

STATE OF ALASKA

DEPARTMENT OF ENVIRONMENTAL CONSERVATION DIVISION OF SPILL PREVENTION AND RESPONSE CONTAMINATED SITES PROGRAM

MARK ARNELL, GOVERNOR

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File: 100.38.240

June 1, 2012

Sheridan and John Heinrich
2919 Seavy Drive
North Pole, Alaska 99705

Re: Results of 2012 Well Water Sampling at 2919 Seavy Drive

Dear Mr. and Ms. Heinrich:

On April 23, 2012, the Alaska Department of Environmental Conservation (DEC) met with you at your residence to inspect the excavation left following cleanup from the 2011 heating oil tank spill at your property. During the inspection I collected a pre-filter water sample (sample ID 2919-G) from your drinking water well and supervised your collection of two soil samples from the spill excavation: one from the southeast side of the excavation beneath the wood boiler line (sample ID 2919-S1), and one from the northwest side of the excavation (sample ID 2919-S2 and duplicate sample ID 2919-S3). The soil samples were collected approximately 3 feet below the ground surface.

All samples were tested for gasoline range organics (GRO), diesel range organics (DRO), and the fuel constituents benzene, ethylbenzene, toluene, and xylenes (BTEX). Enclosed are the soil and water sampling results from the analytical laboratory.

Results of the water analysis indicate that no contaminants were detected in your well water. Results of the soil analysis indicate that no contaminants were detected in the samples from the northwest side of the excavation. Because the wood boiler line interfered with continued excavation to the east, contamination was expected to remain in the soil sample from the southeast wall. The sample from the southeast (2919-S1) wall contained:

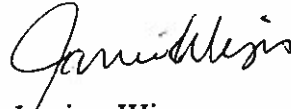
- 7.960 milligrams per kilogram (mg/kg) benzene
- 95.4 mg/kg ethylbenzene
- 110 mg/kg toluene
- 669 mg/kg total xylenes
- 4620 mg/kg GRO
- 36,800 mg/kg DRO

June 1, 2012

These soil analytical results are above DEC's cleanup levels. Based on these results, additional samples may be necessary to determine if significant contamination extends east beyond the wood boiler line.

Please retain these results for your records. If you have any questions, please contact me at (907) 451-2127 or at Janice.Wiegers@alaska.gov.

Sincerely,



Janice Wiegers
Environmental Program Specialist


Enclosure: Lab Results



Laboratory Analysis Report

Janice Wieggers
A D E C - Fairbanks
610 University Avenue
Fairbanks, AK 99709

Work Order: 1127722
Seavy Drive
Client: A D E C - Fairbanks
Report Date: May 03, 2012


Alaska Division Technical Director

Stephen Ede
2012.05.03
08:52:20 -08'00'

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. If you have any questions regarding this report, or if we can be of any other assistance, please contact your SGS Project Manager at 907-562-2343. All work is provided under SGS general terms and conditions (http://www.sgs.com/terms_and_conditions.htm), unless other written agreements have been accepted by both parties.

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 AK100001 for NELAP (RCRA methods: 1020A, 1311, 3010A, 3050B, 3520C, 3550C, 5030B, 5035B, 6010B, 6020, 7470A, 7471B, 8021B, 8081B, 8082A, 8260B, 8270D, 8270D-SIM, 9040B, 9045C, 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, the National Environmental Laboratory Accreditation Program and 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	Continuing Calibration Verification
CL	Control Limit
D	The analyte concentration is the result of a dilution.
DF	Dilution Factor
DL	Detection Limit (i.e., maximum method detection limit)
E	The analyte result is above the calibrated range.
F	Indicates value that is greater than or equal to the DL
GT	Greater Than
ICV	Initial Calibration Verification
J	The quantitation is an estimation.
JL	The analyte was positively identified, but the quantitation is a low estimation.
LCS(D)	Laboratory Control Spike (Duplicate)
LOD	Limit of Detection (i.e., 2xDL)
LOQ	Limit of Quantitation (i.e., reporting or practical quantitation limit)
LT	Less Than
M	A matrix effect was present.
MB	Method Blank
MS(D)	Matrix Spike (Duplicate)
ND	Indicates the analyte is not detected.
Q	QC parameter out of acceptance range.
R	Rejected
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.



SGS Ref.# 1127722001
Client Name A D E C - Fairbanks
Project Name/# Seavy Drive
Client Sample ID 2919-G
Matrix Water (Surface, Eff., Ground)

Printed Date/Time 05/03/2012 8:26
Collected Date/Time 04/23/2012 15:56
Received Date/Time 04/25/2012 12:16
Technical Director Stephen C. Ede

Sample Remarks:

Parameter	Results	LOQ	Units	Method	Container ID	Allowable Limits	Prep Date	Analysis Date	Init
<u>Volatile Fuels Department</u>									
Benzene	ND	0.500	ug/L	SW8021B	A		04/26/12	04/26/12	EAB
Ethylbenzene	ND	1.00	ug/L	SW8021B	A		04/26/12	04/26/12	EAB
Gasoline Range Organics	ND	0.100	mg/L	AK101	A		04/26/12	04/26/12	EAB
o-Xylene	ND	1.00	ug/L	SW8021B	A		04/26/12	04/26/12	EAB
P & M -Xylene	ND	2.00	ug/L	SW8021B	A		04/26/12	04/26/12	EAB
Toluene	ND	1.00	ug/L	SW8021B	A		04/26/12	04/26/12	EAB
<u>Surrogates</u>									
1,4-Difluorobenzene <surr>	97.6		%	SW8021B	A	77-115	04/26/12	04/26/12	EAB
4-Bromofluorobenzene <surr>	112		%	AK101	A	50-150	04/26/12	04/26/12	EAB
<u>Semivolatile Organic Fuels Department</u>									
Diesel Range Organics	ND	0.600	mg/L	AK102	D		04/26/12	04/28/12	LCE
<u>Surrogates</u>									
5a Androstane <surr>	87.2		%	AK102	D	50-150	04/26/12	04/28/12	LCE



SGS Ref.# 1127722002
Client Name A D E C - Fairbanks
Project Name/# Seavy Drive
Client Sample ID 2919-S1
Matrix Soil/Solid (dry weight)

Printed Date/Time 05/03/2012 8:26
Collected Date/Time 04/23/2012 16:30
Received Date/Time 04/25/2012 12:16
Technical Director Stephen C. Ede

Sample Remarks:

AK101 - BFB (surrogate) recovery does not meet QC criteria (biased high) due to matrix interference.
AK102 - The pattern is consistent with a light middle distillate.

Parameter	Results	LOQ	Units	Method	Container ID	Allowable Limits	Prep Date	Analysis Date	Init
<u>Volatile Fuels Department</u>									
Benzene	7960	1570	ug/Kg	SW8021B	B			04/26/12	EAB
Ethylbenzene	95400	3150	ug/Kg	SW8021B	B			04/26/12	EAB
Gasoline Range Organics	4620	315	mg/Kg	AK101	B			04/26/12	EAB
o-Xylene	266000	3150	ug/Kg	SW8021B	B			04/26/12	EAB
P & M -Xylene	403000	6300	ug/Kg	SW8021B	B			04/26/12	EAB
Toluene	110000	3150	ug/Kg	SW8021B	B			04/26/12	EAB
<u>Surrogates</u>									
1,4-Difluorobenzene <surrogate>	99.8		%	SW8021B	B	72-119		04/26/12	EAB
4-Bromofluorobenzene <surrogate>	24000	!	%	AK101	B	50-150		04/26/12	EAB
<u>Semivolatile Organic Fuels Department</u>									
Diesel Range Organics	36800	2570	mg/Kg	AK102	A		04/25/12	04/28/12	LCE
<u>Surrogates</u>									
5a Androstane <surrogate>	109		%	AK102	A	50-150	04/25/12	04/28/12	LCE
<u>Solids</u>									
Total Solids	89.4		%	SM21 2540G	A			04/25/12	CDE



SGS Ref.# 1127722003
Client Name A D E C - Fairbanks
Project Name/# Seavy Drive
Client Sample ID 2919-S2
Matrix Soil/Solid (dry weight)

Printed Date/Time 05/03/2012 8:26
Collected Date/Time 04/23/2012 16:37
Received Date/Time 04/25/2012 12:16
Technical Director Stephen C. Ede

Sample Remarks:

Parameter	Results	LOQ	Units	Method	Container ID	Allowable Limits	Prep Date	Analysis Date	Init
<u>Volatile Fuels Department</u>									
Benzene	ND	45.8	ug/Kg	SW8021B	B		04/23/12	04/26/12	EAB
Ethylbenzene	ND	91.7	ug/Kg	SW8021B	B		04/23/12	04/26/12	EAB
Gasoline Range Organics	ND	9.17	mg/Kg	AK101	B		04/23/12	04/26/12	EAB
o-Xylene	ND	91.7	ug/Kg	SW8021B	B		04/23/12	04/26/12	EAB
P & M -Xylene	ND	183	ug/Kg	SW8021B	B		04/23/12	04/26/12	EAB
Toluene	ND	91.7	ug/Kg	SW8021B	B		04/23/12	04/26/12	EAB
<u>Surrogates</u>									
1,4-Difluorobenzene <surr>	95.4		%	SW8021B	B	72-119	04/23/12	04/26/12	EAB
4-Bromofluorobenzene <surr>	97.4		%	AK101	B	50-150	04/23/12	04/26/12	EAB
<u>Semivolatile Organic Fuels Department</u>									
Diesel Range Organics	ND	22.9	mg/Kg	AK102	A		04/25/12	04/26/12	LCE
<u>Surrogates</u>									
5a Androstane <surr>	77.3		%	AK102	A	50-150	04/25/12	04/26/12	LCE
<u>Solids</u>									
Total Solids	87.0		%	SM21 2540G	A			04/25/12	CDE



SGS Ref.# 1127722004
Client Name A D E C - Fairbanks
Project Name/# Seavy Drive
Client Sample ID 2919-S3
Matrix Soil/Solid (dry weight)

Printed Date/Time 05/03/2012 8:26
Collected Date/Time 04/23/2012 16:39
Received Date/Time 04/25/2012 12:16
Technical Director Stephen C. Ede

Sample Remarks:

Parameter	Results	LOQ	Units	Method	Container ID	Allowable Limits	Prep Date	Analysis Date	Init
<u>Volatile Fuels Department</u>									
Benzene	ND	45.5	ug/Kg	SW8021B	B		04/23/12	04/26/12	EAB
Ethylbenzene	ND	90.9	ug/Kg	SW8021B	B		04/23/12	04/26/12	EAB
Gasoline Range Organics	ND	9.09	mg/Kg	AK101	B		04/23/12	04/26/12	EAB
o-Xylene	ND	90.9	ug/Kg	SW8021B	B		04/23/12	04/26/12	EAB
P & M -Xylene	ND	182	ug/Kg	SW8021B	B		04/23/12	04/26/12	EAB
Toluene	ND	90.9	ug/Kg	SW8021B	B		04/23/12	04/26/12	EAB
<u>Surrogates</u>									
1,4-Difluorobenzene <surr>	95.1		%	SW8021B	B	72-119	04/23/12	04/26/12	EAB
4-Bromofluorobenzene <surr>	99.5		%	AK101	B	50-150	04/23/12	04/26/12	EAB
<u>Semivolatile Organic Fuels Department</u>									
Diesel Range Organics	ND	22.2	mg/Kg	AK102	A		04/25/12	04/26/12	LCE
<u>Surrogates</u>									
5a Androstane <surr>	78.8		%	AK102	A	50-150	04/25/12	04/26/12	LCE
<u>Solids</u>									
Total Solids	89.3		%	SM21 2540G	A			04/25/12	CDE

