3-TIER ALASKA
CIVIL ENGINEERING & SURVEYING

TRAVIS / PETERSON
ENVIRONMENTAL CONSULTING

September 29, 2021
1114-01

MV Investments, LLC
981 Van Horn Road
Fairbanks, Alaska 99701-7547

Attention: **Bill Vivlamore**
Owner

Re: Annual Groundwater Sampling, ADEC File No. 102.26.007
Cornerstone Mall

Dear Mr. Vivlamore:

Travis/Peterson Environmental Consulting (TPEC) is pleased to present our letter summarizing the data obtained from the groundwater sampling event conducted on September 1, 2021 at the Cornerstone Mall (Figure 1). The purpose for sampling is to monitor contaminants on site annually as is stipulated in the June 19, 2007 Conditional Closure letter from the Alaska Department of Environmental Conservation (ADEC).

Groundwater Sampling
On September 1, 2021, TPEC personnel gauged the depth to groundwater and total well depth to determine the volume of water present in MW-1. A minimum of three well volumes of groundwater was purged prior to sample collection. TPEC personnel used a peristaltic pump to purge and retrieve samples from MW-1. The groundwater sample was analyzed for benzene, toluene, ethylbenzene, xylenes (BTEX) by EPA 8260D.

For the detailed analytical results refer to the attached SGS North America Inc. report. The ADEC Laboratory Data Review Checklist was completed and is attached to this report, in addition to the field notes and historical data. Since only one well was sampled, no decontamination of equipment was required between samples.

Discussion
Results from the September 1, 2021 sampling event showed a slight increase in the concentrations of the detected analyte (benzene). Benzene was not detected at 0.450 in the parent sample, and 0.500 in the duplicate, both well below the applicable cleanup level. Ethylbenzene, xylenes, and toluene were not detected in the parent sample or duplicate. The trip blank results were all non-detect for BTEX constituents. Sampling results from 2008 through 2021 are presented in the following table:

GROUNDWATER ANALYTICAL RESULTS

Monitoring Well ID	Sample Date	DTW (Feet)	DRO	GRO	Benzene	Toluene	Ethylbenzene	Total Xylene	Trichlorofluoromethane
		MCL	1.5 mg/L	2.2 mg/L	0.0046 mg/L	1.1 mg/L	0.7 mg/L	0.190 mg/L	5.2 mg/L
MW-1	11/19/08	14.94	0.906	0.981	**0.153**	0.00312	0.0125	0.03077	NA
MW-1	09/29/09	14.94	0.63	1.39	**0.154**	ND	0.0061	0.0139	NA
MW-1	10/05/10	15.60	0.139	1.48	**0.278**	ND	0.00742	0.0162	NA
MW-1	09/01/11	13.90	0.129	0.556	**0.177**	ND	0.00632	0.0161	NA
MW-1	08/09/12	14.90	0.168	0.480	**0.0532**	ND	0.004J	0.0077	NA
MW-2*	08/09/12	14.90	0.160	0.479	**0.0558**	ND	0.0039J	ND	NA
MW-1	08/05/13	15.40	0.127J	0.417	**0.0567**	0.00077J	0.00167J	0.00478J	NA
MW-2*	08/05/13	15.40	0.124J	0.412	**0.0584**	0.00074J	0.00173J	0.0048J	NA
MW-1	08/26/14	12.53	0.0609J	0.399	**0.0411**	ND	0.00156J	0.00538	NA
MW-2*	08/26/14	12.53	0.0641J	0.291	**0.0412**	ND	0.00159J	0.00542	NA
MW-1	08/28/15	14.05	N/A	N/A	**0.0126**	ND	ND	0.00145J	NA
MW-2*	08/28/15	14.05	N/A	N/A	**0.0132**	ND	ND	0.00151J	NA
MW-1	08/16/16	11.31	N/A	N/A	0.00268	0.00036J	ND	0.00107J	NA
MW-2*	08/16/16	11.31	N/A	N/A	0.00281	0.0004J	ND	0.00109J	NA
MW-1	08/22/17	14.28	N/A	N/A	0.002	0.00035J	ND	0.000810J	NA
MW-10*	08/22/17	14.28	N/A	N/A	0.00201	0.000450 J	ND	0.000740J	NA
MW-1	07/20/18	13.59	N/A	N/A	**0.00489**	ND	ND	0.00166J	NA
MW-10*	07/20/18	13.59	N/A	N/A	**0.00472**	ND	ND	0.00121J	NA
MW-1	08/28/19	12.44	N/A	N/A	0.00124	ND	ND	ND	NA
MW-10*	08/28/19	12.44	N/A	N/A	0.00126	ND	ND	ND	NA
MW-1	09/01/20	18.10	N/A	N/A	ND	ND	ND	ND	0.0147
MW-10*	09/01/20	18.10	N/A	N/A	0.000129J	ND	ND	ND	0.0137
MW-1	09/01/21	13.16	N/A	N/A	0.000450	ND	ND	ND	NA
MW-1b*	09/01/21	13.16	N/A	N/A	0.000500	ND	ND	ND	NA

Notes:
*denotes sample is a duplicate
MW-1 is a flush mount well
Bold indicates the analyte was above the ADEC groundwater cleanup level.
DTW – depth to water.
ND indicates the analyte was not detected.
NA indicates the analyte was not analyzed for.
J – Concentrations reported with a J flag are values below the reporting limit (RL) but greater than the established method detection limit (MDL). There is greater uncertainty associated with these results and data should be considered estimated.

Conclusions and Recommendations

The extent of the contaminant plume is known. Existing institutional controls (asphalt encapsulation) appear to be working. In 2018 benzene was detected above the applicable DEC cleanup levels. Since then, no analytes including testing from this sampling event have been above applicable cleanup levels.

MW-1 will be sampled again in 2022, although three consecutive years of monitoring below applicable DEC cleanup levels has occurred it is the owner's preference to continue sampling at the Cornerstone Mall MW-1 location.

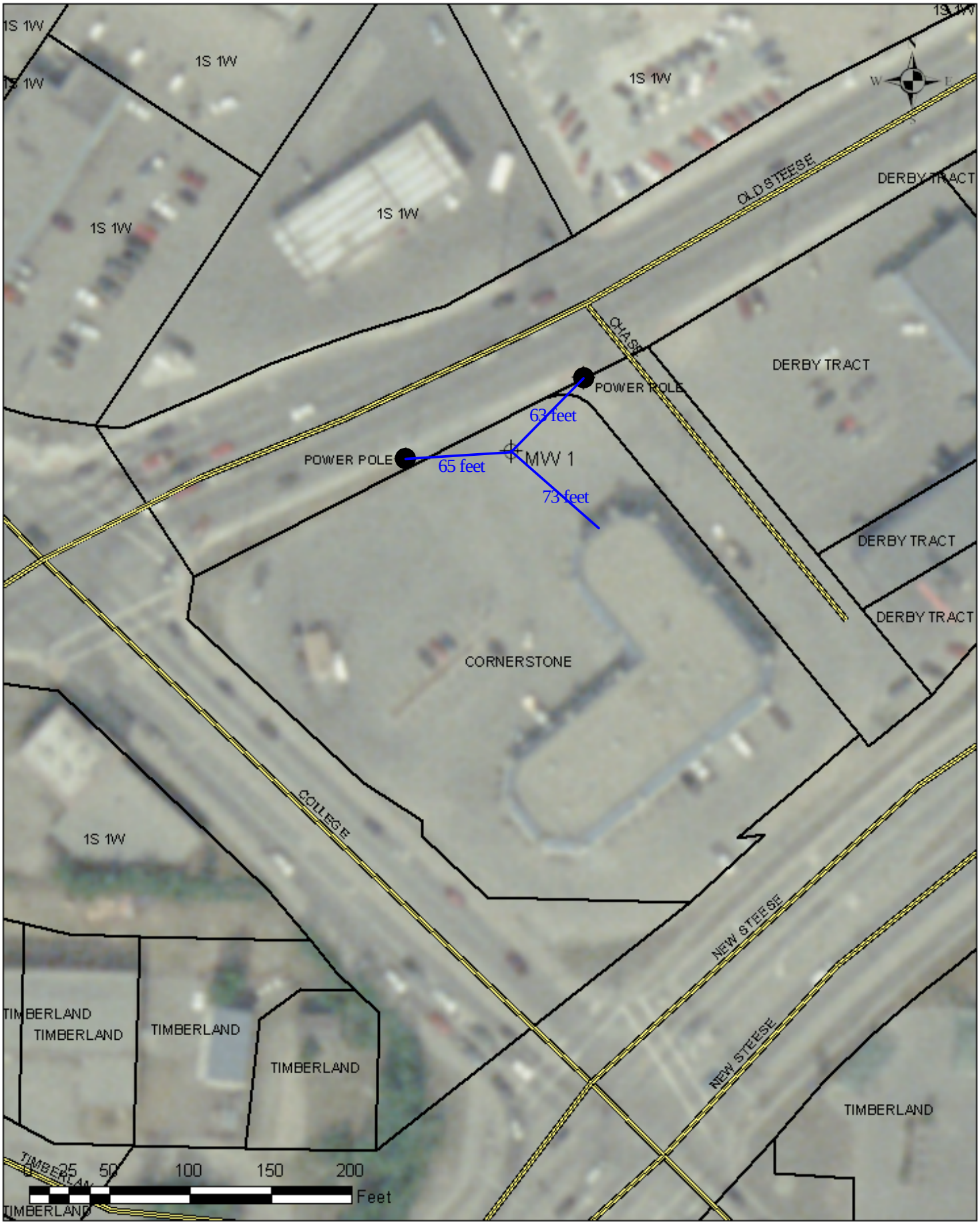
Please contact me at 907-455-7225 if there are any questions or concerns in regard to this monitoring report.

Sincerely,

Michaela L. McGee

Michaela McGee
Staff Scientist

cc: Evonne Reese, DEC Institutional Controls Unit
Attachments: Figure 1
SGS North America Inc.
DEC Laboratory Data Review Checklist
Historical Groundwater Data Table
Field Notes



TRAVIS/PETERSON ENVIRONMENTAL CONSULTING, INC. 329 SECOND STREET FAIRBANKS, ALASKA 99701	MV INVESTMENTS, LLC	FIGURE 1 LOCATION & VICINITY	
PROJECT NO: 1114-01	FILE: S/PROJECTS/1114/01/FIGURES/SITE PLAN FIGURE.SKF	DATE: 9/01/2021	SCALE: AS SHOWN

Laboratory Report of Analysis

To: Travis/Peterson (TPECI)
329 2nd Street
Fairbanks, AK 99701
(907)455-7225

Report Number: **1215743**

Client Project: **MVI Cornerstone**

Dear Eddie Packee,

Enclosed are the results of the analytical services performed under the referenced project for the received samples and associated QC as applicable. The samples are certified to meet the requirements of the National Environmental Laboratory Accreditation Conference Standards. Copies of this report and supporting data will be retained in our files for a period of ten years in the event they are required for future reference. All results are intended to be used in their entirety and SGS is not responsible for use of less than the complete report. Any samples submitted to our laboratory will be retained for a maximum of fourteen (14) days from the date of this report unless other archiving requirements were included in the quote.

If there are any questions about the report or services performed during this project, please call Jennifer at (907) 562-2343. We will be happy to answer any questions or concerns which you may have.

Thank you for using SGS North America Inc. for your analytical services. We look forward to working with you again on any additional analytical needs.

Sincerely,
SGS North America Inc.

_____

Jennifer Dawkins Date
Project Manager
Jennifer.Dawkins@sgs.com

Case Narrative

SGS Client: **Travis/Peterson (TPECI)**
SGS Project: **1215743**
Project Name/Site: **MVI Cornerstone**
Project Contact: **Eddie Packee**

Refer to sample receipt form for information on sample condition.

*QC comments may be associated with the field samples found in this report. When applicable, comments will be applied to associated field samples.

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Laboratory Qualifiers

Enclosed are the analytical results associated with the above work order. The results apply to the samples as received. All results are intended to be used in their entirety and SGS is not responsible for use of less than the complete report. This document is issued by the Company under its General Conditions of Service accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx>. Attention is drawn to the limitation of liability, indenmification and jurisdiction issues defined therein.

Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. Any unauthorized alteration, forgery or falsification of the context or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

SGS maintains a formal Quality Assurance/Quality Control (QA/QC) program. A copy of our Quality Assurance Plan (QAP), which outlines this program, is available at your request. The laboratory certification numbers are AK00971 (DW Chemistry & Microbiology) & 17-021 (CS) for ADEC and 2944.01 for DOD ELAP/ISO17025 (RCRA methods: 1020B, 1311, 3010A, 3050B, 3520C, 3550C, 5030B, 5035A, 6020B, 7470A, 7471B, 8015C, 8021B, 8082A, 8260D, 8270D, 8270D-SIM, 9040C, 9045D, 9056A, 9060A, AK101 and AK102/103). SGS is only certified for the analytes listed on our Drinking Water Certification (DW methods: 200.8, 2130B, 2320B, 2510B, 300.0, 4500-CN-C,E, 4500-H-B, 4500-NO3-F, 4500-P-E and 524.2) and only those analytes will be reported to the State of Alaska for compliance. Except as specifically noted, all statements and data in this report are in conformance to the provisions set forth by the SGS QAP and, when applicable, other regulatory authorities.

The following descriptors or qualifiers may be found in your report:

*	The analyte has exceeded allowable regulatory or control limits.
!	Surrogate out of control limits.
B	Indicates the analyte is found in a blank associated with the sample.
CCV/CVA/CVB	Continuing Calibration Verification
CCCV/CVC/CVCA/CVCB	Closing Continuing Calibration Verification
CL	Control Limit
DF	Analytical Dilution Factor
DL	Detection Limit (i.e., maximum method detection limit)
E	The analyte result is above the calibrated range.
GT	Greater Than
IB	Instrument Blank
ICV	Initial Calibration Verification
J	The quantitation is an estimation.
LCS(D)	Laboratory Control Spike (Duplicate)
LLQC/LLIQC	Low Level Quantitation Check
LOD	Limit of Detection (i.e., 1/2 of the LOQ)
LOQ	Limit of Quantitation (i.e., reporting or practical quantitation limit)
LT	Less Than
MB	Method Blank
MS(D)	Matrix Spike (Duplicate)
ND	Indicates the analyte is not detected.
RPD	Relative Percent Difference
TNTC	Too Numerous To Count
U	Indicates the analyte was analyzed for but not detected.

Note: Sample summaries which include a result for "Total Solids" have already been adjusted for moisture content. All DRO/RRO analyses are integrated per SOP.

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Sample Summary

Client Sample ID	Lab Sample ID	Collected	Received	Matrix
MW-1	1215743001	09/01/2021	09/03/2021	Water (Surface, Eff., Ground)
MW-1b	1215743002	09/01/2021	09/03/2021	Water (Surface, Eff., Ground)

Method	Method Description
SW8260D	Volatile Organic Compounds (W)

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Detectable Results Summary

Client Sample ID: **MW-1**
Lab Sample ID: 1215743001
Volatile GC/MS

Parameter	Result	Units
Benzene	0.450	ug/L

Client Sample ID: **MW-1b**
Lab Sample ID: 1215743002
Volatile GC/MS

Parameter	Result	Units
Benzene	0.500	ug/L

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Results of **MW-1**

Client Sample ID: **MW-1**
Client Project ID: **MVI Cornerstone**
Lab Sample ID: 1215743001
Lab Project ID: 1215743

Collection Date: 09/01/21 11:10
Received Date: 09/03/21 09:38
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Volatile GC/MS**

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Benzene	0.450		0.400	0.120	ug/L	1		09/13/21 18:50
Ethylbenzene	0.500	U	1.00	0.310	ug/L	1		09/13/21 18:50
o-Xylene	0.500	U	1.00	0.310	ug/L	1		09/13/21 18:50
P & M -Xylene	1.00	U	2.00	0.620	ug/L	1		09/13/21 18:50
Toluene	0.500	U	1.00	0.310	ug/L	1		09/13/21 18:50
Xylenes (total)	1.50	U	3.00	1.00	ug/L	1		09/13/21 18:50
Surrogates								
1,2-Dichloroethane-D4 (surr)	99.2		81-118		%	1		09/13/21 18:50
4-Bromofluorobenzene (surr)	101		85-114		%	1		09/13/21 18:50
Toluene-d8 (surr)	103		89-112		%	1		09/13/21 18:50

Batch Information

Analytical Batch: VMS21173
Analytical Method: SW8260D
Analyst: NRB
Analytical Date/Time: 09/13/21 18:50
Container ID: 1215743001-A

Prep Batch: VXX37835
Prep Method: SW5030B
Prep Date/Time: 09/13/21 11:00
Prep Initial Wt./Vol.: 5 mL
Prep Extract Vol: 5 mL

Print Date: 09/15/2021 12:29:28PM

J flagging is activated

Results of **MW-1b**

Client Sample ID: **MW-1b**
Client Project ID: **MVI Cornerstone**
Lab Sample ID: 1215743002
Lab Project ID: 1215743

Collection Date: 09/01/21 11:15
Received Date: 09/03/21 09:38
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Volatile GC/MS**

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Benzene	0.500		0.400	0.120	ug/L	1		09/13/21 19:04
Ethylbenzene	0.500	U	1.00	0.310	ug/L	1		09/13/21 19:04
o-Xylene	0.500	U	1.00	0.310	ug/L	1		09/13/21 19:04
P & M -Xylene	1.00	U	2.00	0.620	ug/L	1		09/13/21 19:04
Toluene	0.500	U	1.00	0.310	ug/L	1		09/13/21 19:04
Xylenes (total)	1.50	U	3.00	1.00	ug/L	1		09/13/21 19:04
Surrogates								
1,2-Dichloroethane-D4 (surr)	99.6		81-118		%	1		09/13/21 19:04
4-Bromofluorobenzene (surr)	103		85-114		%	1		09/13/21 19:04
Toluene-d8 (surr)	104		89-112		%	1		09/13/21 19:04

Batch Information

Analytical Batch: VMS21173
Analytical Method: SW8260D
Analyst: NRB
Analytical Date/Time: 09/13/21 19:04
Container ID: 1215743002-A

Prep Batch: VXX37835
Prep Method: SW5030B
Prep Date/Time: 09/13/21 11:00
Prep Initial Wt./Vol.: 5 mL
Prep Extract Vol: 5 mL

Print Date: 09/15/2021 12:29:28PM

J flagging is activated

Method Blank

Blank ID: MB for HBN 1825511 [VXX/37835]
Blank Lab ID: 1636286

Matrix: Water (Surface, Eff., Ground)

QC for Samples:
1215743001, 1215743002

Results by **SW8260D**

Parameter	Results	LOQ/CL	DL	Units
Benzene	0.200U	0.400	0.120	ug/L
Ethylbenzene	0.500U	1.00	0.310	ug/L
o-Xylene	0.500U	1.00	0.310	ug/L
P & M -Xylene	1.00U	2.00	0.620	ug/L
Toluene	0.500U	1.00	0.310	ug/L
Xylenes (total)	1.50U	3.00	1.00	ug/L
Surrogates				
1,2-Dichloroethane-D4 (surr)	105	81-118		%
4-Bromofluorobenzene (surr)	102	85-114		%
Toluene-d8 (surr)	103	89-112		%

Batch Information

Analytical Batch: VMS21173
Analytical Method: SW8260D
Instrument: VPA 780/5975 GC/MS
Analyst: NRB
Analytical Date/Time: 9/13/2021 11:26:00AM

Prep Batch: VXX37835
Prep Method: SW5030B
Prep Date/Time: 9/13/2021 11:00:00AM
Prep Initial Wt./Vol.: 5 mL
Prep Extract Vol: 5 mL

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Anti-Foam Blank

Blank ID: AFB for HBN 1825511 [VXX/37835
Blank Lab ID: 1636289

Matrix: Water (Surface, Eff., Ground)

QC for Samples:
1215743001, 1215743002

Results by **SW8260D**

Parameter	Results	LOQ/CL	DL	Units
Benzene	0.200U	0.400	0.120	ug/L
Ethylbenzene	0.500U	1.00	0.310	ug/L
o-Xylene	0.500U	1.00	0.310	ug/L
P & M -Xylene	1.00U	2.00	0.620	ug/L
Toluene	0.500U	1.00	0.310	ug/L
Xylenes (total)	1.50U	3.00	1.00	ug/L

Batch Information

Analytical Batch: VMS21173
Analytical Method: SW8260D
Instrument: VPA 780/5975 GC/MS
Analyst: NRB
Analytical Date/Time: 9/13/2021 7:34:00PM

Prep Batch: VXX37835
Prep Method: SW5030B
Prep Date/Time: 9/13/2021 11:00:00AM
Prep Initial Wt./Vol.: 5 mL
Prep Extract Vol: 5 mL

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Blank Spike Summary

Blank Spike ID: LCS for HBN 1215743 [VXX37835]
Blank Spike Lab ID: 1636287
Date Analyzed: 09/13/2021 11:40

Spike Duplicate ID: LCSD for HBN 1215743 [VXX37835]
Spike Duplicate Lab ID: 1636288
Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1215743001, 1215743002

Results by **SW8260D**

	Blank Spike (ug/L)			Spike Duplicate (ug/L)					
Parameter	Spike	Result	Rec (%)	Spike	Result	Rec (%)	CL	RPD (%)	RPD CL
Benzene	30	30.7	102	30	30.5	102	(79-120)	0.83	(< 20)
Ethylbenzene	30	31.9	106	30	31.9	106	(79-121)	0.17	(< 20)
o-Xylene	30	31.8	106	30	31.5	105	(78-122)	0.93	(< 20)
P & M -Xylene	60	64.0	107	60	63.2	105	(80-121)	1.20	(< 20)
Toluene	30	30.8	103	30	30.7	102	(80-121)	0.14	(< 20)
Xylenes (total)	90	95.8	106	90	94.7	105	(79-121)	1.10	(< 20)
Surrogates									
1,2-Dichloroethane-D4 (surr)	30		99	30		96	(81-118)	3.40	
4-Bromofluorobenzene (surr)	30		99	30		101	(85-114)	1.70	
Toluene-d8 (surr)	30		103	30		104	(89-112)	0.33	

Batch Information

Analytical Batch: **VMS21173**
Analytical Method: **SW8260D**
Instrument: **VPA 780/5975 GC/MS**
Analyst: **NRB**

Prep Batch: **VXX37835**
Prep Method: **SW5030B**
Prep Date/Time: **09/13/2021 11:00**
Spike Init Wt./Vol.: 30 ug/L Extract Vol: 5 mL
Dupe Init Wt./Vol.: 30 ug/L Extract Vol: 5 mL

Print Date: 09/15/2021 12:29:32PM

SGS

SGS North America Inc.
CHAIN OF CUSTODY RECORD

1215743

(A)

.com

Instructions: Sections 1 - 5 must be filled out. Omissions may delay the onset of analysis.

Page 1 of 1

Section 1

CLIENT: Travis/Peterson Environmental

CONTACT: Michaela McGee — PHONE #: 907-455-7225

PROJECT NAME: MVI Cornerstone — PROJECT/ PWSID/ PERMIT#:

REPORTS TO: — E-MAIL: mmcgee@tpeci.com — Profile #:

INVOICE TO: — QUOTE #: — P.O. #: 1114-01

Section 3 — Preservative

Section 2

RESERVED for lab use	SAMPLE IDENTIFICATION	DATE mm/dd/yy	TIME HH:MM	MATRIX/ MATRIX CODE	# CONTAINERS	Comp Grab MI (Multi-incre-mental)	Analysis*: HCL	BTEX 8260B									REMARKS/LOC ID
(1) AC	MW-1	09/01/21	11:10am	Water	3	G	X										
(6) AC	MW-1b	09/01/21	11:15am	water	3	G	X										
	Trip blank 1																

NOTE: *The following analyses require specific method and/or compound list: BTEX, Metals, PFAS

Section 5

Relinquished By:	Date	Time	Received By:
(1) Michaela McGee	9/2/21	10:30am	
(2)	9-2-21	1400	
(3)			
(4)	9/3/21	0938	Received For Laboratory By: MA

Section 4

DOD Project? Yes (No)

Data Deliverable Requirements:

Cooler ID:

Requested Turnaround Time and/or Special Instructions: Standard

ANC: 5.3 D602.4

Temp Blank °C: or Ambient [ ]

Chain of Custody Seal: (Circle) ANC: IF115 INTACT BROKEN ABSENT

Delivery Method: Hand Delivery[ ] Commerical Delivery[ ]

http://www.sgs.com/terms-and-conditions

F083-Blank_COC_20181228

1215743

SGS

e-Sample Receipt Form FBK

SGS Workorder #: **Travis Peterson**

Review Criteria	Condition (Yes, No, N/A)	Exceptions Noted below
Chain of Custody / Temperature Requirements	Yes	Exemption permitted if sampler hand carries/delivers.
Were Custody Seals intact? Note # & location	N/A	
COC accompanied samples?	Yes	
DOD: Were samples received in COC corresponding coolers?	N/A	

**Exemption permitted if chilled & collected <8 hours ago, or for samples where chilling is not required

Temperature blank compliant* (i.e., 0-6 °C after CF)?	Yes	Cooler ID:	1	@	2.4	°C	Therm. ID:	D62
		Cooler ID:		@		°C	Therm. ID:	
If samples received without a temperature blank, the "cooler temperature" will be documented instead & "COOLER TEMP" will be noted to the right. "ambient" or "chilled" will be noted if neither is available.		Cooler ID:		@		°C	Therm. ID:	
		Cooler ID:		@		°C	Therm. ID:	

*If >6°C, were samples collected <8 hours ago?		
If <0°C, were sample containers ice free?		
Note: Identify containers received at non-compliant temperature . Use form FS-0029 if more space is needed.		
Holding Time / Documentation / Sample Condition Requirements		Note: Refer to form F-083 "Sample Guide" for specific holding times.
Do samples **match COC**** (i.e.,sample IDs,dates/times collected)?	N/C	
**Note: If times differ <1hr, record details & login per COC.		
***Note: If sample information on containers differs from COC, SGS will default to COC information		
Were samples in good condition (no leaks/cracks/breakage)?	Yes	
Were analytical requests clear? (i.e., method is specified for analyses with multiple option for analysis (Ex: BTEX, Metals)	Yes	
Were Trip Blanks (i.e., VOAs, LL-Hg) in cooler with samples?	Yes	**Shared TB for 4 WOs. See COC notes.**
Were all water VOA vials free of headspace (i.e., bubbles ≤ 6mm)?	N/C	
Were all soil VOAs field extracted with MeOH+BFB?	N/A	
For Rush/Short Hold Time, was RUSH/Short HT email sent?	N/A	

Note to Client: Any "No", answer above indicates non-compliance with standard procedures and may impact data quality.

Additional notes (if applicable):

SGS Profile #	**336472**	336472

e-Sample Receipt Form

SGS Workorder #: **1215743**

Review Criteria	Condition (Yes, No, N/A)	Exceptions Noted below
Chain of Custody / Temperature Requirements		N/A Exemption permitted if sampler hand carries/delivers.
Were Custody Seals intact? Note # & location	Yes	1F,1B
COC accompanied samples?	Yes	
DOD: Were samples received in COC corresponding coolers?	N/A	
N/A **Exemption permitted if chilled & collected <8 hours ago, or for samples where chilling is not required		
Temperature blank compliant* (i.e., 0-6 °C after CF)?	Yes	Cooler ID: 1 @ 5.3 °C Therm. ID: D60
If samples received without a temperature blank, the "cooler temperature" will be documented instead & "COOLER TEMP" will be noted to the right. "ambient" or "chilled" will be noted if neither is available.		Cooler ID: @ °C Therm. ID:
		Cooler ID: @ °C Therm. ID:
		Cooler ID: @ °C Therm. ID:
		Cooler ID: @ °C Therm. ID:
If >6°C, were samples collected <8 hours ago?	N/A	
If <0°C, were sample containers ice free?	Yes	
Note: Identify containers received at non-compliant temperature . Use form FS-0029 if more space is needed.		
Holding Time / Documentation / Sample Condition Requirements		Note: Refer to form F-083 "Sample Guide" for specific holding times.
Were samples received within holding time?	Yes	
Do samples **match COC**** (i.e.,sample IDs,dates/times collected)?	Yes	
**Note: If times differ <1hr, record details & login per COC.		
***Note: If sample information on containers differs from COC, SGS will default to COC informatio		
Were analytical requests clear? (i.e., method is specified for analyses with multiple option for analysis (Ex: BTEX, Metals)	Yes	
		N/A ***Exemption permitted for metals (e.g,200.8/6020B).
Were proper containers (type/mass/volume/preservative***)used?	Yes	
Volatile / LL-Hg Requirements		
Were Trip Blanks (i.e., VOAs, LL-Hg) in cooler with samples?	Yes	Trip Blank shared with 1215739
Were all water VOA vials free of headspace (i.e., bubbles ≤ 6mm)?	Yes	
Were all soil VOAs field extracted with MeOH+BFB?	N/A	

Note to Client: Any "No", answer above indicates non-compliance with standard procedures and may impact data quality.

Additional notes (if applicable):

Sample Containers and Preservatives

Container Id	Preservative	Container Condition	Container Id	Preservative	Container Condition
1215743001-A	HCL to pH < 2	OK			
1215743001-B	HCL to pH < 2	OK			
1215743001-C	HCL to pH < 2	OK			
1215743002-A	HCL to pH < 2	OK			
1215743002-B	HCL to pH < 2	OK			
1215743002-C	HCL to pH < 2	OK			

Container Condition Glossary

Containers for bacteriological, low level mercury and VOA vials are not opened prior to analysis and will be assigned condition code OK unless evidence indicates than an inappropriate container was submitted.

OK - The container was received at an acceptable pH for the analysis requested.
BU - The container was received with headspace greater than 6mm.
DM - The container was received damaged.
FR - The container was received frozen and not usable for Bacteria or BOD analyses.
IC - The container provided for microbiology analysis was not a laboratory-supplied, pre-sterilized container and therefore was not suitable for analysis.
NC- The container provided was not preserved or was under-preserved. The method does not allow for additional preservative added after collection.
PA - The container was received outside of the acceptable pH for the analysis requested. Preservative was added upon receipt and the container is now at the correct pH. See the Sample Receipt Form for details on the amount and lot # of the preservative added.
PH - The container was received outside of the acceptable pH for the analysis requested. Preservative was added upon receipt, but was insufficient to bring the container to the correct pH for the analysis requested. See the Sample Receipt Form for details on the amount and lot # of the preservative added.
QN - Insufficient sample quantity provided.

Field Duplicate Precision

Analyte	Sample MW-1		Sample MW-10		RPD
	Results	Units	Results	Units	
Benzene	0.45	ug/L	0.5	ug/L	10.52631579

Laboratory Data Review Checklist

Completed By:

Michaela McGee

Title:

Staff Scientist

Date:

09/10/2020

Consultant Firm:

Travis/Peterson Environmental Consulting

Laboratory Name:

SGS North America, Inc.

Laboratory Report Number:

1215743

Laboratory Report Date:

09/28/2021

CS Site Name:

MVI Cornerstone Mall

ADEC File Number:

Hazard Identification Number:

1215743

Laboratory Report Date:

09/28/2021

CS Site Name:

MVI Cornerstone Mall

Note: Any N/A or No box checked must have an explanation in the comments box.

1. Laboratory

   a. Did an ADEC CS approved laboratory receive and perform all of the submitted sample analyses?

   Yes☒ No☐ N/A☐ Comments:

   b. If the samples were transferred to another "network" laboratory or sub-contracted to an alternate laboratory, was the laboratory performing the analyses ADEC CS approved?

   Yes☒ No☐ N/A☐ Comments:

   SGS Fairbanks to SGS Anchorage

2. Chain of Custody (CoC)

   a. CoC information completed, signed, and dated (including released/received by)?

   Yes☒ No☐ N/A☐ Comments:

   b. Correct analyses requested?

   Yes☒ No☐ N/A☐ Comments:

3. Laboratory Sample Receipt Documentation

   a. Sample/cooler temperature documented and within range at receipt (0° to 6° C)?

   Yes☒ No☐ N/A☐ Comments:

   b. Sample preservation acceptable – acidified waters, Methanol preserved VOC soil (GRO, BTEX, Volatile Chlorinated Solvents, etc.)?

   Yes☒ No☐ N/A☐ Comments:

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c. Sample condition documented – broken, leaking (Methanol), zero headspace (VOC vials)?

Yes☒ No☐ N/A☐ Comments:

d. If there were any discrepancies, were they documented? For example, incorrect sample containers/preservation, sample temperature outside of acceptable range, insufficient or missing samples, etc.?

Yes☐ No☒ N/A☐ Comments:

e. Data quality or usability affected?

Comments:

None

4. Case Narrative

a. Present and understandable?

Yes☒ No☐ N/A☐ Comments:

b. Discrepancies, errors, or QC failures identified by the lab?

Yes☐ No☒ N/A☐ Comments:

c. Were all corrective actions documented?

Yes☐ No☐ N/A☒ Comments:

d. What is the effect on data quality/usability according to the case narrative?

Comments:

None

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5. Samples Results

a. Correct analyses performed/reported as requested on COC?

Yes☒ No☐ N/A☐ Comments:

b. All applicable holding times met?

Yes☒ No☐ N/A☐ Comments:

c. All soils reported on a dry weight basis?

Yes☐ No☐ N/A☒ Comments:

Groundwater Samples. No soil

d. Are the reported LOQs less than the Cleanup Level or the minimum required detection level for the project?

Yes☒ No☐ N/A☐ Comments:

e. Data quality or usability affected?

6. QC Samples

a. Method Blank

i. One method blank reported per matrix, analysis and 20 samples?

Yes☒ No☐ N/A☐ Comments:

ii. All method blank results less than limit of quantitation (LOQ) or project specified objectives?

Yes☒ No☐ N/A☐ Comments:

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iii. If above LOQ or project specified objectives, what samples are affected?

Comments:

None

iv. Do the affected sample(s) have data flags? If so, are the data flags clearly defined?

Yes☐ No☐ N/A☒ Comments:

v. Data quality or usability affected?

Comments:

None

b. Laboratory Control Sample/Duplicate (LCS/LCSD)

i. Organics – One LCS/LCSD reported per matrix, analysis and 20 samples? (LCS/LCSD required per AK methods, LCS required per SW846)

Yes☒ No☐ N/A☐ Comments:

ii. Metals/Inorganics – one LCS and one sample duplicate reported per matrix, analysis and 20 samples?

Yes☒ No☐ N/A☐ Comments:

iii. Accuracy – All percent recoveries (%R) reported and within method or laboratory limits and project specified objectives, if applicable? (AK Petroleum methods: AK101 60%-120%, AK102 75%-125%, AK103 60%-120%; all other analyses see the laboratory QC pages)

Yes☒ No☐ N/A☐ Comments:

iv. Precision – All relative percent differences (RPD) reported and less than method or laboratory limits and project specified objectives, if applicable? RPD reported from LCS/LCSD, and or sample/sample duplicate. (AK Petroleum methods 20%; all other analyses see the laboratory QC pages)

Yes☒ No☐ N/A☐ Comments:

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v. If %R or RPD is outside of acceptable limits, what samples are affected?

Comments:

None

vi. Do the affected sample(s) have data flags? If so, are the data flags clearly defined?

Yes☐ No☐ N/A☒ Comments:

vii. Data quality or usability affected? (Use comment box to explain.)

Comments:

None

c. Matrix Spike/Matrix Spike Duplicate (MS/MSD)

Note: Leave blank if not required for project

i. Organics – One MS/MSD reported per matrix, analysis and 20 samples?

Yes☒ No☐ N/A☐ Comments:

ii. Metals/Inorganics – one MS and one MSD reported per matrix, analysis and 20 samples?

Yes☒ No☐ N/A☐ Comments:

iii. Accuracy – All percent recoveries (%R) reported and within method or laboratory limits and project specified objectives, if applicable?

Yes☒ No☐ N/A☐ Comments:

iv. Precision – All relative percent differences (RPD) reported and less than method or laboratory limits and project specified objectives, if applicable? RPD reported from MS/MSD, and or sample/sample duplicate.

Yes☒ No☐ N/A☐ Comments:

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v. If %R or RPD is outside of acceptable limits, what samples are affected?

Comments:

None

vi. Do the affected sample(s) have data flags? If so, are the data flags clearly defined?

Yes☐ No☐ N/A☒ Comments:

vii. Data quality or usability affected? (Use comment box to explain.)

Comments:

None

d. Surrogates – Organics Only or Isotope Dilution Analytes (IDA) – Isotope Dilution Methods Only

i. Are surrogate/IDA recoveries reported for organic analyses – field, QC and laboratory samples?

Yes☒ No☐ N/A☐ Comments:

ii. Accuracy – All percent recoveries (%R) reported and within method or laboratory limits and project specified objectives, if applicable? (AK Petroleum methods 50-150 %R for field samples and 60-120 %R for QC samples; all other analyses see the laboratory report pages)

Yes☒ No☐ N/A☐ Comments:

iii. Do the sample results with failed surrogate/IDA recoveries have data flags? If so, are the data flags clearly defined?

Yes☐ No☐ N/A☒ Comments:

iv. Data quality or usability affected?

Comments:

None

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e. Trip Blanks

i. One trip blank reported per matrix, analysis and for each cooler containing volatile samples? (If not, enter explanation below.)

Yes☒ No☐ N/A☐ Comments:

ii. Is the cooler used to transport the trip blank and VOA samples clearly indicated on the COC? (If not, a comment explaining why must be entered below)

Yes☒ No☐ N/A☐ Comments:

iii. All results less than LOQ and project specified objectives?

Yes☒ No☐ N/A☐ Comments:

iv. If above LOQ or project specified objectives, what samples are affected?

Comments:

None

v. Data quality or usability affected?

Comments:

None

f. Field Duplicate

i. One field duplicate submitted per matrix, analysis and 10 project samples?

Yes☒ No☐ N/A☐ Comments:

ii. Submitted blind to lab?

Yes☒ No☐ N/A☐ Comments:

MW-1 and MW-1b

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iii. Precision – All relative percent differences (RPD) less than specified project objectives? (Recommended: 30% water, 50% soil)

RPD (%) = Absolute value of: $\frac{(R_1-R_2)}{((R_1+R_2)/2)} \times 100$

Where R_1 = Sample Concentration
R_2 = Field Duplicate Concentration

Yes☒ No☐ N/A☐ Comments:

iv. Data quality or usability affected? (Use the comment box to explain why or why not.)

Comments:

None

g. Decontamination or Equipment Blank (If not applicable, a comment stating why must be entered below)?

Yes☐ No☐ N/A☒ Comments:

No equipment blank.

i. All results less than LOQ and project specified objectives?

Yes☐ No☐ N/A☒ Comments:

No equipment blank.

ii. If above LOQ or project specified objectives, what samples are affected?

Comments:

None

iii. Data quality or usability affected?

Comments:

None

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7. Other Data Flags/Qualifiers (ACOE, AFCEE, Lab Specific, etc.)

   a. Defined and appropriate?

      Yes☒ No☐ N/A☐ Comments:

CORNERSTONE MALL GROUNDWATER MONITORING DATA

Sample ID	Date	Depth to Groundwater	DRO	GRO	Trichlorofluormethane	Benzene	Toluene	Ethylbenzene	Xylenes
ADEC Cleanup Level	mg/L	feet below ground surface	1.5	2.2	5.2	0.0046	1.1	0.015	0.19
MW-1	4/24/2003	15.98	**3.33**	**4.24**	NA	**0.112**	0.138	0.0912	0.3476
MW-1	9/26/2003	13.52	**2.85**	**2.24**	NA	**0.056**	0.0114	0.0255	0.411
MW-1	8/25/2004		**3.35**	**1.79**	NA	**0.0493**	0.00425	0.0125	0.0425
MW-1	5/23/2005	14.17	**1.49**	**1.65**	NA	**0.342**	ND	ND	0.0342
MW-1	8/14/2006	14.97	**1.62**	1.25	NA	**0.00924**	ND	ND	0.0359
MW-1	9/11/2007	14.72	ND	1.25	NA	**0.141**	0.0012	0.0133	0.0397
MW-1	11/19/2008	14.94	0.906	0.981	NA	**0.153**	0.00312	0.0125	0.03077
MW-1	9/29/2009	14.94	0.63	1.39	NA	**0.154**	ND	0.0061	0.0139
MW-1	10/5/2010	15.60	0.139	1.48	NA	**0.278**	ND	0.00742	0.0162
MW-1	10/5/2010	15.60	0.166	1.44	NA	**0.273**	ND	0.073	0.0161
MW-1	9/1/2011	13.90	0.129	0.556	NA	**0.177**	ND	0.00632	0.0161
MW-1	9/1/2011	13.90	0.141	0.535	NA	**0.108**	ND	0.00611	0.0156
MW-1	8/5/2013	15.40	0.127	0.417	NA	**0.0567**	0.00077	0.00167	0.00478
MW-1	8/5/2013	15.40	0.124	0.412	NA	**0.0584**	0.00074	0.00173	0.0048
MW-1	8/26/2014	12.53	0.0609J	0.399	NA	**0.0411**	ND	0.00156J	0.00538
MW-1	8/26/2014	12.53	0.0641J	0.291	NA	**0.0412**	ND	0.00159J	0.00542
MW-1	8/28/2015	14.05	- -	- -	NA	**0.0126**	ND	ND	0.00145J
MW-1	8/28/2015	14.05	- -	- -	NA	**0.0132**	ND	NS	0.00151J
MW-1	8/16/2016	11.31	- -	- -	NA	0.00268	0.000360 J	ND	0.00107J
MW-1	8/22/2017	14.28	- -	- -	NA	0.002	0.00035J	ND	0.000810J
MW-1	7/20/2018	13.59	- -	- -	NA	**0.00489**	ND	ND	0.00166J
MW-1	8/28/2019	12.44	- -	- -	NA	0.00124	ND	ND	ND
MW-1	9/1/2020	18.01	- -	- -	0.0147	ND	ND	ND	ND
MW-10*	9/1/2020	18.01	- -	- -	0.0137	0.000129J	ND	ND	ND
MW-1	9/1/2021	13.16			NA	0.00045	ND	ND	ND
MW-1b*	9/1/2021	13.16			NA	0.0005	ND	ND	ND
MW-2	4/24/2003	17.25	ND	ND	NA	0.000568	ND	ND	ND
MW-2	9/26/2003	13.81	ND	ND	NA	ND	ND	ND	ND
MW-2	8/25/2004		ND	ND	NA	ND	ND	ND	ND
MW-2	8/14/2006	16.02	ND	ND	NA	ND	ND	ND	ND
MW-2	9/11/2007	15.83	ND	ND	NA	ND	0.000773	ND	ND
MW-2	11/19/2008	--	--	--	--	--	--	--	--
MW-2	9/29/2009	--	--	--	--	--	--	--	--
MW-3	4/24/2003	16.92	ND	ND	NA	ND	ND	ND	ND
MW-3	9/26/2003	13.50	ND	ND	NA	ND	ND	ND	ND
MW-3	8/25/2004		ND	ND	NA	ND	ND	ND	ND
MW-3	5/23/2005	15.16	ND	ND	NA	ND	ND	ND	ND

Sample ID	Date	Depth to Groundwater	DRO	GRO	Trichlorofluormethane	Benzene	Toluene	Ethylbenzene	Xylenes
ADEC Cleanup Level	mg/L	feet below ground surface	1.5	2.2	5.2	0.0046	1.1	0.015	0.19
MW-3	8/14/2006	15.95	ND	ND	NA	ND	ND	ND	ND
MW-3	9/11/2007	15.73	ND	ND	NA	ND	ND	ND	ND
MW-3	11/19/2008	--	--	--	--	--	--	--	--
MW-3	9/29/2009	--	--	--	--	--	--	--	--
MW-4	8/25/2004		ND	ND	NA	ND	ND	ND	ND

NOTES:

DRO	Diesel Range Organic compounds
GRO	Gasoline Range Organic Compounds
mg/L	milligrams per liter
ADEC	Alaska Department of Environmental Conservation
--	Analysis not performed
BOLD	Analyte detected above cleanup level
NA	Analyte was not ran as part of sampling
ND	non-detect

MW-2 and MW-3 were decommissioned in 2021

MVI cornerstone Mall
1September 1, 2021
#1114-01
annual groundwater monitoring

9:45am Michaela McGee (TPEC) the QA/QC arrived onsite.

Objective:
Here to groundwater sample MW-1 using a penistaltic pump for BTEX (8260B).

Weather:
Currently 55°F partly cloudy with SW 1 mph winds 75%. humidity.

MW-1:
DTW: 13.16
DTB: 18.68
4" diameter well.
flush mount well.
18.68 - 13.16 = 5.52 x 0.65 = 3.5 x 3 well volume
10 gallons purge.

10:12am Started purging MW-1 Water appeared a little cloudy with a strange odor. using a penistaltic pump. pump speed: 13.77

11:10am Collected sample MW-1 for BTEX.

11:15am Collected sample MW-16 for BTEX. *Duplicate*

11:25am MLM offsite. Buckets left by the ATM in between yellow/orange posts.

Groundwater Well Sampling Log

Well ID: MW-1

Travis/Peterson Environmental Consulting
329 2nd Street
Fairbanks, Alaska 99701
Phone: (907) 455-7225

Project Information

Job No./Client: MVI #1114-01

Location: MVI Cornerstone Mall

Sampling Personnel: Michaela McGee

Weather Conditions/Temp: 55°F partly cloudy

GPS Data Collected? ☐ YES ☒ NO

Well Information

Type: Stickup / Flushmount

Ground surface to top of stickup (ft): _____

Date: 9/1/2021

Time Started: 9:45 am

Time Completed: 11:30 am

Well Condition

Lock present and operational? ☐ YES ☒ NO

Well label legible? ☐ YES ☒ NO

Evidence of frost-jacking? ☐ YES ☐ NO

Notes: No lock & No label

Well Data

Diameter (in): 4 inches

Type of casing: flushmount

Depth to Water (ft): 13.16

Depth to Bottom (ft): 18.68

Feet of Water in Well: 5.52

Purge Water

Water Disposal Method: leaving onsite

No. of buckets: 2 5-gallon blue buckets

Location: next to ATM between yellow poles.

Gallons per foot:

Inner diameter	1"	1.25"	2"
GPF	0.04	0.08	0.17

One Well Volume: 3.5

Total Purge Water Volume (gal): 10 gallons

Water Quality Parameters:

Time	Temp ± 3% (min of ± 0.2 °C)	pH ± 0.1	Conductivity (µS/cm) ± 3%	DO (mg/L) ± 10%	Time	Temp ± 3% (min of ± 0.2 °C)	pH ± 0.1	Conductivity (µS/cm) ± 3%	DO (mg/L) ± 10%

Sampling Information

Sample Name: MW-1

Duplicate: ☐ NO ☒ YES, ID: MW-1b

Time: 11:10 am / 11:15 am

No. of Containers: 3 VOA vials each

Analyses: BTEX

Equipment Blank? ☐ YES ☒ NO

Pump Method: Peristaltic

Pump Start: 10:12 am

Purge Rate (~~gal/min~~ TTT): 13.77

Pumping End: 11:10 am

Pump set to depth (ft): _____

Notes: _____