

LAND TREATMENT AREA (LTA) REMEDIATION WINDY AND BOSTON CAMPS, NUNAVUT



**In Compliance with Nunavut Water Board Water Use Permits &
Kitikmeot Inuit Association Land Use Permits**

**Boston Project – NWB - 2BB-BOS0106 & KIA KTL303C056
Regional – NWB - 2BE-HOP0207 & KIA KTL306C003**

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Hope Bay Belt**

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EXECUTIVE SUMMARY

Overview

In August 2006, MHL environmental personnel collected a total of thirty-four soil samples and seven water samples from the Windy Lake Camp Landfarm Treatment Area (LTA), from the Boston Camp LTA, and samples of lake water collected at previously known spill sites and associated drainage systems. All samples were tested for CCME petroleum hydrocarbons (PHC) F1 to F4 fractions, BTEX (benzene, toluene, ethylbenzene and xylene), and ICP total metals. The analyses for the various parameters were conducted at ALS Environmental Laboratory in Edmonton, Alberta. ALS is accredited by the Standard Council of Canada / Canadian Association for Environmental Analytical Laboratories (SCC/CAEAL), American Industrial Hygiene Association (AIHA), and Health Canada. ALS is also certified by the National Environmental Laboratory Accreditation Program (NELAP). Sampling of soil and water samples were conducted using sampling protocols and specially prepared bottles supplied by ALS Environmental Laboratory, Edmonton. This report presents only the petroleum hydrocarbon analyses results. The analytical raw data, QAQC and MHL Chain of Custody are attached as Appendix A to this report.

Analytical Results and Applicable Guidelines

The soil analytical results for BTEX and PHC were compared to the Canadian Council of Ministers of Environment (CCME), Canada-Wide Standards (CWS) for Petroleum Hydrocarbons in Soil for coarse grained-soil. Since both camps have residences (the exploration camp) built in close proximity to the LTA, Residential/Parkland criteria were applied for both BTEX and PHC. Water quality analytical results for BTEX were compared to CCME Canadian Environmental Quality Guidelines for the protection of Aquatic Life, 2006.

Water Samples

All water samples recorded BTEX (benzene, toluene, methylbenzene and xylene) residual concentrations below detection limits and applicable guidelines. The PHC F1-BTEX results for all water quality sites are below the laboratory detection limit (DL) of 0.1 mg/L however this DL is above the CCME Guideline value of 0.017 mg/L.

The data suggests that there is no evidence of seepage of residual petroleum hydrocarbons into Windy Lake from previously known impacted areas outside of the LTA. Water from within the LTA also meets applicable CCME BTEX guidelines.

Soil Samples

The 2006 soil sampling program indicates that none of the soil currently within the landfarm treatment areas is remediated to a standard ready for removal. All soil must continue to be held pending further remediation. It is recommended that a more active program of mechanical aeration be implemented and that soils be segregated by time of placement within the LTA. It is further recommended that the LTA's not be used for other storage purposes as this interfering with effective remediation.

The soil samples collected in 2006 from the Windy and Boston Land Treatment Areas showed evidence that remediation is occurring in the contaminated soils that are well exposed to the atmosphere but not in areas covered by large objects stored within the LTA, notably drums of

contaminated soil and fuel. Soil samples collected from all sites in 2006 and analyzed for PHC F4 fractions were within CCME PHC guidelines.

All Boston LTA soil samples (9 samples) results were above CCME PHC F2 and F3 guidelines, while 44% of the samples were within CCME PHC F1 guidelines. On the other hand, all samples from the LTA analyzed for BTEX showed 100% for benzene, 56% for toluene and 88% for xylene within the CCME guidelines. All samples analyzed for methylbenzene were above the guidelines. The exceedance of the guideline was primarily due to the fact that the contracting laboratory used 0.050 mg/Kg as its analytical detection limit. The CCME guideline for methylbenzene is 0.031 mg/Kg.

All samples collected from Windy Lake LTA were within CCME guidelines for PHC F1 and F4 fractions. All LTA samples were within CCME BTEX guidelines for benzene, toluene, methylbenzene and xylene. As for PHC F2 and F3 fractions concentrations, 50% and 41% of the soil samples collected for the LTA were within the applicable CCME guidelines respectively.

Moving forward

Management of the LTA at both camps should be given some priority in the near future. Boston LTA requires a bit more work in terms of aeration and emptying of the contaminated soil currently stored in drums. This work can only be possible if appropriate equipment is left at Boston after the winter program. At Windy, the LTA has to be kept free from drums of contaminated fuel and parked mobile vehicles. Continuous fuel leaks from these vehicles and contaminated fuel drums will contaminate already naturally treated soil.

To move forward with the management of the LTA along the Hope Bay Belt, the following options are presented:

- Soil within the respective LTA's at both camps should be cleared of all large objects and the soil segregated based on the date the material was placed within the LTA. The contaminated soil should be aerated by mechanical tilling of the soil on a minimum of once per month to promote remediation;
- At Windy, snow melt water contained in the LTA should continue to be treated using the water filtration system to remove any residual hydrocarbons prior to discharge via the grey water transfer box pump;
- Continue with water sampling along the Windy Lake shoreline, Windy Lake and Spyder Lake;
- At Boston LTA, all remaining contaminated soil currently stored in 45gallon drums should be emptied into the landfarm are;
- Annual soil sampling in the LTA should continue in 2007; and
- Continue with soil sampling from previously known spill sites and defined drainage systems.

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1.0 INTRODUCTION

1.1 General

Miramar Hope Bay Limited carries out its exploration activities on Inuit Owned Lands in Nunavut. The exploration activities are carried out in two phases: winter program starts from the second week March to the first week of June; and the summer program runs from mid June to about the end of September each year.

Petroleum products are a key component of this program. Approximately a million litres of P50 diesel fuel are transported to site by a barge during the open water season and allowed to freeze-in during the summer winter months. Fuel transportation from Hay River to Roberts Bay is carried out by a contractor (NTCL). Another contractor, Kitnuna Construction Limited from Cambridge are contracted to move fuel during winter months from Roberts Bay to bulk fuel storage facilities at Patch Lake, Boston Camp and Windy Lake Camp.

Over the years, a number of significant spills have occurred on the Hope Belt, one being that of 19,000 litres P50 diesel fuel in June, 2004. As a result of this spill, a land treatment area was constructed at the Windy Lake camp. The LTA was designed to store 600 m³ of contaminated. The LTA currently holds 100 m³ of contaminated soil. At Boston Camp, the LTA was built as a result of a spill that occurred during the 2002/2003 exploration seasons.

Soil samples have been sampled by various organizations over the years at both camps. FSC Architects and Engineers of Yellowknife collected soil and water samples on behalf of Kitikmeot Inuit Association in 2005. EBA Engineers of Yellowknife collected samples on behalf of MHBL in 2005 and 2004. MHBL collected soil and water samples at both LTA's in August 2006. The results of MHBL's 2006 sampling are presented in this report.

1.2 Scope of Reporting

This report provides a summary of the soil and water samples collected by MHBL within the Land Treatment Area (LTA) and along the lakeshores. At Windy Camp, soil samples were collected from within the LTA. Water samples were collected along the shoreline west of the LTA. Boston samples were collected from within the LTA and at the 2002 impacted site.

Additional soil samples were collected at Windy Camp from previously known spill sites and drainage systems. The objective is to determine if residual petroleum hydrocarbon concentrations in soil samples from these sites require further in-situ remediation.

Soil quality analytical test results for benzene, toluene, ethylbenzene and xylenes (BTEX) concentrations were compared to Canadian Council of Ministers of the Environment Guidelines for residential/parkland usage (CCME 2006). Concentrations of petroleum hydrocarbon (PHC) fractions F1 to F4 in soil were compared to (CCME Canada-Wide Standards for Petroleum Hydrocarbons in Soil (CWS) for coarse-grained soil in residential/parkland areas (CCME 2006).

Water quality analytical test results for BTEX concentrations were compared to CCME Canadian Environmental Quality Guidelines for the Protection of Freshwater Aquatic Life, (CCME 2006). The QAQC data and the Chain of Custody are attached in Appendix A of this report.

2.0 METHODS

2.1 Soil Samples

2.1.1 Boston LTA Samples

Nine soil samples were collected from the Boston LTA. In brief, the LTA was divided into five quadrants. The quadrants were later divided into ten equal quadrants. Each quadrant was allocated a sample number starting from “Soil A” through to “Soil J”. Quadrant “Soil J” was not sampled as the quadrant was covered by drums that were filled with contaminated soil awaiting placement in the LTA. The samples were collected using the protocols provided by the external analytical laboratory.

2.1.2 Boston 2002 Impacted Site Soil Samples

Four soil samples were collected from the Boston 2002 Impacted Site. In brief, the contaminated site was divided into four equal quadrants. Each quadrant was allocated a sample number starting from “Site 2-1” through to “Site 2-4”.

2.1.3 Windy LTA Samples

Twelve soil samples were collected from the Windy LTA. In brief, the LTA was divided into six quadrants. The quadrants were later divided into twelve equal quadrants. Each quadrant was allocated a sample number starting from “LTA #A” through to “LTA #L”. The samples were collected using the protocols provided by the external analytical laboratory.

2.1.4 Previous Spill Sites and Drainage Systems

Nine soil samples were collected from the previous spill sites and drainage systems at Windy Camp. The samples were collected using an arguer to collect samples from approximately 5 centimetres from the surface and approximately 20 centimetres from the surface. The samples were collected using the protocols provided by the external analytical laboratory. Figure 1 show the locations of the soils sampled at Windy Camp. This photograph was taken looking from west to east towards the main complex and northern portion of the camp.

2.2 Water Samples

2.2.1 Windy LTA and Windy Lake

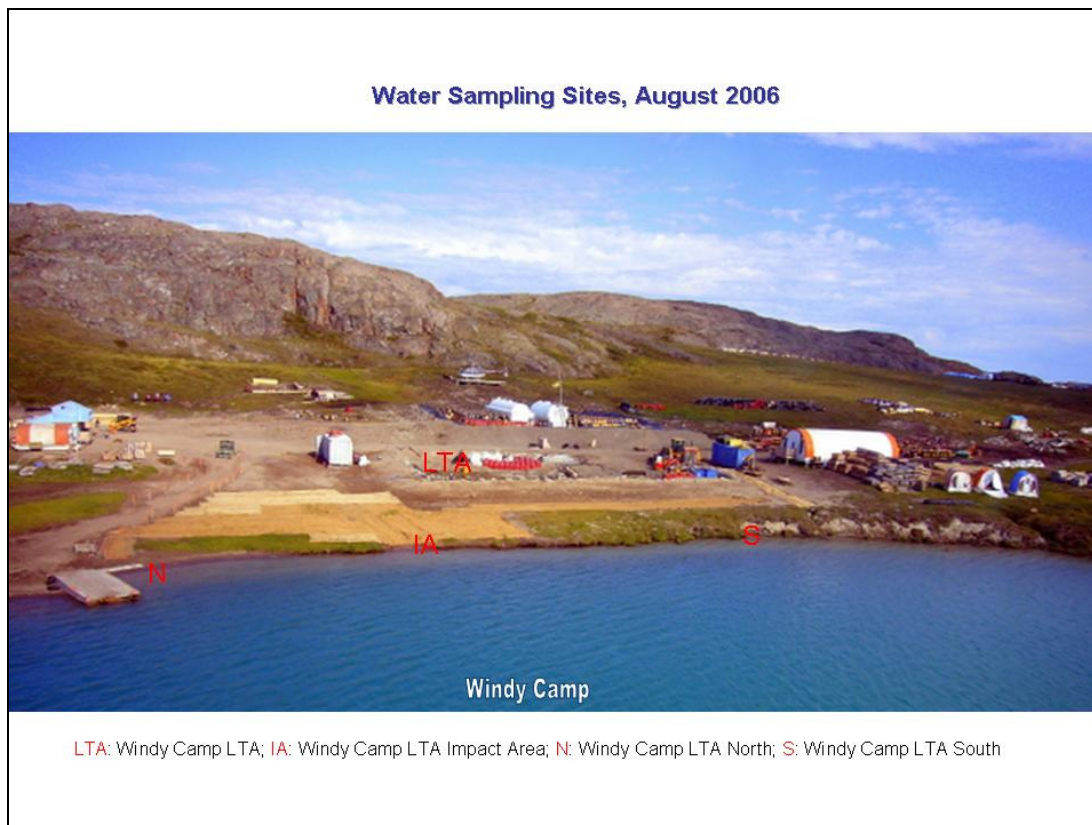
Seven sets of water samples were collected at the same time as the contaminated soil was sampled. Four set of water samples were collected from within the LTA and along the lake shoreline as shown in Figure 2. Three set of samples were collected in Windy Lake to give an indication of the general water quality away from the previously known impacted sites. Water samples were collected using protocols and sampling bottles specially prepared by the external analytical laboratory. Figure 2 show the locations of the water samples collected at the time of sediment sampling at Windy Camp. This

photograph was taken looking from west to east towards the southern portion of the camp. The LTA is in the centre of the photograph.

Figure 1: Photograph of Windy Camp Soil Sampling Sites



Figure 2: Photograph of Windy Camp LTA and lakeshore water sampling sites



2.3 Sample Storage, Transportation and Analyses

2.3.1 Analytical Laboratory

All the analyses performed on the sample media (water and soil) were undertaken at the Analytical Laboratory Services (ALS) lab in Edmonton. The laboratory supplied specially prepared sample bottles for both media.

The soil samples were collected approximately five centimetres from the surface and stored in laboratory-provided 40 mls Teflon-lined glass jars, placed in coolers and maintained at 4°C until shipment to Analytical Laboratory Services (ALS) in Edmonton, Alberta, for hydrocarbon analysis to determine if hydrocarbon migration had occurred into the frozen ground. The requested analytical suite included benzene, toluene, ethylbenzene, xylenes (BTEX) and petroleum hydrocarbon fractions F1 to F4 (PHC F1 to F4). Shipment was completed via Air North using accepted Chain of Custody protocols. The QA/QC analytical reports and MHL Chain of Custody forms are attached in Appendix A.

3.0 RESULTS

3.1 Water Samples

Table 1 summarizes the water analytical results for Windy Lake Camp. Water samples collected from Windy Lake intake (Windy Lake South); outlet (Windy Lake North); and open water body (Windy Lake Central) all showed BTEX concentrations below analytical detection limits and guidelines for benzene, toluene, ethylbenzene and xylene. The F1-BTEX results for all water quality sites are below the laboratory detection level of 0.1 mg/L but unfortunately this DL is above the applicable guideline of 0.017 mg/L. Complete laboratory analytical reports and results are presented in Appendix A.

Table 1: Windy LTA, Impacted Lakeshore Front and Windy Lake Water Samples Analyses (all results quoted as mg/L)

Matrix - Water	Benzene	Tulene	Ethylbenzene	Xylene	F1-BTEX
CCME (Freshwater Aquatic Use) mg/L	0.370	0.002	0.090	0.180	0.017
Windy Camp LTA	<0.0005	<0.0005	<0.0005	<0.0005	<0.1
Windy Camp LTA - South	<0.0005	<0.0005	<0.0005	<0.0005	<0.1
Windy Camp LTA - North	<0.0005	<0.0005	<0.0005	<0.0005	<0.1
Windy Camp LTA – Impact Area	<0.0005	<0.0005	<0.0005	<0.0005	<0.1
Windy Lake North	<0.0005	<0.0005	<0.0005	<0.0005	<0.1
Windy Lake Central	<0.0005	<0.0005	<0.0005	<0.0005	<0.1
Windy Lake South	<0.0005	<0.0005	<0.0005	<0.0005	<0.1

3.2 Land Treatment Area Soil Samples

3.2.1 Boston LTA soil CCME Petroleum Hydrocarbon (PHC) Fractions

Table 2 summarizes the soil analytical results. Laboratory analytical results for soil samples from Soil A to Soil I recorded PHC F1 to F4 concentrations. All F2 and F3 fraction concentrations were above applicable guidelines. F1 residual PHC concentrations were above the CCME guidelines for samples Soil B, C, D, E and F. All F4 residual concentrations for all sites were below CCME guidelines.

The results showed higher residual hydrocarbons in some quadrants within the LTA where contaminated-soil fill drums are currently stored. Complete laboratory analytical reports and results are presented in Appendix A.

Table 2: Summary of Boston LTA Soil samples CCME Petroleum Hydrocarbons (PHC) Fractions, August 2006 (all results reported as mg/Kg)

Land Treatment Area	Soil Texture	F1 (C ₆ -C ₁₀)	F2 (C ₁₀ -C ₁₆)	F3 (C ₁₆ -C ₃₄)	F4 (C ₃₄ -C ₅₀)
Residential/Parkland (mg/Kg)	Coarse Grained-Soil	30	130	300	2,800
	Fine Grained-Soil	210 (170)	150	1,300	5,600
Soil A	Coarse Grained- Soil	58	6400	1900	10
Soil B	Coarse Grained-Soil	824	18000	4900	26
Soil C	Coarse Grained-Soil	343	12000	4500	94
Soil D	Coarse Grained-Soil	378	4100	910	15
Soil E	Coarse Grained-Soil	280	4600	2500	190
Soil F	Coarse Grained-Soil	277	6400	2300	52
Soil G	Coarse Grained-Soil	120	5600	2400	61
Soil H	Coarse Grained-Soil	19	7600	4500	720
Soil I	Coarse Grained-Soil	67	4400	1900	73

3.2.2 Boston LTA Soil CCME BTEX, August 2006

Table 3 summarizes the soil analytical results. Laboratory analytical results for soil samples recorded residual petroleum hydrocarbons concentrations for benzene below detection limits and applicable guidelines. Ethylbenzene concentrations for all sites were above CCME guidelines. Note that the lab analytical detection limit for ethylbenzene is <0.050 mg/Kg which unfortunately was above the CCME guideline. Soil samples Soil F, G, H, and I toluene concentrations were above the applicable guideline. Soil sample Soil F was above CCME xylene guideline. Complete laboratory analytical reports and results are presented in Appendix A.

Table 3: Summary of Boston LTA Soil Samples CCME BTEX, August 2006 (all results reported as mg/Kg)

Land Treatment Area	Soil Texture	Benzene	Tulene	Ethylbenzene	Xylene
Residential/Parkland (mg/Kg)	Coarse Grained-Soil	0.012	0.14	0.031	4.2
Soil A	Coarse Grained-Soil	<0.040	<0.060	<0.050	0.14
Soil B	Coarse Grained-Soil	<0.040	<0.050	<0.050	0.22
Soil C	Coarse Grained-Soil	<0.040	<0.090	<0.050	0.30
Soil D	Coarse Grained-Soil	<0.040	<0.050	<0.050	<0.12
Soil E	Coarse Grained-Soil	<0.040	<0.050	<0.050	<0.12
Soil F	Coarse Grained-Soil	<0.040	0.164	0.118	5.71
Soil G	Coarse Grained-Soil	<0.040	0.167	<0.050	0.29
Soil H	Coarse Grained-Soil	<0.040	0.126	<0.050	0.15
Soil I	Coarse Grained-Soil	<0.040	0.561	0.150	1.96

3.2.3 Boston 2002 Impacted Area Soil Sample PHC Fractions, August 2006

Table 4 summarizes the soil analytical results. Soil sample for site “2002 Spill Site 2-4” recorded PHC F3 hydrocarbon concentrations higher than applicable guideline. All other sites recorded hydrocarbon concentrations lower than applicable guidelines. Complete laboratory analytical reports and results are presented in Appendix A.

Table 4: Boston Camp 2002 Spill Summary of CCME Petroleum Hydrocarbons Fractions (all results reported as mg/Kg)

2002 Impacted Site	Soil Texture	Fraction 1	Fraction 2	Fraction 3	Fraction 4
Residential/Parkland (mg/Kg)	Coarse Grained-Soil	30	130	300	2,800
	Fine Grained- Soil	210 (170)	150	1,300	5,600
2002 Spill Site 2-1	Coarse Grained-Soil	<10	95	130	32
2002 Spill Site 2-2	Coarse Grained-Soil	<10	23	86	29
2002 Spill Site 2-3	Coarse Grained-Soil	<10	29	160	48
2002 Spill Site 2- 4	Coarse Grained-Soil	<10	15	670	180

3.2.4 Windy Camp LTA Soil CCME PHC Fractions

Table 5 summarizes the soil analytical results. Soil samples LTA #'s A, D, F, G, I & J recorded PHC F2 concentrations higher than applicable guidelines. Soil samples LTA #'s A, C, D, F, G, & I recorded PHC F3 concentrations higher than applicable guidelines. Soil samples for all sites (LTA #A to LTA #L) recorded PHC F1 and F4 concentrations lower than applicable guidelines. Complete laboratory analytical reports and results are provided as Appendix A.

Table 5: Windy Camp Petroleum Hydrocarbon Fractions in the LTA, August 2006 (all results are reported as mg/Kg)

Land Treatment Area	Soil Texture	Fraction ¹ 1	Fraction 2	Fraction 3	Fraction 4
Residential/Parkland (mg/Kg) ²	Coarse Grained-Soil	30	130	300	2,800
	Fine grained-soil	210 (170)	150	1,300	5,600
LTA #A	Coarse grained-soil	<5	180	560	160
LTA #B	Coarse grained-soil	<5	44	230	100
LTA #C	Coarse grained-soil	<5	130	760	290
LTA #D	Coarse grained-soil	<5	320	490	130
LTA #E	Coarse grained-soil	<5	60	420	160
LTA #F	Coarse grained-soil	<5	380	310	84
LTA #G	Coarse grained-soil	<5	210	640	250
LTA #H	Coarse grained-soil	<5	46	100	26
LTA #I	Coarse grained-soil	<5	950	860	63
LTA #J	Coarse grained-soil	<5	310	170	31
LTA #K	Coarse grained-soil	<5	31	150	48
LTA #L	Coarse grained-soil	<5	10	69	32

¹ Fractions refers to the equivalent normal straight-chain hydrocarbons (nC) boiling point ranges (Fraction #1: nC6 to nC10; Fraction #2 :> nC10 to nC16; Fraction #3 :> nC16 to nC34; and, Fraction #4 :> nC34).

² CCME, 2006. Canada-Wide Standards for Petroleum Hydrocarbons (PHCs) in Soil. 2006 Revision.

Table 6 summarizes the CCME BTEX soil analytical results. Laboratory analytical results for all soil samples recorded BTEX (benzene, toluene, ethylbenzene and xylene) concentrations below applicable guidelines. Complete laboratory analytical reports and results are provided as Appendix A.

Table 6: Windy LTA Summary of CCME BTEX, August 2006 (all results reported as mg/Kg)

Land Treatment Area	Soil Texture	Benzene	Toluene	Ethylbenzene	Xylene
Residential/Parkland (mg/Kg)	Coarse Grained-Soil	0.012	0.14	0.031	4.2
LTA #A	Coarse Grained-Soil	<0.005	<0.01	<0.01	<0.01
LTA #B	Coarse Grained-Soil	<0.005	<0.01	<0.01	<0.01
LTA #C	Coarse Grained-Soil	<0.005	<0.01	<0.01	<0.01
LTA #D	Coarse Grained-Soil	<0.005	<0.01	<0.01	<0.01
LTA #E	Coarse Grained-Soil	<0.005	<0.01	<0.01	<0.01
LTA #F	Coarse Grained-Soil	<0.005	0.02	<0.01	<0.01
LTA #G	Coarse Grained-Soil	<0.005	<0.01	<0.01	<0.01
LTA #H	Coarse Grained-Soil	<0.005	<0.01	<0.01	<0.01
LTA #I	Coarse Grained-Soil	<0.005	<0.01	<0.01	<0.01
LTA #J	Coarse Grained-Soil	<0.005	<0.01	<0.01	<0.01
LTA #K	Coarse Grained-Soil	<0.005	<0.01	<0.01	<0.01
LTA #L	Coarse Grained-Soil	<0.005	<0.01	<0.01	<0.01

3.2.5 Windy Camp CCME PHC Fractions for other sites, August 2006

Table 7 summarizes the CCME petroleum hydrocarbon soil analytical results. Laboratory analytical results for soil sample “Site 2005-1A” and “Site 2005-1B” recorded PHC F1, F2 and F3 concentrations higher than the applicable guidelines. Soil samples “Site 2003-1A” recorded PHC F2 to F3 concentrations above applicable guidelines. Soil samples Walmart#1, Site 2003-1B, and Site 2003-2A recorded PHC F3 concentrations higher than the applicable guidelines. All soil samples recorded PHC F4 concentrations below applicable guidelines. Complete laboratory analytical reports and results are provided as Appendix A.

Table 7: Windy Camp Summary of CCME Petroleum Hydrocarbon Fractions for other Spill Sites and Drainage Systems, August 2006 (all results reported as mg/Kg)

Contaminated Site	Site Description	Sample Depth (cm)	Soil Texture	F1	F2	F3	F4
Residential/ Parkland (mg/Kg)			CGS	30	130	300	2,800
			FGS	210 (170)	150	1,300	5,600
Walmart #1	Drainage	5	CGS	<5	32	1,500	190
Site 2003-1A	Drainage Drum	5	CGS	<5	430	2,000	300
Site 2003-1B	Drainage Drum	20	CGS	<5	32	440	68
Site 2003-2A	Drainage Drum	5	CGS	<5	19	500	120
Site 2003-2B	Drainage Drum	20	CGS	<5	16	140	16
Site 2005-1A	Spill Site	5	CGS	860	10,000	2,500	72
Site 2005-1B	Spill Site	20	CGS	690	3,600	1,000	28
Site 147-A	Drainage	5	CGS	<5	20	69	31
Site 147-B	Drainage	20	CGS	<5	<5	9	<5

Table 8 summarizes the soil analytical results for BTEX sampled from other spill sites and drainage systems. Laboratory analytical results for soil sample Site 2005-1A and Site 2005-1B recorded xylene concentration higher than the applicable guideline (4.2 mg/kg). All other soil samples recorded BTEX concentrations below applicable guidelines. Complete laboratory analytical reports and results are provided as Appendix A.

Table 8: Windy Camp Summary of CCME BTEX for other Spill Sites and Drainage Systems, August 2006 (all results reported as mg/Kg)

Contaminated Site	Site Description	Sample Depth (cm)	Soil Texture	Benzene	Tulene	Ethylbenzene	Xylene
Residential/ Parkland (mg/Kg)			CGS	0.012	0.14	0.031	4.2
Walmart #1	Drainage	5	CGS	<0.005	<0.01	<0.01	<0.01
Site 2003-1A	Drainage Drum	5	CGS	<0.005	<0.01	<0.01	<0.01
Site 2003-1B	Drainage Drum	20	CGS	<0.005	<0.01	<0.01	<0.01
Site 2003-2A	Drainage Drum	5	CGS	<0.005	<0.01	<0.01	<0.01
Site 2003-2B	Drainage Drum	20	CGS	<0.005	<0.01	<0.01	<0.01
Site 2005-1A	Spill Site	5	CGS	<0.005	0.02	<0.01	8.6
Site 2005-1B	Spill Site	20	CGS	<0.005	0.01	<0.01	8.7
Site 147-A	Drainage	5	CGS	<0.005	<0.01	<0.01	<0.01
Site 147-B	Drainage	20	CGS	<0.005	<0.01	<0.01	<0.01

4.0 DISCUSSION & RECOMMENDATIONS

To date none of the soils within these two landfarm treatment areas has been successfully remediated to an acceptable standard for removal. The soils must remain within the facility while further remediation takes place. MHBL's ability to remediate the contaminated soil currently stored at both LTA areas (Boston and Windy) depends on the following:

4.1 On-Going Remediation and Monitoring

A remediation action plan should be developed to address the following issues:

4.1.1 Mechanical Aeration of Soil within Land farm

At Boston, soil in the LTA has to be aerated. During 2006 while digging and aerating the southern portion of the LTA, it was noticed that a lot of absorbent pads soaked with petroleum products were found beneath the soil. Attempts were made to remove the pads. The absorbent pads could have been dumped together with the contaminated soil into the LTA after the construction of the LTA.

Soil within both LTA should be cleared of all large objects, segregated based on the date the material was placed in the LTA, and periodically aerated (suggest a minimum of once per month) to promote remediation. This activity can only be achieved during the summer months with the use of a backhoe or with a mechanical roto-tiller.

4.1.2 Continued Treatment of Contained Water

At Windy, all water captured within the LTA must be treated through the supplied hydrocarbon separator unit prior to discharge. The treated water should be pumped into

the grey-water transfer box and released together with the grey-water over the ridge and onto the tundra. Treating of water from within the LTA at Boston is not a concern.

4.1.3 Use of the LTA as a Temporary Storage Area

The LTA's at both camps are currently being used as a temporary storage for waste oil and contaminated P50 diesel fuel, salt bags and empty fuel drums. At Windy, heavy vehicles are temporarily parked in the LTA on various occasions. During the 2005 exploration season, a few drums of contaminated waste oil were emptied into the LTA. This incident was cleaned-up by pumping all of the contaminated water within the LTA into several empty 45-gallon drums. Such incidences and continued storage of drums containing petroleum products within the LTA will prolong the natural processes of remediation. At Boston, the contaminated soil currently stored in drums should be emptied into the LTA after the stored soils have been aerated.

4.1.4 LTA Annual Soil Sampling and Monitoring

The current annual soil sampling protocol should be continued until the contaminated soil analytical results meets the CCME soil remediation guidelines.

4.2 Other Sampling Sites

4.2.1 Boston Camp 2002 Spill Site

Sampling location "2002 Spill Site 2- 4" has residual fuel concentrations above the CCME residential/park guidelines for Fractions 3 (F3). This location will be re-sampled in 2007. No further soil sampling and testing is plan for 2002 Spill Sites 2-1, 2-2 and 2-3 in 2007.

4.2.2 Walmart #1 Drainage System

This location is directly west of from the Erection Tent. During snow melt, runoff from east of the Erection Tent drains into the low depression area south of the tent; crossing the access road and under the Walmart towards the grassy areas along the incinerator. The residual fuel concentration for the soil sample was above the F3 CCME residential/park guidelines. This area will be re-sampled in 2007.

4.2.3 Windy Erection Tent 2003 Drainage Drums

There are two drums installed in a trench inside the Erection Tent. Soil samples were taken within these drums. Drum "Site 2003 2A & 2B" is approximately 2 meters north of Drum "Site 2003 1A & 1B". Site 2003 1A and Site 2003 1B is the site where most of the mobile equipment oil filters and engine oil change takes place during exploration season. It is strongly recommended that proper oil catchments trays should be used during scheduled maintenance of these vehicles.

4.2.4 Windy 2005 Spill Site – East of Erection Tent

This location is the site of a 2003 fuel spill and a 2005 P50 diesel fuel spill. During 2006, the new camp generator was placed at this site. This area normally collects runoff from the tundra and slowly drains eastward of the Erection Tent before flowing towards Walmart and into the grassy patch between the camp and Windy Lake. Residual petroleum products in soil samples collected at this site were above CCME guidelines

except for Fraction 4. Soil sample “Site 2005-1B” indicates that residual petroleum hydrocarbon at this site can still be an issue at camp closure. This location will again be sampled in 2007. Few more samples will be collected randomly and at depth greater than 20 cm but less than a meter.

4.2.5 Site 147 Drainage System

This sample site is located between the weather haven tent # 14 and tent #7 where runoff from the track that runs from the back of the geology building towards the sleeping quarters north of the main camp complex. The runoff puddles between tents 14 and 7 before draining into Windy Lake. Although all analytical data for this site is below respective CCME guidelines, this site will be sampled annually to provide data for the northern land portion of the camp.

5.0 REFERENCES

- Canadian Council of Ministers of Environment (CCME), 2006. Canada-Wide Standards (CWS) for Petroleum Hydrocarbons in Soil for coarse grained-soil.
- Canadian Council of Ministers of Environment (CCME), 2006. Canadian Environmental Quality Guidelines for the protection of Aquatic Life.

6.0 APPENDICES

6.1.1 Appendix A: Boston Camp and Windy Camp Soil & Water Analytical Results Laboratory Quality Control Report and MHL Chain of Custody



Environmental Division

ANALYTICAL REPORT

MIRAMAR HOPE BAY LTD

ATTN: MATT KAWEI

300, 889 HARBOURSIDE DRIVE

NORTH VANCOUVER BC V7P 3S1

Reported On: 20-AUG-06 11:23 AM

Lab Work Order #: **L420839**

Date Received: **11-AUG-06**

Project P.O. #:

Job Reference:

Legal Site Desc:

CofC Numbers: 74422, 74423, 74426

Other Information:

Comments:



ROY JONES
General Manager

For any questions about this report please contact your Account Manager:

JENNIFER DARRAH

THIS REPORT SHALL NOT BE REPRODUCED EXCEPT IN FULL WITHOUT THE WRITTEN AUTHORITY OF THE LABORATORY.
ALL SAMPLES WILL BE DISPOSED OF AFTER 30 DAYS FOLLOWING ANALYSIS. PLEASE CONTACT THE LAB IF YOU
REQUIRE ADDITIONAL SAMPLE STORAGE TIME.



ALS LABORATORY GROUP ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	By	Batch
L420839-1 WINDY CAMP LTA								
Sampled By: APRIL on 04-AUG-06 @ 17:30								
Matrix: WATER								
Total Metals								
Total Major Metals								
Calcium (Ca)	112		0.5	mg/L		14-AUG-06	SYF	R430268
Potassium (K)	21.2		0.1	mg/L		14-AUG-06	SYF	R430268
Magnesium (Mg)	78.1		0.1	mg/L		14-AUG-06	SYF	R430268
Sodium (Na)	287		1	mg/L		14-AUG-06	SYF	R430268
Iron (Fe)	2.23		0.005	mg/L		14-AUG-06	SYF	R430268
Manganese (Mn)	0.289		0.001	mg/L		14-AUG-06	SYF	R430268
Total Trace Metals (Low Level)								
Silver (Ag)	<0.0004		0.0004	mg/L		15-AUG-06	QLI	R430691
Aluminum (Al)	1.34		0.02	mg/L		15-AUG-06	QLI	R430691
Arsenic (As)	0.0516		0.0004	mg/L		15-AUG-06	QLI	R430691
Boron (B)	0.68		0.02	mg/L		15-AUG-06	QLI	R430691
Barium (Ba)	0.0445		0.0002	mg/L		15-AUG-06	QLI	R430691
Beryllium (Be)	<0.001		0.001	mg/L		15-AUG-06	QLI	R430691
Bismuth (Bi)	<0.0001		0.0001	mg/L		15-AUG-06	QLI	R430691
Cadmium (Cd)	<0.0002		0.0002	mg/L		15-AUG-06	QLI	R430691
Cobalt (Co)	0.0028		0.0002	mg/L		15-AUG-06	QLI	R430691
Chromium (Cr)	0.0104		0.0008	mg/L		15-AUG-06	QLI	R430691
Copper (Cu)	0.046		0.001	mg/L		15-AUG-06	QLI	R430691
Molybdenum (Mo)	0.0098		0.0001	mg/L		15-AUG-06	QLI	R430691
Nickel (Ni)	0.0162		0.0002	mg/L		15-AUG-06	QLI	R430691
Lead (Pb)	0.0013		0.0001	mg/L		15-AUG-06	QLI	R430691
Antimony (Sb)	0.0036		0.0004	mg/L		15-AUG-06	QLI	R430691
Selenium (Se)	0.0089		0.0004	mg/L		15-AUG-06	QLI	R430691
Tin (Sn)	0.0024		0.0004	mg/L		15-AUG-06	QLI	R430691
Strontium (Sr)	0.403		0.0002	mg/L		15-AUG-06	QLI	R430691
Titanium (Ti)	0.082		0.005	mg/L		15-AUG-06	QLI	R430691
Thallium (Tl)	<0.0001		0.0001	mg/L		15-AUG-06	QLI	R430691
Uranium (U)	0.0021		0.0001	mg/L		15-AUG-06	QLI	R430691
Vanadium (V)	0.0214		0.0002	mg/L		15-AUG-06	QLI	R430691
Zinc (Zn)	0.013		0.004	mg/L		15-AUG-06	QLI	R430691
BTEX and F1 (C6-C10)								
Benzene	<0.0005		0.0005	mg/L	12-AUG-06	12-AUG-06	SCM	R429821
Toluene	<0.0005		0.0005	mg/L	12-AUG-06	12-AUG-06	SCM	R429821
EthylBenzene	<0.0005		0.0005	mg/L	12-AUG-06	12-AUG-06	SCM	R429821
Xylenes	<0.0005		0.0005	mg/L	12-AUG-06	12-AUG-06	SCM	R429821
F1(C6-C10)	<0.1		0.1	mg/L	12-AUG-06	12-AUG-06	SCM	R429821
F1-BTEX	<0.1		0.1	mg/L	12-AUG-06	12-AUG-06	SCM	R429821
Routine Water: Major Ions, Fluoride								
Chloride (Cl)	652		1	mg/L		14-AUG-06	EOC	R430262
Fluoride (F)	0.17		0.05	mg/L		12-AUG-06	PTT	R429805
ICP metals and SO4 for routine water								
Calcium (Ca)	130		0.5	mg/L		14-AUG-06	JWU	R430125
Potassium (K)	21.9		0.5	mg/L		14-AUG-06	JWU	R430125
Magnesium (Mg)	95.4		0.1	mg/L		14-AUG-06	JWU	R430125
Sodium (Na)	315		1	mg/L		14-AUG-06	JWU	R430125
Sulfate (SO4)	246		0.5	mg/L		14-AUG-06	JWU	R430125
Ion Balance Calculation								
Ion Balance	102			%		15-AUG-06		
TDS (Calculated)	1590			mg/L		15-AUG-06		
Hardness (as CaCO3)	717			mg/L		15-AUG-06		

ALS LABORATORY GROUP ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	By	Batch
L420839-1 WINDY CAMP LTA								
Sampled By: APRIL on 04-AUG-06 @ 17:30								
Matrix: WATER								
Routine Water: Major Ions, Fluoride								
Nitrate+Nitrite-N	<0.1		0.1	mg/L		14-AUG-06	KMY	R430408
Nitrate-N	<0.1		0.1	mg/L		14-AUG-06	KMY	R430408
Nitrite-N	<0.05		0.05	mg/L		14-AUG-06	KMY	R430408
pH, Conductivity and Total Alkalinity								
pH	8.3		0.1	pH		12-AUG-06	PTT	R429805
Conductivity (EC)	2540		0.2	uS/cm		12-AUG-06	PTT	R429805
Bicarbonate (HCO3)	274		5	mg/L		12-AUG-06	PTT	R429805
Carbonate (CO3)	<5		5	mg/L		12-AUG-06	PTT	R429805
Hydroxide (OH)	<5		5	mg/L		12-AUG-06	PTT	R429805
Alkalinity, Total (as CaCO3)	224		5	mg/L		12-AUG-06	PTT	R429805
L420839-2 WINDY CAMP LTA-SOUTH								
Sampled By: APRIL on 04-AUG-06 @ 17:42								
Matrix: WATER								
Total Metals								
Total Major Metals								
Calcium (Ca)	11.6		0.5	mg/L		14-AUG-06	SYF	R430268
Potassium (K)	3.8		0.1	mg/L		14-AUG-06	SYF	R430268
Magnesium (Mg)	9.1		0.1	mg/L		14-AUG-06	SYF	R430268
Sodium (Na)	52		1	mg/L		14-AUG-06	SYF	R430268
Iron (Fe)	0.186		0.005	mg/L		14-AUG-06	SYF	R430268
Manganese (Mn)	0.006		0.001	mg/L		14-AUG-06	SYF	R430268
Total Trace Metals (Low Level)								
Silver (Ag)	<0.0004		0.0004	mg/L		15-AUG-06	QLI	R430691
Aluminum (Al)	0.23		0.02	mg/L		15-AUG-06	QLI	R430691
Arsenic (As)	0.0009		0.0004	mg/L		15-AUG-06	QLI	R430691
Boron (B)	0.09		0.02	mg/L		15-AUG-06	QLI	R430691
Barium (Ba)	0.0044		0.0002	mg/L		15-AUG-06	QLI	R430691
Beryllium (Be)	<0.001		0.001	mg/L		15-AUG-06	QLI	R430691
Bismuth (Bi)	<0.0001		0.0001	mg/L		15-AUG-06	QLI	R430691
Cadmium (Cd)	<0.0002		0.0002	mg/L		15-AUG-06	QLI	R430691
Cobalt (Co)	0.0002		0.0002	mg/L		15-AUG-06	QLI	R430691
Chromium (Cr)	0.0031		0.0008	mg/L		15-AUG-06	QLI	R430691
Copper (Cu)	0.002		0.001	mg/L		15-AUG-06	QLI	R430691
Molybdenum (Mo)	0.0007		0.0001	mg/L		15-AUG-06	QLI	R430691
Nickel (Ni)	0.0004		0.0002	mg/L		15-AUG-06	QLI	R430691
Lead (Pb)	0.0003		0.0001	mg/L		15-AUG-06	QLI	R430691
Antimony (Sb)	0.0007		0.0004	mg/L		15-AUG-06	QLI	R430691
Selenium (Se)	0.0032		0.0004	mg/L		15-AUG-06	QLI	R430691
Tin (Sn)	<0.0004		0.0004	mg/L		15-AUG-06	QLI	R430691
Strontium (Sr)	0.0585		0.0002	mg/L		15-AUG-06	QLI	R430691
Titanium (Ti)	0.013		0.005	mg/L		15-AUG-06	QLI	R430691
Thallium (Tl)	<0.0001		0.0001	mg/L		15-AUG-06	QLI	R430691
Uranium (U)	0.0002		0.0001	mg/L		15-AUG-06	QLI	R430691
Vanadium (V)	0.0038		0.0002	mg/L		15-AUG-06	QLI	R430691
Zinc (Zn)	<0.004		0.004	mg/L		15-AUG-06	QLI	R430691
BTEX and F1 (C6-C10)								
Benzene	<0.0005		0.0005	mg/L	12-AUG-06	12-AUG-06	SCM	R429821
Toluene	<0.0005		0.0005	mg/L	12-AUG-06	12-AUG-06	SCM	R429821
EthylBenzene	<0.0005		0.0005	mg/L	12-AUG-06	12-AUG-06	SCM	R429821
Xylenes	<0.0005		0.0005	mg/L	12-AUG-06	12-AUG-06	SCM	R429821

ALS LABORATORY GROUP ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	By	Batch
L420839-2 WINDY CAMP LTA-SOUTH								
Sampled By: APRIL on 04-AUG-06 @ 17:42								
Matrix: WATER								
BTEX and F1 (C6-C10)								
F1(C6-C10)	<0.1		0.1	mg/L	12-AUG-06	12-AUG-06	SCM	R429821
F1-BTEX	<0.1		0.1	mg/L	12-AUG-06	12-AUG-06	SCM	R429821
Routine Water: Major Ions, Fluoride								
Chloride (Cl)	98		1	mg/L		17-AUG-06	EOC	R431636
Fluoride (F)	0.07		0.05	mg/L		12-AUG-06	PTT	R429805
ICP metals and SO4 for routine water								
Calcium (Ca)	11.9		0.5	mg/L		17-AUG-06	EOC	R431610
Potassium (K)	3.8		0.5	mg/L		17-AUG-06	EOC	R431610
Magnesium (Mg)	9.9		0.1	mg/L		17-AUG-06	EOC	R431610
Sodium (Na)	52		1	mg/L		17-AUG-06	EOC	R431610
Sulfate (SO4)	9.0		0.5	mg/L		17-AUG-06	EOC	R431610
Ion Balance Calculation								
Ion Balance	94.9			%		18-AUG-06		
TDS (Calculated)	215			mg/L		18-AUG-06		
Hardness (as CaCO3)	70			mg/L		18-AUG-06		
Nitrate+Nitrite-N	<0.1		0.1	mg/L		18-AUG-06	KMY	R432093
Nitrate-N	<0.1		0.1	mg/L		18-AUG-06	KMY	R432093
Nitrite-N	<0.05		0.05	mg/L		18-AUG-06	KMY	R432093
pH, Conductivity and Total Alkalinity								
pH	7.9		0.1	pH		12-AUG-06	PTT	R429805
Conductivity (EC)	433		0.2	uS/cm		12-AUG-06	PTT	R429805
Bicarbonate (HCO3)	62		5	mg/L		12-AUG-06	PTT	R429805
Carbonate (CO3)	<5		5	mg/L		12-AUG-06	PTT	R429805
Hydroxide (OH)	<5		5	mg/L		12-AUG-06	PTT	R429805
Alkalinity, Total (as CaCO3)	51		5	mg/L		12-AUG-06	PTT	R429805
L420839-3 WINDY CAMP LTA-NORTH								
Sampled By: APRIL on 04-AUG-06 @ 17:38								
Matrix: WATER								
Total Metals								
Total Major Metals								
Calcium (Ca)	11.1		0.5	mg/L		14-AUG-06	SYF	R430268
Potassium (K)	3.8		0.1	mg/L		14-AUG-06	SYF	R430268
Magnesium (Mg)	8.7		0.1	mg/L		14-AUG-06	SYF	R430268
Sodium (Na)	51		1	mg/L		14-AUG-06	SYF	R430268
Iron (Fe)	0.084		0.005	mg/L		14-AUG-06	SYF	R430268
Manganese (Mn)	0.003		0.001	mg/L		14-AUG-06	SYF	R430268
Total Trace Metals (Low Level)								
Silver (Ag)	<0.0004		0.0004	mg/L		15-AUG-06	QLI	R430691
Aluminum (Al)	0.10		0.02	mg/L		15-AUG-06	QLI	R430691
Arsenic (As)	0.0010		0.0004	mg/L		15-AUG-06	QLI	R430691
Boron (B)	0.10		0.02	mg/L		15-AUG-06	QLI	R430691
Barium (Ba)	0.0031		0.0002	mg/L		15-AUG-06	QLI	R430691
Beryllium (Be)	<0.001		0.001	mg/L		15-AUG-06	QLI	R430691
Bismuth (Bi)	<0.0001		0.0001	mg/L		15-AUG-06	QLI	R430691
Cadmium (Cd)	<0.0002		0.0002	mg/L		15-AUG-06	QLI	R430691
Cobalt (Co)	<0.0002		0.0002	mg/L		15-AUG-06	QLI	R430691
Chromium (Cr)	0.0027		0.0008	mg/L		15-AUG-06	QLI	R430691
Copper (Cu)	0.001		0.001	mg/L		15-AUG-06	QLI	R430691
Molybdenum (Mo)	0.0006		0.0001	mg/L		15-AUG-06	QLI	R430691
Nickel (Ni)	0.0003		0.0002	mg/L		15-AUG-06	QLI	R430691

ALS LABORATORY GROUP ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	By	Batch
L420839-3 WINDY CAMP LTA-NORTH								
Sampled By: APRIL on 04-AUG-06 @ 17:38								
Matrix: WATER								
Total Metals								
Total Trace Metals (Low Level)								
Lead (Pb)	0.0003		0.0001	mg/L		15-AUG-06	QLI	R430691
Antimony (Sb)	0.0008		0.0004	mg/L		15-AUG-06	QLI	R430691
Selenium (Se)	0.0031		0.0004	mg/L		15-AUG-06	QLI	R430691
Tin (Sn)	<0.0004		0.0004	mg/L		15-AUG-06	QLI	R430691
Strontium (Sr)	0.0558		0.0002	mg/L		15-AUG-06	QLI	R430691
Titanium (Ti)	0.006		0.005	mg/L		15-AUG-06	QLI	R430691
Thallium (Tl)	<0.0001		0.0001	mg/L		15-AUG-06	QLI	R430691
Uranium (U)	0.0002		0.0001	mg/L		15-AUG-06	QLI	R430691
Vanadium (V)	0.0030		0.0002	mg/L		15-AUG-06	QLI	R430691
Zinc (Zn)	<0.004		0.004	mg/L		15-AUG-06	QLI	R430691
BTEX and F1 (C6-C10)								
Benzene	<0.0005		0.0005	mg/L	12-AUG-06	12-AUG-06	SCM	R429821
Toluene	<0.0005		0.0005	mg/L	12-AUG-06	12-AUG-06	SCM	R429821
EthylBenzene	<0.0005		0.0005	mg/L	12-AUG-06	12-AUG-06	SCM	R429821
Xylenes	<0.0005		0.0005	mg/L	12-AUG-06	12-AUG-06	SCM	R429821
F1(C6-C10)	<0.1		0.1	mg/L	12-AUG-06	12-AUG-06	SCM	R429821
F1-BTEX	<0.1		0.1	mg/L	12-AUG-06	12-AUG-06	SCM	R429821
Routine Water: Major Ions, Fluoride								
Chloride (Cl)	99		1	mg/L		14-AUG-06	EOC	R430262
Fluoride (F)	0.07		0.05	mg/L		12-AUG-06	PTT	R429805
ICP metals and SO4 for routine water								
Calcium (Ca)	13.5		0.5	mg/L		14-AUG-06	JWU	R430125
Potassium (K)	4.1		0.5	mg/L		14-AUG-06	JWU	R430125
Magnesium (Mg)	10.8		0.1	mg/L		14-AUG-06	JWU	R430125
Sodium (Na)	59		1	mg/L		14-AUG-06	JWU	R430125
Sulfate (SO4)	8.7		0.5	mg/L		14-AUG-06	JWU	R430125
Ion Balance Calculation								
Ion Balance	106			%		15-AUG-06		
TDS (Calculated)	225			mg/L		15-AUG-06		
Hardness (as CaCO3)	78			mg/L		15-AUG-06		
Nitrate+Nitrite-N	<0.1		0.1	mg/L		14-AUG-06	KMY	R430408
Nitrate-N	<0.1		0.1	mg/L		14-AUG-06	KMY	R430408
Nitrite-N	<0.05		0.05	mg/L		14-AUG-06	KMY	R430408
pH, Conductivity and Total Alkalinity								
pH	7.9		0.1	pH		12-AUG-06	PTT	R429805
Conductivity (EC)	428		0.2	uS/cm		12-AUG-06	PTT	R429805
Bicarbonate (HCO3)	61		5	mg/L		12-AUG-06	PTT	R429805
Carbonate (CO3)	<5		5	mg/L		12-AUG-06	PTT	R429805
Hydroxide (OH)	<5		5	mg/L		12-AUG-06	PTT	R429805
Alkalinity, Total (as CaCO3)	50		5	mg/L		12-AUG-06	PTT	R429805
L420839-4 WINDY CAMP LTA-IMPACT AREA								
Sampled By: APRIL on 04-AUG-06 @ 17:35								
Matrix: WATER								
Total Metals								
Total Major Metals								
Calcium (Ca)	11.2		0.5	mg/L		14-AUG-06	SYF	R430268
Potassium (K)	3.7		0.1	mg/L		14-AUG-06	SYF	R430268
Magnesium (Mg)	8.8		0.1	mg/L		14-AUG-06	SYF	R430268
Sodium (Na)	51		1	mg/L		14-AUG-06	SYF	R430268

ALS LABORATORY GROUP ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	By	Batch
L420839-4 WINDY CAMP LTA-IMPACT AREA								
Sampled By: APRIL on 04-AUG-06 @ 17:35								
Matrix: WATER								
Total Metals								
Total Major Metals								
Iron (Fe)	0.094		0.005	mg/L		14-AUG-06	SYF	R430268
Manganese (Mn)	0.005		0.001	mg/L		14-AUG-06	SYF	R430268
Total Trace Metals (Low Level)								
Silver (Ag)	<0.0004		0.0004	mg/L		15-AUG-06	QLI	R430691
Aluminum (Al)	0.11		0.02	mg/L		15-AUG-06	QLI	R430691
Arsenic (As)	0.0010		0.0004	mg/L		15-AUG-06	QLI	R430691
Boron (B)	1.05		0.02	mg/L		15-AUG-06	QLI	R430691
Barium (Ba)	0.0031		0.0002	mg/L		15-AUG-06	QLI	R430691
Beryllium (Be)	<0.001		0.001	mg/L		15-AUG-06	QLI	R430691
Bismuth (Bi)	<0.0001		0.0001	mg/L		15-AUG-06	QLI	R430691
Cadmium (Cd)	<0.0002		0.0002	mg/L		15-AUG-06	QLI	R430691
Cobalt (Co)	<0.0002		0.0002	mg/L		15-AUG-06	QLI	R430691
Chromium (Cr)	0.0029		0.0008	mg/L		15-AUG-06	QLI	R430691
Copper (Cu)	0.001		0.001	mg/L		15-AUG-06	QLI	R430691
Molybdenum (Mo)	0.0007		0.0001	mg/L		15-AUG-06	QLI	R430691
Nickel (Ni)	<0.0002		0.0002	mg/L		15-AUG-06	QLI	R430691
Lead (Pb)	0.0002		0.0001	mg/L		15-AUG-06	QLI	R430691
Antimony (Sb)	0.0008		0.0004	mg/L		15-AUG-06	QLI	R430691
Selenium (Se)	0.0035		0.0004	mg/L		15-AUG-06	QLI	R430691
Tin (Sn)	<0.0004		0.0004	mg/L		15-AUG-06	QLI	R430691
Strontium (Sr)	0.0563		0.0002	mg/L		15-AUG-06	QLI	R430691
Titanium (Ti)	0.006		0.005	mg/L		15-AUG-06	QLI	R430691
Thallium (Tl)	<0.0001		0.0001	mg/L		15-AUG-06	QLI	R430691
Uranium (U)	0.0002		0.0001	mg/L		15-AUG-06	QLI	R430691
Vanadium (V)	0.0034		0.0002	mg/L		15-AUG-06	QLI	R430691
Zinc (Zn)	<0.004		0.004	mg/L		15-AUG-06	QLI	R430691
BTEX and F1 (C6-C10)								
Benzene	<0.0005		0.0005	mg/L	12-AUG-06	12-AUG-06	SCM	R429821
Toluene	<0.0005		0.0005	mg/L	12-AUG-06	12-AUG-06	SCM	R429821
EthylBenzene	<0.0005		0.0005	mg/L	12-AUG-06	12-AUG-06	SCM	R429821
Xylenes	<0.0005		0.0005	mg/L	12-AUG-06	12-AUG-06	SCM	R429821
F1(C6-C10)	<0.1		0.1	mg/L	12-AUG-06	12-AUG-06	SCM	R429821
F1-BTEX	<0.1		0.1	mg/L	12-AUG-06	12-AUG-06	SCM	R429821
Routine Water: Major Ions, Fluoride								
Chloride (Cl)	99		1	mg/L		14-AUG-06	EOC	R430262
Fluoride (F)	0.07		0.05	mg/L		12-AUG-06	PTT	R429805
ICP metals and SO4 for routine water								
Calcium (Ca)	13.2		0.5	mg/L		14-AUG-06	JWU	R430125
Potassium (K)	4.1		0.5	mg/L		14-AUG-06	JWU	R430125
Magnesium (Mg)	10.6		0.1	mg/L		14-AUG-06	JWU	R430125
Sodium (Na)	59		1	mg/L		14-AUG-06	JWU	R430125
Sulfate (SO4)	8.0		0.5	mg/L		14-AUG-06	JWU	R430125
Ion Balance Calculation								
Ion Balance	106			%		15-AUG-06		
TDS (Calculated)	225			mg/L		15-AUG-06		
Hardness (as CaCO3)	77			mg/L		15-AUG-06		
Nitrate+Nitrite-N	<0.1		0.1	mg/L		14-AUG-06	KMY	R430408
Nitrate-N	<0.1		0.1	mg/L		14-AUG-06	KMY	R430408
Nitrite-N	<0.05		0.05	mg/L		14-AUG-06	KMY	R430408

ALS LABORATORY GROUP ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	By	Batch
L420839-4 WINDY CAMP LTA-IMPACT AREA Sampled By: APRIL on 04-AUG-06 @ 17:35 Matrix: WATER Routine Water: Major Ions, Fluoride pH, Conductivity and Total Alkalinity								
pH	7.9		0.1	pH		12-AUG-06	PTT	R429805
Conductivity (EC)	429		0.2	uS/cm		12-AUG-06	PTT	R429805
Bicarbonate (HCO3)	62		5	mg/L		12-AUG-06	PTT	R429805
Carbonate (CO3)	<5		5	mg/L		12-AUG-06	PTT	R429805
Hydroxide (OH)	<5		5	mg/L		12-AUG-06	PTT	R429805
Alkalinity, Total (as CaCO3)	51		5	mg/L		12-AUG-06	PTT	R429805
L420839-5 WINDY CAMP LTA #A Sampled By: APRIL on 05-AUG-06 @ 09:31 Matrix: SOIL CCME BTEX, TVHs and TEHs CCME BTEX								
Benzene	<0.005		0.005	mg/kg	14-AUG-06	14-AUG-06	SCM	R430420
Toluene	<0.01		0.01	mg/kg	14-AUG-06	14-AUG-06	SCM	R430420
Ethylbenzene	<0.01		0.01	mg/kg	14-AUG-06	14-AUG-06	SCM	R430420
Xylenes	<0.01		0.01	mg/kg	14-AUG-06	14-AUG-06	SCM	R430420
CCME Total Extractable Hydrocarbons								
Surr: 2-Bromobenzotrifluoride	100		33-172	%	17-AUG-06	17-AUG-06	AAT	R431984
Surr: Hexatriacontane	151		44-173	%	17-AUG-06	17-AUG-06	AAT	R431984
Prep/Analysis Dates					17-AUG-06	17-AUG-06	AAT	R431984
CCME Total Hydrocarbons								
F1 (C6-C10)	<5	IPT	5	mg/kg		18-AUG-06		
F1-BTEX	<5		5	mg/kg		18-AUG-06		
F2 (C10-C16)	180	RAMB	5	mg/kg		18-AUG-06		
F3 (C16-C34)	560		5	mg/kg		18-AUG-06		
F4 (C34-C50)	160		5	mg/kg		18-AUG-06		
Total Hydrocarbons (C6-C50)	900		5	mg/kg		18-AUG-06		
Chromatogram to baseline at nC50	NO					18-AUG-06		
% Moisture	16		0.1	%		14-AUG-06	HMB	R430313
L420839-6 WINDY CAMP LTA #B Sampled By: APRIL on 05-AUG-06 @ 09:35 Matrix: SOIL CCME BTEX, TVHs and TEHs CCME BTEX								
Benzene	<0.005		0.005	mg/kg	14-AUG-06	14-AUG-06	SCM	R430420
Toluene	<0.01		0.01	mg/kg	14-AUG-06	14-AUG-06	SCM	R430420
Ethylbenzene	<0.01		0.01	mg/kg	14-AUG-06	14-AUG-06	SCM	R430420
Xylenes	<0.01		0.01	mg/kg	14-AUG-06	14-AUG-06	SCM	R430420
CCME Total Extractable Hydrocarbons								
Surr: 2-Bromobenzotrifluoride	92		33-172	%	17-AUG-06	17-AUG-06	AAT	R431984
Surr: Hexatriacontane	117		44-173	%	17-AUG-06	17-AUG-06	AAT	R431984
Prep/Analysis Dates					17-AUG-06	17-AUG-06	AAT	R431984
CCME Total Hydrocarbons								
F1 (C6-C10)	<5	IPT	5	mg/kg		18-AUG-06		
F1-BTEX	<5		5	mg/kg		18-AUG-06		
F2 (C10-C16)	44	RAMB	5	mg/kg		18-AUG-06		
F3 (C16-C34)	230	RAMB	5	mg/kg		18-AUG-06		
F4 (C34-C50)	100		5	mg/kg		18-AUG-06		
Total Hydrocarbons (C6-C50)	370		5	mg/kg		18-AUG-06		
Chromatogram to baseline at nC50	NO					18-AUG-06		

ALS LABORATORY GROUP ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	By	Batch
L420839-6 WINDY CAMP LTA #B Sampled By: APRIL on 05-AUG-06 @ 09:35 Matrix: SOIL CCME BTEX, TVHs and TEHs								
% Moisture	14		0.1	%		14-AUG-06	HMB	R430313
L420839-7 WINDY CAMP LTA #C Sampled By: APRIL on 05-AUG-06 @ 09:38 Matrix: SOIL CCME BTEX, TVHs and TEHs								
CCME BTEX								
Benzene	<0.005	RAMB	0.005	mg/kg	14-AUG-06	14-AUG-06	SCM	R430420
Toluene	<0.01		0.01	mg/kg	14-AUG-06	14-AUG-06	SCM	R430420
Ethylbenzene	<0.01		0.01	mg/kg	14-AUG-06	14-AUG-06	SCM	R430420
Xylenes	<0.01		0.01	mg/kg	14-AUG-06	14-AUG-06	SCM	R430420
CCME Total Extractable Hydrocarbons								
Surr: 2-Bromobenzotrifluoride	101		33-172	%	17-AUG-06	17-AUG-06	AAT	R431984
Surr: Hexatriacontane	157		44-173	%	17-AUG-06	17-AUG-06	AAT	R431984
Prep/Analysis Dates					17-AUG-06	17-AUG-06	AAT	R431984
CCME Total Hydrocarbons								
F1 (C6-C10)	<5	IPT	5	mg/kg		18-AUG-06		
F1-BTEX	<5		5	mg/kg		18-AUG-06		
F2 (C10-C16)	130	RAMB	5	mg/kg		18-AUG-06		
F3 (C16-C34)	760		5	mg/kg		18-AUG-06		
F4 (C34-C50)	290		5	mg/kg		18-AUG-06		
Total Hydrocarbons (C6-C50)	1200		5	mg/kg		18-AUG-06		
Chromatogram to baseline at nC50	NO					18-AUG-06		
% Moisture	25		0.1	%		14-AUG-06	HMB	R430313
L420839-8 WINDY CAMP LTA #D Sampled By: APRIL on 05-AUG-06 @ 09:43 Matrix: SOIL CCME BTEX, TVHs and TEHs								
CCME BTEX								
Benzene	<0.005		0.005	mg/kg	14-AUG-06	14-AUG-06	SCM	R430420
Toluene	<0.01		0.01	mg/kg	14-AUG-06	14-AUG-06	SCM	R430420
Ethylbenzene	<0.01		0.01	mg/kg	14-AUG-06	14-AUG-06	SCM	R430420
Xylenes	<0.01		0.01	mg/kg	14-AUG-06	14-AUG-06	SCM	R430420
CCME Total Extractable Hydrocarbons								
Surr: 2-Bromobenzotrifluoride	87		33-172	%	17-AUG-06	17-AUG-06	AAT	R431984
Surr: Hexatriacontane	127		44-173	%	17-AUG-06	17-AUG-06	AAT	R431984
Prep/Analysis Dates					17-AUG-06	17-AUG-06	AAT	R431984
CCME Total Hydrocarbons								
F1 (C6-C10)	<5	IPT	5	mg/kg		18-AUG-06		
F1-BTEX	<5		5	mg/kg		18-AUG-06		
F2 (C10-C16)	320		5	mg/kg		18-AUG-06		
F3 (C16-C34)	490		5	mg/kg		18-AUG-06		
F4 (C34-C50)	130		5	mg/kg		18-AUG-06		
Total Hydrocarbons (C6-C50)	940		5	mg/kg		18-AUG-06		
Chromatogram to baseline at nC50	NO					18-AUG-06		
% Moisture	14		0.1	%		14-AUG-06	HMB	R430313

ALS LABORATORY GROUP ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	By	Batch
L420839-9 WINDY CAMP LTA #E Sampled By: APRIL on 05-AUG-06 @ 09:48 Matrix: SOIL CCME BTEX, TVHs and TEHs CCME BTEX Benzene Toluene Ethylbenzene Xylenes CCME Total Extractable Hydrocarbons Surr: 2-Bromobenzotrifluoride Surr: Hexatriacontane Prep/Analysis Dates CCME Total Hydrocarbons F1 (C6-C10) F1-BTEX F2 (C10-C16) F3 (C16-C34) F4 (C34-C50) Total Hydrocarbons (C6-C50) Chromatogram to baseline at nC50 % Moisture	<0.005 <0.01 <0.01 <0.01 105 153 <5 <5 60 420 160 640 NO 15	 IPT RAMB 	0.005 0.01 0.01 0.01 33-172 44-173 5 5 5 5 5 5 0.1	mg/kg mg/kg mg/kg mg/kg % % mg/kg mg/kg mg/kg mg/kg mg/kg %	14-AUG-06 14-AUG-06 14-AUG-06 14-AUG-06 17-AUG-06 17-AUG-06 17-AUG-06 18-AUG-06 18-AUG-06 18-AUG-06 18-AUG-06 18-AUG-06 18-AUG-06 18-AUG-06 14-AUG-06	14-AUG-06 14-AUG-06 14-AUG-06 14-AUG-06 17-AUG-06 17-AUG-06 17-AUG-06 18-AUG-06 18-AUG-06 18-AUG-06 18-AUG-06 18-AUG-06 18-AUG-06 18-AUG-06 14-AUG-06	SCM SCM SCM SCM AAT AAT AAT HMB	R430420 R430420 R430420 R430420 R431984 R431984 R431984 R430313
L420839-10 WINDY CAMP LTA #F Sampled By: APRIL on 05-AUG-06 @ 09:51 Matrix: SOIL CCME BTEX, TVHs and TEHs CCME BTEX Benzene Toluene Ethylbenzene Xylenes CCME Total Extractable Hydrocarbons Surr: 2-Bromobenzotrifluoride Surr: Hexatriacontane Prep/Analysis Dates CCME Total Hydrocarbons F1 (C6-C10) F1-BTEX F2 (C10-C16) F3 (C16-C34) F4 (C34-C50) Total Hydrocarbons (C6-C50) Chromatogram to baseline at nC50 % Moisture	<0.005 0.02 <0.01 0.13 89 114 <5 <5 380 310 84 770 NO 10	 IPT RAMB IPT RAMB 	0.005 0.01 0.01 0.01 33-172 44-173 5 5 5 5 5 5 0.1	mg/kg mg/kg mg/kg mg/kg % % mg/kg mg/kg mg/kg mg/kg mg/kg %	14-AUG-06 14-AUG-06 14-AUG-06 14-AUG-06 17-AUG-06 17-AUG-06 17-AUG-06 18-AUG-06 18-AUG-06 18-AUG-06 18-AUG-06 18-AUG-06 18-AUG-06 18-AUG-06 14-AUG-06	14-AUG-06 14-AUG-06 14-AUG-06 14-AUG-06 17-AUG-06 17-AUG-06 17-AUG-06 18-AUG-06 18-AUG-06 18-AUG-06 18-AUG-06 18-AUG-06 18-AUG-06 18-AUG-06 14-AUG-06	SCM SCM SCM SCM AAT AAT AAT HMB	R430420 R430420 R430420 R430420 R431984 R431984 R431984 R430313
L420839-11 WINDY CAMP LTA #G Sampled By: APRIL on 05-AUG-06 @ 09:55 Matrix: SOIL CCME BTEX, TVHs and TEHs CCME BTEX Benzene Toluene Ethylbenzene Xylenes	<0.005 <0.01 <0.01 <0.01	 	0.005 0.01 0.01 0.01	mg/kg mg/kg mg/kg mg/kg	14-AUG-06 14-AUG-06 14-AUG-06 14-AUG-06	14-AUG-06 14-AUG-06 14-AUG-06 14-AUG-06	SCM SCM SCM SCM	R430420 R430420 R430420 R430420

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	By	Batch
L420839-13 WINDY CAMP LTA #I Sampled By: APRIL on 05-AUG-06 @ 10:34 Matrix: SOIL CCME BTEX, TVHs and TEHs CCME Total Hydrocarbons F1 (C6-C10) F1-BTEX F2 (C10-C16) F3 (C16-C34) F4 (C34-C50) Total Hydrocarbons (C6-C50) Chromatogram to baseline at nC50 % Moisture	<5 <5 950 860 63 1900 NO 13	 IPT IPC IPC 	 5 5 5 5 5 0.1	 mg/kg mg/kg mg/kg mg/kg mg/kg %	 14-AUG-06	20-AUG-06 20-AUG-06 20-AUG-06 20-AUG-06 20-AUG-06 20-AUG-06 20-AUG-06 14-AUG-06	 HMB	 R430313
L420839-14 WINDY CAMP LTA #J Sampled By: APRIL on 05-AUG-06 @ 10:34 Matrix: SOIL CCME BTEX, TVHs and TEHs CCME BTEX Benzene Toluene Ethylbenzene Xylenes CCME Total Extractable Hydrocarbons Surr: 2-Bromobenzotrifluoride Surr: Hexatriacontane Prep/Analysis Dates CCME Total Hydrocarbons F1 (C6-C10) F1-BTEX F2 (C10-C16) F3 (C16-C34) F4 (C34-C50) Total Hydrocarbons (C6-C50) Chromatogram to baseline at nC50 % Moisture	<0.005 <0.01 <0.01 <0.01 98 92 21	 IPT RAMB 	 33-172 44-173 0.1	 mg/kg mg/kg mg/kg mg/kg % % %	14-AUG-06 14-AUG-06 14-AUG-06 14-AUG-06 17-AUG-06 17-AUG-06 17-AUG-06 14-AUG-06	14-AUG-06 14-AUG-06 14-AUG-06 14-AUG-06 18-AUG-06 18-AUG-06 18-AUG-06 14-AUG-06	SCM SCM SCM SCM MKE MKE MKE HMB	R430420 R430420 R430420 R430420 R432244 R432244 R432244 R430313
L420839-15 WINDY CAMP LTA #K Sampled By: APRIL on 05-AUG-06 @ 10:44 Matrix: SOIL CCME BTEX, TVHs and TEHs CCME BTEX Benzene Toluene Ethylbenzene Xylenes CCME Total Extractable Hydrocarbons Surr: 2-Bromobenzotrifluoride Surr: Hexatriacontane Prep/Analysis Dates CCME Total Hydrocarbons F1 (C6-C10) F1-BTEX F2 (C10-C16) F3 (C16-C34)	<0.005 <0.01 <0.01 <0.01 108 103 150	 IPT RAMB	 33-172 44-173 5	 mg/kg mg/kg mg/kg mg/kg % % mg/kg	14-AUG-06 14-AUG-06 14-AUG-06 14-AUG-06 17-AUG-06 17-AUG-06 17-AUG-06 20-AUG-06	14-AUG-06 14-AUG-06 14-AUG-06 14-AUG-06 18-AUG-06 18-AUG-06 18-AUG-06 20-AUG-06	SCM SCM SCM SCM MKE MKE MKE R430420 R430420 R430420 R430420 R432244 R432244 R432244 R430420	

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	By	Batch
L420839-15 WINDY CAMP LTA #K Sampled By: APRIL on 05-AUG-06 @ 10:44 Matrix: SOIL CCME BTEX, TVHs and TEHs CCME Total Hydrocarbons F4 (C34-C50) Total Hydrocarbons (C6-C50) Chromatogram to baseline at nC50 % Moisture	48 230 NO 20		5 5 0.1	mg/kg mg/kg %	 14-AUG-06	20-AUG-06 20-AUG-06 20-AUG-06 14-AUG-06	 HMB	 R430313
L420839-16 WINDY CAMP LTA #L Sampled By: APRIL on 05-AUG-06 @ 10:47 Matrix: SOIL CCME BTEX, TVHs and TEHs CCME BTEX Benzene Toluene Ethylbenzene Xylenes CCME Total Extractable Hydrocarbons Surr: 2-Bromobenzotrifluoride Surr: Hexatriacontane Prep/Analysis Dates CCME Total Hydrocarbons F1 (C6-C10) F1-BTEX F2 (C10-C16) F3 (C16-C34) F4 (C34-C50) Total Hydrocarbons (C6-C50) Chromatogram to baseline at nC50 % Moisture	<0.005 <0.01 <0.01 <0.01 114 102 12	 IPT RAMB	0.005 0.01 0.01 0.01 33-172 44-173 5 5 5 5 5 5 0.1	mg/kg mg/kg mg/kg mg/kg % % mg/kg mg/kg mg/kg mg/kg mg/kg %	14-AUG-06 14-AUG-06 14-AUG-06 14-AUG-06 17-AUG-06 17-AUG-06 17-AUG-06 20-AUG-06 20-AUG-06 20-AUG-06 20-AUG-06 20-AUG-06 20-AUG-06 20-AUG-06 14-AUG-06	14-AUG-06 14-AUG-06 14-AUG-06 14-AUG-06 18-AUG-06 18-AUG-06 18-AUG-06 20-AUG-06 20-AUG-06 20-AUG-06 20-AUG-06 20-AUG-06 20-AUG-06 20-AUG-06 14-AUG-06	SCM SCM SCM SCM MKE MKE MKE HMB	R430420 R430420 R430420 R430420 R432244 R432244 R432244 R430313
L420839-17 147-A Sampled By: APRIL on 07-AUG-06 @ 09:45 Matrix: SOIL CCME BTEX, TVHs and TEHs CCME BTEX Benzene Toluene Ethylbenzene Xylenes CCME Total Extractable Hydrocarbons Surr: 2-Bromobenzotrifluoride Surr: Hexatriacontane Prep/Analysis Dates CCME Total Hydrocarbons F1 (C6-C10) F1-BTEX F2 (C10-C16) F3 (C16-C34) F4 (C34-C50) Total Hydrocarbons (C6-C50) Chromatogram to baseline at nC50	<0.005 <0.01 <0.01 <0.01 68 93 120 NO	 IPT RAMB	0.005 0.01 0.01 0.01 33-172 44-173 5 5 5 5 5 5	mg/kg mg/kg mg/kg mg/kg % % mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg	14-AUG-06 14-AUG-06 14-AUG-06 14-AUG-06 17-AUG-06 17-AUG-06 17-AUG-06 20-AUG-06 20-AUG-06 20-AUG-06 20-AUG-06 20-AUG-06 20-AUG-06 20-AUG-06	14-AUG-06 14-AUG-06 14-AUG-06 14-AUG-06 18-AUG-06 18-AUG-06 18-AUG-06 20-AUG-06 20-AUG-06 20-AUG-06 20-AUG-06 20-AUG-06 20-AUG-06 20-AUG-06	SCM SCM SCM SCM MKE MKE MKE HMB	R430420 R430420 R430420 R430420 R432244 R432244 R432244 R430313

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Sample Details/Parameters		Result	Qualifier*	D.L.	Units	Extracted	Analyzed	By	Batch
L420839-17 147-A Sampled By: APRIL on 07-AUG-06 @ 09:45 Matrix: SOIL									
% Moisture		19		0.1	%		14-AUG-06	HMB	R430313
L420839-18 147-B Sampled By: APRIL on 07-AUG-06 @ 09:49 Matrix: SOIL									
CCME BTEX, TVHs and TEHs									
CCME BTEX									
Benzene		<0.005		0.005	mg/kg	14-AUG-06	14-AUG-06	SCM	R430420
Toluene		<0.01		0.01	mg/kg	14-AUG-06	14-AUG-06	SCM	R430420
Ethylbenzene		<0.01		0.01	mg/kg	14-AUG-06	14-AUG-06	SCM	R430420
Xylenes		<0.01		0.01	mg/kg	14-AUG-06	14-AUG-06	SCM	R430420
CCME Total Extractable Hydrocarbons									
Surr: 2-Bromobenzotrifluoride		134		33-172	%	17-AUG-06	18-AUG-06	MKE	R432244
Surr: Hexatriacontane		116		44-173	%	17-AUG-06	18-AUG-06	MKE	R432244
Prep/Analysis Dates						17-AUG-06	18-AUG-06	MKE	R432244
CCME Total Hydrocarbons									
F1 (C6-C10)		<5	IPT	5	mg/kg		20-AUG-06		
F1-BTEX		<5		5	mg/kg		20-AUG-06		
F2 (C10-C16)		<5	RAMB	5	mg/kg		20-AUG-06		
F3 (C16-C34)		9		5	mg/kg		20-AUG-06		
F4 (C34-C50)		<5		5	mg/kg		20-AUG-06		
Total Hydrocarbons (C6-C50)		9		5	mg/kg		20-AUG-06		
Chromatogram to baseline at nC50		YES					20-AUG-06		
% Moisture		14		0.1	%		14-AUG-06	HMB	R430313
L420839-19 2003-2B Sampled By: APRIL on 07-AUG-06 @ 09:27 Matrix: SOIL									
CCME BTEX, TVHs and TEHs									
CCME BTEX									
Benzene		<0.005		0.005	mg/kg	14-AUG-06	14-AUG-06	SCM	R430420
Toluene		<0.01		0.01	mg/kg	14-AUG-06	14-AUG-06	SCM	R430420
Ethylbenzene		<0.01		0.01	mg/kg	14-AUG-06	14-AUG-06	SCM	R430420
Xylenes		<0.01		0.01	mg/kg	14-AUG-06	14-AUG-06	SCM	R430420
CCME Total Extractable Hydrocarbons									
Surr: 2-Bromobenzotrifluoride		123		33-172	%	18-AUG-06	18-AUG-06	MKE	R432237
Surr: Hexatriacontane		111		44-173	%	18-AUG-06	18-AUG-06	MKE	R432237
Prep/Analysis Dates						18-AUG-06	18-AUG-06	MKE	R432237
CCME Total Hydrocarbons									
F1 (C6-C10)		<5	IPT	5	mg/kg		20-AUG-06		
F1-BTEX		<5		5	mg/kg		20-AUG-06		
F2 (C10-C16)		16	RAMB	5	mg/kg		20-AUG-06		
F3 (C16-C34)		140		5	mg/kg		20-AUG-06		
F4 (C34-C50)		16		5	mg/kg		20-AUG-06		
Total Hydrocarbons (C6-C50)		170		5	mg/kg		20-AUG-06		
Chromatogram to baseline at nC50		NO					20-AUG-06		
% Moisture		12		0.1	%		14-AUG-06	HMB	R430313
L420839-20 2003-2A Sampled By: APRIL on 07-AUG-06 @ 09:25 Matrix: SOIL									

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	By	Batch
L420839-20 2003-2A Sampled By: APRIL on 07-AUG-06 @ 09:25 Matrix: SOIL								
CCME BTEX, TVHs and TEHs								
CCME BTEX								
Benzene	<0.005		0.005	mg/kg	14-AUG-06	14-AUG-06	SCM	R430420
Toluene	<0.01		0.01	mg/kg	14-AUG-06	14-AUG-06	SCM	R430420
Ethylbenzene	<0.01		0.01	mg/kg	14-AUG-06	14-AUG-06	SCM	R430420
Xylenes	<0.01		0.01	mg/kg	14-AUG-06	14-AUG-06	SCM	R430420
CCME Total Extractable Hydrocarbons								
Surr: 2-Bromobenzotrifluoride	107		33-172	%	18-AUG-06	18-AUG-06	MKE	R432237
Surr: Hexatriacontane	118		44-173	%	18-AUG-06	18-AUG-06	MKE	R432237
Prep/Analysis Dates					18-AUG-06	18-AUG-06	MKE	R432237
CCME Total Hydrocarbons								
F1 (C6-C10)	<5	IPT	5	mg/kg		20-AUG-06		
F1-BTEX	<5		5	mg/kg		20-AUG-06		
F2 (C10-C16)	19	IPC	5	mg/kg		20-AUG-06		
F3 (C16-C34)	500	IPC	5	mg/kg		20-AUG-06		
F4 (C34-C50)	120	IPC	5	mg/kg		20-AUG-06		
Total Hydrocarbons (C6-C50)	640		5	mg/kg		20-AUG-06		
Chromatogram to baseline at nC50	NO					20-AUG-06		
% Moisture	22		0.1	%		14-AUG-06	HMB	R430313
L420839-21 2003-1A Sampled By: APRIL on 07-AUG-06 @ 09:12 Matrix: SOIL								
CCME BTEX, TVHs and TEHs								
CCME BTEX								
Benzene	<0.005		0.005	mg/kg	14-AUG-06	14-AUG-06	SCM	R430420
Toluene	<0.01		0.01	mg/kg	14-AUG-06	14-AUG-06	SCM	R430420
Ethylbenzene	<0.01		0.01	mg/kg	14-AUG-06	14-AUG-06	SCM	R430420
Xylenes	<0.01		0.01	mg/kg	14-AUG-06	14-AUG-06	SCM	R430420
CCME Total Extractable Hydrocarbons								
Surr: 2-Bromobenzotrifluoride	108		33-172	%	18-AUG-06	18-AUG-06	MKE	R432237
Surr: Hexatriacontane	226	SOL:MI	44-173	%	18-AUG-06	18-AUG-06	MKE	R432237
Prep/Analysis Dates					18-AUG-06	18-AUG-06	MKE	R432237
CCME Total Hydrocarbons								
F1 (C6-C10)	<5	IPT	5	mg/kg		20-AUG-06		
F1-BTEX	<5		5	mg/kg		20-AUG-06		
F2 (C10-C16)	430	IPC	5	mg/kg		20-AUG-06		
F3 (C16-C34)	2000	IPC	5	mg/kg		20-AUG-06		
F4 (C34-C50)	300	IPC	5	mg/kg		20-AUG-06		
Total Hydrocarbons (C6-C50)	2700		5	mg/kg		20-AUG-06		
Chromatogram to baseline at nC50	NO					20-AUG-06		
% Moisture	19		0.1	%		14-AUG-06	HMB	R430313
L420839-22 2003-1B Sampled By: APRIL on 07-AUG-06 @ 09:14 Matrix: SOIL								
CCME BTEX, TVHs and TEHs								
CCME BTEX								
Benzene	<0.005		0.005	mg/kg	14-AUG-06	14-AUG-06	SCM	R430420
Toluene	<0.01		0.01	mg/kg	14-AUG-06	14-AUG-06	SCM	R430420
Ethylbenzene	<0.01		0.01	mg/kg	14-AUG-06	14-AUG-06	SCM	R430420
Xylenes	<0.01		0.01	mg/kg	14-AUG-06	14-AUG-06	SCM	R430420

ALS LABORATORY GROUP ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	By	Batch
L420839-24 2005-1B Sampled By: APRIL on 07-AUG-06 @ 09:30 Matrix: SOIL CCME BTEX, TVHs and TEHs CCME Total Hydrocarbons F1 (C6-C10) 690 IPT 5 mg/kg 20-AUG-06 F1-BTEX 680 5 mg/kg 20-AUG-06 F2 (C10-C16) 3600 IPC 5 mg/kg 20-AUG-06 F3 (C16-C34) 1000 IPC 5 mg/kg 20-AUG-06 F4 (C34-C50) 28 IPC 5 mg/kg 20-AUG-06 Total Hydrocarbons (C6-C50) 5300 5 mg/kg 20-AUG-06 Chromatogram to baseline at nC50 NO 20-AUG-06 % Moisture 11 0.1 % 14-AUG-06 HMB R430313								
L420839-25 WALMART #1 Sampled By: APRIL P. on 07-AUG-06 @ 09:40 Matrix: SOIL CCME BTEX, TVHs and TEHs CCME BTEX Benzene <0.005 0.005 mg/kg 14-AUG-06 14-AUG-06 SCM R430420 Toluene <0.01 0.01 mg/kg 14-AUG-06 14-AUG-06 SCM R430420 Ethylbenzene <0.01 0.01 mg/kg 14-AUG-06 14-AUG-06 SCM R430420 Xylenes <0.01 0.01 mg/kg 14-AUG-06 14-AUG-06 SCM R430420 CCME Total Extractable Hydrocarbons Surr: 2-Bromobenzotrifluoride 111 33-172 % 18-AUG-06 18-AUG-06 MKE R432237 Surr: Hexatriacontane 139 44-173 % 18-AUG-06 18-AUG-06 MKE R432237 Prep/Analysis Dates 18-AUG-06 18-AUG-06 MKE R432237 CCME Total Hydrocarbons F1 (C6-C10) <5 IPT 5 mg/kg 20-AUG-06 F1-BTEX <5 5 mg/kg 20-AUG-06 F2 (C10-C16) 32 IPC 5 mg/kg 20-AUG-06 F3 (C16-C34) 1500 IPC 5 mg/kg 20-AUG-06 F4 (C34-C50) 190 IPC 5 mg/kg 20-AUG-06 Total Hydrocarbons (C6-C50) 1700 5 mg/kg 20-AUG-06 Chromatogram to baseline at nC50 NO 20-AUG-06 % Moisture 34 0.1 % 14-AUG-06 HMB R430313								
L420839-26 LAKE NORTH END Sampled By: APRIL P. on 07-AUG-06 @ 13:40 Matrix: WATER Total Metals Total Major Metals Calcium (Ca) 11.5 0.5 mg/L 17-AUG-06 SYF R431645 Potassium (K) 3.7 0.1 mg/L 17-AUG-06 SYF R431645 Magnesium (Mg) 9.0 0.1 mg/L 17-AUG-06 SYF R431645 Sodium (Na) 50 1 mg/L 17-AUG-06 SYF R431645 Iron (Fe) 0.048 0.005 mg/L 17-AUG-06 SYF R431645 Manganese (Mn) 0.002 0.001 mg/L 17-AUG-06 SYF R431645 Total Trace Metals (Low Level) Silver (Ag) <0.0004 0.0004 mg/L 15-AUG-06 QLI R430691 Aluminum (Al) 0.07 0.02 mg/L 15-AUG-06 QLI R430691 Arsenic (As) 0.0010 0.0004 mg/L 15-AUG-06 QLI R430691 Boron (B) 0.09 0.02 mg/L 15-AUG-06 QLI R430691 Barium (Ba) 0.0033 0.0002 mg/L 15-AUG-06 QLI R430691 Beryllium (Be) <0.001 0.001 mg/L 15-AUG-06 QLI R430691								

ALS LABORATORY GROUP ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	By	Batch
L420839-26 LAKE NORTH END								
Sampled By: APRIL P. on 07-AUG-06 @ 13:40								
Matrix: WATER								
Total Metals								
Total Trace Metals (Low Level)								
Bismuth (Bi)	<0.0001		0.0001	mg/L		15-AUG-06	QLI	R430691
Cadmium (Cd)	<0.0002		0.0002	mg/L		15-AUG-06	QLI	R430691
Cobalt (Co)	<0.0002		0.0002	mg/L		15-AUG-06	QLI	R430691
Chromium (Cr)	0.0030		0.0008	mg/L		15-AUG-06	QLI	R430691
Copper (Cu)	0.001		0.001	mg/L		15-AUG-06	QLI	R430691
Molybdenum (Mo)	0.0007		0.0001	mg/L		15-AUG-06	QLI	R430691
Nickel (Ni)	<0.0002		0.0002	mg/L		15-AUG-06	QLI	R430691
Lead (Pb)	0.0002		0.0001	mg/L		15-AUG-06	QLI	R430691
Antimony (Sb)	0.0008		0.0004	mg/L		15-AUG-06	QLI	R430691
Selenium (Se)	0.0038		0.0004	mg/L		15-AUG-06	QLI	R430691
Tin (Sn)	<0.0004		0.0004	mg/L		15-AUG-06	QLI	R430691
Strontium (Sr)	0.0589		0.0002	mg/L		15-AUG-06	QLI	R430691
Titanium (Ti)	<0.005		0.005	mg/L		15-AUG-06	QLI	R430691
Thallium (Tl)	<0.0001		0.0001	mg/L		15-AUG-06	QLI	R430691
Uranium (U)	0.0002		0.0001	mg/L		15-AUG-06	QLI	R430691
Vanadium (V)	0.0035		0.0002	mg/L		15-AUG-06	QLI	R430691
Zinc (Zn)	<0.004		0.004	mg/L		15-AUG-06	QLI	R430691
BTEX and F1 (C6-C10)								
Benzene	<0.0005		0.0005	mg/L	12-AUG-06	12-AUG-06	SCM	R429821
Toluene	<0.0005		0.0005	mg/L	12-AUG-06	12-AUG-06	SCM	R429821
EthylBenzene	<0.0005		0.0005	mg/L	12-AUG-06	12-AUG-06	SCM	R429821
Xylenes	<0.0005		0.0005	mg/L	12-AUG-06	12-AUG-06	SCM	R429821
F1(C6-C10)	<0.1		0.1	mg/L	12-AUG-06	12-AUG-06	SCM	R429821
F1-BTEX	<0.1		0.1	mg/L	12-AUG-06	12-AUG-06	SCM	R429821
Routine Water: Major Ions, Fluoride								
Chloride (Cl)	97		1	mg/L		17-AUG-06	EOC	R431636
Fluoride (F)	0.07		0.05	mg/L		12-AUG-06	PTT	R429805
ICP metals and SO4 for routine water								
Calcium (Ca)	13.1		0.5	mg/L		14-AUG-06	JWU	R430125
Potassium (K)	4.1		0.5	mg/L		14-AUG-06	JWU	R430125
Magnesium (Mg)	10.5		0.1	mg/L		14-AUG-06	JWU	R430125
Sodium (Na)	59		1	mg/L		14-AUG-06	JWU	R430125
Sulfate (SO4)	8.2		0.5	mg/L		14-AUG-06	JWU	R430125
Ion Balance Calculation								
Ion Balance	107			%		17-AUG-06		
TDS (Calculated)	222			mg/L		17-AUG-06		
Hardness (as CaCO3)	76			mg/L		17-AUG-06		
Nitrate+Nitrite-N	<0.1		0.1	mg/L		14-AUG-06	KMY	R430408
Nitrate-N	<0.1		0.1	mg/L		14-AUG-06	KMY	R430408
Nitrite-N	<0.05		0.05	mg/L		14-AUG-06	KMY	R430408
pH, Conductivity and Total Alkalinity								
pH	8.0		0.1	pH		12-AUG-06	PTT	R429805
Conductivity (EC)	428		0.2	uS/cm		12-AUG-06	PTT	R429805
Bicarbonate (HCO3)	61		5	mg/L		12-AUG-06	PTT	R429805
Carbonate (CO3)	<5		5	mg/L		12-AUG-06	PTT	R429805
Hydroxide (OH)	<5		5	mg/L		12-AUG-06	PTT	R429805
Alkalinity, Total (as CaCO3)	50		5	mg/L		12-AUG-06	PTT	R429805

ALS LABORATORY GROUP ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	By	Batch
L420839-27 WINDY LAKE-SOUTH								
Sampled By: APRIL P. on 07-AUG-06 @ 13:20								
Matrix: WATER								
Total Metals								
Total Major Metals								
Calcium (Ca)	11.4		0.5	mg/L		14-AUG-06	SYF	R430268
Potassium (K)	3.7		0.1	mg/L		14-AUG-06	SYF	R430268
Magnesium (Mg)	9.1		0.1	mg/L		14-AUG-06	SYF	R430268
Sodium (Na)	52		1	mg/L		14-AUG-06	SYF	R430268
Iron (Fe)	0.066		0.005	mg/L		14-AUG-06	SYF	R430268
Manganese (Mn)	0.002		0.001	mg/L		14-AUG-06	SYF	R430268
Total Trace Metals (Low Level)								
Silver (Ag)	<0.0004		0.0004	mg/L		15-AUG-06	QLI	R430691
Aluminum (Al)	0.09		0.02	mg/L		15-AUG-06	QLI	R430691
Arsenic (As)	0.0009		0.0004	mg/L		15-AUG-06	QLI	R430691
Boron (B)	0.09		0.02	mg/L		15-AUG-06	QLI	R430691
Barium (Ba)	0.0034		0.0002	mg/L		15-AUG-06	QLI	R430691
Beryllium (Be)	<0.001		0.001	mg/L		15-AUG-06	QLI	R430691
Bismuth (Bi)	<0.0001		0.0001	mg/L		15-AUG-06	QLI	R430691
Cadmium (Cd)	<0.0002		0.0002	mg/L		15-AUG-06	QLI	R430691
Cobalt (Co)	<0.0002		0.0002	mg/L		15-AUG-06	QLI	R430691
Chromium (Cr)	0.0030		0.0008	mg/L		15-AUG-06	QLI	R430691
Copper (Cu)	0.001		0.001	mg/L		15-AUG-06	QLI	R430691
Molybdenum (Mo)	0.0006		0.0001	mg/L		15-AUG-06	QLI	R430691
Nickel (Ni)	<0.0002		0.0002	mg/L		15-AUG-06	QLI	R430691
Lead (Pb)	0.0002		0.0001	mg/L		15-AUG-06	QLI	R430691
Antimony (Sb)	0.0008		0.0004	mg/L		15-AUG-06	QLI	R430691
Selenium (Se)	0.0032		0.0004	mg/L		15-AUG-06	QLI	R430691
Tin (Sn)	<0.0004		0.0004	mg/L		15-AUG-06	QLI	R430691
Strontium (Sr)	0.0568		0.0002	mg/L		15-AUG-06	QLI	R430691
Titanium (Ti)	<0.005		0.005	mg/L		15-AUG-06	QLI	R430691
Thallium (Tl)	<0.0001		0.0001	mg/L		15-AUG-06	QLI	R430691
Uranium (U)	0.0002		0.0001	mg/L		15-AUG-06	QLI	R430691
Vanadium (V)	0.0037		0.0002	mg/L		15-AUG-06	QLI	R430691
Zinc (Zn)	<0.004		0.004	mg/L		15-AUG-06	QLI	R430691
BTEX and F1 (C6-C10)								
Benzene	<0.0005		0.0005	mg/L	12-AUG-06	12-AUG-06	SCM	R429821
Toluene	<0.0005		0.0005	mg/L	12-AUG-06	12-AUG-06	SCM	R429821
EthylBenzene	<0.0005		0.0005	mg/L	12-AUG-06	12-AUG-06	SCM	R429821
Xylenes	<0.0005		0.0005	mg/L	12-AUG-06	12-AUG-06	SCM	R429821
F1(C6-C10)	<0.1		0.1	mg/L	12-AUG-06	12-AUG-06	SCM	R429821
F1-BTEX	<0.1		0.1	mg/L	12-AUG-06	12-AUG-06	SCM	R429821
Routine Water: Major Ions, Fluoride								
Chloride (Cl)	99		1	mg/L		14-AUG-06	EOC	R430262
Fluoride (F)	0.07		0.05	mg/L		12-AUG-06	PTT	R429805
ICP metals and SO4 for routine water								
Calcium (Ca)	13.1		0.5	mg/L		14-AUG-06	JWU	R430125
Potassium (K)	4.0		0.5	mg/L		14-AUG-06	JWU	R430125
Magnesium (Mg)	10.7		0.1	mg/L		14-AUG-06	JWU	R430125
Sodium (Na)	59		1	mg/L		14-AUG-06	JWU	R430125
Sulfate (SO4)	8.3		0.5	mg/L		14-AUG-06	JWU	R430125
Ion Balance Calculation								
Ion Balance	105			%		15-AUG-06		
TDS (Calculated)	225			mg/L		15-AUG-06		
Hardness (as CaCO3)	77			mg/L		15-AUG-06		

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Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	By	Batch
L420839-27 WINDY LAKE-SOUTH								
Sampled By: APRIL P. on 07-AUG-06 @ 13:20								
Matrix: WATER								
Routine Water: Major Ions, Fluoride								
Nitrate+Nitrite-N	<0.1		0.1	mg/L		14-AUG-06	KMY	R430408
Nitrate-N	<0.1		0.1	mg/L		14-AUG-06	KMY	R430408
Nitrite-N	<0.05		0.05	mg/L		14-AUG-06	KMY	R430408
pH, Conductivity and Total Alkalinity								
pH	8.0		0.1	pH		12-AUG-06	PTT	R429805
Conductivity (EC)	429		0.2	uS/cm		12-AUG-06	PTT	R429805
Bicarbonate (HCO3)	62		5	mg/L		12-AUG-06	PTT	R429805
Carbonate (CO3)	<5		5	mg/L		12-AUG-06	PTT	R429805
Hydroxide (OH)	<5		5	mg/L		12-AUG-06	PTT	R429805
Alkalinity, Total (as CaCO3)	51		5	mg/L		12-AUG-06	PTT	R429805
L420839-28 LAKE CENTRAL								
Sampled By: APRIL P. on 07-AUG-06 @ 13:30								
Matrix: WATER								
Total Metals								
Total Major Metals								
Calcium (Ca)	11.3		0.5	mg/L		14-AUG-06	SYF	R430268
Potassium (K)	3.6		0.1	mg/L		14-AUG-06	SYF	R430268
Magnesium (Mg)	9.1		0.1	mg/L		14-AUG-06	SYF	R430268
Sodium (Na)	51		1	mg/L		14-AUG-06	SYF	R430268
Iron (Fe)	0.044		0.005	mg/L		14-AUG-06	SYF	R430268
Manganese (Mn)	0.002		0.001	mg/L		14-AUG-06	SYF	R430268
Total Trace Metals (Low Level)								
Silver (Ag)	<0.0004		0.0004	mg/L		15-AUG-06	QLI	R430691
Aluminum (Al)	0.07		0.02	mg/L		15-AUG-06	QLI	R430691
Arsenic (As)	0.0009		0.0004	mg/L		15-AUG-06	QLI	R430691
Boron (B)	0.08		0.02	mg/L		15-AUG-06	QLI	R430691
Barium (Ba)	0.0032		0.0002	mg/L		15-AUG-06	QLI	R430691
Beryllium (Be)	<0.001		0.001	mg/L		15-AUG-06	QLI	R430691
Bismuth (Bi)	<0.0001		0.0001	mg/L		15-AUG-06	QLI	R430691
Cadmium (Cd)	<0.0002		0.0002	mg/L		15-AUG-06	QLI	R430691
Cobalt (Co)	<0.0002		0.0002	mg/L		15-AUG-06	QLI	R430691
Chromium (Cr)	0.0029		0.0008	mg/L		15-AUG-06	QLI	R430691
Copper (Cu)	0.001		0.001	mg/L		15-AUG-06	QLI	R430691
Molybdenum (Mo)	0.0006		0.0001	mg/L		15-AUG-06	QLI	R430691
Nickel (Ni)	0.0002		0.0002	mg/L		15-AUG-06	QLI	R430691
Lead (Pb)	0.0002		0.0001	mg/L		15-AUG-06	QLI	R430691
Antimony (Sb)	0.0007		0.0004	mg/L		15-AUG-06	QLI	R430691
Selenium (Se)	0.0035		0.0004	mg/L		15-AUG-06	QLI	R430691
Tin (Sn)	<0.0004		0.0004	mg/L		15-AUG-06	QLI	R430691
Strontium (Sr)	0.0567		0.0002	mg/L		15-AUG-06	QLI	R430691
Titanium (Ti)	<0.005		0.005	mg/L		15-AUG-06	QLI	R430691
Thallium (Tl)	<0.0001		0.0001	mg/L		15-AUG-06	QLI	R430691
Uranium (U)	0.0002		0.0001	mg/L		15-AUG-06	QLI	R430691
Vanadium (V)	0.0038		0.0002	mg/L		15-AUG-06	QLI	R430691
Zinc (Zn)	<0.004		0.004	mg/L		15-AUG-06	QLI	R430691
BTEX and F1 (C6-C10)								
Benzene	<0.0005		0.0005	mg/L	12-AUG-06	12-AUG-06	SCM	R429821
Toluene	<0.0005		0.0005	mg/L	12-AUG-06	12-AUG-06	SCM	R429821
EthylBenzene	<0.0005		0.0005	mg/L	12-AUG-06	12-AUG-06	SCM	R429821
Xylenes	<0.0005		0.0005	mg/L	12-AUG-06	12-AUG-06	SCM	R429821

ALS LABORATORY GROUP ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	By	Batch
L420839-28 LAKE CENTRAL Sampled By: APRIL P. on 07-AUG-06 @ 13:30 Matrix: WATER								
BTEX and F1 (C6-C10)								
F1(C6-C10)	<0.1		0.1	mg/L	12-AUG-06	12-AUG-06	SCM	R429821
F1-BTEX	<0.1		0.1	mg/L	12-AUG-06	12-AUG-06	SCM	R429821
Routine Water: Major Ions, Fluoride								
Chloride (Cl)	99		1	mg/L		14-AUG-06	EOC	R430262
Fluoride (F)	0.07		0.05	mg/L		12-AUG-06	PTT	R429805
ICP metals and SO4 for routine water								
Calcium (Ca)	13.0		0.5	mg/L		14-AUG-06	JWU	R430125
Potassium (K)	3.9		0.5	mg/L		14-AUG-06	JWU	R430125
Magnesium (Mg)	10.5		0.1	mg/L		14-AUG-06	JWU	R430125
Sodium (Na)	58		1	mg/L		14-AUG-06	JWU	R430125
Sulfate (SO4)	8.1		0.5	mg/L		14-AUG-06	JWU	R430125
Ion Balance Calculation								
Ion Balance	104			%		15-AUG-06		
TDS (Calculated)	223			mg/L		15-AUG-06		
Hardness (as CaCO3)	76			mg/L		15-AUG-06		
Nitrate+Nitrite-N	<0.1		0.1	mg/L		14-AUG-06	KMY	R430408
Nitrate-N	<0.1		0.1	mg/L		14-AUG-06	KMY	R430408
Nitrite-N	<0.05		0.05	mg/L		14-AUG-06	KMY	R430408
pH, Conductivity and Total Alkalinity								
pH	8.0		0.1	pH		12-AUG-06	PTT	R429805
Conductivity (EC)	429		0.2	uS/cm		12-AUG-06	PTT	R429805
Bicarbonate (HCO3)	61		5	mg/L		12-AUG-06	PTT	R429805
Carbonate (CO3)	<5		5	mg/L		12-AUG-06	PTT	R429805
Hydroxide (OH)	<5		5	mg/L		12-AUG-06	PTT	R429805
Alkalinity, Total (as CaCO3)	50		5	mg/L		12-AUG-06	PTT	R429805
L420839-29 WINDY TF-SW Sampled By: APRIL P. on 08-AUG-06 @ 09:20 Matrix: WATER								
BTEX and F1 (C6-C10)								
Benzene	<0.0005		0.0005	mg/L	12-AUG-06	12-AUG-06	SCM	R429821
Toluene	<0.0005	RAMB	0.0005	mg/L	12-AUG-06	12-AUG-06	SCM	R429821
EthylBenzene	<0.0005		0.0005	mg/L	12-AUG-06	12-AUG-06	SCM	R429821
Xylenes	0.0024		0.0005	mg/L	12-AUG-06	12-AUG-06	SCM	R429821
F1(C6-C10)	<0.1		0.1	mg/L	12-AUG-06	12-AUG-06	SCM	R429821
F1-BTEX	<0.1		0.1	mg/L	12-AUG-06	12-AUG-06	SCM	R429821
L420839-30 WINDY TF-CENTRE Sampled By: APRIL P. on 08-AUG-06 @ 09:22 Matrix: WATER								
BTEX and F1 (C6-C10)								
Benzene	<0.0005		0.0005	mg/L	12-AUG-06	12-AUG-06	SCM	R429821
Toluene	<0.0005		0.0005	mg/L	12-AUG-06	12-AUG-06	SCM	R429821
EthylBenzene	<0.0005		0.0005	mg/L	12-AUG-06	12-AUG-06	SCM	R429821
Xylenes	<0.0005		0.0005	mg/L	12-AUG-06	12-AUG-06	SCM	R429821
F1(C6-C10)	<0.1		0.1	mg/L	12-AUG-06	12-AUG-06	SCM	R429821
F1-BTEX	<0.1		0.1	mg/L	12-AUG-06	12-AUG-06	SCM	R429821

ALS LABORATORY GROUP ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	By	Batch
L420839-31 WINDY TF-SW2 Sampled By: APRIL P. on 08-AUG-06 @ 09:25 Matrix: SOIL CCME BTEX, TVHs and TEHs CCME BTEX Benzene Toluene Ethylbenzene Xylenes CCME Total Extractable Hydrocarbons Surr: 2-Bromobenzotrifluoride Surr: Hexatriacontane Prep/Analysis Dates CCME Total Hydrocarbons F1 (C6-C10) F1-BTEX F2 (C10-C16) F3 (C16-C34) F4 (C34-C50) Total Hydrocarbons (C6-C50) Chromatogram to baseline at nC50 % Moisture	<0.005 <0.01 <0.01 <0.01 122 111 <5 <5 37 130 32 200 NO 8.1	 IPT RAMB 	 33-172 44-173 5 5 5 5 5 5 0.1	 mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg %	 14-AUG-06 14-AUG-06 14-AUG-06 14-AUG-06 18-AUG-06 18-AUG-06 18-AUG-06 20-AUG-06 20-AUG-06 20-AUG-06 20-AUG-06 20-AUG-06 20-AUG-06 20-AUG-06 14-AUG-06	 14-AUG-06 14-AUG-06 14-AUG-06 14-AUG-06 18-AUG-06 18-AUG-06 18-AUG-06 20-AUG-06 20-AUG-06 20-AUG-06 20-AUG-06 20-AUG-06 20-AUG-06 20-AUG-06 14-AUG-06	 SCM SCM SCM SCM MKE MKE MKE HMB	 R430420 R430420 R430420 R430420 R432237 R432237 R432237 R430313
L420839-32 WINDY TF-CENTRE 2 Sampled By: APRIL P. on 08-AUG-06 @ 09:26 Matrix: SOIL CCME BTEX, TVHs and TEHs CCME BTEX Benzene Toluene Ethylbenzene Xylenes CCME Total Extractable Hydrocarbons Surr: 2-Bromobenzotrifluoride Surr: Hexatriacontane Prep/Analysis Dates CCME Total Hydrocarbons F1 (C6-C10) F1-BTEX F2 (C10-C16) F3 (C16-C34) F4 (C34-C50) Total Hydrocarbons (C6-C50) Chromatogram to baseline at nC50 % Moisture	<0.005 <0.01 <0.01 <0.01 112 115 <5 <5 410 110 48 570 NO 26	 IPT RAMB 	 33-172 44-173 5 5 5 5 5 5 0.1	 mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg %	 14-AUG-06 14-AUG-06 14-AUG-06 14-AUG-06 18-AUG-06 18-AUG-06 18-AUG-06 20-AUG-06 20-AUG-06 20-AUG-06 20-AUG-06 20-AUG-06 20-AUG-06 20-AUG-06 14-AUG-06	 14-AUG-06 14-AUG-06 14-AUG-06 14-AUG-06 18-AUG-06 18-AUG-06 18-AUG-06 20-AUG-06 20-AUG-06 20-AUG-06 20-AUG-06 20-AUG-06 20-AUG-06 20-AUG-06 14-AUG-06	 SCM SCM SCM SCM MKE MKE MKE HMB	 R430420 R430420 R430420 R430420 R432238 R432238 R432238 R430313
L420839-33 WINDY TF-NW Sampled By: APRIL P. on 08-AUG-06 @ 09:29 Matrix: SOIL CCME BTEX, TVHs and TEHs CCME BTEX Benzene Toluene Ethylbenzene Xylenes	<0.005 <0.01 <0.01 <0.01	 	 0.005 0.01 0.01 0.01	 mg/kg mg/kg mg/kg mg/kg	 14-AUG-06 14-AUG-06 14-AUG-06 14-AUG-06	 14-AUG-06 14-AUG-06 14-AUG-06 14-AUG-06	 SCM SCM SCM SCM	 R430420 R430420 R430420 R430420

Sample Details/Parameters		Result	Qualifier*	D.L.	Units	Extracted	Analyzed	By	Batch
L420839-33 WINDY TF-NW									
Sampled By: APRIL P. on 08-AUG-06 @ 09:29									
Matrix: SOIL									
CCME BTEX, TVHs and TEHs									
CCME Total Extractable Hydrocarbons									
Surr:	2-Bromobenzotrifluoride	115		33-172	%	18-AUG-06	18-AUG-06	MKE	R432238
Surr:	Hexatriacontane	111		44-173	%	18-AUG-06	18-AUG-06	MKE	R432238
Prep/Analysis Dates						18-AUG-06	18-AUG-06	MKE	R432238
CCME Total Hydrocarbons									
	F1 (C6-C10)	<5	IPT	5	mg/kg		20-AUG-06		
	F1-BTEX	<5		5	mg/kg		20-AUG-06		
	F2 (C10-C16)	<5	RAMB	5	mg/kg		20-AUG-06		
	F3 (C16-C34)	48	RAMB	5	mg/kg		20-AUG-06		
	F4 (C34-C50)	18		5	mg/kg		20-AUG-06		
	Total Hydrocarbons (C6-C50)	66		5	mg/kg		20-AUG-06		
	Chromatogram to baseline at nC50	NO					20-AUG-06		
	% Moisture	13		0.1	%		14-AUG-06	HMB	R430313
* Refer to Referenced Information for Qualifiers (if any) and Methodology.									

Reference Information

Qualifiers for Individual Samples Listed:

Sample Number	Client ID	Qualifier	Description
L420839-12	WINDY CAMP LTA #H	IPC	TEH-CCME-ED F2-F4 - Instrument performance not showing the C50 response factor within 30% of the average of C10, C16 & C34 response factors.
L420839-14	WINDY CAMP LTA #J	IPC	TEH-CCME-ED F2-F4 - Instrument performance not showing the C50 response factor within 30% of the average of C10, C16 & C34 response factors.
L420839-15	WINDY CAMP LTA #K	IPC	TEH-CCME-ED F2-F4 - Instrument performance not showing the C50 response factor within 30% of the average of C10, C16 & C34 response factors.
L420839-16	WINDY CAMP LTA #L	IPC	TEH-CCME-ED F2-F4 - Instrument performance not showing the C50 response factor within 30% of the average of C10, C16 & C34 response factors.
L420839-17	147-A	IPC	TEH-CCME-ED F2-F4 - Instrument performance not showing the C50 response factor within 30% of the average of C10, C16 & C34 response factors.
L420839-18	147-B	IPC	TEH-CCME-ED F2-F4 - Instrument performance not showing the C50 response factor within 30% of the average of C10, C16 & C34 response factors.
L420839-19	2003-2B	IPC	TEH-CCME-ED F2-F4 - Instrument performance not showing the C50 response factor within 30% of the average of C10, C16 & C34 response factors.
L420839-31	WINDY TF-SW2	IPC	TEH-CCME-ED F2-F4 - Instrument performance not showing the C50 response factor within 30% of the average of C10, C16 & C34 response factors.
L420839-32	WINDY TF-CENTRE 2	IPC	TEH-CCME-ED F2-F4 - Instrument performance not showing the C50 response factor within 30% of the average of C10, C16 & C34 response factors.
L420839-33	WINDY TF-NW	IPC	TEH-CCME-ED F2-F4 - Instrument performance not showing the C50 response factor within 30% of the average of C10, C16 & C34 response factors.

Sample Parameter Qualifier key listed:

Qualifier	Description
IPC	Instrument performance not showing the C50 response factor within 30% of the average of C10, C16 & C34 response factors.
IPT	Instrument performance showing response factors for C6 and C10 not within 30% of the response factor for toluene.
RAMB	Result Adjusted For Method Blank
SOL:MI	Surrogate recovery outside acceptable limits due to matrix interference

Methods Listed (if applicable):

ALS Test Code	Matrix	Test Description	Preparation Method Reference(Based On)	Analytical Method Reference(Based On)
BTX,F1-ED	Water	BTEX and F1 (C6-C10)	EPA 5030	EPA 5030/8015&8260-P&T GC-MS & FID
CL-ED	Water	Chloride (Cl)		APHA 4500 Cl E-Colorimetry
ETL-BTX,TVH-CCME-ED	Soil	CCME BTEX		CCME CWS-PHC Dec-2000 - Pub# 1310
ETL-ROUTINE-ICP-ED	Water	ICP metals and SO4 for routine water		APHA 3120 B-ICP-OES
ETL-TEH-CCME-ED	Soil	CCME Total Extractable Hydrocarbons		CCME CWS-PHC Dec-2000 - Pub# 1310
ETL-TVH,TEH-CCME-ED	Soil	CCME Total Hydrocarbons		CCME CWS-PHC Dec-2000 - Pub# 1310

Analytical methods used for analysis of CCME Petroleum Hydrocarbons have been validated and comply with the Reference Method for the CWS PHC

Hydrocarbon results are expressed on a dry weight basis.

In cases where results for both F4 and F4G are reported, the greater of the two results must be used in any application of the CWS PHC guidelines and the gravimetric heavy hydrocarbons cannot be added to the C6 to C50 hydrocarbons.

In samples where BTEX and F1 were analyzed, F1-BTEX represents a value where the sum of Benzene, Toluene, Ethylbenzene and total Xylenes have been subtracted from F1.

In samples where PAHs, F2 and F3 were analyzed, F2-Naphth represents the result where Naphthalene has been subtracted from F2. F3-PAH represents a result where the sum of Benzo(a)anthracene, Benzo(a)pyrene, Benzo(b)fluoranthene, Benzo(k)fluoranthene, Dibenzo(a,h)anthracene, Fluoranthene, Indeno(1,2,3-cd)pyrene, Phenanthrene, and Pyrene has been subtracted from F3.

Unless otherwise qualified, the following quality control criteria have been met for the F1 hydrocarbon range:

1. All extraction and analysis holding times were met.
2. Instrument performance showing response factors for C6 and C10 within 30% of the response factor for toluene.
3. Linearity of gasoline response within 15% throughout the calibration range.

Unless otherwise qualified, the following quality control criteria have been met for the F2-F4 hydrocarbon ranges:

1. All extraction and analysis holding times were met.
2. Instrument performance showing C10, C16 and C34 response factors within 10% of their average.

Reference Information

IONBALANCE-ED	Water	Ion Balance Calculation	APHA 1030E
MET1-TOT-LOW-ED	Water	Total Trace Metals (Low Level)	EPA3015 EPA 6020
MET2-TOT-LOW-ED	Water	Total Major Metals	EPA3015 EPA 200.7
N2N3-ED	Water	Nitrate+Nitrite-N	APHA 4500 NO3H-Colorimetry
NO2-ED	Water	Nitrite-N	APHA 4500 NO2B-Colorimetry
NO3-ED	Water	Nitrate-N	APHA 4500 NO3H-Colorimetry
PH/EC/ALK-ED	Water	pH, Conductivity and Total Alkalinity	APHA 4500-H, 2510, 2320
PREP-MOISTURE-ED	Soil	% Moisture	Oven dry 105C-Gravimetric

** Laboratory Methods employed follow in-house procedures, which are generally based on nationally or internationally accepted methodologies.

Chain of Custody numbers:

74422 74423 74426

The last two letters of the above test code(s) indicate the laboratory that performed analytical analysis for that test. Refer to the list below:

Laboratory Definition Code	Laboratory Location	Laboratory Definition Code	Laboratory Location
ED	ALS LABORATORY GROUP - EDMONTON, ALBERTA, CANADA		

GLOSSARY OF REPORT TERMS

Surr - A surrogate is an organic compound that is similar to the target analyte(s) in chemical composition and behavior but not normally detected in environmental samples. Prior to sample processing, samples are fortified with one or more surrogate compounds. The reported surrogate recovery value provides a measure of method efficiency. The Laboratory control limits are determined under column heading D.L.

mg/kg (units) - unit of concentration based on mass, parts per million.

mg/L (units) - unit of concentration based on volume, parts per million.

< - Less than.

D.L. - The reporting limit.

N/A - Result not available. Refer to qualifier code and definition for explanation.

Test results reported relate only to the samples as received by the laboratory.

UNLESS OTHERWISE STATED, ALL SAMPLES WERE RECEIVED IN ACCEPTABLE CONDITION.

UNLESS OTHERWISE STATED, SAMPLES ARE NOT CORRECTED FOR CLIENT FIELD BLANKS.

Although test results are generated under strict QA/QC protocols, any unsigned test reports, faxes, or emails are considered preliminary.

ALS Laboratory Group has an extensive QA/QC program where all analytical data reported is analyzed using approved referenced procedures followed by checks and reviews by senior managers and quality assurance personnel. However, since the results are obtained from chemical measurements and thus cannot be guaranteed, ALS Laboratory Group assumes no liability for the use or interpretation of the results.



Environmental Division

ALS Laboratory Group Quality Control Report

Workorder: L420839

Report Date: 20-AUG-06

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Client: MIRAMAR HOPE BAY LTD
300, 889 HARBOURSIDE DRIVE
NORTH VANCOUVER BC V7P 3S1

Contact: MATT KAWEI

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
<u>BTX,F1-ED</u>		<u>Water</u>						
Batch	R429821							
WG481094-2	LCS							
Benzene			71		%		49-121	12-AUG-06
EthylBenzene			78		%		49-117	12-AUG-06
Toluene			73		%		53-116	12-AUG-06
F1(C6-C10)			101		%		39-154	12-AUG-06
Xylenes			83		%		49-123	12-AUG-06
WG481094-1	MB							
Benzene			<0.0005		mg/L		0.0005	12-AUG-06
EthylBenzene			<0.0005		mg/L		0.0005	12-AUG-06
Toluene			<0.0005		mg/L		0.0005	12-AUG-06
F1(C6-C10)			<0.1		mg/L		0.1	12-AUG-06
Xylenes			<0.0005		mg/L		0.0005	12-AUG-06
WG480879-2	MS	L420681-1						
Benzene			67		%		47-117	12-AUG-06
EthylBenzene			76		%		53-110	12-AUG-06
Toluene			72		%		52-110	12-AUG-06
Xylenes			80		%		65-143	12-AUG-06
WG480879-3	MS	L420681-1						
F1(C6-C10)			99		%		31-154	12-AUG-06
<u>CL-ED</u>		<u>Water</u>						
Batch	R430262							
WG481346-11	DUP	L407884-4						
Chloride (Cl)		701	699		mg/L	0.28	6.5	14-AUG-06
WG481346-13	DUP	L420813-1						
Chloride (Cl)		5	5	J	mg/L	0	4	14-AUG-06
WG481346-15	DUP	L421205-3						
Chloride (Cl)		55	56		mg/L	0.93	6.5	14-AUG-06
WG481346-2	LCS							
Chloride (Cl)			101		%		92-112	14-AUG-06
WG481346-3	LCS							
Chloride (Cl)			106		%		93-113	14-AUG-06
WG481346-1	MB							
Chloride (Cl)			<1		mg/L		1	14-AUG-06
WG481346-14	MS	L420813-1						
Chloride (Cl)			111		%		86-117	14-AUG-06
WG481346-16	MS	L421205-3						

ALS Laboratory Group Quality Control Report

Workorder: L420839

Report Date: 20-AUG-06

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Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
CL-ED		Water						
Batch	R430262							
WG481346-16	MS	L421205-3						
Chloride (Cl)			97		%		86-117	14-AUG-06
Batch	R431636							
WG483163-11	DUP	L422673-2						
Chloride (Cl)		83	83		mg/L	0.12	6.5	18-AUG-06
WG483163-15	DUP	L423146-2						
Chloride (Cl)		5	5	J	mg/L	0	4	17-AUG-06
WG483163-2	LCS							
Chloride (Cl)			101		%		92-112	17-AUG-06
WG483163-3	LCS							
Chloride (Cl)			104		%		93-113	17-AUG-06
WG483163-1	MB							
Chloride (Cl)			<1		mg/L		1	17-AUG-06
WG483163-16	MS	L423146-2						
Chloride (Cl)			109		%		86-117	17-AUG-06
ETL-ROUTINE-ICP-ED		Water						
Batch	R430125							
WG481417-4	CRM	ION-915 WATER						
Calcium (Ca)			109		%		94-114	14-AUG-06
Magnesium (Mg)			108		%		91-111	14-AUG-06
Potassium (K)			106		%		94-117	14-AUG-06
Sodium (Na)			108		%		95-114	14-AUG-06
Sulfate (SO4)			100		%		81-115	14-AUG-06
WG481417-5	DUP	L418839-5						
Calcium (Ca)		169	168		mg/L	0.67	14	14-AUG-06
Magnesium (Mg)		40.1	39.3		mg/L	1.9	10	14-AUG-06
Potassium (K)		5.2	5.5		mg/L	5.9	15	14-AUG-06
Sodium (Na)		345	348		mg/L	0.89	10	14-AUG-06
Sulfate (SO4)		93.5	93.3		mg/L	0.23	10	14-AUG-06
WG481417-7	DUP	L420839-28						
Calcium (Ca)		13.0	13.0		mg/L	0.041	14	14-AUG-06
Magnesium (Mg)		10.5	10.5		mg/L	0.44	10	14-AUG-06
Potassium (K)		3.9	4.1	J	mg/L	0.2	2	14-AUG-06
Sodium (Na)		58	58		mg/L	0.83	10	14-AUG-06
Sulfate (SO4)		8.1	7.9		mg/L	2.1	10	14-AUG-06

ALS Laboratory Group Quality Control Report

Workorder: L420839

Report Date: 20-AUG-06

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Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
ETL-ROUTINE-ICP-ED		Water						
Batch R430125								
WG481417-1	MB							
Calcium (Ca)			<0.5		mg/L		2.5	14-AUG-06
Magnesium (Mg)			<0.1		mg/L		0.5	14-AUG-06
Potassium (K)			<0.5		mg/L		2.5	14-AUG-06
Sodium (Na)			<1		mg/L		5	14-AUG-06
Sulfate (SO4)			<0.5		mg/L		2.5	14-AUG-06
WG481417-6	MS	L418839-5						
Calcium (Ca)			108		%		87-121	14-AUG-06
Magnesium (Mg)			108		%		82-116	14-AUG-06
Potassium (K)			105		%		88-115	14-AUG-06
Sodium (Na)			111		%		87-119	14-AUG-06
Sulfate (SO4)			103		%		82-121	14-AUG-06
WG481417-8	MS	L420839-28						
Calcium (Ca)			109		%		87-121	14-AUG-06
Magnesium (Mg)			108		%		82-116	14-AUG-06
Potassium (K)			104		%		88-115	14-AUG-06
Sodium (Na)			106		%		87-119	14-AUG-06
Sulfate (SO4)			102		%		82-121	14-AUG-06
Batch R431610								
WG483375-5	DUP	L422117-4						
Calcium (Ca)		N/A	982		mg/L	0.26	14	17-AUG-06
Magnesium (Mg)		N/A	352		mg/L	0.16	10	17-AUG-06
Potassium (K)		N/A	5.6		mg/L	4.1	15	17-AUG-06
Sodium (Na)		N/A	1000		mg/L	1.3	10	17-AUG-06
Sulfate (SO4)		N/A	11.2		mg/L	5.0	10	17-AUG-06
WG483375-7	DUP	L422123-2						
Calcium (Ca)		N/A	716		mg/L	2.6	14	17-AUG-06
Magnesium (Mg)		N/A	132		mg/L	2.5	10	17-AUG-06
Potassium (K)		N/A	3.5	J	mg/L	0.2	2	17-AUG-06
Sodium (Na)		N/A	360		mg/L	8.4	10	17-AUG-06
Sulfate (SO4)		N/A	78.5		mg/L	4.2	10	17-AUG-06
WG483375-9	DUP	L421410-11						
Calcium (Ca)		49.8	49.5		mg/L	0.52	14	17-AUG-06
Magnesium (Mg)		14.4	14.1		mg/L	2.0	10	17-AUG-06
Potassium (K)		2.3	2.2	J	mg/L	0.1	2	17-AUG-06

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ETL-ROUTINE-ICP-ED		Water						
Batch	R431610							
WG483375-9	DUP	L421410-11						
Sodium (Na)		15	14		mg/L	3.1	10	17-AUG-06
Sulfate (SO4)		13.7	12.5		mg/L	9.3	10	17-AUG-06
WG483375-3	LCS							
Calcium (Ca)			108		%		63-138	17-AUG-06
Magnesium (Mg)			108		%		63-138	17-AUG-06
Potassium (K)			110		%		63-138	17-AUG-06
Sodium (Na)			108		%		63-138	17-AUG-06
Sulfate (SO4)			104		%		63-138	17-AUG-06
WG483375-1	MB							
Calcium (Ca)			<0.5		mg/L		2.5	17-AUG-06
Magnesium (Mg)			<0.1		mg/L		0.5	17-AUG-06
Potassium (K)			<0.5		mg/L		2.5	17-AUG-06
Sodium (Na)			<1		mg/L		5	17-AUG-06
Sulfate (SO4)			<0.5		mg/L		2.5	17-AUG-06
WG483375-10	MS	L421410-11						
Calcium (Ca)			105		%		87-121	17-AUG-06
Magnesium (Mg)			108		%		82-116	17-AUG-06
Potassium (K)			102		%		88-115	17-AUG-06
Sodium (Na)			102		%		87-119	17-AUG-06
Sulfate (SO4)			108		%		82-121	17-AUG-06
WG483375-6	MS	L422117-4						
Calcium (Ca)			98		%		87-121	17-AUG-06
Magnesium (Mg)			106		%		82-116	17-AUG-06
Potassium (K)			106		%		88-115	17-AUG-06
Sodium (Na)			105		%		87-119	17-AUG-06
Sulfate (SO4)			112		%		82-121	17-AUG-06
WG483375-8	MS	L422123-2						
Calcium (Ca)			98		%		87-121	17-AUG-06
Magnesium (Mg)			104		%		82-116	17-AUG-06
Potassium (K)			103		%		88-115	17-AUG-06
Sodium (Na)			99		%		87-119	17-AUG-06
Sulfate (SO4)			105		%		82-121	17-AUG-06

F-ED

Water

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Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
F-ED		Water						
Batch	R429805							
WG480942-4	DUP	L418839-4						
Fluoride (F)		0.46	0.49	J	mg/L	0.03	0.2	12-AUG-06
WG480942-3	LCS							
Fluoride (F)			109		%		90-112	12-AUG-06
MET1-TOT-LOW-ED		Water						
Batch	R430691							
WG481428-2	DUP	L420839-27						
Aluminum (Al)		0.09	0.08	J	mg/L	0.01	0.08	15-AUG-06
Antimony (Sb)		0.0008	0.0008	J	mg/L	0.0001	0.0016	15-AUG-06
Arsenic (As)		0.0009	0.0010	J	mg/L	0.0001	0.0016	15-AUG-06
Barium (Ba)		0.0034	0.0031		mg/L	10	15	15-AUG-06
Beryllium (Be)		<0.001	<0.001	RPD-NA	mg/L	N/A	26	15-AUG-06
Bismuth (Bi)		<0.0001	<0.0001	RPD-NA	mg/L	N/A	26	15-AUG-06
Boron (B)		0.09	0.07	J	mg/L	0.02	0.08	15-AUG-06
Cadmium (Cd)		<0.0002	<0.0002	RPD-NA	mg/L	N/A	31	15-AUG-06
Chromium (Cr)		0.0030	0.0030	J	mg/L	0.0000	0.0032	15-AUG-06
Cobalt (Co)		<0.0002	<0.0002	RPD-NA	mg/L	N/A	15	15-AUG-06
Copper (Cu)		0.001	0.001	J	mg/L	0.000	0.004	15-AUG-06
Lead (Pb)		0.0002	0.0002	J	mg/L	0.0000	0.0004	15-AUG-06
Molybdenum (Mo)		0.0006	0.0006	J	mg/L	0.0000	0.0004	15-AUG-06
Nickel (Ni)		<0.0002	0.0002	RPD-NA	mg/L	N/A	13	15-AUG-06
Phosphorus (P)		<0.01	<0.01	RPD-NA	mg/L	N/A	19	15-AUG-06
Selenium (Se)		0.0032	0.0036	J	mg/L	0.0004	0.0016	15-AUG-06
Silver (Ag)		<0.0004	<0.0004	RPD-NA	mg/L	N/A	33	15-AUG-06
Strontium (Sr)		0.0568	0.0558		mg/L	1.7	9.5	15-AUG-06
Thallium (Tl)		<0.0001	<0.0001	RPD-NA	mg/L	N/A	26	15-AUG-06
Tin (Sn)		<0.0004	<0.0004	RPD-NA	mg/L	N/A	17	15-AUG-06
Titanium (Ti)		<0.005	0.005	RPD-NA	mg/L	N/A	32	15-AUG-06
Uranium (U)		0.0002	0.0002	J	mg/L	0.0000	0.0004	15-AUG-06
Vanadium (V)		0.0037	0.0038		mg/L	4.5	27	15-AUG-06
Zinc (Zn)		<0.004	<0.004	RPD-NA	mg/L	N/A	33	15-AUG-06
WG481428-1	MB							
Aluminum (Al)			<0.02		mg/L		0.1	15-AUG-06
Antimony (Sb)			<0.0004		mg/L		0.002	15-AUG-06

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Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
MET1-TOT-LOW-ED		Water						
Batch	R430691							
WG481428-1	MB							
Arsenic (As)			<0.0004		mg/L		0.002	15-AUG-06
Barium (Ba)			0.0002		mg/L		0.001	15-AUG-06
Beryllium (Be)			<0.001		mg/L		0.005	15-AUG-06
Bismuth (Bi)			<0.0001		mg/L		0.0005	15-AUG-06
Boron (B)			<0.02		mg/L		0.1	15-AUG-06
Cadmium (Cd)			<0.0002		mg/L		0.001	15-AUG-06
Chromium (Cr)			<0.0008		mg/L		0.004	15-AUG-06
Cobalt (Co)			<0.0002		mg/L		0.001	15-AUG-06
Copper (Cu)			<0.001		mg/L		0.005	15-AUG-06
Lead (Pb)			<0.0001		mg/L		0.0005	15-AUG-06
Molybdenum (Mo)			<0.0001		mg/L		0.0005	15-AUG-06
Nickel (Ni)			0.0004		mg/L		0.001	15-AUG-06
Selenium (Se)			<0.0004		mg/L		0.002	15-AUG-06
Silver (Ag)			<0.0004		mg/L		0.002	15-AUG-06
Strontium (Sr)			0.0009		mg/L		0.001	15-AUG-06
Thallium (Tl)			<0.0001		mg/L		0.0005	15-AUG-06
Tin (Sn)			<0.0004		mg/L		0.002	15-AUG-06
Titanium (Ti)			<0.005		mg/L		0.025	15-AUG-06
Uranium (U)			<0.0001		mg/L		0.0005	15-AUG-06
Vanadium (V)			0.0004		mg/L		0.001	15-AUG-06
Zinc (Zn)			<0.004		mg/L		0.02	15-AUG-06
Phosphorus (P)			0.07	A	mg/L		0.05	15-AUG-06
WG481428-3	MS	L420839-28						
Aluminum (Al)			92		%		71-131	15-AUG-06
Antimony (Sb)			95		%		79-122	15-AUG-06
Arsenic (As)			99		%		81-118	15-AUG-06
Barium (Ba)			96		%		69-123	15-AUG-06
Beryllium (Be)			94		%		68-132	15-AUG-06
Bismuth (Bi)			98		%		82-119	15-AUG-06
Boron (B)			89		%		71-128	15-AUG-06
Cadmium (Cd)			85		%		83-114	15-AUG-06
Chromium (Cr)			99		%		78-120	15-AUG-06
Cobalt (Co)			95		%		84-114	15-AUG-06

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<u>MET1-TOT-LOW-ED</u>		<u>Water</u>						
Batch	R430691							
WG481428-3	MS	L420839-28						
Copper (Cu)			100		%		73-124	15-AUG-06
Lead (Pb)			105		%		80-121	15-AUG-06
Molybdenum (Mo)			93		%		80-121	15-AUG-06
Nickel (Ni)			97		%		78-118	15-AUG-06
Phosphorus (P)			99		%		67-134	15-AUG-06
Selenium (Se)			94		%		68-125	15-AUG-06
Silver (Ag)			55		%		21-154	15-AUG-06
Strontium (Sr)			95		%		49-144	15-AUG-06
Thallium (Tl)			107		%		80-123	15-AUG-06
Tin (Sn)			98		%		81-120	15-AUG-06
Titanium (Ti)			112		%		72-128	15-AUG-06
Uranium (U)			97		%		82-125	15-AUG-06
Vanadium (V)			101		%		74-125	15-AUG-06
Zinc (Zn)			90		%		60-131	15-AUG-06
<u>MET2-TOT-LOW-ED</u>		<u>Water</u>						
Batch	R430268							
WG481428-2	DUP	L420839-27						
Calcium (Ca)		11.4	11.3		mg/L	0.71	11	14-AUG-06
Iron (Fe)		0.066	0.067		mg/L	1.5	16	14-AUG-06
Magnesium (Mg)		9.1	9.0		mg/L	0.81	10	14-AUG-06
Manganese (Mn)		0.002	0.002	J	mg/L	0.000	0.004	14-AUG-06
Potassium (K)		3.7	3.7		mg/L	1.2	10	14-AUG-06
Sodium (Na)		52	52		mg/L	0.57	10	14-AUG-06
WG481428-1	MB							
Calcium (Ca)			<0.5		mg/L		2.5	14-AUG-06
Iron (Fe)			<0.005		mg/L		0.025	14-AUG-06
Magnesium (Mg)			<0.1		mg/L		0.5	14-AUG-06
Manganese (Mn)			<0.001		mg/L		0.005	14-AUG-06
Potassium (K)			<0.1		mg/L		0.5	14-AUG-06
Sodium (Na)			<1		mg/L		5	14-AUG-06
WG481428-3	MS	L420839-28						
Calcium (Ca)			89		%		50-132	14-AUG-06
Iron (Fe)			95		%		84-117	14-AUG-06

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<u>MET2-TOT-LOW-ED</u>		<u>Water</u>						
Batch	R430268							
WG481428-3	MS	L420839-28						
Magnesium (Mg)			86		%		62-122	14-AUG-06
Manganese (Mn)			97		%		79-119	14-AUG-06
Potassium (K)			95		%		72-122	14-AUG-06
Sodium (Na)			96		%		64-127	14-AUG-06
<u>N2N3-ED</u>		<u>Water</u>						
Batch	R430408							
WG481537-4	DUP	L420720-3						
Nitrate+Nitrite-N		<0.1	<0.1	RPD-NA	mg/L	N/A	6.9	14-AUG-06
WG481537-6	DUP	L420839-26						
Nitrate+Nitrite-N		<0.1	<0.1	RPD-NA	mg/L	N/A	6.9	14-AUG-06
WG481537-3	LCS							
Nitrate+Nitrite-N			98		%		87-113	14-AUG-06
WG481537-2	MB							
Nitrate+Nitrite-N			<0.1		mg/L		0.1	14-AUG-06
WG481537-5	MS	L418839-2						
Nitrate+Nitrite-N			101		%		76-121	14-AUG-06
WG481537-7	MS	L421350-4						
Nitrate+Nitrite-N			101		%		76-121	14-AUG-06
<u>NO2-ED</u>		<u>Water</u>						
Batch	R430408							
WG481537-6	DUP	L420839-26						
Nitrite-N		<0.05	<0.05	RPD-NA	mg/L	N/A	6.5	14-AUG-06
WG481537-3	LCS							
Nitrite-N			102		%		90-110	14-AUG-06
WG481537-2	MB							
Nitrite-N			<0.05		mg/L		0.05	14-AUG-06
WG481537-5	MS	L418839-2						
Nitrite-N			102		%		88-113	14-AUG-06
WG481537-7	MS	L421350-4						
Nitrite-N			103		%		88-113	14-AUG-06
<u>PH/EC/ALK-ED</u>		<u>Water</u>						
Batch	R429805							
WG480942-4	DUP	L418839-4						
Alkalinity, Total (as CaCO3)		488	489		mg/L	0.17	6.5	12-AUG-06
Bicarbonate (HCO3)		595	596		mg/L	0.17	26	12-AUG-06

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<u>PH/EC/ALK-ED</u>		<u>Water</u>						
Batch	R429805							
WG480942-4	DUP	L418839-4						
Carbonate (CO3)		<5	<5	RPD-NA	mg/L	N/A	26	12-AUG-06
Conductivity (EC)		944	945		uS/cm	0.11	7.1	12-AUG-06
Hydroxide (OH)		<5	<5	RPD-NA	mg/L	N/A	26	12-AUG-06
pH		7.6	7.6	J	pH	0.0	0.2	12-AUG-06
WG480942-5	DUP	L420268-1						
Alkalinity, Total (as CaCO3)		238	239		mg/L	0.16	6.5	12-AUG-06
Bicarbonate (HCO3)		291	291		mg/L	0.17	26	12-AUG-06
Carbonate (CO3)		<5	<5	RPD-NA	mg/L	N/A	26	12-AUG-06
Conductivity (EC)		469	468		uS/cm	0.21	7.1	12-AUG-06
Hydroxide (OH)		<5	<5	RPD-NA	mg/L	N/A	26	12-AUG-06
pH		8.2	8.3	J	pH	0.0	0.2	12-AUG-06
WG480942-1	LCS							
Conductivity (EC)			99		%		94-106	12-AUG-06
WG480942-2	LCS							
pH			7.1		pH		6.9-7.1	12-AUG-06
WG480942-3	LCS							
Alkalinity, Total (as CaCO3)			103		%		90-110	12-AUG-06
<u>ETL-BTX,TVH-CCME-ED</u>		<u>Soil</u>						
Batch	R430420							
WG481207-1	DUP	L420839-6						
Benzene		<0.005	<0.005	RPD-NA	mg/kg	N/A	59	14-AUG-06
Ethylbenzene		<0.01	<0.01	RPD-NA	mg/kg	N/A	55	14-AUG-06
Toluene		<0.01	<0.01	RPD-NA	mg/kg	N/A	49	14-AUG-06
TVH: (C6-C10 / No BTEX Correction)		<5	<5	RPD-NA	mg/kg	N/A	76	14-AUG-06
Xylenes		<0.01	<0.01	RPD-NA	mg/kg	N/A	63	14-AUG-06
WG481207-4	DUP	L420839-24						
Benzene		<0.005	<0.005	RPD-NA	mg/kg	N/A	59	14-AUG-06
Ethylbenzene		<0.01	<0.01	RPD-NA	mg/kg	N/A	55	14-AUG-06
Toluene		0.01	<0.01	RPD-NA	mg/kg	N/A	49	14-AUG-06
TVH: (C6-C10 / No BTEX Correction)		690	500		mg/kg	31	76	14-AUG-06
Xylenes		8.7	8.7		mg/kg	0.21	63	14-AUG-06
WG481733-2	LCS							
Benzene			51		%		31-110	14-AUG-06
Ethylbenzene			62		%		33-111	14-AUG-06

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<u>ETL-BTX,TVH-CCME-ED</u>		<u>Soil</u>						
Batch	R430420							
WG481733-2	LCS							
Toluene			58		%		32-110	14-AUG-06
TVH: (C6-C10 / No BTEX Correction)			42		%		9-80	14-AUG-06
Xylenes			65		%		33-112	14-AUG-06
WG481733-1	MB							
Benzene			<0.005		mg/kg		0.005	14-AUG-06
Ethylbenzene			<0.01		mg/kg		0.01	14-AUG-06
Toluene			<0.01		mg/kg		0.01	14-AUG-06
TVH: (C6-C10 / No BTEX Correction)			<5		mg/kg		5	14-AUG-06
Xylenes			<0.01		mg/kg		0.01	14-AUG-06
WG481207-2	MS	L420839-16						
Benzene			63		%		17-133	14-AUG-06
Ethylbenzene			77		%		33-130	14-AUG-06
Toluene			71		%		29-132	14-AUG-06
Xylenes			84		%		31-137	14-AUG-06
WG481207-3	MS	L420839-16						
TVH: (C6-C10 / No BTEX Correction)			34		%		0-90	14-AUG-06
<u>ETL-TEH-CCME-ED</u>		<u>Soil</u>						
Batch	R431984							
WG483770-3	DUP	L420839-5						
TEH: (C10-C16)		180	210		mg/kg	13	58	17-AUG-06
TEH: (C16-C34)		560	620		mg/kg	11	60	17-AUG-06
TEH: (C34-C50)		160	220		mg/kg	31	60	17-AUG-06
WG483770-2	LCS							
TEH: (C10-C16)			118		%		39-136	17-AUG-06
TEH: (C16-C34)			118		%		39-136	17-AUG-06
TEH: (C34-C50)			118		%		39-136	17-AUG-06
WG483770-1	MB							
TEH: (C34-C50)			<5		mg/kg		5	17-AUG-06
TEH: (C10-C16)			14	A	mg/kg		5	17-AUG-06
TEH: (C16-C34)			20	A	mg/kg		5	17-AUG-06
Batch	R432237							
WG484288-2	LCS							
TEH: (C10-C16)			111		%		39-136	18-AUG-06
TEH: (C16-C34)			111		%		39-136	18-AUG-06

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<u>ETL-TEH-CCME-ED</u>		<u>Soil</u>						
Batch	R432237							
WG484288-2	LCS							
TEH: (C34-C50)			111		%		39-136	18-AUG-06
WG484288-1	MB							
TEH: (C10-C16)			<5		mg/kg		5	18-AUG-06
TEH: (C34-C50)			<5		mg/kg		5	18-AUG-06
TEH: (C16-C34)			21	A	mg/kg		5	18-AUG-06
Batch	R432238							
WG484289-3	DUP	L423401-1						
TEH: (C10-C16)		<5	<5	RPD-NA	mg/kg	N/A	58	18-AUG-06
TEH: (C16-C34)		<5	<5	RPD-NA	mg/kg	N/A	60	18-AUG-06
TEH: (C34-C50)		<5	7	RPD-NA	mg/kg	N/A	60	18-AUG-06
WG484289-1	MB							
TEH: (C34-C50)			<5		mg/kg		5	18-AUG-06
TEH: (C10-C16)			13	A	mg/kg		5	18-AUG-06
TEH: (C16-C34)			29	A	mg/kg		5	18-AUG-06
WG484289-2	MS	L423376-1						
TEH: (C10-C16)			110.9		%		27-148	18-AUG-06
TEH: (C16-C34)			110.9		%		27-148	18-AUG-06
TEH: (C34-C50)			110.9		%		27-148	18-AUG-06
Batch	R432244							
WG484348-1	MB							
TEH: (C10-C16)			<5		mg/kg		5	18-AUG-06
TEH: (C34-C50)			<5		mg/kg		5	18-AUG-06
TEH: (C16-C34)			18	A	mg/kg		5	18-AUG-06
WG484348-2	MS	L420839-14						
TEH: (C10-C16)			90		%		27-148	18-AUG-06
TEH: (C16-C34)			90		%		27-148	18-AUG-06
TEH: (C34-C50)			90		%		27-148	18-AUG-06
<u>PREP-MOISTURE-ED</u>		<u>Soil</u>						
Batch	R430313							
WG481212-1	DUP	L420839-6						
% Moisture		14	14		%	3.5	15	14-AUG-06
WG481212-3	DUP	L420839-24						
% Moisture		11	11		%	1.1	15	14-AUG-06

ALS Laboratory Group Quality Control Report

Workorder: L420839

Report Date: 20-AUG-06

Page 12 of 12

Legend:

Limit	99% Confidence Interval (Laboratory Control Limits)
DUP	Duplicate
RPD	Relative Percent Difference
N/A	Not Available
LCS	Laboratory Control Sample
SRM	Standard Reference Material
MS	Matrix Spike
MSD	Matrix Spike Duplicate
ADE	Average Desorption Efficiency
MB	Method Blank
IRM	Internal Reference Material
CRM	Certified Reference Material
CCV	Continuing Calibration Verification
CVS	Calibration Verification Standard
LCSD	Laboratory Control Sample Duplicate

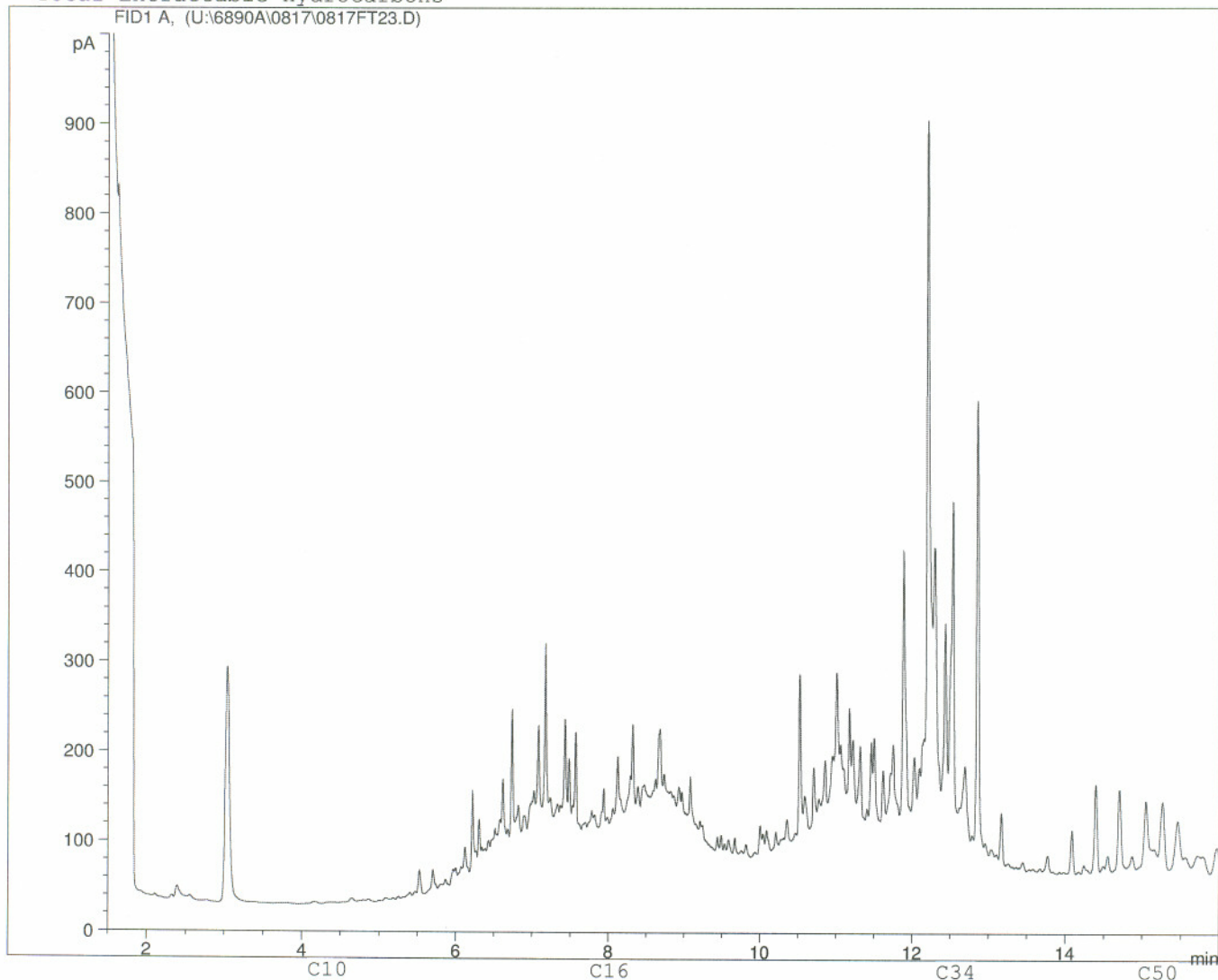
Qualifier:

RPD-NA	Relative Percent Difference Not Available due to result(s) being less than detection limit.
A	Method blank exceeds acceptance limit. Blank correction not applied, unless the qualifier "RAMB" (result adjusted for method blank) appears in the Analytical Report.
B	Method blank result exceeds acceptance limit, however, it is less than 5% of sample concentration. Blank correction not applied.
E	Matrix spike recovery may fall outside the acceptance limits due to high sample background.
F	Silver recovery low, likely due to elevated chloride levels in sample.
G	Outlier - No assignable cause for nonconformity has been determined.
J	Duplicate results and limit(s) are expressed in terms of absolute difference.
K	The sample referenced above is of a non-standard matrix type; standard QC acceptance criteria may not be achievable.

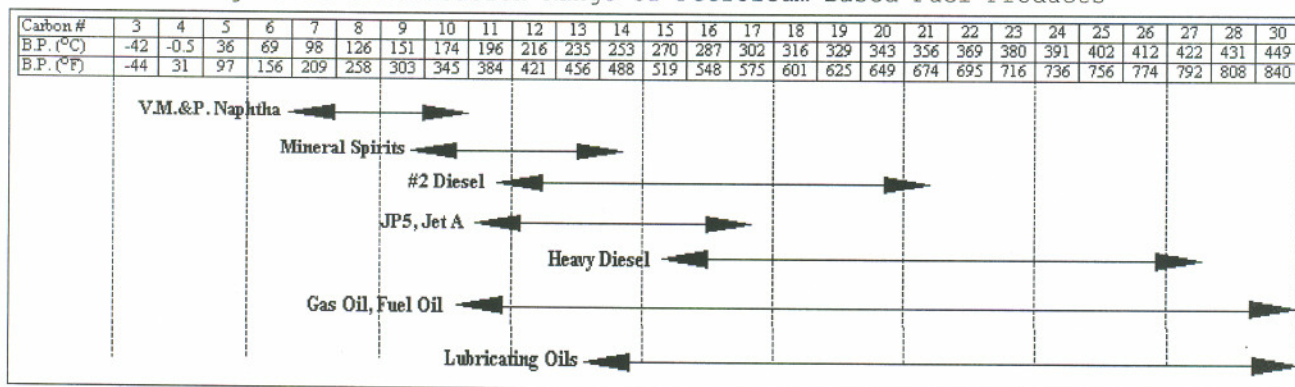
Client ID: WINDY CAMP LTA #A
Sample ID: L420839-5 4
Injection Date: 8/18/2006 2:51:11 AM
Instrument: 6890



Total Extractable Hydrocarbons



Boiling Point Distribution Range of Petroleum Based Fuel Products



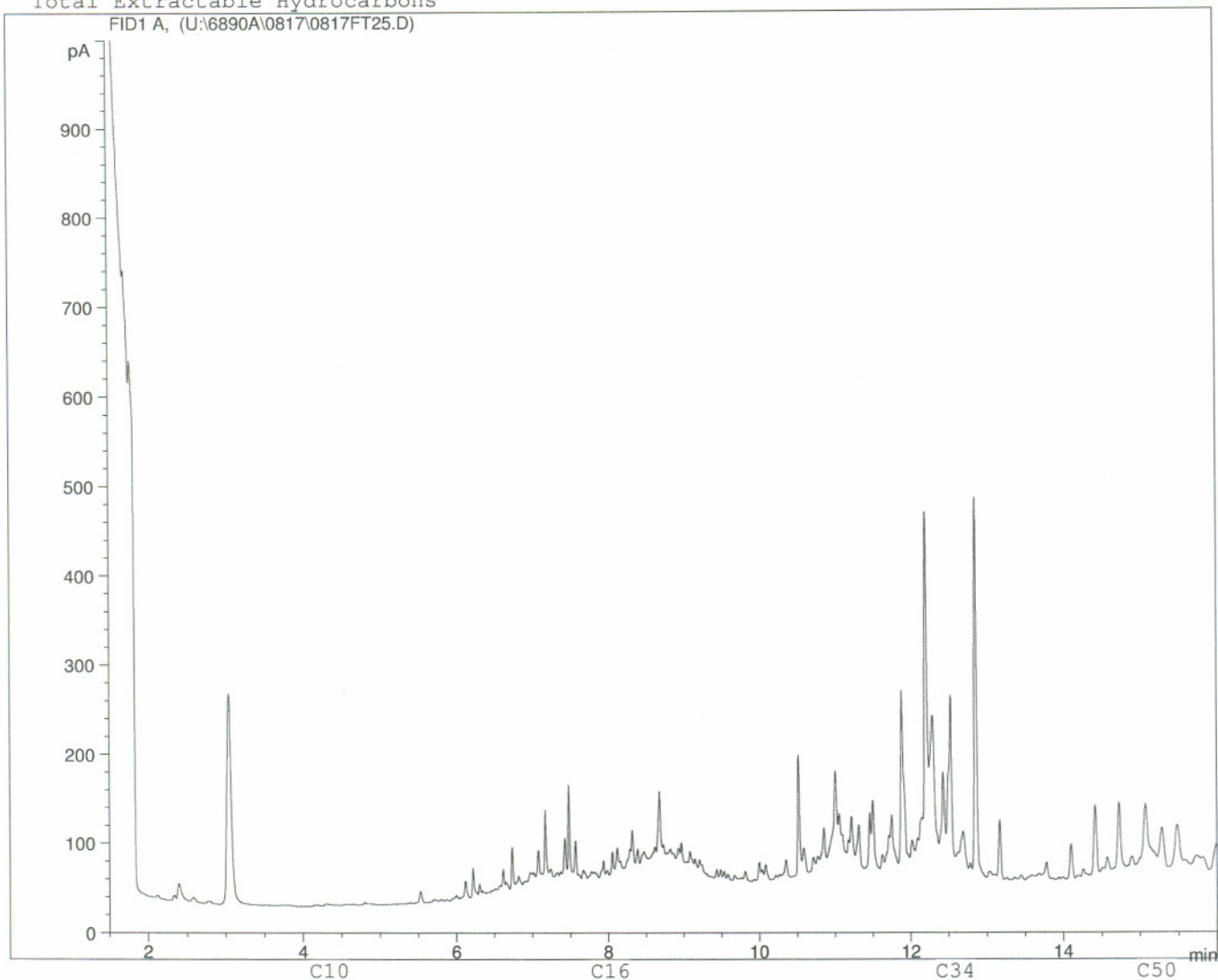
Adapted from: Drews, A.W., ED. Manual on Hydrocarbon Analysis, 4th ed.; American Society for Testing and Materials: Philadelphia, PA., 1989: p XVIII

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Sample ID: L420839-6 4
Injection Date: 8/18/2006 3:41:21 AM
Instrument: 6890

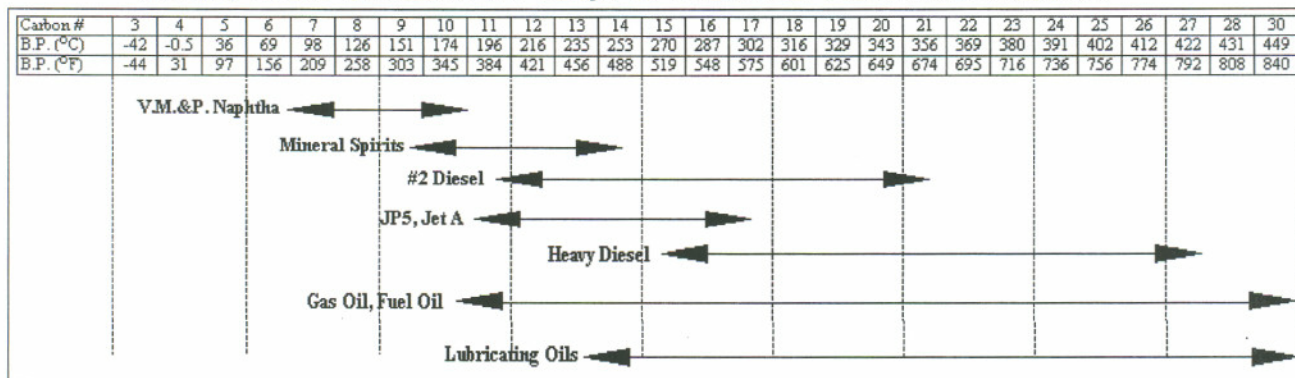


Total Extractable Hydrocarbons

FID1 A, (U:\6890A\0817\0817FT25.D)



Boiling Point Distribution Range of Petroleum Based Fuel Products



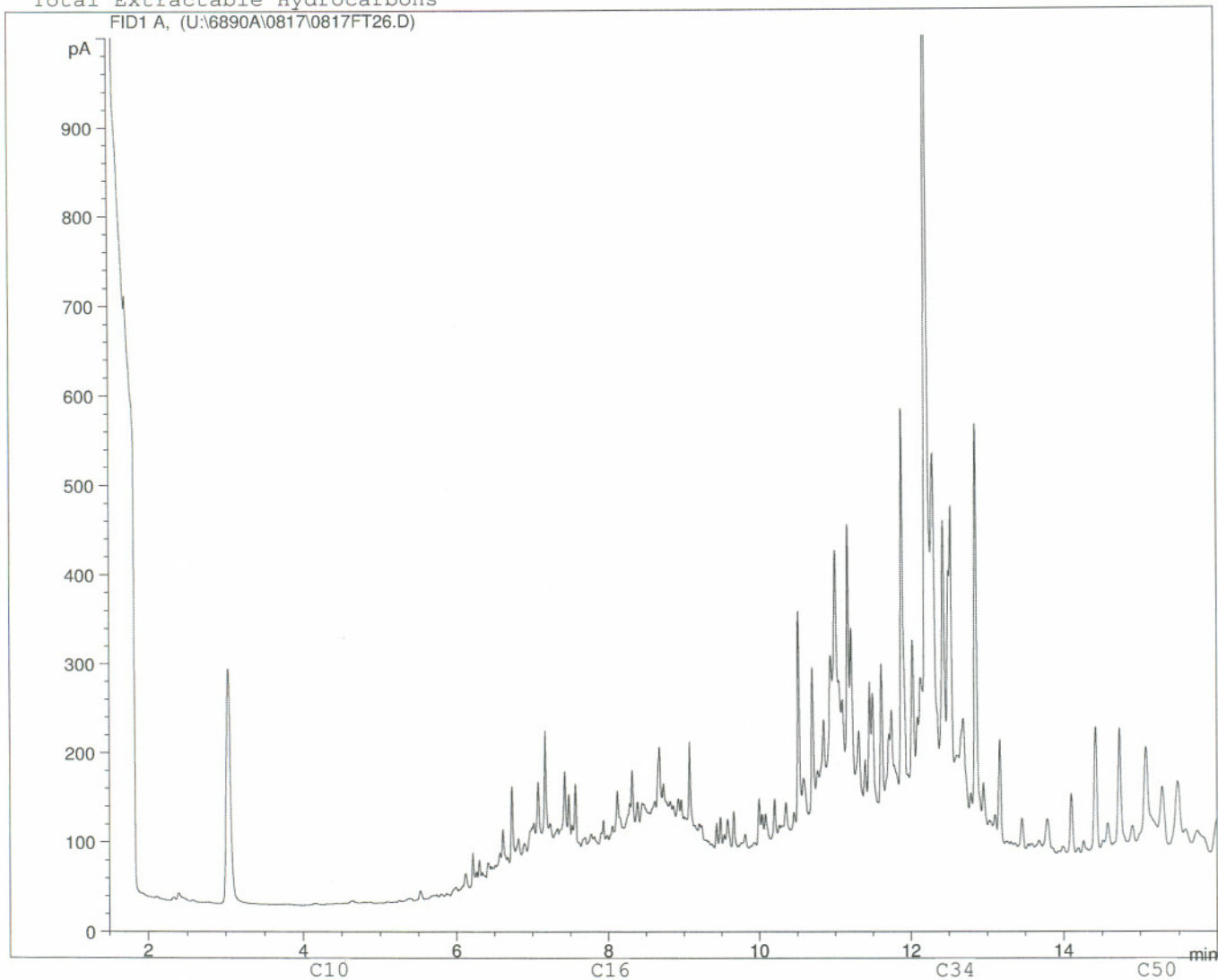
Adapted from: Drews, A.W., ED. Manual on Hydrocarbon Analysis, 4th ed.; American Society for Testing and Materials: Philadelphia, PA., 1989: p XVIII

Client ID: WINDY CAMP LTA #C
 Sample ID: L420839-7 4
 Injection Date: 8/18/2006 4:06:14 AM
 Instrument: 6890

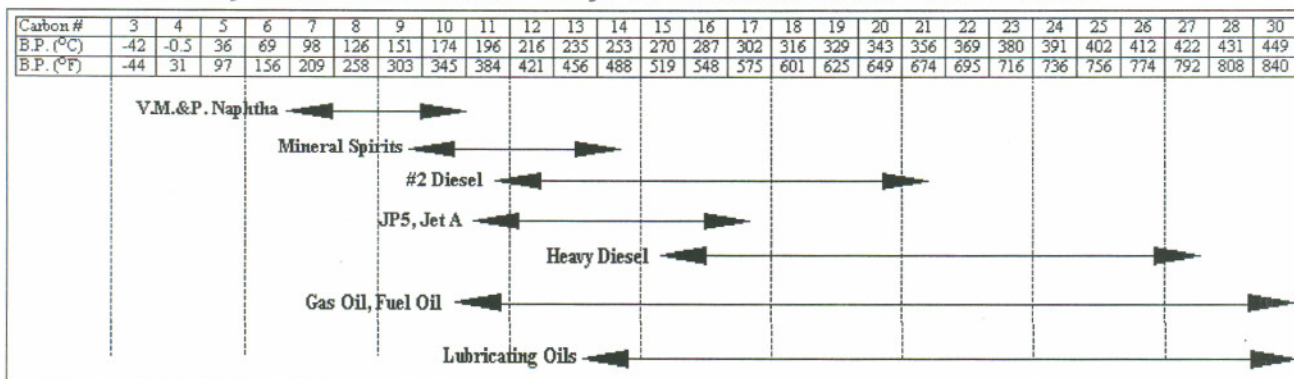


Total Extractable Hydrocarbons

FID1 A, (U:\6890A\0817\0817FT26.D)



Boiling Point Distribution Range of Petroleum Based Fuel Products

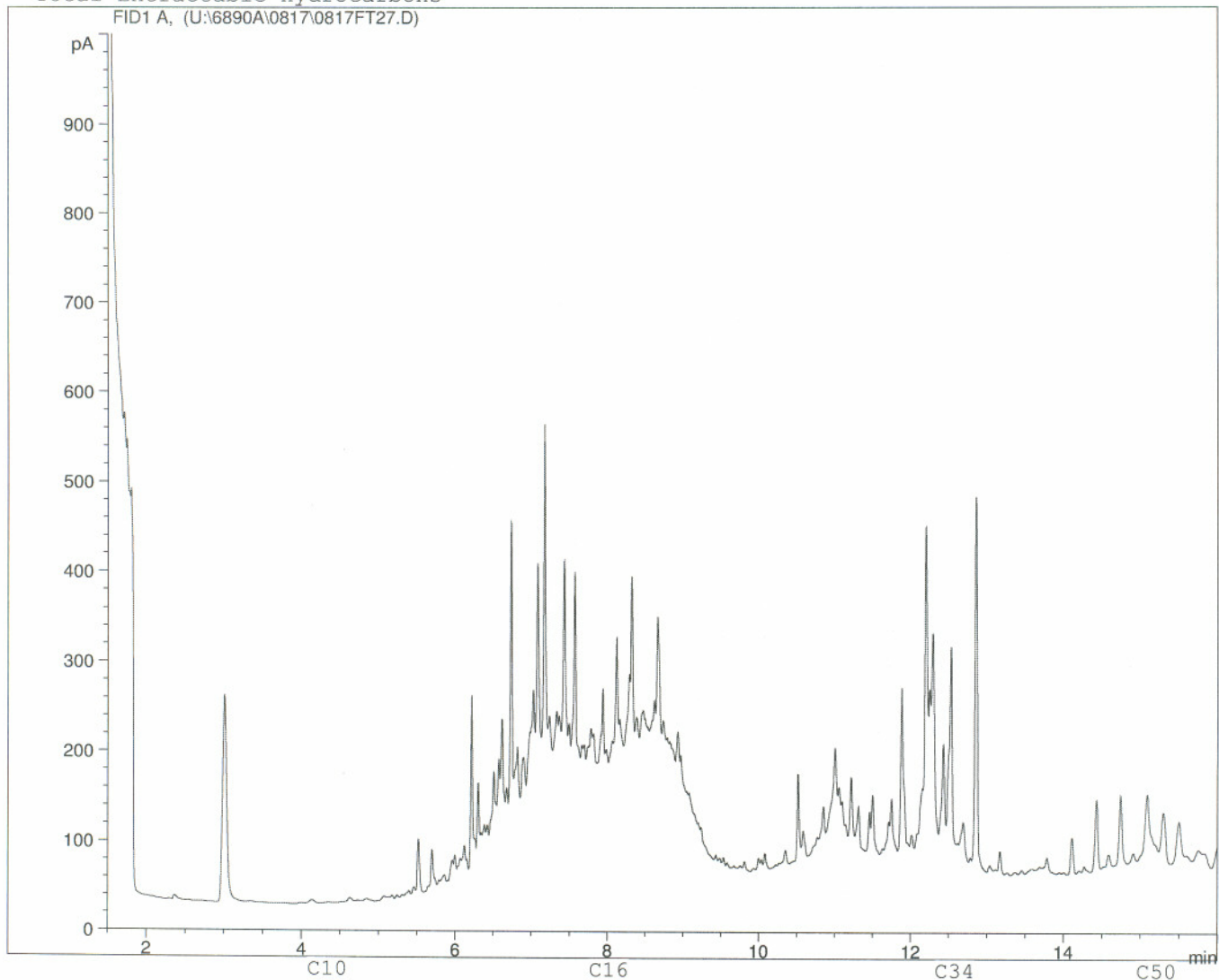


Adapted from: Drews, A.W., ED. Manual on Hydrocarbon Analysis, 4th ed.; American Society for Testing and Materials: Philadelphia, PA., 1989: p XVIII

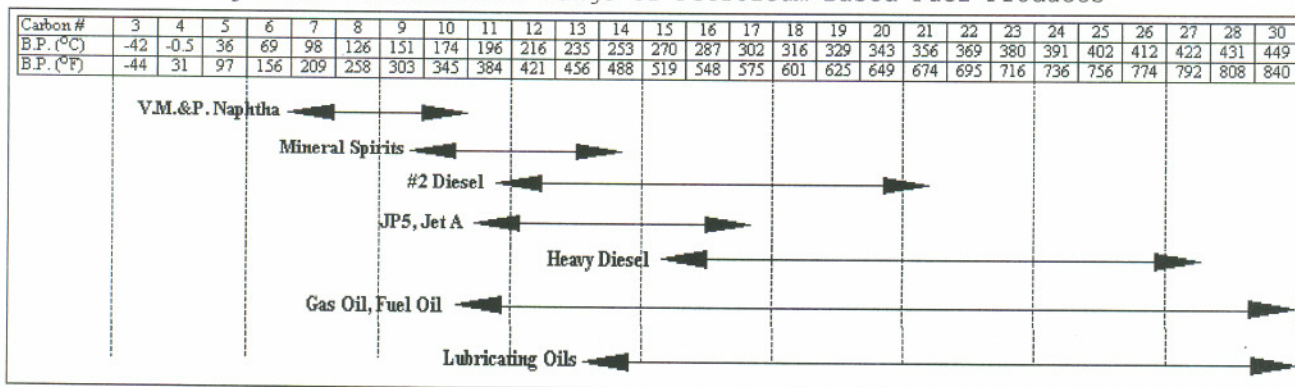
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Instrument: 6890



Total Extractable Hydrocarbons



Boiling Point Distribution Range of Petroleum Based Fuel Products

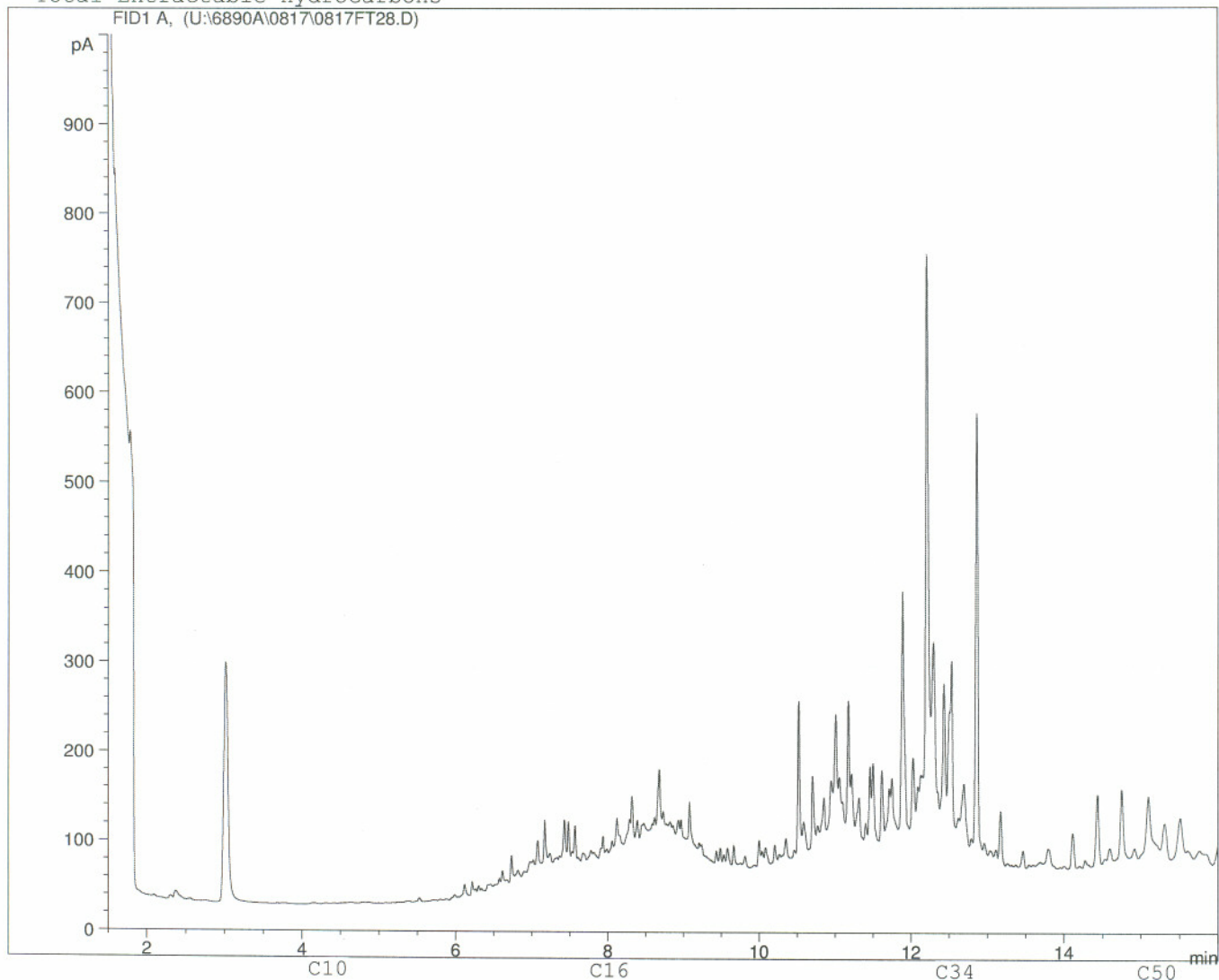


Adapted from: Drews, A.W., ED. Manual on Hydrocarbon Analysis, 4th ed.; American Society for Testing and Materials: Philadelphia, PA., 1989: p XVIII

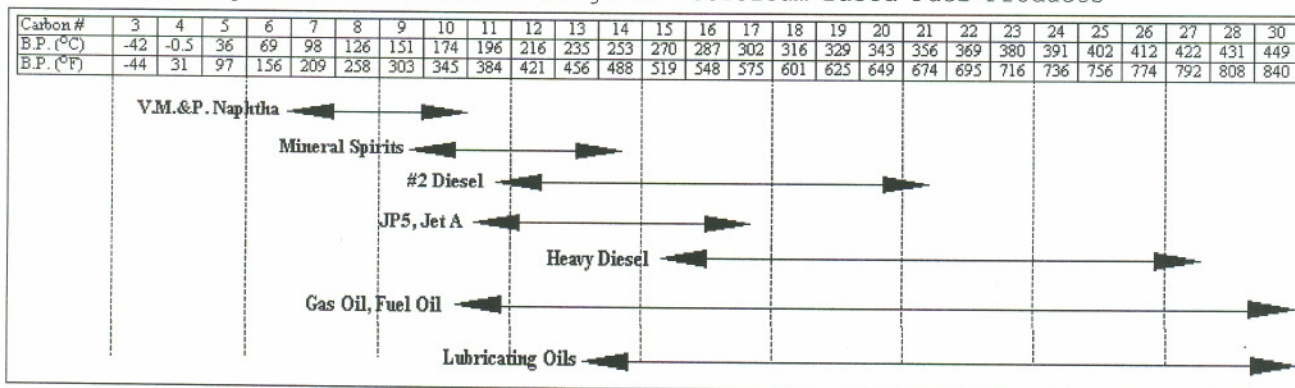
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Instrument: 6890



Total Extractable Hydrocarbons



Boiling Point Distribution Range of Petroleum Based Fuel Products

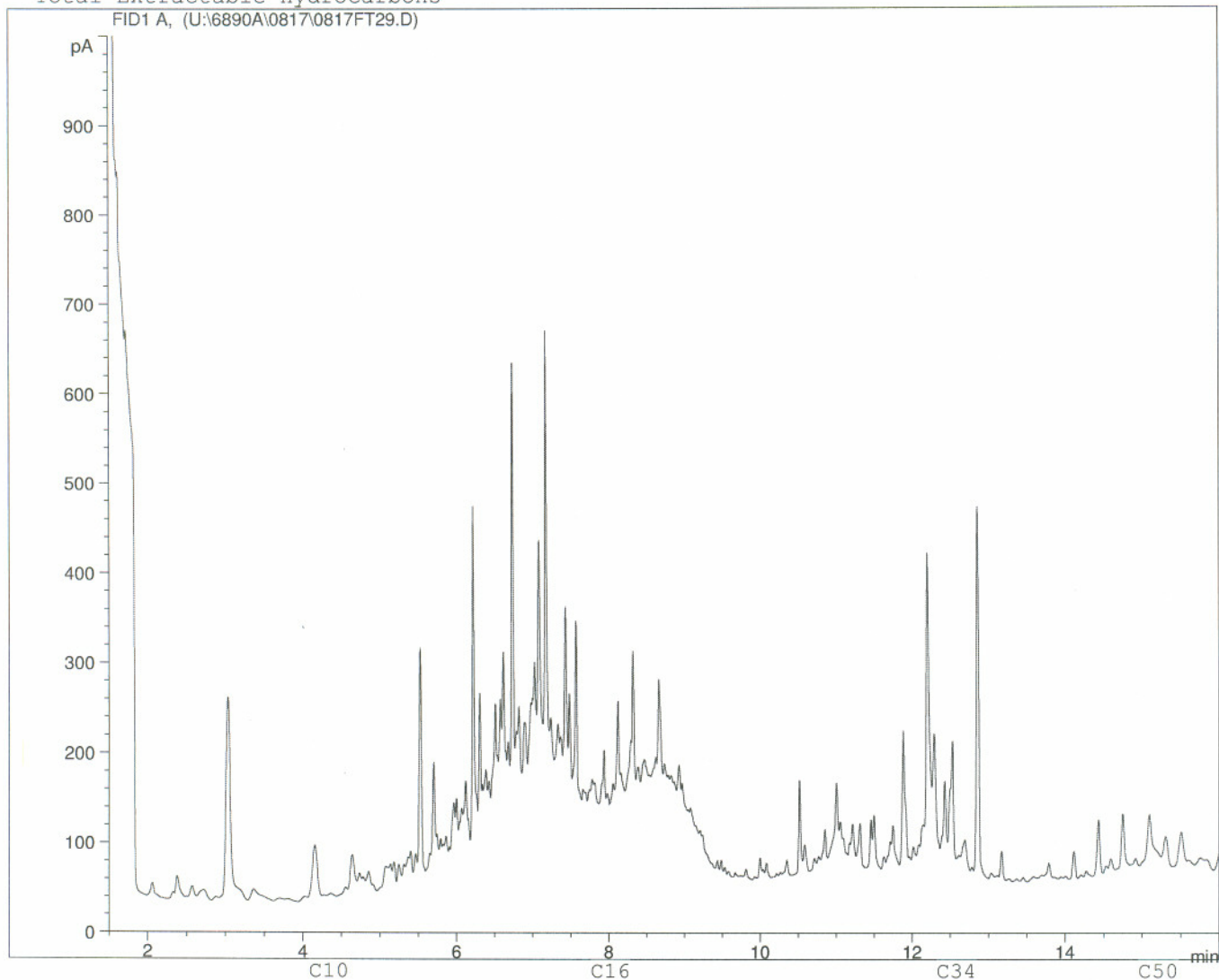


Adapted from: Drews, A.W., ED. Manual on Hydrocarbon Analysis, 4th ed.; American Society for Testing and Materials: Philadelphia, PA., 1989: p XVIII

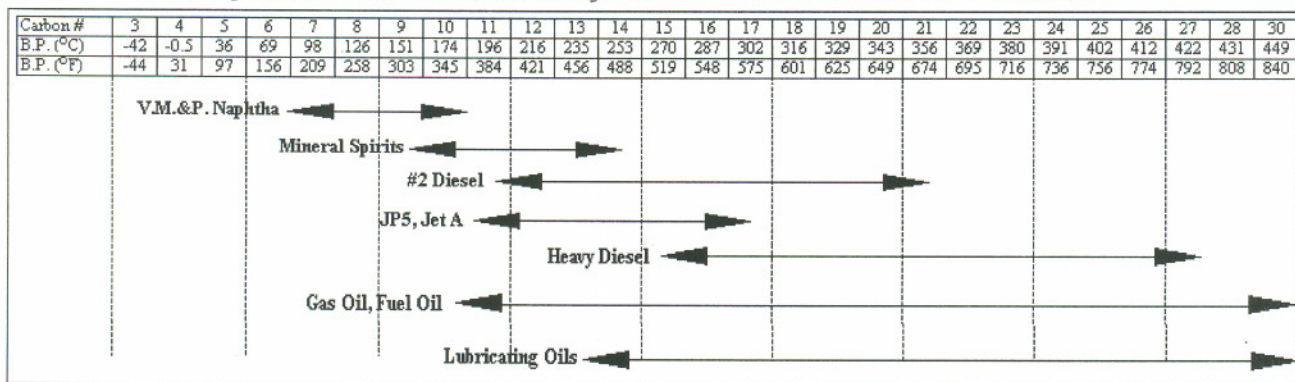
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Instrument: 6890



Total Extractable Hydrocarbons



Boiling Point Distribution Range of Petroleum Based Fuel Products

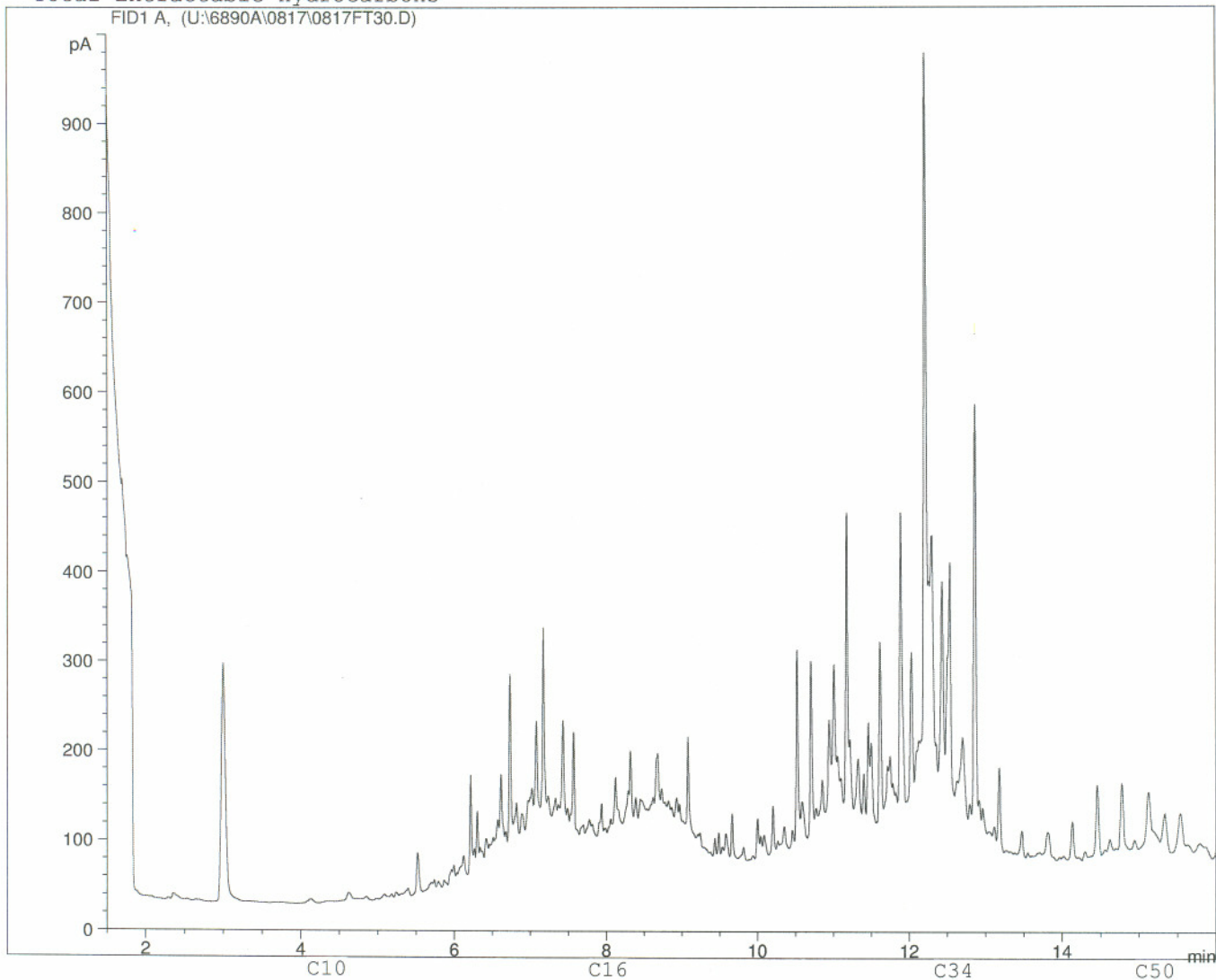


Adapted from: Drews, A.W., ED. Manual on Hydrocarbon Analysis, 4th ed.; American Society for Testing and Materials: Philadelphia, PA., 1989: p XVIII

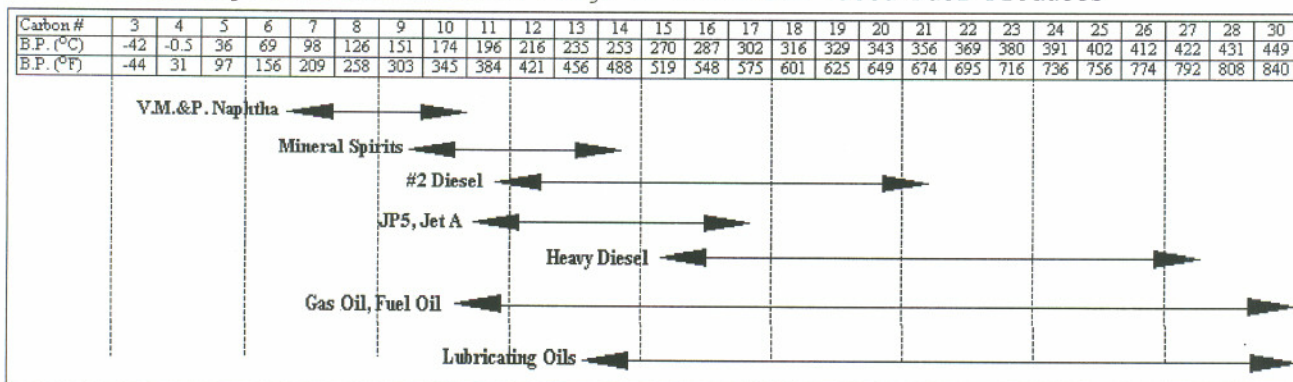
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Sample ID: L420839-11 4
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Instrument: 6890



Total Extractable Hydrocarbons



Boiling Point Distribution Range of Petroleum Based Fuel Products

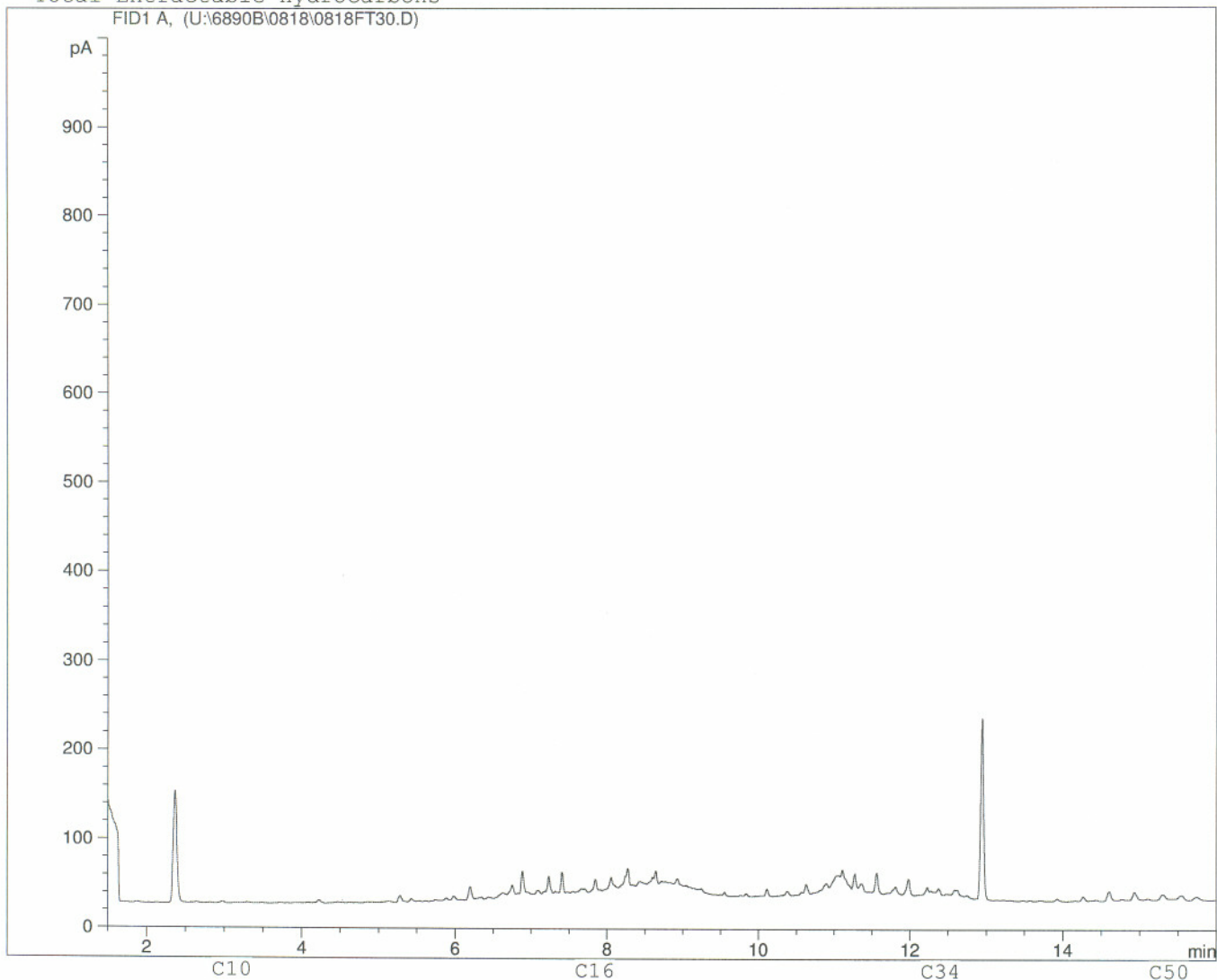


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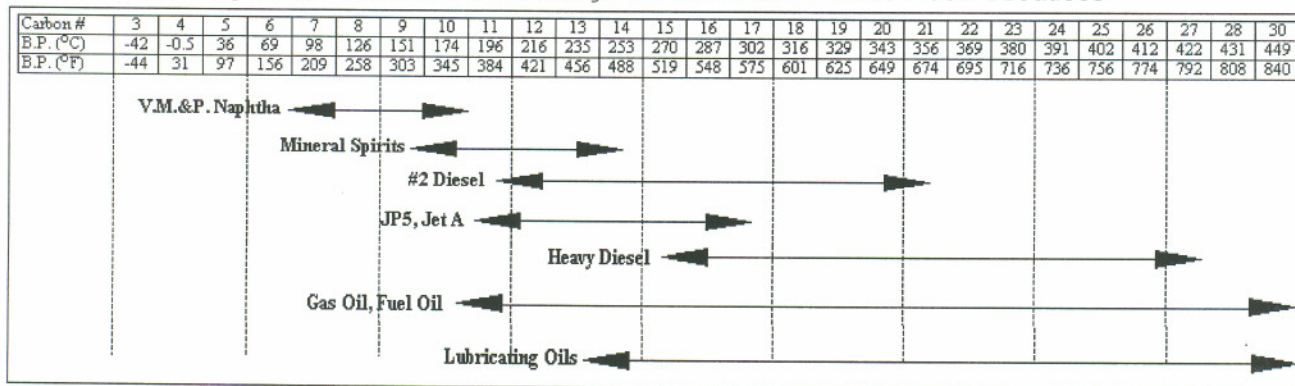
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Instrument: 6890



Total Extractable Hydrocarbons



Boiling Point Distribution Range of Petroleum Based Fuel Products

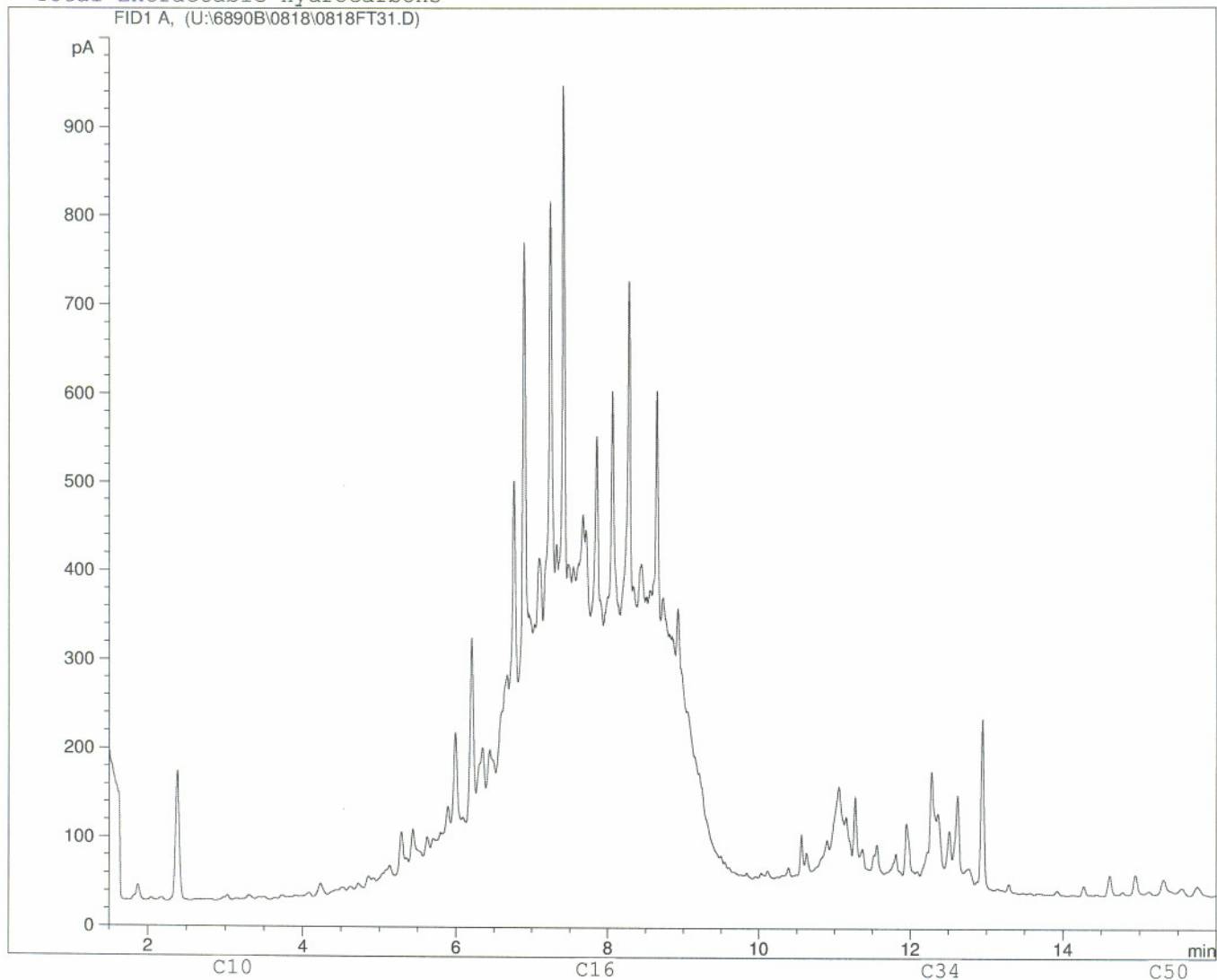


Adapted from: Drews, A.W., ED. Manual on Hydrocarbon Analysis, 4th ed.; American Society for Testing and Materials: Philadelphia, PA., 1989: p XVIII

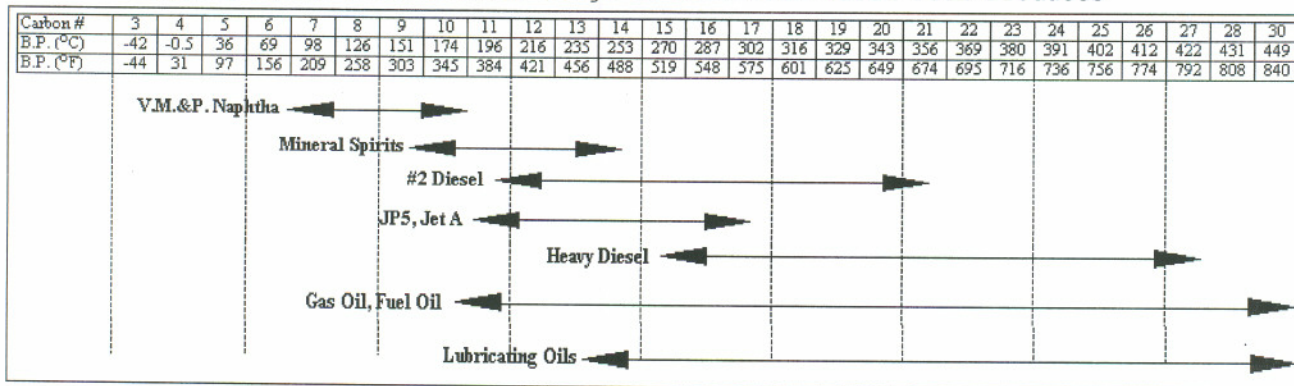
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Instrument: 6890



Total Extractable Hydrocarbons



Boiling Point Distribution Range of Petroleum Based Fuel Products



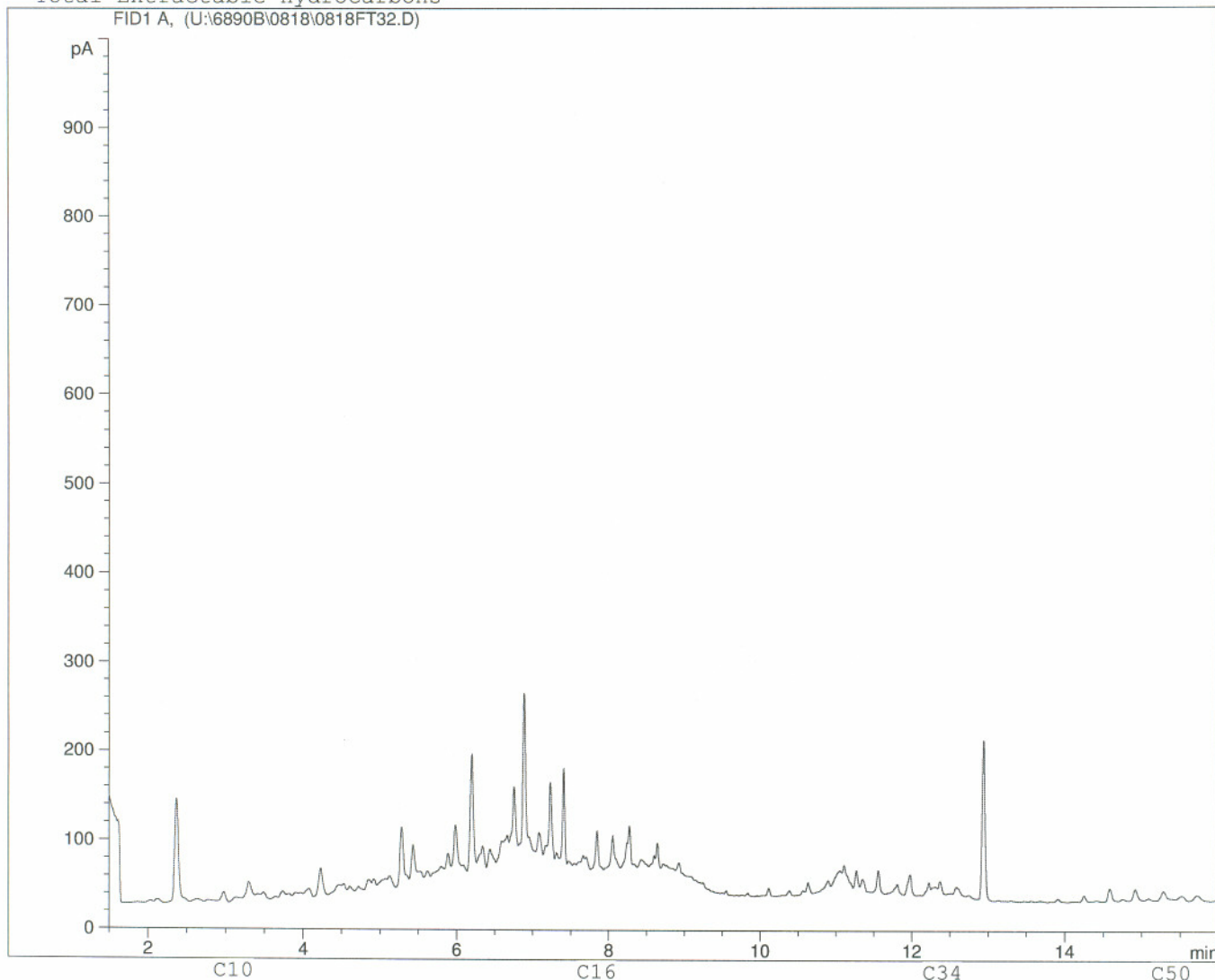
Adapted from: Drews, A.W., ED. Manual on Hydrocarbon Analysis, 4th ed.; American Society for Testing and Materials: Philadelphia, PA., 1989: p XVIII

Client ID: WINDY CAMP LTA #J
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Injection Date: 8/19/06 6:29:59 AM
Instrument: 6890

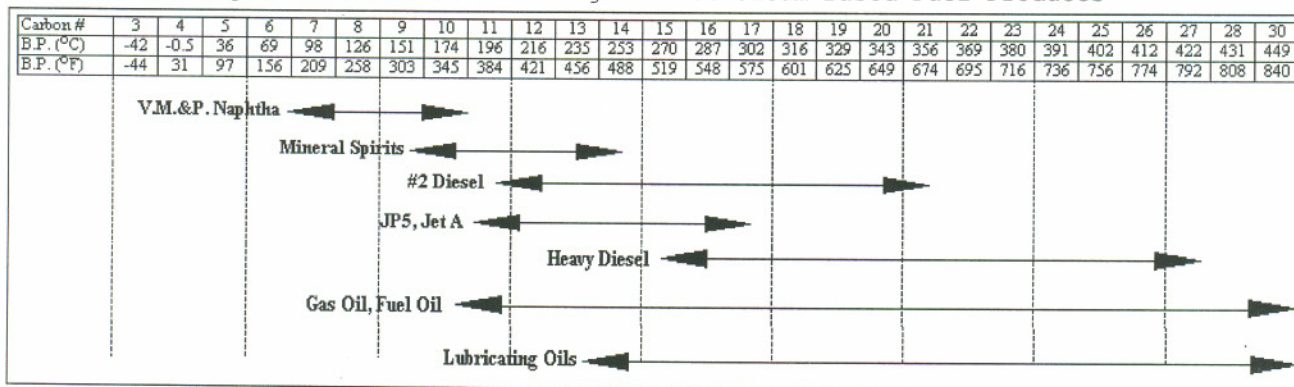


Total Extractable Hydrocarbons

FID1 A, (U:\6890B\0818\0818FT32.D)



Boiling Point Distribution Range of Petroleum Based Fuel Products

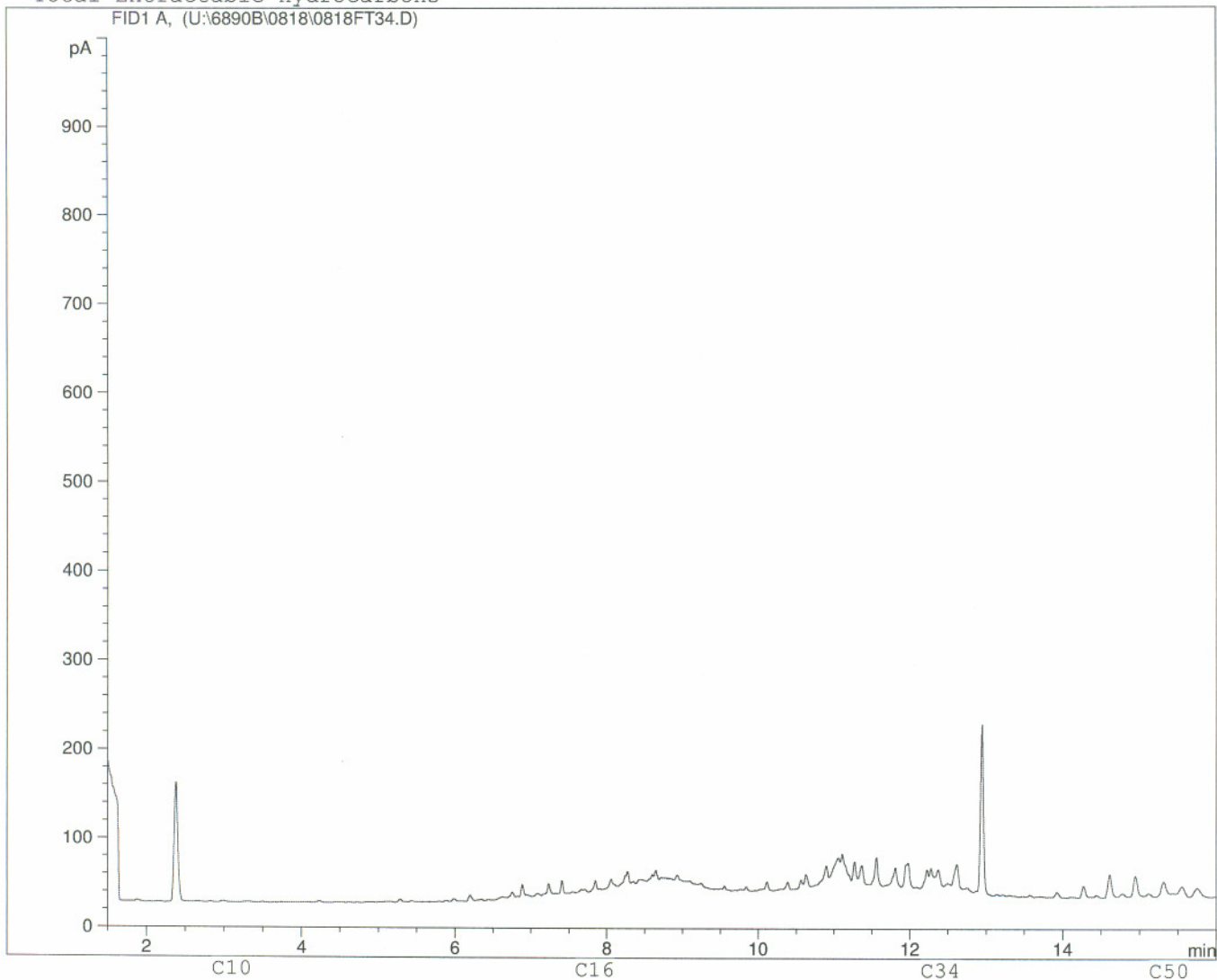


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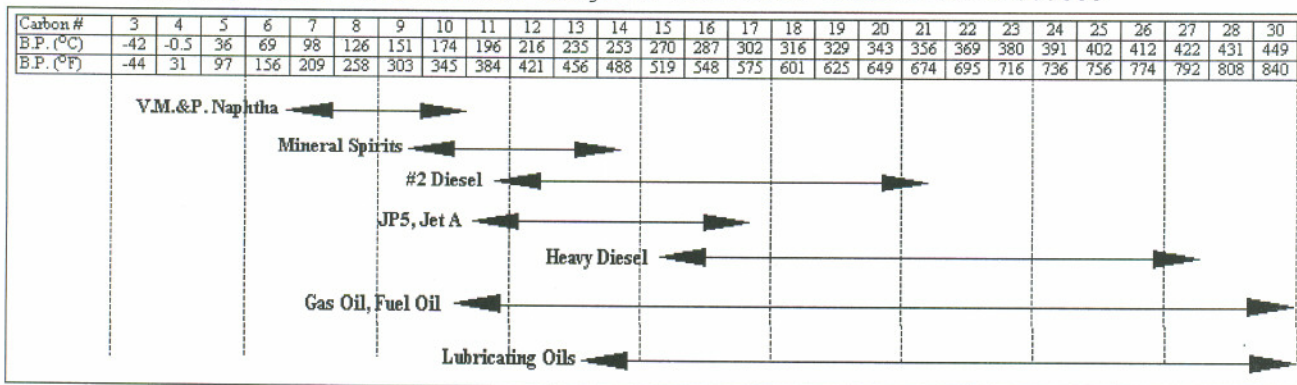
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Instrument: 6890



Total Extractable Hydrocarbons



Boiling Point Distribution Range of Petroleum Based Fuel Products



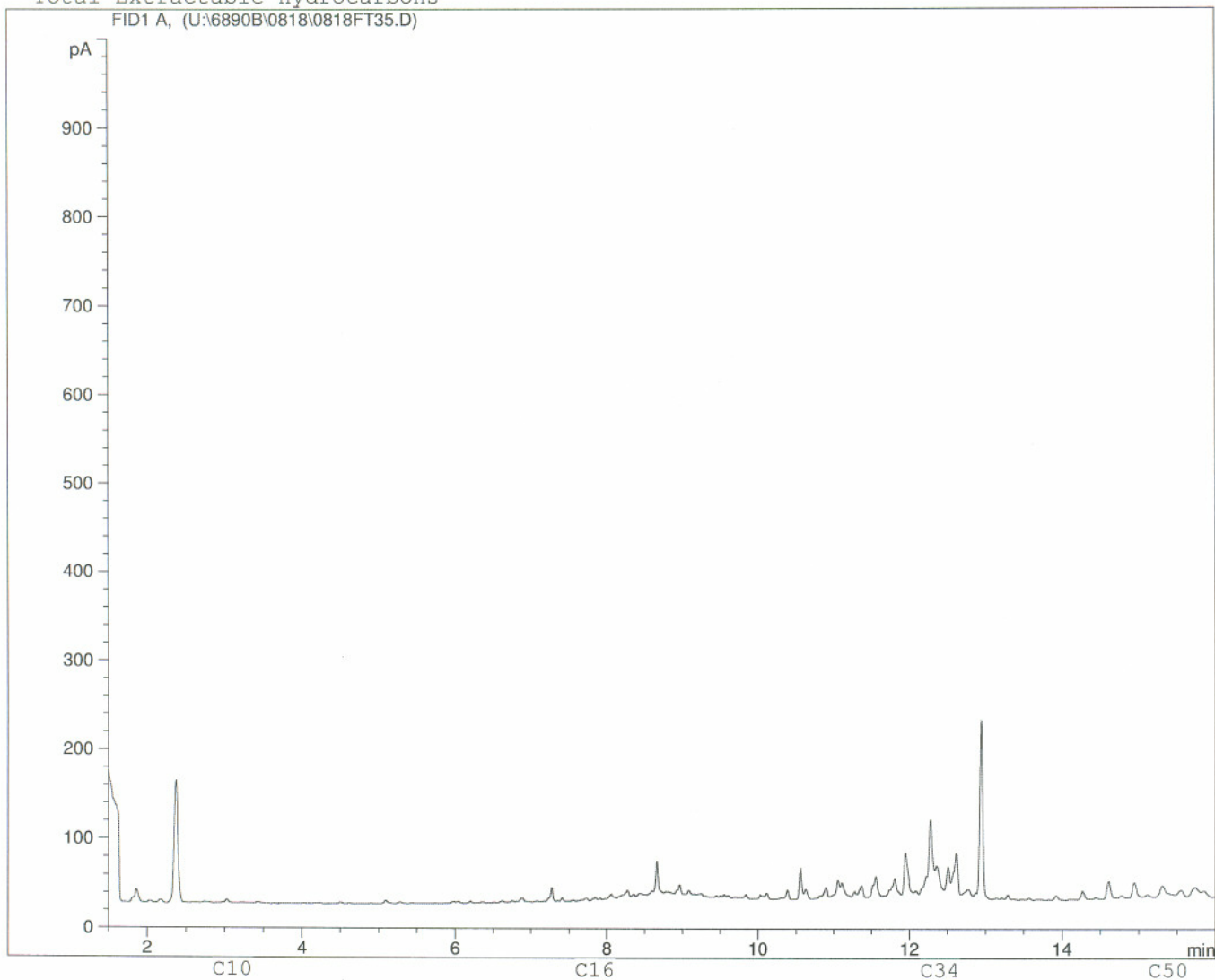
Adapted from: Drews, A.W., ED. Manual on Hydrocarbon Analysis, 4th ed.; American Society for Testing and Materials: Philadelphia, PA., 1989: p XVIII

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Sample ID: L420839-16 4
Injection Date: 8/19/06 7:51:41 AM
Instrument: 6890

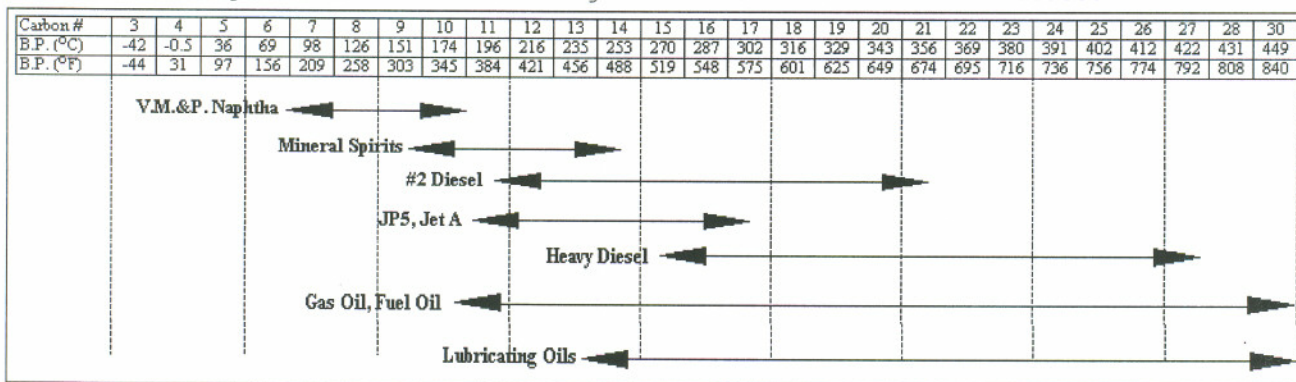


Total Extractable Hydrocarbons

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Boiling Point Distribution Range of Petroleum Based Fuel Products



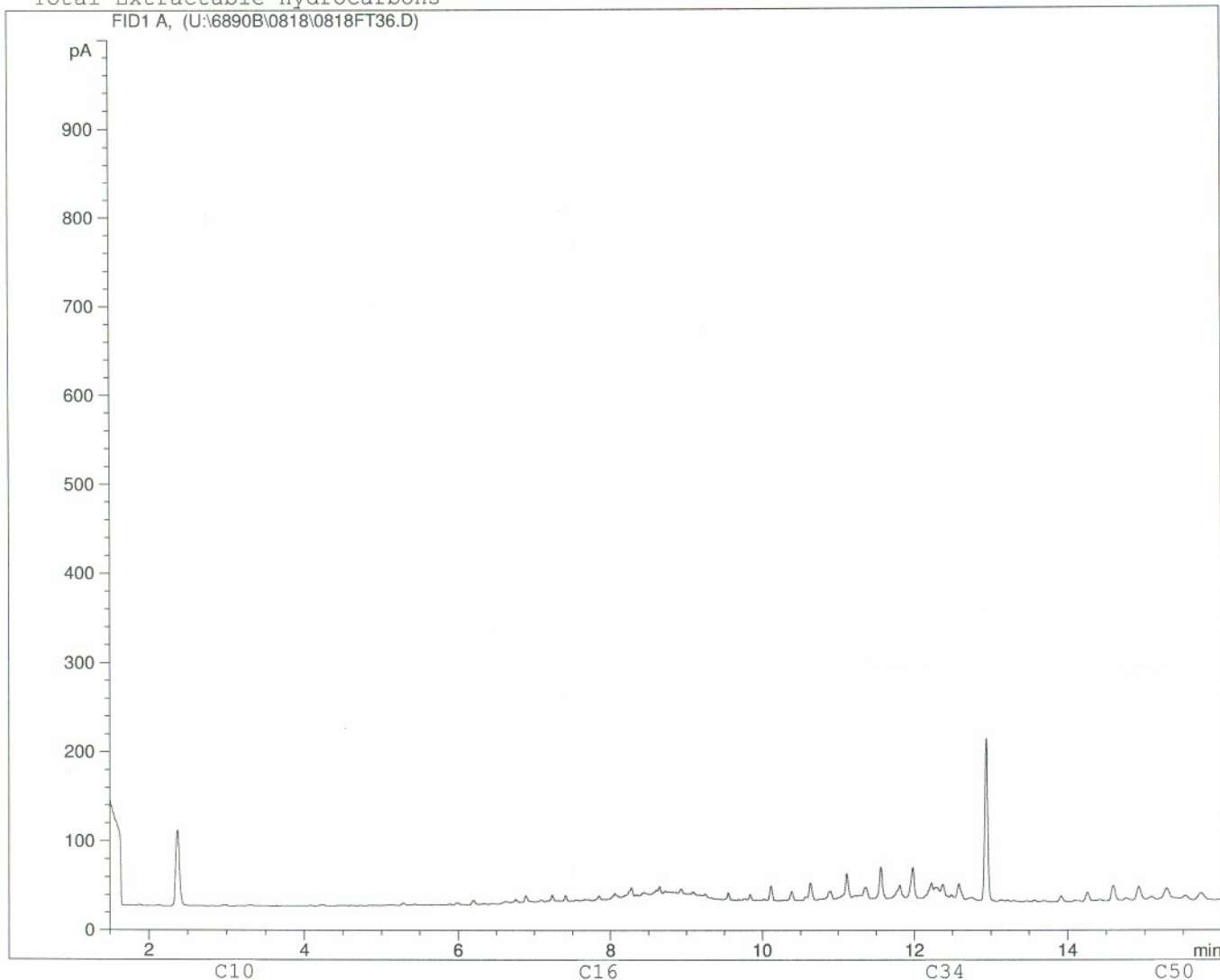
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Client ID: 147-A
 Sample ID: L420839-17 4
 Injection Date: 8/19/06 8:18:54 AM
 Instrument: 6890

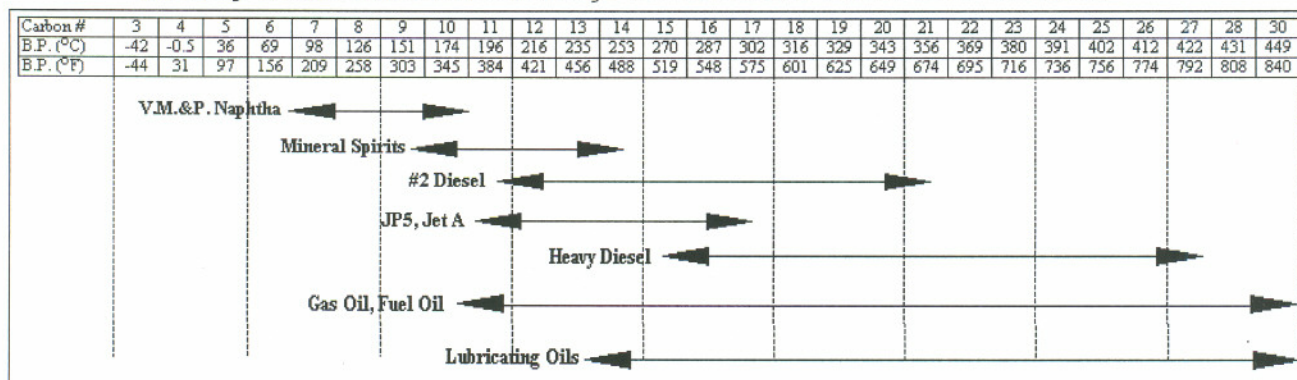


Total Extractable Hydrocarbons

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Boiling Point Distribution Range of Petroleum Based Fuel Products

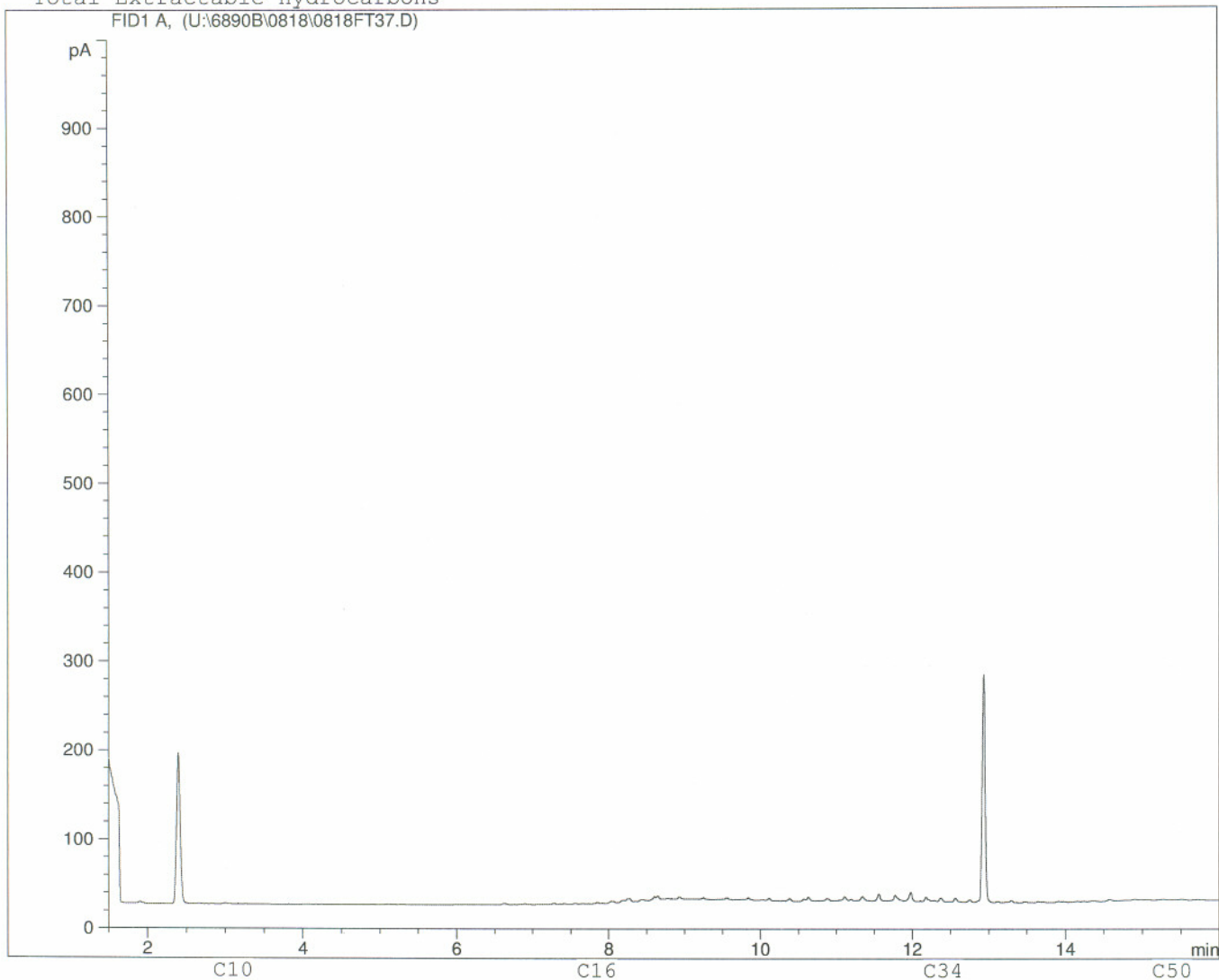


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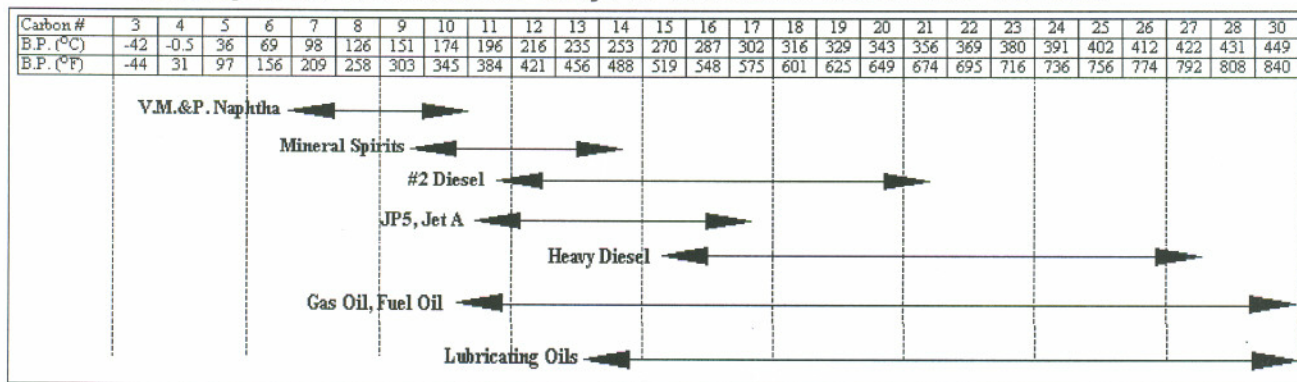
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 Injection Date: 8/19/06 8:46:22 AM
 Instrument: 6890



Total Extractable Hydrocarbons



Boiling Point Distribution Range of Petroleum Based Fuel Products



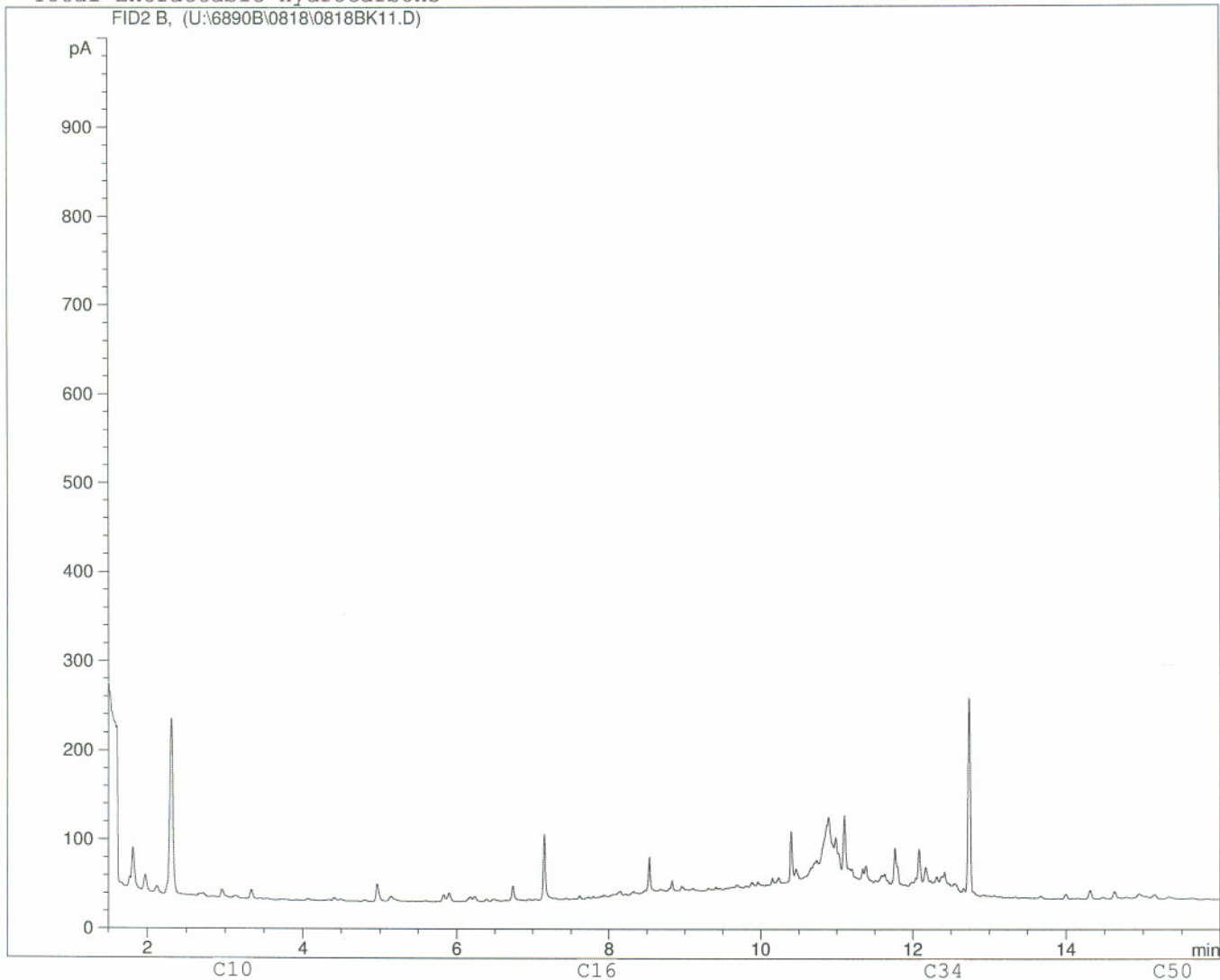
Adapted from: Drews, A.W., ED. Manual on Hydrocarbon Analysis, 4th ed.; American Society for Testing and Materials: Philadelphia, PA., 1989: p XVIII

Client ID: 2003-2B
 Sample ID: L420839-19 4
 Injection Date: 8/18/06 9:01:05 PM
 Instrument: 6890

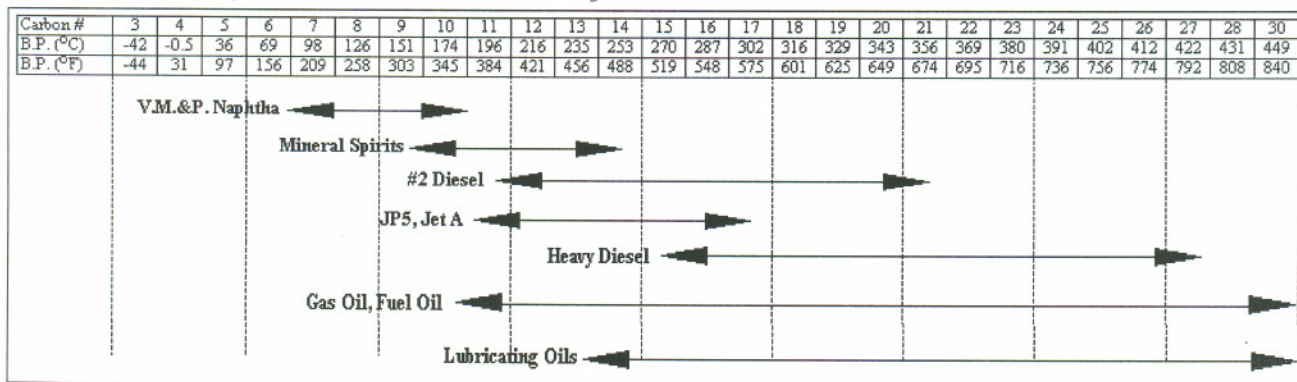


Total Extractable Hydrocarbons

FID2 B, (U:\6890B\0818\0818BK11.D)



Boiling Point Distribution Range of Petroleum Based Fuel Products

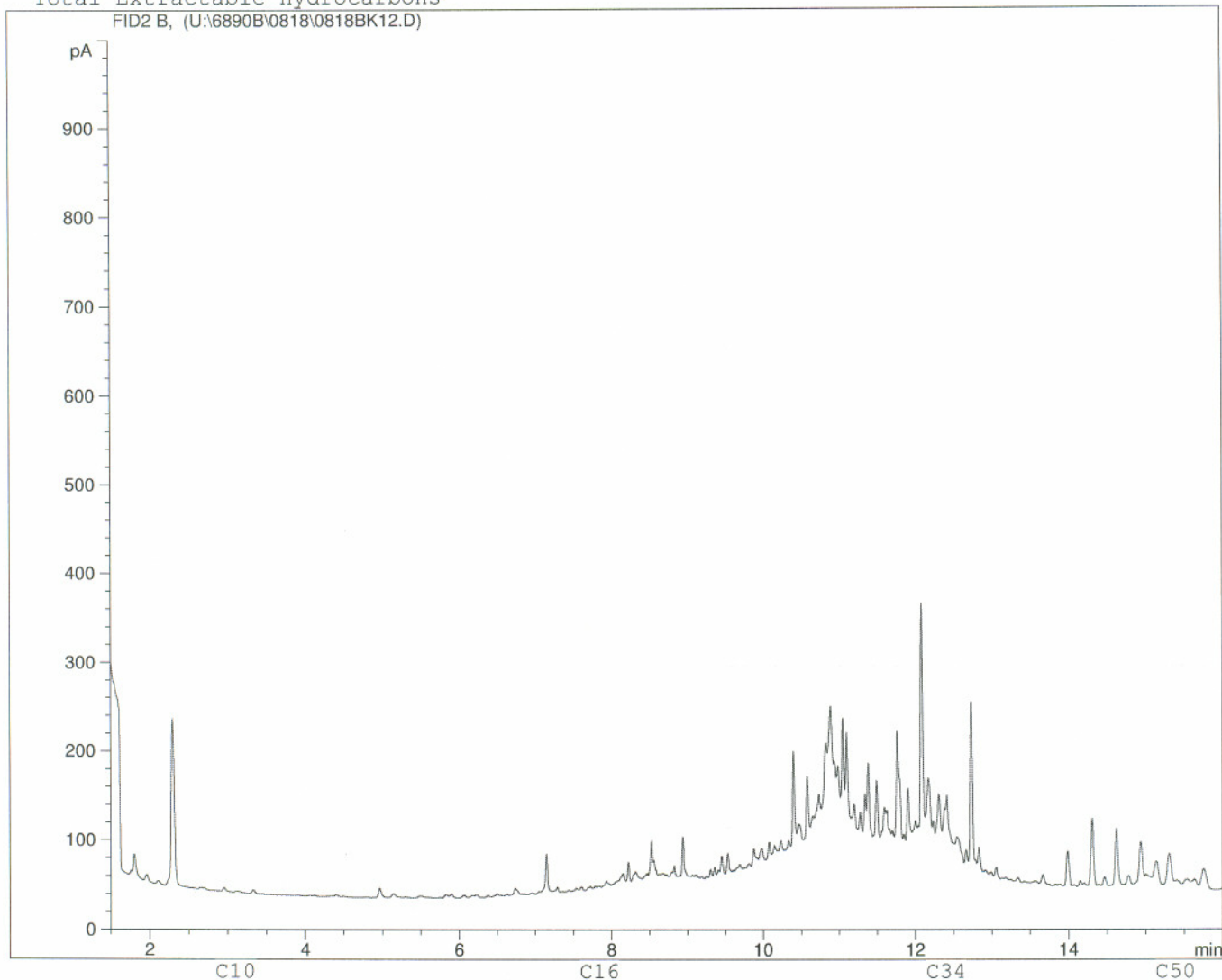


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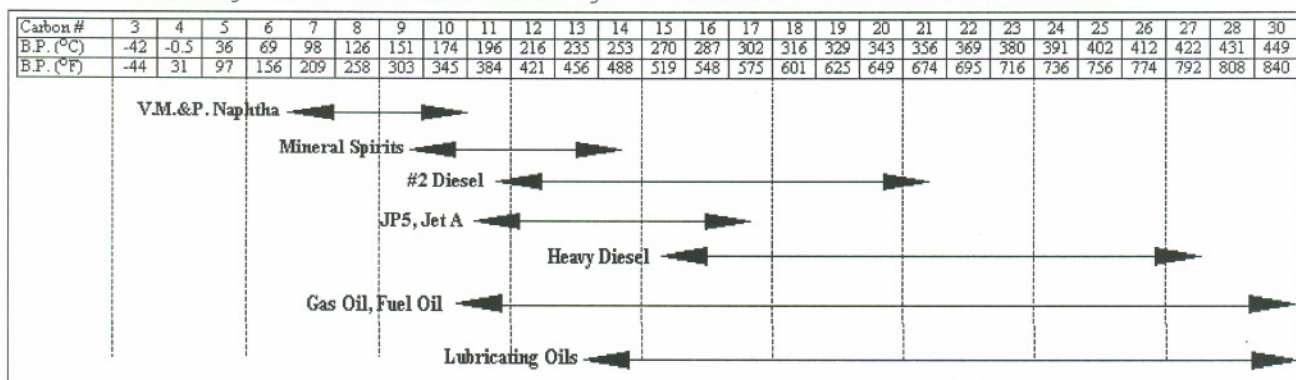
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Instrument: 6890



Total Extractable Hydrocarbons



Boiling Point Distribution Range of Petroleum Based Fuel Products

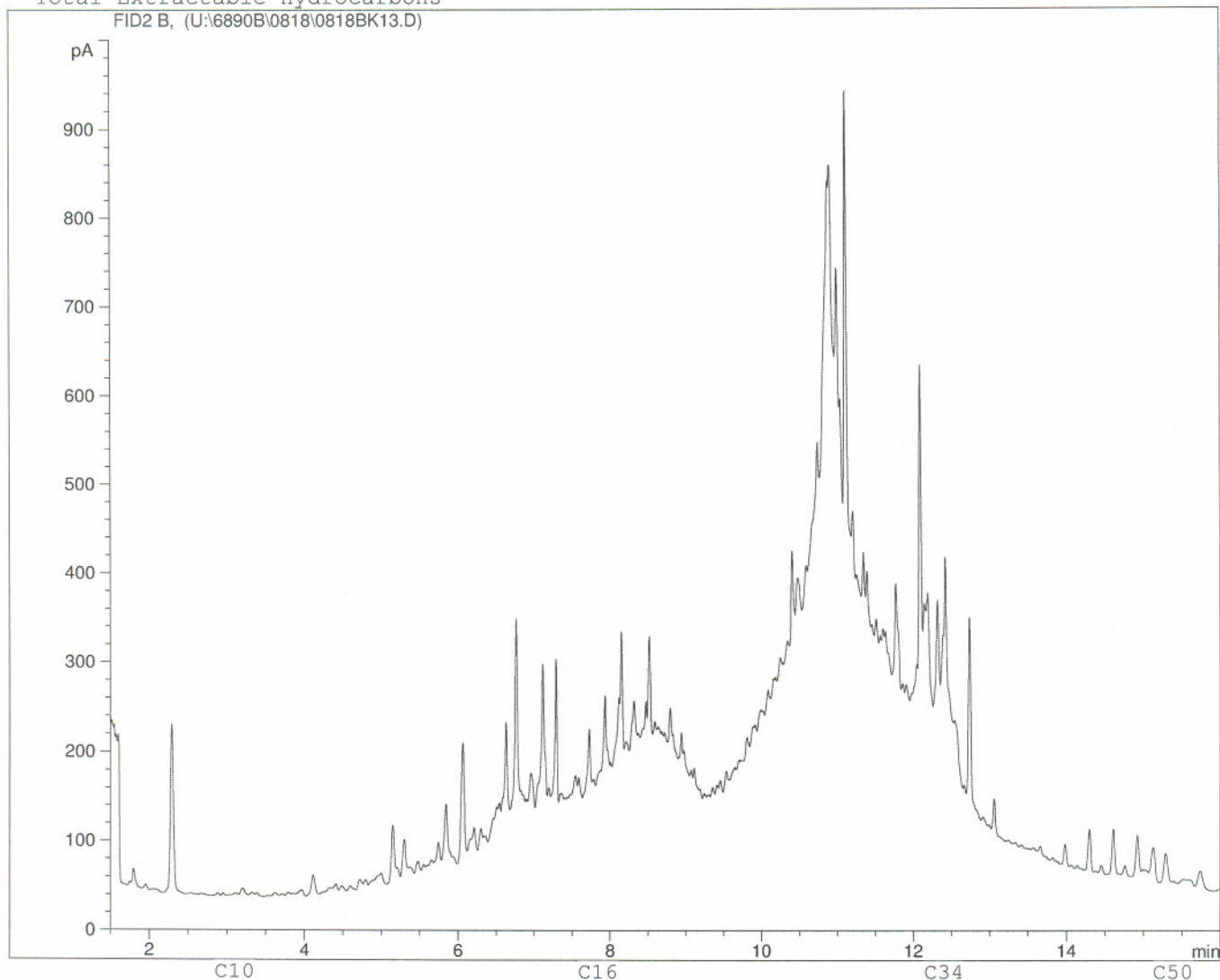


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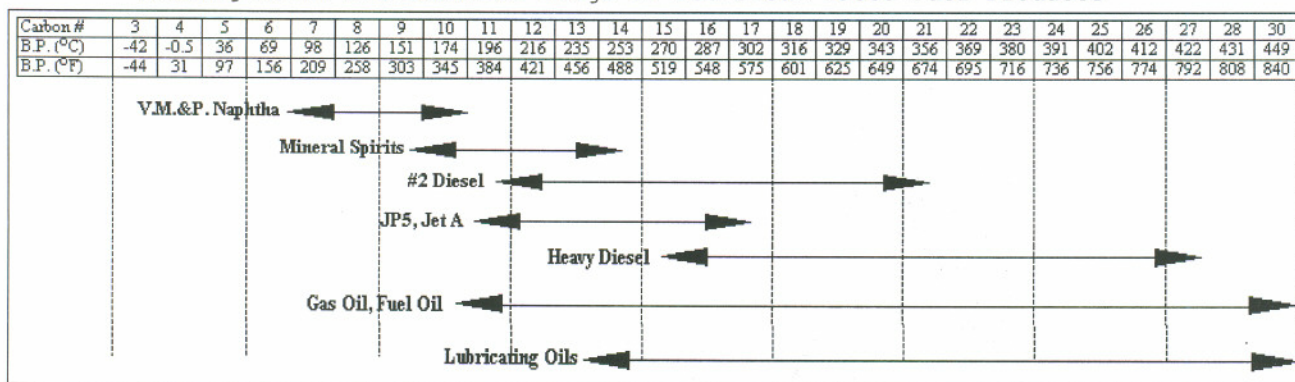
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Instrument: 6890



Total Extractable Hydrocarbons



Boiling Point Distribution Range of Petroleum Based Fuel Products



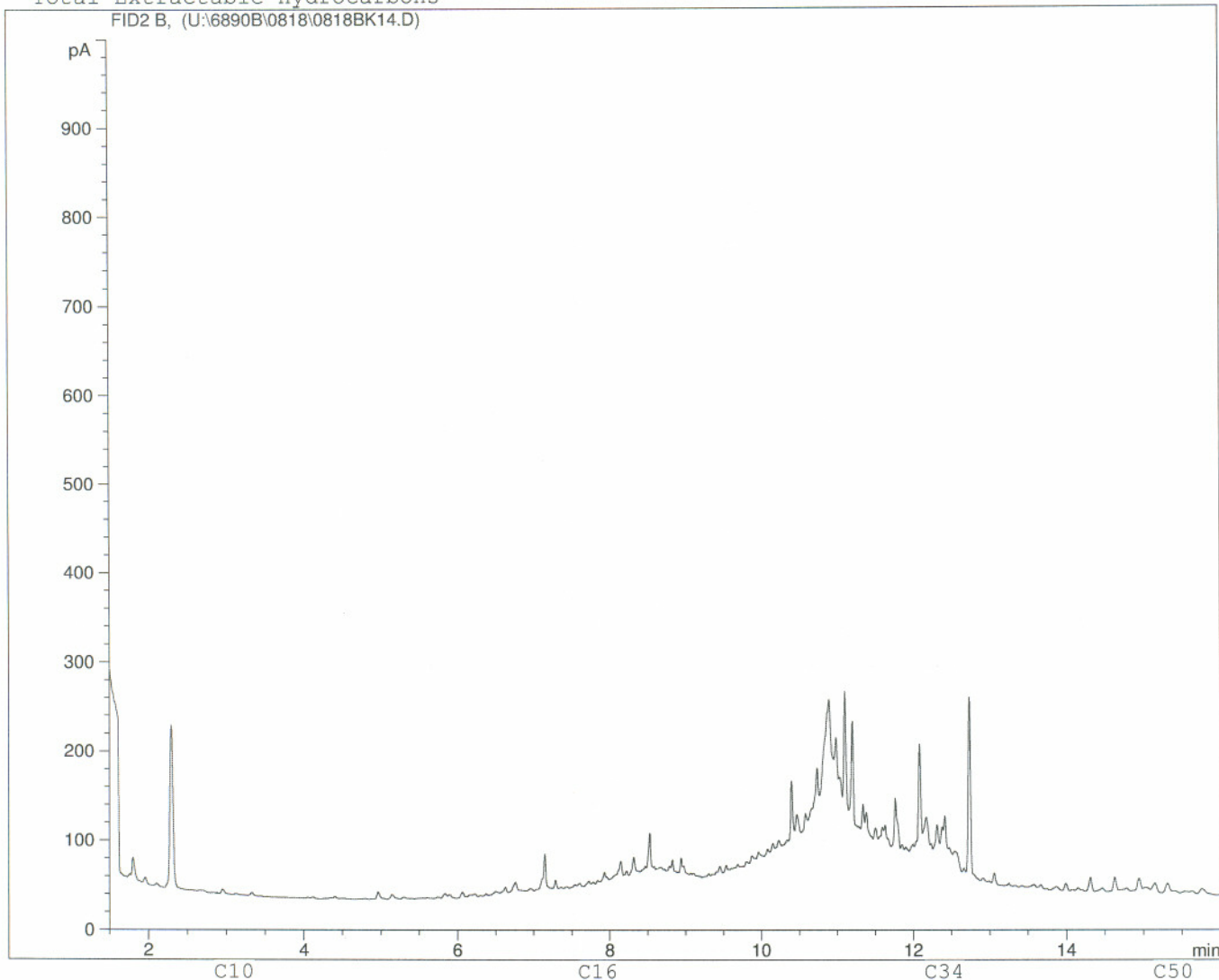
Adapted from: Drews, A.W., ED. Manual on Hydrocarbon Analysis, 4th ed.; American Society for Testing and Materials: Philadelphia, PA., 1989: p XVIII

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 Injection Date: 8/18/06 10:21:45 PM
 Instrument: 6890

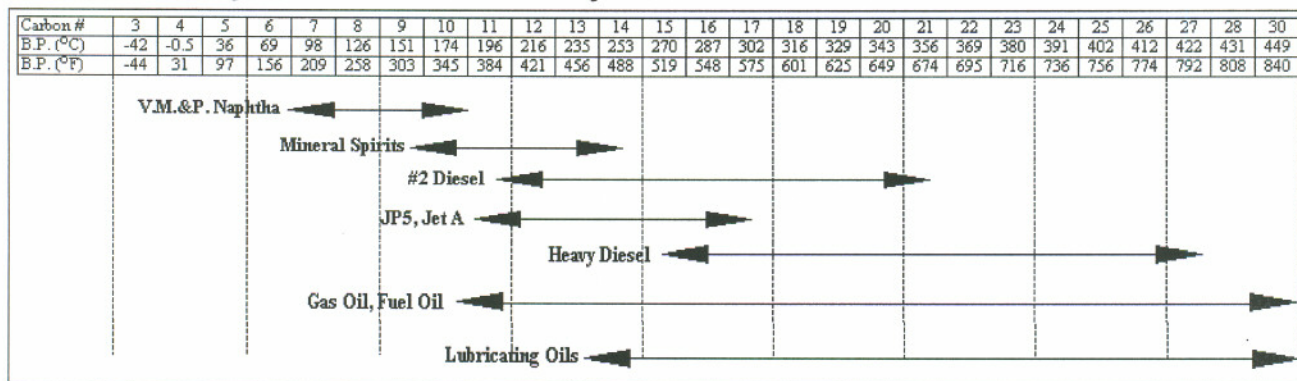


Total Extractable Hydrocarbons

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Boiling Point Distribution Range of Petroleum Based Fuel Products

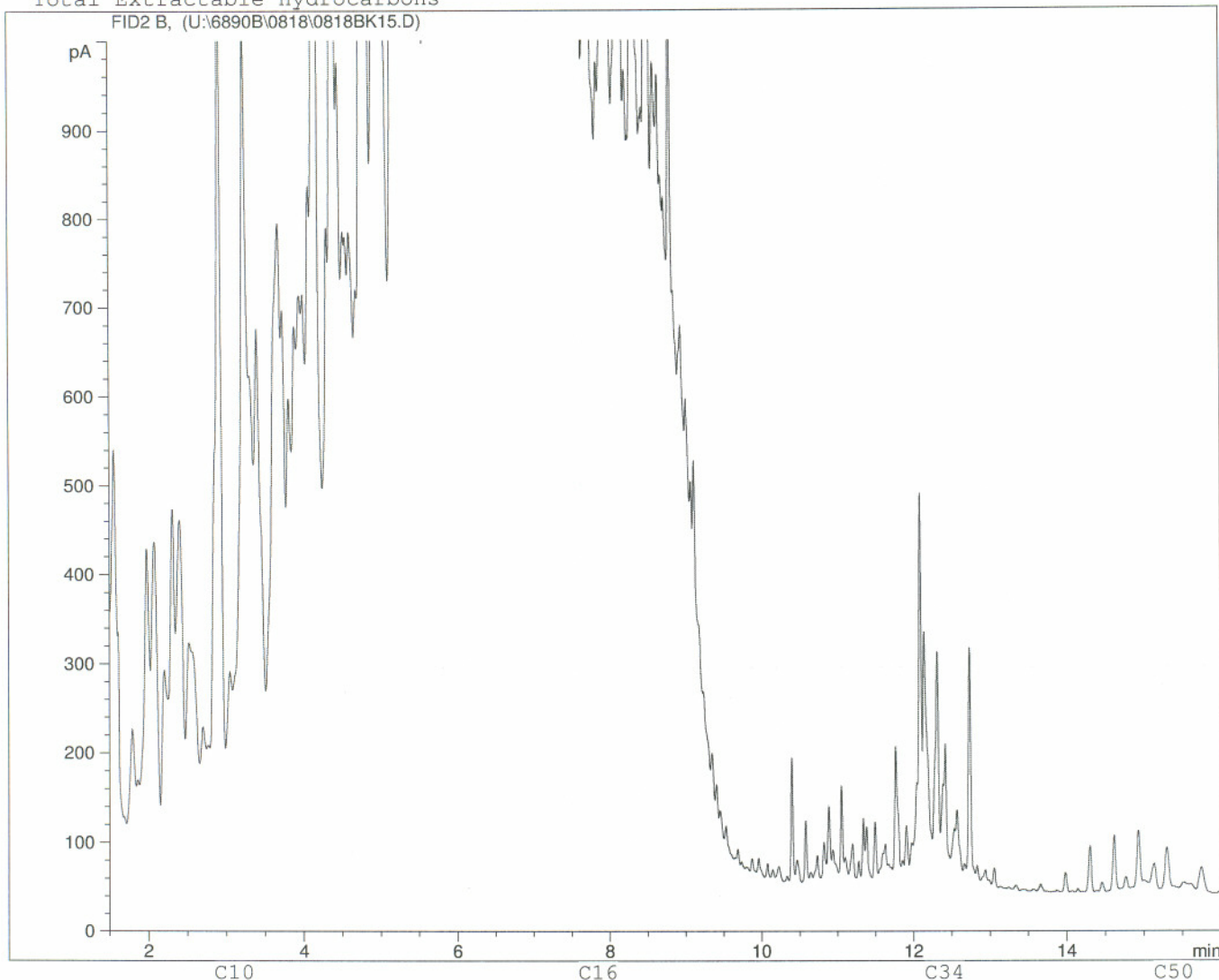


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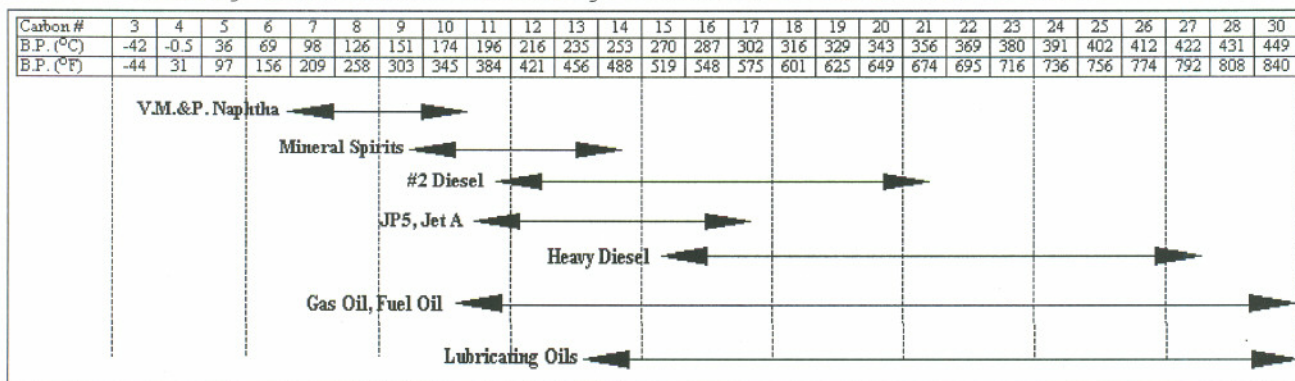
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Instrument: 6890



Total Extractable Hydrocarbons



Boiling Point Distribution Range of Petroleum Based Fuel Products



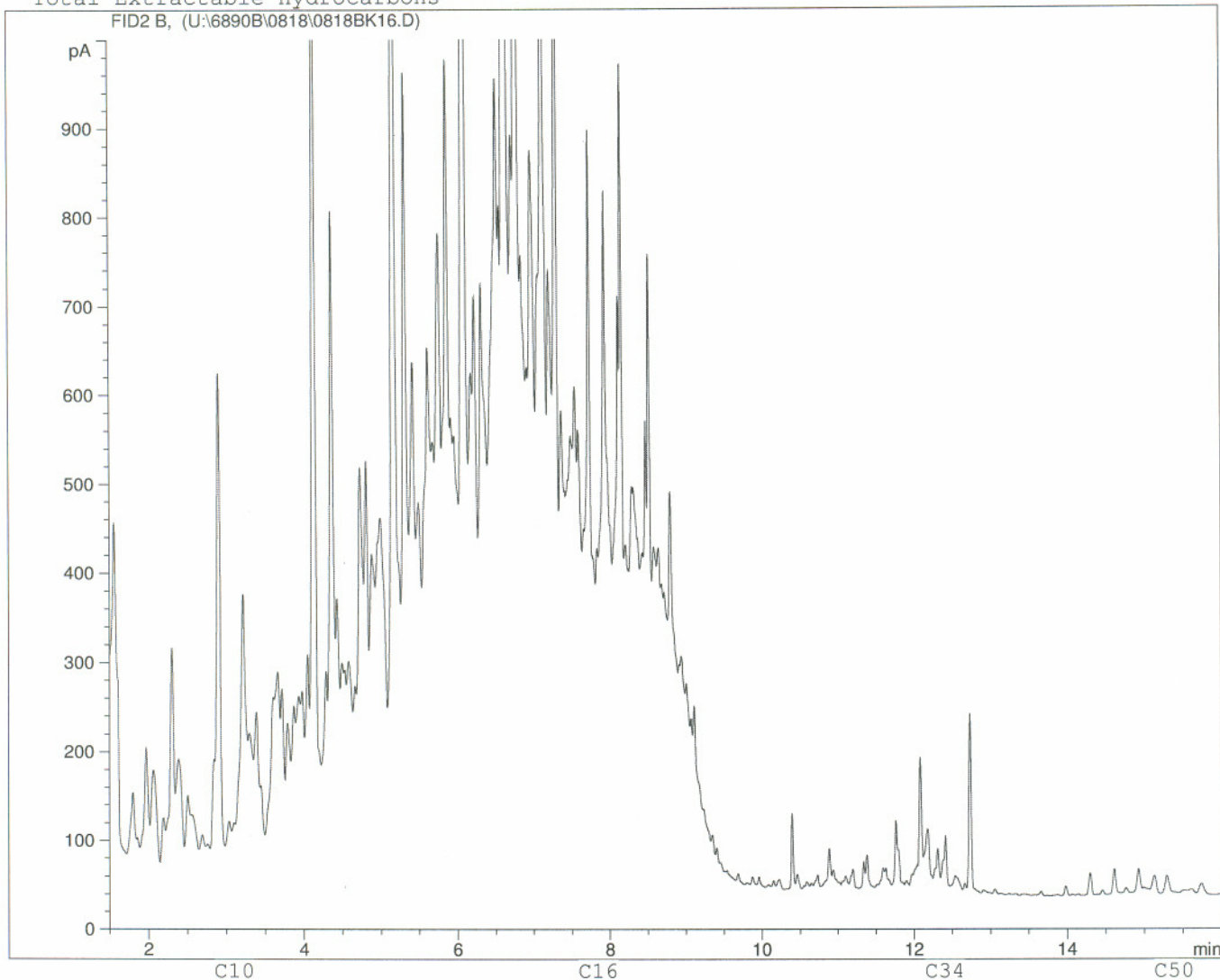
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Instrument: 6890

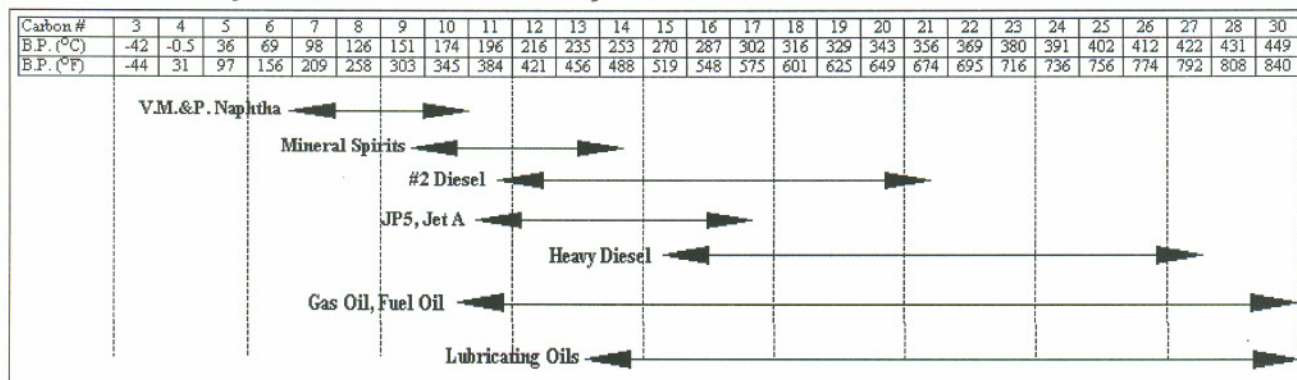


Total Extractable Hydrocarbons

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Boiling Point Distribution Range of Petroleum Based Fuel Products



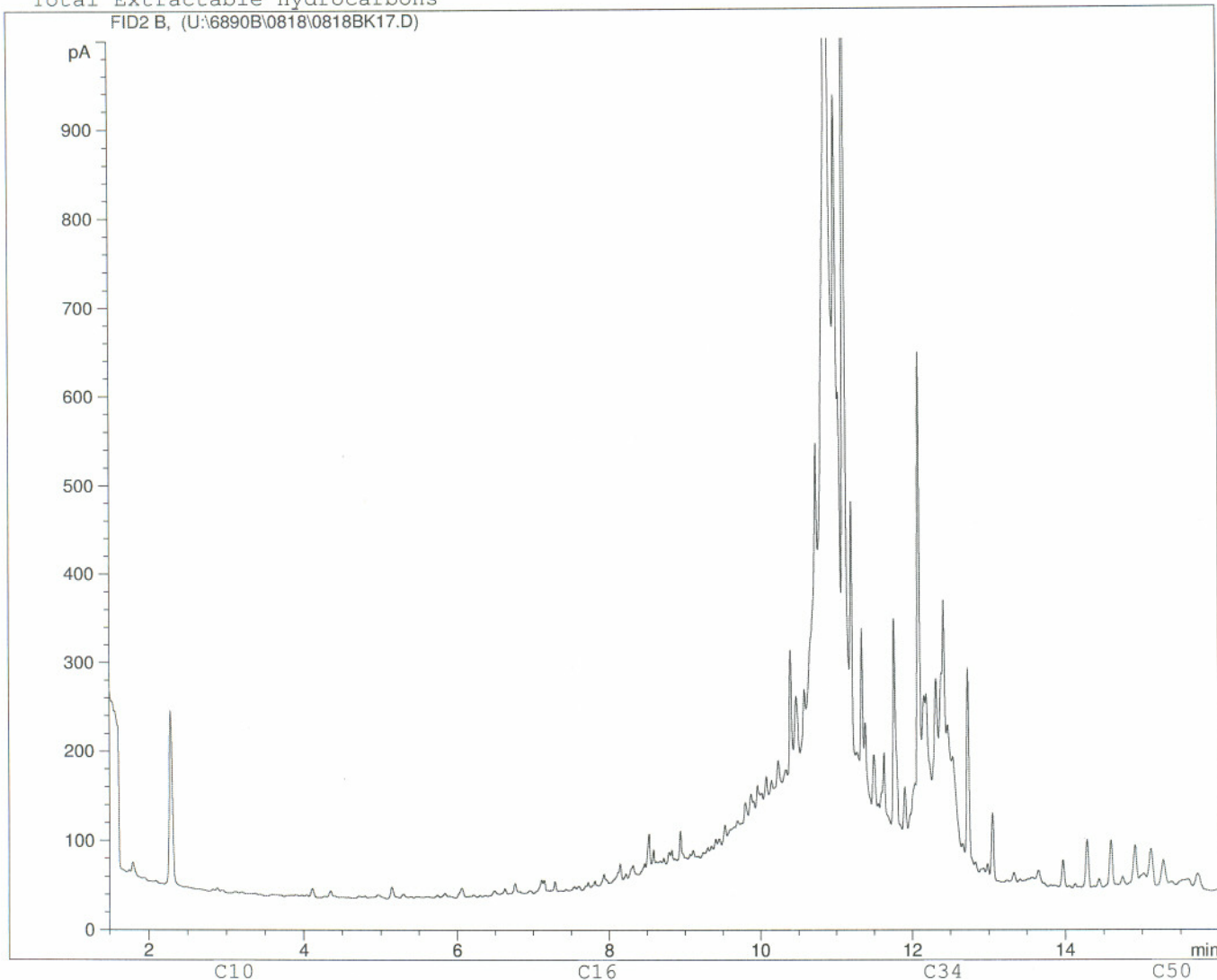
Adapted from: Drews, A.W., ED. Manual on Hydrocarbon Analysis, 4th ed.; American Society for Testing and Materials: Philadelphia, PA., 1989: p XVIII

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Sample ID: L420839-25 4
Injection Date: 8/18/06 11:43:20 PM
Instrument: 6890

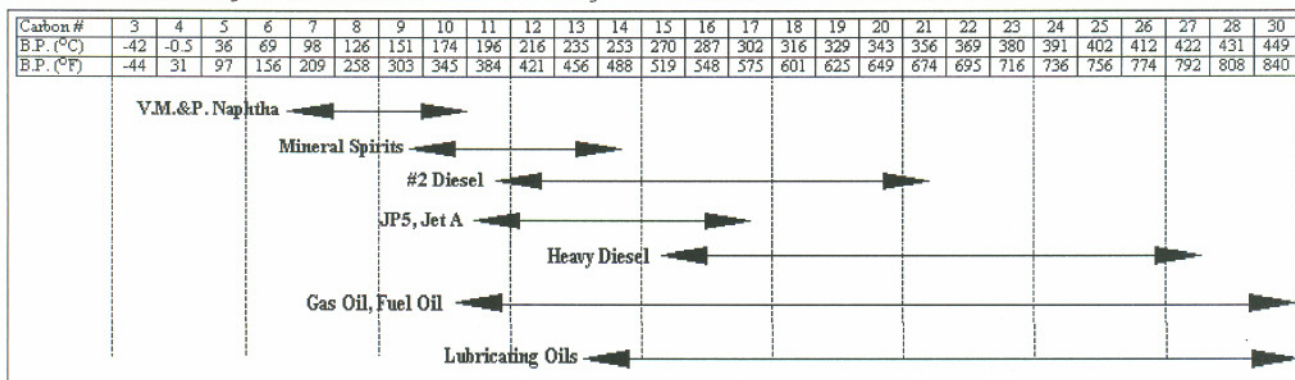


Total Extractable Hydrocarbons

FID2 B, (U:\6890B\0818\0818BK17.D)



Boiling Point Distribution Range of Petroleum Based Fuel Products



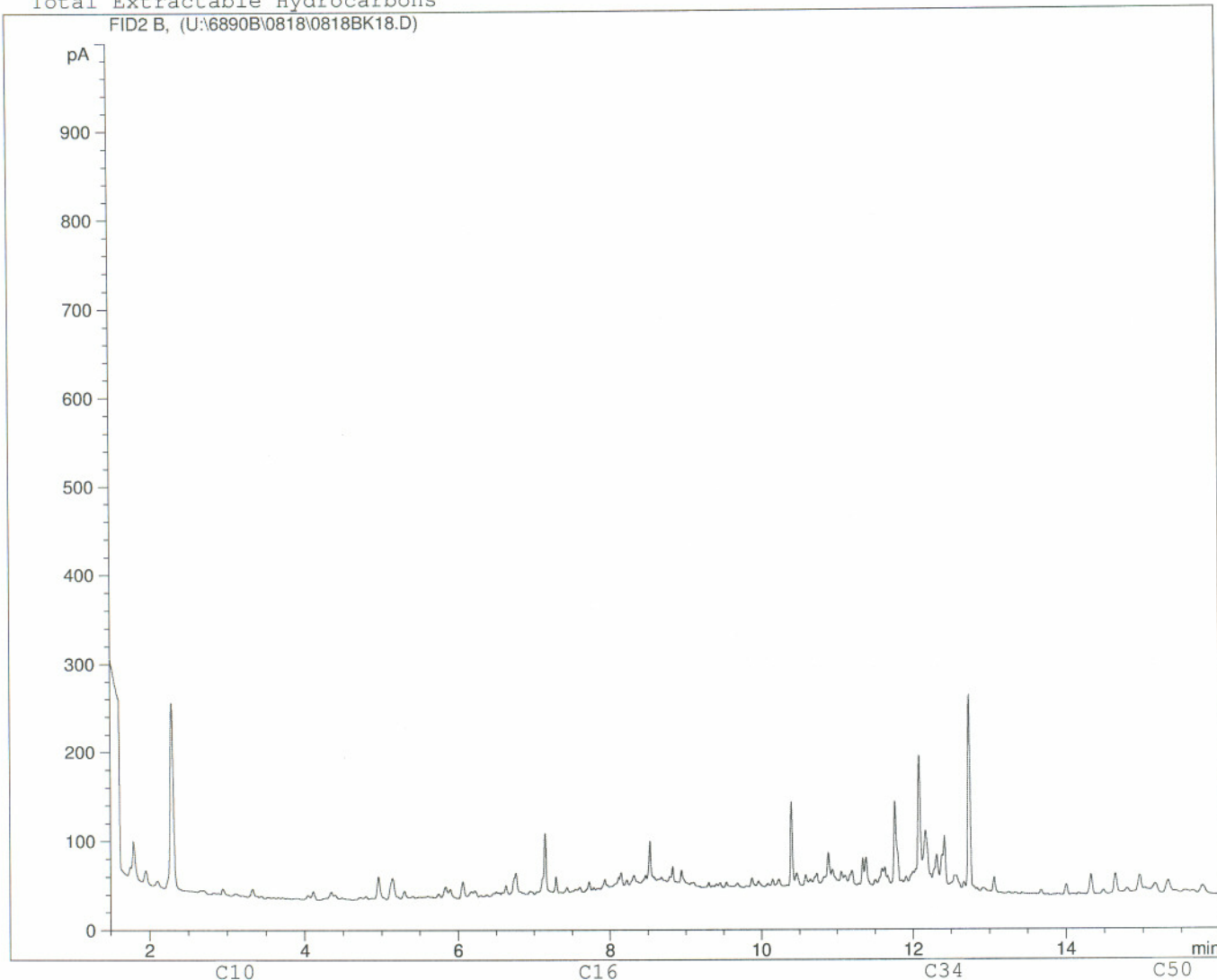
Adapted from: Drews, A.W., ED. Manual on Hydrocarbon Analysis, 4th ed.; American Society for Testing and Materials: Philadelphia, PA., 1989: p XVIII

Client ID: WINDY TF-SW2
Sample ID: L420839-31 4
Injection Date: 8/19/06 12:10:20 AM
Instrument: 6890

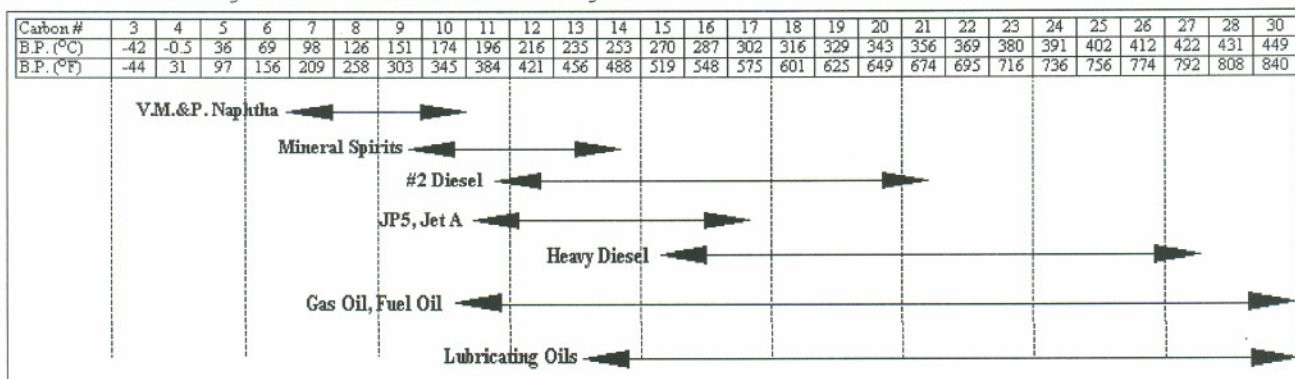


Total Extractable Hydrocarbons

FID2 B, (U:\6890B\0818\0818BK18.D)



Boiling Point Distribution Range of Petroleum Based Fuel Products



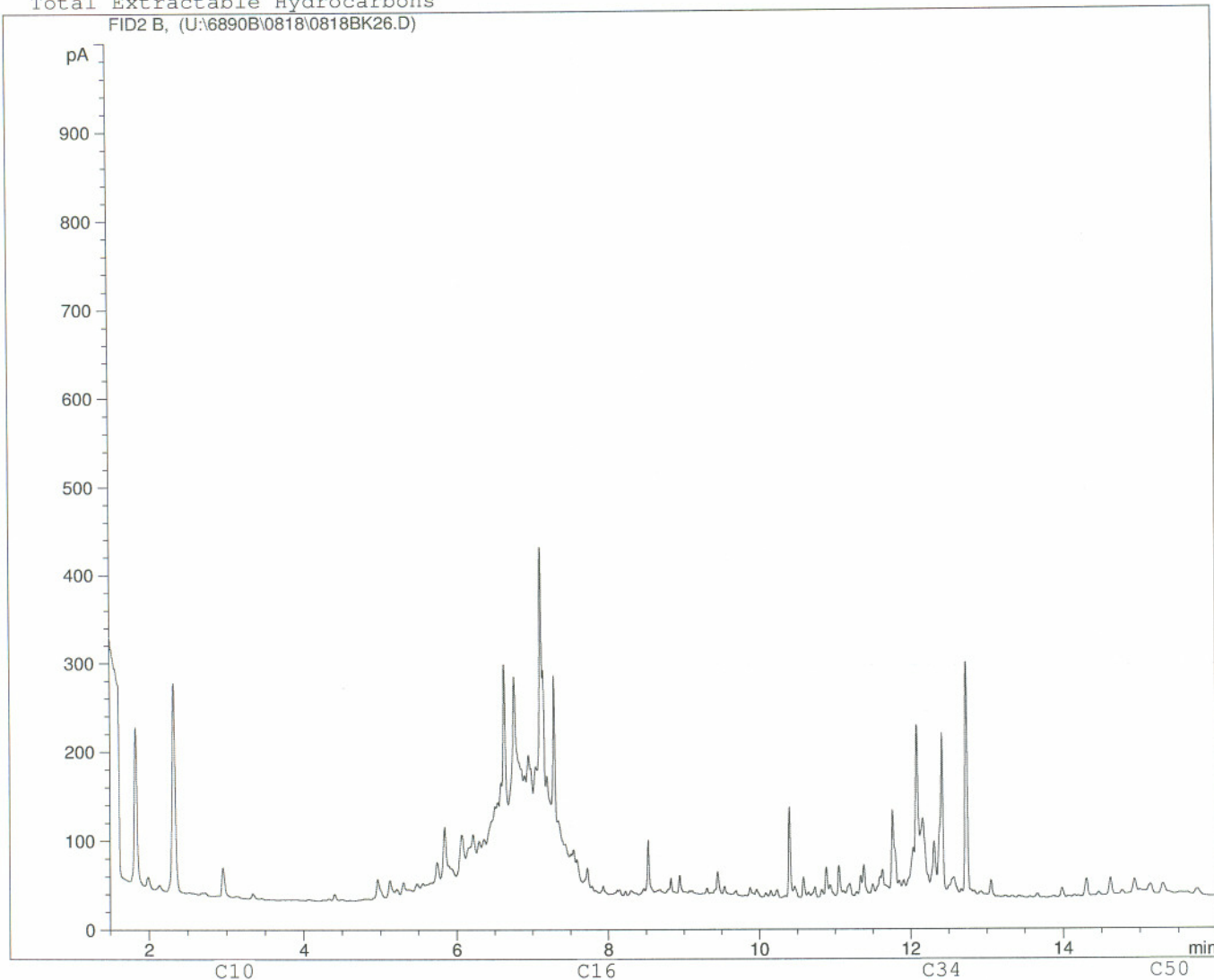
Adapted from: Drews, A.W., ED. Manual on Hydrocarbon Analysis, 4th ed.; American Society for Testing and Materials: Philadelphia, PA., 1989: p XVIII

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Sample ID: L420839-32 4
Injection Date: 8/19/06 3:47:00 AM
Instrument: 6890

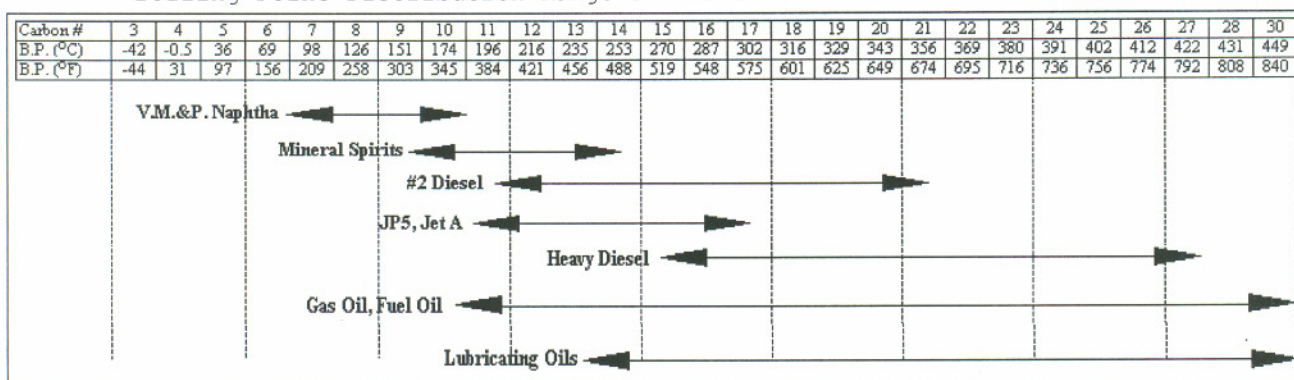


Total Extractable Hydrocarbons

FID2 B, (U:\6890B\0818\0818BK26.D)



Boiling Point Distribution Range of Petroleum Based Fuel Products



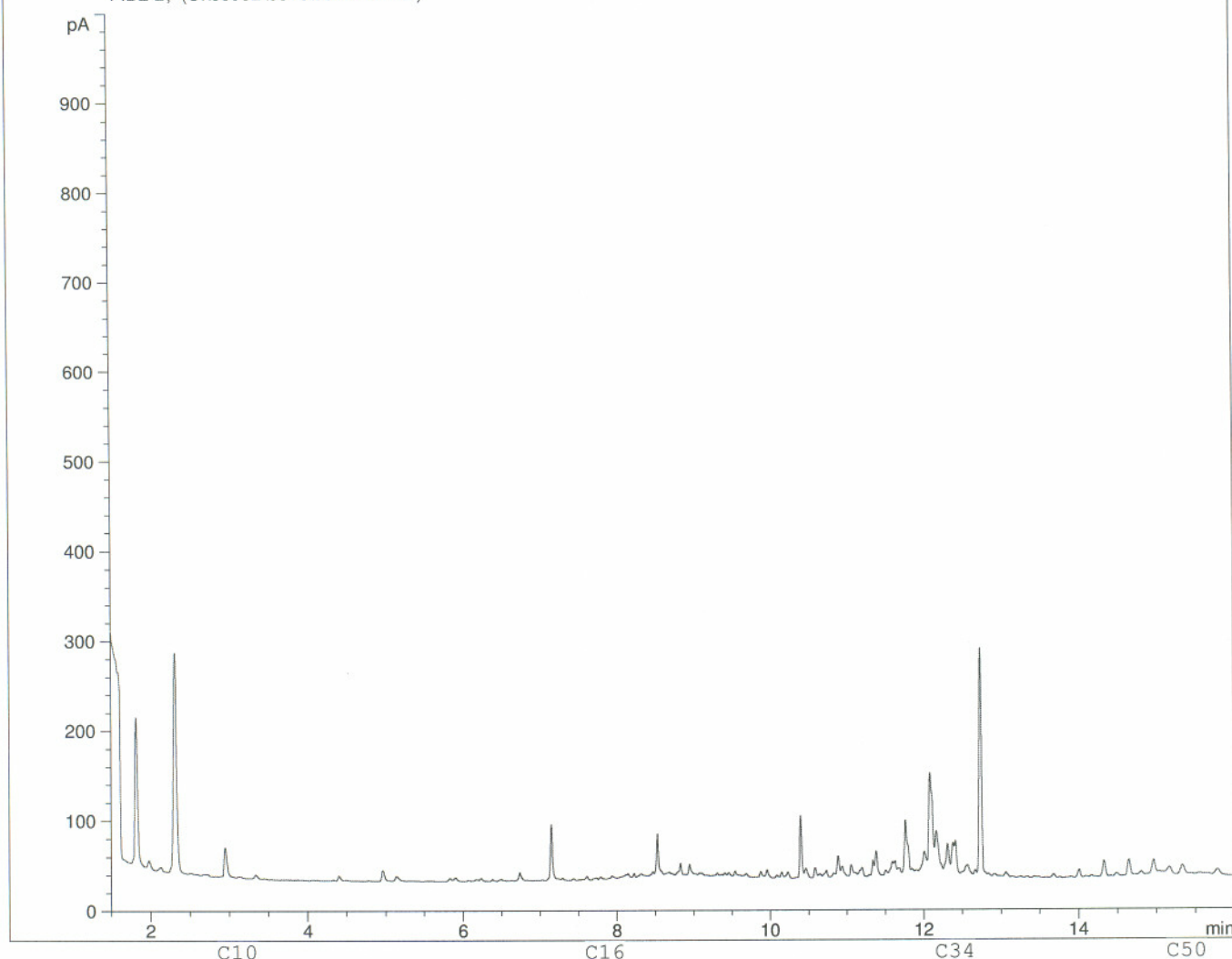
Adapted from: Drews, A.W., ED. Manual on Hydrocarbon Analysis, 4th ed.; American Society for Testing and Materials: Philadelphia, PA., 1989: p XVIII

Client ID: WINDY TF-NW
Sample ID: L420839-33 4
Injection Date: 8/19/06 4:14:04 AM
Instrument: 6890

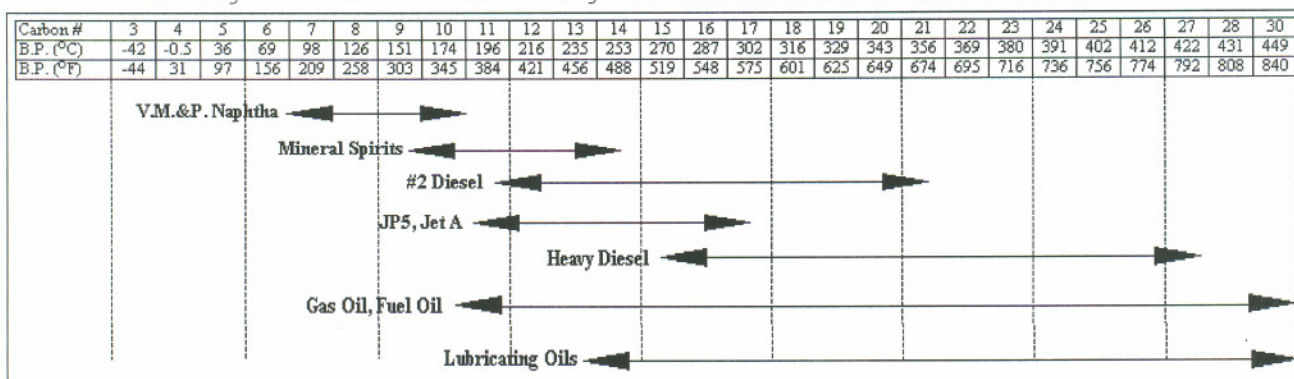


Total Extractable Hydrocarbons

FID2 B, (U:\6890B\0818\0818BK27.D)



Boiling Point Distribution Range of Petroleum Based Fuel Products



Adapted from: Drews, A.W., ED. Manual on Hydrocarbon Analysis, 4th ed.; American Society for Testing and Materials: Philadelphia, PA., 1989: p XVIII



ALS Environmental
excellence in analytical testing

Vancouver, BC 1988 Triumph Street V5L 1K5 Tel: 604-253-4188 Toll Free: 1-800-665-0243 Fax: 604-253-6700
Fort St. John, BC #2 - 8820 100th Street V1J 3W9 Tel: 250-785-8281 Fax: 250-785-8286
Calgary, AB #2 - 21 Highfield Circle SE T2G 5N6 Tel: 403-214-5431 Toll Free: 1-866-722-6231 Fax: 403-214-5430
Burlington, ON 5420 Mainway Drive, Unit 5 L7L 6A4 Tel: 905-331-3111 Toll Free: 1-888-257-3684 Fax: 905-331-4567

74422

SEND REPORT TO:

CHAIN OF CUSTODY FORM

PAGE 1 OF 3

CLIENT: MIRAMAR HOPE BAY LTD ATTN.: Matt Kawai

ADDRESS: 300-889 Harbourside Drive

CITY: North Vancouver PROV.: BC POSTAL CODE: V7P 3S1

TELEPHONE: 604-677-0636 FAX: _____ SAMPLER: April

PROJECT NAME & NO.: _____ QUOTE NO.: _____

PO NO.: _____ ALS CONTACT: Randy Fournier

REPORT FORMAT: ☒ HARDCOPY ☒ EMAIL - ADDRESS: mkawej@miramar.mil

☐ FAX ☒ EXCEL ☒ PDF ☐ OTHER: _____**ANALYSIS REQUESTED:**

General water quality
Total metals (36 LCP)
BTX FI (CG-C10)
~~BTX FI (CG-C10)~~
BTX, TVH, TEH-CME

L 420 839

NOTES (sample specific
comments, due dates, etc.)

[illegible]

TURN AROUND REQUIRED: ☒ ROUTINE ☐ RUSH - SPECIFY DATE: _____ (surcharge may apply)

SEND INVOICE TO: ☒ SAME AS REPORT INVOICE FORMAT: ☒ HARDCOPY ☒ PDF ☐ FAX
☐ DIFFERENT FROM REPORT (provide details below)

SPECIAL INSTRUCTIONS:

Please email PDF format results to
mkawei@miramarmining.com

RELINQUISHED BY:

DATE _____

TIME

RECEIVED BY:

DATE 11/1/21

TIME

RELINQUISHED BY:

DATE _____

TIME

RECEIVED BY:

DATE _____

TIME

FOR LAB USE ONLY

COOLER SEAL INTACT?

☐ YES ☐ NO ☐ N/A

SAMPLE TEMPERATURE: 11.3°C

FROZEN? ☐ YES ☐ NO

COOLING METHOD?

☐ ICEPACKS ☐ ICE ☐ NONE

ALS COPY

SEE WHITEPAPER FOR SOURCE VERSIONR 08



ALS Environmental
excellence in analytical testing

Vancouver, BC 1988 Triumph Street V5L 1K5 Tel: 604-253-4188 Toll Free: 1-800-665-0243 Fax: 604-253-6700
Fort St. John, BC #2 - 8820 100th Street V1J 3W9 Tel: 250-785-8281 Fax: 250-785-8286
Calgary, AB #2 - 21 Highfield Circle SE T2G 5N6 Tel: 403-214-5431 Toll Free: 1-866-722-6231 Fax: 403-214-5430
Burlington, ON 5420 Mainway Drive, Unit 5 L7L 6A4 Tel: 905-331-3111 Toll Free: 1-888-257-3684 Fax: 905-331-4567

74423

SEND REPORT TO:

CHAIN OF CUSTODY FORM

PAGE 2 OF 3

CLIENT: MIRAMAR HIDE BAY LTD ATTN: Matt Kawai

ADDRESS: 300-889 Harbourside Drive

CITY: North Vancouver PROV.: BC POSTAL CODE: V7P 3S1

TELEPHONE: 604-677-0636 FAX: _____ SAMPLER: April

PROJECT NAME & NO.: _____ QUOTE NO.: _____

PO NO.: _____ ALS CONTACT: Randy Fournier

REPORT FORMAT: ☒ HARDCOPY ☒ EMAIL - ADDRESS: mkawci@miramar.mn

☐ FAX ☒ EXCEL ☒ PDF ☐ OTHER:

ANALYSIS REQUESTED:

General water quality	
Total metals (36-1CP)	
F ¹ (CG-110)	
BTEX F ₂ (CG-116)	
BTEX, TVH, TEH-CME	

NOTES (sample specific
comments, due dates, etc.)

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[illegible]

TURN AROUND REQUIRED: ☒ ROUTINE ☐ RUSH - SPECIFY DATE: _____ (surcharge may apply)

SEND INVOICE TO: ☒ SAME AS REPORT **INVOICE FORMAT:** ☒ HARDCOPY ☒ PDF ☐ FAX
☐ DIFFERENT FROM REPORT (provide details below)

SPECIAL INSTRUCTIONS:

Please email PDF format results to
mukaiwei@miramarmining.com

RELINQUISHED BY:	DATE	RECEIVED BY:	DATE
	TIME		TIME
RELINQUISHED BY:	DATE	RECEIVED BY:	DATE
	TIME		TIME

FOR LAB USE ONLY

COOLER SEAL INTACT?

☐ YES ☐ NO ☐ N/A

SAMPLE TEMPERATURE: °C

FROZEN? ☐ YES ☐ NO

COOLING METHOD?

☐ ICEPACKS ☒ ICE ☐ NONE

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74426

PAGE 3 OF 3

SEND REPORT TO:

CHAIN OF CUSTODY FORM

CLIENT: MIRAMAR HOPE RAY LTD ATTN: Matt Kawai

ADDRESS: 300-889 Harbourside Drive

CITY: North Vancouver PROV.: BC POSTAL CODE: V7P 3S1

TELEPHONE: 604-677-0636 FAX: _____ SAMPLER: Aori 1 P.

PROJECT NAME & NO.: _____ QUOTE NO.: _____

PO NO.: _____ ALS CONTACT: Randy Fournier

REPORT FORMAT: ☒ **HARDCOPY** ☒ **EMAIL - ADDRESS:** mlkwei@mira.marminio

☐ FAX ☒ EXCEL ☒ PDF ☐ OTHER:

ANALYSIS REQUESTED:

[illegible]

TURN AROUND REQUIRED: ☒ ROUTINE ☐ RUSH - SPECIFY DATE: _____ (surcharge may apply)

SEND INVOICE TO: ☒ SAME AS REPORT INVOICE FORMAT: ☒ HARDCOPY ☒ PDF ☐ FAX
☐ DIFFERENT FROM REPORT (provide details below)

SPECIAL INSTRUCTIONS:

INSTRUCTIONS:

Please email PDF format ^{results} to
mkawei@~~estmichigan~~ miramarmining.com

RELINQUISHED BY:	DATE	RECEIVED BY:	DATE
	TIME		TIME
RELINQUISHED BY:	DATE	RECEIVED BY:	DATE
	TIME		TIME

FOR LAB USE ONLY

COOLER SEAL INTACT?

☐ YES ☐ NO ☐ N/A

SAMPLE TEMPERATURE: °C

FROZEN? ☐ YES ☐ NO

COOLING METHOD?

☐ ICEPACKS ☐ ICE ☐ NONE

ALS COPY

SEE WHITEPAPER FOR SOURCE VERSIONB 08