

655,325

December 15, 1999

Robert Weimer
ADEC/UST
555 Cordova St.
Anchorage, AK 99501

RECEIVED
DEC 17 1999

Dept. of Environmental Conservation
Underground Storage Tanks — FAP


Re: Senco; Spill #98210030101; Monitoring Well Results; Second Quarterly Sampling

The three monitoring wells at the Senco site were sampled on 12/6/99. The lab results for the three wells are attached, as is the running Monitoring Well Log. None of the wells had free product or sheen. GRO and benzene remains above the default cleanup goals in MW2. MW1 has dropped below cleanup goals and MW3 remained non-detect for all species of concern.

As you suggested in your 9/22/99 letter, the sampling frequency will be reevaluated after four quarterly sampling events, applicable to all wells. The locations of the wells, beneath flushmounts in the alley and parking lot, makes sampling difficult in winter. The March sampling event may be postponed or skipped if ice prevents the access to the wells or ice removal would lead to damage of the wells.

If you have any questions, please give me a call.

Sincerely,


Ralph Hulbert, P.E.

Att: Lab results
Monitoring Well Log

Cc: Clay Dial, Senco Alaska

**CT&E Environmental Services Inc.**

200 W. Potter Drive
Anchorage, AK 99518-1605
Tel: (907) 562-2343
Fax: (907) 561-5301
Web: <http://www.cteesi.com>

Ralph Hulbert
Hulbert, Ralph P.E.
P.O. Box 1846
Palmer, AK 99645

Work Order:	996573
	Senco
Client:	Hulbert, Ralph P.E.
Report Date:	December 14, 1999

Enclosed are the analytical results associated with the above workorder.

As required by the state of Alaska and the USEPA, a formal Quality Assurance/Quality Control Program is maintained by CT&E. A copy of our Quality Control Manual that outlines this program is available at your request.

Except as specifically noted, all statements and data in this report are in conformance to the provisions set forth in our Quality Assurance Program Plan.

If you have any questions regarding this report or if we can be of any other assistance, please call your CT&E Project Manager at (907) 562-2343.

The following descriptors may be found on your report which will serve to further qualify the data.

- U Indicates the analyte was analyzed for but not detected.
- J Indicates an estimated value that falls below PQL, but is greater than the MDL.
- B Indicates the analyte is found in the blank associated with the sample.
- * The analyte has exceeded allowable limits.
- GT Greater Than
- D Secondary Dilution
- LT Less Than
- ! Surrogate out of range



CT&E Environmental Services Inc.

CT&E Ref.# 996573001
 Client Name Hulbert, Ralph P.E.
 Project Name/# Senco
 Client Sample ID SMW1
 Matrix Water (Surface, Eff., Ground)
 Ordered By

Client PO#
 Printed Date/Time 12/14/1999 15:22
 Collected Date/Time 12/06/1999 11:00
 Received Date/Time 12/06/1999 16:40
 Technical Director Stephen Ede
 Released By *Shonda Struck*

Sample Remarks:

Parameter	Results	PQL	Units	Method	Allowable Limits	Prep Date	Analysis Date	Init
VOLATILE FUELS DEPT								
Gasoline Range Organics	0.0900u	0.0900	mg/L	AK101/8021B		12/08/1999	12/08/1999	DAR
Benzene	0.00148	0.00050	mg/L	AK101/8021B		12/08/1999	12/08/1999	DAR
Toluene	0.0020u	0.0020	mg/L	AK101/8021B		12/08/1999	12/08/1999	DAR
Ethylbenzene	0.0020u	0.0020	mg/L	AK101/8021B		12/08/1999	12/08/1999	DAR
P & M -Xylene	0.0020u	0.0020	mg/L	AK101/8021B		12/08/1999	12/08/1999	DAR
o-Xylene	0.0020u	0.0020	mg/L	AK101/8021B		12/08/1999	12/08/1999	DAR
Surrogates								
4-Bromofluorobenzene <Surr>	89.9		%	AK101/8021B	50-150	12/08/1999	12/08/1999	DAR
1,4-Difluorobenzene <Surr>	95.4		%	AK101/8021B	60-120	12/08/1999	12/08/1999	DAR



CT&E Environmental Services Inc.

CT&E Ref.# 996573002
 Client Name Hulbert, Ralph P.E.
 Project Name/# Senco
 Client Sample ID SMW2
 Matrix Water (Surface, Eff., Ground)
 Ordered By

Client PO#
 Printed Date/Time 12/14/1999 15:22
 Collected Date/Time 12/06/1999 11:00
 Received Date/Time 12/06/1999 16:40
 Technical Director Stephen Ede

Released By *Shonda Struckman*

Sample Remarks:

GRO/BTEX - Surrogate recoveries are biased high
 due to matrix interference. Results not affected.

Parameter	Results	PQL	Units	Method	Allowable Limits	Prep Date	Analysis Date	Init
VOLATILE FUELS DEPT								
Gasoline Range Organics	4.9	0.450	mg/L	AK101/80218		12/08/1999	12/09/1999	DAR
Benzene	0.0632	0.0025	mg/L	AK101/80218		12/08/1999	12/09/1999	DAR
Toluene	0.273	0.010	mg/L	AK101/80218		12/08/1999	12/09/1999	DAR
Ethylbenzene	0.0917	0.010	mg/L	AK101/80218		12/08/1999	12/09/1999	DAR
P & M -Xylene	0.389	0.010	mg/L	AK101/80218		12/08/1999	12/09/1999	DAR
o-Xylene	0.110	0.010	mg/L	AK101/80218		12/08/1999	12/09/1999	DAR
Surrogates								
4-Bromofluorobenzene <Surr>	210 ±		%	AK101/80218	50-150	12/08/1999	12/09/1999	DAR
1,4-Difluorobenzene <Surr>	147 ±		%	AK101/80218	60-120	12/08/1999	12/09/1999	DAR



CT&E Environmental Services Inc.

CT&E Ref.# 996573003
 Client Name Hulbert, Ralph P.E.
 Project Name/# Senco
 Client Sample ID SMW3
 Matrix Water (Surface, Eff., Ground)
 Ordered By

Client PO#
 Printed Date/Time 12/14/1999 15:22
 Collected Date/Time 12/06/1999 11:00
 Received Date/Time 12/06/1999 16:40
 Technical Director Stephen Ede
 Released By *Shonda Hucha*

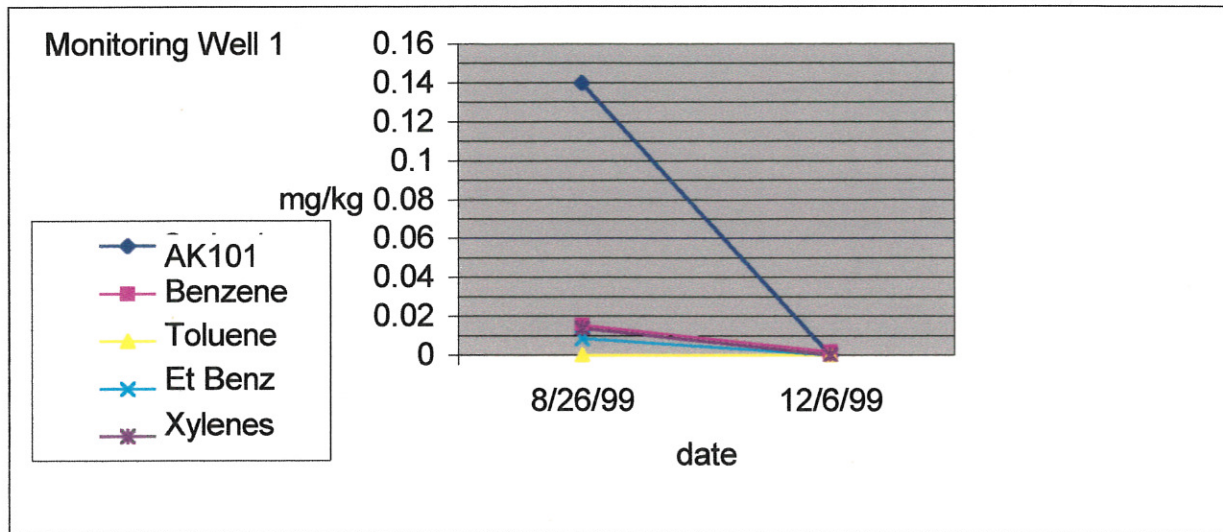
Sample Remarks:

Parameter	Results	PQL	Units	Method	Allowable Limits	Prep Date	Analysis Date	Init
VOLATILE FUELS DEPT								
Gasoline Range Organics	0.0900u	0.0900	mg/L	AK101/8021B		12/08/1999	12/08/1999	DAR
Benzene	0.00050u	0.00050	mg/L	AK101/8021B		12/08/1999	12/08/1999	DAR
Toluene	0.0020u	0.0020	mg/L	AK101/8021B		12/08/1999	12/08/1999	DAR
Ethylbenzene	0.0020u	0.0020	mg/L	AK101/8021B		12/08/1999	12/08/1999	DAR
P & M -Xylene	0.0020u	0.0020	mg/L	AK101/8021B		12/08/1999	12/08/1999	DAR
o-Xylene	0.0020u	0.0020	mg/L	AK101/8021B		12/08/1999	12/08/1999	DAR
Surrogates								
4-Bromofluorobenzene <Surr>	89.3		%	AK101/8021B	50-150	12/08/1999	12/08/1999	DAR
1,4-Difluorobenzene <Surr>	102		%	AK101/8021B	60-120	12/08/1999	12/08/1999	DAR

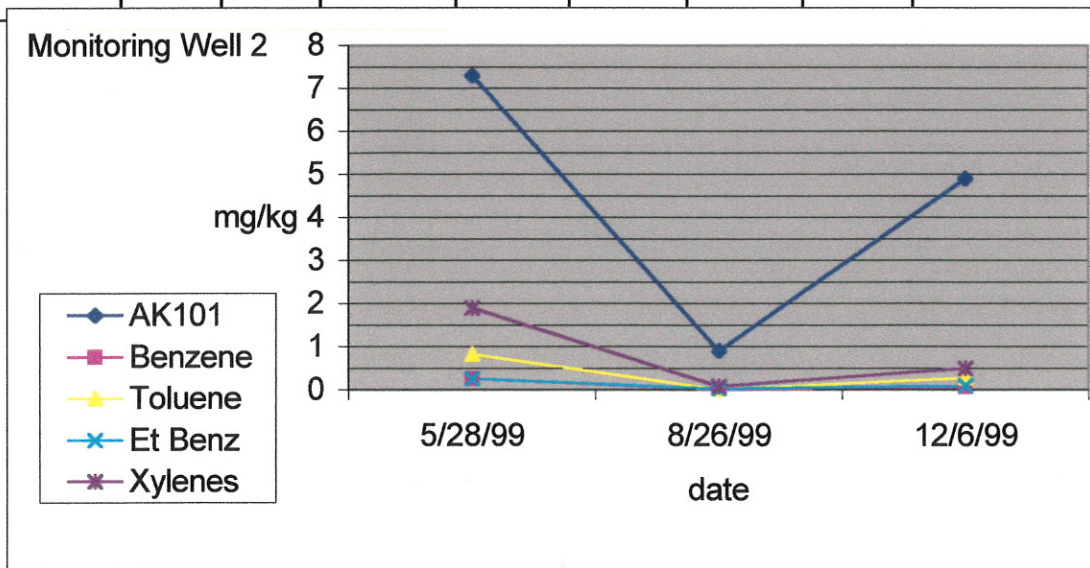
Senco Alaska, Inc.
877 E. Dowling Rd.

Monitoring Well Log

Monitoring Well #1 Results in mg/kg							
Sample #	Date	AK101	Benzene	Toluene	Et Benz	Xylenes	Depth
Goal		1.3	0.005	1	0.7	10	ft BTOC
	5/28/99						2.87
MW1	8/26/99	0.14	0.0154	0	0.00847	0.01377	1.21
SMW1	12/6/99	0	0.00148	0	0	0	5.5



Monitoring Well #2 Results in mg/kg							
Sample #	Date	AK101	Benzene	Toluene	Et Benz	Xylenes	Depth
Goal	goal	1.3	0.005	1	0.7	10	ft BTOC
SGW99-1	5/28/99	7.3	0.25	0.815	0.259	1.89	3.53
MW2	8/26/99	0.89	0.00561	0.00428	0.0206	0.0743	1.71
SMW2	12/6/99	4.9	0.0632	0.273	0.0917	0.489	5.81



Senco Alaska, Inc.
877 E. Dowling Rd.

Monitoring Well Log

Monitoring Well #3 Results in mg/kg								
Sample #	Date	AK101	Benzene	Toluene	Et Benz	Xylenes	Depth	Comments
Goal		1.3	0.005	1	0.7	10	ft BTOC	From 18 AAC 75.341 Table C
MW3-GW1	6/8/99	0	0	0	0	0	26.48	First test
MW3	8/26/99	0	0	0	0	0	26.24	2nd test
SMW3	12/6/99	0	0	0	0	0	24.28	3rd test

Notes: Lab non-detects are assigned zero values for graphing purposes.
Shaded cells have concentrations above target goals.