

**Travis/Peterson
Environmental Consulting, Inc.**

Michael D. Travis P.E.
Principal

3305 Arctic Boulevard, Suite 102
Anchorage, Alaska 99503

Phone: 907-522-4337
Fax: 907-522-4313
e-mail: mtravis@tpeci.com

Laurence A. Peterson
Operations Manager

329 2nd Street
Fairbanks, Alaska 99701

Phone: 907-455-7225
Fax: 907-455-7228
e-mail: larry@tpeci.com

October 6, 2017 – Revised October 31, 2017
1197-02

Seekins Ford-Lincoln, Inc.
1625 Seekins Ford Drive
Fairbanks, Alaska 99701

**Attention: Paul Austin
Parts and Service Director**

Re: 2017 Annual Groundwater Monitoring Report, File No. 100.26.131

Dear Mr. Austin:

Travis/Peterson Environmental Consulting, Inc. (TPECI) is pleased to present our letter report summarizing data obtained from the groundwater sampling event conducted on August 23, 2017 at Seekins Ford – Lincoln, Inc. (Figure 1, attached).

On August 23, 2017 monitoring wells MW-1, MW-2, MW-3, MW-6 and MW-7 were sampled. The sample labeled MW-10 is a duplicate of MW-1. The samples were submitted to SGS North America Inc. for analysis by the following methods:

- Gasoline range organics (GRO) by Method AK101
- Diesel range organics (DRO) by Method AK102; and
- Volatile organic compounds (VOCs) by EPA Method 8260B.

Field Measurements

Depth to groundwater and well depths were measured from the top of each well casing prior to sampling (Table 1). All the wells sampled were flush mount wells so measurements below top of casing are considered to be below ground surface. The analytical results from this sampling event appear in Table 2. The laboratory analytical report and quality assurance checklist are attached.

Table 1. Well Measurement Data

Well	Depth to Water (ft)	Total Depth (ft)	Casing Height(ft)
MW-1	14.22	24.59	flush mount
MW-2	14.68	24.47	flush mount
MW-3	13.63	22.60	flush mount
MW-6	14.29	22.10	flush mount
MW-7	14.69	21.17	flush mount

Table 2. 2017 Analytical Results

Sample	DRO (mg/L)	GRO (mg/L)	VOCs (µg/L)	
MW-1	0.515J	3.81	benzene:	1.4J
			toluene:	15.6
			ethylbenzene:	459
			xylenes (total):	1320
			isopropylbenzene(cumene):	23.9
			n-propylbenzene:	42.2
MW-10	0.695	3.55	benzene:	1.229
			toluene:	62.1
			ethylbenzene:	408
			xylenes (total):	1250
			isopropylbenzene(cumene):	27.1
			n-propylbenzene:	48.5
MW-2	0.937	ND	1,1,1-trichloroethane:	0.560J
			chloromethane:	0.430J
MW-3	0.412J	ND	tetrachloroethene:	0.690J
			4-isopropyltoluene:	3.78
			chloromethane:	0.370J
			naphthalene:	1.19
MW-6	ND	ND	trichlorofluoromethane:	0.710J
			1,2-dichloroethane:	0.280J
MW-7	ND	ND	trichlorofluoromethane:	2.37
			trichlorofluoromethane:	5200
Cleanup Level ^a	1.5	2.2	benzene	4.6
			toluene:	1,100
			tetrachloroethene:	41
			ethylbenzene:	15
			xylenes (total):	190
			Isopropylbenzene:	450
			n-propylbenzene:	660
			1,3,5-trimethylbenzene:	120
			sec-butylbenzene:	2000
4-isopropyltoluene:	n/a			
1,4-dichlorobenzene:	4.8			
1,2,4-trimethylbenzene:	15			
naphthalene:	1.7			
1,2-dichloroethane:	1.7			
Trichloroethylene:	2.85			
			1,3,5-trimethylbenzene:	56.4
			1,2,4-trimethylbenzene:	252
			naphthalene:	20.9
			1,3,5-trimethylbenzene:	64.7
			1,2,4-trimethylbenzene:	208
			naphthalene:	18.6
			chloromethane:	0.540J
			sec-butylbenzene:	2.49
			trichlorofluoromethane:	2.85
			tetrachloroethene:	5.17
			1,2-dichlorobenzene:	3.13
			1,2,4-trimethylbenzene:	1.23
			1,3,5-trimethylbenzene:	0.510J
			1,4-dichlorobenzene:	0.200J
			tetrachloroethene:	0.510J

^a18 AAC 75 Table C: Groundwater Cleanup Levels. Only detected VOCs are listed in the table. Measurements exceeding DEC Cleanup Levels are indicated in bold type. n/a – cleanup standard not available.

Bolded numbers are above ADEC Cleanup levels.

Sampling Discussion

Historic results for all wells sampled are attached for further reference.

Detections in MW-1

The following analytes were detected in MW-1 above DEC Cleanup Levels:

- GRO;
- Ethylbenzene;
- Xylenes (total);
- 1,2,4-trimethylbenzene; and
- Naphthalene.

The following analytes were below DEC Cleanup Levels and trending down from the 2016 sampling event:

- DRO;
- 1,3,5-Trimethylbenzene;
- Benzene;
- Isopropylbenzene;
- n-Propylbenzene;
- Toluene.

In the 2016 sampling event, GRO was detected above DEC Cleanup Levels. GRO, ethylbenzene, total xylenes, 1,2,4-trimethylbenzene, and naphthalene were all detected above the Cleanup Levels in the 2017 sampling event. This is in part due to the revised ADEC Cleanup Levels.

Detections in MW-2

The following analytes were detected in MW-2, all below DEC Cleanup Levels except for trichloroethylene:

- DRO;
- 1,1,1-Trichloroethane;
- Chloromethane;
- Tetrachloroethene;
- Trichlorofluoromethane; and
- Trichloroethylene.

Some of the above analytes were J-flagged meaning the results were estimated, however it does appear to be an increase in contamination found in MW-2 from the 2016 sampling event. Trichloroethylene was detected above DEC cleanup levels in MW-2.

Detections in MW-3

The following analytes were detected in MW-3, all below DEC Cleanup Levels:

- DRO;
- 1,2,4-Trimethylbenzene;
- 1,2-Dichlorobenzene;
- 1,3,5-Trimethylbenzene;
- 1,4-Dichlorobenzene;
- 4-Isopropyltoluene;
- Chloromethane;
- Naphthalene; and
- Tetrachloroethene.

The contamination detected in MW-3 is consistent with historical contamination found within the monitoring well. None of the analytes in MW-3 were detected above ADEC cleanup levels. For a complete historical list of contamination see the historical data table attached to this letter.

Detections in MW-6

The following analytes were detected in MW-6, all below ADEC Cleanup Levels:

- 1,2-Dichloroethane;
- Tetrachloroethene; and
- Trichlorofluoromethane.

DRO and GRO have not been detected in MW-6 in the past three consecutive sampling events. None of the analytes in MW-6 were detected above DEC cleanup levels.

Detections in MW-7

The following analyte was detected in MW-7, below the DEC Cleanup Level:

- Trichlorofluoromethane.

DEC Laboratory Report Checklist Discussion

Laboratory analyses of the samples were performed by SGS North America Inc. TPECI employee Michaela McGee completed the DEC Laboratory Data Review Checklist for the analytical report; a copy of the completed DEC Laboratory Data Review Checklist is attached to this letter.

SGS North America Inc. Data Review Checklist

The data review checklist revealed a few QC failures with the laboratory data. MS/MSD RPD was outside of the QC criteria for dichlorodifluoromethane and naphthalene. The analyte was not detected in the parent samples. This QC failure does not affect the data as the analytes were not detected in the parent samples. In sample MW-1 surrogate recovery for 4-bromofluorobenzene (247%) did not meet QC criteria. This QC failure was due to matrix interference and should not affect the data.

While comparing the field duplicates, one of the analytes was outside the RPD% recommended by ADEC. However, this was because the detection limit was used to reflect the result for MW-1 since chloromethane was not detected. This should not accurately reflect the samples RPD.

Conclusions

No contaminants were detected above DEC groundwater cleanup levels in, MW-3, MW-6, and MW-7. The following wells have also experienced three consecutive annual sampling events with no detected analytes above DEC groundwater cleanup levels.

The sampling of MW-1 in 2017 detected GRO, ethylbenzene, xylenes, naphthalene, and 1,2,4-trimethylbenzene as contaminants above DEC groundwater cleanup levels. In the previous sampling event in 2016 only GRO was detected above cleanup levels however in the preceding years multiple contaminants were present above applicable DEC groundwater cleanup levels. The levels detected in 2017 appear consistent with historic results and have added contaminants above applicable limits due to the recent DEC groundwater cleanup level changes.

The sampling of MW-2 in 2017 detected trichloroethylene above DEC cleanup levels. In the previous sampling event in 2016 no contaminants were detected above DEC cleanup levels.

A review of the data, using the DEC laboratory data review checklists identified minor problems in the laboratory reports. It was determined that none of these problems adversely affected the data obtained.

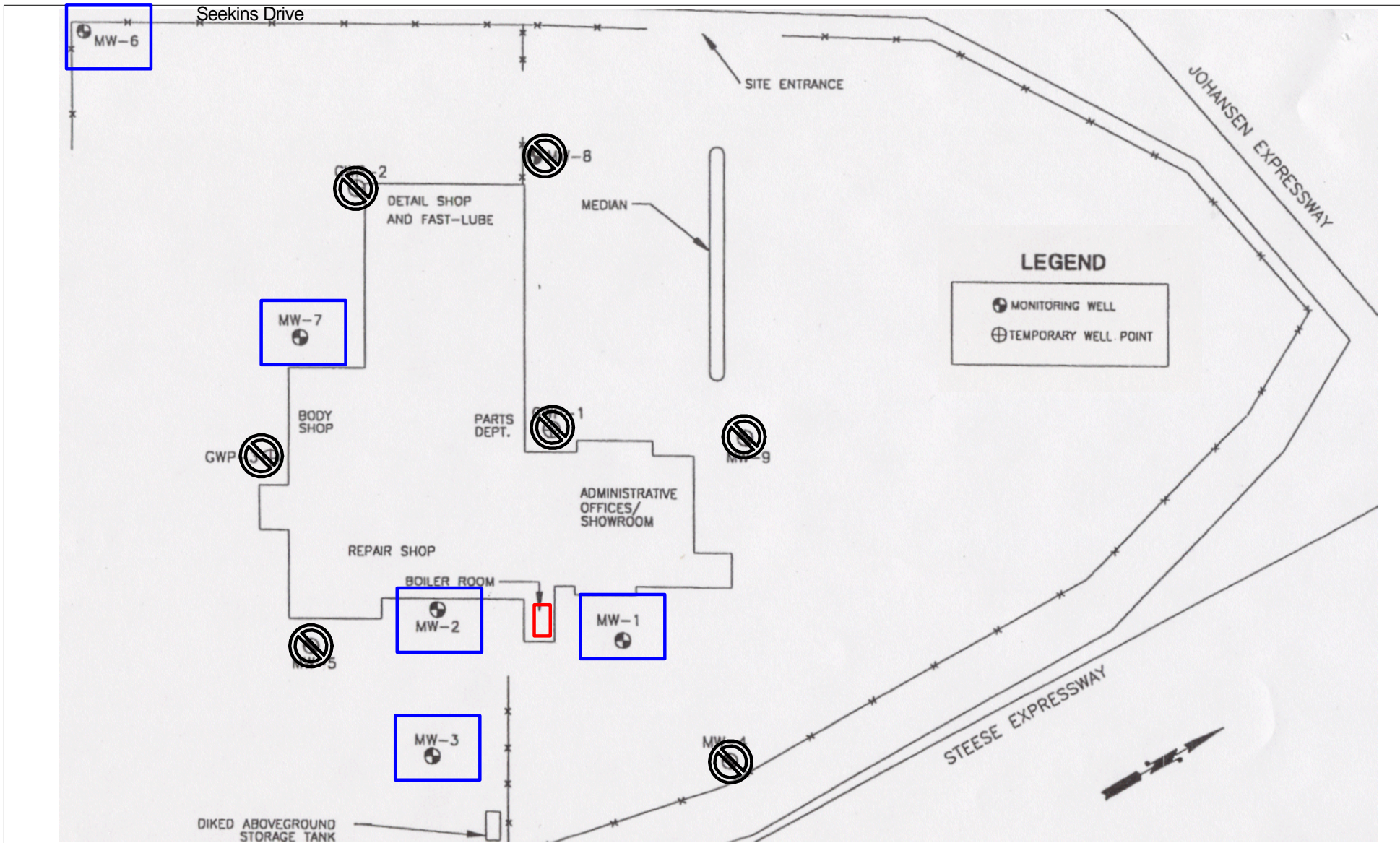
Based on the analytical results, TPECI agrees with DEC suggestion of monitoring MW-1, MW-2, MW-3 and MW-7 once every three years, with the next sampling event being conducted in 2020. If you have any questions regarding this report please contact me at (907) 455-7225.

Sincerely,

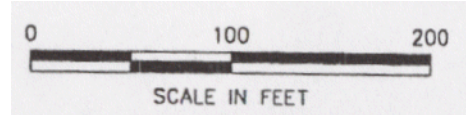
Michaela McGee
Staff Scientist

cc: Mr. Jim Fish, State of Alaska, Department of Environmental Conservation.

Attachments: Figure 1
Historical Groundwater Data Table
Laboratory Data Reports and DEC Laboratory Data Review Checklist
Field Notes



- LOCATION OF INVESTIGATIVE WASTE BUCKETS DERIVED FROM EACH WELL.
- WELLS SAMPLES IN 2017
- X DECOMMISSIONED MONITORING WELL



TRAVIS/PETERSON ENVIRONMENTAL CONSULTING, INC.
 329 2ND STREET
 FAIRBANKS, ALASKA 99701

SEEKINS FORD-LINCOLN-MERCURY

FIGURE 1
 SITE PLAN

PROJECT No: 1197-02	FILE: S:\Projects\1197\02\2015\Figure 1-Site Plan.SKF	DATE: 08/25/2017	SCALE: AS SHOWN
---------------------	---	------------------	-----------------

HISTORIC GROUNDWATER ANALYTICAL DATA FOR SEEKINS FORD-LINCOLN-MERCURY MONITORING WELLS

Well Number	Date	Depth to Water (Feet)	GRO (µg/L)	DRO (µg/L)	Acetone (µg/L)	Benzene (µg/L)	MEK (µg/L)	n-Butylbenzene (µg/L)	sec-Butylbenzene (µg/L)	tert-Butylbenzene (µg/L)	Carbon Tetrachloride (µg/L)	Carbon disulfide (µg/L)	4-chlorotoluene (µg/L)	Chloroform (µg/L)	Chloromethane (µg/L)	1,2-DCB (µg/L)	1,4-DCB (µg/L)	1,1-DCE (µg/L)	1,2-DCE (µg/L)	1,2-Dichloropropane (µg/L)	Dichlorodifluoromethane (µg/L)	Ethylbenzene (µg/L)	Isopropylbenzene (µg/L)	Methyl-tert-butyl-ether (µg/L)	4-Isopropyltoluene (µg/L)	p-Isopropyltoluene (µg/L)	Naphthalene (µg/L)	n-Propylbenzene (µg/L)	Styrene (µg/L)	PCE (µg/L)	Toluene (µg/L)	1,2,3-TCB (µg/L)	1,2,4-TCB (µg/L)	1,1,1-Trichloroethane (µg/L)	Trichlorofluoromethane (µg/L)	TCE (µg/L)	1,2,3-Trichloropropane (µg/L)	1,2,4-TMB (µg/L)	1,3,5-TMB (µg/L)	Total Xylenes (µg/L)	Naphthalene (µg/L)	Fluorene (µg/L)	Phenanthrene (µg/L)	Fluoranthene (µg/L)	Pyrene (µg/L)	Acenaphthylene (µg/L)
ADEC MCL (µg/L)			2,200	1,500	14,000	4.6	5,600	1000	2000	690	4.6	810	N/A	2.2	190	300	4.8	28	1.7	4.4	200	15	450	140	N/A	N/A	1.7	660	1200	41.0	1,100	7	4	8000	5,200	2.8	0.0075	15	120	190	700	290	170	260	120	260
MW-1	7/21/1995	14.2	180	5.4	--	12,000	--	--	--	ND	--	ND	--	--	--	--	--	--	--	--	NA	--	ND	--	--	--	--	--	--	NA	--	ND	--	--	--	--	--	--	NT	--	--	--	--	--		
	5/1/1996	15.7	240	6.2	ND	7,500	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	420	ND	NA	ND	ND	ND	ND	ND	3,000	740	--	ND	--	--	--	--	--	
	8/7/1996	15.28	250	11	--	8,500	--	--	--	ND	--	ND	--	--	--	--	--	--	--	--	--	NA	--	ND	--	--	--	--	--	--	NA	--	ND	--	--	--	--	--	--	NT	--	--	--	--	--	
	11/21/1996	15.57	330	9.6	--	11,000	--	--	--	ND	--	ND	--	--	--	--	--	--	--	--	--	NA	--	ND	--	--	--	--	--	NA	--	ND	--	--	--	--	--	--	NT	--	--	--	--	--		
	5/25/2005	14.64	1,120	0.363	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.2	--	ND	ND	ND	2.24	ND	ND	ND	ND	ND	ND	ND	69	19.3	317	2.24	ND	ND	ND	ND	ND	ND
	7/17/2006	14.62	9,810	0.843	ND	ND	ND	245	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	368	ND	ND	ND	ND	ND	ND	755	ND	ND	ND	ND	ND	ND	ND	370	ND	1,420	ND	ND	ND	ND	ND	ND	
	9/13/2007	14.74	47,600	3,620	--	25.6	ND	10.1	9.71	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	--	1,590	85.4	ND	8.02	--	76.8	146	ND	13,000	ND	ND	1.78	ND	ND	1,310	356	15,670	ND	--	--	--	--	--		
	9/16/2008	12.65	15,500	1,680	ND	6.3	84.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	--	1,080	56	ND	--	4.24	51.2	ND	ND	1,750	ND	ND	ND	ND	ND	ND	735	175	5,790	ND	--	--	--	--	--	
	11/8/2010	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
	2011	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	9/4/2012	14.93	75,300	670	20.5	4.7	ND	15.3	7.5	--	ND	--	ND	ND	1.3	ND	ND	ND	ND	ND	ND	3,090	117	--	--	7.4	90.9	176	183	ND	3,670	4.2	--	ND	1.5	ND	ND	2,200	587	18,400	--	--	--	--	--	--
	8/14/2013	9.8	59,200	582	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2,130	96.4	ND	ND	ND	166	ND	ND	3,410	ND	ND	ND	ND	ND	ND	1,440	383	13,400	--	--	--	--	--	--	
Duplicate	8/14/2013	9.8	57,900	594	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2,150	95.5	ND	ND	168	ND	ND	3,440	ND	ND	ND	ND	ND	ND	1,450	385	13,500	--	--	--	--	--	--		
	8/27/2014	10.82	25,900	362	ND	1.65	ND	6.04	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1,080	40.7	ND	5.02	--	45.6	68.7	ND	1,340	ND	ND	2.91	ND	ND	923	164	6,480	--	--	--	--	--	--		
Duplicate	8/27/2014	10.82	24,700	355	ND	1.74	ND	6.03	1.1	ND	ND	22.6	ND	ND	ND	ND	ND	ND	ND	1.39	ND	1,110	49.3	ND	4.79	--	47.0	85.1	ND	1,220	ND	ND	2.71	ND	ND	889	209	6,510	--	--	--	--	--	--		
	9/28/2015	13.64	25,300	260	ND	1.45	ND	13.4	6.89	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1,100	58.2	ND	5.47	ND	46.3	112	ND	684	ND	ND	ND	ND	ND	802	202	5,930	--	--	--	--	--	--		
Duplicate	9/28/2015	13.64	24,700	258	ND	1.40	ND	13.2	6.66	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1,220	62.8	ND	5.31	ND	48.8	118	ND	759	ND	ND	ND	ND	ND	848	210	6,470	--	--	--	--	--	--		
	8/23/2016	11.61	4,900	901	ND	0.65	ND	ND	ND	ND	ND	ND	ND	0.590J	ND	ND	ND	ND	ND	ND	ND	610	22.7	ND	1.35	ND	15.9	43.5	ND	15.6	ND	ND	ND	ND	362	54.6	2,250	--	--	--	--	--	--			
	8/23/2017	14.22	3,810	515	ND	1.40J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	459	23.9	ND	1.35	ND	20.9	42.2	ND	57.5	ND	ND	ND	252	56.4	1,320	--	--	--	--	--	--				
Duplicate	8/23/2017	14.22	3,550	695	ND	1.29	ND	2.49	ND	ND	ND	ND	ND	0.540J	ND	ND	ND	ND	ND	ND	ND	408	27.1	ND	1.15	ND	18.6	48.5	ND	62.1	ND	ND	ND	208	64.7	1,250	--	--	--	--	--	--				
MW-2	7/21/1995	14.64	0.15	0.35	ND	ND	ND	--	--	ND	8.2	ND	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	--	ND	--	--	--	--	20	ND	ND	57	6.3	ND	--	--	--	--	--	--	--	--	--			
	5/1/1996	16.13	0.26	0.74	ND	2	ND	ND	ND	ND	ND	ND	ND	1.88	ND	ND	ND	ND	ND	ND	ND	3.53	ND	1.3	--	ND	9.59	1.71	ND	3.53	ND	9.39	ND	ND	22.2	16.2	ND	ND	ND	ND	ND	ND	ND	ND		
	8/7/1996	15.72	0.16	3.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	57	ND	ND	180	8.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
	11/21/1996	16.02	0.105	2.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.11	ND	ND	ND	ND	ND	ND	ND	ND	1.69	ND	--	ND	4.74	28.4	ND	ND	48.3	7.19	ND	ND	8.55	6.61	ND	ND	ND	ND	ND	ND	ND	ND		
	5/25/2005	15.09	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
	7/17/2006	Well was obstructed.																																												
	9/13/2007	15.18	ND	950	--	ND	ND	ND	ND	ND	ND	ND	ND	9.5	ND	ND	ND	ND	ND	ND	--	ND	ND	ND	ND	--	ND	ND	2.03	ND	ND	2.36	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
	9/16/2008	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
	11/8/2010	16.49	ND	232	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	7.0	ND	ND	11.7	3.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
	9/5/2012	15.38	0.0566J	0.144	ND	ND	ND	ND	ND	--	ND	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	--	--	ND	ND	ND	5.2	ND	ND	--	3.8	1.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Duplicate	9/5/2012	15.38	0.0374J	0.127J	ND	ND	ND	ND	ND	--	ND	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	--	--	ND	ND	ND	ND	5.3	ND	ND	--	3.7	1.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
	8/14/2013	14.6	ND	0.217	ND	ND	ND	ND	ND	--	ND	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.7	ND	ND	2.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
	8/27/2014	11.29	19.2J	30.7J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.43	ND	ND	ND	ND	ND	1.3	1.12	ND	ND	ND	ND	ND	ND	1.34	ND	6.11	--	--	--	--	--	--		

Laboratory Report of Analysis

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

Report Number: **1178278**

Client Project: **Seekins Ford**

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.



Alaska Division Technical Director

Stephen Ede

2017.09.06

11:36:43 -08'00'

Jennifer Dawkins
Project Manager
Jennifer.Dawkins@sgs.com

Date



Case Narrative

SGS Client: Travis/Peterson (TPECI)

SGS Project: 1178278

Project Name/Site: Seekins Ford

Refer to sample receipt form for information on sample condition.

MW-1

1178278001 PS

AK101 - Surrogate recovery for 4-bromofluorobenzene (247 %) does not meet QC criteria due to matrix interference.

1176136020MS

1409994 MS

8260C - MS recovery for dichlorodifluoromethane (192%) does not meet QC criteria. This analyte was not detected in the parent sample.

1176136020MSD

1409995 MSD

8260C - MSD recoveries for dichlorodifluoromethane (192%) and naphthalene (129%) do not meet QC criteria. These analytes were not detected in the parent sample.

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

Report of Manual Integrations

<u>Laboratory ID</u>	<u>Client Sample ID</u>	<u>Analytical Batch</u>	<u>Analyte</u>	<u>Reason</u>
SW8260C				
1176136020	LABREFQC	VMS17128	4-Isopropyltoluene	SP
1178278002	MW-10	VMS17128	4-Isopropyltoluene	SP

Manual Integration Reason Code Descriptions

Code	Description
O	Original Chromatogram
M	Modified Chromatogram
SS	Skimmed surrogate
BLG	Closed baseline gap
RP	Reassign peak name
PIR	Pattern integration required
IT	Included tail
SP	Split peak
RSP	Removed split peak
FPS	Forced peak start/stop
BLC	Baseline correction
PNF	Peak not found by software

All DRO/RRO analysis are integrated per SOP.

Laboratory Qualifiers

Enclosed are the analytical results associated with the above work order. 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, indemnification 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) & UST-005 (CS) for ADEC and 2944.01 for DOD ELAP/ISO17025 (RCRA methods: 1020B, 1311, 3010A, 3050B, 3520C, 3550C, 5030B, 5035A, 6020A, 7470A, 7471B, 8015C, 8021B, 8082A, 8260C, 8270D, 8270D-SIM, 9040C, 9045D, 9056A, 9060A, AK101 and AK102/103). 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
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.

Sample Summary

<u>Client Sample ID</u>	<u>Lab Sample ID</u>	<u>Collected</u>	<u>Received</u>	<u>Matrix</u>
MW-1	1178278001	08/23/2017	08/24/2017	Water (Surface, Eff., Ground)
MW-10	1178278002	08/23/2017	08/24/2017	Water (Surface, Eff., Ground)
MW-2	1178278003	08/23/2017	08/24/2017	Water (Surface, Eff., Ground)
MW-3	1178278004	08/23/2017	08/24/2017	Water (Surface, Eff., Ground)
MW-6	1178278005	08/23/2017	08/24/2017	Water (Surface, Eff., Ground)
MW-7	1178278006	08/23/2017	08/24/2017	Water (Surface, Eff., Ground)
Trip Blank	1178278007	08/23/2017	08/24/2017	Water (Surface, Eff., Ground)

<u>Method</u>	<u>Method Description</u>
AK102	DRO Low Volume (W)
AK101	Gasoline Range Organics (W)
SW8260C	Volatile Organic Compounds (W) FULL

Print Date: 09/06/2017 8:49:17AM

Detectable Results Summary

Client Sample ID: **MW-1**
 Lab Sample ID: 1178278001
Semivolatile Organic Fuels
Volatile Fuels
Volatile GC/MS

<u>Parameter</u>	<u>Result</u>	<u>Units</u>
Diesel Range Organics	0.515J	mg/L
Gasoline Range Organics	3.81	mg/L
1,2,4-Trimethylbenzene	252	ug/L
1,3,5-Trimethylbenzene	56.4	ug/L
Benzene	1.40J	ug/L
Ethylbenzene	459	ug/L
Isopropylbenzene (Cumene)	23.9	ug/L
Naphthalene	20.9	ug/L
n-Propylbenzene	42.2	ug/L
o-Xylene	522	ug/L
P & M -Xylene	796	ug/L
Toluene	57.5	ug/L
Xylenes (total)	1320	ug/L

Client Sample ID: **MW-10**
 Lab Sample ID: 1178278002
Semivolatile Organic Fuels
Volatile Fuels
Volatile GC/MS

<u>Parameter</u>	<u>Result</u>	<u>Units</u>
Diesel Range Organics	0.695	mg/L
Gasoline Range Organics	3.55	mg/L
1,2,4-Trimethylbenzene	208	ug/L
1,3,5-Trimethylbenzene	64.7	ug/L
4-Isopropyltoluene	1.15	ug/L
Benzene	1.29	ug/L
Chloromethane	0.540J	ug/L
Ethylbenzene	408	ug/L
Isopropylbenzene (Cumene)	27.1	ug/L
Naphthalene	18.6	ug/L
n-Propylbenzene	48.5	ug/L
o-Xylene	486	ug/L
P & M -Xylene	759	ug/L
sec-Butylbenzene	2.49	ug/L
Toluene	62.1	ug/L
Xylenes (total)	1250	ug/L

Client Sample ID: **MW-2**
 Lab Sample ID: 1178278003
Semivolatile Organic Fuels
Volatile GC/MS

<u>Parameter</u>	<u>Result</u>	<u>Units</u>
Diesel Range Organics	0.937	mg/L
1,1,1-Trichloroethane	0.560J	ug/L
Chloromethane	0.430J	ug/L
Tetrachloroethene	5.17	ug/L
Trichlorofluoromethane	2.85	ug/L

Detectable Results Summary

Client Sample ID: **MW-3**
 Lab Sample ID: 1178278004
Semivolatile Organic Fuels
Volatile GC/MS

<u>Parameter</u>	<u>Result</u>	<u>Units</u>
Diesel Range Organics	0.412J	mg/L
1,2,4-Trimethylbenzene	1.23	ug/L
1,2-Dichlorobenzene	3.13	ug/L
1,3,5-Trimethylbenzene	0.510J	ug/L
1,4-Dichlorobenzene	0.200J	ug/L
4-Isopropyltoluene	3.78	ug/L
Chloromethane	0.370J	ug/L
Naphthalene	1.19	ug/L
Tetrachloroethene	0.690J	ug/L

Client Sample ID: **MW-6**
 Lab Sample ID: 1178278005
Volatile GC/MS

<u>Parameter</u>	<u>Result</u>	<u>Units</u>
1,2-Dichloroethane	0.280J	ug/L
Tetrachloroethene	0.510J	ug/L
Trichlorofluoromethane	0.710J	ug/L

Client Sample ID: **MW-7**
 Lab Sample ID: 1178278006
Volatile GC/MS

<u>Parameter</u>	<u>Result</u>	<u>Units</u>
Trichlorofluoromethane	2.37	ug/L

Client Sample ID: **Trip Blank**
 Lab Sample ID: 1178278007
Volatile GC/MS

<u>Parameter</u>	<u>Result</u>	<u>Units</u>
Chloromethane	0.330J	ug/L

Results of MW-1

Client Sample ID: **MW-1**
 Client Project ID: **Seekins Ford**
 Lab Sample ID: 1178278001
 Lab Project ID: 1178278

Collection Date: 08/23/17 09:50
 Received Date: 08/24/17 09:24
 Matrix: Water (Surface, Eff., Ground)
 Solids (%):
 Location:

Results by Semivolatile Organic Fuels

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Diesel Range Organics	0.515 J	0.545	0.164	mg/L	1		09/01/17 14:13
Surrogates							
5a Androstane (surr)	75.1	50-150		%	1		09/01/17 14:13

Batch Information

Analytical Batch: XFC13746
 Analytical Method: AK102
 Analyst: KMD
 Analytical Date/Time: 09/01/17 14:13
 Container ID: 1178278001-G

Prep Batch: XXX38278
 Prep Method: SW3520C
 Prep Date/Time: 08/27/17 08:13
 Prep Initial Wt./Vol.: 275 mL
 Prep Extract Vol: 1 mL



Results of **MW-1**

Client Sample ID: **MW-1**
Client Project ID: **Seekins Ford**
Lab Sample ID: 1178278001
Lab Project ID: 1178278

Collection Date: 08/23/17 09:50
Received Date: 08/24/17 09:24
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Volatile Fuels**

<u>Parameter</u>	<u>Result</u>	<u>Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Gasoline Range Organics	3.81		0.100	0.0310	mg/L	1		08/25/17 16:59
Surrogates								
4-Bromofluorobenzene (surr)	247	*	50-150		%	1		08/25/17 16:59

Batch Information

Analytical Batch: VFC13840
Analytical Method: AK101
Analyst: ST
Analytical Date/Time: 08/25/17 16:59
Container ID: 1178278001-D

Prep Batch: VXX31158
Prep Method: SW5030B
Prep Date/Time: 08/25/17 08:00
Prep Initial Wt./Vol.: 5 mL
Prep Extract Vol: 5 mL



Results of MW-1

Client Sample ID: MW-1
Client Project ID: Seekins Ford
Lab Sample ID: 1178278001
Lab Project ID: 1178278

Collection Date: 08/23/17 09:50
Received Date: 08/24/17 09:24
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by Volatile GC/MS

Table with 8 columns: Parameter, Result Qual, LOQ/CL, DL, Units, DF, Allowable Limits, Date Analyzed. Lists various chemical compounds and their detection results.



Results of MW-1

Client Sample ID: MW-1
Client Project ID: Seekins Ford
Lab Sample ID: 1178278001
Lab Project ID: 1178278

Collection Date: 08/23/17 09:50
Received Date: 08/24/17 09:24
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by Volatile GC/MS

Table with 8 columns: Parameter, Result Qual, LOQ/CL, DL, Units, DF, Allowable Limits, Date Analyzed. Lists various chemical compounds and their detection results.

Results of MW-1

Client Sample ID: **MW-1**
Client Project ID: **Seekins Ford**
Lab Sample ID: 1178278001
Lab Project ID: 1178278

Collection Date: 08/23/17 09:50
Received Date: 08/24/17 09:24
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by Volatile GC/MS

Batch Information

Analytical Batch: VMS17128
Analytical Method: SW8260C
Analyst: FDR
Analytical Date/Time: 09/01/17 17:05
Container ID: 1178278001-A

Prep Batch: VXX31206
Prep Method: SW5030B
Prep Date/Time: 09/01/17 06:00
Prep Initial Wt./Vol.: 5 mL
Prep Extract Vol: 5 mL

Results of MW-10

Client Sample ID: **MW-10**
 Client Project ID: **Seekins Ford**
 Lab Sample ID: 1178278002
 Lab Project ID: 1178278

Collection Date: 08/23/17 10:00
 Received Date: 08/24/17 09:24
 Matrix: Water (Surface, Eff., Ground)
 Solids (%):
 Location:

Results by Semivolatile Organic Fuels

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Diesel Range Organics	0.695	0.545	0.164	mg/L	1		09/01/17 14:23
Surrogates							
5a Androstane (surr)	80.5	50-150		%	1		09/01/17 14:23

Batch Information

Analytical Batch: XFC13746
 Analytical Method: AK102
 Analyst: KMD
 Analytical Date/Time: 09/01/17 14:23
 Container ID: 1178278002-G

Prep Batch: XXX38278
 Prep Method: SW3520C
 Prep Date/Time: 08/27/17 08:13
 Prep Initial Wt./Vol.: 275 mL
 Prep Extract Vol: 1 mL

Results of MW-10

Client Sample ID: **MW-10**
 Client Project ID: **Seekins Ford**
 Lab Sample ID: 1178278002
 Lab Project ID: 1178278

Collection Date: 08/23/17 10:00
 Received Date: 08/24/17 09:24
 Matrix: Water (Surface, Eff., Ground)
 Solids (%):
 Location:

Results by Volatile Fuels

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Gasoline Range Organics	3.55	0.500	0.155	mg/L	5		08/28/17 21:04
Surrogates							
4-Bromofluorobenzene (surr)	117	50-150		%	5		08/28/17 21:04

Batch Information

Analytical Batch: VFC13842
 Analytical Method: AK101
 Analyst: ST
 Analytical Date/Time: 08/28/17 21:04
 Container ID: 1178278002-E

Prep Batch: VXX31167
 Prep Method: SW5030B
 Prep Date/Time: 08/28/17 08:00
 Prep Initial Wt./Vol.: 5 mL
 Prep Extract Vol: 5 mL



Results of MW-10

Client Sample ID: MW-10
Client Project ID: Seekins Ford
Lab Sample ID: 1178278002
Lab Project ID: 1178278

Collection Date: 08/23/17 10:00
Received Date: 08/24/17 09:24
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by Volatile GC/MS

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
1,1,1,2-Tetrachloroethane	0.250 U	0.500	0.150	ug/L	1		09/01/17 16:48
1,1,1-Trichloroethane	0.500 U	1.00	0.310	ug/L	1		09/01/17 16:48
1,1,2,2-Tetrachloroethane	0.250 U	0.500	0.150	ug/L	1		09/01/17 16:48
1,1,2-Trichloroethane	0.200 U	0.400	0.120	ug/L	1		09/01/17 16:48
1,1-Dichloroethane	0.500 U	1.00	0.310	ug/L	1		09/01/17 16:48
1,1-Dichloroethene	0.500 U	1.00	0.310	ug/L	1		09/01/17 16:48
1,1-Dichloropropene	0.500 U	1.00	0.310	ug/L	1		09/01/17 16:48
1,2,3-Trichlorobenzene	0.500 U	1.00	0.310	ug/L	1		09/01/17 16:48
1,2,3-Trichloropropane	0.500 U	1.00	0.310	ug/L	1		09/01/17 16:48
1,2,4-Trichlorobenzene	0.500 U	1.00	0.310	ug/L	1		09/01/17 16:48
1,2,4-Trimethylbenzene	208	20.0	6.20	ug/L	20		09/02/17 23:34
1,2-Dibromo-3-chloropropane	5.00 U	10.0	3.10	ug/L	1		09/01/17 16:48
1,2-Dibromoethane	0.0375 U	0.0750	0.0180	ug/L	1		09/01/17 16:48
1,2-Dichlorobenzene	0.500 U	1.00	0.310	ug/L	1		09/01/17 16:48
1,2-Dichloroethane	0.250 U	0.500	0.150	ug/L	1		09/01/17 16:48
1,2-Dichloropropane	0.500 U	1.00	0.310	ug/L	1		09/01/17 16:48
1,3,5-Trimethylbenzene	64.7	1.00	0.310	ug/L	1		09/01/17 16:48
1,3-Dichlorobenzene	0.500 U	1.00	0.310	ug/L	1		09/01/17 16:48
1,3-Dichloropropane	0.250 U	0.500	0.150	ug/L	1		09/01/17 16:48
1,4-Dichlorobenzene	0.250 U	0.500	0.150	ug/L	1		09/01/17 16:48
2,2-Dichloropropane	0.500 U	1.00	0.310	ug/L	1		09/01/17 16:48
2-Butanone (MEK)	5.00 U	10.0	3.10	ug/L	1		09/01/17 16:48
2-Chlorotoluene	0.500 U	1.00	0.310	ug/L	1		09/01/17 16:48
2-Hexanone	5.00 U	10.0	3.10	ug/L	1		09/01/17 16:48
4-Chlorotoluene	0.500 U	1.00	0.310	ug/L	1		09/01/17 16:48
4-Isopropyltoluene	1.15	1.00	0.310	ug/L	1		09/01/17 16:48
4-Methyl-2-pentanone (MIBK)	5.00 U	10.0	3.10	ug/L	1		09/01/17 16:48
Benzene	1.29	0.400	0.120	ug/L	1		09/01/17 16:48
Bromobenzene	0.500 U	1.00	0.310	ug/L	1		09/01/17 16:48
Bromochloromethane	0.500 U	1.00	0.310	ug/L	1		09/01/17 16:48
Bromodichloromethane	0.250 U	0.500	0.150	ug/L	1		09/01/17 16:48
Bromoform	0.500 U	1.00	0.310	ug/L	1		09/01/17 16:48
Bromomethane	2.50 U	5.00	1.50	ug/L	1		09/01/17 16:48
Carbon disulfide	5.00 U	10.0	3.10	ug/L	1		09/01/17 16:48
Carbon tetrachloride	0.500 U	1.00	0.310	ug/L	1		09/01/17 16:48
Chlorobenzene	0.250 U	0.500	0.150	ug/L	1		09/01/17 16:48
Chloroethane	0.500 U	1.00	0.310	ug/L	1		09/01/17 16:48

Print Date: 09/06/2017 8:49:19AM

J flagging is activated



Results of MW-10

Client Sample ID: MW-10
Client Project ID: Seekins Ford
Lab Sample ID: 1178278002
Lab Project ID: 1178278

Collection Date: 08/23/17 10:00
Received Date: 08/24/17 09:24
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by Volatile GC/MS

Table with 8 columns: Parameter, Result Qual, LOQ/CL, DL, Units, DF, Allowable Limits, Date Analyzed. Lists various chemical compounds and their detection results.

Results of MW-10

Client Sample ID: **MW-10**
Client Project ID: **Seekins Ford**
Lab Sample ID: 1178278002
Lab Project ID: 1178278

Collection Date: 08/23/17 10:00
Received Date: 08/24/17 09:24
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by Volatile GC/MS

Batch Information

Analytical Batch: VMS17128
Analytical Method: SW8260C
Analyst: FDR
Analytical Date/Time: 09/01/17 16:48
Container ID: 1178278002-A

Prep Batch: VXX31206
Prep Method: SW5030B
Prep Date/Time: 09/01/17 06:00
Prep Initial Wt./Vol.: 5 mL
Prep Extract Vol: 5 mL

Analytical Batch: VMS17129
Analytical Method: SW8260C
Analyst: FDR
Analytical Date/Time: 09/02/17 23:34
Container ID: 1178278002-A

Prep Batch: VXX31207
Prep Method: SW5030B
Prep Date/Time: 09/02/17 06:00
Prep Initial Wt./Vol.: 5 mL
Prep Extract Vol: 5 mL

Results of MW-2

Client Sample ID: **MW-2**
 Client Project ID: **Seekins Ford**
 Lab Sample ID: 1178278003
 Lab Project ID: 1178278

Collection Date: 08/23/17 10:40
 Received Date: 08/24/17 09:24
 Matrix: Water (Surface, Eff., Ground)
 Solids (%):
 Location:

Results by Semivolatile Organic Fuels

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Diesel Range Organics	0.937	0.545	0.164	mg/L	1		09/01/17 14:34
Surrogates							
5a Androstane (surr)	79.8	50-150		%	1		09/01/17 14:34

Batch Information

Analytical Batch: XFC13746
 Analytical Method: AK102
 Analyst: KMD
 Analytical Date/Time: 09/01/17 14:34
 Container ID: 1178278003-G

Prep Batch: XXX38278
 Prep Method: SW3520C
 Prep Date/Time: 08/27/17 08:13
 Prep Initial Wt./Vol.: 275 mL
 Prep Extract Vol: 1 mL

Results of MW-2

Client Sample ID: **MW-2**
 Client Project ID: **Seekins Ford**
 Lab Sample ID: 1178278003
 Lab Project ID: 1178278

Collection Date: 08/23/17 10:40
 Received Date: 08/24/17 09:24
 Matrix: Water (Surface, Eff., Ground)
 Solids (%):
 Location:

Results by Volatile Fuels

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Gasoline Range Organics	0.0500 U	0.100	0.0310	mg/L	1		08/25/17 17:37
Surrogates							
4-Bromofluorobenzene (surr)	94.4	50-150		%	1		08/25/17 17:37

Batch Information

Analytical Batch: VFC13840
 Analytical Method: AK101
 Analyst: ST
 Analytical Date/Time: 08/25/17 17:37
 Container ID: 1178278003-D

Prep Batch: VXX31158
 Prep Method: SW5030B
 Prep Date/Time: 08/25/17 08:00
 Prep Initial Wt./Vol.: 5 mL
 Prep Extract Vol: 5 mL



Results of MW-2

Client Sample ID: MW-2
Client Project ID: Seekins Ford
Lab Sample ID: 1178278003
Lab Project ID: 1178278

Collection Date: 08/23/17 10:40
Received Date: 08/24/17 09:24
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by Volatile GC/MS

Table with 8 columns: Parameter, Result Qual, LOQ/CL, DL, Units, DF, Allowable Limits, Date Analyzed. Lists various chemical compounds and their detection results.



Results of MW-2

Client Sample ID: **MW-2**
 Client Project ID: **Seekins Ford**
 Lab Sample ID: 1178278003
 Lab Project ID: 1178278

Collection Date: 08/23/17 10:40
 Received Date: 08/24/17 09:24
 Matrix: Water (Surface, Eff., Ground)
 Solids (%):
 Location:

Results by Volatile GC/MS

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Chloroform	0.500 U	1.00	0.310	ug/L	1		09/01/17 15:37
Chloromethane	0.430 J	1.00	0.310	ug/L	1		09/01/17 15:37
cis-1,2-Dichloroethene	0.500 U	1.00	0.310	ug/L	1		09/01/17 15:37
cis-1,3-Dichloropropene	0.250 U	0.500	0.150	ug/L	1		09/01/17 15:37
Dibromochloromethane	0.250 U	0.500	0.150	ug/L	1		09/01/17 15:37
Dibromomethane	0.500 U	1.00	0.310	ug/L	1		09/01/17 15:37
Dichlorodifluoromethane	0.500 U	1.00	0.310	ug/L	1		09/01/17 15:37
Ethylbenzene	0.500 U	1.00	0.310	ug/L	1		09/01/17 15:37
Freon-113	5.00 U	10.0	3.10	ug/L	1		09/01/17 15:37
Hexachlorobutadiene	0.500 U	1.00	0.310	ug/L	1		09/01/17 15:37
Isopropylbenzene (Cumene)	0.500 U	1.00	0.310	ug/L	1		09/01/17 15:37
Methylene chloride	2.50 U	5.00	1.00	ug/L	1		09/01/17 15:37
Methyl-t-butyl ether	5.00 U	10.0	3.10	ug/L	1		09/01/17 15:37
Naphthalene	0.500 U	1.00	0.310	ug/L	1		09/01/17 15:37
n-Butylbenzene	0.500 U	1.00	0.310	ug/L	1		09/01/17 15:37
n-Propylbenzene	0.500 U	1.00	0.310	ug/L	1		09/01/17 15:37
o-Xylene	0.500 U	1.00	0.310	ug/L	1		09/01/17 15:37
P & M -Xylene	1.00 U	2.00	0.620	ug/L	1		09/01/17 15:37
sec-Butylbenzene	0.500 U	1.00	0.310	ug/L	1		09/01/17 15:37
Styrene	0.500 U	1.00	0.310	ug/L	1		09/01/17 15:37
tert-Butylbenzene	0.500 U	1.00	0.310	ug/L	1		09/01/17 15:37
Tetrachloroethene	5.17	1.00	0.310	ug/L	1		09/01/17 15:37
Toluene	0.500 U	1.00	0.310	ug/L	1		09/01/17 15:37
trans-1,2-Dichloroethene	0.500 U	1.00	0.310	ug/L	1		09/01/17 15:37
trans-1,3-Dichloropropene	0.500 U	1.00	0.310	ug/L	1		09/01/17 15:37
Trichloroethene	0.500 U	1.00	0.310	ug/L	1		09/01/17 15:37
Trichlorofluoromethane	2.85	1.00	0.310	ug/L	1		09/01/17 15:37
Vinyl acetate	5.00 U	10.0	3.10	ug/L	1		09/01/17 15:37
Vinyl chloride	0.0750 U	0.150	0.0500	ug/L	1		09/01/17 15:37
Xylenes (total)	1.50 U	3.00	1.00	ug/L	1		09/01/17 15:37
Surrogates							
1,2-Dichloroethane-D4 (surr)	97.2	81-118		%	1		09/01/17 15:37
4-Bromofluorobenzene (surr)	103	85-114		%	1		09/01/17 15:37
Toluene-d8 (surr)	103	89-112		%	1		09/01/17 15:37

Results of MW-2

Client Sample ID: **MW-2**
Client Project ID: **Seekins Ford**
Lab Sample ID: 1178278003
Lab Project ID: 1178278

Collection Date: 08/23/17 10:40
Received Date: 08/24/17 09:24
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by Volatile GC/MS

Batch Information

Analytical Batch: VMS17128
Analytical Method: SW8260C
Analyst: FDR
Analytical Date/Time: 09/01/17 15:37
Container ID: 1178278003-A

Prep Batch: VXX31206
Prep Method: SW5030B
Prep Date/Time: 09/01/17 06:00
Prep Initial Wt./Vol.: 5 mL
Prep Extract Vol: 5 mL

Results of MW-3

Client Sample ID: **MW-3**
 Client Project ID: **Seekins Ford**
 Lab Sample ID: 1178278004
 Lab Project ID: 1178278

Collection Date: 08/23/17 11:20
 Received Date: 08/24/17 09:24
 Matrix: Water (Surface, Eff., Ground)
 Solids (%):
 Location:

Results by Semivolatile Organic Fuels

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Diesel Range Organics	0.412 J	0.545	0.164	mg/L	1		09/01/17 14:44
Surrogates							
5a Androstane (surr)	78.3	50-150		%	1		09/01/17 14:44

Batch Information

Analytical Batch: XFC13746
 Analytical Method: AK102
 Analyst: KMD
 Analytical Date/Time: 09/01/17 14:44
 Container ID: 1178278004-G

Prep Batch: XXX38278
 Prep Method: SW3520C
 Prep Date/Time: 08/27/17 08:13
 Prep Initial Wt./Vol.: 275 mL
 Prep Extract Vol: 1 mL

Results of MW-3

Client Sample ID: **MW-3**
 Client Project ID: **Seekins Ford**
 Lab Sample ID: 1178278004
 Lab Project ID: 1178278

Collection Date: 08/23/17 11:20
 Received Date: 08/24/17 09:24
 Matrix: Water (Surface, Eff., Ground)
 Solids (%):
 Location:

Results by Volatile Fuels

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Gasoline Range Organics	0.0500 U	0.100	0.0310	mg/L	1		08/25/17 18:35
Surrogates							
4-Bromofluorobenzene (surr)	88.3	50-150		%	1		08/25/17 18:35

Batch Information

Analytical Batch: VFC13840
 Analytical Method: AK101
 Analyst: ST
 Analytical Date/Time: 08/25/17 18:35
 Container ID: 1178278004-D

Prep Batch: VXX31158
 Prep Method: SW5030B
 Prep Date/Time: 08/25/17 08:00
 Prep Initial Wt./Vol.: 5 mL
 Prep Extract Vol: 5 mL



Results of MW-3

Client Sample ID: MW-3
Client Project ID: Seekins Ford
Lab Sample ID: 1178278004
Lab Project ID: 1178278

Collection Date: 08/23/17 11:20
Received Date: 08/24/17 09:24
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by Volatile GC/MS

Table with 8 columns: Parameter, Result Qual, LOQ/CL, DL, Units, DF, Allowable Limits, Date Analyzed. Lists various chemical compounds and their detection results.



Results of MW-3

Client Sample ID: MW-3
Client Project ID: Seekins Ford
Lab Sample ID: 1178278004
Lab Project ID: 1178278

Collection Date: 08/23/17 11:20
Received Date: 08/24/17 09:24
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by Volatile GC/MS

Table with 8 columns: Parameter, Result Qual, LOQ/CL, DL, Units, DF, Allowable Limits, Date Analyzed. Lists various chemical compounds like Chloroform, Benzene, and Toluene with their respective test results and quality indicators.

Results of MW-3

Client Sample ID: **MW-3**
Client Project ID: **Seekins Ford**
Lab Sample ID: 1178278004
Lab Project ID: 1178278

Collection Date: 08/23/17 11:20
Received Date: 08/24/17 09:24
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by Volatile GC/MS

Batch Information

Analytical Batch: VMS17128
Analytical Method: SW8260C
Analyst: FDR
Analytical Date/Time: 09/01/17 15:55
Container ID: 1178278004-A

Prep Batch: VXX31206
Prep Method: SW5030B
Prep Date/Time: 09/01/17 06:00
Prep Initial Wt./Vol.: 5 mL
Prep Extract Vol: 5 mL

Results of MW-6

Client Sample ID: **MW-6**
 Client Project ID: **Seekins Ford**
 Lab Sample ID: 1178278005
 Lab Project ID: 1178278

Collection Date: 08/23/17 14:30
 Received Date: 08/24/17 09:24
 Matrix: Water (Surface, Eff., Ground)
 Solids (%):
 Location:

Results by Semivolatile Organic Fuels

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Diesel Range Organics	0.273 U	0.545	0.164	mg/L	1		09/01/17 14:55
Surrogates							
5a Androstane (surr)	76.8	50-150		%	1		09/01/17 14:55

Batch Information

Analytical Batch: XFC13746
 Analytical Method: AK102
 Analyst: KMD
 Analytical Date/Time: 09/01/17 14:55
 Container ID: 1178278005-G

Prep Batch: XXX38278
 Prep Method: SW3520C
 Prep Date/Time: 08/27/17 08:13
 Prep Initial Wt./Vol.: 275 mL
 Prep Extract Vol: 1 mL

Results of MW-6

Client Sample ID: **MW-6**
 Client Project ID: **Seekins Ford**
 Lab Sample ID: 1178278005
 Lab Project ID: 1178278

Collection Date: 08/23/17 14:30
 Received Date: 08/24/17 09:24
 Matrix: Water (Surface, Eff., Ground)
 Solids (%):
 Location:

Results by Volatile Fuels

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Gasoline Range Organics	0.0500 U	0.100	0.0310	mg/L	1		08/25/17 20:49

Surrogates

4-Bromofluorobenzene (surr)	89.9	50-150		%	1		08/25/17 20:49
-----------------------------	------	--------	--	---	---	--	----------------

Batch Information

Analytical Batch: VFC13840
 Analytical Method: AK101
 Analyst: ST
 Analytical Date/Time: 08/25/17 20:49
 Container ID: 1178278005-D

Prep Batch: VXX31159
 Prep Method: SW5030B
 Prep Date/Time: 08/25/17 08:00
 Prep Initial Wt./Vol.: 5 mL
 Prep Extract Vol: 5 mL



Results of MW-6

Client Sample ID: MW-6
Client Project ID: Seekins Ford
Lab Sample ID: 1178278005
Lab Project ID: 1178278

Collection Date: 08/23/17 14:30
Received Date: 08/24/17 09:24
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by Volatile GC/MS

Table with 8 columns: Parameter, Result Qual, LOQ/CL, DL, Units, DF, Allowable Limits, Date Analyzed. Lists various chemical compounds and their detection results.



Results of MW-6

Client Sample ID: MW-6
Client Project ID: Seekins Ford
Lab Sample ID: 1178278005
Lab Project ID: 1178278

Collection Date: 08/23/17 14:30
Received Date: 08/24/17 09:24
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by Volatile GC/MS

Table with 8 columns: Parameter, Result Qual, LOQ/CL, DL, Units, DF, Allowable Limits, Date Analyzed. Lists various chemical compounds and their detection results.

Results of MW-6

Client Sample ID: **MW-6**
Client Project ID: **Seekins Ford**
Lab Sample ID: 1178278005
Lab Project ID: 1178278

Collection Date: 08/23/17 14:30
Received Date: 08/24/17 09:24
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by Volatile GC/MS

Batch Information

Analytical Batch: VMS17128
Analytical Method: SW8260C
Analyst: FDR
Analytical Date/Time: 09/01/17 16:13
Container ID: 1178278005-A

Prep Batch: VXX31206
Prep Method: SW5030B
Prep Date/Time: 09/01/17 06:00
Prep Initial Wt./Vol.: 5 mL
Prep Extract Vol: 5 mL

Results of MW-7

Client Sample ID: **MW-7**
 Client Project ID: **Seekins Ford**
 Lab Sample ID: 1178278006
 Lab Project ID: 1178278

Collection Date: 08/23/17 13:45
 Received Date: 08/24/17 09:24
 Matrix: Water (Surface, Eff., Ground)
 Solids (%):
 Location:

Results by Semivolatile Organic Fuels

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Diesel Range Organics	0.273 U	0.545	0.164	mg/L	1		09/01/17 15:05
Surrogates							
5a Androstane (surr)	78.7	50-150		%	1		09/01/17 15:05

Batch Information

Analytical Batch: XFC13746
 Analytical Method: AK102
 Analyst: KMD
 Analytical Date/Time: 09/01/17 15:05
 Container ID: 1178278006-G

Prep Batch: XXX38278
 Prep Method: SW3520C
 Prep Date/Time: 08/27/17 08:13
 Prep Initial Wt./Vol.: 275 mL
 Prep Extract Vol: 1 mL

Results of MW-7

Client Sample ID: **MW-7**
 Client Project ID: **Seekins Ford**
 Lab Sample ID: 1178278006
 Lab Project ID: 1178278

Collection Date: 08/23/17 13:45
 Received Date: 08/24/17 09:24
 Matrix: Water (Surface, Eff., Ground)
 Solids (%):
 Location:

Results by Volatile Fuels

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Gasoline Range Organics	0.0500 U	0.100	0.0310	mg/L	1		08/25/17 21:08
Surrogates							
4-Bromofluorobenzene (surr)	97.4	50-150		%	1		08/25/17 21:08

Batch Information

Analytical Batch: VFC13840
 Analytical Method: AK101
 Analyst: ST
 Analytical Date/Time: 08/25/17 21:08
 Container ID: 1178278006-D

Prep Batch: VXX31159
 Prep Method: SW5030B
 Prep Date/Time: 08/25/17 08:00
 Prep Initial Wt./Vol.: 5 mL
 Prep Extract Vol: 5 mL



Results of MW-7

Client Sample ID: MW-7
Client Project ID: Seekins Ford
Lab Sample ID: 1178278006
Lab Project ID: 1178278

Collection Date: 08/23/17 13:45
Received Date: 08/24/17 09:24
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by Volatile GC/MS

Table with 8 columns: Parameter, Result Qual, LOQ/CL, DL, Units, DF, Allowable Limits, Date Analyzed. Lists various chemical compounds and their detection results.



Results of MW-7

Client Sample ID: MW-7
Client Project ID: Seekins Ford
Lab Sample ID: 1178278006
Lab Project ID: 1178278

Collection Date: 08/23/17 13:45
Received Date: 08/24/17 09:24
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by Volatile GC/MS

Table with 8 columns: Parameter, Result Qual, LOQ/CL, DL, Units, DF, Allowable Limits, Date Analyzed. Lists various chemical compounds and their detection results.

Results of MW-7

Client Sample ID: **MW-7**
Client Project ID: **Seekins Ford**
Lab Sample ID: 1178278006
Lab Project ID: 1178278

Collection Date: 08/23/17 13:45
Received Date: 08/24/17 09:24
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by Volatile GC/MS

Batch Information

Analytical Batch: VMS17128
Analytical Method: SW8260C
Analyst: FDR
Analytical Date/Time: 09/01/17 16:30
Container ID: 1178278006-A

Prep Batch: VXX31206
Prep Method: SW5030B
Prep Date/Time: 09/01/17 06:00
Prep Initial Wt./Vol.: 5 mL
Prep Extract Vol: 5 mL

Results of Trip Blank

Client Sample ID: **Trip Blank**
 Client Project ID: **Seekins Ford**
 Lab Sample ID: 1178278007
 Lab Project ID: 1178278

Collection Date: 08/23/17 13:45
 Received Date: 08/24/17 09:24
 Matrix: Water (Surface, Eff., Ground)
 Solids (%):
 Location:

Results by Volatile Fuels

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Gasoline Range Organics	0.0500 U	0.100	0.0310	mg/L	1		08/25/17 12:51
Surrogates							
4-Bromofluorobenzene (surr)	93.1	50-150		%	1		08/25/17 12:51

Batch Information

Analytical Batch: VFC13840
 Analytical Method: AK101
 Analyst: ST
 Analytical Date/Time: 08/25/17 12:51
 Container ID: 1178278007-C

Prep Batch: VXX31158
 Prep Method: SW5030B
 Prep Date/Time: 08/25/17 08:00
 Prep Initial Wt./Vol.: 5 mL
 Prep Extract Vol: 5 mL



Results of Trip Blank

Client Sample ID: Trip Blank
Client Project ID: Seekins Ford
Lab Sample ID: 1178278007
Lab Project ID: 1178278

Collection Date: 08/23/17 13:45
Received Date: 08/24/17 09:24
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by Volatile GC/MS

Table with 8 columns: Parameter, Result Qual, LOQ/CL, DL, Units, DF, Allowable Limits, Date Analyzed. Lists various chemical compounds and their detection results.



Results of Trip Blank

Client Sample ID: Trip Blank
Client Project ID: Seekins Ford
Lab Sample ID: 1178278007
Lab Project ID: 1178278

Collection Date: 08/23/17 13:45
Received Date: 08/24/17 09:24
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by Volatile GC/MS

Table with 8 columns: Parameter, Result Qual, LOQ/CL, DL, Units, DF, Allowable Limits, Date Analyzed. Lists various chemical compounds and their detection results.

Results of Trip Blank

Client Sample ID: **Trip Blank**
Client Project ID: **Seekins Ford**
Lab Sample ID: 1178278007
Lab Project ID: 1178278

Collection Date: 08/23/17 13:45
Received Date: 08/24/17 09:24
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by Volatile GC/MS

Batch Information

Analytical Batch: VMS17128
Analytical Method: SW8260C
Analyst: FDR
Analytical Date/Time: 09/01/17 14:45
Container ID: 1178278007-A

Prep Batch: VXX31206
Prep Method: SW5030B
Prep Date/Time: 09/01/17 06:00
Prep Initial Wt./Vol.: 5 mL
Prep Extract Vol: 5 mL

Method Blank

Blank ID: MB for HBN 1767020 [VXX/31158]
 Blank Lab ID: 1408406

Matrix: Water (Surface, Eff., Ground)

QC for Samples:
 1178278001, 1178278003, 1178278004, 1178278007

Results by AK101

<u>Parameter</u>	<u>Results</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>
Gasoline Range Organics	0.0500U	0.100	0.0310	mg/L
Surrogates				
4-Bromofluorobenzene (surr)	92.7	50-150		%

Batch Information

Analytical Batch: VFC13840
 Analytical Method: AK101
 Instrument: Agilent 7890 PID/FID
 Analyst: ST
 Analytical Date/Time: 8/25/2017 10:38:00AM

Prep Batch: VXX31158
 Prep Method: SW5030B
 Prep Date/Time: 8/25/2017 8:00:00AM
 Prep Initial Wt./Vol.: 5 mL
 Prep Extract Vol: 5 mL

Print Date: 09/06/2017 8:49:22AM

Blank Spike Summary

Blank Spike ID: LCS for HBN 1178278 [VXX31158]
 Blank Spike Lab ID: 1408409
 Date Analyzed: 08/25/2017 11:35

Spike Duplicate ID: LCSD for HBN 1178278 [VXX31158]
 Spike Duplicate Lab ID: 1408410
 Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1178278001, 1178278003, 1178278004, 1178278007

Results by AK101

Parameter	Blank Spike (mg/L)			Spike Duplicate (mg/L)			CL	RPD (%)	RPD CL
	Spike	Result	Rec (%)	Spike	Result	Rec (%)			
Gasoline Range Organics	1.00	1.07	107	1.00	1.02	102	(60-120)	5.00	(< 20)

Surrogates

4-Bromofluorobenzene (surr)	0.0500	97.1	97	0.0500	98.2	98	(50-150)	1.10	
-----------------------------	--------	------	----	--------	------	----	------------	------	--

Batch Information

Analytical Batch: **VFC13840**
 Analytical Method: **AK101**
 Instrument: **Agilent 7890 PID/FID**
 Analyst: **ST**

Prep Batch: **VXX31158**
 Prep Method: **SW5030B**
 Prep Date/Time: **08/25/2017 08:00**
 Spike Init Wt./Vol.: 1.00 mg/L Extract Vol: 5 mL
 Dupe Init Wt./Vol.: 1.00 mg/L Extract Vol: 5 mL

Method Blank

Blank ID: MB for HBN 1767021 [VXX/31159]
 Blank Lab ID: 1408411

Matrix: Water (Surface, Eff., Ground)

QC for Samples:
 1178278005, 1178278006

Results by AK101

<u>Parameter</u>	<u>Results</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>
Gasoline Range Organics	0.0500U	0.100	0.0310	mg/L
Surrogates				
4-Bromofluorobenzene (surr)	95.2	50-150		%

Batch Information

Analytical Batch: VFC13840
 Analytical Method: AK101
 Instrument: Agilent 7890 PID/FID
 Analyst: ST
 Analytical Date/Time: 8/25/2017 7:32:00PM

Prep Batch: VXX31159
 Prep Method: SW5030B
 Prep Date/Time: 8/25/2017 8:00:00AM
 Prep Initial Wt./Vol.: 5 mL
 Prep Extract Vol: 5 mL



Blank Spike Summary

Blank Spike ID: LCS for HBN 1178278 [VXX31159]
 Blank Spike Lab ID: 1408414
 Date Analyzed: 08/26/2017 00:58

Spike Duplicate ID: LCSD for HBN 1178278 [VXX31159]
 Spike Duplicate Lab ID: 1408415
 Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1178278005, 1178278006

Results by AK101

Parameter	Blank Spike (mg/L)			Spike Duplicate (mg/L)			CL	RPD (%)	RPD CL
	Spike	Result	Rec (%)	Spike	Result	Rec (%)			
Gasoline Range Organics	1.00	1.04	104	1.00	0.988	99	(60-120)	5.50	(< 20)

Surrogates

4-Bromofluorobenzene (surr)	0.0500	99.4	99	0.0500	95.5	96	(50-150)	4.00	
-----------------------------	--------	------	----	--------	------	----	------------	------	--

Batch Information

Analytical Batch: VFC13840
 Analytical Method: AK101
 Instrument: Agilent 7890 PID/FID
 Analyst: ST

Prep Batch: VXX31159
 Prep Method: SW5030B
 Prep Date/Time: 08/25/2017 08:00
 Spike Init Wt./Vol.: 1.00 mg/L Extract Vol: 5 mL
 Dupe Init Wt./Vol.: 1.00 mg/L Extract Vol: 5 mL

Print Date: 09/06/2017 8:49:28AM

Method Blank

Blank ID: MB for HBN 1767109 [VXX/31167]
Blank Lab ID: 1408805

Matrix: Water (Surface, Eff., Ground)

QC for Samples:
1178278002

Results by AK101

<u>Parameter</u>	<u>Results</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>
Gasoline Range Organics	0.0500U	0.100	0.0310	mg/L
Surrogates				
4-Bromofluorobenzene (surr)	91.1	50-150		%

Batch Information

Analytical Batch: VFC13842
Analytical Method: AK101
Instrument: Agilent 7890A PID/FID
Analyst: ST
Analytical Date/Time: 8/28/2017 8:26:00PM

Prep Batch: VXX31167
Prep Method: SW5030B
Prep Date/Time: 8/28/2017 8:00:00AM
Prep Initial Wt./Vol.: 5 mL
Prep Extract Vol: 5 mL

Print Date: 09/06/2017 8:49:30AM

Blank Spike Summary

Blank Spike ID: LCS for HBN 1178278 [VXX31167]
 Blank Spike Lab ID: 1408808
 Date Analyzed: 08/28/2017 17:20

Spike Duplicate ID: LCSD for HBN 1178278 [VXX31167]
 Spike Duplicate Lab ID: 1408809
 Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1178278002

Results by AK101

Parameter	Blank Spike (mg/L)			Spike Duplicate (mg/L)			CL	RPD (%)	RPD CL
	Spike	Result	Rec (%)	Spike	Result	Rec (%)			
Gasoline Range Organics	1.00	0.987	99	1.00	0.952	95	(60-120)	3.60	(< 20)
Surrogates									
4-Bromofluorobenzene (surr)	0.0500	96.3	96	0.0500	95.8	96	(50-150)	0.50	

Batch Information

Analytical Batch: **VFC13842**
 Analytical Method: **AK101**
 Instrument: **Agilent 7890A PID/FID**
 Analyst: **ST**

Prep Batch: **VXX31167**
 Prep Method: **SW5030B**
 Prep Date/Time: **08/28/2017 08:00**
 Spike Init Wt./Vol.: 1.00 mg/L Extract Vol: 5 mL
 Dupe Init Wt./Vol.: 1.00 mg/L Extract Vol: 5 mL



Method Blank

Blank ID: MB for HBN 1767380 [VXX/31206]
Blank Lab ID: 1409991

Matrix: Water (Surface, Eff., Ground)

QC for Samples:

1178278001, 1178278002, 1178278003, 1178278004, 1178278005, 1178278006, 1178278007

Results by SW8260C

<u>Parameter</u>	<u>Results</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>
1,1,1,2-Tetrachloroethane	0.250U	0.500	0.150	ug/L
1,1,1-Trichloroethane	0.500U	1.00	0.310	ug/L
1,1,2,2-Tetrachloroethane	0.250U	0.500	0.150	ug/L
1,1,2-Trichloroethane	0.200U	0.400	0.120	ug/L
1,1-Dichloroethane	0.500U	1.00	0.310	ug/L
1,1-Dichloroethene	0.500U	1.00	0.310	ug/L
1,1-Dichloropropene	0.500U	1.00	0.310	ug/L
1,2,3-Trichlorobenzene	0.500U	1.00	0.310	ug/L
1,2,3-Trichloropropane	0.500U	1.00	0.310	ug/L
1,2,4-Trichlorobenzene	0.500U	1.00	0.310	ug/L
1,2,4-Trimethylbenzene	0.500U	1.00	0.310	ug/L
1,2-Dibromo-3-chloropropane	5.00U	10.0	3.10	ug/L
1,2-Dibromoethane	0.0375U	0.0750	0.0180	ug/L
1,2-Dichlorobenzene	0.500U	1.00	0.310	ug/L
1,2-Dichloroethane	0.250U	0.500	0.150	ug/L
1,2-Dichloropropane	0.500U	1.00	0.310	ug/L
1,3,5-Trimethylbenzene	0.500U	1.00	0.310	ug/L
1,3-Dichlorobenzene	0.500U	1.00	0.310	ug/L
1,3-Dichloropropane	0.250U	0.500	0.150	ug/L
1,4-Dichlorobenzene	0.250U	0.500	0.150	ug/L
2,2-Dichloropropane	0.500U	1.00	0.310	ug/L
2-Butanone (MEK)	5.00U	10.0	3.10	ug/L
2-Chlorotoluene	0.500U	1.00	0.310	ug/L
2-Hexanone	5.00U	10.0	3.10	ug/L
4-Chlorotoluene	0.500U	1.00	0.310	ug/L
4-Isopropyltoluene	0.500U	1.00	0.310	ug/L
4-Methyl-2-pentanone (MIBK)	5.00U	10.0	3.10	ug/L
Benzene	0.200U	0.400	0.120	ug/L
Bromobenzene	0.500U	1.00	0.310	ug/L
Bromochloromethane	0.500U	1.00	0.310	ug/L
Bromodichloromethane	0.250U	0.500	0.150	ug/L
Bromoform	0.500U	1.00	0.310	ug/L
Bromomethane	2.50U	5.00	1.50	ug/L
Carbon disulfide	5.00U	10.0	3.10	ug/L
Carbon tetrachloride	0.500U	1.00	0.310	ug/L
Chlorobenzene	0.250U	0.500	0.150	ug/L
Chloroethane	0.500U	1.00	0.310	ug/L
Chloroform	0.500U	1.00	0.310	ug/L

Print Date: 09/06/2017 8:49:33AM



Method Blank

Blank ID: MB for HBN 1767380 [VXX/31206]
Blank Lab ID: 1409991

Matrix: Water (Surface, Eff., Ground)

QC for Samples:

1178278001, 1178278002, 1178278003, 1178278004, 1178278005, 1178278006, 1178278007

Results by SW8260C

<u>Parameter</u>	<u>Results</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>
Chloromethane	0.390J	1.00	0.310	ug/L
cis-1,2-Dichloroethene	0.500U	1.00	0.310	ug/L
cis-1,3-Dichloropropene	0.250U	0.500	0.150	ug/L
Dibromochloromethane	0.250U	0.500	0.150	ug/L
Dibromomethane	0.500U	1.00	0.310	ug/L
Dichlorodifluoromethane	0.500U	1.00	0.310	ug/L
Ethylbenzene	0.500U	1.00	0.310	ug/L
Freon-113	5.00U	10.0	3.10	ug/L
Hexachlorobutadiene	0.500U	1.00	0.310	ug/L
Isopropylbenzene (Cumene)	0.500U	1.00	0.310	ug/L
Methylene chloride	2.50U	5.00	1.00	ug/L
Methyl-t-butyl ether	5.00U	10.0	3.10	ug/L
Naphthalene	0.500U	1.00	0.310	ug/L
n-Butylbenzene	0.500U	1.00	0.310	ug/L
n-Propylbenzene	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
sec-Butylbenzene	0.500U	1.00	0.310	ug/L
Styrene	0.500U	1.00	0.310	ug/L
tert-Butylbenzene	0.500U	1.00	0.310	ug/L
Tetrachloroethene	0.500U	1.00	0.310	ug/L
Toluene	0.500U	1.00	0.310	ug/L
trans-1,2-Dichloroethene	0.500U	1.00	0.310	ug/L
trans-1,3-Dichloropropene	0.500U	1.00	0.310	ug/L
Trichloroethene	0.500U	1.00	0.310	ug/L
Trichlorofluoromethane	0.500U	1.00	0.310	ug/L
Vinyl acetate	5.00U	10.0	3.10	ug/L
Vinyl chloride	0.0750U	0.150	0.0500	ug/L
Xylenes (total)	1.50U	3.00	1.00	ug/L
Surrogates				
1,2-Dichloroethane-D4 (surr)	97.3	81-118		%
4-Bromofluorobenzene (surr)	102	85-114		%
Toluene-d8 (surr)	102	89-112		%

Print Date: 09/06/2017 8:49:33AM



Method Blank

Blank ID: MB for HBN 1767380 [VXX/31206]
Blank Lab ID: 1409991

Matrix: Water (Surface, Eff., Ground)

QC for Samples:

1178278001, 1178278002, 1178278003, 1178278004, 1178278005, 1178278006, 1178278007

Results by SW8260C

<u>Parameter</u>	<u>Results</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>
------------------	----------------	---------------	-----------	--------------

Batch Information

Analytical Batch: VMS17128
Analytical Method: SW8260C
Instrument: VPA 780/5975 GC/MS
Analyst: FDR
Analytical Date/Time: 9/1/2017 11:54:00AM

Prep Batch: VXX31206
Prep Method: SW5030B
Prep Date/Time: 9/1/2017 6:00:00AM
Prep Initial Wt./Vol.: 5 mL
Prep Extract Vol: 5 mL

Print Date: 09/06/2017 8:49:33AM

Blank Spike Summary

Blank Spike ID: LCS for HBN 1178278 [VXX31206]
 Blank Spike Lab ID: 1409992
 Date Analyzed: 09/01/2017 12:42

Spike Duplicate ID: LCSD for HBN 1178278 [VXX31206]
 Spike Duplicate Lab ID: 1409993
 Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1178278001, 1178278002, 1178278003, 1178278004, 1178278005, 1178278006, 1178278007

Results by SW8260C

Parameter	Blank Spike (ug/L)			Spike Duplicate (ug/L)			CL	RPD (%)	RPD CL
	Spike	Result	Rec (%)	Spike	Result	Rec (%)			
1,1,1,2-Tetrachloroethane	30	28.5	95	30	29.2	97	(78-124)	2.40	(< 20)
1,1,1-Trichloroethane	30	26.7	89	30	26.9	90	(74-131)	0.60	(< 20)
1,1,2,2-Tetrachloroethane	30	31.3	104	30	33.5	112	(71-121)	6.90	(< 20)
1,1,2-Trichloroethane	30	30.8	103	30	32.0	107	(80-119)	4.00	(< 20)
1,1-Dichloroethane	30	29.7	99	30	29.7	99	(77-125)	0.10	(< 20)
1,1-Dichloroethene	30	24.0	80	30	23.5	78	(71-131)	2.30	(< 20)
1,1-Dichloropropene	30	29.0	97	30	29.3	98	(79-125)	1.00	(< 20)
1,2,3-Trichlorobenzene	30	28.9	96	30	32.0	107	(69-129)	10.10	(< 20)
1,2,3-Trichloropropane	30	30.1	100	30	31.7	106	(73-122)	5.10	(< 20)
1,2,4-Trichlorobenzene	30	29.2	97	30	30.8	103	(69-130)	5.50	(< 20)
1,2,4-Trimethylbenzene	30	32.6	109	30	32.4	108	(79-124)	0.74	(< 20)
1,2-Dibromo-3-chloropropane	30	29.4	98	30	32.8	109	(62-128)	11.20	(< 20)
1,2-Dibromoethane	30	30.3	101	30	31.4	105	(77-121)	3.70	(< 20)
1,2-Dichlorobenzene	30	29.3	98	30	30.1	100	(80-119)	2.60	(< 20)
1,2-Dichloroethane	30	26.6	89	30	27.1	90	(73-128)	1.90	(< 20)
1,2-Dichloropropane	30	30.1	100	30	30.5	102	(78-122)	1.30	(< 20)
1,3,5-Trimethylbenzene	30	32.1	107	30	32.2	107	(75-124)	0.28	(< 20)
1,3-Dichlorobenzene	30	29.6	99	30	30.5	102	(80-119)	2.90	(< 20)
1,3-Dichloropropane	30	30.9	103	30	32.1	107	(80-119)	3.70	(< 20)
1,4-Dichlorobenzene	30	29.4	98	30	30.4	101	(79-118)	3.30	(< 20)
2,2-Dichloropropane	30	28.5	95	30	28.4	95	(60-139)	0.32	(< 20)
2-Butanone (MEK)	90	102	113	90	108	119	(56-143)	5.20	(< 20)
2-Chlorotoluene	30	31.2	104	30	31.5	105	(79-122)	1.00	(< 20)
2-Hexanone	90	114	127	90	123	137	(57-139)	7.70	(< 20)
4-Chlorotoluene	30	31.7	106	30	32.6	109	(78-122)	2.80	(< 20)
4-Isopropyltoluene	30	32.9	110	30	32.2	107	(77-127)	2.10	(< 20)
4-Methyl-2-pentanone (MIBK)	90	103	114	90	108	120	(67-130)	4.90	(< 20)
Benzene	30	29.3	98	30	29.8	99	(79-120)	1.80	(< 20)
Bromobenzene	30	28.8	96	30	29.6	99	(80-120)	2.70	(< 20)
Bromochloromethane	30	28.3	94	30	28.2	94	(78-123)	0.07	(< 20)
Bromodichloromethane	30	27.8	93	30	28.4	95	(79-125)	2.10	(< 20)
Bromoform	30	29.2	97	30	30.1	100	(66-130)	2.90	(< 20)
Bromomethane	30	30.5	102	30	28.2	94	(53-141)	7.80	(< 20)
Carbon disulfide	45	37.2	83	45	35.5	79	(64-133)	4.90	(< 20)

Print Date: 09/06/2017 8:49:35AM

Blank Spike Summary

Blank Spike ID: LCS for HBN 1178278 [VXX31206]
 Blank Spike Lab ID: 1409992
 Date Analyzed: 09/01/2017 12:42

Spike Duplicate ID: LCSD for HBN 1178278 [VXX31206]
 Spike Duplicate Lab ID: 1409993
 Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1178278001, 1178278002, 1178278003, 1178278004, 1178278005, 1178278006, 1178278007

Results by SW8260C

Parameter	Blank Spike (ug/L)			Spike Duplicate (ug/L)			CL	RPD (%)	RPD CL
	Spike	Result	Rec (%)	Spike	Result	Rec (%)			
Carbon tetrachloride	30	27.0	90	30	26.9	90	(72-136)	0.63	(< 20)
Chlorobenzene	30	28.4	95	30	29.0	97	(82-118)	2.10	(< 20)
Chloroethane	30	29.9	100	30	26.8	89	(60-138)	11.00	(< 20)
Chloroform	30	26.4	88	30	26.8	89	(79-124)	1.20	(< 20)
Chloromethane	30	30.7	102	30	31.1	104	(50-139)	1.30	(< 20)
cis-1,2-Dichloroethene	30	28.0	93	30	28.2	94	(78-123)	0.85	(< 20)
cis-1,3-Dichloropropene	30	29.4	98	30	30.3	101	(75-124)	2.80	(< 20)
Dibromochloromethane	30	29.1	97	30	29.7	99	(74-126)	2.10	(< 20)
Dibromomethane	30	26.0	87	30	28.3	94	(79-123)	8.40	(< 20)
Dichlorodifluoromethane	30	40.3	134	30	38.5	128	(32-152)	4.70	(< 20)
Ethylbenzene	30	30.1	100	30	30.6	102	(79-121)	1.50	(< 20)
Freon-113	45	37.1	82	45	35.2	78	(70-136)	5.20	(< 20)
Hexachlorobutadiene	30	32.4	108	30	28.5	95	(66-134)	12.60	(< 20)
Isopropylbenzene (Cumene)	30	30.0	100	30	30.3	101	(72-131)	0.83	(< 20)
Methylene chloride	30	28.0	93	30	28.1	94	(74-124)	0.18	(< 20)
Methyl-t-butyl ether	45	42.4	94	45	44.0	98	(71-124)	3.80	(< 20)
Naphthalene	30	28.2	94	30	34.1	114	(61-128)	18.90	(< 20)
n-Butylbenzene	30	35.9	120	30	33.8	113	(75-128)	6.00	(< 20)
n-Propylbenzene	30	32.2	107	30	32.0	107	(76-126)	0.56	(< 20)
o-Xylene	30	29.9	100	30	30.8	103	(78-122)	3.20	(< 20)
P & M -Xylene	60	60.0	100	60	61.1	102	(80-121)	1.80	(< 20)
sec-Butylbenzene	30	33.1	110	30	32.2	107	(77-126)	2.60	(< 20)
Styrene	30	30.5	102	30	31.6	105	(78-123)	3.50	(< 20)
tert-Butylbenzene	30	31.7	106	30	31.3	104	(78-124)	1.50	(< 20)
Tetrachloroethene	30	28.6	95	30	29.3	98	(74-129)	2.50	(< 20)
Toluene	30	29.0	97	30	29.3	98	(80-121)	1.30	(< 20)
trans-1,2-Dichloroethene	30	28.0	93	30	28.1	94	(75-124)	0.39	(< 20)
trans-1,3-Dichloropropene	30	31.1	104	30	32.0	107	(73-127)	2.90	(< 20)
Trichloroethene	30	28.1	94	30	28.3	94	(79-123)	0.74	(< 20)
Trichlorofluoromethane	30	26.1	87	30	25.1	84	(65-141)	4.10	(< 20)
Vinyl acetate	30	30.8	103	30	32.0	107	(54-146)	3.80	(< 20)
Vinyl chloride	30	27.5	92	30	28.8	96	(58-137)	4.70	(< 20)
Xylenes (total)	90	89.8	100	90	91.9	102	(79-121)	2.30	(< 20)

Blank Spike Summary

Blank Spike ID: LCS for HBN 1178278 [VXX31206]
 Blank Spike Lab ID: 1409992
 Date Analyzed: 09/01/2017 12:42

Spike Duplicate ID: LCSD for HBN 1178278 [VXX31206]
 Spike Duplicate Lab ID: 1409993
 Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1178278001, 1178278002, 1178278003, 1178278004, 1178278005, 1178278006, 1178278007

Results by SW8260C

Parameter	Blank Spike (%)			Spike Duplicate (%)			CL	RPD (%)	RPD CL
	Spike	Result	Rec (%)	Spike	Result	Rec (%)			
Surrogates									
1,2-Dichloroethane-D4 (surr)	30	95.2	95	30	94.4	94	(81-118)	0.84	
4-Bromofluorobenzene (surr)	30	102	102	30	102	102	(85-114)	0.52	
Toluene-d8 (surr)	30	103	103	30	103	103	(89-112)	0.68	

Batch Information

Analytical Batch: **VMS17128**
 Analytical Method: **SW8260C**
 Instrument: **VPA 780/5975 GC/MS**
 Analyst: **FDR**

Prep Batch: **VXX31206**
 Prep Method: **SW5030B**
 Prep Date/Time: **09/01/2017 06:00**
 Spike Init Wt./Vol.: 30 ug/L Extract Vol: 5 mL
 Dupe Init Wt./Vol.: 30 ug/L Extract Vol: 5 mL

Matrix Spike Summary

Original Sample ID: 1176136020
 MS Sample ID: 1409994 MS
 MSD Sample ID: 1409995 MSD

Analysis Date: 09/01/2017 20:36
 Analysis Date: 09/01/2017 20:53
 Analysis Date: 09/01/2017 21:11
 Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1178278001, 1178278002, 1178278003, 1178278004, 1178278005, 1178278006, 1178278007

Results by SW8260C

Parameter	Sample	Matrix Spike (ug/L)			Spike Duplicate (ug/L)			CL	RPD (%)	RPD CL
		Spike	Result	Rec (%)	Spike	Result	Rec (%)			
1,1,1,2-Tetrachloroethane	0.250U	30.0	30.3	101	30.0	30.2	101	78-124	0.36	(< 20)
1,1,1-Trichloroethane	0.500U	30.0	28.1	94	30.0	27.6	92	74-131	1.90	(< 20)
1,1,2,2-Tetrachloroethane	0.250U	30.0	34.5	115	30.0	33.9	113	71-121	1.60	(< 20)
1,1,2-Trichloroethane	0.200U	30.0	34.2	114	30.0	33.8	113	80-119	1.20	(< 20)
1,1-Dichloroethane	0.500U	30.0	31	103	30.0	30.4	101	77-125	1.80	(< 20)
1,1-Dichloroethene	0.500U	30.0	24.5	82	30.0	24.6	82	71-131	0.24	(< 20)
1,1-Dichloropropene	0.500U	30.0	30.4	101	30.0	29.9	100	79-125	1.50	(< 20)
1,2,3-Trichlorobenzene	0.500U	30.0	32.6	109	30.0	34.2	114	69-129	4.90	(< 20)
1,2,3-Trichloropropane	0.500U	30.0	32.1	107	30.0	31.6	105	73-122	1.70	(< 20)
1,2,4-Trichlorobenzene	0.500U	30.0	32.4	108	30.0	33.9	113	69-130	4.50	(< 20)
1,2,4-Trimethylbenzene	2.05	30.0	35.7	112	30.0	35.5	112	79-124	0.53	(< 20)
1,2-Dibromo-3-chloropropane	5.00U	30.0	32.3	108	30.0	32.6	109	62-128	1.10	(< 20)
1,2-Dibromoethane	0.0375U	30.0	31.9	106	30.0	31.8	106	77-121	0.28	(< 20)
1,2-Dichlorobenzene	0.500U	30.0	31.1	104	30.0	30.9	103	80-119	0.58	(< 20)
1,2-Dichloroethane	0.250U	30.0	28	93	30.0	27.9	93	73-128	0.21	(< 20)
1,2-Dichloropropane	0.500U	30.0	31.8	106	30.0	31.3	104	78-122	1.50	(< 20)
1,3,5-Trimethylbenzene	1.57	30.0	33.1	105	30.0	32.9	104	75-124	0.64	(< 20)
1,3-Dichlorobenzene	0.500U	30.0	31.3	104	30.0	31.0	103	80-119	0.96	(< 20)
1,3-Dichloropropane	0.250U	30.0	32.9	110	30.0	32.8	109	80-119	0.43	(< 20)
1,4-Dichlorobenzene	0.250U	30.0	31.3	104	30.0	30.8	103	79-118	1.50	(< 20)
2,2-Dichloropropane	0.500U	30.0	27.8	93	30.0	27.3	91	60-139	1.80	(< 20)
2-Butanone (MEK)	5.00U	90.0	99.8	111	90.0	99.8	111	56-143	0.01	(< 20)
2-Chlorotoluene	0.500U	30.0	33	110	30.0	32.7	109	79-122	0.67	(< 20)
2-Hexanone	5.00U	90.0	122	135	90.0	120	134	57-139	1.20	(< 20)
4-Chlorotoluene	0.500U	30.0	32.9	110	30.0	33.0	110	78-122	0.30	(< 20)
4-Isopropyltoluene	0.640J	30.0	33.7	110	30.0	34.2	112	77-127	1.50	(< 20)
4-Methyl-2-pentanone (MIBK)	5.00U	90.0	107	119	90.0	108	120	67-130	0.30	(< 20)
Benzene	0.200U	30.0	31	103	30.0	30.7	102	79-120	0.94	(< 20)
Bromobenzene	0.500U	30.0	30.8	103	30.0	30.8	103	80-120	0.07	(< 20)
Bromochloromethane	0.500U	30.0	29	97	30.0	29.1	97	78-123	0.24	(< 20)
Bromodichloromethane	0.250U	30.0	29.4	98	30.0	29.4	98	79-125	0.14	(< 20)
Bromoform	0.500U	30.0	30.9	103	30.0	30.6	102	66-130	0.91	(< 20)
Bromomethane	2.50U	30.0	18.1	60	30.0	21.3	71	53-141	16.50	(< 20)
Carbon disulfide	5.00U	45.0	38	84	45.0	38.3	85	64-133	0.89	(< 20)
Carbon tetrachloride	0.500U	30.0	28.3	94	30.0	27.6	92	72-136	2.40	(< 20)
Chlorobenzene	0.250U	30.0	30.6	102	30.0	30.3	101	82-118	0.99	(< 20)
Chloroethane	0.500U	30.0	34.1	114	30.0	33.7	112	60-138	1.20	(< 20)

Print Date: 09/06/2017 8:49:36AM

Matrix Spike Summary

Original Sample ID: 1176136020
 MS Sample ID: 1409994 MS
 MSD Sample ID: 1409995 MSD

Analysis Date: 09/01/2017 20:36
 Analysis Date: 09/01/2017 20:53
 Analysis Date: 09/01/2017 21:11
 Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1178278001, 1178278002, 1178278003, 1178278004, 1178278005, 1178278006, 1178278007

Results by SW8260C

Parameter	Sample	Matrix Spike (ug/L)			Spike Duplicate (ug/L)			CL	RPD (%)	RPD CL
		Spike	Result	Rec (%)	Spike	Result	Rec (%)			
Chloroform	0.500U	30.0	27.7	92	30.0	27.3	91	79-124	1.30	(< 20)
Chloromethane	0.500U	30.0	37.3	124	30.0	36.8	123	50-139	1.50	(< 20)
cis-1,2-Dichloroethene	0.500U	30.0	29	97	30.0	29.5	98	78-123	1.70	(< 20)
cis-1,3-Dichloropropene	0.250U	30.0	30.3	101	30.0	30.7	102	75-124	1.20	(< 20)
Dibromochloromethane	0.250U	30.0	31.1	104	30.0	30.9	103	74-126	0.77	(< 20)
Dibromomethane	0.500U	30.0	28.4	95	30.0	28.6	95	79-123	0.63	(< 20)
Dichlorodifluoromethane	0.500U	30.0	57.7	192 *	30.0	55.4	185 *	32-152	4.00	(< 20)
Ethylbenzene	0.500U	30.0	32.1	107	30.0	31.4	105	79-121	2.10	(< 20)
Freon-113	5.00U	45.0	37.3	83	45.0	37.0	82	70-136	0.89	(< 20)
Hexachlorobutadiene	0.500U	30.0	29	97	30.0	29.4	98	66-134	1.50	(< 20)
Isopropylbenzene (Cumene)	0.370J	30.0	32.2	106	30.0	31.9	105	72-131	0.75	(< 20)
Methylene chloride	2.50U	30.0	29	97	30.0	29.0	97	74-124	0.10	(< 20)
Methyl-t-butyl ether	5.00U	45.0	44	98	45.0	44.3	99	71-124	0.61	(< 20)
Naphthalene	0.500U	30.0	36.6	122	30.0	38.7	129 *	61-128	5.60	(< 20)
n-Butylbenzene	0.500U	30.0	34.1	114	30.0	34.4	115	75-128	0.79	(< 20)
n-Propylbenzene	0.530J	30.0	33.5	110	30.0	33.4	110	76-126	0.39	(< 20)
o-Xylene	0.500U	30.0	32.3	108	30.0	32.4	108	78-122	0.49	(< 20)
P & M -Xylene	1.00U	60.0	63.8	106	60.0	63.1	105	80-121	1.10	(< 20)
sec-Butylbenzene	0.650J	30.0	33.7	110	30.0	33.8	111	77-126	0.24	(< 20)
Styrene	0.500U	30.0	33	110	30.0	32.8	109	78-123	0.76	(< 20)
tert-Butylbenzene	0.500U	30.0	32.6	109	30.0	32.4	108	78-124	0.62	(< 20)
Tetrachloroethene	0.500U	30.0	30	100	30.0	29.8	99	74-129	0.87	(< 20)
Toluene	0.500U	30.0	30.7	102	30.0	30.2	101	80-121	1.70	(< 20)
trans-1,2-Dichloroethene	0.500U	30.0	29.4	98	30.0	29.1	97	75-124	0.75	(< 20)
trans-1,3-Dichloropropene	0.500U	30.0	32.1	107	30.0	32.1	107	73-127	0.03	(< 20)
Trichloroethene	0.500U	30.0	29.4	98	30.0	29.0	97	79-123	1.60	(< 20)
Trichlorofluoromethane	0.500U	30.0	27.1	90	30.0	26.7	89	65-141	1.60	(< 20)
Vinyl acetate	5.00U	30.0	35.1	117	30.0	35.0	117	54-146	0.49	(< 20)
Vinyl chloride	0.0750U	30.0	30.9	103	30.0	29.0	97	58-137	6.40	(< 20)
Xylenes (total)	1.50U	90.0	96.1	107	90.0	95.6	106	79-121	0.56	(< 20)
Surrogates										
1,2-Dichloroethane-D4 (surr)		30.0	28.5	95	30.0	28.3	94	81-118	0.74	
4-Bromofluorobenzene (surr)		30.0	30.8	103	30.0	31.0	103	85-114	0.65	
Toluene-d8 (surr)		30.0	31	103	30.0	30.9	103	89-112	0.52	

Print Date: 09/06/2017 8:49:36AM

Matrix Spike Summary

Original Sample ID: 1176136020
 MS Sample ID: 1409994 MS
 MSD Sample ID: 1409995 MSD

Analysis Date:
 Analysis Date: 09/01/2017 20:53
 Analysis Date: 09/01/2017 21:11
 Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1178278001, 1178278002, 1178278003, 1178278004, 1178278005, 1178278006, 1178278007

Results by SW8260C

Parameter	Sample	Matrix Spike (%)			Spike Duplicate (%)			CL	RPD (%)	RPD CL
		Spike	Result	Rec (%)	Spike	Result	Rec (%)			

Batch Information

Analytical Batch: VMS17128
 Analytical Method: SW8260C
 Instrument: VPA 780/5975 GC/MS
 Analyst: FDR
 Analytical Date/Time: 9/1/2017 8:53:00PM

Prep Batch: VXX31206
 Prep Method: Volatiles Extraction 8240/8260 FULL
 Prep Date/Time: 9/1/2017 6:00:00AM
 Prep Initial Wt./Vol.: 5.00mL
 Prep Extract Vol: 5.00mL

Print Date: 09/06/2017 8:49:36AM

Method Blank

Blank ID: MB for HBN 1767466 [VXX/31207]
 Blank Lab ID: 1409999

Matrix: Water (Surface, Eff., Ground)

QC for Samples:
 1178278002

Results by SW8260C

<u>Parameter</u>	<u>Results</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>
1,2,4-Trimethylbenzene	0.500U	1.00	0.310	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
Xylenes (total)	1.50U	3.00	1.00	ug/L
Surrogates				
1,2-Dichloroethane-D4 (surr)	105	81-118		%
4-Bromofluorobenzene (surr)	105	85-114		%
Toluene-d8 (surr)	102	89-112		%

Batch Information

Analytical Batch: VMS17129
 Analytical Method: SW8260C
 Instrument: VSA Agilent GC/MS 7890B/5977A
 Analyst: FDR
 Analytical Date/Time: 9/2/2017 4:52:00PM

Prep Batch: VXX31207
 Prep Method: SW5030B
 Prep Date/Time: 9/2/2017 6:00:00AM
 Prep Initial Wt./Vol.: 5 mL
 Prep Extract Vol: 5 mL

Blank Spike Summary

Blank Spike ID: LCS for HBN 1178278 [VXX31207]
 Blank Spike Lab ID: 1410000
 Date Analyzed: 09/02/2017 17:45

Spike Duplicate ID: LCSD for HBN 1178278 [VXX31207]
 Spike Duplicate Lab ID: 1410001
 Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1178278002

Results by SW8260C

Parameter	Blank Spike (ug/L)			Spike Duplicate (ug/L)			CL	RPD (%)	RPD CL
	Spike	Result	Rec (%)	Spike	Result	Rec (%)			
1,2,4-Trimethylbenzene	30	28.5	95	30	28.4	95	(79-124)	0.11	(< 20)
Ethylbenzene	30	30.4	101	30	29.7	99	(79-121)	2.40	(< 20)
o-Xylene	30	30.3	101	30	29.7	99	(78-122)	1.90	(< 20)
P & M -Xylene	60	60.6	101	60	58.5	98	(80-121)	3.60	(< 20)
Xylenes (total)	90	90.9	101	90	88.2	98	(79-121)	3.00	(< 20)
Surrogates									
1,2-Dichloroethane-D4 (surr)	30	96.6	97	30	93.8	94	(81-118)	2.90	
4-Bromofluorobenzene (surr)	30	92.7	93	30	94.3	94	(85-114)	1.70	
Toluene-d8 (surr)	30	101	101	30	103	103	(89-112)	1.90	

Batch Information

Analytical Batch: VMS17129
 Analytical Method: SW8260C
 Instrument: VSA Agilent GC/MS 7890B/5977A
 Analyst: FDR

Prep Batch: VXX31207
 Prep Method: SW5030B
 Prep Date/Time: 09/02/2017 06:00
 Spike Init Wt./Vol.: 30 ug/L Extract Vol: 5 mL
 Dupe Init Wt./Vol.: 30 ug/L Extract Vol: 5 mL

Method Blank

Blank ID: MB for HBN 1767030 [XXX/38278]
Blank Lab ID: 1408453

Matrix: Water (Surface, Eff., Ground)

QC for Samples:

1178278001, 1178278002, 1178278003, 1178278004, 1178278005, 1178278006

Results by AK102

<u>Parameter</u>	<u>Results</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>
Diesel Range Organics	0.300U	0.600	0.180	mg/L
Surrogates				
5a Androstane (surr)	77.5	60-120		%

Batch Information

Analytical Batch: XFC13746
Analytical Method: AK102
Instrument: Agilent 7890B R
Analyst: KMD
Analytical Date/Time: 9/1/2017 10:14:00AM

Prep Batch: XXX38278
Prep Method: SW3520C
Prep Date/Time: 8/27/2017 8:13:52AM
Prep Initial Wt./Vol.: 250 mL
Prep Extract Vol: 1 mL

Print Date: 09/06/2017 8:49:41AM

Blank Spike Summary

Blank Spike ID: LCS for HBN 1178278 [XXX38278]
 Blank Spike Lab ID: 1408454
 Date Analyzed: 09/01/2017 10:24

Spike Duplicate ID: LCSD for HBN 1178278
 [XXX38278]
 Spike Duplicate Lab ID: 1408455
 Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1178278001, 1178278002, 1178278003, 1178278004, 1178278005, 1178278006

Results by AK102

Parameter	Blank Spike (mg/L)			Spike Duplicate (mg/L)			CL	RPD (%)	RPD CL
	Spike	Result	Rec (%)	Spike	Result	Rec (%)			
Diesel Range Organics	20	18.8	94	20	16.9	85	(75-125)	10.30	(< 20)
Surrogates									
5a Androstane (surr)	0.4	113	113	0.4	99.3	99	(60-120)	13.00	

Batch Information

Analytical Batch: **XFC13746**
 Analytical Method: **AK102**
 Instrument: **Agilent 7890B R**
 Analyst: **KMD**

Prep Batch: **XXX38278**
 Prep Method: **SW3520C**
 Prep Date/Time: **08/27/2017 08:13**
 Spike Init Wt./Vol.: 20 mg/L Extract Vol: 1 mL
 Dupe Init Wt./Vol.: 20 mg/L Extract Vol: 1 mL



1178278



Locations Nationwide
Alaska
Maryland
New Jersey
New York
North Carolina

www.us.sgs.com

Page 1 of 1

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

CLIENT: Travis and Petersen

CONTACT: Eddie Packee **PHONE #:** 455-7225

PROJECT NAME: Seekins Ford

REPORTS TO: Eddie Packee **E-MAIL:** epackee@tpeci.com

INVOICE TO: Travis and Petersen **QUOTE #:** 1197-02

RESERVED for lab use

RESERVED for lab use	SAMPLE IDENTIFICATION	DATE mm/dd/yy	TIME HH:MM	MATRIX/MATRIX CODE
① A-H	MW-1	08/23/17	9:50 am	water
② A-H	MW-10		10:00 am	water
③ A-H	MW-2		10:40 am	water
④ A-H	MW-3		11:20 am	water
⑤ A-H	MW-6		2:30 pm	water
⑥ A-H	MW-7		1:45 pm	water
⑦ AD	TB			

Section 3			Section 4			REMARKS/LOC ID
#	CONTAINERS	Pres: Type:	VOC 8260	DRO (AK102)	HCl	
8		Comp	X	X	X	
8		Grab	X	X	X	
8		MI	X	X	X	
8		(Multi-incremental)	X	X	X	
8			X	X	X	
8			X	X	X	

Section 5

Relinquished By: (1) *Michael [Signature]* **Date:** 8/23/17 **Time:** 3:00 pm

Relinquished By: (2) *[Signature]* **Date:** 8-23-17 **Time:** 1:50

Relinquished By: (3) *[Signature]* **Date:** **Time:** **Received By:** *[Signature]*

Relinquished By: (4) *[Signature]* **Date:** 8/24/17 **Time:** 09:34 **Received For Laboratory By:** *[Signature]*

Section 4

DOD Project? Yes No

Cooler ID: * WU 2 + EDD

Requested Turnaround Time and/or Special Instructions:

Temp Blank °C: 35°C **Chain of Custody Seal: (Circle)** INTACT **BROKEN** **ABSENT**

Delivery Method: (Check) Hand Delivered [] Commercial Delivered []

[] 200 W. Potter Drive Anchorage, AK 99518 Tel: (907) 562-2343 Fax: (907) 561-5301
[] 5500 Business Drive Wilmington, NC 28405 Tel: (910) 350-1903 Fax: (910) 350-1557

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

ANC: 2.1 #011

ANC: (F, B)



e-Sample Receipt Form

SGS Workorder #:

1178278



1 1 7 8 2 7 8

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	1 Front 1 Back
COC accompanied samples?	Yes	
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 @ 2.1 °C Therm. ID: D11
		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?	N/A	
If samples received <u>without</u> a temperature blank, the "cooler temperature" will be documented in lieu of the temperature blank & "COOLER TEMP" will be noted to the right. In cases where neither a temp blank nor cooler temp can be obtained, note "ambient" or "chilled".		
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.		
Were analyses requested unambiguous? (i.e., method is specified for analyses with >1 option for analysis)	Yes	
Were proper containers (type/mass/volume/preservative***) used?	Yes	N/A ***Exemption permitted for metals (e.g.200.8/6020A).
Volatile / LL-Hg Requirements		
Were Trip Blanks (i.e., VOAs, LL-Hg) in cooler with samples?	Yes	
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

<u>Container Id</u>	<u>Preservative</u>	<u>Container Condition</u>	<u>Container Id</u>	<u>Preservative</u>	<u>Container Condition</u>
1178278001-A	HCL to pH < 2	OK	1178278006-C	HCL to pH < 2	OK
1178278001-B	HCL to pH < 2	OK	1178278006-D	HCL to pH < 2	OK
1178278001-C	HCL to pH < 2	OK	1178278006-E	HCL to pH < 2	OK
1178278001-D	HCL to pH < 2	OK	1178278006-F	HCL to pH < 2	OK
1178278001-E	HCL to pH < 2	OK	1178278006-G	HCL to pH < 2	OK
1178278001-F	HCL to pH < 2	OK	1178278006-H	HCL to pH < 2	OK
1178278001-G	HCL to pH < 2	OK	1178278007-A	HCL to pH < 2	OK
1178278001-H	HCL to pH < 2	OK	1178278007-B	HCL to pH < 2	OK
1178278002-A	HCL to pH < 2	OK	1178278007-C	HCL to pH < 2	OK
1178278002-B	HCL to pH < 2	OK	1178278007-D	HCL to pH < 2	OK
1178278002-C	HCL to pH < 2	OK			
1178278002-D	HCL to pH < 2	OK			
1178278002-E	HCL to pH < 2	OK			
1178278002-F	HCL to pH < 2	OK			
1178278002-G	HCL to pH < 2	OK			
1178278002-H	HCL to pH < 2	OK			
1178278003-A	HCL to pH < 2	OK			
1178278003-B	HCL to pH < 2	OK			
1178278003-C	HCL to pH < 2	OK			
1178278003-D	HCL to pH < 2	OK			
1178278003-E	HCL to pH < 2	OK			
1178278003-F	HCL to pH < 2	OK			
1178278003-G	HCL to pH < 2	OK			
1178278003-H	HCL to pH < 2	OK			
1178278004-A	HCL to pH < 2	OK			
1178278004-B	HCL to pH < 2	OK			
1178278004-C	HCL to pH < 2	OK			
1178278004-D	HCL to pH < 2	OK			
1178278004-E	HCL to pH < 2	OK			
1178278004-F	HCL to pH < 2	OK			
1178278004-G	HCL to pH < 2	OK			
1178278004-H	HCL to pH < 2	OK			
1178278005-A	HCL to pH < 2	OK			
1178278005-B	HCL to pH < 2	OK			
1178278005-C	HCL to pH < 2	OK			
1178278005-D	HCL to pH < 2	OK			
1178278005-E	HCL to pH < 2	OK			
1178278005-F	HCL to pH < 2	OK			
1178278005-G	HCL to pH < 2	OK			
1178278005-H	HCL to pH < 2	OK			
1178278006-A	HCL to pH < 2	OK			
1178278006-B	HCL to pH < 2	OK			

Container Id

Preservative

Container
Condition

Container Id

Preservative

Container
Condition

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.

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.

Laboratory Data Review Checklist

Completed by:	Michaela McGee		
Title:	Environmental Scientist	Date:	09/11/2017
CS Report Name:	Seekins Ford 1197-02	Report Date:	09/06/2017
Consultant Firm:	Travis/Peterson Environmental Consulting, Inc.		
Laboratory Name:	SGS North America Inc.	Laboratory Report Number:	1178278
ADEC File Number:	100.26.131	ADEC RecKey Number:	

1. Laboratory

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

Yes No NA (Please explain.) 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 NA (Please explain) Comments:

Not Transferred.

2. Chain of Custody (COC)

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

Yes No NA (Please explain) Comments:

b. Correct analyses requested?

Yes No NA (Please explain) Comments:

3. Laboratory Sample Receipt Documentation

a. Sample/cooler temperature documented and within range at receipt ($4^{\circ} \pm 2^{\circ}$ C)?

Yes No NA (Please explain) Comments:

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

Yes No NA (Please explain) Comments:

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

Yes No NA (Please explain) Comments:

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

Yes No NA (Please explain) Comments:

No discrepancies.

e. Data quality or usability affected? (Please explain)

Comments:

None.

4. Case Narrative

a. Present and understandable?

Yes No NA (Please explain) Comments:

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

Yes No NA (Please explain) Comments:

See Attached

c. Were all corrective actions documented?

Yes No NA (Please explain) Comments:

No corrective actions.

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

Comments:

See Attached

5. Samples Results

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

Yes No NA (Please explain)

Comments:

b. All applicable holding times met?

Yes No NA (Please explain)

Comments:

c. All soils reported on a dry weight basis?

Yes No NA (Please explain)

Comments:

No soil samples.

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

Yes No NA (Please explain)

Comments:

e. Data quality or usability affected? (Please explain)

Comments:

None.

6. QC Samples

a. Method Blank

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

Yes No NA (Please explain)

Comments:

ii. All method blank results less than PQL?

Yes No NA (Please explain)

Comments:

iii. If above PQL, 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 NA (Please explain) Comments:

v. Data quality or usability affected? (Please explain) 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 NA (Please explain) Comments:

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

Yes No NA (Please explain) Comments:

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

Yes No NA (Please explain) Comments:

See attached

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

Yes No NA (Please explain) Comments:

The analytes dichlorodifluoromethane and naphthalene were outside limits

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

The analytes dichlorodifluoromethane and naphthalene will be biased high but since was not detected in the parent sample data should not be affected.

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

Yes No NA (Please explain) Comments:

vii. Data quality or usability affected? (Please explain) Comments:

c. Surrogates - Organics Only

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

Yes No NA (Please explain) Comments:

ii. Accuracy - All percent recoveries (%R) reported and within method or laboratory limits? And project specified DQOs, if applicable. (AK Petroleum methods 50-150 %R; all other analyses see the laboratory report pages)

Yes No NA (Please explain) Comments:

4-bromofluorobenzene

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

Yes No NA (Please explain) Comments:

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

Comments:

None, this failure was due to matrix interference

d. Trip Blank - Volatile analyses only (GRO, BTEX, Volatile Chlorinated Solvents, etc.): Water and Soil

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

Yes No NA (Please explain.) 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 NA (Please explain.) Comments:

One cooler for all samples.

iii. All results less than PQL?

Yes No NA (Please explain.)

Comments:

iv. If above PQL, what samples are affected?

Comments:

None

v. Data quality or usability affected? (Please explain.)

Comments:

None

e. Field Duplicate

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

Yes No NA (Please explain.)

Comments:

ii. Submitted blind to lab?

Yes No NA (Please explain.)

Comments:

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

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

Where R_1 = Sample Concentration

R_2 = Field Duplicate Concentration

Yes No NA (Please explain.)

Comments:

See Attached

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

Yes No NA (Please explain.)

Comments:

The only analyte that is over 30% was because the detection limit was used as it was not detected in MW-1

f. Decontamination or Equipment Blank (if applicable)

Yes No NA (Please explain)

Comments:

No equipment blank

i. All results less than PQL?

Yes No NA (Please explain)

Comments:

No equipment blank

ii. If above PQL, what samples are affected?

Comments:

None

iii. Data quality or usability affected? (Please explain.)

Comments:

None

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

a. Defined and appropriate?

Yes No NA (Please explain)

Comments:

None

Reset Form

Field Duplicate Precision

Analyte	Sample MW-1		Sample MW-10		RPD
	Results	Units	Results	Units	
Diesel Range Organics	0.515	mg/L	0.695	mg/L	29.75206612
Gasoline Range Organics	3.81	mg/L	3.55	mg/L	7.065217391
1,2,4-Trimethylbenzene	252	ug/L	208	ug/L	19.13043478
1,3,5-Trimethylbenzene	56.4	ug/L	64.7	ug/L	3.426919901
4-Isopropyltoluene	3.1	ug/L	1.15	ug/L	22.94117647
Benzene	1.4	ug/L	1.29	ug/L	2.044609665
Chloromethane	3.1	ug/L	0.54	ug/L	35.16483516
Ethylbenzene	459	ug/L	408	ug/L	2.941176471
Isopropylbenzene	23.9	ug/L	27.1	ug/L	3.137254902
Naphthalene	20.9	ug/L	18.6	ug/L	2.911392405
n-Propylbenzene	42.2	ug/L	48.5	ug/L	3.472987872
o-Xylene	522	ug/L	486	ug/L	1.785714286
P&M Xylene	796	ug/L	759	ug/L	1.189710611
sec-Butylbenzene	3.1	ug/L	2.49	ug/L	5.456171735
Toluene	57.5	ug/L	62.1	ug/L	1.923076923
Xylenes (total)	1320	ug/L	1250	ug/L	1.361867704

BOLD= Outside of the recommended precision. But for this particular one Chloromethane was not detected in sample MW-1 so this should not reflect the accuracy of duplicates. 3.10 is the detection limit.

QC Failures:

MW-1 Surrogate recovery for 4-bromofluorobenzene did not meet QC criteria due to matrix interference.

MS/MSD recoveries for dichlorodifluoromethane and naphthalene did not meet QC criteria but were not detected in the parent sample, so data should not be affected

DAILY FIELD REPORT

PERSONNEL	Time On- Site		Office Hours
	Arrive	Leave	
<input type="checkbox"/> Eddie Packee			
<input type="checkbox"/> Ryan Peterson			
<input type="checkbox"/> Jessica Knowles			
<input type="checkbox"/> Michaela Hale			
<input type="checkbox"/>			

FIELD EQUIPMENT

- PID
- Color-Tec Hardware Kit
- Misc. Equip. (tools, etc)
- GPS Unit (Trimble)
- Other: _____

JOB NO.: _____ CLIENT: _____

PROJECT LOCATION: _____ DATE: _____ TIME: _____ am pm

PRECIPITATION: None Light Heavy Rain Snow CLOUDINESS: Clear Partly Mostly Overcast

SURFACE CONDITION: Dry Damp Moist Wet Saturated TEMP RANGE: _____ WIND: _____

GENERAL DESCRIPTION OF WORK:

WAS CONTAMINATION ENCOUNTERED? NO YES Type: _____

If yes... Client Notified? NO YES GPS Location Collected? NO YES

LOCATION AND OTHER NOTES:

SOIL SAMPLING: NO YES

Lab Used: _____ No. of Samples Collected: _____ COC Attached? NO YES

Turnaround Time? _____ No. of Duplicates: _____ Duplicate No.: _____

DAILY SITE SAFETY INSPECTION (circle all that apply)

<u>NON-CHEMICAL HAZARDS</u>			<u>CHEMICAL HAZARDS</u>	
Underground Utilities	Noise	Confined Space	Petroleum	Lubricants
Overhead Utilities	Cold Exposure	Water	Oils	Solvents
Slips, Trips, and Falls	Heat Exposure	Unstable Surfaces	Metals	_____
Heavy Equipment	Trenches	Electrical	PCBs	_____
<u>PERSONAL PROTECTIVE EQUIPMENT</u>				
<input type="checkbox"/> Steel-Toe Boots	<input type="checkbox"/> Safety Glasses	<input type="checkbox"/> Reflective Vest	<input type="checkbox"/> Hardhat	<input type="checkbox"/> Tyvek <input type="checkbox"/> Respirator

Field Investigator: _____ Signature: _____

1197-02

Seekins Ford

August 23, 2017

9:15am Michaela McGeer (staff scientist with Travis/Peterson TPECI) arrived onsite. went to informed seekins staff that I will be onsite.

Objective:

To perform groundwater monitoring (collect samples) from MW-1, MW-2,

MW-3, MW-6, MW-7 for

VOCs B200B, GLO AK101, and DFO AK102.

Weather:

Currently 49°F mostly cloudy with ESE 1 mph winds.

MW-1:

DTW: 14.22 ft.

DTB: 24.59 ft.

 $24.59 - 14.22 = 10.37 \times 0.10 = 1.04$

1.04 x 3 well volumes = 4.9 gallons purge.

9:28am started purging MW-1 water appears murky with a grey color. NO apparent odors.

9:50am Collected MW-1 sample

10:00am Collected MW-10 sample

* Duplicate of MW-1

MW-2

DTW: 14.68 ft.

DTB: 24.47 ft.

 $24.47 - 14.68 = 9.79 \times 0.10 = 0.98$

1.0 x 3 well volumes = 4.7 gallons purge

10:25am

started purging MW-2

water had iron at first but

then cleared up. NO apparent odor.

10:40am

collected MW-2 sample

MW-3

DTW: 13.63 ft.

DTB: 22.60 ft.

 $22.60 - 13.63 = 8.97 \times 0.10 =$

1.4 ft x 3 well = 4.3 gallons ~~8~~ purge

10:57am Started purging MW-3
 water appears clear. NO
 apparent odors. Slight sheen.
 Soapymaterial

11:20am collected sample MW-3

11:45am spoke with Paul told him I
 will be back in an hour or
 go to finish MW-U @ MW-7.
 offsite.

MW-7 DTB: 21.17

DTW: 14.69

21.17 - 14.69 = 6.48 x 0.10 = 1.03
 1.03 x 3 well volume = 3.1 gallons
 purge!

~~collected sample~~

1:30pm Started purging MW-7. water
 appears clear. No strong odors
 observed.

1:45pm collected sample MW-7.

MW-U DTW: 14.29 ft.

DTB: 22.10 ft.

22.1 - 14.29 = 7.81 x 0.50 = 1.2
 1.2 x 3 well volume = 3.7 gallons
 Purge

2:17pm Started purging MW-U
 water appears clear
 NO apparent odors

2:30pm collected sample MW-U

* All purging was done with
 a peristaltic pump at 0.25 gpm
 rate.

All purge waste water buckets
~~and~~ are labeled and placed
 in utilities room/boiler room
 marked on figure, pending
 lab results.

7:50pm Michaela offsite to bring
 samples to SGS.

Rite in the Rain



1178278



Locations Nationwide
Alaska
Maryland
New Jersey
New York
North Carolina

www.us.sgs.com

CLIENT: Travis and Petersen

CONTACT: Eddie Packee **PHONE #:** 455-7225

PROJECT NAME: Seekins Ford

REPORTS TO: Eddie Packee **E-MAIL:** epackee@tpeci.com

INVOICE TO: Travis and Petersen **QUOTE #:** 1197-02

RESERVED for lab use

SAMPLE IDENTIFICATION	DATE mm/dd/yy	TIME HH:MM	MATRIX/MATRIX CODE
MW-1	08/23/17	9:50 am	water
MW-10		10:00 am	water
MW-2		10:40 am	water
MW-3		11:20 am	water
MW-4		2:30 pm	water
MW-7		1:45 pm	water

Section 1

Section 2

Section 3

Section 4

Section 5

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

Preservative

#	CONTAINERS	Pres: Type:	VOC 8260	DRO (AK102)	GRO (AK101)	REMARKS/LOC ID
8		Comp	X	X	X	
8		Grab	X	X	X	
8		MI (Multi-Incremental)	X	X	X	
8			X	X	X	
8			X	X	X	
8			X	X	X	

Section 4 DOD Project? Yes No

Section 5 Data Deliverable Requirements: * WU 2 + EDD

Relinquished By: (1) *Michael Stok*

Relinquished By: (2)

Relinquished By: (3)

Relinquished By: (4)

Temp Blank °C: 35°C

Chain of Custody Seal: (Circle) **INTACT** **BROKEN** **ABSENT**

Delivery Method: (Check) Hand Delivered [] Commerical Delivered []

[] 200 W. Potter Drive Anchorage, AK 99518 Tel: (907) 562-2343 Fax: (907) 561-5301
[] 5500 Business Drive Wilmington, NC 28405 Tel: (910) 350-1903 Fax: (910) 350-1557

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