

LEGEND

- - - 25 Elevation Contour (ft Above MLLW)
- X - Fence
- Monitoring Well
- ⊠ Geoprobe Well (Abandoned)
- ⊕ Abandoned Well
- ⊙ Recovery Well
- - - Main Road Pipeline

Sample Location

Chemical Concentrations for Groundwater (ug/L)

04-163	10/15/96	Sample Date
	320	DRO
	100U	GRO
	1U	Benzene
	1U	Toluene
	1U	Ethylbenzene
	1U	Total Xylenes

- U Chemical Not Detected at Detection Limit Shown
- J Estimated Concentration
- NA Not Analyzed

Alaska DEC Groundwater Criteria	
DRO	1,500 ug/L
GRO	1,300 ug/L
Benzene	5 ug/L
Toluene	1,000 ug/L
Ethylbenzene	700 ug/L
Total xylenes	10,000 ug/L

Note: These criteria are for groundwater used as a drinking water source. Criteria for groundwater not used as a drinking water source are 10 times the values listed (18 AAC 75).

█ Exceeds Criteria

8/10/98	8/23/99	11/10/99	2/18/00	6/3/00	10/8/01	10/4/02
200U	NA	160U	160U	160UJ	575U	160U
100U	20U	20U	20U	20U	90U	13J
1U	0.2U	0.2U	0.2U	0.2U	0.5U	1U
1U	0.3U	0.3U	0.3U	0.3U	2U	1U
1U	0.2U	0.2U	0.2U	0.2U	2U	1U
1U	0.4U	0.4U	0.4U	0.4U	2U	3U

10/15/96	320
100U	1U
1U	1U
1U	1U

10/16/96	50U
5U	0.2U
0.2U	0.2U
0.2U	0.4U

11/8/92	10/26/96
6,200	240U
110	100U
1U	1U
1U	1U
1U	1U

10/15/96	10/8/97	8/2/02
8,300	3,100J	9,800
570	307	360
2.2	5U	0.42
3.1	5U	1U
46	21	11
240	114	30

10/16/96	600
5U	0.2U
0.2U	0.2U
0.2U	3

12/5/96	1,700J
5U	0.2U
0.2U	1.4J
0.2U	5.6

10/26/96	250U
100U	1U
1U	1U
1U	1U

10/15/96	8/2/02
3,000	3,300
280	750
1U	1.1
1U	1.1
17	30
110	150

10/15/96	7/8/98	8/2/02
6,400	5,400	6,100
590	950	1,000
3.8	2.1	2
2	1U	1.2
47	46	49
210	160	170

10/26/96	240U
100U	1U
1U	1.6
1U	1U
1U	1.3

11/8/92	10/16/96	10/8/97	8/2/02
820	7,200	2,300J	4,100
100U	492	750	730
1U	9.5	6.7	2.3
1U	0.2U	5U	1U
1U	47	52	39
1U	261	247	150

10/15/96	5,900
130	1U
1U	3.9
1U	58

11/8/92	11/4/96	10/19/97	8/2/02
4,600	110,000J	3,500J	9,600
1,200	220J	336	630
1U	1U	5UJ	0.38J
1U	1U	5UJ	1U
31J	38.6	22J	32
130J	130	82	73

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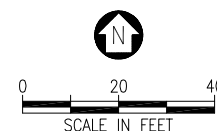
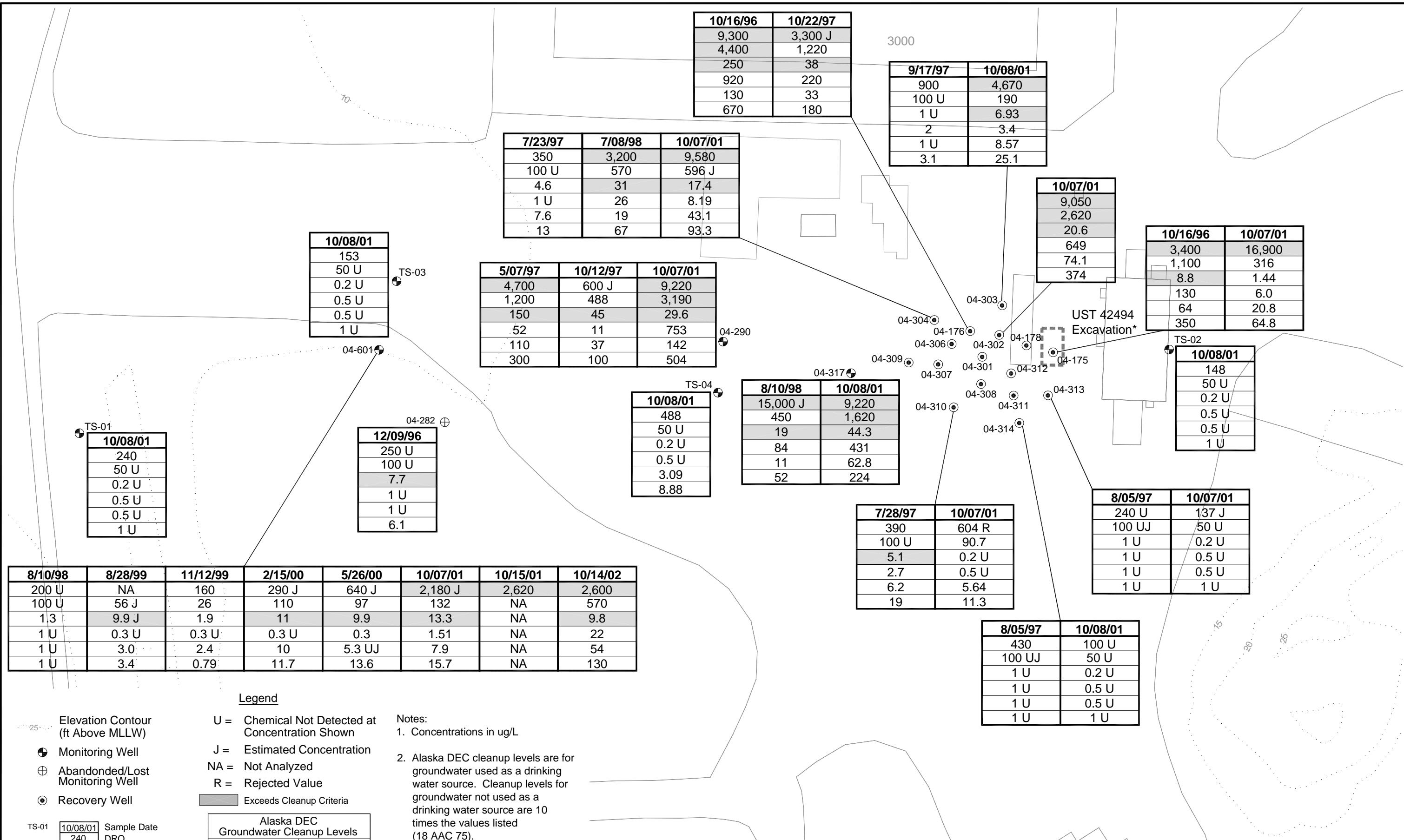


Figure B-4
DRO, GRO, and BTEX Concentrations in Groundwater
SA 80, Steam Plant No. 4
USTs 27089 and 27090

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8/10/98	8/28/99	11/12/99	2/15/00	5/26/00	10/07/01	10/15/01	10/14/02
200 U	NA	160	290 J	640 J	2,180 J	2,620	2,600
100 U	56 J	26	110	97	132	NA	570
1.3	9.9 J	1.9	11	9.9	13.3	NA	9.8
1 U	0.3 U	0.3 U	0.3 U	0.3	1.51	NA	22
1 U	3.0	2.4	10	5.3 UJ	7.9	NA	54
1 U	3.4	0.79	11.7	13.6	15.7	NA	130

Legend

- Elevation Contour (ft Above MLLW)
- Monitoring Well
- Abandoned/Lost Monitoring Well
- Recovery Well

- U = Chemical Not Detected at Concentration Shown
- J = Estimated Concentration
- NA = Not Analyzed
- R = Rejected Value
- Exceeds Cleanup Criteria

- Notes:**
- Concentrations in ug/L
 - Alaska DEC cleanup levels are for groundwater used as a drinking water source. Cleanup levels for groundwater not used as a drinking water source are 10 times the values listed (18 AAC 75).

Alaska DEC Groundwater Cleanup Levels	
DRO	1,500 ug/L
GRO	1,300 ug/L
Benzene	5 ug/L
Toluene	1,000 ug/L
Ethylbenzene	700 ug/L
Total xylenes	10,000 ug/L

TS-01	10/08/01	Sample Date
	240	DRO
	50 U	GRO
	0.2 U	Benzene
	0.5 U	Toluene
	0.5 U	Ethylbenzene
	1 U	Total Xylenes

	Delivery Order 0037 Adak Island, AK DECISION DOCUMENT		Figure B-5 DRO, GRO and BTEX Concentrations in Groundwater, Tanker Shed, UST 42494
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LEGEND

- 25' Elevation Contour (ft Above MLLW)
- Monitoring Well
- Abandoned Well
- Borehole
- Sediment/Surface Water
- Ground Surface
- Geoprobe Boring
- Geoprobe Well
- Test Pit

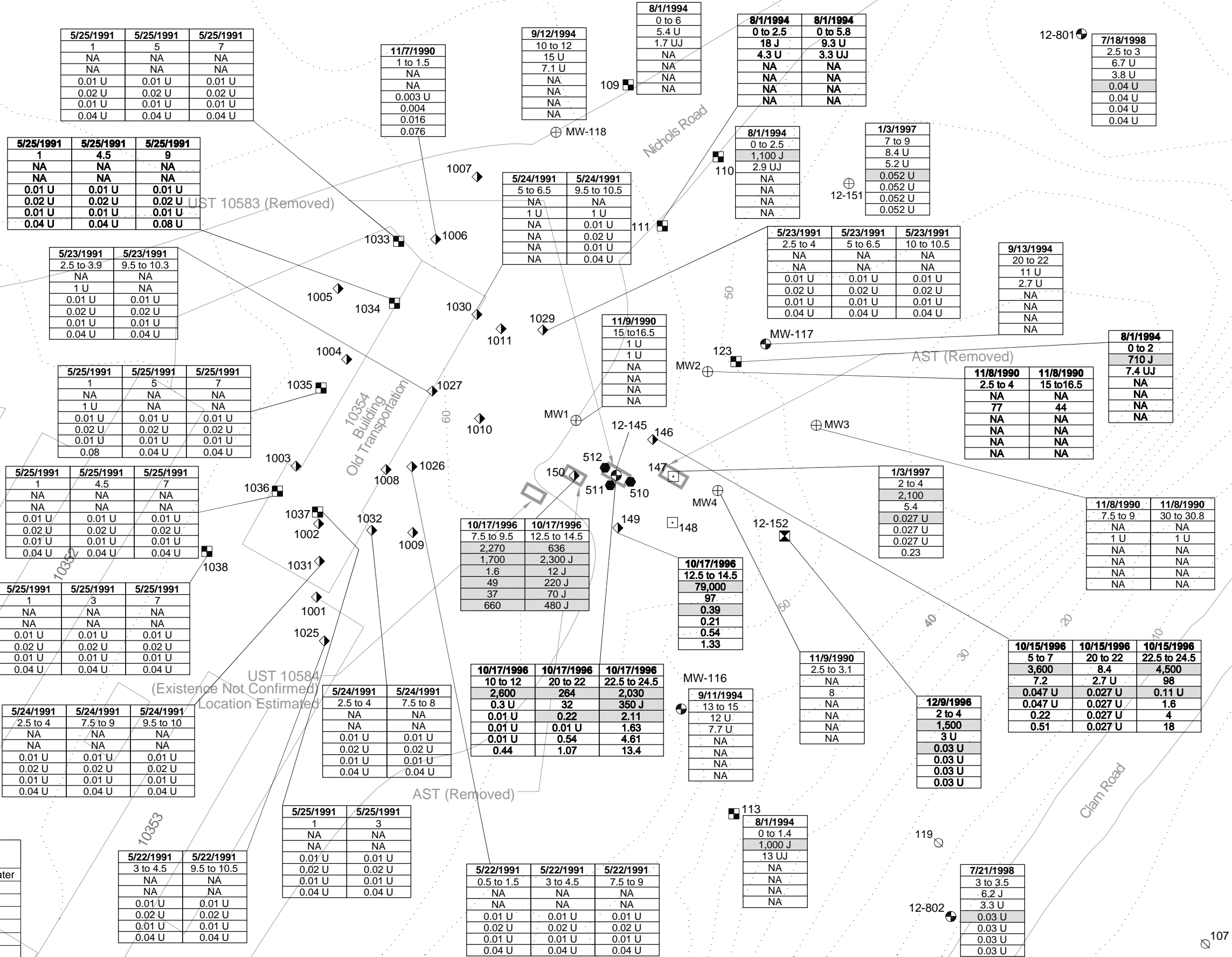
Sample Location

Chemical Concentrations in Soil (mg/kg)

10/10/96	Sample Date
15-17	Sample Depth Interval (ft bgs)
12	DRO
12	GRO
0.06	Benzene
0.08	Toluene
0.38	Ethylbenzene
1.4	Total Xylenes

- U Chemical Not Detected at Concentration Shown
- J Estimated Concentration
- bgs Below Ground Surface
- NA Not Analyzed
- Exceeds Most Stringent Criteria

Alaska DEC Method 2 Soil Criteria Over 40-Inch Rainfall Zone			
	Ingestion	Inhalation	Migration to Groundwater
DRO	8,250 mg/kg	12,500 mg/kg	230 mg/kg
GRO	1,400 mg/kg	1,400 mg/kg	260 mg/kg
Benzene	230 mg/kg	6.4 mg/kg	0.02 mg/kg
Toluene	17,000 mg/kg	180 mg/kg	4.8 mg/kg
Ethylbenzene	8,300 mg/kg	89 mg/kg	5 mg/kg
Total xylenes	166,000 mg/kg	81 mg/kg	69 mg/kg



Note: These criteria levels are specified for petroleum release sites at Adak in the Record of Decision for Operable Unit A.

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Figure B-6
DRO, GRO and BTEX Concentrations in Soil
SA 78, Old Transportation Building
USTs 10583, 10584, and ASTs

LEGEND

- 25 --- Elevation Contour (ft Above MLLW)
- ⊕ Monitoring Well
- ⊕ Abandoned Well

Note: Concentrations in ug/L.

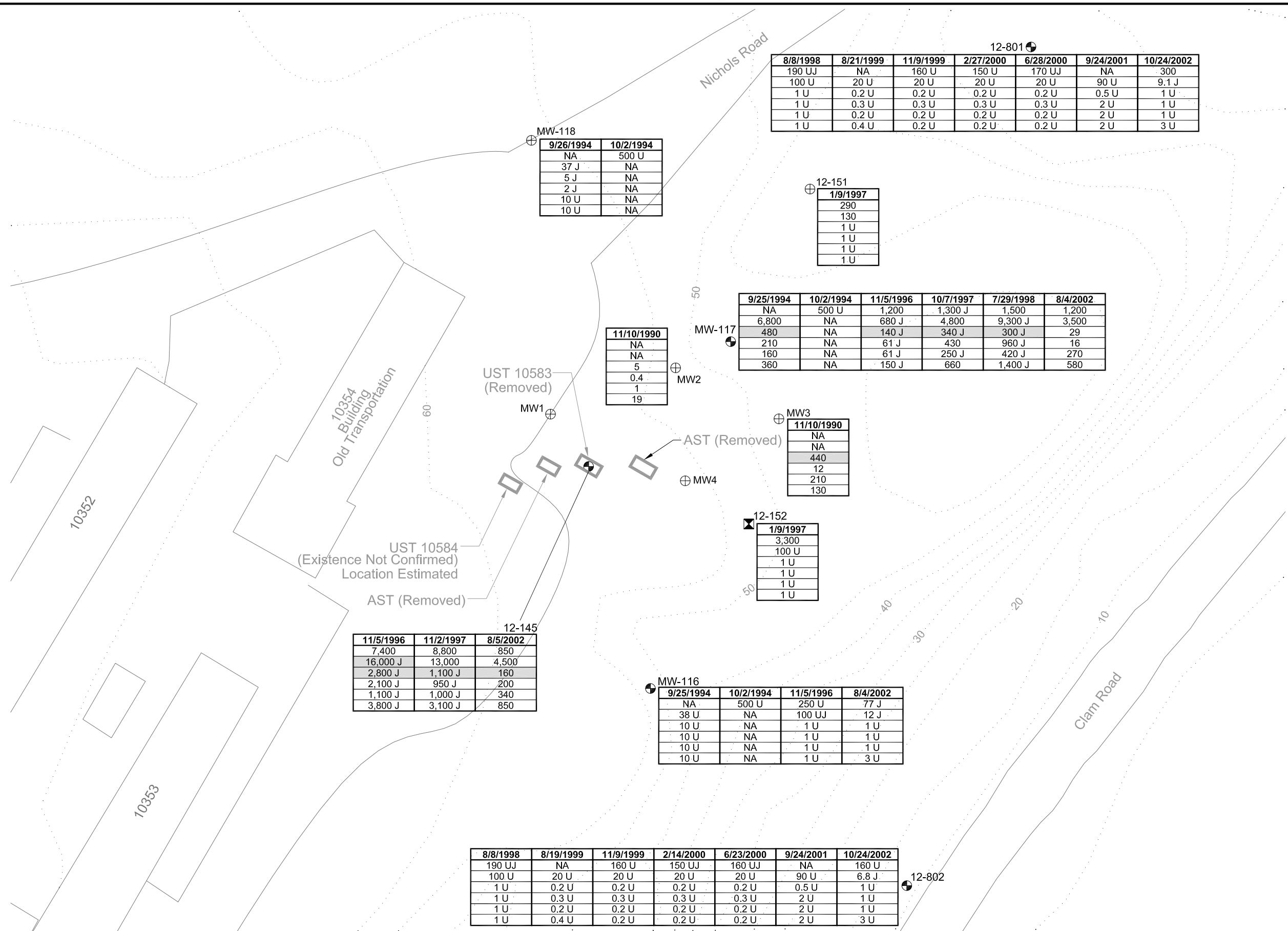
10/25/96	Sample Date
3,900	DRO
100 U	GRO
1 U	Benzene
1 U	Toluene
13	Ethylbenzene
32	Total Xylenes

- U = Chemical Not Detected at Concentration Shown
- J = Estimated Concentration
- NA = Not Analyzed

Alaska DEC Groundwater Criteria	
DRO	15,000 ug/L
GRO	13,000 ug/L
Benzene	50 ug/L
Toluene	10,000 ug/L
Ethylbenzene	7,000 ug/L
Total xylenes	100,000 ug/L

Note: These criteria are for groundwater not used as a drinking water source (18 AAC 75).

█ Exceeds Criteria



8/8/1998	8/21/1999	11/9/1999	2/27/2000	6/28/2000	9/24/2001	10/24/2002
190 UJ	NA	160 U	150 U	170 UJ	NA	300
100 U	20 U	20 U	20 U	20 U	90 U	9.1 J
1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	1 U
1 U	0.3 U	0.3 U	0.3 U	0.3 U	2 U	1 U
1 U	0.2 U	0.2 U	0.2 U	0.2 U	2 U	1 U
1 U	0.4 U	0.2 U	0.2 U	0.2 U	2 U	3 U

9/26/1994	10/2/1994
NA	500 U
37 J	NA
5 J	NA
2 J	NA
10 U	NA
10 U	NA

12-151	1/9/1997
290	
130	
1 U	
1 U	
1 U	
1 U	

9/25/1994	10/2/1994	11/5/1996	10/7/1997	7/29/1998	8/4/2002
NA	500 U	1,200	1,300 J	1,500	1,200
6,800	NA	680 J	4,800	9,300 J	3,500
480	NA	140 J	340 J	300 J	29
210	NA	61 J	430	960 J	16
160	NA	61 J	250 J	420 J	270
360	NA	150 J	660	1,400 J	580

11/10/1990
NA
NA
5
0.4
1
19

MW3	11/10/1990
NA	
NA	
440	
12	
210	
130	

12-152	1/9/1997
3,300	
100 U	
1 U	
1 U	
1 U	
1 U	

11/5/1996	11/2/1997	8/5/2002
7,400	8,800	850
16,000 J	13,000	4,500
2,800 J	1,100 J	160
2,100 J	950 J	200
1,100 J	1,000 J	340
3,800 J	3,100 J	850

MW-116	9/25/1994	10/2/1994	11/5/1996	8/4/2002
NA	500 U	250 U	77 J	
38 U	NA	100 UJ	12 J	
10 U	NA	1 U	1 U	
10 U	NA	1 U	1 U	
10 U	NA	1 U	1 U	
10 U	NA	1 U	3 U	

8/8/1998	8/19/1999	11/9/1999	2/14/2000	6/23/2000	9/24/2001	10/24/2002
190 UJ	NA	160 U	150 UJ	160 UJ	NA	160 U
100 U	20 U	20 U	20 U	20 U	90 U	6.8 J
1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	1 U
1 U	0.3 U	0.3 U	0.3 U	0.3 U	2 U	1 U
1 U	0.2 U	0.2 U	0.2 U	0.2 U	2 U	1 U
1 U	0.4 U	0.2 U	0.2 U	0.2 U	2 U	3 U

<p>U.S. NAVY</p>	<p>Delivery Order 0037 Adak Island, AK DECISION DOCUMENT</p>		<p>Figure B-7 DRO, GRO, and BTEX Concentrations in Groundwater SA 78, Old Transportation Building USTs 10583, 10584, and ASTs</p>
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LEGEND

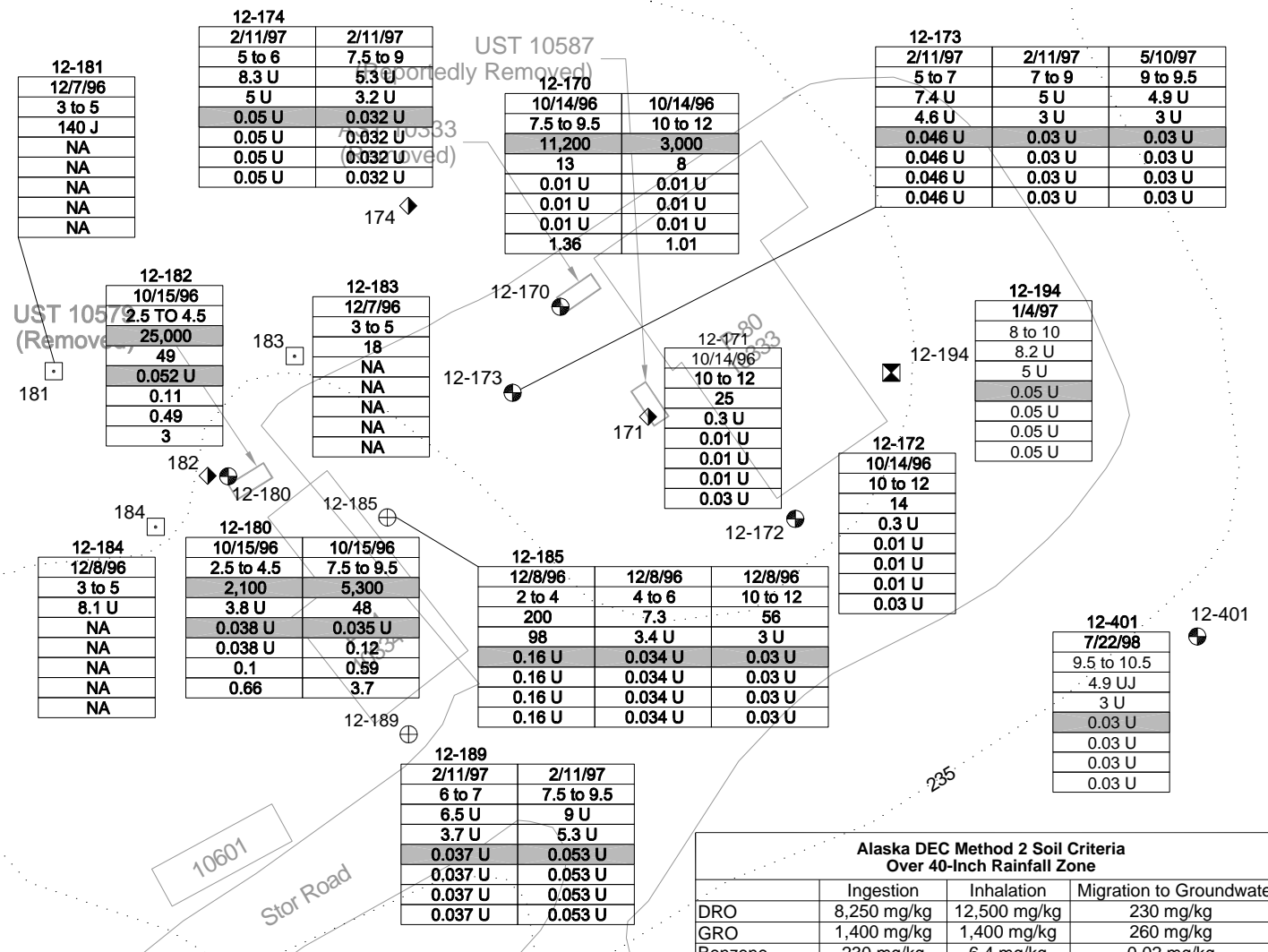
- 25 Elevation Contour (ft Above MLLW)
- Road
- Fence
- Monitoring Well
- Abandoned Monitoring Well
- Geoprobe Well
- Soil Boring
- Geoprobe

Chemical Concentrations in Soil (mg/kg)

04-211	10/10/96	Sample Date
	15 to 17	Sample Depth Interval (ft bgs)
	12	DRO
	12	GRO
	0.06	Benzene
	0.08	Toluene
	0.38	Ethylbenzene
	1.4	Total Xylenes

- U Chemical Not Detected at Concentration Shown
- J Estimated Concentration
- bgs Below Ground Surface
- NA Not Analyzed

Exceeds Most Stringent Criteria



Note: These criteria levels are specified for petroleum release sites at Adak in the Record of Decision for Operable Unit A.

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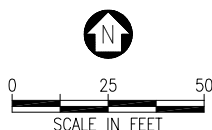


Figure B-8
DRO, GRO, and BTEX Concentrations in Soil
SA 82, P-80/P-81 Buildings

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