dissolved Iron (ug/L)	Sulfate (mg/L)	Chloride (mg/L)	Ammonia as N (mg/L)	Methane (mg/L)	Ethane (mg/L)	Ethene (mg/L)	Total Organic Carbon (mg/L)			
				10/10/14			DOF	4,100	390	150	<2.0 U	6.2		360.0	0.2	-25.6						12800	<1.2 U	<1.1 U	2.82		
				11/11/15	9.61	35.93	HWA	2,900	180	1,100	<0.20	6.26		397.0	0.00	11			16				3000	<150	<18	2.2	
				9/22/16	8.89	36.58	Kane	1,100	140	730	<10	6.37		410.0													
				10/26/16	7.26	38.21	Kane	1,300	230	1,600	<20	6.56	15.6	369.0						13		<0.050					2.1
				7/20/18	8.44	37.03	Kane	4,110	351	2,110	14.3	6.45	14.8	162.0	0.66												
				9/10/18	9.14	36.33	Kane	3,460	231	1,460	11.1	6.46	15.3	343.0	0.14	71.8	834	19.9	12.5	<0.100	4.12	<0.0162	<0.0151				5.72
				11/30/18	8.59	36.88	Kane	2,340	194	669	<4.0	6.16	15.1	533.8	0.11	84.5	2,330	14	46.2	<0.100	0.727	<0.162	<0.151				3.9
				5/24/19	7.92	37.55	Kane	5,400	400	780	<30	6.25	14.1	383.9	0.30	-89.5	530	24	9.5	<0.050	3.7	<0.250	<0.250				2.5
				7/22/19	8.4	37.07	Kane	910	240	630	6.2	6.12	18.6	672.0	0.05	-341	3,400	18	42	<0.050	3.2	<0.0005	<0.0005				2.8
				10/18/19	9.07	36.40	Kane	360	68	240	0.84	5.85	16.2	361.6	0.12	40	6,000	14	36	<0.050	3.3	<0.0005	<0.0005				2.1
				1/27/20	7.8	37.67	Kane	260	120	450	1.9	6.28	15.5	459.0	0.31	38.2	6,100	12	32	<0.050	2.4	<0.00022	<0.00029				2.3
4/21/20	7.64	37.83	Kane	330	84	52	0.82	6.26	16.1	472.9	0.18	27.5	5,100	21	30	<0.050	3.6	<0.00022	<0.00029				2.9				
MW-13	Deep Damaged	40 to 55	48.777	11/28/07			Farallon	<1.0	<0.2	<0.2		7.10		152.0	1.35	151											
MW-14	Intermediate Decommissioned	22 to 32	49.157	11/28/07			Farallon	<0.2	<0.2	<0.2		7.0		146.0	4.0	160											
				11/11/15	10.23	38.96	HWA	<0.20	<0.20	<0.20	<0.20	5.56		395.0	0.00	-99		<10				11000	<500	<55	13		
				9/21/16	9.53	39.63	Kane	0.91	<0.20	<0.20	<0.20	6.08		243.0													
11/1/16	8.29	40.87	Kane	<0.20	<0.20	<0.20	<0.20	5.96	15.6	307.0																	
MW-15	Intermediate Decommissioned	22 to 32		11/28/07			Farallon	<0.2	<0.2	<0.2		6.8		157.0	4.0	170											
MW-16	Deep Decommissioned	40 to 55		11/28/07			Farallon	10	<0.2	<0.2		7.9		124.0	6.9	130											
MW-17	Deep Damaged	40 to 50	48.947	11/28/07			Farallon	6.5	<0.2	<0.2		7.7		188.0	0.49	141											
MW-18	Intermediate Decommissioned	22 to 30	48.747	11/28/07			Farallon	270	<2.0	<2.0		7.2		266.0	0.83	158											
				5/22/08			Farallon	<0.25	<0.25	<0.25																	
				4/4/14			DOF	2.4	1.2	14	3.3	6.1		493.0	0.3	-111							16700	<1.2	<1.1	48.5	
				10/11/14			DOF	0.49	<0.2 U	3.6	1.3	5.9		449.0	0.4	-6.6							13300	<1.2 U	<1.1 U	29.8	
				9/23/16	9.65	39.10	Kane	7.8	<0.20	1.3	0.26	6.02		238.0													
10/27/16	8.11	40.64	Kane	<0.20	<0.20	2.0	0.47	5.90	15.8	256.0																	
MW-19	Shallow Decommissioned	9 to 19	47.517	11/16/15	9.31	38.26	HWA	8,200	70	76	<50	6.34		638.0	3.75	49.2		31				74	<15	2.2	7.9		
				9/21/16	9.20	38.32	Kane	1,800	84	490	34	6.34		313.0													
				10/25/16	8.02	39.50	Kane	5,700	140	860	61	6.70	17.8	296.0													
MW-20	Intermediate	25 to 30	46.857	11/16/15	9.20	37.70	HWA	900	60	37	17	6.17		557.0	0.00	-73		22				1800	<125	9.4	2.7		
				9/21/16	9.02	37.84	Kane	190	45	120	9.0	6.66		340.0													
				10/26/16	7.73	39.13	Kane	140	44	120	17	6.44	16.4	348.0					43		0.21					4.3	
				12/20/18	7.5	39.36	Kane	32	879	552	2.23	5.72	-	263.9	0.05	-4.4	3,140	2.56	8.88	1.54	0.0446	<0.0162	<0.0151			95.4	
				3/14/19	7.55	39.31	Kane	<0.841	136	163	<2.0	6	-	219.3	0.2	68.3	1,460	0.348	7.8	1.07	0.0463	<0.0162	<0.0151			45.3	
				6/6/19	8.03	38.83	Kane	0.43	51	31	<0.40	6.45	55.6	218.1	0.08	4.4	950	<5.0	7.4	0.75	0.51	<0.05	<0.05			16	
				7/25/19	8.64	38.22	Kane	0.82	36	27	0.052	6.36	52.5	210.2	0.13	-82	800	<5.0	6.4	0.89	0.67	<0.0005	<0.0005			8	
				10/22/19	8.47	38.39	Kane	0.46	19	68	0.15	6.32	36.6	375.7	0.07	-47.2	1,200	<5.0	13	0.81	3.1	<0.0005	<0.0005			9.8	
				1/28/20	7.66	39.20	Kane	<1.0	<1.0	190	46	6.87	26.7	483.0	0.13	-452	910	<5.0	14	0.65	13	<0.00022	<0.00029			13	
4/21/20	8.44	38.41	Kane	0.23	<1.0	0.34	18	6.89	23.1	704.0	0.18	6.3	2,300	<5.0	13	0.59	13	<0.00022	0.041			25					
MW-21	Shallow	10 to 15	45.717	11/16/15	9.41	35.58	HWA	21,000	440	350	<100	7.38		1579.0	8.60	-18		96				310	<25	2.6	3.3		
				9/22/16	9.05	36.67	Kane	27,000	540	360	<200	6.56		355.0													
				10/31/16	6.97	38.75	Kane	8,400	210	190	<50	6.32	17.7	319.0													
				9/10/18	9.31	36.41	Kane	410	12	9	<0.20	6.22	18.1	280.0	2.40	93.5	<100	20	11.9	<0.100	0.0299	<0.0162	<0.0151			3.78	
				12/3/18	7.23	38.49	Kane	122	1.67	<1.00	<0.20	5.85	15.9	272.7	2.97	75.7	<100	12.9	4.61	<0.100	<0.00863	<0.0162	<0.0151			4.03	
				5/24/19	7.69	38.03	Kane	82	1.40	0.5	<0.40	6.08	14.3	248.0	3.51	2.7	<56	12	3.7	<0.050	0.0026	<0.0005	<0.0005			<1.0	
MW-22	Deep	54 to 59	44.957	11/16/15	8.91	36.84	HWA	69	2.8	2.0	<0.40	7.30		296.0	0.00	-52.2		<5.0				1400	<250	<9.0	1.5		
				9/22/16	8.41	36.55	Kane	11	<0.20	1.5	<0.20	7.42		236.0													
				10/26/16	7.16	37.80	Kane	2.1	<0.20	2.2	<0.20	7.63	14.7	262.0				<5.0		0.24						1.2	
				7/16/18	8.27	36.69	Kane	<1.00	<0.50	1.6	<0.20	7.87	15.4	214.0	0.00												
				9/19/18	8.85	36.11	Kane	<1.00	<0.50	1.22	<0.20	7.54	15.2	251.0	0.45	33.9	<100	0.932	6.65	0.392	0.654	<0.0162	<0.0151			2.37	
				12/3/18	8.63	36.33	Kane	<1.00	<0.50	1.11	<0.20	7.22	14.3	267.8	0.07	-16	<100	0.533	6.66	0.291	0.0695	<0.0324	<0.0303			2.26	
6/20/19	7.91	37.05	Kane	0.43	<0.20	0.87	<0.20	7.31	15.1	233.0	0.27	-106.6	250	<5.0	3.9	0.3	0.001	<0.0005	<0.0005			1.3					
MW-23	Shallow	6 to 16	48.027	9/20/16	8.92	39.11	Kane	0.46	<0.20	<0.20	<0.20	5.91		123.0													
				11/1/16	7.29	40.74	Kane	2.2	<0.20	<0.20	<0.20	6.19	15.0	128.0													
				9/19/18	9.04	38.99	Kane	<1.00	<0.50	<1.00	<0.20	6.16	16.2	94.0	0.87	54.7	<100	8.86	2.79	<0.100	1.04	<0.0162	<0.0151			2.74	
				12/5/18	8.70	39.33	Kane	1.05	<0.50	<1.00	<0.20	5.65	14.4	112.4	1.24	49.8	124	10.3	2.16	<0.100	0.0854	<0.0162	<0.0151			2.4	

**Table 1
Bothell Service Center Simon Son
Groundwater Analytical Results**

Well	Well Type and Water Bearing Zone	Screened Depth, (ft bgs)	Top of Casing (TOC) Elevation (feet)*	Date Sampled	Depth to Water (ft below TOC)	GW Elevation (feet)	Sampled By	PCE (µg/L)	TCE (µg/L)	(cis) 1,2-DCE (µg/L)	Vinyl Chloride (µg/L)	pH (units)	Temp (°C)	Conductivity (µS)	Dissolved Oxygen (mg/L)	Oxidation Reduction Potential (mV)	Dissolved Iron (ug/L)	Sulfate (mg/L)	Chloride (mg/L)	Ammonia as N (mg/L)	Methane (mg/L)	Ethane (mg/L)	Ethene (mg/L)	Total Organic Carbon (mg/L)		
				6/4/19	8.57	39.46	Kane	0.94	<0.20	<0.20	<0.20	6.13	14.9	113.4	0.87	19.1	720	6.7	3.3	<0.050	0.14	<0.0075	<0.0075	1.6		
MW-24	Deep	44 to 54	48.962	11/1/16	8.89	40.07	Kane	9.0	<0.20	<0.20	<0.20	8.44	14.7	225.0												
MW-25	Shallow <i>Decommissioned</i>	7.5 to 17.5	46.207	9/20/16	9.22	36.99	Kane	4,200	<20.0	<20.0	<20.0	6.56		324.0												
				10/25/16	7.75	38.46	Kane	99	7.4	10	<1.0	6.58	17.3	184.0												
MW-26	Intermediate <i>Decommissioned</i>	25 to 35	46.047	9/20/16	9.04	37.01	Kane	13	0.29	5.3	<0.20	6.48		379.0												
				10/31/16	7.65	38.40	Kane	310	2.6	<2.0	<2.0	6.59	16	364.0												
MW-27	Shallow	6 to 16	48.177	9/15/16	10.43	37.75	Kane	120	<1.0	<1.0	<1.0	6.31		87.0												
				10/31/16	8.22	39.96	Kane	120	<0.40	<0.40	<0.40	5.95	16.4	63.0												
				7/19/18	10.40	37.78	Kane	138	<0.50	<1.00	<0.20	5.89	15.2	126.0	17.18											
				9/14/18	10.98	37.20	Kane	106	<0.50	<1.00	<0.20	5.64	16.4	128.0	8.48	49.4	<100	38	1.07	<0.100	<0.00863	<0.0162	<0.0151	2.15		
				12/12/18	10.09	38.09	Kane	169	0.712	<1.00	<0.20	5.17	14.5	133.3	7.04	48.3	<100	34.9	2.67	<0.100	<0.00863	<0.0162	<0.0151	0.793		
				5/24/19	9.65	38.53	Kane	110	<1.0	<1.0	<1.0	5.73	13.1	131.9	8.54	41.5	<56	24	4.7	<0.050	<0.001	<0.0005	<0.0005	<1.0		
				7/16/19	10.39	37.79	Kane	91	<0.40	<0.40	<0.040	4.53	16.3	120.9	6.39	155.7	<56	23	3.6	<0.050	<0.001	<0.0005	<0.0005	<1.0		
				10/18/19	10.05	38.13	Kane	130	<1.0	<1.0	<0.10	5.20	16	97.3	7.17	243.9	<56	24	4.5	<0.050	<0.001	<0.0005	<0.0005	8.7		
				1/29/20	8.22	39.96	Kane	90	1.2	1.50	<0.040	5.01	12.2	134.2	6.26	166.3	180	17	5.2	<0.050	<0.00055	<0.00022	<0.00029	1.3		
4/16/20	8.87	39.31	Kane	75	0.51	0.89	<0.040	5.47	14.6	139.6	3.53	59.6	91	17	<2.0	<0.050	<0.00055	<0.00022	<0.00029	<1.0						
MW-28	Intermediate	25 to 35	48.187	9/15/16	10.39	37.80	Kane	<0.20	<0.20	<0.20	<0.20	6.22		157.0												
				11/1/16	8.8	39.39	Kane	<0.20	<0.20	<0.20	<0.20	5.97	15.2	105.0												
				7/19/18	10.48	37.71	Kane	<1.00	<0.50	<1.00	<0.20	6.32	14.2	122.0	3.12											
				9/14/18	10.6	37.59	Kane	<1.00	<0.50	<1.00	<0.20	6.12	14.6	127.0	2.01	62.4	<100	8.42	7.43	<0.100	<0.00863	<0.0162	<0.0151	2.44		
				12/12/18	10.01	38.18	Kane	<1.00	<0.50	<1.00	<0.20	5.70	13.9	130.1	1.78	48.7	<100	11.8	8.06	<0.100	<0.00863	<0.0162	<0.0151	0.69		
				2/19/19	9.07	39.12	Kane	<1.0	<0.50	<1.0	<0.20	5.73	13.0	108.6	2.56	202.9	<100	8.78	5.65	<0.10	<0.00863	<0.0162	<0.0151	0.618		
5/24/19	9.85	38.34	Kane	<0.20	<0.20	<0.20	<0.20	5.54	13.6	116.0	1.8	-74.6	<56	9.5	6.2	<0.050	0.0096	<0.0005	<0.0005	<1.0						
MW-29	Deep	45 to 55	48.242	9/15/16	10.5	37.74	Kane	<0.20	<0.20	<0.20	<0.20	7.33		254.0												
				10/27/16	9.01	39.23	Kane	0.44	<0.20	<0.20	<0.20	7.06	14.5	252.0												
				7/17/18	10.32	37.92	Kane	<1.00	<0.50	<1.00	<0.20	7.57	14.4	236.0	0.00											
				9/14/18	10.73	37.51	Kane	<1.00	<0.50	<1.00	<0.20	7.31	14.5	262.0	0.08	19.3	191	8.37	7.17	0.255	0.0242	<0.0162	<0.0151	4.32		
				12/12/18	10.25	37.99	Kane	1.06	<0.50	<1.00	<0.20	7.05	13.8	276.8	0.15	-16.7	<100	6.72	5.32	0.243	0.04	<0.0162	<0.0151	3.02		
				6/4/19	10.08	38.16	Kane	0.26	<0.20	<0.20	<0.20	7.40	16.3	265.3	0.25	15	450	<5.0	26	0.25	0.32	<0.015	<0.015	2.2		
				7/16/19	10.61	37.63	Kane	<0.20	<0.20	<0.20	<0.020	6.88	16.2	274.4	0.11	-106.2	460	<5.0	5.2	0.3	0.35	<0.0005	<0.00050	2.1		
				10/18/19	10.48	37.76	Kane	<0.20	<0.20	<0.20	<0.020	6.99	14.5	207.7	0.11	7.4	610	<5.0	6.4	0.29	0.39	<0.0005	<0.0005	2.2		
				1/29/20	9.61	38.63	Kane	<0.20	<0.20	<0.20	<0.020	7.29	13.7	249.5	0.04	-82	570	<5.0	6.3	0.24	0.36	<0.00022	<0.00029	1.9		
4/16/20	9.71	32.53	Kane	<0.20	<0.20	<0.20	<0.020	7.23	16.2	312.9	0.31	-11.6	1,100	<5.0	5.5	0.25	0.093	<0.00022	<0.00029	2.0						
MW-30	Shallow <i>Decommissioned</i>	9 to 19	48.142	9/20/16	8.81	39.33	Kane	92,000	<500	<500	<500	6.65		241.0												
				10/26/16	7.33	40.81	Kane	130,000	<1,000	1,300	<1,000	6.40	15.7	619.0			120		0.15					26		
MW-31	Deep <i>Decommissioned</i>	40 to 50	47.817	9/20/16	9.81	38.01	Kane	11	0.25	<0.20	<0.20	6.80		244.0												
				10/28/16	8.25	39.57	Kane	7.8	0.22	<0.20	<0.20	6.79		250.0												
MW-32	Deep <i>Decommissioned</i>	45 to 55	45.952	9/19/16	8.94	37.01	Kane	950	7.7	<4.0	<4.0	7.57		285.0												
				10/27/16	7.51	38.44	Kane	1,200	<10	<10	<10	7.65	14.8	276.0												
MW-33	Deep	40 to 50	49.547	9/16/16	10.61	38.94	Kane	<0.20	<0.20	<0.20	<0.20	6.38		258.0												
				10/27/16	9.19	40.36	Kane	0.34	<0.20	<0.20	<0.20	6.37	15.0	221.0												
				12/5/18	10.4	39.15	Kane	<1.00	<0.50	<1.00	<0.20	6.13	18.1	174.3	0.07	43.5	<100	10.6	6.74	<0.100	<0.00863	<0.0162	<0.0151	3.01		
				2/19/19	9.17	40.38	Kane	<1.0	<0.50	<1.0	<0.20	6.35	15.1	164.3	0.18	204.8	<100	11.5	6.45	<0.10	<0.00863	<0.0162	<0.0151	1.44		
6/4/19	10.56	38.99	Kane	<0.20	<0.20	<0.20	<0.20	6.42	16.1	196.6	0.19	31.6	<56	13	6.6	<0.050	0.0012	<0.0005	<0.0005	1.5						
MW-34	Deep	40 to 50	46.597	9/16/16	9.19	37.41	Kane	20	1.5	12	0.29	6.33		271.0												
				10/27/16	7.75	38.85	Kane	6.6	0.54	2.4	<0.20	6.21	15.6	254.0												
				7/16/18	8.82	37.78	Kane	<1.00	<0.50	<1.00	<0.20	6.53	15.5	240.0	0.00											
				9/18/18	9.45	37.15	Kane	<1.00	<0.50	<1.00	<0.20	6.37	17.6	255.0	0.18	66.2	724	11.5	30.5	<0.100	0.0497	<0.0162	<0.0151	2.92		
				12/11/18	8.5	38.10	Kane	<1.00	<0.50	<1.00	<0.20	5.92	22.9	284.6	0.09	44.3	561	13.5	39	<0.100	0.0103	<0.0162	<0.0151	1.2		
				2/21/19	7.59	39.01	Kane	1.29	<0.50	1.52	<0.20	5.95	27.5	255.8	0.22	91.9	367	14.6	32.7	<0.10	0.0274	<0.0162	<0.0151	10.49		
6/3/19	8.28	38.32	Kane	1.3	<0.20	3.2	<0.20	6.16	32.4	263.9	0.19	18.6	440	15	29	<0.050	0.14	<0.0075	<0.0075	1.8						
MW-35	Deep	48 to 58	44.247	9/16/16	8.19	36.06	Kane	2.1	<0.20	<0.20	<0.20	6.92		230.0												
				10/27/16	6.65	37.60	Kane	1.4	<0.20	<0.20	<0.20	6.92	14.4	235.0												
				7/16/18	7.74	36.51	Kane	<1.00	<0.50	<1.00	<0.20	7.35	15.0	217.0	0.13											
				9/10/18	8.45	35.80	Kane	<1.00	<0.50	<1.00	<0.20	7.08	15.1	244.0	0.25	21.8	1,130	2.94	8.11	0.244	0.323					

Table 1
Bothell Service Center Simon Son
Groundwater Analytical Results

Well	Well Type and Water Bearing Zone	Screened Depth, (ft bgs)	Top of Casing (TOC) Elevation (feet)*	Date Sampled	Depth to Water (ft below TOC)	GW Elevation (feet)	Sampled By	PCE (µg/L)	TCE (µg/L)	(cis) 1,2-DCE (µg/L)	Vinyl Chloride (µg/L)	pH (units)	Temp (°C)	Conductivity (µS)	Dissolved Oxygen (mg/L)	Oxidation Reduction Potential (mV)	Dissolved Iron (ug/L)	Sulfate (mg/L)	Chloride (mg/L)	Ammonia as N (mg/L)	Methane (mg/L)	Ethane (mg/L)	Ethene (mg/L)	Total Organic Carbon (mg/L)		
MW-36	Intermediate Decommissioned	25 to 35	47.327	9/19/16	8.68	38.65	Kane	2.5	<0.20	<0.20	<0.20	6.56		257.0												
				11/1/16	7.31	40.02	Kane	7.3	<0.20	<0.20	<0.20	6.60	15.1	264.0												
MW-37	Shallow Decommissioned	15 to 25	47.557	9/19/16	9.81	37.75	Kane	0.7	<0.20	<0.20	<0.20	6.40		272.0												
				11/1/16	7.53	40.03	Kane	0.74	<0.20	<0.20	<0.20	6.54	14.9	247.0												
MW-38	Deep Decommissioned	40 to 50	47.187	9/19/16	10.44	36.75	Kane	1.3	<0.20	<0.20	<0.20	6.89		271.0												
				10/28/16	7.66	39.53	Kane	0.26	<0.20	<0.20	<0.20	6.78		266.0												
MW-39	Deep	40 to 50	44.524	10/25/16	6.20	38.32	Kane	95	<0.40	<0.40	<0.40	7.11	16.5	279.0												
				7/25/18	7.15	37.37	Kane	<1.00	<0.50	1.03	<0.20	7.11	17.2	190.0	0.00											
				12/17/18	6.33	38.19	Kane	2.32	2.62	6.81	<0.20	6.39	24.1	225.4	0.15	-3.5	4,580	2.13	3.45	0.563	0.364	<0.0162	<0.0151	3.36		
				3/13/19	6.32	38.20	Kane	<1.00	<1.00	1.99	<0.20	6.08	26.6	63.3	1.33	82.2	4,380	<0.300	3.76	0.445	0.552	<0.0162	<0.0151	4.15		
				5/29/19	6.49	38.03	Kane	0.33	0.34	<0.20	<0.20	6.61	28.4	219.2	0.14	1.8	4,500	<5.0	4.3	0.48	1.1	<0.10	<0.10	3.3		
				7/23/19	7.02	37.50	Kane	0.52	0.63	1.3	<0.020	6.33	28.2	215.5	0.25	-96.6	4,300	<5.0	4.3	0.44	1	<0.0005	<0.0005	2.9		
				10/24/19	6.94	37.58	Kane	0.52	0.52	1.6	<0.020	6.1	26.2	250.0	0.24	19.8	4,600	<5.0	4.5	0.48	0.91	<0.0005	<0.0005	3.1		
				1/28/20	5.53	38.99	Kane	<0.20	<0.20	1.8	<0.020	6.5	20.2	272.1	0.21	57.1	5,000	<5.0	4.8	0.53	0.67	<0.00022	<0.00029	3.2		
4/27/20	6.17	38.35	Kane	3.1	2.2	8.9	0.024	6.43	21.2	236.2	4.4	48.5	440	<5.0	4.3	<0.050	0.0011	<0.00022	<0.00029	2.1						
MW-40	Shallow	15 to 25	44.521	10/25/16	8.21	36.31	Kane	25,000	<100	<100	<100	6.69	16.5	321.0												
				11/2/16	6.3	38.22	Kane	11,000	<100	<100	<100	6.73	14.9	229.0												
				7/25/18	7	37.52	Kane	5,460	55.6	9.5	<0.20	7.24	20.4	320.0	0.13											
				12/17/18	6.28	38.24	Kane	212	46	56.7	<0.20	6.43	34.3	69.2	2.39	52.6	<100	1.55	0.586	<0.100	<0.00863	<0.0162	<0.0151	1.11		
				3/13/19	6.29	38.23	Kane	213	146	746	<0.20	6.08	29.5	63.3	1.33	82.2	<100	0.819	2.08	<0.10	0.00959	<0.0162	<0.0151	2.03		
				5/29/19	6.49	38.03	Kane	560	600	4,300	<20	6.41	30.7	268.1	0.23	3.8	7,600	<5.0	11	0.35	0.47	0.011	<0.025	11		
				7/23/19	7	37.52	Kane	530	380	4,700	11	6.29	30.5	319.8	0.05	-112.4	19,000	<5.0	12	0.39	0.49	0.0082	<0.0005	12		
				10/25/19	6.82	37.70	Kane	65	84	1,500	1.6	5.82	23.7	163.6	0.06	35.6	4,600	<5.0	4.9	0.14	0.51	<0.0005	0.0016	13		
1/28/20	5.51	39.01	Kane	150	130	2,300	1600	6.89	21.2	368.4	0.01	-60.6	9,800	<5.0	19	0.33	10	<0.00022	<0.00029	10						
4/27/20	6.48	38.04	Kane	<10	<10	150	930	6.53	19.9	239.8	0.09	26	5,600	<5.0	7.9	0.24	5.6	<0.00022	0.13	9.9						
MW-41	Shallow	5 to 15	-	1/3/17	8.31		Kane	3.4	<0.20	<0.20	<0.20	6.13		129.0												
				10/23/18	-	-	Kane	2.02	<0.50	<0.50	<0.20															
				6/7/19	8.12		Kane	1.30	<0.20	<0.20	<0.20	6.31	15.1	84.9	5.26	43.2	<56	6.6	4.5	<0.050	<0.001	<0.0005	<0.0005	<1.0		
MW-42	Int./Deep	30 to 45	-	1/3/19	10.21		Kane	<1.00	<0.50	<1.0	<0.20															
				3/18/19	8.79		Kane	<1.00	<0.50	<1.0	<0.20	6.63	32.8	155.4	0.06	76.4	821	1.99	3.57	0.266	0.177	<0.0162	<0.0151	1.9		
				6/5/19	9.11		Kane	<0.20	<0.20	<0.20	<0.20	6.92	22.9	216.9	0.13	5	5,500	<5.0	6.3	0.2	4.1	<0.25	<0.25	2.3		
				7/30/19	9.65		Kane	<0.20	<0.20	0.72	0.053	6.49	26.4	713.0	0.05	-321.9	5,300	8	8.1	0.27	2.5	<0.0005	<0.0005	1.7		
				10/22/19	9.29		Kane	<0.20	1.90	1.9	0.056	6.04	18.3	254.0	0.10	-10.2	7,600	7.3	13	0.28	3.2	<0.0005	<0.0005	3.9		
				1/29/20	8.49		Kane	<0.20	<0.20	20	3.3	6.52	14.1	454.1	0.02	-24.8	19,000	<0.50	14	0.16	7.1	<0.00022	<0.00029	6.3		
4/16/20	8.88		Kane	<0.20	<0.20	26	27	6.46	14.7	567.6	0.47	-19.2	25,000	<5.0	14	0.21	8.9	<0.00022	0.012	3.5						
MW-43	Shallow	10 to 25	-	1/2/19	10.4		Kane	225	31.6	7.16	<0.20															
				3/18/19	8.42		Kane	1.66	<0.50	1.20	<0.20	6.61	33.3	183.6	0.10	-4.6	286	14.4	3.34	<0.10	0.0336	<0.0162	<0.0151	8.25		
				6/5/19	8.68		Kane	9.10	7.60	35.0	<0.20	6.86	24.1	168.3	0.09	21.5	450	15	3.7	0.08	0.53	<0.038	<0.038	5.8		
				7/30/19	9.17		Kane	<0.20	0.23	2.0	<0.020	6.32	26.0	711.0	0.09	-281	280	11	5.7	0.11	0.44	<0.0005	<0.0005	4.7		
				10/22/19	9.67		Kane	0.80	<0.20	24.0	0.29	6.17	19.2	552.0	0.06	-40.2	18,000	9.3	10	0.43	0.32	<0.0005	<0.0005	110		
1/29/20	7.76		Kane	0.88	<0.20	8.7	1.9	6.58	12.2	836.0	0.18	141.7	1,800	130	8.2	0.66	0.42	<0.00022	0.0029	10						
4/21/20	7.62		Kane	0.47	<0.20	17	5.8	6.61	23	456.7	0.13	19.7	6,800	22	7.9	0.49	0.51	<0.00022	0.0055	15						
MW-44	Intermediate	25 to 35	-	6/6/19	7.49		Kane	<0.20	1.70	28.0	<0.20	6.35	51.4	229.6	0.18	-1.9	1,700	<5.0	7.6	0.49	0.24	<0.025	<0.025	19		
				7/25/19	8.11		Kane	<0.20	1.50	2.7	0.047	6.15	47.4	254.1	0.34	-77	2,200	<5.0	6.6	0.71	0.13	<0.0005	0.0039	20		
				10/22/19	9.85		Kane	<0.20	0.77	14.0	0.29	5.94	37.2	450.1	0.07	15.4	3,900	<5.0	12	0.73	1.4	<0.0005	0.0011	22		
				1/29/20	7.14		Kane	<0.40	1.20	38.0	0.48	6.44	27.5	349.5	0.13	46.8	3,400	<5.0	10	0.62	9.9	<0.00022	<0.00029	16		
4/21/20	7.62		Kane	<0.20	<0.20	22.0	32	6.61	23	456.7	0.13	19.7	4,800	<5.0	11	0.62	8.7	<0.00022	0.0075	18						
MW-45	Shallow	7 to 17	-	6/6/19	7.29		Kane	<0.20	<0.20	6.0	<0.20	6.81	45.7	798.0	0.09	18.4	770	<5.0	38	0.36	0.11	<0.0075	<0.0075	120		
				7/25/19	7.96		Kane	<0.20	<0.20	0.75	0.043	6.49	44.1	825.0	0.25	-67.4	2,000	<5.0	21	0.63	1.2	<0.0005	<0.0005	88		
				10/22/19	7.44		Kane	<0.20	<0.20	0.88	<0.020	6.28	32.5	569.0	0.14	51.6	1,600	12	15	0.75	1.5	<0.0005	<0.0005	33		
				1/29/20	6.6		Kane	<1.0	<1.0	160	46	6.70	21.8	609.0	0.01	-54.2	5,400	<5.0	14	0.79	5.2	<0.00022	0.0072	21		
				4/21/20	7.41		Kane	<0.20	<0.20	0.4	7	6.78	19.9	848.0	0.19	7.1	2,800	<5.0	16	0.87	8.6	<0.00022	0.011	41		
HZ-MW-1	Shallow	5 to 15	41.637	9/5/08			HWA	0.58	<0.2	<0.2	<0.20															
				5/30/14			HWA	21	0.22	<0.20	<0.20	6.62		478.0	3.23											
				9/12/14			HWA	33	0.33	<0.20	<0.20	6.51		279.0	2.35											
				12/15/14			HWA	15	<																	

Table 1
Bothell Service Center Simon Son
Groundwater Analytical Results

Well	Well Type and Water Bearing Zone	Screened Depth, (ft bgs)	Top of Casing (TOC) Elevation (feet)*	Date Sampled	Depth to Water (ft below TOC)	GW Elevation (feet)	Sampled By	PCE (µg/L)	TCE (µg/L)	(cis) 1,2-DCE (µg/L)	Vinyl Chloride (µg/L)	pH (units)	Temp (°C)	Conductivity (µS)	Dissolved Oxygen (mg/L)	Oxidation Reduction Potential (mV)	Dissolved Iron (ug/L)	Sulfate (mg/L)	Chloride (mg/L)	Ammonia as N (mg/L)	Methane (mg/L)	Ethane (mg/L)	Ethene (mg/L)	Total Organic Carbon (mg/L)			
				12/19/18	6.94	34.70	Kane	7.8	<0.50	<1.00	<0.20	6.21	13.5	159.8	5.00	45	<100	8.54	3.43	<0.100	<0.00863	<0.0162	<0.0151	1.17			
				5/30/19	6.81	34.83	Kane	11	<0.20	<0.20	<0.20	6.55	14.0	190.5	7.81	15.2	<56	7.4	5.9	<0.050	0.0014	<0.0005	<0.0005	<0.0005	1.1		
				7/30/19	7.2	34.44	Kane	14	<0.20	<0.20	<0.020	6.17	17.3	189.6	4.08	-70.1	<56	6.6	4.4	<0.050	<0.001	<0.0005	<0.0005	<0.0005	1		
				10/21/19	7.45	34.19	Kane	15	<0.20	<0.20	<0.020	5.65	15.9	172.5	4.58	200	<56	6.5	5.1	<0.050	<0.001	<0.0005	<0.0005	<0.0005	1.1		
				1/24/20	6.39	35.25	Kane	5.9	<0.20	<0.20	<0.020	5.85	12.6	173.1	24.0	86.3	<56	16	4.0	<0.050	1.5	<0.00022	<0.00029	<0.00029	1.2		
				4/14/20	6.33	35.35	Kane	33	1.1	1.2	0.15	6.20	12.9	301.4	1.1	-3.8	<56	16	6.3	<0.050	1.2	<0.00022	<0.00029	1.6			
HZ-MW-4	Shallow	8 to 18	40.177	9/5/08			HWA	<0.2	<0.2	<0.2	<0.20																
				6/9/14			HWA	<0.20	<0.20	<0.20	<0.20	6.35		407.0	2.73												
				9/12/14			HWA	2.6	<0.20	<0.20	<0.20	6.42		361.0	2.12												
				12/16/14			HWA	0.54	<0.20	<0.20	<0.20	6.56		316.0	2.17												
				3/30/15			HWA	<0.20	<0.20	<0.20	<0.20	5.47		323.0	2.67				<50				<0.50				
				11/11/15	6.18	34.06	HWA	0.27	<0.20	0.51	0.44	6.22		459.0	39.20	6.5			23					1.3	<0.50	<0.50	2.3
				9/23/16	7.16	33.02	Kane	0.31	<0.20	<0.20	<0.20	6.23		331.0													
				10/28/16	5.22	34.96	Kane	<0.20	<0.20	<0.20	<0.20	6.36	16.9	308.0													
				7/24/18	6.95	33.23	Kane	<1.00	<0.50	<1.00	<0.20	6.75	15.8	356.0	3.35												
				9/13/18	7.59	32.59	Kane	<1.00	<0.50	<1.00	<0.20	6.52	16.9	354.0	2.25	53.6	161	40.7	13	<0.100	<0.00863	<0.0162	<0.0151	<0.0151	3.95		
				12/21/18	6.27	33.91	Kane	<1.00	<0.50	<1.00	<0.20	6.21	13.1	420.9	0.19	10	<100	36.5	15	<0.100	<0.00863	<0.0162	<0.0151	<0.0151	3.1		
				5/30/19	6.37	33.81	Kane	0.41	<0.20	<0.20	<0.20	6.38	16.3	446.1	0.30	45.3	<56	45	21	<0.050	0.0016	<0.0005	<0.0005	<0.0005	<0.0005	2.6	
HZ-MW-14S	Shallow	5 to 15	42.377	2/25/13			HWA	2,400	47	29																	
				5/29/14			HWA	1,000	23	11	<10	6.46		799.0	0.16												
				9/11/14			HWA	4,900	96	78	<20	6.51		441.0	0.54												
				12/15/14			HWA	790	16	13	<4.0	6.34		396.0	0.48												
				3/20/15			HWA	200	6.5	3.8	<1.0	6.4		482.0	13.86												
				11/11/15	7.65	34.79	HWA	75.0	3.1	8.6	<0.40	6.10		437.0	1.3	24.8			30					170	<0.50	<0.50	2.2
				9/26/16	7.52	34.86	Kane	1,800	57	110	<20	6.34		330.0													
				10/28/16	5.82	36.56	Kane	440	13	12	<2.0	6.43	18.4	309.0													
				7/20/18	7	35.38	Kane	2,580	52.5	86.6	0.572	6.87	16.9	300.0	0.70												
				9/21/18	7.36	35.02	Kane	2,710	61.9	203	<2.0	6.52	19.1	346.0	0.13	42.9	<100	27.4	7.81	<0.100	0.361	<0.0162	<0.0151	<0.0151	3.87		
				12/13/18	6.23	36.15	Kane	240	7.33	6.12	<0.20	6.11	15.5	327.3	0.17	20.4	<100	22.4	7.29	<0.100	<0.00863	<0.0162	<0.0151	<0.0151	1.89		
				5/21/19	6.43	35.95	Kane	240	7.0	3.2	<2.0	6.47	14.7	339.2	0.11	-26.3	490	21	7.2	<0.050	0.053	<0.005	<0.005	<0.005	<0.005	1.7	
				7/25/19	6.31	36.07	Kane	160	6.8	7	<0.10	6.15	20.8	303.6	0.23	-57.4	160	18	7.8	0.53	0.018	<0.0005	<0.0005	<0.0005	<0.0005	1.8	
				10/16/19	6.99	35.39	Kane	78	5.9	3.6	<0.04	6.41	18.7	295.1	0.05	103.9	<56	17	8	<0.050	0.29	<0.0005	<0.0005	<0.0005	<0.0005	1.9	
				1/22/20	5.65	36.73	Kane	23	4.2	15	0.069	6.31	11.6	265.0	2.22	115	<56	19	9.5	<0.050	0.014	<0.00022	<0.00022	<0.00022	<0.00029	2.8	
4/15/20	5.76	36.62	Kane	55	3.5	4.3	3.0	6.12	13	320.4	0.24	11.5	<56	18	8.1	<0.050	6.9	<0.00022	0.019	<0.00022	0.019	2.1					
HZ-MW-14D	Intermediate	30 to 40	42.397	2/25/13			HWA	360	7.6	21																	
				5/29/14			HWA	100	3.7	16	<1.0	6.47		622.0	0.23												
				9/11/14			HWA	100	3.2	17	<1.0	6.45		352.0	0.28												
				12/15/14			HWA	100	2.8	15	<1.0	6.41		332.0	0.87												
				3/20/15			HWA	62	2.4	9.8	<0.40	6.69		423.0	NA												
				11/11/15	8.12	34.31	HWA	970	16	14	<10	6.08		414.0	0.00	24.9			12					69	<0.50	<0.50	1.2
				9/26/16	7.38	35.02	Kane	37	1.5	2.9	<0.20	6.10		434.0													
				10/28/16	5.62	36.78	Kane	55	2.8	6.1	<0.20	6.21	18.1	373.0													
				7/20/18	6.96	35.44	Kane	42.9	2.18	7.55	<0.20	6.42	16.4	220.0	0.33												
				9/19/18	7.19	35.21	Kane	36.4	1.98	7.14	<0.20	6.23	15.9	500.0	0.23	100.4	<100	10	100	<0.100	0.0317	<0.0162	<0.0151	<0.0151	4.3		
				12/13/18	6.7	35.70	Kane	44.2	3.3	13.5	<0.20	5.87	14.9	523.1	0.07	36	<100	15.5	90.8	<0.100	0.0524	<0.0162	<0.0151	<0.0151	0.968		
				5/21/19	6.16	36.24	Kane	65	2.9	12	<0.20	6.09	14.7	500.3	0.06	-40.7	<56	10	87	<0.050	0.18	<0.01	<0.01	<0.01	<1.0		
				7/30/19	6.92	35.48	Kane	100	4.7	28	0.30	5.84	19.6	454.8	0.22	-86.5	<56	11	69	<0.050	0.92	<0.0005	<0.0005	<0.0005	<0.0005	1	
				10/16/19	7.7	34.70	Kane	190	7.9	48	0.51	6.13	16.3	443.8	0.02	143.8	<56	9.3	75	<0.050	1.5	<0.0005	<0.0005	<0.0005	<1.0		
				1/22/20	5.98	36.42	Kane	400	24	140	1.1	5.99	13.0	453.7	2.10	132.8	<56	11	65	<0.050	2.6	<0.00022	<0.00022	<0.00022	<0.00029	1.2	
4/15/20	6.14	36.26	Kane	400	24	110	0.76	6.13	14.2	443.4	0.28	14.4	<56	13	52	<0.050	1.8	<0.00022	<0.00022	<0.00022	<0.00029	1.2					
HZ-MW-15S	Shallow	10 to 15	41.747	3/25/13			HWA	86	2.3	3.6																	
				5/29/14			HWA	150	7.1	3.6	<1.0	6.35		785.0	1.45												
				9/13/14			HWA	400	19	12	<0.20	6.87		575.0	0.25												
				12/15/14			HWA	300	14	12	<2.0	6.44		549.0	0.95												
				3/20/15			HWA	140	6.2	3.5	<1.0	6.32		579.0	NA												
				11/12/15	6.99	34.79	HWA	110	4.9	4.2	<10	5.9		394.0	0.13	97.4			26					3.1	<250	<12	1.1
				9/27/16	6.65	35.10	Kane	57	1.6	1.4	<0.40	6.21		280.0													
				10/28/16	4.15	37.60	Kane																				

Table 1
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Groundwater Analytical Results

Well	Well Type and Water Bearing Zone	Screened Depth, (ft bgs)	Top of Casing (TOC) Elevation (feet)*	Date Sampled	Depth to Water (ft below TOC)	GW Elevation (feet)	Sampled By	PCE (µg/L)	TCE (µg/L)	(cis) 1,2-DCE (µg/L)	Vinyl Chloride (µg/L)	pH (units)	Temp (°C)	Conductivity (µS)	Dissolved Oxygen (mg/L)	Oxidation Reduction Potential (mV)	Dissolved Iron (ug/L)	Sulfate (mg/L)	Chloride (mg/L)	Ammonia as N (mg/L)	Methane (mg/L)	Ethane (mg/L)	Ethene (mg/L)	Total Organic Carbon (mg/L)				
				7/24/19	5.66	36.09	Kane	11	0.41	<0.20	<0.02	6.06	18.7	227.5	0.38	-69.1	<56	13	3.6	<0.050	0.02	<0.0005	<0.0005	1				
				10/17/19	5.87	35.88	Kane	9.8	0.39	<0.20	<0.02	6.01	16.3	202.4	0.23	189	<56	13	5.1	<0.050	0.0076	<0.0005	<0.0005	1.2				
				1/22/20	4.02	37.73	Kane	4.2	<0.20	<0.20	<0.02	5.99	10.4	295.5	6.00	129.5	<56	12	3.0	<0.050	0.0086	<0.00022	<0.00029	1.4				
				4/15/20	4.51	37.24	Kane	3.6	<0.20	<0.20	<0.02	6.34	13.6	267.0	1.43	17.6	<56	14	2.1	<0.050	0.0012	<0.00022	<0.00029	1.3				
HZ-MW-15D	Intermediate	20 to 30	41.787	3/25/13			HWA	330	18	12																		
				5/29/14			HWA	3,700	290	180	<20	6.28		1000.0	0.12													
				9/13/14			HWA	93	6.9	4.5	<0.40	6.33		308.0	0.30													
				12/15/14			HWA	130	9.2	4.3	<1.0	6.34		290.0	1.87													
				3/20/15			HWA	6,700	400	280	<30	6.27		491.0	NA													
				11/11/15	7.2	34.63	HWA	1,800	120	100	<10	5.66		260.0	0.00	95.5		28						2800	<250	<12	<1.0	
				9/27/16	6.69	35.10	Kane	840	40	43	<4.0	5.96		211.0														
				10/28/16	5.33	36.46	Kane	3,300	210	200	<20	6.20	15.9	266.0														
				9/19/18	6.74	35.05	Kane	4,910	152	117	<0.20	6.05	15.3	282.0	0.21	204	<100	22.8	16.5	<0.100	2.23	<0.0162	<0.0151	4.7				
				12/27/18	4.23	37.56	Kane	6,410	229	199	<10.0	5.95		315.5	0.09	52.4	<100	19.5	2.85	<0.100	<0.00863	<0.0162	<0.0151	1.36				
				6/4/19	6.11	35.68	Kane	10,000	390	260	<100	6.25	15.1	337.4	0.12	20.9	<56	23	14	<0.05	5	<0.25	<0.25	1.50				
				7/24/19	6.83	34.96	Kane	9,200	390	340	<5.0	5.93	16.9	324.0	0.24	-56.6	<56	21	13	<0.050	5	<0.0005	<0.0005	1.60				
				10/17/19	7.02	34.77	Kane	7,700	410	360	<5.0	5.83	15.1	292.1	0.12	173.5	100	18	13	<0.050	5	<0.0005	<0.0005	1.30				
				1/22/20	6.05	35.74	Kane	4,000	280	410	<2.0	6.21	12.3	430.0	0.11	88.9	<56	13	16	<0.050	2.4	<0.00022	<0.00029	1.20				
4/15/20	6.67	35.12	Kane	3,300	240	400	<2.0	6.19	14.9	505.3	0.27	32.4	120	9.6	16	<0.050	3	<0.00022	<0.00029	1.20								
HZ-MW-16	Shallow	15 to 25	-	5/28/14			HWA	0.32	<0.20	0.30	<0.20	6.52		451.0	0.16													
				9/12/14			HWA	4.2	<0.20	<0.20	<0.20	7.08		207.0	1.23													
				12/15/14			HWA	0.4	<0.20	<0.20	<0.20	7.01		235.0	0.57													
				3/19/15			HWA	0.35	<0.20	0.24	<0.20	6.59		326.0	NA									<0.50				
				11/28/16	4.53		Kane	0.34	<0.20	<0.20	<0.20	6.78		167.0														
				9/24/18	6.23		Kane	<1.00	<0.50	<1.00	<0.20	6.62	16.6	131.0	1.85	83.4	<100	9.78	2.83	<0.100	<0.00863	<0.0162	<0.0151	1.58				
				1/3/19	5.56		Kane	1.39	<0.50	<1.00	<0.20	6.09		220.2	0.66	63.5	<100	15.2	8.5	<0.100	<0.00863	<0.0162	<0.0151	0.645				
6/5/19	5.8		Kane	2.00	0.30	0.61	<0.20	6.46	15.0	222.3	0.29	26.7	<56	16	7.6	<0.050	<0.001	<0.0005	<0.0005	<1.0								
HZ-MW-17	Shallow	10 to 20	38.567	6/9/14			HWA	<0.20	<0.20	<0.20	<0.20	6.61		594.0	0.15													
				9/12/14			HWA	2.0	<0.20	<0.20	<0.20	6.94		345.0	0.89													
				12/16/14			HWA	0.5	<0.20	<0.20	<0.20	6.71		309.0	1.55													
				3/19/15			HWA	<0.20	<0.20	<0.20	<0.20	6.96		434.0	NA													
				9/26/16	8.90	29.67	Kane	<0.20	<0.20	<0.20	<0.20	6.73		230.0														
				10/27/16	6.61	31.96	Kane	<0.20	<0.20	<0.20	<0.20	6.89	14.9	238.0														
				7/24/18	7.45	31.12	Kane	<1.00	<0.50	<1.00	<0.20	7.17	16.1	250.0	0.41													
				9/12/18	7.90	30.67	Kane	<1.00	<0.50	<1.00	<0.20	6.97	16.2	267.0	0.09	39.9	2,540	16.9	7	<0.100	<0.00863	<0.0162	<0.0151	2.54				
				12/6/18	7.68	30.89	Kane	<1.00	<0.50	<1.00	<0.20	6.65	14.9	297.5	0.32	29.1	2,060	23.7	9.1	<0.100	<0.00863	<0.0162	<0.0151	2.28				
5/31/19	7.08	31.49	Kane	<0.20	<0.20	<0.20	<0.20	6.91	15.2	312.3	0.11	-30.1	3,600	16	9	0.081	0.25	<0.015	<0.015	1.1								
HZ-MW-18	Shallow Decommissioned	7.5 to 17.5		6/10/14			HWA	<0.20	<0.20	<0.20	<0.20	6.38		1901.0	0.14													
HZ-MW-19	Shallow	5 to 15	42.177	5/30/14			HWA	0.97	0.94	0.40	<0.20	6.38		1210.0	0.10													
				6/9/14			HWA	0.28	0.67	1.1	<0.20	6.26		1213.0	0.13													
				9/12/14			HWA	3.3	0.76	0.67	<0.20	6.37		675.0	0.50													
				12/16/14			HWA	1.0	<0.20	<0.20	<0.20	6.75		301.0	0.42													
				3/19/15			HWA	<0.20	<0.20	<0.20	<0.20	6.33		376.0	NA									100				
				8/6/15			HWA					6.18		513.0	0.00													
				11/11/15	7.01	35.22	HWA	0.6	0.77	1.1	<0.20	6.03		623.0	0.00	-13.9		25						11	<0.50	<0.50	8.4	
				9/26/16	7.73	34.45	Kane	0.59	0.54	0.48	<0.20	6.29		438.0														
				10/31/16	4.78	37.40	Kane	<0.20	<0.20	<0.20	<0.20	6.11	14.2	174.0														
				7/24/18	7.17	35.01	Kane	<1.00	<0.50	<1.00	<0.20	6.56	17.3	335.0	0.00													
				9/7/18	7.72	34.46	Kane	<1.00	0.574	<1.00	<0.20	6.34	18.0	504.0	1.16	102.7	1,460	61.5	5.2	<0.100	<0.00863	<0.0162	<0.0151	8.59				
				12/7/18	6.32	35.86	Kane	<1.00	<0.50	<1.00	<0.20	5.99	14.5	376.6	0.12	64.7	2,500	24.5	2.44	<0.100	0.0158	<0.0162	<0.0151	6.15				
5/30/19	6.25	35.93	Kane	0.21	0.25	<0.20	<0.20	6.25	18.1	424.6	0.15	34.5	240	28	3.9	<0.050	0.019	<0.001	<0.001	3.5								
HZ-MW-20	Shallow Decommissioned	5 to 15		6/9/14			HWA	<0.20	<0.20	<0.20	<0.20	6.79		1914.0	0.28													
				9/13/14			HWA	1.3	<0.20	<0.20	<0.20	7.09		1018.0	0.72													
				12/16/14			HWA	0.41	<0.20	<0.20	<0.20	6.72		851.0	0.44													
				3/19/15			HWA	<0.20	<0.20	<0.20	<0.20	6.91		1139.0	NA													
HZ-MW-21	Shallow	6 to 16	39.517	9/13/16	7.14	32.38	Kane	<0.20	<0.20	<0.20	<0.20	6.55		509.0														
				10/31/16	5.90	33.62	Kane	<0.20	<0.20	<0.20	<0.20	6.31	14.7	528.0														
				7/23/18	6.90	32.62	Kane	<1.00	<0.50	<1.00	<0.20	6.77	17.6	576.0	0.19													
				9/13/18	7.37	32.15	Kane	<1.00	<0.50	<1.00	<0.20	6.65	17.9	700.0	0.12	71.6	739	35.6	7.12	0.169	0.0386	<0.0162	<0.0151	18.3				
				12/10/18	6.69	32.83	Kane	<1.00	<0.50	<1.00	<0.20	6.43	14.1	120.9	0.71	71.7	<100	8.51	1.4	0.125	<0.00863	<0.0162	<					

Table 1
Bothell Service Center Simon Son
Groundwater Analytical Results

Well	Well Type and Water Bearing Zone	Screened Depth, (ft bgs)	Top of Casing (TOC) Elevation (feet)*	Date Sampled	Depth to Water (ft below TOC)	GW Elevation (feet)	Sampled By	PCE (µg/L)	TCE (µg/L)	(cis) 1,2-DCE (µg/L)	Vinyl Chloride (µg/L)	pH (units)	Temp (°C)	Conductivity (µS)	Dissolved Oxygen (mg/L)	Oxidation Reduction Potential (mV)	Dissolved Iron (ug/L)	Sulfate (mg/L)	Chloride (mg/L)	Ammonia as N (mg/L)	Methane (mg/L)	Ethane (mg/L)	Ethene (mg/L)	Total Organic Carbon (mg/L)			
HZ-MW-22	Shallow	5 to 15	40.827	5/23/19	6.55	32.97	Kane	<0.20	<0.20	<0.20	<0.20	6.60	15.3	500.7	0.11	-0.1	550	21	8.1	0.29	0.14	0.00093	<0.0005	14			
				9/14/16	6.77	34.06	Kane	0.67	0.62	0.24	<0.20	6.13		303.0													
				10/28/16	4.85	35.98	Kane	0.46	<0.20	<0.20	<0.20	6.52	16.5	318.0													
				7/23/18	6.45	34.38	Kane	1.52	0.849	<1.00	<0.20	6.47	17.6	316.0	0.68												
				9/7/18	7.10	33.73	Kane	1.44	1.33	1.07	<0.20	6.25	18.9	338.0	0.51	98.7	<100	20.3	14.1	<0.100	<0.00863	<0.0162	<0.0151	5.38			
				12/21/18	5.35	35.48	Kane	1.46	0.956	<1.00	<0.20	6.16	13.3	392.0	0.98	32.7	<100	25.5	10.2	<0.100	<0.00863	<0.0162	<0.0151	2.52			
HZ-MW-23	Intermediate	28 to 38	41.677	5/21/19	5.72	35.11	Kane	1.2	0.66	0.51	<0.20	6.37	14.3	413.6	0.50	-19.1	<56	31	8.1	<0.050	0.004	<0.0005	<0.0005	2.3			
				9/14/16	8.21	33.47	Kane	2.4	<0.20	0.41	<0.20	6.55		378.0													
				10/31/16	6.80	34.88	Kane	2.3	<0.20	0.33	<0.20	6.77	14.4	345.0													
				9/7/18	8.26	33.42	Kane	<1.00	<0.500	<1.00	<0.20	6.84	15.6	401.0	0.07	24.8	3,800	13.2	11.1	<0.100	0.527	<0.0162	<0.0151	6.14			
				12/19/18	7.40	34.28	Kane	<1.00	<0.50	<1.00	<0.20	6.53	14.2	416.2	0.06	7.5	1,200	16.6	11.3	<0.100	0.273	<0.0162	<0.0151	3.14			
				5/30/19	7.17	34.51	Kane	<0.20	<0.20	<0.20	<0.20	6.74		358.2	0.20	11.5	7,500	13	11	<0.050	0.75	<0.05	<0.05	3.4			
				7/30/19	7.98	33.70	Kane	<0.20	<0.20	<0.20	<0.020	6.65	18.6	281.2	0.22	-79.8	4,900	11	6.8	<0.050	0.21	<0.0005	<0.0005	3.4			
				10/24/19	8.61	33.07	Kane	<0.20	<0.20	<0.20	<0.020	6.40	14.9	290.2	0.17	-5	8,700	8.1	7.1	<0.050	0.92	<0.0005	<0.0005	24			
HZ-MW-24	Intermediate	25 to 35	40.997	1/29/20	6.69	34.99	Kane	<0.20	<0.20	<0.02	0.039	6.55	13.2	502.7	0.20	13.5	10,000	<5.0	9.4	<0.050	1.9	<0.00022	<0.00029	42			
				4/13/02	6.77	34.91	Kane	<0.20	<0.20	<0.02	0.044	6.77	14.7	702.0	0.34	-59	16,000	<5.0	12	<0.050	7.3	<0.00022	<0.00029	92			
				9/14/16	7.20	33.80	Kane	4.9	2.4	21	0.8	6.47		356.0													
				10/27/16	5.66	35.34	Kane	6.7	0.8	12	0.6	6.69	17.1	316.0													
				9/18/18	6.92	34.08	Kane	4.48	2.3	14.8	0.577	6.31	16.2	286.0	0.22	99.2	<100	26.1	8.28	<0.100	0.0181	<0.0162	<0.0151	3.98			
				12/10/18	6.04	34.96	Kane	2.79	0.908	5.38	<0.20	6.26	15.0	273.7	0.08	-1.4	828	10.3	7.18	<0.100	<0.00863	<0.0162	<0.0151	7.02			
				5/31/19	6.06	34.94	Kane	2.0	0.92	21	0.77	6.61	15.3	533.7	0.13	-11.7	8,500	<5.0	13	0.19	5.4	<0.25	<0.25	3.5			
				7/17/19	7.10	33.90	Kane	2.7	1.1	16	0.58	6.39	17.1	557.4	0.07	-167.7	15,000	7.8	13	0.39	6.3	<0.0005	<0.0005	3.8			
HZ-MW-25	Deep	44.33 to 54.33	41.907	10/24/19	6.82	34.18	Kane	<0.40	<0.40	93	0.76	6.21	16.0	442.3	0.16	10	20,000	<5.0	14	1.1	9.7	<0.0005	<0.0005	4.7			
				1/27/20	5.71	35.29	Kane	2.2	1.3	150	3.2	6.47	13.0	452.3	0.13	35.3	14,000	<5.0	15	2.5	9.5	<0.00022	<0.00029	4.9			
				4/14/20	6.01	34.99	Kane	<0.40	<0.40	73	30	6.36	15.7	493.7	0.22	-13.9	14,000	13	19	4.1	4.0	<0.00022	0.0027	5.4			
				9/14/16	8.17	33.74	Kane	6.4	<0.20	<0.20	<0.20	6.71		254.0													
				10/28/16	7.02	34.89	Kane	1.2	<0.20	<0.20	<0.20	6.46		237.0													
				7/19/18	8.00	33.91	Kane	<1.00	<0.50	<1.00	<0.20	6.67	14.7	248.0	0.45												
HZ-MW-26	Intermediate	25 to 35	40.692	9/11/18	8.41	33.50	Kane	<1.00	<0.50	<1.00	<0.20	6.38	15.3	273.0	0.08	102.8	201	9.38	25.8	<0.100	0.00931	<0.0162	<0.0151	2.72			
				12/4/18	7.35	34.56	Kane	3.67	1.36	<1.00	<0.20	6.11	14.7	299.6	0.07	48.7	5,900	14.5	21.1	<0.100	<0.00863	<0.0162	<0.0151	4.34			
				5/30/19	7.60	34.31	Kane	<0.20	<0.20	<0.20	<0.20	6.36		259.6	0.32	21.3	330	12	22	<0.050	0.056	<0.005	<0.005	<1.0			
				9/14/16	7.55	33.14	Kane	99	3.5	4.7	<0.40	6.71		267.0													
				10/28/16	6.26	34.43	Kane	3.3	<0.20	0.25	<0.20	6.74	16.0	265.0													
				7/23/18	7.36	33.33	Kane	11.9	<0.50	2.01	<0.20	6.98	16.4	284.0	0.31												
				9/17/18	6.83	33.86	Kane	7.12	<0.50	1.3	<0.20	6.55	15.0	316.0	0.37	187	<100	24.9	7.46	<0.100	<0.00863	<0.0162	<0.0151	3.54			
				12/4/18	7.23	33.46	Kane	6.21	<0.50	1.03	<0.20	6.38	14.2	334.2	0.10	75.6	<100	25.3	8.08	<0.100	<0.00863	<0.0162	<0.0151	2.3			
HZ-MW-27	Deep	45 to 55	41.597	5/30/19	6.85	33.84	Kane	9.7	<0.20	1.4	<0.20	6.70	16.6	329.9	0.18	17	<56	28	9.3	<0.050	0.0042	<0.0005	<0.0005	<1.0			
				7/30/19	7.34	33.35	Kane	5.0	<0.20	1.0	0.053	6.42	16.5	327.9	0.21	-96.7	<56	23	9.3	0.063	0.01	<0.0005	<0.0005	<1.0			
				10/16/19	7.91	32.78	Kane	2.8	<0.20	0.53	0.055	6.61	15.1	322.7	0.03	152.3	<56	24	11	<0.050	0.022	<0.0005	<0.0005	<1.0			
				1/24/20	6.86	33.83	Kane	1.5	<0.20	0.42	0.041	6.55	13.1	334.4	0.10	36.3	<56	23	14	<0.050	0.035	<0.00022	0.00052	<1.0			
				4/13/20	6.33	34.36	Kane	73.0	2.5	4.9	<0.040	6.52	14.6	396.4	0.66	-4.8	<56	24	14	<0.050	0.059	<0.00022	<0.00029	<1.0			
				9/14/16	8.00	33.60	Kane	1.6	<0.20	0.34	<0.20	6.80		227.0													
HZ-MW-28	Intermediate	25 to 35	38.744	10/28/16	6.55	35.05	Kane	0.84	<0.20	<0.20	<0.20	6.51		208.0													
				7/13/18	7.35	34.25	Kane	2.24	<0.50	1.07	<0.20	6.77	15.1	215.0	0.40												
				9/18/18	7.73	33.87	Kane	1.75	<0.50	<1.00	<0.20	6.24	15.1	222.0	0.34	62.8	<100	15.3	8.08	<0.100	0.0449	<0.0162	<0.0151	4.12			
				12/7/18	8.18	33.42	Kane	<1.00	<0.50	<1.00	<0.20	6.12	14.5	229.6	0.13	49.8	835	21.1	8.36	<0.100	0.0636	<0.0162	<0.0151	1.28			
				5/30/19	7.30	34.30	Kane	<0.20	<0.20	<0.20	<0.20	6.51	15.8	223.5	0.22	18.6	1,200	18	8.7	<0.050	0.093	<0.005	<0.005	1.4			
HZ-MW-29	Intermediate	25 to 35	40.309	10/27/16	5.90	32.84	Kane	0.96	<0.20	<0.20	<0.20	6.87	15.3	343.0													
				7/24/18	6.65	32.09	Kane	<1.00	<0.50	<1.00	<0.20	7.08	15.6	333.0	0.42												
				9/13/18	7.00	31.74	Kane	<1.00	<0.50	<1.00	<0.20	6.86	15.1	368.0	0.13	35.8	420	17.6	16	<0.100	0.0191	<0.0162	<0.0151	2.29			
				12/6/18	6.40	32.34	Kane	<1.00	<0.50	<1.00	<0.20	6.58	14.2	429.8	0.28	56.7	<100	37.6	14	<0.100	0.0101	<0.0162	<0.0151	2.77			
				5/31/19	6.35	32.39	Kane	<0.20	<0.20	<0.20	<0.20	6.75	14.6	416.1	0.14	-7.1	<56	45	16	<0.050	0.053	<0.003	<0.003	1.4			

Table 1
Bothell Service Center Simon Son
Groundwater Analytical Results

Well	Well Type and Water Bearing Zone	Screened Depth, (ft bgs)	Top of Casing (TOC) Elevation (feet)*	Date Sampled	Depth to Water (ft below TOC)	GW Elevation (feet)	Sampled By	PCE (µg/L)	TCE (µg/L)	(cis) 1,2-DCE (µg/L)	Vinyl Chloride (µg/L)	pH (units)	Temp (°C)	Conductivity (µS)	Dissolved Oxygen (mg/L)	Oxidation Reduction Potential (mV)	Dissolved Iron (ug/L)	Sulfate (mg/L)	Chloride (mg/L)	Ammonia as N (mg/L)	Methane (mg/L)	Ethane (mg/L)	Ethene (mg/L)	Total Organic Carbon (mg/L)		
HZ-MW-30	Deep	40 to 50	-	11/28/16	7.08		Kane	<0.20	<0.20	<0.20	<0.20	8.01		418.0												
				8/27/18	8.60		Kane	<1.00	<0.50	<1.00	<0.20	7.71	16.9	235.0												
				9/20/18	9.54		Kane	<1.00	<0.50	<1.00	<0.20	7.71	15.0	273.0		0.25	-140	162	0.506	3.51	0.937	0.426	<0.0162	<0.0151		2.1
				12/18/18	7.71		Kane	<1.00	<0.50	<1.00	<0.20	7.60	13.9	281.5		0.05	-2.4	247	<0.300	3.62	0.956	0.307	<0.0162	<0.0151		2.15
				5/19/19	7.88		Kane	<0.20	<0.20	<0.20	<0.20	7.68		260.5		0.17	22.8	170	<5.0	4.8	0.61	0.91	<0.05	<0.05		1.8
HZ-MW-31	Shallow	15 to 25	-	11/28/16	8.42		Kane	<0.20	<0.20	<0.20	<0.20	6.80		325.0												
				8/27/18	9.55		Kane	<1.00	<0.50	<1.00	<0.20	6.52	16.3	294.0												
				9/20/18	9.63		Kane	<1.00	<0.50	<1.00	<0.20	6.46	15.5	321.0		0.43	-45.4	8,800	7.69	9.3	0.33	0.0618	<0.0162	<0.0151		5.41
				12/18/18	9.40		Kane	<1.00	<0.50	<1.00	<0.20	6.33	14.2	331.1		0.07	2	1,880	8.74	8.76	0.297	0.151	<0.0162	<0.0151		4.99
				5/29/19	9.34		Kane	0.78	<0.20	<0.20	<0.20	6.58	15.0	320.7		0.23	19.8	20,000	<5.0	8.7	0.26	0.34	<0.025	<0.025		4.6
				7/24/19	9.45		Kane	2.5	<0.20	0.69	0.048	6.33	16.9	295.9		0.21	-64	19,000	<5.0	8.3	0.27	0.62	<0.0005	<0.0005		4.4
				10/25/19	9.16		Kane	<0.20	<0.20	<0.20	0.048	6.22	15.1	232.9		0.10	23	19,000	<5.0	6.3	0.3	0.9	<0.0005	<0.0005		4.8
				1/28/20	8.75		Kane	<0.20	<0.20	<0.20	0.054	6.27	12.9	298.6		0.24	69	18,000	<5.0	6.7	0.29	0.76	<0.00022	<0.00029		4.8
4/27/20	24.75		Kane	<0.20	<0.20	<0.20	0.049	6.50	14.3	347.3		0.25	34	19,000	<5.0	5.8	0.29	0.84	<0.00022	<0.00029		4.7				
HZ-MW-32	Shallow	15 to 25	-	11/28/16	7.68		Kane	<0.20	<0.20	<0.20	<0.20	6.78		331.0												
				9/20/18	9.46		Kane	<1.00	<0.50	<1.00	<0.20	6.50	14.8	355.0		0.20	-68.3	13,500	3.07	13.3	0.402	0.147	<0.0162	<0.0151		6.79
				12/19/18	8.70		Kane	<1.00	<0.50	<1.00	<0.20	6.28	13.2	377.0		0.14	-5	234	5.93	13.6	0.356	0.121	<0.0162	<0.0151		6.56
				5/29/19	8.25		Kane	<0.20	<0.20	<0.20	<0.20	6.56		377.1		0.46	25.6	27,000	<5.0	13	0.39	0.27	<0.015	<0.015		5.9
HZ-MW-33	Intermediate	25 to 35	-	11/28/16	6.33		Kane	<0.20	<0.20	0.48	<0.20	7.39		242.0												
				7/24/18	6.87		Kane	<1.00	<0.20	<1.00	<0.20	7.02	17.0	214.0		0.00										
				9/12/18	7.35		Kane	<1.00	<0.50	1.11	<0.20	6.84	15.2	237.0		0.25	103.4	<100	14.2	6.54	<0.100	<0.00863	<0.0162	<0.0151		2.08
				12/6/18	7.19		Kane	<1.00	<0.50	2.06	0.303	6.55	14.1	259.5		0.21	48.1	<100	19.1	7.87	<0.100	<0.00863	<0.0162	<0.0151		2.36
				5/31/19	6.82		Kane	0.51	<0.20	1.7	<0.20	6.77	15.6	271.0		0.14	-12.5	<56	16	7.3	<0.050	0.0027	<0.0005	<0.0005		<1.0
HZ-MW-34	Shallow	15 to 25	-	11/28/16	4.81		Kane	7.2	14	44	3.1	6.64		272.0												
				9/17/18	6.68		Kane	8.05	16.5	40.6	2.97	6.12	17.1	265.0		0.32	152	<100	17.7	10.4	<0.100	0.0191	<0.0162	<0.0151		3.87
				12/7/18	5.77		Kane	4.63	12.7	32.6	<0.20	6.18	15.9	383.7		0.10	0.9	5,750	7.8	14.2	<0.100	<0.00863	<0.0162	<0.0151		3.96
				5/31/19	5.88		Kane	0.83	3.3	24	0.26	6.46	14.7	550.0		0.16	-17.2	10,000	5.7	13	<0.050	1.1	<0.05	<0.05		42
				7/17/19	6.41		Kane	1.4	3.3	20	0.28	6.24	17.3	508.5		0.08	-158.7	11,000	5.2	13	<0.050	3.1	<0.00050	<0.0005		24
				10/23/19	6.60		Kane	<1.0	<1.0	110	0.97	6.25	16.2	258.4		0.07	24.7	4,900	17	9	0.69	7.7	<0.0005	<0.0005		5.8
				1/27/20	5.22		Kane	<1.0	2.6	120	31	6.25	14.0	570.1		0.14	48.8	6,200	11	14	0.67	11	<0.00022	<0.00029		2.3
				4/14/20	5.83		Kane	<1.0	1.6	100	130	6.50	13.8	646.0		0.21	-21.8	11,000	5.1	13	0.68	16	<0.00022	0.0043		2.1
S-MW-1	Shallow	5.5 to 15.5	43.527	9/20/16	6.96	36.57	Kane	150	<1.0	<1.0	<1.0	6.48		303.0												
				10/24/16	4.64	38.89	Kane	17	<0.20	<0.20	<0.20	6.74	16.5	140.0												
				10/23/18	6.80	36.73	Kane	9.1	<0.50	<1.0	<0.20	6.59		161.0												
				6/6/19	6.00	37.53	Kane	8.9	<0.20	<0.20	<0.20	6.25	14.4	256.6		3.46	5	<56	50	4.6	<0.050	<0.001	<0.0005	<0.0005		1.4
				7/24/19	6.61	36.92	Kane	6.5	<0.20	<0.20	<0.020	6.01	18.8	200.8		3.10	-74.5	<56	26	4.8	0.15	<0.001	<0.0005	<0.0005		<1.0
				10/23/19	6.18	37.35	Kane	7.3	<0.20	<0.20	<0.020	5.92	15.4	162.8		3.82	164.3	<56	23	4.2	<0.050	<0.001	<0.0005	<0.0005		<1.0
				1/21/20	4.78	38.75	Kane	3.4	<0.20	<0.20	<0.020	6.32	11.0	236.2		4.38	105.9	<56	42	3.7	<0.050	<0.00055	<0.00022	<0.00029		<1.0
4/23/20	5.01	38.52	Kane	3.5	<0.20	<0.20	<0.020	6.13	11.1	324.2		4.58	1.3	<56	57	4.4	<0.050	<0.00055	<0.00022	<0.00029		<1.0				
S-MW-2	Shallow Decommissioned	5 to 15	42.297	9/20/16	6.21	36.09	Kane	47	7	26	<0.40	6.41		339.0												
				10/24/16	3.95	38.35	Kane	35	20	69	5.1	6.83	17.8	349.0												
				9/21/18	6.03	36.27	Kane	10.3	4.74	3.66	<0.20	6.80	18.4	246.0		0.12	105.6	<100	19.3	4.29	<0.100	<0.00863	<0.0162	<0.0151		2.25
				1/2/19	4.40	37.90	Kane	7.55	4.2	5.02	<0.20	6.45		278.4		0.11	34.7	<100	19	4.74	<0.100	<0.00863	<0.0162	<0.0151		1.02
				6/6/19	5.14	37.16	Kane	5.8	3.8	3.2	<0.20	6.68	15.6	363.7		0.25	0.5	<56	35	6.6	<0.050	0.033	<0.0025	<0.0025		1.6
				7/24/19	5.34	36.96	Kane	6.2	3.8	4.1	0.11	6.18	18.5	338.0		0.14	-129.2	<56	21	7.4	<0.050	0.027	<0.0005	<0.0005		1.3
10/17/19	5.26	37.04	Kane	5.8	3.7	4.2	0.11	6.34	17.6	245.9		0.10	193.1	<56	26	6.9	<0.050	0.023	<0.0005	<0.0005		1.6				
S-MW-2R	Shallow	5 to 15	-	4/24/20	4.46		Kane	5.5	2.4	2.0	0.029	6.59	12.9	601.7	0.30	26.7	230	63	6.3	<0.050	0.0024	<0.00022	<0.00029		61	
S-MW-3	Intermediate Decommissioned	25 to 35	42.807	9/16/16	6.62	36.19	Kane	0.44	<0.20	<0.20	<0.20	5.79		116.0												
				10/31/16	4.93	37.88	Kane	1.7	<0.20	<0.20	<0.20	6.04	15.9	116.0												
				9/21/18	6.51	36.30	Kane	3.8	<0.50	<1.00	<0.20	5.95	14.8	95.0		0.24	80.3	<100	13.7	2.82	<0.100	0.0652	<0.0162	<0.0151		1.24
				1/3/19	5.17	37.64	Kane	2.28	<0.50	<1.00	<0.20	5.57		103.2		0.14	49	<100	15	3.63	<0.100	0.0994	<0.0162	<0.0151		0.723
				6/5/19	6.05	36.76	Kane	2.2	<0.20</																	

Table 1
Bothell Service Center Simon Son
Groundwater Analytical Results

Well	Well Type and Water Bearing Zone	Screened Depth, (ft bgs)	Top of Casing (TOC) Elevation (feet)*	Date Sampled	Depth to Water (ft below TOC)	GW Elevation (feet)	Sampled By	PCE (µg/L)	TCE (µg/L)	(cis) 1,2-DCE (µg/L)	Vinyl Chloride (µg/L)	pH (units)	Temp (°C)	Conductivity (µS)	Dissolved Oxygen (mg/L)	Oxidation Reduction Potential (mV)	Dissolved Iron (ug/L)	Sulfate (mg/L)	Chloride (mg/L)	Ammonia as N (mg/L)	Methane (mg/L)	Ethane (mg/L)	Ethene (mg/L)	Total Organic Carbon (mg/L)	
S-MW-5	Shallow	15 to 25	41.357	10/28/16	4.56	36.80	Kane	340	<4.0	<4.0	<4.0	6.68	18.0	259.0											
				9/24/18	6.07	35.29	Kane	530	<5.0	<10	<2.0	6.38	16.2	164.0	2.17	48.5	<100	12.6	6.05	<0.100	<0.00863	<0.0162	<0.0151	1.36	
				12/27/18	3.90	37.46	Kane	1,690	6.03	16.7	<0.20	6.31		235.5	0.98	58.2	<100	21.6	6.56	<0.100	<0.00863	<0.0162	<0.0151	0.506	
				6/5/19	5.20	36.16	Kane	880	<10	<10	<10	6.57	15.2	205.1	1.81	7.3	<56	19	5.9	<0.050	<0.001	<0.0005	<0.0005	<1.0	
				7/24/19	5.72	35.64	Kane	530	<4.0	<4.0	<0.40	6.22	17.6	169.8	1.93	-76.1	<56	15	7.5	<0.050	<0.001	<0.0005	<0.0005	<1.0	
				10/17/19	5.88	35.48	Kane	820	<4.0	<4.0	<0.40	6.05	15.8	159.8	1.78	198.6	<56	17	5.3	<0.050	<0.001	<0.0005	<0.0005	<1.0	
				1/21/20	5.00	36.36	Kane	780	<4.0	<4.0	<0.40	6.65	12.8	195.6	1.30	74.8	<56	22	6.1	<0.050	<0.00055	<0.00022	<0.00029	<1.0	
				4/23/20	4.85	37.52	Kane	1,500	<10	<10	<1.0	6.37	13.4	217.3	2.11	-8.3	57	15	5.1	<0.050	<0.00055	<0.00022	<0.00029	<1.0	
S-MW-6	Shallow	4 to 14	-	1/3/17	5.51		Kane	<0.20	<0.20	<0.20	<0.20	6.23		155.0											
				1/11/19	5.54		Kane	<1.00	<0.50	<1.00	<0.20	6.11		129.0											
				6/7/19	7.57		Kane	<0.20	<0.20	<0.20	<0.20	6.1	13.5	182.8	4.90	8.7	<56	29	7.3	<0.050	0.0016	<0.0005	<0.0005	<1.0	
MTCA Method A Cleanup Level ¹								5.0	5.0		0.2														
MTCA Method B Cleanup Level ²										16						11,200									

* HWA TOC elevation was used to calculate GW elevation during HWA sampling events.

Notes:

- PCE – Tetrachloroethene
- TCE – Trichloroethene
- 1,1-DCE - 1,1-Dichloroethene
- (cis) 1,2-DCE - (cis) 1,2-Dichloroethene
- (trans) 1,2-DCE - (trans) 1,2-Dichloroethene
- Blank – Not analyzed or not available
- Blank – Not analyzed or not available
- Bold** – Analyte detected
- Bold / highlighted** – Analyte exceeds MTCA A/B cleanup level
- Italicized* - Detection limit exceeds respective cleanup level
- < – Analyte not detected at listed reporting limit
- mg/L – micrograms per liter
- MV – Millivolts
- ES – Estimated concentration because analyte concentration was outside of lab instrument calibration range
- DNAPL – Dense Non-Aqueous Phase Liquid
- 1 – Table 720-1, WAC 173-340-900
- 2 – WA Dept. of Ecology CLARC ground water data table (<https://fortress.wa.gov/ecy/clarc/FocusSheets/Groundwater%20Methods%20B%20and%20A%20and%20ARARs.pdf>)
- NA – Not Applicable

- Well was not sampled by Kane

* HWA TOC elevation was used to calculate GW elevation during HWA sampling events.



14648 NE 95th Street, Redmond, WA 98052 • (425) 883-3881

April 21, 2020

Jeff Jensen
Kane Environmental, Inc.
4015 13th Avenue West
Seattle, WA 98119

Re: Analytical Data for Project 82302-9.4
Laboratory Reference No. 2004-075

Dear Jeff:

Enclosed are the analytical results and associated quality control data for samples submitted on April 13, 2020.

The standard policy of OnSite Environmental, Inc. is to store your samples for 30 days from the date of receipt. If you require longer storage, please contact the laboratory.

We appreciate the opportunity to be of service to you on this project. If you have any questions concerning the data, or need additional information, please feel free to call me.

Sincerely,

A handwritten signature in black ink, appearing to read "DB", with a long horizontal stroke extending to the right.

David Baumeister
Project Manager

Enclosures



OnSite Environmental, Inc. 14648 NE 95th Street, Redmond, WA 98052 (425) 883-3881

This report pertains to the samples analyzed in accordance with the chain of custody, and is intended only for the use of the individual or company to whom it is addressed.

Date of Report: April 21, 2020
Samples Submitted: April 13, 2020
Laboratory Reference: 2004-075
Project: 82302-9.4

Case Narrative

Samples were collected on April 13, 2020 and received by the laboratory on April 13, 2020. They were maintained at the laboratory at a temperature of 2°C to 6°C.

Please note that any and all soil sample results are reported on a dry-weight basis, unless otherwise noted below.

General QA/QC issues associated with the analytical data enclosed in this laboratory report will be indicated with a reference to a comment or explanation on the Data Qualifier page. More complex and involved QA/QC issues will be discussed in detail below.



Date of Report: April 21, 2020
 Samples Submitted: April 13, 2020
 Laboratory Reference: 2004-075
 Project: 82302-9.4

VOLATILE ORGANICS EPA 8260D
 page 1 of 2

Matrix: Water
 Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	HZ-MW-29:W					
Laboratory ID:	04-075-01					
Dichlorodifluoromethane	ND	1.9	EPA 8260D	4-15-20	4-15-20	
Chloromethane	ND	5.0	EPA 8260D	4-15-20	4-15-20	
Vinyl Chloride	5.8	1.0	EPA 8260D	4-15-20	4-15-20	
Bromomethane	ND	1.0	EPA 8260D	4-15-20	4-15-20	
Chloroethane	ND	5.0	EPA 8260D	4-15-20	4-15-20	
Trichlorofluoromethane	ND	1.0	EPA 8260D	4-15-20	4-15-20	
1,1-Dichloroethene	ND	1.0	EPA 8260D	4-15-20	4-15-20	
Iodomethane	ND	5.0	EPA 8260D	4-15-20	4-15-20	
Methylene Chloride	ND	5.0	EPA 8260D	4-15-20	4-15-20	
(trans) 1,2-Dichloroethene	ND	1.0	EPA 8260D	4-15-20	4-15-20	
1,1-Dichloroethane	ND	1.0	EPA 8260D	4-15-20	4-15-20	
2,2-Dichloropropane	ND	1.0	EPA 8260D	4-15-20	4-15-20	
(cis) 1,2-Dichloroethene	130	1.0	EPA 8260D	4-15-20	4-15-20	
Bromochloromethane	ND	1.0	EPA 8260D	4-15-20	4-15-20	
Chloroform	ND	1.0	EPA 8260D	4-15-20	4-15-20	
1,1,1-Trichloroethane	ND	1.0	EPA 8260D	4-15-20	4-15-20	
Carbon Tetrachloride	ND	1.0	EPA 8260D	4-15-20	4-15-20	
1,1-Dichloropropene	ND	1.0	EPA 8260D	4-15-20	4-15-20	
1,2-Dichloroethane	ND	1.0	EPA 8260D	4-15-20	4-15-20	
Trichloroethene	5.2	1.0	EPA 8260D	4-15-20	4-15-20	
1,2-Dichloropropane	ND	1.0	EPA 8260D	4-15-20	4-15-20	
Dibromomethane	ND	1.0	EPA 8260D	4-15-20	4-15-20	
Bromodichloromethane	ND	1.0	EPA 8260D	4-15-20	4-15-20	
2-Chloroethyl Vinyl Ether	ND	6.5	EPA 8260D	4-15-20	4-15-20	
(cis) 1,3-Dichloropropene	ND	1.0	EPA 8260D	4-15-20	4-15-20	
(trans) 1,3-Dichloropropene	ND	1.0	EPA 8260D	4-15-20	4-15-20	



Date of Report: April 21, 2020
 Samples Submitted: April 13, 2020
 Laboratory Reference: 2004-075
 Project: 82302-9.4

VOLATILE ORGANICS EPA 8260D
 page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	HZ-MW-29:W					
Laboratory ID:	04-075-01					
1,1,2-Trichloroethane	ND	1.0	EPA 8260D	4-15-20	4-15-20	
Tetrachloroethene	ND	1.0	EPA 8260D	4-15-20	4-15-20	
1,3-Dichloropropane	ND	1.0	EPA 8260D	4-15-20	4-15-20	
Dibromochloromethane	ND	1.0	EPA 8260D	4-15-20	4-15-20	
1,2-Dibromoethane	ND	1.0	EPA 8260D	4-15-20	4-15-20	
Chlorobenzene	ND	1.0	EPA 8260D	4-15-20	4-15-20	
1,1,1,2-Tetrachloroethane	ND	1.0	EPA 8260D	4-15-20	4-15-20	
Bromoform	ND	5.0	EPA 8260D	4-15-20	4-15-20	
Bromobenzene	ND	1.0	EPA 8260D	4-15-20	4-15-20	
1,1,2,2-Tetrachloroethane	ND	1.0	EPA 8260D	4-15-20	4-15-20	
1,2,3-Trichloropropane	ND	1.0	EPA 8260D	4-15-20	4-15-20	
2-Chlorotoluene	ND	1.0	EPA 8260D	4-15-20	4-15-20	
4-Chlorotoluene	ND	1.0	EPA 8260D	4-15-20	4-15-20	
1,3-Dichlorobenzene	ND	1.0	EPA 8260D	4-15-20	4-15-20	
1,4-Dichlorobenzene	ND	1.0	EPA 8260D	4-15-20	4-15-20	
1,2-Dichlorobenzene	ND	1.0	EPA 8260D	4-15-20	4-15-20	
1,2-Dibromo-3-chloropropane	ND	5.0	EPA 8260D	4-15-20	4-15-20	
1,2,4-Trichlorobenzene	ND	1.0	EPA 8260D	4-15-20	4-15-20	
Hexachlorobutadiene	ND	5.0	EPA 8260D	4-15-20	4-15-20	
1,2,3-Trichlorobenzene	ND	1.0	EPA 8260D	4-15-20	4-15-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>120</i>	<i>75-127</i>				
<i>Toluene-d8</i>	<i>101</i>	<i>80-127</i>				
<i>4-Bromofluorobenzene</i>	<i>103</i>	<i>78-125</i>				



Date of Report: April 21, 2020
 Samples Submitted: April 13, 2020
 Laboratory Reference: 2004-075
 Project: 82302-9.4

VOLATILE ORGANICS EPA 8260D
 page 1 of 2

Matrix: Water
 Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	HZ-MW-26:W					
Laboratory ID:	04-075-02					
Dichlorodifluoromethane	ND	0.74	EPA 8260D	4-15-20	4-15-20	
Chloromethane	ND	2.0	EPA 8260D	4-15-20	4-15-20	
Vinyl Chloride	ND	0.040	EPA 8260D/SIM	4-15-20	4-15-20	
Bromomethane	ND	0.40	EPA 8260D	4-15-20	4-15-20	
Chloroethane	ND	2.0	EPA 8260D	4-15-20	4-15-20	
Trichlorofluoromethane	ND	0.40	EPA 8260D	4-15-20	4-15-20	
1,1-Dichloroethene	ND	0.40	EPA 8260D	4-15-20	4-15-20	
Iodomethane	ND	2.0	EPA 8260D	4-15-20	4-15-20	
Methylene Chloride	ND	2.0	EPA 8260D	4-15-20	4-15-20	
(trans) 1,2-Dichloroethene	ND	0.40	EPA 8260D	4-15-20	4-15-20	
1,1-Dichloroethane	ND	0.40	EPA 8260D	4-15-20	4-15-20	
2,2-Dichloropropane	ND	0.40	EPA 8260D	4-15-20	4-15-20	
(cis) 1,2-Dichloroethene	4.9	0.40	EPA 8260D	4-15-20	4-15-20	
Bromochloromethane	ND	0.40	EPA 8260D	4-15-20	4-15-20	
Chloroform	ND	0.40	EPA 8260D	4-15-20	4-15-20	
1,1,1-Trichloroethane	ND	0.40	EPA 8260D	4-15-20	4-15-20	
Carbon Tetrachloride	ND	0.40	EPA 8260D	4-15-20	4-15-20	
1,1-Dichloropropene	ND	0.40	EPA 8260D	4-15-20	4-15-20	
1,2-Dichloroethane	ND	0.40	EPA 8260D	4-15-20	4-15-20	
Trichloroethene	2.5	0.40	EPA 8260D	4-15-20	4-15-20	
1,2-Dichloropropane	ND	0.40	EPA 8260D	4-15-20	4-15-20	
Dibromomethane	ND	0.40	EPA 8260D	4-15-20	4-15-20	
Bromodichloromethane	ND	0.40	EPA 8260D	4-15-20	4-15-20	
2-Chloroethyl Vinyl Ether	ND	2.6	EPA 8260D	4-15-20	4-15-20	
(cis) 1,3-Dichloropropene	ND	0.40	EPA 8260D	4-15-20	4-15-20	
(trans) 1,3-Dichloropropene	ND	0.40	EPA 8260D	4-15-20	4-15-20	



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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	HZ-MW-26:W					
Laboratory ID:	04-075-02					
1,1,2-Trichloroethane	ND	0.40	EPA 8260D	4-15-20	4-15-20	
Tetrachloroethene	73	0.40	EPA 8260D	4-15-20	4-15-20	
1,3-Dichloropropane	ND	0.40	EPA 8260D	4-15-20	4-15-20	
Dibromochloromethane	ND	0.40	EPA 8260D	4-15-20	4-15-20	
1,2-Dibromoethane	ND	0.40	EPA 8260D	4-15-20	4-15-20	
Chlorobenzene	ND	0.40	EPA 8260D	4-15-20	4-15-20	
1,1,1,2-Tetrachloroethane	ND	0.40	EPA 8260D	4-15-20	4-15-20	
Bromoform	ND	2.0	EPA 8260D	4-15-20	4-15-20	
Bromobenzene	ND	0.40	EPA 8260D	4-15-20	4-15-20	
1,1,1,2,2-Tetrachloroethane	ND	0.40	EPA 8260D	4-15-20	4-15-20	
1,2,3-Trichloropropane	ND	0.40	EPA 8260D	4-15-20	4-15-20	
2-Chlorotoluene	ND	0.40	EPA 8260D	4-15-20	4-15-20	
4-Chlorotoluene	ND	0.40	EPA 8260D	4-15-20	4-15-20	
1,3-Dichlorobenzene	ND	0.40	EPA 8260D	4-15-20	4-15-20	
1,4-Dichlorobenzene	ND	0.40	EPA 8260D	4-15-20	4-15-20	
1,2-Dichlorobenzene	ND	0.40	EPA 8260D	4-15-20	4-15-20	
1,2-Dibromo-3-chloropropane	ND	2.0	EPA 8260D	4-15-20	4-15-20	
1,2,4-Trichlorobenzene	ND	0.40	EPA 8260D	4-15-20	4-15-20	
Hexachlorobutadiene	ND	2.0	EPA 8260D	4-15-20	4-15-20	
1,2,3-Trichlorobenzene	ND	0.40	EPA 8260D	4-15-20	4-15-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>120</i>	<i>75-127</i>				
<i>Toluene-d8</i>	<i>103</i>	<i>80-127</i>				
<i>4-Bromofluorobenzene</i>	<i>107</i>	<i>78-125</i>				



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Matrix: Water
 Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	HZ-MW-23:W					
Laboratory ID:	04-075-03					
Dichlorodifluoromethane	ND	0.37	EPA 8260D	4-15-20	4-15-20	
Chloromethane	ND	1.0	EPA 8260D	4-15-20	4-15-20	
Vinyl Chloride	0.044	0.020	EPA 8260D/SIM	4-15-20	4-15-20	
Bromomethane	ND	0.20	EPA 8260D	4-15-20	4-15-20	
Chloroethane	ND	1.0	EPA 8260D	4-15-20	4-15-20	
Trichlorofluoromethane	ND	0.20	EPA 8260D	4-15-20	4-15-20	
1,1-Dichloroethene	ND	0.20	EPA 8260D	4-15-20	4-15-20	
Iodomethane	ND	1.0	EPA 8260D	4-15-20	4-15-20	
Methylene Chloride	ND	1.0	EPA 8260D	4-15-20	4-15-20	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260D	4-15-20	4-15-20	
1,1-Dichloroethane	ND	0.20	EPA 8260D	4-15-20	4-15-20	
2,2-Dichloropropane	ND	0.20	EPA 8260D	4-15-20	4-15-20	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260D	4-15-20	4-15-20	
Bromochloromethane	ND	0.20	EPA 8260D	4-15-20	4-15-20	
Chloroform	ND	0.20	EPA 8260D	4-15-20	4-15-20	
1,1,1-Trichloroethane	ND	0.20	EPA 8260D	4-15-20	4-15-20	
Carbon Tetrachloride	ND	0.20	EPA 8260D	4-15-20	4-15-20	
1,1-Dichloropropene	ND	0.20	EPA 8260D	4-15-20	4-15-20	
1,2-Dichloroethane	ND	0.20	EPA 8260D	4-15-20	4-15-20	
Trichloroethene	ND	0.20	EPA 8260D	4-15-20	4-15-20	
1,2-Dichloropropane	ND	0.20	EPA 8260D	4-15-20	4-15-20	
Dibromomethane	ND	0.20	EPA 8260D	4-15-20	4-15-20	
Bromodichloromethane	ND	0.20	EPA 8260D	4-15-20	4-15-20	
2-Chloroethyl Vinyl Ether	ND	1.3	EPA 8260D	4-15-20	4-15-20	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260D	4-15-20	4-15-20	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260D	4-15-20	4-15-20	



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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	HZ-MW-23:W					
Laboratory ID:	04-075-03					
1,1,2-Trichloroethane	ND	0.20	EPA 8260D	4-15-20	4-15-20	
Tetrachloroethene	ND	0.20	EPA 8260D	4-15-20	4-15-20	
1,3-Dichloropropane	ND	0.20	EPA 8260D	4-15-20	4-15-20	
Dibromochloromethane	ND	0.20	EPA 8260D	4-15-20	4-15-20	
1,2-Dibromoethane	ND	0.20	EPA 8260D	4-15-20	4-15-20	
Chlorobenzene	ND	0.20	EPA 8260D	4-15-20	4-15-20	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260D	4-15-20	4-15-20	
Bromoform	ND	1.0	EPA 8260D	4-15-20	4-15-20	
Bromobenzene	ND	0.20	EPA 8260D	4-15-20	4-15-20	
1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260D	4-15-20	4-15-20	
1,2,3-Trichloropropane	ND	0.20	EPA 8260D	4-15-20	4-15-20	
2-Chlorotoluene	ND	0.20	EPA 8260D	4-15-20	4-15-20	
4-Chlorotoluene	ND	0.20	EPA 8260D	4-15-20	4-15-20	
1,3-Dichlorobenzene	ND	0.20	EPA 8260D	4-15-20	4-15-20	
1,4-Dichlorobenzene	ND	0.20	EPA 8260D	4-15-20	4-15-20	
1,2-Dichlorobenzene	ND	0.20	EPA 8260D	4-15-20	4-15-20	
1,2-Dibromo-3-chloropropane	ND	1.0	EPA 8260D	4-15-20	4-15-20	
1,2,4-Trichlorobenzene	ND	0.20	EPA 8260D	4-15-20	4-15-20	
Hexachlorobutadiene	ND	1.0	EPA 8260D	4-15-20	4-15-20	
1,2,3-Trichlorobenzene	ND	0.20	EPA 8260D	4-15-20	4-15-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>115</i>	<i>75-127</i>				
<i>Toluene-d8</i>	<i>104</i>	<i>80-127</i>				
<i>4-Bromofluorobenzene</i>	<i>105</i>	<i>78-125</i>				



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Matrix: Water
 Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0415W1					
Dichlorodifluoromethane	ND	0.37	EPA 8260D	4-15-20	4-15-20	
Chloromethane	ND	1.0	EPA 8260D	4-15-20	4-15-20	
Vinyl Chloride	ND	0.020	EPA 8260D/SIM	4-15-20	4-15-20	
Bromomethane	ND	0.20	EPA 8260D	4-15-20	4-15-20	
Chloroethane	ND	1.0	EPA 8260D	4-15-20	4-15-20	
Trichlorofluoromethane	ND	0.20	EPA 8260D	4-15-20	4-15-20	
1,1-Dichloroethene	ND	0.20	EPA 8260D	4-15-20	4-15-20	
Iodomethane	ND	1.0	EPA 8260D	4-15-20	4-15-20	
Methylene Chloride	ND	1.0	EPA 8260D	4-15-20	4-15-20	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260D	4-15-20	4-15-20	
1,1-Dichloroethane	ND	0.20	EPA 8260D	4-15-20	4-15-20	
2,2-Dichloropropane	ND	0.20	EPA 8260D	4-15-20	4-15-20	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260D	4-15-20	4-15-20	
Bromochloromethane	ND	0.20	EPA 8260D	4-15-20	4-15-20	
Chloroform	ND	0.20	EPA 8260D	4-15-20	4-15-20	
1,1,1-Trichloroethane	ND	0.20	EPA 8260D	4-15-20	4-15-20	
Carbon Tetrachloride	ND	0.20	EPA 8260D	4-15-20	4-15-20	
1,1-Dichloropropene	ND	0.20	EPA 8260D	4-15-20	4-15-20	
1,2-Dichloroethane	ND	0.20	EPA 8260D	4-15-20	4-15-20	
Trichloroethene	ND	0.20	EPA 8260D	4-15-20	4-15-20	
1,2-Dichloropropane	ND	0.20	EPA 8260D	4-15-20	4-15-20	
Dibromomethane	ND	0.20	EPA 8260D	4-15-20	4-15-20	
Bromodichloromethane	ND	0.20	EPA 8260D	4-15-20	4-15-20	
2-Chloroethyl Vinyl Ether	ND	1.3	EPA 8260D	4-15-20	4-15-20	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260D	4-15-20	4-15-20	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260D	4-15-20	4-15-20	



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**VOLATILE ORGANICS EPA 8260D/SIM
 QUALITY CONTROL**

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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0415W1					
1,1,2-Trichloroethane	ND	0.20	EPA 8260D	4-15-20	4-15-20	
Tetrachloroethene	ND	0.20	EPA 8260D	4-15-20	4-15-20	
1,3-Dichloropropane	ND	0.20	EPA 8260D	4-15-20	4-15-20	
Dibromochloromethane	ND	0.20	EPA 8260D	4-15-20	4-15-20	
1,2-Dibromoethane	ND	0.20	EPA 8260D	4-15-20	4-15-20	
Chlorobenzene	ND	0.20	EPA 8260D	4-15-20	4-15-20	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260D	4-15-20	4-15-20	
Bromoform	ND	1.0	EPA 8260D	4-15-20	4-15-20	
Bromobenzene	ND	0.20	EPA 8260D	4-15-20	4-15-20	
1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260D	4-15-20	4-15-20	
1,2,3-Trichloropropane	ND	0.20	EPA 8260D	4-15-20	4-15-20	
2-Chlorotoluene	ND	0.20	EPA 8260D	4-15-20	4-15-20	
4-Chlorotoluene	ND	0.20	EPA 8260D	4-15-20	4-15-20	
1,3-Dichlorobenzene	ND	0.20	EPA 8260D	4-15-20	4-15-20	
1,4-Dichlorobenzene	ND	0.20	EPA 8260D	4-15-20	4-15-20	
1,2-Dichlorobenzene	ND	0.20	EPA 8260D	4-15-20	4-15-20	
1,2-Dibromo-3-chloropropane	ND	1.0	EPA 8260D	4-15-20	4-15-20	
1,2,4-Trichlorobenzene	ND	0.20	EPA 8260D	4-15-20	4-15-20	
Hexachlorobutadiene	ND	1.0	EPA 8260D	4-15-20	4-15-20	
1,2,3-Trichlorobenzene	ND	0.20	EPA 8260D	4-15-20	4-15-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>117</i>	<i>75-127</i>				
<i>Toluene-d8</i>	<i>102</i>	<i>80-127</i>				
<i>4-Bromofluorobenzene</i>	<i>102</i>	<i>78-125</i>				



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**VOLATILE ORGANICS EPA 8260D
 QUALITY CONTROL**

Matrix: Water
 Units: ug/L

Analyte	Result		Spike Level		Percent Recovery		Recovery	RPD	RPD	Flags
					Recovery	Limits	RPD	Limit		
SPIKE BLANKS										
Laboratory ID:	SB0415W1									
	SB	SBD	SB	SBD	SB	SBD				
1,1-Dichloroethene	10.9	11.2	10.0	10.0	109	112	63-130	3	17	
Benzene	10.9	11.1	10.0	10.0	109	111	76-125	2	19	
Trichloroethene	10.2	10.4	10.0	10.0	102	104	76-121	2	18	
Toluene	9.92	9.93	10.0	10.0	99	99	80-124	0	18	
Chlorobenzene	9.84	9.80	10.0	10.0	98	98	75-120	0	19	
<i>Surrogate:</i>										
<i>Dibromofluoromethane</i>					<i>114</i>	<i>114</i>	<i>75-127</i>			
<i>Toluene-d8</i>					<i>104</i>	<i>104</i>	<i>80-127</i>			
<i>4-Bromofluorobenzene</i>					<i>93</i>	<i>96</i>	<i>78-125</i>			



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**TOTAL ORGANIC CARBON
 SM 5310B**

Matrix: Water
 Units: mg/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	HZ-MW-29:W					
Laboratory ID:	04-075-01					
Total Organic Carbon	3.2	1.0	SM 5310B	4-20-20	4-20-20	

Client ID:	HZ-MW-26:W					
Laboratory ID:	04-075-02					
Total Organic Carbon	ND	1.0	SM 5310B	4-20-20	4-20-20	

Client ID:	HZ-MW-23:W					
Laboratory ID:	04-075-03					
Total Organic Carbon	92	1.0	SM 5310B	4-20-20	4-20-20	



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**TOTAL ORGANIC CARBON
 SM 5310B
 QUALITY CONTROL**

Matrix: Water
 Units: mg/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0420W1					
Total Organic Carbon	ND	1.0	SM 5310B	4-20-20	4-20-20	

Analyte	Result	Spike Level	Source Result	Percent Recovery	Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE								
Laboratory ID:	04-075-01							
	ORIG	DUP						
Total Organic Carbon	3.22	3.31	NA	NA	NA	NA	3	20

MATRIX SPIKE

Laboratory ID:	04-075-01							
	MS	MS		MS				
Total Organic Carbon	13.9		10.0	3.22	107	85-131	NA	NA

SPIKE BLANK

Laboratory ID:	SB0420W1							
	SB	SB		SB				
Total Organic Carbon	10.9		10.0	NA	109	88-127	NA	NA



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DISSOLVED IRON
EPA 6010D

Matrix: Water
 Units: ug/L (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	HZ-MW-29:W					
Laboratory ID:	04-075-01					
Iron	11000	56	EPA 6010D	4-13-20	4-15-20	

Client ID:	HZ-MW-26:W					
Laboratory ID:	04-075-02					
Iron	ND	56	EPA 6010D	4-13-20	4-15-20	

Client ID:	HZ-MW-23:W					
Laboratory ID:	04-075-03					
Iron	16000	56	EPA 6010D	4-13-20	4-15-20	



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**DISSOLVED IRON
 EPA 6010D
 QUALITY CONTROL**

Matrix: Water
 Units: ug/L (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0413F1					
Iron	ND	56	EPA 6010D	4-13-20	4-15-20	

Analyte	Result	Spike Level	Source Result	Percent Recovery	Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE								
Laboratory ID:	04-075-01							
	ORIG	DUP						
Iron	10600	10500	NA	NA	NA	NA	1	20

MATRIX SPIKES

Laboratory ID:	04-075-01									
	MS	MSD	MS	MSD	MS	MSD				
Iron	115000	117000	100000	100000	10600	105	106	75-125	1	20



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CHLORIDE
SM 4500-Cl E

Matrix: Water
 Units: mg/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	HZ-MW-29:W					
Laboratory ID:	04-075-01					
Chloride	14	2.0	SM 4500-Cl E	4-15-20	4-15-20	

Client ID:	HZ-MW-26:W					
Laboratory ID:	04-075-02					
Chloride	14	2.0	SM 4500-Cl E	4-15-20	4-15-20	

Client ID:	HZ-MW-23:W					
Laboratory ID:	04-075-03					
Chloride	12	2.0	SM 4500-Cl E	4-15-20	4-15-20	



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**CHLORIDE
 SM 4500-Cl E
 QUALITY CONTROL**

Matrix: Water
 Units: mg/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0415W1					
Chloride	ND	2.0	SM 4500-Cl E	4-15-20	4-15-20	

Analyte	Result	Spike Level	Source Result	Percent Recovery	Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE								
Laboratory ID:	04-070-06							
	ORIG	DUP						
Chloride	56.0	55.9	NA	NA	NA	0	17	

MATRIX SPIKE								
Laboratory ID:	04-070-06							
	MS	MS		MS				
Chloride	157	100	56.0	101	80-116	NA	NA	

SPIKE BLANK								
Laboratory ID:	SB0415W1							
	SB	SB		SB				
Chloride	49.8	50.0	NA	100	90-110	NA	NA	



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SULFATE
ASTM D516-11

Matrix: Water
 Units: mg/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	HZ-MW-29:W					
Laboratory ID:	04-075-01					
Sulfate	8.3	5.0	ASTM D516-11	4-16-20	4-16-20	

Client ID:	HZ-MW-26:W					
Laboratory ID:	04-075-02					
Sulfate	24	5.0	ASTM D516-11	4-16-20	4-16-20	

Client ID:	HZ-MW-23:W					
Laboratory ID:	04-075-03					
Sulfate	ND	5.0	ASTM D516-11	4-16-20	4-16-20	



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 Samples Submitted: April 13, 2020
 Laboratory Reference: 2004-075
 Project: 82302-9.4

**SULFATE
 ASTM D516-11
 QUALITY CONTROL**

Matrix: Water
 Units: mg/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0416W1					
Sulfate	ND	5.0	ASTM D516-11	4-16-20	4-16-20	

Analyte	Result	Spike Level	Source Result	Percent Recovery	Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE								
Laboratory ID:	04-075-02							
	ORIG	DUP						
Sulfate	24.1	23.5	NA	NA	NA	3	10	

MATRIX SPIKE								
Laboratory ID:	04-075-02							
	MS	MS		MS				
Sulfate	43.7	20.0	24.1	98	73-134	NA	NA	

SPIKE BLANK								
Laboratory ID:	SB0416W1							
	SB	SB		SB				
Sulfate	10.8	10.0	NA	108	89-113	NA	NA	



Date of Report: April 21, 2020
 Samples Submitted: April 13, 2020
 Laboratory Reference: 2004-075
 Project: 82302-9.4

AMMONIA (as Nitrogen)
SM 4500-NH₃ D

Matrix: Water
 Units: mg/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	HZ-MW-29:W					
Laboratory ID:	04-075-01					
Ammonia	3.0	0.050	SM 4500-NH3 D	4-17-20	4-17-20	

Client ID:	HZ-MW-26:W					
Laboratory ID:	04-075-02					
Ammonia	ND	0.050	SM 4500-NH3 D	4-17-20	4-17-20	

Client ID:	HZ-MW-23:W					
Laboratory ID:	04-075-03					
Ammonia	ND	0.050	SM 4500-NH3 D	4-17-20	4-17-20	



Date of Report: April 21, 2020
 Samples Submitted: April 13, 2020
 Laboratory Reference: 2004-075
 Project: 82302-9.4

**AMMONIA (as Nitrogen)
 SM 4500-NH₃ D
 QUALITY CONTROL**

Matrix: Water
 Units: mg/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0417W1					
Ammonia	ND	0.050	SM 4500-NH3 D	4-17-20	4-17-20	

Analyte	Result	Spike Level	Source Result	Percent Recovery	Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE								
Laboratory ID:	04-075-01							
	ORIG	DUP						
Ammonia	3.00	2.99	NA	NA	NA	0	12	

MATRIX SPIKE								
Laboratory ID:	04-075-01							
	MS	MS		MS				
Ammonia	7.76	5.00	3.00	95	75-121	NA	NA	

SPIKE BLANK								
Laboratory ID:	SB0417W1							
	SB	SB		SB				
Ammonia	4.95	5.00	NA	99	85-110	NA	NA	



Date of Report: April 21, 2020
 Samples Submitted: April 13, 2020
 Laboratory Reference: 2004-075
 Project: 82302-9.4

**DISSOLVED GASES
RSK 175**

Matrix: Water
 Units: ug/L (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	HZ-MW-29:W					
Laboratory ID:	04-075-01					
Methane	19000	110	RSK 175	4-14-20	4-14-20	
Ethane	ND	0.22	RSK 175	4-14-20	4-14-20	
Ethene	ND	0.29	RSK 175	4-14-20	4-14-20	

Client ID:	HZ-MW-26:W					
Laboratory ID:	04-075-02					
Methane	59	0.55	RSK 175	4-14-20	4-14-20	
Ethane	ND	0.22	RSK 175	4-14-20	4-14-20	
Ethene	ND	0.29	RSK 175	4-14-20	4-14-20	

Client ID:	HZ-MW-23:W					
Laboratory ID:	04-075-03					
Methane	7300	55	RSK 175	4-14-20	4-14-20	
Ethane	ND	0.22	RSK 175	4-14-20	4-14-20	
Ethene	ND	0.29	RSK 175	4-14-20	4-14-20	



Date of Report: April 21, 2020
 Samples Submitted: April 13, 2020
 Laboratory Reference: 2004-075
 Project: 82302-9.4

**DISSOLVED GASES
 RSK 175
 QUALITY CONTROL**

Matrix: Water
 Units: ug/L (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0414W1					
Methane	ND	0.55	RSK 175	4-14-20	4-14-20	
Ethane	ND	0.22	RSK 175	4-14-20	4-14-20	
Ethene	ND	0.29	RSK 175	4-14-20	4-14-20	

Analyte	Result		Spike Level		Percent Recovery		Recovery Limits	RPD	RPD Limit	Flags
SPIKE BLANK										
Laboratory ID:	SB0414W1									
	SB	SBD	SB	SBD	SB	SBD				
Methane	21.5	21.5	22.1	22.1	97	97	75-125	0	25	
Ethane	39.7	39.6	41.6	41.6	95	95	75-125	0	25	
Ethene	36.5	36.1	38.8	38.8	94	93	75-125	1	25	





Data Qualifiers and Abbreviations

- A - Due to a high sample concentration, the amount spiked is insufficient for meaningful MS/MSD recovery data.
 - B - The analyte indicated was also found in the blank sample.
 - C - The duplicate RPD is outside control limits due to high result variability when analyte concentrations are within five times the quantitation limit.
 - E - The value reported exceeds the quantitation range and is an estimate.
 - F - Surrogate recovery data is not available due to the high concentration of coeluting target compounds.
 - H - The analyte indicated is a common laboratory solvent and may have been introduced during sample preparation, and be impacting the sample result.
 - I - Compound recovery is outside of the control limits.
 - J - The value reported was below the practical quantitation limit. The value is an estimate.
 - K - Sample duplicate RPD is outside control limits due to sample inhomogeneity. The sample was re-extracted and re-analyzed with similar results.
 - L - The RPD is outside of the control limits.
 - M - Hydrocarbons in the gasoline range are impacting the diesel range result.
 - M1 - Hydrocarbons in the gasoline range (toluene-naphthalene) are present in the sample.
 - N - Hydrocarbons in the lube oil range are impacting the diesel range result.
 - N1 - Hydrocarbons in diesel range are impacting lube oil range results.
 - O - Hydrocarbons indicative of heavier fuels are present in the sample and are impacting the gasoline result.
 - P - The RPD of the detected concentrations between the two columns is greater than 40.
 - Q - Surrogate recovery is outside of the control limits.
 - S - Surrogate recovery data is not available due to the necessary dilution of the sample.
 - T - The sample chromatogram is not similar to a typical _____.
 - U - The analyte was analyzed for, but was not detected above the reported sample quantitation limit.
 - U1 - The practical quantitation limit is elevated due to interferences present in the sample.
 - V - Matrix Spike/Matrix Spike Duplicate recoveries are outside control limits due to matrix effects.
 - W - Matrix Spike/Matrix Spike Duplicate RPD are outside control limits due to matrix effects.
 - X - Sample extract treated with a mercury cleanup procedure.
 - X1 - Sample extract treated with a sulfuric acid/silica gel cleanup procedure.
 - Y - The calibration verification for this analyte exceeded the 20% drift specified in methods 8260 & 8270, and therefore the reported result should be considered an estimate. The overall performance of the calibration verification standard met the acceptance criteria of the method.
 - Z -
- ND - Not Detected at PQL
 PQL - Practical Quantitation Limit
 RPD - Relative Percent Difference





14648 NE 95th Street, Redmond, WA 98052 • (425) 883-3881

April 24, 2020

Jeff Jensen
Kane Environmental, Inc.
4015 13th Avenue West
Seattle, WA 98119

Re: Analytical Data for Project 82302-9.4
Laboratory Reference No. 2004-084

Dear Jeff:

Enclosed are the analytical results and associated quality control data for samples submitted on April 14, 2020.

The standard policy of OnSite Environmental, Inc. is to store your samples for 30 days from the date of receipt. If you require longer storage, please contact the laboratory.

We appreciate the opportunity to be of service to you on this project. If you have any questions concerning the data, or need additional information, please feel free to call me.

Sincerely,

A handwritten signature in black ink, appearing to read "DB", with a long horizontal flourish extending to the right.

David Baumeister
Project Manager

Enclosures



OnSite Environmental, Inc. 14648 NE 95th Street, Redmond, WA 98052 (425) 883-3881

This report pertains to the samples analyzed in accordance with the chain of custody, and is intended only for the use of the individual or company to whom it is addressed.

Date of Report: April 24, 2020
Samples Submitted: April 14, 2020
Laboratory Reference: 2004-084
Project: 82302-9.4

Case Narrative

Samples were collected on April 14, 2020 and received by the laboratory on April 14, 2020. They were maintained at the laboratory at a temperature of 2°C to 6°C.

Please note that any and all soil sample results are reported on a dry-weight basis, unless otherwise noted below.

General QA/QC issues associated with the analytical data enclosed in this laboratory report will be indicated with a reference to a comment or explanation on the Data Qualifier page. More complex and involved QA/QC issues will be discussed in detail below.



Date of Report: April 24, 2020
 Samples Submitted: April 14, 2020
 Laboratory Reference: 2004-084
 Project: 82302-9.4

VOLATILE ORGANICS EPA 8260D/SIM
 page 1 of 2

Matrix: Water
 Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	HZ-MW-1:W					
Laboratory ID:	04-084-01					
Dichlorodifluoromethane	ND	0.37	EPA 8260D	4-15-20	4-15-20	
Chloromethane	ND	1.0	EPA 8260D	4-15-20	4-15-20	
Vinyl Chloride	0.15	0.020	EPA 8260D/SIM	4-15-20	4-15-20	
Bromomethane	ND	0.20	EPA 8260D	4-15-20	4-15-20	
Chloroethane	ND	1.0	EPA 8260D	4-15-20	4-15-20	
Trichlorofluoromethane	ND	0.20	EPA 8260D	4-15-20	4-15-20	
1,1-Dichloroethene	ND	0.20	EPA 8260D	4-15-20	4-15-20	
Iodomethane	ND	1.0	EPA 8260D	4-15-20	4-15-20	
Methylene Chloride	ND	1.0	EPA 8260D	4-15-20	4-15-20	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260D	4-15-20	4-15-20	
1,1-Dichloroethane	ND	0.20	EPA 8260D	4-15-20	4-15-20	
2,2-Dichloropropane	ND	0.20	EPA 8260D	4-15-20	4-15-20	
(cis) 1,2-Dichloroethene	1.2	0.20	EPA 8260D	4-15-20	4-15-20	
Bromochloromethane	ND	0.20	EPA 8260D	4-15-20	4-15-20	
Chloroform	ND	0.20	EPA 8260D	4-15-20	4-15-20	
1,1,1-Trichloroethane	ND	0.20	EPA 8260D	4-15-20	4-15-20	
Carbon Tetrachloride	ND	0.20	EPA 8260D	4-15-20	4-15-20	
1,1-Dichloropropene	ND	0.20	EPA 8260D	4-15-20	4-15-20	
1,2-Dichloroethane	ND	0.20	EPA 8260D	4-15-20	4-15-20	
Trichloroethene	1.1	0.20	EPA 8260D	4-15-20	4-15-20	
1,2-Dichloropropane	ND	0.20	EPA 8260D	4-15-20	4-15-20	
Dibromomethane	ND	0.20	EPA 8260D	4-15-20	4-15-20	
Bromodichloromethane	ND	0.20	EPA 8260D	4-15-20	4-15-20	
2-Chloroethyl Vinyl Ether	ND	1.3	EPA 8260D	4-15-20	4-15-20	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260D	4-15-20	4-15-20	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260D	4-15-20	4-15-20	



Date of Report: April 24, 2020
 Samples Submitted: April 14, 2020
 Laboratory Reference: 2004-084
 Project: 82302-9.4

VOLATILE ORGANICS EPA 8260D/SIM
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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	HZ-MW-1:W					
Laboratory ID:	04-084-01					
1,1,2-Trichloroethane	ND	0.20	EPA 8260D	4-15-20	4-15-20	
Tetrachloroethene	33	0.20	EPA 8260D	4-15-20	4-15-20	
1,3-Dichloropropane	ND	0.20	EPA 8260D	4-15-20	4-15-20	
Dibromochloromethane	ND	0.20	EPA 8260D	4-15-20	4-15-20	
1,2-Dibromoethane	ND	0.20	EPA 8260D	4-15-20	4-15-20	
Chlorobenzene	ND	0.20	EPA 8260D	4-15-20	4-15-20	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260D	4-15-20	4-15-20	
Bromoform	ND	1.0	EPA 8260D	4-15-20	4-15-20	
Bromobenzene	ND	0.20	EPA 8260D	4-15-20	4-15-20	
1,1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260D	4-15-20	4-15-20	
1,2,3-Trichloropropane	ND	0.20	EPA 8260D	4-15-20	4-15-20	
2-Chlorotoluene	ND	0.20	EPA 8260D	4-15-20	4-15-20	
4-Chlorotoluene	ND	0.20	EPA 8260D	4-15-20	4-15-20	
1,3-Dichlorobenzene	ND	0.20	EPA 8260D	4-15-20	4-15-20	
1,4-Dichlorobenzene	ND	0.20	EPA 8260D	4-15-20	4-15-20	
1,2-Dichlorobenzene	ND	0.20	EPA 8260D	4-15-20	4-15-20	
1,2-Dibromo-3-chloropropane	ND	1.0	EPA 8260D	4-15-20	4-15-20	
1,2,4-Trichlorobenzene	ND	0.20	EPA 8260D	4-15-20	4-15-20	
Hexachlorobutadiene	ND	1.0	EPA 8260D	4-15-20	4-15-20	
1,2,3-Trichlorobenzene	ND	0.20	EPA 8260D	4-15-20	4-15-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>118</i>	<i>75-127</i>				
<i>Toluene-d8</i>	<i>105</i>	<i>80-127</i>				
<i>4-Bromofluorobenzene</i>	<i>102</i>	<i>78-125</i>				



Date of Report: April 24, 2020
 Samples Submitted: April 14, 2020
 Laboratory Reference: 2004-084
 Project: 82302-9.4

VOLATILE ORGANICS EPA 8260D
 page 1 of 2

Matrix: Water
 Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	HZ-MW-34:W					
Laboratory ID:	04-084-02					
Dichlorodifluoromethane	ND	1.9	EPA 8260D	4-15-20	4-15-20	
Chloromethane	ND	5.0	EPA 8260D	4-15-20	4-15-20	
Vinyl Chloride	130	1.0	EPA 8260D	4-15-20	4-15-20	
Bromomethane	ND	1.0	EPA 8260D	4-15-20	4-15-20	
Chloroethane	ND	5.0	EPA 8260D	4-15-20	4-15-20	
Trichlorofluoromethane	ND	1.0	EPA 8260D	4-15-20	4-15-20	
1,1-Dichloroethene	ND	1.0	EPA 8260D	4-15-20	4-15-20	
Iodomethane	ND	5.0	EPA 8260D	4-15-20	4-15-20	
Methylene Chloride	ND	5.0	EPA 8260D	4-15-20	4-15-20	
(trans) 1,2-Dichloroethene	ND	1.0	EPA 8260D	4-15-20	4-15-20	
1,1-Dichloroethane	ND	1.0	EPA 8260D	4-15-20	4-15-20	
2,2-Dichloropropane	ND	1.0	EPA 8260D	4-15-20	4-15-20	
(cis) 1,2-Dichloroethene	100	1.0	EPA 8260D	4-15-20	4-15-20	
Bromochloromethane	ND	1.0	EPA 8260D	4-15-20	4-15-20	
Chloroform	ND	1.0	EPA 8260D	4-15-20	4-15-20	
1,1,1-Trichloroethane	ND	1.0	EPA 8260D	4-15-20	4-15-20	
Carbon Tetrachloride	ND	1.0	EPA 8260D	4-15-20	4-15-20	
1,1-Dichloropropene	ND	1.0	EPA 8260D	4-15-20	4-15-20	
1,2-Dichloroethane	ND	1.0	EPA 8260D	4-15-20	4-15-20	
Trichloroethene	1.6	1.0	EPA 8260D	4-15-20	4-15-20	
1,2-Dichloropropane	ND	1.0	EPA 8260D	4-15-20	4-15-20	
Dibromomethane	ND	1.0	EPA 8260D	4-15-20	4-15-20	
Bromodichloromethane	ND	1.0	EPA 8260D	4-15-20	4-15-20	
2-Chloroethyl Vinyl Ether	ND	6.5	EPA 8260D	4-15-20	4-15-20	
(cis) 1,3-Dichloropropene	ND	1.0	EPA 8260D	4-15-20	4-15-20	
(trans) 1,3-Dichloropropene	ND	1.0	EPA 8260D	4-15-20	4-15-20	



Date of Report: April 24, 2020
 Samples Submitted: April 14, 2020
 Laboratory Reference: 2004-084
 Project: 82302-9.4

VOLATILE ORGANICS EPA 8260D
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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	HZ-MW-34:W					
Laboratory ID:	04-084-02					
1,1,2-Trichloroethane	ND	1.0	EPA 8260D	4-15-20	4-15-20	
Tetrachloroethene	ND	1.0	EPA 8260D	4-15-20	4-15-20	
1,3-Dichloropropane	ND	1.0	EPA 8260D	4-15-20	4-15-20	
Dibromochloromethane	ND	1.0	EPA 8260D	4-15-20	4-15-20	
1,2-Dibromoethane	ND	1.0	EPA 8260D	4-15-20	4-15-20	
Chlorobenzene	ND	1.0	EPA 8260D	4-15-20	4-15-20	
1,1,1,2-Tetrachloroethane	ND	1.0	EPA 8260D	4-15-20	4-15-20	
Bromoform	ND	5.0	EPA 8260D	4-15-20	4-15-20	
Bromobenzene	ND	1.0	EPA 8260D	4-15-20	4-15-20	
1,1,2,2-Tetrachloroethane	ND	1.0	EPA 8260D	4-15-20	4-15-20	
1,2,3-Trichloropropane	ND	1.0	EPA 8260D	4-15-20	4-15-20	
2-Chlorotoluene	ND	1.0	EPA 8260D	4-15-20	4-15-20	
4-Chlorotoluene	ND	1.0	EPA 8260D	4-15-20	4-15-20	
1,3-Dichlorobenzene	ND	1.0	EPA 8260D	4-15-20	4-15-20	
1,4-Dichlorobenzene	ND	1.0	EPA 8260D	4-15-20	4-15-20	
1,2-Dichlorobenzene	ND	1.0	EPA 8260D	4-15-20	4-15-20	
1,2-Dibromo-3-chloropropane	ND	5.0	EPA 8260D	4-15-20	4-15-20	
1,2,4-Trichlorobenzene	ND	1.0	EPA 8260D	4-15-20	4-15-20	
Hexachlorobutadiene	ND	5.0	EPA 8260D	4-15-20	4-15-20	
1,2,3-Trichlorobenzene	ND	1.0	EPA 8260D	4-15-20	4-15-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>119</i>	<i>75-127</i>				
<i>Toluene-d8</i>	<i>106</i>	<i>80-127</i>				
<i>4-Bromofluorobenzene</i>	<i>106</i>	<i>78-125</i>				



Date of Report: April 24, 2020
 Samples Submitted: April 14, 2020
 Laboratory Reference: 2004-084
 Project: 82302-9.4

VOLATILE ORGANICS EPA 8260D
 page 1 of 2

Matrix: Water
 Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	HZ-MW-24:W					
Laboratory ID:	04-084-03					
Dichlorodifluoromethane	ND	0.74	EPA 8260D	4-15-20	4-15-20	
Chloromethane	ND	2.0	EPA 8260D	4-15-20	4-15-20	
Vinyl Chloride	30	0.40	EPA 8260D	4-15-20	4-15-20	
Bromomethane	ND	0.40	EPA 8260D	4-15-20	4-15-20	
Chloroethane	ND	2.0	EPA 8260D	4-15-20	4-15-20	
Trichlorofluoromethane	ND	0.40	EPA 8260D	4-15-20	4-15-20	
1,1-Dichloroethene	ND	0.40	EPA 8260D	4-15-20	4-15-20	
Iodomethane	ND	2.0	EPA 8260D	4-15-20	4-15-20	
Methylene Chloride	ND	2.0	EPA 8260D	4-15-20	4-15-20	
(trans) 1,2-Dichloroethene	ND	0.40	EPA 8260D	4-15-20	4-15-20	
1,1-Dichloroethane	ND	0.40	EPA 8260D	4-15-20	4-15-20	
2,2-Dichloropropane	ND	0.40	EPA 8260D	4-15-20	4-15-20	
(cis) 1,2-Dichloroethene	73	0.40	EPA 8260D	4-15-20	4-15-20	
Bromochloromethane	ND	0.40	EPA 8260D	4-15-20	4-15-20	
Chloroform	ND	0.40	EPA 8260D	4-15-20	4-15-20	
1,1,1-Trichloroethane	ND	0.40	EPA 8260D	4-15-20	4-15-20	
Carbon Tetrachloride	ND	0.40	EPA 8260D	4-15-20	4-15-20	
1,1-Dichloropropene	ND	0.40	EPA 8260D	4-15-20	4-15-20	
1,2-Dichloroethane	ND	0.40	EPA 8260D	4-15-20	4-15-20	
Trichloroethene	ND	0.40	EPA 8260D	4-15-20	4-15-20	
1,2-Dichloropropane	ND	0.40	EPA 8260D	4-15-20	4-15-20	
Dibromomethane	ND	0.40	EPA 8260D	4-15-20	4-15-20	
Bromodichloromethane	ND	0.40	EPA 8260D	4-15-20	4-15-20	
2-Chloroethyl Vinyl Ether	ND	2.6	EPA 8260D	4-15-20	4-15-20	
(cis) 1,3-Dichloropropene	ND	0.40	EPA 8260D	4-15-20	4-15-20	
(trans) 1,3-Dichloropropene	ND	0.40	EPA 8260D	4-15-20	4-15-20	



Date of Report: April 24, 2020
 Samples Submitted: April 14, 2020
 Laboratory Reference: 2004-084
 Project: 82302-9.4

VOLATILE ORGANICS EPA 8260D
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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	HZ-MW-24:W					
Laboratory ID:	04-084-03					
1,1,2-Trichloroethane	ND	0.40	EPA 8260D	4-15-20	4-15-20	
Tetrachloroethene	ND	0.40	EPA 8260D	4-15-20	4-15-20	
1,3-Dichloropropane	ND	0.40	EPA 8260D	4-15-20	4-15-20	
Dibromochloromethane	ND	0.40	EPA 8260D	4-15-20	4-15-20	
1,2-Dibromoethane	ND	0.40	EPA 8260D	4-15-20	4-15-20	
Chlorobenzene	ND	0.40	EPA 8260D	4-15-20	4-15-20	
1,1,1,2-Tetrachloroethane	ND	0.40	EPA 8260D	4-15-20	4-15-20	
Bromoform	ND	2.0	EPA 8260D	4-15-20	4-15-20	
Bromobenzene	ND	0.40	EPA 8260D	4-15-20	4-15-20	
1,1,1,2,2-Tetrachloroethane	ND	0.40	EPA 8260D	4-15-20	4-15-20	
1,2,3-Trichloropropane	ND	0.40	EPA 8260D	4-15-20	4-15-20	
2-Chlorotoluene	ND	0.40	EPA 8260D	4-15-20	4-15-20	
4-Chlorotoluene	ND	0.40	EPA 8260D	4-15-20	4-15-20	
1,3-Dichlorobenzene	ND	0.40	EPA 8260D	4-15-20	4-15-20	
1,4-Dichlorobenzene	ND	0.40	EPA 8260D	4-15-20	4-15-20	
1,2-Dichlorobenzene	ND	0.40	EPA 8260D	4-15-20	4-15-20	
1,2-Dibromo-3-chloropropane	ND	2.0	EPA 8260D	4-15-20	4-15-20	
1,2,4-Trichlorobenzene	ND	0.40	EPA 8260D	4-15-20	4-15-20	
Hexachlorobutadiene	ND	2.0	EPA 8260D	4-15-20	4-15-20	
1,2,3-Trichlorobenzene	ND	0.40	EPA 8260D	4-15-20	4-15-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>124</i>	<i>75-127</i>				
<i>Toluene-d8</i>	<i>104</i>	<i>80-127</i>				
<i>4-Bromofluorobenzene</i>	<i>107</i>	<i>78-125</i>				



Date of Report: April 24, 2020
 Samples Submitted: April 14, 2020
 Laboratory Reference: 2004-084
 Project: 82302-9.4

**VOLATILE ORGANICS EPA 8260D/SIM
 QUALITY CONTROL**

page 1 of 2

Matrix: Water

Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0415W1					
Dichlorodifluoromethane	ND	0.37	EPA 8260D	4-15-20	4-15-20	
Chloromethane	ND	1.0	EPA 8260D	4-15-20	4-15-20	
Vinyl Chloride	ND	0.020	EPA 8260D/SIM	4-15-20	4-15-20	
Bromomethane	ND	0.20	EPA 8260D	4-15-20	4-15-20	
Chloroethane	ND	1.0	EPA 8260D	4-15-20	4-15-20	
Trichlorofluoromethane	ND	0.20	EPA 8260D	4-15-20	4-15-20	
1,1-Dichloroethene	ND	0.20	EPA 8260D	4-15-20	4-15-20	
Iodomethane	ND	1.0	EPA 8260D	4-15-20	4-15-20	
Methylene Chloride	ND	1.0	EPA 8260D	4-15-20	4-15-20	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260D	4-15-20	4-15-20	
1,1-Dichloroethane	ND	0.20	EPA 8260D	4-15-20	4-15-20	
2,2-Dichloropropane	ND	0.20	EPA 8260D	4-15-20	4-15-20	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260D	4-15-20	4-15-20	
Bromochloromethane	ND	0.20	EPA 8260D	4-15-20	4-15-20	
Chloroform	ND	0.20	EPA 8260D	4-15-20	4-15-20	
1,1,1-Trichloroethane	ND	0.20	EPA 8260D	4-15-20	4-15-20	
Carbon Tetrachloride	ND	0.20	EPA 8260D	4-15-20	4-15-20	
1,1-Dichloropropene	ND	0.20	EPA 8260D	4-15-20	4-15-20	
1,2-Dichloroethane	ND	0.20	EPA 8260D	4-15-20	4-15-20	
Trichloroethene	ND	0.20	EPA 8260D	4-15-20	4-15-20	
1,2-Dichloropropane	ND	0.20	EPA 8260D	4-15-20	4-15-20	
Dibromomethane	ND	0.20	EPA 8260D	4-15-20	4-15-20	
Bromodichloromethane	ND	0.20	EPA 8260D	4-15-20	4-15-20	
2-Chloroethyl Vinyl Ether	ND	1.3	EPA 8260D	4-15-20	4-15-20	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260D	4-15-20	4-15-20	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260D	4-15-20	4-15-20	



Date of Report: April 24, 2020
 Samples Submitted: April 14, 2020
 Laboratory Reference: 2004-084
 Project: 82302-9.4

**VOLATILE ORGANICS EPA 8260D/SIM
 QUALITY CONTROL**

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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0415W1					
1,1,2-Trichloroethane	ND	0.20	EPA 8260D	4-15-20	4-15-20	
Tetrachloroethene	ND	0.20	EPA 8260D	4-15-20	4-15-20	
1,3-Dichloropropane	ND	0.20	EPA 8260D	4-15-20	4-15-20	
Dibromochloromethane	ND	0.20	EPA 8260D	4-15-20	4-15-20	
1,2-Dibromoethane	ND	0.20	EPA 8260D	4-15-20	4-15-20	
Chlorobenzene	ND	0.20	EPA 8260D	4-15-20	4-15-20	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260D	4-15-20	4-15-20	
Bromoform	ND	1.0	EPA 8260D	4-15-20	4-15-20	
Bromobenzene	ND	0.20	EPA 8260D	4-15-20	4-15-20	
1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260D	4-15-20	4-15-20	
1,2,3-Trichloropropane	ND	0.20	EPA 8260D	4-15-20	4-15-20	
2-Chlorotoluene	ND	0.20	EPA 8260D	4-15-20	4-15-20	
4-Chlorotoluene	ND	0.20	EPA 8260D	4-15-20	4-15-20	
1,3-Dichlorobenzene	ND	0.20	EPA 8260D	4-15-20	4-15-20	
1,4-Dichlorobenzene	ND	0.20	EPA 8260D	4-15-20	4-15-20	
1,2-Dichlorobenzene	ND	0.20	EPA 8260D	4-15-20	4-15-20	
1,2-Dibromo-3-chloropropane	ND	1.0	EPA 8260D	4-15-20	4-15-20	
1,2,4-Trichlorobenzene	ND	0.20	EPA 8260D	4-15-20	4-15-20	
Hexachlorobutadiene	ND	1.0	EPA 8260D	4-15-20	4-15-20	
1,2,3-Trichlorobenzene	ND	0.20	EPA 8260D	4-15-20	4-15-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>117</i>	<i>75-127</i>				
<i>Toluene-d8</i>	<i>102</i>	<i>80-127</i>				
<i>4-Bromofluorobenzene</i>	<i>102</i>	<i>78-125</i>				



Date of Report: April 24, 2020
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 Laboratory Reference: 2004-084
 Project: 82302-9.4

**VOLATILE ORGANICS EPA 8260D
 QUALITY CONTROL**

Matrix: Water
 Units: ug/L

Analyte	Result		Spike Level		Percent Recovery		Recovery	RPD	RPD	Flags
					Recovery	Limits	RPD	Limit		
SPIKE BLANKS										
Laboratory ID:	SB0415W1									
	SB	SBD	SB	SBD	SB	SBD				
1,1-Dichloroethene	10.9	11.2	10.0	10.0	109	112	63-130	3	17	
Benzene	10.9	11.1	10.0	10.0	109	111	76-125	2	19	
Trichloroethene	10.2	10.4	10.0	10.0	102	104	76-121	2	18	
Toluene	9.92	9.93	10.0	10.0	99	99	80-124	0	18	
Chlorobenzene	9.84	9.80	10.0	10.0	98	98	75-120	0	19	
<i>Surrogate:</i>										
<i>Dibromofluoromethane</i>					<i>114</i>	<i>114</i>	<i>75-127</i>			
<i>Toluene-d8</i>					<i>104</i>	<i>104</i>	<i>80-127</i>			
<i>4-Bromofluorobenzene</i>					<i>93</i>	<i>96</i>	<i>78-125</i>			



Date of Report: April 24, 2020
 Samples Submitted: April 14, 2020
 Laboratory Reference: 2004-084
 Project: 82302-9.4

**TOTAL ORGANIC CARBON
 SM 5310B**

Matrix: Water
 Units: mg/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	HZ-MW-1:W					
Laboratory ID:	04-084-01					
Total Organic Carbon	1.6	1.0	SM 5310B	4-20-20	4-20-20	

Client ID:	HZ-MW-34:W					
Laboratory ID:	04-084-02					
Total Organic Carbon	2.1	1.0	SM 5310B	4-20-20	4-20-20	

Client ID:	HZ-MW-24:W					
Laboratory ID:	04-084-03					
Total Organic Carbon	5.4	1.0	SM 5310B	4-20-20	4-20-20	



Date of Report: April 24, 2020
 Samples Submitted: April 14, 2020
 Laboratory Reference: 2004-084
 Project: 82302-9.4

**TOTAL ORGANIC CARBON
 SM 5310B
 QUALITY CONTROL**

Matrix: Water
 Units: mg/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0420W1					
Total Organic Carbon	ND	1.0	SM 5310B	4-20-20	4-20-20	

Analyte	Result	Spike Level	Source Result	Percent Recovery	Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE								
Laboratory ID:	04-075-01							
	ORIG	DUP						
Total Organic Carbon	3.22	3.31	NA	NA	NA	3	20	

MATRIX SPIKE

Laboratory ID:	04-075-01							
	MS	MS		MS				
Total Organic Carbon	13.9	10.0	3.22	107	85-131	NA	NA	

SPIKE BLANK

Laboratory ID:	SB0420W1							
	SB	SB		SB				
Total Organic Carbon	10.9	10.0	NA	109	88-127	NA	NA	



Date of Report: April 24, 2020
 Samples Submitted: April 14, 2020
 Laboratory Reference: 2004-084
 Project: 82302-9.4

**DISSOLVED IRON
 EPA 6010D**

Matrix: Water
 Units: ug/L (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	HZ-MW-1:W					
Laboratory ID:	04-084-01					
Iron	ND	56	EPA 6010D	4-13-20	4-15-20	

Client ID:	HZ-MW-34:W					
Laboratory ID:	04-084-02					
Iron	11000	56	EPA 6010D	4-13-20	4-15-20	

Client ID:	HZ-MW-24:W					
Laboratory ID:	04-084-03					
Iron	14000	56	EPA 6010D	4-13-20	4-15-20	



Date of Report: April 24, 2020
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**DISSOLVED IRON
 EPA 6010D
 QUALITY CONTROL**

Matrix: Water
 Units: ug/L (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0414F1					
Iron	ND	56	EPA 6010D	4-14-20	4-15-20	

Analyte	Result	Spike Level	Source Result	Percent Recovery	Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE								
Laboratory ID:	04-075-01							
	ORIG	DUP						
Iron	10600	10500	NA	NA	NA	NA	1	20

MATRIX SPIKES

Laboratory ID:	04-075-01									
	MS	MSD	MS	MSD	MS	MSD				
Iron	115000	117000	100000	100000	10600	105	106	75-125	1	20



Date of Report: April 24, 2020
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CHLORIDE
SM 4500-Cl E

Matrix: Water
 Units: mg/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	HZ-MW-1:W					
Laboratory ID:	04-084-01					
Chloride	6.3	2.0	SM 4500-Cl E	4-15-20	4-15-20	

Client ID:	HZ-MW-34:W					
Laboratory ID:	04-084-02					
Chloride	13	2.0	SM 4500-Cl E	4-15-20	4-15-20	

Client ID:	HZ-MW-24:W					
Laboratory ID:	04-084-03					
Chloride	19	2.0	SM 4500-Cl E	4-15-20	4-15-20	



Date of Report: April 24, 2020
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**CHLORIDE
 SM 4500-Cl E
 QUALITY CONTROL**

Matrix: Water
 Units: mg/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0415W1					
Chloride	ND	2.0	SM 4500-Cl E	4-15-20	4-15-20	

Analyte	Result	Spike Level	Source Result	Percent Recovery	Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE								
Laboratory ID:	04-070-06							
	ORIG	DUP						
Chloride	56.0	55.9	NA	NA	NA	0	17	

MATRIX SPIKE								
Laboratory ID:	04-070-06							
	MS	MS		MS				
Chloride	157	100	56.0	101	80-116	NA	NA	

SPIKE BLANK								
Laboratory ID:	SB0415W1							
	SB	SB		SB				
Chloride	49.8	50.0	NA	100	90-110	NA	NA	



Date of Report: April 24, 2020
 Samples Submitted: April 14, 2020
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 Project: 82302-9.4

SULFATE
ASTM D516-11

Matrix: Water
 Units: mg/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	HZ-MW-1:W					
Laboratory ID:	04-084-01					
Sulfate	16	5.0	ASTM D516-11	4-20-20	4-20-20	

Client ID:	HZ-MW-34:W					
Laboratory ID:	04-084-02					
Sulfate	5.1	5.0	ASTM D516-11	4-20-20	4-20-20	

Client ID:	HZ-MW-24:W					
Laboratory ID:	04-084-03					
Sulfate	13	5.0	ASTM D516-11	4-20-20	4-20-20	



Date of Report: April 24, 2020
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**SULFATE
 ASTM D516-11
 QUALITY CONTROL**

Matrix: Water
 Units: mg/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0420W1					
Sulfate	ND	5.0	ASTM D516-11	4-20-20	4-20-20	

Analyte	Result	Spike Level	Source Result	Percent Recovery	Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE								
Laboratory ID:	04-093-02							
	ORIG	DUP						
Sulfate	13.1	12.7	NA	NA	NA	3	10	

MATRIX SPIKE

Laboratory ID:	04-093-02							
	MS	MS		MS				
Sulfate	22.1	10.0	13.1	90	73-134	NA	NA	

SPIKE BLANK

Laboratory ID:	SB0420W1							
	SB	SB		SB				
Sulfate	10.7	10.0	NA	107	89-113	NA	NA	



Date of Report: April 24, 2020
 Samples Submitted: April 14, 2020
 Laboratory Reference: 2004-084
 Project: 82302-9.4

AMMONIA (as Nitrogen)
SM 4500-NH₃ D

Matrix: Water
 Units: mg/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	HZ-MW-1:W					
Laboratory ID:	04-084-01					
Ammonia	ND	0.050	SM 4500-NH3 D	4-17-20	4-17-20	

Client ID:	HZ-MW-34:W					
Laboratory ID:	04-084-02					
Ammonia	0.68	0.050	SM 4500-NH3 D	4-17-20	4-17-20	

Client ID:	HZ-MW-24:W					
Laboratory ID:	04-084-03					
Ammonia	4.1	0.050	SM 4500-NH3 D	4-17-20	4-17-20	



Date of Report: April 24, 2020
 Samples Submitted: April 14, 2020
 Laboratory Reference: 2004-084
 Project: 82302-9.4

**AMMONIA (as Nitrogen)
 SM 4500-NH₃ D
 QUALITY CONTROL**

Matrix: Water
 Units: mg/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0417W1					
Ammonia	ND	0.050	SM 4500-NH3 D	4-17-20	4-17-20	

Analyte	Result	Spike Level	Source Result	Percent Recovery	Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE								
Laboratory ID:	04-075-01							
	ORIG	DUP						
Ammonia	3.00	2.99	NA	NA	NA	0	12	

MATRIX SPIKE								
Laboratory ID:	04-075-01							
	MS	MS		MS				
Ammonia	7.76	5.00	3.00	95	75-121	NA	NA	

SPIKE BLANK								
Laboratory ID:	SB0417W1							
	SB	SB		SB				
Ammonia	4.95	5.00	NA	99	85-110	NA	NA	



Date of Report: April 24, 2020
 Samples Submitted: April 14, 2020
 Laboratory Reference: 2004-084
 Project: 82302-9.4

**DISSOLVED GASES
 RSK 175**

Matrix: Water
 Units: ug/L (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	HZ-MW-1:W					
Laboratory ID:	04-084-01					
Methane	12000	83	RSK 175	4-22-20	4-22-20	
Ethane	ND	0.22	RSK 175	4-22-20	4-22-20	
Ethene	ND	0.29	RSK 175	4-22-20	4-22-20	

Client ID:	HZ-MW-34:W					
Laboratory ID:	04-084-02					
Methane	16000	110	RSK 175	4-22-20	4-22-20	
Ethane	ND	0.22	RSK 175	4-22-20	4-22-20	
Ethene	4.3	0.29	RSK 175	4-22-20	4-22-20	

Client ID:	HZ-MW-24:W					
Laboratory ID:	04-084-03					
Methane	4000	28	RSK 175	4-22-20	4-22-20	
Ethane	ND	0.22	RSK 175	4-22-20	4-22-20	
Ethene	2.7	0.29	RSK 175	4-22-20	4-22-20	



Date of Report: April 24, 2020
 Samples Submitted: April 14, 2020
 Laboratory Reference: 2004-084
 Project: 82302-9.4

**DISSOLVED GASES
 RSK 175
 QUALITY CONTROL**

Matrix: Water
 Units: ug/L (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0422W1					
Methane	ND	0.55	RSK 175	4-22-20	4-22-20	
Ethane	ND	0.22	RSK 175	4-22-20	4-22-20	
Ethene	ND	0.29	RSK 175	4-22-20	4-22-20	

Analyte	Result		Spike Level		Percent Recovery		Recovery Limits	RPD	RPD Limit	Flags
SPIKE BLANK										
Laboratory ID:	SB0422W1									
	SB	SBD	SB	SBD	SB	SBD				
Methane	23.1	24.1	22.1	22.1	105	109	75-125	4	25	
Ethane	43.0	44.8	41.6	41.6	103	108	75-125	4	25	
Ethene	39.7	44.3	38.8	38.8	102	114	75-125	11	25	





Data Qualifiers and Abbreviations

- A - Due to a high sample concentration, the amount spiked is insufficient for meaningful MS/MSD recovery data.
 - B - The analyte indicated was also found in the blank sample.
 - C - The duplicate RPD is outside control limits due to high result variability when analyte concentrations are within five times the quantitation limit.
 - E - The value reported exceeds the quantitation range and is an estimate.
 - F - Surrogate recovery data is not available due to the high concentration of coeluting target compounds.
 - H - The analyte indicated is a common laboratory solvent and may have been introduced during sample preparation, and be impacting the sample result.
 - I - Compound recovery is outside of the control limits.
 - J - The value reported was below the practical quantitation limit. The value is an estimate.
 - K - Sample duplicate RPD is outside control limits due to sample inhomogeneity. The sample was re-extracted and re-analyzed with similar results.
 - L - The RPD is outside of the control limits.
 - M - Hydrocarbons in the gasoline range are impacting the diesel range result.
 - M1 - Hydrocarbons in the gasoline range (toluene-naphthalene) are present in the sample.
 - N - Hydrocarbons in the lube oil range are impacting the diesel range result.
 - N1 - Hydrocarbons in diesel range are impacting lube oil range results.
 - O - Hydrocarbons indicative of heavier fuels are present in the sample and are impacting the gasoline result.
 - P - The RPD of the detected concentrations between the two columns is greater than 40.
 - Q - Surrogate recovery is outside of the control limits.
 - S - Surrogate recovery data is not available due to the necessary dilution of the sample.
 - T - The sample chromatogram is not similar to a typical _____.
 - U - The analyte was analyzed for, but was not detected above the reported sample quantitation limit.
 - U1 - The practical quantitation limit is elevated due to interferences present in the sample.
 - V - Matrix Spike/Matrix Spike Duplicate recoveries are outside control limits due to matrix effects.
 - W - Matrix Spike/Matrix Spike Duplicate RPD are outside control limits due to matrix effects.
 - X - Sample extract treated with a mercury cleanup procedure.
 - X1 - Sample extract treated with a sulfuric acid/silica gel cleanup procedure.
 - Y - The calibration verification for this analyte exceeded the 20% drift specified in methods 8260 & 8270, and therefore the reported result should be considered an estimate. The overall performance of the calibration verification standard met the acceptance criteria of the method.
 - Z -
- ND - Not Detected at PQL
 PQL - Practical Quantitation Limit
 RPD - Relative Percent Difference





14648 NE 95th Street, Redmond, WA 98052 • (425) 883-3881

April 23, 2020

Jeff Jensen
Kane Environmental, Inc.
4015 13th Avenue West
Seattle, WA 98119

Re: Analytical Data for Project 82302-9.4
Laboratory Reference No. 2004-093

Dear Jeff:

Enclosed are the analytical results and associated quality control data for samples submitted on April 15, 2020.

The standard policy of OnSite Environmental, Inc. is to store your samples for 30 days from the date of receipt. If you require longer storage, please contact the laboratory.

We appreciate the opportunity to be of service to you on this project. If you have any questions concerning the data, or need additional information, please feel free to call me.

Sincerely,

A handwritten signature in black ink, appearing to read "DB", with a long horizontal stroke extending to the right.

David Baumeister
Project Manager

Enclosures



OnSite Environmental, Inc. 14648 NE 95th Street, Redmond, WA 98052 (425) 883-3881

This report pertains to the samples analyzed in accordance with the chain of custody, and is intended only for the use of the individual or company to whom it is addressed.

Date of Report: April 23, 2020
Samples Submitted: April 15, 2020
Laboratory Reference: 2004-093
Project: 82302-9.4

Case Narrative

Samples were collected on April 15, 2020 and received by the laboratory on April 15, 2020. They were maintained at the laboratory at a temperature of 2°C to 6°C.

Please note that any and all soil sample results are reported on a dry-weight basis, unless otherwise noted below.

General QA/QC issues associated with the analytical data enclosed in this laboratory report will be indicated with a reference to a comment or explanation on the Data Qualifier page. More complex and involved QA/QC issues will be discussed in detail below.



Date of Report: April 23, 2020
 Samples Submitted: April 15, 2020
 Laboratory Reference: 2004-093
 Project: 82302-9.4

VOLATILE ORGANICS EPA 8260D
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Matrix: Water
 Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	HZ-MW-14S:W					
Laboratory ID:	04-093-01					
Dichlorodifluoromethane	ND	0.40	EPA 8260D	4-17-20	4-17-20	
Chloromethane	ND	2.0	EPA 8260D	4-17-20	4-17-20	
Vinyl Chloride	3.0	0.40	EPA 8260D	4-17-20	4-17-20	
Bromomethane	ND	0.40	EPA 8260D	4-17-20	4-17-20	
Chloroethane	ND	2.0	EPA 8260D	4-17-20	4-17-20	
Trichlorofluoromethane	ND	0.40	EPA 8260D	4-17-20	4-17-20	
1,1-Dichloroethene	ND	0.40	EPA 8260D	4-17-20	4-17-20	
Iodomethane	ND	2.0	EPA 8260D	4-17-20	4-17-20	
Methylene Chloride	ND	2.0	EPA 8260D	4-17-20	4-17-20	
(trans) 1,2-Dichloroethene	ND	0.40	EPA 8260D	4-17-20	4-17-20	
1,1-Dichloroethane	ND	0.40	EPA 8260D	4-17-20	4-17-20	
2,2-Dichloropropane	ND	0.40	EPA 8260D	4-17-20	4-17-20	
(cis) 1,2-Dichloroethene	4.3	0.40	EPA 8260D	4-17-20	4-17-20	
Bromochloromethane	ND	0.40	EPA 8260D	4-17-20	4-17-20	
Chloroform	ND	0.40	EPA 8260D	4-17-20	4-17-20	
1,1,1-Trichloroethane	ND	0.40	EPA 8260D	4-17-20	4-17-20	
Carbon Tetrachloride	ND	0.40	EPA 8260D	4-17-20	4-17-20	
1,1-Dichloropropene	ND	0.40	EPA 8260D	4-17-20	4-17-20	
1,2-Dichloroethane	ND	0.40	EPA 8260D	4-17-20	4-17-20	
Trichloroethene	3.5	0.40	EPA 8260D	4-17-20	4-17-20	
1,2-Dichloropropane	ND	0.40	EPA 8260D	4-17-20	4-17-20	
Dibromomethane	ND	0.40	EPA 8260D	4-17-20	4-17-20	
Bromodichloromethane	ND	0.40	EPA 8260D	4-17-20	4-17-20	
2-Chloroethyl Vinyl Ether	ND	2.0	EPA 8260D	4-17-20	4-17-20	
(cis) 1,3-Dichloropropene	ND	0.40	EPA 8260D	4-17-20	4-17-20	
(trans) 1,3-Dichloropropene	ND	0.40	EPA 8260D	4-17-20	4-17-20	



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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	HZ-MW-14S:W					
Laboratory ID:	04-093-01					
1,1,2-Trichloroethane	ND	0.40	EPA 8260D	4-17-20	4-17-20	
Tetrachloroethene	55	0.40	EPA 8260D	4-17-20	4-17-20	
1,3-Dichloropropane	ND	0.40	EPA 8260D	4-17-20	4-17-20	
Dibromochloromethane	ND	0.40	EPA 8260D	4-17-20	4-17-20	
1,2-Dibromoethane	ND	0.40	EPA 8260D	4-17-20	4-17-20	
Chlorobenzene	ND	0.40	EPA 8260D	4-17-20	4-17-20	
1,1,1,2-Tetrachloroethane	ND	0.40	EPA 8260D	4-17-20	4-17-20	
Bromoform	ND	2.0	EPA 8260D	4-17-20	4-17-20	
Bromobenzene	ND	0.40	EPA 8260D	4-17-20	4-17-20	
1,1,1,2-Tetrachloroethane	ND	0.40	EPA 8260D	4-17-20	4-17-20	
1,2,3-Trichloropropane	ND	0.40	EPA 8260D	4-17-20	4-17-20	
2-Chlorotoluene	ND	0.40	EPA 8260D	4-17-20	4-17-20	
4-Chlorotoluene	ND	0.40	EPA 8260D	4-17-20	4-17-20	
1,3-Dichlorobenzene	ND	0.40	EPA 8260D	4-17-20	4-17-20	
1,4-Dichlorobenzene	ND	0.40	EPA 8260D	4-17-20	4-17-20	
1,2-Dichlorobenzene	ND	0.40	EPA 8260D	4-17-20	4-17-20	
1,2-Dibromo-3-chloropropane	ND	2.0	EPA 8260D	4-17-20	4-17-20	
1,2,4-Trichlorobenzene	ND	0.50	EPA 8260D	4-17-20	4-17-20	
Hexachlorobutadiene	ND	2.0	EPA 8260D	4-17-20	4-17-20	
1,2,3-Trichlorobenzene	ND	0.40	EPA 8260D	4-17-20	4-17-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	99	75-127				
<i>Toluene-d8</i>	96	80-127				
<i>4-Bromofluorobenzene</i>	104	78-125				



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Matrix: Water
 Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	HZ-MW-14D:W					
Laboratory ID:	04-093-02					
Dichlorodifluoromethane	ND	2.0	EPA 8260D	4-17-20	4-17-20	
Chloromethane	ND	10	EPA 8260D	4-17-20	4-17-20	
Vinyl Chloride	0.76	0.20	EPA 8260D/SIM	4-17-20	4-17-20	
Bromomethane	ND	2.0	EPA 8260D	4-17-20	4-17-20	
Chloroethane	ND	10	EPA 8260D	4-17-20	4-17-20	
Trichlorofluoromethane	ND	2.0	EPA 8260D	4-17-20	4-17-20	
1,1-Dichloroethene	ND	2.0	EPA 8260D	4-17-20	4-17-20	
Iodomethane	ND	10	EPA 8260D	4-17-20	4-17-20	
Methylene Chloride	ND	10	EPA 8260D	4-17-20	4-17-20	
(trans) 1,2-Dichloroethene	ND	2.0	EPA 8260D	4-17-20	4-17-20	
1,1-Dichloroethane	ND	2.0	EPA 8260D	4-17-20	4-17-20	
2,2-Dichloropropane	ND	2.0	EPA 8260D	4-17-20	4-17-20	
(cis) 1,2-Dichloroethene	110	2.0	EPA 8260D	4-17-20	4-17-20	
Bromochloromethane	ND	2.0	EPA 8260D	4-17-20	4-17-20	
Chloroform	ND	2.0	EPA 8260D	4-17-20	4-17-20	
1,1,1-Trichloroethane	ND	2.0	EPA 8260D	4-17-20	4-17-20	
Carbon Tetrachloride	ND	2.0	EPA 8260D	4-17-20	4-17-20	
1,1-Dichloropropene	ND	2.0	EPA 8260D	4-17-20	4-17-20	
1,2-Dichloroethane	ND	2.0	EPA 8260D	4-17-20	4-17-20	
Trichloroethene	24	2.0	EPA 8260D	4-17-20	4-17-20	
1,2-Dichloropropane	ND	2.0	EPA 8260D	4-17-20	4-17-20	
Dibromomethane	ND	2.0	EPA 8260D	4-17-20	4-17-20	
Bromodichloromethane	ND	2.0	EPA 8260D	4-17-20	4-17-20	
2-Chloroethyl Vinyl Ether	ND	10	EPA 8260D	4-17-20	4-17-20	
(cis) 1,3-Dichloropropene	ND	2.0	EPA 8260D	4-17-20	4-17-20	
(trans) 1,3-Dichloropropene	ND	2.0	EPA 8260D	4-17-20	4-17-20	



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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	HZ-MW-14D:W					
Laboratory ID:	04-093-02					
1,1,2-Trichloroethane	ND	2.0	EPA 8260D	4-17-20	4-17-20	
Tetrachloroethene	400	2.0	EPA 8260D	4-17-20	4-17-20	
1,3-Dichloropropane	ND	2.0	EPA 8260D	4-17-20	4-17-20	
Dibromochloromethane	ND	2.0	EPA 8260D	4-17-20	4-17-20	
1,2-Dibromoethane	ND	2.0	EPA 8260D	4-17-20	4-17-20	
Chlorobenzene	ND	2.0	EPA 8260D	4-17-20	4-17-20	
1,1,1,2-Tetrachloroethane	ND	2.0	EPA 8260D	4-17-20	4-17-20	
Bromoform	ND	10	EPA 8260D	4-17-20	4-17-20	
Bromobenzene	ND	2.0	EPA 8260D	4-17-20	4-17-20	
1,1,1,2,2-Tetrachloroethane	ND	2.0	EPA 8260D	4-17-20	4-17-20	
1,2,3-Trichloropropane	ND	2.0	EPA 8260D	4-17-20	4-17-20	
2-Chlorotoluene	ND	2.0	EPA 8260D	4-17-20	4-17-20	
4-Chlorotoluene	ND	2.0	EPA 8260D	4-17-20	4-17-20	
1,3-Dichlorobenzene	ND	2.0	EPA 8260D	4-17-20	4-17-20	
1,4-Dichlorobenzene	ND	2.0	EPA 8260D	4-17-20	4-17-20	
1,2-Dichlorobenzene	ND	2.0	EPA 8260D	4-17-20	4-17-20	
1,2-Dibromo-3-chloropropane	ND	10	EPA 8260D	4-17-20	4-17-20	
1,2,4-Trichlorobenzene	ND	2.5	EPA 8260D	4-17-20	4-17-20	
Hexachlorobutadiene	ND	10	EPA 8260D	4-17-20	4-17-20	
1,2,3-Trichlorobenzene	ND	2.0	EPA 8260D	4-17-20	4-17-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	96	75-127				
<i>Toluene-d8</i>	95	80-127				
<i>4-Bromofluorobenzene</i>	106	78-125				



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Matrix: Water
 Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	HZ-MW-15S:W					
Laboratory ID:	04-093-03					
Dichlorodifluoromethane	ND	0.20	EPA 8260D	4-17-20	4-17-20	
Chloromethane	ND	1.0	EPA 8260D	4-17-20	4-17-20	
Vinyl Chloride	ND	0.020	EPA 8260D/SIM	4-17-20	4-17-20	
Bromomethane	ND	0.20	EPA 8260D	4-17-20	4-17-20	
Chloroethane	ND	1.0	EPA 8260D	4-17-20	4-17-20	
Trichlorofluoromethane	ND	0.20	EPA 8260D	4-17-20	4-17-20	
1,1-Dichloroethene	ND	0.20	EPA 8260D	4-17-20	4-17-20	
Iodomethane	ND	1.0	EPA 8260D	4-17-20	4-17-20	
Methylene Chloride	ND	1.0	EPA 8260D	4-17-20	4-17-20	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260D	4-17-20	4-17-20	
1,1-Dichloroethane	ND	0.20	EPA 8260D	4-17-20	4-17-20	
2,2-Dichloropropane	ND	0.20	EPA 8260D	4-17-20	4-17-20	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260D	4-17-20	4-17-20	
Bromochloromethane	ND	0.20	EPA 8260D	4-17-20	4-17-20	
Chloroform	ND	0.20	EPA 8260D	4-17-20	4-17-20	
1,1,1-Trichloroethane	ND	0.20	EPA 8260D	4-17-20	4-17-20	
Carbon Tetrachloride	ND	0.20	EPA 8260D	4-17-20	4-17-20	
1,1-Dichloropropene	ND	0.20	EPA 8260D	4-17-20	4-17-20	
1,2-Dichloroethane	ND	0.20	EPA 8260D	4-17-20	4-17-20	
Trichloroethene	ND	0.20	EPA 8260D	4-17-20	4-17-20	
1,2-Dichloropropane	ND	0.20	EPA 8260D	4-17-20	4-17-20	
Dibromomethane	ND	0.20	EPA 8260D	4-17-20	4-17-20	
Bromodichloromethane	ND	0.20	EPA 8260D	4-17-20	4-17-20	
2-Chloroethyl Vinyl Ether	ND	1.0	EPA 8260D	4-17-20	4-17-20	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260D	4-17-20	4-17-20	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260D	4-17-20	4-17-20	



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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	HZ-MW-15S:W					
Laboratory ID:	04-093-03					
1,1,2-Trichloroethane	ND	0.20	EPA 8260D	4-17-20	4-17-20	
Tetrachloroethene	3.6	0.20	EPA 8260D	4-17-20	4-17-20	
1,3-Dichloropropane	ND	0.20	EPA 8260D	4-17-20	4-17-20	
Dibromochloromethane	ND	0.20	EPA 8260D	4-17-20	4-17-20	
1,2-Dibromoethane	ND	0.20	EPA 8260D	4-17-20	4-17-20	
Chlorobenzene	ND	0.20	EPA 8260D	4-17-20	4-17-20	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260D	4-17-20	4-17-20	
Bromoform	ND	1.0	EPA 8260D	4-17-20	4-17-20	
Bromobenzene	ND	0.20	EPA 8260D	4-17-20	4-17-20	
1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260D	4-17-20	4-17-20	
1,2,3-Trichloropropane	ND	0.20	EPA 8260D	4-17-20	4-17-20	
2-Chlorotoluene	ND	0.20	EPA 8260D	4-17-20	4-17-20	
4-Chlorotoluene	ND	0.20	EPA 8260D	4-17-20	4-17-20	
1,3-Dichlorobenzene	ND	0.20	EPA 8260D	4-17-20	4-17-20	
1,4-Dichlorobenzene	ND	0.20	EPA 8260D	4-17-20	4-17-20	
1,2-Dichlorobenzene	ND	0.20	EPA 8260D	4-17-20	4-17-20	
1,2-Dibromo-3-chloropropane	ND	1.0	EPA 8260D	4-17-20	4-17-20	
1,2,4-Trichlorobenzene	ND	0.25	EPA 8260D	4-17-20	4-17-20	
Hexachlorobutadiene	ND	1.0	EPA 8260D	4-17-20	4-17-20	
1,2,3-Trichlorobenzene	ND	0.20	EPA 8260D	4-17-20	4-17-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>94</i>	<i>75-127</i>				
<i>Toluene-d8</i>	<i>96</i>	<i>80-127</i>				
<i>4-Bromofluorobenzene</i>	<i>108</i>	<i>78-125</i>				



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Matrix: Water
 Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	HZ-MW-15D:W					
Laboratory ID:	04-093-04					
Dichlorodifluoromethane	ND	20	EPA 8260D	4-17-20	4-17-20	
Chloromethane	ND	100	EPA 8260D	4-17-20	4-17-20	
Vinyl Chloride	ND	2.0	EPA 8260D/SIM	4-17-20	4-17-20	
Bromomethane	ND	20	EPA 8260D	4-17-20	4-17-20	
Chloroethane	ND	100	EPA 8260D	4-17-20	4-17-20	
Trichlorofluoromethane	ND	20	EPA 8260D	4-17-20	4-17-20	
1,1-Dichloroethene	ND	20	EPA 8260D	4-17-20	4-17-20	
Iodomethane	ND	100	EPA 8260D	4-17-20	4-17-20	
Methylene Chloride	ND	100	EPA 8260D	4-17-20	4-17-20	
(trans) 1,2-Dichloroethene	ND	20	EPA 8260D	4-17-20	4-17-20	
1,1-Dichloroethane	ND	20	EPA 8260D	4-17-20	4-17-20	
2,2-Dichloropropane	ND	20	EPA 8260D	4-17-20	4-17-20	
(cis) 1,2-Dichloroethene	400	20	EPA 8260D	4-17-20	4-17-20	
Bromochloromethane	ND	20	EPA 8260D	4-17-20	4-17-20	
Chloroform	ND	20	EPA 8260D	4-17-20	4-17-20	
1,1,1-Trichloroethane	ND	20	EPA 8260D	4-17-20	4-17-20	
Carbon Tetrachloride	ND	20	EPA 8260D	4-17-20	4-17-20	
1,1-Dichloropropene	ND	20	EPA 8260D	4-17-20	4-17-20	
1,2-Dichloroethane	ND	20	EPA 8260D	4-17-20	4-17-20	
Trichloroethene	240	20	EPA 8260D	4-17-20	4-17-20	
1,2-Dichloropropane	ND	20	EPA 8260D	4-17-20	4-17-20	
Dibromomethane	ND	20	EPA 8260D	4-17-20	4-17-20	
Bromodichloromethane	ND	20	EPA 8260D	4-17-20	4-17-20	
2-Chloroethyl Vinyl Ether	ND	100	EPA 8260D	4-17-20	4-17-20	
(cis) 1,3-Dichloropropene	ND	20	EPA 8260D	4-17-20	4-17-20	
(trans) 1,3-Dichloropropene	ND	20	EPA 8260D	4-17-20	4-17-20	



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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	HZ-MW-15D:W					
Laboratory ID:	04-093-04					
1,1,2-Trichloroethane	ND	20	EPA 8260D	4-17-20	4-17-20	
Tetrachloroethene	3300	20	EPA 8260D	4-17-20	4-17-20	
1,3-Dichloropropane	ND	20	EPA 8260D	4-17-20	4-17-20	
Dibromochloromethane	ND	20	EPA 8260D	4-17-20	4-17-20	
1,2-Dibromoethane	ND	20	EPA 8260D	4-17-20	4-17-20	
Chlorobenzene	ND	20	EPA 8260D	4-17-20	4-17-20	
1,1,1,2-Tetrachloroethane	ND	20	EPA 8260D	4-17-20	4-17-20	
Bromoform	ND	100	EPA 8260D	4-17-20	4-17-20	
Bromobenzene	ND	20	EPA 8260D	4-17-20	4-17-20	
1,1,2,2-Tetrachloroethane	ND	20	EPA 8260D	4-17-20	4-17-20	
1,2,3-Trichloropropane	ND	20	EPA 8260D	4-17-20	4-17-20	
2-Chlorotoluene	ND	20	EPA 8260D	4-17-20	4-17-20	
4-Chlorotoluene	ND	20	EPA 8260D	4-17-20	4-17-20	
1,3-Dichlorobenzene	ND	20	EPA 8260D	4-17-20	4-17-20	
1,4-Dichlorobenzene	ND	20	EPA 8260D	4-17-20	4-17-20	
1,2-Dichlorobenzene	ND	20	EPA 8260D	4-17-20	4-17-20	
1,2-Dibromo-3-chloropropane	ND	100	EPA 8260D	4-17-20	4-17-20	
1,2,4-Trichlorobenzene	ND	25	EPA 8260D	4-17-20	4-17-20	
Hexachlorobutadiene	ND	100	EPA 8260D	4-17-20	4-17-20	
1,2,3-Trichlorobenzene	ND	20	EPA 8260D	4-17-20	4-17-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	93	75-127				
<i>Toluene-d8</i>	95	80-127				
<i>4-Bromofluorobenzene</i>	103	78-125				



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Matrix: Water
 Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0417W1					
Dichlorodifluoromethane	ND	0.20	EPA 8260D	4-17-20	4-17-20	
Chloromethane	ND	1.0	EPA 8260D	4-17-20	4-17-20	
Vinyl Chloride	ND	0.020	EPA 8260D/SIM	4-17-20	4-17-20	
Bromomethane	ND	0.20	EPA 8260D	4-17-20	4-17-20	
Chloroethane	ND	1.0	EPA 8260D	4-17-20	4-17-20	
Trichlorofluoromethane	ND	0.20	EPA 8260D	4-17-20	4-17-20	
1,1-Dichloroethene	ND	0.20	EPA 8260D	4-17-20	4-17-20	
Iodomethane	ND	1.0	EPA 8260D	4-17-20	4-17-20	
Methylene Chloride	ND	1.0	EPA 8260D	4-17-20	4-17-20	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260D	4-17-20	4-17-20	
1,1-Dichloroethane	ND	0.20	EPA 8260D	4-17-20	4-17-20	
2,2-Dichloropropane	ND	0.20	EPA 8260D	4-17-20	4-17-20	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260D	4-17-20	4-17-20	
Bromochloromethane	ND	0.20	EPA 8260D	4-17-20	4-17-20	
Chloroform	ND	0.20	EPA 8260D	4-17-20	4-17-20	
1,1,1-Trichloroethane	ND	0.20	EPA 8260D	4-17-20	4-17-20	
Carbon Tetrachloride	ND	0.20	EPA 8260D	4-17-20	4-17-20	
1,1-Dichloropropene	ND	0.20	EPA 8260D	4-17-20	4-17-20	
1,2-Dichloroethane	ND	0.20	EPA 8260D	4-17-20	4-17-20	
Trichloroethene	ND	0.20	EPA 8260D	4-17-20	4-17-20	
1,2-Dichloropropane	ND	0.20	EPA 8260D	4-17-20	4-17-20	
Dibromomethane	ND	0.20	EPA 8260D	4-17-20	4-17-20	
Bromodichloromethane	ND	0.20	EPA 8260D	4-17-20	4-17-20	
2-Chloroethyl Vinyl Ether	ND	1.0	EPA 8260D	4-17-20	4-17-20	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260D	4-17-20	4-17-20	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260D	4-17-20	4-17-20	



Date of Report: April 23, 2020
 Samples Submitted: April 15, 2020
 Laboratory Reference: 2004-093
 Project: 82302-9.4

**VOLATILE ORGANICS EPA 8260D/SIM
 QUALITY CONTROL**

page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0417W1					
1,1,2-Trichloroethane	ND	0.20	EPA 8260D	4-17-20	4-17-20	
Tetrachloroethene	ND	0.20	EPA 8260D	4-17-20	4-17-20	
1,3-Dichloropropane	ND	0.20	EPA 8260D	4-17-20	4-17-20	
Dibromochloromethane	ND	0.20	EPA 8260D	4-17-20	4-17-20	
1,2-Dibromoethane	ND	0.20	EPA 8260D	4-17-20	4-17-20	
Chlorobenzene	ND	0.20	EPA 8260D	4-17-20	4-17-20	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260D	4-17-20	4-17-20	
Bromoform	ND	1.0	EPA 8260D	4-17-20	4-17-20	
Bromobenzene	ND	0.20	EPA 8260D	4-17-20	4-17-20	
1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260D	4-17-20	4-17-20	
1,2,3-Trichloropropane	ND	0.20	EPA 8260D	4-17-20	4-17-20	
2-Chlorotoluene	ND	0.20	EPA 8260D	4-17-20	4-17-20	
4-Chlorotoluene	ND	0.20	EPA 8260D	4-17-20	4-17-20	
1,3-Dichlorobenzene	ND	0.20	EPA 8260D	4-17-20	4-17-20	
1,4-Dichlorobenzene	ND	0.20	EPA 8260D	4-17-20	4-17-20	
1,2-Dichlorobenzene	ND	0.20	EPA 8260D	4-17-20	4-17-20	
1,2-Dibromo-3-chloropropane	ND	1.0	EPA 8260D	4-17-20	4-17-20	
1,2,4-Trichlorobenzene	ND	0.25	EPA 8260D	4-17-20	4-17-20	
Hexachlorobutadiene	ND	1.0	EPA 8260D	4-17-20	4-17-20	
1,2,3-Trichlorobenzene	ND	0.20	EPA 8260D	4-17-20	4-17-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>90</i>	<i>75-127</i>				
<i>Toluene-d8</i>	<i>94</i>	<i>80-127</i>				
<i>4-Bromofluorobenzene</i>	<i>106</i>	<i>78-125</i>				



Date of Report: April 23, 2020
 Samples Submitted: April 15, 2020
 Laboratory Reference: 2004-093
 Project: 82302-9.4

**VOLATILE ORGANICS EPA 8260D
 QUALITY CONTROL**

Matrix: Water
 Units: ug/L

Analyte	Result		Spike Level		Percent Recovery		Recovery	RPD	RPD	Flags
					Recovery	Limits	RPD	Limit		
SPIKE BLANKS										
Laboratory ID:	SB0417W1									
	SB	SBD	SB	SBD	SB	SBD				
1,1-Dichloroethene	9.62	10.1	10.0	10.0	96	101	63-130	5	17	
Benzene	9.63	9.91	10.0	10.0	96	99	76-125	3	19	
Trichloroethene	9.74	9.59	10.0	10.0	97	96	76-121	2	18	
Toluene	9.52	8.70	10.0	10.0	95	87	80-124	9	18	
Chlorobenzene	10.6	10.8	10.0	10.0	106	108	75-120	2	19	
<i>Surrogate:</i>										
<i>Dibromofluoromethane</i>					95	99	75-127			
<i>Toluene-d8</i>					94	92	80-127			
<i>4-Bromofluorobenzene</i>					103	101	78-125			



Date of Report: April 23, 2020
 Samples Submitted: April 15, 2020
 Laboratory Reference: 2004-093
 Project: 82302-9.4

**TOTAL ORGANIC CARBON
 SM 5310B**

Matrix: Water
 Units: mg/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	HZ-MW-14S:W					
Laboratory ID:	04-093-01					
Total Organic Carbon	2.1	1.0	SM 5310B	4-20-20	4-20-20	

Client ID:	HZ-MW-14D:W					
Laboratory ID:	04-093-02					
Total Organic Carbon	1.2	1.0	SM 5310B	4-20-20	4-20-20	

Client ID:	HZ-MW-15S:W					
Laboratory ID:	04-093-03					
Total Organic Carbon	1.3	1.0	SM 5310B	4-20-20	4-20-20	

Client ID:	HZ-MW-15D:W					
Laboratory ID:	04-093-04					
Total Organic Carbon	1.2	1.0	SM 5310B	4-20-20	4-20-20	



Date of Report: April 23, 2020
 Samples Submitted: April 15, 2020
 Laboratory Reference: 2004-093
 Project: 82302-9.4

**TOTAL ORGANIC CARBON
 SM 5310B
 QUALITY CONTROL**

Matrix: Water
 Units: mg/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0420W1					
Total Organic Carbon	ND	1.0	SM 5310B	4-20-20	4-20-20	

Analyte	Result	Spike Level	Source Result	Percent Recovery	Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE								
Laboratory ID:	04-075-01							
	ORIG	DUP						
Total Organic Carbon	3.22	3.31	NA	NA	NA	NA	3	20

MATRIX SPIKE

Laboratory ID:	04-075-01							
	MS	MS		MS				
Total Organic Carbon	13.9		10.0	3.22	107	85-131	NA	NA

SPIKE BLANK

Laboratory ID:	SB0420W1							
	SB	SB		SB				
Total Organic Carbon	10.9		10.0	NA	109	88-127	NA	NA



Date of Report: April 23, 2020
 Samples Submitted: April 15, 2020
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 Project: 82302-9.4

**DISSOLVED IRON
 EPA 6010D**

Matrix: Water
 Units: ug/L (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	HZ-MW-14S:W					
Laboratory ID:	04-093-01					
Iron	ND	56	EPA 6010D	4-15-20	4-15-20	

Client ID:	HZ-MW-14D:W					
Laboratory ID:	04-093-02					
Iron	ND	56	EPA 6010D	4-15-20	4-15-20	

Client ID:	HZ-MW-15S:W					
Laboratory ID:	04-093-03					
Iron	ND	56	EPA 6010D	4-15-20	4-15-20	

Client ID:	HZ-MW-15D:W					
Laboratory ID:	04-093-04					
Iron	120	56	EPA 6010D	4-15-20	4-15-20	



Date of Report: April 23, 2020
 Samples Submitted: April 15, 2020
 Laboratory Reference: 2004-093
 Project: 82302-9.4

**DISSOLVED IRON
 EPA 6010D
 QUALITY CONTROL**

Matrix: Water
 Units: ug/L (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0415F1					
Iron	ND	56	EPA 6010D	4-15-20	4-15-20	

Analyte	Result	Spike Level	Source Result	Percent Recovery	Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE								
Laboratory ID:	04-075-01							
	ORIG	DUP						
Iron	10600	10500	NA	NA	NA	NA	1	20

MATRIX SPIKES

Laboratory ID:	04-075-01									
	MS	MSD	MS	MSD	MS	MSD				
Iron	115000	117000	100000	100000	10600	105	106	75-125	1	20



Date of Report: April 23, 2020
 Samples Submitted: April 15, 2020
 Laboratory Reference: 2004-093
 Project: 82302-9.4

CHLORIDE
SM 4500-Cl E

Matrix: Water
 Units: mg/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	HZ-MW-14S:W					
Laboratory ID:	04-093-01					
Chloride	8.1	2.0	SM 4500-Cl E	4-21-20	4-21-20	

Client ID:	HZ-MW-14D:W					
Laboratory ID:	04-093-02					
Chloride	52	2.0	SM 4500-Cl E	4-21-20	4-21-20	

Client ID:	HZ-MW-15S:W					
Laboratory ID:	04-093-03					
Chloride	2.1	2.0	SM 4500-Cl E	4-21-20	4-21-20	

Client ID:	HZ-MW-15D:W					
Laboratory ID:	04-093-04					
Chloride	16	2.0	SM 4500-Cl E	4-21-20	4-21-20	



Date of Report: April 23, 2020
 Samples Submitted: April 15, 2020
 Laboratory Reference: 2004-093
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**CHLORIDE
 SM 4500-CI E
 QUALITY CONTROL**

Matrix: Water
 Units: mg/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0421W1					
Chloride	ND	2.0	SM 4500-CI E	4-21-20	4-21-20	

Analyte	Result	Spike Level	Source Result	Percent Recovery	Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE								
Laboratory ID:	04-109-03							
	ORIG	DUP						
Chloride	ND	ND	NA	NA	NA	NA	17	

MATRIX SPIKE								
Laboratory ID:	04-109-03							
	MS	MS		MS				
Chloride	48.7	50.0	ND	97	80-116	NA	NA	

SPIKE BLANK								
Laboratory ID:	SB0421W1							
	SB	SB		SB				
Chloride	45.3	50.0	NA	91	90-110	NA	NA	



Date of Report: April 23, 2020
 Samples Submitted: April 15, 2020
 Laboratory Reference: 2004-093
 Project: 82302-9.4

SULFATE
ASTM D516-11

Matrix: Water
 Units: mg/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	HZ-MW-14S:W					
Laboratory ID:	04-093-01					
Sulfate	18	5.0	ASTM D516-11	4-20-20	4-20-20	

Client ID:	HZ-MW-14D:W					
Laboratory ID:	04-093-02					
Sulfate	13	5.0	ASTM D516-11	4-20-20	4-20-20	

Client ID:	HZ-MW-15S:W					
Laboratory ID:	04-093-03					
Sulfate	14	5.0	ASTM D516-11	4-20-20	4-20-20	

Client ID:	HZ-MW-15D:W					
Laboratory ID:	04-093-04					
Sulfate	9.6	5.0	ASTM D516-11	4-20-20	4-20-20	



Date of Report: April 23, 2020
 Samples Submitted: April 15, 2020
 Laboratory Reference: 2004-093
 Project: 82302-9.4

**SULFATE
 ASTM D516-11
 QUALITY CONTROL**

Matrix: Water
 Units: mg/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0420W1					
Sulfate	ND	5.0	ASTM D516-11	4-20-20	4-20-20	

Analyte	Result	Spike Level	Source Result	Percent Recovery	Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE								
Laboratory ID:	04-093-02							
	ORIG	DUP						
Sulfate	13.1	12.7	NA	NA	NA	3	10	

MATRIX SPIKE								
Laboratory ID:	04-093-02							
	MS	MS		MS				
Sulfate	22.1	10.0	13.1	90	73-134	NA	NA	

SPIKE BLANK								
Laboratory ID:	SB0420W1							
	SB	SB		SB				
Sulfate	10.7	10.0	NA	107	89-113	NA	NA	



Date of Report: April 23, 2020
 Samples Submitted: April 15, 2020
 Laboratory Reference: 2004-093
 Project: 82302-9.4

AMMONIA (as Nitrogen)
SM 4500-NH₃ D

Matrix: Water
 Units: mg/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	HZ-MW-14S:W					
Laboratory ID:	04-093-01					
Ammonia	ND	0.050	SM 4500-NH3 D	4-17-20	4-17-20	

Client ID:	HZ-MW-14D:W					
Laboratory ID:	04-093-02					
Ammonia	ND	0.050	SM 4500-NH3 D	4-17-20	4-17-20	

Client ID:	HZ-MW-15S:W					
Laboratory ID:	04-093-03					
Ammonia	ND	0.050	SM 4500-NH3 D	4-17-20	4-17-20	

Client ID:	HZ-MW-15D:W					
Laboratory ID:	04-093-04					
Ammonia	ND	0.050	SM 4500-NH3 D	4-17-20	4-17-20	



Date of Report: April 23, 2020
 Samples Submitted: April 15, 2020
 Laboratory Reference: 2004-093
 Project: 82302-9.4

AMMONIA (as Nitrogen)
SM 4500-NH₃ D
QUALITY CONTROL

Matrix: Water
 Units: mg/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0417W1					
Ammonia	ND	0.050	SM 4500-NH3 D	4-17-20	4-17-20	

Analyte	Result	Spike Level	Source Result	Percent Recovery	Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE								
Laboratory ID:	04-075-01							
	ORIG	DUP						
Ammonia	3.00	2.99	NA	NA	NA	0	12	

MATRIX SPIKE								
Laboratory ID:	04-075-01							
	MS	MS		MS				
Ammonia	7.76	5.00	3.00	95	75-121	NA	NA	

SPIKE BLANK								
Laboratory ID:	SB0417W1							
	SB	SB		SB				
Ammonia	4.95	5.00	NA	99	85-110	NA	NA	



Date of Report: April 23, 2020
 Samples Submitted: April 15, 2020
 Laboratory Reference: 2004-093
 Project: 82302-9.4

**DISSOLVED GASES
 RSK 175**

Matrix: Water
 Units: ug/L (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	HZ-MW-14S:W					
Laboratory ID:	04-093-01					
Methane	6900	42	RSK 175	4-22-20	4-22-20	
Ethane	ND	0.22	RSK 175	4-22-20	4-22-20	
Ethene	19	0.29	RSK 175	4-22-20	4-22-20	

Client ID:	HZ-MW-14D:W					
Laboratory ID:	04-093-02					
Methane	1800	11	RSK 175	4-22-20	4-22-20	
Ethane	ND	0.22	RSK 175	4-22-20	4-22-20	
Ethene	ND	0.29	RSK 175	4-22-20	4-22-20	

Client ID:	HZ-MW-15S:W					
Laboratory ID:	04-093-03					
Methane	1.2	0.55	RSK 175	4-22-20	4-22-20	
Ethane	ND	0.22	RSK 175	4-22-20	4-22-20	
Ethene	ND	0.29	RSK 175	4-22-20	4-22-20	

Client ID:	HZ-MW-15D:W					
Laboratory ID:	04-093-04					
Methane	3000	17	RSK 175	4-22-20	4-22-20	
Ethane	ND	0.22	RSK 175	4-22-20	4-22-20	
Ethene	ND	0.29	RSK 175	4-22-20	4-22-20	



Date of Report: April 23, 2020
 Samples Submitted: April 15, 2020
 Laboratory Reference: 2004-093
 Project: 82302-9.4

**DISSOLVED GASES
 RSK 175
 QUALITY CONTROL**

Matrix: Water
 Units: ug/L (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0422W1					
Methane	ND	0.55	RSK 175	4-22-20	4-22-20	
Ethane	ND	0.22	RSK 175	4-22-20	4-22-20	
Ethene	ND	0.29	RSK 175	4-22-20	4-22-20	

Analyte	Result		Spike Level		Percent Recovery		Recovery Limits	RPD	RPD Limit	Flags
SPIKE BLANK										
Laboratory ID:	SB0422W1									
	SB	SBD	SB	SBD	SB	SBD				
Methane	23.1	24.1	22.1	22.1	105	109	75-125	4	25	
Ethane	43.0	44.8	41.6	41.6	103	108	75-125	4	25	
Ethene	39.7	44.3	38.8	38.8	102	114	75-125	11	25	





Data Qualifiers and Abbreviations

- A - Due to a high sample concentration, the amount spiked is insufficient for meaningful MS/MSD recovery data.
 - B - The analyte indicated was also found in the blank sample.
 - C - The duplicate RPD is outside control limits due to high result variability when analyte concentrations are within five times the quantitation limit.
 - E - The value reported exceeds the quantitation range and is an estimate.
 - F - Surrogate recovery data is not available due to the high concentration of coeluting target compounds.
 - H - The analyte indicated is a common laboratory solvent and may have been introduced during sample preparation, and be impacting the sample result.
 - I - Compound recovery is outside of the control limits.
 - J - The value reported was below the practical quantitation limit. The value is an estimate.
 - K - Sample duplicate RPD is outside control limits due to sample inhomogeneity. The sample was re-extracted and re-analyzed with similar results.
 - L - The RPD is outside of the control limits.
 - M - Hydrocarbons in the gasoline range are impacting the diesel range result.
 - M1 - Hydrocarbons in the gasoline range (toluene-naphthalene) are present in the sample.
 - N - Hydrocarbons in the lube oil range are impacting the diesel range result.
 - N1 - Hydrocarbons in diesel range are impacting lube oil range results.
 - O - Hydrocarbons indicative of heavier fuels are present in the sample and are impacting the gasoline result.
 - P - The RPD of the detected concentrations between the two columns is greater than 40.
 - Q - Surrogate recovery is outside of the control limits.
 - S - Surrogate recovery data is not available due to the necessary dilution of the sample.
 - T - The sample chromatogram is not similar to a typical _____.
 - U - The analyte was analyzed for, but was not detected above the reported sample quantitation limit.
 - U1 - The practical quantitation limit is elevated due to interferences present in the sample.
 - V - Matrix Spike/Matrix Spike Duplicate recoveries are outside control limits due to matrix effects.
 - W - Matrix Spike/Matrix Spike Duplicate RPD are outside control limits due to matrix effects.
 - X - Sample extract treated with a mercury cleanup procedure.
 - X1 - Sample extract treated with a sulfuric acid/silica gel cleanup procedure.
 - Y - The calibration verification for this analyte exceeded the 20% drift specified in methods 8260 & 8270, and therefore the reported result should be considered an estimate. The overall performance of the calibration verification standard met the acceptance criteria of the method.
 - Z -
- ND - Not Detected at PQL
 PQL - Practical Quantitation Limit
 RPD - Relative Percent Difference





OnSite Environmental Inc.
Analytical Laboratory Testing Services
14648 NE 95th Street • Redmond, WA 98052
Phone: (425) 883-3881 • www.onsite-env.com

Chain of Custody

Turnaround Request
(in working days)
(Check One)

Same Day 1 Day

2 Days 3 Days

Standard (7 Days)

(other) _____

Laboratory Number: **04-093**

Company: **Kane Environmental 1**
Project Number: **82302-9.4**
Project Name: **BSCSS**
Project Manager: **Jeff Jensen**
Sampled by: **Jeff Jensen**

Lab ID	Sample Identification	Date Sampled	Time Sampled	Matrix	Number of Containers
1	H2-MW-14S:W	4/15/20	0903	GW	9
2	H2-MW-14D:W	4/15/20	0934	GW	9
3	H2-MW-15S:W	4/15/20	1120	GW	9
4	H2-MW-15D:W	4/15/20	1305	GW	9

Parameter	1	2	3	4
NWTPH-HCID				
NWTPH-Gx/BTEX				
NWTPH-Gx				
NWTPH-Dx (<input type="checkbox"/> Acid / SG Clean-up)				
Volatiles 8260C				
Halogenated Volatiles 8260C	X	X	X	X
EDB EPA 8011 (Waters Only)				
Semivolatiles 8270D/SIM (with low-level PAHs)				
PAHs 8270D/SIM (low-level)				
PCBs 8082A				
Organochlorine Pesticides 8081B				
Organophosphorus Pesticides 8270D/SIM				
Chlorinated Acid Herbicides 8151A				
Total RCRA Metals				
Total MTCA Metals				
TCLP Metals				
NEM (oil and grease) 1664A	X	X	X	X
dissolved Fe	X	X	X	X
chloride	X	X	X	X
sulfate	X	X	X	X
ammonia-N	X	X	X	X
% Moisture	X	X	X	X

Signature	Company	Date	Time	Comments/Special Instructions
<i>Philo Savinoy</i>	Kane Env.	4/15/20	13:45	Lab Filter RSK - methane, ethane, ethene low detection limit (3-4 µg/L) low detection limit for vinyl chloride
<i>Jeff Jensen</i>	OSE	4/15/20	13:45	

Relinquished _____
Received _____
Relinquished _____
Received _____
Relinquished _____
Received _____
Relinquished _____
Received _____
Relinquished _____
Received _____

Data Package: Standard Level III Level IV

Chromatograms with final report Electronic Data Deliverables (EDDs)



14648 NE 95th Street, Redmond, WA 98052 • (425) 883-3881

April 23, 2020

Jeff Jensen
Kane Environmental, Inc.
4015 13th Avenue West
Seattle, WA 98119

Re: Analytical Data for Project 82302-9.4
Laboratory Reference No. 2004-109

Dear Jeff:

Enclosed are the analytical results and associated quality control data for samples submitted on April 16, 2020.

The standard policy of OnSite Environmental, Inc. is to store your samples for 30 days from the date of receipt. If you require longer storage, please contact the laboratory.

We appreciate the opportunity to be of service to you on this project. If you have any questions concerning the data, or need additional information, please feel free to call me.

Sincerely,

A handwritten signature in black ink, appearing to read "DB", with a long horizontal flourish extending to the right.

David Baumeister
Project Manager

Enclosures



OnSite Environmental, Inc. 14648 NE 95th Street, Redmond, WA 98052 (425) 883-3881

This report pertains to the samples analyzed in accordance with the chain of custody, and is intended only for the use of the individual or company to whom it is addressed.

Date of Report: April 23, 2020
Samples Submitted: April 16, 2020
Laboratory Reference: 2004-109
Project: 82302-9.4

Case Narrative

Samples were collected on April 16, 2020 and received by the laboratory on April 16, 2020. They were maintained at the laboratory at a temperature of 2°C to 6°C.

Please note that any and all soil sample results are reported on a dry-weight basis, unless otherwise noted below.

General QA/QC issues associated with the analytical data enclosed in this laboratory report will be indicated with a reference to a comment or explanation on the Data Qualifier page. More complex and involved QA/QC issues will be discussed in detail below.



Date of Report: April 23, 2020
 Samples Submitted: April 16, 2020
 Laboratory Reference: 2004-109
 Project: 82302-9.4

VOLATILE ORGANICS EPA 8260D
 page 1 of 2

Matrix: Water
 Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW-42:W					
Laboratory ID:	04-109-01					
Dichlorodifluoromethane	ND	0.20	EPA 8260D	4-17-20	4-17-20	
Chloromethane	ND	1.0	EPA 8260D	4-17-20	4-17-20	
Vinyl Chloride	27	0.20	EPA 8260D	4-17-20	4-17-20	
Bromomethane	ND	0.20	EPA 8260D	4-17-20	4-17-20	
Chloroethane	ND	1.0	EPA 8260D	4-17-20	4-17-20	
Trichlorofluoromethane	ND	0.20	EPA 8260D	4-17-20	4-17-20	
1,1-Dichloroethene	ND	0.20	EPA 8260D	4-17-20	4-17-20	
Iodomethane	ND	1.0	EPA 8260D	4-17-20	4-17-20	
Methylene Chloride	ND	1.0	EPA 8260D	4-17-20	4-17-20	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260D	4-17-20	4-17-20	
1,1-Dichloroethane	ND	0.20	EPA 8260D	4-17-20	4-17-20	
2,2-Dichloropropane	ND	0.20	EPA 8260D	4-17-20	4-17-20	
(cis) 1,2-Dichloroethene	26	0.20	EPA 8260D	4-17-20	4-17-20	
Bromochloromethane	ND	0.20	EPA 8260D	4-17-20	4-17-20	
Chloroform	ND	0.20	EPA 8260D	4-17-20	4-17-20	
1,1,1-Trichloroethane	ND	0.20	EPA 8260D	4-17-20	4-17-20	
Carbon Tetrachloride	ND	0.20	EPA 8260D	4-17-20	4-17-20	
1,1-Dichloropropene	ND	0.20	EPA 8260D	4-17-20	4-17-20	
1,2-Dichloroethane	ND	0.20	EPA 8260D	4-17-20	4-17-20	
Trichloroethene	ND	0.20	EPA 8260D	4-17-20	4-17-20	
1,2-Dichloropropane	ND	0.20	EPA 8260D	4-17-20	4-17-20	
Dibromomethane	ND	0.20	EPA 8260D	4-17-20	4-17-20	
Bromodichloromethane	ND	0.20	EPA 8260D	4-17-20	4-17-20	
2-Chloroethyl Vinyl Ether	ND	1.0	EPA 8260D	4-17-20	4-17-20	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260D	4-17-20	4-17-20	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260D	4-17-20	4-17-20	



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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW-42:W					
Laboratory ID:	04-109-01					
1,1,2-Trichloroethane	ND	0.20	EPA 8260D	4-17-20	4-17-20	
Tetrachloroethene	ND	0.20	EPA 8260D	4-17-20	4-17-20	
1,3-Dichloropropane	ND	0.20	EPA 8260D	4-17-20	4-17-20	
Dibromochloromethane	ND	0.20	EPA 8260D	4-17-20	4-17-20	
1,2-Dibromoethane	ND	0.20	EPA 8260D	4-17-20	4-17-20	
Chlorobenzene	ND	0.20	EPA 8260D	4-17-20	4-17-20	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260D	4-17-20	4-17-20	
Bromoform	ND	1.0	EPA 8260D	4-17-20	4-17-20	
Bromobenzene	ND	0.20	EPA 8260D	4-17-20	4-17-20	
1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260D	4-17-20	4-17-20	
1,2,3-Trichloropropane	ND	0.20	EPA 8260D	4-17-20	4-17-20	
2-Chlorotoluene	ND	0.20	EPA 8260D	4-17-20	4-17-20	
4-Chlorotoluene	ND	0.20	EPA 8260D	4-17-20	4-17-20	
1,3-Dichlorobenzene	ND	0.20	EPA 8260D	4-17-20	4-17-20	
1,4-Dichlorobenzene	ND	0.20	EPA 8260D	4-17-20	4-17-20	
1,2-Dichlorobenzene	ND	0.20	EPA 8260D	4-17-20	4-17-20	
1,2-Dibromo-3-chloropropane	ND	1.0	EPA 8260D	4-17-20	4-17-20	
1,2,4-Trichlorobenzene	ND	0.25	EPA 8260D	4-17-20	4-17-20	
Hexachlorobutadiene	ND	1.0	EPA 8260D	4-17-20	4-17-20	
1,2,3-Trichlorobenzene	ND	0.20	EPA 8260D	4-17-20	4-17-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	95	75-127				
<i>Toluene-d8</i>	99	80-127				
<i>4-Bromofluorobenzene</i>	109	78-125				



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Matrix: Water
 Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW-43:W					
Laboratory ID:	04-109-02					
Dichlorodifluoromethane	ND	0.20	EPA 8260D	4-17-20	4-17-20	
Chloromethane	ND	1.0	EPA 8260D	4-17-20	4-17-20	
Vinyl Chloride	5.8	0.20	EPA 8260D	4-17-20	4-17-20	
Bromomethane	ND	0.20	EPA 8260D	4-17-20	4-17-20	
Chloroethane	ND	1.0	EPA 8260D	4-17-20	4-17-20	
Trichlorofluoromethane	ND	0.20	EPA 8260D	4-17-20	4-17-20	
1,1-Dichloroethene	ND	0.20	EPA 8260D	4-17-20	4-17-20	
Iodomethane	ND	1.0	EPA 8260D	4-17-20	4-17-20	
Methylene Chloride	3.8	1.0	EPA 8260D	4-17-20	4-17-20	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260D	4-17-20	4-17-20	
1,1-Dichloroethane	ND	0.20	EPA 8260D	4-17-20	4-17-20	
2,2-Dichloropropane	ND	0.20	EPA 8260D	4-17-20	4-17-20	
(cis) 1,2-Dichloroethene	17	0.20	EPA 8260D	4-17-20	4-17-20	
Bromochloromethane	ND	0.20	EPA 8260D	4-17-20	4-17-20	
Chloroform	ND	0.20	EPA 8260D	4-17-20	4-17-20	
1,1,1-Trichloroethane	ND	0.20	EPA 8260D	4-17-20	4-17-20	
Carbon Tetrachloride	ND	0.20	EPA 8260D	4-17-20	4-17-20	
1,1-Dichloropropene	ND	0.20	EPA 8260D	4-17-20	4-17-20	
1,2-Dichloroethane	0.28	0.20	EPA 8260D	4-17-20	4-17-20	
Trichloroethene	ND	0.20	EPA 8260D	4-17-20	4-17-20	
1,2-Dichloropropane	ND	0.20	EPA 8260D	4-17-20	4-17-20	
Dibromomethane	ND	0.20	EPA 8260D	4-17-20	4-17-20	
Bromodichloromethane	ND	0.20	EPA 8260D	4-17-20	4-17-20	
2-Chloroethyl Vinyl Ether	ND	1.0	EPA 8260D	4-17-20	4-17-20	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260D	4-17-20	4-17-20	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260D	4-17-20	4-17-20	



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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW-43:W					
Laboratory ID:	04-109-02					
1,1,2-Trichloroethane	ND	0.20	EPA 8260D	4-17-20	4-17-20	
Tetrachloroethene	0.47	0.20	EPA 8260D	4-17-20	4-17-20	
1,3-Dichloropropane	ND	0.20	EPA 8260D	4-17-20	4-17-20	
Dibromochloromethane	ND	0.20	EPA 8260D	4-17-20	4-17-20	
1,2-Dibromoethane	ND	0.20	EPA 8260D	4-17-20	4-17-20	
Chlorobenzene	ND	0.20	EPA 8260D	4-17-20	4-17-20	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260D	4-17-20	4-17-20	
Bromoform	ND	1.0	EPA 8260D	4-17-20	4-17-20	
Bromobenzene	ND	0.20	EPA 8260D	4-17-20	4-17-20	
1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260D	4-17-20	4-17-20	
1,2,3-Trichloropropane	ND	0.20	EPA 8260D	4-17-20	4-17-20	
2-Chlorotoluene	ND	0.20	EPA 8260D	4-17-20	4-17-20	
4-Chlorotoluene	ND	0.20	EPA 8260D	4-17-20	4-17-20	
1,3-Dichlorobenzene	ND	0.20	EPA 8260D	4-17-20	4-17-20	
1,4-Dichlorobenzene	ND	0.20	EPA 8260D	4-17-20	4-17-20	
1,2-Dichlorobenzene	ND	0.20	EPA 8260D	4-17-20	4-17-20	
1,2-Dibromo-3-chloropropane	ND	1.0	EPA 8260D	4-17-20	4-17-20	
1,2,4-Trichlorobenzene	ND	0.25	EPA 8260D	4-17-20	4-17-20	
Hexachlorobutadiene	ND	1.0	EPA 8260D	4-17-20	4-17-20	
1,2,3-Trichlorobenzene	ND	0.20	EPA 8260D	4-17-20	4-17-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>97</i>	<i>75-127</i>				
<i>Toluene-d8</i>	<i>96</i>	<i>80-127</i>				
<i>4-Bromofluorobenzene</i>	<i>108</i>	<i>78-125</i>				



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Matrix: Water
 Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW-27:W					
Laboratory ID:	04-109-03					
Dichlorodifluoromethane	0.52	0.40	EPA 8260D	4-17-20	4-17-20	
Chloromethane	ND	2.0	EPA 8260D	4-17-20	4-17-20	
Vinyl Chloride	ND	0.040	EPA 8260D/SIM	4-17-20	4-17-20	
Bromomethane	ND	0.40	EPA 8260D	4-17-20	4-17-20	
Chloroethane	ND	2.0	EPA 8260D	4-17-20	4-17-20	
Trichlorofluoromethane	ND	0.40	EPA 8260D	4-17-20	4-17-20	
1,1-Dichloroethene	ND	0.40	EPA 8260D	4-17-20	4-17-20	
Iodomethane	ND	2.0	EPA 8260D	4-17-20	4-17-20	
Methylene Chloride	ND	2.0	EPA 8260D	4-17-20	4-17-20	
(trans) 1,2-Dichloroethene	ND	0.40	EPA 8260D	4-17-20	4-17-20	
1,1-Dichloroethane	ND	0.40	EPA 8260D	4-17-20	4-17-20	
2,2-Dichloropropane	ND	0.40	EPA 8260D	4-17-20	4-17-20	
(cis) 1,2-Dichloroethene	0.89	0.40	EPA 8260D	4-17-20	4-17-20	
Bromochloromethane	ND	0.40	EPA 8260D	4-17-20	4-17-20	
Chloroform	ND	0.40	EPA 8260D	4-17-20	4-17-20	
1,1,1-Trichloroethane	ND	0.40	EPA 8260D	4-17-20	4-17-20	
Carbon Tetrachloride	ND	0.40	EPA 8260D	4-17-20	4-17-20	
1,1-Dichloropropene	ND	0.40	EPA 8260D	4-17-20	4-17-20	
1,2-Dichloroethane	ND	0.40	EPA 8260D	4-17-20	4-17-20	
Trichloroethene	0.51	0.40	EPA 8260D	4-17-20	4-17-20	
1,2-Dichloropropane	ND	0.40	EPA 8260D	4-17-20	4-17-20	
Dibromomethane	ND	0.40	EPA 8260D	4-17-20	4-17-20	
Bromodichloromethane	ND	0.40	EPA 8260D	4-17-20	4-17-20	
2-Chloroethyl Vinyl Ether	ND	2.0	EPA 8260D	4-17-20	4-17-20	
(cis) 1,3-Dichloropropene	ND	0.40	EPA 8260D	4-17-20	4-17-20	
(trans) 1,3-Dichloropropene	ND	0.40	EPA 8260D	4-17-20	4-17-20	



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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW-27:W					
Laboratory ID:	04-109-03					
1,1,2-Trichloroethane	ND	0.40	EPA 8260D	4-17-20	4-17-20	
Tetrachloroethene	75	0.40	EPA 8260D	4-17-20	4-17-20	
1,3-Dichloropropane	ND	0.40	EPA 8260D	4-17-20	4-17-20	
Dibromochloromethane	ND	0.40	EPA 8260D	4-17-20	4-17-20	
1,2-Dibromoethane	ND	0.40	EPA 8260D	4-17-20	4-17-20	
Chlorobenzene	ND	0.40	EPA 8260D	4-17-20	4-17-20	
1,1,1,2-Tetrachloroethane	ND	0.40	EPA 8260D	4-17-20	4-17-20	
Bromoform	ND	2.0	EPA 8260D	4-17-20	4-17-20	
Bromobenzene	ND	0.40	EPA 8260D	4-17-20	4-17-20	
1,1,2,2-Tetrachloroethane	ND	0.40	EPA 8260D	4-17-20	4-17-20	
1,2,3-Trichloropropane	ND	0.40	EPA 8260D	4-17-20	4-17-20	
2-Chlorotoluene	ND	0.40	EPA 8260D	4-17-20	4-17-20	
4-Chlorotoluene	ND	0.40	EPA 8260D	4-17-20	4-17-20	
1,3-Dichlorobenzene	ND	0.40	EPA 8260D	4-17-20	4-17-20	
1,4-Dichlorobenzene	ND	0.40	EPA 8260D	4-17-20	4-17-20	
1,2-Dichlorobenzene	ND	0.40	EPA 8260D	4-17-20	4-17-20	
1,2-Dibromo-3-chloropropane	ND	2.0	EPA 8260D	4-17-20	4-17-20	
1,2,4-Trichlorobenzene	ND	0.50	EPA 8260D	4-17-20	4-17-20	
Hexachlorobutadiene	ND	2.0	EPA 8260D	4-17-20	4-17-20	
1,2,3-Trichlorobenzene	ND	0.40	EPA 8260D	4-17-20	4-17-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>96</i>	<i>75-127</i>				
<i>Toluene-d8</i>	<i>94</i>	<i>80-127</i>				
<i>4-Bromofluorobenzene</i>	<i>100</i>	<i>78-125</i>				



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Matrix: Water
 Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW-29:W					
Laboratory ID:	04-109-04					
Dichlorodifluoromethane	ND	0.20	EPA 8260D	4-17-20	4-17-20	
Chloromethane	ND	1.0	EPA 8260D	4-17-20	4-17-20	
Vinyl Chloride	ND	0.020	EPA 8260D/SIM	4-17-20	4-17-20	
Bromomethane	ND	0.20	EPA 8260D	4-17-20	4-17-20	
Chloroethane	ND	1.0	EPA 8260D	4-17-20	4-17-20	
Trichlorofluoromethane	ND	0.20	EPA 8260D	4-17-20	4-17-20	
1,1-Dichloroethene	ND	0.20	EPA 8260D	4-17-20	4-17-20	
Iodomethane	ND	1.0	EPA 8260D	4-17-20	4-17-20	
Methylene Chloride	ND	1.0	EPA 8260D	4-17-20	4-17-20	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260D	4-17-20	4-17-20	
1,1-Dichloroethane	ND	0.20	EPA 8260D	4-17-20	4-17-20	
2,2-Dichloropropane	ND	0.20	EPA 8260D	4-17-20	4-17-20	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260D	4-17-20	4-17-20	
Bromochloromethane	ND	0.20	EPA 8260D	4-17-20	4-17-20	
Chloroform	ND	0.20	EPA 8260D	4-17-20	4-17-20	
1,1,1-Trichloroethane	ND	0.20	EPA 8260D	4-17-20	4-17-20	
Carbon Tetrachloride	ND	0.20	EPA 8260D	4-17-20	4-17-20	
1,1-Dichloropropene	ND	0.20	EPA 8260D	4-17-20	4-17-20	
1,2-Dichloroethane	ND	0.20	EPA 8260D	4-17-20	4-17-20	
Trichloroethene	ND	0.20	EPA 8260D	4-17-20	4-17-20	
1,2-Dichloropropane	ND	0.20	EPA 8260D	4-17-20	4-17-20	
Dibromomethane	ND	0.20	EPA 8260D	4-17-20	4-17-20	
Bromodichloromethane	ND	0.20	EPA 8260D	4-17-20	4-17-20	
2-Chloroethyl Vinyl Ether	ND	1.0	EPA 8260D	4-17-20	4-17-20	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260D	4-17-20	4-17-20	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260D	4-17-20	4-17-20	



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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW-29:W					
Laboratory ID:	04-109-04					
1,1,2-Trichloroethane	ND	0.20	EPA 8260D	4-17-20	4-17-20	
Tetrachloroethene	ND	0.20	EPA 8260D	4-17-20	4-17-20	
1,3-Dichloropropane	ND	0.20	EPA 8260D	4-17-20	4-17-20	
Dibromochloromethane	ND	0.20	EPA 8260D	4-17-20	4-17-20	
1,2-Dibromoethane	ND	0.20	EPA 8260D	4-17-20	4-17-20	
Chlorobenzene	ND	0.20	EPA 8260D	4-17-20	4-17-20	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260D	4-17-20	4-17-20	
Bromoform	ND	1.0	EPA 8260D	4-17-20	4-17-20	
Bromobenzene	ND	0.20	EPA 8260D	4-17-20	4-17-20	
1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260D	4-17-20	4-17-20	
1,2,3-Trichloropropane	ND	0.20	EPA 8260D	4-17-20	4-17-20	
2-Chlorotoluene	ND	0.20	EPA 8260D	4-17-20	4-17-20	
4-Chlorotoluene	ND	0.20	EPA 8260D	4-17-20	4-17-20	
1,3-Dichlorobenzene	ND	0.20	EPA 8260D	4-17-20	4-17-20	
1,4-Dichlorobenzene	ND	0.20	EPA 8260D	4-17-20	4-17-20	
1,2-Dichlorobenzene	ND	0.20	EPA 8260D	4-17-20	4-17-20	
1,2-Dibromo-3-chloropropane	ND	1.0	EPA 8260D	4-17-20	4-17-20	
1,2,4-Trichlorobenzene	ND	0.25	EPA 8260D	4-17-20	4-17-20	
Hexachlorobutadiene	ND	1.0	EPA 8260D	4-17-20	4-17-20	
1,2,3-Trichlorobenzene	ND	0.20	EPA 8260D	4-17-20	4-17-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>95</i>	<i>75-127</i>				
<i>Toluene-d8</i>	<i>98</i>	<i>80-127</i>				
<i>4-Bromofluorobenzene</i>	<i>106</i>	<i>78-125</i>				



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Matrix: Water
 Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0417W1					
Dichlorodifluoromethane	ND	0.20	EPA 8260D	4-17-20	4-17-20	
Chloromethane	ND	1.0	EPA 8260D	4-17-20	4-17-20	
Vinyl Chloride	ND	0.020	EPA 8260D/SIM	4-17-20	4-17-20	
Bromomethane	ND	0.20	EPA 8260D	4-17-20	4-17-20	
Chloroethane	ND	1.0	EPA 8260D	4-17-20	4-17-20	
Trichlorofluoromethane	ND	0.20	EPA 8260D	4-17-20	4-17-20	
1,1-Dichloroethene	ND	0.20	EPA 8260D	4-17-20	4-17-20	
Iodomethane	ND	1.0	EPA 8260D	4-17-20	4-17-20	
Methylene Chloride	ND	1.0	EPA 8260D	4-17-20	4-17-20	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260D	4-17-20	4-17-20	
1,1-Dichloroethane	ND	0.20	EPA 8260D	4-17-20	4-17-20	
2,2-Dichloropropane	ND	0.20	EPA 8260D	4-17-20	4-17-20	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260D	4-17-20	4-17-20	
Bromochloromethane	ND	0.20	EPA 8260D	4-17-20	4-17-20	
Chloroform	ND	0.20	EPA 8260D	4-17-20	4-17-20	
1,1,1-Trichloroethane	ND	0.20	EPA 8260D	4-17-20	4-17-20	
Carbon Tetrachloride	ND	0.20	EPA 8260D	4-17-20	4-17-20	
1,1-Dichloropropene	ND	0.20	EPA 8260D	4-17-20	4-17-20	
1,2-Dichloroethane	ND	0.20	EPA 8260D	4-17-20	4-17-20	
Trichloroethene	ND	0.20	EPA 8260D	4-17-20	4-17-20	
1,2-Dichloropropane	ND	0.20	EPA 8260D	4-17-20	4-17-20	
Dibromomethane	ND	0.20	EPA 8260D	4-17-20	4-17-20	
Bromodichloromethane	ND	0.20	EPA 8260D	4-17-20	4-17-20	
2-Chloroethyl Vinyl Ether	ND	1.0	EPA 8260D	4-17-20	4-17-20	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260D	4-17-20	4-17-20	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260D	4-17-20	4-17-20	



Date of Report: April 23, 2020
 Samples Submitted: April 16, 2020
 Laboratory Reference: 2004-109
 Project: 82302-9.4

VOLATILE ORGANICS EPA 8260D/SIM
QUALITY CONTROL
 page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0417W1					
1,1,2-Trichloroethane	ND	0.20	EPA 8260D	4-17-20	4-17-20	
Tetrachloroethene	ND	0.20	EPA 8260D	4-17-20	4-17-20	
1,3-Dichloropropane	ND	0.20	EPA 8260D	4-17-20	4-17-20	
Dibromochloromethane	ND	0.20	EPA 8260D	4-17-20	4-17-20	
1,2-Dibromoethane	ND	0.20	EPA 8260D	4-17-20	4-17-20	
Chlorobenzene	ND	0.20	EPA 8260D	4-17-20	4-17-20	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260D	4-17-20	4-17-20	
Bromoform	ND	1.0	EPA 8260D	4-17-20	4-17-20	
Bromobenzene	ND	0.20	EPA 8260D	4-17-20	4-17-20	
1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260D	4-17-20	4-17-20	
1,2,3-Trichloropropane	ND	0.20	EPA 8260D	4-17-20	4-17-20	
2-Chlorotoluene	ND	0.20	EPA 8260D	4-17-20	4-17-20	
4-Chlorotoluene	ND	0.20	EPA 8260D	4-17-20	4-17-20	
1,3-Dichlorobenzene	ND	0.20	EPA 8260D	4-17-20	4-17-20	
1,4-Dichlorobenzene	ND	0.20	EPA 8260D	4-17-20	4-17-20	
1,2-Dichlorobenzene	ND	0.20	EPA 8260D	4-17-20	4-17-20	
1,2-Dibromo-3-chloropropane	ND	1.0	EPA 8260D	4-17-20	4-17-20	
1,2,4-Trichlorobenzene	ND	0.25	EPA 8260D	4-17-20	4-17-20	
Hexachlorobutadiene	ND	1.0	EPA 8260D	4-17-20	4-17-20	
1,2,3-Trichlorobenzene	ND	0.20	EPA 8260D	4-17-20	4-17-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>90</i>	<i>75-127</i>				
<i>Toluene-d8</i>	<i>94</i>	<i>80-127</i>				
<i>4-Bromofluorobenzene</i>	<i>106</i>	<i>78-125</i>				



Date of Report: April 23, 2020
 Samples Submitted: April 16, 2020
 Laboratory Reference: 2004-109
 Project: 82302-9.4

**VOLATILE ORGANICS EPA 8260D
 QUALITY CONTROL**

Matrix: Water
 Units: ug/L

Analyte	Result		Spike Level		Percent Recovery		Recovery	RPD	RPD	Flags
					Recovery	Limits	RPD	Limit		
SPIKE BLANKS										
Laboratory ID:	SB0417W1									
	SB	SBD	SB	SBD	SB	SBD				
1,1-Dichloroethene	9.62	10.1	10.0	10.0	96	101	63-130	5	17	
Benzene	9.63	9.91	10.0	10.0	96	99	76-125	3	19	
Trichloroethene	9.74	9.59	10.0	10.0	97	96	76-121	2	18	
Toluene	9.52	8.70	10.0	10.0	95	87	80-124	9	18	
Chlorobenzene	10.6	10.8	10.0	10.0	106	108	75-120	2	19	
<i>Surrogate:</i>										
<i>Dibromofluoromethane</i>					95	99	75-127			
<i>Toluene-d8</i>					94	92	80-127			
<i>4-Bromofluorobenzene</i>					103	101	78-125			



Date of Report: April 23, 2020
 Samples Submitted: April 16, 2020
 Laboratory Reference: 2004-109
 Project: 82302-9.4

**TOTAL ORGANIC CARBON
 SM 5310B**

Matrix: Water
 Units: mg/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW-42:W					
Laboratory ID:	04-109-01					
Total Organic Carbon	3.5	1.0	SM 5310B	4-22-20	4-22-20	
Client ID:	MW-43:W					
Laboratory ID:	04-109-02					
Total Organic Carbon	15	1.0	SM 5310B	4-22-20	4-22-20	
Client ID:	MW-27:W					
Laboratory ID:	04-109-03					
Total Organic Carbon	ND	1.0	SM 5310B	4-22-20	4-22-20	
Client ID:	MW-29:W					
Laboratory ID:	04-109-04					
Total Organic Carbon	2.0	1.0	SM 5310B	4-22-20	4-22-20	



Date of Report: April 23, 2020
 Samples Submitted: April 16, 2020
 Laboratory Reference: 2004-109
 Project: 82302-9.4

**TOTAL ORGANIC CARBON
 SM 5310B
 QUALITY CONTROL**

Matrix: Water
 Units: mg/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0422W1					
Total Organic Carbon	ND	1.0	SM 5310B	4-22-20	4-22-20	

Analyte	Result	Spike Level	Source Result	Percent Recovery	Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE								
Laboratory ID:	04-109-01							
	ORIG	DUP						
Total Organic Carbon	3.52	3.77	NA	NA	NA	7	20	

MATRIX SPIKE

Laboratory ID:	04-109-01							
	MS	MS		MS				
Total Organic Carbon	14.1	10.0	3.52	106	85-131	NA	NA	

SPIKE BLANK

Laboratory ID:	SB0422W1							
	SB	SB		SB				
Total Organic Carbon	10.5	10.0	NA	105	88-127	NA	NA	



Date of Report: April 23, 2020
 Samples Submitted: April 16, 2020
 Laboratory Reference: 2004-109
 Project: 82302-9.4

DISSOLVED IRON
EPA 6010D

Matrix: Water
 Units: ug/L (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW-42:W					
Laboratory ID:	04-109-01					
Iron	25000	56	EPA 6010D	4-16-20	4-22-20	

Client ID:	MW-43:W					
Laboratory ID:	04-109-02					
Iron	6800	56	EPA 6010D	4-16-20	4-22-20	

Client ID:	MW-27:W					
Laboratory ID:	04-109-03					
Iron	91	56	EPA 6010D	4-16-20	4-22-20	

Client ID:	MW-29:W					
Laboratory ID:	04-109-04					
Iron	1100	56	EPA 6010D	4-16-20	4-22-20	



Date of Report: April 23, 2020
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**DISSOLVED IRON
 EPA 6010D
 QUALITY CONTROL**

Matrix: Water
 Units: ug/L (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0416F1					
Iron	ND	56	EPA 6010D	4-16-20	4-22-20	

Analyte	Result	Spike Level	Source Result	Percent Recovery	Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE								
Laboratory ID:	04-109-01							
	ORIG	DUP						
Iron	24900	25300	NA	NA	NA	NA	1	20

MATRIX SPIKES

Laboratory ID:	04-109-01									
	MS	MSD	MS	MSD	MS	MSD				
Iron	123000	125000	100000	100000	24900	99	100	75-125	1	20



Date of Report: April 23, 2020
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 Laboratory Reference: 2004-109
 Project: 82302-9.4

**CHLORIDE
 SM 4500-Cl E**

Matrix: Water
 Units: mg/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW-42:W					
Laboratory ID:	04-109-01					
Chloride	14	2.0	SM 4500-Cl E	4-21-20	4-21-20	

Client ID:	MW-43:W					
Laboratory ID:	04-109-02					
Chloride	7.9	2.0	SM 4500-Cl E	4-21-20	4-21-20	

Client ID:	MW-27:W					
Laboratory ID:	04-109-03					
Chloride	ND	2.0	SM 4500-Cl E	4-21-20	4-21-20	

Client ID:	MW-29:W					
Laboratory ID:	04-109-04					
Chloride	5.5	2.0	SM 4500-Cl E	4-21-20	4-21-20	



Date of Report: April 23, 2020
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**CHLORIDE
 SM 4500-CI E
 QUALITY CONTROL**

Matrix: Water
 Units: mg/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0421W1					
Chloride	ND	2.0	SM 4500-CI E	4-21-20	4-21-20	

Analyte	Result	Spike Level	Source Result	Percent Recovery	Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE								
Laboratory ID:	04-109-03							
	ORIG	DUP						
Chloride	ND	ND	NA	NA	NA	NA	17	

MATRIX SPIKE								
Laboratory ID:	04-109-03							
	MS	MS		MS				
Chloride	48.7	50.0	ND	97	80-116	NA	NA	

SPIKE BLANK								
Laboratory ID:	SB0421W1							
	SB	SB		SB				
Chloride	45.3	50.0	NA	91	90-110	NA	NA	



Date of Report: April 23, 2020
 Samples Submitted: April 16, 2020
 Laboratory Reference: 2004-109
 Project: 82302-9.4

SULFATE
ASTM D516-11

Matrix: Water
 Units: mg/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW-42:W					
Laboratory ID:	04-109-01					
Sulfate	ND	5.0	ASTM D516-11	4-20-20	4-20-20	

Client ID:	MW-43:W					
Laboratory ID:	04-109-02					
Sulfate	22	5.0	ASTM D516-11	4-20-20	4-20-20	

Client ID:	MW-27:W					
Laboratory ID:	04-109-03					
Sulfate	17	5.0	ASTM D516-11	4-20-20	4-20-20	

Client ID:	MW-29:W					
Laboratory ID:	04-109-04					
Sulfate	ND	5.0	ASTM D516-11	4-20-20	4-20-20	



Date of Report: April 23, 2020
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**SULFATE
 ASTM D516-11
 QUALITY CONTROL**

Matrix: Water
 Units: mg/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0420W1					
Sulfate	ND	5.0	ASTM D516-11	4-20-20	4-20-20	

Analyte	Result	Spike Level	Source Result	Percent Recovery	Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE								
Laboratory ID:	04-093-02							
	ORIG	DUP						
Sulfate	13.1	12.7	NA	NA	NA	3	10	

MATRIX SPIKE								
Laboratory ID:	04-093-02							
	MS	MS		MS				
Sulfate	22.1	10.0	13.1	90	73-134	NA	NA	

SPIKE BLANK								
Laboratory ID:	SB0420W1							
	SB	SB		SB				
Sulfate	10.7	10.0	NA	107	89-113	NA	NA	



Date of Report: April 23, 2020
 Samples Submitted: April 16, 2020
 Laboratory Reference: 2004-109
 Project: 82302-9.4

AMMONIA (as Nitrogen)
SM 4500-NH₃ D

Matrix: Water
 Units: mg/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW-42:W					
Laboratory ID:	04-109-01					
Ammonia	0.21	0.050	SM 4500-NH3 D	4-17-20	4-17-20	
Client ID:	MW-43:W					
Laboratory ID:	04-109-02					
Ammonia	0.49	0.050	SM 4500-NH3 D	4-17-20	4-17-20	
Client ID:	MW-27:W					
Laboratory ID:	04-109-03					
Ammonia	ND	0.050	SM 4500-NH3 D	4-17-20	4-17-20	
Client ID:	MW-29:W					
Laboratory ID:	04-109-04					
Ammonia	0.25	0.050	SM 4500-NH3 D	4-17-20	4-17-20	



Date of Report: April 23, 2020
 Samples Submitted: April 16, 2020
 Laboratory Reference: 2004-109
 Project: 82302-9.4

**AMMONIA (as Nitrogen)
 SM 4500-NH₃ D
 QUALITY CONTROL**

Matrix: Water
 Units: mg/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0417W1					
Ammonia	ND	0.050	SM 4500-NH3 D	4-17-20	4-17-20	

Analyte	Result	Spike Level	Source Result	Percent Recovery	Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE								
Laboratory ID:	04-075-01							
	ORIG	DUP						
Ammonia	3.00	2.99	NA	NA	NA	0	12	

MATRIX SPIKE								
Laboratory ID:	04-075-01							
	MS	MS		MS				
Ammonia	7.76	5.00	3.00	95	75-121	NA	NA	

SPIKE BLANK								
Laboratory ID:	SB0417W1							
	SB	SB		SB				
Ammonia	4.95	5.00	NA	99	85-110	NA	NA	



Date of Report: April 23, 2020
 Samples Submitted: April 16, 2020
 Laboratory Reference: 2004-109
 Project: 82302-9.4

**DISSOLVED GASES
 RSK 175**

Matrix: Water
 Units: ug/L (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW-42:W					
Laboratory ID:	04-109-01					
Methane	8900	55	RSK 175	4-22-20	4-22-20	
Ethane	ND	0.22	RSK 175	4-22-20	4-22-20	
Ethene	12	0.29	RSK 175	4-22-20	4-22-20	

Client ID:	MW-43:W					
Laboratory ID:	04-109-02					
Methane	510	2.8	RSK 175	4-22-20	4-22-20	
Ethane	ND	0.22	RSK 175	4-22-20	4-22-20	
Ethene	5.5	0.29	RSK 175	4-22-20	4-22-20	

Client ID:	MW-27:W					
Laboratory ID:	04-109-03					
Methane	ND	0.55	RSK 175	4-22-20	4-22-20	
Ethane	ND	0.22	RSK 175	4-22-20	4-22-20	
Ethene	ND	0.29	RSK 175	4-22-20	4-22-20	

Client ID:	MW-29:W					
Laboratory ID:	04-109-04					
Methane	93	0.55	RSK 175	4-22-20	4-22-20	
Ethane	ND	0.22	RSK 175	4-22-20	4-22-20	
Ethene	ND	0.29	RSK 175	4-22-20	4-22-20	



Date of Report: April 23, 2020
 Samples Submitted: April 16, 2020
 Laboratory Reference: 2004-109
 Project: 82302-9.4

**DISSOLVED GASES
 RSK 175
 QUALITY CONTROL**

Matrix: Water
 Units: ug/L (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0422W1					
Methane	ND	0.55	RSK 175	4-22-20	4-22-20	
Ethane	ND	0.22	RSK 175	4-22-20	4-22-20	
Ethene	ND	0.29	RSK 175	4-22-20	4-22-20	

Analyte	Result		Spike Level		Percent Recovery		Recovery Limits	RPD	RPD Limit	Flags
SPIKE BLANK										
Laboratory ID:	SB0422W1									
	SB	SBD	SB	SBD	SB	SBD				
Methane	23.1	24.1	22.1	22.1	105	109	75-125	4	25	
Ethane	43.0	44.8	41.6	41.6	103	108	75-125	4	25	
Ethene	39.7	44.3	38.8	38.8	102	114	75-125	11	25	





Data Qualifiers and Abbreviations

- A - Due to a high sample concentration, the amount spiked is insufficient for meaningful MS/MSD recovery data.
 - B - The analyte indicated was also found in the blank sample.
 - C - The duplicate RPD is outside control limits due to high result variability when analyte concentrations are within five times the quantitation limit.
 - E - The value reported exceeds the quantitation range and is an estimate.
 - F - Surrogate recovery data is not available due to the high concentration of coeluting target compounds.
 - H - The analyte indicated is a common laboratory solvent and may have been introduced during sample preparation, and be impacting the sample result.
 - I - Compound recovery is outside of the control limits.
 - J - The value reported was below the practical quantitation limit. The value is an estimate.
 - K - Sample duplicate RPD is outside control limits due to sample inhomogeneity. The sample was re-extracted and re-analyzed with similar results.
 - L - The RPD is outside of the control limits.
 - M - Hydrocarbons in the gasoline range are impacting the diesel range result.
 - M1 - Hydrocarbons in the gasoline range (toluene-naphthalene) are present in the sample.
 - N - Hydrocarbons in the lube oil range are impacting the diesel range result.
 - N1 - Hydrocarbons in diesel range are impacting lube oil range results.
 - O - Hydrocarbons indicative of heavier fuels are present in the sample and are impacting the gasoline result.
 - P - The RPD of the detected concentrations between the two columns is greater than 40.
 - Q - Surrogate recovery is outside of the control limits.
 - S - Surrogate recovery data is not available due to the necessary dilution of the sample.
 - T - The sample chromatogram is not similar to a typical _____.
 - U - The analyte was analyzed for, but was not detected above the reported sample quantitation limit.
 - U1 - The practical quantitation limit is elevated due to interferences present in the sample.
 - V - Matrix Spike/Matrix Spike Duplicate recoveries are outside control limits due to matrix effects.
 - W - Matrix Spike/Matrix Spike Duplicate RPD are outside control limits due to matrix effects.
 - X - Sample extract treated with a mercury cleanup procedure.
 - X1 - Sample extract treated with a sulfuric acid/silica gel cleanup procedure.
 - Y - The calibration verification for this analyte exceeded the 20% drift specified in methods 8260 & 8270, and therefore the reported result should be considered an estimate. The overall performance of the calibration verification standard met the acceptance criteria of the method.
 - Z -
- ND - Not Detected at PQL
 PQL - Practical Quantitation Limit
 RPD - Relative Percent Difference





MVA Onsite Environmental Inc.
Analytical Laboratory Testing Services
14648 NE 95th Street • Redmond, WA 98052
Phone: (425) 883-3881 • www.onsite-env.com

Chain of Custody

Turnaround Request
(in working days)
(Check One)

Same Day 1 Day

2 Days 3 Days

Standard (7 Days)

(other) _____

Company: Kane Environmental
Project Number: B2802-9.4
Project Name: BSCSS
Project Manager: Jeff Jensen
Sampled by: Mike Espinoza

Lab ID	Sample Identification	Date Sampled	Time Sampled	Matrix
1	MW-42:W	4/16/20	0946	GW
2	MW-43:W	4/16/20	1053	GW
3	MW-27:W	4/16/20	1234	GW
4	MW-29:W	4/16/20	1330	GW

Number of Containers

Number of Containers	Laboratory Number:
	04-109
	NWTPH-HCID
	NWTPH-Gx/BTEX
	NWTPH-Gx
	NWTPH-Dx (<input type="checkbox"/> Acid / SG Clean-up)
	Volatiles 8260C
	Halogenated Volatiles 8260C
	EDB EPA 8011 (Waters Only)
	Semivolatiles 8270D/SIM (with low-level PAHs)
	PAHs 8270D/SIM (low-level)
	PCBs 8082A
	Organochlorine Pesticides 8081B
	Organophosphorus Pesticides 8270D/SIM
	Chlorinated Acid Herbicides 8151A
	Total RCRA Metals
	Total MTCA Metals
	TCLP Metals
	REM (oil and grease) 1664A TOL
	dissolved Fe
	chloride
	sulfate
	ammonia - N
	Moisture RSK

Signature	Company	Date	Time	Comments/Special Instructions
<i>Mike Espinoza</i>	Kane Env.	4/16/20	14:15	Lab filter
<i>Jeff Jensen</i>	OSE	4/16/20	14:15	RSK = methane, ethane, ethene Low detection limits (3-4 µg/L) Low detection limit for vinyl chloride

Received _____
Relinquished _____
Received _____
Relinquished _____
Received _____
Relinquished _____
Received _____
Relinquished _____
Reviewed/Date _____

Reviewed/Date _____

Data Package: Standard Level III Level IV

Chromatograms with final report Electronic Data Deliverables (EDDs)



14648 NE 95th Street, Redmond, WA 98052 • (425) 883-3881

April 28, 2020

Jeff Jensen
Kane Environmental, Inc.
4015 13th Avenue West
Seattle, WA 98119

Re: Analytical Data for Project 82302-9.4
Laboratory Reference No. 2004-117

Dear Jeff:

Enclosed are the analytical results and associated quality control data for samples submitted on April 17, 2020.

The standard policy of OnSite Environmental, Inc. is to store your samples for 30 days from the date of receipt. If you require longer storage, please contact the laboratory.

We appreciate the opportunity to be of service to you on this project. If you have any questions concerning the data, or need additional information, please feel free to call me.

Sincerely,

A handwritten signature in black ink, appearing to read "DB", with a long horizontal flourish extending to the right.

David Baumeister
Project Manager

Enclosures



OnSite Environmental, Inc. 14648 NE 95th Street, Redmond, WA 98052 (425) 883-3881

This report pertains to the samples analyzed in accordance with the chain of custody, and is intended only for the use of the individual or company to whom it is addressed.

Date of Report: April 28, 2020
Samples Submitted: April 17, 2020
Laboratory Reference: 2004-117
Project: 82302-9.4

Case Narrative

Samples were collected on April 17, 2020 and received by the laboratory on April 17, 2020. They were maintained at the laboratory at a temperature of 2°C to 6°C.

Please note that any and all soil sample results are reported on a dry-weight basis, unless otherwise noted below.

General QA/QC issues associated with the analytical data enclosed in this laboratory report will be indicated with a reference to a comment or explanation on the Data Qualifier page. More complex and involved QA/QC issues will be discussed in detail below.



Date of Report: April 28, 2020
 Samples Submitted: April 17, 2020
 Laboratory Reference: 2004-117
 Project: 82302-9.4

VOLATILE ORGANICS EPA 8260D
 page 1 of 2

Matrix: Water
 Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW-6:W					
Laboratory ID:	04-117-01					
Dichlorodifluoromethane	ND	0.40	EPA 8260D	4-17-20	4-17-20	
Chloromethane	ND	2.0	EPA 8260D	4-17-20	4-17-20	
Vinyl Chloride	50	0.40	EPA 8260D	4-17-20	4-17-20	
Bromomethane	ND	0.40	EPA 8260D	4-17-20	4-17-20	
Chloroethane	ND	2.0	EPA 8260D	4-17-20	4-17-20	
Trichlorofluoromethane	ND	0.40	EPA 8260D	4-17-20	4-17-20	
1,1-Dichloroethene	1.4	0.40	EPA 8260D	4-17-20	4-17-20	
Iodomethane	ND	2.0	EPA 8260D	4-17-20	4-17-20	
Methylene Chloride	ND	2.0	EPA 8260D	4-17-20	4-17-20	
(trans) 1,2-Dichloroethene	0.47	0.40	EPA 8260D	4-17-20	4-17-20	
1,1-Dichloroethane	ND	0.40	EPA 8260D	4-17-20	4-17-20	
2,2-Dichloropropane	ND	0.40	EPA 8260D	4-17-20	4-17-20	
(cis) 1,2-Dichloroethene	38	0.40	EPA 8260D	4-17-20	4-17-20	
Bromochloromethane	ND	0.40	EPA 8260D	4-17-20	4-17-20	
Chloroform	ND	0.40	EPA 8260D	4-17-20	4-17-20	
1,1,1-Trichloroethane	ND	0.40	EPA 8260D	4-17-20	4-17-20	
Carbon Tetrachloride	ND	0.40	EPA 8260D	4-17-20	4-17-20	
1,1-Dichloropropene	ND	0.40	EPA 8260D	4-17-20	4-17-20	
1,2-Dichloroethane	ND	0.40	EPA 8260D	4-17-20	4-17-20	
Trichloroethene	7.4	0.40	EPA 8260D	4-17-20	4-17-20	
1,2-Dichloropropane	ND	0.40	EPA 8260D	4-17-20	4-17-20	
Dibromomethane	ND	0.40	EPA 8260D	4-17-20	4-17-20	
Bromodichloromethane	ND	0.40	EPA 8260D	4-17-20	4-17-20	
2-Chloroethyl Vinyl Ether	ND	2.0	EPA 8260D	4-17-20	4-17-20	
(cis) 1,3-Dichloropropene	ND	0.40	EPA 8260D	4-17-20	4-17-20	
(trans) 1,3-Dichloropropene	ND	0.40	EPA 8260D	4-17-20	4-17-20	



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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW-6:W					
Laboratory ID:	04-117-01					
1,1,2-Trichloroethane	ND	0.40	EPA 8260D	4-17-20	4-17-20	
Tetrachloroethene	23	0.40	EPA 8260D	4-17-20	4-17-20	
1,3-Dichloropropane	ND	0.40	EPA 8260D	4-17-20	4-17-20	
Dibromochloromethane	ND	0.40	EPA 8260D	4-17-20	4-17-20	
1,2-Dibromoethane	ND	0.40	EPA 8260D	4-17-20	4-17-20	
Chlorobenzene	ND	0.40	EPA 8260D	4-17-20	4-17-20	
1,1,1,2-Tetrachloroethane	ND	0.40	EPA 8260D	4-17-20	4-17-20	
Bromoform	ND	2.0	EPA 8260D	4-17-20	4-17-20	
Bromobenzene	ND	0.40	EPA 8260D	4-17-20	4-17-20	
1,1,2,2-Tetrachloroethane	ND	0.40	EPA 8260D	4-17-20	4-17-20	
1,2,3-Trichloropropane	ND	0.40	EPA 8260D	4-17-20	4-17-20	
2-Chlorotoluene	ND	0.40	EPA 8260D	4-17-20	4-17-20	
4-Chlorotoluene	ND	0.40	EPA 8260D	4-17-20	4-17-20	
1,3-Dichlorobenzene	ND	0.40	EPA 8260D	4-17-20	4-17-20	
1,4-Dichlorobenzene	ND	0.40	EPA 8260D	4-17-20	4-17-20	
1,2-Dichlorobenzene	ND	0.40	EPA 8260D	4-17-20	4-17-20	
1,2-Dibromo-3-chloropropane	ND	2.0	EPA 8260D	4-17-20	4-17-20	
1,2,4-Trichlorobenzene	ND	0.50	EPA 8260D	4-17-20	4-17-20	
Hexachlorobutadiene	ND	2.0	EPA 8260D	4-17-20	4-17-20	
1,2,3-Trichlorobenzene	ND	0.40	EPA 8260D	4-17-20	4-17-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>100</i>	<i>75-127</i>				
<i>Toluene-d8</i>	<i>98</i>	<i>80-127</i>				
<i>4-Bromofluorobenzene</i>	<i>109</i>	<i>78-125</i>				



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Matrix: Water
 Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW-11:W					
Laboratory ID:	04-117-02					
Dichlorodifluoromethane	ND	1.0	EPA 8260D	4-17-20	4-17-20	
Chloromethane	ND	5.0	EPA 8260D	4-17-20	4-17-20	
Vinyl Chloride	140	1.0	EPA 8260D	4-17-20	4-17-20	
Bromomethane	ND	1.0	EPA 8260D	4-17-20	4-17-20	
Chloroethane	ND	5.0	EPA 8260D	4-17-20	4-17-20	
Trichlorofluoromethane	ND	1.0	EPA 8260D	4-17-20	4-17-20	
1,1-Dichloroethene	3.2	1.0	EPA 8260D	4-17-20	4-17-20	
Iodomethane	ND	5.0	EPA 8260D	4-17-20	4-17-20	
Methylene Chloride	ND	5.0	EPA 8260D	4-17-20	4-17-20	
(trans) 1,2-Dichloroethene	1.4	1.0	EPA 8260D	4-17-20	4-17-20	
1,1-Dichloroethane	ND	1.0	EPA 8260D	4-17-20	4-17-20	
2,2-Dichloropropane	ND	1.0	EPA 8260D	4-17-20	4-17-20	
(cis) 1,2-Dichloroethene	130	1.0	EPA 8260D	4-17-20	4-17-20	
Bromochloromethane	ND	1.0	EPA 8260D	4-17-20	4-17-20	
Chloroform	ND	1.0	EPA 8260D	4-17-20	4-17-20	
1,1,1-Trichloroethane	ND	1.0	EPA 8260D	4-17-20	4-17-20	
Carbon Tetrachloride	ND	1.0	EPA 8260D	4-17-20	4-17-20	
1,1-Dichloropropene	ND	1.0	EPA 8260D	4-17-20	4-17-20	
1,2-Dichloroethane	ND	1.0	EPA 8260D	4-17-20	4-17-20	
Trichloroethene	20	1.0	EPA 8260D	4-17-20	4-17-20	
1,2-Dichloropropane	ND	1.0	EPA 8260D	4-17-20	4-17-20	
Dibromomethane	ND	1.0	EPA 8260D	4-17-20	4-17-20	
Bromodichloromethane	ND	1.0	EPA 8260D	4-17-20	4-17-20	
2-Chloroethyl Vinyl Ether	ND	5.0	EPA 8260D	4-17-20	4-17-20	
(cis) 1,3-Dichloropropene	ND	1.0	EPA 8260D	4-17-20	4-17-20	
(trans) 1,3-Dichloropropene	ND	1.0	EPA 8260D	4-17-20	4-17-20	



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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW-11:W					
Laboratory ID:	04-117-02					
1,1,2-Trichloroethane	ND	1.0	EPA 8260D	4-17-20	4-17-20	
Tetrachloroethene	8.0	1.0	EPA 8260D	4-17-20	4-17-20	
1,3-Dichloropropane	ND	1.0	EPA 8260D	4-17-20	4-17-20	
Dibromochloromethane	ND	1.0	EPA 8260D	4-17-20	4-17-20	
1,2-Dibromoethane	ND	1.0	EPA 8260D	4-17-20	4-17-20	
Chlorobenzene	ND	1.0	EPA 8260D	4-17-20	4-17-20	
1,1,1,2-Tetrachloroethane	ND	1.0	EPA 8260D	4-17-20	4-17-20	
Bromoform	ND	5.0	EPA 8260D	4-17-20	4-17-20	
Bromobenzene	ND	1.0	EPA 8260D	4-17-20	4-17-20	
1,1,2,2-Tetrachloroethane	ND	1.0	EPA 8260D	4-17-20	4-17-20	
1,2,3-Trichloropropane	ND	1.0	EPA 8260D	4-17-20	4-17-20	
2-Chlorotoluene	ND	1.0	EPA 8260D	4-17-20	4-17-20	
4-Chlorotoluene	ND	1.0	EPA 8260D	4-17-20	4-17-20	
1,3-Dichlorobenzene	ND	1.0	EPA 8260D	4-17-20	4-17-20	
1,4-Dichlorobenzene	ND	1.0	EPA 8260D	4-17-20	4-17-20	
1,2-Dichlorobenzene	ND	1.0	EPA 8260D	4-17-20	4-17-20	
1,2-Dibromo-3-chloropropane	ND	5.0	EPA 8260D	4-17-20	4-17-20	
1,2,4-Trichlorobenzene	ND	1.3	EPA 8260D	4-17-20	4-17-20	
Hexachlorobutadiene	ND	5.0	EPA 8260D	4-17-20	4-17-20	
1,2,3-Trichlorobenzene	ND	1.0	EPA 8260D	4-17-20	4-17-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>91</i>	<i>75-127</i>				
<i>Toluene-d8</i>	<i>94</i>	<i>80-127</i>				
<i>4-Bromofluorobenzene</i>	<i>103</i>	<i>78-125</i>				



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Matrix: Water
 Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW-8:W					
Laboratory ID:	04-117-03					
Dichlorodifluoromethane	ND	0.20	EPA 8260D	4-17-20	4-17-20	
Chloromethane	ND	1.0	EPA 8260D	4-17-20	4-17-20	
Vinyl Chloride	0.024	0.020	EPA 8260D/SIM	4-17-20	4-17-20	
Bromomethane	ND	0.20	EPA 8260D	4-17-20	4-17-20	
Chloroethane	ND	1.0	EPA 8260D	4-17-20	4-17-20	
Trichlorofluoromethane	ND	0.20	EPA 8260D	4-17-20	4-17-20	
1,1-Dichloroethene	ND	0.20	EPA 8260D	4-17-20	4-17-20	
Iodomethane	ND	1.0	EPA 8260D	4-17-20	4-17-20	
Methylene Chloride	ND	1.0	EPA 8260D	4-17-20	4-17-20	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260D	4-17-20	4-17-20	
1,1-Dichloroethane	ND	0.20	EPA 8260D	4-17-20	4-17-20	
2,2-Dichloropropane	ND	0.20	EPA 8260D	4-17-20	4-17-20	
(cis) 1,2-Dichloroethene	0.47	0.20	EPA 8260D	4-17-20	4-17-20	
Bromochloromethane	ND	0.20	EPA 8260D	4-17-20	4-17-20	
Chloroform	ND	0.20	EPA 8260D	4-17-20	4-17-20	
1,1,1-Trichloroethane	ND	0.20	EPA 8260D	4-17-20	4-17-20	
Carbon Tetrachloride	ND	0.20	EPA 8260D	4-17-20	4-17-20	
1,1-Dichloropropene	ND	0.20	EPA 8260D	4-17-20	4-17-20	
1,2-Dichloroethane	ND	0.20	EPA 8260D	4-17-20	4-17-20	
Trichloroethene	0.30	0.20	EPA 8260D	4-17-20	4-17-20	
1,2-Dichloropropane	ND	0.20	EPA 8260D	4-17-20	4-17-20	
Dibromomethane	ND	0.20	EPA 8260D	4-17-20	4-17-20	
Bromodichloromethane	ND	0.20	EPA 8260D	4-17-20	4-17-20	
2-Chloroethyl Vinyl Ether	ND	1.0	EPA 8260D	4-17-20	4-17-20	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260D	4-17-20	4-17-20	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260D	4-17-20	4-17-20	



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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW-8:W					
Laboratory ID:	04-117-03					
1,1,2-Trichloroethane	ND	0.20	EPA 8260D	4-17-20	4-17-20	
Tetrachloroethene	0.94	0.20	EPA 8260D	4-17-20	4-17-20	
1,3-Dichloropropane	ND	0.20	EPA 8260D	4-17-20	4-17-20	
Dibromochloromethane	ND	0.20	EPA 8260D	4-17-20	4-17-20	
1,2-Dibromoethane	ND	0.20	EPA 8260D	4-17-20	4-17-20	
Chlorobenzene	ND	0.20	EPA 8260D	4-17-20	4-17-20	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260D	4-17-20	4-17-20	
Bromoform	ND	1.0	EPA 8260D	4-17-20	4-17-20	
Bromobenzene	ND	0.20	EPA 8260D	4-17-20	4-17-20	
1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260D	4-17-20	4-17-20	
1,2,3-Trichloropropane	ND	0.20	EPA 8260D	4-17-20	4-17-20	
2-Chlorotoluene	ND	0.20	EPA 8260D	4-17-20	4-17-20	
4-Chlorotoluene	ND	0.20	EPA 8260D	4-17-20	4-17-20	
1,3-Dichlorobenzene	ND	0.20	EPA 8260D	4-17-20	4-17-20	
1,4-Dichlorobenzene	ND	0.20	EPA 8260D	4-17-20	4-17-20	
1,2-Dichlorobenzene	ND	0.20	EPA 8260D	4-17-20	4-17-20	
1,2-Dibromo-3-chloropropane	ND	1.0	EPA 8260D	4-17-20	4-17-20	
1,2,4-Trichlorobenzene	ND	0.25	EPA 8260D	4-17-20	4-17-20	
Hexachlorobutadiene	ND	1.0	EPA 8260D	4-17-20	4-17-20	
1,2,3-Trichlorobenzene	ND	0.20	EPA 8260D	4-17-20	4-17-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>93</i>	<i>75-127</i>				
<i>Toluene-d8</i>	<i>94</i>	<i>80-127</i>				
<i>4-Bromofluorobenzene</i>	<i>103</i>	<i>78-125</i>				



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QUALITY CONTROL
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Matrix: Water
 Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0417W1					
Dichlorodifluoromethane	ND	0.20	EPA 8260D	4-17-20	4-17-20	
Chloromethane	ND	1.0	EPA 8260D	4-17-20	4-17-20	
Vinyl Chloride	ND	0.020	EPA 8260D/SIM	4-17-20	4-17-20	
Bromomethane	ND	0.20	EPA 8260D	4-17-20	4-17-20	
Chloroethane	ND	1.0	EPA 8260D	4-17-20	4-17-20	
Trichlorofluoromethane	ND	0.20	EPA 8260D	4-17-20	4-17-20	
1,1-Dichloroethene	ND	0.20	EPA 8260D	4-17-20	4-17-20	
Iodomethane	ND	1.0	EPA 8260D	4-17-20	4-17-20	
Methylene Chloride	ND	1.0	EPA 8260D	4-17-20	4-17-20	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260D	4-17-20	4-17-20	
1,1-Dichloroethane	ND	0.20	EPA 8260D	4-17-20	4-17-20	
2,2-Dichloropropane	ND	0.20	EPA 8260D	4-17-20	4-17-20	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260D	4-17-20	4-17-20	
Bromochloromethane	ND	0.20	EPA 8260D	4-17-20	4-17-20	
Chloroform	ND	0.20	EPA 8260D	4-17-20	4-17-20	
1,1,1-Trichloroethane	ND	0.20	EPA 8260D	4-17-20	4-17-20	
Carbon Tetrachloride	ND	0.20	EPA 8260D	4-17-20	4-17-20	
1,1-Dichloropropene	ND	0.20	EPA 8260D	4-17-20	4-17-20	
1,2-Dichloroethane	ND	0.20	EPA 8260D	4-17-20	4-17-20	
Trichloroethene	ND	0.20	EPA 8260D	4-17-20	4-17-20	
1,2-Dichloropropane	ND	0.20	EPA 8260D	4-17-20	4-17-20	
Dibromomethane	ND	0.20	EPA 8260D	4-17-20	4-17-20	
Bromodichloromethane	ND	0.20	EPA 8260D	4-17-20	4-17-20	
2-Chloroethyl Vinyl Ether	ND	1.0	EPA 8260D	4-17-20	4-17-20	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260D	4-17-20	4-17-20	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260D	4-17-20	4-17-20	



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 QUALITY CONTROL**
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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0417W1					
1,1,2-Trichloroethane	ND	0.20	EPA 8260D	4-17-20	4-17-20	
Tetrachloroethene	ND	0.20	EPA 8260D	4-17-20	4-17-20	
1,3-Dichloropropane	ND	0.20	EPA 8260D	4-17-20	4-17-20	
Dibromochloromethane	ND	0.20	EPA 8260D	4-17-20	4-17-20	
1,2-Dibromoethane	ND	0.20	EPA 8260D	4-17-20	4-17-20	
Chlorobenzene	ND	0.20	EPA 8260D	4-17-20	4-17-20	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260D	4-17-20	4-17-20	
Bromoform	ND	1.0	EPA 8260D	4-17-20	4-17-20	
Bromobenzene	ND	0.20	EPA 8260D	4-17-20	4-17-20	
1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260D	4-17-20	4-17-20	
1,2,3-Trichloropropane	ND	0.20	EPA 8260D	4-17-20	4-17-20	
2-Chlorotoluene	ND	0.20	EPA 8260D	4-17-20	4-17-20	
4-Chlorotoluene	ND	0.20	EPA 8260D	4-17-20	4-17-20	
1,3-Dichlorobenzene	ND	0.20	EPA 8260D	4-17-20	4-17-20	
1,4-Dichlorobenzene	ND	0.20	EPA 8260D	4-17-20	4-17-20	
1,2-Dichlorobenzene	ND	0.20	EPA 8260D	4-17-20	4-17-20	
1,2-Dibromo-3-chloropropane	ND	1.0	EPA 8260D	4-17-20	4-17-20	
1,2,4-Trichlorobenzene	ND	0.25	EPA 8260D	4-17-20	4-17-20	
Hexachlorobutadiene	ND	1.0	EPA 8260D	4-17-20	4-17-20	
1,2,3-Trichlorobenzene	ND	0.20	EPA 8260D	4-17-20	4-17-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>90</i>	<i>75-127</i>				
<i>Toluene-d8</i>	<i>94</i>	<i>80-127</i>				
<i>4-Bromofluorobenzene</i>	<i>106</i>	<i>78-125</i>				



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**VOLATILE ORGANICS EPA 8260D
 QUALITY CONTROL**

Matrix: Water
 Units: ug/L

Analyte	Result		Spike Level		Percent Recovery		Recovery	RPD	RPD	Flags
					Recovery	Limits	RPD	Limit		
SPIKE BLANKS										
Laboratory ID:	SB0417W1									
	SB	SBD	SB	SBD	SB	SBD				
1,1-Dichloroethene	9.62	10.1	10.0	10.0	96	101	63-130	5	17	
Benzene	9.63	9.91	10.0	10.0	96	99	76-125	3	19	
Trichloroethene	9.74	9.59	10.0	10.0	97	96	76-121	2	18	
Toluene	9.52	8.70	10.0	10.0	95	87	80-124	9	18	
Chlorobenzene	10.6	10.8	10.0	10.0	106	108	75-120	2	19	
<i>Surrogate:</i>										
<i>Dibromofluoromethane</i>					95	99	75-127			
<i>Toluene-d8</i>					94	92	80-127			
<i>4-Bromofluorobenzene</i>					103	101	78-125			



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**TOTAL ORGANIC CARBON
 SM 5310B**

Matrix: Water
 Units: mg/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW-6:W					
Laboratory ID:	04-117-01					
Total Organic Carbon	10	1.0	SM 5310B	4-20-20	4-20-20	

Client ID:	MW-11:W					
Laboratory ID:	04-117-02					
Total Organic Carbon	17	1.0	SM 5310B	4-20-20	4-20-20	

Client ID:	MW-8:W					
Laboratory ID:	04-117-03					
Total Organic Carbon	2.7	1.0	SM 5310B	4-20-20	4-20-20	



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**TOTAL ORGANIC CARBON
 SM 5310B
 QUALITY CONTROL**

Matrix: Water
 Units: mg/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0420W1					
Total Organic Carbon	ND	1.0	SM 5310B	4-20-20	4-20-20	

Analyte	Result	Spike Level	Source Result	Percent Recovery	Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE								
Laboratory ID:	04-075-01							
	ORIG	DUP						
Total Organic Carbon	3.22	3.31	NA	NA	NA	NA	3	20

MATRIX SPIKE

Laboratory ID:	04-075-01							
	MS	MS		MS				
Total Organic Carbon	13.9		10.0	3.22	107	85-131	NA	NA

SPIKE BLANK

Laboratory ID:	SB0420W1							
	SB	SB		SB				
Total Organic Carbon	10.9		10.0	NA	109	88-127	NA	NA



Date of Report: April 28, 2020
 Samples Submitted: April 17, 2020
 Laboratory Reference: 2004-117
 Project: 82302-9.4

DISSOLVED IRON
EPA 6010D

Matrix: Water
 Units: ug/L (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW-6:W					
Laboratory ID:	04-117-01					
Iron	1500	56	EPA 6010D	4-17-20	4-22-20	

Client ID:	MW-11:W					
Laboratory ID:	04-117-02					
Iron	580	56	EPA 6010D	4-17-20	4-22-20	

Client ID:	MW-8:W					
Laboratory ID:	04-117-03					
Iron	150	56	EPA 6010D	4-17-20	4-22-20	



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**DISSOLVED IRON
 EPA 6010D
 QUALITY CONTROL**

Matrix: Water
 Units: ug/L (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0417F1					
Iron	ND	56	EPA 6010D	4-17-20	4-27-20	

Analyte	Result	Spike Level	Source Result	Percent Recovery	Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE								
Laboratory ID:	04-109-01							
	ORIG	DUP						
Iron	24900	25300	NA	NA	NA	NA	1	20

MATRIX SPIKES

Laboratory ID:	04-109-01									
	MS	MSD	MS	MSD	MS	MSD				
Iron	123000	125000	100000	100000	24900	99	100	75-125	1	20



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 Project: 82302-9.4

CHLORIDE
SM 4500-Cl E

Matrix: Water
 Units: mg/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW-6:W					
Laboratory ID:	04-117-01					
Chloride	6.3	2.0	SM 4500-Cl E	4-21-20	4-21-20	

Client ID:	MW-11:W					
Laboratory ID:	04-117-02					
Chloride	8.9	2.0	SM 4500-Cl E	4-21-20	4-21-20	

Client ID:	MW-8:W					
Laboratory ID:	04-117-03					
Chloride	6.6	2.0	SM 4500-Cl E	4-21-20	4-21-20	



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**CHLORIDE
 SM 4500-CI E
 QUALITY CONTROL**

Matrix: Water
 Units: mg/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0421W1					
Chloride	ND	2.0	SM 4500-CI E	4-21-20	4-21-20	

Analyte	Result	Spike Level	Source Result	Percent Recovery	Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE								
Laboratory ID:	04-109-03							
	ORIG	DUP						
Chloride	ND	ND	NA	NA	NA	NA	17	

MATRIX SPIKE								
Laboratory ID:	04-109-03							
	MS	MS		MS				
Chloride	48.7	50.0	ND	97	80-116	NA	NA	

SPIKE BLANK								
Laboratory ID:	SB0421W1							
	SB	SB		SB				
Chloride	45.3	50.0	NA	91	90-110	NA	NA	



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SULFATE
ASTM D516-11

Matrix: Water
 Units: mg/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW-6:W					
Laboratory ID:	04-117-01					
Sulfate	13	5.0	ASTM D516-11	4-20-20	4-20-20	

Client ID:	MW-11:W					
Laboratory ID:	04-117-02					
Sulfate	62	25	ASTM D516-11	4-20-20	4-20-20	

Client ID:	MW-8:W					
Laboratory ID:	04-117-03					
Sulfate	13	5.0	ASTM D516-11	4-20-20	4-20-20	



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**SULFATE
 ASTM D516-11
 QUALITY CONTROL**

Matrix: Water
 Units: mg/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0420W1					
Sulfate	ND	5.0	ASTM D516-11	4-20-20	4-20-20	

Analyte	Result	Spike Level	Source Result	Percent Recovery	Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE								
Laboratory ID:	04-093-02							
	ORIG	DUP						
Sulfate	13.1	12.7	NA	NA	NA	3	10	

MATRIX SPIKE								
Laboratory ID:	04-093-02							
	MS	MS		MS				
Sulfate	22.1	10.0	13.1	90	73-134	NA	NA	

SPIKE BLANK								
Laboratory ID:	SB0420W1							
	SB	SB		SB				
Sulfate	10.7	10.0	NA	107	89-113	NA	NA	



Date of Report: April 28, 2020
 Samples Submitted: April 17, 2020
 Laboratory Reference: 2004-117
 Project: 82302-9.4

AMMONIA (as Nitrogen)
SM 4500-NH₃ D

Matrix: Water
 Units: mg/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW-6:W					
Laboratory ID:	04-117-01					
Ammonia	0.10	0.050	SM 4500-NH3 D	4-22-20	4-22-20	
Client ID:	MW-11:W					
Laboratory ID:	04-117-02					
Ammonia	0.25	0.050	SM 4500-NH3 D	4-22-20	4-22-20	
Client ID:	MW-8:W					
Laboratory ID:	04-117-03					
Ammonia	ND	0.050	SM 4500-NH3 D	4-22-20	4-22-20	



Date of Report: April 28, 2020
 Samples Submitted: April 17, 2020
 Laboratory Reference: 2004-117
 Project: 82302-9.4

**AMMONIA (as Nitrogen)
 SM 4500-NH₃ D
 QUALITY CONTROL**

Matrix: Water
 Units: mg/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0422W1					
Ammonia	ND	0.050	SM 4500-NH3 D	4-22-20	4-22-20	

Analyte	Result	Spike Level	Source Result	Percent Recovery	Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE								
Laboratory ID:	04-117-01							
	ORIG	DUP						
Ammonia	0.102	0.106	NA	NA	NA	4	12	

MATRIX SPIKE								
Laboratory ID:	04-117-01							
	MS	MS		MS				
Ammonia	4.13	5.00	0.102	81	75-121	NA	NA	

SPIKE BLANK								
Laboratory ID:	SB0422W1							
	SB	SB		SB				
Ammonia	4.74	5.00	NA	95	85-110	NA	NA	



Date of Report: April 28, 2020
 Samples Submitted: April 17, 2020
 Laboratory Reference: 2004-117
 Project: 82302-9.4

**DISSOLVED GASES
 RSK 175**

Matrix: Water
 Units: ug/L (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW-6:W					
Laboratory ID:	04-117-01					
Methane	760	5.5	RSK 175	4-22-20	4-22-20	
Ethane	ND	0.22	RSK 175	4-22-20	4-22-20	
Ethene	15	0.29	RSK 175	4-22-20	4-22-20	

Client ID:	MW-11:W					
Laboratory ID:	04-117-02					
Methane	62	0.55	RSK 175	4-22-20	4-22-20	
Ethane	ND	0.22	RSK 175	4-22-20	4-22-20	
Ethene	6.8	0.29	RSK 175	4-22-20	4-22-20	

Client ID:	MW-8:W					
Laboratory ID:	04-117-03					
Methane	9.0	0.55	RSK 175	4-22-20	4-22-20	
Ethane	ND	0.22	RSK 175	4-22-20	4-22-20	
Ethene	ND	0.29	RSK 175	4-22-20	4-22-20	



Date of Report: April 28, 2020
 Samples Submitted: April 17, 2020
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**DISSOLVED GASES
 RSK 175
 QUALITY CONTROL**

Matrix: Water
 Units: ug/L (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0422W1					
Methane	ND	0.55	RSK 175	4-22-20	4-22-20	
Ethane	ND	0.22	RSK 175	4-22-20	4-22-20	
Ethene	ND	0.29	RSK 175	4-22-20	4-22-20	

Analyte	Result		Spike Level		Percent Recovery		Recovery Limits	RPD	RPD Limit	Flags
SPIKE BLANK										
Laboratory ID:	SB0422W1									
	SB	SBD	SB	SBD	SB	SBD				
Methane	23.1	24.1	22.1	22.1	105	109	75-125	4	25	
Ethane	43.0	44.8	41.6	41.6	103	108	75-125	4	25	
Ethene	39.7	44.3	38.8	38.8	102	114	75-125	11	25	





Data Qualifiers and Abbreviations

- A - Due to a high sample concentration, the amount spiked is insufficient for meaningful MS/MSD recovery data.
 - B - The analyte indicated was also found in the blank sample.
 - C - The duplicate RPD is outside control limits due to high result variability when analyte concentrations are within five times the quantitation limit.
 - E - The value reported exceeds the quantitation range and is an estimate.
 - F - Surrogate recovery data is not available due to the high concentration of coeluting target compounds.
 - H - The analyte indicated is a common laboratory solvent and may have been introduced during sample preparation, and be impacting the sample result.
 - I - Compound recovery is outside of the control limits.
 - J - The value reported was below the practical quantitation limit. The value is an estimate.
 - K - Sample duplicate RPD is outside control limits due to sample inhomogeneity. The sample was re-extracted and re-analyzed with similar results.
 - L - The RPD is outside of the control limits.
 - M - Hydrocarbons in the gasoline range are impacting the diesel range result.
 - M1 - Hydrocarbons in the gasoline range (toluene-naphthalene) are present in the sample.
 - N - Hydrocarbons in the lube oil range are impacting the diesel range result.
 - N1 - Hydrocarbons in diesel range are impacting lube oil range results.
 - O - Hydrocarbons indicative of heavier fuels are present in the sample and are impacting the gasoline result.
 - P - The RPD of the detected concentrations between the two columns is greater than 40.
 - Q - Surrogate recovery is outside of the control limits.
 - S - Surrogate recovery data is not available due to the necessary dilution of the sample.
 - T - The sample chromatogram is not similar to a typical _____.
 - U - The analyte was analyzed for, but was not detected above the reported sample quantitation limit.
 - U1 - The practical quantitation limit is elevated due to interferences present in the sample.
 - V - Matrix Spike/Matrix Spike Duplicate recoveries are outside control limits due to matrix effects.
 - W - Matrix Spike/Matrix Spike Duplicate RPD are outside control limits due to matrix effects.
 - X - Sample extract treated with a mercury cleanup procedure.
 - X1 - Sample extract treated with a sulfuric acid/silica gel cleanup procedure.
 - Y - The calibration verification for this analyte exceeded the 20% drift specified in methods 8260 & 8270, and therefore the reported result should be considered an estimate. The overall performance of the calibration verification standard met the acceptance criteria of the method.
 - Z -
- ND - Not Detected at PQL
 PQL - Practical Quantitation Limit
 RPD - Relative Percent Difference





14648 NE 95th Street, Redmond, WA 98052 • (425) 883-3881

April 30, 2020

Jeff Jensen
Kane Environmental, Inc.
4015 13th Avenue West
Seattle, WA 98119

Re: Analytical Data for Project 82302-9.4
Laboratory Reference No. 2004-130

Dear Jeff:

Enclosed are the analytical results and associated quality control data for samples submitted on April 21, 2020.

The standard policy of OnSite Environmental, Inc. is to store your samples for 30 days from the date of receipt. If you require longer storage, please contact the laboratory.

We appreciate the opportunity to be of service to you on this project. If you have any questions concerning the data, or need additional information, please feel free to call me.

Sincerely,

A handwritten signature in black ink, appearing to read "DB", with a long horizontal flourish extending to the right.

David Baumeister
Project Manager

Enclosures



OnSite Environmental, Inc. 14648 NE 95th Street, Redmond, WA 98052 (425) 883-3881

This report pertains to the samples analyzed in accordance with the chain of custody, and is intended only for the use of the individual or company to whom it is addressed.

Date of Report: April 30, 2020
Samples Submitted: April 21, 2020
Laboratory Reference: 2004-130
Project: 82302-9.4

Case Narrative

Samples were collected on April 21, 2020 and received by the laboratory on April 21, 2020. They were maintained at the laboratory at a temperature of 2°C to 6°C.

Please note that any and all soil sample results are reported on a dry-weight basis, unless otherwise noted below.

General QA/QC issues associated with the analytical data enclosed in this laboratory report will be indicated with a reference to a comment or explanation on the Data Qualifier page. More complex and involved QA/QC issues will be discussed in detail below.



Date of Report: April 30, 2020
 Samples Submitted: April 21, 2020
 Laboratory Reference: 2004-130
 Project: 82302-9.4

VOLATILE ORGANICS EPA 8260D
 page 1 of 2

Matrix: Water
 Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW-20:W					
Laboratory ID:	04-130-01					
Dichlorodifluoromethane	ND	0.20	EPA 8260D	4-22-20	4-22-20	
Chloromethane	ND	1.0	EPA 8260D	4-22-20	4-22-20	
Vinyl Chloride	18	0.20	EPA 8260D	4-22-20	4-22-20	
Bromomethane	ND	0.20	EPA 8260D	4-22-20	4-22-20	
Chloroethane	ND	1.0	EPA 8260D	4-22-20	4-22-20	
Trichlorofluoromethane	ND	0.20	EPA 8260D	4-22-20	4-22-20	
1,1-Dichloroethene	ND	0.20	EPA 8260D	4-22-20	4-22-20	
Iodomethane	ND	1.0	EPA 8260D	4-22-20	4-22-20	
Methylene Chloride	ND	1.0	EPA 8260D	4-22-20	4-22-20	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260D	4-22-20	4-22-20	
1,1-Dichloroethane	ND	0.20	EPA 8260D	4-22-20	4-22-20	
2,2-Dichloropropane	ND	0.20	EPA 8260D	4-22-20	4-22-20	
(cis) 1,2-Dichloroethene	0.34	0.20	EPA 8260D	4-22-20	4-22-20	
Bromochloromethane	ND	0.20	EPA 8260D	4-22-20	4-22-20	
Chloroform	ND	0.20	EPA 8260D	4-22-20	4-22-20	
1,1,1-Trichloroethane	ND	0.20	EPA 8260D	4-22-20	4-22-20	
Carbon Tetrachloride	ND	0.20	EPA 8260D	4-22-20	4-22-20	
1,1-Dichloropropene	ND	0.20	EPA 8260D	4-22-20	4-22-20	
1,2-Dichloroethane	ND	0.20	EPA 8260D	4-22-20	4-22-20	
Trichloroethene	ND	0.20	EPA 8260D	4-22-20	4-22-20	
1,2-Dichloropropane	ND	0.20	EPA 8260D	4-22-20	4-22-20	
Dibromomethane	ND	0.20	EPA 8260D	4-22-20	4-22-20	
Bromodichloromethane	ND	0.20	EPA 8260D	4-22-20	4-22-20	
2-Chloroethyl Vinyl Ether	ND	1.0	EPA 8260D	4-22-20	4-22-20	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260D	4-22-20	4-22-20	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260D	4-22-20	4-22-20	



Date of Report: April 30, 2020
 Samples Submitted: April 21, 2020
 Laboratory Reference: 2004-130
 Project: 82302-9.4

VOLATILE ORGANICS EPA 8260D
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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW-20:W					
Laboratory ID:	04-130-01					
1,1,2-Trichloroethane	ND	0.20	EPA 8260D	4-22-20	4-22-20	
Tetrachloroethene	0.23	0.20	EPA 8260D	4-22-20	4-22-20	
1,3-Dichloropropane	ND	0.20	EPA 8260D	4-22-20	4-22-20	
Dibromochloromethane	ND	0.20	EPA 8260D	4-22-20	4-22-20	
1,2-Dibromoethane	ND	0.20	EPA 8260D	4-22-20	4-22-20	
Chlorobenzene	ND	0.20	EPA 8260D	4-22-20	4-22-20	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260D	4-22-20	4-22-20	
Bromoform	ND	1.0	EPA 8260D	4-22-20	4-22-20	
Bromobenzene	ND	0.20	EPA 8260D	4-22-20	4-22-20	
1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260D	4-22-20	4-22-20	
1,2,3-Trichloropropane	ND	0.20	EPA 8260D	4-22-20	4-22-20	
2-Chlorotoluene	ND	0.20	EPA 8260D	4-22-20	4-22-20	
4-Chlorotoluene	ND	0.20	EPA 8260D	4-22-20	4-22-20	
1,3-Dichlorobenzene	ND	0.20	EPA 8260D	4-22-20	4-22-20	
1,4-Dichlorobenzene	ND	0.20	EPA 8260D	4-22-20	4-22-20	
1,2-Dichlorobenzene	ND	0.20	EPA 8260D	4-22-20	4-22-20	
1,2-Dibromo-3-chloropropane	ND	1.0	EPA 8260D	4-22-20	4-22-20	
1,2,4-Trichlorobenzene	ND	0.20	EPA 8260D	4-22-20	4-22-20	
Hexachlorobutadiene	ND	1.0	EPA 8260D	4-22-20	4-22-20	
1,2,3-Trichlorobenzene	ND	0.20	EPA 8260D	4-22-20	4-22-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>96</i>	<i>75-127</i>				
<i>Toluene-d8</i>	<i>97</i>	<i>80-127</i>				
<i>4-Bromofluorobenzene</i>	<i>113</i>	<i>78-125</i>				



Date of Report: April 30, 2020
 Samples Submitted: April 21, 2020
 Laboratory Reference: 2004-130
 Project: 82302-9.4

VOLATILE ORGANICS EPA 8260D
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Matrix: Water
 Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW-45:W					
Laboratory ID:	04-130-02					
Dichlorodifluoromethane	ND	0.20	EPA 8260D	4-22-20	4-22-20	
Chloromethane	ND	1.0	EPA 8260D	4-22-20	4-22-20	
Vinyl Chloride	7.0	0.20	EPA 8260D	4-22-20	4-22-20	
Bromomethane	ND	0.20	EPA 8260D	4-22-20	4-22-20	
Chloroethane	ND	1.0	EPA 8260D	4-22-20	4-22-20	
Trichlorofluoromethane	ND	0.20	EPA 8260D	4-22-20	4-22-20	
1,1-Dichloroethene	ND	0.20	EPA 8260D	4-22-20	4-22-20	
Iodomethane	ND	1.0	EPA 8260D	4-22-20	4-22-20	
Methylene Chloride	ND	1.0	EPA 8260D	4-22-20	4-22-20	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260D	4-22-20	4-22-20	
1,1-Dichloroethane	ND	0.20	EPA 8260D	4-22-20	4-22-20	
2,2-Dichloropropane	ND	0.20	EPA 8260D	4-22-20	4-22-20	
(cis) 1,2-Dichloroethene	0.40	0.20	EPA 8260D	4-22-20	4-22-20	
Bromochloromethane	ND	0.20	EPA 8260D	4-22-20	4-22-20	
Chloroform	ND	0.20	EPA 8260D	4-22-20	4-22-20	
1,1,1-Trichloroethane	ND	0.20	EPA 8260D	4-22-20	4-22-20	
Carbon Tetrachloride	ND	0.20	EPA 8260D	4-22-20	4-22-20	
1,1-Dichloropropene	ND	0.20	EPA 8260D	4-22-20	4-22-20	
1,2-Dichloroethane	ND	0.20	EPA 8260D	4-22-20	4-22-20	
Trichloroethene	ND	0.20	EPA 8260D	4-22-20	4-22-20	
1,2-Dichloropropane	ND	0.20	EPA 8260D	4-22-20	4-22-20	
Dibromomethane	ND	0.20	EPA 8260D	4-22-20	4-22-20	
Bromodichloromethane	ND	0.20	EPA 8260D	4-22-20	4-22-20	
2-Chloroethyl Vinyl Ether	ND	1.0	EPA 8260D	4-22-20	4-22-20	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260D	4-22-20	4-22-20	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260D	4-22-20	4-22-20	



Date of Report: April 30, 2020
 Samples Submitted: April 21, 2020
 Laboratory Reference: 2004-130
 Project: 82302-9.4

VOLATILE ORGANICS EPA 8260D
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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW-45:W					
Laboratory ID:	04-130-02					
1,1,2-Trichloroethane	ND	0.20	EPA 8260D	4-22-20	4-22-20	
Tetrachloroethene	ND	0.20	EPA 8260D	4-22-20	4-22-20	
1,3-Dichloropropane	ND	0.20	EPA 8260D	4-22-20	4-22-20	
Dibromochloromethane	ND	0.20	EPA 8260D	4-22-20	4-22-20	
1,2-Dibromoethane	ND	0.20	EPA 8260D	4-22-20	4-22-20	
Chlorobenzene	ND	0.20	EPA 8260D	4-22-20	4-22-20	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260D	4-22-20	4-22-20	
Bromoform	ND	1.0	EPA 8260D	4-22-20	4-22-20	
Bromobenzene	ND	0.20	EPA 8260D	4-22-20	4-22-20	
1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260D	4-22-20	4-22-20	
1,2,3-Trichloropropane	ND	0.20	EPA 8260D	4-22-20	4-22-20	
2-Chlorotoluene	ND	0.20	EPA 8260D	4-22-20	4-22-20	
4-Chlorotoluene	ND	0.20	EPA 8260D	4-22-20	4-22-20	
1,3-Dichlorobenzene	ND	0.20	EPA 8260D	4-22-20	4-22-20	
1,4-Dichlorobenzene	ND	0.20	EPA 8260D	4-22-20	4-22-20	
1,2-Dichlorobenzene	ND	0.20	EPA 8260D	4-22-20	4-22-20	
1,2-Dibromo-3-chloropropane	ND	1.0	EPA 8260D	4-22-20	4-22-20	
1,2,4-Trichlorobenzene	ND	0.20	EPA 8260D	4-22-20	4-22-20	
Hexachlorobutadiene	ND	1.0	EPA 8260D	4-22-20	4-22-20	
1,2,3-Trichlorobenzene	ND	0.20	EPA 8260D	4-22-20	4-22-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>97</i>	<i>75-127</i>				
<i>Toluene-d8</i>	<i>95</i>	<i>80-127</i>				
<i>4-Bromofluorobenzene</i>	<i>109</i>	<i>78-125</i>				



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Matrix: Water
 Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW-44:W					
Laboratory ID:	04-130-03					
Dichlorodifluoromethane	ND	0.20	EPA 8260D	4-22-20	4-22-20	
Chloromethane	ND	1.0	EPA 8260D	4-22-20	4-22-20	
Vinyl Chloride	32	0.20	EPA 8260D	4-22-20	4-22-20	
Bromomethane	ND	0.20	EPA 8260D	4-22-20	4-22-20	
Chloroethane	ND	1.0	EPA 8260D	4-22-20	4-22-20	
Trichlorofluoromethane	ND	0.20	EPA 8260D	4-22-20	4-22-20	
1,1-Dichloroethene	ND	0.20	EPA 8260D	4-22-20	4-22-20	
Iodomethane	ND	1.0	EPA 8260D	4-22-20	4-22-20	
Methylene Chloride	ND	1.0	EPA 8260D	4-22-20	4-22-20	
(trans) 1,2-Dichloroethene	0.89	0.20	EPA 8260D	4-22-20	4-22-20	
1,1-Dichloroethane	ND	0.20	EPA 8260D	4-22-20	4-22-20	
2,2-Dichloropropane	ND	0.20	EPA 8260D	4-22-20	4-22-20	
(cis) 1,2-Dichloroethene	22	0.20	EPA 8260D	4-22-20	4-22-20	
Bromochloromethane	ND	0.20	EPA 8260D	4-22-20	4-22-20	
Chloroform	ND	0.20	EPA 8260D	4-22-20	4-22-20	
1,1,1-Trichloroethane	ND	0.20	EPA 8260D	4-22-20	4-22-20	
Carbon Tetrachloride	ND	0.20	EPA 8260D	4-22-20	4-22-20	
1,1-Dichloropropene	ND	0.20	EPA 8260D	4-22-20	4-22-20	
1,2-Dichloroethane	ND	0.20	EPA 8260D	4-22-20	4-22-20	
Trichloroethene	ND	0.20	EPA 8260D	4-22-20	4-22-20	
1,2-Dichloropropane	ND	0.20	EPA 8260D	4-22-20	4-22-20	
Dibromomethane	ND	0.20	EPA 8260D	4-22-20	4-22-20	
Bromodichloromethane	ND	0.20	EPA 8260D	4-22-20	4-22-20	
2-Chloroethyl Vinyl Ether	ND	1.0	EPA 8260D	4-22-20	4-22-20	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260D	4-22-20	4-22-20	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260D	4-22-20	4-22-20	



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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW-44:W					
Laboratory ID:	04-130-03					
1,1,2-Trichloroethane	ND	0.20	EPA 8260D	4-22-20	4-22-20	
Tetrachloroethene	ND	0.20	EPA 8260D	4-22-20	4-22-20	
1,3-Dichloropropane	ND	0.20	EPA 8260D	4-22-20	4-22-20	
Dibromochloromethane	ND	0.20	EPA 8260D	4-22-20	4-22-20	
1,2-Dibromoethane	ND	0.20	EPA 8260D	4-22-20	4-22-20	
Chlorobenzene	ND	0.20	EPA 8260D	4-22-20	4-22-20	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260D	4-22-20	4-22-20	
Bromoform	ND	1.0	EPA 8260D	4-22-20	4-22-20	
Bromobenzene	ND	0.20	EPA 8260D	4-22-20	4-22-20	
1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260D	4-22-20	4-22-20	
1,2,3-Trichloropropane	ND	0.20	EPA 8260D	4-22-20	4-22-20	
2-Chlorotoluene	ND	0.20	EPA 8260D	4-22-20	4-22-20	
4-Chlorotoluene	ND	0.20	EPA 8260D	4-22-20	4-22-20	
1,3-Dichlorobenzene	ND	0.20	EPA 8260D	4-22-20	4-22-20	
1,4-Dichlorobenzene	ND	0.20	EPA 8260D	4-22-20	4-22-20	
1,2-Dichlorobenzene	ND	0.20	EPA 8260D	4-22-20	4-22-20	
1,2-Dibromo-3-chloropropane	ND	1.0	EPA 8260D	4-22-20	4-22-20	
1,2,4-Trichlorobenzene	ND	0.20	EPA 8260D	4-22-20	4-22-20	
Hexachlorobutadiene	ND	1.0	EPA 8260D	4-22-20	4-22-20	
1,2,3-Trichlorobenzene	ND	0.20	EPA 8260D	4-22-20	4-22-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>97</i>	<i>75-127</i>				
<i>Toluene-d8</i>	<i>96</i>	<i>80-127</i>				
<i>4-Bromofluorobenzene</i>	<i>110</i>	<i>78-125</i>				



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Matrix: Water
 Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW-12:W					
Laboratory ID:	04-130-04					
Dichlorodifluoromethane	ND	2.0	EPA 8260D	4-22-20	4-22-20	
Chloromethane	ND	10	EPA 8260D	4-22-20	4-22-20	
Vinyl Chloride	0.82	0.20	EPA 8260D/SIM	4-22-20	4-22-20	
Bromomethane	ND	2.0	EPA 8260D	4-22-20	4-22-20	
Chloroethane	ND	10	EPA 8260D	4-22-20	4-22-20	
Trichlorofluoromethane	ND	2.0	EPA 8260D	4-22-20	4-22-20	
1,1-Dichloroethene	ND	2.0	EPA 8260D	4-22-20	4-22-20	
Iodomethane	ND	10	EPA 8260D	4-22-20	4-22-20	
Methylene Chloride	ND	10	EPA 8260D	4-22-20	4-22-20	
(trans) 1,2-Dichloroethene	ND	2.0	EPA 8260D	4-22-20	4-22-20	
1,1-Dichloroethane	ND	2.0	EPA 8260D	4-22-20	4-22-20	
2,2-Dichloropropane	ND	2.0	EPA 8260D	4-22-20	4-22-20	
(cis) 1,2-Dichloroethene	52	2.0	EPA 8260D	4-22-20	4-22-20	
Bromochloromethane	ND	2.0	EPA 8260D	4-22-20	4-22-20	
Chloroform	ND	2.0	EPA 8260D	4-22-20	4-22-20	
1,1,1-Trichloroethane	ND	2.0	EPA 8260D	4-22-20	4-22-20	
Carbon Tetrachloride	ND	2.0	EPA 8260D	4-22-20	4-22-20	
1,1-Dichloropropene	ND	2.0	EPA 8260D	4-22-20	4-22-20	
1,2-Dichloroethane	ND	2.0	EPA 8260D	4-22-20	4-22-20	
Trichloroethene	84	2.0	EPA 8260D	4-22-20	4-22-20	
1,2-Dichloropropane	ND	2.0	EPA 8260D	4-22-20	4-22-20	
Dibromomethane	ND	2.0	EPA 8260D	4-22-20	4-22-20	
Bromodichloromethane	ND	2.0	EPA 8260D	4-22-20	4-22-20	
2-Chloroethyl Vinyl Ether	ND	10	EPA 8260D	4-22-20	4-22-20	
(cis) 1,3-Dichloropropene	ND	2.0	EPA 8260D	4-22-20	4-22-20	
(trans) 1,3-Dichloropropene	ND	2.0	EPA 8260D	4-22-20	4-22-20	



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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW-12:W					
Laboratory ID:	04-130-04					
1,1,2-Trichloroethane	ND	2.0	EPA 8260D	4-22-20	4-22-20	
Tetrachloroethene	330	2.0	EPA 8260D	4-22-20	4-22-20	
1,3-Dichloropropane	ND	2.0	EPA 8260D	4-22-20	4-22-20	
Dibromochloromethane	ND	2.0	EPA 8260D	4-22-20	4-22-20	
1,2-Dibromoethane	ND	2.0	EPA 8260D	4-22-20	4-22-20	
Chlorobenzene	ND	2.0	EPA 8260D	4-22-20	4-22-20	
1,1,1,2-Tetrachloroethane	ND	2.0	EPA 8260D	4-22-20	4-22-20	
Bromoform	ND	10	EPA 8260D	4-22-20	4-22-20	
Bromobenzene	ND	2.0	EPA 8260D	4-22-20	4-22-20	
1,1,2,2-Tetrachloroethane	ND	2.0	EPA 8260D	4-22-20	4-22-20	
1,2,3-Trichloropropane	ND	2.0	EPA 8260D	4-22-20	4-22-20	
2-Chlorotoluene	ND	2.0	EPA 8260D	4-22-20	4-22-20	
4-Chlorotoluene	ND	2.0	EPA 8260D	4-22-20	4-22-20	
1,3-Dichlorobenzene	ND	2.0	EPA 8260D	4-22-20	4-22-20	
1,4-Dichlorobenzene	ND	2.0	EPA 8260D	4-22-20	4-22-20	
1,2-Dichlorobenzene	ND	2.0	EPA 8260D	4-22-20	4-22-20	
1,2-Dibromo-3-chloropropane	ND	10	EPA 8260D	4-22-20	4-22-20	
1,2,4-Trichlorobenzene	ND	2.0	EPA 8260D	4-22-20	4-22-20	
Hexachlorobutadiene	ND	10	EPA 8260D	4-22-20	4-22-20	
1,2,3-Trichlorobenzene	ND	2.0	EPA 8260D	4-22-20	4-22-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>95</i>	<i>75-127</i>				
<i>Toluene-d8</i>	<i>91</i>	<i>80-127</i>				
<i>4-Bromofluorobenzene</i>	<i>106</i>	<i>78-125</i>				



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**VOLATILE ORGANICS EPA 8260D/SIM
 QUALITY CONTROL**

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Matrix: Water

Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0422W1					
Dichlorodifluoromethane	ND	0.20	EPA 8260D	4-22-20	4-22-20	
Chloromethane	ND	1.0	EPA 8260D	4-22-20	4-22-20	
Vinyl Chloride	ND	0.020	EPA 8260D/SIM	4-22-20	4-22-20	
Bromomethane	ND	0.20	EPA 8260D	4-22-20	4-22-20	
Chloroethane	ND	1.0	EPA 8260D	4-22-20	4-22-20	
Trichlorofluoromethane	ND	0.20	EPA 8260D	4-22-20	4-22-20	
1,1-Dichloroethene	ND	0.20	EPA 8260D	4-22-20	4-22-20	
Iodomethane	ND	1.0	EPA 8260D	4-22-20	4-22-20	
Methylene Chloride	ND	1.0	EPA 8260D	4-22-20	4-22-20	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260D	4-22-20	4-22-20	
1,1-Dichloroethane	ND	0.20	EPA 8260D	4-22-20	4-22-20	
2,2-Dichloropropane	ND	0.20	EPA 8260D	4-22-20	4-22-20	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260D	4-22-20	4-22-20	
Bromochloromethane	ND	0.20	EPA 8260D	4-22-20	4-22-20	
Chloroform	ND	0.20	EPA 8260D	4-22-20	4-22-20	
1,1,1-Trichloroethane	ND	0.20	EPA 8260D	4-22-20	4-22-20	
Carbon Tetrachloride	ND	0.20	EPA 8260D	4-22-20	4-22-20	
1,1-Dichloropropene	ND	0.20	EPA 8260D	4-22-20	4-22-20	
1,2-Dichloroethane	ND	0.20	EPA 8260D	4-22-20	4-22-20	
Trichloroethene	ND	0.20	EPA 8260D	4-22-20	4-22-20	
1,2-Dichloropropane	ND	0.20	EPA 8260D	4-22-20	4-22-20	
Dibromomethane	ND	0.20	EPA 8260D	4-22-20	4-22-20	
Bromodichloromethane	ND	0.20	EPA 8260D	4-22-20	4-22-20	
2-Chloroethyl Vinyl Ether	ND	1.0	EPA 8260D	4-22-20	4-22-20	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260D	4-22-20	4-22-20	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260D	4-22-20	4-22-20	



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 QUALITY CONTROL**

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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0422W1					
1,1,2-Trichloroethane	ND	0.20	EPA 8260D	4-22-20	4-22-20	
Tetrachloroethene	ND	0.20	EPA 8260D	4-22-20	4-22-20	
1,3-Dichloropropane	ND	0.20	EPA 8260D	4-22-20	4-22-20	
Dibromochloromethane	ND	0.20	EPA 8260D	4-22-20	4-22-20	
1,2-Dibromoethane	ND	0.20	EPA 8260D	4-22-20	4-22-20	
Chlorobenzene	ND	0.20	EPA 8260D	4-22-20	4-22-20	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260D	4-22-20	4-22-20	
Bromoform	ND	1.0	EPA 8260D	4-22-20	4-22-20	
Bromobenzene	ND	0.20	EPA 8260D	4-22-20	4-22-20	
1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260D	4-22-20	4-22-20	
1,2,3-Trichloropropane	ND	0.20	EPA 8260D	4-22-20	4-22-20	
2-Chlorotoluene	ND	0.20	EPA 8260D	4-22-20	4-22-20	
4-Chlorotoluene	ND	0.20	EPA 8260D	4-22-20	4-22-20	
1,3-Dichlorobenzene	ND	0.20	EPA 8260D	4-22-20	4-22-20	
1,4-Dichlorobenzene	ND	0.20	EPA 8260D	4-22-20	4-22-20	
1,2-Dichlorobenzene	ND	0.20	EPA 8260D	4-22-20	4-22-20	
1,2-Dibromo-3-chloropropane	ND	1.0	EPA 8260D	4-22-20	4-22-20	
1,2,4-Trichlorobenzene	ND	0.20	EPA 8260D	4-22-20	4-22-20	
Hexachlorobutadiene	ND	1.0	EPA 8260D	4-22-20	4-22-20	
1,2,3-Trichlorobenzene	ND	0.20	EPA 8260D	4-22-20	4-22-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>92</i>	<i>75-127</i>				
<i>Toluene-d8</i>	<i>93</i>	<i>80-127</i>				
<i>4-Bromofluorobenzene</i>	<i>109</i>	<i>78-125</i>				



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**VOLATILE ORGANICS EPA 8260D
 QUALITY CONTROL**

Matrix: Water
 Units: ug/L

Analyte	Result		Spike Level		Percent Recovery		Recovery	RPD		Flags
					SB	SBD	Limits	RPD	Limit	
SPIKE BLANKS										
Laboratory ID:	SB0422W1									
	SB	SBD	SB	SBD	SB	SBD				
1,1-Dichloroethene	9.83	9.63	10.0	10.0	98	96	63-130	2	17	
Benzene	9.53	9.14	10.0	10.0	95	91	76-125	4	19	
Trichloroethene	10.3	9.94	10.0	10.0	103	99	76-121	4	18	
Toluene	10.2	9.52	10.0	10.0	102	95	80-124	7	18	
Chlorobenzene	11.0	9.90	10.0	10.0	110	99	75-120	11	19	
<i>Surrogate:</i>										
<i>Dibromofluoromethane</i>					89	90	75-127			
<i>Toluene-d8</i>					94	97	80-127			
<i>4-Bromofluorobenzene</i>					101	97	78-125			



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**TOTAL ORGANIC CARBON
 SM 5310B**

Matrix: Water
 Units: mg/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW-20:W					
Laboratory ID:	04-130-01					
Total Organic Carbon	25	1.0	SM 5310B	4-22-20	4-22-20	
Client ID:	MW-45:W					
Laboratory ID:	04-130-02					
Total Organic Carbon	41	1.0	SM 5310B	4-22-20	4-22-20	
Client ID:	MW-44:W					
Laboratory ID:	04-130-03					
Total Organic Carbon	18	1.0	SM 5310B	4-22-20	4-22-20	
Client ID:	MW-12:W					
Laboratory ID:	04-130-04					
Total Organic Carbon	2.9	1.0	SM 5310B	4-22-20	4-22-20	



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**TOTAL ORGANIC CARBON
 SM 5310B
 QUALITY CONTROL**

Matrix: Water
 Units: mg/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0422W1					
Total Organic Carbon	ND	1.0	SM 5310B	4-22-20	4-22-20	

Analyte	Result	Spike Level	Source Result	Percent Recovery	Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE								
Laboratory ID:	04-109-01							
	ORIG	DUP						
Total Organic Carbon	3.52	3.77	NA	NA	NA	NA	7	20

MATRIX SPIKE

Laboratory ID:	04-109-01							
	MS	MS		MS				
Total Organic Carbon	14.1		10.0	3.52	106	85-131	NA	NA

SPIKE BLANK

Laboratory ID:	SB0422W1							
	SB	SB		SB				
Total Organic Carbon	10.5		10.0	NA	105	88-127	NA	NA



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DISSOLVED IRON
EPA 6010D

Matrix: Water
 Units: ug/L (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW-20:W					
Laboratory ID:	04-130-01					
Iron	2300	56	EPA 6010D	4-21-20	4-22-20	

Client ID:	MW-45:W					
Laboratory ID:	04-130-02					
Iron	2800	56	EPA 6010D	4-21-20	4-22-20	

Client ID:	MW-44:W					
Laboratory ID:	04-130-03					
Iron	4800	56	EPA 6010D	4-21-20	4-22-20	

Client ID:	MW-12:W					
Laboratory ID:	04-130-04					
Iron	5100	56	EPA 6010D	4-21-20	4-22-20	



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**DISSOLVED IRON
 EPA 6010D
 QUALITY CONTROL**

Matrix: Water
 Units: ug/L (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB04221F1					
Iron	ND	56	EPA 6010D	4-21-20	4-22-20	

Analyte	Result	Spike Level	Source Result	Percent Recovery	Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE								
Laboratory ID:	04-109-01							
	ORIG	DUP						
Iron	24900	25300	NA	NA	NA	NA	1	20

MATRIX SPIKES

Laboratory ID:	04-109-01									
	MS	MSD	MS	MSD	MS	MSD				
Iron	123000	125000	100000	100000	24900	99	100	75-125	1	20



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CHLORIDE
SM 4500-Cl E

Matrix: Water
 Units: mg/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW-20:W					
Laboratory ID:	04-130-01					
Chloride	13	2.0	SM 4500-Cl E	4-21-20	4-21-20	

Client ID:	MW-45:W					
Laboratory ID:	04-130-02					
Chloride	16	2.0	SM 4500-Cl E	4-21-20	4-21-20	

Client ID:	MW-44:W					
Laboratory ID:	04-130-03					
Chloride	11	2.0	SM 4500-Cl E	4-21-20	4-21-20	

Client ID:	MW-12:W					
Laboratory ID:	04-130-04					
Chloride	30	2.0	SM 4500-Cl E	4-21-20	4-21-20	



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**CHLORIDE
 SM 4500-CI E
 QUALITY CONTROL**

Matrix: Water
 Units: mg/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0421W1					
Chloride	ND	2.0	SM 4500-CI E	4-21-20	4-21-20	

Analyte	Result	Spike Level	Source Result	Percent Recovery	Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE								
Laboratory ID:	04-109-03							
	ORIG	DUP						
Chloride	ND	ND	NA	NA	NA	NA	17	

MATRIX SPIKE								
Laboratory ID:	04-109-03							
	MS	MS		MS				
Chloride	48.7	50.0	ND	97	80-116	NA	NA	

SPIKE BLANK								
Laboratory ID:	SB0421W1							
	SB	SB		SB				
Chloride	45.3	50.0	NA	91	90-110	NA	NA	



Date of Report: April 30, 2020
 Samples Submitted: April 21, 2020
 Laboratory Reference: 2004-130
 Project: 82302-9.4

SULFATE
ASTM D516-11

Matrix: Water
 Units: mg/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW-20:W					
Laboratory ID:	04-130-01					
Sulfate	ND	5.0	ASTM D516-11	4-24-20	4-24-20	

Client ID:	MW-45:W					
Laboratory ID:	04-130-02					
Sulfate	ND	5.0	ASTM D516-11	4-24-20	4-24-20	

Client ID:	MW-44:W					
Laboratory ID:	04-130-03					
Sulfate	ND	5.0	ASTM D516-11	4-24-20	4-24-20	

Client ID:	MW-12:W					
Laboratory ID:	04-130-04					
Sulfate	21	10	ASTM D516-11	4-24-20	4-24-20	



Date of Report: April 30, 2020
 Samples Submitted: April 21, 2020
 Laboratory Reference: 2004-130
 Project: 82302-9.4

**SULFATE
 ASTM D516-11
 QUALITY CONTROL**

Matrix: Water
 Units: mg/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0424W1					
Sulfate	ND	5.0	ASTM D516-11	4-24-20	4-24-20	

Analyte	Result	Spike Level	Source Result	Percent Recovery	Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE								
Laboratory ID:	04-164-02							
	ORIG	DUP						
Sulfate	ND	ND	NA	NA	NA	NA	10	

MATRIX SPIKE								
Laboratory ID:	04-164-02							
	MS	MS		MS				
Sulfate	12.2	10.0	ND	122	73-134	NA	NA	

SPIKE BLANK								
Laboratory ID:	SB0424W1							
	SB	SB		SB				
Sulfate	9.77	10.0	NA	98	89-113	NA	NA	



Date of Report: April 30, 2020
 Samples Submitted: April 21, 2020
 Laboratory Reference: 2004-130
 Project: 82302-9.4

AMMONIA (as Nitrogen)
SM 4500-NH₃ D

Matrix: Water
 Units: mg/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW-20:W					
Laboratory ID:	04-130-01					
Ammonia	0.59	0.050	SM 4500-NH3 D	4-22-20	4-22-20	
Client ID:	MW-45:W					
Laboratory ID:	04-130-02					
Ammonia	0.87	0.050	SM 4500-NH3 D	4-22-20	4-22-20	
Client ID:	MW-44:W					
Laboratory ID:	04-130-03					
Ammonia	0.62	0.050	SM 4500-NH3 D	4-22-20	4-22-20	
Client ID:	MW-12:W					
Laboratory ID:	04-130-04					
Ammonia	ND	0.050	SM 4500-NH3 D	4-22-20	4-22-20	



Date of Report: April 30, 2020
 Samples Submitted: April 21, 2020
 Laboratory Reference: 2004-130
 Project: 82302-9.4

AMMONIA (as Nitrogen)
SM 4500-NH₃ D
QUALITY CONTROL

Matrix: Water
 Units: mg/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0422W1					
Ammonia	ND	0.050	SM 4500-NH3 D	4-22-20	4-22-20	

Analyte	Result	Spike Level	Source Result	Percent Recovery	Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE								
Laboratory ID:	04-117-01							
	ORIG	DUP						
Ammonia	0.102	0.106	NA	NA	NA	4	12	

MATRIX SPIKE								
Laboratory ID:	04-117-01							
	MS	MS		MS				
Ammonia	4.13	5.00	0.102	81	75-121	NA	NA	

SPIKE BLANK								
Laboratory ID:	SB0422W1							
	SB	SB		SB				
Ammonia	4.74	5.00	NA	95	85-110	NA	NA	



Date of Report: April 30, 2020
 Samples Submitted: April 21, 2020
 Laboratory Reference: 2004-130
 Project: 82302-9.4

**DISSOLVED GASES
 RSK 175**

Matrix: Water
 Units: ug/L (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW-20:W					
Laboratory ID:	04-130-01					
Methane	13000	83	RSK 175	4-29-20	4-29-20	
Ethane	ND	0.22	RSK 175	4-29-20	4-29-20	
Ethene	41	0.29	RSK 175	4-29-20	4-29-20	

Client ID:	MW-45:W					
Laboratory ID:	04-130-02					
Methane	8900	55	RSK 175	4-29-20	4-29-20	
Ethane	ND	0.22	RSK 175	4-29-20	4-29-20	
Ethene	11	0.29	RSK 175	4-29-20	4-29-20	

Client ID:	MW-44:W					
Laboratory ID:	04-130-03					
Methane	8700	55	RSK 175	4-29-20	4-29-20	
Ethane	ND	0.22	RSK 175	4-29-20	4-29-20	
Ethene	7.5	0.29	RSK 175	4-29-20	4-29-20	

Client ID:	MW-12:W					
Laboratory ID:	04-130-04					
Methane	3600	28	RSK 175	4-29-20	4-29-20	
Ethane	ND	0.22	RSK 175	4-29-20	4-29-20	
Ethene	ND	0.29	RSK 175	4-29-20	4-29-20	



Date of Report: April 30, 2020
 Samples Submitted: April 21, 2020
 Laboratory Reference: 2004-130
 Project: 82302-9.4

**DISSOLVED GASES
 RSK 175
 QUALITY CONTROL**

Matrix: Water
 Units: ug/L (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0429W1					
Methane	ND	0.55	RSK 175	4-29-20	4-29-20	
Ethane	ND	0.22	RSK 175	4-29-20	4-29-20	
Ethene	ND	0.29	RSK 175	4-29-20	4-29-20	

Analyte	Result		Spike Level		Percent Recovery		Recovery Limits	RPD	RPD Limit	Flags
SPIKE BLANK										
Laboratory ID:	SB0429W1									
	SB	SBD	SB	SBD	SB	SBD				
Methane	21.7	21.5	22.1	22.1	98	97	75-125	1	25	
Ethane	40.6	39.9	41.6	41.6	98	96	75-125	2	25	
Ethene	41.1	40.6	38.8	38.8	106	105	75-125	1	25	





Data Qualifiers and Abbreviations

- A - Due to a high sample concentration, the amount spiked is insufficient for meaningful MS/MSD recovery data.
 - B - The analyte indicated was also found in the blank sample.
 - C - The duplicate RPD is outside control limits due to high result variability when analyte concentrations are within five times the quantitation limit.
 - E - The value reported exceeds the quantitation range and is an estimate.
 - F - Surrogate recovery data is not available due to the high concentration of coeluting target compounds.
 - H - The analyte indicated is a common laboratory solvent and may have been introduced during sample preparation, and be impacting the sample result.
 - I - Compound recovery is outside of the control limits.
 - J - The value reported was below the practical quantitation limit. The value is an estimate.
 - K - Sample duplicate RPD is outside control limits due to sample inhomogeneity. The sample was re-extracted and re-analyzed with similar results.
 - L - The RPD is outside of the control limits.
 - M - Hydrocarbons in the gasoline range are impacting the diesel range result.
 - M1 - Hydrocarbons in the gasoline range (toluene-naphthalene) are present in the sample.
 - N - Hydrocarbons in the lube oil range are impacting the diesel range result.
 - N1 - Hydrocarbons in diesel range are impacting lube oil range results.
 - O - Hydrocarbons indicative of heavier fuels are present in the sample and are impacting the gasoline result.
 - P - The RPD of the detected concentrations between the two columns is greater than 40.
 - Q - Surrogate recovery is outside of the control limits.
 - S - Surrogate recovery data is not available due to the necessary dilution of the sample.
 - T - The sample chromatogram is not similar to a typical _____.
 - U - The analyte was analyzed for, but was not detected above the reported sample quantitation limit.
 - U1 - The practical quantitation limit is elevated due to interferences present in the sample.
 - V - Matrix Spike/Matrix Spike Duplicate recoveries are outside control limits due to matrix effects.
 - W - Matrix Spike/Matrix Spike Duplicate RPD are outside control limits due to matrix effects.
 - X - Sample extract treated with a mercury cleanup procedure.
 - X1 - Sample extract treated with a sulfuric acid/silica gel cleanup procedure.
 - Y - The calibration verification for this analyte exceeded the 20% drift specified in methods 8260 & 8270, and therefore the reported result should be considered an estimate. The overall performance of the calibration verification standard met the acceptance criteria of the method.
 - Z -
- ND - Not Detected at PQL
 PQL - Practical Quantitation Limit
 RPD - Relative Percent Difference





MA Onsite Environmental Inc.
 Analytical Laboratory Testing Services
 14648 NE 95th Street • Redmond, WA 98052
 Phone: (425) 883-3881 • www.onsite-env.com

Chain of Custody

Turnaround Request (in working days)
 (Check One)

Same Day 1 Day

2 Days 3 Days

Standard (7 Days)

_____ (other)

Laboratory Number: 04-130

Number of Containers	
NWTPH-HCID	
NWTPH-Gx/BTEX	
NWTPH-Gx	
NWTPH-Dx (<input type="checkbox"/> Acid / SG Clean-up)	
Volatiles 8260C	
Halogenated Volatiles 8260C	X
EDB EPA 8011 (Waters Only)	
Semivolatiles 8270D/SIM (with low-level PAHs)	
PAHs 8270D/SIM (low-level)	
PCBs 8082A	
Organochlorine Pesticides 8081B	
Organophosphorus Pesticides 8270D/SIM	
Chlorinated Acid Herbicides 8151A	
Total RCRA Metals	
Total MTCA Metals	
TCLP Metals	
HEM (oil and grease)-1004A	X
TOC	X
dissolved Fe	X
chloride	X
sulfate	X
ammonia-N	X
% Moisture	X

Lab ID	Sample Identification	Date Sampled	Time Sampled	Matrix
1	MW-20:W	4/21/20	0914	GW
2	MW-4S:W	4/21/20	1030	GW
3	MW-44:W	4/21/20	1147	GW
4	MW-12:W	4/21/20	1308	GW

Signature	Company
	Kane Env.

Date	Time
4/21/20	14:05
4/21/20	1405

Comments/Special Instructions
 Lab Filter
 RSK = methane, ethane, ethene
 ↳ low detection limit (3-4µg/L)
 low detection for vinyl chloride

Received	Relinquished	Received	Relinquished	Received	Relinquished	Reviewed/Date

Data Package: Standard Level III Level IV
 Chromatograms with final report Electronic Data Deliverables (EDDs)



14648 NE 95th Street, Redmond, WA 98052 • (425) 883-3881

April 30, 2020

Jeff Jensen
Kane Environmental, Inc.
4015 13th Avenue West
Seattle, WA 98119

Re: Analytical Data for Project 82302-9.4
Laboratory Reference No. 2004-144

Dear Jeff:

Enclosed are the analytical results and associated quality control data for samples submitted on April 22, 2020.

The standard policy of OnSite Environmental, Inc. is to store your samples for 30 days from the date of receipt. If you require longer storage, please contact the laboratory.

We appreciate the opportunity to be of service to you on this project. If you have any questions concerning the data, or need additional information, please feel free to call me.

Sincerely,

A handwritten signature in black ink, appearing to read "DB", with a long horizontal stroke extending to the right.

David Baumeister
Project Manager

Enclosures



OnSite Environmental, Inc. 14648 NE 95th Street, Redmond, WA 98052 (425) 883-3881

This report pertains to the samples analyzed in accordance with the chain of custody, and is intended only for the use of the individual or company to whom it is addressed.

Date of Report: April 30, 2020
Samples Submitted: April 22, 2020
Laboratory Reference: 2004-144
Project: 82302-9.4

Case Narrative

Samples were collected on April 22, 2020 and received by the laboratory on April 22, 2020. They were maintained at the laboratory at a temperature of 2°C to 6°C.

Please note that any and all soil sample results are reported on a dry-weight basis, unless otherwise noted below.

General QA/QC issues associated with the analytical data enclosed in this laboratory report will be indicated with a reference to a comment or explanation on the Data Qualifier page. More complex and involved QA/QC issues will be discussed in detail below.



Date of Report: April 30, 2020
 Samples Submitted: April 22, 2020
 Laboratory Reference: 2004-144
 Project: 82302-9.4

VOLATILE ORGANICS EPA 8260D
 page 1 of 2

Matrix: Water
 Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW-4:W					
Laboratory ID:	04-144-01					
Dichlorodifluoromethane	ND	10	EPA 8260D	4-28-20	4-28-20	
Chloromethane	ND	50	EPA 8260D	4-28-20	4-28-20	
Vinyl Chloride	14	10	EPA 8260D	4-28-20	4-28-20	
Bromomethane	ND	10	EPA 8260D	4-28-20	4-28-20	
Chloroethane	ND	50	EPA 8260D	4-28-20	4-28-20	
Trichlorofluoromethane	ND	10	EPA 8260D	4-28-20	4-28-20	
1,1-Dichloroethene	ND	10	EPA 8260D	4-28-20	4-28-20	
Iodomethane	ND	50	EPA 8260D	4-28-20	4-28-20	
Methylene Chloride	ND	50	EPA 8260D	4-28-20	4-28-20	
(trans) 1,2-Dichloroethene	ND	10	EPA 8260D	4-28-20	4-28-20	
1,1-Dichloroethane	ND	10	EPA 8260D	4-28-20	4-28-20	
2,2-Dichloropropane	ND	10	EPA 8260D	4-28-20	4-28-20	
(cis) 1,2-Dichloroethene	760	10	EPA 8260D	4-28-20	4-28-20	
Bromochloromethane	ND	10	EPA 8260D	4-28-20	4-28-20	
Chloroform	ND	10	EPA 8260D	4-28-20	4-28-20	
1,1,1-Trichloroethane	ND	10	EPA 8260D	4-28-20	4-28-20	
Carbon Tetrachloride	ND	10	EPA 8260D	4-28-20	4-28-20	
1,1-Dichloropropene	ND	10	EPA 8260D	4-28-20	4-28-20	
1,2-Dichloroethane	ND	10	EPA 8260D	4-28-20	4-28-20	
Trichloroethene	210	10	EPA 8260D	4-28-20	4-28-20	
1,2-Dichloropropane	ND	10	EPA 8260D	4-28-20	4-28-20	
Dibromomethane	ND	10	EPA 8260D	4-28-20	4-28-20	
Bromodichloromethane	ND	10	EPA 8260D	4-28-20	4-28-20	
2-Chloroethyl Vinyl Ether	ND	50	EPA 8260D	4-28-20	4-28-20	
(cis) 1,3-Dichloropropene	ND	10	EPA 8260D	4-28-20	4-28-20	
(trans) 1,3-Dichloropropene	ND	10	EPA 8260D	4-28-20	4-28-20	



Date of Report: April 30, 2020
 Samples Submitted: April 22, 2020
 Laboratory Reference: 2004-144
 Project: 82302-9.4

VOLATILE ORGANICS EPA 8260D
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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW-4:W					
Laboratory ID:	04-144-01					
1,1,2-Trichloroethane	ND	10	EPA 8260D	4-28-20	4-28-20	
Tetrachloroethene	1600	10	EPA 8260D	4-28-20	4-28-20	
1,3-Dichloropropane	ND	10	EPA 8260D	4-28-20	4-28-20	
Dibromochloromethane	ND	10	EPA 8260D	4-28-20	4-28-20	
1,2-Dibromoethane	ND	10	EPA 8260D	4-28-20	4-28-20	
Chlorobenzene	ND	10	EPA 8260D	4-28-20	4-28-20	
1,1,1,2-Tetrachloroethane	ND	10	EPA 8260D	4-28-20	4-28-20	
Bromoform	ND	50	EPA 8260D	4-28-20	4-28-20	
Bromobenzene	ND	10	EPA 8260D	4-28-20	4-28-20	
1,1,2,2-Tetrachloroethane	ND	10	EPA 8260D	4-28-20	4-28-20	
1,2,3-Trichloropropane	ND	10	EPA 8260D	4-28-20	4-28-20	
2-Chlorotoluene	ND	10	EPA 8260D	4-28-20	4-28-20	
4-Chlorotoluene	ND	10	EPA 8260D	4-28-20	4-28-20	
1,3-Dichlorobenzene	ND	10	EPA 8260D	4-28-20	4-28-20	
1,4-Dichlorobenzene	ND	10	EPA 8260D	4-28-20	4-28-20	
1,2-Dichlorobenzene	ND	10	EPA 8260D	4-28-20	4-28-20	
1,2-Dibromo-3-chloropropane	ND	50	EPA 8260D	4-28-20	4-28-20	
1,2,4-Trichlorobenzene	ND	10	EPA 8260D	4-28-20	4-28-20	
Hexachlorobutadiene	ND	50	EPA 8260D	4-28-20	4-28-20	
1,2,3-Trichlorobenzene	ND	50	EPA 8260D	4-28-20	4-28-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>95</i>	<i>75-127</i>				
<i>Toluene-d8</i>	<i>98</i>	<i>80-127</i>				
<i>4-Bromofluorobenzene</i>	<i>98</i>	<i>78-125</i>				



Date of Report: April 30, 2020
 Samples Submitted: April 22, 2020
 Laboratory Reference: 2004-144
 Project: 82302-9.4

VOLATILE ORGANICS EPA 8260D/SIM
 page 1 of 2

Matrix: Water
 Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW-35:W					
Laboratory ID:	04-144-02					
Dichlorodifluoromethane	ND	0.20	EPA 8260D	4-28-20	4-28-20	
Chloromethane	ND	1.0	EPA 8260D	4-28-20	4-28-20	
Vinyl Chloride	ND	0.020	EPA 8260D/SIM	4-28-20	4-28-20	
Bromomethane	ND	0.20	EPA 8260D	4-28-20	4-28-20	
Chloroethane	ND	1.0	EPA 8260D	4-28-20	4-28-20	
Trichlorofluoromethane	ND	0.20	EPA 8260D	4-28-20	4-28-20	
1,1-Dichloroethene	ND	0.20	EPA 8260D	4-28-20	4-28-20	
Iodomethane	ND	1.0	EPA 8260D	4-28-20	4-28-20	
Methylene Chloride	ND	1.0	EPA 8260D	4-28-20	4-28-20	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260D	4-28-20	4-28-20	
1,1-Dichloroethane	ND	0.20	EPA 8260D	4-28-20	4-28-20	
2,2-Dichloropropane	ND	0.20	EPA 8260D	4-28-20	4-28-20	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260D	4-28-20	4-28-20	
Bromochloromethane	ND	0.20	EPA 8260D	4-28-20	4-28-20	
Chloroform	ND	0.20	EPA 8260D	4-28-20	4-28-20	
1,1,1-Trichloroethane	ND	0.20	EPA 8260D	4-28-20	4-28-20	
Carbon Tetrachloride	ND	0.20	EPA 8260D	4-28-20	4-28-20	
1,1-Dichloropropene	ND	0.20	EPA 8260D	4-28-20	4-28-20	
1,2-Dichloroethane	ND	0.20	EPA 8260D	4-28-20	4-28-20	
Trichloroethene	ND	0.20	EPA 8260D	4-28-20	4-28-20	
1,2-Dichloropropane	ND	0.20	EPA 8260D	4-28-20	4-28-20	
Dibromomethane	ND	0.20	EPA 8260D	4-28-20	4-28-20	
Bromodichloromethane	ND	0.20	EPA 8260D	4-28-20	4-28-20	
2-Chloroethyl Vinyl Ether	ND	1.0	EPA 8260D	4-28-20	4-28-20	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260D	4-28-20	4-28-20	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260D	4-28-20	4-28-20	



Date of Report: April 30, 2020
 Samples Submitted: April 22, 2020
 Laboratory Reference: 2004-144
 Project: 82302-9.4

VOLATILE ORGANICS EPA 8260D/SIM
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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW-35:W					
Laboratory ID:	04-144-02					
1,1,2-Trichloroethane	ND	0.20	EPA 8260D	4-28-20	4-28-20	
Tetrachloroethene	2.1	0.20	EPA 8260D	4-28-20	4-28-20	
1,3-Dichloropropane	ND	0.20	EPA 8260D	4-28-20	4-28-20	
Dibromochloromethane	ND	0.20	EPA 8260D	4-28-20	4-28-20	
1,2-Dibromoethane	ND	0.20	EPA 8260D	4-28-20	4-28-20	
Chlorobenzene	ND	0.20	EPA 8260D	4-28-20	4-28-20	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260D	4-28-20	4-28-20	
Bromoform	ND	1.0	EPA 8260D	4-28-20	4-28-20	
Bromobenzene	ND	0.20	EPA 8260D	4-28-20	4-28-20	
1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260D	4-28-20	4-28-20	
1,2,3-Trichloropropane	ND	0.20	EPA 8260D	4-28-20	4-28-20	
2-Chlorotoluene	ND	0.20	EPA 8260D	4-28-20	4-28-20	
4-Chlorotoluene	ND	0.20	EPA 8260D	4-28-20	4-28-20	
1,3-Dichlorobenzene	ND	0.20	EPA 8260D	4-28-20	4-28-20	
1,4-Dichlorobenzene	ND	0.20	EPA 8260D	4-28-20	4-28-20	
1,2-Dichlorobenzene	ND	0.20	EPA 8260D	4-28-20	4-28-20	
1,2-Dibromo-3-chloropropane	ND	1.0	EPA 8260D	4-28-20	4-28-20	
1,2,4-Trichlorobenzene	ND	0.20	EPA 8260D	4-28-20	4-28-20	
Hexachlorobutadiene	ND	1.0	EPA 8260D	4-28-20	4-28-20	
1,2,3-Trichlorobenzene	ND	1.0	EPA 8260D	4-28-20	4-28-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>92</i>	<i>75-127</i>				
<i>Toluene-d8</i>	<i>102</i>	<i>80-127</i>				
<i>4-Bromofluorobenzene</i>	<i>103</i>	<i>78-125</i>				



Date of Report: April 30, 2020
 Samples Submitted: April 22, 2020
 Laboratory Reference: 2004-144
 Project: 82302-9.4

VOLATILE ORGANICS EPA 8260D/SIM
QUALITY CONTROL
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Matrix: Water
 Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0228W1					
Dichlorodifluoromethane	ND	0.20	EPA 8260D	4-28-20	4-28-20	
Chloromethane	ND	1.0	EPA 8260D	4-28-20	4-28-20	
Vinyl Chloride	ND	0.020	EPA 8260D/SIM	4-28-20	4-28-20	
Bromomethane	ND	0.20	EPA 8260D	4-28-20	4-28-20	
Chloroethane	ND	1.0	EPA 8260D	4-28-20	4-28-20	
Trichlorofluoromethane	ND	0.20	EPA 8260D	4-28-20	4-28-20	
1,1-Dichloroethene	ND	0.20	EPA 8260D	4-28-20	4-28-20	
Iodomethane	ND	1.0	EPA 8260D	4-28-20	4-28-20	
Methylene Chloride	ND	1.0	EPA 8260D	4-28-20	4-28-20	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260D	4-28-20	4-28-20	
1,1-Dichloroethane	ND	0.20	EPA 8260D	4-28-20	4-28-20	
2,2-Dichloropropane	ND	0.20	EPA 8260D	4-28-20	4-28-20	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260D	4-28-20	4-28-20	
Bromochloromethane	ND	0.20	EPA 8260D	4-28-20	4-28-20	
Chloroform	ND	0.20	EPA 8260D	4-28-20	4-28-20	
1,1,1-Trichloroethane	ND	0.20	EPA 8260D	4-28-20	4-28-20	
Carbon Tetrachloride	ND	0.20	EPA 8260D	4-28-20	4-28-20	
1,1-Dichloropropene	ND	0.20	EPA 8260D	4-28-20	4-28-20	
1,2-Dichloroethane	ND	0.20	EPA 8260D	4-28-20	4-28-20	
Trichloroethene	ND	0.20	EPA 8260D	4-28-20	4-28-20	
1,2-Dichloropropane	ND	0.20	EPA 8260D	4-28-20	4-28-20	
Dibromomethane	ND	0.20	EPA 8260D	4-28-20	4-28-20	
Bromodichloromethane	ND	0.20	EPA 8260D	4-28-20	4-28-20	
2-Chloroethyl Vinyl Ether	ND	1.0	EPA 8260D	4-28-20	4-28-20	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260D	4-28-20	4-28-20	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260D	4-28-20	4-28-20	



Date of Report: April 30, 2020
 Samples Submitted: April 22, 2020
 Laboratory Reference: 2004-144
 Project: 82302-9.4

**VOLATILE ORGANICS EPA 8260D/SIM
 QUALITY CONTROL**

page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0228W1					
1,1,2-Trichloroethane	ND	0.20	EPA 8260D	4-28-20	4-28-20	
Tetrachloroethene	ND	0.20	EPA 8260D	4-28-20	4-28-20	
1,3-Dichloropropane	ND	0.20	EPA 8260D	4-28-20	4-28-20	
Dibromochloromethane	ND	0.20	EPA 8260D	4-28-20	4-28-20	
1,2-Dibromoethane	ND	0.20	EPA 8260D	4-28-20	4-28-20	
Chlorobenzene	ND	0.20	EPA 8260D	4-28-20	4-28-20	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260D	4-28-20	4-28-20	
Bromoform	ND	1.0	EPA 8260D	4-28-20	4-28-20	
Bromobenzene	ND	0.20	EPA 8260D	4-28-20	4-28-20	
1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260D	4-28-20	4-28-20	
1,2,3-Trichloropropane	ND	0.20	EPA 8260D	4-28-20	4-28-20	
2-Chlorotoluene	ND	0.20	EPA 8260D	4-28-20	4-28-20	
4-Chlorotoluene	ND	0.20	EPA 8260D	4-28-20	4-28-20	
1,3-Dichlorobenzene	ND	0.20	EPA 8260D	4-28-20	4-28-20	
1,4-Dichlorobenzene	ND	0.20	EPA 8260D	4-28-20	4-28-20	
1,2-Dichlorobenzene	ND	0.20	EPA 8260D	4-28-20	4-28-20	
1,2-Dibromo-3-chloropropane	ND	1.0	EPA 8260D	4-28-20	4-28-20	
1,2,4-Trichlorobenzene	ND	0.20	EPA 8260D	4-28-20	4-28-20	
Hexachlorobutadiene	ND	1.0	EPA 8260D	4-28-20	4-28-20	
1,2,3-Trichlorobenzene	ND	1.0	EPA 8260D	4-28-20	4-28-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>97</i>	<i>75-127</i>				
<i>Toluene-d8</i>	<i>95</i>	<i>80-127</i>				
<i>4-Bromofluorobenzene</i>	<i>102</i>	<i>78-125</i>				



Date of Report: April 30, 2020
 Samples Submitted: April 22, 2020
 Laboratory Reference: 2004-144
 Project: 82302-9.4

**VOLATILE ORGANICS EPA 8260D
 QUALITY CONTROL**

Matrix: Water
 Units: ug/L

Analyte	Result		Spike Level		Percent Recovery		Recovery	RPD	RPD	Flags
					Recovery	Limits	RPD	Limit		
SPIKE BLANKS										
Laboratory ID:	SB0428W1									
	SB	SBD	SB	SBD	SB	SBD				
1,1-Dichloroethene	10.5	9.67	10.0	10.0	105	97	63-130	8	17	
Benzene	10.9	10.3	10.0	10.0	109	103	76-125	6	19	
Trichloroethene	11.6	11.3	10.0	10.0	116	113	76-121	3	18	
Toluene	10.9	10.7	10.0	10.0	109	107	80-124	2	18	
Chlorobenzene	11.5	11.1	10.0	10.0	115	111	75-120	4	19	
<i>Surrogate:</i>										
Dibromofluoromethane					95	94	75-127			
Toluene-d8					97	99	80-127			
4-Bromofluorobenzene					95	95	78-125			



Date of Report: April 30, 2020
 Samples Submitted: April 22, 2020
 Laboratory Reference: 2004-144
 Project: 82302-9.4

**TOTAL ORGANIC CARBON
 SM 5310B**

Matrix: Water
 Units: mg/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW-4:W					
Laboratory ID:	04-144-01					
Total Organic Carbon	1.6	1.0	SM 5310B	4-22-20	4-22-20	

Client ID:	MW-35:W					
Laboratory ID:	04-144-02					
Total Organic Carbon	1.1	1.0	SM 5310B	4-22-20	4-22-20	



Date of Report: April 30, 2020
 Samples Submitted: April 22, 2020
 Laboratory Reference: 2004-144
 Project: 82302-9.4

**TOTAL ORGANIC CARBON
 SM 5310B
 QUALITY CONTROL**

Matrix: Water
 Units: mg/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0422W1					
Total Organic Carbon	ND	1.0	SM 5310B	4-22-20	4-22-20	

Analyte	Result	Spike Level	Source Result	Percent Recovery	Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE								
Laboratory ID:	04-109-01							
	ORIG	DUP						
Total Organic Carbon	3.52	3.77	NA	NA	NA	7	20	

MATRIX SPIKE

Laboratory ID:	04-109-01							
	MS	MS		MS				
Total Organic Carbon	14.1	10.0	3.52	106	85-131	NA	NA	

SPIKE BLANK

Laboratory ID:	SB0422W1							
	SB	SB		SB				
Total Organic Carbon	10.5	10.0	NA	105	88-127	NA	NA	



Date of Report: April 30, 2020
 Samples Submitted: April 22, 2020
 Laboratory Reference: 2004-144
 Project: 82302-9.4

DISSOLVED IRON
EPA 6010D

Matrix: Water
 Units: ug/L (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW-4:W					
Laboratory ID:	04-144-01					
Iron	1300	56	EPA 6010D	4-22-20	4-29-20	

Client ID:	MW-35:W					
Laboratory ID:	04-144-02					
Iron	ND	56	EPA 6010D	4-22-20	4-29-20	



Date of Report: April 30, 2020
 Samples Submitted: April 22, 2020
 Laboratory Reference: 2004-144
 Project: 82302-9.4

**DISSOLVED IRON
 EPA 6010D
 QUALITY CONTROL**

Matrix: Water
 Units: ug/L (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0422F1					
Iron	ND	56	EPA 6010D	4-22-20	4-29-20	

Analyte	Result	Spike Level	Source Result	Percent Recovery	Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE								
Laboratory ID:	04-132-02							
	ORIG	DUP						
Iron	ND	ND	NA	NA	NA	NA	20	

MATRIX SPIKES

Laboratory ID:	04-132-02									
	MS	MSD	MS	MSD		MS	MSD			
Iron	22900	22600	22200	22200	ND	103	102	75-125	1	20



Date of Report: April 30, 2020
Samples Submitted: April 22, 2020
Laboratory Reference: 2004-144
Project: 82302-9.4

CHLORIDE
SM 4500-CI E

Matrix: Water
Units: mg/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW-4:W					
Laboratory ID:	04-144-01					
Chloride	13	2.0	SM 4500-CI E	4-24-20	4-24-20	

Client ID:	MW-35:W					
Laboratory ID:	04-144-02					
Chloride	14	2.0	SM 4500-CI E	4-24-20	4-24-20	



Date of Report: April 30, 2020
 Samples Submitted: April 22, 2020
 Laboratory Reference: 2004-144
 Project: 82302-9.4

**CHLORIDE
 SM 4500-Cl E
 QUALITY CONTROL**

Matrix: Water
 Units: mg/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0424W1					
Chloride	ND	2.0	SM 4500-Cl E	4-24-20	4-24-20	

Analyte	Result	Spike Level	Source Result	Percent Recovery	Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE								
Laboratory ID:	04-165-01							
	ORIG	DUP						
Chloride	4.43	4.07	NA	NA	NA	8	17	

MATRIX SPIKE

Laboratory ID:	04-165-01							
	MS	MS		MS				
Chloride	55.0	50.0	4.43	101	80-116	NA	NA	

SPIKE BLANK

Laboratory ID:	SB0424W1							
	SB	SB		SB				
Chloride	47.7	50.0	NA	95	90-110	NA	NA	



Date of Report: April 30, 2020
Samples Submitted: April 22, 2020
Laboratory Reference: 2004-144
Project: 82302-9.4

SULFATE
ASTM D516-11

Matrix: Water
Units: mg/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW-4:W					
Laboratory ID:	04-144-01					
Sulfate	12	5.0	ASTM D516-11	4-24-20	4-24-20	

Client ID:	MW-35:W					
Laboratory ID:	04-144-02					
Sulfate	14	5.0	ASTM D516-11	4-24-20	4-24-20	



Date of Report: April 30, 2020
 Samples Submitted: April 22, 2020
 Laboratory Reference: 2004-144
 Project: 82302-9.4

**SULFATE
 ASTM D516-11
 QUALITY CONTROL**

Matrix: Water
 Units: mg/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0424W1					
Sulfate	ND	5.0	ASTM D516-11	4-24-20	4-24-20	

Analyte	Result	Spike Level	Source Result	Percent Recovery	Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE								
Laboratory ID:	04-164-02							
	ORIG	DUP						
Sulfate	ND	ND	NA	NA	NA	NA	10	

MATRIX SPIKE

Laboratory ID:	04-164-02							
	MS	MS		MS				
Sulfate	12.2	10.0	ND	122	73-134	NA	NA	

SPIKE BLANK

Laboratory ID:	SB0424W1							
	SB	SB		SB				
Sulfate	9.77	10.0	NA	98	89-113	NA	NA	



Date of Report: April 30, 2020
 Samples Submitted: April 22, 2020
 Laboratory Reference: 2004-144
 Project: 82302-9.4

AMMONIA (as Nitrogen)
SM 4500-NH₃ D

Matrix: Water
 Units: mg/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW-4:W					
Laboratory ID:	04-144-01					
Ammonia	ND	0.050	SM 4500-NH3 D	4-28-20	4-28-20	

Client ID:	MW-35:W					
Laboratory ID:	04-144-02					
Ammonia	ND	0.050	SM 4500-NH3 D	4-28-20	4-28-20	



Date of Report: April 30, 2020
 Samples Submitted: April 22, 2020
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 Project: 82302-9.4

AMMONIA (as Nitrogen)
SM 4500-NH₃ D
QUALITY CONTROL

Matrix: Water
 Units: mg/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0428W1					
Ammonia	ND	0.050	SM 4500-NH3 D	4-28-20	4-28-20	

Analyte	Result	Spike Level	Source Result	Percent Recovery	Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE								
Laboratory ID:	04-144-01							
	ORIG	DUP						
Ammonia	ND	ND	NA	NA	NA	NA	12	

MATRIX SPIKE								
Laboratory ID:	04-144-01							
	MS	MS		MS				
Ammonia	4.98	5.00	ND	100	75-121	NA	NA	

SPIKE BLANK								
Laboratory ID:	SB0428W1							
	SB	SB		SB				
Ammonia	5.02	5.00	NA	100	85-110	NA	NA	



Date of Report: April 30, 2020
 Samples Submitted: April 22, 2020
 Laboratory Reference: 2004-144
 Project: 82302-9.4

**DISSOLVED GASES
 RSK 175**

Matrix: Water
 Units: ug/L (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW-4:W					
Laboratory ID:	04-144-01					
Methane	8300	55	RSK 175	4-29-20	4-29-20	
Ethane	ND	0.22	RSK 175	4-29-20	4-29-20	
Ethene	ND	0.29	RSK 175	4-29-20	4-29-20	

Client ID:	MW-35:W					
Laboratory ID:	04-144-02					
Methane	43	0.55	RSK 175	4-29-20	4-29-20	
Ethane	ND	0.22	RSK 175	4-29-20	4-29-20	
Ethene	ND	0.29	RSK 175	4-29-20	4-29-20	



Date of Report: April 30, 2020
 Samples Submitted: April 22, 2020
 Laboratory Reference: 2004-144
 Project: 82302-9.4

**DISSOLVED GASES
 RSK 175
 QUALITY CONTROL**

Matrix: Water
 Units: ug/L (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0429W1					
Methane	ND	0.55	RSK 175	4-29-20	4-29-20	
Ethane	ND	0.22	RSK 175	4-29-20	4-29-20	
Ethene	ND	0.29	RSK 175	4-29-20	4-29-20	

Analyte	Result		Spike Level		Percent Recovery		Recovery Limits	RPD	RPD Limit	Flags
SPIKE BLANK										
Laboratory ID:	SB0429W1									
	SB	SBD	SB	SBD	SB	SBD				
Methane	21.7	21.5	22.1	22.1	98	97	75-125	1	25	
Ethane	40.6	39.9	41.6	41.6	98	96	75-125	2	25	
Ethene	41.1	40.6	38.8	38.8	106	105	75-125	1	25	





Data Qualifiers and Abbreviations

- A - Due to a high sample concentration, the amount spiked is insufficient for meaningful MS/MSD recovery data.
 - B - The analyte indicated was also found in the blank sample.
 - C - The duplicate RPD is outside control limits due to high result variability when analyte concentrations are within five times the quantitation limit.
 - E - The value reported exceeds the quantitation range and is an estimate.
 - F - Surrogate recovery data is not available due to the high concentration of coeluting target compounds.
 - H - The analyte indicated is a common laboratory solvent and may have been introduced during sample preparation, and be impacting the sample result.
 - I - Compound recovery is outside of the control limits.
 - J - The value reported was below the practical quantitation limit. The value is an estimate.
 - K - Sample duplicate RPD is outside control limits due to sample inhomogeneity. The sample was re-extracted and re-analyzed with similar results.
 - L - The RPD is outside of the control limits.
 - M - Hydrocarbons in the gasoline range are impacting the diesel range result.
 - M1 - Hydrocarbons in the gasoline range (toluene-naphthalene) are present in the sample.
 - N - Hydrocarbons in the lube oil range are impacting the diesel range result.
 - N1 - Hydrocarbons in diesel range are impacting lube oil range results.
 - O - Hydrocarbons indicative of heavier fuels are present in the sample and are impacting the gasoline result.
 - P - The RPD of the detected concentrations between the two columns is greater than 40.
 - Q - Surrogate recovery is outside of the control limits.
 - S - Surrogate recovery data is not available due to the necessary dilution of the sample.
 - T - The sample chromatogram is not similar to a typical _____.
 - U - The analyte was analyzed for, but was not detected above the reported sample quantitation limit.
 - U1 - The practical quantitation limit is elevated due to interferences present in the sample.
 - V - Matrix Spike/Matrix Spike Duplicate recoveries are outside control limits due to matrix effects.
 - W - Matrix Spike/Matrix Spike Duplicate RPD are outside control limits due to matrix effects.
 - X - Sample extract treated with a mercury cleanup procedure.
 - X1 - Sample extract treated with a sulfuric acid/silica gel cleanup procedure.
 - Y - The calibration verification for this analyte exceeded the 20% drift specified in methods 8260 & 8270, and therefore the reported result should be considered an estimate. The overall performance of the calibration verification standard met the acceptance criteria of the method.
 - Z -
- ND - Not Detected at PQL
 PQL - Practical Quantitation Limit
 RPD - Relative Percent Difference





MA Onsite Environmental Inc.
 Analytical Laboratory Testing Services
 14648 NE 95th Street • Redmond, WA 98052
 Phone: (425) 883-3881 • www.onsite-env.com

Chain of Custody

Turnaround Request
 (in working days)
 (Check One)

Same Day 1 Day

2 Days 3 Days

Standard (7 Days)

_____ (other)

Laboratory Number: **04-144**

Company: Kane Environmental
 Project Number: 83302-9.4
 Project Name: BSCSS
 Project Manager: Jeff Jensen
 Sampled by: Mike Espinoza

Lab ID	Sample Identification	Date Sampled	Time Sampled	Matrix	Number of Containers
1	MW-4:W	4/24/20	09:30	GW	9
2	MW-35:W	4/22/20	10:30	GW	9

Lab ID	Sample Identification	Date Sampled	Time Sampled	Matrix	Number of Containers	NWTPH-HCID	NWTPH-Gx/BTEX	NWTPH-Gx	NWTPH-Dx (<input type="checkbox"/> Acid / SG Clean-up)	Volatiles 8260C	Halogenated Volatiles 8260C	EDB EPA 8011 (Waters Only)	Semivolatiles 8270D/SIM (with low-level PAHs)	PAHs 8270D/SIM (low-level)	PCBs 8082A	Organochlorine Pesticides 8081B	Organophosphorus Pesticides 8270D/SIM	Chlorinated Acid Herbicides 8151A	Total RCRA Metals	Total MTCA Metals	TCLP Metals	HEM (oil and grease) 1064A	TOC	dissolved Fe	chloride	sulfate	Ammonia	% Moisture	RSK
1	MW-4:W	4/24/20	09:30	GW	9						X											X		X	X	X	X	X	X
2	MW-35:W	4/22/20	10:30	GW	9						X											X		X	X	X	X	X	X

Signature	Company	Date	Time	Comments/Special Instructions
	Kane Env.	4/22/20	12:17	Lab Filter RSK = methane, ethane, ethene ↳ low detection limits (3-4 µg/l) low detection limit for vinyl chloride

Relinquished Received Relinquished Received Relinquished Received Relinquished Received

Reviewed/Date _____ Reviewed/Date _____

Data Package: Standard Level III Level IV

Chromatograms with final report Electronic Data Deliverables (EDDs)



14648 NE 95th Street, Redmond, WA 98052 • (425) 883-3881

May 1, 2020

Jeff Jensen
Kane Environmental, Inc.
4015 13th Avenue West
Seattle, WA 98119

Re: Analytical Data for Project 82302-9.4
Laboratory Reference No. 2004-165

Dear Jeff:

Enclosed are the analytical results and associated quality control data for samples submitted on April 23, 2020.

The standard policy of OnSite Environmental, Inc. is to store your samples for 30 days from the date of receipt. If you require longer storage, please contact the laboratory.

We appreciate the opportunity to be of service to you on this project. If you have any questions concerning the data, or need additional information, please feel free to call me.

Sincerely,

A handwritten signature in black ink, appearing to read "DB", with a long horizontal flourish extending to the right.

David Baumeister
Project Manager

Enclosures



OnSite Environmental, Inc. 14648 NE 95th Street, Redmond, WA 98052 (425) 883-3881

This report pertains to the samples analyzed in accordance with the chain of custody, and is intended only for the use of the individual or company to whom it is addressed.

Date of Report: May 1, 2020
Samples Submitted: April 23, 2020
Laboratory Reference: 2004-165
Project: 82302-9.4

Case Narrative

Samples were collected on April 23, 2020 and received by the laboratory on April 23, 2020. They were maintained at the laboratory at a temperature of 2°C to 6°C.

Please note that any and all soil sample results are reported on a dry-weight basis, unless otherwise noted below.

General QA/QC issues associated with the analytical data enclosed in this laboratory report will be indicated with a reference to a comment or explanation on the Data Qualifier page. More complex and involved QA/QC issues will be discussed in detail below.



Date of Report: May 1, 2020
 Samples Submitted: April 23, 2020
 Laboratory Reference: 2004-165
 Project: 82302-9.4

VOLATILE ORGANICS EPA 8260D/SIM
 page 1 of 2

Matrix: Water
 Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	S-MW-1:W					
Laboratory ID:	04-165-01					
Dichlorodifluoromethane	0.37	0.20	EPA 8260D	4-29-20	4-29-20	
Chloromethane	ND	1.0	EPA 8260D	4-29-20	4-29-20	
Vinyl Chloride	ND	0.020	EPA 8260D/SIM	4-29-20	4-29-20	
Bromomethane	ND	0.20	EPA 8260D	4-29-20	4-29-20	
Chloroethane	ND	1.0	EPA 8260D	4-29-20	4-29-20	
Trichlorofluoromethane	ND	0.20	EPA 8260D	4-29-20	4-29-20	
1,1-Dichloroethene	ND	0.20	EPA 8260D	4-29-20	4-29-20	
Iodomethane	ND	1.5	EPA 8260D	4-29-20	4-29-20	
Methylene Chloride	ND	1.0	EPA 8260D	4-29-20	4-29-20	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260D	4-29-20	4-29-20	
1,1-Dichloroethane	ND	0.20	EPA 8260D	4-29-20	4-29-20	
2,2-Dichloropropane	ND	0.20	EPA 8260D	4-29-20	4-29-20	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260D	4-29-20	4-29-20	
Bromochloromethane	ND	0.20	EPA 8260D	4-29-20	4-29-20	
Chloroform	0.24	0.20	EPA 8260D	4-29-20	4-29-20	
1,1,1-Trichloroethane	ND	0.20	EPA 8260D	4-29-20	4-29-20	
Carbon Tetrachloride	ND	0.20	EPA 8260D	4-29-20	4-29-20	
1,1-Dichloropropene	ND	0.20	EPA 8260D	4-29-20	4-29-20	
1,2-Dichloroethane	ND	0.20	EPA 8260D	4-29-20	4-29-20	
Trichloroethene	ND	0.20	EPA 8260D	4-29-20	4-29-20	
1,2-Dichloropropane	ND	0.20	EPA 8260D	4-29-20	4-29-20	
Dibromomethane	ND	0.20	EPA 8260D	4-29-20	4-29-20	
Bromodichloromethane	ND	0.20	EPA 8260D	4-29-20	4-29-20	
2-Chloroethyl Vinyl Ether	ND	1.4	EPA 8260D	4-29-20	4-29-20	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260D	4-29-20	4-29-20	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260D	4-29-20	4-29-20	



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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	S-MW-1:W					
Laboratory ID:	04-165-01					
1,1,2-Trichloroethane	ND	0.20	EPA 8260D	4-29-20	4-29-20	
Tetrachloroethene	3.5	0.20	EPA 8260D	4-29-20	4-29-20	
1,3-Dichloropropane	ND	0.20	EPA 8260D	4-29-20	4-29-20	
Dibromochloromethane	ND	0.20	EPA 8260D	4-29-20	4-29-20	
1,2-Dibromoethane	ND	0.20	EPA 8260D	4-29-20	4-29-20	
Chlorobenzene	ND	0.20	EPA 8260D	4-29-20	4-29-20	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260D	4-29-20	4-29-20	
Bromoform	ND	1.0	EPA 8260D	4-29-20	4-29-20	
Bromobenzene	ND	0.20	EPA 8260D	4-29-20	4-29-20	
1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260D	4-29-20	4-29-20	
1,2,3-Trichloropropane	ND	0.20	EPA 8260D	4-29-20	4-29-20	
2-Chlorotoluene	ND	0.20	EPA 8260D	4-29-20	4-29-20	
4-Chlorotoluene	ND	0.20	EPA 8260D	4-29-20	4-29-20	
1,3-Dichlorobenzene	ND	0.20	EPA 8260D	4-29-20	4-29-20	
1,4-Dichlorobenzene	ND	0.20	EPA 8260D	4-29-20	4-29-20	
1,2-Dichlorobenzene	ND	0.20	EPA 8260D	4-29-20	4-29-20	
1,2-Dibromo-3-chloropropane	ND	1.3	EPA 8260D	4-29-20	4-29-20	
1,2,4-Trichlorobenzene	ND	0.20	EPA 8260D	4-29-20	4-29-20	
Hexachlorobutadiene	ND	1.0	EPA 8260D	4-29-20	4-29-20	
1,2,3-Trichlorobenzene	ND	0.20	EPA 8260D	4-29-20	4-29-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	95	75-127				
<i>Toluene-d8</i>	96	80-127				
<i>4-Bromofluorobenzene</i>	103	78-125				



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Matrix: Water
 Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	S-MW-5:W					
Laboratory ID:	04-165-02					
Dichlorodifluoromethane	ND	10	EPA 8260D	4-29-20	4-29-20	
Chloromethane	ND	50	EPA 8260D	4-29-20	4-29-20	
Vinyl Chloride	ND	1.0	EPA 8260D/SIM	4-29-20	4-29-20	
Bromomethane	ND	10	EPA 8260D	4-29-20	4-29-20	
Chloroethane	ND	50	EPA 8260D	4-29-20	4-29-20	
Trichlorofluoromethane	ND	10	EPA 8260D	4-29-20	4-29-20	
1,1-Dichloroethene	ND	10	EPA 8260D	4-29-20	4-29-20	
Iodomethane	ND	75	EPA 8260D	4-29-20	4-29-20	
Methylene Chloride	ND	50	EPA 8260D	4-29-20	4-29-20	
(trans) 1,2-Dichloroethene	ND	10	EPA 8260D	4-29-20	4-29-20	
1,1-Dichloroethane	ND	10	EPA 8260D	4-29-20	4-29-20	
2,2-Dichloropropane	ND	10	EPA 8260D	4-29-20	4-29-20	
(cis) 1,2-Dichloroethene	ND	10	EPA 8260D	4-29-20	4-29-20	
Bromochloromethane	ND	10	EPA 8260D	4-29-20	4-29-20	
Chloroform	ND	10	EPA 8260D	4-29-20	4-29-20	
1,1,1-Trichloroethane	ND	10	EPA 8260D	4-29-20	4-29-20	
Carbon Tetrachloride	ND	10	EPA 8260D	4-29-20	4-29-20	
1,1-Dichloropropene	ND	10	EPA 8260D	4-29-20	4-29-20	
1,2-Dichloroethane	ND	10	EPA 8260D	4-29-20	4-29-20	
Trichloroethene	ND	10	EPA 8260D	4-29-20	4-29-20	
1,2-Dichloropropane	ND	10	EPA 8260D	4-29-20	4-29-20	
Dibromomethane	ND	10	EPA 8260D	4-29-20	4-29-20	
Bromodichloromethane	ND	10	EPA 8260D	4-29-20	4-29-20	
2-Chloroethyl Vinyl Ether	ND	70	EPA 8260D	4-29-20	4-29-20	
(cis) 1,3-Dichloropropene	ND	10	EPA 8260D	4-29-20	4-29-20	
(trans) 1,3-Dichloropropene	ND	10	EPA 8260D	4-29-20	4-29-20	



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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	S-MW-5:W					
Laboratory ID:	04-165-02					
1,1,2-Trichloroethane	ND	10	EPA 8260D	4-29-20	4-29-20	
Tetrachloroethene	1500	10	EPA 8260D	4-29-20	4-29-20	
1,3-Dichloropropane	ND	10	EPA 8260D	4-29-20	4-29-20	
Dibromochloromethane	ND	10	EPA 8260D	4-29-20	4-29-20	
1,2-Dibromoethane	ND	10	EPA 8260D	4-29-20	4-29-20	
Chlorobenzene	ND	10	EPA 8260D	4-29-20	4-29-20	
1,1,1,2-Tetrachloroethane	ND	10	EPA 8260D	4-29-20	4-29-20	
Bromoform	ND	50	EPA 8260D	4-29-20	4-29-20	
Bromobenzene	ND	10	EPA 8260D	4-29-20	4-29-20	
1,1,2,2-Tetrachloroethane	ND	10	EPA 8260D	4-29-20	4-29-20	
1,2,3-Trichloropropane	ND	10	EPA 8260D	4-29-20	4-29-20	
2-Chlorotoluene	ND	10	EPA 8260D	4-29-20	4-29-20	
4-Chlorotoluene	ND	10	EPA 8260D	4-29-20	4-29-20	
1,3-Dichlorobenzene	ND	10	EPA 8260D	4-29-20	4-29-20	
1,4-Dichlorobenzene	ND	10	EPA 8260D	4-29-20	4-29-20	
1,2-Dichlorobenzene	ND	10	EPA 8260D	4-29-20	4-29-20	
1,2-Dibromo-3-chloropropane	ND	65	EPA 8260D	4-29-20	4-29-20	
1,2,4-Trichlorobenzene	ND	10	EPA 8260D	4-29-20	4-29-20	
Hexachlorobutadiene	ND	50	EPA 8260D	4-29-20	4-29-20	
1,2,3-Trichlorobenzene	ND	10	EPA 8260D	4-29-20	4-29-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>102</i>	<i>75-127</i>				
<i>Toluene-d8</i>	<i>98</i>	<i>80-127</i>				
<i>4-Bromofluorobenzene</i>	<i>100</i>	<i>78-125</i>				



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VOLATILE ORGANICS EPA 8260D/SIM
QUALITY CONTROL
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Matrix: Water
 Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0429W1					
Dichlorodifluoromethane	ND	0.20	EPA 8260D	4-29-20	4-29-20	
Chloromethane	ND	1.0	EPA 8260D	4-29-20	4-29-20	
Vinyl Chloride	ND	0.020	EPA 8260D/SIM	4-29-20	4-29-20	
Bromomethane	ND	0.20	EPA 8260D	4-29-20	4-29-20	
Chloroethane	ND	1.0	EPA 8260D	4-29-20	4-29-20	
Trichlorofluoromethane	ND	0.20	EPA 8260D	4-29-20	4-29-20	
1,1-Dichloroethene	ND	0.20	EPA 8260D	4-29-20	4-29-20	
Iodomethane	ND	1.5	EPA 8260D	4-29-20	4-29-20	
Methylene Chloride	ND	1.0	EPA 8260D	4-29-20	4-29-20	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260D	4-29-20	4-29-20	
1,1-Dichloroethane	ND	0.20	EPA 8260D	4-29-20	4-29-20	
2,2-Dichloropropane	ND	0.20	EPA 8260D	4-29-20	4-29-20	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260D	4-29-20	4-29-20	
Bromochloromethane	ND	0.20	EPA 8260D	4-29-20	4-29-20	
Chloroform	ND	0.20	EPA 8260D	4-29-20	4-29-20	
1,1,1-Trichloroethane	ND	0.20	EPA 8260D	4-29-20	4-29-20	
Carbon Tetrachloride	ND	0.20	EPA 8260D	4-29-20	4-29-20	
1,1-Dichloropropene	ND	0.20	EPA 8260D	4-29-20	4-29-20	
1,2-Dichloroethane	ND	0.20	EPA 8260D	4-29-20	4-29-20	
Trichloroethene	ND	0.20	EPA 8260D	4-29-20	4-29-20	
1,2-Dichloropropane	ND	0.20	EPA 8260D	4-29-20	4-29-20	
Dibromomethane	ND	0.20	EPA 8260D	4-29-20	4-29-20	
Bromodichloromethane	ND	0.20	EPA 8260D	4-29-20	4-29-20	
2-Chloroethyl Vinyl Ether	ND	1.4	EPA 8260D	4-29-20	4-29-20	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260D	4-29-20	4-29-20	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260D	4-29-20	4-29-20	



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 QUALITY CONTROL**
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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0429W1					
1,1,2-Trichloroethane	ND	0.20	EPA 8260D	4-29-20	4-29-20	
Tetrachloroethene	ND	0.20	EPA 8260D	4-29-20	4-29-20	
1,3-Dichloropropane	ND	0.20	EPA 8260D	4-29-20	4-29-20	
Dibromochloromethane	ND	0.20	EPA 8260D	4-29-20	4-29-20	
1,2-Dibromoethane	ND	0.20	EPA 8260D	4-29-20	4-29-20	
Chlorobenzene	ND	0.20	EPA 8260D	4-29-20	4-29-20	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260D	4-29-20	4-29-20	
Bromoform	ND	1.0	EPA 8260D	4-29-20	4-29-20	
Bromobenzene	ND	0.20	EPA 8260D	4-29-20	4-29-20	
1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260D	4-29-20	4-29-20	
1,2,3-Trichloropropane	ND	0.20	EPA 8260D	4-29-20	4-29-20	
2-Chlorotoluene	ND	0.20	EPA 8260D	4-29-20	4-29-20	
4-Chlorotoluene	ND	0.20	EPA 8260D	4-29-20	4-29-20	
1,3-Dichlorobenzene	ND	0.20	EPA 8260D	4-29-20	4-29-20	
1,4-Dichlorobenzene	ND	0.20	EPA 8260D	4-29-20	4-29-20	
1,2-Dichlorobenzene	ND	0.20	EPA 8260D	4-29-20	4-29-20	
1,2-Dibromo-3-chloropropane	ND	1.3	EPA 8260D	4-29-20	4-29-20	
1,2,4-Trichlorobenzene	ND	0.20	EPA 8260D	4-29-20	4-29-20	
Hexachlorobutadiene	ND	1.0	EPA 8260D	4-29-20	4-29-20	
1,2,3-Trichlorobenzene	ND	0.20	EPA 8260D	4-29-20	4-29-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>91</i>	<i>75-127</i>				
<i>Toluene-d8</i>	<i>97</i>	<i>80-127</i>				
<i>4-Bromofluorobenzene</i>	<i>100</i>	<i>78-125</i>				



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**VOLATILE ORGANICS EPA 8260D
 QUALITY CONTROL**

Matrix: Water
 Units: ug/L

Analyte	Result		Spike Level		Percent Recovery		Recovery	RPD	RPD	Flags
					Recovery	Limits	RPD	Limit		
SPIKE BLANKS										
Laboratory ID:	SB0429W1									
	SB	SBD	SB	SBD	SB	SBD				
1,1-Dichloroethene	9.13	9.77	10.0	10.0	91	98	63-130	7	17	
Benzene	9.61	10.3	10.0	10.0	96	103	76-125	7	19	
Trichloroethene	10.0	10.9	10.0	10.0	100	109	76-121	9	18	
Toluene	9.59	10.4	10.0	10.0	96	104	80-124	8	18	
Chlorobenzene	10.2	11.2	10.0	10.0	102	112	75-120	9	19	
<i>Surrogate:</i>										
Dibromofluoromethane					95	91	75-127			
Toluene-d8					96	97	80-127			
4-Bromofluorobenzene					94	95	78-125			



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**TOTAL ORGANIC CARBON
 SM 5310B**

Matrix: Water
 Units: mg/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	S-MW-1:W					
Laboratory ID:	04-165-01					
Total Organic Carbon	ND	1.0	SM 5310B	4-30-20	4-30-20	

Client ID:	S-MW-5:W					
Laboratory ID:	04-165-02					
Total Organic Carbon	ND	1.0	SM 5310B	4-30-20	4-30-20	



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**TOTAL ORGANIC CARBON
 SM 5310B
 QUALITY CONTROL**

Matrix: Water
 Units: mg/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0430W1					
Total Organic Carbon	ND	1.0	SM 5310B	4-30-20	4-30-20	

Analyte	Result	Spike Level	Source Result	Percent Recovery	Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE								
Laboratory ID:	04-165-01							
	ORIG	DUP						
Total Organic Carbon	ND	ND	NA	NA	NA	NA	20	

MATRIX SPIKE

Laboratory ID:	04-165-01							
	MS	MS		MS				
Total Organic Carbon	11.4	10.0	ND	114	85-131	NA	NA	

SPIKE BLANK

Laboratory ID:	SB0430W1							
	SB	SB		SB				
Total Organic Carbon	10.7	10.0	NA	107	88-127	NA	NA	



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DISSOLVED IRON
EPA 6010D

Matrix: Water
Units: ug/L (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	S-MW-1:W					
Laboratory ID:	04-165-01					
Iron	ND	56	EPA 6010D	4-23-20	4-29-20	

Client ID:	S-MW-5:W					
Laboratory ID:	04-165-02					
Iron	57	56	EPA 6010D	4-23-20	4-29-20	



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**DISSOLVED IRON
 EPA 6010D
 QUALITY CONTROL**

Matrix: Water
 Units: ug/L (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0423F1					
Iron	ND	56	EPA 6010D	4-23-20	4-29-20	

Analyte	Result	Spike Level	Source Result	Percent Recovery	Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE								
Laboratory ID:	04-132-02							
	ORIG	DUP						
Iron	ND	ND	NA	NA	NA	NA	20	

MATRIX SPIKES

Laboratory ID:	04-132-02									
	MS	MSD	MS	MSD		MS	MSD			
Iron	22900	22600	22200	22200	ND	103	102	75-125	1	20



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CHLORIDE
SM 4500-CI E

Matrix: Water
Units: mg/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	S-MW-1:W					
Laboratory ID:	04-165-01					
Chloride	4.4	2.0	SM 4500-CI E	4-24-20	4-24-20	

Client ID:	S-MW-5:W					
Laboratory ID:	04-165-02					
Chloride	5.1	2.0	SM 4500-CI E	4-24-20	4-24-20	



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**CHLORIDE
 SM 4500-CI E
 QUALITY CONTROL**

Matrix: Water
 Units: mg/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0424W1					
Chloride	ND	2.0	SM 4500-CI E	4-24-20	4-24-20	

Analyte	Result	Spike Level	Source Result	Percent Recovery	Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE								
Laboratory ID:	04-165-01							
	ORIG	DUP						
Chloride	4.43	4.07	NA	NA	NA	8	17	

MATRIX SPIKE

Laboratory ID:	04-165-01							
	MS	MS		MS				
Chloride	55.0	50.0	4.43	101	80-116	NA	NA	

SPIKE BLANK

Laboratory ID:	SB0424W1							
	SB	SB		SB				
Chloride	47.7	50.0	NA	95	90-110	NA	NA	



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SULFATE
ASTM D516-11

Matrix: Water
Units: mg/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	S-MW-1:W					
Laboratory ID:	04-165-01					
Sulfate	57	25	ASTM D516-11	4-29-20	4-29-20	

Client ID:	S-MW-5:W					
Laboratory ID:	04-165-02					
Sulfate	15	5.0	ASTM D516-11	4-29-20	4-29-20	



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**SULFATE
 ASTM D516-11
 QUALITY CONTROL**

Matrix: Water
 Units: mg/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0429W1					
Sulfate	ND	5.0	ASTM D516-11	4-29-20	4-29-20	

Analyte	Result	Spike Level	Source Result	Percent Recovery	Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE								
Laboratory ID:	04-186-01							
	ORIG	DUP						
Sulfate	ND	ND	NA	NA	NA	NA	10	

MATRIX SPIKE								
Laboratory ID:	04-186-01							
	MS	MS		MS				
Sulfate	8.98	10.0	ND	90	73-134	NA	NA	

SPIKE BLANK								
Laboratory ID:	SB0429W1							
	SB	SB		SB				
Sulfate	10.2	10.0	NA	102	89-113	NA	NA	



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AMMONIA (as Nitrogen)
SM 4500-NH₃ D

Matrix: Water
 Units: mg/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	S-MW-1:W					
Laboratory ID:	04-165-01					
Ammonia	ND	0.050	SM 4500-NH3 D	4-28-20	4-28-20	

Client ID:	S-MW-5:W					
Laboratory ID:	04-165-02					
Ammonia	ND	0.050	SM 4500-NH3 D	4-28-20	4-28-20	



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**AMMONIA (as Nitrogen)
 SM 4500-NH₃ D
 QUALITY CONTROL**

Matrix: Water
 Units: mg/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0428W1					
Ammonia	ND	0.050	SM 4500-NH3 D	4-28-20	4-28-20	

Analyte	Result	Spike Level	Source Result	Percent Recovery	Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE								
Laboratory ID:	04-144-01							
	ORIG	DUP						
Ammonia	ND	ND	NA	NA	NA	NA	12	

MATRIX SPIKE								
Laboratory ID:	04-144-01							
	MS	MS		MS				
Ammonia	4.98	5.00	ND	100	75-121	NA	NA	

SPIKE BLANK								
Laboratory ID:	SB0428W1							
	SB	SB		SB				
Ammonia	5.02	5.00	NA	100	85-110	NA	NA	



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**DISSOLVED GASES
 RSK 175**

Matrix: Water
 Units: ug/L (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	S-MW-1:W					
Laboratory ID:	04-165-01					
Methane	ND	0.55	RSK 175	4-29-20	4-29-20	
Ethane	ND	0.22	RSK 175	4-29-20	4-29-20	
Ethene	ND	0.29	RSK 175	4-29-20	4-29-20	

Client ID:	S-MW-5:W					
Laboratory ID:	04-165-02					
Methane	ND	0.55	RSK 175	4-29-20	4-29-20	
Ethane	ND	0.22	RSK 175	4-29-20	4-29-20	
Ethene	ND	0.29	RSK 175	4-29-20	4-29-20	



Date of Report: May 1, 2020
 Samples Submitted: April 23, 2020
 Laboratory Reference: 2004-165
 Project: 82302-9.4

**DISSOLVED GASES
 RSK 175
 QUALITY CONTROL**

Matrix: Water
 Units: ug/L (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0429W1					
Methane	ND	0.55	RSK 175	4-29-20	4-29-20	
Ethane	ND	0.22	RSK 175	4-29-20	4-29-20	
Ethene	ND	0.29	RSK 175	4-29-20	4-29-20	

Analyte	Result		Spike Level		Percent Recovery		Recovery Limits	RPD	RPD Limit	Flags
SPIKE BLANK										
Laboratory ID:	SB0429W1									
	SB	SBD	SB	SBD	SB	SBD				
Methane	21.7	21.5	22.1	22.1	98	97	75-125	1	25	
Ethane	40.6	39.9	41.6	41.6	98	96	75-125	2	25	
Ethene	41.1	40.6	38.8	38.8	106	105	75-125	1	25	





Data Qualifiers and Abbreviations

- A - Due to a high sample concentration, the amount spiked is insufficient for meaningful MS/MSD recovery data.
 - B - The analyte indicated was also found in the blank sample.
 - C - The duplicate RPD is outside control limits due to high result variability when analyte concentrations are within five times the quantitation limit.
 - E - The value reported exceeds the quantitation range and is an estimate.
 - F - Surrogate recovery data is not available due to the high concentration of coeluting target compounds.
 - H - The analyte indicated is a common laboratory solvent and may have been introduced during sample preparation, and be impacting the sample result.
 - I - Compound recovery is outside of the control limits.
 - J - The value reported was below the practical quantitation limit. The value is an estimate.
 - K - Sample duplicate RPD is outside control limits due to sample inhomogeneity. The sample was re-extracted and re-analyzed with similar results.
 - L - The RPD is outside of the control limits.
 - M - Hydrocarbons in the gasoline range are impacting the diesel range result.
 - M1 - Hydrocarbons in the gasoline range (toluene-naphthalene) are present in the sample.
 - N - Hydrocarbons in the lube oil range are impacting the diesel range result.
 - N1 - Hydrocarbons in diesel range are impacting lube oil range results.
 - O - Hydrocarbons indicative of heavier fuels are present in the sample and are impacting the gasoline result.
 - P - The RPD of the detected concentrations between the two columns is greater than 40.
 - Q - Surrogate recovery is outside of the control limits.
 - S - Surrogate recovery data is not available due to the necessary dilution of the sample.
 - T - The sample chromatogram is not similar to a typical _____.
 - U - The analyte was analyzed for, but was not detected above the reported sample quantitation limit.
 - U1 - The practical quantitation limit is elevated due to interferences present in the sample.
 - V - Matrix Spike/Matrix Spike Duplicate recoveries are outside control limits due to matrix effects.
 - W - Matrix Spike/Matrix Spike Duplicate RPD are outside control limits due to matrix effects.
 - X - Sample extract treated with a mercury cleanup procedure.
 - X1 - Sample extract treated with a sulfuric acid/silica gel cleanup procedure.
 - Y - The calibration verification for this analyte exceeded the 20% drift specified in methods 8260 & 8270, and therefore the reported result should be considered an estimate. The overall performance of the calibration verification standard met the acceptance criteria of the method.
 - Z -
- ND - Not Detected at PQL
 PQL - Practical Quantitation Limit
 RPD - Relative Percent Difference





Onsite Environmental Inc.
Analytical Laboratory Testing Services
14648 NE 95th Street • Redmond, WA 98052
Phone: (425) 883-3881 • www.onsite-env.com

Chain of Custody

Turnaround Request
(in working days)
(Check One)

Same Day 1 Day

2 Days 3 Days

Standard (7 Days)

_____ (other)

Laboratory Number: **04-165**

Company: Kane Environmental
Project Number: 22302-9.4
Project Name: BRESS
Project Manager: Jeff Jensen
Sampled By: Mike Espinoza

Lab ID	Sample Identification	Date Sampled	Time Sampled	Matrix	Number of Containers
1	S-MW-1:W	4/23/20	0924	GW	9
2	S-MW-5:W	4/23/20	1145	GW	9

Lab ID	Sample Identification	Date Sampled	Time Sampled	Matrix	Number of Containers	NWTPH-HCID	NWTPH-Gx/BTEX	NWTPH-Gx	NWTPH-Dx (<input type="checkbox"/> Acid / SG Clean-up)	Volatiles 8260C	Halogenated Volatiles 8260C	EDB EPA 8011 (Waters Only)	Semivolatiles 8270D/SIM (with low-level PAHs)	PAHs 8270D/SIM (low-level)	PCBs 8082A	Organochlorine Pesticides 8081B	Organophosphorus Pesticides 8270D/SIM	Chlorinated Acid Herbicides 8151A	Total RCRA Metals	Total MTCA Metals	TCLP Metals	HEM (oil and grease) 4664A	TOC	dissolved Fe	chloride	sulfate	ammonia-N	% Moisture RSK	
1	S-MW-1:W	4/23/20	0924	GW	9						X											X							
2	S-MW-5:W	4/23/20	1145	GW	9						X											X							

Signature	Company	Date	Time	Comments/Special Instructions
<i>Mike Espinoza</i>	Kane Env.	4/23/20	1433	lab filter RSK = methane, ethane, ethene low detection limit (3-4 ug/L) low detection limit for vinyl chloride
<i>Jason Lissou</i>	OSE	4/23/20	1433	

Relinquished

Received

Relinquished

Received

Relinquished

Received

Relinquished

Received

Relinquished

Reviewed/Date

Reviewed/Date

Reviewed/Date

Data Package: Standard Level III Level IV

Chromatograms with final report Electronic Data Deliverables (EDDs)



14648 NE 95th Street, Redmond, WA 98052 • (425) 883-3881

May 4, 2020

Jeff Jensen
Kane Environmental, Inc.
4015 13th Avenue West
Seattle, WA 98119

Re: Analytical Data for Project 82302-9.4
Laboratory Reference No. 2004-181

Dear Jeff:

Enclosed are the analytical results and associated quality control data for samples submitted on April 24, 2020.

The standard policy of OnSite Environmental, Inc. is to store your samples for 30 days from the date of receipt. If you require longer storage, please contact the laboratory.

We appreciate the opportunity to be of service to you on this project. If you have any questions concerning the data, or need additional information, please feel free to call me.

Sincerely,

A handwritten signature in black ink, appearing to read "DB", with a long horizontal stroke extending to the right.

David Baumeister
Project Manager

Enclosures



OnSite Environmental, Inc. 14648 NE 95th Street, Redmond, WA 98052 (425) 883-3881

This report pertains to the samples analyzed in accordance with the chain of custody, and is intended only for the use of the individual or company to whom it is addressed.

Date of Report: May 4, 2020
Samples Submitted: April 24, 2020
Laboratory Reference: 2004-181
Project: 82302-9.4

Case Narrative

Samples were collected on April 24, 2020 and received by the laboratory on April 24, 2020. They were maintained at the laboratory at a temperature of 2°C to 6°C.

Please note that any and all soil sample results are reported on a dry-weight basis, unless otherwise noted below.

General QA/QC issues associated with the analytical data enclosed in this laboratory report will be indicated with a reference to a comment or explanation on the Data Qualifier page. More complex and involved QA/QC issues will be discussed in detail below.



Date of Report: May 4, 2020
 Samples Submitted: April 24, 2020
 Laboratory Reference: 2004-181
 Project: 82302-9.4

VOLATILE ORGANICS EPA 8260D
 page 1 of 2

Matrix: Water
 Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	S-MW-3R:W					
Laboratory ID:	04-181-01					
Dichlorodifluoromethane	ND	0.20	EPA 8260D	4-29-20	4-29-20	
Chloromethane	ND	1.0	EPA 8260D	4-29-20	4-29-20	
Vinyl Chloride	ND	0.020	EPA 8260D/SIM	4-29-20	4-29-20	
Bromomethane	ND	0.20	EPA 8260D	4-29-20	4-29-20	
Chloroethane	ND	1.0	EPA 8260D	4-29-20	4-29-20	
Trichlorofluoromethane	ND	0.20	EPA 8260D	4-29-20	4-29-20	
1,1-Dichloroethene	ND	0.20	EPA 8260D	4-29-20	4-29-20	
Iodomethane	ND	1.5	EPA 8260D	4-29-20	4-29-20	
Methylene Chloride	ND	1.0	EPA 8260D	4-29-20	4-29-20	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260D	4-29-20	4-29-20	
1,1-Dichloroethane	ND	0.20	EPA 8260D	4-29-20	4-29-20	
2,2-Dichloropropane	ND	0.20	EPA 8260D	4-29-20	4-29-20	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260D	4-29-20	4-29-20	
Bromochloromethane	ND	0.20	EPA 8260D	4-29-20	4-29-20	
Chloroform	ND	0.20	EPA 8260D	4-29-20	4-29-20	
1,1,1-Trichloroethane	ND	0.20	EPA 8260D	4-29-20	4-29-20	
Carbon Tetrachloride	ND	0.20	EPA 8260D	4-29-20	4-29-20	
1,1-Dichloropropene	ND	0.20	EPA 8260D	4-29-20	4-29-20	
1,2-Dichloroethane	ND	0.20	EPA 8260D	4-29-20	4-29-20	
Trichloroethene	0.54	0.20	EPA 8260D	4-29-20	4-29-20	
1,2-Dichloropropane	ND	0.20	EPA 8260D	4-29-20	4-29-20	
Dibromomethane	ND	0.20	EPA 8260D	4-29-20	4-29-20	
Bromodichloromethane	ND	0.20	EPA 8260D	4-29-20	4-29-20	
2-Chloroethyl Vinyl Ether	ND	1.4	EPA 8260D	4-29-20	4-29-20	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260D	4-29-20	4-29-20	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260D	4-29-20	4-29-20	



Date of Report: May 4, 2020
 Samples Submitted: April 24, 2020
 Laboratory Reference: 2004-181
 Project: 82302-9.4

VOLATILE ORGANICS EPA 8260D
 page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	S-MW-3R:W					
Laboratory ID:	04-181-01					
1,1,2-Trichloroethane	ND	0.20	EPA 8260D	4-29-20	4-29-20	
Tetrachloroethene	6.6	0.20	EPA 8260D	4-29-20	4-29-20	
1,3-Dichloropropane	ND	0.20	EPA 8260D	4-29-20	4-29-20	
Dibromochloromethane	ND	0.20	EPA 8260D	4-29-20	4-29-20	
1,2-Dibromoethane	ND	0.20	EPA 8260D	4-29-20	4-29-20	
Chlorobenzene	ND	0.20	EPA 8260D	4-29-20	4-29-20	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260D	4-29-20	4-29-20	
Bromoform	ND	1.0	EPA 8260D	4-29-20	4-29-20	
Bromobenzene	ND	0.20	EPA 8260D	4-29-20	4-29-20	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260D	4-29-20	4-29-20	
1,2,3-Trichloropropane	ND	0.20	EPA 8260D	4-29-20	4-29-20	
2-Chlorotoluene	ND	0.20	EPA 8260D	4-29-20	4-29-20	
4-Chlorotoluene	ND	0.20	EPA 8260D	4-29-20	4-29-20	
1,3-Dichlorobenzene	ND	0.20	EPA 8260D	4-29-20	4-29-20	
1,4-Dichlorobenzene	ND	0.20	EPA 8260D	4-29-20	4-29-20	
1,2-Dichlorobenzene	ND	0.20	EPA 8260D	4-29-20	4-29-20	
1,2-Dibromo-3-chloropropane	ND	1.3	EPA 8260D	4-29-20	4-29-20	
1,2,4-Trichlorobenzene	ND	0.20	EPA 8260D	4-29-20	4-29-20	
Hexachlorobutadiene	ND	1.0	EPA 8260D	4-29-20	4-29-20	
1,2,3-Trichlorobenzene	ND	0.20	EPA 8260D	4-29-20	4-29-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>97</i>	<i>75-127</i>				
<i>Toluene-d8</i>	<i>102</i>	<i>80-127</i>				
<i>4-Bromofluorobenzene</i>	<i>106</i>	<i>78-125</i>				



Date of Report: May 4, 2020
 Samples Submitted: April 24, 2020
 Laboratory Reference: 2004-181
 Project: 82302-9.4

VOLATILE ORGANICS EPA 8260D
 page 1 of 2

Matrix: Water
 Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	S-MW-2R:W					
Laboratory ID:	04-181-02					
Dichlorodifluoromethane	ND	0.20	EPA 8260D	4-29-20	4-29-20	
Chloromethane	ND	1.0	EPA 8260D	4-29-20	4-29-20	
Vinyl Chloride	0.029	0.020	EPA 8260D/SIM	4-29-20	4-29-20	
Bromomethane	ND	0.20	EPA 8260D	4-29-20	4-29-20	
Chloroethane	ND	1.0	EPA 8260D	4-29-20	4-29-20	
Trichlorofluoromethane	ND	0.20	EPA 8260D	4-29-20	4-29-20	
1,1-Dichloroethene	ND	0.20	EPA 8260D	4-29-20	4-29-20	
Iodomethane	ND	1.5	EPA 8260D	4-29-20	4-29-20	
Methylene Chloride	ND	1.0	EPA 8260D	4-29-20	4-29-20	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260D	4-29-20	4-29-20	
1,1-Dichloroethane	ND	0.20	EPA 8260D	4-29-20	4-29-20	
2,2-Dichloropropane	ND	0.20	EPA 8260D	4-29-20	4-29-20	
(cis) 1,2-Dichloroethene	1.6	0.20	EPA 8260D	4-29-20	4-29-20	
Bromochloromethane	ND	0.20	EPA 8260D	4-29-20	4-29-20	
Chloroform	ND	0.20	EPA 8260D	4-29-20	4-29-20	
1,1,1-Trichloroethane	ND	0.20	EPA 8260D	4-29-20	4-29-20	
Carbon Tetrachloride	ND	0.20	EPA 8260D	4-29-20	4-29-20	
1,1-Dichloropropene	ND	0.20	EPA 8260D	4-29-20	4-29-20	
1,2-Dichloroethane	ND	0.20	EPA 8260D	4-29-20	4-29-20	
Trichloroethene	2.5	0.20	EPA 8260D	4-29-20	4-29-20	
1,2-Dichloropropane	ND	0.20	EPA 8260D	4-29-20	4-29-20	
Dibromomethane	ND	0.20	EPA 8260D	4-29-20	4-29-20	
Bromodichloromethane	ND	0.20	EPA 8260D	4-29-20	4-29-20	
2-Chloroethyl Vinyl Ether	ND	1.4	EPA 8260D	4-29-20	4-29-20	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260D	4-29-20	4-29-20	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260D	4-29-20	4-29-20	



Date of Report: May 4, 2020
 Samples Submitted: April 24, 2020
 Laboratory Reference: 2004-181
 Project: 82302-9.4

VOLATILE ORGANICS EPA 8260D
 page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	S-MW-2R:W					
Laboratory ID:	04-181-02					
1,1,2-Trichloroethane	ND	0.20	EPA 8260D	4-29-20	4-29-20	
Tetrachloroethene	5.4	0.20	EPA 8260D	4-29-20	4-29-20	
1,3-Dichloropropane	ND	0.20	EPA 8260D	4-29-20	4-29-20	
Dibromochloromethane	ND	0.20	EPA 8260D	4-29-20	4-29-20	
1,2-Dibromoethane	ND	0.20	EPA 8260D	4-29-20	4-29-20	
Chlorobenzene	ND	0.20	EPA 8260D	4-29-20	4-29-20	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260D	4-29-20	4-29-20	
Bromoform	ND	1.0	EPA 8260D	4-29-20	4-29-20	
Bromobenzene	ND	0.20	EPA 8260D	4-29-20	4-29-20	
1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260D	4-29-20	4-29-20	
1,2,3-Trichloropropane	ND	0.20	EPA 8260D	4-29-20	4-29-20	
2-Chlorotoluene	ND	0.20	EPA 8260D	4-29-20	4-29-20	
4-Chlorotoluene	ND	0.20	EPA 8260D	4-29-20	4-29-20	
1,3-Dichlorobenzene	ND	0.20	EPA 8260D	4-29-20	4-29-20	
1,4-Dichlorobenzene	ND	0.20	EPA 8260D	4-29-20	4-29-20	
1,2-Dichlorobenzene	ND	0.20	EPA 8260D	4-29-20	4-29-20	
1,2-Dibromo-3-chloropropane	ND	1.3	EPA 8260D	4-29-20	4-29-20	
1,2,4-Trichlorobenzene	ND	0.20	EPA 8260D	4-29-20	4-29-20	
Hexachlorobutadiene	ND	1.0	EPA 8260D	4-29-20	4-29-20	
1,2,3-Trichlorobenzene	ND	0.20	EPA 8260D	4-29-20	4-29-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>91</i>	<i>75-127</i>				
<i>Toluene-d8</i>	<i>96</i>	<i>80-127</i>				
<i>4-Bromofluorobenzene</i>	<i>104</i>	<i>78-125</i>				



Date of Report: May 4, 2020
 Samples Submitted: April 24, 2020
 Laboratory Reference: 2004-181
 Project: 82302-9.4

VOLATILE ORGANICS EPA 8260D
QUALITY CONTROL
 page 1 of 2

Matrix: Water
 Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0429W1					
Dichlorodifluoromethane	ND	0.20	EPA 8260D	4-29-20	4-29-20	
Chloromethane	ND	1.0	EPA 8260D	4-29-20	4-29-20	
Vinyl Chloride	ND	0.020	EPA 8260D/SIM	4-29-20	4-29-20	
Bromomethane	ND	0.20	EPA 8260D	4-29-20	4-29-20	
Chloroethane	ND	1.0	EPA 8260D	4-29-20	4-29-20	
Trichlorofluoromethane	ND	0.20	EPA 8260D	4-29-20	4-29-20	
1,1-Dichloroethene	ND	0.20	EPA 8260D	4-29-20	4-29-20	
Iodomethane	ND	1.5	EPA 8260D	4-29-20	4-29-20	
Methylene Chloride	ND	1.0	EPA 8260D	4-29-20	4-29-20	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260D	4-29-20	4-29-20	
1,1-Dichloroethane	ND	0.20	EPA 8260D	4-29-20	4-29-20	
2,2-Dichloropropane	ND	0.20	EPA 8260D	4-29-20	4-29-20	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260D	4-29-20	4-29-20	
Bromochloromethane	ND	0.20	EPA 8260D	4-29-20	4-29-20	
Chloroform	ND	0.20	EPA 8260D	4-29-20	4-29-20	
1,1,1-Trichloroethane	ND	0.20	EPA 8260D	4-29-20	4-29-20	
Carbon Tetrachloride	ND	0.20	EPA 8260D	4-29-20	4-29-20	
1,1-Dichloropropene	ND	0.20	EPA 8260D	4-29-20	4-29-20	
1,2-Dichloroethane	ND	0.20	EPA 8260D	4-29-20	4-29-20	
Trichloroethene	ND	0.20	EPA 8260D	4-29-20	4-29-20	
1,2-Dichloropropane	ND	0.20	EPA 8260D	4-29-20	4-29-20	
Dibromomethane	ND	0.20	EPA 8260D	4-29-20	4-29-20	
Bromodichloromethane	ND	0.20	EPA 8260D	4-29-20	4-29-20	
2-Chloroethyl Vinyl Ether	ND	1.4	EPA 8260D	4-29-20	4-29-20	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260D	4-29-20	4-29-20	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260D	4-29-20	4-29-20	



Date of Report: May 4, 2020
 Samples Submitted: April 24, 2020
 Laboratory Reference: 2004-181
 Project: 82302-9.4

VOLATILE ORGANICS EPA 8260D
QUALITY CONTROL
 page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0429W1					
1,1,2-Trichloroethane	ND	0.20	EPA 8260D	4-29-20	4-29-20	
Tetrachloroethene	ND	0.20	EPA 8260D	4-29-20	4-29-20	
1,3-Dichloropropane	ND	0.20	EPA 8260D	4-29-20	4-29-20	
Dibromochloromethane	ND	0.20	EPA 8260D	4-29-20	4-29-20	
1,2-Dibromoethane	ND	0.20	EPA 8260D	4-29-20	4-29-20	
Chlorobenzene	ND	0.20	EPA 8260D	4-29-20	4-29-20	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260D	4-29-20	4-29-20	
Bromoform	ND	1.0	EPA 8260D	4-29-20	4-29-20	
Bromobenzene	ND	0.20	EPA 8260D	4-29-20	4-29-20	
1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260D	4-29-20	4-29-20	
1,2,3-Trichloropropane	ND	0.20	EPA 8260D	4-29-20	4-29-20	
2-Chlorotoluene	ND	0.20	EPA 8260D	4-29-20	4-29-20	
4-Chlorotoluene	ND	0.20	EPA 8260D	4-29-20	4-29-20	
1,3-Dichlorobenzene	ND	0.20	EPA 8260D	4-29-20	4-29-20	
1,4-Dichlorobenzene	ND	0.20	EPA 8260D	4-29-20	4-29-20	
1,2-Dichlorobenzene	ND	0.20	EPA 8260D	4-29-20	4-29-20	
1,2-Dibromo-3-chloropropane	ND	1.3	EPA 8260D	4-29-20	4-29-20	
1,2,4-Trichlorobenzene	ND	0.20	EPA 8260D	4-29-20	4-29-20	
Hexachlorobutadiene	ND	1.0	EPA 8260D	4-29-20	4-29-20	
1,2,3-Trichlorobenzene	ND	0.20	EPA 8260D	4-29-20	4-29-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>91</i>	<i>75-127</i>				
<i>Toluene-d8</i>	<i>97</i>	<i>80-127</i>				
<i>4-Bromofluorobenzene</i>	<i>100</i>	<i>78-125</i>				



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**VOLATILE ORGANICS EPA 8260D
 QUALITY CONTROL**

Matrix: Water
 Units: ug/L

Analyte	Result		Spike Level		Percent Recovery		Recovery	RPD	RPD	Flags
					Recovery	Limits	RPD	Limit		
SPIKE BLANKS										
Laboratory ID:	SB0429W1									
	SB	SBD	SB	SBD	SB	SBD				
1,1-Dichloroethene	9.13	9.77	10.0	10.0	91	98	63-130	7	17	
Benzene	9.61	10.3	10.0	10.0	96	103	76-125	7	19	
Trichloroethene	10.0	10.9	10.0	10.0	100	109	76-121	9	18	
Toluene	9.59	10.4	10.0	10.0	96	104	80-124	8	18	
Chlorobenzene	10.2	11.2	10.0	10.0	102	112	75-120	9	19	
<i>Surrogate:</i>										
Dibromofluoromethane					95	91	75-127			
Toluene-d8					96	97	80-127			
4-Bromofluorobenzene					94	95	78-125			



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**TOTAL ORGANIC CARBON
 SM 5310B**

Matrix: Water
 Units: mg/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	S-MW-3R:W					
Laboratory ID:	04-181-01					
Total Organic Carbon	1.1	1.0	SM 5310B	4-30-20	4-30-20	

Client ID:	S-MW-2R:W					
Laboratory ID:	04-181-02					
Total Organic Carbon	61	1.0	SM 5310B	4-30-20	4-30-20	



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**TOTAL ORGANIC CARBON
 SM 5310B
 QUALITY CONTROL**

Matrix: Water
 Units: mg/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0430W1					
Total Organic Carbon	ND	1.0	SM 5310B	4-30-20	4-30-20	

Analyte	Result	Spike Level	Source Result	Percent Recovery	Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE								
Laboratory ID:	04-165-01							
	ORIG	DUP						
Total Organic Carbon	ND	ND	NA	NA	NA	NA	20	

MATRIX SPIKE

Laboratory ID:	04-165-01							
	MS	MS		MS				
Total Organic Carbon	11.4	10.0	ND	114	85-131	NA	NA	

SPIKE BLANK

Laboratory ID:	SB0430W1							
	SB	SB		SB				
Total Organic Carbon	10.7	10.0	NA	107	88-127	NA	NA	



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DISSOLVED IRON
EPA 6010D

Matrix: Water
 Units: ug/L (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	S-MW-3R:W					
Laboratory ID:	04-181-01					
Iron	79	56	EPA 6010D	4-24-20	4-29-20	

Client ID:	S-MW-2R:W					
Laboratory ID:	04-181-02					
Iron	230	56	EPA 6010D	4-24-20	4-29-20	



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**DISSOLVED IRON
 EPA 6010D
 QUALITY CONTROL**

Matrix: Water
 Units: ug/L (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0424F1					
Iron	ND	56	EPA 6010D	4-24-20	4-29-20	

Analyte	Result	Spike Level	Source Result	Percent Recovery	Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE								
Laboratory ID:	04-132-02							
	ORIG	DUP						
Iron	ND	ND	NA	NA	NA	NA	20	

MATRIX SPIKES

Laboratory ID:	04-132-02									
	MS	MSD	MS	MSD		MS	MSD			
Iron	22900	22600	22200	22200	ND	103	102	75-125	1	20



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CHLORIDE
SM 4500-CI E

Matrix: Water
Units: mg/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	S-MW-3R:W					
Laboratory ID:	04-181-01					
Chloride	5.5	2.0	SM 4500-CI E	5-1-20	5-1-20	
Client ID:	S-MW-2R:W					
Laboratory ID:	04-181-02					
Chloride	6.3	2.0	SM 4500-CI E	5-1-20	5-1-20	



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**CHLORIDE
 SM 4500-Cl E
 QUALITY CONTROL**

Matrix: Water
 Units: mg/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0501W1					
Chloride	ND	2.0	SM 4500-Cl E	5-1-20	5-1-20	

Analyte	Result	Spike Level	Source Result	Percent Recovery	Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE								
Laboratory ID:	04-181-01							
	ORIG	DUP						
Chloride	5.50	5.45	NA	NA	NA	1	14	

MATRIX SPIKE

Laboratory ID:	04-181-01							
	MS	MS		MS				
Chloride	57.5	50.0	5.50	104	86-110	NA	NA	

SPIKE BLANK

Laboratory ID:	SB0501W1							
	SB	SB		SB				
Chloride	47.6	50.0	NA	95	86-110	NA	NA	



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SULFATE
ASTM D516-11

Matrix: Water
Units: mg/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	S-MW-3R:W					
Laboratory ID:	04-181-01					
Sulfate	14	5.0	ASTM D516-11	4-29-20	4-29-20	

Client ID:	S-MW-2R:W					
Laboratory ID:	04-181-02					
Sulfate	63	25	ASTM D516-11	4-29-20	4-29-20	



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**SULFATE
 ASTM D516-11
 QUALITY CONTROL**

Matrix: Water
 Units: mg/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0429W1					
Sulfate	ND	5.0	ASTM D516-11	4-29-20	4-29-20	

Analyte	Result	Spike Level	Source Result	Percent Recovery	Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE								
Laboratory ID:	04-186-01							
	ORIG	DUP						
Sulfate	ND	ND	NA	NA	NA	NA	10	

MATRIX SPIKE								
Laboratory ID:	04-186-01							
	MS	MS		MS				
Sulfate	8.98	10.0	ND	90	73-134	NA	NA	

SPIKE BLANK								
Laboratory ID:	SB0429W1							
	SB	SB		SB				
Sulfate	10.2	10.0	NA	102	89-113	NA	NA	



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AMMONIA (as Nitrogen)
SM 4500-NH₃ D

Matrix: Water
 Units: mg/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	S-MW-3R:W					
Laboratory ID:	04-181-01					
Ammonia	ND	0.050	SM 4500-NH3 D	4-28-20	4-28-20	

Client ID:	S-MW-2R:W					
Laboratory ID:	04-181-02					
Ammonia	ND	0.050	SM 4500-NH3 D	4-28-20	4-28-20	



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AMMONIA (as Nitrogen)
SM 4500-NH₃ D
QUALITY CONTROL

Matrix: Water
 Units: mg/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0428W1					
Ammonia	ND	0.050	SM 4500-NH3 D	4-28-20	4-28-20	

Analyte	Result	Spike Level	Source Result	Percent Recovery	Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE								
Laboratory ID:	04-144-01							
	ORIG	DUP						
Ammonia	ND	ND	NA	NA	NA	NA	12	

MATRIX SPIKE								
Laboratory ID:	04-144-01							
	MS	MS		MS				
Ammonia	4.98	5.00	ND	100	75-121	NA	NA	

SPIKE BLANK								
Laboratory ID:	SB0428W1							
	SB	SB		SB				
Ammonia	5.02	5.00	NA	100	85-110	NA	NA	



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**DISSOLVED GASES
 RSK 175**

Matrix: Water
 Units: ug/L (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	S-MW-3R:W					
Laboratory ID:	04-181-01					
Methane	1500	8.3	RSK 175	4-29-20	4-29-20	
Ethane	ND	0.22	RSK 175	4-29-20	4-29-20	
Ethene	ND	0.29	RSK 175	4-29-20	4-29-20	

Client ID:	S-MW-2R:W					
Laboratory ID:	04-181-02					
Methane	2.4	0.55	RSK 175	4-29-20	4-29-20	
Ethane	ND	0.22	RSK 175	4-29-20	4-29-20	
Ethene	ND	0.29	RSK 175	4-29-20	4-29-20	



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**DISSOLVED GASES
 RSK 175
 QUALITY CONTROL**

Matrix: Water
 Units: ug/L (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0429W1					
Methane	ND	0.55	RSK 175	4-29-20	4-29-20	
Ethane	ND	0.22	RSK 175	4-29-20	4-29-20	
Ethene	ND	0.29	RSK 175	4-29-20	4-29-20	

Analyte	Result		Spike Level		Percent Recovery		Recovery Limits	RPD	RPD Limit	Flags
SPIKE BLANK										
Laboratory ID:	SB0429W1									
	SB	SBD	SB	SBD	SB	SBD				
Methane	21.7	21.5	22.1	22.1	98	97	75-125	1	25	
Ethane	40.6	39.9	41.6	41.6	98	96	75-125	2	25	
Ethene	41.1	40.6	38.8	38.8	106	105	75-125	1	25	





Data Qualifiers and Abbreviations

- A - Due to a high sample concentration, the amount spiked is insufficient for meaningful MS/MSD recovery data.
 - B - The analyte indicated was also found in the blank sample.
 - C - The duplicate RPD is outside control limits due to high result variability when analyte concentrations are within five times the quantitation limit.
 - E - The value reported exceeds the quantitation range and is an estimate.
 - F - Surrogate recovery data is not available due to the high concentration of coeluting target compounds.
 - H - The analyte indicated is a common laboratory solvent and may have been introduced during sample preparation, and be impacting the sample result.
 - I - Compound recovery is outside of the control limits.
 - J - The value reported was below the practical quantitation limit. The value is an estimate.
 - K - Sample duplicate RPD is outside control limits due to sample inhomogeneity. The sample was re-extracted and re-analyzed with similar results.
 - L - The RPD is outside of the control limits.
 - M - Hydrocarbons in the gasoline range are impacting the diesel range result.
 - M1 - Hydrocarbons in the gasoline range (toluene-naphthalene) are present in the sample.
 - N - Hydrocarbons in the lube oil range are impacting the diesel range result.
 - N1 - Hydrocarbons in diesel range are impacting lube oil range results.
 - O - Hydrocarbons indicative of heavier fuels are present in the sample and are impacting the gasoline result.
 - P - The RPD of the detected concentrations between the two columns is greater than 40.
 - Q - Surrogate recovery is outside of the control limits.
 - S - Surrogate recovery data is not available due to the necessary dilution of the sample.
 - T - The sample chromatogram is not similar to a typical _____.
 - U - The analyte was analyzed for, but was not detected above the reported sample quantitation limit.
 - U1 - The practical quantitation limit is elevated due to interferences present in the sample.
 - V - Matrix Spike/Matrix Spike Duplicate recoveries are outside control limits due to matrix effects.
 - W - Matrix Spike/Matrix Spike Duplicate RPD are outside control limits due to matrix effects.
 - X - Sample extract treated with a mercury cleanup procedure.
 - X1 - Sample extract treated with a sulfuric acid/silica gel cleanup procedure.
 - Y - The calibration verification for this analyte exceeded the 20% drift specified in methods 8260 & 8270, and therefore the reported result should be considered an estimate. The overall performance of the calibration verification standard met the acceptance criteria of the method.
 - Z -
- ND - Not Detected at PQL
 PQL - Practical Quantitation Limit
 RPD - Relative Percent Difference





14648 NE 95th Street, Redmond, WA 98052 • (425) 883-3881

May 4, 2020

Jeff Jensen
Kane Environmental, Inc.
4015 13th Avenue West
Seattle, WA 98119

Re: Analytical Data for Project 82302-9.4
Laboratory Reference No. 2004-186

Dear Jeff:

Enclosed are the analytical results and associated quality control data for samples submitted on April 27, 2020.

The standard policy of OnSite Environmental, Inc. is to store your samples for 30 days from the date of receipt. If you require longer storage, please contact the laboratory.

We appreciate the opportunity to be of service to you on this project. If you have any questions concerning the data, or need additional information, please feel free to call me.

Sincerely,

A handwritten signature in black ink, appearing to read "DB", with a long horizontal flourish extending to the right.

David Baumeister
Project Manager

Enclosures



OnSite Environmental, Inc. 14648 NE 95th Street, Redmond, WA 98052 (425) 883-3881

This report pertains to the samples analyzed in accordance with the chain of custody, and is intended only for the use of the individual or company to whom it is addressed.

Date of Report: May 4, 2020
Samples Submitted: April 27, 2020
Laboratory Reference: 2004-186
Project: 82302-9.4

Case Narrative

Samples were collected on April 27, 2020 and received by the laboratory on April 27, 2020. They were maintained at the laboratory at a temperature of 2°C to 6°C.

Please note that any and all soil sample results are reported on a dry-weight basis, unless otherwise noted below.

General QA/QC issues associated with the analytical data enclosed in this laboratory report will be indicated with a reference to a comment or explanation on the Data Qualifier page. More complex and involved QA/QC issues will be discussed in detail below.



Date of Report: May 4, 2020
 Samples Submitted: April 27, 2020
 Laboratory Reference: 2004-186
 Project: 82302-9.4

VOLATILE ORGANICS EPA 8260D
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Matrix: Water
 Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	HZ-MW-31:W					
Laboratory ID:	04-186-01					
Dichlorodifluoromethane	ND	0.20	EPA 8260D	5-1-20	5-1-20	
Chloromethane	ND	1.0	EPA 8260D	5-1-20	5-1-20	
Vinyl Chloride	0.049	0.020	EPA 8260D/SIM	5-1-20	5-1-20	
Bromomethane	ND	0.20	EPA 8260D	5-1-20	5-1-20	
Chloroethane	ND	1.0	EPA 8260D	5-1-20	5-1-20	
Trichlorofluoromethane	ND	0.20	EPA 8260D	5-1-20	5-1-20	
1,1-Dichloroethene	ND	0.20	EPA 8260D	5-1-20	5-1-20	
Iodomethane	ND	1.3	EPA 8260D	5-1-20	5-1-20	
Methylene Chloride	ND	1.0	EPA 8260D	5-1-20	5-1-20	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260D	5-1-20	5-1-20	
1,1-Dichloroethane	ND	0.20	EPA 8260D	5-1-20	5-1-20	
2,2-Dichloropropane	ND	0.20	EPA 8260D	5-1-20	5-1-20	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260D	5-1-20	5-1-20	
Bromochloromethane	ND	0.20	EPA 8260D	5-1-20	5-1-20	
Chloroform	ND	0.20	EPA 8260D	5-1-20	5-1-20	
1,1,1-Trichloroethane	ND	0.20	EPA 8260D	5-1-20	5-1-20	
Carbon Tetrachloride	ND	0.20	EPA 8260D	5-1-20	5-1-20	
1,1-Dichloropropene	ND	0.20	EPA 8260D	5-1-20	5-1-20	
1,2-Dichloroethane	ND	0.20	EPA 8260D	5-1-20	5-1-20	
Trichloroethene	ND	0.20	EPA 8260D	5-1-20	5-1-20	
1,2-Dichloropropane	ND	0.20	EPA 8260D	5-1-20	5-1-20	
Dibromomethane	ND	0.20	EPA 8260D	5-1-20	5-1-20	
Bromodichloromethane	ND	0.20	EPA 8260D	5-1-20	5-1-20	
2-Chloroethyl Vinyl Ether	ND	1.3	EPA 8260D	5-1-20	5-1-20	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260D	5-1-20	5-1-20	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260D	5-1-20	5-1-20	



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VOLATILE ORGANICS EPA 8260D
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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	HZ-MW-31:W					
Laboratory ID:	04-186-01					
1,1,2-Trichloroethane	ND	0.20	EPA 8260D	5-1-20	5-1-20	
Tetrachloroethene	ND	0.20	EPA 8260D	5-1-20	5-1-20	
1,3-Dichloropropane	ND	0.20	EPA 8260D	5-1-20	5-1-20	
Dibromochloromethane	ND	0.20	EPA 8260D	5-1-20	5-1-20	
1,2-Dibromoethane	ND	0.20	EPA 8260D	5-1-20	5-1-20	
Chlorobenzene	ND	0.20	EPA 8260D	5-1-20	5-1-20	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260D	5-1-20	5-1-20	
Bromoform	ND	1.0	EPA 8260D	5-1-20	5-1-20	
Bromobenzene	ND	0.20	EPA 8260D	5-1-20	5-1-20	
1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260D	5-1-20	5-1-20	
1,2,3-Trichloropropane	ND	0.20	EPA 8260D	5-1-20	5-1-20	
2-Chlorotoluene	ND	0.20	EPA 8260D	5-1-20	5-1-20	
4-Chlorotoluene	ND	0.20	EPA 8260D	5-1-20	5-1-20	
1,3-Dichlorobenzene	ND	0.20	EPA 8260D	5-1-20	5-1-20	
1,4-Dichlorobenzene	ND	0.20	EPA 8260D	5-1-20	5-1-20	
1,2-Dichlorobenzene	ND	0.20	EPA 8260D	5-1-20	5-1-20	
1,2-Dibromo-3-chloropropane	ND	1.0	EPA 8260D	5-1-20	5-1-20	
1,2,4-Trichlorobenzene	ND	0.20	EPA 8260D	5-1-20	5-1-20	
Hexachlorobutadiene	ND	1.0	EPA 8260D	5-1-20	5-1-20	
1,2,3-Trichlorobenzene	ND	0.20	EPA 8260D	5-1-20	5-1-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	89	75-127				
<i>Toluene-d8</i>	96	80-127				
<i>4-Bromofluorobenzene</i>	102	78-125				



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VOLATILE ORGANICS EPA 8260D
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Matrix: Water
 Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW-40:W					
Laboratory ID:	04-186-02					
Dichlorodifluoromethane	ND	10	EPA 8260D	5-1-20	5-1-20	
Chloromethane	ND	50	EPA 8260D	5-1-20	5-1-20	
Vinyl Chloride	930	10	EPA 8260D	5-1-20	5-1-20	
Bromomethane	ND	10	EPA 8260D	5-1-20	5-1-20	
Chloroethane	ND	50	EPA 8260D	5-1-20	5-1-20	
Trichlorofluoromethane	ND	10	EPA 8260D	5-1-20	5-1-20	
1,1-Dichloroethene	ND	10	EPA 8260D	5-1-20	5-1-20	
Iodomethane	ND	65	EPA 8260D	5-1-20	5-1-20	
Methylene Chloride	ND	50	EPA 8260D	5-1-20	5-1-20	
(trans) 1,2-Dichloroethene	ND	10	EPA 8260D	5-1-20	5-1-20	
1,1-Dichloroethane	ND	10	EPA 8260D	5-1-20	5-1-20	
2,2-Dichloropropane	ND	10	EPA 8260D	5-1-20	5-1-20	
(cis) 1,2-Dichloroethene	150	10	EPA 8260D	5-1-20	5-1-20	
Bromochloromethane	ND	10	EPA 8260D	5-1-20	5-1-20	
Chloroform	ND	10	EPA 8260D	5-1-20	5-1-20	
1,1,1-Trichloroethane	ND	10	EPA 8260D	5-1-20	5-1-20	
Carbon Tetrachloride	ND	10	EPA 8260D	5-1-20	5-1-20	
1,1-Dichloropropene	ND	10	EPA 8260D	5-1-20	5-1-20	
1,2-Dichloroethane	ND	10	EPA 8260D	5-1-20	5-1-20	
Trichloroethene	ND	10	EPA 8260D	5-1-20	5-1-20	
1,2-Dichloropropane	ND	10	EPA 8260D	5-1-20	5-1-20	
Dibromomethane	ND	10	EPA 8260D	5-1-20	5-1-20	
Bromodichloromethane	ND	10	EPA 8260D	5-1-20	5-1-20	
2-Chloroethyl Vinyl Ether	ND	65	EPA 8260D	5-1-20	5-1-20	
(cis) 1,3-Dichloropropene	ND	10	EPA 8260D	5-1-20	5-1-20	
(trans) 1,3-Dichloropropene	ND	10	EPA 8260D	5-1-20	5-1-20	



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VOLATILE ORGANICS EPA 8260D
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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW-40:W					
Laboratory ID:	04-186-02					
1,1,2-Trichloroethane	ND	10	EPA 8260D	5-1-20	5-1-20	
Tetrachloroethene	ND	10	EPA 8260D	5-1-20	5-1-20	
1,3-Dichloropropane	ND	10	EPA 8260D	5-1-20	5-1-20	
Dibromochloromethane	ND	10	EPA 8260D	5-1-20	5-1-20	
1,2-Dibromoethane	ND	10	EPA 8260D	5-1-20	5-1-20	
Chlorobenzene	ND	10	EPA 8260D	5-1-20	5-1-20	
1,1,1,2-Tetrachloroethane	ND	10	EPA 8260D	5-1-20	5-1-20	
Bromoform	ND	50	EPA 8260D	5-1-20	5-1-20	
Bromobenzene	ND	10	EPA 8260D	5-1-20	5-1-20	
1,1,2,2-Tetrachloroethane	ND	10	EPA 8260D	5-1-20	5-1-20	
1,2,3-Trichloropropane	ND	10	EPA 8260D	5-1-20	5-1-20	
2-Chlorotoluene	ND	10	EPA 8260D	5-1-20	5-1-20	
4-Chlorotoluene	ND	10	EPA 8260D	5-1-20	5-1-20	
1,3-Dichlorobenzene	ND	10	EPA 8260D	5-1-20	5-1-20	
1,4-Dichlorobenzene	ND	10	EPA 8260D	5-1-20	5-1-20	
1,2-Dichlorobenzene	ND	10	EPA 8260D	5-1-20	5-1-20	
1,2-Dibromo-3-chloropropane	ND	50	EPA 8260D	5-1-20	5-1-20	
1,2,4-Trichlorobenzene	ND	10	EPA 8260D	5-1-20	5-1-20	
Hexachlorobutadiene	ND	50	EPA 8260D	5-1-20	5-1-20	
1,2,3-Trichlorobenzene	ND	10	EPA 8260D	5-1-20	5-1-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	96	75-127				
<i>Toluene-d8</i>	99	80-127				
<i>4-Bromofluorobenzene</i>	108	78-125				



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Matrix: Water
 Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW-39:W					
Laboratory ID:	04-186-03					
Dichlorodifluoromethane	ND	0.20	EPA 8260D	5-1-20	5-1-20	
Chloromethane	ND	1.0	EPA 8260D	5-1-20	5-1-20	
Vinyl Chloride	0.024	0.020	EPA 8260D/SIM	5-1-20	5-1-20	
Bromomethane	ND	0.20	EPA 8260D	5-1-20	5-1-20	
Chloroethane	ND	1.0	EPA 8260D	5-1-20	5-1-20	
Trichlorofluoromethane	ND	0.20	EPA 8260D	5-1-20	5-1-20	
1,1-Dichloroethene	ND	0.20	EPA 8260D	5-1-20	5-1-20	
Iodomethane	ND	1.3	EPA 8260D	5-1-20	5-1-20	
Methylene Chloride	ND	1.0	EPA 8260D	5-1-20	5-1-20	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260D	5-1-20	5-1-20	
1,1-Dichloroethane	ND	0.20	EPA 8260D	5-1-20	5-1-20	
2,2-Dichloropropane	ND	0.20	EPA 8260D	5-1-20	5-1-20	
(cis) 1,2-Dichloroethene	8.9	0.20	EPA 8260D	5-1-20	5-1-20	
Bromochloromethane	ND	0.20	EPA 8260D	5-1-20	5-1-20	
Chloroform	ND	0.20	EPA 8260D	5-1-20	5-1-20	
1,1,1-Trichloroethane	ND	0.20	EPA 8260D	5-1-20	5-1-20	
Carbon Tetrachloride	ND	0.20	EPA 8260D	5-1-20	5-1-20	
1,1-Dichloropropene	ND	0.20	EPA 8260D	5-1-20	5-1-20	
1,2-Dichloroethane	ND	0.20	EPA 8260D	5-1-20	5-1-20	
Trichloroethene	2.2	0.20	EPA 8260D	5-1-20	5-1-20	
1,2-Dichloropropane	ND	0.20	EPA 8260D	5-1-20	5-1-20	
Dibromomethane	ND	0.20	EPA 8260D	5-1-20	5-1-20	
Bromodichloromethane	ND	0.20	EPA 8260D	5-1-20	5-1-20	
2-Chloroethyl Vinyl Ether	ND	1.3	EPA 8260D	5-1-20	5-1-20	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260D	5-1-20	5-1-20	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260D	5-1-20	5-1-20	



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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW-39:W					
Laboratory ID:	04-186-03					
1,1,2-Trichloroethane	ND	0.20	EPA 8260D	5-1-20	5-1-20	
Tetrachloroethene	3.1	0.20	EPA 8260D	5-1-20	5-1-20	
1,3-Dichloropropane	ND	0.20	EPA 8260D	5-1-20	5-1-20	
Dibromochloromethane	ND	0.20	EPA 8260D	5-1-20	5-1-20	
1,2-Dibromoethane	ND	0.20	EPA 8260D	5-1-20	5-1-20	
Chlorobenzene	ND	0.20	EPA 8260D	5-1-20	5-1-20	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260D	5-1-20	5-1-20	
Bromoform	ND	1.0	EPA 8260D	5-1-20	5-1-20	
Bromobenzene	ND	0.20	EPA 8260D	5-1-20	5-1-20	
1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260D	5-1-20	5-1-20	
1,2,3-Trichloropropane	ND	0.20	EPA 8260D	5-1-20	5-1-20	
2-Chlorotoluene	ND	0.20	EPA 8260D	5-1-20	5-1-20	
4-Chlorotoluene	ND	0.20	EPA 8260D	5-1-20	5-1-20	
1,3-Dichlorobenzene	ND	0.20	EPA 8260D	5-1-20	5-1-20	
1,4-Dichlorobenzene	ND	0.20	EPA 8260D	5-1-20	5-1-20	
1,2-Dichlorobenzene	ND	0.20	EPA 8260D	5-1-20	5-1-20	
1,2-Dibromo-3-chloropropane	ND	1.0	EPA 8260D	5-1-20	5-1-20	
1,2,4-Trichlorobenzene	ND	0.20	EPA 8260D	5-1-20	5-1-20	
Hexachlorobutadiene	ND	1.0	EPA 8260D	5-1-20	5-1-20	
1,2,3-Trichlorobenzene	ND	0.20	EPA 8260D	5-1-20	5-1-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>97</i>	<i>75-127</i>				
<i>Toluene-d8</i>	<i>98</i>	<i>80-127</i>				
<i>4-Bromofluorobenzene</i>	<i>105</i>	<i>78-125</i>				



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QUALITY CONTROL
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Matrix: Water
 Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0501W1					
Dichlorodifluoromethane	ND	0.20	EPA 8260D	5-1-20	5-1-20	
Chloromethane	ND	1.0	EPA 8260D	5-1-20	5-1-20	
Vinyl Chloride	ND	0.020	EPA 8260D/SIM	5-1-20	5-1-20	
Bromomethane	ND	0.20	EPA 8260D	5-1-20	5-1-20	
Chloroethane	ND	1.0	EPA 8260D	5-1-20	5-1-20	
Trichlorofluoromethane	ND	0.20	EPA 8260D	5-1-20	5-1-20	
1,1-Dichloroethene	ND	0.20	EPA 8260D	5-1-20	5-1-20	
Iodomethane	ND	1.3	EPA 8260D	5-1-20	5-1-20	
Methylene Chloride	ND	1.0	EPA 8260D	5-1-20	5-1-20	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260D	5-1-20	5-1-20	
1,1-Dichloroethane	ND	0.20	EPA 8260D	5-1-20	5-1-20	
2,2-Dichloropropane	ND	0.20	EPA 8260D	5-1-20	5-1-20	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260D	5-1-20	5-1-20	
Bromochloromethane	ND	0.20	EPA 8260D	5-1-20	5-1-20	
Chloroform	ND	0.20	EPA 8260D	5-1-20	5-1-20	
1,1,1-Trichloroethane	ND	0.20	EPA 8260D	5-1-20	5-1-20	
Carbon Tetrachloride	ND	0.20	EPA 8260D	5-1-20	5-1-20	
1,1-Dichloropropene	ND	0.20	EPA 8260D	5-1-20	5-1-20	
1,2-Dichloroethane	ND	0.20	EPA 8260D	5-1-20	5-1-20	
Trichloroethene	ND	0.20	EPA 8260D	5-1-20	5-1-20	
1,2-Dichloropropane	ND	0.20	EPA 8260D	5-1-20	5-1-20	
Dibromomethane	ND	0.20	EPA 8260D	5-1-20	5-1-20	
Bromodichloromethane	ND	0.20	EPA 8260D	5-1-20	5-1-20	
2-Chloroethyl Vinyl Ether	ND	1.3	EPA 8260D	5-1-20	5-1-20	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260D	5-1-20	5-1-20	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260D	5-1-20	5-1-20	



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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0501W1					
1,1,2-Trichloroethane	ND	0.20	EPA 8260D	5-1-20	5-1-20	
Tetrachloroethene	ND	0.20	EPA 8260D	5-1-20	5-1-20	
1,3-Dichloropropane	ND	0.20	EPA 8260D	5-1-20	5-1-20	
Dibromochloromethane	ND	0.20	EPA 8260D	5-1-20	5-1-20	
1,2-Dibromoethane	ND	0.20	EPA 8260D	5-1-20	5-1-20	
Chlorobenzene	ND	0.20	EPA 8260D	5-1-20	5-1-20	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260D	5-1-20	5-1-20	
Bromoform	ND	1.0	EPA 8260D	5-1-20	5-1-20	
Bromobenzene	ND	0.20	EPA 8260D	5-1-20	5-1-20	
1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260D	5-1-20	5-1-20	
1,2,3-Trichloropropane	ND	0.20	EPA 8260D	5-1-20	5-1-20	
2-Chlorotoluene	ND	0.20	EPA 8260D	5-1-20	5-1-20	
4-Chlorotoluene	ND	0.20	EPA 8260D	5-1-20	5-1-20	
1,3-Dichlorobenzene	ND	0.20	EPA 8260D	5-1-20	5-1-20	
1,4-Dichlorobenzene	ND	0.20	EPA 8260D	5-1-20	5-1-20	
1,2-Dichlorobenzene	ND	0.20	EPA 8260D	5-1-20	5-1-20	
1,2-Dibromo-3-chloropropane	ND	1.0	EPA 8260D	5-1-20	5-1-20	
1,2,4-Trichlorobenzene	ND	0.20	EPA 8260D	5-1-20	5-1-20	
Hexachlorobutadiene	ND	1.0	EPA 8260D	5-1-20	5-1-20	
1,2,3-Trichlorobenzene	ND	0.20	EPA 8260D	5-1-20	5-1-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>95</i>	<i>75-127</i>				
<i>Toluene-d8</i>	<i>95</i>	<i>80-127</i>				
<i>4-Bromofluorobenzene</i>	<i>102</i>	<i>78-125</i>				



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**VOLATILE ORGANICS EPA 8260D
 QUALITY CONTROL**

Matrix: Water
 Units: ug/L

Analyte	Result		Spike Level		Percent Recovery		Recovery	RPD	RPD	Flags
					Recovery	Limits	RPD	Limit		
SPIKE BLANKS										
Laboratory ID:	SB0501W1									
	SB	SBD	SB	SBD	SB	SBD				
1,1-Dichloroethene	9.25	9.42	10.0	10.0	93	94	65-126	2	17	
Benzene	10.1	10.1	10.0	10.0	101	101	71-119	0	19	
Trichloroethene	10.6	10.2	10.0	10.0	106	102	82-123	4	18	
Toluene	10.1	10.1	10.0	10.0	101	101	77-119	0	18	
Chlorobenzene	10.9	10.6	10.0	10.0	109	106	80-120	3	19	
<i>Surrogate:</i>										
<i>Dibromofluoromethane</i>					97	93	75-127			
<i>Toluene-d8</i>					102	98	80-127			
<i>4-Bromofluorobenzene</i>					103	97	78-125			



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**TOTAL ORGANIC CARBON
 SM 5310B**

Matrix: Water
 Units: mg/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	HZ-MW-31:W					
Laboratory ID:	04-186-01					
Total Organic Carbon	4.7	1.0	SM 5310B	4-30-20	4-30-20	

Client ID:	MW-40:W					
Laboratory ID:	04-186-02					
Total Organic Carbon	9.9	1.0	SM 5310B	4-30-20	4-30-20	

Client ID:	MW-39:W					
Laboratory ID:	04-186-03					
Total Organic Carbon	2.1	1.0	SM 5310B	4-30-20	4-30-20	



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**TOTAL ORGANIC CARBON
 SM 5310B
 QUALITY CONTROL**

Matrix: Water
 Units: mg/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0430W1					
Total Organic Carbon	ND	1.0	SM 5310B	4-30-20	4-30-20	

Analyte	Result	Spike Level	Source Result	Percent Recovery	Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE								
Laboratory ID:	04-165-01							
	ORIG	DUP						
Total Organic Carbon	ND	ND	NA	NA	NA	NA	20	

MATRIX SPIKE

Laboratory ID:	04-165-01							
	MS	MS		MS				
Total Organic Carbon	11.4	10.0	ND	114	85-131	NA	NA	

SPIKE BLANK

Laboratory ID:	SB0430W1							
	SB	SB		SB				
Total Organic Carbon	10.7	10.0	NA	107	88-127	NA	NA	



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DISSOLVED IRON
EPA 6010D

Matrix: Water
 Units: ug/L (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	HZ-MW-31:W					
Laboratory ID:	04-186-01					
Iron	19000	56	EPA 6010D	4-27-20	4-29-20	
Client ID:	MW-40:W					
Laboratory ID:	04-186-02					
Iron	5600	56	EPA 6010D	4-27-20	4-29-20	
Client ID:	MW-39:W					
Laboratory ID:	04-186-03					
Iron	440	56	EPA 6010D	4-27-20	4-29-20	



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**DISSOLVED IRON
 EPA 6010D
 QUALITY CONTROL**

Matrix: Water
 Units: ug/L (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0427F1					
Iron	ND	56	EPA 6010D	4-27-20	4-29-20	

Analyte	Result	Spike Level	Source Result	Percent Recovery	Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE								
Laboratory ID:	04-132-02							
	ORIG	DUP						
Iron	ND	ND	NA	NA	NA	NA	20	

MATRIX SPIKES

Laboratory ID:	04-132-02									
	MS	MSD	MS	MSD		MS	MSD			
Iron	22900	22600	22200	22200	ND	103	102	75-125	1	20



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CHLORIDE
SM 4500-CI E

Matrix: Water
 Units: mg/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	HZ-MW-31:W					
Laboratory ID:	04-186-01					
Chloride	5.8	2.0	SM 4500-CI E	5-1-20	5-1-20	
Client ID:	MW-40:W					
Laboratory ID:	04-186-02					
Chloride	7.9	2.0	SM 4500-CI E	5-1-20	5-1-20	
Client ID:	MW-39:W					
Laboratory ID:	04-186-03					
Chloride	4.3	2.0	SM 4500-CI E	5-1-20	5-1-20	



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**CHLORIDE
 SM 4500-Cl E
 QUALITY CONTROL**

Matrix: Water
 Units: mg/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0501W1					
Chloride	ND	2.0	SM 4500-Cl E	5-1-20	5-1-20	

Analyte	Result	Spike Level	Source Result	Percent Recovery	Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE								
Laboratory ID:	04-181-01							
	ORIG	DUP						
Chloride	5.50	5.45	NA	NA	NA	1	14	

MATRIX SPIKE								
Laboratory ID:	04-181-01							
	MS	MS		MS				
Chloride	57.5	50.0	5.50	104	86-110	NA	NA	

SPIKE BLANK								
Laboratory ID:	SB0501W1							
	SB	SB		SB				
Chloride	47.6	50.0	NA	95	86-110	NA	NA	



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SULFATE
ASTM D516-11

Matrix: Water
 Units: mg/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	HZ-MW-31:W					
Laboratory ID:	04-186-01					
Sulfate	ND	5.0	ASTM D516-11	4-29-20	4-29-20	

Client ID:	MW-40:W					
Laboratory ID:	04-186-02					
Sulfate	ND	5.0	ASTM D516-11	4-29-20	4-29-20	

Client ID:	MW-39:W					
Laboratory ID:	04-186-03					
Sulfate	ND	5.0	ASTM D516-11	4-29-20	4-29-20	



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**SULFATE
 ASTM D516-11
 QUALITY CONTROL**

Matrix: Water
 Units: mg/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0429W1					
Sulfate	ND	5.0	ASTM D516-11	4-29-20	4-29-20	

Analyte	Result	Spike Level	Source Result	Percent Recovery	Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE								
Laboratory ID:	04-186-01							
	ORIG	DUP						
Sulfate	ND	ND	NA	NA	NA	NA	10	

MATRIX SPIKE								
Laboratory ID:	04-186-01							
	MS	MS		MS				
Sulfate	8.98	10.0	ND	90	73-134	NA	NA	

SPIKE BLANK								
Laboratory ID:	SB0429W1							
	SB	SB		SB				
Sulfate	10.2	10.0	NA	102	89-113	NA	NA	



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AMMONIA (as Nitrogen)
SM 4500-NH₃ D

Matrix: Water
 Units: mg/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	HZ-MW-31:W					
Laboratory ID:	04-186-01					
Ammonia	0.29	0.050	SM 4500-NH3 D	4-28-20	4-28-20	
Client ID:	MW-40:W					
Laboratory ID:	04-186-02					
Ammonia	0.24	0.050	SM 4500-NH3 D	4-28-20	4-28-20	
Client ID:	MW-39:W					
Laboratory ID:	04-186-03					
Ammonia	ND	0.050	SM 4500-NH3 D	4-28-20	4-28-20	



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AMMONIA (as Nitrogen)
SM 4500-NH₃ D
QUALITY CONTROL

Matrix: Water
 Units: mg/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0428W1					
Ammonia	ND	0.050	SM 4500-NH3 D	4-28-20	4-28-20	

Analyte	Result	Spike Level	Source Result	Percent Recovery	Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE								
Laboratory ID:	04-144-01							
	ORIG	DUP						
Ammonia	ND	ND	NA	NA	NA	NA	12	

MATRIX SPIKE								
Laboratory ID:	04-144-01							
	MS	MS		MS				
Ammonia	4.98	5.00	ND	100	75-121	NA	NA	

SPIKE BLANK								
Laboratory ID:	SB0428W1							
	SB	SB		SB				
Ammonia	5.02	5.00	NA	100	85-110	NA	NA	



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**DISSOLVED GASES
 RSK 175**

Matrix: Water
 Units: ug/L (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	HZ-MW-31:W					
Laboratory ID:	04-186-01					
Methane	840	5.5	RSK 175	4-29-20	4-29-20	
Ethane	ND	0.22	RSK 175	4-29-20	4-29-20	
Ethene	ND	0.29	RSK 175	4-29-20	4-29-20	

Client ID:	MW-40:W					
Laboratory ID:	04-186-02					
Methane	5600	55	RSK 175	4-29-20	4-29-20	
Ethane	ND	0.22	RSK 175	4-29-20	4-29-20	
Ethene	130	0.29	RSK 175	4-29-20	4-29-20	

Client ID:	MW-39:W					
Laboratory ID:	04-186-03					
Methane	1.1	0.55	RSK 175	4-29-20	4-29-20	
Ethane	ND	0.22	RSK 175	4-29-20	4-29-20	
Ethene	ND	0.29	RSK 175	4-29-20	4-29-20	



Date of Report: May 4, 2020
 Samples Submitted: April 27, 2020
 Laboratory Reference: 2004-186
 Project: 82302-9.4

**DISSOLVED GASES
 RSK 175
 QUALITY CONTROL**

Matrix: Water
 Units: ug/L (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0429W1					
Methane	ND	0.55	RSK 175	4-29-20	4-29-20	
Ethane	ND	0.22	RSK 175	4-29-20	4-29-20	
Ethene	ND	0.29	RSK 175	4-29-20	4-29-20	

Analyte	Result		Spike Level		Percent Recovery		Recovery Limits	RPD	RPD Limit	Flags
SPIKE BLANK										
Laboratory ID:	SB0429W1									
	SB	SBD	SB	SBD	SB	SBD				
Methane	21.7	21.5	22.1	22.1	98	97	75-125	1	25	
Ethane	40.6	39.9	41.6	41.6	98	96	75-125	2	25	
Ethene	41.1	40.6	38.8	38.8	106	105	75-125	1	25	





Data Qualifiers and Abbreviations

- A - Due to a high sample concentration, the amount spiked is insufficient for meaningful MS/MSD recovery data.
 - B - The analyte indicated was also found in the blank sample.
 - C - The duplicate RPD is outside control limits due to high result variability when analyte concentrations are within five times the quantitation limit.
 - E - The value reported exceeds the quantitation range and is an estimate.
 - F - Surrogate recovery data is not available due to the high concentration of coeluting target compounds.
 - H - The analyte indicated is a common laboratory solvent and may have been introduced during sample preparation, and be impacting the sample result.
 - I - Compound recovery is outside of the control limits.
 - J - The value reported was below the practical quantitation limit. The value is an estimate.
 - K - Sample duplicate RPD is outside control limits due to sample inhomogeneity. The sample was re-extracted and re-analyzed with similar results.
 - L - The RPD is outside of the control limits.
 - M - Hydrocarbons in the gasoline range are impacting the diesel range result.
 - M1 - Hydrocarbons in the gasoline range (toluene-naphthalene) are present in the sample.
 - N - Hydrocarbons in the lube oil range are impacting the diesel range result.
 - N1 - Hydrocarbons in diesel range are impacting lube oil range results.
 - O - Hydrocarbons indicative of heavier fuels are present in the sample and are impacting the gasoline result.
 - P - The RPD of the detected concentrations between the two columns is greater than 40.
 - Q - Surrogate recovery is outside of the control limits.
 - S - Surrogate recovery data is not available due to the necessary dilution of the sample.
 - T - The sample chromatogram is not similar to a typical _____.
 - U - The analyte was analyzed for, but was not detected above the reported sample quantitation limit.
 - U1 - The practical quantitation limit is elevated due to interferences present in the sample.
 - V - Matrix Spike/Matrix Spike Duplicate recoveries are outside control limits due to matrix effects.
 - W - Matrix Spike/Matrix Spike Duplicate RPD are outside control limits due to matrix effects.
 - X - Sample extract treated with a mercury cleanup procedure.
 - X1 - Sample extract treated with a sulfuric acid/silica gel cleanup procedure.
 - Y - The calibration verification for this analyte exceeded the 20% drift specified in methods 8260 & 8270, and therefore the reported result should be considered an estimate. The overall performance of the calibration verification standard met the acceptance criteria of the method.
 - Z -
- ND - Not Detected at PQL
 PQL - Practical Quantitation Limit
 RPD - Relative Percent Difference



