

FILENAME: T:\ADAK\IDIQ\Sub-Tasks\DO 37\DD\APPENDIX\FIG B-14 DRO SOIL.dwg
EDIT DATE: 03/18/05 AT: 11:38

LEGEND

- Road
- Fence
- Tank (Location and Orientation)
- Monitoring Well
- Abandoned Well
- Geoprobe Well
- Recovery Well
- Geoprobe
- Soil Sample
- Exceeds Most Stringent Criteria

Sample Location

Chemical Concentrations in Soil (mg/kg)

05-801	7/11/98	Sample Date
	8-9	Sample Depth Interval (ft bgs)
	7.1	DRO
	3.7U	GRO
	0.04U	Benzene
	0.04U	Toluene
	0.04U	Ethylbenzene
	0.04U	Total Xylenes

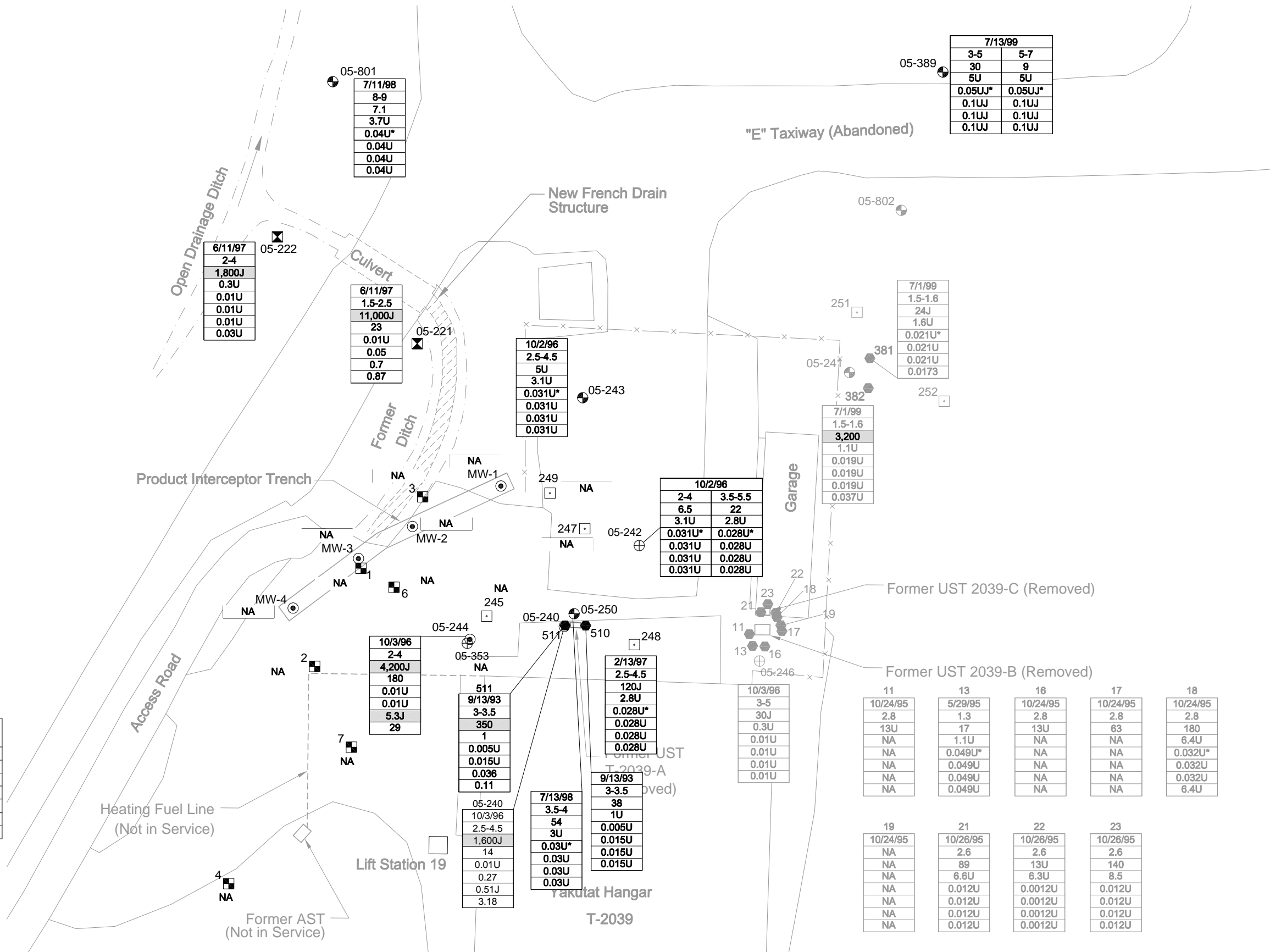
- U Chemical Not Detected at Concentration Shown
- J Estimated Concentration
- bgs Below Ground Surface
- NA Not Analyzed
- * Detection Limit Exceeds Most Stringent Screening Criteria

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 are specified for petroleum release sites at Adak in the Record of Decision for Operable Unit A and are used to determine the potential area of concern for petroleum hydrocarbons in soil. Actual site-specific soil cleanup levels are established following Alaska DEC Method 4 criteria.

NOTE:

The sampling locations presented in gray tone are associated with investigations at the adjacent site, Yakutat Hanger, UST T-2039-B and -C.



FILENAME: T:\ADAK\IDIQ\Sub-Tasks\DO_37\DD\APPENDIX\FIG B-15 DRO GW.dwg
EDIT DATE: 03/18/05 AT: 11:40

LEGEND

- Road
- Fence
- Tank (Location and Orientation)
- Monitoring Well
- Geoprobe Well
- Recovery Well
- Abandoned/Lost Well

NOTE:

The sampling locations presented in gray tone are associated with investigations at the adjacent site, Yakutat Hanger, UST T-2039-B and -C.

NOTE: Concentrations in ug/L.

05-221	6/16/97	Sample Date
	700	DRO
	56	GRO
	0.2U	Benzene
	0.2U	Toluene
	0.2UJ	Ethylbenzene
	0.2U	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

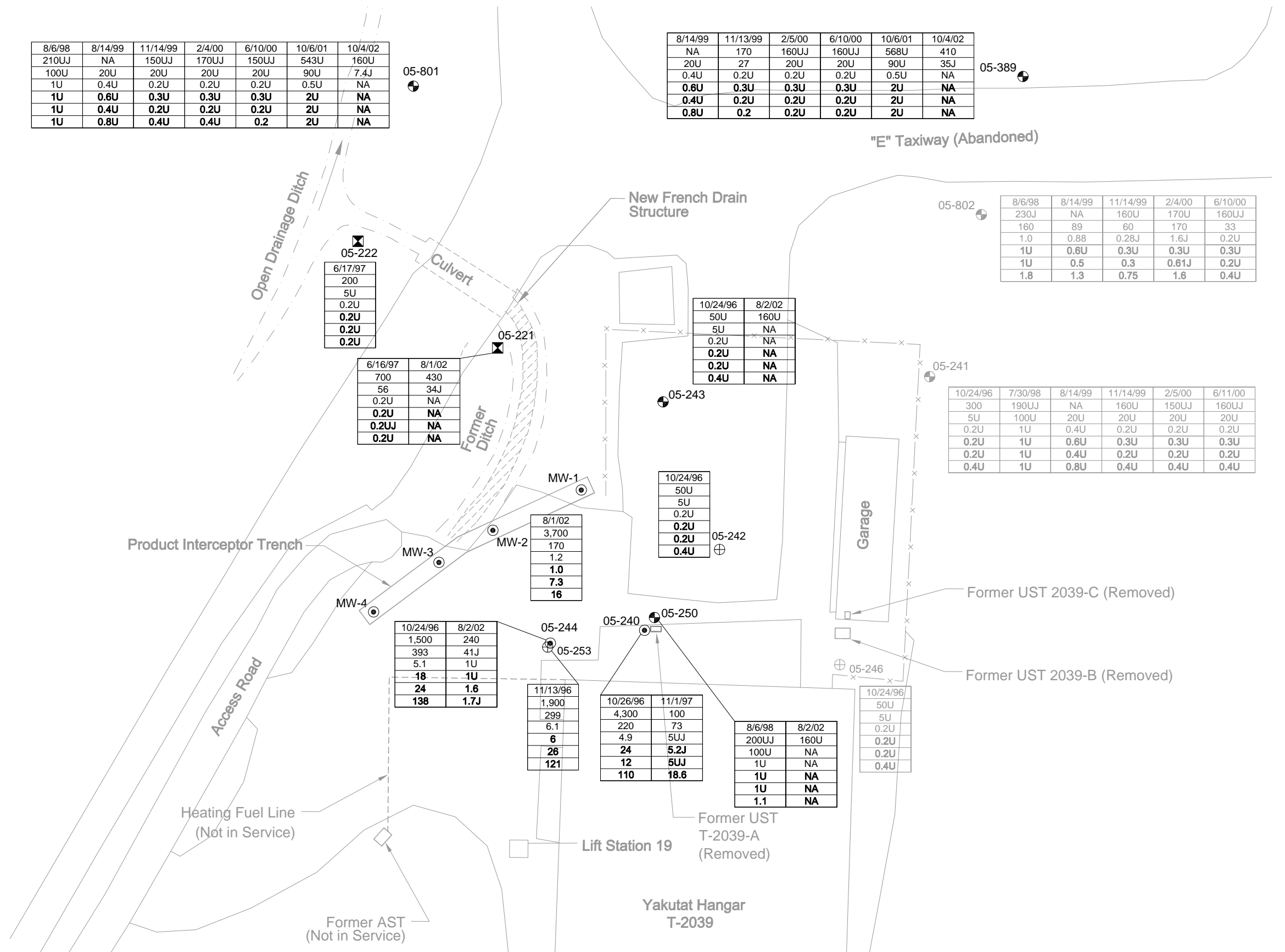
NOTE: These criteria are for groundwater not used as a drinking water source, which are 10 times the criteria for groundwater used as a drinking water source (18 AAC 75). No concentrations in groundwater exceeded these criteria.

8/6/98	8/14/99	11/14/99	2/4/00	6/10/00	10/6/01	10/4/02
210UJ	NA	150UJ	170UJ	150UJ	543U	160U
100U	20U	20U	20U	20U	90U	7.4J
1U	0.4U	0.2U	0.2U	0.2U	0.5U	NA
1U	0.6U	0.3U	0.3U	0.3U	2U	NA
1U	0.4U	0.2U	0.2U	0.2U	2U	NA
1U	0.8U	0.4U	0.4U	0.2	2U	NA

8/14/99	11/13/99	2/5/00	6/10/00	10/6/01	10/4/02
NA	170	160UJ	160UJ	568U	410
20U	27	20U	20U	90U	35J
0.4U	0.2U	0.2U	0.2U	0.5U	NA
0.6U	0.3U	0.3U	0.3U	2U	NA
0.4U	0.2U	0.2U	0.2U	2U	NA
0.8U	0.2	0.2U	0.2U	2U	NA

8/6/98	8/14/99	11/14/99	2/4/00	6/10/00
230J	NA	160U	170U	160UJ
160	89	60	170	33
1.0	0.88	0.28J	1.6J	0.2U
1U	0.6U	0.3U	0.3U	0.3U
1U	0.5	0.3	0.61J	0.2U
1.8	1.3	0.75	1.6	0.4U

10/24/96	7/30/98	8/14/99	11/14/99	2/5/00	6/11/00
300	190UJ	NA	160U	150UJ	160UJ
5U	100U	20U	20U	20U	20U
0.2U	1U	0.4U	0.2U	0.2U	0.2U
0.2U	1U	0.6U	0.3U	0.3U	0.3U
0.2U	1U	0.4U	0.2U	0.2U	0.2U
0.4U	1U	0.8U	0.4U	0.4U	0.4U



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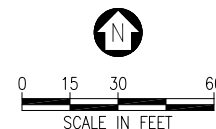


Figure B-15
DRO, GRO, and BTEX Concentrations in Groundwater
Yakutat Hanger, UST T-2039-A

LEGEND

- 25 Elevation Contour (ft Above MLLW)
- Monitoring Well
- Abandoned Well
- Recovery Well
- Geoprobe Well
- Soil Boring
- Hand Auger
- Soil Sample
- Geoprobe Boring
- Heating Fuel Pipelines

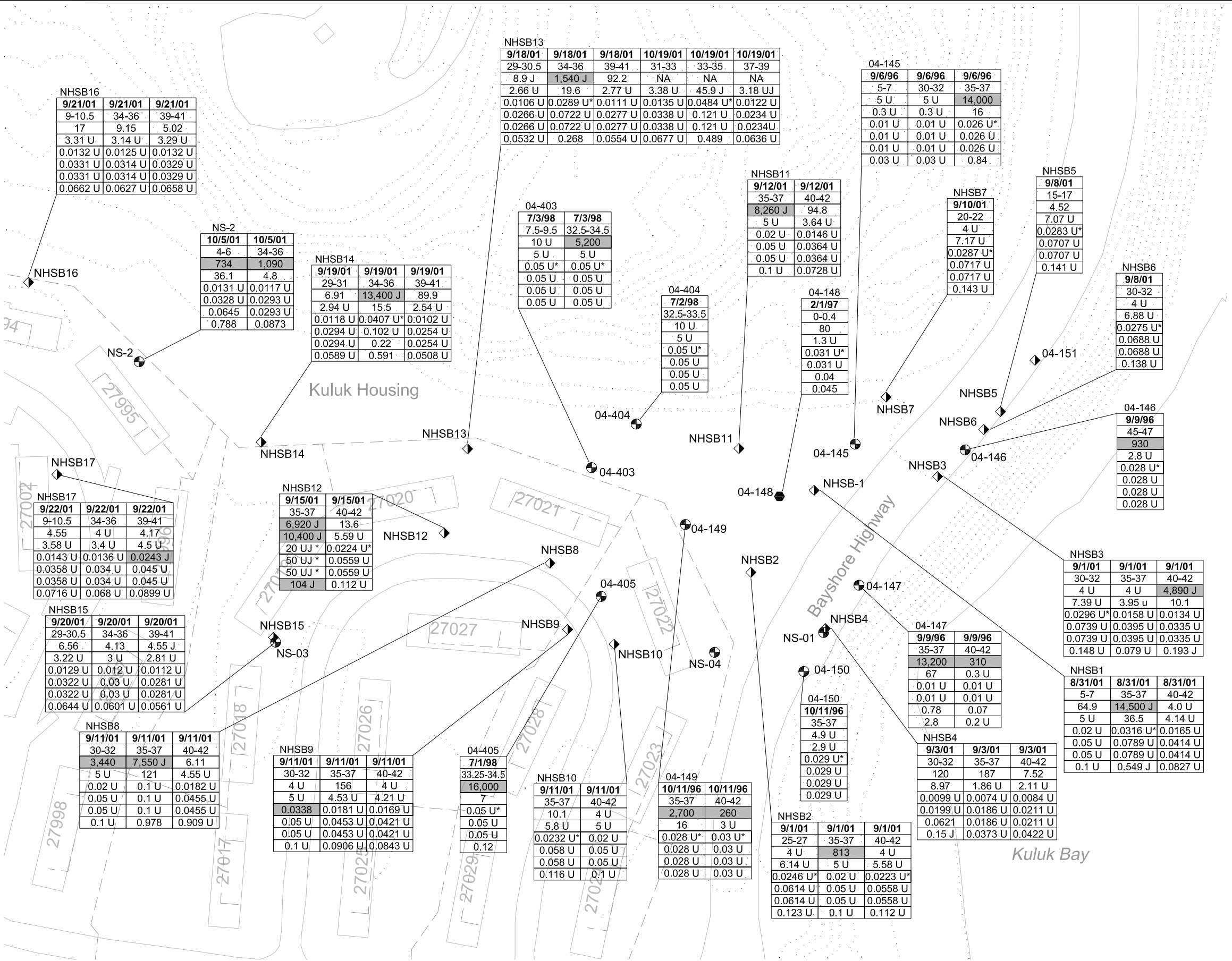
Chemical Concentrations in Soil (mg/kg)

12-252	10/10/96	Sample Date
15-17	12	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
- * Detection Limit Exceeds Most Stringent Screening 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
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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 are specified for petroleum release sites at Adak in the Record of Decision for Operable Unit A and are used to determine the potential area of concern for petroleum related chemicals in soil. Actual site-specific soil cleanup levels are established following Alaska DEC Method 4 criteria.



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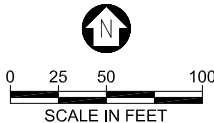


Figure B-16
DRO, GRO, and BTEX Concentrations in Soil
NORPAC Hill Seep Area

LEGEND

- 25

Elevation Contour
(ft Above MLLW)
- Monitoring Well
- Recovery Well
- Geoprobe 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). No concentrations in groundwater exceed these criteria.

