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Bellevue, Washington 98007
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September 25, 2020

Roger McCracken, Director
Gateway Investments LLC
10400 NE 4th Street, Suite 2225
Bellevue, WA. 98004

Subject: Summer 2020
Post Dismissal Groundwater Monitoring Report
MasterPark/Former Tac-Sea Motel
International Boulevard
SeaTac, Washington

Dear Mr. McCracken:

Introduction

This letter transmits the results of CDM Smith's groundwater monitoring conducted in August 2020 for the above-referenced site. This work is being conducted under the Amended Consent Decree No. 00-2-02909-8KNT between the State of Washington Department of Ecology (Ecology) and Linda T.Y. Lee and Gateway Investments LLC filed on December 4, 2014, which requires two groundwater monitoring events (1 dry season and 1 wet season) at 5 year intervals until it can be demonstrated that cleanup levels have been met in accordance with the Model Toxics Control Act (MTCA).

Site Description and Background Information

The site is located in SeaTac, Washington near the north end of Sea-Tac International Airport as shown on **Figure 1**. The property is currently being operated as a MasterPark parking lot. An air sparge (AS) and soil vapor extraction (SVE) remediation system operated on the site between August 2000 and April 5, 2011. The purpose of the remediation system was to remove tetrachloroethene (PCE) from soil and groundwater. The system was turned off after it was determined that declining PCE concentrations in groundwater had reached asymptotic conditions. The former configuration of the remediation system AS/SVE wells and groundwater monitoring wells are shown on **Figure 2**. In accordance with the Amended Consent Decree, the remediation system AS/SVE wells and groundwater monitoring wells, with the exception of MWA and MWC, were abandoned in May 2014. The above ground portions of the remediation system were decommissioned in July 2014. Monitoring wells MWA and MWC were retained for the post dismissal confirmation groundwater monitoring.



Groundwater Monitoring

Groundwater samples were collected from MWA and MWC on August 26, 2020. Prior to purging and sampling, the depth to groundwater was measured in each well using an electronic water level indicator to measure the depth to water from the top of the well casing to the nearest 0.01 foot. Historical and current depths to groundwater and water table elevations are summarized in **Table 1**. Prior to collection of the groundwater samples, both wells were purged of stagnant water within the well casing and sand filter pack using clean nylon twine and a disposable polyethylene bailer. Temperature, pH, and specific conductance were monitored at regular intervals during purging to check for stabilization. Historical and present stabilized groundwater parameter measurements are summarized in **Table 2**.

Groundwater samples were collected into laboratory-supplied glass bottles containing hydrochloric acid as a preservative. The samples were packed in a chilled container and were transported under chain-of-custody protocol to OnSite Environmental in Redmond, Washington. Groundwater samples were analyzed for chlorinated volatile organic compounds (cVOCs) by EPA Method 8260D. The laboratory report is included in **Attachment A** and the results are summarized in **Table 3**.

Findings

The groundwater elevation, at approximately 309 feet, was consistent with historical groundwater elevation data. The stabilized field measured parameters of specific conductance, pH, and temperature were within typical ranges. PCE was detected in the groundwater samples collected from both wells at 9.7 micrograms per liter ($\mu\text{g/L}$) in MWA and 9.0 $\mu\text{g/L}$ in MWC, which exceeds the Model Toxics Control Act (MTCA) Method A cleanup level of 5 $\mu\text{g/L}$. Trichloroethene (TCE) was not detected in either groundwater sample at concentrations greater than the laboratory practical quantitation limit (PQL) of 0.20 $\mu\text{g/L}$. A degradation product of PCE, cis-1,2-dichloroethene (cis-1,2-DCE), was detected in the groundwater sample collected from MWC at a concentration 0.21 $\mu\text{g/L}$, which is slightly greater than the PQL of 0.2 $\mu\text{g/L}$.

Typically, the samples are analyzed for a limited list of cVOCs (PCE and its degradation products through vinyl chloride), but this sampling event they were analyzed for the full list. Chloroform was detected at concentrations of 0.20 $\mu\text{g/L}$ and 0.37 $\mu\text{g/L}$ in MWA and MWC, respectively. Low concentrations of chloroform have similarly been detected during past sampling events. No MTCA Method A cleanup level for chloroform is listed; however, the results are less than the most conservative MTCA Method B value of 1.40 $\mu\text{g/L}$. Chloroform is not considered a contaminant of concern at these low concentrations.

Mr. Roger McCracken
September 25, 2020
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Conclusions and Recommendations

The trend of PCE concentrations in groundwater samples collected from MWA and MWC remain on a declining, asymptotic, trend and have been less than 10 µg/L for nearly 15 years. Occasionally, PCE concentrations dip below the MTCA Method A cleanup level of 5 µg/L. The presence of cis-1,2-DCE is noted as a degradation product of PCE and is an indication that some degradation of the PCE is occurring under natural conditions. Concentrations of cis-1,2-DCE remain relatively low and are not of concern. This concludes the groundwater sampling and summary of the data necessary to complete the 5 year review. The next five year review should occur in 2025.

We appreciate the opportunity to provide continuing services on this project. If you have any questions, please feel free to call me at (425) 519-8300.

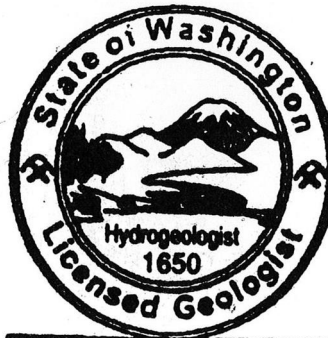
Sincerely,



Pamela J. Morrill, LHG, PMP
Project Manager
CDM Smith Inc.

Attachments

cc: Mr. Harry Grant, Fox Rothschild LLP
Mr. Jerome Cruz, Department of Ecology



Pamela Jeanne Morrill

Tables

Table 1**Groundwater Elevation Data**

Gateway Investment LLC/Former Tac-Sea Motel - Compliance Monitoring
SeaTac, Washington

Monitoring Well I.D.	Date	Reference Elevation (ft amsl)	Depth to Groundwater (ft btoc)	Groundwater Elevation (ft amsl)
MWA	10/03/00	384.17	72.59	311.58
	12/13/00		70.84	313.33
	01/29/01		71.46	312.71
	02/13/01		71.49	312.68
	05/10/01		73.18	310.99
	08/22/01		74.44	309.73
	11/29/01		75.04	309.13
	03/12/02		75.09	309.08
	07/16/02		74.80	309.37
	11/05/02		74.87	309.30
	02/19/03		75.40	308.77
	05/22/03		75.10	309.07
	9/9/2003		75.75	308.42
	12/09/03		76.20	307.97
	03/09/04		75.57	308.60
	06/08/04		75.55	308.62
	07/16/04		75.90	308.27
	09/24/04		76.00	308.17
	12/15/04		76.18	307.99
	03/30/05		76.22	307.95
	06/30/05		76.15	308.02
	08/16/05		76.60	307.57
	09/28/05		76.64	307.53
	01/12/06		76.98	307.19
	04/12/06		75.93	308.24
	07/26/06		76.05	308.12
	10/31/06		75.80	308.37
	01/29/07		75.53	308.64
	03/28/07		75.28	308.89
	05/04/07		74.90	309.27
	08/28/07		75.10	309.07
	12/05/07		74.92	309.25
	03/19/08		74.55	309.62
	07/08/08		74.95	309.22
	10/16/08		75.42	308.75
	01/20/09		75.57	308.60
	04/29/09		75.35	308.82
	08/06/09		75.78	308.39
	11/18/09		75.85	308.32
	02/24/10		75.53	308.64
	04/08/10		75.23	308.94
	04/09/10		75.39	308.78
	07/06/10		74.90	309.27
	10/25/10		75.10	309.07
	06/28/11		73.62	310.55
	05/15/14		74.05	310.12
	09/17/14		74.48	309.69
	02/11/20		74.04	310.13
	08/26/20		75.17	309.00

Table 1**Groundwater Elevation Data**

Gateway Investment LLC/Former Tac-Sea Motel - Compliance Monitoring
SeaTac, Washington

Monitoring Well I.D.	Date	Reference Elevation (ft amsl)	Depth to Groundwater (ft btoc)	Groundwater Elevation (ft amsl)
MWC	10/03/00	385.44	72.59	312.85
	12/13/00		72.10	313.34
	01/29/01		72.66	312.78
	02/13/01		72.72	312.72
	05/10/01		74.31	311.13
	08/22/01		75.61	309.83
	11/29/01		76.24	309.20
	03/12/02		76.34	309.10
	07/16/02		76.00	309.44
	11/05/02		NM	NM
	02/19/03		76.70	308.74
	05/22/03		76.35	309.09
	9/9/2003		76.88	308.56
	12/09/03		77.34	308.10
	03/09/04		76.78	308.66
	06/08/04		76.82	308.62
	07/16/04		76.98	308.46
	09/24/04		77.10	308.34
	12/17/04		77.25	308.19
	03/30/05		77.35	308.09
	06/30/05		77.17	308.27
	08/16/05		77.68	307.76
	09/28/05		77.70	307.74
	01/12/06		78.10	307.34
	04/12/06		77.02	308.42
	07/26/06		77.20	308.24
	10/31/06		77.08	308.36
	01/29/07		76.82	308.62
	03/28/07		76.45	308.99
	05/04/07		76.00	309.44
	08/28/07		76.28	309.16
	12/05/07		76.00	309.44
	03/19/08		75.97	309.47
	07/08/08		76.22	309.22
	10/16/08		76.68	308.76
	01/20/09		76.82	308.62
	04/29/09		77.05	308.39
	08/06/09		76.90	308.54
	11/18/09		77.03	308.41
	02/24/10		76.85	308.59
	04/08/10		76.31	309.13
	04/09/10		76.51	308.93
	07/06/10		76.00	309.44
	10/25/10		76.24	309.20
	06/28/11		74.85	310.59
	05/15/14		75.32	310.12
	09/17/14		75.74	309.70
	02/11/20		75.34	310.10
	08/26/20		76.55	308.89

Notes:

Reference elevation is measured from the top of the well casing at each location and is based on City of SeaTac vertical control benchmark ST-19 located on the southeast corner of S. 167th Street and International Highway. Benchmark has an elevation of 403.85 feet above mean sea level (amsl), North American Vertical Datum of 1988 (NAVD88).

ft amsl - feet above mean sea level

ft btoc - feet below top of well casing reference point

NM - not measured.

Table 2**Stabilized Groundwater Parameters**

Gateway Investment LLC/Former Tac-Sea Motel - Compliance Monitoring
SeaTac, Washington

Monitoring Well I.D.	Date Sampled	Specific Conductance (µmhos/cm)	pH (standard units)	Temperature (°C)
MWA	10/31/00	340	6.50	13.1
	01/29/01	440	6.53	11.0
	05/10/01	390	6.44	13.9
	08/23/01	280	6.30	12.9
	11/29/01	405	5.72	12.0
	04/15/02	250	6.91	12.3
	07/16/02	492	5.77	13.0
	11/05/02	345	6.25	13.2
	02/19/03	332	6.34	11.5
	05/22/03	331	6.66	12.6
	09/09/03	283	6.42	13.2
	12/09/03	279	6.15	11.3
	03/09/04	309	5.95	12.7
	06/08/04	355	6.22	13.7
	09/14/04	287	6.29	12.6
	12/15/04	321	6.75	13.3
	03/30/05	310	6.39	12.8
	06/30/05	323	6.08	13.6
	09/28/05	179	6.16	13.3
	01/12/06	202	6.11	10.6
	04/12/06	402	4.82	12.7
	07/26/06	313	5.64	14.5
	10/31/06	298	5.87	12.6
	01/29/07	306	5.52	12.2
	05/04/07	292	5.53	12.2
	08/28/07	228	5.53	14.8
	12/05/07	235	5.19	11.8
	03/19/08	208	5.57	11.8
	07/08/08	202	6.13	14.2
	10/16/08	298	5.28	13.1
	01/20/09	218	6.14	12.2
	04/29/09	257	6.15	13.3
	08/06/09	290	6.10	13.3
	11/18/09	237	6.33	18.9
	02/24/10	289	6.41	12.7
	07/06/10	260	6.10	13.7
	10/25/10	241	5.92	12.3
	06/28/11	248	5.96	16.2
	05/15/14	293	5.81	14.2
	09/17/14	301	5.88	13.4
	02/11/20	178	6.23	6.2
	08/26/20	266	6.96	16.3

Table 2**Stabilized Groundwater Parameters**

Gateway Investment LLC/Former Tac-Sea Motel - Compliance Monitoring
SeaTac, Washington

Monitoring Well I.D.	Date Sampled	Specific Conductance (µmhos/cm)	pH (standard units)	Temperature (°C)
MWC	10/31/00	510	6.59	14.0
	01/29/01	560	6.56	11.5
	05/10/01	380	6.58	13.5
	08/23/01	370	6.58	13.2
	11/29/01	NS	NS	NS
	04/15/02	NS	NS	NS
	07/16/02	NS	NS	NS
	11/05/02	NS	NS	NS
	02/19/03	495	6.65	11.5
	05/22/03	391	6.76	12.6
	09/09/03	330	6.99	13.3
	12/09/03	459	6.42	10.7
	03/09/04	517	6.23	12.5
	06/08/04	431	6.92	13.7
	09/14/04	324	7.25	12.7
	12/15/04	404	6.98	13.1
	03/30/05	520	7.37	13.0
	06/30/05	452	6.98	14.0
	09/28/05	522	6.77	14.4
	01/12/06	589	6.65	10.4
	04/12/06	616	6.42	12.7
	07/26/06	542	6.42	13.9
	10/31/06	460	6.10	12.2
	01/29/07	475	5.96	12.0
	05/04/07	473	6.15	11.9
	08/28/07	425	6.15	14.0
	12/05/07	445	5.89	11.6
	03/19/08	380	6.59	12.7
	07/08/08	256	6.71	14.3
	10/16/08	394	5.90	13.3
	01/20/09	376	5.85	11.7
	04/29/09	251	6.74	12.8
	08/06/09	405	6.49	13.1
	11/18/09	395	6.71	17.6
	02/24/10	442	6.97	12.7
	07/06/10	431	6.60	13.7
	10/25/10	393	6.31	12.2
	06/28/11	417	6.22	16.1
	05/15/14	281	6.15	13.8
	09/17/14	268	6.18	13.5
	02/11/20	270	6.42	8.2
	08/26/20	382	6.04	15.9

Notes:

µmhos/cm - micromhos per centimeter

°C - degrees Celsius.

Table 3

Volatile Organic Compounds in Groundwater

Gateway Investment LLC/Former Tac-Sea Motel - Compliance Monitoring
SeaTac, Washington

Well I.D.	Date Sampled	EPA Methods 8010 or 8260			
		Tetrachloroethene	Trichloroethene	cis -1,2-Dichloroethene	Vinyl Chloride
		µg/L			
Onsite Monitoring Wells					
MWA	10/31/00	140	<5	9	<2.0
	01/29/01	150	<5	6	<2.0
	05/10/01	200	<5	7	<2.0
	08/23/01	190	<5	6	<2.0
	11/29/01	140	<5	5	<2.0
	04/15/02	66	<2	<2	<2.0
	07/16/02	180	<2	4	<2.0
	11/05/02	54	<2	<2	<2.0
	02/19/03	47	<2	<2	<2.0
	05/22/03	45	<2	<2	<2.0
	09/09/03	43	<2	<2	<2.0
	12/09/03	40	<2	<2	<2.0
	03/09/04	24	<2	<2	<2.0
	06/08/04	20	<2	<2	<2.0
	09/14/04	24	<2	<2	<2.0
	12/15/04	10	<2	<2	<2.0
	03/30/05	11	<2	<2	<2.0
	06/30/05	10	<2	<2	<2.0
	09/28/05	19	<2	<2	<2.0
	01/12/06	15	<2	<2	<2.0
	04/12/06	5	<2	<2	<2.0
	07/26/06	6	<2	<2	<0.20
	10/31/06	13	<2	<2	<0.20
	01/29/07	8	<2	<2	<0.20
	05/04/07	4	<2	<2	<0.20
	08/28/07	7	<2	<2	<0.20
	12/05/07	8	<2	<2	<0.20
	03/19/08	5	<2	<2	<0.20
	07/08/08	7	<2	<2	<0.20
	10/16/08	7	<2	<2	<0.20
	01/20/09	7	<2	<2	<0.20
	04/29/09	4	<2	<2	<0.20
	08/06/09	4.7	<2	<2	<0.20
	11/18/09	8.5	<2	<2	<0.20
	02/24/10	7.5	<2	<2	<0.20
	07/06/10	5.5	<2	<2	0.20
	10/25/10	7.0	<2	<2	<0.20
	06/28/11	5.5	<2	<2	<0.20
	05/15/14	5.5	<2	<2	<0.20
	09/17/14	6.1	<2	<2	<0.20
	02/11/20	4.3	<0.20	<0.20	<0.20
	08/26/20	9.7	<0.20	<0.20	<0.10

Table 3**Volatile Organic Compounds in Groundwater**

Gateway Investment LLC/Former Tac-Sea Motel - Compliance Monitoring
SeaTac, Washington

Well I.D.	Date Sampled	EPA Methods 8010 or 8260			
		Tetrachloroethene	Trichloroethene	cis -1,2-Dichloroethene	Vinyl Chloride
		µg/L			
MWC	10/31/00	100	<5	9	<2.0
	01/29/01	160	<5	8	<2.0
	05/10/01	180	<5	8	<2.0
	08/23/01	130	<5	8	<2.0
	11/29/01	NS	NS	NS	<2.0
	04/15/02	NS	NS	NS	<2.0
	07/16/02	NS	NS	NS	<2.0
	11/05/02	NS	NS	NS	<2.0
	02/19/03	33	<2	<2	<2.0
	05/22/03	11	<2	<2	<2.0
	09/09/03	8	<2	<2	<2.0
	12/09/03	16	<2	<2	<2.0
	03/09/04	20	<2	<2	<2.0
	06/08/04	7	<2	<2	<2.0
	09/14/04	5	<2	<2	<2.0
	12/15/04	15	<2	<2	<2.0
	03/30/05	4	<2	<2	<2.0
	06/30/05	5	<2	<2	<2.0
	09/28/05	6	<2	<2	<2.0
	01/12/06	9	<2	<2	<2.0
	04/12/06	5	<2	<2	<2.0
	07/26/06	6	<2	<2	<0.20
	10/31/06	7	<2	<2	<0.20
	01/29/07	7	<2	<2	<0.20
	05/04/07	6	<2	<2	<0.20
	08/28/07	7	<2	<2	<0.20
	12/05/07	8	<2	<2	<0.20
	03/19/08	4	<2	<2	<0.20
	07/08/08	4	<2	<2	<0.20
	10/16/08	8	<2	<2	<0.20
	01/20/09	7	<2	<2	<0.20
	04/29/09	3	<2	<2	<0.20
	08/06/09	5	<2	<2	<0.20
	11/18/09	8.6	<2	<2	<0.20
	02/24/10	7.1	<2	<2	<0.20
	07/06/10	7.5	<2	<2	<0.20
	10/25/10	7.9	<2	<2	<0.20
	06/28/11	5.4	<2	<2	<0.20
	05/15/14	6.1	<2	<2	<0.20
	09/17/14	6.1	<2	<2	<0.20
	02/11/20	9.2	<0.20	0.21	<0.20
	08/26/20	9.0	<0.20	0.21	<0.10
Cleanup Level ^a		5	5	--	0.2

Notes:

Boxed value exceeds the cleanup level.

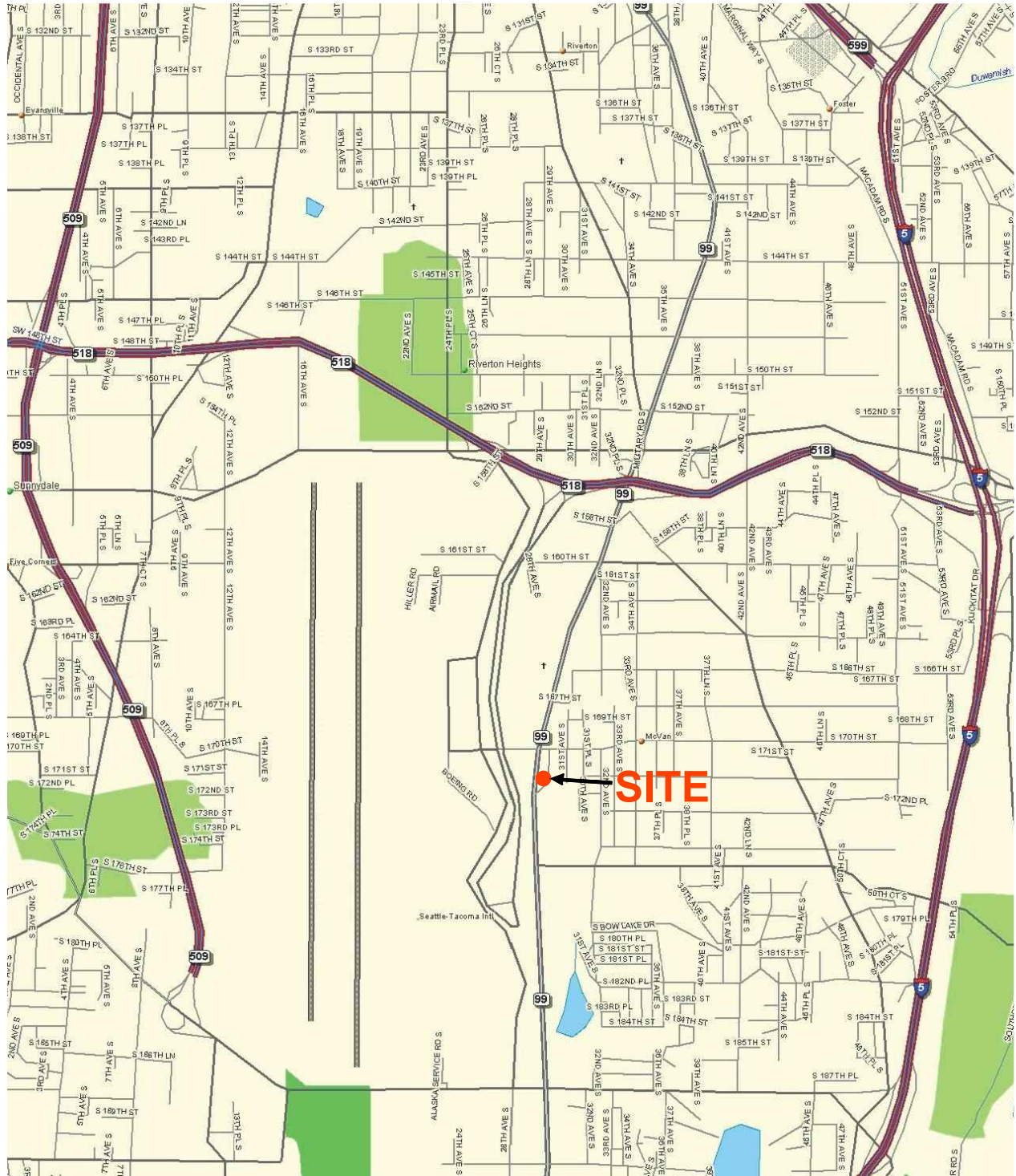
a) Washington Administrative Code Chapter 173-340, Model Toxics Control Act Cleanup

Regulation, Method A suggested groundwater cleanup level.

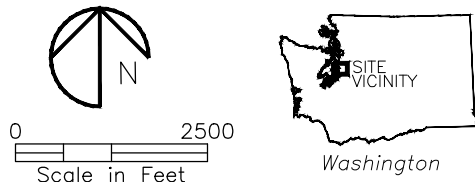
µg/L - micrograms per liter.

< - analyte not detected at or greater than the listed concentration.

Figures



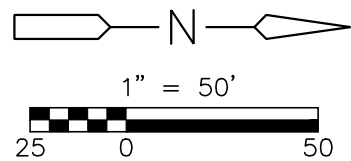
Source: 2000 DeLorme, Xmap Business. 2000 GDT, Inc. Rel. 04/2000



GATEWAY INVESTMENT LLC /
 FORMER TAC-SEA MOTEL
 COMPLIANCE MONITORING
 SEATAC, WASHINGTON

Figure No. 1
 Vicinity Map

P:\20843\104206 (SEA TAC)\Figure 2 (site plan) 06/03/14 10:21 richlepj XREFS: S_1117
©2014 CDM SMITH ALL RIGHTS RESERVED. REUSE OF DOCUMENTS: THESE DOCUMENTS AND DESIGNS PROVIDED BY PROFESSIONAL SERVICE, INCORPORATED HEREIN, ARE THE PROPERTY OF CDM SMITH
AND ARE NOT TO BE USED, IN WHOLE OR PART, FOR ANY OTHER PROJECT WITHOUT THE WRITTEN AUTHORIZATION OF CDM SMITH.



LEGEND

- MWA** MONITORING WELL LOCATION AND ID
- SE1** SOIL VAPOR EXTRACTION WELL LOCATION AND ID (ABANDONED)
- DE1/AS1** COMBINED SOIL VAPOR EXTRACTION AND AIR SPARGE WELL LOCATION AND ID (ABANDONED)
- MW6** MONITORING WELL LOCATION (ABANDONED)
- LAMP POST
- SITE BOUNDARY

GATEWAY INVESTMENT LLC / FORMER TAC-SEA MOTEL
COMPLIANCE MONITORING
SEATAC, WASHINGTON

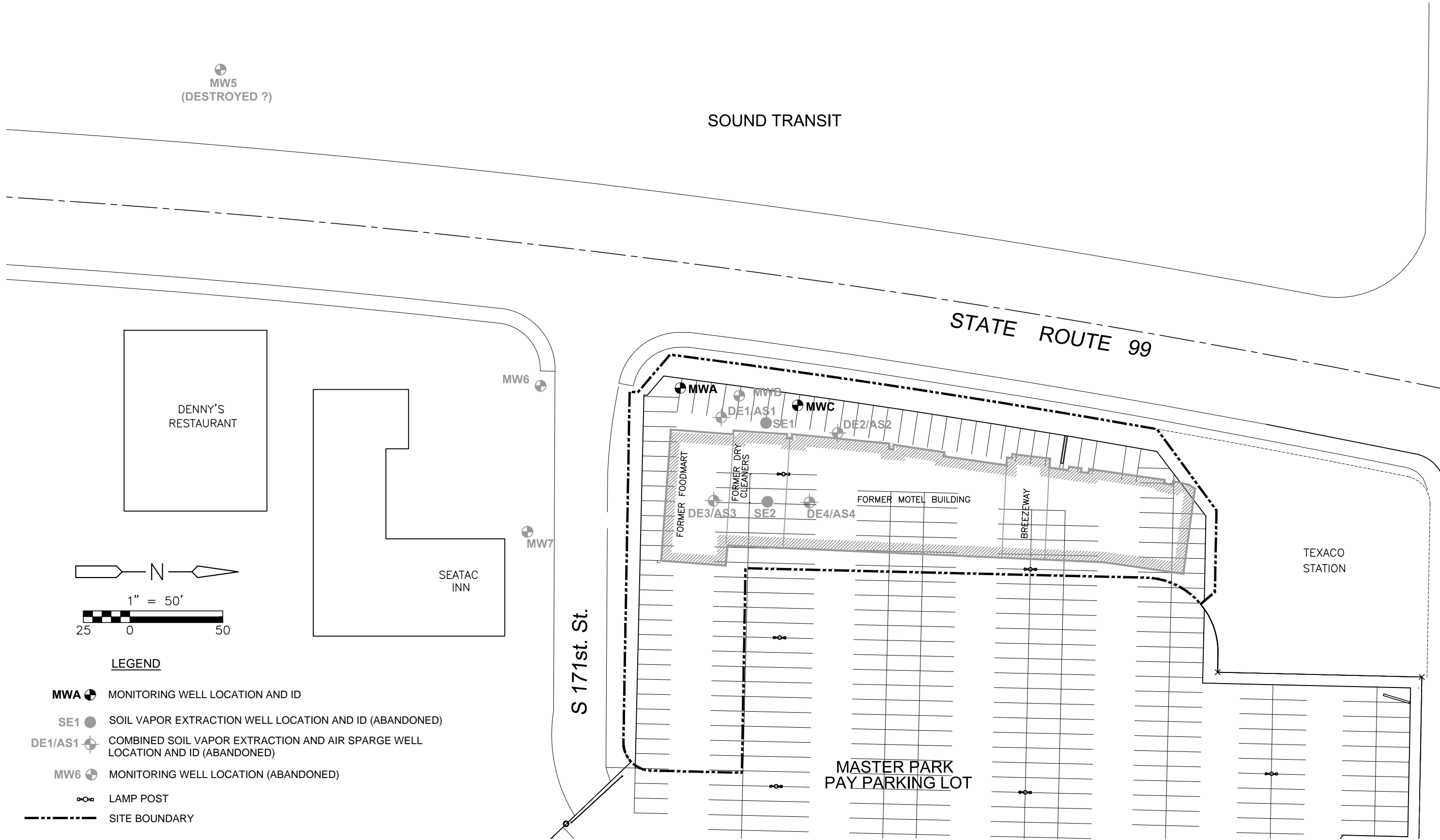


Figure No. 2
Site Plan

Attachment A

Laboratory Report



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

August 28, 2020

Pam Morrill
CDM Smith, Inc.
14432 SE Eastgate Way, Suite 100
Bellevue, WA 98007-6493

Re: Analytical Data for Project 244553
Laboratory Reference No. 2008-259

Dear Pam:

Enclosed are the analytical results and associated quality control data for samples submitted on August 26, 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 "DeB" followed by a stylized flourish.

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: August 28, 2020
Samples Submitted: August 26, 2020
Laboratory Reference: 2008-259
Project: 244553

Case Narrative

Samples were collected on August 26, 2020 and received by the laboratory on August 26, 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: August 28, 2020
 Samples Submitted: August 26, 2020
 Laboratory Reference: 2008-259
 Project: 244553

VOLATILE ORGANICS EPA 8260D
 page 1 of 2

Matrix: Water
 Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:		082620_MWA				
Laboratory ID:		08-259-01				
Dichlorodifluoromethane	ND	0.20	EPA 8260D	8-27-20	8-27-20	
Chloromethane	ND	1.0	EPA 8260D	8-27-20	8-27-20	
Vinyl Chloride	ND	0.10	EPA 8260D	8-27-20	8-27-20	
Chloroethane	ND	1.0	EPA 8260D	8-27-20	8-27-20	
Trichlorofluoromethane	ND	0.20	EPA 8260D	8-27-20	8-27-20	
1,1-Dichloroethene	ND	0.20	EPA 8260D	8-27-20	8-27-20	
Methylene Chloride	ND	1.0	EPA 8260D	8-27-20	8-27-20	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260D	8-27-20	8-27-20	
1,1-Dichloroethane	ND	0.20	EPA 8260D	8-27-20	8-27-20	
2,2-Dichloropropane	ND	0.20	EPA 8260D	8-27-20	8-27-20	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260D	8-27-20	8-27-20	
Bromochloromethane	ND	0.20	EPA 8260D	8-27-20	8-27-20	
Chloroform	0.20	0.20	EPA 8260D	8-27-20	8-27-20	
1,1,1-Trichloroethane	ND	0.20	EPA 8260D	8-27-20	8-27-20	
Carbon Tetrachloride	ND	0.20	EPA 8260D	8-27-20	8-27-20	
1,1-Dichloropropene	ND	0.20	EPA 8260D	8-27-20	8-27-20	
1,2-Dichloroethane	ND	0.20	EPA 8260D	8-27-20	8-27-20	
Trichloroethene	ND	0.20	EPA 8260D	8-27-20	8-27-20	
1,2-Dichloropropane	ND	0.20	EPA 8260D	8-27-20	8-27-20	
Bromodichloromethane	ND	0.20	EPA 8260D	8-27-20	8-27-20	
2-Chloroethyl Vinyl Ether	ND	1.0	EPA 8260D	8-27-20	8-27-20	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260D	8-27-20	8-27-20	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260D	8-27-20	8-27-20	



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VOLATILE ORGANICS EPA 8260D
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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	082620_MWA					
Laboratory ID:	08-259-01					
1,1,2-Trichloroethane	ND	0.20	EPA 8260D	8-27-20	8-27-20	
Tetrachloroethene	9.7	0.20	EPA 8260D	8-27-20	8-27-20	
1,3-Dichloropropane	ND	0.20	EPA 8260D	8-27-20	8-27-20	
Dibromochloromethane	ND	0.20	EPA 8260D	8-27-20	8-27-20	
Chlorobenzene	ND	0.20	EPA 8260D	8-27-20	8-27-20	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260D	8-27-20	8-27-20	
1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260D	8-27-20	8-27-20	
1,2,3-Trichloropropane	ND	0.20	EPA 8260D	8-27-20	8-27-20	
2-Chlorotoluene	ND	0.20	EPA 8260D	8-27-20	8-27-20	
4-Chlorotoluene	ND	0.20	EPA 8260D	8-27-20	8-27-20	
1,3-Dichlorobenzene	ND	0.20	EPA 8260D	8-27-20	8-27-20	
1,4-Dichlorobenzene	ND	0.20	EPA 8260D	8-27-20	8-27-20	
1,2-Dichlorobenzene	ND	0.20	EPA 8260D	8-27-20	8-27-20	
1,2-Dibromo-3-chloropropane	ND	1.0	EPA 8260D	8-27-20	8-27-20	
1,2,4-Trichlorobenzene	ND	0.20	EPA 8260D	8-27-20	8-27-20	
Hexachlorobutadiene	ND	1.0	EPA 8260D	8-27-20	8-27-20	
1,2,3-Trichlorobenzene	ND	0.20	EPA 8260D	8-27-20	8-27-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>106</i>	<i>75-127</i>				
<i>Toluene-d8</i>	<i>107</i>	<i>80-127</i>				
<i>4-Bromofluorobenzene</i>	<i>102</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:		082620_MWC				
Laboratory ID:		08-259-02				
Dichlorodifluoromethane	ND	0.20	EPA 8260D	8-27-20	8-27-20	
Chloromethane	ND	1.0	EPA 8260D	8-27-20	8-27-20	
Vinyl Chloride	ND	0.10	EPA 8260D	8-27-20	8-27-20	
Chloroethane	ND	1.0	EPA 8260D	8-27-20	8-27-20	
Trichlorofluoromethane	ND	0.20	EPA 8260D	8-27-20	8-27-20	
1,1-Dichloroethene	ND	0.20	EPA 8260D	8-27-20	8-27-20	
Methylene Chloride	ND	1.0	EPA 8260D	8-27-20	8-27-20	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260D	8-27-20	8-27-20	
1,1-Dichloroethane	ND	0.20	EPA 8260D	8-27-20	8-27-20	
2,2-Dichloropropane	ND	0.20	EPA 8260D	8-27-20	8-27-20	
(cis) 1,2-Dichloroethene	0.21	0.20	EPA 8260D	8-27-20	8-27-20	
Bromochloromethane	ND	0.20	EPA 8260D	8-27-20	8-27-20	
Chloroform	0.37	0.20	EPA 8260D	8-27-20	8-27-20	
1,1,1-Trichloroethane	ND	0.20	EPA 8260D	8-27-20	8-27-20	
Carbon Tetrachloride	ND	0.20	EPA 8260D	8-27-20	8-27-20	
1,1-Dichloropropene	ND	0.20	EPA 8260D	8-27-20	8-27-20	
1,2-Dichloroethane	ND	0.20	EPA 8260D	8-27-20	8-27-20	
Trichloroethene	ND	0.20	EPA 8260D	8-27-20	8-27-20	
1,2-Dichloropropane	ND	0.20	EPA 8260D	8-27-20	8-27-20	
Bromodichloromethane	ND	0.20	EPA 8260D	8-27-20	8-27-20	
2-Chloroethyl Vinyl Ether	ND	1.0	EPA 8260D	8-27-20	8-27-20	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260D	8-27-20	8-27-20	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260D	8-27-20	8-27-20	



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VOLATILE ORGANICS EPA 8260D
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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	082620_MWC					
Laboratory ID:	08-259-02					
1,1,2-Trichloroethane	ND	0.20	EPA 8260D	8-27-20	8-27-20	
Tetrachloroethene	9.0	0.20	EPA 8260D	8-27-20	8-27-20	
1,3-Dichloropropane	ND	0.20	EPA 8260D	8-27-20	8-27-20	
Dibromochloromethane	ND	0.20	EPA 8260D	8-27-20	8-27-20	
Chlorobenzene	ND	0.20	EPA 8260D	8-27-20	8-27-20	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260D	8-27-20	8-27-20	
1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260D	8-27-20	8-27-20	
1,2,3-Trichloropropane	ND	0.20	EPA 8260D	8-27-20	8-27-20	
2-Chlorotoluene	ND	0.20	EPA 8260D	8-27-20	8-27-20	
4-Chlorotoluene	ND	0.20	EPA 8260D	8-27-20	8-27-20	
1,3-Dichlorobenzene	ND	0.20	EPA 8260D	8-27-20	8-27-20	
1,4-Dichlorobenzene	ND	0.20	EPA 8260D	8-27-20	8-27-20	
1,2-Dichlorobenzene	ND	0.20	EPA 8260D	8-27-20	8-27-20	
1,2-Dibromo-3-chloropropane	ND	1.0	EPA 8260D	8-27-20	8-27-20	
1,2,4-Trichlorobenzene	ND	0.20	EPA 8260D	8-27-20	8-27-20	
Hexachlorobutadiene	ND	1.0	EPA 8260D	8-27-20	8-27-20	
1,2,3-Trichlorobenzene	ND	0.20	EPA 8260D	8-27-20	8-27-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>104</i>	<i>75-127</i>				
<i>Toluene-d8</i>	<i>108</i>	<i>80-127</i>				
<i>4-Bromofluorobenzene</i>	<i>98</i>	<i>78-125</i>				



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 Project: 244553

**VOLATILE ORGANICS EPA 8260D
 QUALITY CONTROL**

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Matrix: Water

Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0827W1					
Dichlorodifluoromethane	ND	0.20	EPA 8260D	8-27-20	8-27-20	
Chloromethane	ND	1.0	EPA 8260D	8-27-20	8-27-20	
Vinyl Chloride	ND	0.10	EPA 8260D	8-27-20	8-27-20	
Chloroethane	ND	1.0	EPA 8260D	8-27-20	8-27-20	
Trichlorofluoromethane	ND	0.20	EPA 8260D	8-27-20	8-27-20	
1,1-Dichloroethene	ND	0.20	EPA 8260D	8-27-20	8-27-20	
Methylene Chloride	ND	1.0	EPA 8260D	8-27-20	8-27-20	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260D	8-27-20	8-27-20	
1,1-Dichloroethane	ND	0.20	EPA 8260D	8-27-20	8-27-20	
2,2-Dichloropropane	ND	0.20	EPA 8260D	8-27-20	8-27-20	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260D	8-27-20	8-27-20	
Bromochloromethane	ND	0.20	EPA 8260D	8-27-20	8-27-20	
Chloroform	ND	0.20	EPA 8260D	8-27-20	8-27-20	
1,1,1-Trichloroethane	ND	0.20	EPA 8260D	8-27-20	8-27-20	
Carbon Tetrachloride	ND	0.20	EPA 8260D	8-27-20	8-27-20	
1,1-Dichloropropene	ND	0.20	EPA 8260D	8-27-20	8-27-20	
1,2-Dichloroethane	ND	0.20	EPA 8260D	8-27-20	8-27-20	
Trichloroethene	ND	0.20	EPA 8260D	8-27-20	8-27-20	
1,2-Dichloropropane	ND	0.20	EPA 8260D	8-27-20	8-27-20	
Bromodichloromethane	ND	0.20	EPA 8260D	8-27-20	8-27-20	
2-Chloroethyl Vinyl Ether	ND	1.0	EPA 8260D	8-27-20	8-27-20	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260D	8-27-20	8-27-20	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260D	8-27-20	8-27-20	



Date of Report: August 28, 2020
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 Laboratory Reference: 2008-259
 Project: 244553

**VOLATILE ORGANICS EPA 8260D
 QUALITY CONTROL**

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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0827W1					
1,1,2-Trichloroethane	ND	0.20	EPA 8260D	8-27-20	8-27-20	
Tetrachloroethene	ND	0.20	EPA 8260D	8-27-20	8-27-20	
1,3-Dichloropropane	ND	0.20	EPA 8260D	8-27-20	8-27-20	
Dibromochloromethane	ND	0.20	EPA 8260D	8-27-20	8-27-20	
Chlorobenzene	ND	0.20	EPA 8260D	8-27-20	8-27-20	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260D	8-27-20	8-27-20	
1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260D	8-27-20	8-27-20	
1,2,3-Trichloropropane	ND	0.20	EPA 8260D	8-27-20	8-27-20	
2-Chlorotoluene	ND	0.20	EPA 8260D	8-27-20	8-27-20	
4-Chlorotoluene	ND	0.20	EPA 8260D	8-27-20	8-27-20	
1,3-Dichlorobenzene	ND	0.20	EPA 8260D	8-27-20	8-27-20	
1,4-Dichlorobenzene	ND	0.20	EPA 8260D	8-27-20	8-27-20	
1,2-Dichlorobenzene	ND	0.20	EPA 8260D	8-27-20	8-27-20	
1,2-Dibromo-3-chloropropane	ND	1.0	EPA 8260D	8-27-20	8-27-20	
1,2,4-Trichlorobenzene	ND	0.20	EPA 8260D	8-27-20	8-27-20	
Hexachlorobutadiene	ND	1.0	EPA 8260D	8-27-20	8-27-20	
1,2,3-Trichlorobenzene	ND	0.20	EPA 8260D	8-27-20	8-27-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>99</i>	<i>75-127</i>				
<i>Toluene-d8</i>	<i>108</i>	<i>80-127</i>				
<i>4-Bromofluorobenzene</i>	<i>101</i>	<i>78-125</i>				



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 Project: 244553

**VOLATILE ORGANICS EPA 8260D
 QUALITY CONTROL**

Matrix: Water

Units: ug/L

Analyte	Result		Spike Level		Percent Recovery		Recovery	RPD	RPD	Flags
					Recovery	Limits	Limits		Limit	
SPIKE BLANKS										
Laboratory ID:	SB0827W1									
	SB	SBD	SB	SBD	SB	SBD				
1,1-Dichloroethene	9.79	9.49	10.0	10.0	98	95	65-126	3	19	
Benzene	10.5	10.1	10.0	10.0	105	101	71-119	4	16	
Trichloroethene	10.3	9.79	10.0	10.0	103	98	82-123	5	18	
Toluene	10.4	10.0	10.0	10.0	104	100	77-119	4	18	
Chlorobenzene	10.5	9.91	10.0	10.0	105	99	80-120	6	17	
Surrogate:										
Dibromofluoromethane					104	100	75-127			
Toluene-d8					105	101	80-127			
4-Bromofluorobenzene					107	103	78-125			





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





Company:	CDM Smith
Project Number:	244553
Project Name:	Masterpark
Project Manager:	Pamela Merrill
Sampled by:	Morgan Simon

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