# SITE CHARACTERIZATION REPORT FAIRBANKS INTERNATIONAL AIRPORT FORMER MARK AIR FACILITIES FAIRBANKS, ALASKA

## **Prepared For**

Fairbanks International Airport State of Alaska Department of Transportation and Public Facilities 6450 Airport Way, Suite 1 Fairbanks, Alaska 99709

**April 2005** 

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Prepared by

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### **ACRONYMS**

ADEC Alaska Department of Environmental Conservation

ADOT&PF Alaska Department of Transportation and Public Facilities

AK 101 Alaska method 101 AK 102 Alaska method 102 AK 103 Alaska method 103

AMEC Earth and Environmental, Inc.

Av-Gas aviation gasoline

BTEX benzene, toluene, ethylbenzene, and xylenes

DRO diesel range organics

DRPH diesel range petroleum hydrocarbons

EDB ethylene dibromide (or 1,2-Dibromoethane) EDC ethylene dichloride (or 1,2-Dichloroethane)

EMI Environmental Management Inc. ESA environmental site assessment FIA Fairbanks International Airport

GRO gasoline-range organics

GRPH gasoline-range petroleum hydrocarbons

IDW investigation derived waste MCL maximum cleanup level mg/kg milligrams per kilogram mg/L milligrams per liter MRL method reporting limit NCA North Creek Analytical NFA No Further Action

NFRAP No Further Remedial Action Planned

PAH polynuclear aromatic hydrocarbons

PID photoionization detector

ppm parts per million PVC poly-vinyl chloride

QA/QC quality assurance/quality control

RRO residual range organics

SLR SLR International Corp (dba SLR Alaska)
USEPA United States Environmental Protection Agency

UST underground storage tank VOC volatile organic compound

#### 1 EXECUTIVE SUMMARY

The Alaska Department of Transportation and Public Facilities, Fairbanks International Airport (FIA) contracted SLR International Corp (SLR) to conduct site characterization activities at the former Weaver Brothers facility, a.k.a former Mark Air Warehouse (Block 10, Lots 6, 7, and 13, FIA) and Mark Air Hangar facility (Block 1, Lot 6, FIA), collectively identified as the former Mark Air facilities at FIA, in Fairbanks, Alaska. This report summarizes soil and ground water results of our recent site characterization work, and makes recommendations for future monitoring, site delineation, and disposal of investigation derived wastes (IDW).

At the former underground storage tank (UST) locations of the two sites, subsurface investigation activities focused on the areas with suspected hydrocarbon-impacted media. These areas represent the locations of former diesel, gasoline and waste oil USTs, and their associated pipe systems. Findings and recommendations are summarized by site in the following paragraphs. Sections 5 and 6 contain more detailed discussions concerning the results of the investigation, and our conclusions and recommendations.

## Former Weaver Brother Facility

### Former USTs 1-4 and Former Dispenser Island

Gasoline-range organics (GRO); and benzene, toluene, ethylbenzene, and xylenes (BTEX) compounds; in excess of Alaska Department of Environmental Conservation (ADEC) cleanup levels, were encountered at WP-1 and WP-2 in ground water and within the 'smear zone,' (the realm of soil and ground water interface in which the water table seasonally fluctuates). Dieselrange organics (DRO) –contaminated soil was encountered at a depth of seven feet in borehole WP-3 (the vicinity of the former dispenser island).

GRO, benzene, ethylbenzene, and DRO were encountered in ground water in excess of ADEC cleanup levels at monitoring well MW-8, located approximately 100 feet downgradient of the former USTs 1 through 4. Benzene was detected slightly below the ADEC cleanup level in ground water at monitoring well MW-9, located approximately 165 feet downgradient of former USTs. A plume of GRO/BTEX- and DRO-contaminated ground water was evident, emanating from the vicinity of these former USTs and dispenser island, and extending northwesterly to MW-8.

To better define the extents of this plume, and to define a possible mitigation scope, the following recommendations are made for the vicinity of these former USTs:

• Further Characterization – Collect additional soil and ground water samples lateral to WP-1, WP-2 and WP-3 in order to define the estimated volume of soil and the extent of the dissolved phase petroleum hydrocarbon plume exceeding ADEC cleanup levels. As part of the characterization, consider biannual monitoring of wells WP-1, WP-2, WP-3, MW-8, MW-9, and possibly MW-4 for target contaminants. These data can be used to better clarify the extent of the soil and groundwater contamination at this

location, in addition to providing data that could be used to develop area-wide cleanup levels.

#### Former UST 8

GRO and DRO in excess of ADEC cleanup levels were encountered at borehole WP-4N, within the 'smear zone'. Well point WP-4N(15) completed with a screen at a depth of 15 feet was dry (above the apparent level of ground water) and could not be used to establish water quality near the surface of the water table in October 2004. Contamination was not encountered at 25 and 35 feet in depth at this nested well, nor was it encountered in neighboring well points WP-5, WP-6 and WP-7.

The following recommendations are made for the vicinity of former UST 8:

• *Monitoring* - Sample and test well point WP-4N(15) for GRO/BTEX, VOCs and DRO in 2005, when the water table is higher.

With favorable results in 2005, it is our opinion that FIA could successfully apply for a No Further Action (NFA) determination from the ADEC at this former UST location.

#### Former UST 16

Contamination was not found in soil and ground water samples from boreholes/well points WP-8 and WP-9, in the immediate vicinity of former UST 16. We recommend the FIA request a NFA determination from the ADEC for this former UST location.

#### **General Site Conditions**

Ground water contamination was not observed above ADEC ground water cleanup levels at the two most down gradient well locations (MW-4 and MW-9). These locations are approximately 80 feet north and 120 feet west of the former dispenser island and former USTs 1-4 location, the closest locations at which petroleum hydrocarbon impact has been documented. From this, it is apparent that ground water contamination from former USTs 1-4 does not extend to the northeast.

## Former Mark Air Hanger Facility

#### Former USTs 6 and 7

Contamination was not found in ground water from well point WP-10, in the immediate vicinity of former USTs 6 and 7. We recommend the FIA request a NFA determination from the ADEC for the locations of these former USTs.

#### Former UST 10

Shallow well point WP-11N(15) completed with a screen at a depth of 15 feet, was dry and could not be used to establish water quality near the surface of the water table at the former UST 10 location in October 2004. Contamination was not encountered in ground water at 25 and 35 feet depths in this nested well.

The following recommendations are made for the vicinity of former UST 10:

• *Monitoring* - Sample and test well point WP-11N(15) for DRO, VOCs and GRO/BTEX in 2005 when the water table is higher.

With favorable results in 2005, it is our opinion that FIA could successfully apply for a NFA determination from the ADEC at this former UST location.

#### Former UST 9

Benzene marginally in excess of the ADEC soil cleanup level was encountered at a depth of ten feet in borehole MW-7, representative of the upper 'smear zone' in the vicinity of former UST 9. DRO, toluene, ethylbenzene, xylenes and SVOCs did not exceed ADEC soil target cleanup levels in this sample. As contaminated soil was excavated from this location during the UST removal activities, this benzene detection does not warrant additional soil investigation activities. GRO, DRO and benzene were detected in excess of the ADEC ground water cleanup levels in corresponding monitoring well MW-7.

The following recommendation is made for the vicinity of former UST 9:

• Further Ground Water Characterization – Collect additional ground water samples lateral to MW-7 in order to define the extent of the dissolved phase petroleum hydrocarbon plume exceeding ADEC cleanup levels. As part of the characterization, include monitoring of MW-7 for target contaminants. These data can be used to support development of a monitored natural attenuation (MNA) management rationale for this location, in addition to providing data that could be used to develop area-wide cleanup levels.

#### Former UST 12

GRO and benzene slightly in excess of ADEC cleanup levels were encountered in ground water at well point WP-12, located in the vicinity of former gasoline UST 12. Contaminated soil was removed from this location during removal of the UST.

The following recommendation is made for the vicinity of former UST 12:

• *Monitoring* – Continue to monitorWP-12 for target contaminants. This data can be used to support development of a MNA management rationale for this location, in addition to providing data that could be used to develop area-wide cleanup levels.

#### Former UST 13

DRO, BTEX and SVOCs were not detected above ADEC soil cleanup levels in sample MW-8-13, collected from the smear zone in the vicinity of former diesel UST 13. From this data, it does not appear that a contaminated soil source area remains at this location and that ground water impacts are likely a remnant plume. GRO, benzene and DRO in excess of ADEC cleanup levels were encountered in ground water in corresponding monitoring well MW-8,

The following recommendation is made for the vicinity of former UST 13:

• *Monitoring* –Continue to monitorMW-8 for target contaminants. This data can be used to support development of a MNA management rationale for this location, in addition to providing data that could be used to develop area-wide cleanup levels.

#### Former UST 15

DRO in excess of the ADEC cleanup level was encountered in ground water at well point WP-13, in the vicinity of former diesel UST 15. BTEX and SVOCs were not detected above ADEC ground water cleanup levels in this sample. Contaminated soil was excavated from this location during the UST removal activities. This DRO plume is likely the result of remnant smear zone soil and/or ground water impact. The closest downgradient monitoring well (MW-6, located 120 feet downgradient) did not contain DRO or BTEX constituents above ADEC ground water cleanup levels. The following recommendation is made for this vicinity:

• *Monitoring* – Continue to monitor WP-13 for target contaminants. This data can be used to support development of a MNA management rationale for this location, in addition to providing data that could be used to develop area-wide cleanup levels.

#### **General Site Conditions**

Contamination was not found in ground water samples from monitoring wells MW-1, MW-3 and MW-6, (located west and down gradient of the former Mark Air Hangar and Cargo buildings and beyond the former USTs). We recommend the FIA discontinue monitoring these wells at this time. However, FIA may wish to consider maintaining these wells for potential future use. We understand that the integrity of MW-1 may be compromised, and that the well head is often located beneath ponded surface water during the spring. Consequently future data from this well may be of questionable quality.

### 2 INTRODUCTION

SLR International Corp (SLR) was retained on September 13, 2004 by Alaska Department of Transportation and Public Facilities (ADOT&PF), Fairbanks International Airport (FIA) to conduct further site characterization and remediation activities and site closure assistance for two former Mark Air facilities at FIA (Figure 1).

The two facilities are known as the former Weaver Brothers Facility also known as the former Mark Air warehouse (Block 10, Lots 6, 7, and 13, FIA (Figure 2)) and the former Mark Air Hangar (Block 1, Lot 6, FIA (Figure 6)). Both facilities were serviced by a total of 17 underground storage tanks (USTs) which were closed by removal in 1992 by Environmental Management Inc. (EMI). At the time of removal, 12 of the 17 USTs had undergone tank tightness testing and four of the USTs had failed the test. Contaminated soil was encountered during closure of some of the USTs, and limited removal activities of this impacted soil was performed.

Some contaminated soil remained in place, and subsequent activities at the sites included long-term ground water monitoring between 1993 and 2003 by EMI, and subsequently by Nortech Environmental and Engineering Consultants (Nortech) and AMEC Earth and Environmental, Inc. (AMEC).

On December 15, 2003, FIA requested that Alaska Department of Environmental Conservation (ADEC) issue a NFA determination for UST 11 at the former Weaver Brothers facility. On December 16, 2003, FIA requested that ADEC issue NFA determinations for three USTs located at the former Mark Air Hangar facility, as well as a NFRAP determination (no further remedial action planned) for two USTs. Based on subsequent discussions between the FIA Environmental Manager and ADEC, SLR prepared *Fairbanks International Airport, Former Mark Air Facilities, Fairbanks, Alaska, Final Site Characterization Work Plan*, dated September 2004 (the Work Plan), which was approved by ADEC on October 1, 2004. SLR performed field activities in accordance with the Work Plan in October and November 2004, with the exceptions noted in Section 5.4.

## 2.1 Purpose

This site characterization report summarizes our field activities and soil and ground water analytical results, in the vicinity of former USTs at the two facilities that have USTs yet to be granted NFA or NFRAP (no further remedial action planned) status.

## 2.2 Objectives

Our report is structured to provide an introduction and background to the sites, identify regulatory compliance, describe field activities and procedures, present results of analytical Final Former Mark Air Site Characterization 5 Rev. 5, 4/2005

testing, and make recommendation as necessary toward regulatory closure of these sites. executive summary of results and recommendations is provided for convenience to the client.	An

### 3 BACKGROUND

An overview of regional and local geology, hydrogeology, and historical environmental activity at the former Mark Air facilities are summarized in this section.

## 3.1 Regional and Local Geology

Fairbanks is located on the north side of the Tanana River Valley, at the base of the hills of the southern Yukon-Tanana Upland, approximately 100 miles south of the Arctic Circle. Mountain summits in the area typically top out at 1,250 to 1,800 feet in elevation, with local relief ranging from 600 to 1,300 feet in elevation.

Fairbanks bedrock geology comprises calc-mica schist, marble, and quartzite (Péwé, 1982). The schist is locally intruded by quartz diorite, granite, or other granitic rocks. In uplands, bedrock is typically overlain with wind-blown silt or loess (upper slopes), or erosional silts (lower slopes). Valley bottoms exhibit thick deposits of coarse gravels on bedrock, which are overlain with silt. Hydraulic conductivity of these silts and percolation of precipitation is low; frozen silts are typically impermeable to ground water flow and may exhibit high ice contents. Fairbanks is located in a physiographic zone of discontinuous permafrost; the active layer, or realm of seasonally frozen ground, is typically 1 to 15 feet thick.

The FIA lies at the confluence of the Chena and Tanana Rivers in west Fairbanks. The flood plain exhibits deposits of unconsolidated alluvial gravelly sands and sandy gravel several hundreds of feet thick. Physiographic features include silt-laden swales, oxbows, and sloughs, and stream and creek tributaries of the two rivers. The alluvium is commonly unfrozen within the flood plain, but can be frozen to depths of several hundred feet in places. Frozen alluvium typically exhibits low ice content and low probability of massive ice (Péwé, 1982); local ice wedges and lenses are sporadically encountered in uplands of the Fairbanks area.

The average annual precipitation in Fairbanks is 11.2 inches per year. Maximum discharge to the Tanana and Chena Rivers typically occurs from mid-July through August, with minimum influx occurring in late winter before spring thaw. The Tanana River is the major source of ground water recharge in the area. The general ground water flow direction through the flood plain (former Mark Air sites inclusive) is northwesterly, with local variations from southwest to north.

#### 3.2 Historical Environmental Activities

Environmental investigation activity has occurred at both of the former Mark Air sites since the early 1990s. Releases were confirmed, and a Phase I Environmental Site Assessment (ESA) was completed in early 1992. USTs at former Weaver Brothers and Mark Air Hangar facilities were tested for tightness, four failed, and a Phase II ESA was completed in November 1992. The original 17 USTs were removed from both sites, some contaminated soils were removed and Final Former Mark Air Site Characterization 7 Rev. 5, 4/2005

stockpiled for later treatment, and a ground water monitoring program was initiated in 1993. This ground water program was to be a coordinated effort between Mark Air, the United States Postal Service, Crowley, and MAPCO, as an area-wide ground water investigation. Nine monitoring wells were installed in 1993, four at the Weaver Brothers site, and five at the former Mark Air Hangar site. Petroleum hydrocarbons above state maximum cleanup levels (MCLs) and some volatile organic compounds (VOCs) were detected in ground water from some wells. Ground water monitoring was intermittent at these sites between 1993 and 2002. The septic system at the former Mark Air Hangar facility, and a septic crib at the former Weaver Brothers site were investigated in 2001 and 2003, respectively. Key environmental documents are identified:

- Phase 2 Site Assessment, MarkAir Fairbanks Facilities, Fairbanks, Alaska, Volume 1, by EMI, Anchorage, dated February 1993.
- NRO File 100.26.043, Phase 2 Site Assessment, MarkAir Fairbanks Facilities, Volume 1 (Phase 2 Site Assessment revision letter), by EMI, Anchorage, dated March 9, 1993.
- *MarkAir Fairbanks Monitoring Well Report*, by EMI, Anchorage, undated (stamped received in November 1993).
- Environmental Investigation Report, Lot 6 Block 1, Fairbanks International Airport, by Rockwell Engineering & Construction Services, Inc., Fairbanks, dated June 25, 2001.
- Results and Summary of Ground water Sampling, Block 1, Lot 6, of the Fairbanks International Airport, Former Mark Air Hangar, by Nortech Environmental & Engineering Consultants, Fairbanks, dated October 21, 2003.
- Results of Ground water Sampling, Weaver Brothers Facility, Lot 7, Block 10, Fairbanks International Airport, by AMEC Earth & Environmental, Inc., Fairbanks, dated November 24, 2003.
- Septic Crib Characterization Report, 5250 Airport Industrial Road, (Lots 6, 7, and 13, Block 10), Fairbanks International Airport, by Shannon & Wilson, Inc., Fairbanks, dated November 2003.
- No Further Action (NFA) Request for UST #11, former Weaver Brothers Facility, Block 10, Lots 6, 7, and 13, Fairbanks International Airport, by ADOT&PF FIA, dated December 15, 2003.
- No Further Action (NFA) Request for USTs #1, 5, and 14 and No Further Remedial Action Planned (NFRAP) Request for USTs #6 & 7 at the former MarkAir Hangar/Cargo Facility, Block 1, Lot 6, Fairbanks International Airport, by ADOT&PF FIA, dated December 16, 2003.

#### 3.2.1 Former Weaver Brothers Facility

Seven USTs, all installed in 1976, were removed and closed at the former Weaver Brothers Facility (Figure 2). Figures 3, 4 and 5 identify the locations of these former tanks. USTs 4 (leaded gas) and 8 (waste oil) failed tank tightness tests in 1992. UST 11 was removed, and no

contamination was encountered. Appearance of overfilling or leaks was associated with USTs 1 through 4, 8 and 16. These tanks and associated pipes were removed as practical; some pipes were cut and grouted in place near building edges.

Soil investigation indicated diesel-range and gasoline-range petroleum hydrocarbons (DRPH and GRPH, respectively), benzene, and total benzene, toluene, ethylbenzene, and xylenes (BTEX) in excess of the applicable cleanup levels in excavations for USTs 1 through 4, and UST 8. DRPH in soil exceeded the applicable cleanup level in the UST 16 excavation.

Four monitoring wells were installed at the former Weaver Brothers facility in 1992. These historic wells are identified on the aforementioned figures. Review of the historical ground water analytical data indicates benzene and lead were not been detected above state cleanup levels since before 1997 at monitoring well WB-3. Although benzene and diesel-range organics (DRO) were ground water contaminants of concern at well WB-4, these compounds were not been detected above state cleanup levels over the past couple of years. Trace VOCs have been detected in ground water at some of these wells, but at concentrations below applicable cleanup standards.

### 3.2.2 Former Mark Air Hangar Facility

Ten USTs, installed between 1974 and 1980 were removed and closed at the former Mark Air Hangar facility (Figures 6 through 11). UST 9 (diesel) and 10 (waste oil) failed tank tightness tests in 1992. USTs 5 and 15 were removed and no contamination was encountered. Holes were found in USTs 9 and M01; appearance of overfilling and/or leaks was associated with USTs 10 and 13. The ten tanks and associated pipes were removed as practical; some pipes were cut and grouted in place near building edges or at other structural barriers.

Soil investigation indicated DRPH, GRPH, benzene, and total BTEX in excess of the applicable cleanup levels in excavations for USTs 6, 7, and 10 (Figure 7); soil contaminated with VOCs was also encountered in the UST 10 excavation. DRPH in soil exceeded the applicable cleanup level in USTs 9, 13, and 15 excavations. Benzene in soil exceeded the applicable cleanup level in USTs 12 and M01 excavations (Figures 8-11). Soil was not contaminated in the UST 14 excavation.

Five monitoring wells (MW-1 through MW-5 in Figure 6) were installed at the former Mark Air Hangar facility in 1992. Well MW-5 was later decommissioned and replaced with a push-point well as MW-6 in 2002. Review of the historical ground water analytical data indicates that contaminants of concern are trichloroethene at MW-2, and residual range organics (RRO) at MW-5 (now MW-6). Lead is also a contaminant of concern at this site. During a 2003 sampling event trace VOCs were detected in ground water at MW-3; 1,1-dichloroethene was detected slightly above the applicable cleanup standard.

### 3.2.3 Excavated Contaminated Soils

Along with removal of the 17 USTs in 1992, approximately 4,300 cubic yards of contaminated soils were excavated, segregated, and stockpiled on-site for later treatment. We understand that soil was remediated off-site. No soils were observed stockpiled at either site during the course of our site characterization fieldwork.

### **4 FIELD ACTIVITIES AND PROCEDURES**

SLR performed site characterization field activities at the former Mark Air facilities between the last week in September 2004 through November 2, 2004. Utility locates and site accesses were coordinated prior to October 4, 2004. Discovery Drilling Inc. of Anchorage, Alaska (Discovery) met SLR staff at the site on October 4 for FIA badging and initial briefing on site safety and health and the fieldwork schedule. Borehole drilling and well installations were performed under SLR supervision between October 4 and 8, 2004. SLR accomplished well development between October 11 and 12, 2004. SLR completed ground water sampling between October 13 and 15, 2004, and again on November 2, 2004. These activities were performed to assess subsurface soil conditions and ground water quality in the vicinity of former tank locations. Field tasks and procedures are discussed in the following sections. Investigation derived waste (IDW) management is also considered.

## 4.1 Utility Locates

SLR coordinated with utility providers during the last week in September through October 4, 2004 to locate buried and aboveground utility conveyances before commencing drilling. Golden Valley Electric Association, College Utilities, Alaska Communication Systems (ACS), and Alaska OneCall were contacted and SLR staff met utility personnel in the field as necessary to locate the sites and identify utility alignments for marking.

## 4.2 Field Investigation Methods

The investigation methodology implemented for subsurface soil and ground water sampling is presented below. Building footprints, locations of former USTs, locations of previously installed USTs, locations of new wells, and locations of well points are shown on the attached figures. Copies of the North Creek Analytical (NCA) laboratory reports, photographs, SLR field data, e.g., soil boring logs, monitoring well and well-point completion details, monitoring well development records, our field log notes, well survey data, and IDW management records are included in the appendices.

#### 4.2.1 Subsurface Soils

Seventeen soil borings were drilled to various depths between 15 and 35 feet deep (Table 1A), using a truck-mounted drill rig equipped with an 8-inch outside diameter by <sup>3</sup>/<sub>4</sub>-inch inside diameter hollow-stem auger. Discovery performed the borings under SLR supervision. SLR located and documented the boreholes as soil boring logs (Appendix C).

Eleven borings were advanced at the former Weaver Brothers site, 8 to 15 feet, 1 to 18 feet, 1 to 20 feet, and one to 35 feet deep.

Six borings were advanced at the former Mark Air Hangar facility, 3 to 15 feet, 2 to 20 feet, and one to 35 feet deep.

Soils were field screened with a photoionization detector (PID), samples were collected for laboratory testing, and well points or monitoring wells were installed according to the schedule outlined in Table 1B.

During drilling, soil samples were collected with split-spoon samplers at 5-foot intervals through the depths of borehole penetration. Split-spoon sampling was accomplished by driving a 3-inch outside diameter by 2.5-inch inside diameter sampler into the soil at the base of the auger with a heavy drop hammer falling 30 inches onto the drill rods. Penetration resistance was assessed from the blow counts, the number of blows (or hammer drops) required to advance the sampler 6 inches over a 2-foot interval at the desired sample realm.

Once a split-spoon was retrieved and opened, soils were visually classified and a sample was collected in a zip-loc baggie and field-screened with a PID to infer presence of organic contaminants. Field-screen samples were allowed to warm in a heated truck for 15 minutes before finger agitation and the PID probe was inserted for headspace analysis. Total hydrocarbon emissions are recorded on the soil boring logs (Appendix C). The PID headspace measurements were used to assist determination of sample collections for laboratory analytical testing.

Relatively undisturbed samples for analytical testing were typically collected from the split-spoon tube where contamination was inferred with the PID, or from the vicinity of the water table interface. The representative samples were collected in laboratory-supplied jars, which were labeled and logged before being placed into coolers with ice-substitute for cold storage until submittal to the laboratory. A chain-of-custody and seal accompanied each cooler of samples to the NCA laboratory as a quality control measure. Table 1A summarizes the soil sample schedule with duplication at ten percent frequency, with a minimum of one duplicate sample per site.

Discovery performed decontamination of auger flights after completion of each borehole. For borings where petroleum compounds were contaminants of concern, augers were steam-cleaned with detergent and rinsed in a tub, and wash water was drummed as 'oily water' IDW. Where VOC and/or polynuclear aromatic hydrocarbon (PAH) contamination might be encountered, wash water was drummed as other hazardous IDW. SLR performed split-spoon decontamination after each sample collection with a bucket-wash setup. The split-spoon halves were first brushed free of soil in a detergent bath, then dipped and washed in a soap bath, and finally rinsed with deionized water. This decontamination IDW was segregated as oily water or other hazardous water and combined with drilling IDW accordingly.

#### 4.2.2 Ground Water

SLR installed two monitoring wells at each of the former Weaver Brothers and Mark Air Hangar sites in accordance with ADEC's *Recommended Practices for Monitoring Well Design, Installation, and Decommissioning.* 

At the former Weaver Brothers site, 18- and 20-foot-deep monitoring wells MW-9 and MW-8 were installed downgradient of former USTs 1 through 4 (Figure 2).

At the former Mark Air Hangar site, 20-foot monitoring wells MW-7 and MW-8 (Figure 6) were installed at each of the former UST 9 and UST 13 locations.

Monitoring wells were installed in boreholes subsequent soil sampling. The typical well was constructed with a 2-inch-diameter, schedule 40 polyvinyl chloride (PVC) casing, the bottom 10-feet of which is 0.010-inch slot-screen PVC. Annular space around the wells was backfilled with #16-30 silica sand to at least 1-foot above the top of screen and above a hydrated 2-foot bentonite seal, up to within 6 inches of the ground surface. The wells were completed with flush-mounted protective monuments and an asphalt or concrete patch.

Nine well points (WP-1 through WP-9) were installed at the former Weaver Brothers site at the locations identified in Figure 2. Eight of these well points were installed to depths between 15 and 20 feet. The ninth, WP-4N, is a well point cluster comprising three discrete sampling points embedded at 15, 25, and 35-foot depths. Another four well points were installed at the former Mark Air Hangar site at the locations shown in Figure 6. Well points WP-10, WP-12 and WP-13 were installed to 15 or 20 feet deep. Well point WP-11N is a well point cluster comprising three discrete sampling points at 15, 25, and 35-foot depths.

The typical single-point well was constructed with a ¼-inch-diameter PVC riser above a 2-foot length of 1-inch-diameter PVC, slotted screen section, screw-capped at both ends. This well point was connected to the surface with poly-tube fastened with cable ties and a Parker fitting. The typical nested well point cluster was constructed with a 1-inch diameter PVC stalk and 2-foot lengths of 2-inch diameter PVC slot-screened well points. Each well point was fastened to the stalk with cable ties at a prescribed depth, and similarly completed with a color-coded poly-tube and a Parker fitting. The well points were constructed without use of PVC cement or other chemical adhesives. A flush-mounted protective monument was installed around the well point head to complete each installation.

The newly constructed monitoring wells and well points were developed before sampling. First, the wells were purged of at least three casing volumes of ground water using a peristaltic pump set for low-flow purging. Field measurements of purge volume, temperature, pH, specific conductivity, and ORP (oxygen recovery potential) were recorded on SLR Well Sampling Calculation and Record Sheets during purging. Well completion details, development records, and purge measurements are included in Appendix C; field notes are included as Appendix D.

SLR subcontracted Stutzmann Engineering Association (Stutzmann), a licensed professional surveyor, to perform a well survey of the new monitoring installations. Vertical and horizontal datum were recorded to fix well locations and accommodate ground water level measurements. The Stutzmann survey data, amended with reference locations, is included in Appendix E.

## 4.3 Analytical Methods

Soil and ground water samples were submitted for laboratory analysis in accordance with the analytical program summarized in Tables 1A and 1B. Samples were analyzed for specific contaminants of concern based on source of contamination (former tank contents) and historical

data for these sites. Target compounds and analytical methods used for this site characterization work were:

- BTEX using United States Environmental Protection Agency (USEPA) Method 8021B;
- GRO using Alaska Method 101 (AK 101);
- DRO using Alaska Method 102 (AK 102);
- RRO using Alaska Method 103 (AK 103);
- VOCs using USEPA Method 8260B (including EDC);
- ADEC-priority PAH compounds using USEPA Method 8270C with selective ion monitoring (or 8270C-SIM);
- Lead using USEPA Method 6020; and
- EDB (or 1,2 dibromoethane) using USEPA Method 8011.

Field duplicate samples were collected at a minimum frequency of 10 percent of the total number of samples collected, with at least one duplicate for each analytical method used at each site. Trip blanks for each of the soil and ground water sampling parameters accompanied the laboratory shipment of containers to and from the site. The North Creek Analytical (NCA) laboratory analytical reports with quality control reviews are included in Appendix A. An SLR Quality Assurance Review of the NCA results is also included in Appendix A.

## 4.4 IDW Management

Borehole soil tailings were containerized in metal, 55-gallon drums. Tailings were segregated in the field based on historical knowledge of the borehole location relative to contaminants of concern, PID headspace screening data, and analytical sample results. Decontamination IDW was segregated and drummed as described in section 4.2.1. Water generated during well development and sampling was managed similarly to that of soil IDW. Purge water was segregated based on historical knowledge of the wells location with respect to known contamination and target contaminants. In general, water with potential to contain petroleum contaminants and lead was drummed separate from water that might contain VOCs and PAHs. IDW drums were sealed and labeled with borehole and well nomenclature, inventoried, and collectively stored on asphalt near the east corner of the former Weaver Brothers site. The analytical results will be used to determine the final disposition of drummed soils and water produced during the site investigations.

#### **5 RESULTS**

### 5.1 Site Characterization

Soils from each of the boreholes performed at both sites were field-screened for indication of contamination.

A total of 13 soil samples were collected for laboratory analysis from the former Weaver Brothers sites. One sample was collected from each borehole, with the exception of MW-9, which was installed downgradient of the soil contamination with the purpose of identifying ground water quality. Three duplicates were also collected from these sites.

Soil samples from three of the six borings at the former Mark Air Hangar facility, plus one duplicate sample were also tested.

Ground water samples from each of the wells and well points at both sites were also collected and analyzed.

Eighteen water samples were collected from the former Weaver Brothers sites, 3 were duplicates, and one pair was collected from nested well point WP-4N.

An additional 14 samples, including 4 duplicates and a sample pair from nested well point WP-11N were collected and tested from the former Mark Air Hangar facility.

Results of the soil and ground water analyses are discussed in the following sections and are summarized in Tables 2 through 5.

## 5.2 Soil Quality

#### 5.2.1 Former Weaver Brothers Sites

At the Former Weaver Brothers sites, target contaminants were not detected above ADEC cleanup levels in soils analyzed from boreholes WP-5, WP-6 and WP-7 (beyond former UST 8), and WP-8 and WP-9 (vicinity of former UST 16).

GRO and BTEX compounds in excess of ADEC cleanup levels were encountered in soil from near the ground water table at boreholes WP-1 and WP-2 (in the vicinity of former USTs 1-4). Specifically, GRO, benzene, toluene, and ethylbenzene concentrations at a depth of 11 feet in WP-1 were reported at 1,020 mg/kg, 0.574 mg/kg, 12.4 mg/kg, and 14.8 mg/kg respectively. GRO, benzene, toluene, ethylbenzene, and xylenes concentrations at a depth of 11 feet in WP-2

were reported at 2,720 mg/kg, 29.2 mg/kg, 138 mg/kg, 56.9 mg/kg, and 230 mg/kg respectively At WP-3, in the vicinity of the former dispenser island, DRO at a concentration of 7,450 mg/kg in soil was encountered at a depth of 7 feet.

At a depth of 10 feet in borehole MW-8, located downgradient of former USTs 1-4, benzene was also reported in excess of the ADEC cleanup level at 0.376 mg/kg.

At borehole WP-4N (in the immediate vicinity of former UST 8) DRO and GRO/BTEX in soil in excess of ADEC cleanup levels were encountered near the ground water table at a depth of 11 feet. DRO was reported at 805 mg/kg, GRO at 1,260 mg/kg, benzene at 0.186 mg/kg, toluene at 14.0 mg/kg, and ethylbenzene at 7.85 mg/kg at this location.

VOCs, PAHs, RRO and lead were not detected above method reporting limits (MRLs) or above ADEC cleanup levels in soils at the former Weaver Brothers sites.

#### 5.2.2 Former Mark Air Hangar Sites

VOCs, PAHs, GRO, DRO, RRO, BTEX and lead were not detected above MRLs or ADEC cleanup levels in soil samples analyzed from the former Mark Air Hangar facility (vicinity of former USTs 13, and 6 and 7), with the following exception. Benzene, reported at 0.0316 mg/kg, was encountered at 10 feet in depth at borehole MW-7 (vicinity of former UST 9).

### 5.3 Ground Water Quality

#### 5.3.1 Former Weaver Brothers Sites

At the former Weaver Brothers sites, target contaminants were not detected above ADEC cleanup levels in ground water analyzed from well points WP-4N, WP-5, WP-6 and WP-7 (vicinity of former UST 8), and WP-8 and WP-9 (vicinity of former UST 16). Furthermore, target contaminants were not detected above ADEC cleanup levels in ground water from new monitoring well MW-9, and historic monitoring wells MW-2, MW-3 and MW-4.

In the vicinity of former USTs 1-4, GRO and benzene were detected in the ground water sample from well point WP-1 at concentrations exceeding the ADEC cleanup levels. GRO was reported at 2.37 mg/L and benzene at 0.00723 mg/L. At WP-2, DRO and some BTEX analytes were reported in excess of the ADEC cleanup levels for ground water. The respective concentrations of DRO, benzene, toluene, and ethylbenzene in the WP-2 sample were 1.96 mg/L, 1.6 mg/L, 5.59 mg/L and 0.846 mg/L. Lead was the only target contaminant found to be in excess of its ADEC cleanup level in the well-point WP-3 sample, reported slightly above the cleanup level (0.015 mg/L) at 0.0198 mg/L.

Downgradient from USTs 1-4, the ground water sample from downgradient well MW-8 exceeded the ADEC cleanup levels for DRO, GRO, some BTEX analytes, and EDC, a gasoline additive. The respective DRO, GRO, benzene, ethylbenzene, and EDC concentrations are 1.97 mg/L, 20.9 mg/L, 3.86 mg/L, 1.41 mg/L, and 0.0324 mg/L.

RRO, PAHs, and other VOCs were not detected above ADEC cleanup levels in ground water samples from the well points and monitoring wells at the former Weaver Brothers site.

### 5.3.2 Former Mark Air Hangar

At the former Mark Air Hangar sites, target contaminants were not detected above ADEC cleanup levels in ground water analyzed from well points WP-10 (vicinity of former USTs 6 and 7), WP-11N (vicinity of former UST 10), and historic monitoring wells MW-1 and MW-3 (vicinity of airplane graveyard), and MW-6 (vicinity of cargo building).

DRO, GRO and/or benzene in excess of ADEC cleanup levels was reported in ground water samples from monitoring wells MW-7 and MW-8, and well points WP-12 and WP-13.

In the sample collected from MW-7 (vicinity of former UST 9), DRO, GRO and benzene were reported at 2.22 mg/L, 3.31 mg/L, and 0.13 mg/L, respectively.

In the sample collected from MW-8 (vicinity of former UST 13), GRO and benzene were reported at 2.2 mg/L and 0.018 mg/L, respectively.

In the sample collected from WP-12 (vicinity of former UST 12), GRO and benzene were reported at 1.56 mg/L and 0.0518 mg/L, respectively.

In the sample collected from WP-13 (vicinity of former UST 15), DRO was reported at 4.87 mg/L.

RRO, PAHs, and VOCs were not detected above ADEC cleanup levels in ground water samples from the well points and monitoring wells at the former Mark Air Hangar sites.

## 5.4 Deviations From Workplan Analytical Program

## 5.4.1 Soil Analytical Program

At the former Weaver Brothers sites in the vicinity of former diesel USTs 1 and 2, the workplan specified that a BTEX and DRO sample would be collected from boring WP-2. However, a BTEX and GRO sample was collected and analyzed. As noted above, the BTEX and GRO concentrations exceeded the ADEC soil cleanup levels at this location.

The workplan did not specify collection of soil samples downgradient of USTs 1 and 2 (at locations MW-8 or MW-9). As suspected soil contamination was encountered in the smear zone at MW-8, SLR field staff collected a sample and requested analysis for BTEX, GRO, DRO and RRO. Benzene was encountered in soil above the ADEC cleanup level at this location.

## **5.4.2 Ground Water Analytical Program**

At the former Weaver Brothers sites in the vicinity of former dispenser island associated with gasoline USTs 3 and 4, a ground water sample was collected from well point WP-3, adjacent to

the dispenser island. The workplan specified that it would be analyzed for BTEX, GRO, DRO and EDC. Although the BTEX, GRO and DRO analyses were performed as requested, due to a communication error with NCA, the sample was not analyzed for EDC.

However, as noted above, a ground water sample and associated duplicate sample (samples WP-1 and WP-3A) were analyzed for GRO, VOCs, PAHs, total lead, EDB and EDC adjacent to the former gasoline USTs 3 and 4 that were formerly connected to the dispenser island (a lateral distance of 77 feet up gradient). Although benzene was encountered slightly above the ADEC ground water cleanup level in these samples, EDC was not detected above the MRL of 0.00001 mg/L.

The purpose of the EDC analysis in this vicinity was to determine the presence or absence of EDC in ground water associated with the gasoline fuel stored in former USTs 3 and 4. Samples WP-1 and associated duplicate sample WP-3A have confirmed the absence of EDC above the MRL.

#### 5.5 IDW Soil and Water

IDW generated from field activities at the two former Mark Air sites comprised fifteen drums of soil tailings and three drums of purge water. Based on the NCA analytical results, seven of the soil drums contained petroleum hydrocarbons in excess of ADEC cleanup levels, and five soil drums did not contain contamination. Based on PID results, three drums of soil required further testing for petroleum hydrocarbons to definitively determine the soil quality. Alternatively, the drums could be considered impacted and handled as such.

The three drums of purge water contain petroleum compounds in excess of ADEC cleanup standards. Consequently, we submitted analytical results to Golden Hearts Utilities and are awaiting their response for possible treatment of this water at their facility. Similarly, Organic Incineration Technology of North Pole, Alaska must validate analytical results with their permit for possible incineration of the contaminated soil drums. These authorizations are not anticipated until January 2005. Once the proper authorizations are obtained, SLR will assist FIA-ADOT&PF with IDW disposal as necessary. The IDW inventory is included in Appendix F.

## 5.6 Quality Assurance/Quality Control

Quality assurance and quality control (QA/QC) procedures are used to assure sampling, documentation and laboratory results are of acceptable quality and are deemed reliable. QA procedures used to validate results include standard field sampling techniques, sample duplication, laboratory QC, and analysis of trip blanks.

Our field sampling procedures follow ADEC guidelines and are described in Chapter 4. Sample duplication was performed at a minimum frequency of ten percent of the total number of samples collected, with at least one duplicate collected for each analytical method used at each of the two sites. Laboratory QC measures included analysis of method blanks, matrix and matrix spike (MS) samples with duplication, and laboratory control spiked (LCS) samples with duplication.

Surrogate recoveries and relative percent difference (RPD) calculations between MS and LCS samples and their associated duplicates are integral to laboratory QC.

A trip blank, which accompanies a sample kit through the duration of sampling and during transit to and from the laboratory, is by design as a negative control for field sampling procedures. If analysis detects contamination in a 'clean' trip blank, cross-contamination resulting from poor handling of samples in the field is indicated. However, contaminants (e.g., cleaning agents, refrigerants, surrogates) can accidentally be introduced into a trip blank at the laboratory during sample kit preparations. Furthermore, laboratories that traditionally did not charge for trip blank analyses are not doing so. Consequently, trip blanks were analyzed at a frequency of twenty percent for this project. Field duplication of soil and ground water samples is a better way to assess the quality of sample collection and storage procedures, and the precision of laboratory testing.

In addition to the standard QA/QC procedures outlined above, SLR performed a quality assurance review (QAR) of each NCA laboratory report, supplemented with field-duplicate precision calculations for each field sample and its duplicate counterpart. Expressed as RPDs for individual analytes or parameters detected above reporting or method detection limits in both samples, these RPD values are a way for us to assess data quality objectives. RPD is defined as

$$RPD = 100 \ x \frac{\text{(field result - duplicate result)}}{\text{(field result + duplicate result)} \div 2}$$

Our data quality objectives for petroleum contamination in soil and ground water are ±50 and ±30 percent, respectively. When RPDs exceed these precision goals, review of sampling procedures and laboratory case narratives and data qualifiers is warranted is assessing reliability of the affected results. Examples of phenomena that can cause elevated RPDs include collection of co-located rather than true duplicate samples (common with soil samples), laboratory results flagged as 'estimated' due to surrogate recoveries outside control limits or matrix effects, and poor laboratory analysis.

In general, our reviews of the NCA laboratory reports indicate overall satisfaction with precision, accuracy, and completeness of the analytical results, despite the lack of field (or trip) blank analyses. The QA/QC measures that were applied to sampling and analyses are sufficient to warrant reliability in the results. Furthermore, comparison of the analytical results reported herein with historic data did not indicate anomalous findings at either former Mark Air site. Our Laboratory Data Validation Reviews of the NCA reports are included in Appendix A.

### **6 CONCLUSIONS AND RECOMMENDATIONS**

Organization of this section is by site, then by former UST location for ease of reading and decision-making. The information collected during our 2004 site characterization work and historic information from the two sites was used to develop recommendations for the former UST locations.

### 6.1 Former Weaver Brothers Sites

#### 6.1.1 Former USTs 1-4 and Former Dispenser Island

GRO and BTEX compounds in excess of ADEC cleanup levels, were encountered at WP-1 and WP-2 in ground water and within the 'smear zone,' (the realm of soil and ground water interface in which the water table seasonally fluctuates). DRO –contaminated soil was encountered at a depth of seven feet in borehole WP-3 (the vicinity of the former dispenser island).

GRO, benzene, ethylbenzene, and DRO were encountered in ground water in excess of ADEC cleanup levels at monitoring well MW-8, located approximately 100 feet downgradient of the former USTs 1 through 4. Benzene was detected slightly below the ADEC cleanup level in ground water at monitoring well MW-9, located approximately 165 feet downgradient of former USTs. A plume of GRO/BTEX- and DRO-contaminated ground water was evident, emanating from the vicinity of these former USTs and dispenser island, and extending northwesterly to MW-8.

To better define the extents of this plume, and to define a possible mitigation scope, the following recommendations are made for the vicinity of these former USTs:

• Further Characterization – Collect additional soil and ground water samples lateral to WP-1, WP-2 and WP-3 in order to define the estimated volume of soil and the extent of the dissolved phase petroleum hydrocarbon plume exceeding ADEC cleanup levels. As part of the characterization, consider biannual monitoring of wells WP-1, WP-2, WP-3, MW-8, MW-9, and possibly MW-4 for target contaminants. These data can be used to better clarify the extent of the soil and groundwater contamination at this location, in addition to providing data that could be used to develop area-wide cleanup levels.

#### 6.1.2 Former UST 8

GRO and DRO in excess of ADEC cleanup levels were encountered at borehole WP-4N, within the 'smear zone'. Well point WP-4N(15) completed with a screen at a depth of 15 feet was dry

(above the apparent level of ground water) and could not be used to establish water quality near the surface of the water table in October 2004. Contamination was not encountered at 25 and 35 feet in depth at this nested well, nor was it encountered in neighboring well points WP-5, WP-6 and WP-7.

The following recommendations are made for the vicinity of former UST 8:

- *Monitoring* Sample and test well point WP-4N(15) for GRO/BTEX, VOCs and DRO in 2005, when the water table is higher.
- With favorable results in 2005, it is our opinion that FIA could successfully apply for a NFA determination from the ADEC at this former UST location

#### 6.1.3 Former UST 16

Contamination was not found in soil and ground water samples from boreholes/well points WP-8 and WP-9, in the immediate vicinity of former UST 16. We recommend the FIA request a NFA determination from the ADEC for this former UST location.

#### 6.1.4 General Site Conditions

Ground water contamination was not observed above ADEC ground water cleanup levels at the two most down gradient well locations (MW-4 and MW-9). These locations are approximately 80 feet north and 120 feet west of the former dispenser island and former USTs 1-4 location, the closest locations at which petroleum hydrocarbon impact has been documented. From this, it is apparent that ground water contamination from former USTs 1-4 does not extend to the northeast.

## 6.2 Former Mark Air Hanger Facility

### 6.2.1 Former USTs 6 and 7

Contamination was not found in ground water from well point WP-10, in the immediate vicinity of former USTs 6 and 7. We recommend the FIA request a NFA determination from the ADEC for this former UST location.

#### 6.2.2 Former UST 10

Shallow well point WP-11N(15) completed with a screen at a depth of 15 feet was dry and could not be used to establish water quality near the surface of the water table at the former UST 10 location in October 2004. Contamination was not encountered in ground water at 25 and 35 feet in depth at this nested well.

The following recommendations are made for the vicinity of former UST 10:

• *Monitoring* - Sample and test well point WP-11N(15) for DRO, VOCs and GRO/BTEX after spring breakup in 2005, when the water table is higher.

With favorable results in 2005, it is our opinion that FIA could successfully apply for a NFA determination from the ADEC at this former UST location.

#### 6.2.3 Former UST 9

Benzene marginally in excess of the ADEC soil cleanup level was encountered at a depth of ten feet in borehole MW-7, representative of the upper 'smear zone' in the vicinity of former UST 9. DRO, toluene, ethylbenzene, xylenes and SVOCs did not exceed ADEC soil target cleanup levels in this sample. As contaminated soil was excavated from this location during the UST removal activities, this benzene detection does not warrant additional soil investigation activities. GRO, DRO and benzene were detected in excess of the ADEC ground water cleanup levels in corresponding monitoring well MW-7.

The following recommendation is made for the vicinity of former UST 9:

• Further Ground Water Characterization – Collect additional ground water samples lateral to MW-7 in order to define the extent of the dissolved phase petroleum hydrocarbon plume exceeding ADEC cleanup levels. As part of the characterization, include monitoring of MW-7 for target contaminants. These data can be used to support development of a MNA management rationale for this location, in addition to providing data that could be used to develop area-wide cleanup levels..

#### 6.2.4 Former UST 12

GRO and benzene slightly in excess of ADEC cleanup levels were encountered in ground water at well point WP-12, located in the vicinity of former gasoline UST 12. Contaminated soil was removed from this location during closure of the UST.

The following recommendation is made for the vicinity of former UST 12:

• *Monitoring* – Continue to monitor WP-12 for target contaminants. This data can be used to support development of a MNA management rationale for this location, in addition to providing data that could be used to develop area-wide cleanup levels.

#### 6.2.5 Former UST 13

DRO, BTEX and SVOCs were not detected above ADEC soil cleanup levels in sample MW-8-13, collected from the smear zone in the vicinity of former diesel UST 13. From this data, it does not appear that a contaminated soil source area remains at this location and that ground water impacts are likely a remnant plume. GRO, benzene and DRO in excess of ADEC cleanup levels were encountered in ground water in corresponding monitoring well MW-8,

The following recommendation is made for the vicinity of former UST 13:

• *Monitoring* –Continue to monitor MW-8 for target contaminants. This data can be used to support development of a MNA management rationale for this location, in addition to providing data that could be used to develop area-wide cleanup levels.

#### 6.2.6 Former UST 15

DRO in excess of the ADEC cleanup level was encountered in ground water at well point WP-13, in the vicinity of former diesel UST 15. BTEX and SVOCs were not detected above ADEC ground water cleanup levels in this sample. Contaminated soil was excavated from this location during the UST removal activities. This DRO plume is likely the result of remnant smear zone soil and/or ground water impact. The closest downgradient monitoring well (MW-6, located 120 feet downgradient) did not contain DRO or BTEX constituents above ADEC ground water cleanup levels. The following recommendation is made for this vicinity:

• *Monitoring* – Continue to monitor WP-13 for target contaminants. This data can be used to support development of a MNA management rationale for this location, in addition to providing data that could be used to develop area-wide cleanup levels.

### 6.3 General Site Conditions

Contamination was not found in ground water samples from monitoring wells MW-1, MW-3 and MW-6, (located west and down gradient of the former Mark Air Hangar and Cargo buildings and beyond the former USTs). We recommend the FIA discontinue monitoring these wells at this time. However, FIA may wish to consider maintaining these wells for potential future use. We understand that the integrity of MW-1 may be compromised, and that the well head is often located beneath ponded surface water during the spring. Consequently future data from this well may be of questionable quality.

### **7 REFERENCES**

Péwé, TL. 1982. *Geologic Hazards of the Fairbanks Area, Alaska*. Alaska Geological & Geophysical Surveys, Special Report 15.

Other reports and miscellaneous documents associated with environmental activity at the former Weaver Brothers and Mark Air Hangar Facility sites are listed in Section 3.2 of this report.

#### **LIMITATIONS**

The services described in this report were performed consistent with generally accepted professional consulting principles and practices. No other warranty, express or implied, is made. These services were performed consistent with our agreement with our client. This report is solely for the use and information of our client unless otherwise noted. Any reliance on this report by a third party is at such party's sole risk.

Opinions and recommendations contained in this report apply to conditions existing when services were performed and are intended only for the client, purposes, locations, time frames, and project parameters indicated. We are not responsible for the impacts of any changes in environmental standards, practices, or regulations subsequent to performance of services. We do not warrant the accuracy of information supplied by others, nor the use of segregated portions of this report.

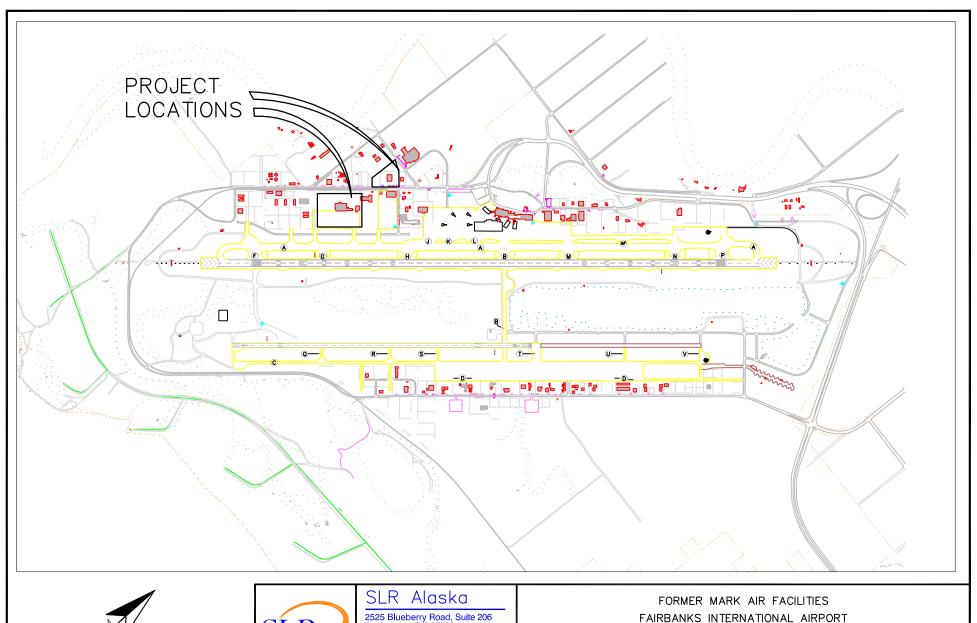
The purpose of an environmental assessment is to reasonably evaluate the potential for or actual impact of past practices on a given site area. In performing an environmental assessment, it is understood that a balance must be struck between a reasonable inquiry into the environmental issues and an exhaustive analysis of each conceivable issue of potential concern. The following paragraphs discuss the assumptions and parameters under which such an opinion is rendered.

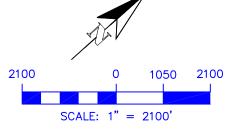
No investigation is thorough enough to exclude the presence of hazardous materials at a given site. If hazardous conditions have not been identified during the assessment, such a finding should not therefore be construed as a guarantee of the absence of such materials on the site, but rather as the result of the services performed within the scope, limitations, and cost of the work performed.

Environmental conditions may exist at the site that cannot be identified by visual observation. Where subsurface work was performed, our professional opinions are based in part on interpretation of data from discrete sampling locations that may not represent actual conditions at unsampled locations.

Except where there is express concern of our client, or where specific environmental contaminants have been previously reported by others, naturally occurring toxic substances, potential environmental contaminants inside buildings, or contaminant concentrations that are not of current environmental concern may not be reflected in this document.

# **FIGURES**





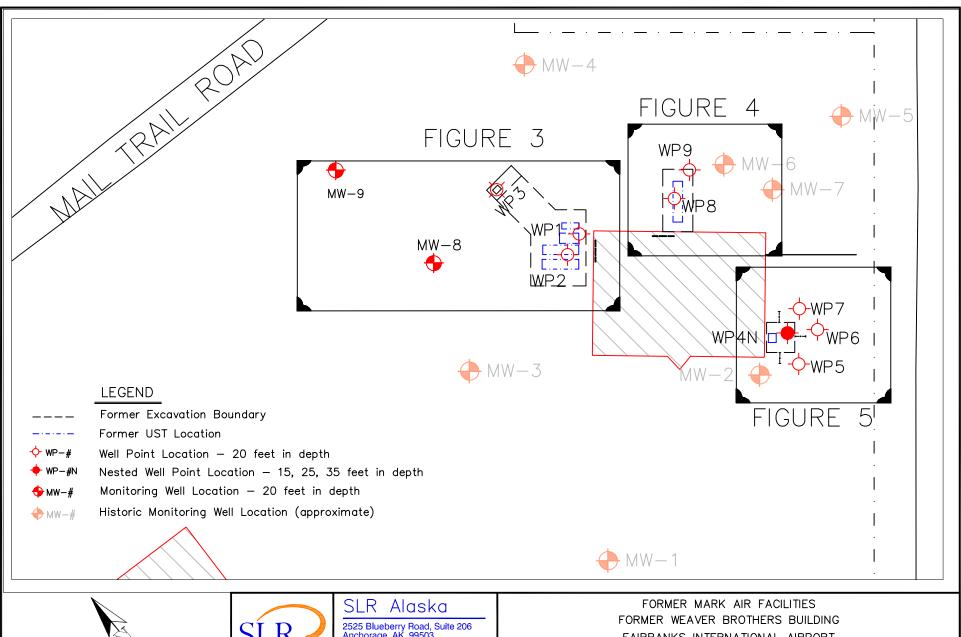


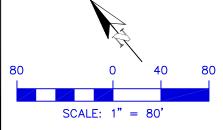
2525 Blueberry Road, Suite 206 Anchorage, AK 99503 (907)222-1112 Fax (907)222-1113 3522 International Street Fairbanks, AK 99701 (907)455-9005 Fax (907)455-9015 SLR International Corp.

Alaska Department of Transportation

## SITE VICINITY MAP

PROJECT MANAGER:	APPROVED:	DESIGNED:	SCALE:	REVISION:	FIGURE:
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PROJECT NO.:	DRAWN:	DATE:	FILE:		1
004.0184.00001	S. Swenson	Dec. 2004	markair_rpt04_fig1		







2525 Blueberry Road, Suite 206 Anchorage, AK 99503 (907)222-1112 Fax (907)222-1113

3522 International Street Fairbanks, AK 99708 (907)455-9005 Fax (907)455-9015 SLR International Corp.

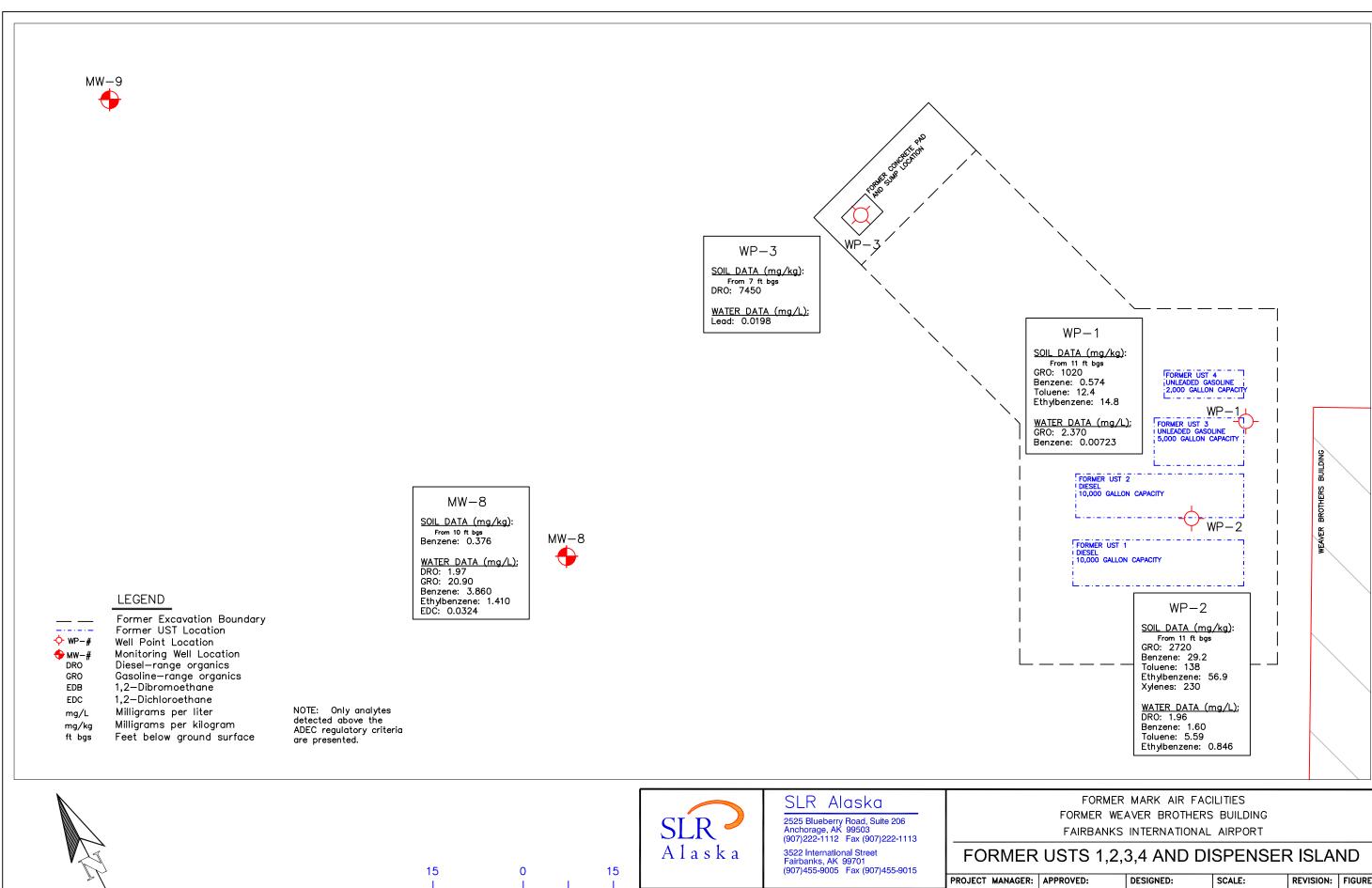
CLIENT:

Alaska Department of Transportation

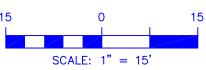
FAIRBANKS INTERNATIONAL AIRPORT

## WEAVER BROTHERS FACILITY SITE PLAN

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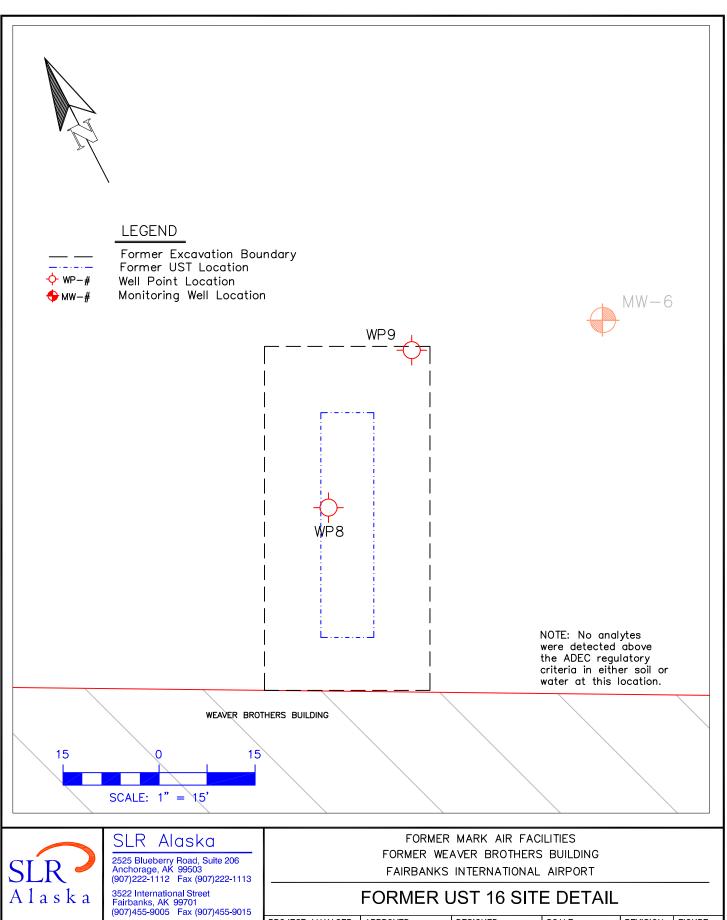






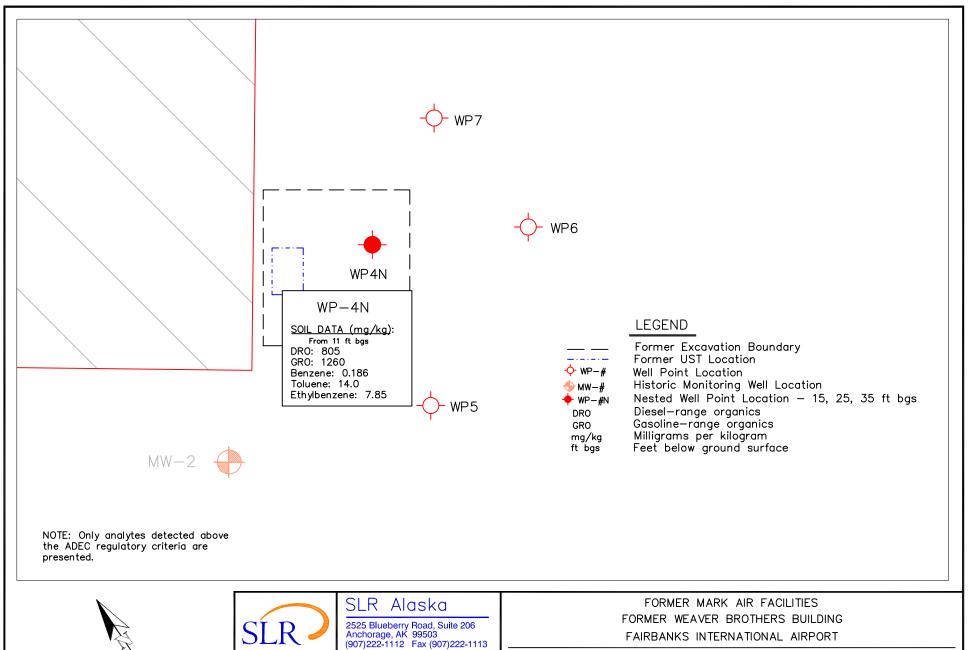
ALASKA DEPARTMENT OF TRANSPORTATION

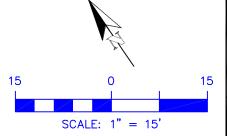
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PROJECT NO.:	DRAWN:	DATE:	FILE:		3
004.0184.00001	S. Swenson	Dec. 2004	markair_rpt04_fig3-5		



CLIENT: AK DEPARTMENT OF TRANSPORTATION

PROJECT MANAGER:	APPROVED:	DESIGNED:	SCALE:	REVISION:	FIGURE:
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004.0184.00001	S. Swenson	Dec. 2004	markair_rpt04_fig	3-5	







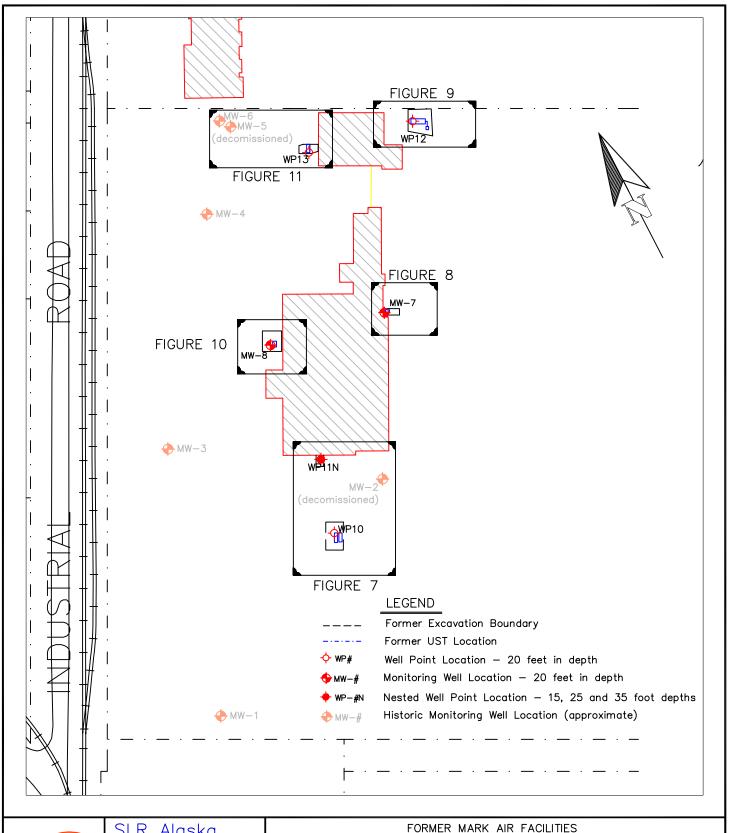
3522 International Street Fairbanks, AK 99708 (907)455-9005 Fax (907)455-9015 SLR International Corp.

### CLIENT:

Alaska Department of Transportation

# FORMER UST 8 SITE DETAIL

PROJECT MANAGER:	APPROVED:	DESIGNED:	SCALE:	REVISION:	FIGURE:
D. Filler	A. Dimitriou	S. Swenson	1" = 15 feet	0	
PROJECT NO.:	DRAWN:	DATE:	FILE:	5	
004.0184.00001	S. Swenson	Dec. 2004	markair_rpt04_fig3-		





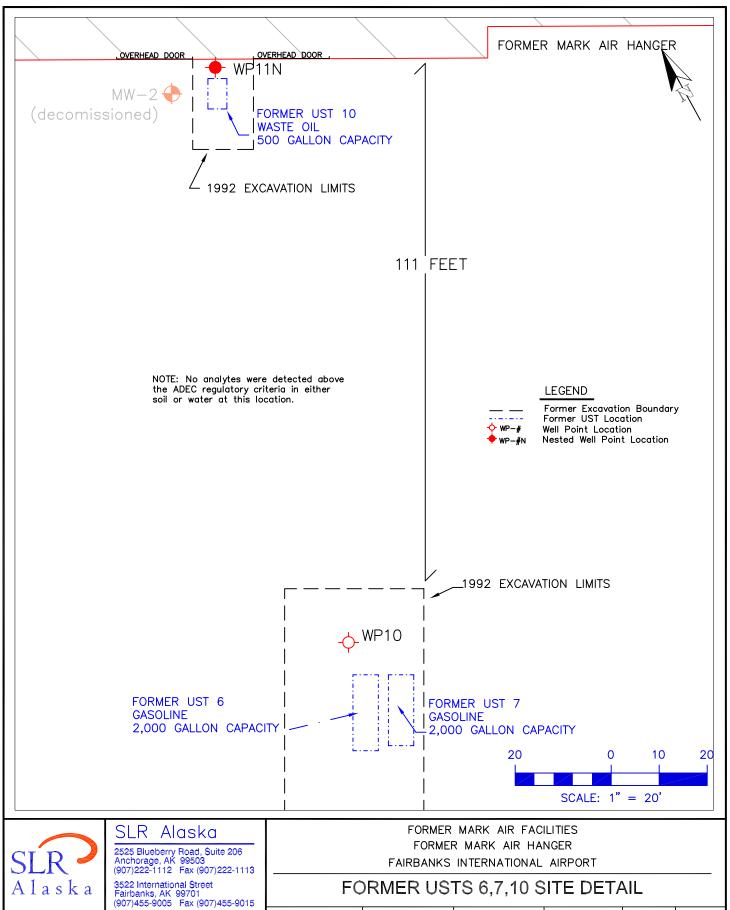
### SLR Alaska

2525 Blueberry Road, Suite 206 Anchorage, AK 99503 (907)222-1112 Fax (907)222-1113 3522 International Street Fairbanks, AK 99701 (907)455-9005 Fax (907)455-9015

FORMER MARK AIR HANGER FAIRBANKS INTERNATIONAL AIRPORT

### FORMER HANGER FACILITY SITE PLAN

PROJECT MANAGER: REVISION: APPROVED: DESIGNED: SCALE: FIGURE: D. Filler A. Dimitriou A. Dimitriou 1" = 150 feet 6 PROJECT NO .: FILE: DRAWN: DATE: AK DEPARTMENT OF TRANSPORTATION 004.0184.00001 Dec. 2004 S. Swenson markair\_rpt04\_fig6

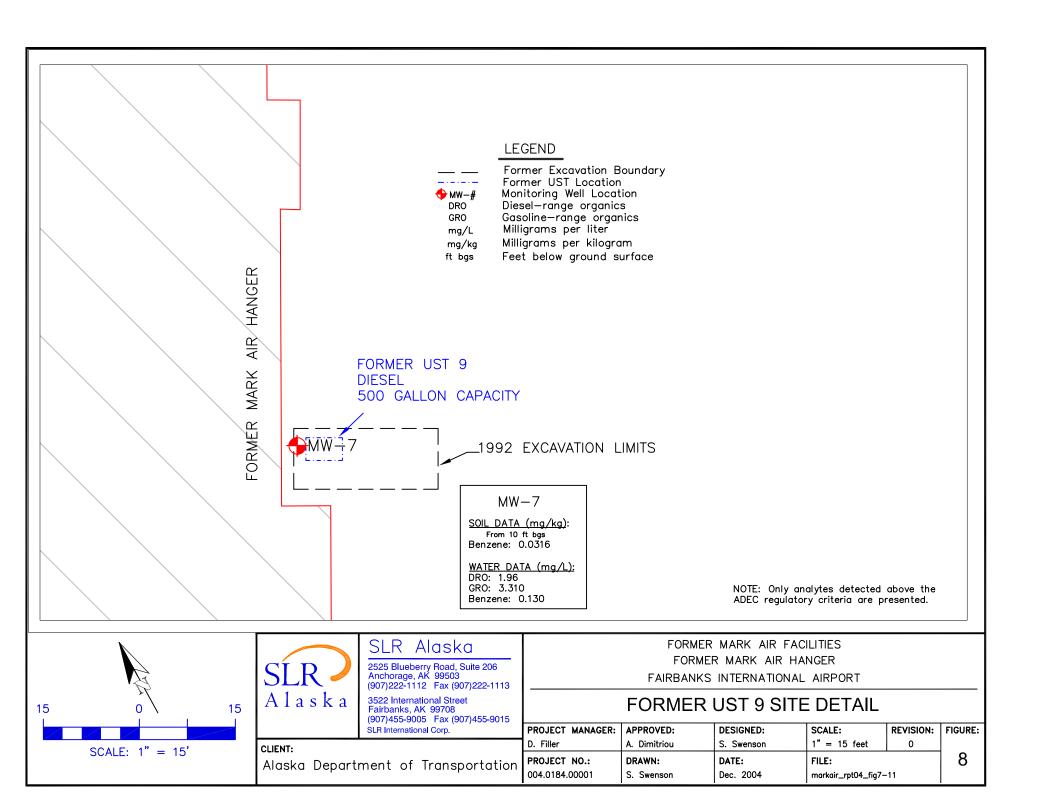


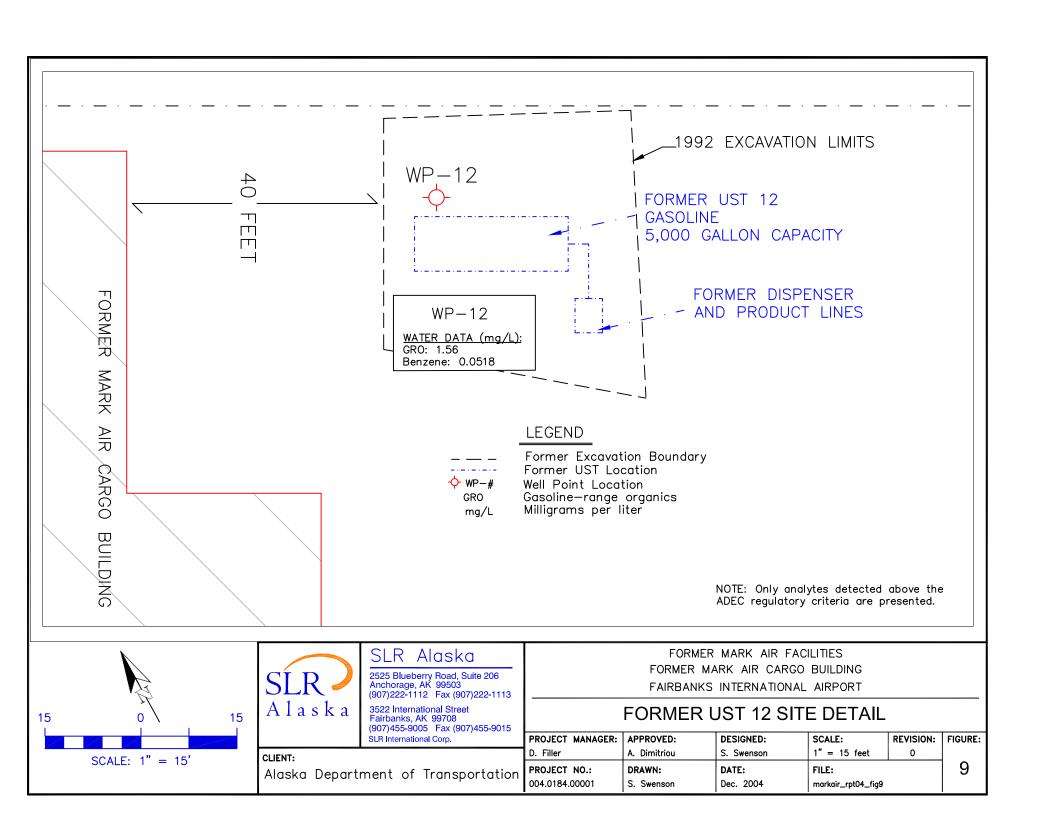
Alaska

AK DEPARTMENT OF TRANSPORTATION

FORMER USTS 6,7,10 SITE DETAIL

PROJECT MANAGER: APPROVED: **DESIGNED:** SCALE: REVISION: FIGURE: D. Filler A. Dimitriou S. Swenson 1" = 20 feet 7 PROJECT NO .: DATE: FILE: DRAWN: 004.0184.00001 Dec. 2004 S. Swenson markair\_rpt04\_fig7-11



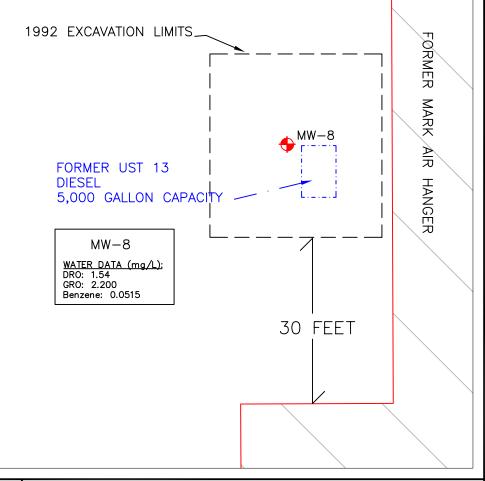


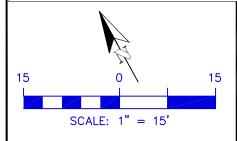
### LEGEND

♦ MW−# DRO GRO mg/L Former Excavation Boundary Former UST Location Monitoring Well Location Diesel—range organics Gasoline—range organics Milliarams per liter

NOTES: Well MW-8 was sampled on 10-15-04 and 11-02-04. The highest concentrations are reported here.

Only analytes detected above the ADEC regulatory criteria are presented.







### SLR Alaska

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3522 International Street Fairbanks, AK 99708 (907)455-9005 Fax (907)455-9015 SLR International Corp.

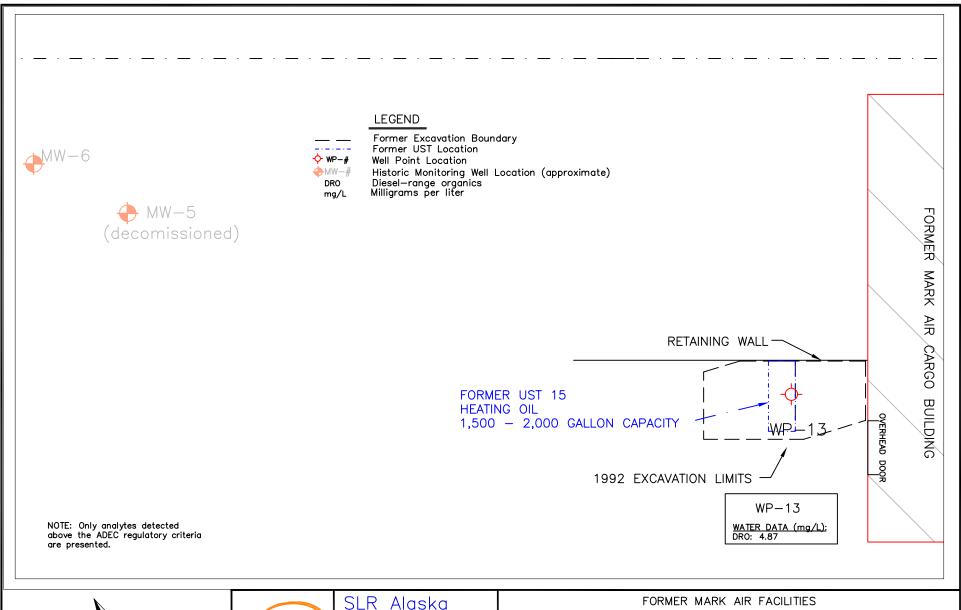
### CLIENT:

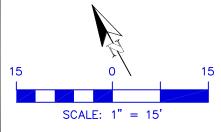
Alaska Department of Transportation

FORMER MARK AIR FACILITIES
FORMER MARK AIR HANGER
FAIRBANKS INTERNATIONAL AIRPORT

### FORMER UST 13 SITE DETAIL

PROJECT MANAGER:	APPROVED:	DESIGNED:	SCALE:	REVISION:	FIGURE:
D. Filler	A. Dimitriou	S. Swenson	1" = 15 feet	0	
PROJECT NO.:	DRAWN:	DATE:	FILE:		10 <b> </b>
004.0184.00001	S. Swenson	Dec. 2004	markair_rpt04_fig7-		







2525 Blueberry Road, Suite 206 Anchorage, AK 99503 (907)222-1112 Fax (907)222-1113

3522 International Street Fairbanks, AK 99708 (907)455-9005 Fax (907)455-9015 SLR International Corp.

### CLIENT:

Alaska Department of Transportation

FORMER MARK AIR FACILITIES
FORMER MARK AIR CARGO BUILDING
FAIRBANKS INTERNATIONAL AIRPORT

### FORMER UST 15 SITE DETAIL

	PROJECT MANAGER:	APPROVED:	DESIGNED:	SCALE:	REVISION:	FIGURE:
	D. Filler	A. Dimitriou	S. Swenson	1" = 15 feet	0	
١	PROJECT NO.:	DRAWN:	DATE:	FILE:		11
•	004.0184.00001	S. Swenson	Dec. 2004	markair_rpt04_fig7-	-11	

# **TABLES**

TABLE 1A
FIELD DATA & ANALYTICAL PROGRAM (SOIL)
FORMER MARK AIR FACILITIES

Site	Location	Borehole ID	Media	Borehole Depth (fbgs)	Sample Depth (fbgs)	Est. DTGW (fbgs) <sup>1</sup>	PID (ppm)	<b>BTEX</b> EPA 8021B	<b>GRO</b> AK101	DRO AK102	RRO AK103	VOC EPA 8260B	PAH 8270C-SIM	LEAD EPA 6020
Weaver Bros.	Former UST 1 Former UST 2	WP-2	soil	15	11	11.5	427	Х	Х					
	Former UST 3 Former UST 4	WP-1	soil	15	11	11	457	Х	Х				Х	Х
	Former Dispenser	WP-3	soil	15	7	10.5	143	Х	Х	Х			Х	Х
	Island	WP-4A	QA/QC dup											Χ
		WP-5	soil	15	10.5	11	1.2		Χ	Χ	Χ	X		
		WP-6	soil	15	10	11	3.1		X	X	X	X		
	Former UST 8	WP-7	soil	15	10	11	0.8		Χ	Χ	Χ	X		
		WP-4N	soil	35	11	11	422		Χ	Х	Χ	X	Х	
		WP-3A	QA/QC dup						Χ	Χ	X	X	X	
		WP-8	soil	15	11	11.5	1.8	Х		Х			Х	
	Former UST 16	WP-9	soil	15	11	11.5	0.6	Х		X				
		WP-2A	QA/QC dup					Х						
	Downgradient of-	MW-8	soil	20	10	11	56.2	Х	Χ	Χ	Χ			
	USTs 1-4	MW-9	soil	18	7 12	10.5	1.1 0.7				not sai	mpled		
Mark Air Hanger	Former UST 6 Former UST 7	WP-10	soil	15	5 11	12	2.1 4.4				not sai	mpled		
	Former UST 9	MW-7	soil	20	11	12	30.8	Х		Χ			Х	
	Former UST 10	WP-11N	soil	35	7 12	12	3.2 0.5				not saı	mpled		
	Former UST 12	WP-12	soil	15	6 12	12	2.1 250				not sai	mpled		
	Former UST 13	MW-8 MW-1A	soil QA/QC dup	20	13	13	4.9	X X		X X			X X	
	Former UST 15	WP-13	soil	20	12	12	3.7	Х		Χ			Х	

### Notes:

### Abbreviations:

DRO: diesel range organics GRO: gasoline range organics RRO: residual range organics

BTEX: benzene, ethylbenzene, toluene, and xylenes

PAH: polynuclear aromatic hydrocarbons VOC: volatile organic compounds

PID: photoionization detector DTGW - depth to groundwater.

fbgs - feet below ground surface

ADEC: Alaska Department of Environmental Conservation

EPA: Environmental Protection Agency of the United States

ppm: parts per million

<sup>&</sup>lt;sup>1</sup> Estimated on day of drilling

# TABLE 1B ANALYTICAL PROGRAM (GROUND WATER) FORMER MARK AIR FACILITIES

Site	Location	Well or Well Point ID	Media	<b>BTEX</b> EPA 8021B	GRO AK101	DRO AK102	RRO AK103	VOC (EDC incl.) EPA 8260B	<b>PAH</b> 8270C-SIM	LEAD EPA 6020	<b>EDB</b> EPA 8011
Weaver Bros.	Former UST 1 Former UST 2	WP-2	water	Х		Х					
	Former UST 3	WP-1	water		Х			X	Х	Х	Х
	Former UST 4	WP-3A	QA/QC dup		Х			X	Χ	Х	Х
	Former Dispenser Island	WP-3	water	Х	Х	Х				Х	Х
		WP-5	water		Х	Х	Х	Х			
		WP-6	water		Х	Х	X	X			
		WP-7	water		Х	Х	Х	X			
	Former UST 8	WP-4N (15)	NS		,,	,,	,,	Dry			
	**	WP-4N (25)	water		Х	Х	Х	X	X		
		WP-2A	QA/QC dup		X	X	X	,	^		
		WP-4N (35)	water					X			
	_	WP-8	water	Х	Х	Х			Х		
	Former UST 16	WP-9	water	X	X	X			Α		
		MW-8	water	X	X	X		Х	Х	Х	Х
	Downgradient of	MW-9	water	X			X			^	
	USTs 1-4	WP-1A	QA/QC dup	X		Х	Λ				
		MW-2	water	,	Х	X		Х		Х	
		MW-3	water		Х	Х		X		X	
		MW-4	water		Х	Х		X		X	
Mark Air Hanger	Former UST 6 Former UST 7	WP-10	water	Х	Х	Х			Х		
		MW-7	water	Х	Х	Х			Х		
	Former UST 9	MW-7A	QA/QC dup			Х					
		WP-11N(15)	NS					Dry			
	F	WP-11N(25)	water		Х	Х		x	X	X	
	Former UST 10 -	WP-11N (35)	water		X	Χ		X	X	X	
		WP-11A	QA/QC dup					X			
	Former UST 12	WP-12	water	Х	Х				Х		
	Former UST 13	MW-8	water	Х	Х	Х			Х		
		MW-12	QA/QC dup	X	Χ				X		
	Former UST 15	WP-13	water	Х		Х			Х		
		MW-1	water	Х		Х	Х	X		X	
		MW-3	water	X		X	X	X		X	
		MW-6	water	X		Х	X	X		X	
		MW-10	QA/QC dup	Х			X			Χ	

### Abbreviations:

DRO: diesel range organics GRO: gasoline range organics RRO: residual range organics

BTEX: benzene, ethylbenzene, toluene, and xylenes

PAH: polynuclear aromatic hydrocarbons VOC: volatile organic compounds

ADEC: Alaska Department of Environmental Conservation EPA: Environmental Protection Agency of the United States

PID: photoionization detector DTGW - depth to groundwater. fbgs - feet below ground surface ppm: parts per million

### TABLE 2 SUMMARY OF SOIL RESULTS FORMER WEAVER BROTHERS FACILITY

(concentrations in mg/kg dry soil)

						ı	BTI EPA Meth				Poly		Aromation hod 827	c Hydroc 0C-SIM	arbons <sup>1</sup>	
Sample Identification	Date Sampled	Sample Depth (fbgs)	DRO AK 102	RRO AK 103	GRO AK 101	Benzene	Toluene	Ethylbenzene	Xylenes	1-Methylnaphthalene	2-Methylnaphthalene	Fluorene	Naphthalene	Chrysene	Benzo (k) fluoranthe	Pyrene
ADEC Soil Cle	anup Level		250	11000	300	0.02	5.4	5.5	78	43	60.9	270	21	620	200	1500
WP-1-11	10/6/2004	11	NA	NA	1020	0.574	12.4	14.8	59.7	8.40	11.9	ND	7.85	ND	ND	ND
WP-2-11	10/6/2004	11	NA	NA	2720	29.2	138	56.9	230	NA	NA	NA	NA	NA	NA	NA
WP-8-11	10/6/2004	11	ND	NA	NA	0.0187	0.0638	ND	ND	ND	ND	ND	ND	ND	ND	ND
WP-9-11	10/6/2004	11	55.4	NA	NA	0.0195	0.0569	ND	ND	NA	NA	NA	NA	NA	NA	NA
WP-2A-10	dup. of W	/P-9-11	NA	NA	NA	0.0141	0.0563	ND	ND	NA	NA	NA	NA	NA	NA	NA
WP-4M-11	10/7/2004	11	805	962	1260	NA	NA	NA	NA	8.39	10.9	0.304	6.95	ND	ND	ND
WP-3A-10	dup. of Wi		1240	1590	1400	NA	NA	NA	NA	14.5	18.8	0.543	11.6	ND	ND	ND
WP-6-10	10/7/2004	10	13.4	147	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
WP-5-10.5	10/7/2004	10.5	ND	ND	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
WP-7-10	10/7/2004	10	ND	ND	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-8-WB-10	10/8/2004	10	ND	ND	4.98	0.376	ND	0.189	0.613	NA	NA	NA	NA	NA	NA	NA
WP-3-7	10/8/2004	7	7450	NA	175	ND	ND	ND	4.41	ND	ND	ND	ND	0.0135	0.0157	0.0440
WP-4A-10	dup. of V	VP-3-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

### Abbreviations:

ADEC: Alaska Department of Environmental Conservation

DRO: diesel range organics GRO: gasoline range organics RRO: residual range organics

BTEX: benzene, ethylbenzene, toluene, and xylenes

VOC: volatile organic compounds

SIM: selective ion monitoring mg/kg: milligrams per kilogram

NA: not analyzed ND: not detected

EPA: Environmental Protection Agency

# TABLE 2 (continued) SUMMARY OF SOIL RESULTS FORMER WEAVER BROTHERS FACILITY

(concentrations in mg/kg dry soil)

						Volat	_	ic Compo nod 8260E					
Sample Identification	Date Sampled	Sample Depth (fbgs)	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	Naphthalene	1,2-Dichloroethane (EDC)	Isopropylbenzene	Benzene	Toluene	Ethylbenzene	Xylenes	other VOCs³	Lead EPA Method 6020
ADEC Soil Cle	eanup Level		95.2	25	21	0.6	227	0.02	5.4	5.5	78		1000
WP-1-11	10/6/2004	11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.76
WP-2-11	10/6/2004	11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
WP-8-11	10/6/2004	11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
WP-9-11	10/6/2004	11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
WP-2A-10	dup. of W	P-9-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
WP-4M-11	10/7/2004	11	26.0	7.20	9.03	ND	2.31	0.186*	14.0*	7.85	57.3*	12.41	NA
WP-3A-10	dup. of Wi	P-4N-11	28.7	9.75	10.4	ND	2.49	0.134	15.8	8.70	58.8	14.07	NA
WP-6-10	10/7/2004	10	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
WP-5-10.5	10/7/2004	10.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
WP-7-10	10/7/2004	10	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
MW-8-WB-10	10/8/2004	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
WP-3-7	10/8/2004	7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.25
WP-4A-10	dup. of V	VP-3-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	10.5

#### Notes:

ND indicates not detected above reporting limit. Reporting limit below applicable water quality criteria.

Sample WP-4M-11 collected from borehole WP-4N.

### Abbreviations:

ADEC: Alaska Department of Environmental Conservation SIM: selective ion monitoring

DRO: diesel range organics mg/kg: milligrams per kilogram GRO: gasoline range organics NA: not analyzed RRO: residual range organics ND: not detected

BTEX: benzene, ethylbenzene, toluene, and xylenes EPA: Environmental Protection Agency

VOC: volatile organic compounds

<sup>&</sup>lt;sup>1</sup>Only those PAH analytes detected above reporting limits are listed here.

<sup>&</sup>lt;sup>2</sup>Only VOCs detected above reporting limits IN more than one sample are listed.

<sup>&</sup>lt;sup>3</sup>Sum of other trace VOCs detected; no individual analyte was detected above ADEC cleanup or EPA guidance criteria.

<sup>\*</sup>Represents highest value detected with increased dilution.

# TABLE 3 SUMMARY OF SOIL RESULTS FORMER MARK AIR HANGAR FACILITY (concentrations in mg/kg dry soil)

						E	BTI PA Meth		3	spun	
Sample Identification	Date Sampled	Sample Depth (fbgs)	DRO AK 102	RRO AK 103	GRO AK 101	Benzene	Toluene	Ethylbenzene	Xylenes	Volatile Organic Compounds EPA Method 8260B	Lead EPA Method 6020
ADEC Soil Cle	anup Level		250	11000	300	0.02	5.4	5.5	78		1000
MW-7-10	10/5/2004	10	12.6	NA	NA	0.0316	0.0949	0.871	5.98	NA	NA
MW-8-13	10/5/2004	13	ND	NA	NA	0.0189	0.0686	ND	0.292	NA	NA
MW-1A-10	dup. of M	IW-8-13	ND	NA	NA	0.0164	ND	ND	0.300	NA	NA
WP-13-12	10/4/2004	12	13.7	NA	NA	ND	ND	ND	ND	NA	NA

### Abbreviations:

ADEC: Alaska Department of Environmental Conservation

DRO: diesel range organics

GRO: gasoline range organics RRO: residual range organics

BTEX: benzene, ethylbenzene, toluene, and xylenes

VOC: volatile organic compounds

SIM: selective ion monitoring mg/kg: milligrams per kilogram

NA: not analyzed ND: not detected --: not applicable

# TABLE 3 (continued) SUMMARY OF SOIL RESULTS FORMER MARK AIR HANGAR FACILITY

(concentrations in mg/kg dry soil)

								Ро	-		atic Hydr 270C-SIN	ocarbons //	<b>3</b> 1					
Sample Identification	Date Sampled	Sample Depth (fbgs)	1-Methylnaphthalene	2-Methylnaphthalene	Anthracene	Benzo (a) anthracene	Benzo (a) pyrene	Benzo (b) fluoranthene	Benzo (ghi) perylene	Benzo (k) fluoranthene	Chrysene	Dibenzo (a,h) anthracen	Fluoranthene	Fluorene	Indeno (1,2,3-cd) pyrene	Naphthalene	Phenanthrene	Pyrene
ADEC Soil Cle	anup Level		43	60.9	4300	6	3	20	1500	200	620	6	2100	270	11	21	4300	1500
MW-7-10	10/5/2004	10	0.598	0.700	ND	0.0114	ND	0.0211	0.0273	0.0185	ND	0.0246	ND	ND	0.0252	0.755	0.0153	ND
MW-8-13	10/5/2004	13	0.0121	0.0139	ND	ND	ND	ND	0.0264	0.0183	ND	0.0230	ND	ND	0.0246	0.0138	0.0132	ND
MW-1A-10	dup. of M	1W-8-13	0.0244	0.0275	ND	ND	ND	0.0198	0.0262	0.0179	ND	0.0233	ND	ND	0.0243	0.0269	0.0145	ND
WP-13-12	10/4/2004	12	ND	ND	0.0180	0.0309	0.0299	0.0367	0.0418	0.0280	0.0360	0.0258	0.0670	ND	0.0348	ND	0.0651	0.0734

### Notes:

<sup>1</sup>Only those PAH analytes detected above reporting limits are listed.

ND indicates not detected above reporting limit. Reporting limit below applicable criteria.

### Abbreviations:

ADEC: Alaska Department of Environmental Conservation

DRO: diesel range organics GRO: gasoline range organics RRO: residual range organics

--: Not Applicable

BTEX: benzene, ethylbenzene, toluene, and xylenes

PAH: polynuclear aromatic hydrocarbons

mg/kg: milligrams per kilogram

NA: not analyzed ND: not detected

### TABLE 4 SUMMARY OF GROUND WATER RESULTS FORMER WEAVER BROTHERS FACILITY (concentrations in mg/L)

						BT EPA Meth					Polynu		atic Hydroca 270C-SIM	arbons <sup>1</sup>		
Sample Identification	Date Sampled	DRO AK 102	RRO AK 103	GRO AK 101	Benzene	Toluene	Ethylbenzene	Xylenes	Naphthalene	1-Methylnaphthalene	2-Methylnaphthalene	Benzo (a) anthracene	Fluorene	Phenanthrene	Pyrene	Acenaphthylene
ADEC Groun	d Water Cleanup Level	1.5	1.1	1.3	0.005	1	0.7	10	1.46	1.5	0.78	0.001	1.46	11	1.1	2.2
WP-1	10/13/2004	NA	NA	2.370	NA	NA	NA	NA	0.0368	0.0268	0.0305	0.000346	0.000285	0.000135	ND	ND
WP-3A	dup. of WP-1	NA	NA	2.270	NA	NA	NA	NA	0.0383	0.0289	0.0334	ND	0.000304	ND	0.000208	ND
WP-2	10/13/2004	1.96	NA	NA	1.60	5.59	0.846	3.95	NA	NA	NA	NA	NA	NA	NA	NA
WP-3	10/13/2004	1.48	NA	0.405	0.000299	0.00278	0.00313	0.00894	NA	NA	NA	NA	NA	NA	NA	NA
WP-4N (15)	NS									)ry						
WP-4N (25)	10/13/2004	0.734	ND	0.0621	NA	NA	NA	NA	0.000162	0.000223	0.000213	ND	ND	ND	ND	0.000371
WP-2A	dup. of WP-4N(25)	0.630	ND	0.068	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
WP-4N (35)	10/13/2004	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
WP-5	10/14/2004	0.290	0.229**	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
WP-6	10/13/2004	0.103	ND	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
WP-7	10/14/2004	0.077**	ND	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
WP-8	10/13/2004	ND	NA	ND	0.000733	0.00465	0.00074	0.00379	ND	ND	ND	ND	ND	ND	ND	ND
WP-9	10/13/2004	ND	NA	ND	0.000548	0.0034	0.000632	0.00331	NA	NA	NA	NA	NA	NA	NA	NA
MW-8	10/13/2004	1.97	NA	20.90	3.860	0.0517	1.410	4.080	0.228	0.0352	0.0397	ND	ND	ND	ND	ND
MW-9	10/13/2004	NA	ND	NA	0.00458	ND	ND	ND	NA	NA	NA	NA	NA	NA	NA	NA
WP-1A	dup. of MW-9	ND		NA	0.00449	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-2	10/14/2004	0.409	NA	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-3	10/13/2004	ND	NA	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-4	10/13/2004	0.477	NA	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

### Abbreviations:

ADEC: Alaska Department of Environmental Conservation

DRO: diesel range organics GRO: gasoline range organics RRO: residual range organics

BTEX: benzene, ethylbenzene, toluene, and xylenes

PAH: polynuclear aromatic hydrocarbons

mg/kg: milligrams per kilogram

NA: not analyzed

ND: not detected

# TABLE 4 (continued) SUMMARY OF GROUND WATER RESULTS FORMER WEAVER BROTHERS FACILITY (concentrations in mg/L)

							Vol	_	nic Compounds <sup>2</sup> thod 8260B						
Sample Identification	Date Sampled	Isopropylbenzene	Naphthalene	Trichlorofluoromethane	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	2-Butanone (MEK)	1,2-Dichloroethane (EDC)	1,2-Dibromoethane (EDB)	Benzene	Toluene	Ethylbenzene	Xylenes	other VOCs³	Lead EPA Method 6020
ADEC Groui	nd Water Cleanup Level	3.65	0.7	1.3 (EPA)	1.85	1.85	22	0.005	0.00005 <sup>5</sup>	0.005	1	0.7	10		0.015
WP-1	10/13/2004	0.0235	0.0543	0.00371	0.248**	0.0649**	ND	ND	ND[0.000001] <sup>4</sup>	0.00723	0.0584	0.0883	0.442**	0.08791	ND
WP-3A	dup. of WP-1	0.024*	0.0526*	0.00431	0.238**	0.0696**	ND	ND	ND[0.000001] <sup>4</sup>	0.00714	0.0584	0.0864**	0.437**	0.07976	ND
WP-2	10/13/2004	ND	ND	ND	ND	ND	ND	ND	ND[0.0001]	ND	ND	ND	ND	ND	NA
WP-3	10/13/2004	NA	NA	NA	NA	NA	NA	NA	ND[0.000001] <sup>4</sup>	NA	NA	NA	NA	NA	0.0198
WP-4N (15)	NS								Dry						
WP-4N (25)	10/13/2004	ND	ND	ND	ND	ND	ND	ND	ND[0.0001]	ND	0.00686	0.00129	0.00699	0.00340	NA
WP-2A	dup. of WP-4N(25)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
WP-4N (35)	10/13/2004	ND	ND	ND	ND	ND	ND	ND	ND[0.0001]	ND	0.00467	ND	0.00382	ND	NA
WP-5	10/14/2004	ND	ND	0.00231	0.00106	ND	ND	ND	ND[0.0001]	ND	0.00210	ND	0.00253	ND	ND
WP-6	10/13/2004	ND	ND	0.0274	ND	ND	ND	ND	ND[0.0001]	ND	0.00276	ND	ND	ND	NA
WP-7***	10/14/2004	ND	ND	0.0220	ND	ND	ND	ND	ND[0.0001]	ND	ND	ND	ND	ND	NA
WP-8	10/13/2004	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
WP-9	10/13/2004	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-8	10/13/2004	0.115	0.377	ND	0.916*	0.256	0.0162	0.0324	$0.0000543[0.00005]^4$	3.560*	0.0844**	1.370*	3.753*	0.3095	0.00143
MW-9	10/13/2004	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
WP-1A	dup. of MW-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-2	10/14/2004	ND	ND	ND	ND	ND	ND	ND	ND[0.0001]	ND	ND	ND	ND	ND	ND
MW-3	10/13/2004	ND	ND	ND	ND	ND	ND	ND	ND[0.0001]	ND	ND	ND	ND	ND	ND
MW-4	10/13/2004	0.00134	ND	ND	ND	ND	ND	ND	ND[0.0001]	ND	ND	ND	ND	ND	ND

#### Notes:

above ADEC cleanup or EPA guidance criteria.

ND indicates not detected above reporting limit or method detection limit (MDL).

Reporting limits and/or MDLs below applicable water quality criteria.

ND[###] indicates not detected above reporting limit in brackets.

#### Abbreviations:

ADEC: Alaska Department of Environmental Conservation

DRO: diesel range organics GRO: gasoline range organics

RRO: residual range organics

BTEX: benzene, ethylbenzene, toluene, and xylenes

PAH: polynuclear aromatic hydrocarbons VOC: volatile organic compounds

EPA: Environmental Protection Agency Region 9 PRG, October 2004

mg/L: milligrams per liter

NA: not analyzed ND: not detected NS: not sampled

<sup>&</sup>lt;sup>1</sup>Only those PAH analytes detected above reporting limits are listed.

<sup>&</sup>lt;sup>2</sup>Only VOCs detected above reporting limits are listed.

<sup>&</sup>lt;sup>3</sup>Sum of other trace VOCs detected; no individual analyte was detected

<sup>&</sup>lt;sup>4</sup> MRL resulting from use of USEPA Method 8011

<sup>&</sup>lt;sup>5</sup> ADEC Tech Memo 01-007 11/24/2003

<sup>\*</sup>Represents highest value detected with increased dilution.

<sup>\*\*</sup>Estimated value.

<sup>\*\*\*</sup>Results biased low; sample analyzed outside recommended holding time for samples > pH  $2\,$ 

# TABLE 5 SUMMARY OF GROUND WATER RESULTS FORMER MARK AIR HANGAR FACILITY (concentrations in mg/L)

						_	ΓEX hod 8021B			Po	-	Aromatic H	-	ns¹	
Sample Identification	Date Sampled	DRO AK 102	RRO AK 103	GRO AK 101	Benzene	Toluene	Ethylbenzene	Xylenes	Naphthalene	1-Methylnaphthalene	2-Methylnaphthalene	Benzo (a) anthracene	Fluorene	Acenaphthylene	Chrysene
ADEC Groun	d Water Cleanup Level	1.5	1.1	1.3	0.005	1	0.7	10	1.46	1.5	0.78	0.001	1.46	2.2	0.1
WP-10	10/15/2004	1.36	NA	0.178	0.00199	0.00138	ND	0.020	0.00534	0.00716	0.00578	ND	0.000169	0.000141*	ND
MW-7	10/15/2004	1.96	NA	3.310	0.130	0.0233	0.305	0.934	0.207	0.0563	0.0659	ND	ND	ND	ND
MW-7A	dup. of MW-7	2.22	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
WP-11N (15)	NS								Dry						
WP-11N (B)	10/15/2004	1.47	NA	ND	NA	NA	NA	NA	0.000322	0.000146	0.000157	0.000129*	ND	ND	0.000112*
WP-11N (G)	10/15/2004	ND	NA	0.0753	NA	NA	NA	NA	0.000468	0.000192	0.000146	ND	ND	ND	ND
WP-11A	dup. of WP-11N(G)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
WP-12	10/15/2004	NA	NA	1.56	0.0518	0.00451	0.174	0.0255	0.0175	0.00710	0.00170	ND	ND	0.000952*	ND
MW-8	10/15/2004	1.54	NA	NA	0.0515	0.0417	0.0904	1.030	0.115	0.0465	0.0363	ND	ND	ND	ND
MW-8	11/2/2004	NA	NA	2.200	0.018	0.01	0.679	0.550	0.0862	0.0416	0.0305	ND	0.000602	ND	ND
MW-12	dup. of MW-8	NA	NA	2.020	0.0158	0.00789	0.0638	0.498	0.0685	0.033	0.0225	ND	0.000482	ND	ND
WP-13	10/15/2004	4.87	NA	NA	0.000532	0.00208	0.0423	0.00995	0.043	0.00269	0.00285	ND	ND	0.000792*	ND
MW-1	10/15/2004	0.188**	ND	NA	ND	ND	0.000512	0.00148	NA	NA	NA	NA	NA	NA	NA
MW-3	10/15/2004	0.160**	ND	NA	ND	ND	0.000660	0.00170	NA	NA	NA	NA	NA	NA	NA
MW-6	10/15/2004	0.242**	ND	NA	ND	ND	0.000948	0.00373	NA	NA	NA	NA	NA	NA	NA
MW-6	11/2/2004	NA	ND	NA	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA	NA
MW-10	dup. of MW-6	NA	ND	NA	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA	NA

### Abbreviations:

ADEC: Alaska Department of Environmental Conservation

DRO: diesel range organics GRO: gasoline range organics RRO: residual range organics

BTEX: benzene, ethylbenzene, toluene, and xylenes

PAH: polynuclear aromatic hydrocarbons

VOC: volatile organic compounds

mg/L: milligrams per liter

EPA: Environmental Protection Agency

NA: not analyzed ND: not detected

NS: not sampled

# TABLE 5 (continued) SUMMARY OF GROUNDWATER RESULTS FORMER MARK AIR HANGAR FACILITY (concentrations in mg/L)

			Volatile Organic Compounds <sup>2</sup> EPA Method 8260B												
Sample Identification	Date Sampled	Isopropylbenzene	Naphthalene	Trichlorofluoromethane	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	1,1-Dichloroethane	1,2-Dichloroethane (EDC)	Trichloroethene	Benzene	Toluene	Ethylbenzene	Xylenes	other VOCs³	Lead EPA Method 6020
	nd Water Cleanup Level	3.65	0.7	1.3 (EPA)	1.85	1.85	3.65	0.005	0.005	0.005	1	0.7	10		0.015
WP-10	10/15/2004	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-7	10/15/2004	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-7A	dup. of MW-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
WP-11N (15)	10/15/2004	NS				•			Dry		,	•	,	•	
WP-11N (B)	10/15/2004	ND	ND	ND	0.00111	ND	0.00114	ND	0.00241	ND	0.00184	0.00104	0.00283	ND	ND
WP-11N (G)	10/15/2004	ND	0.00310	ND	0.00344	0.00124	ND	ND	ND	ND	0.00595	0.00408	0.01316	0.00117	ND
WP-11A	dup. of WP-11N(G)	ND	0.00150	ND	0.00230	ND	ND	ND	ND	ND	0.00262	0.00216	0.00678	ND	NA
WP-12	10/15/2004	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-8	10/15/2004	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-8	11/2/2004	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-12	dup. of MW-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
WP-13	10/15/2004	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-1	10/15/2004	ND	ND	ND	0.00122	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.00241
MW-3	10/15/2004	ND	ND	0.0273	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
MW-6	10/15/2004	ND	0.00104	ND	0.00121	ND	ND	ND	ND	ND	ND	ND	0.00341	ND	0.0232
MW-6	11/2/2004	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.00354
MW-10	dup. of MW-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.00364

#### Notes:

ND indicates not detected above reporting limit. Reporting limit below applicable water quality criteria.

Sample WP-11N(B) collected from the 25-ft deep well point and WP-11N(G) from the 35-ft deep well point of this nested well.

### Abbreviations:

ADEC: Alaska Department of Environmental Conservation NA: not analyzed DRO: diesel range organics ND: not detected GRO: gasoline range organics NS: not sampled RRO: residual range organics --: not applicable

BTEX: benzene, ethylbenzene, toluene, and xylenes

PAH: polynuclear aromatic hydrocarbons VOC: volatile organic compounds

mg/L: milligrams per liter

EPA: Environmental Protection Agency Region 9 PRG, October 2004

<sup>&</sup>lt;sup>1</sup>Only those PAH analytes detected above reporting limits are listed.

<sup>&</sup>lt;sup>2</sup>Only VOCs detected above reporting limits are listed.

<sup>&</sup>lt;sup>3</sup>Sum of other trace VOCs detected; no individual analyte was detected above

ADEC cleanup or EPA guidance criteria.

<sup>\*</sup>Represents highest value detected with increased dilution or from re-extraction outside holding time.

<sup>\*\*</sup>Estimated value.

# **APPENDIX A**

# LABORATORY ANALYTICAL REPORTS AND SLR QUALITY ASSURANCE REVIEW



Spokane

Portland

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907.563.9200 fax 907.563.9210 **Anchorage** 

07 December 2004

Andy Dimitriou SLR Alaska 2525 Blueberry Road, Suite 206 Anchorage, AK/USA 99503

RE: FIA Former Mark Air Facilities

Enclosed are the results of analyses for samples received by the laboratory on 10/08/04 16:30. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

**Amar Gill** 

**Project Manager** 

### CASE NARRATIVE for B4J0416

Client: SLR Alaska

Project Manager: Andy Dimitriou

Project Name: FIA Former Mark Air Facilities

Project Number: 004.0184.00001

### 1.0 DESCRIPTION OF CASE

Twelve (12) soil samples were submitted for the analysis of:

- Gasoline Range Hydrocarbons and BTEX by AK101/EPA 8021B
- Diesel Hydrocarbons and Heavy Oil by AK102 and AK103
- BTEX by EPA method 8021B
- Total Metals by EPA 6000/7000 Series Methods
- Volatile Organic Compounds by EPA Method 8260B
- Polynuclear Aromatic Compounds by GC/MS with Selected Ion Monitoring

### 2.0 COMMENTS ON SAMPLE RECEIPT

The samples were received 8<sup>th</sup> October 2004 at a temperature of 5.3°C and logged in 12<sup>th</sup> October 2004.

### 3.0 PREPARATION AND ANALYSIS

### Gasoline Range Hydrocarbons and BTEX by AK101/EPA 8021B

No additional anomalies or discrepancies were associated with this analysis other than those already qualified in the data.

### Diesel Hydrocarbons and Heavy Oil by AK102 and AK103

No additional anomalies or discrepancies were associated with this analysis other than those already qualified in the data.

### BTEX by EPA method 8021B

No additional anomalies or discrepancies were associated with this analysis other than those already qualified in the data.

### Total Metals by EPA 6000/7000 Series Methods

No additional anomalies or discrepancies were associated with this analysis other than those already qualified in the data.

Amar Gill
Project Manager

North Creek Analytical

### CASE NARRATIVE for B4J0416

### Volatile Organic Compounds by EPA Method 8260B

The Matrix Spike and Matrix Spike Duplicate for analytical batch 4J14041 were analyzed outside the twelve-hour quality control window. Since all other batch QC samples and project samples were analyzed within a twelve-hour window no further action was deemed necessary other than to note the anomaly in the report. No additional anomalies or discrepancies were associated with this analysis other than those already qualified in the data.

### Polynuclear Aromatic Compounds by GC/MS with Selected Ion Monitoring

Project samples WP-1-11, WP-8-11, WP-4M-11 and WP-3A-10 were extracted in analytical batch 4J18059. The percent recoveries of spike compounds, Benzo(a)Pyrene, Chrysene and Pyrene were above control limits in the analytical batch Blank Spike (BS) and Blank Spike Duplicate (BSD). The Relative Percent Difference (RPD) for each spike compound was within control limits. The project samples analyzed as part of analytical batch 4J18059 were all non-detect (ND) for Benzo(a)Pyrene, Chrysene and Pyrene. No further action was deemed necessary. No additional anomalies or discrepancies were associated with this analysis other than those already qualified in the data.

Amar Gill
Project Manager
North Crook Applytical

North Creek Analytical



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509-924-9200

503-906-9200

541-383-9310 FAX 382-7588 907-334-9200 FAX 334-9210

425-420-9200 FAX 420-9210

**CHAIN OF CUSTODY REPORT** Work Order INVOICE TO: THEN APOLIND REQUEST

CLIENT: 4-007 - F/4	INVOICE TO:		TURNAROU	ND REQUEST
REPORT TO: 3522 INTERNATIONAL ADDRESS:	SLR A	K		ness Days *
ADDRESS: FAIRBANKS AK			Organic & Inorg	
· · · · · · · · · · · · · · · · · · ·			10 7 5 4	3 2 1 <1
PHONE: 907-455-9005 FAX: 907-455-9015	P.O. NUMBER:			ocarbon Analyses
PROJECT NAME: F14 - FORMER	PRESERVAT	IIVE	5 4 3	2 1 <1
PROJECT NUMBER: FACILITIES WOL ME		ALVERG	[]	
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SAMPLED BY: Sally Swenson Andy Demitting	20 CE CO	'     -		n standard may incur Rush Charges.
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WP-2-4 10.6.04 1630 XX			5 2	09
WP-8-11 10.6.04 1345			5 2	03
WP-9-11 10.6.04 11.00	X		5 2	04
			5 2	05
MW-7-10 10.5.04 1100				
MW-14-10 10.5-04 1320 X	XIX		S 2	06
MW-8-13 10:6:04 1650	$X \mid X \mid$		5 2	67
WP-13-12 10.4.04 1350 X			5 2	C8
WP-2A-10 10.6.04 1420 X			5 1	09
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10 WP-4N-11 10:7.04 0950 X	DATE: A . 7. Act	RECEIVED BY: JOHN TO		DATE: (0/8/14)
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PRINT NAME: Satty C. Swenson FIRM: SLR RELEASED BY:		RECEIVED BY:	<i>y</i> -	DATE:
PRINT NAME: FIRM:		PRINT NAME:	FIRM:	TIME:
ADDITIONAL REMARKS:				TEMP:
COC REV 1/03				5.3 PAGE / OF 2



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541-383-9310 FAX 382-7588 907-334-9200 FAX 334-9210

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ADDRESS: 3522 International Fights AK 9976 PHONE: 47-455-905 FAX: 455 PROJECT NAME: Former MARK	onal ST			P.O. N	NUMB	ER:						-		10 7	etroleum	4 3	bon Ana	alyses	<1
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ADDITIONAL REMARKS: COC REV 1/03															<u>.</u>			PAG	e 20f <u>2</u>



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Bend

Anchorage

SLR Alaska Project: FIA Former Mark Air Facilities

2525 Blueberry Road, Suite 206 Project Number: 004.0184.00001 Reported: Anchorage, AK/USA 99503 Project Manager: Andy Dimitriou 12/07/04 17:13

Spokane

### ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
WP-1-11	B4J0416-01	Soil	10/06/04 16:00	10/08/04 16:30
WP-2-11	B4J0416-02	Soil	10/06/04 16:30	10/08/04 16:30
WP-8-11	B4J0416-03	Soil	10/06/04 13:45	10/08/04 16:30
WP-9-11	B4J0416-04	Soil	10/06/04 11:00	10/08/04 16:30
MW-7-10	B4J0416-05	Soil	10/05/04 11:00	10/08/04 16:30
MW-1A-10	B4J0416-06	Soil	10/05/04 13:20	10/08/04 16:30
MW-8-13	B4J0416-07	Soil	10/05/04 16:50	10/08/04 16:30
WP-13-12	B4J0416-08	Soil	10/04/04 13:50	10/08/04 16:30
WP-2A-10	B4J0416-09	Soil	10/06/04 14:20	10/08/04 16:30
WP-4M-11	B4J0416-10	Soil	10/07/04 09:50	10/08/04 16:30
WP-3A-10	B4J0416-11	Soil	10/07/04 11:25	10/08/04 16:30
WP-6-10	B4J0416-12	Soil	10/07/04 12:10	10/08/04 16:30

North Creek Analytical - Bothell



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Bend

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SLR Alaska Project: FIA Former Mark Air Facilities

2525 Blueberry Road, Suite 206 Project Number: 004.0184.00001 Reported: Anchorage, AK/USA 99503 Project Manager: Andy Dimitriou 12/07/04 17:13

### Gasoline Range Hydrocarbons (n-Hexane to <n-Decane) by AK101 North Creek Analytical - Bothell

Spokane

Anchorage

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
WP-4M-11 (B4J0416-10) Soil Sample	d: 10/07/04 0	9:50 Receiv	ved: 10/08/04	4 16:30					
Gasoline Range Hydrocarbons	1260	100	mg/kg dry	20	4J22005	10/22/04	10/23/04	AK 101	
Surrogate: 4-BFB (FID)	198 %	60-120			"	"	"	"	S-04
Surrogate: a,a,a-TFT (FID)	117 %	50-150			"	"	"	"	
WP-3A-10 (B4J0416-11) Soil Sampled	d: 10/07/04 1	1:25 Receiv	ed: 10/08/04	16:30					
Gasoline Range Hydrocarbons	1400	100	mg/kg dry	20	4J22005	10/22/04	10/23/04	AK 101	
Surrogate: 4-BFB (FID)	189 %	60-120			"	"	"	"	S-04
Surrogate: a,a,a-TFT (FID)	116 %	50-150			"	"	"	"	
WP-6-10 (B4J0416-12) Soil Sampled:	10/07/04 12:	10 Received	d: 10/08/04 1	6:30					
Gasoline Range Hydrocarbons	ND	2.89	mg/kg dry	1	4J22005	10/22/04	10/23/04	AK 101	
Surrogate: 4-BFB (FID)	99.4 %	60-120			"	"	"	"	
Surrogate: a,a,a-TFT (FID)	78.8 %	50-150			"	"	"	"	

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SLR Alaska Project: FIA Former Mark Air Facilities

2525 Blueberry Road, Suite 206 Project Number: 004.0184.00001 Reported: Anchorage, AK/USA 99503 Project Manager: Andy Dimitriou 12/07/04 17:13

# Gasoline Hydrocarbons (n-Hexane to <n-Decane) and BTEX by AK101/EPA 8021B North Creek Analytical - Bothell

		Reporting							
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Note
WP-1-11 (B4J0416-01) Soil	Sampled: 10/06/04 16:00	Receive	d: 10/08/04 1	6:30					
Gasoline Range Hydrocarbo	ns 1020	75.8	mg/kg dry	20	4J18022	10/18/04	10/18/04	AK 101	
Benzene	0.574	0.303	"	"	"	"	"	"	
Toluene	12.4	0.758	"	"	"	"	"	"	
Ethylbenzene	14.8	0.758	"	"	"	"	"	"	
Xylenes (total)	59.7	1.52	"	"	"	"	"	"	
Surrogate: 4-BFB (FID)	198 %	50-120			"	"	"	"	S-04
Surrogate: a,a,a-TFT (FID)	117 %	50-150			"	"	"	"	
Surrogate: 4-BFB (PID)	116 %	50-120			"	"	"	"	
Surrogate: a,a,a-TFT (PID)	113 %	50-150			"	"	"	"	
WP-2-11 (B4J0416-02) Soil	Sampled: 10/06/04 16:30	Receive	d: 10/08/04 1	6:30					
Gasoline Range Hydrocarbo	ns 2720	153	mg/kg dry	50	4J18022	10/18/04	10/18/04	AK 101	
Benzene	29.2	0.611	"	"	"	"	"	"	
Toluene	138	1.53	"	"	"	"	"	"	
Ethylbenzene	56.9	1.53	"	"	"	"	"	"	
Xylenes (total)	230	3.06	"	"	"	"	"	"	
Surrogate: 4-BFB (FID)	166 %	50-120			"	"	"	"	S-04
Surrogate: a,a,a-TFT (FID)	>200 %	50-150			"	"	"	"	S-04
, ,	1120/	50-120			"	"	"	"	
Surrogate: 4-BFB (PID)	112 %	120							

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Project: FIA Former Mark Air Facilities SLR Alaska

2525 Blueberry Road, Suite 206 Project Number: 004.0184.00001 Reported: Anchorage, AK/USA 99503 Project Manager: Andy Dimitriou 12/07/04 17:13

# Diesel Hydrocarbons (C10-C25) by AK102 North Creek Analytical - Bothell

Spokane

		Reporting							
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
WP-8-11 (B4J0416-03) Soil	Sampled: 10/06/04 13:45	Receive	d: 10/08/04 1	6:30					
Diesel Range Hydrocarbons	ND	4.00	mg/kg dry	1	4J20022	10/20/04	10/20/04	AK 102	
Surrogate: 2-FBP	72.7 %	50-150			"	"	"	"	
WP-9-11 (B4J0416-04) Soil	Sampled: 10/06/04 11:00	Receive	d: 10/08/04 1	6:30					
Diesel Range Hydrocarbons	55.4	20.0	mg/kg dry	5	4J20022	10/20/04	10/21/04	AK 102	
Surrogate: 2-FBP	68.1 %	50-150			"	"	"	"	
MW-7-10 (B4J0416-05) Soil	Sampled: 10/05/04 11:00	) Receive	ed: 10/08/04	16:30					
Diesel Range Hydrocarbons	12.6	4.00	mg/kg dry	1	4J15001	10/15/04	10/16/04	AK 102	
Surrogate: 2-FBP	89.5 %	50-150			"	"	"	"	
MW-1A-10 (B4J0416-06) So	il Sampled: 10/05/04 13:	20 Recei	ved: 10/08/0	4 16:30					
Diesel Range Hydrocarbons	ND	4.00	mg/kg dry	1	4J15001	10/15/04	10/16/04	AK 102	
Surrogate: 2-FBP	84.8 %	50-150			"	"	"	"	
MW-8-13 (B4J0416-07) Soil	Sampled: 10/05/04 16:50	) Receive	ed: 10/08/04	16:30					
Diesel Range Hydrocarbons	ND	4.00	mg/kg dry	1	4J15001	10/15/04	10/16/04	AK 102	
Surrogate: 2-FBP	89.4 %	50-150			"	"	"	"	
WP-13-12 (B4J0416-08) Soil	Sampled: 10/04/04 13:5	0 Receiv	ed: 10/08/04	16:30					
Diesel Range Hydrocarbons	13.7	4.00	mg/kg dry	1	4J15001	10/15/04	10/16/04	AK 102	
Surrogate: 2-FBP	83.8 %	50-150			"	"	"	"	

North Creek Analytical - Bothell

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SLR Alaska Project: FIA Former Mark Air Facilities

2525 Blueberry Road, Suite 206 Project Number: 004.0184.00001 Reported: Anchorage, AK/USA 99503 Project Manager: Andy Dimitriou 12/07/04 17:13

# Diesel Hydrocarbons (C10-C25) and Heavy Oil (C25-C36) by AK102 and AK103 North Creek Analytical - Bothell

		Reporting							
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
WP-4M-11 (B4J0416-10) Soil	Sampled: 10/07/04 0	9:50 Recei	ved: 10/08/0	4 16:30					
Diesel Range Hydrocarbons	805	40.0	mg/kg dry	10	4J18058	10/18/04	10/20/04	AK102/103	
Residual Range Organics	962	250	"	n	"	"	"	"	
Surrogate: 2-FBP	79.3 %	50-150			"	"	"	"	
Surrogate: Octacosane	109 %	50-150			"	"	"	"	
WP-3A-10 (B4J0416-11) Soil	Sampled: 10/07/04 1	1:25 Receiv	ed: 10/08/04	16:30					
Diesel Range Hydrocarbons	1240	40.0	mg/kg dry	10	4J18058	10/18/04	10/20/04	AK102/103	
Residual Range Organics	1590	250	"	"	"	"	"	"	
Surrogate: 2-FBP	101 %	50-150			"	"	"	"	
Surrogate: Octacosane	96.8 %	50-150			"	"	"	"	
WP-6-10 (B4J0416-12) Soil	Sampled: 10/07/04 12:	10 Receive	d: 10/08/04 1	6:30					
Diesel Range Hydrocarbons	13.4	4.00	mg/kg dry	1	4J18058	10/18/04	10/20/04	AK102/103	
Residual Range Organics	147	25.0	"	"	"	"	"	"	
Surrogate: 2-FBP	76.0 %	50-150			"	"	"	"	
Surrogate: Octacosane	91.1 %	50-150			"	"	"	"	

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SLR Alaska Project: FIA Former Mark Air Facilities

Project Number: 004.0184.00001 2525 Blueberry Road, Suite 206 Reported: Anchorage, AK/USA 99503 Project Manager: Andy Dimitriou 12/07/04 17:13

# BTEX by EPA Method 8021B North Creek Analytical - Bothell

		Reporting							
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
WP-8-11 (B4J0416-03) Soil	Sampled: 10/06/04 13:4	5 Receive	d: 10/08/04 1	6:30					
Benzene	0.0187	0.0102	mg/kg dry	1	4J22005	10/22/04	10/23/04	EPA 8021B	
Toluene	0.0638	0.0341	"	"	"	"	"	"	
Ethylbenzene	ND	0.0341	"	"	"	"	"	"	
Xylenes (total)	ND	0.0682	"	"	"	"	"	"	
Surrogate: 4-BFB (PID)	91.4 %	60-120			"	"	"	"	
Surrogate: a,a,a-TFT (PID)	66.5 %	50-150			"	"	"	"	
WP-9-11 (B4J0416-04) Soil	Sampled: 10/06/04 11:0	0 Receive	d: 10/08/04 1	6:30					
Benzene	0.0195	0.0132	mg/kg dry	1	4J22005	10/22/04	10/23/04	EPA 8021B	
Toluene	0.0569	0.0440	"	"	"	"	"	"	
Ethylbenzene	ND	0.0440	"	"	"	"	"	"	
Xylenes (total)	ND	0.0881	"	"	"	"	"	"	
Surrogate: 4-BFB (PID)	91.3 %	60-120			"	"	"	"	
Surrogate: a,a,a-TFT (PID)	98.7 %	50-150			"	"	"	"	
MW-7-10 (B4J0416-05) Soil	Sampled: 10/05/04 11:	00 Receive	ed: 10/08/04	16:30					
Benzene	0.0316	0.0150	mg/kg dry	1	4J22005	10/22/04	10/23/04	EPA 8021B	
Toluene	0.0949	0.0500	"	"	"	"	"	"	
Ethylbenzene	0.871	0.0500	"	"	"	"	"	"	
Xylenes (total)	5.98	0.100	"	"	"	"	"	"	
Surrogate: 4-BFB (PID)	102 %	60-120			"	"	"	"	
Surrogate: a,a,a-TFT (PID)	75.2 %	50-150			"	"	"	"	
MW-1A-10 (B4J0416-06) So	il Sampled: 10/05/04 1.	3:20 Recei	ved: 10/08/0	4 16:30					
Benzene	0.0164	0.00951	mg/kg dry	1	4J22005	10/22/04	10/23/04	EPA 8021B	
Toluene	ND	0.0317	"	"	"	"	"	"	
Ethylbenzene	ND	0.0317	"	"	"	"	"	"	
Xylenes (total)	0.300	0.0634	"	"	"	"	"	"	I-06
Surrogate: 4-BFB (PID)	92.3 %	60-120			"	"	"	"	<u> </u>
Surrogate: a,a,a-TFT (PID)	73.5 %	50-150			"	"	"	"	

North Creek Analytical - Bothell

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SLR Alaska Project: FIA Former Mark Air Facilities

Project Number: 004.0184.00001 2525 Blueberry Road, Suite 206 Reported: Anchorage, AK/USA 99503 Project Manager: Andy Dimitriou 12/07/04 17:13

# BTEX by EPA Method 8021B North Creek Analytical - Bothell

		Reporting							
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-8-13 (B4J0416-07) Soil	Sampled: 10/05/04 16	:50 Receive	ed: 10/08/04	16:30					
Benzene	0.0189	0.0106	mg/kg dry	1	4J22005	10/22/04	10/23/04	EPA 8021B	
Toluene	0.0686	0.0352	"	"	"	"	"	"	
Ethylbenzene	ND	0.0352	"	"	"	"	"	"	
Xylenes (total)	0.292	0.0704	"	n	"	"	"	"	I-06
Surrogate: 4-BFB (PID)	91.2 %	60-120			"	"	"	"	
Surrogate: a,a,a-TFT (PID)	49.1 %	50-150			"	"	"	"	G-06
WP-13-12 (B4J0416-08) Soil	Sampled: 10/04/04 13	3:50 Receiv	ed: 10/08/04	16:30					
Benzene	ND	0.0150	mg/kg dry	1	4J22005	10/22/04	10/23/04	EPA 8021B	
Toluene	ND	0.0500	"	"	"	"	"	"	
Ethylbenzene	ND	0.0500	"	"	"	"	"	"	
Xylenes (total)	ND	0.100	"	n	"	"	"	"	
Surrogate: 4-BFB (PID)	90.4 %	60-120			"	"	"	"	
Surrogate: a,a,a-TFT (PID)	86.8 %	50-150			"	"	"	"	
WP-2A-10 (B4J0416-09) Soil	Sampled: 10/06/04 1	4:20 Receiv	ed: 10/08/04	16:30					
Benzene	0.0141	0.0103	mg/kg dry	1	4J22005	10/22/04	10/23/04	EPA 8021B	
Toluene	0.0563	0.0345	"	"	"	"	"	"	
Ethylbenzene	ND	0.0345	"	"	"	"	"	"	
Xylenes (total)	ND	0.0689	"	"	"	"	"	"	
Surrogate: 4-BFB (PID)	91.5 %	60-120			"	"	"	"	
Surrogate: a,a,a-TFT (PID)	66.7 %	50-150			"	"	"	"	

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SLR Alaska Project: FIA Former Mark Air Facilities

Project Number: 004.0184.00001 2525 Blueberry Road, Suite 206 Reported: Anchorage, AK/USA 99503 Project Manager: Andy Dimitriou 12/07/04 17:13

# Total Metals by EPA 6000/7000 Series Methods North Creek Analytical - Bothell

Analyte	F Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
WP-1-11 (B4J0416-01) Soil	Sampled: 10/06/04 16:00	Received	1: 10/08/04 1	16:30					
Lead	3.76	1.00	mg/kg dry	1	4J18044	10/18/04	10/19/04	EPA 6020	

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SLR Alaska Project: FIA Former Mark Air Facilities

Project Number: 004.0184.00001 2525 Blueberry Road, Suite 206 Reported: Anchorage, AK/USA 99503 Project Manager: Andy Dimitriou 12/07/04 17:13

# **Volatile Organic Compounds by EPA Method 8260B** North Creek Analytical - Bothell

Analysta	n1	Reporting	I In:4-	Dilection	Do4-1-	Dror1	Analassa	Matk - J	NT
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Note
WP-4M-11 (B4J0416-10) Soil			ved: 10/08/04	4 16:30					
Acetone	ND	2.00	mg/kg dry	2	4J14041	10/14/04	10/14/04	EPA 8260B	
Benzene	0.178	0.0400	"	"	"	"	"	"	
Bromobenzene	ND	0.200	"	"	"	"	"	"	
Bromochloromethane	ND	0.200	"	"	"	"	"	"	
Bromodichloromethane	ND	0.200	"	"	"	"	"	"	
Bromoform	ND	0.200	"	"	"	"	"	"	
Bromomethane	ND	0.200	"	"	"	"	"	"	
2-Butanone	ND	2.00	"	"	"	"	"	"	
n-Butylbenzene	4.00	0.200	"	"	"	"	"	"	
sec-Butylbenzene	2.18	0.200	"	"	"	"	"	"	
tert-Butylbenzene	ND	0.200	"	"	"	"	"	"	
Carbon disulfide	ND	0.200	"	"	"	"	"	"	
Carbon tetrachloride	ND	0.200	"	"	"	"	"	"	
Chlorobenzene	ND	0.200	"	"	"	"	"	"	
Chloroethane	ND	0.200	"	"	"	"	"	"	
Chloroform	ND	0.200	"	"	"	"	"	"	
Chloromethane	ND	1.00	"	"	"	"	"	"	
2-Chlorotoluene	ND	0.200	"	"	"	"	"	"	
4-Chlorotoluene	ND	0.200	"	"	"	"	"	"	
Dibromochloromethane	ND	0.200	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	1.00	"	"	"	"	"	"	
1,2-Dibromoethane	ND	0.200	"	"	"	"	"	"	
Dibromomethane	ND	0.200	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	0.200	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	0.200	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	0.200	"	"	"	"	"	"	
Dichlorodifluoromethane	ND	0.200	"	"	"	"	"	"	
1,1-Dichloroethane	ND	0.200	"	"	"	"	"	"	
1,2-Dichloroethane	ND	0.200	"	"	"	"	"	"	
1,1-Dichloroethene	ND	0.200	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	0.200	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	0.200	"	"	"	"	"	"	
1,2-Dichloropropane	ND	0.200	m .	"	"	"	"	"	
1,3-Dichloropropane	ND	0.200	m .	"	"	"	"	"	
2,2-Dichloropropane	ND	0.200	"	"	"	"	"	"	
1,1-Dichloropropene	ND	0.200	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	0.200	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	0.200	"	"	"	"	"	"	

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SLR Alaska Project: FIA Former Mark Air Facilities

Project Number: 004.0184.00001 2525 Blueberry Road, Suite 206 Reported: Anchorage, AK/USA 99503 Project Manager: Andy Dimitriou 12/07/04 17:13

# **Volatile Organic Compounds by EPA Method 8260B** North Creek Analytical - Bothell

		Reporting							
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
WP-4M-11 (B4J0416-10) Soil Sampled: 10/07/04 09:50 Received: 10/08/04 16:30									
Ethylbenzene	7.85	0.200	mg/kg dry	2	4J14041	10/14/04	10/14/04	EPA 8260B	E
Hexachlorobutadiene	ND	0.200	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	1.00	"	"	"	"	"	"	
2-Hexanone	ND	2.00	"	"	"	"	"	"	
Isopropylbenzene	2.31	0.200	"	"	"	"	"	"	
p-Isopropyltoluene	2.44	0.200	"	"	"	"	"	"	
4-Methyl-2-pentanone	ND	2.00	"	"	"	"	"	"	
Methylene chloride	ND	2.00	"	"	"	"	"	"	
Naphthalene	9.03	0.200	"	"	"	"	"	"	E
n-Propylbenzene	3.79	0.200	"	"	"	"	"	"	
Styrene	ND	0.200	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	0.200	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	0.200	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	0.200	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	0.200	"	"	"	"	"	"	
Tetrachloroethene	ND	0.200	"	"	"	"	"	"	
Toluene	7.01	0.100	"	1	"	"	"	"	E-01
1,1,1-Trichloroethane	ND	0.200	"	2	"	"	"	"	
1,1,2-Trichloroethane	ND	0.200	"	"	"	"	"	"	
Trichloroethene	ND	0.200	"	"	"	"	"	"	
Trichlorofluoromethane	ND	0.200	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	0.200	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	26.0	0.200	m .	"	"	"	"	"	E-01
1,3,5-Trimethylbenzene	7.20	0.200	"	"	"	"	"	"	Е
Vinyl chloride	ND	0.200	"	"	"	"	"	"	
o-Xylene	18.2	0.200	"	"	"	"	"	"	E-01
m,p-Xylene	27.5	0.400	"	"	"	"	"	"	E-01
Surrogate: 1,2-DCA-d4	109 %	70-130			"	"	"	"	
Surrogate: Toluene-d8	103 %	70-130			"	"	"	"	
Surrogate: 4-BFB	94.9 %	70-130			"	"	"	"	
-									

North Creek Analytical - Bothell



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SLR Alaska Project: FIA Former Mark Air Facilities

Project Number: 004.0184.00001 2525 Blueberry Road, Suite 206 Reported: Anchorage, AK/USA 99503 Project Manager: Andy Dimitriou 12/07/04 17:13

# **Volatile Organic Compounds by EPA Method 8260B** North Creek Analytical - Bothell

		Reporting							
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Note
WP-4M-11 (B4J0416-10RE1) Soil	Sampled: 10/07/0	4 09:50 R	eceived: 10/	08/04 16:3	0				
Acetone	ND	5.00	mg/kg dry	5	4J20032	10/20/04	10/20/04	EPA 8260B	
Benzene	0.186	0.100	"	"	"	"	"	"	
Bromobenzene	ND	0.500	"	"	"	"	"	"	
Bromochloromethane	ND	0.500	"	"	"	"	"	"	
Bromodichloromethane	ND	0.500	"	"	"	"	"	"	
Bromoform	ND	0.500	"	"	"	"	"	"	
Bromomethane	ND	0.500	"	"	"	"	"	"	
2-Butanone	ND	5.00	"	"	"	"	"	"	
n-Butylbenzene	2.74	0.500	"	"	"	"	"	"	
sec-Butylbenzene	1.76	0.500	"	"	"	"	"	"	
tert-Butylbenzene	ND	0.500	"	"	"	"	"	"	
Carbon disulfide	ND	0.500	"	"	"	"	"	"	
Carbon tetrachloride	ND	0.500	"	"	"	"	"	"	
Chlorobenzene	ND	0.500	"	"	"	"	"	"	
Chloroethane	ND	0.500	"	"	"	"	"	"	
Chloroform	ND	0.500	"	"	"	"	"	"	
Chloromethane	ND	2.50	"	"	"	"	"	"	
2-Chlorotoluene	ND	0.500	"	"	"	"	"	"	
4-Chlorotoluene	ND	0.500	"	"	"	"	"	"	
Dibromochloromethane	ND	0.500	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	2.50	"	"	"	"	"	"	
1,2-Dibromoethane	ND	0.500	"	"	"	"	"	"	
Dibromomethane	ND	0.500	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	0.500	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	0.500	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	0.500	"	"	"	"	"	"	
Dichlorodifluoromethane	ND	0.500	"	"	"	"	"	"	
1,1-Dichloroethane	ND	0.500	"	"	"	"	"	"	
1,2-Dichloroethane	ND	0.500	"	"	"	"	"	"	
1,1-Dichloroethene	ND	0.500	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	0.500	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	0.500	"	"	"	"	"	"	
1,2-Dichloropropane	ND	0.500	"	"	"	"	"	"	
1,3-Dichloropropane	ND	0.500	"	"	"	"	"	"	
2,2-Dichloropropane	ND	0.500	"	"	"	"	"	"	
1,1-Dichloropropene	ND	0.500	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	0.500	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	0.500	"	"	"	"	"	u u	

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SLR Alaska Project: FIA Former Mark Air Facilities

Project Number: 004.0184.00001 2525 Blueberry Road, Suite 206 Reported: Anchorage, AK/USA 99503 Project Manager: Andy Dimitriou 12/07/04 17:13

#### **Volatile Organic Compounds by EPA Method 8260B** North Creek Analytical - Bothell

A 1 4.	D 16	Reporting	TT- '4-	D'I 4'	D. t. I	D 1	A 1	Malad	NI. (
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Note
WP-4M-11 (B4J0416-10RE1) Soil	Sampled: 10/07	/04 09:50 R	eceived: 10/	08/04 16:3	0				
Ethylbenzene	7.51	0.500	mg/kg dry	5	4J20032	10/20/04	10/20/04	EPA 8260B	
Hexachlorobutadiene	ND	0.500	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	2.50	"	"	"	"	"	"	
2-Hexanone	ND	5.00	"	"	"	"	"	"	
Isopropylbenzene	2.15	0.500	"	"	"	"	"	"	
p-Isopropyltoluene	1.88	0.500	"	"	"	"	"	"	
4-Methyl-2-pentanone	ND	5.00	"	"	"	"	"	"	
Methylene chloride	ND	5.00	"	"	"	"	"	"	
Naphthalene	8.07	0.500	"	"	"	"	"	"	
n-Propylbenzene	3.36	0.500	"	"	"	"	"	"	
Styrene	ND	0.500	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	0.500	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	0.500	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	0.500	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	0.500	"	"	"	"	"	"	
Tetrachloroethene	ND	0.500	"	"	"	"	"	"	
Toluene	14.0	0.500	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	0.500	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	0.500	"	"	"	"	"	"	
Trichloroethene	ND	0.500	"	"	"	"	"	"	
Trichlorofluoromethane	ND	0.500	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	0.500	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	19.8	0.500	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	6.37	0.500	"	"	"	"	"	"	
Vinyl chloride	ND	0.500	"	"	"	"	"	"	
o-Xylene	15.9	0.500	"	"	"	"	"	"	
m,p-Xylene	41.4	1.00	"	"	"	"	"	"	
Surrogate: 1,2-DCA-d4	94.9 %	70-130			"	"	"	"	
Surrogate: Toluene-d8	102 %	70-130			"	"	"	"	
Surrogate: 4-BFB	102 %	70-130			"	"	"	"	

North Creek Analytical - Bothell



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SLR Alaska Project: FIA Former Mark Air Facilities

Project Number: 004.0184.00001 2525 Blueberry Road, Suite 206 Reported: Anchorage, AK/USA 99503 Project Manager: Andy Dimitriou 12/07/04 17:13

#### **Volatile Organic Compounds by EPA Method 8260B** North Creek Analytical - Bothell

Anchorage

		Reporting							
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Note
WP-3A-10 (B4J0416-11) Soil	Sampled: 10/07/04 11	:25 Receiv	ed: 10/08/04	16:30					
Acetone	ND	2.00	mg/kg dry	2	4J14041	10/14/04	10/14/04	EPA 8260B	
Benzene	0.134	0.0400	"	"	"	"	"	"	
Bromobenzene	ND	0.200	"	"	"	"	"	"	
Bromochloromethane	ND	0.200	"	"	"	"	"	"	
Bromodichloromethane	ND	0.200	"	"	"	"	"	"	
Bromoform	ND	0.200	"	"	"	"	"	"	
Bromomethane	ND	0.200	"	"	"	"	"	"	
2-Butanone	ND	2.00	"	"	"	"	"	"	
n-Butylbenzene	4.70	0.200	"	"	"	"	"	"	
sec-Butylbenzene	2.43	0.200	"	"	"	"	"	"	
tert-Butylbenzene	ND	0.200	"	"	"	"	"	"	
Carbon disulfide	ND	0.200	"	"	"	"	"	"	
Carbon tetrachloride	ND	0.200	"	"	"	"	"	"	
Chlorobenzene	ND	0.200	"	"	"	"	"	"	
Chloroethane	ND	0.200	"	"	"	"	"	"	
Chloroform	ND	0.200	"	"	"	"	"	"	
Chloromethane	ND	1.00	"	"	"	"	"	"	
2-Chlorotoluene	ND	0.200	"	"	"	"	"	"	
4-Chlorotoluene	ND	0.200	"	"	"	"	"	"	
Dibromochloromethane	ND	0.200	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	1.00	"	"	"	"	"	"	
1,2-Dibromoethane	ND	0.200	"	"	"	"	"	u u	
Dibromomethane	ND	0.200	"	"	"	"	"	"	
1.2-Dichlorobenzene	ND	0.200	"	"	"	"	"	u u	
1,3-Dichlorobenzene	ND	0.200	"	"	"	"	"	ıı .	
1,4-Dichlorobenzene	ND	0.200	"	"	"	"	"	"	
Dichlorodifluoromethane	ND	0.200	"	"	"	"	"	ıı .	
1,1-Dichloroethane	ND	0.200	"	"	"	"	"	"	
1,2-Dichloroethane	ND	0.200	"	"	"	"	"	"	
1,1-Dichloroethene	ND	0.200	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	0.200	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	0.200	"	"	"	"	"	"	
1,2-Dichloropropane	ND	0.200	"	"	"	"	"	"	
1,3-Dichloropropane	ND	0.200	"	"	"	"	"	"	
2,2-Dichloropropane	ND	0.200	"	"	"	"	"	"	
1,1-Dichloropropene	ND	0.200	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND ND	0.200	"	"		"	"	"	
trans-1,3-Dichloropropene	ND ND	0.200	"	,,	,,	"	,,	"	
nans-1,3-Dictioropropene	ND	0.200							

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SLR Alaska Project: FIA Former Mark Air Facilities

Project Number: 004.0184.00001 2525 Blueberry Road, Suite 206 Reported: Anchorage, AK/USA 99503 Project Manager: Andy Dimitriou 12/07/04 17:13

#### **Volatile Organic Compounds by EPA Method 8260B** North Creek Analytical - Bothell

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Allalyte	Result	Lillit	Units	Dilution	Batch	Frepareu	Allalyzeu	Method	INOICS
WP-3A-10 (B4J0416-11) Soil	Sampled: 10/07/04 11	:25 Receiv	ed: 10/08/04	16:30					
Ethylbenzene	8.70	0.200	mg/kg dry	2	4J14041	10/14/04	10/14/04	EPA 8260B	E
Hexachlorobutadiene	ND	0.200	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	1.00	"	"	"	"	"	"	
2-Hexanone	ND	2.00	"	"	"	"	"	"	
Isopropylbenzene	2.49	0.200	"	"	"	"	"	"	
p-Isopropyltoluene	2.67	0.200	"	"	"	"	"	"	
4-Methyl-2-pentanone	ND	2.00	"	"	"	"	"	"	
Methylene chloride	ND	2.00	"	"	"	"	"	"	
Naphthalene	10.4	0.200	"	"	"	"	"	"	E
n-Propylbenzene	4.27	0.200	"	"	"	"	"	"	
Styrene	ND	0.200	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	0.200	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	0.200	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	0.200	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	0.200	"	"	"	"	"	"	
Tetrachloroethene	ND	0.200	"	"	"	"	"	"	
Toluene	15.8	0.200	"	"	"	"	"	"	E-01
1,1,1-Trichloroethane	ND	0.200	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	0.200	"	"	"	"	"	"	
Trichloroethene	ND	0.200	"	"	"	"	"	"	
Trichlorofluoromethane	ND	0.200	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	0.200	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	28.7	0.200	"	"	"	"	"	"	E-01
1,3,5-Trimethylbenzene	9.75	0.200	"	"	"	"	"	"	E
Vinyl chloride	ND	0.200	"	"	"	"	"	"	
o-Xylene	19.5	0.200	"	"	"	"	"	"	Е
m,p-Xylene	39.3	0.400	"	"	"	"	"	"	E-01
Surrogate: 1,2-DCA-d4	111 %	70-130			"	"	"	"	
Surrogate: Toluene-d8	104 %	70-130			"	"	"	"	
Surrogate: 4-BFB	99.1 %	70-130			"	"	"	"	

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The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

> North Creek Analytical, Inc. **Environmental Laboratory Network**



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SLR Alaska Project: FIA Former Mark Air Facilities

Project Number: 004.0184.00001 2525 Blueberry Road, Suite 206 Reported: Anchorage, AK/USA 99503 Project Manager: Andy Dimitriou 12/07/04 17:13

#### **Volatile Organic Compounds by EPA Method 8260B** North Creek Analytical - Bothell

Spokane

		Reporting	•					_	
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Note
WP-3A-10 (B4J0416-11RE1) Soil	Sampled: 10/07/0	4 11:25 R	eceived: 10/0	08/04 16:30	)				
Acetone	ND	5.00	mg/kg dry	5	4J20032	10/20/04	10/20/04	EPA 8260B	
Benzene	0.126	0.100	"	"	"	"	"	"	
Bromobenzene	ND	0.500	"	"	"	"	"	"	
Bromochloromethane	ND	0.500	"	"	"	"	"	"	
Bromodichloromethane	ND	0.500	"	"	"	"	"	m .	
Bromoform	ND	0.500	"	"	"	"	"	m .	
Bromomethane	ND	0.500	"	"	"	"	"	m .	
2-Butanone	ND	5.00	"	"	"	"	"	m .	
n-Butylbenzene	3.00	0.500	"	"	"	"	"	m .	
sec-Butylbenzene	1.81	0.500	"	"	"	"	"	m .	
tert-Butylbenzene	ND	0.500	"	"	"	"	"	"	
Carbon disulfide	ND	0.500	"	"	"	"	"	m .	
Carbon tetrachloride	ND	0.500	"	"	"	"	"	n .	
Chlorobenzene	ND	0.500	"	"	"	"	"	m .	
Chloroethane	ND	0.500	"	"	"	"	"	n .	
Chloroform	ND	0.500	"	"	"	"	"	n .	
Chloromethane	ND	2.50	"	"	"	"	"	n .	
2-Chlorotoluene	ND	0.500	"	"	"	"	"	m .	
4-Chlorotoluene	ND	0.500	"	"	"	"	"	"	
Dibromochloromethane	ND	0.500	"	"	"	"	"	m .	
1,2-Dibromo-3-chloropropane	ND	2.50	"	"	"	"	"	"	
1,2-Dibromoethane	ND	0.500	"	"	"	"	"	m .	
Dibromomethane	ND	0.500	"	"	"	"	"	n .	
1,2-Dichlorobenzene	ND	0.500	"	"	"	"	"	m .	
1,3-Dichlorobenzene	ND	0.500	"	"	"	"	"	n .	
1,4-Dichlorobenzene	ND	0.500	"	"	"	"	"	"	
Dichlorodifluoromethane	ND	0.500	"	"	"	"	"	n .	
1,1-Dichloroethane	ND	0.500	"	"	"	"	"	n .	
1,2-Dichloroethane	ND	0.500	"	"	"	"	"	n .	
1,1-Dichloroethene	ND	0.500	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	0.500	"	"	"	"	"	n .	
trans-1,2-Dichloroethene	ND	0.500	"	"	"	"	"	"	
1,2-Dichloropropane	ND	0.500	"	"	"	"	"	"	
1,3-Dichloropropane	ND	0.500	"	"	"	"	"	"	
2,2-Dichloropropane	ND	0.500	"	"	"	"	"	"	
1,1-Dichloropropene	ND	0.500	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	0.500	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	0.500	"	"	"	"	"	"	

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SLR Alaska Project: FIA Former Mark Air Facilities

Project Number: 004.0184.00001 2525 Blueberry Road, Suite 206 Reported: Anchorage, AK/USA 99503 Project Manager: Andy Dimitriou 12/07/04 17:13

# **Volatile Organic Compounds by EPA Method 8260B** North Creek Analytical - Bothell

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
WP-3A-10 (B4J0416-11RE1) Soil	Sampled: 10/07/	04 11:25 R	eceived: 10/0	08/04 16:30	)				
Ethylbenzene	7.81	0.500	mg/kg dry	5	4J20032	10/20/04	10/20/04	EPA 8260B	
Hexachlorobutadiene	ND	0.500	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	2.50	"	"	"	"	"	"	
2-Hexanone	ND	5.00	"	"	"	"	"	"	
Isopropylbenzene	2.20	0.500	"	"	"	"	"	"	
p-Isopropyltoluene	1.90	0.500	"	"	"	"	"	"	
4-Methyl-2-pentanone	ND	5.00	"	"	"	"	"	"	
Methylene chloride	ND	5.00	"	"	"	"	"	"	
Naphthalene	8.65	0.500	"	"	"	"	"	"	
n-Propylbenzene	3.38	0.500	"	"	"	"	"	"	
Styrene	ND	0.500	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	0.500	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	0.500	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	0.500	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	0.500	"	"	"	"	"	"	
Tetrachloroethene	ND	0.500	"	"	"	"	"	"	
Toluene	14.7	0.500	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	0.500	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	0.500	"	"	"	"	"	"	
Trichloroethene	ND	0.500	"	"	"	"	"	"	
Trichlorofluoromethane	ND	0.500	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	0.500	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	20.1	0.500	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	6.41	0.500	"	"	"	"	"	"	
Vinyl chloride	ND	0.500	"	"	"	"	"	"	
o-Xylene	16.2	0.500	"	"	"	"	"	"	
m,p-Xylene	42.3	1.00	"	"	"	"	"	"	
Surrogate: 1,2-DCA-d4	96.1 %	70-130			"	"	"	"	
Surrogate: Toluene-d8	101 %	70-130			"	"	"	"	
Surrogate: 4-BFB	100 %	70-130			"	"	"	"	

North Creek Analytical - Bothell

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SLR Alaska Project: FIA Former Mark Air Facilities

Project Number: 004.0184.00001 2525 Blueberry Road, Suite 206 Reported: Anchorage, AK/USA 99503 Project Manager: Andy Dimitriou 12/07/04 17:13

# **Volatile Organic Compounds by EPA Method 8260B** North Creek Analytical - Bothell

Analyte	F Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
WP-6-10 (B4J0416-12) Soil	Sampled: 10/07/04 12:10	Receive	d: 10/08/04 1	6:30				_	A-01
Acetone	ND	0.577	mg/kg dry	1	4J14041	10/14/04	10/14/04	EPA 8260B	
Benzene	ND	0.0115	"	"	"	"	"	"	
Bromobenzene	ND	0.0577	"	"	"	"	"	"	
Bromochloromethane	ND	0.0577	"	"	"	"	"	"	
Bromodichloromethane	ND	0.0577	"	"	"	"	"	"	
Bromoform	ND	0.0577	"	"	"	"	"	"	
Bromomethane	ND	0.0577	"	"	"	"	"	"	
2-Butanone	ND	0.577	"	"	"	"	"	"	
n-Butylbenzene	ND	0.0577	"	"	"	"	"	"	
sec-Butylbenzene	ND	0.0577	"	"	"	"	"	"	
tert-Butylbenzene	ND	0.0577	"	"	"	"	"	"	
Carbon disulfide	ND	0.0577	"	"	"	"	"	"	
Carbon tetrachloride	ND	0.0577	"	"	"	"	"	"	
Chlorobenzene	ND	0.0577	"	"	"	"	"	"	
Chloroethane	ND	0.0577	"	"	"	"	"	"	
Chloroform	ND	0.0577	"	"	"	"	"	"	
Chloromethane	ND	0.289	"	"	"	"	"	"	
2-Chlorotoluene	ND	0.0577	"	"	"	"	"	"	
4-Chlorotoluene	ND	0.0577	"	"	"	"	"	"	
Dibromochloromethane	ND	0.0577	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	0.289	"	"	"	"	"	"	
1,2-Dibromoethane	ND	0.0577	"	"	"	"	"	"	
Dibromomethane	ND	0.0577	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	0.0577	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	0.0577	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	0.0577	"	"	"	"	"	"	
Dichlorodifluoromethane	ND	0.0577	"	"	"	"	"	"	
1,1-Dichloroethane	ND	0.0577	"	"	"	"	"	"	
1,2-Dichloroethane	ND	0.0577	"	"	"	"	"	"	
1,1-Dichloroethene	ND	0.0577	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	0.0577	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	0.0577	"	"	"	"	"	"	
1,2-Dichloropropane	ND	0.0577	"	"	"	"	"	"	
1,3-Dichloropropane	ND	0.0577	"	"	"	"	"	"	
2,2-Dichloropropane	ND	0.0577	"	"	"	"	"	"	
1,1-Dichloropropene	ND	0.0577	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	0.0577	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	0.0577	"	"	"	"	"	"	

North Creek Analytical - Bothell



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SLR Alaska Project: FIA Former Mark Air Facilities

Project Number: 004.0184.00001 2525 Blueberry Road, Suite 206 Reported: Anchorage, AK/USA 99503 Project Manager: Andy Dimitriou 12/07/04 17:13

#### **Volatile Organic Compounds by EPA Method 8260B** North Creek Analytical - Bothell

4 1 .		Reporting	TT 1	Dil e	D . 1	D 1	A 1 1	36.4.1	NT 4
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Note
WP-6-10 (B4J0416-12) Soil	Sampled: 10/07/04 12:10	Receive	d: 10/08/04 1	6:30					A-02
Ethylbenzene	ND	0.0577	mg/kg dry	1	4J14041	10/14/04	10/14/04	EPA 8260B	
Hexachlorobutadiene	ND	0.0577	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	0.289	"	"	"	"	"	"	
2-Hexanone	ND	0.577	"	"	"	"	"	"	
Isopropylbenzene	ND	0.0577	"	"	"	"	"	"	
p-Isopropyltoluene	ND	0.0577	"	"	"	"	"	"	
4-Methyl-2-pentanone	ND	0.577	"	"	"	"	"	"	
Methylene chloride	ND	0.577	"	"	"	"	"	"	
Naphthalene	ND	0.0577	"	"	"	"	"	"	
n-Propylbenzene	ND	0.0577	"	"	"	"	"	"	
Styrene	ND	0.0577	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	0.0577	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	0.0577	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	0.0577	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	0.0577	"	"	"	"	"	"	
Tetrachloroethene	ND	0.0577	"	"	"	"	"	"	
Toluene	ND	0.0577	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	0.0577	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	0.0577	"	"	"	"	"	"	
Trichloroethene	ND	0.0577	"	"	"	"	"	"	
Trichlorofluoromethane	ND	0.0577	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	0.0577	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	0.0577	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	0.0577	"	"	"	"	"	"	
Vinyl chloride	ND	0.0577	"	"	"	"	"	"	
o-Xylene	ND	0.0577	"	"	"	"	"	"	
m,p-Xylene	ND	0.115	"	"	"	"	"	"	
Surrogate: 1,2-DCA-d4	101 %	70-130			"	"	"	"	
Surrogate: Toluene-d8		70-130			"	"	"	"	
Surrogate: 4-BFB		70-130			"	"	"	"	

North Creek Analytical - Bothell

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SLR Alaska Project: FIA Former Mark Air Facilities

Project Number: 004.0184.00001 2525 Blueberry Road, Suite 206 Reported: Anchorage, AK/USA 99503 Project Manager: Andy Dimitriou 12/07/04 17:13

#### **Volatile Organic Compounds by EPA Method 8260B** North Creek Analytical - Bothell

		Reporting							
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Note
WP-6-10 (B4J0416-12RE1) Soil	Sampled: 10/07/04	12:10 Rec	eived: 10/08	/04 16:30					
Acetone	ND	0.577	mg/kg dry	1	4J15059	10/18/04	10/18/04	EPA 8260B	
Benzene	ND	0.0115	"	"	"	"	"	"	
Bromobenzene	ND	0.0577	"	"	"	"	"	"	
Bromochloromethane	ND	0.0577	"	"	"	"	"	"	
Bromodichloromethane	ND	0.0577	"	"	"	"	"	"	
Bromoform	ND	0.0577	"	"	"	"	"	"	
Bromomethane	ND	0.0577	"	"	"	"	"	"	
2-Butanone	ND	0.577	"	"	"	"	"	"	
n-Butylbenzene	ND	0.0577	"	"	"	"	"	"	
sec-Butylbenzene	ND	0.0577	"	"	"	"	"	"	
ert-Butylbenzene	ND	0.0577	"	"	"	"	"	"	
Carbon disulfide	ND	0.0577	"	"	"	"	"	"	
Carbon tetrachloride	ND	0.0577	"	"	"	"	"	"	
Chlorobenzene	ND	0.0577	"	"	"	"	"	"	
Chloroethane	ND	0.0577	"	"	"	"	"	"	
Chloroform	ND	0.0577	"	"	"	"	"	"	
Chloromethane	ND	0.289	"	"	"	"	"	"	
2-Chlorotoluene	ND	0.0577	"	"	"	"	"	"	
1-Chlorotoluene	ND	0.0577	"	"	"	"	"	"	
Dibromochloromethane	ND	0.0577	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	0.289	"	"	"	"	"	"	
1,2-Dibromoethane	ND	0.0577	"	"	"	"	"	"	
Dibromomethane	ND	0.0577	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	0.0577	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	0.0577	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	0.0577	"	"	"	"	"	"	
Dichlorodifluoromethane	ND	0.0577	"	"	"	"	"	"	
1,1-Dichloroethane	ND	0.0577	"	"	"	"	"	"	
1,2-Dichloroethane	ND	0.0577	"	"	"	"	"	"	
1,1-Dichloroethene	ND	0.0577	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	0.0577	"	"	"	"	"	"	
rans-1,2-Dichloroethene	ND	0.0577	"	"	"	"	"	"	
1,2-Dichloropropane	ND	0.0577	"	"	"	"	"	u u	
1,3-Dichloropropane	ND	0.0577	"	"	"	"	"	u u	
2,2-Dichloropropane	ND	0.0577	"	"	"	"	"	"	
1,1-Dichloropropene	ND	0.0577	"	"	"	"	"	"	
eis-1,3-Dichloropropene	ND	0.0577	"	"	"	"	"	"	
rans-1,3-Dichloropropene	ND	0.0577	,,	,,			,,	,,	

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SLR Alaska Project: FIA Former Mark Air Facilities

Project Number: 004.0184.00001 2525 Blueberry Road, Suite 206 Reported: Anchorage, AK/USA 99503 Project Manager: Andy Dimitriou 12/07/04 17:13

# **Volatile Organic Compounds by EPA Method 8260B** North Creek Analytical - Bothell

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
WP-6-10 (B4J0416-12RE1) Soil	Sampled: 10/07/04	4 12:10 Rec	eived: 10/08/	/04 16:30					
Ethylbenzene	ND	0.0577	mg/kg dry	1	4J15059	10/18/04	10/18/04	EPA 8260B	
Hexachlorobutadiene	ND	0.0577	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	0.289	"	"	"	"	"	"	
2-Hexanone	ND	0.577	"	"	"	"	"	"	
Isopropylbenzene	ND	0.0577	"	"	"	"	"	"	
p-Isopropyltoluene	ND	0.0577	"	"	"	"	"	"	
4-Methyl-2-pentanone	ND	0.577	"	"	"	"	"	"	
Methylene chloride	ND	0.577	"	"	"	"	"	"	
Naphthalene	ND	0.0577	"	"	"	"	"	"	
n-Propylbenzene	ND	0.0577	"	"	"	"	"	"	
Styrene	ND	0.0577	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	0.0577	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	0.0577	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	0.0577	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	0.0577	"	"	"	"	"	"	
Tetrachloroethene	ND	0.0577	"	"	"	"	"	"	
Toluene	ND	0.0577	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	0.0577	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	0.0577	"	"	"	"	"	"	
Trichloroethene	ND	0.0577	"	"	"	"	"	"	
Trichlorofluoromethane	ND	0.0577	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	0.0577	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	0.0577	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	0.0577	"	"	"	"	"	"	
Vinyl chloride	ND	0.0577	"	"	"	"	"	"	
o-Xylene	ND	0.0577	"	"	"	"	"	"	
m,p-Xylene	ND	0.115	"	"	"	"	"	"	
Surrogate: 1,2-DCA-d4	113 %	70-130			"	"	"	"	
Surrogate: Toluene-d8	106 %	70-130			"	"	"	"	
Surrogate: 4-BFB	104 %	70-130			"	"	"	"	

North Creek Analytical - Bothell

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SLR Alaska Project: FIA Former Mark Air Facilities

Reporting

2525 Blueberry Road, Suite 206 Project Number: 004.0184.00001 Reported: Anchorage, AK/USA 99503 Project Manager: Andy Dimitriou 12/07/04 17:13

# Polynuclear Aromatic Compounds by GC/MS with Selected Ion Monitoring **North Creek Analytical - Bothell**

Spokane

Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
					Buten	Trepured	Tillaryzea	Wichiod	110103
WP-1-11 (B4J0416-01) Soil			d: 10/08/04 1	6:30					
1-Methylnaphthalene	8.40	0.200	mg/kg dry	20	4J18059	10/18/04	11/17/04	8270C-SIM	
2-Methylnaphthalene	11.9	0.200	"	"	"	"	"	"	
Acenaphthene	ND	0.200	"	"	"	"	"	"	
Acenaphthylene	ND	0.200	"	"	"	"	"	"	
Anthracene	ND	0.200	"	"	"	"	"	"	
Benzo (a) anthracene	ND	0.200	"	"	"	"	"	"	
Benzo (a) pyrene	ND	0.200	"	"	"	"	"	"	X
Benzo (b) fluoranthene	ND	0.200	"	"	"	"	"	"	
Benzo (ghi) perylene	ND	0.200	"	"	"	"	"	"	
Benzo (k) fluoranthene	ND	0.200	"	"	"	"	"	"	
Chrysene	ND	0.200	"	"	"	"	"	"	X
Dibenz (a,h) anthracene	ND	0.200	"	"	"	"	"	"	
Fluoranthene	ND	0.200	"	"	"	"	"	"	
Fluorene	ND	0.200	"	"	"	"	"	"	
Indeno (1,2,3-cd) pyrene	ND	0.200	"	"	"	"	"	"	
Naphthalene	7.85	0.200	"	"	"	"	"	"	
Phenanthrene	ND	0.200	"	"	"	"	"	"	
Pyrene	ND	0.200	"	"	"	"	"	"	X
Surrogate: p-Terphenyl-d14	128 %	28-161			"	"	"	"	
WP-8-11 (B4J0416-03) Soil	Sampled: 10/06/04 13:4	5 Received	d: 10/08/04 1	6:30					
1-Methylnaphthalene	ND	0.0100	ma/Ira der	1	4J18059	10/18/04	11/17/04	8270C-SIM	
2-Methylnaphthalene	ND	0.0100	mg/kg dry	1	.01000				
Acenaphthene	ND ND	0.0100	mg/kg dry	"	"	"	"	"	
Acenaphinene						"	"		
Acenaphthylene	ND	0.0100	"	"	"			"	
-	ND ND	0.0100 0.0100	"	"	"	"	"	"	
Acenaphthylene	ND ND ND	0.0100 0.0100 0.0100	" "	" "	" "	"	"	" " "	
Acenaphthylene Anthracene	ND ND ND ND	0.0100 0.0100 0.0100 0.0100	" "	" " "	" "	" "	" "	11 11 11	X
Acenaphthylene Anthracene Benzo (a) anthracene	ND ND ND ND ND	0.0100 0.0100 0.0100 0.0100 0.0100	" " " " " " " " " " " " " " " " " " " "	" " "	" " " " "	" " "	" " "	11 11 11	Х
Acenaphthylene Anthracene Benzo (a) anthracene Benzo (a) pyrene	ND ND ND ND ND ND	0.0100 0.0100 0.0100 0.0100 0.0100 0.0100	11 11 11 11	" " " " " " " " " " " " " " " " " " " "	" " " " " " " " " " " " " " " " " " " "	" " " " " " " " " " " " " " " " " " " "	" " " "	" " " " " "	Х
Acenaphthylene Anthracene Benzo (a) anthracene Benzo (a) pyrene Benzo (b) fluoranthene	ND ND ND ND ND ND	0.0100 0.0100 0.0100 0.0100 0.0100 0.0100 0.0100	" " " " " " "	" " " " " " " " " " " " " " " " " " " "	" " " " " " " " " " " " " " " " " " " "	" " " " " " " " " " " " " " " " " " " "	n n n n	" " " " " " " " "	Х
Acenaphthylene Anthracene Benzo (a) anthracene Benzo (a) pyrene Benzo (b) fluoranthene Benzo (ghi) perylene	ND ND ND ND ND ND ND	0.0100 0.0100 0.0100 0.0100 0.0100 0.0100 0.0100 0.0100	n n n n n n n n n n n n n n n n n n n	" " " " " " "	" " " " " " " " " " " " " " " " " " " "	" " " " " " " " " " " " " " " " " " " "	n n n n	" " " " " " " " " "	X X
Acenaphthylene Anthracene Benzo (a) anthracene Benzo (b) fluoranthene Benzo (ghi) perylene Benzo (k) fluoranthene	ND N	0.0100 0.0100 0.0100 0.0100 0.0100 0.0100 0.0100 0.0100	" " " " " " " " " " " " " " " " " " "	" " " " " " " "	" " " " " " " " " " " " " " " " " " " "	n n n n n n n n n n n n n n n n n n n	n n n n	" " " " " " " " " " " " " "	
Acenaphthylene Anthracene Benzo (a) anthracene Benzo (b) fluoranthene Benzo (ghi) perylene Benzo (k) fluoranthene Chrysene	ND N	0.0100 0.0100 0.0100 0.0100 0.0100 0.0100 0.0100 0.0100 0.0100		" " " " " " " " "	" " " " " " " " " " " " " " " " " " " "	11 11 11 11 11	n n n n	" " " " " " " " " " " " "	
Acenaphthylene Anthracene Benzo (a) anthracene Benzo (a) pyrene Benzo (b) fluoranthene Benzo (ghi) perylene Benzo (k) fluoranthene Chrysene Dibenz (a,h) anthracene	ND N	0.0100 0.0100 0.0100 0.0100 0.0100 0.0100 0.0100 0.0100 0.0100 0.0100			"" "" "" "" "" "" "" "" "" "" "" "" ""	11 11 11 11 11 11 11 11 11 11 11 11 11	n n n n		
Acenaphthylene Anthracene Benzo (a) anthracene Benzo (a) pyrene Benzo (b) fluoranthene Benzo (ghi) perylene Benzo (k) fluoranthene Chrysene Dibenz (a,h) anthracene Fluoranthene	ND N	0.0100 0.0100 0.0100 0.0100 0.0100 0.0100 0.0100 0.0100 0.0100 0.0100 0.0100				11 11 11 11 11 11 11 11 11 11 11 11 11	n n n n n n n n n n n n n n n n n n n		
Acenaphthylene Anthracene Benzo (a) anthracene Benzo (a) pyrene Benzo (b) fluoranthene Benzo (ghi) perylene Benzo (k) fluoranthene Chrysene Dibenz (a,h) anthracene Fluoranthene Fluorene	ND N	0.0100 0.0100 0.0100 0.0100 0.0100 0.0100 0.0100 0.0100 0.0100 0.0100 0.0100 0.0100							

North Creek Analytical - Bothell



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SLR Alaska Project: FIA Former Mark Air Facilities

2525 Blueberry Road, Suite 206 Project Number: 004.0184.00001 Reported: Anchorage, AK/USA 99503 Project Manager: Andy Dimitriou 12/07/04 17:13

#### Polynuclear Aromatic Compounds by GC/MS with Selected Ion Monitoring North Creek Analytical - Bothell

Anchorage

		Reporting							
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Note
WP-8-11 (B4J0416-03) Soil	Sampled: 10/06/04 13:	45 Receive	d: 10/08/04 1	6:30					
Pyrene	ND	0.0100	mg/kg dry	1	4J18059	10/18/04	11/17/04	8270C-SIM	2
Surrogate: p-Terphenyl-d14	126 %	28-161			"	"	"	"	
MW-7-10 (B4J0416-05) Soil	Sampled: 10/05/04 11	:00 Receive	ed: 10/08/04	16:30					
-Methylnaphthalene	0.598	0.0100	mg/kg dry	1	4J18032	10/18/04	11/12/04	8270C-SIM	
2-Methylnaphthalene	0.700	0.0100	"	"	"	"	"	"	
Acenaphthene	ND	0.0100	"	"	"	"	"	"	
Acenaphthylene	ND	0.0100	"	"	"	"	"	"	
Anthracene	ND	0.0100	"	"	"	"	"	"	
Benzo (a) anthracene	0.0114	0.0100	"	"	"	"	"	"	
Benzo (a) pyrene	ND	0.0100	"	"	"	"	"	"	
Benzo (b) fluoranthene	0.0211	0.0100	"	"	"	"	"	"	
Benzo (ghi) perylene	0.0273	0.0100	"	"	"	"	"	"	
Benzo (k) fluoranthene	0.0185	0.0100	"	"	"	"	"	"	
Chrysene	ND	0.0100	"	"	"	"	"	m .	
Dibenz (a,h) anthracene	0.0246	0.0100	"	"	"	"	"	"	
Fluoranthene	ND	0.0100	"	"	"	"	"	"	
Fluorene	ND	0.0100	"	"	"	"	"	"	
ndeno (1,2,3-cd) pyrene	0.0252	0.0100	"	"	"	"	"	"	
Naphthalene	0.755	0.0100	"	"	"	"	"	"	
? Phenanthrene	0.0153	0.0100	"	"	"	"	"	"	
Pyrene	ND	0.0100	"	"	"	"	"	"	
Surrogate: p-Terphenyl-d14	139 %	28-161			"	"	"	"	
MW-1A-10 (B4J0416-06) Soi	l Sampled: 10/05/04 1	3:20 Recei	ved: 10/08/0	4 16:30					
-Methylnaphthalene	0.0244	0.0100	mg/kg dry	1	4J18032	10/18/04	11/12/04	8270C-SIM	
2-Methylnaphthalene	0.0275	0.0100	"	"	"	"	"	"	
Acenaphthene	ND	0.0100	"	"	"	"	"	"	
Acenaphthylene	ND	0.0100	"	"	"	"	"	"	
Anthracene	ND	0.0100	"	"	"	"	"	"	
Benzo (a) anthracene	ND	0.0100	"	"	"	"	"	"	
Benzo (a) pyrene	ND	0.0100	"	"	"	"	"	"	
Benzo (b) fluoranthene	0.0198	0.0100	"	"	"	"	"	"	
Benzo (ghi) perylene	0.0262	0.0100	"	"	"	"	"	"	
Benzo (k) fluoranthene	0.0179	0.0100	"	"	"	"	"	"	
Chrysene	ND	0.0100	"	"	"	"	"	"	
•	0.0222	0.0100	"	"	,,	"	"	"	
Dibenz (a,h) anthracene	0.0233	0.0100							

North Creek Analytical - Bothell



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SLR Alaska Project: FIA Former Mark Air Facilities

2525 Blueberry Road, Suite 206 Project Number: 004.0184.00001 Reported: Anchorage, AK/USA 99503 Project Manager: Andy Dimitriou 12/07/04 17:13

# Polynuclear Aromatic Compounds by GC/MS with Selected Ion Monitoring North Creek Analytical - Bothell

		Reporting							
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-1A-10 (B4J0416-06) Soil	l Sampled: 10/05/04	13:20 Recei	ved: 10/08/0	4 16:30					
Fluorene	ND	0.0100	mg/kg dry	1	4J18032	10/18/04	11/12/04	8270C-SIM	
Indeno (1,2,3-cd) pyrene	0.0243	0.0100	"	"	"	"	"	"	
Naphthalene	0.0269	0.0100	"	"	"	"	"	"	
Phenanthrene	0.0145	0.0100	"	"	"	"	"	"	
Pyrene	ND	0.0100	"	"	"	"	"	H	
Surrogate: p-Terphenyl-d14	149 %	28-161			"	"	"	"	
MW-8-13 (B4J0416-07) Soil	Sampled: 10/05/04 16	:50 Receive	ed: 10/08/04	16:30					
1-Methylnaphthalene	0.0121	0.0100	mg/kg dry	1	4J18032	10/18/04	11/12/04	8270C-SIM	
2-Methylnaphthalene	0.0139	0.0100	"	"	"	"	"	"	
Acenaphthene	ND	0.0100	"	"	"	"	"	"	
Acenaphthylene	ND	0.0100	"	"	"	"	"	"	
Anthracene	ND	0.0100	"	"	"	"	"	"	
Benzo (a) anthracene	ND	0.0100	"	"	"	"	"	"	
Benzo (a) pyrene	ND	0.0100	"	"	"	"	"	"	
Benzo (b) fluoranthene	ND	0.0100	"	"	"	"	"	"	
Benzo (ghi) perylene	0.0264	0.0100	"	"	"	"	"	"	
Benzo (k) fluoranthene	0.0183	0.0100	"	"	"	"	"	"	
Chrysene	ND	0.0100	"	"	"	"	"	"	
Dibenz (a,h) anthracene	0.0230	0.0100	"	"	"	"	"	"	
Fluoranthene	ND	0.0100	"	"	"	"	"	"	
Fluorene	ND	0.0100	"	"	"	"	"	"	
Indeno (1,2,3-cd) pyrene	0.0246	0.0100	"	"	"	"	"	"	
Naphthalene	0.0138	0.0100	"	"	"	"	"	"	
Phenanthrene	0.0132	0.0100	"	"	"	"	"	"	
Pyrene	ND	0.0100	n n	"	"	"	"	"	
Surrogate: p-Terphenyl-d14	148 %	28-161			"	"	"	"	

North Creek Analytical - Bothell

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SLR Alaska Project: FIA Former Mark Air Facilities

Reporting

2525 Blueberry Road, Suite 206 Project Number: 004.0184.00001 Reported: Anchorage, AK/USA 99503 Project Manager: Andy Dimitriou 12/07/04 17:13

#### Polynuclear Aromatic Compounds by GC/MS with Selected Ion Monitoring North Creek Analytical - Bothell

Spokane

Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Note
WP-13-12 (B4J0416-08) Soil	Sampled: 10/04/04 13	:50 Receiv	ed: 10/08/04	16:30					
1-Methylnaphthalene	ND	0.0100	mg/kg dry	1	4J18032	10/18/04	11/12/04	8270C-SIM	
2-Methylnaphthalene	ND	0.0100	m .	"	"	"	"	"	
Acenaphthene	ND	0.0100	"	"	"	"	"	"	
Acenaphthylene	ND	0.0100	m .	"	"	"	"	"	
Anthracene	0.0180	0.0100	m .	"	"	"	"	"	
Benzo (a) anthracene	0.0309	0.0100	"	"	"	"	"	"	
Benzo (a) pyrene	0.0299	0.0100	m .	"	"	"	"	"	
Benzo (b) fluoranthene	0.0367	0.0100	m .	"	"	"	"	"	
Benzo (ghi) perylene	0.0418	0.0100	"	"	"	"	"	m .	
Benzo (k) fluoranthene	0.0280	0.0100	m .	"	"	"	"	"	
Chrysene	0.0360	0.0100	"	"	"	"	"	m .	
Dibenz (a,h) anthracene	0.0258	0.0100	"	"	"	"	"	m .	
Fluoranthene	0.0670	0.0100	m .	"	"	"	"	"	
Fluorene	ND	0.0100	"	"	"	"	"	n .	
Indeno (1,2,3-cd) pyrene	0.0348	0.0100	m .	"	"	"	"	"	
Naphthalene	ND	0.0100	m .	"	"	"	"	"	
Phenanthrene	0.0651	0.0100	m .	"	"	"	"	"	
Pyrene	0.0734	0.0100	"	"	"	"	"	n .	
Surrogate: p-Terphenyl-d14	140 %	28-161			"	"	"	"	
WP-4M-11 (B4J0416-10) Soil	Sampled: 10/07/04 0	9:50 Recei	ved: 10/08/0	4 16:30					
-	•					10/10/01			
1-Methylnaphthalene	8.39	0.200	mg/kg dry	20	4J18059	10/18/04	11/17/04	8270C-SIM	
1-Methylnaphthalene 2-Methylnaphthalene		0.200 0.200	mg/kg dry	20	4J18059	10/18/04	11/17/04	8270C-SIM	
	8.39								
2-Methylnaphthalene	8.39 10.9	0.200	"	"	"	"	"	n .	
2-Methylnaphthalene Acenaphthene	8.39 10.9 ND	0.200 0.200	"	"	"	"	"	"	
2-Methylnaphthalene Acenaphthene Acenaphthylene	8.39 10.9 ND ND	0.200 0.200 0.200	" "	" "	" "	" "	" "	" " "	
2-Methylnaphthalene Acenaphthene Acenaphthylene Anthracene	8.39 10.9 ND ND ND	0.200 0.200 0.200 0.200	" "	" "	" "	" " "	" "	11 11 11	X
2-Methylnaphthalene Acenaphthene Acenaphthylene Anthracene Benzo (a) anthracene	8.39 10.9 ND ND ND ND	0.200 0.200 0.200 0.200 0.200	" " " " " " " " " " " " " " " " " " " "	" " " " "	" " " " " " " " " " " " " " " " " " " "	" " " " " " " " " " " " " " " " " " " "	" " " " " " " " " " " " " " " " " " " "	11 11 11	X
2-Methylnaphthalene Acenaphthene Acenaphthylene Anthracene Benzo (a) anthracene Benzo (a) pyrene	8.39 10.9 ND ND ND ND ND	0.200 0.200 0.200 0.200 0.200 0.200	11 11 11 11	" " " " " " " " " " " " " " " " " " " "	" " " " " " " " " " " " " " " " " " " "	" " " " " " " " " " " " " " " " " " " "	" " " " "	" " " " " " " " " " " " " " " " " " " "	X
2-Methylnaphthalene Acenaphthene Acenaphthylene Anthracene Benzo (a) anthracene Benzo (a) pyrene Benzo (b) fluoranthene	8.39 10.9 ND ND ND ND ND ND	0.200 0.200 0.200 0.200 0.200 0.200 0.200	" " " " " " " " " " " " " " " " " " " "	" " " " " " " " " " " " " " " " " " " "	11 11 11 11	" " " " " " " " " " " " " " " " " " " "	" " " " " "	11 11 11 11	X
2-Methylnaphthalene Acenaphthene Acenaphthylene Anthracene Benzo (a) anthracene Benzo (a) pyrene Benzo (b) fluoranthene Benzo (ghi) perylene	8.39 10.9 ND ND ND ND ND ND ND	0.200 0.200 0.200 0.200 0.200 0.200 0.200 0.200	11 11 11 11 11	" " " " " " " " " " " " " " " " " " " "	11 11 11 11 11	11 11 11 11 11 11 11 11 11 11 11 11 11	" " " " " "	11 11 11 11 11	X
2-Methylnaphthalene Acenaphthene Acenaphthylene Anthracene Benzo (a) anthracene Benzo (b) fluoranthene Benzo (ghi) perylene Benzo (k) fluoranthene	8.39 10.9 ND	0.200 0.200 0.200 0.200 0.200 0.200 0.200 0.200 0.200	11 11 11 11 11	" " " " " " " " " " " " " " " " " " " "	" " " " " " " " " " " "	11 11 11 11 11 11 11 11 11 11 11 11 11	" " " " " " "		
2-Methylnaphthalene Acenaphthene Acenaphthylene Anthracene Benzo (a) anthracene Benzo (b) fluoranthene Benzo (ghi) perylene Benzo (k) fluoranthene Chrysene	8.39 10.9 ND	0.200 0.200 0.200 0.200 0.200 0.200 0.200 0.200 0.200 0.200		" " " " " " " "	" " " " " " " " " " " "	11 11 11 11 11 11 11 11 11 11 11 11 11	" " " " " " " "	11 11 11 11 11 11	
2-Methylnaphthalene Acenaphthene Acenaphthylene Anthracene Benzo (a) anthracene Benzo (a) pyrene Benzo (b) fluoranthene Benzo (ghi) perylene Benzo (k) fluoranthene Chrysene Dibenz (a,h) anthracene	8.39 10.9 ND	0.200 0.200 0.200 0.200 0.200 0.200 0.200 0.200 0.200 0.200 0.200 0.200		"" "" "" "" "" "" "" "" "" "" "" "" ""	" " " " " " " " " " " " " " " " "	11 11 11 11 11 11 11 11 11 11 11 11 11			
2-Methylnaphthalene Acenaphthene Acenaphthylene Anthracene Benzo (a) anthracene Benzo (a) pyrene Benzo (b) fluoranthene Benzo (ghi) perylene Benzo (k) fluoranthene Chrysene Dibenz (a,h) anthracene Fluorene	8.39 10.9 ND	0.200 0.200 0.200 0.200 0.200 0.200 0.200 0.200 0.200 0.200 0.200 0.200 0.200		"" "" "" "" "" "" "" "" "" "" "" "" ""					
2-Methylnaphthalene Acenaphthene Acenaphthylene Anthracene Benzo (a) anthracene Benzo (a) pyrene Benzo (b) fluoranthene Benzo (ghi) perylene Benzo (k) fluoranthene Chrysene Dibenz (a,h) anthracene Fluoranthene	8.39 10.9 ND	0.200 0.200 0.200 0.200 0.200 0.200 0.200 0.200 0.200 0.200 0.200 0.200 0.200 0.200		"" "" "" "" "" "" "" "" "" "" "" "" ""					

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SLR Alaska Project: FIA Former Mark Air Facilities

2525 Blueberry Road, Suite 206 Project Number: 004.0184.00001 Reported: Anchorage, AK/USA 99503 Project Manager: Andy Dimitriou 12/07/04 17:13

# Polynuclear Aromatic Compounds by GC/MS with Selected Ion Monitoring North Creek Analytical - Bothell

Spokane

		Reporting							
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Note
WP-4M-11 (B4J0416-10) Soil	Sampled: 10/07/04 0	9:50 Recei	ved: 10/08/04	4 16:30					
Pyrene	ND	0.200	mg/kg dry	20	4J18059	10/18/04	11/17/04	8270C-SIM	X
Surrogate: p-Terphenyl-d14	106 %	28-161			"	"	"	"	
WP-3A-10 (B4J0416-11) Soil	Sampled: 10/07/04 1	1:25 Receiv	ed: 10/08/04	16:30					
1-Methylnaphthalene	14.5	0.200	mg/kg dry	20	4J18059	10/18/04	11/17/04	8270C-SIM	
2-Methylnaphthalene	18.8	0.200	"	"	"	"	"	"	
Acenaphthene	ND	0.200	"	"	"	"	"	"	
Acenaphthylene	ND	0.200	"	"	"	"	"	"	
Anthracene	ND	0.200	"	"	"	"	"	"	
Benzo (a) anthracene	ND	0.200	"	"	"	"	"	"	
Benzo (a) pyrene	ND	0.200	"	"	"	"	"	"	Х
Benzo (b) fluoranthene	ND	0.200	"	"	"	"	"	"	
Benzo (ghi) perylene	ND	0.200	"	"	"	"	"	"	
Benzo (k) fluoranthene	ND	0.200	"	"	"	"	"	"	
Chrysene	ND	0.200	"	"	"	"	"	"	X
Dibenz (a,h) anthracene	ND	0.200	"	"	"	"	"	"	
Fluoranthene	ND	0.200	"	"	"	"	"	"	
Fluorene	0.543	0.200	"	"	"	"	"	"	
Indeno (1,2,3-cd) pyrene	ND	0.200	"	"	"	"	"	"	
Naphthalene	11.6	0.200	"	"	"	"	"	"	
Phenanthrene	ND	0.200	"	"	"	"	"	"	
Pyrene	ND	0.200	"	"	"	"	"	"	Х
Surrogate: p-Terphenyl-d14	140 %	28-161			"	"	"	"	

North Creek Analytical - Bothell

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SLR Alaska Project: FIA Former Mark Air Facilities

2525 Blueberry Road, Suite 206 Project Number: 004.0184.00001 Reported: Anchorage, AK/USA 99503 Project Manager: Andy Dimitriou 12/07/04 17:13

# Physical Parameters by APHA/ASTM/EPA Methods North Creek Analytical - Bothell

Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sampled: 10/06/04 16:00	Received:	: 10/08/04	16:30					
88.3	1.00	%	1	4J19014	10/19/04	10/19/04	BSOPSPL003R08	
Sampled: 10/06/04 16:30	Received:	10/08/04	16:30					
84.4	1.00	%	1	4J19014	10/19/04	10/19/04	BSOPSPL003R08	
Sampled: 10/06/04 13:45	Received:	10/08/04	16:30					
83.3	1.00	%	1	4J19032	10/19/04	10/20/04	BSOPSPL003R08	
Sampled: 10/06/04 11:00	Received:	10/08/04	16:30					
92.5	1.00	%	1	4J20012	10/20/04	10/20/04	BSOPSPL003R08	
Sampled: 10/05/04 11:00	Received	l: 10/08/0	4 16:30					
76.1	1.00	%	1	4J18053	10/18/04	10/19/04	BSOPSPL003R08	
il Sampled: 10/05/04 13:2	0 Receive	ed: 10/08/	04 16:30					
77.5	1.00	%	1	4J18053	10/18/04	10/19/04	BSOPSPL003R08	
Sampled: 10/05/04 16:50	Received	l: 10/08/0	1 16:30					
78.1	1.00	%	1	4J18053	10/18/04	10/19/04	BSOPSPL003R08	
		% d: 10/08/0	1 <b>4 16:30</b>	4J18053	10/18/04	10/19/04	BSOPSPL003R08	
78.1			1 4 16:30	4J18053 4J18053	10/18/04	10/19/04	BSOPSPL003R08 BSOPSPL003R08	
78.1 Sampled: 10/04/04 13:50	Received	1: 10/08/0	1					
	Result  Sampled: 10/06/04 16:00 88.3  Sampled: 10/06/04 16:30 84.4  Sampled: 10/06/04 13:45 83.3  Sampled: 10/06/04 11:00 92.5  Sampled: 10/05/04 11:00 76.1  il Sampled: 10/05/04 13:2 77.5	Sampled: 10/06/04 16:00       Received: 88.3       1.00         Sampled: 10/06/04 16:30       Received: 84.4       1.00         Sampled: 10/06/04 13:45       Received: 83.3       1.00         Sampled: 10/06/04 11:00       Received: 92.5       1.00         Sampled: 10/05/04 11:00       Received: 76.1       1.00         il Sampled: 10/05/04 13:20       Received: 77.5       1.00	Result         Limit         Units           Sampled: 10/06/04 16:00         Received: 10/08/04           88.3         1.00         %           Sampled: 10/06/04 16:30         Received: 10/08/04           84.4         1.00         %           Sampled: 10/06/04 13:45         Received: 10/08/04           83.3         1.00         %           Sampled: 10/06/04 11:00         Received: 10/08/04           92.5         1.00         %           Sampled: 10/05/04 11:00         Received: 10/08/04           76.1         1.00         %           il Sampled: 10/05/04 13:20         Received: 10/08/04           77.5         1.00         %	Result         Limit         Units         Dilution           Sampled: 10/06/04 16:00         Received: 10/08/04 16:30         1           Sampled: 10/06/04 16:30         Received: 10/08/04 16:30         1           Sampled: 10/06/04 13:45         Received: 10/08/04 16:30         1           Sampled: 10/06/04 11:00         Received: 10/08/04 16:30         1           Sampled: 10/05/04 11:00         Received: 10/08/04 16:30         1           Sampled: 10/05/04 11:00         Received: 10/08/04 16:30         1           T6.1         1.00         %         1           Sampled: 10/05/04 13:20         Received: 10/08/04 16:30         1           77.5         1.00         %         1	Result         Limit         Units         Dilution         Batch           Sampled: 10/06/04 16:00         Received: 10/08/04 16:30         4J19014           Sampled: 10/06/04 16:30         Received: 10/08/04 16:30         4J19014           Sampled: 10/06/04 13:45         Received: 10/08/04 16:30         4J19014           Sampled: 10/06/04 11:00         Received: 10/08/04 16:30         4J19032           Sampled: 10/05/04 11:00         Received: 10/08/04 16:30         4J20012           Sampled: 10/05/04 11:00         Received: 10/08/04 16:30         4J18053           il Sampled: 10/05/04 13:20         Received: 10/08/04 16:30         4J18053	Result         Limit         Units         Dilution         Batch         Prepared           Sampled: 10/06/04 16:00         Received: 10/08/04 16:30         4J19014         10/19/04           Sampled: 10/06/04 16:30         Received: 10/08/04 16:30         4J19014         10/19/04           Sampled: 10/06/04 13:45         Received: 10/08/04 16:30         4J19032         10/19/04           Sampled: 10/06/04 11:00         Received: 10/08/04 16:30         1         4J20012         10/20/04           Sampled: 10/05/04 11:00         Received: 10/08/04 16:30         1         4J18053         10/18/04           Sampled: 10/05/04 13:20         Received: 10/08/04 16:30         1         4J18053         10/18/04           1         Sampled: 10/05/04 13:20         Received: 10/08/04 16:30         1         4J18053         10/18/04	Sampled: 10/06/04 16:00         Received: 10/08/04 16:30         Holiton         Batch         Prepared         Analyzed           88.3         1.00         %         1         4J19014         10/19/04         10/19/04           Sampled: 10/06/04 16:30         Received: 10/08/04 16:30         3         4J19014         10/19/04         10/19/04           Sampled: 10/06/04 13:45         Received: 10/08/04 16:30         3         1.00         %         1         4J19032         10/19/04         10/20/04           Sampled: 10/06/04 11:00         Received: 10/08/04 16:30         3         1         4J20012         10/20/04         10/20/04           Sampled: 10/05/04 11:00         Received: 10/08/04 16:30         3         10/18/04         10/19/04           3 Sampled: 10/05/04 11:20         Received: 10/08/04 16:30         3         1         4J18053         10/18/04         10/19/04           3 Sampled: 10/05/04 13:20         Received: 10/08/04 16:30         4         4J18053         10/18/04         10/19/04	Result         Limit         Units         Dilution         Batch         Prepared         Analyzed         Method           Sampled: 10/06/04 16:00         Received: 10/08/04 16:30         Sampled: 10/06/04 16:30         Received: 10/08/04 16:30         Invasion of the prepared of

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SLR Alaska Project: FIA Former Mark Air Facilities

2525 Blueberry Road, Suite 206 Project Number: 004.0184.00001 Reported: Anchorage, AK/USA 99503 Project Manager: Andy Dimitriou 12/07/04 17:13

#### Physical Parameters by APHA/ASTM/EPA Methods North Creek Analytical - Bothell

Spokane

	Re	porting							
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
WP-4M-11 (B4J0416-10) Soi	l Sampled: 10/07/04 09:50	Receiv	ed: 10/08/	04 16:30					
Dry Weight	95.9	1.00	%	1	4J18053	10/18/04	10/19/04	BSOPSPL003R08	
WP-3A-10 (B4J0416-11) Soil	Sampled: 10/07/04 11:25	Receive	ed: 10/08/0	04 16:30					
Dry Weight	94.0	1.00	%	1	4J18053	10/18/04	10/19/04	BSOPSPL003R08	
WP-6-10 (B4J0416-12) Soil	Sampled: 10/07/04 12:10	Received	: 10/08/04	16:30					
Dry Weight	81.5	1.00	%	1	4J18053	10/18/04	10/19/04	BSOPSPL003R08	

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SLR Alaska Project: FIA Former Mark Air Facilities

2525 Blueberry Road, Suite 206 Project Number: 004.0184.00001 Reported: Anchorage, AK/USA 99503 Project Manager: Andy Dimitriou 12/07/04 17:13

# Gasoline Range Hydrocarbons (n-Hexane to <n-Decane) by AK101 - Quality Control North Creek Analytical - Bothell

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch 4J22005: Prepared 10/22/04	Using EP	A 5030B	(MeOH)							
Blank (4J22005-BLK1)										
Gasoline Range Hydrocarbons	ND	5.00	mg/kg							
Surrogate: 4-BFB (FID)	2.05		"	2.40		85.4	60-120			
Surrogate: a,a,a-TFT (FID)	2.34		"	2.40		97.5	50-150			
LCS (4J22005-BS1)										
Gasoline Range Hydrocarbons	24.0	5.00	mg/kg	25.1		95.6	60-120			
Surrogate: 4-BFB (FID)	2.23		"	2.40		92.9	60-120			
Surrogate: a,a,a-TFT (FID)	2.45		"	2.40		102	50-150			
LCS Dup (4J22005-BSD1)										
Gasoline Range Hydrocarbons	24.3	5.00	mg/kg	25.1		96.8	60-120	1.24	20	
Surrogate: 4-BFB (FID)	2.34		"	2.40		97.5	60-120			
Surrogate: a,a,a-TFT (FID)	2.54		"	2.40		106	50-150			

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SLR Alaska Project: FIA Former Mark Air Facilities

2525 Blueberry Road, Suite 206 Project Number: 004.0184.00001 Reported: Anchorage, AK/USA 99503 Project Manager: Andy Dimitriou 12/07/04 17:13

# Gasoline Hydrocarbons (n-Hexane to <n-Decane) and BTEX by AK101/EPA 8021B - Quality Control North Creek Analytical - Bothell

			Reporting		Spike	Source		%REC		RPD	
Analyte		Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch 4J18022:	Prepared 10/18/04	Using E	PA 5030B	(МеОН)							
Blank (4J18022-Bl	LK1)										
Gasoline Range Hydro	ocarbons	ND	5.00	mg/kg							
Benzene		ND	0.0200	"							
Toluene		ND	0.0500	"							
Ethylbenzene		ND	0.0500	"							
Xylenes (total)		ND	0.100	"							
Surrogate: 4-BFB (FL	D)	2.14		"	2.40		89.2	60-120			
Surrogate: a,a,a-TFT	(FID)	2.44		"	2.40		102	50-150			
Surrogate: 4-BFB (PI	D)	2.09		"	2.40		87.1	60-120			
Surrogate: a,a,a-TFT	(PID)	2.38		"	2.40		99.2	50-150			
LCS (4J18022-BS1	1)										
Gasoline Range Hydro	ocarbons	26.0	5.00	mg/kg	25.1		104	60-120			
Benzene		0.289	0.0200	"	0.310		93.2	75-125			
Toluene		1.67	0.0500	"	1.75		95.4	75-125			
Ethylbenzene		0.409	0.0500	"	0.419		97.6	75-125			
Xylenes (total)		2.01	0.100	"	2.03		99.0	75-125			
Surrogate: 4-BFB (FI	D)	2.48		"	2.40		103	60-120			
Surrogate: a,a,a-TFT	(FID)	2.57		"	2.40		107	50-150			
Surrogate: 4-BFB (PL	D)	2.14		"	2.40		89.2	60-120			
Surrogate: a,a,a-TFT	(PID)	2.36		"	2.40		98.3	50-150			
LCS Dup (4J18022	2-BSD1)										
Gasoline Range Hydro	ocarbons	27.0	5.00	mg/kg	25.1		108	60-120	3.77	20	
Benzene		0.304	0.0200	"	0.310		98.1	75-125	5.06	25	
Toluene		1.74	0.0500	"	1.75		99.4	75-125	4.11	25	
Ethylbenzene		0.425	0.0500	"	0.419		101	75-125	3.84	25	
Xylenes (total)		2.11	0.100	"	2.03		104	75-125	4.85	25	
Surrogate: 4-BFB (FI	D)	2.49		"	2.40		104	60-120			
Surrogate: a,a,a-TFT	(FID)	2.56		"	2.40		107	50-150			
Surrogate: 4-BFB (PL	D)	2.13		"	2.40		88.8	60-120			
Surrogate: a,a,a-TFT	(PID)	2.34		"	2.40		97.5	50-150			

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SLR Alaska Project: FIA Former Mark Air Facilities

2525 Blueberry Road, Suite 206 Project Number: 004.0184.00001 Reported: Anchorage, AK/USA 99503 Project Manager: Andy Dimitriou 12/07/04 17:13

# Diesel Hydrocarbons (C10-C25) by AK102 - Quality Control North Creek Analytical - Bothell

			Reporting		Spike	Source		%REC		RPD	
Analyte		Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch 4J15001:	Prepared 10/15/04	Using El	PA 3550B								
Blank (4J15001-BI	LK1)										
Diesel Range Hydroca	rbons	ND	4.00	mg/kg							
Surrogate: 2-FBP		6.18		"	8.40		73.6	50-150			
LCS (4J15001-BS1	)										
Diesel Range Hydroca	rbons	61.6	4.00	mg/kg	74.8		82.4	75-125			
Surrogate: 2-FBP		6.43		"	8.40		76.5	50-150			
LCS Dup (4J15001	-BSD1)										
Diesel Range Hydroca	rbons	68.4	4.00	mg/kg	74.8		91.4	75-125	10.5	20	
Surrogate: 2-FBP		6.87		"	8.40		81.8	50-150			
Matrix Spike (4J15	5001-MS1)					Source: E	84J0501-0	19			
Diesel Range Hydroca	rbons	144	9.24	mg/kg dry	173	7.60	78.8	75-125			
Surrogate: 2-FBP		16.8		"	19.4		86.6	50-150			
Matrix Spike Dup	(4J15001-MSD1)					Source: E	34J0501-0	19			
Diesel Range Hydroca	rbons	150	9.24	mg/kg dry	173	7.60	82.3	75-125	4.08	20	
Surrogate: 2-FBP		16.9		"	19.4		87.1	50-150			
Batch 4J20022:	Prepared 10/20/04	Using El	PA 3550B								
Blank (4J20022-BI	LK1)										
Diesel Range Hydroca	rbons	ND	4.00	mg/kg							
Surrogate: 2-FBP		6.18		"	8.40		73.6	50-150			
LCS (4J20022-BS1	)										
Diesel Range Hydroca	rbons	68.0	4.00	mg/kg	74.8		90.9	75-125			
Surrogate: 2-FBP		6.81		"	8.40		81.1	50-150			

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North Creek Analytical, Inc. **Environmental Laboratory Network** Amar Gill, Project Manager



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SLR Alaska Project: FIA Former Mark Air Facilities

2525 Blueberry Road, Suite 206 Project Number: 004.0184.00001 Reported: Anchorage, AK/USA 99503 Project Manager: Andy Dimitriou 12/07/04 17:13

# Diesel Hydrocarbons (C10-C25) by AK102 - Quality Control North Creek Analytical - Bothell

	Reporting			Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch 4J20022: Prepared 10/20/04	Using EP	A 3550B								
LCS Dup (4J20022-BSD1)										
Diesel Range Hydrocarbons	72.0	4.00	mg/kg	74.8		96.3	75-125	5.71	20	
Surrogate: 2-FBP	7.58		"	8.40		90.2	50-150			
Matrix Spike (4J20022-MS1)					Source: E	<b>34J0416-</b> 0	)3			
Diesel Range Hydrocarbons	73.9	4.00	mg/kg dry	88.0	ND	84.0	75-125			
Surrogate: 2-FBP	7.68		"	9.89		77.7	50-150			
Matrix Spike Dup (4J20022-MSD1)					Source: E	34J0416-0	)3			
Diesel Range Hydrocarbons	77.4	4.00	mg/kg dry	88.0	ND	88.0	75-125	4.63	20	
Surrogate: 2-FBP	7.76		"	9.89		78.5	50-150			

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SLR Alaska Project: FIA Former Mark Air Facilities

2525 Blueberry Road, Suite 206 Project Number: 004.0184.00001 Reported: Anchorage, AK/USA 99503 Project Manager: Andy Dimitriou 12/07/04 17:13

# Diesel Hydrocarbons (C10-C25) and Heavy Oil (C25-C36) by AK102 and AK103 - Quality Control **North Creek Analytical - Bothell**

Anchorage

Batch 4J18058:         Prepared 10/18/04         Using EPA 3550B           Blank (4J18058-BLK1)         Diesel Range Hydrocarbons         ND 4.00 mg/kg           Residual Range Organics         ND 25.0 "           Surrogate: 2-FBP         7.59 " 8.40           Surrogate: Octacosane         9.66 " 8.00	90.4	Limits	RPD	Limit	Notes
Blank (4J18058-BLK1)           Diesel Range Hydrocarbons         ND         4.00         mg/kg           Residual Range Organics         ND         25.0         "           Surrogate: 2-FBP         7.59         "         8.40	00.4				
Diesel Range Hydrocarbons ND 4.00 mg/kg Residual Range Organics ND 25.0 "  Surrogate: 2-FBP 7.59 " 8.40	00.4				
Residual Range Organics         ND         25.0         "           Surrogate: 2-FBP         7.59         "         8.40	00.4				
Surrogate: 2-FBP 7.59 " 8.40	00.4				
	00.4				
Surrogate: Octacosane 9.66 " 8.00	90.4	50-150			
· ·	121	50-150			
LCS (4J18058-BS1)					
Diesel Range Hydrocarbons 71.0 4.00 mg/kg 74.8	94.9	75-125			
Surrogate: 2-FBP 7.10 " 8.40	84.5	50-150			
LCS (4J18058-BS2)					
Residual Range Organics 75.1 25.0 mg/kg 80.0	93.9	60-120			
Surrogate: Octacosane 8.91 " 8.00	111	50-150			-
LCS Dup (4J18058-BSD1)					
Diesel Range Hydrocarbons 71.3 4.00 mg/kg 74.8	95.3	75-125	0.422	20	
Surrogate: 2-FBP 7.23 " 8.40	86.1	50-150			
LCS Dup (4J18058-BSD2)					
Residual Range Organics 72.4 25.0 mg/kg 80.0	90.5	60-120	3.66	20	
Surrogate: Octacosane 8.77 " 8.00	110	50-150			
Matrix Spike (4J18058-MS1) Source	: <b>B4J0416</b> -1	10			
Diesel Range Hydrocarbons 750 40.0 mg/kg dry 77.4 805	-71.1	75-125			Q-0
Surrogate: 2-FBP 6.17 " 8.69	71.0	50-150			
Matrix Spike Dup (4J18058-MSD1) Source:	: <b>B4J0416</b> -1	10			
Diesel Range Hydrocarbons 894 40.0 mg/kg dry 78.9 805	113	75-125	17.5	20	
Surrogate: 2-FBP 8.00 " 8.87	90.2	50-150			

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%REC

RPD

SLR Alaska Project: FIA Former Mark Air Facilities

Reporting

2525 Blueberry Road, Suite 206 Project Number: 004.0184.00001 Reported: Anchorage, AK/USA 99503 Project Manager: Andy Dimitriou 12/07/04 17:13

#### BTEX by EPA Method 8021B - Quality Control North Creek Analytical - Bothell

Spike

Analyte		Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch 4J22005:	Prepared 10/22/04	Using EF	PA 5030B	(МеОН)							
Blank (4J22005-Bl	LK1)										
Benzene		ND	0.0150	mg/kg							
Toluene		ND	0.0500	"							
Ethylbenzene		ND	0.0500	"							
Xylenes (total)		ND	0.100	"							
Surrogate: 4-BFB (PII	D)	2.10		"	2.40		87.5	60-120			
Surrogate: a,a,a-TFT	(PID)	2.36		"	2.40		98.3	50-150			
LCS (4J22005-BS1											
Benzene		0.300	0.0150	mg/kg	0.310		96.8	75-125			
Toluene		1.72	0.0500	"	1.75		98.3	75-125			
Ethylbenzene		0.417	0.0500	"	0.419		99.5	75-125			
Xylenes (total)		2.08	0.100	"	2.03		102	75-125			
Surrogate: 4-BFB (PII	D)	2.12		"	2.40		88.3	60-120			
Surrogate: a,a,a-TFT	(PID)	2.46		"	2.40		102	50-150			
LCS Dup (4J22005	5-BSD1)										
Benzene		0.291	0.0150	mg/kg	0.310		93.9	75-125	3.05	25	
Toluene		1.66	0.0500	"	1.75		94.9	75-125	3.55	25	
Ethylbenzene		0.405	0.0500	"	0.419		96.7	75-125	2.92	25	
Xylenes (total)		2.01	0.100	"	2.03		99.0	75-125	3.42	25	
Surrogate: 4-BFB (PI	D)	2.11		"	2.40		87.9	60-120			
Surrogate: a,a,a-TFT	(PID)	2.39		"	2.40		99.6	50-150			

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SLR Alaska Project: FIA Former Mark Air Facilities

Reporting

2525 Blueberry Road, Suite 206 Project Number: 004.0184.00001 Reported: Anchorage, AK/USA 99503 Project Manager: Andy Dimitriou 12/07/04 17:13

# Total Metals by EPA 6000/7000 Series Methods - Quality Control North Creek Analytical - Bothell

Anchorage

Spike

Analyte		Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch 4J18044:	Prepared 10/18/04	Using EP	A 3050B								
Blank (4J18044-BL	.K1)										
Lead		ND	0.500	mg/kg							
LCS (4J18044-BS1)	)										
Lead		40.6	0.500	mg/kg	40.0		102	80-120			
LCS Dup (4J18044-	-BSD1)										
Lead		39.6	0.500	mg/kg	38.5		103	80-120	2.49	20	
Matrix Spike (4J18	044-MS1)					Source: B	34J0394-1	14			
Lead		48.6	0.500	mg/kg dry	40.7	8.84	97.7	62-137			
Matrix Spike Dup (	(4J18044-MSD1)					Source: B	34J0394-1	14			
Lead		60.2	0.500	mg/kg dry	44.0	8.84	117	62-137	21.3	30	
Post Spike (4J1804	4-PS1)					Source: B	34J0394-1	14			
Lead		0.114		ug/ml	0.0995	0.0166	97.9	75-125			

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SLR Alaska Project: FIA Former Mark Air Facilities

2525 Blueberry Road, Suite 206 Project Number: 004.0184.00001 Reported: Anchorage, AK/USA 99503 Project Manager: Andy Dimitriou 12/07/04 17:13

# Volatile Organic Compounds by EPA Method 8260B - Quality Control **North Creek Analytical - Bothell**

Anchorage

	Reporting			Spike	Source %REC			RPD		
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes

Batch 4J14041:	<b>Prepared 10/14/04</b>	Using EPA 5030B	[MeOH]

Blank (4J14041-BLK1)	ND	1.00	п
Acetone	ND	1.00	mg/kg
Benzene	ND	0.0200	"
Bromobenzene	ND	0.100	
Bromochloromethane	ND	0.100	"
Bromodichloromethane	ND	0.100	"
Bromoform	ND	0.100	"
Bromomethane	ND	0.100	"
2-Butanone	ND	1.00	"
n-Butylbenzene	ND	0.100	"
sec-Butylbenzene	ND	0.100	"
tert-Butylbenzene	ND	0.100	"
Carbon disulfide	ND	0.100	"
Carbon tetrachloride	ND	0.100	"
Chlorobenzene	ND	0.100	"
Chloroethane	ND	0.100	"
Chloroform	ND	0.100	"
Chloromethane	ND	0.500	"
2-Chlorotoluene	ND	0.100	"
4-Chlorotoluene	ND	0.100	"
Dibromochloromethane	ND	0.100	"
1,2-Dibromo-3-chloropropane	ND	0.500	"
1,2-Dibromoethane	ND	0.100	"
Dibromomethane	ND	0.100	"
1,2-Dichlorobenzene	ND	0.100	"
1,3-Dichlorobenzene	ND	0.100	"
1,4-Dichlorobenzene	ND	0.100	"
Dichlorodifluoromethane	ND	0.100	"
1,1-Dichloroethane	ND	0.100	"
1,2-Dichloroethane	ND	0.100	"
1,1-Dichloroethene	ND	0.100	"
cis-1,2-Dichloroethene	ND	0.100	"
trans-1,2-Dichloroethene	ND	0.100	"
1,2-Dichloropropane	ND	0.100	"
1,3-Dichloropropane	ND	0.100	"
2,2-Dichloropropane	ND	0.100	"
2,2 Diemoropropane	ND	0.100	

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SLR Alaska Project: FIA Former Mark Air Facilities

2525 Blueberry Road, Suite 206 Project Number: 004.0184.00001 Reported: Anchorage, AK/USA 99503 Project Manager: Andy Dimitriou 12/07/04 17:13

# Volatile Organic Compounds by EPA Method 8260B - Quality Control North Creek Analytical - Bothell

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes

Batch 4J14041:	Prepared 10/14/04	Using EPA 5030B	[MeOH]

Blank (4J14041-BLK1)					
1,1-Dichloropropene	ND	0.100	mg/kg		
cis-1,3-Dichloropropene	ND	0.100	"		
trans-1,3-Dichloropropene	ND	0.100	"		
Ethylbenzene	ND	0.100	"		
Hexachlorobutadiene	ND	0.100	"		
Methyl tert-butyl ether	ND	0.500	"		
2-Hexanone	ND	1.00	"		
Isopropylbenzene	ND	0.100	"		
p-Isopropyltoluene	ND	0.100	"		
4-Methyl-2-pentanone	ND	1.00	"		
Methylene chloride	ND	1.00	"		
Naphthalene	ND	0.100	"		
n-Propylbenzene	ND	0.100	"		
Styrene	ND	0.100	"		
1,2,3-Trichlorobenzene	ND	0.100	"		
1,2,4-Trichlorobenzene	ND	0.100	"		
1,1,1,2-Tetrachloroethane	ND	0.100	"		
1,1,2,2-Tetrachloroethane	ND	0.100	"		
Tetrachloroethene	ND	0.100	"		
Toluene	ND	0.100	"		
1,1,1-Trichloroethane	ND	0.100	"		
1,1,2-Trichloroethane	ND	0.100	"		
Trichloroethene	ND	0.100	"		
Trichlorofluoromethane	ND	0.100	"		
1,2,3-Trichloropropane	ND	0.100	"		
1,2,4-Trimethylbenzene	ND	0.100	"		
1,3,5-Trimethylbenzene	ND ND	0.100	"		
Vinyl chloride	ND ND	0.100	"		
o-Xylene	ND ND	0.100	,,		
m,p-Xylene	ND ND	0.100	,,		
		0.200	"	2.00	2.20
Surrogate: 1,2-DCA-d4	1.94 1.97		"	2.00 2.00	
Surrogate: Toluene-d8 Surrogate: 4-BFB	1.97 1.95		"	2.00	
Surroguie. 4-DI D	1.93			2.00	2.00

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SLR Alaska Project: FIA Former Mark Air Facilities

2525 Blueberry Road, Suite 206 Project Number: 004.0184.00001 Reported: Anchorage, AK/USA 99503 Project Manager: Andy Dimitriou 12/07/04 17:13

# Volatile Organic Compounds by EPA Method 8260B - Quality Control North Creek Analytical - Bothell

		•	Reporting		Spike	Source	•	%REC	•	RPD	
Analyte		Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch 4J14041: P	repared 10/14/04	Using E	PA 5030B	[MeOH]							
LCS (4J14041-BS1)											
Benzene		0.936	0.0200	mg/kg	1.00		93.6	75-125			
Chlorobenzene		0.959	0.100	"	1.00		95.9	74-128			
1,1-Dichloroethene		1.11	0.100	"	1.00		111	57-122			
Methyl tert-butyl ether		1.01	0.500	"	1.00		101	75-125			
Toluene		0.912	0.100	"	1.00		91.2	74-121			
Trichloroethene		0.902	0.100	"	1.00		90.2	72-122			
Surrogate: 1,2-DCA-d4		1.95		"	2.00		97.5	70-130			
Surrogate: Toluene-d8		1.94		"	2.00		97.0	70-130			
Surrogate: 4-BFB		1.97		"	2.00		98.5	70-130			
LCS Dup (4J14041-BS	SD1)										
Benzene		0.947	0.0200	mg/kg	1.00		94.7	75-125	1.17	20	
Chlorobenzene		0.993	0.100	"	1.00		99.3	74-128	3.48	20	
1,1-Dichloroethene		1.14	0.100	"	1.00		114	57-122	2.67	20	
Methyl tert-butyl ether		0.996	0.500	"	1.00		99.6	75-125	1.40	20	
Toluene		0.952	0.100	"	1.00		95.2	74-121	4.29	20	
Trichloroethene		0.916	0.100	"	1.00		91.6	72-122	1.54	20	
Surrogate: 1,2-DCA-d4		1.96		"	2.00		98.0	70-130			
Surrogate: Toluene-d8		1.99		"	2.00		99.5	70-130			
Surrogate: 4-BFB		1.97		"	2.00		98.5	70-130			
Matrix Spike (4J14041	-MS1)					Source: 1	34J0416-1	2			A-011
Benzene		0.688	0.0115	mg/kg dry	0.708	ND	97.2	61-130			
Chlorobenzene		0.712	0.0577	"	0.708	ND	101	62-129			
1,1-Dichloroethene		0.773	0.0577	"	0.708	ND	109	42-127			
Methyl tert-butyl ether		0.734	0.289	"	0.708	ND	104	50-150			
Toluene		0.690	0.0577	"	0.708	0.0106	96.0	62-125			
Trichloroethene		0.663	0.0577	"	0.708	ND	93.6	55-130			
Surrogate: 1,2-DCA-d4		1.43		"	1.42		101	70-130			
Surrogate: Toluene-d8		1.40		"	1.42		98.6	70-130			
Surrogate: 4-BFB		1.40		"	1.42		98.6	70-130			

North Creek Analytical - Bothell

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SLR Alaska Project: FIA Former Mark Air Facilities

2525 Blueberry Road, Suite 206 Project Number: 004.0184.00001 Reported: Anchorage, AK/USA 99503 Project Manager: Andy Dimitriou 12/07/04 17:13

#### **Volatile Organic Compounds by EPA Method 8260B - Quality Control** North Creek Analytical - Bothell

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes

Batch 4J14041: Prepared 10/14/04 Using EPA 5030B [MeOH]

Matrix Spike Dup (4J14041-MSD1)	Source: B4J0416-12								A-01a	
Benzene	0.654	0.0115	mg/kg dry	0.708	ND	92.4	61-130	5.07	25	
Chlorobenzene	0.682	0.0577	"	0.708	ND	96.3	62-129	4.30	25	
1,1-Dichloroethene	0.793	0.0577	"	0.708	ND	112	42-127	2.55	25	
Methyl tert-butyl ether	0.720	0.289	"	0.708	ND	102	50-150	1.93	25	
Toluene	0.653	0.0577	"	0.708	0.0106	90.7	62-125	5.51	25	
Trichloroethene	0.642	0.0577	"	0.708	ND	90.7	55-130	3.22	25	
Surrogate: 1,2-DCA-d4	1.41		"	1.42		99.3	70-130			
Surrogate: Toluene-d8	1.39		"	1.42		97.9	70-130			
Surrogate: 4-BFB	1.40		"	1.42		98.6	70-130			

#### Batch 4J15059: Prepared 10/18/04 Using EPA 5030B [MeOH]

Blank (4J15059-BLK1)			
Acetone	ND	1.00	mg/kg
Benzene	ND	0.0200	"
Bromobenzene	ND	0.100	"
Bromochloromethane	ND	0.100	"
Bromodichloromethane	ND	0.100	"
Bromoform	ND	0.100	"
Bromomethane	ND	0.100	"
2-Butanone	ND	1.00	"
n-Butylbenzene	ND	0.100	"
sec-Butylbenzene	ND	0.100	"
tert-Butylbenzene	ND	0.100	"
Carbon disulfide	ND	0.100	"
Carbon tetrachloride	ND	0.100	"
Chlorobenzene	ND	0.100	"
Chloroethane	ND	0.100	"
Chloroform	ND	0.100	"
Chloromethane	ND	0.500	"
2-Chlorotoluene	ND	0.100	"
4-Chlorotoluene	ND	0.100	"
Dibromochloromethane	ND	0.100	"
1,2-Dibromo-3-chloropropane	ND	0.500	"
1,2-Dibromoethane	ND	0.100	"

ND

0.100

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Dibromomethane



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SLR Alaska Project: FIA Former Mark Air Facilities

2525 Blueberry Road, Suite 206 Project Number: 004.0184.00001 Reported: Anchorage, AK/USA 99503 Project Manager: Andy Dimitriou 12/07/04 17:13

# Volatile Organic Compounds by EPA Method 8260B - Quality Control North Creek Analytical - Bothell

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes

Batch 4J15059:	<b>Prepared 10/18/04</b>	Using EPA 5030B	[MeOH]

Blank (4J15059-BLK1)			
1,2-Dichlorobenzene	ND	0.100	mg/kg
1,3-Dichlorobenzene	ND	0.100	"
1,4-Dichlorobenzene	ND	0.100	"
Dichlorodifluoromethane	ND	0.100	"
1,1-Dichloroethane	ND	0.100	"
1,2-Dichloroethane	ND	0.100	"
1,1-Dichloroethene	ND	0.100	"
cis-1,2-Dichloroethene	ND	0.100	"
trans-1,2-Dichloroethene	ND	0.100	"
1,2-Dichloropropane	ND	0.100	"
1,3-Dichloropropane	ND	0.100	"
2,2-Dichloropropane	ND	0.100	"
1,1-Dichloropropene	ND	0.100	"
cis-1,3-Dichloropropene	ND	0.100	"
trans-1,3-Dichloropropene	ND	0.100	"
Ethylbenzene	ND	0.100	"
Hexachlorobutadiene	ND	0.100	"
Methyl tert-butyl ether	ND	0.500	"
2-Hexanone	ND	1.00	"
Isopropylbenzene	ND	0.100	"
p-Isopropyltoluene	ND	0.100	"
4-Methyl-2-pentanone	ND	1.00	"
Methylene chloride	ND	1.00	"
Naphthalene	ND	0.100	"
n-Propylbenzene	ND	0.100	"
Styrene	ND	0.100	"
1,2,3-Trichlorobenzene	ND	0.100	"
1,2,4-Trichlorobenzene	ND	0.100	"
1,1,1,2-Tetrachloroethane	ND	0.100	"
1,1,2,2-Tetrachloroethane	ND	0.100	"
Tetrachloroethene	ND	0.100	"
Toluene	ND	0.100	"
1,1,1-Trichloroethane	ND	0.100	"
1,1,2-Trichloroethane	ND	0.100	"
Trichloroethene	ND	0.100	"

North Creek Analytical - Bothell



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%REC

RPD

SLR Alaska Project: FIA Former Mark Air Facilities

2.08

2.03

Reporting

2525 Blueberry Road, Suite 206 Project Number: 004.0184.00001 Reported: Anchorage, AK/USA 99503 Project Manager: Andy Dimitriou 12/07/04 17:13

#### **Volatile Organic Compounds by EPA Method 8260B - Quality Control** North Creek Analytical - Bothell

Spike

Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch 4J15059: Prepared 10/18/04	Using El	PA 5030B	[MeOH]							
Blank (4J15059-BLK1)										
Trichlorofluoromethane	ND	0.100	mg/kg							
1,2,3-Trichloropropane	ND	0.100	"							
1,2,4-Trimethylbenzene	ND	0.100	"							
1,3,5-Trimethylbenzene	ND	0.100	"							
Vinyl chloride	ND	0.100	"							
o-Xylene	ND	0.100	"							
n,p-Xylene	ND	0.200	"							
Surrogate: 1,2-DCA-d4	2.20		"	2.00		110	70-130			
Surrogate: Toluene-d8	2.11		"	2.00		106	70-130			
Surrogate: 4-BFB	2.08		"	2.00		104	70-130			
LCS (4J15059-BS1)										
Benzene	0.974	0.0200	mg/kg	1.00		97.4	75-125			
Chlorobenzene	1.00	0.100	"	1.00		100	74-128			
1,1-Dichloroethene	1.12	0.100	"	1.00		112	57-122			
Methyl tert-butyl ether	1.02	0.500	"	1.00		102	75-125			
Γoluene	0.979	0.100	"	1.00		97.9	74-121			
Trichloroethene	0.926	0.100	"	1.00		92.6	72-122			
Surrogate: 1,2-DCA-d4	2.23		"	2.00		112	70-130			
Surrogate: Toluene-d8	2.08		"	2.00		104	70-130			
Surrogate: 4-BFB	2.01		"	2.00		100	70-130			
LCS Dup (4J15059-BSD1)										
Benzene	0.959	0.0200	mg/kg	1.00		95.9	75-125	1.55	20	
Chlorobenzene	0.990	0.100	"	1.00		99.0	74-128	1.01	20	
1,1-Dichloroethene	1.13	0.100	"	1.00		113	57-122	0.889	20	
Methyl tert-butyl ether	0.964	0.500	"	1.00		96.4	75-125	5.65	20	
Toluene	0.972	0.100	"	1.00		97.2	74-121	0.718	20	
Trichloroethene	0.922	0.100	"	1.00		92.2	72-122	0.433	20	
Surrogate: 1,2-DCA-d4	2.15		"	2.00		108	70-130			

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Surrogate: Toluene-d8

Surrogate: 4-BFB

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104

102

2.00

2.00

Amar Gill, Project Manager

70-130

70-130



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SLR Alaska Project: FIA Former Mark Air Facilities

2525 Blueberry Road, Suite 206 Project Number: 004.0184.00001 Reported: Anchorage, AK/USA 99503 Project Manager: Andy Dimitriou 12/07/04 17:13

# Volatile Organic Compounds by EPA Method 8260B - Quality Control North Creek Analytical - Bothell

	Reporting			Spike	Source	ource %REC			RPD		
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes	

Batch 4J20032:	<b>Prepared 10/20/04</b>	Using EPA 5030B	[MeOH]

Blank (4J20032-BLK1)				
Acetone	ND	1.00	mg/kg	
Benzene	ND	0.0200	"	
Bromobenzene	ND	0.100	"	
Bromochloromethane	ND	0.100	"	
Bromodichloromethane	ND	0.100	"	
Bromoform	ND	0.100	"	
Bromomethane	ND	0.100	"	
2-Butanone	ND	1.00	"	
n-Butylbenzene	ND	0.100	"	
sec-Butylbenzene	ND	0.100	"	
tert-Butylbenzene	ND	0.100	"	
Carbon disulfide	ND	0.100	"	
Carbon tetrachloride	ND	0.100	"	
Chlorobenzene	ND	0.100	"	
Chloroethane	ND	0.100	"	
Chloroform	ND	0.100	"	
Chloromethane	ND	0.500	"	
2-Chlorotoluene	ND	0.100	"	
4-Chlorotoluene	ND	0.100	"	
Dibromochloromethane	ND	0.100	"	
1,2-Dibromo-3-chloropropane	ND	0.500	"	
1,2-Dibromoethane	ND	0.100	"	
Dibromomethane	ND	0.100	"	
1,2-Dichlorobenzene	ND	0.100	"	
1,3-Dichlorobenzene	ND	0.100	"	
1,4-Dichlorobenzene	ND	0.100	"	
Dichlorodifluoromethane	ND	0.100	"	
1,1-Dichloroethane	ND	0.100	"	
1,2-Dichloroethane	ND	0.100	"	
1,1-Dichloroethene	ND	0.100	"	
cis-1,2-Dichloroethene	ND	0.100	"	
trans-1,2-Dichloroethene	ND	0.100	"	
1,2-Dichloropropane	ND	0.100	"	
1,3-Dichloropropane	ND	0.100	m .	
	112	0.100		

North Creek Analytical - Bothell



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SLR Alaska Project: FIA Former Mark Air Facilities

2525 Blueberry Road, Suite 206 Project Number: 004.0184.00001 Reported: Anchorage, AK/USA 99503 Project Manager: Andy Dimitriou 12/07/04 17:13

# Volatile Organic Compounds by EPA Method 8260B - Quality Control North Creek Analytical - Bothell

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes

Batch 4J20032:	Prepared 10/20/04	Using EPA 5030B	[MeOH]

Blank (4J20032-BLK1)						
1,1-Dichloropropene	ND	0.100	mg/kg			
cis-1,3-Dichloropropene	ND	0.100	"			
trans-1,3-Dichloropropene	ND	0.100	"			
Ethylbenzene	ND	0.100	"			
Hexachlorobutadiene	ND	0.100	"			
Methyl tert-butyl ether	ND	0.500	"			
2-Hexanone	ND	1.00	"			
Isopropylbenzene	ND	0.100	"			
p-Isopropyltoluene	ND	0.100	"			
4-Methyl-2-pentanone	ND	1.00	"			
Methylene chloride	ND	1.00	"			
Naphthalene	ND	0.100	"			
n-Propylbenzene	ND	0.100	"			
Styrene	ND	0.100	n .			
1,2,3-Trichlorobenzene	ND	0.100	"			
1,2,4-Trichlorobenzene	ND	0.100	"			
1,1,1,2-Tetrachloroethane	ND	0.100	"			
1,1,2,2-Tetrachloroethane	ND	0.100	"			
Tetrachloroethene	ND	0.100	"			
Toluene	ND	0.100	"			
1,1,1-Trichloroethane	ND	0.100	"			
1,1,2-Trichloroethane	ND	0.100	"			
Trichloroethene	ND	0.100	"			
Trichlorofluoromethane	ND	0.100	"			
1,2,3-Trichloropropane	ND	0.100	"			
1,2,4-Trimethylbenzene	ND	0.100	"			
1,3,5-Trimethylbenzene	ND	0.100	"			
Vinyl chloride	ND	0.100	"			
o-Xylene	ND	0.100	"			
m,p-Xylene	ND	0.100	"			
Surrogate: 1,2-DCA-d4	2.00	0.200	"	2.00	100	
Surrogate: 1,2-DCA-a4 Surrogate: Toluene-d8	2.00		"	2.00	100 101	
Surrogate: 4-BFB	2.02		"	2.00	101	
Surroguic. T-DI D	2.09			2.00	107	

North Creek Analytical - Bothell



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SLR Alaska Project: FIA Former Mark Air Facilities

2525 Blueberry Road, Suite 206 Project Number: 004.0184.00001 Reported: Anchorage, AK/USA 99503 Project Manager: Andy Dimitriou 12/07/04 17:13

# Volatile Organic Compounds by EPA Method 8260B - Quality Control North Creek Analytical - Bothell

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch 4J20032: Prepared 10/20/04	Using EI	PA 5030B	[MeOH]							
LCS (4J20032-BS1)										
Benzene	1.98	0.0200	mg/kg	2.00		99.0	75-125			
Chlorobenzene	1.97	0.100	"	2.00		98.5	74-128			
1,1-Dichloroethene	2.00	0.100	"	2.00		100	57-122			
Methyl tert-butyl ether	1.92	0.500	"	2.00		96.0	75-125			
Toluene	1.92	0.100	"	2.00		96.0	74-121			
Trichloroethene	1.94	0.100	"	2.00		97.0	72-122			
Surrogate: 1,2-DCA-d4	1.90		"	2.00		95.0	70-130			
Surrogate: Toluene-d8	1.95		"	2.00		97.5	70-130			
Surrogate: 4-BFB	1.96		"	2.00		98.0	70-130			
LCS Dup (4J20032-BSD1)										
Benzene	2.04	0.0200	mg/kg	2.00		102	75-125	2.99	20	
Chlorobenzene	2.00	0.100	"	2.00		100	74-128	1.51	20	
1,1-Dichloroethene	2.01	0.100	"	2.00		100	57-122	0.499	20	
Methyl tert-butyl ether	2.00	0.500	"	2.00		100	75-125	4.08	20	
Toluene	1.98	0.100	"	2.00		99.0	74-121	3.08	20	
Trichloroethene	1.99	0.100	"	2.00		99.5	72-122	2.54	20	
Surrogate: 1,2-DCA-d4	1.97		"	2.00		98.5	70-130			
Surrogate: Toluene-d8	1.97		"	2.00		98.5	70-130			
Surrogate: 4-BFB	1.99		"	2.00		99.5	70-130			

North Creek Analytical - Bothell



Analyte

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%REC

Limits

**RPD** 

RPD

Limit

Notes

%REC

Result

SLR Alaska Project: FIA Former Mark Air Facilities

Result

Reporting

Limit

2525 Blueberry Road, Suite 206 Project Number: 004.0184.00001 Reported: Anchorage, AK/USA 99503 Project Manager: Andy Dimitriou 12/07/04 17:13

Units

#### Polynuclear Aromatic Compounds by GC/MS with Selected Ion Monitoring - Quality Control North Creek Analytical - Bothell

Spike

Level

0.333

Batch 4J18032: Prepared 10	/18/04 Using EF	PA 3545					
Blank (4J18032-BLK1)							
1-Methylnaphthalene	ND	0.0100	mg/kg				
2-Methylnaphthalene	ND	0.0100	"				
Acenaphthene	ND	0.0100	"				
Acenaphthylene	ND	0.0100	"				
Anthracene	ND	0.0100	"				
Benzo (a) anthracene	ND	0.0100	"				
Benzo (a) pyrene	ND	0.0100	"				
Benzo (b) fluoranthene	ND	0.0100	"				
Benzo (ghi) perylene	ND	0.0100	"				
Benzo (k) fluoranthene	ND	0.0100	"				
Chrysene	ND	0.0100	"				
Dibenz (a,h) anthracene	ND	0.0100	"				
Fluoranthene	ND	0.0100	"				
Fluorene	ND	0.0100	"				
Indeno (1,2,3-cd) pyrene	ND	0.0100	"				
Naphthalene	ND	0.0100	"				
Phenanthrene	ND	0.0100	"				
Pyrene	ND	0.0100	"				
Surrogate: p-Terphenyl-d14	2.41		"	1.67	144	28-161	
LCS (4J18032-BS2)							
1-Methylnaphthalene	0.419	0.0100	mg/kg	0.333	126	50-150	

Acenaphthene 0.380 0.0100 0.333114 53-120 52-120 0.381 0.0100 0.333114 Acenaphthylene 0.346 0.0100 0.333 104 39-145 Anthracene Benzo (a) anthracene 0.304 0.0100 0.333 91.3 64-120 0.385 0.0100 0.333 65-120 Benzo (a) pyrene 116 0.0100 103 52-139 Benzo (b) fluoranthene 0.344 0.333 Benzo (ghi) perylene 0.379 0.0100 0.333 114 54-125 Benzo (k) fluoranthene 0.335 0.0100 0.333 101 47-138 0.402 0.0100 0.333 121 57-125 Chrysene Dibenz (a,h) anthracene 0.380 0.0100 0.333 114 52-120 Fluoranthene 0.348 105 61-128 0.0100 0.333Fluorene 0.389 0.0100 0.333 117 63-120

0.0100

0.374

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112

50-150

2-Methylnaphthalene



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SLR Alaska Project: FIA Former Mark Air Facilities

2525 Blueberry Road, Suite 206 Project Number: 004.0184.00001 Reported: Anchorage, AK/USA 99503 Project Manager: Andy Dimitriou 12/07/04 17:13

# Polynuclear Aromatic Compounds by GC/MS with Selected Ion Monitoring - Quality Control North Creek Analytical - Bothell

			Reporting		Spike Source			%REC			RPD		
Analyte		Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes		
Batch 4J18032:	Prepared 10/18/04	Using El	PA 3545										
LCS (4J18032-BS2)													
Indeno (1,2,3-cd) pyrer	ne	0.383	0.0100	mg/kg	0.333		115	54-128					
Naphthalene		0.376	0.0100	"	0.333		113	54-120					
Phenanthrene		0.331	0.0100	"	0.333		99.4	28-120					
Pyrene		0.386	0.0100	"	0.333		116	59-124					
Surrogate: p-Terpheny	l-d14	2.38		"	1.67		143	28-161					
LCS Dup (4J18032-	-BSD2)												
1-Methylnaphthalene		0.424	0.0100	mg/kg	0.333		127	50-150	1.19	40			
2-Methylnaphthalene		0.372	0.0100	"	0.333		112	50-150	0.536	40			
Acenaphthene		0.373	0.0100	"	0.333		112	53-120	1.86	40			
Acenaphthylene		0.380	0.0100	"	0.333		114	52-120	0.263	40			
Anthracene		0.340	0.0100	"	0.333		102	39-145	1.75	40			
Benzo (a) anthracene		0.302	0.0100	"	0.333		90.7	64-120	0.660	40			
Benzo (a) pyrene		0.376	0.0100	"	0.333		113	65-120	2.37	40			
Benzo (b) fluoranthene		0.354	0.0100	"	0.333		106	52-139	2.87	40			
Benzo (ghi) perylene		0.371	0.0100	"	0.333		111	54-125	2.13	40			
Benzo (k) fluoranthene		0.360	0.0100	"	0.333		108	47-138	7.19	40			
Chrysene		0.415	0.0100	"	0.333		125	57-125	3.18	24			
Dibenz (a,h) anthracen	2	0.365	0.0100	"	0.333		110	52-120	4.03	40			
Fluoranthene		0.342	0.0100	"	0.333		103	61-128	1.74	40			
Fluorene		0.382	0.0100	"	0.333		115	63-120	1.82	43			
Indeno (1,2,3-cd) pyrer	ne	0.368	0.0100	"	0.333		111	54-128	3.99	39			
Naphthalene		0.374	0.0100	"	0.333		112	54-120	0.533	40			
Phenanthrene		0.336	0.0100	"	0.333		101	28-120	1.50	40			
Pyrene		0.411	0.0100	"	0.333		123	59-124	6.27	40			
Surrogate: p-Terpheny	l-d14	2.50		"	1.67		150	28-161					

North Creek Analytical - Bothell

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SLR Alaska Project: FIA Former Mark Air Facilities

2525 Blueberry Road, Suite 206 Project Number: 004.0184.00001 Reported: Anchorage, AK/USA 99503 Project Manager: Andy Dimitriou 12/07/04 17:13

# Polynuclear Aromatic Compounds by GC/MS with Selected Ion Monitoring - Quality Control **North Creek Analytical - Bothell**

		D 1:	Reporting	TT 1.	Spike	Source	0/850	%REC	DPP	RPD	NI :
Analyte		Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch 4J18059: 1	Prepared 10/18/04	Using E	EPA 3545								
Blank (4J18059-BLK	1)										
1-Methylnaphthalene		ND	0.0100	mg/kg							
2-Methylnaphthalene		ND	0.0100	"							
Acenaphthene		ND	0.0100	"							
Acenaphthylene		ND	0.0100	"							
Anthracene		ND	0.0100	"							
Benzo (a) anthracene		ND	0.0100	"							
Benzo (a) pyrene		ND	0.0100	"							2
Benzo (b) fluoranthene		ND	0.0100	"							
Benzo (ghi) perylene		ND	0.0100	"							
Benzo (k) fluoranthene		ND	0.0100	"							
Chrysene		ND	0.0100	"							2
Dibenz (a,h) anthracene		ND	0.0100	"							
Fluoranthene		ND	0.0100	"							
Fluorene		ND	0.0100	"							
Indeno (1,2,3-cd) pyrene		ND	0.0100	"							
Naphthalene		ND	0.0100	"							
Phenanthrene		ND	0.0100	"							
Pyrene		ND	0.0100	"							2
Surrogate: p-Terphenyl-a	114	2.64		"	1.67		158	28-161			
LCS (4J18059-BS2)											
1-Methylnaphthalene		0.373	0.0100	mg/kg	0.333		112	50-150			
2-Methylnaphthalene		0.370	0.0100	"	0.333		111	50-150			
Acenaphthene		0.377	0.0100	"	0.333		113	53-120			
Acenaphthylene		0.387	0.0100	"	0.333		116	52-120			
Anthracene		0.418	0.0100	"	0.333		126	39-145			
Benzo (a) anthracene		0.351	0.0100	"	0.333		105	64-120			
Benzo (a) pyrene		0.404	0.0100	"	0.333		121	65-120			2
Benzo (b) fluoranthene		0.447	0.0100	"	0.333		134	52-139			
Benzo (ghi) perylene		0.326	0.0100	"	0.333		97.9	54-125			
Benzo (k) fluoranthene		0.343	0.0100	"	0.333		103	47-138			
Chrysene		0.420	0.0100	"	0.333		126	57-125			2
Dibenz (a,h) anthracene		0.310	0.0100	"	0.333		93.1	52-120			
Fluoranthene		0.358	0.0100	"	0.333		108	61-128			
Fluorene		0.393	0.0100	"	0.333		118	63-120			

North Creek Analytical - Bothell



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SLR Alaska Project: FIA Former Mark Air Facilities

2525 Blueberry Road, Suite 206 Project Number: 004.0184.00001 Reported: Anchorage, AK/USA 99503 Project Manager: Andy Dimitriou 12/07/04 17:13

# Polynuclear Aromatic Compounds by GC/MS with Selected Ion Monitoring - Quality Control North Creek Analytical - Bothell

			Reporting		Spike	Source		%REC		RPD	
Analyte		Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch 4J18059:	Prepared 10/18/04	Using El	PA 3545								
LCS (4J18059-BS2)	)										
Indeno (1,2,3-cd) pyrer	ie	0.309	0.0100	mg/kg	0.333		92.8	54-128			
Naphthalene		0.382	0.0100	"	0.333		115	54-120			
Phenanthrene		0.336	0.0100	"	0.333		101	28-120			
Pyrene		0.423	0.0100	"	0.333		127	59-124			X
Surrogate: p-Terpheny	l-d14	2.32		"	1.67		139	28-161			
LCS Dup (4J18059-	-BSD2)										
1-Methylnaphthalene		0.361	0.0100	mg/kg	0.333		108	50-150	3.27	40	
2-Methylnaphthalene		0.362	0.0100	"	0.333		109	50-150	2.19	40	
Acenaphthene		0.371	0.0100	"	0.333		111	53-120	1.60	40	
Acenaphthylene		0.386	0.0100	"	0.333		116	52-120	0.259	40	
Anthracene		0.420	0.0100	"	0.333		126	39-145	0.477	40	
Benzo (a) anthracene		0.367	0.0100	"	0.333		110	64-120	4.46	40	
Benzo (a) pyrene		0.425	0.0100	"	0.333		128	65-120	5.07	40	X
Benzo (b) fluoranthene		0.457	0.0100	"	0.333		137	52-139	2.21	40	
Benzo (ghi) perylene		0.339	0.0100	"	0.333		102	54-125	3.91	40	
Benzo (k) fluoranthene		0.351	0.0100	"	0.333		105	47-138	2.31	40	
Chrysene		0.429	0.0100	"	0.333		129	57-125	2.12	24	X
Dibenz (a,h) anthracene		0.325	0.0100	"	0.333		97.6	52-120	4.72	40	
Fluoranthene		0.363	0.0100	"	0.333		109	61-128	1.39	40	
Fluorene		0.389	0.0100	"	0.333		117	63-120	1.02	43	
Indeno (1,2,3-cd) pyrer	ie	0.325	0.0100	"	0.333		97.6	54-128	5.05	39	
Naphthalene		0.369	0.0100	"	0.333		111	54-120	3.46	40	
Phenanthrene		0.335	0.0100	"	0.333		101	28-120	0.298	40	
Pyrene		0.422	0.0100	"	0.333		127	59-124	0.237	40	X
Surrogate: p-Terpheny	l-d14	2.25		"	1.67		135	28-161			

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SLR Alaska Project: FIA Former Mark Air Facilities

2525 Blueberry Road, Suite 206 Project Number: 004.0184.00001 Reported: Anchorage, AK/USA 99503 Project Manager: Andy Dimitriou 12/07/04 17:13

# Physical Parameters by APHA/ASTM/EPA Methods - Quality Control **North Creek Analytical - Bothell**

Anchorage

		Reporting		Spike	Source		%REC		RPD	
	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Prepared 10/18/04	Using Ge	neral Prep	paration							
LK1)										
	100	1.00	%							
Prepared 10/19/04	Using Ge	neral Prep	paration							
LK1)										
	99.9	1.00	%							
Prepared 10/19/04	Using Ge	neral Prep	paration							
LK1)										
	100	1.00	%							
Prepared 10/20/04	Using Ge	neral Prej	paration							
LK1)										
	100	1.00	%							
	Prepared 10/19/04 LK1)  Prepared 10/19/04 LK1)  Prepared 10/20/04	Result	Result   Limit	Result   Limit   Units     Prepared 10/18/04   Using General Preparation	Result   Limit   Units   Level	Result   Limit   Units   Level   Result	Result   Limit   Units   Level   Result   %REC	Result   Limit   Units   Level   Result   %REC   Limits	Result   Limit   Units   Level   Result   %REC   Limits   RPD	Result   Limit   Units   Level   Result   %REC   Limits   RPD   Limit

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SLR Alaska Project: FIA Former Mark Air Facilities

2525 Blueberry Road, Suite 206 Project Number: 004.0184.00001 Reported: Anchorage, AK/USA 99503 Project Manager: Andy Dimitriou 12/07/04 17:13

Spokane

#### **Notes and Definitions**

A-01 Sample may have carryover. The results were reported due to MS/MSD related to this sample, the sample will be rerun to confirm.

A-01a The Matrix Spike Duplicate was analyzed thirty-four minutes outside twelve hour QC window.

The Matrix Spike was analyzed five minutes outside of the twelve hour QC window. A-01b

Е Estimated value. The reported value exceeds the calibration range of the analysis.

E-01 Estimated value. The reported value exceeds the capacity of the detector and therefore is unreliable.

G-06 The field surrogate for this sample is outside established control limits. Acceptable laboratory surrogate recovery suggests the

field surrogate recovery may have been impacted by sampling, sample handling or sample matrix.

I-06 The analyte concentration may be artificially elevated due to coeluting compounds or components.

The percent recovery for this QC spike sample cannot be accurately calculated due to the high concentration of analyte already Q-03

present in the sample.

The surrogate recovery for this sample is outside of established control limits due to a sample matrix effect. S-04

Χ See case narrative.

Analyte DETECTED DET

ND Analyte NOT DETECTED at or above the reporting limit

NR Not Reported

Sample results reported on a dry weight basis dry

RPD Relative Percent Difference

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Spokane

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03 December 2004

Andy Dimitriou SLR Alaska 2525 Blueberry Road, Suite 206 Anchorage, AK/USA 99503

RE: FIA Former Mark Air Facilities

Enclosed are the results of analyses for samples received by the laboratory on 10/12/04 15:30. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

**Amar Gill** 

**Project Manager** 

#### CASE NARRATIVE for B4J0471

Client: SLR Alaska

Project Manager: Andy Dimitriou

Project Name: FIA Former Mark Air Facilities

Project Number: 004.0184.00001

#### 1.0 DESCRIPTION OF CASE

Five (5) soil samples were submitted for the analysis of:

- Gasoline Range Hydrocarbons and BTEX by AK101/EPA 8021B
- Diesel Hydrocarbons and Heavy Oil by AK102 and AK103
- Total Metals by EPA 6000/7000 Series Methods
- Volatile Organic Compounds by EPA Method 8260B
- Polynuclear Aromatic Compounds by GC/MS with Selected Ion Monitoring

#### 2.0 COMMENTS ON SAMPLE RECEIPT

The samples were received 12<sup>th</sup> October 2004 at a temperature of 6.0°C and logged in 14<sup>th</sup> October 2004.

#### 3.0 PREPARATION AND ANALYSIS

#### Gasoline Range Hydrocarbons and BTEX by AK101/EPA 8021B

No additional anomalies or discrepancies were associated with this analysis other than those already qualified in the data.

#### Diesel Hydrocarbons and Heavy Oil by AK102 and AK103

No additional anomalies or discrepancies were associated with this analysis other than those already qualified in the data.

#### Total Metals by EPA 6000/7000 Series Methods

No additional anomalies or discrepancies were associated with this analysis other than those already qualified in the data.

#### Volatile Organic Compounds by EPA Method 8260B

No additional anomalies or discrepancies were associated with this analysis other than those already qualified in the data.

Amar Gill Project Manager

North Creek Analytical

#### CASE NARRATIVE for B4J0471

#### Polynuclear Aromatic Compounds by GC/MS with Selected Ion Monitoring

Project sample WP-3-7 was extracted in analytical batch 4J18059. The percent recoveries of spike compounds, Benzo(a)Pyrene, Chrysene and Pyrene were above control limits in the analytical batch Blank Spike and Blank Spike Duplicate. The Relative Percent Difference (RPD) for each spike compound was within control limits and the project samples was ND for both Benzo(a)Pyrene. Chrysene and Pyrene were observed in the project sample at a level above the method reporting level, MRL. No further action was taken. No additional anomalies or discrepancies were associated with this analysis other than those already qualified in the data.

Amar Gill Project Manager North Creek Analytical

2 of 2



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FAX 924-9290
FAX 906-9210
FAX 382-7588
907-334-9200
FAX 334-9210

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1 WP-5-10.5	10-7-04 1620		X	X	X		X								5	3			01
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3 MW-8-WB-10	10.8.04 0950	X	$\bigvee$	X	X										S	2			03
4 WP-3-7	14.8.04 1105	X	X	久		X		X							5	2			04
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SLR Alaska Project: FIA Former Mark Air Facilities

2525 Blueberry Road, Suite 206 Project Number: 004.0184.00001 Reported: Anchorage, AK/USA 99503 Project Manager: Andy Dimitriou 12/03/04 16:24

Anchorage

#### ANALYTICAL REPORT FOR SAMPLES

The state of the s				
Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
WP-5-10.5	B4J0471-01	Soil	10/07/04 16:20	10/12/04 15:30
WP-7-10	B4J0471-02	Soil	10/07/04 14:45	10/12/04 15:30
MW-8-WB-10	B4J0471-03	Soil	10/08/04 09:50	10/12/04 15:30
WP-3-7	B4J0471-04	Soil	10/08/04 11:05	10/12/04 15:30
WP-4A-10	B4J0471-05	Soil	10/08/04 13:20	10/12/04 15:30

North Creek Analytical - Bothell

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SLR Alaska Project: FIA Former Mark Air Facilities

2525 Blueberry Road, Suite 206 Project Number: 004.0184.00001 Reported: Anchorage, AK/USA 99503 Project Manager: Andy Dimitriou 12/03/04 16:24

# Gasoline Range Hydrocarbons (n-Hexane to <n-Decane) by AK101 North Creek Analytical - Bothell

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
WP-5-10.5 (B4J0471-01) Soil Sample	d: 10/07/04 1	6:20 Receiv	ed: 10/12/04	15:30					
Gasoline Range Hydrocarbons	ND	2.11	mg/kg dry	1	4J18022	10/18/04	10/18/04	AK 101	
Surrogate: 4-BFB (FID)	94.5 %	60-120			"	"	"	"	
Surrogate: a,a,a-TFT (FID)	69.6 %	50-150			"	"	"	"	
WP-7-10 (B4J0471-02) Soil Sampled:	10/07/04 14:	45 Receive	1: 10/12/04 1	5:30					
Gasoline Range Hydrocarbons	ND	3.37	mg/kg dry	1	4J18022	10/18/04	10/18/04	AK 101	
Surrogate: 4-BFB (FID)	89.4 %	60-120			"	"	"	"	
Surrogate: a,a,a-TFT (FID)	87.8 %	50-150			"	"	"	"	

North Creek Analytical - Bothell

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SLR Alaska Project: FIA Former Mark Air Facilities

2525 Blueberry Road, Suite 206 Project Number: 004.0184.00001 Reported: Anchorage, AK/USA 99503 Project Manager: Andy Dimitriou 12/03/04 16:24

# Gasoline Hydrocarbons (n-Hexane to <n-Decane) and BTEX by AK101/EPA 8021B North Creek Analytical - Bothell

Spokane

Anchorage

		Reporting							
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-8-WB-10 (B4J0471-03) Soil	Sampled: 10/08/0	04 09:50 Re	ceived: 10/1	2/04 15:30					
Gasoline Range Hydrocarbons	4.98	2.84	mg/kg dry	1	4J18022	10/18/04	10/18/04	AK 101	
Benzene	0.376	0.0113	"	"	"	"	"	"	
Toluene	ND	0.0284	"	"	"	"	"	"	
Ethylbenzene	0.189	0.0284	"	"	"	"	"	"	
Xylenes (total)	0.613	0.0567	"	"	"	"	"	"	
Surrogate: 4-BFB (FID)	100 %	60-120			"	"	"	"	
Surrogate: a,a,a-TFT (FID)	71.4 %	50-150			"	"	"	"	
Surrogate: 4-BFB (PID)	91.4 %	60-120			"	"	"	"	
Surrogate: a,a,a-TFT (PID)	76.6 %	50-150			"	"	"	"	
WP-3-7 (B4J0471-04) Soil Sam	pled: 10/08/04 11:0	5 Received	: 10/12/04 15	5:30					
Gasoline Range Hydrocarbons	175	4.54	mg/kg dry	1	4J18022	10/18/04	10/19/04	AK 101	G-02
Benzene	ND	0.0182	"	"	"	"	"	"	
Toluene	ND	0.0454	"	"	"	"	"	"	
Ethylbenzene	ND	0.0454	"	"	"	"	"	"	
Xylenes (total)	4.41	0.0908	"	"	"	"	"	"	I-06
Surrogate: 4-BFB (FID)	148 %	60-120			"	"	"	"	S-04
Surrogate: a,a,a-TFT (FID)	91.2 %	50-150			"	"	"	"	
Surrogate: 4-BFB (PID)	118 %	60-120			"	"	"	"	
Surrogate: a,a,a-TFT (PID)	93.8 %	50-150			"	"	"	"	

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SLR Alaska Project: FIA Former Mark Air Facilities

Project Number: 004.0184.00001 2525 Blueberry Road, Suite 206 Reported: Anchorage, AK/USA 99503 Project Manager: Andy Dimitriou 12/03/04 16:24

# Diesel Hydrocarbons (C10-C25) by AK102 North Creek Analytical - Bothell

Spokane

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
WP-3-7 (B4J0471-04) Soil Sampled	l: 10/08/04 11:05	Received	: 10/12/04 15	5:30					
Diesel Range Hydrocarbons	7450	160	mg/kg dry	40	4J15001	10/15/04	10/18/04	AK 102	
Surrogate: 2-FBP	ND	50-150			"	"	"	"	S-01

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SLR Alaska Project: FIA Former Mark Air Facilities

2525 Blueberry Road, Suite 206 Project Number: 004.0184.00001 Reported: Anchorage, AK/USA 99503 Project Manager: Andy Dimitriou 12/03/04 16:24

#### Diesel Hydrocarbons (C10-C25) and Heavy Oil (C25-C36) by AK102 and AK103 North Creek Analytical - Bothell

		Reporting			-				
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
WP-5-10.5 (B4J0471-01) Soil Sa	ampled: 10/07/04 1	6:20 Receiv	ved: 10/12/04	15:30					
Diesel Range Hydrocarbons	ND	4.00	mg/kg dry	1	4J15001	10/15/04	10/16/04	AK102/103	
Residual Range Organics	ND	25.0	"	"	"	"	"	"	
Surrogate: 2-FBP	69.3 %	50-150			"	"	"	"	
Surrogate: Octacosane	80.8 %	50-150			"	"	"	"	
WP-7-10 (B4J0471-02) Soil San	npled: 10/07/04 14:	45 Receive	d: 10/12/04 1	5:30					
Diesel Range Hydrocarbons	ND	4.00	mg/kg dry	1	4J15001	10/15/04	10/16/04	AK102/103	
Residual Range Organics	ND	25.0	"	"	"	"	"	"	
Surrogate: 2-FBP	79.3 %	50-150			"	"	"	"	
Surrogate: Octacosane	86.6 %	50-150			"	"	"	"	
MW-8-WB-10 (B4J0471-03) Soil	Sampled: 10/08/0	04 09:50 Re	eceived: 10/1	2/04 15:30					
Diesel Range Hydrocarbons	ND	4.00	mg/kg dry	1	4J15001	10/15/04	10/16/04	AK102/103	
Residual Range Organics	ND	25.0	"	"	"	"	"	"	
Surrogate: 2-FBP	78.9 %	50-150			"	"	"	"	
Surrogate: Octacosane	91.8 %	50-150			"	"	"	"	

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SLR Alaska Project: FIA Former Mark Air Facilities

Project Number: 004.0184.00001 2525 Blueberry Road, Suite 206 Reported: Anchorage, AK/USA 99503 Project Manager: Andy Dimitriou 12/03/04 16:24

#### Total Metals by EPA 6000/7000 Series Methods North Creek Analytical - Bothell

Spokane

Analyte	R Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
WP-3-7 (B4J0471-04) Soil Sai	mpled: 10/08/04 11:05	Received:	10/12/04 15	5:30					
Lead	7.25	0.806	mg/kg dry	1	4J18044	10/18/04	10/19/04	EPA 6020	
WP-4A-10 (B4J0471-05) Soil	Sampled: 10/08/04 13:20	0 Receiv	ed: 10/12/04	15:30					
Lead	10.5	0.862	mg/kg dry	1	4J18044	10/18/04	10/19/04	EPA 6020	

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SLR Alaska Project: FIA Former Mark Air Facilities

Project Number: 004.0184.00001 2525 Blueberry Road, Suite 206 Reported: Anchorage, AK/USA 99503 Project Manager: Andy Dimitriou 12/03/04 16:24

#### **Volatile Organic Compounds by EPA Method 8260B** North Creek Analytical - Bothell

Spokane

Anchorage

Benzene         ND         0.00842         "         "           Bromobenzene         ND         0.0421         "         "           Bromochloromethane         ND         0.0421         "         "           Bromodichloromethane         ND         0.0421         "         "           Bromoform         ND         0.0421         "         "	4J14041 " " " "	10/14/04 "	Analyzed  10/14/04  """"""""""""""""""""""""""""""""""	Method  EPA 8260B	Note
Acetone         ND         0.421 mg/kg dry         1           Benzene         ND         0.00842 " "         "           Bromobenzene         ND         0.0421 " "         "           Bromochloromethane         ND         0.0421 " "         "           Bromodichloromethane         ND         0.0421 " "         "           Bromoform         ND         0.0421 " "         "	" " "	" "	"		
Benzene         ND         0.00842         "         "           Bromobenzene         ND         0.0421         "         "           Bromochloromethane         ND         0.0421         "         "           Bromodichloromethane         ND         0.0421         "         "           Bromoform         ND         0.0421         "         "	" " "	" "	"		
Bromobenzene         ND         0.0421         "         "           Bromochloromethane         ND         0.0421         "         "           Bromodichloromethane         ND         0.0421         "         "           Bromoform         ND         0.0421         "         "	"	"			
Bromochloromethane         ND         0.0421         "         "           Bromodichloromethane         ND         0.0421         "         "           Bromoform         ND         0.0421         "         "	"			"	
Bromodichloromethane ND 0.0421 " " Bromoform ND 0.0421 " "		"	"	"	
Bromoform ND 0.0421 " "	"		"	"	
		"	"	"	
	"	"	"	"	
2-Butanone ND 0.421 " "	"	"	"	"	
n-Butylbenzene ND 0.0421 " "	"	"	"	"	
sec-Butylbenzene ND 0.0421 " "	,,	"	"	"	
tert-Butylbenzene ND 0.0421 " "	"	"	"	,,	
Carbon disulfide ND 0.0421 " "	"	,,	"	,,	
Carbon distinde ND 0.0421  Carbon tetrachloride ND 0.0421 " "	,,	,,	,,	,,	
Carbon tetracinoride ND 0.0421 " " Chlorobenzene ND 0.0421 " "	,,	"	"	,,	
Chloroethane ND 0.0421 " "	,,	,,	"	,,	
	"	"	"	,,	
Chloroform         ND         0.0421         "         "           Chloromethane         ND         0.211         "         "	,,	,,	"	,,	
	"	,,	"	"	
2-Chlorotoluene ND 0.0421 " " 4-Chlorotoluene ND 0.0421 " "	,,	,,	"	,,	
	"	,,	"	"	
Dioromocmorometriane ND 0.0421	,,	,,	,,	,,	
7	,,	,,	"	,,	
	"	"	"	,,	
	,,	,,	"	,,	
1,2-Diemoroochizene	"	"	,,		
1,5-Diemoroochizene		"	"	"	
1,4-Dictiologenzene ND 0.0421		,,	"	"	
Diemorodificolomethalie ND 0.0421		"	"	"	
1,1-Dichioloculatic	"	"	"	"	
1,2-Dichioloctualic ND 0.0421		"	"	"	
1,1-Dichiotoculene	"	"	"	"	
CIS-1,2-Dictionocement ND 0.0421		"	"	"	
trans-1,2-Dictioroethene ND 0.0421	"	"			
1,2-Dichiotopropane ND 0.0421			"	"	
1,3-Dichloropropane ND 0.0421 " "	"	"	"	"	
2,2-Dichloropropane ND 0.0421 " "	"	"	"	"	
1,1-Dichloropropene ND 0.0421 " "	"	"	"	"	
cis-1,3-Dichloropropene ND 0.0421 " "	"	"	"	"	
trans-1,3-Dichloropropene ND 0.0421 "	"	"	"	"	

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SLR Alaska Project: FIA Former Mark Air Facilities

Project Number: 004.0184.00001 2525 Blueberry Road, Suite 206 Reported: Anchorage, AK/USA 99503 Project Manager: Andy Dimitriou 12/03/04 16:24

#### **Volatile Organic Compounds by EPA Method 8260B** North Creek Analytical - Bothell

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
WP-5-10.5 (B4J0471-01) Soil	Sampled: 10/07/04 1	6:20 Receiv	red: 10/12/04	15:30					
Ethylbenzene	ND	0.0421	mg/kg dry	1	4J14041	10/14/04	10/14/04	EPA 8260B	
Hexachlorobutadiene	ND	0.0421	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	0.211	"	"	"	"	"	"	
2-Hexanone	ND	0.421	"	"	"	"	"	"	
Isopropylbenzene	ND	0.0421	"	"	"	"	"	"	
p-Isopropyltoluene	ND	0.0421	"	"	"	"	"	"	
4-Methyl-2-pentanone	ND	0.421	"	"	"	"	"	"	
Methylene chloride	ND	0.421	"	"	"	"	"	"	
Naphthalene	ND	0.0421	"	"	"	"	"	"	
n-Propylbenzene	ND	0.0421	"	"	"	"	"	"	
Styrene	ND	0.0421	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	0.0421	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	0.0421	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	0.0421	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	0.0421	"	"	"	"	"	"	
Tetrachloroethene	ND	0.0421	"	"	"	"	"	"	
Toluene	ND	0.0421	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	0.0421	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	0.0421	"	"	"	"	"	"	
Trichloroethene	ND	0.0421	"	"	"	"	"	"	
Trichlorofluoromethane	ND	0.0421	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	0.0421	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	0.0421	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	0.0421	"	"	"	"	"	"	
Vinyl chloride	ND	0.0421	"	"	"	"	"	"	
o-Xylene	ND	0.0421	"	"	"	"	"	u u	
m,p-Xylene	ND	0.0842	"	"	"	"	"	"	
Surrogate: 1,2-DCA-d4	99.1 %	70-130			"	"	"	"	
Surrogate: Toluene-d8	101 %	70-130			"	"	"	"	
Surrogate: 4-BFB	102 %	70-130			"	"	"	"	

North Creek Analytical - Bothell



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SLR Alaska Project: FIA Former Mark Air Facilities

Project Number: 004.0184.00001 2525 Blueberry Road, Suite 206 Reported: Anchorage, AK/USA 99503 Project Manager: Andy Dimitriou 12/03/04 16:24

#### **Volatile Organic Compounds by EPA Method 8260B** North Creek Analytical - Bothell

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Note
WP-7-10 (B4J0471-02) Soil	Sampled: 10/07/04 14:45	Receive	d: 10/12/04 1	5:30					
Acetone	ND	0.674	mg/kg dry	1	4J14041	10/14/04	10/14/04	EPA 8260B	
Benzene	ND	0.0135	"	"	"	"	"	"	
Bromobenzene	ND	0.0674	"	"	"	"	"	"	
Bromochloromethane	ND	0.0674	"	"	"	"	"	"	
Bromodichloromethane	ND	0.0674	"	"	"	"	"	"	
Bromoform	ND	0.0674	"	"	"	"	"	"	
Bromomethane	ND	0.0674	"	"	"	"	"	"	
2-Butanone	ND	0.674	"	"	"	"	"	"	
n-Butylbenzene	ND	0.0674	"	"	"	"	"	"	
sec-Butylbenzene	ND	0.0674	"	"	"	"	"	"	
ert-Butylbenzene	ND	0.0674	"	"	"	"	"	"	
Carbon disulfide	ND	0.0674	"	"	"	"	"	"	
Carbon tetrachloride	ND	0.0674	"	"	"	"	"	"	
Chlorobenzene	ND	0.0674	"	"	"	"	"	"	
Chloroethane	ND	0.0674	"	"	"	"	"	"	
Chloroform	ND	0.0674	"	"	"	"	"	"	
Chloromethane	ND	0.337	"	"	"	"	"	"	
2-Chlorotoluene	ND	0.0674	"	"	"	"	"	"	
4-Chlorotoluene	ND	0.0674	"	"	"	"	"	"	
Dibromochloromethane	ND	0.0674	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane		0.337	"	"	"	"	"	"	
1,2-Dibromoethane	ND	0.0674	"	"	"	"	"	"	
Dibromomethane	ND	0.0674	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	0.0674	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	0.0674		"	"	"	"	"	
1,4-Dichlorobenzene	ND	0.0674		"	"	"	"	"	
Dichlorodifluoromethane	ND	0.0674	"	"	"	"	"	"	
1,1-Dichloroethane	ND	0.0674	"	"	"	"	"	"	
1,2-Dichloroethane	ND	0.0674	"	"	"	"	"	"	
1,1-Dichloroethene	ND	0.0674	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	0.0674	"	"	"	"	"	"	
rans-1,2-Dichloroethene	ND	0.0674	"	"	"	"	"	"	
1,2-Dichloropropane	ND ND	0.0674	"	"	"	"	"	"	
1,3-Dichloropropane	ND ND	0.0674	"	"	"	"	"	"	
2,2-Dichloropropane	ND ND	0.0674	"	"		"	"	"	
1,1-Dichloropropene	ND ND	0.0674	,,	"	,,	"	"	"	
cis-1,3-Dichloropropene	ND ND	0.0674	"	"	,,	"	"	"	
rans-1,3-Dichloropropene	ND ND	0.0674	,,	"	,,	"	,,	"	

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SLR Alaska Project: FIA Former Mark Air Facilities

Project Number: 004.0184.00001 2525 Blueberry Road, Suite 206 Reported: Anchorage, AK/USA 99503 Project Manager: Andy Dimitriou 12/03/04 16:24

#### **Volatile Organic Compounds by EPA Method 8260B** North Creek Analytical - Bothell

		Reporting				_			
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Note
WP-7-10 (B4J0471-02) Soil	Sampled: 10/07/04 14:45	Receive	d: 10/12/04 1	5:30					
Ethylbenzene	ND	0.0674	mg/kg dry	1	4J14041	10/14/04	10/14/04	EPA 8260B	
Hexachlorobutadiene	ND	0.0674	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	0.337	"	"	"	"	"	"	
2-Hexanone	ND	0.674	"	"	"	"	"	"	
Isopropylbenzene	ND	0.0674	"	"	"	"	"	"	
p-Isopropyltoluene	ND	0.0674	"	"	"	"	"	"	
4-Methyl-2-pentanone	ND	0.674	"	"	"	"	"	"	
Methylene chloride	ND	0.674	"	"	"	"	"	"	
Naphthalene	ND	0.0674	"	"	"	"	"	"	
n-Propylbenzene	ND	0.0674	"	"	"	"	"	"	
Styrene	ND	0.0674	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	0.0674	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	0.0674	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	0.0674	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	0.0674	"	"	"	"	"	"	
Tetrachloroethene	ND	0.0674	"	"	"	"	"	"	
Toluene	ND	0.0674	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	0.0674	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	0.0674	"	"	"	"	"	"	
Trichloroethene	ND	0.0674	"	"	"	"	"	"	
Trichlorofluoromethane	ND	0.0674	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	0.0674	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	0.0674	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	0.0674	"	"	"	"	"	"	
Vinyl chloride	ND	0.0674	"	"	"	"	"	"	
o-Xylene	ND	0.0674	"	"	"	"	"	"	
m,p-Xylene	ND	0.135	"	"	"	"	"	"	
Surrogate: 1,2-DCA-d4	98.7 %	70-130			"	"	"	"	
Surrogate: Toluene-d8		70-130			"	"	"	"	
Surrogate: 4-BFB	102 %	70-130			"	"	"	"	

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SLR Alaska Project: FIA Former Mark Air Facilities

2525 Blueberry Road, Suite 206 Project Number: 004.0184.00001 Reported: Anchorage, AK/USA 99503 Project Manager: Andy Dimitriou 12/03/04 16:24

# Polynuclear Aromatic Compounds by GC/MS with Selected Ion Monitoring **North Creek Analytical - Bothell**

Spokane

Anchorage

		Reporting							
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
WP-3-7 (B4J0471-04) Soil	Sampled: 10/08/04 11:0:	5 Received	: 10/12/04 15	5:30					
1-Methylnaphthalene	ND	0.0100	mg/kg dry	1	4J18059	10/18/04	11/22/04	8270C-SIM	
2-Methylnaphthalene	ND	0.0100	"	"	"	"	"	"	
Acenaphthene	ND	0.0100	"	"	"	"	"	"	
Acenaphthylene	ND	0.0100	"	"	"	"	"	"	
Anthracene	ND	0.0100	"	"	"	"	"	"	
Benzo (a) anthracene	ND	0.0100	"	"	"	"	"	"	
Benzo (a) pyrene	ND	0.0100	"	"	"	"	"	"	X
Benzo (b) fluoranthene	ND	0.0100	"	"	"	"	"	"	
Benzo (ghi) perylene	ND	0.0100	"	"	"	"	"	"	
Benzo (k) fluoranthene	0.0157	0.0100	"	"	"	"	"	"	
Chrysene	0.0135	0.0100	"	"	"	"	"	"	X
Dibenz (a,h) anthracene	ND	0.0100	"	"	"	"	"	"	
Fluoranthene	ND	0.0100	"	"	"	"	"	"	
Fluorene	ND	0.0100	"	"	"	"	"	"	
Indeno (1,2,3-cd) pyrene	ND	0.0100	"	"	"	"	"	"	
Naphthalene	ND	0.0100	"	"	"	"	"	"	
Phenanthrene	ND	0.0100	"	"	"	"	"	"	
Pyrene	0.0440	0.0100	"	"	"	"	"	n	X
Surrogate: p-Terphenyl-d14	128 %	28-161			"	"	"	"	

North Creek Analytical - Bothell



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SLR Alaska Project: FIA Former Mark Air Facilities

2525 Blueberry Road, Suite 206 Project Number: 004.0184.00001 Reported: Anchorage, AK/USA 99503 Project Manager: Andy Dimitriou 12/03/04 16:24

#### Physical Parameters by APHA/ASTM/EPA Methods North Creek Analytical - Bothell

Analyte	Result	porting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
WP-5-10.5 (B4J0471-01) Soil Sampled: 1	10/07/04 16:20	Receive	d: 10/12/0	4 15:30					
Dry Weight	79.3	1.00	%	1	4J15013	10/15/04	10/16/04	BSOPSPL003R08	
WP-7-10 (B4J0471-02) Soil Sampled: 10	/07/04 14:45	Received	: 10/12/04	15:30					
Dry Weight	86.0	1.00	%	1	4J15013	10/15/04	10/16/04	BSOPSPL003R08	
MW-8-WB-10 (B4J0471-03) Soil Sampled: 10/08/04 09:50 Received: 10/12/04 15:30									
Dry Weight	77.9	1.00	%	1	4J15013	10/15/04	10/16/04	BSOPSPL003R08	
WP-3-7 (B4J0471-04) Soil Sampled: 10/0	08/04 11:05 R	eceived:	10/12/04 1	5:30					
Dry Weight	83.8	1.00	%	1	4J15013	10/15/04	10/16/04	BSOPSPL003R08	
WP-4A-10 (B4J0471-05) Soil Sampled: 10/08/04 13:20 Received: 10/12/04 15:30									
Dry Weight	67.3	1.00	%	1	4J21043	10/21/04	10/22/04	BSOPSPL003R08	

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SLR Alaska Project: FIA Former Mark Air Facilities

2525 Blueberry Road, Suite 206 Project Number: 004.0184.00001 Reported: Anchorage, AK/USA 99503 Project Manager: Andy Dimitriou 12/03/04 16:24

Anchorage

# Gasoline Range Hydrocarbons (n-Hexane to <n-Decane) by AK101 - Quality Control North Creek Analytical - Bothell

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch 4J18022: Prepared 10/18/04	Using EF	PA 5030B (	(MeOH)							
Blank (4J18022-BLK1)										
Gasoline Range Hydrocarbons	ND	5.00	mg/kg							
Surrogate: 4-BFB (FID)	2.14		"	2.40		89.2	60-120			
Surrogate: a,a,a-TFT (FID)	2.44		"	2.40		102	50-150			
LCS (4J18022-BS1)										
Gasoline Range Hydrocarbons	26.0	5.00	mg/kg	25.1		104	60-120			
Surrogate: 4-BFB (FID)	2.48		"	2.40		103	60-120			
Surrogate: a,a,a-TFT (FID)	2.57		"	2.40		107	50-150			
LCS Dup (4J18022-BSD1)										
Gasoline Range Hydrocarbons	27.0	5.00	mg/kg	25.1		108	60-120	3.77	20	
Surrogate: 4-BFB (FID)	2.49		"	2.40		104	60-120			
Surrogate: a,a,a-TFT (FID)	2.56		"	2.40		107	50-150			

North Creek Analytical - Bothell



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SLR Alaska Project: FIA Former Mark Air Facilities

2525 Blueberry Road, Suite 206 Project Number: 004.0184.00001 Reported: Anchorage, AK/USA 99503 Project Manager: Andy Dimitriou 12/03/04 16:24

# Gasoline Hydrocarbons (n-Hexane to <n-Decane) and BTEX by AK101/EPA 8021B - Quality Control North Creek Analytical - Bothell

			Reporting		Spike	Source		%REC		RPD	
Analyte		Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch 4J18022:	Prepared 10/18/04	Using E	PA 5030B	(МеОН)							
Blank (4J18022-Bl	LK1)										
Gasoline Range Hydro	ocarbons	ND	5.00	mg/kg							
Benzene		ND	0.0200	"							
Toluene		ND	0.0500	"							
Ethylbenzene		ND	0.0500	"							
Xylenes (total)		ND	0.100	"							
Surrogate: 4-BFB (FL	D)	2.14		"	2.40		89.2	60-120			
Surrogate: a,a,a-TFT	(FID)	2.44		"	2.40		102	50-150			
Surrogate: 4-BFB (PI	D)	2.09		"	2.40		87.1	60-120			
Surrogate: a,a,a-TFT	(PID)	2.38		"	2.40		99.2	50-150			
LCS (4J18022-BS1	1)										
Gasoline Range Hydro	ocarbons	26.0	5.00	mg/kg	25.1		104	60-120			
Benzene		0.289	0.0200	"	0.310		93.2	75-125			
Toluene		1.67	0.0500	"	1.75		95.4	75-125			
Ethylbenzene		0.409	0.0500	"	0.419		97.6	75-125			
Xylenes (total)		2.01	0.100	"	2.03		99.0	75-125			
Surrogate: 4-BFB (FI	D)	2.48		"	2.40		103	60-120			
Surrogate: a,a,a-TFT	(FID)	2.57		"	2.40		107	50-150			
Surrogate: 4-BFB (PL	D)	2.14		"	2.40		89.2	60-120			
Surrogate: a,a,a-TFT	(PID)	2.36		"	2.40		98.3	50-150			
LCS Dup (4J18022	2-BSD1)										
Gasoline Range Hydro	ocarbons	27.0	5.00	mg/kg	25.1		108	60-120	3.77	20	
Benzene		0.304	0.0200	"	0.310		98.1	75-125	5.06	25	
Toluene		1.74	0.0500	"	1.75		99.4	75-125	4.11	25	
Ethylbenzene		0.425	0.0500	"	0.419		101	75-125	3.84	25	
Xylenes (total)		2.11	0.100	"	2.03		104	75-125	4.85	25	
Surrogate: 4-BFB (FI	D)	2.49		"	2.40		104	60-120			
Surrogate: a,a,a-TFT	(FID)	2.56		"	2.40		107	50-150			
Surrogate: 4-BFB (PL	D)	2.13		"	2.40		88.8	60-120			
Surrogate: a,a,a-TFT	(PID)	2.34		"	2.40		97.5	50-150			

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SLR Alaska Project: FIA Former Mark Air Facilities

2525 Blueberry Road, Suite 206 Project Number: 004.0184.00001 Reported: Anchorage, AK/USA 99503 Project Manager: Andy Dimitriou 12/03/04 16:24

# Diesel Hydrocarbons (C10-C25) by AK102 - Quality Control North Creek Analytical - Bothell

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
<b>Batch 4J15001:</b> Prepared 10/15/0	04 Using EP	A 3550B								
Blank (4J15001-BLK1)										
Diesel Range Hydrocarbons	ND	4.00	mg/kg							
Surrogate: 2-FBP	6.18		"	8.40		73.6	50-150			
LCS (4J15001-BS1)										
Diesel Range Hydrocarbons	61.6	4.00	mg/kg	74.8		82.4	75-125			
Surrogate: 2-FBP	6.43		"	8.40		76.5	50-150			
LCS Dup (4J15001-BSD1)										
Diesel Range Hydrocarbons	68.4	4.00	mg/kg	74.8		91.4	75-125	10.5	20	
Surrogate: 2-FBP	6.87		"	8.40		81.8	50-150			
Matrix Spike (4J15001-MS1)					Source: I	34J0501-0	)9			
Diesel Range Hydrocarbons	144	9.24	mg/kg dry	173	7.60	78.8	75-125			
Surrogate: 2-FBP	16.8		"	19.4		86.6	50-150			
Matrix Spike Dup (4J15001-MSD1)					Source: I	34J0501-0	)9			
Diesel Range Hydrocarbons	150	9.24	mg/kg dry	173	7.60	82.3	75-125	4.08	20	
Surrogate: 2-FBP	16.9		"	19.4		87.1	50-150			

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SLR Alaska Project: FIA Former Mark Air Facilities

2525 Blueberry Road, Suite 206 Project Number: 004.0184.00001 Reported: Anchorage, AK/USA 99503 Project Manager: Andy Dimitriou 12/03/04 16:24

# Diesel Hydrocarbons (C10-C25) and Heavy Oil (C25-C36) by AK102 and AK103 - Quality Control North Creek Analytical - Bothell

			Reporting		Spike	Source		%REC		RPD	
Analyte		Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch 4J15001:	Prepared 10/15/04	Using EP	A 3550B								
Blank (4J15001-Bl	LK1)										
Diesel Range Hydroca	arbons	ND	4.00	mg/kg							
Residual Range Organ	nics	ND	25.0	"							
Surrogate: 2-FBP		6.18		"	8.40		73.6	50-150			
Surrogate: Octacosan	e	7.09		"	8.00		88.6	50-150			
LCS (4J15001-BS1	1)										
Diesel Range Hydroca	arbons	61.6	4.00	mg/kg	74.8		82.4	75-125			
Surrogate: 2-FBP		6.43		"	8.40		76.5	50-150			
LCS (4J15001-BS2	2)										
Residual Range Organ	nics	60.5	25.0	mg/kg	80.0		75.6	60-120			
Surrogate: Octacosan	e	6.75		"	8.00		84.4	50-150			
LCS Dup (4J15001	I-BSD1)										
Diesel Range Hydroca	arbons	68.4	4.00	mg/kg	74.8		91.4	75-125	10.5	20	
Surrogate: 2-FBP		6.87		"	8.40		81.8	50-150			
LCS Dup (4J15001	I-BSD2)										
Residual Range Organ	nics	58.7	25.0	mg/kg	80.0		73.4	60-120	3.02	20	
Surrogate: Octacosan	e	6.74		"	8.00		84.2	50-150			
Matrix Spike (4J1:	5001-MS1)		Source: B4J0501-09								
Diesel Range Hydroca	arbons	144	9.24	mg/kg dry	173	7.60	78.8	75-125			
Surrogate: 2-FBP		16.8		"	19.4		86.6	50-150			
Matrix Spike Dup	(4J15001-MSD1)					Source: I	34J0501-0	19			
Diesel Range Hydroca	arbons	150	9.24	mg/kg dry	173	7.60	82.3	75-125	4.08	20	
Surrogate: 2-FBP		16.9		"	19.4		87.1	50-150			

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%REC

RPD

SLR Alaska Project: FIA Former Mark Air Facilities

Reporting

2525 Blueberry Road, Suite 206 Project Number: 004.0184.00001 Reported: Anchorage, AK/USA 99503 Project Manager: Andy Dimitriou 12/03/04 16:24

# Total Metals by EPA 6000/7000 Series Methods - Quality Control North Creek Analytical - Bothell

Spike

Analyte		Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch 4J18044:	Prepared 10/18/04	Using EP.	A 3050B								
Blank (4J18044-BL	LK1)										
Lead		ND	0.500	mg/kg							
LCS (4J18044-BS1	)										
Lead		40.6	0.500	mg/kg	40.0		102	80-120			
LCS Dup (4J18044	-BSD1)										
Lead		39.6	0.500	mg/kg	38.5		103	80-120	2.49	20	
Matrix Spike (4J18	8044-MS1)					Source: E	34J0394-1	4			
Lead		48.6	0.500	mg/kg dry	40.7	8.84	97.7	62-137			
Matrix Spike Dup (	(4J18044-MSD1)					Source: E	34J0394-1	4			
Lead		60.2	0.500	mg/kg dry	44.0	8.84	117	62-137	21.3	30	
Post Spike (4J1804	4-PS1)					Source: I	34J0394-1	4			
Lead		0.114		ug/ml	0.0995	0.0166	97.9	75-125			

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SLR Alaska Project: FIA Former Mark Air Facilities

2525 Blueberry Road, Suite 206 Project Number: 004.0184.00001 Reported: Anchorage, AK/USA 99503 Project Manager: Andy Dimitriou 12/03/04 16:24

# Volatile Organic Compounds by EPA Method 8260B - Quality Control North Creek Analytical - Bothell

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes

Batch 4J14041:	<b>Prepared 10/14/04</b>	Using EPA 5030B	[MeOH]

Blank (4J14041-BLK1) Acetone	ND	1.00	ma/ka
			mg/kg
Benzene Bromobenzene	ND ND	0.0200 0.100	,,
			"
Bromochloromethane	ND	0.100	,,
Bromodichloromethane	ND	0.100	
Bromoform	ND	0.100	,,
Bromomethane	ND	0.100	
2-Butanone	ND	1.00	
n-Butylbenzene	ND	0.100	"
sec-Butylbenzene	ND	0.100	"
tert-Butylbenzene	ND	0.100	"
Carbon disulfide	ND	0.100	"
Carbon tetrachloride	ND	0.100	"
Chlorobenzene	ND	0.100	"
Chloroethane	ND	0.100	"
Chloroform	ND	0.100	"
Chloromethane	ND	0.500	"
2-Chlorotoluene	ND	0.100	"
4-Chlorotoluene	ND	0.100	"
Dibromochloromethane	ND	0.100	"
1,2-Dibromo-3-chloropropane	ND	0.500	"
1,2-Dibromoethane	ND	0.100	"
Dibromomethane	ND	0.100	"
1,2-Dichlorobenzene	ND	0.100	"
1,3-Dichlorobenzene	ND	0.100	"
1,4-Dichlorobenzene	ND	0.100	"
Dichlorodifluoromethane	ND	0.100	"
1,1-Dichloroethane	ND	0.100	"
1,2-Dichloroethane	ND	0.100	"
1,1-Dichloroethene	ND	0.100	"
cis-1,2-Dichloroethene	ND	0.100	"
trans-1,2-Dichloroethene	ND	0.100	"
1,2-Dichloropropane	ND	0.100	"
1,3-Dichloropropane	ND	0.100	"
2,2-Dichloropropane	ND	0.100	"
,rrr	1,2		

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SLR Alaska Project: FIA Former Mark Air Facilities

2525 Blueberry Road, Suite 206 Project Number: 004.0184.00001 Reported: Anchorage, AK/USA 99503 Project Manager: Andy Dimitriou 12/03/04 16:24

# Volatile Organic Compounds by EPA Method 8260B - Quality Control North Creek Analytical - Bothell

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes

Batch 4J14041:	<b>Prepared 10/14/04</b>	Using EPA 5030B	[MeOH]

Blank (4J14041-BLK1)						
1,1-Dichloropropene	ND	0.100	mg/kg			
cis-1,3-Dichloropropene	ND	0.100	"			
trans-1,3-Dichloropropene	ND	0.100	n			
Ethylbenzene	ND	0.100	"			
Hexachlorobutadiene	ND	0.100	"			
Methyl tert-butyl ether	ND	0.500	"			
-Hexanone	ND	1.00	"			
opropylbenzene	ND	0.100	"			
Isopropyltoluene	ND	0.100	"			
-Methyl-2-pentanone	ND	1.00	"			
lethylene chloride	ND	1.00	"			
aphthalene	ND	0.100	n			
Propylbenzene	ND	0.100	"			
tyrene	ND	0.100	"			
,2,3-Trichlorobenzene	ND	0.100	"			
,2,4-Trichlorobenzene	ND	0.100	"			
1,1,2-Tetrachloroethane	ND	0.100	"			
1,2,2-Tetrachloroethane	ND	0.100	"			
trachloroethene	ND	0.100	n			
oluene	ND	0.100	n			
1,1-Trichloroethane	ND	0.100	"			
1,2-Trichloroethane	ND	0.100	"			
richloroethene	ND	0.100	"			
richlorofluoromethane	ND	0.100	"			
2,3-Trichloropropane	ND	0.100	"			
2,4-Trimethylbenzene	ND	0.100	"			
,3,5-Trimethylbenzene	ND	0.100	"			
inyl chloride	ND	0.100	"			
-Xylene	ND	0.100	"			
n,p-Xylene	ND	0.200	"			
urrogate: 1,2-DCA-d4	1.94		"	2.00	97.0	70-130
urrogate: Toluene-d8	1.97		"	2.00	98.5	70-130
urrogate: 4-BFB	1.95		"	2.00	97.5	70-130

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SLR Alaska Project: FIA Former Mark Air Facilities

2525 Blueberry Road, Suite 206 Project Number: 004.0184.00001 Reported: Anchorage, AK/USA 99503 Project Manager: Andy Dimitriou 12/03/04 16:24

# Volatile Organic Compounds by EPA Method 8260B - Quality Control North Creek Analytical - Bothell

		•	Reporting		Spike	Source		%REC	•	RPD	
Analyte		Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch 4J14041: P	repared 10/14/04	Using E	PA 5030B	[MeOH]							
LCS (4J14041-BS1)											
Benzene		0.936	0.0200	mg/kg	1.00		93.6	75-125			
Chlorobenzene		0.959	0.100	"	1.00		95.9	74-128			
1,1-Dichloroethene		1.11	0.100	"	1.00		111	57-122			
Methyl tert-butyl ether		1.01	0.500	"	1.00		101	75-125			
Toluene		0.912	0.100	"	1.00		91.2	74-121			
Trichloroethene		0.902	0.100	"	1.00		90.2	72-122			
Surrogate: 1,2-DCA-d4		1.95		"	2.00		97.5	70-130			
Surrogate: Toluene-d8		1.94		"	2.00		97.0	70-130			
Surrogate: 4-BFB		1.97		"	2.00		98.5	70-130			
LCS Dup (4J14041-BS	SD1)										
Benzene		0.947	0.0200	mg/kg	1.00		94.7	75-125	1.17	20	
Chlorobenzene		0.993	0.100	"	1.00		99.3	74-128	3.48	20	
1,1-Dichloroethene		1.14	0.100	"	1.00		114	57-122	2.67	20	
Methyl tert-butyl ether		0.996	0.500	"	1.00		99.6	75-125	1.40	20	
Toluene		0.952	0.100	"	1.00		95.2	74-121	4.29	20	
Trichloroethene		0.916	0.100	"	1.00		91.6	72-122	1.54	20	
Surrogate: 1,2-DCA-d4		1.96		"	2.00		98.0	70-130			
Surrogate: Toluene-d8		1.99		"	2.00		99.5	70-130			
Surrogate: 4-BFB		1.97		"	2.00		98.5	70-130			
Matrix Spike (4J14041	-MS1)					Source: 1	34J0416-1	2			A-01a
Benzene		0.688	0.0115	mg/kg dry	0.708	ND	97.2	61-130			
Chlorobenzene		0.712	0.0577	"	0.708	ND	101	62-129			
1,1-Dichloroethene		0.773	0.0577	"	0.708	ND	109	42-127			
Methyl tert-butyl ether		0.734	0.289	"	0.708	ND	104	50-150			
Toluene		0.690	0.0577	"	0.708	0.0106	96.0	62-125			
Trichloroethene		0.663	0.0577	"	0.708	ND	93.6	55-130			
Surrogate: 1,2-DCA-d4		1.43		"	1.42		101	70-130			
Surrogate: Toluene-d8		1.40		"	1.42		98.6	70-130			
Surrogate: 4-BFB		1.40		"	1.42		98.6	70-130			

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SLR Alaska Project: FIA Former Mark Air Facilities

2525 Blueberry Road, Suite 206 Project Number: 004.0184.00001 Reported: Anchorage, AK/USA 99503 Project Manager: Andy Dimitriou 12/03/04 16:24

# Volatile Organic Compounds by EPA Method 8260B - Quality Control North Creek Analytical - Bothell

	F	Reporting		Spike	Source		%REC	RPD		
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes

Batch 4J14041: 1	Prepared 10/14/04	Using EPA	5030B [	MeOHl
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Matrix Spike Dup (4J14041-MSD1)	Source: B4J0416-12												
Benzene	0.654	0.0115	mg/kg dry	0.708	ND	92.4	61-130	5.07	25				
Chlorobenzene	0.682	0.0577	"	0.708	ND	96.3	62-129	4.30	25				
1,1-Dichloroethene	0.793	0.0577	"	0.708	ND	112	42-127	2.55	25				
Methyl tert-butyl ether	0.720	0.289	"	0.708	ND	102	50-150	1.93	25				
Toluene	0.653	0.0577	"	0.708	0.0106	90.7	62-125	5.51	25				
Trichloroethene	0.642	0.0577	"	0.708	ND	90.7	55-130	3.22	25				
Surrogate: 1,2-DCA-d4	1.41		"	1.42		99.3	70-130						
Surrogate: Toluene-d8	1.39		"	1.42		97.9	70-130						
Surrogate: 4-BFB	1.40		"	1.42		98.6	70-130						

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SLR Alaska Project: FIA Former Mark Air Facilities

2525 Blueberry Road, Suite 206 Project Number: 004.0184.00001 Reported: Anchorage, AK/USA 99503 Project Manager: Andy Dimitriou 12/03/04 16:24

# Polynuclear Aromatic Compounds by GC/MS with Selected Ion Monitoring - Quality Control **North Creek Analytical - Bothell**

Spokane

			Reporting		Spike	Source		%REC		RPD	
Analyte		Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch 4J18059: F	Prepared 10/18/04	Using E	EPA 3545								
Blank (4J18059-BLK)	1)										
1-Methylnaphthalene		ND	0.0100	mg/kg							
2-Methylnaphthalene		ND	0.0100	"							
Acenaphthene		ND	0.0100	"							
Acenaphthylene		ND	0.0100	"							
Anthracene		ND	0.0100	"							
Benzo (a) anthracene		ND	0.0100	"							
Benzo (a) pyrene		ND	0.0100	"							X
Benzo (b) fluoranthene		ND	0.0100	"							
Benzo (ghi) perylene		ND	0.0100	"							
Benzo (k) fluoranthene		ND	0.0100	"							
Chrysene		ND	0.0100	"							X
Dibenz (a,h) anthracene		ND	0.0100	"							
Fluoranthene		ND	0.0100	"							
Fluorene		ND	0.0100	"							
Indeno (1,2,3-cd) pyrene		ND	0.0100	"							
Naphthalene		ND	0.0100	"							
Phenanthrene		ND	0.0100	"							
Pyrene		ND	0.0100	"							X
Surrogate: p-Terphenyl-d	14	2.64		"	1.67		158	28-161			
LCS (4J18059-BS2)											
1-Methylnaphthalene		0.373	0.0100	mg/kg	0.333		112	50-150			
2-Methylnaphthalene		0.370	0.0100	"	0.333		111	50-150			
Acenaphthene		0.377	0.0100	"	0.333		113	53-120			
Acenaphthylene		0.387	0.0100	"	0.333		116	52-120			
Anthracene		0.418	0.0100	"	0.333		126	39-145			
Benzo (a) anthracene		0.351	0.0100	"	0.333		105	64-120			
Benzo (a) pyrene		0.404	0.0100	"	0.333		121	65-120			X
Benzo (b) fluoranthene		0.447	0.0100	"	0.333		134	52-139			
Benzo (ghi) perylene		0.326	0.0100	"	0.333		97.9	54-125			
Benzo (k) fluoranthene		0.343	0.0100	"	0.333		103	47-138			
Chrysene		0.420	0.0100	"	0.333		126	57-125			X
Dibenz (a,h) anthracene		0.310	0.0100	"	0.333		93.1	52-120			
Fluoranthene		0.358	0.0100	"	0.333		108	61-128			
Fluorene		0.393	0.0100	"	0.333		118	63-120			

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SLR Alaska Project: FIA Former Mark Air Facilities

2525 Blueberry Road, Suite 206 Project Number: 004.0184.00001 Reported: Anchorage, AK/USA 99503 Project Manager: Andy Dimitriou 12/03/04 16:24

# Polynuclear Aromatic Compounds by GC/MS with Selected Ion Monitoring - Quality Control North Creek Analytical - Bothell

			Reporting		Spike	Source		%REC		RPD	
Analyte		Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch 4J18059:	Prepared 10/18/04	Using El	PA 3545								
LCS (4J18059-BS2)	)										
Indeno (1,2,3-cd) pyrer	ie	0.309	0.0100	mg/kg	0.333		92.8	54-128			
Naphthalene		0.382	0.0100	"	0.333		115	54-120			
Phenanthrene		0.336	0.0100	"	0.333		101	28-120			
Pyrene		0.423	0.0100	"	0.333		127	59-124			X
Surrogate: p-Terpheny	l-d14	2.32		"	1.67		139	28-161			
LCS Dup (4J18059-	-BSD2)										
1-Methylnaphthalene		0.361	0.0100	mg/kg	0.333		108	50-150	3.27	40	
2-Methylnaphthalene		0.362	0.0100	"	0.333		109	50-150	2.19	40	
Acenaphthene		0.371	0.0100	"	0.333		111	53-120	1.60	40	
Acenaphthylene		0.386	0.0100	"	0.333		116	52-120	0.259	40	
Anthracene		0.420	0.0100	"	0.333		126	39-145	0.477	40	
Benzo (a) anthracene		0.367	0.0100	"	0.333		110	64-120	4.46	40	
Benzo (a) pyrene		0.425	0.0100	"	0.333		128	65-120	5.07	40	X
Benzo (b) fluoranthene		0.457	0.0100	"	0.333		137	52-139	2.21	40	
Benzo (ghi) perylene		0.339	0.0100	"	0.333		102	54-125	3.91	40	
Benzo (k) fluoranthene		0.351	0.0100	"	0.333		105	47-138	2.31	40	
Chrysene		0.429	0.0100	"	0.333		129	57-125	2.12	24	X
Dibenz (a,h) anthracene		0.325	0.0100	"	0.333		97.6	52-120	4.72	40	
Fluoranthene		0.363	0.0100	"	0.333		109	61-128	1.39	40	
Fluorene		0.389	0.0100	"	0.333		117	63-120	1.02	43	
Indeno (1,2,3-cd) pyrer	ie	0.325	0.0100	"	0.333		97.6	54-128	5.05	39	
Naphthalene		0.369	0.0100	"	0.333		111	54-120	3.46	40	
Phenanthrene		0.335	0.0100	"	0.333		101	28-120	0.298	40	
Pyrene		0.422	0.0100	"	0.333		127	59-124	0.237	40	X
Surrogate: p-Terpheny	l-d14	2.25		"	1.67		135	28-161			

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SLR Alaska Project: FIA Former Mark Air Facilities

2525 Blueberry Road, Suite 206 Project Number: 004.0184.00001 Reported: Project Manager: Andy Dimitriou Anchorage, AK/USA 99503 12/03/04 16:24

#### Physical Parameters by APHA/ASTM/EPA Methods - Quality Control **North Creek Analytical - Bothell**

Anchorage

		Reporting		Spike	Source		%REC		RPD		
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes	

Batch 4J15013: Prepared 10/15/04 Using General Preparation

Blank (4J15013-BLK1)

Dry Weight 100 1.00

Batch 4J21043: Prepared 10/21/04 Using General Preparation

Blank (4J21043-BLK1)

Dry Weight 99.8 1.00 %

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SLR Alaska Project: FIA Former Mark Air Facilities

2525 Blueberry Road, Suite 206 Project Number: 004.0184.00001 Reported: Anchorage, AK/USA 99503 Project Manager: Andy Dimitriou 12/03/04 16:24

#### **Notes and Definitions**

A-01 The Matrix Spike Duplicate was analyzed thirty-four minutes outside twelve hour QC window.

A-01a The Matrix Spike was analyzed five minutes outside of the twelve hour QC window.

G-02 The chromatogram for this sample does not resemble a typical gasoline pattern. Please refer to the sample chromatogram.

I-06 The analyte concentration may be artificially elevated due to coeluting compounds or components.

S-01 The surrogate recovery for this sample is not available due to sample dilution required from high analyte concentration and/or

matrix interferences.

S-04 The surrogate recovery for this sample is outside of established control limits due to a sample matrix effect.

X See case narrative.

DET Analyte DETECTED

ND Analyte NOT DETECTED at or above the reporting limit

NR Not Reported

dry Sample results reported on a dry weight basis

RPD Relative Percent Difference

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#### 14 December 2004

Andy Dimitriou SLR Alaska 2525 Blueberry Road, Suite 206 Anchorage, AK/USA 99503

RE: FIA Former Mark Air Facilities

Enclosed are the results of analyses for samples received by the laboratory on 10/15/04 08:30. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

**Amar Gill** 

**Project Manager** 



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FAX 906-9210
541-383-9310
FAX 382-7588
907-334-9200
FAX 334-9210

Work Order #: 4H 106 Zh **CHAIN OF CUSTODY REPORT** CLIENT: TIA INVOICE TO: TURNAROUND REQUEST SLL AK in Business Days \* REPORT TO: SLR ALASKA ADDRESS: 2525 BLUEBERRY RD. STE. 206 MINCHORALE MK 99503 Organic & Inorganic Analyses 3 PHONE: 902-222-1/12 FAX: 907-222-1/13 Petroleum Hydrocarbon Analyses P.O. NUMBER: PROJECT NAME: FORMOR MIGHT HILL FAL 2 **PRESERVATIVE** PROJECT NUMBER: 004.0184.00001 REOUESTED ANALYSES OTHER Specify: \* Turnaround Requests less than standard may incur Rush Charges. SAMPLED BY: SALLY SWENSON MATRIX #OF LOCATION / NCA CLIENT SAMPLE SAMPLING COMMENTS WO ID CONT (W, S, O) DATE/TIME **IDENTIFICATION** 10 1 WF -10 OZ 5 a 09 (0)10-13-04 DATE: 10/15/04 RECEIVED BY: 1000 DATE: 10 · 14 · 04 FIRM: NCA FIRM: SLK A TIME: PRINT NAME: TIME: PRINT NAME: DATE: RECEIVED BY: DATE: RELEASED BY: TIME: PRINT NAME: FIRM: PRINT NAME: FIRM: TIME: TEMP: ADDITIONAL REMARKS: 4.3° PAGE 1 OF Z COC REV 1/03



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541-383-9310
FAX 382-7588
907-334-9200
FAX 334-9210

	CHAIN O	F C	CUS'	TOI	DY :	RE	POF	RT						٦	Work O			1062	
CLIENT: FIA /A					INVC										T	URNAI	ROUND	REQUEST	ſ
REPORT TO: SLA MIN ADDRESS: 2525 BIM Arction 166	ska Foerly RD					Sh	RA	k							7		Business I Inorganic . 4 3	Analyses	<1
PHONE: 907-222-1112	-				P.O. 1	IUME	ER:								STD.	etroleum		on Analyses	_
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PROJECT NUMBER: 004-0184 SAMPLED BY: SACLY	100001	nce	100	1114		REQ	UEST		NALY	SES					ـــــــا	HER	Specify:		
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2 WP4N - 25	10.13.04 1920		X	X	X	X	X									7	10		12
3WP5 - 83	10.13.04		X	X	$\times$	X			-		_								
4WP6	16.13.04 2000		X	$\boxtimes$	$\boxtimes$	X										7	18		B
5WP-7 S	10:13:04		$\geq$	X	$\times$	X													
6 WP-ZA	10113:04 1320		X	$\boxtimes$	$\boxtimes$											5			114
1 WP -1A	10:13:04 1300	$\geq$		X							_					5	*.		15
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Anchorage

SLR Alaska Project: FIA Former Mark Air Facilities

2525 Blueberry Road, Suite 206 Project Number: 004.0184.00001 Reported: Anchorage, AK/USA 99503 Project Manager: Andy Dimitriou 12/14/04 08:06

#### ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
WP-1	B4J0626-01	Water	10/13/04 11:00	10/15/04 08:30
WP-3A	B4J0626-02	Water	10/13/04 09:00	10/15/04 08:30
WP-2	B4J0626-03	Water	10/13/04 12:30	10/15/04 08:30
WP-3	B4J0626-04	Water	10/13/04 12:50	10/15/04 08:30
MW-8	B4J0626-05	Water	10/13/04 14:10	10/15/04 08:30
MW-9	B4J0626-06	Water	10/13/04 14:50	10/15/04 08:30
MW-3	B4J0626-07	Water	10/13/04 15:25	10/15/04 08:30
WP-9	B4J0626-08	Water	10/13/04 15:55	10/15/04 08:30
WP-8	B4J0626-09	Water	10/13/04 16:20	10/15/04 08:30
MW-4	B4J0626-10	Water	10/13/04 18:15	10/15/04 08:30
WP4N-35	B4J0626-11	Water	10/13/04 19:00	10/15/04 08:30
WP4N-25	B4J0626-12	Water	10/13/04 19:20	10/15/04 08:30
WP-6	B4J0626-13	Water	10/13/04 20:00	10/15/04 08:30
WP-2A	B4J0626-14	Water	10/13/04 13:20	10/15/04 08:30
WP-1A	B4J0626-15	Water	10/13/04 13:00	10/15/04 08:30

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SLR Alaska Project: FIA Former Mark Air Facilities

2525 Blueberry Road, Suite 206 Project Number: 004.0184.00001 Reported: Anchorage, AK/USA 99503 Project Manager: Andy Dimitriou 12/14/04 08:06

#### Residual Range Organics (C25-C36) by AK 103 North Creek Analytical - Bothell

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes		
MW-9 (B4J0626-06) Water Sampled: 10/13/04 14:50 Received: 10/15/04 08:30												
Residual Range Organics	ND	0.400	3.00	mg/l	1	4J27011	10/27/04	10/28/04	AK 103			
Surrogate: Octacosane	96.7 %		50-15	50		"	"	"	"			

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SLR Alaska Project: FIA Former Mark Air Facilities

2525 Blueberry Road, Suite 206 Project Number: 004.0184.00001 Reported: Anchorage, AK/USA 99503 Project Manager: Andy Dimitriou 12/14/04 08:06

#### Gasoline Range Hydrocarbons (n-Hexane to <n-Decane) by AK101 North Creek Analytical - Bothell

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Note
WP-1 (B4J0626-01) Water Sa	mpled: 10/13/04	11:00 Rec	eived: 10/1	5/04 08:	30					
Gasoline Range Hydrocarbons	2370		50.0	ug/l	1	4J26003	10/26/04	10/26/04	AK 101	
Surrogate: 4-BFB (FID)	215 %		60-12	20		"	"	"	"	S-0-
WP-3A (B4J0626-02) Water S	Sampled: 10/13/0	4 09:00 R	eceived: 10	/15/04 08	3:30					
Gasoline Range Hydrocarbons	2270		50.0	ug/l	1	4J26003	10/26/04	10/26/04	AK 101	
Surrogate: 4-BFB (FID)	208 %		60-12	20		"	"	"	"	S-04
MW-3 (B4J0626-07) Water Sa	ampled: 10/13/04	15:25 Re	ceived: 10/	15/04 08:	:30					
Gasoline Range Hydrocarbons	ND		50.0	ug/l	1	4J26003	10/26/04	10/26/04	AK 101	
Surrogate: 4-BFB (FID)	97.9 %		60-12	20		"	"	"	"	
MW-4 (B4J0626-10) Water Sa	ampled: 10/13/04	18:15 Re	ceived: 10/	15/04 08:	:30					
Gasoline Range Hydrocarbons	ND		50.0	ug/l	1	4J26003	10/26/04	10/27/04	AK 101	
Surrogate: 4-BFB (FID)	101 %		60-12	20		"	"	"	"	
WP4N-25 (B4J0626-12) Water	Sampled: 10/13	3/04 19:20	Received:	10/15/04	08:30					
Gasoline Range Hydrocarbons	62.1		50.0	ug/l	1	4J26003	10/26/04	10/27/04	AK 101	
Surrogate: 4-BFB (FID)	99.0 %		60-12	20		"	"	"	"	
WP-6 (B4J0626-13) Water Sa	mpled: 10/13/04	20:00 Rec	eived: 10/1	5/04 08:	30					
Gasoline Range Hydrocarbons	ND		50.0	ug/l	1	4J26003	10/26/04	10/27/04	AK 101	
Surrogate: 4-BFB (FID)	92.7 %		60-12	20		"	"	"	"	
WP-2A (B4J0626-14) Water S	Sampled: 10/13/0	4 13:20 R	eceived: 10	/15/04_08	3:30					
Gasoline Range Hydrocarbons	68.0		50.0	ug/l	1	4J26003	10/26/04	10/27/04	AK 101	
Surrogate: 4-BFB (FID)	97.9 %		60-12	20		"	"	"	"	

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Project: FIA Former Mark Air Facilities SLR Alaska

2525 Blueberry Road, Suite 206 Project Number: 004.0184.00001 Reported: Anchorage, AK/USA 99503 Project Manager: Andy Dimitriou 12/14/04 08:06

#### Gasoline Hydrocarbons (n-Hexane to <n-Decane) and BTEX by AK101/EPA 8021B North Creek Analytical - Bothell

Analyte	Result M	Reporting DL Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
WP-3 (B4J0626-04) Water 5	Sampled: 10/13/04 12:50	Received: 10/1	5/04 08:3	30					
Gasoline Range Hydrocarbon	as 405	50.0	ug/l	1	4J26003	10/26/04	10/27/04	AK 101	
Benzene	0.299	0.200	"	"	"	"	"	"	
Toluene	2.78	0.500	"	"	"	"	"	"	
Ethylbenzene	3.13	0.500	"	"	"	"	"	"	
Xylenes (total)	8.94	1.00	"	"	"	"	"	"	
Surrogate: 4-BFB (FID)	155 %	60-12	20		"	"	"	"	S-04
Surrogate: 4-BFB (PID)	121 %	68-14	40		"	"	"	"	
MW-8 (B4J0626-05) Water	Sampled: 10/13/04 14:10	Received: 10/	15/04 08:	:30					
Gasoline Range Hydrocarbon	s 20900	250	ug/l	5	4J26003	10/26/04	10/26/04	AK 101	
Benzene	3860	10.0	"	50	"	"	10/27/04	"	
Toluene	51.7	2.50	"	5	"	"	10/26/04	"	
Ethylbenzene	1410	25.0	"	50	"	"	10/27/04	"	
Xylenes (total)	4080	50.0	"	"	"	"	"	"	
Surrogate: 4-BFB (FID)	182 %	60-12	20		"	"	10/26/04	"	S-04
Surrogate: 4-BFB (PID)	126 %	68-14	40		"	"	"	"	
WP-9 (B4J0626-08) Water S	Sampled: 10/13/04 15:55	Received: 10/1	5/04 08:3	30					
Gasoline Range Hydrocarbons	ND	50.0	ug/l	1	4J26003	10/26/04	10/26/04	AK 101	
Benzene	0.548	0.200	"	"	"	"	"	"	
Toluene	3.40	0.500	"	"	"	"	"	"	
Ethylbenzene	0.632	0.500	"	"	"	"	"	"	
Xylenes (total)	3.31	1.00	"	"	"	"	"	"	
Surrogate: 4-BFB (FID)	95.6 %	60-12	20		"	"	"	"	
Surrogate: 4-BFB (PID)	94.8 %	68-14	40		"	"	"	"	

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Project: FIA Former Mark Air Facilities SLR Alaska

2525 Blueberry Road, Suite 206 Project Number: 004.0184.00001 Reported: Anchorage, AK/USA 99503 Project Manager: Andy Dimitriou 12/14/04 08:06

#### Gasoline Hydrocarbons (n-Hexane to <n-Decane) and BTEX by AK101/EPA 8021B North Creek Analytical - Bothell

Analyte	Result N	Reporting MDL Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
WP-8 (B4J0626-09) Water	Sampled: 10/13/04 16:2	0 Received: 10/1	5/04 08:	30					
Gasoline Range Hydrocarbons	ND	50.0	ug/l	1	4J26003	10/26/04	10/27/04	AK 101	
Benzene	0.733	0.200	"	"	"	"	"	"	
Toluene	4.65	0.500	"	"	"	"	"	"	
Ethylbenzene	0.740	0.500	"	"	"	"	"	"	
Xylenes (total)	3.79	1.00	"	"	"	"	"	"	
Surrogate: 4-BFB (FID)	94.4 %	60-12	20		"	"	"	"	
Surrogate: 4-BFB (PID)	95.6 %	68-14	10		"	"	"	"	

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SLR Alaska Project: FIA Former Mark Air Facilities

Project Number: 004.0184.00001 2525 Blueberry Road, Suite 206 Reported: Anchorage, AK/USA 99503 Project Manager: Andy Dimitriou 12/14/04 08:06

#### Diesel Hydrocarbons (C10-C25) by AK102 North Creek Analytical - Bothell

Analyte	Result MI	Reporting DL Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Note
WP-2 (B4J0626-03) Water	Sampled: 10/13/04 12:30	Received: 10/1	5/04 08:3	30					
Diesel Range Hydrocarbons	1.96	0.417	mg/l	1	4J27011	10/27/04	10/28/04	AK 102	D-08
Surrogate: 2-FBP	91.1 %	50-1.	50		"	"	"	"	
WP-3 (B4J0626-04) Water	Sampled: 10/13/04 12:50	Received: 10/1	5/04 08:3	30					
Diesel Range Hydrocarbons	1.48	0.385	mg/l	1	4J27011	10/27/04	10/28/04	AK 102	
Surrogate: 2-FBP	90.9 %	50-1.	50		"	"	"	"	
MW-8 (B4J0626-05) Water	Sampled: 10/13/04 14:10	Received: 10/	15/04 08:	:30					
Diesel Range Hydrocarbons	1.97	0.417	mg/l	1	4J27011	10/27/04	10/28/04	AK 102	D-08
Surrogate: 2-FBP	90.2 %	50-1.	50		"	"	"	"	
MW-3 (B4J0626-07) Water	Sampled: 10/13/04 15:25	Received: 10/	15/04 08:	:30					
Diesel Range Hydrocarbons	ND	0.400	mg/l	1	4J27011	10/27/04	10/28/04	AK 102	
Surrogate: 2-FBP	81.1 %	50-1.	50		"	"	"	"	
WP-9 (B4J0626-08) Water	Sampled: 10/13/04 15:55	Received: 10/1	5/04 08:3	30					
Diesel Range Hydrocarbons	ND	0.400	mg/l	1	4J27011	10/27/04	10/28/04	AK 102	
Surrogate: 2-FBP	75.2 %	50-1.	50		"	"	"	"	
WP-8 (B4J0626-09) Water	Sampled: 10/13/04 16:20	Received: 10/1	5/04 08:3	30					
Diesel Range Hydrocarbons	ND	0.385	mg/l	1	4J27011	10/27/04	10/28/04	AK 102	
Surrogate: 2-FBP	99.2 %	50-1.	50		"	"	"	"	
MW-4 (B4J0626-10) Water	Sampled: 10/13/04 18:15	Received: 10/	15/04 08:	:30					
<b>Diesel Range Hydrocarbons</b>	0.477	0.385	mg/l	1	4J27011	10/27/04	10/28/04	AK 102	
Surrogate: 2-FBP	85.9 %	50-1.	50		"	"	"	"	

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Amar Gill, Project Manager



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SLR Alaska Project: FIA Former Mark Air Facilities

Project Number: 004.0184.00001 2525 Blueberry Road, Suite 206 Reported: Anchorage, AK/USA 99503 Project Manager: Andy Dimitriou 12/14/04 08:06

#### Diesel Hydrocarbons (C10-C25) by AK102 North Creek Analytical - Bothell

Spokane

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
WP-1A (B4J0626-15) Water	Sampled: 10/13/04	13:00 R	eceived: 10	/15/04 08	:30					
Diesel Range Hydrocarbons	ND		0.417	mg/l	1	4J27011	10/27/04	10/28/04	AK 102	
Surrogate: 2-FBP	73.8 %		50-15	50		"	"	"	"	

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Project: FIA Former Mark Air Facilities SLR Alaska

2525 Blueberry Road, Suite 206 Project Number: 004.0184.00001 Reported: Anchorage, AK/USA 99503 Project Manager: Andy Dimitriou 12/14/04 08:06

#### Diesel Hydrocarbons (C10-C25) and Heavy Oil (C25-C36) by AK102 and AK103 North Creek Analytical - Bothell

Bend

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
WP4N-25 (B4J0626-12) Water	r Sampled: 10/13/	04 19:20	Received:	10/15/04	08:30					
<b>Diesel Range Hydrocarbons</b>	0.734		0.100	mg/l	1	4J27011	10/27/04	10/28/04	AK102/103	_
Residual Range Organics	ND		0.750	"	"	"	"	"	"	
Surrogate: 2-FBP	101 %		50-15	50		"	"	"	"	
Surrogate: Octacosane	112 %		50-15	50		"	"	"	"	
WP-6 (B4J0626-13) Water S	sampled: 10/13/04 2	0:00 Re	ceived: 10/1	5/04 08:3	30					
<b>Diesel Range Hydrocarbons</b>	0.103		0.100	mg/l	1	4J27011	10/27/04	10/28/04	AK102/103	_
Residual Range Organics	ND		0.750	"	"	"	"	"	"	
Surrogate: 2-FBP	83.5 %		50-15	50		"	"	"	"	
Surrogate: Octacosane	99.6 %		50-15	50		"	"	"	"	
WP-2A (B4J0626-14) Water	Sampled: 10/13/04	13:20 F	Received: 10	/15/04 08	3:30					
Diesel Range Hydrocarbons	0.630		0.100	mg/l	1	4J27011	10/27/04	10/28/04	AK102/103	
Residual Range Organics	ND		0.750	"	"	"	"	"	"	
Surrogate: 2-FBP	109 %		50-15	50		"	"	"	"	
Surrogate: Octacosane	113 %		50-15	50		"	"	"	"	

North Creek Analytical - Bothell



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SLR Alaska Project: FIA Former Mark Air Facilities

Project Number: 004.0184.00001 2525 Blueberry Road, Suite 206 Reported: Anchorage, AK/USA 99503 Project Manager: Andy Dimitriou 12/14/04 08:06

#### BTEX by EPA Method 8021B North Creek Analytical - Bothell

			Reporting							
Analyte	Result	MDL	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
WP-2 (B4J0626-03) Water	Sampled: 10/13/04 12	2:30 Rece	eived: 10/1	5/04 08:3	30					
Benzene	1600		20.0	ug/l	100	4J26003	10/26/04	10/27/04	EPA 8021B	
Toluene	5590		50.0	"	"	"	"	"	"	
Ethylbenzene	846		50.0	"	"	"	"	"	"	
Xylenes (total)	3950		100	"	"	"	"	"	"	
Surrogate: 4-BFB (PID)	103 %		68-14	10		"	"	"	"	
MW-9 (B4J0626-06) Water	Sampled: 10/13/04 1	14:50 Rec	eived: 10/	15/04 08:	30					
Benzene	4.58		0.200	ug/l	1	4J26003	10/26/04	10/27/04	EPA 8021B	
Toluene	ND		0.500	"	"	"	"	"	"	
Ethylbenzene	ND		0.500	"	"	"	"	"	"	
Xylenes (total)	ND		1.00	"	"	"	"	"	"	
Surrogate: 4-BFB (PID)	94.0 %		68-14	10		"	"	"	"	
WP-1A (B4J0626-15) Water	Sampled: 10/13/04	13:00 Re	ceived: 10	/15/04 08	:30					
Benzene	4.49		0.200	ug/l	1	4J26003	10/26/04	10/27/04	EPA 8021B	
Toluene	ND		0.500	"	"	"	"	"	"	
Ethylbenzene	ND		0.500	"	"	"	"	"	"	
Xylenes (total)	ND		1.00	"	"	"	"	"	"	
Surrogate: 4-BFB (PID)	93.5 %		68-14	10		"	"	"	"	

North Creek Analytical - Bothell



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SLR Alaska Project: FIA Former Mark Air Facilities

2525 Blueberry Road, Suite 206 Project Number: 004.0184.00001 Reported: Anchorage, AK/USA 99503 Project Manager: Andy Dimitriou 12/14/04 08:06

# Total Metals by EPA 6000/7000 Series Methods **North Creek Analytical - Bothell**

Spokane

Analyte	Result M	Reporting DL Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
WP-1 (B4J0626-01) Water	Sampled: 10/13/04 11:00	Received: 10/1	15/04 08:3	80					
Lead	ND	0.00100	mg/l	1	4J21033	10/21/04	10/25/04	EPA 6020	
WP-3A (B4J0626-02) Water	Sampled: 10/13/04 09:0	0 Received: 10	/15/04 08	:30					
Lead	ND	0.00100	mg/l	1	4J21033	10/21/04	10/25/04	EPA 6020	
WP-3 (B4J0626-04) Water	Sampled: 10/13/04 12:50	Received: 10/1	15/04 08:3	<b>30</b>					
Lead	0.0198	0.00100	mg/l	1	4J21033	10/21/04	10/25/04	EPA 6020	
MW-8 (B4J0626-05) Water	Sampled: 10/13/04 14:10	Received: 10/	15/04 08:	30					
Lead	0.00143	0.00100	mg/l	1	4J21033	10/21/04	10/25/04	EPA 6020	
MW-3 (B4J0626-07) Water	Sampled: 10/13/04 15:25	Received: 10/	15/04 08:	30					
Lead	ND	0.00100	mg/l	1	4J21033	10/21/04	10/25/04	EPA 6020	
MW-4 (B4J0626-10) Water	Sampled: 10/13/04 18:15	Received: 10/	15/04 08:	30					
Lead	ND	0.00100	mg/l	1	4J21033	10/21/04	10/25/04	EPA 6020	

North Creek Analytical - Bothell

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Amar Gill, Project Manager



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SLR Alaska Project: FIA Former Mark Air Facilities

Project Number: 004.0184.00001 2525 Blueberry Road, Suite 206 Reported: Anchorage, AK/USA 99503 Project Manager: Andy Dimitriou 12/14/04 08:06

# EDB and DBCP by EPA Method 8011 North Creek Analytical - Bothell

Spokane

Analyte	Result MI	Reporting DL Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
WP-1 (B4J0626-01) Water	Sampled: 10/13/04 11:00	Received: 10/1	5/04 08:	30					
1,2-Dibromoethane (EDB)	ND	0.010	ug/l	1	4J20052	10/20/04	10/28/04	EPA 8011	I-02
WP-3A (B4J0626-02) Water	Sampled: 10/13/04 09:00	0 Received: 10	/15/04 0	8:30					
1,2-Dibromoethane (EDB)	ND	0.010	ug/l	1	4J20052	10/20/04	10/28/04	EPA 8011	I-02
WP-3 (B4J0626-04) Water	Sampled: 10/13/04 12:50	Received: 10/1	5/04 08:	30					
1,2-Dibromoethane (EDB)	ND	0.010	ug/l	1	4J20052	10/20/04	10/28/04	EPA 8011	I-02
MW-8 (B4J0626-05) Water	Sampled: 10/13/04 14:10	Received: 10/	15/04 08	3:30					
1,2-Dibromoethane (EDB)	0.543	0.050	ug/l	5	4J20052	10/20/04	10/29/04	EPA 8011	I-02

North Creek Analytical - Bothell

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> North Creek Analytical, Inc. Environmental Laboratory Network



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SLR Alaska Project: FIA Former Mark Air Facilities

Project Number: 004.0184.00001 2525 Blueberry Road, Suite 206 Reported: Anchorage, AK/USA 99503 Project Manager: Andy Dimitriou 12/14/04 08:06

#### **Volatile Organic Compounds by EPA Method 8260B** North Creek Analytical - Bothell

Spokane

Analyte	Result	Reporting MDL Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
WP-1 (B4J0626-01) Water	Sampled: 10/13/04 11	:00 Received: 10/	15/04 08:3	30					
Acetone	ND	20.0	ug/l	1	4J24009	10/22/04	10/23/04	EPA 8260B	
Benzene	7.23	1.00	"	"	"	"	"	"	
Bromobenzene	ND	1.00	"	"	"	"	"	"	
Bromochloromethane	ND	1.00	"	"	"	"	"	"	
Bromodichloromethane	ND	1.00	"	"	"	"	"	"	
Bromoform	ND	1.00	"	"	"	"	"	"	
Bromomethane	ND	2.00	"	"	"	"	"	"	
2-Butanone	ND	10.0	"	"	"	"	"	"	
n-Butylbenzene	16.0	1.00	"	"	"	"	"	"	
sec-Butylbenzene	7.70	1.00	"	"	"	"	"	"	
tert-Butylbenzene	1.96	1.00	"	"	"	"	"	"	
Carbon disulfide	ND	1.00	"	"	"	"	"	"	
Carbon tetrachloride	ND	1.00	"	"	"	"	"	"	
Chlorobenzene	ND	1.00	"	"	"	"	"	"	
Chloroethane	ND	1.00	"	"	"	"	"	"	
Chloroform	ND	1.00	"	"	"	"	"	"	
Chloromethane	ND	5.00	"	"	"	"	"	"	
2-Chlorotoluene	ND	1.00	"	"	"	"	"	"	
4-Chlorotoluene	ND	1.00	"	"	"	"	"	"	
Dibromochloromethane	ND	1.00	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane		5.00	"	"	"	"	"	"	
1,2-Dibromoethane	ND	1.00	"	"	"	"	"	"	
Dibromomethane	ND	1.00	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	1.00	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	1.00	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	1.00	"	"	"	"	"	"	
Dichlorodifluoromethane	ND	1.00	"	"	"	"	"	"	
1,1-Dichloroethane	ND	1.00	"	"	"	"	"	"	
1,2-Dichloroethane	ND	1.00	"	"	"	"	"	"	
1,1-Dichloroethene	ND	1.00	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	1.00	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	1.00	"	"	"	"	"	"	
1,2-Dichloropropane	ND	1.00	"	"	"	"	"	"	
1,3-Dichloropropane	ND	1.00	"	"	"	"	"	"	
2,2-Dichloropropane	ND	1.00	"	"	"	"	"	"	
1,1-Dichloropropene	ND	1.00	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	1.00	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	1.00	"	"	"	"	"	"	

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SLR Alaska Project: FIA Former Mark Air Facilities

Project Number: 004.0184.00001 2525 Blueberry Road, Suite 206 Reported: Anchorage, AK/USA 99503 Project Manager: Andy Dimitriou 12/14/04 08:06

#### **Volatile Organic Compounds by EPA Method 8260B** North Creek Analytical - Bothell

Spokane

Bend

Analyte	Result	Reportin MDL Lim		Dilution	Batch	Prepared	Analyzed	Method	Notes
WP-1 (B4J0626-01) Water	Sampled: 10/13/04 11	:00 Received: 1	0/15/04 08:	30					
Ethylbenzene	88.3	1.0	0 ug/l	1	4J24009	10/22/04	10/23/04	EPA 8260B	Е
Hexachlorobutadiene	ND	1.0	0 "	"	"	"	"	"	
Methyl tert-butyl ether	ND	2.0	0 "	"	"	"	"	"	
2-Hexanone	ND	10.	0 "	"	"	"	"	"	
Isopropylbenzene	23.5	1.0	0 "	"	"	"	"	"	
p-Isopropyltoluene	6.05	1.0	0 "	"	"	"	"	"	
4-Methyl-2-pentanone	ND	10.	0 "	"	"	"	"	"	
Methylene chloride	ND	5.0	0 "	"	"	"	"	"	
Naphthalene	54.3	1.0	0 "	"	"	"	"	"	
n-Propylbenzene	56.2	1.0	0 "	"	"	"	"	"	
Styrene	ND	1.0	0 "	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	1.0	0 "	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	1.0	0 "	"	"	"	"	"	
1,1,2-Tetrachloroethane	ND	1.0	0 "	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	1.0	0 "	"	"	"	"	"	
Tetrachloroethene	ND	1.0	0 "	"	"	"	"	"	
Toluene	58.4	1.0	0 "	"	"	"	"	"	
1,1,1-Trichloroethane	ND	1.0	0 "	"	"	"	"	"	
1,1,2-Trichloroethane	ND	1.0	0 "	"	"	"	"	"	
Trichloroethene	ND	1.0	0 "	"	"	"	"	"	
Trichlorofluoromethane	3.71	1.0	0 "	"	"	"	"	"	
1,2,3-Trichloropropane	ND	1.0	0 "	"	"	"	"	"	
1,2,4-Trimethylbenzene	248	1.0	0 "	"	"	"	"	"	E-01
1,3,5-Trimethylbenzene	64.9	1.0	0 "	"	"	"	"	"	Е
Vinyl chloride	ND	1.0	0 "	"	"	"	"	"	
o-Xylene	145	1.0		"	"	"	"	"	Е
m,p-Xylene	297	2.0		"	"	"	"	"	E
Surrogate: 1,2-DCA-d4	95.5 %	70	-130		"	"	"	"	
Surrogate: Toluene-d8	107 %	70	-130		"	"	"	"	
Surrogate: 4-BFB	107 %	70	-130		"	"	"	"	
-									

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SLR Alaska Project: FIA Former Mark Air Facilities

Project Number: 004.0184.00001 2525 Blueberry Road, Suite 206 Reported: Anchorage, AK/USA 99503 Project Manager: Andy Dimitriou 12/14/04 08:06

#### **Volatile Organic Compounds by EPA Method 8260B** North Creek Analytical - Bothell

Analyte	Result MD	Reporting L Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
WP-1 (B4J0626-01RE1) Water	Sampled: 10/13/04 11:	00 Received:	10/15/04	08:30					
Acetone	ND	400	ug/l	20	4J24010	10/24/04	10/24/04	EPA 8260B	
Benzene	ND	20.0	"	"	"	"	"	"	
Bromobenzene	ND	20.0	"	"	"	"	"	"	
Bromochloromethane	ND	20.0	"	"	"	"	"	"	
Bromodichloromethane	ND	20.0	"	"	"	"	"	"	
Bromoform	ND	20.0	"	"	"	"	"	"	
Bromomethane	ND	40.0	"	"	"	"	"	"	
2-Butanone	ND	200	"	"	"	"	"	"	
n-Butylbenzene	ND	20.0	"	"	"	"	"	"	
sec-Butylbenzene	ND	20.0	"	"	"	"	"	"	
tert-Butylbenzene	ND	20.0	"	"	"	"	"	"	
Carbon disulfide	ND	20.0	"	"	"	"	"	"	
Carbon tetrachloride	ND	20.0	"	"	"	"	"	"	
Chlorobenzene	ND	20.0	"	"	"	"	"	"	
Chloroethane	ND	20.0	"	"	"	"	"	"	
Chloroform	ND	20.0	"	"	"	"	"	"	
Chloromethane	ND	100	"	"	"	"	"	"	
2-Chlorotoluene	ND	20.0	"	"	"	"	"	"	
4-Chlorotoluene	ND	20.0	"	"	"	"	"	"	
Dibromochloromethane	ND	20.0	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	100	"	"	"	"	"	"	
1,2-Dibromoethane	ND	20.0	"	"	"	"	"	"	
Dibromomethane	ND	20.0	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	20.0	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	20.0	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	20.0	"	"	"	"	"	"	
Dichlorodifluoromethane	ND	20.0	"	"	"	"	"	"	
1,1-Dichloroethane	ND	20.0	"	"	"	"	"	"	
1,2-Dichloroethane	ND	20.0	"	"	"	"	"	"	
1,1-Dichloroethene	ND	20.0	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	20.0	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	20.0	"	"	"	"	"	"	
1,2-Dichloropropane	ND	20.0	"	"	"	"	"	"	
1,3-Dichloropropane	ND	20.0	"	"	"	"	"	"	
2,2-Dichloropropane	ND	20.0	"	"	"	"	"	"	
1,1-Dichloropropene	ND	20.0	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	20.0	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	20.0	"	"	"	"	"	"	

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SLR Alaska Project: FIA Former Mark Air Facilities

Project Number: 004.0184.00001 2525 Blueberry Road, Suite 206 Reported: Anchorage, AK/USA 99503 Project Manager: Andy Dimitriou 12/14/04 08:06

#### **Volatile Organic Compounds by EPA Method 8260B** North Creek Analytical - Bothell

Spokane

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
WP-1 (B4J0626-01RE1) Water	Sampled: 10/13	/04 11:00	Received:	10/15/04	08:30					
Ethylbenzene	70.8		20.0	ug/l	20	4J24010	10/24/04	10/24/04	EPA 8260B	
Hexachlorobutadiene	ND		20.0	"	"	"	"	"	"	
Methyl tert-butyl ether	ND		40.0	"	"	"	"	"	"	
2-Hexanone	ND		200	"	"	"	"	"	"	
Isopropylbenzene	ND		20.0	"	"	"	"	"	"	
p-Isopropyltoluene	ND		20.0	"	"	"	"	"	"	
4-Methyl-2-pentanone	ND		200	"	"	"	"	"	"	
Methylene chloride	ND		100	"	"	"	"	"	"	
Naphthalene	37.2		20.0	"	"	"	"	"	"	
n-Propylbenzene	35.6		20.0	"	"	"	"	"	"	
Styrene	ND		20.0	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND		20.0	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND		20.0	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND		20.0	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND		20.0	"	"	"	"	"	"	
Tetrachloroethene	ND		20.0	"	"	"	"	"	"	
Toluene	39.8		20.0	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND		20.0	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND		20.0	"	"	"	"	"	"	
Trichloroethene	ND		20.0	"	"	"	"	"	"	
Trichlorofluoromethane	ND		20.0	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND		20.0	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	197		20.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	55.8		20.0	"	"	"	"	"	"	
Vinyl chloride	ND		20.0	"	"	"	"	"	"	
o-Xylene	118		20.0	"	"	"	"	"	"	
m,p-Xylene	247		40.0	"	"	"	"	"	"	
Surrogate: 1,2-DCA-d4	103 %		70-13	0		"	"	"	"	
Surrogate: Toluene-d8	87.0 %		70-13	0		"	"	"	"	
Surrogate: 4-BFB	90.5 %		70-13	0		"	"	"	"	

North Creek Analytical - Bothell



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SLR Alaska Project: FIA Former Mark Air Facilities

Project Number: 004.0184.00001 2525 Blueberry Road, Suite 206 Reported: Anchorage, AK/USA 99503 Project Manager: Andy Dimitriou 12/14/04 08:06

#### **Volatile Organic Compounds by EPA Method 8260B** North Creek Analytical - Bothell

Spokane

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
WP-3A (B4J0626-02) Water	Sampled: 10/13/04 0	9:00	Received: 10	/15/04 08	3:30					
Acetone	ND		20.0	ug/l	1	4J24009	10/22/04	10/23/04	EPA 8260B	
Benzene	7.14		1.00	"	"	"	"	"	"	
Bromobenzene	ND		1.00	"	"	"	"	"	"	
Bromochloromethane	ND		1.00	"	"	"	"	"	"	
Bromodichloromethane	ND		1.00	"	"	"	"	"	"	
Bromoform	ND		1.00	"	"	"	"	"	"	
Bromomethane	ND		2.00	"	"	"	"	"	"	
2-Butanone	ND		10.0	"	"	"	"	"	"	
n-Butylbenzene	14.2		1.00	"	"	"	"	"	"	
sec-Butylbenzene	7.15		1.00	"	"	"	"	"	"	
tert-Butylbenzene	1.72		1.00	"	"	"	"	"	"	
Carbon disulfide	ND		1.00	"	"	"	"	"	"	
Carbon tetrachloride	ND		1.00	"	"	"	"	"	"	
Chlorobenzene	ND		1.00	"	"	"	"	"	"	
Chloroethane	ND		1.00	"	"	"	"	"	"	
Chloroform	ND		1.00	"	"	"	"	"	"	
Chloromethane	ND		5.00	"	"	"	"	"	"	
2-Chlorotoluene	ND		1.00	"	"	"	"	"	"	
4-Chlorotoluene	ND		1.00	"	"	"	"	"	"	
Dibromochloromethane	ND		1.00	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND		5.00	"	"	"	"	"	"	
1,2-Dibromoethane	ND		1.00	"	"	"	"	"	"	
Dibromomethane	ND		1.00	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND		1.00	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND		1.00	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND		1.00	"	"	"	"	"	"	
Dichlorodifluoromethane	ND		1.00	"	"	"	"	"	"	
1,1-Dichloroethane	ND		1.00	"	"	"	"	"	"	
1,2-Dichloroethane	ND		1.00	"	"	"	"	"	"	
1,1-Dichloroethene	ND		1.00	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND		1.00	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND		1.00	"	"	"	"	"	"	
1,2-Dichloropropane	ND		1.00	"	"	"	"	"	"	
1,3-Dichloropropane	ND		1.00	"	"	"	"	"	"	
2,2-Dichloropropane	ND		1.00	"	"	"	"	"	"	
1,1-Dichloropropene	ND		1.00	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND		1.00	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND		1.00	"	"	"	"	"	"	

North Creek Analytical - Bothell



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SLR Alaska Project: FIA Former Mark Air Facilities

Project Number: 004.0184.00001 2525 Blueberry Road, Suite 206 Reported: Anchorage, AK/USA 99503 Project Manager: Andy Dimitriou 12/14/04 08:06

# **Volatile Organic Compounds by EPA Method 8260B** North Creek Analytical - Bothell

Bend

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
WP-3A (B4J0626-02) Water	Sampled: 10/13/04 0	9:00 F	Received: 10/	15/04 08	:30					
Ethylbenzene	79.9		1.00	ug/l	1	4J24009	10/22/04	10/23/04	EPA 8260B	Е
Hexachlorobutadiene	ND		1.00	"	"	"	"	"	"	
Methyl tert-butyl ether	ND		2.00	"	"	"	"	"	"	
2-Hexanone	ND		10.0	"	"	"	"	"	"	
Isopropylbenzene	21.7		1.00	"	"	"	"	"	"	
p-Isopropyltoluene	5.29		1.00	"	"	"	"	"	"	
4-Methyl-2-pentanone	ND		10.0	"	"	"	"	"	"	
Methylene chloride	ND		5.00	"	"	"	"	"	"	
Naphthalene	48.3		1.00	"	"	"	"	"	"	
n-Propylbenzene	51.4		1.00	"	"	"	"	"	"	
Styrene	ND		1.00	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND		1.00	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND		1.00	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND		1.00	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND		1.00	"	"	"	"	"	"	
Tetrachloroethene	ND		1.00	"	"	"	"	"	"	
Toluene	58.4		1.00	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND		1.00	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND		1.00	"	"	"	"	"	"	
Trichloroethene	ND		1.00	"	"	"	"	"	"	
Trichlorofluoromethane	4.31		1.00	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND		1.00	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	227		1.00	"	"	"	"	"	"	E-01
1,3,5-Trimethylbenzene	64.5		1.00	"	"	"	"	"	"	Е
Vinyl chloride	ND		1.00	"	"	"	"	"	"	
o-Xylene	125		1.00	"	"	"	"	"	"	Е
m,p-Xylene	271		2.00	"	"	"	"	"	"	E
Surrogate: 1,2-DCA-d4	96.5 %		70-13	0		"	"	"	"	
Surrogate: Toluene-d8	108 %		70-13	0		"	"	"	"	
Surrogate: 4-BFB	104 %		70-13	0		"	"	"	"	

North Creek Analytical - Bothell



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SLR Alaska Project: FIA Former Mark Air Facilities

Project Number: 004.0184.00001 2525 Blueberry Road, Suite 206 Reported: Anchorage, AK/USA 99503 Project Manager: Andy Dimitriou 12/14/04 08:06

# **Volatile Organic Compounds by EPA Method 8260B** North Creek Analytical - Bothell

Analyte	Result	MDL I	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
WP-3A (B4J0626-02RE1) Water	Sampled: 10/	13/04 09:00	Received	d: 10/15/0	04 08:30					
Acetone	ND		400	ug/l	20	4J24010	10/24/04	10/25/04	EPA 8260B	
Benzene	ND		20.0	"	"	"	"	"	"	
Bromobenzene	ND		20.0	"	"	"	"	"	"	
Bromochloromethane	ND		20.0	"	"	"	"	"	"	
Bromodichloromethane	ND		20.0	"	"	"	"	"	"	
Bromoform	ND		20.0	"	"	"	"	"	"	
Bromomethane	ND		40.0	"	"	"	"	"	"	
2-Butanone	ND		200	"	"	"	"	"	"	
n-Butylbenzene	ND		20.0	"	"	"	"	"	"	
sec-Butylbenzene	ND		20.0	"	"	"	"	"	"	
tert-Butylbenzene	ND		20.0	"	"	"	"	"	"	
Carbon disulfide	ND		20.0	"	"	"	"	"	"	
Carbon tetrachloride	ND		20.0	"	"	"	"	"	"	
Chlorobenzene	ND		20.0	"	"	"	"	"	"	
Chloroethane	ND		20.0	"	"	"	"	"	"	
Chloroform	ND		20.0	"	"	"	"	"	"	
Chloromethane	ND		100	"	"	"	"	"	"	
2-Chlorotoluene	ND		20.0	"	"	"	"	"	"	
4-Chlorotoluene	ND		20.0	"	"	"	"	"	"	
Dibromochloromethane	ND		20.0	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND		100	"	"	"	"	"	"	
1,2-Dibromoethane	ND		20.0	"	"	"	"	"	"	
Dibromomethane	ND		20.0	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND		20.0	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND		20.0	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND		20.0	"	"	"	"	"	"	
Dichlorodifluoromethane	ND		20.0	"	"	"	"	"	"	
1,1-Dichloroethane	ND		20.0	"	"	"	"	"	"	
1,2-Dichloroethane	ND		20.0	"	"	"	"	"	"	
1,1-Dichloroethene	ND		20.0	"	"	,,	"	"	"	
cis-1,2-Dichloroethene	ND		20.0	"	"	,,	"	"	"	
trans-1,2-Dichloroethene	ND		20.0	"	"	"	"	"	"	
1,2-Dichloropropane	ND ND		20.0	"	,,	"	"	"	"	
1,3-Dichloropropane	ND ND		20.0	"	,,	"	"	"	"	
2,2-Dichloropropane	ND ND		20.0	"	,,	"	"	"	"	
	ND ND		20.0	"	,,	,,	,,	,,		
1,1-Dichloropropene				"	,,	,,	,,	"		
cis-1,3-Dichloropropene	ND		20.0	"	,,	,,	,,	,,	"	
trans-1,3-Dichloropropene	ND		20.0	.,	"					

North Creek Analytical - Bothell



Spokane

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SLR Alaska Project: FIA Former Mark Air Facilities

Project Number: 004.0184.00001 2525 Blueberry Road, Suite 206 Reported: Anchorage, AK/USA 99503 Project Manager: Andy Dimitriou 12/14/04 08:06

#### **Volatile Organic Compounds by EPA Method 8260B** North Creek Analytical - Bothell

Analyte	Result	MDL F	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
WP-3A (B4J0626-02RE1) Water	Sampled: 10/	13/04 09:00	Received	: 10/15/0	4 08:30					
Ethylbenzene	86.4		20.0	ug/l	20	4J24010	10/24/04	10/25/04	EPA 8260B	
Hexachlorobutadiene	ND		20.0	"	"	"	"	"	"	
Methyl tert-butyl ether	ND		40.0	"	"	"	"	"	"	
2-Hexanone	ND		200	"	"	"	"	"	"	
Isopropylbenzene	24.0		20.0	"	"	"	"	"	"	
p-Isopropyltoluene	ND		20.0	"	"	"	"	"	"	
4-Methyl-2-pentanone	ND		200	"	"	"	"	"	"	
Methylene chloride	ND		100	"	"	"	"	"	"	
Naphthalene	52.6		20.0	"	"	"	"	"	"	
n-Propylbenzene	42.2		20.0	"	"	"	"	"	"	
Styrene	ND		20.0	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND		20.0	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND		20.0	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND		20.0	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND		20.0	"	"	"	"	"	"	
Tetrachloroethene	ND		20.0	"	"	"	"	"	"	
Toluene	44.4		20.0	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND		20.0	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND		20.0	"	"	"	"	"	"	
Trichloroethene	ND		20.0	"	"	"	"	"	"	
Trichlorofluoromethane	ND		20.0	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND		20.0	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	238		20.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	69.6		20.0	"	"	"	"	"	"	
Vinyl chloride	ND		20.0	"	"	"	"	"	"	
o-Xylene	146		20.0	"	"	"	"	"	"	
m,p-Xylene	291		40.0	"	"	"	"	"	"	
Surrogate: 1,2-DCA-d4	99.5 %		70-13	0		"	"	"	"	
Surrogate: Toluene-d8	87.5 %		70-13	0		"	"	"	"	
Surrogate: 4-BFB	92.5 %		70-13	0		"	"	"	"	

North Creek Analytical - Bothell



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SLR Alaska Project: FIA Former Mark Air Facilities

Project Number: 004.0184.00001 2525 Blueberry Road, Suite 206 Reported: Anchorage, AK/USA 99503 Project Manager: Andy Dimitriou 12/14/04 08:06

#### **Volatile Organic Compounds by EPA Method 8260B** North Creek Analytical - Bothell

Spokane

Bend

Analyte	Result	MDL Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-8 (B4J0626-05) Water	Sampled: 10/13/04 14	:10 Received: 10/	15/04 08:	30					
Acetone	ND	20.0	ug/l	1	4J24009	10/22/04	10/23/04	EPA 8260B	
Benzene	ND	1.00	"	"	"	"	"	"	
Bromobenzene	ND	1.00	"	"	"	"	"	"	
Bromochloromethane	ND	1.00	"	"	"	"	"	"	
Bromodichloromethane	ND	1.00	"	"	"	"	"	"	
Bromoform	ND	1.00	"	"	"	"	"	"	
Bromomethane	ND	2.00	"	"	"	"	"	"	
2-Butanone	16.2	10.0	"	"	"	"	"	"	
n-Butylbenzene	32.0	1.00	"	"	"	"	"	"	
sec-Butylbenzene	ND	1.00	"	"	"	"	"	"	
tert-Butylbenzene	5.00	1.00	"	"	"	"	"	"	
Carbon disulfide	ND	1.00	"	"	"	"	"	"	
Carbon tetrachloride	ND	1.00	"	"	"	"	"	"	
Chlorobenzene	ND	1.00	"	"	"	"	"	"	
Chloroethane	ND	1.00	"	"	"	"	"	"	
Chloroform	ND	1.00	"	"	"	"	"	"	
Chloromethane	ND	5.00	"	"	"	"	"	"	
2-Chlorotoluene	ND	1.00	"	"	"	"	"	"	
4-Chlorotoluene	ND	1.00	"	"	"	"	"	"	
Dibromochloromethane	ND	1.00	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane		5.00	"	"	"	"	"	"	
1,2-Dibromoethane	ND	1.00	"	"	"	"	"	"	
Dibromomethane	ND	1.00	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	1.00	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	1.00	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	1.00	"	"	"	"	"	"	
Dichlorodifluoromethane	ND	1.00	"	"	"	"	"	"	
1,1-Dichloroethane	ND	1.00	"	"	"	"	"	"	
1,2-Dichloroethane	32.4	1.00	"	"	"	"	"	"	
1,1-Dichloroethene	ND	1.00	**	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	1.00	**	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	1.00	"	"	"	"	"	m .	
1,2-Dichloropropane	ND	1.00	"	"	"	"	"	m .	
1,3-Dichloropropane	ND	1.00	"	"	"	"	"	"	
2,2-Dichloropropane	ND	1.00	"	"	"	"	"	"	
1,1-Dichloropropene	ND	1.00	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	1.00	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	1.00	"	"	"	"	"	"	

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SLR Alaska Project: FIA Former Mark Air Facilities

Project Number: 004.0184.00001 2525 Blueberry Road, Suite 206 Reported: Anchorage, AK/USA 99503 Project Manager: Andy Dimitriou 12/14/04 08:06

# **Volatile Organic Compounds by EPA Method 8260B** North Creek Analytical - Bothell

Bend

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-8 (B4J0626-05) Water	Sampled: 10/13/04 14	:10 Rec	eived: 10/1	5/04 08:	30					
Ethylbenzene	584		1.00	ug/l	1	4J24009	10/22/04	10/23/04	EPA 8260B	E-01
Hexachlorobutadiene	ND		1.00	"	"	"	"	"	"	
Methyl tert-butyl ether	ND		2.00	"	"	"	"	"	"	
2-Hexanone	ND		10.0	"	"	"	"	"	"	
Isopropylbenzene	115		1.00	"	"	"	"	"	"	E
p-Isopropyltoluene	23.5		1.00	"	"	"	"	"	"	
4-Methyl-2-pentanone	ND		10.0	"	"	"	"	"	"	
Methylene chloride	ND		5.00	"	"	"	"	"	"	
Naphthalene	377		1.00	"	"	"	"	"	"	E-01
n-Propylbenzene	249		1.00	"	"	"	"	"	"	E-01
Styrene	ND		1.00	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND		1.00	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND		1.00	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND		1.00	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND		1.00	"	"	"	"	"	"	
Tetrachloroethene	ND		1.00	"	"	"	"	"	"	
Toluene	84.4		1.00	"	"	"	"	"	"	Е
1,1,1-Trichloroethane	ND		1.00	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND		1.00	"	"	"	"	"	"	
Trichloroethene	ND		1.00	"	"	"	"	"	"	
Trichlorofluoromethane	ND		1.00	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND		1.00	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	583		1.00	"	"	"	"	"	"	E-01
1,3,5-Trimethylbenzene	256		1.00	"	"	"	"	"	"	E-01
Vinyl chloride	ND		1.00	"	"	"	"	"	"	
o-Xylene	508		1.00	"	"	"	"	"	"	E-01
m,p-Xylene	869		2.00	"	"	"	"	"	"	E-01
Surrogate: 1,2-DCA-d4	104 %		70-13	0		"	"	"	"	
Surrogate: Toluene-d8	109 %		70-13	0		"	"	"	"	
Surrogate: 4-BFB	106 %		70-13	0		"	"	"	"	

North Creek Analytical - Bothell



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SLR Alaska Project: FIA Former Mark Air Facilities

2525 Blueberry Road, Suite 206 Project Number: 004.0184.00001 Reported: Anchorage, AK/USA 99503 Project Manager: Andy Dimitriou 12/14/04 08:06

#### **Volatile Organic Compounds by EPA Method 8260B** North Creek Analytical - Bothell

Analyte	Result M	Reporting DL Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-8 (B4J0626-05RE1) Water	Sampled: 10/13/04	14:10 Received	: 10/15/0	4 08:30					
Acetone	ND	2000	ug/l	100	4J24010	10/24/04	10/25/04	EPA 8260B	
Benzene	3560	100	"	"	"	"	"	"	
Bromobenzene	ND	100	"	"	"	"	"	"	
Bromochloromethane	ND	100	"	"	"	"	"	"	
Bromodichloromethane	ND	100	"	"	"	"	"	"	
Bromoform	ND	100	"	"	"	"	"	"	
Bromomethane	ND	200	"	"	"	"	"	"	
2-Butanone	ND	1000	"	"	"	"	"	"	
n-Butylbenzene	ND	100	"	"	"	"	"	"	
sec-Butylbenzene	ND	100	"	"	"	"	"	"	
tert-Butylbenzene	ND	100	"	"	"	"	"	"	
Carbon disulfide	ND	100	"	"	"	"	"	"	
Carbon tetrachloride	ND	100	"	"	"	"	"	"	
Chlorobenzene	ND	100	"	"	"	"	"	"	
Chloroethane	ND	100	"	"	"	"	"	"	
Chloroform	ND	100	"	"	"	"	"	"	
Chloromethane	ND	500	"	"	"	"	"	"	
2-Chlorotoluene	ND	100	"	"	"	"	"	"	
4-Chlorotoluene	ND	100	"	"	"	"	"	"	
Dibromochloromethane	ND	100	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	500	"	"	"	"	"	"	
1,2-Dibromoethane	ND	100	"	"	"	"	"	"	
Dibromomethane	ND	100	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	100	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	100	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	100	"	"	"	"	"	"	
Dichlorodifluoromethane	ND	100	"	"	"	"	"	"	
1,1-Dichloroethane	ND	100	"	"	"	"	"	"	
1,2-Dichloroethane	ND	100	"	"	"	"	"	"	
1,1-Dichloroethene	ND	100	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	100	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	100	"	"	"	"	"	"	
1,2-Dichloropropane	ND	100	"	"	"	"	"	"	
1,3-Dichloropropane	ND	100	"	"	"	"	"	"	
2,2-Dichloropropane	ND	100	"	"	"	"	"	"	
1,1-Dichloropropene	ND	100	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	100	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	100	"	"	"	"	"	"	

North Creek Analytical - Bothell



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SLR Alaska Project: FIA Former Mark Air Facilities

Project Number: 004.0184.00001 2525 Blueberry Road, Suite 206 Reported: Anchorage, AK/USA 99503 Project Manager: Andy Dimitriou 12/14/04 08:06

#### **Volatile Organic Compounds by EPA Method 8260B** North Creek Analytical - Bothell

Spokane

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-8 (B4J0626-05RE1) Water	Sampled: 10/13	3/04 14:10	Received:	10/15/04	1 08:30					
Ethylbenzene	1370		100	ug/l	100	4J24010	10/24/04	10/25/04	EPA 8260B	
Hexachlorobutadiene	ND		100	"	"	"	"	"	"	
Methyl tert-butyl ether	ND		200	"	"	"	"	"	"	
2-Hexanone	ND		1000	"	"	"	"	"	"	
Isopropylbenzene	102		100	"	"	"	"	"	"	
p-Isopropyltoluene	ND		100	"	"	"	"	"	"	
4-Methyl-2-pentanone	ND		1000	"	"	"	"	"	"	
Methylene chloride	ND		500	"	"	"	"	"	"	
Naphthalene	318		100	"	"	"	"	"	"	
n-Propylbenzene	153		100	"	"	"	"	"	"	
Styrene	ND		100	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND		100	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND		100	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND		100	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND		100	"	"	"	"	"	"	
Tetrachloroethene	ND		100	"	"	"	"	"	"	
Toluene	ND		100	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND		100	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND		100	"	"	"	"	"	"	
Trichloroethene	ND		100	"	"	"	"	"	"	
Trichlorofluoromethane	ND		100	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND		100	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	916		100	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	229		100	"	"	"	"	"	"	
Vinyl chloride	ND		100	"	"	"	"	"	"	
o-Xylene	703		100	"	"	"	"	"	"	
m,p-Xylene	3050		200	"	"	"	"	n .	"	
Surrogate: 1,2-DCA-d4	104 %		70-130	)		"	"	"	"	
Surrogate: Toluene-d8	87.5 %		70-130	)		"	"	"	"	
Surrogate: 4-BFB	90.5 %		70-130	)		"	"	"	"	

North Creek Analytical - Bothell



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SLR Alaska Project: FIA Former Mark Air Facilities

Project Number: 004.0184.00001 2525 Blueberry Road, Suite 206 Reported: Anchorage, AK/USA 99503 Project Manager: Andy Dimitriou 12/14/04 08:06

#### **Volatile Organic Compounds by EPA Method 8260B North Creek Analytical - Bothell**

Spokane

Analyte	Result	Reportin MDL Lim	_	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-3 (B4J0626-07) Water	Sampled: 10/13/04 15	5:25 Received: 1	10/15/04 08	:30					
Acetone	ND	20.	0 ug/l	1	4J24010	10/24/04	10/24/04	EPA 8260B	
Benzene	ND	1.0	0 "	"	"	"	"	"	
Bromobenzene	ND	1.0	0 "	"	"	"	"	"	
Bromochloromethane	ND	1.0	0 "	"	"	"	"	"	
Bromodichloromethane	ND	1.0	0 "	"	"	"	"	"	
Bromoform	ND	1.0	0 "	"	"	"	"	"	
Bromomethane	ND	2.0	0 "	"	"	"	"	"	
2-Butanone	ND	10.	0 "	"	"	"	"	"	
n-Butylbenzene	ND	1.0	0 "	"	"	"	"	"	
sec-Butylbenzene	ND	1.0	0 "	"	"	"	"	"	
tert-Butylbenzene	ND	1.0	0 "	"	"	"	"	"	
Carbon disulfide	ND	1.0	0 "	"	"	"	"	"	
Carbon tetrachloride	ND	1.0	0 "	"	"	"	"	"	
Chlorobenzene	ND	1.0	0 "	"	"	"	"	"	
Chloroethane	ND	1.0	0 "	"	"	"	"	"	
Chloroform	ND	1.0	0 "	"	"	"	"	"	
Chloromethane	ND	5.0	0 "	"	"	"	"	"	
2-Chlorotoluene	ND	1.0	0 "	"	"	"	"	"	
4-Chlorotoluene	ND	1.0	0 "	"	"	"	"	"	
Dibromochloromethane	ND	1.0	0 "	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	5.0	0 "	"	"	"	"	"	
1,2-Dibromoethane	ND	1.0	0 "	"	"	"	"	"	
Dibromomethane	ND	1.0	0 "	"	"	"	"	"	
1,2-Dichlorobenzene	ND	1.0	0 "	"	"	"	"	"	
1,3-Dichlorobenzene	ND	1.0	0 "	"	"	"	"	"	
1,4-Dichlorobenzene	ND	1.0	0 "	"	"	"	"	"	
Dichlorodifluoromethane	ND	1.0	0 "	"	"	"	"	"	
1,1-Dichloroethane	ND	1.0	0 "	"	"	"	"	"	
1,2-Dichloroethane	ND	1.0	0 "	"	"	"	"	"	
1,1-Dichloroethene	ND	1.0	0 "	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	1.0	0 "	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	1.0	0 "	"	"	"	"	"	
1,2-Dichloropropane	ND	1.0	0 "	"	"	"	"	"	
1,3-Dichloropropane	ND	1.0		"	"	"	"	"	
2,2-Dichloropropane	ND	1.0	0 "	"	"	"	"	"	
1,1-Dichloropropene	ND	1.0		"	"	"	"	"	
cis-1,3-Dichloropropene	ND	1.0		"	"	"	"	"	
trans-1,3-Dichloropropene	ND	1.0	0 "	"	"	"	"	n	

North Creek Analytical - Bothell



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SLR Alaska Project: FIA Former Mark Air Facilities

Project Number: 004.0184.00001 2525 Blueberry Road, Suite 206 Reported: Anchorage, AK/USA 99503 Project Manager: Andy Dimitriou 12/14/04 08:06

# **Volatile Organic Compounds by EPA Method 8260B** North Creek Analytical - Bothell

Analyte	Result	MDL Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-3 (B4J0626-07) Water	Sampled: 10/13/04 15	3:25 Received: 10	/15/04 08:	30					
Ethylbenzene	ND	1.00	ug/l	1	4J24010	10/24/04	10/24/04	EPA 8260B	
Hexachlorobutadiene	ND	1.00	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	2.00	"	"	"	"	"	"	
2-Hexanone	ND	10.0	"	"	"	"	"	"	
Isopropylbenzene	ND	1.00	"	"	"	"	"	"	
p-Isopropyltoluene	ND	1.00	"	"	"	"	"	"	
4-Methyl-2-pentanone	ND	10.0	"	"	"	"	"	"	
Methylene chloride	ND	5.00	"	"	"	"	"	"	
Naphthalene	ND	1.00	"	"	"	"	"	"	
n-Propylbenzene	ND	1.00	"	"	"	"	"	"	
Styrene	ND	1.00	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	1.00	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	1.00	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	1.00	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	1.00	"	"	"	"	"	"	
Tetrachloroethene	ND	1.00	"	"	"	"	"	"	
Toluene	ND	1.00	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	1.00	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	1.00	"	"	"	"	"	"	
Trichloroethene	ND	1.00	"	"	"	"	"	"	
Trichlorofluoromethane	ND	1.00	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	1.00	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	1.00	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	1.00	"	"	"	"	"	"	
Vinyl chloride	ND	1.00	"	"	"	"	"	"	
o-Xylene	ND	1.00	"	"	"	"	"	"	
m,p-Xylene	ND	2.00	"	"	"	"	"	"	
Surrogate: 1,2-DCA-d4	100 %	70-1	30		"	"	"	"	
Surrogate: Toluene-d8	87.0 %	70-1	30		"	"	"	"	
Surrogate: 4-BFB	90.0 %	70-1	30		"	"	"	"	

North Creek Analytical - Bothell

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Amar Gill, Project Manager



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SLR Alaska Project: FIA Former Mark Air Facilities

Project Number: 004.0184.00001 2525 Blueberry Road, Suite 206 Reported: Anchorage, AK/USA 99503 Project Manager: Andy Dimitriou 12/14/04 08:06

#### **Volatile Organic Compounds by EPA Method 8260B** North Creek Analytical - Bothell

Spokane

Bend

Analyte	Result M	Reporting IDL Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Note
MW-4 (B4J0626-10) Water	Sampled: 10/13/04 18:1	5 Received: 10/	15/04 08:	30					
Acetone	ND	20.0	ug/l	1	4J24010	10/24/04	10/24/04	EPA 8260B	
Benzene	ND	1.00	"	"	"	"	"	"	
Bromobenzene	ND	1.00	"	"	"	"	"	"	
Bromochloromethane	ND	1.00	"	"	"	"	"	"	
Bromodichloromethane	ND	1.00	"	"	"	"	"	"	
Bromoform	ND	1.00	"	"	"	"	"	"	
Bromomethane	ND	2.00	"	"	"	"	"	"	
2-Butanone	ND	10.0	"	"	"	"	"	"	
n-Butylbenzene	ND	1.00	"	"	"	"	"	"	
sec-Butylbenzene	ND	1.00	"	"	"	"	"	"	
tert-Butylbenzene	ND	1.00	"	"	"	"	"	"	
Carbon disulfide	ND	1.00	"	"	"	"	"	"	
Carbon tetrachloride	ND	1.00	"	"	"	"	"	"	
Chlorobenzene	ND	1.00	"	"	"	"	"	"	
Chloroethane	ND	1.00	"	"	"	"	"	"	
Chloroform	ND	1.00	"	"	"	"	"	"	
Chloromethane	ND	5.00	"	"	"	"	"	"	
2-Chlorotoluene	ND	1.00	"	"	"	"	"	"	
4-Chlorotoluene	ND	1.00	"	"	"	"	"	"	
Dibromochloromethane	ND	1.00	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	5.00	"	"	"	"	"	"	
1,2-Dibromoethane	ND	1.00	"	"	"	"	"	"	
Dibromomethane	ND	1.00	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	1.00	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	1.00	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	1.00	"	"	"	"	"	"	
Dichlorodifluoromethane	ND	1.00	"	"	"	"	"	"	
1,1-Dichloroethane	ND	1.00	"	"	"	"	"	"	
1,2-Dichloroethane	ND	1.00	"	"	"	"	"	"	
1,1-Dichloroethene	ND	1.00	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	1.00	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	1.00	"	"	"	"	"	"	
1,2-Dichloropropane	ND	1.00	"	"	"	"	"	n	
1,3-Dichloropropane	ND	1.00	"	"	"	"	"	n .	
2,2-Dichloropropane	ND	1.00	"	"	"	"	"	"	
1,1-Dichloropropene	ND	1.00	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	1.00	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	1.00	"	"	"	"	"	"	

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SLR Alaska Project: FIA Former Mark Air Facilities

Project Number: 004.0184.00001 2525 Blueberry Road, Suite 206 Reported: Anchorage, AK/USA 99503 Project Manager: Andy Dimitriou 12/14/04 08:06

#### **Volatile Organic Compounds by EPA Method 8260B** North Creek Analytical - Bothell

Spokane

Bend

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-4 (B4J0626-10) Water	Sampled: 10/13/04 18	8:15 Re	ceived: 10/1	15/04 08:	30					
Ethylbenzene	ND		1.00	ug/l	1	4J24010	10/24/04	10/24/04	EPA 8260B	
Hexachlorobutadiene	ND		1.00	"	"	"	"	"	"	
Methyl tert-butyl ether	ND		2.00	"	"	"	"	"	"	
2-Hexanone	ND		10.0	"	"	"	"	"	"	
Isopropylbenzene	1.34		1.00	"	"	"	"	"	"	
p-Isopropyltoluene	ND		1.00	"	"	"	"	"	"	
4-Methyl-2-pentanone	ND		10.0	"	"	"	"	"	"	
Methylene chloride	ND		5.00	"	"	"	"	"	"	
Naphthalene	ND		1.00	"	"	"	"	"	"	
n-Propylbenzene	ND		1.00	"	"	"	"	"	"	
Styrene	ND		1.00	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND		1.00	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND		1.00	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND		1.00	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND		1.00	"	"	"	"	"	"	
Tetrachloroethene	ND		1.00	"	"	"	"	"	"	
Toluene	ND		1.00	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND		1.00	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND		1.00	"	"	"	"	"	"	
Trichloroethene	ND		1.00	"	"	"	"	"	"	
Trichlorofluoromethane	ND		1.00	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND		1.00	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND		1.00	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND		1.00	"	"	"	"	"	"	
Vinyl chloride	ND		1.00	"	"	"	"	"	"	
o-Xylene	ND		1.00	"	"	"	"	"	"	
m,p-Xylene	ND		2.00	"	"	"	"	"	"	
Surrogate: 1,2-DCA-d4	103 %		70-13	0		"	"	"	"	
Surrogate: Toluene-d8	86.5 %		70-13	0		"	"	"	"	
Surrogate: 4-BFB	91.0 %		70-13	0		"	"	"	"	

North Creek Analytical - Bothell



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SLR Alaska Project: FIA Former Mark Air Facilities

2525 Blueberry Road, Suite 206 Project Number: 004.0184.00001 Reported: Anchorage, AK/USA 99503 Project Manager: Andy Dimitriou 12/14/04 08:06

#### **Volatile Organic Compounds by EPA Method 8260B** North Creek Analytical - Bothell

Spokane

Bend

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
WP4N-35 (B4J0626-11) Water	Sampled: 10/13/04	19:00	Received:	10/15/04	08:30					
Acetone	ND		20.0	ug/l	1	4J24010	10/24/04	10/24/04	EPA 8260B	
Benzene	ND		1.00	"	"	"	"	"	"	
Bromobenzene	ND		1.00	"	"	"	"	"	"	
Bromochloromethane	ND		1.00	"	"	"	"	"	"	
Bromodichloromethane	ND		1.00	"	"	"	"	"	"	
Bromoform	ND		1.00	"	"	"	"	"	"	
Bromomethane	ND		2.00	"	"	"	"	"	"	
2-Butanone	ND		10.0	"	"	"	"	"	"	
n-Butylbenzene	ND		1.00	"	"	"	"	"	"	
sec-Butylbenzene	ND		1.00	"	"	"	"	"	"	
tert-Butylbenzene	ND		1.00	"	"	"	"	"	"	
Carbon disulfide	ND		1.00	"	"	"	"	"	"	
Carbon tetrachloride	ND		1.00	"	"	"	"	"	"	
Chlorobenzene	ND		1.00	"	"	"	"	"	"	
Chloroethane	ND		1.00	"	"	"	"	"	"	
Chloroform	ND		1.00	"	"	"	"	"	"	
Chloromethane	ND		5.00	"	"	"	"	"	"	
2-Chlorotoluene	ND		1.00	"	"	"	"	"	"	
4-Chlorotoluene	ND		1.00	"	"	"	"	"	"	
Dibromochloromethane	ND		1.00	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND		5.00	"	"	"	"	"	"	
1,2-Dibromoethane	ND		1.00	"	"	"	"	"	"	
Dibromomethane	ND		1.00	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND		1.00	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND		1.00	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND		1.00	"	"	"	"	"	"	
Dichlorodifluoromethane	ND		1.00	"	"	"	"	"	"	
1,1-Dichloroethane	ND		1.00	"	"	"	"	"	"	
1,2-Dichloroethane	ND		1.00	"	"	"	"	"	m .	
1,1-Dichloroethene	ND		1.00	"	"	"	"	"	m .	
cis-1,2-Dichloroethene	ND		1.00	"	"	"	"	"	m .	
trans-1,2-Dichloroethene	ND		1.00	"	"	"	"	"	m .	
1,2-Dichloropropane	ND		1.00	"	"	"	"	"	"	
1,3-Dichloropropane	ND		1.00	"	"	"	"	"	"	
2,2-Dichloropropane	ND		1.00	"	"	"	"	"	"	
1,1-Dichloropropene	ND		1.00	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND		1.00	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND		1.00	"	"	,,	,,	,,	,,	

North Creek Analytical - Bothell



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SLR Alaska Project: FIA Former Mark Air Facilities

Project Number: 004.0184.00001 2525 Blueberry Road, Suite 206 Reported: Anchorage, AK/USA 99503 Project Manager: Andy Dimitriou 12/14/04 08:06

#### **Volatile Organic Compounds by EPA Method 8260B** North Creek Analytical - Bothell

Spokane

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
WP4N-35 (B4J0626-11) Water	Sampled: 10/13/0	04 19:00	Received:	10/15/04	08:30					
Ethylbenzene	ND		1.00	ug/l	1	4J24010	10/24/04	10/24/04	EPA 8260B	_
Hexachlorobutadiene	ND		1.00	"	"	"	"	"	"	
Methyl tert-butyl ether	ND		2.00	"	"	"	"	"	"	
2-Hexanone	ND		10.0	"	"	"	"	"	"	
Isopropylbenzene	ND		1.00	"	"	"	"	"	"	
p-Isopropyltoluene	ND		1.00	"	"	"	"	"	"	
4-Methyl-2-pentanone	ND		10.0	"	"	"	"	"	"	
Methylene chloride	ND		5.00	"	"	"	"	"	"	
Naphthalene	ND		1.00	"	"	"	"	"	"	
n-Propylbenzene	ND		1.00	"	"	"	"	"	"	
Styrene	ND		1.00	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND		1.00	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND		1.00	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND		1.00	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND		1.00	"	"	"	"	"	"	
Tetrachloroethene	ND		1.00	"	"	"	"	"	"	
Toluene	4.67		1.00	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND		1.00	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND		1.00	"	"	"	"	"	"	
Trichloroethene	ND		1.00	"	"	"	"	"	"	
Trichlorofluoromethane	ND		1.00	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND		1.00	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND		1.00	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND		1.00	"	"	"	"	"	"	
Vinyl chloride	ND		1.00	"	"	"	"	"	"	
o-Xylene	ND		1.00	"	"	"	"	"	"	
m,p-Xylene	3.82		2.00	"	"	"	"	"	"	
Surrogate: 1,2-DCA-d4	102 %		70-13	20		"	"	"	"	
Surrogate: Toluene-d8	88.0 %		70-13	80		"	"	"	"	
Surrogate: 4-BFB	92.0 %		70-13	20		"	"	"	"	

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SLR Alaska Project: FIA Former Mark Air Facilities

Project Number: 004.0184.00001 2525 Blueberry Road, Suite 206 Reported: Anchorage, AK/USA 99503 Project Manager: Andy Dimitriou 12/14/04 08:06

#### **Volatile Organic Compounds by EPA Method 8260B** North Creek Analytical - Bothell

Spokane

Bend

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
WP4N-25 (B4J0626-12) Water	Sampled: 10/13/04	19:20	Received:	10/15/04	08:30					
Acetone	ND		20.0	ug/l	1	4J24010	10/24/04	10/24/04	EPA 8260B	
Benzene	ND		1.00	"	"	"	"	"	"	
Bromobenzene	ND		1.00	"	"	"	"	"	"	
Bromochloromethane	ND		1.00	"	"	"	"	"	"	
Bromodichloromethane	ND		1.00	"	"	"	"	"	"	
Bromoform	ND		1.00	"	"	"	"	"	"	
Bromomethane	ND		2.00	"	"	"	"	"	"	
2-Butanone	ND		10.0	"	"	"	"	"	"	
n-Butylbenzene	ND		1.00	"	"	"	"	"	"	
sec-Butylbenzene	ND		1.00	"	"	"	"	"	"	
tert-Butylbenzene	ND		1.00	"	"	"	"	"	"	
Carbon disulfide	ND		1.00	"	"	"	"	"	"	
Carbon tetrachloride	ND		1.00	"	"	"	"	"	"	
Chlorobenzene	ND		1.00	"	"	"	"	"	"	
Chloroethane	ND		1.00	"	"	"	"	"	"	
Chloroform	ND		1.00	"	"	"	"	"	"	
Chloromethane	ND		5.00	"	"	"	"	"	"	
2-Chlorotoluene	ND		1.00	"	"	"	"	"	"	
4-Chlorotoluene	ND		1.00	"	"	"	"	"	"	
Dibromochloromethane	ND		1.00	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND		5.00	"	"	"	"	"	"	
1,2-Dibromoethane	ND		1.00	"	"	"	"	"	"	
Dibromomethane	ND		1.00	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND		1.00	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND		1.00	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND		1.00	"	"	"	"	"	"	
Dichlorodifluoromethane	3.40		1.00	"	"	"	"	"	"	
1,1-Dichloroethane	ND		1.00	"	"	"	"	"	"	
1.2-Dichloroethane	ND		1.00	"	"	"	"	"	"	
1,1-Dichloroethene	ND		1.00	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND		1.00	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND		1.00	"	"	"	"	"	"	
1,2-Dichloropropane	ND		1.00	"	"	"	"	"	"	
1,3-Dichloropropane	ND		1.00	"	"	"	"	"	"	
2,2-Dichloropropane	ND		1.00	"	"	"	"	"	"	
1,1-Dichloropropene	ND		1.00	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND		1.00	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND		1.00	"	,,	,,	,,	,,	,,	

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SLR Alaska Project: FIA Former Mark Air Facilities

Project Number: 004.0184.00001 2525 Blueberry Road, Suite 206 Reported: Anchorage, AK/USA 99503 Project Manager: Andy Dimitriou 12/14/04 08:06

#### **Volatile Organic Compounds by EPA Method 8260B** North Creek Analytical - Bothell

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
WP4N-25 (B4J0626-12) Water	Sampled: 10/13	/04 19:20	Received:	10/15/04	08:30					
Ethylbenzene	1.29		1.00	ug/l	1	4J24010	10/24/04	10/24/04	EPA 8260B	
Hexachlorobutadiene	ND		1.00	"	"	"	"	"	"	
Methyl tert-butyl ether	ND		2.00	"	"	"	"	"	"	
2-Hexanone	ND		10.0	"	"	"	"	"	"	
Isopropylbenzene	ND		1.00	"	"	"	"	"	"	
p-Isopropyltoluene	ND		1.00	"	"	"	"	"	"	
4-Methyl-2-pentanone	ND		10.0	"	"	"	"	"	"	
Methylene chloride	ND		5.00	"	"	"	"	"	"	
Naphthalene	ND		1.00	"	"	"	"	"	"	
n-Propylbenzene	ND		1.00	"	"	"	"	"	"	
Styrene	ND		1.00	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND		1.00	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND		1.00	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND		1.00	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND		1.00	"	"	"	"	"	"	
Tetrachloroethene	ND		1.00	"	"	"	"	"	"	
Toluene	6.86		1.00	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND		1.00	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND		1.00	"	"	"	"	"	"	
Trichloroethene	ND		1.00	"	"	"	"	"	"	
Trichlorofluoromethane	ND		1.00	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND		1.00	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND		1.00	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND		1.00	"	"	"	"	"	"	
Vinyl chloride	ND		1.00	"	"	"	"	"	"	
o-Xylene	1.19		1.00	"	"	"	"	"	"	
m,p-Xylene	5.80		2.00	"	"	"	"	"	"	
Surrogate: 1,2-DCA-d4	102 %		70-13	80		"	"	"	"	
Surrogate: Toluene-d8	87.0 %		70-13	80		"	"	"	"	
Surrogate: 4-BFB	93.5 %		70-13	80		"	"	"	"	

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SLR Alaska Project: FIA Former Mark Air Facilities

2525 Blueberry Road, Suite 206 Project Number: 004.0184.00001 Reported: Anchorage, AK/USA 99503 Project Manager: Andy Dimitriou 12/14/04 08:06

# **Volatile Organic Compounds by EPA Method 8260B** North Creek Analytical - Bothell

Spokane

Bend

Analyte	Result	MDL Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Note
WP-6 (B4J0626-13) Water	Sampled: 10/13/04 20:	00 Received: 10/1	5/04 08:3	30					
Acetone	ND	20.0	ug/l	1	4J27030	10/26/04	10/26/04	EPA 8260B	
Benzene	ND	1.00	"	"	"	"	"	"	
Bromobenzene	ND	1.00	"	"	"	"	"	"	
Bromochloromethane	ND	1.00	"	"	"	"	"	"	
Bromodichloromethane	ND	1.00	"	"	"	"	"	"	
Bromoform	ND	1.00	"	"	"	"	"	"	
Bromomethane	ND	2.00	"	"	"	"	"	"	
2-Butanone	ND	10.0	"	"	"	"	"	"	
n-Butylbenzene	ND	1.00	"	"	"	"	"	"	
sec-Butylbenzene	ND	1.00	"	"	"	"	"	"	
tert-Butylbenzene	ND	1.00	"	"	"	"	"	"	
Carbon disulfide	ND	1.00	"	"	"	"	"	"	
Carbon tetrachloride	ND	1.00	"	"	"	"	"	"	
Chlorobenzene	ND	1.00	"	"	"	"	"	"	
Chloroethane	ND	1.00	"	"	"	"	"	"	
Chloroform	ND	1.00	"	"	"	"	"	"	
Chloromethane	ND	5.00	"	"	"	"	"	"	
2-Chlorotoluene	ND	1.00	"	"	"	"	"	"	
4-Chlorotoluene	ND	1.00	"	"	"	"	"	"	
Dibromochloromethane	ND	1.00	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	5.00	"	"	"	"	"	"	
1,2-Dibromoethane	ND	1.00	"	"	"	"	"	"	
Dibromomethane	ND	1.00	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	1.00	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	1.00	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	1.00	"	"	"	"	"	"	
Dichlorodifluoromethane	ND	1.00	"	"	"	"	"	"	
1,1-Dichloroethane	ND	1.00	"	"	"	"	"	"	
1,2-Dichloroethane	ND	1.00	"	"	"	"	"	"	
1,1-Dichloroethene	ND	1.00	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	1.00	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	1.00	"	"	"	"	"	"	
1,2-Dichloropropane	ND	1.00	"	"	"	"	"	"	
1,3-Dichloropropane	ND	1.00	"	"	"	"	"	"	
2,2-Dichloropropane	ND	1.00	"	"	"	"	"	"	
1,1-Dichloropropene	ND	1.00	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	1.00	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	1.00	"	"	"	"	"	"	

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SLR Alaska Project: FIA Former Mark Air Facilities

Project Number: 004.0184.00001 2525 Blueberry Road, Suite 206 Reported: Anchorage, AK/USA 99503 Project Manager: Andy Dimitriou 12/14/04 08:06

# **Volatile Organic Compounds by EPA Method 8260B** North Creek Analytical - Bothell

Spokane

Bend

Analyte	Result	Repor MDL L	_	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
WP-6 (B4J0626-13) Water	Sampled: 10/13/04 20:	00 Received:	: 10/15/	04 08:3	0					
Ethylbenzene	ND	1	.00	ug/l	1	4J27030	10/26/04	10/26/04	EPA 8260B	
Hexachlorobutadiene	ND	1	.00	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	2	2.00	"	"	"	"	"	"	
2-Hexanone	ND	1	0.0	"	"	"	"	"	"	
Isopropylbenzene	ND	1	.00	"	"	"	"	"	"	
p-Isopropyltoluene	ND	1	.00	"	"	"	"	"	"	
4-Methyl-2-pentanone	ND	1	0.0	"	"	"	"	"	"	
Methylene chloride	ND	5	5.00	"	"	"	"	"	"	
Naphthalene	ND	1	.00	"	"	"	"	"	"	
n-Propylbenzene	ND	1	.00	"	"	"	"	"	"	
Styrene	ND	1	.00	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	1	.00	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	1	.00	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	1	.00	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	1	.00	"	"	"	"	"	"	
Tetrachloroethene	ND	1	.00	"	"	"	"	"	"	
Toluene	2.76	1	.00	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	1	.00	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	1	.00	"	"	"	"	"	"	
Trichloroethene	ND	1	.00	"	"	"	"	"	"	
Trichlorofluoromethane	27.4	1	.00	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	1	.00	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND		.00	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND		.00	"	"	"	"	"	"	
Vinyl chloride	ND		.00	"	"	"	"	"	"	
o-Xylene	ND		.00	"	"	"	"	"	"	
m,p-Xylene	ND		2.00	"	"	"	"	"	II .	
Surrogate: 1,2-DCA-d4	102 %		70-130			"	"	"	"	
Surrogate: Toluene-d8	94.0 %		70-130			"	"	"	"	
Surrogate: 4-BFB	98.5 %		70-130			"	"	"	"	

North Creek Analytical - Bothell

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SLR Alaska Project: FIA Former Mark Air Facilities

2525 Blueberry Road, Suite 206 Project Number: 004.0184.00001 Reported: Anchorage, AK/USA 99503 Project Manager: Andy Dimitriou 12/14/04 08:06

# Polynuclear Aromatic Compounds by GC/MS with Selected Ion Monitoring North Creek Analytical - Bothell

Analyte	Result	Reporting MDL Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
WP-1 (B4J0626-01) Water	Sampled: 10/13/04 11	:00 Received: 10/1	5/04 08:3	80					
1-Methylnaphthalene	26.8	0.100	ug/l	1	4J20011	10/20/04	11/04/04	8270C-SIM	
2-Methylnaphthalene	30.5	0.100	"	"	"	"	"	"	
Acenaphthene	ND	0.100	"	"	"	"	"	"	
Acenaphthylene	ND	0.100	"	"	"	"	"	"	
Anthracene	ND	0.100	"	"	"	"	"	"	
Benzo (a) anthracene	0.346	0.100	"	"	"	"	"	"	
Benzo (a) pyrene	ND	0.100	"	"	"	"	"	"	
Benzo (b) fluoranthene	ND	0.100	"	"	"	"	"	"	
Benzo (ghi) perylene	ND	0.100	"	"	"	"	"	"	
Benzo (k) fluoranthene	ND	0.100	"	"	"	"	"	"	
Chrysene	ND	0.100	"	"	"	"	"	"	
Dibenz (a,h) anthracene	ND	0.100	"	"	"	"	"	"	
Fluoranthene	ND	0.100	"	"	"	"	"	"	
Fluorene	0.285	0.100	"	"	"	"	"	"	
Indeno (1,2,3-cd) pyrene	ND	0.100	"	"	"	"	"	"	
Naphthalene	36.8	0.100	"	"	"	"	"	"	
Phenanthrene	0.135	0.100	**	"	"	"	"	"	
Pyrene	ND	0.100	"	"	"	"	"	II .	
Surrogate: p-Terphenyl-d14	125 %	20-12	7		"	"	"	"	
WP-3A (B4J0626-02) Water	Sampled: 10/13/04 0	9:00 Received: 10	/15/04 08	:30					
1-Methylnaphthalene	28.9	0.200	ug/l	2	4J20011	10/20/04	11/05/04	8270C-SIM	
2-Methylnaphthalene	33.4	0.200	"	"	"	"	"	"	
Acenaphthene	ND	0.200	"	"	"	"	"	"	
Acenaphthylene	ND	0.200	"	"	"	"	"	"	
Anthracene	ND	0.200	"	"	"	"	"	"	
Benzo (a) anthracene	ND	0.200	"	"	"	"	"	"	
Benzo (a) pyrene	ND	0.200	"	"	"	"	"	"	
Benzo (b) fluoranthene	ND	0.200	"	"	"	"	"	"	
Benzo (ghi) perylene	ND	0.200	"	"	"	"	"	"	
Benzo (k) fluoranthene	ND	0.200	"	"	"	"	"	"	
Chrysene	ND	0.200	"	"	"	"	"	"	
Dibenz (a,h) anthracene	ND	0.200	"	"	"	"	"	"	
Fluoranthene	ND	0.200	"	"	"	"	"	"	
Fluorene	0.304	0.200	"	"	"	"	"	"	
Indeno (1,2,3-cd) pyrene	ND	0.200	"	"	"	"	"	"	
Naphthalene	38.3	0.200	"	"	"	"	"	"	
Phenanthrene	ND	0.200	"	"	"	"	"	"	

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SLR Alaska Project: FIA Former Mark Air Facilities

2525 Blueberry Road, Suite 206 Project Number: 004.0184.00001 Reported: Anchorage, AK/USA 99503 Project Manager: Andy Dimitriou 12/14/04 08:06

# Polynuclear Aromatic Compounds by GC/MS with Selected Ion Monitoring North Creek Analytical - Bothell

Spokane

Analyte	Result !	Reporting MDL Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Not
WP-3A (B4J0626-02) Water	Sampled: 10/13/04 09	:00 Received: 1	0/15/04 08	:30					
Pyrene	0.208	0.200	ug/l	2	4J20011	10/20/04	11/05/04	8270C-SIM	
Surrogate: p-Terphenyl-d14	119 %	20-1	27		"	"	"	"	
MW-8 (B4J0626-05) Water	Sampled: 10/13/04 14:	10 Received: 10	/15/04 08:	30					
1-Methylnaphthalene	35.2	2.00	ug/l	20	4J20011	10/20/04	11/05/04	8270C-SIM	
2-Methylnaphthalene	39.7	2.00	"	"	"	"	"	"	
Acenaphthene	ND	2.00	"	"	"	"	"	"	
Acenaphthylene	ND	2.00	"	"	"	"	"	"	
Anthracene	ND	2.00	"	"	"	"	"	"	
Benzo (a) anthracene	ND	2.00	"	"	"	"	"	"	
Benzo (a) pyrene	ND	2.00	"	"	"	"	"	"	
Benzo (b) fluoranthene	ND	2.00	"	"	"	"	"	"	
Benzo (ghi) perylene	ND	2.00	"	"	"	"	"	"	
Benzo (k) fluoranthene	ND	2.00	"	"	"	"	"	"	
Chrysene	ND	2.00	"	"	"	"	"	"	
Dibenz (a,h) anthracene	ND	2.00	"	"	"	"	"	"	
Fluoranthene	ND	2.00	"	"	"	"	"	"	
Fluorene	ND	2.00	"	"	"	"	"	"	
Indeno (1,2,3-cd) pyrene	ND	2.00	"	"	"	"	"	"	
Naphthalene	228	2.00	"	"	"	"	"	"	
Phenanthrene	ND	2.00	"	"	"	"	"	"	
Pyrene	ND	2.00	"	"	"	"	"	"	
Surrogate: p-Terphenyl-d14	112 %	20-1	27		"	"	"	"	
WP-8 (B4J0626-09) Water	Sampled: 10/13/04 16:2	0 Received: 10/	15/04 08:3	<b>30</b>					
1-Methylnaphthalene	ND	0.100	ug/l	1	4J20011	10/20/04	11/05/04	8270C-SIM	
2-Methylnaphthalene	ND	0.100	"	"	"	"	"	"	
Acenaphthene	ND	0.100	"	"	"	"	"	"	
Acenaphthylene	ND	0.100	"	"	"	"	"	"	
Anthracene	ND	0.100	"	"	"	"	"	"	
Benzo (a) anthracene	ND	0.100	"	"	"	"	"	"	
Benzo (a) pyrene	ND	0.100	"	"	"	"	"	"	
Benzo (b) fluoranthene	ND	0.100	"	"	"	"	"	"	
Benzo (ghi) perylene	ND	0.100	"	"	"	"	"	"	
Benzo (k) fluoranthene	ND	0.100	"	"	"	"	"	"	
Chrysene	ND	0.100	"	"	"	"	"	"	
Dibenz (a,h) anthracene	ND	0.100	"	"	"	"	"	"	
Fluoranthene	ND	0.100	"	"	"	"	"	"	

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SLR Alaska Project: FIA Former Mark Air Facilities

2525 Blueberry Road, Suite 206 Project Number: 004.0184.00001 Reported: Anchorage, AK/USA 99503 Project Manager: Andy Dimitriou 12/14/04 08:06

#### Polynuclear Aromatic Compounds by GC/MS with Selected Ion Monitoring North Creek Analytical - Bothell

		1 TOT THE CITCEN 1	inary ti	cui Do	tiitii				
Analyte	Result	Reporting MDL Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
WP-8 (B4J0626-09) Water	Sampled: 10/13/04 16:	20 Received: 10/1	5/04 08:3	30					
Fluorene	ND	0.100	ug/l	1	4J20011	10/20/04	11/05/04	8270C-SIM	
Indeno (1,2,3-cd) pyrene	ND	0.100	"	"	"	"	"	"	
Naphthalene	ND	0.100	"	"	"	"	"	"	
Phenanthrene	ND	0.100	"	"	"	"	"	"	
Pyrene	ND	0.100	"	"	"	"	"	"	
Surrogate: p-Terphenyl-d14	109 %	20-12	27		"	"	"	"	
WP4N-25 (B4J0626-12) Water	er Sampled: 10/13/04	19:20 Received:	10/15/04	08:30					
1-Methylnaphthalene	0.223	0.100	ug/l	1	4J20011	10/20/04	11/04/04	8270C-SIM	
2-Methylnaphthalene	0.213	0.100	"	"	"	"	"	"	
Acenaphthene	ND	0.100	"	"	"	"	"	"	
Acenaphthylene	0.371	0.100	"	"	"	"	"	"	
Anthracene	ND	0.100	"	"	"	"	"	"	
Benzo (a) anthracene	ND	0.100	"	"	"	"	"	"	
Benzo (a) pyrene	ND	0.100	"	"	"	"	"	"	
Benzo (b) fluoranthene	ND	0.100	"	"	"	"	"	"	
Benzo (ghi) perylene	ND	0.100	"	"	"	"	"	"	
Benzo (k) fluoranthene	ND	0.100	"	"	"	"	"	"	
Chrysene	ND	0.100	"	"	"	"	"	"	
Dibenz (a,h) anthracene	ND	0.100	"	"	"	"	"	"	
Fluoranthene	ND	0.100	"	"	"	"	"	"	
Fluorene	ND	0.100	"	"	"	"	"	"	
Indeno (1,2,3-cd) pyrene	ND	0.100	"	"	"	"	"	"	
Naphthalene	0.162	0.100	"	"	"	"	"	"	
Phenanthrene	ND	0.100	"	"	"	"	"	"	
Pyrene	ND	0.100	"	"	"	"	"	"	
Surrogate: p-Terphenyl-d14	125 %	20-12	27		"	"	"	"	

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Amar Gill, Project Manager



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%REC

RPD

SLR Alaska Project: FIA Former Mark Air Facilities

Project Number: 004.0184.00001 2525 Blueberry Road, Suite 206 Reported: Anchorage, AK/USA 99503 Project Manager: Andy Dimitriou 12/14/04 08:06

# Residual Range Organics (C25-C36) by AK 103 - Quality Control North Creek Analytical - Bothell

Spike

Source

Reporting

			1 5		- I						
Analyte	Result	MDL	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch 4J27011: Prepared 1	.0/27/04 Usir	ng EPA 35	20C								
Blank (4J27011-BLK1)											
Residual Range Organics	ND	0.100	0.750	mg/l							
Surrogate: Octacosane	0.237			"	0.240		98.8	50-150			
LCS (4J27011-BS2)											
Residual Range Organics	1.55	0.100	0.750	mg/l	2.00		77.5	60-120			
Surrogate: Octacosane	0.221			"	0.240		92.1	50-150			
LCS Dup (4J27011-BSD2)											
Residual Range Organics	1.56	0.100	0.750	mg/l	2.00		78.0	60-120	0.643	20	
Surrogate: Octacosane	0.214			"	0.240		89.2	50-150			

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SLR Alaska Project: FIA Former Mark Air Facilities

2525 Blueberry Road, Suite 206 Project Number: 004.0184.00001 Reported: Anchorage, AK/USA 99503 Project Manager: Andy Dimitriou 12/14/04 08:06

# Gasoline Range Hydrocarbons (n-Hexane to <n-Decane) by AK101 - Quality Control North Creek Analytical - Bothell

				Reporting		Spike	Source		%REC		RPD	
Analyte		Result	MDL	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch 4J26003:	Prepared 10	/26/04 Usin	ng EPA 50	30B (P/T	)							
Blank (4J26003-BL	K1)											
Gasoline Range Hydrod	carbons	ND		50.0	ug/l							
Surrogate: 4-BFB (FID	))	45.8			"	48.0		95.4	60-120			
LCS (4J26003-BS1)	1											
Gasoline Range Hydrod	carbons	512		50.0	ug/l	502		102	60-120			
Surrogate: 4-BFB (FID	))	53.0			"	48.0		110	60-120			
LCS Dup (4J26003-	·BSD1)											
Gasoline Range Hydrod	carbons	514		50.0	ug/l	502		102	60-120	0.390	20	
Surrogate: 4-BFB (FID	))	52.9			"	48.0		110	60-120			
Matrix Spike (4J26	003-MS1)						Source: I	34J0626-0	)1			
Gasoline Range Hydrod	carbons	4180		250	ug/l	2510	2370	72.1	60-120			
Surrogate: 4-BFB (FID	))	60.8			"	48.0		127	60-120			S-04
Matrix Spike Dup (	4J26003-MSD1	1)					Source: I	34J0626-0	)1			
Gasoline Range Hydrod	carbons	4220		250	ug/l	2510	2370	73.7	60-120	0.952	20	
Surrogate: 4-BFB (FID	))	61.5			"	48.0		128	60-120			S-04
Surrogate: 4-BFB (FID	))	61.5			"	48.0		128	60-120			

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Amar Gill, Project Manager



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SLR Alaska Project: FIA Former Mark Air Facilities

2525 Blueberry Road, Suite 206 Project Number: 004.0184.00001 Reported: Anchorage, AK/USA 99503 Project Manager: Andy Dimitriou 12/14/04 08:06

# Gasoline Hydrocarbons (n-Hexane to <n-Decane) and BTEX by AK101/EPA 8021B - Quality Control North Creek Analytical - Bothell

Analyte	Result	Reporting MDL Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
		ng EPA 5030B (P/T		Level	Result	701120	Limits	МЪ	Liiiit	110103
Blank (4J26003-BLK1)	1ed 10/20/04 USII	ig E1 A 3030B (171	<u>)                                    </u>							
Gasoline Range Hydrocarbons	ND	50.0	ug/l							
Benzene	ND	0.200	"							
Toluene	ND	0.500	"							
Ethylbenzene	ND	0.500	"							
Xylenes (total)	ND	1.00	"							
Surrogate: 4-BFB (FID)	45.8		"	48.0		95.4	60-120			
Surrogate: 4-BFB (PID)	47.3		"	48.0		98.5	68-140			
LCS (4J26003-BS1)										
Gasoline Range Hydrocarbons	512	50.0	ug/l	502		102	60-120			
Benzene	6.93	0.200	"	6.21		112	80-120			
Toluene	37.2	0.500	"	34.9		107	80-120			
Ethylbenzene	9.46	0.500	"	8.38		113	80-120			
Xylenes (total)	45.8	1.00	"	40.6		113	80-120			
Surrogate: 4-BFB (FID)	53.0		"	48.0		110	60-120			
Surrogate: 4-BFB (PID)	47.9		"	48.0		99.8	68-140			
LCS Dup (4J26003-BSD1)										
Gasoline Range Hydrocarbons	514	50.0	ug/l	502		102	60-120	0.390	20	
Benzene	6.98	0.200	"	6.21		112	80-120	0.719	25	
Toluene	37.5	0.500	"	34.9		107	80-120	0.803	25	
Ethylbenzene	9.46	0.500	"	8.38		113	80-120	0.00	25	
Xylenes (total)	45.7	1.00	"	40.6		113	80-120	0.219	25	
Surrogate: 4-BFB (FID)	52.9		"	48.0		110	60-120			
Surrogate: 4-BFB (PID)	47.6		"	48.0		99.2	68-140			
Matrix Spike (4J26003-MS)	1)				Source: I	34J0626-0	1			
Gasoline Range Hydrocarbons	4180	250	ug/l	2510	2370	72.1	60-120			
Benzene	41.4	1.00	"	31.0	8.25	107	46-130			
Toluene	223	2.50	"	175	47.7	100	60-124			
Ethylbenzene	106	2.50	"	41.9	75.8	72.1	56-141			
Xylenes (total)	542	5.00	"	203	384	77.8	66-132			
Surrogate: 4-BFB (FID)	60.8		"	48.0		127	60-120			S-0

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SLR Alaska Project: FIA Former Mark Air Facilities

2525 Blueberry Road, Suite 206 Project Number: 004.0184.00001 Reported: Anchorage, AK/USA 99503 Project Manager: Andy Dimitriou 12/14/04 08:06

# Gasoline Hydrocarbons (n-Hexane to <n-Decane) and BTEX by AK101/EPA 8021B - Quality Control North Creek Analytical - Bothell

			Reporting		Spike	Source		%REC		RPD	
Analyte	Result	MDL	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes

Matrix Spike (4J26003-MS1)		Source: B4J0626-01										
Surrogate: 4-BFB (PID)	50.8		ug/l	48.0		106	68-140					
Matrix Spike Dup (4J26003-MS	D1)				Source: B	84J0626-	01					
Gasoline Range Hydrocarbons	4220	250	ug/l	2510	2370	73.7	60-120	0.952	20			
Benzene	39.9	1.00	"	31.0	8.25	102	46-130	3.69	40			
Toluene	225	2.50	"	175	47.7	101	60-124	0.893	40			
Ethylbenzene	106	2.50	"	41.9	75.8	72.1	56-141	0.00	40			
Xylenes (total)	543	5.00	"	203	384	78.3	66-132	0.184	40			
Surrogate: 4-BFB (FID)	61.5		"	48.0		128	60-120			S-04		
Surrogate: 4-BFB (PID)	51.1		"	48.0		106	68-140					

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%REC

RPD

SLR Alaska Project: FIA Former Mark Air Facilities

2525 Blueberry Road, Suite 206 Project Number: 004.0184.00001 Reported: Anchorage, AK/USA 99503 Project Manager: Andy Dimitriou 12/14/04 08:06

Reporting

# Diesel Hydrocarbons (C10-C25) by AK102 - Quality Control North Creek Analytical - Bothell

Spike

Source

Analyte	Resul	t MDL	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch 4J27011: Pre	pared 10/27/04	Using EPA 3	3520C								
Blank (4J27011-BLK1)											
Diesel Range Hydrocarbons	NE	)	0.100	mg/l							
Surrogate: 2-FBP	0.219	9		"	0.250		87.6	50-150			
LCS (4J27011-BS1)											
Diesel Range Hydrocarbons	1.65	5	0.100	mg/l	1.87		88.2	75-125			
Surrogate: 2-FBP	0.229	9		"	0.250		91.6	50-150			
LCS Dup (4J27011-BSD	1)										
Diesel Range Hydrocarbons	1.67	7	0.100	mg/l	1.87		89.3	75-125	1.20	20	
Surrogate: 2-FBP	0.232	2		"	0.250		92.8	50-150			

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SLR Alaska Project: FIA Former Mark Air Facilities

2525 Blueberry Road, Suite 206 Project Number: 004.0184.00001 Reported: Anchorage, AK/USA 99503 Project Manager: Andy Dimitriou 12/14/04 08:06

# Diesel Hydrocarbons (C10-C25) and Heavy Oil (C25-C36) by AK102 and AK103 - Quality Control North Creek Analytical - Bothell

Spokane

Bend

Analyte	Result	Reporting MDL Limit		Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 4J27011: Prepared 1	10/27/04 Usir	ng EPA 3520C								
Blank (4J27011-BLK1)										
Diesel Range Hydrocarbons	ND	0.100	mg/l							
Residual Range Organics	ND	0.750	"							
Surrogate: 2-FBP	0.219		"	0.250		87.6	50-150			
Surrogate: Octacosane	0.237		"	0.240		98.8	50-150			
LCS (4J27011-BS1)										
Diesel Range Hydrocarbons	1.65	0.100	mg/l	1.87		88.2	75-125			
Surrogate: 2-FBP	0.229		"	0.250		91.6	50-150			
LCS (4J27011-BS2)										
Residual Range Organics	1.55	0.750	mg/l	2.00		77.5	60-120			
Surrogate: Octacosane	0.221		"	0.240		92.1	50-150			
LCS Dup (4J27011-BSD1)										
Diesel Range Hydrocarbons	1.67	0.100	mg/l	1.87		89.3	75-125	1.20	20	
Surrogate: 2-FBP	0.232		"	0.250		92.8	50-150			
LCS Dup (4J27011-BSD2)										
Residual Range Organics	1.56	0.750	mg/l	2.00		78.0	60-120	0.643	20	
Surrogate: Octacosane	0.214		"	0.240		89.2	50-150			

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SLR Alaska Project: FIA Former Mark Air Facilities

2525 Blueberry Road, Suite 206 Project Number: 004.0184.00001 Reported: Anchorage, AK/USA 99503 Project Manager: Andy Dimitriou 12/14/04 08:06

# BTEX by EPA Method 8021B - Quality Control North Creek Analytical - Bothell

			Reporting		Spike	Source		%REC		RPD	
Analyte	Result	MDL	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch 4J26003: 1	Prepared 10/26/04 U	Jsing EPA 5	5030B (P/T	·)							
Blank (4J26003-BLK	1)										
Benzene	ND		0.200	ug/l							
Toluene	ND		0.500	"							
Ethylbenzene	ND		0.500	"							
Xylenes (total)	ND		1.00	"							
Surrogate: 4-BFB (PID)	47.3			"	48.0		98.5	68-140			
LCS (4J26003-BS1)											
Benzene	6.93		0.200	ug/l	6.21		112	80-120			
Toluene	37.2		0.500	"	34.9		107	80-120			
Ethylbenzene	9.46		0.500	"	8.38		113	80-120			
Xylenes (total)	45.8		1.00	"	40.6		113	80-120			
Surrogate: 4-BFB (PID)	47.9			"	48.0		99.8	68-140			
LCS Dup (4J26003-B	SD1)										
Benzene	6.98		0.200	ug/l	6.21		112	80-120	0.719	25	
Toluene	37.5		0.500	"	34.9		107	80-120	0.803	25	
Ethylbenzene	9.46		0.500	"	8.38		113	80-120	0.00	25	
Xylenes (total)	45.7		1.00	"	40.6		113	80-120	0.219	25	
Surrogate: 4-BFB (PID)	47.6			"	48.0		99.2	68-140			
Matrix Spike (4J2600	03-MS1)					Source: I	<b>34J0626-</b> 0	)1			
Benzene	41.4		1.00	ug/l	31.0	8.25	107	46-130			
Toluene	223		2.50	"	175	47.7	100	60-124			
Ethylbenzene	106		2.50	"	41.9	75.8	72.1	56-141			
Xylenes (total)	542		5.00	"	203	384	77.8	66-132			
Surrogate: 4-BFB (PID)	50.8			"	48.0		106	68-140			
Matrix Spike Dup (4.	J26003-MSD1)					Source: I	<b>34J0626-</b> 0	)1			
Benzene	39.9		1.00	ug/l	31.0	8.25	102	46-130	3.69	40	
Toluene	225		2.50	"	175	47.7	101	60-124	0.893	40	
Ethylbenzene	106		2.50	"	41.9	75.8	72.1	56-141	0.00	40	
Xylenes (total)	543		5.00	"	203	384	78.3	66-132	0.184	40	
Surrogate: 4-BFB (PID)	51.1			"	48.0		106	68-140			

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SLR Alaska Project: FIA Former Mark Air Facilities

2525 Blueberry Road, Suite 206 Project Number: 004.0184.00001 Reported: Anchorage, AK/USA 99503 Project Manager: Andy Dimitriou 12/14/04 08:06

# Total Metals by EPA 6000/7000 Series Methods - Quality Control North Creek Analytical - Bothell

Spokane

Analyte	Result	Reporting MDL Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 4J21033: P1	repared 10/21/04 Usin	g EPA 3020A								
Blank (4J21033-BLK1	)									
Lead	ND	0.00100	mg/l							
LCS (4J21033-BS1)										
Lead	0.0806	0.00100	mg/l	0.0800		101	80-120			
LCS Dup (4J21033-BS	D1)									
Lead	0.0803	0.00100	mg/l	0.0800		100	80-120	0.373	20	
Matrix Spike (4J21033	i-MS1)				Source: B	4J0626-0	)1			
Lead	0.0771	0.00100	mg/l	0.0800	0.000250	96.1	78-125			
Matrix Spike Dup (4J2	21033-MSD1)				Source: B	4J0626-(	)1			
Lead	0.0779	0.00100	mg/l	0.0800	0.000250	97.1	78-125	1.03	20	
Post Spike (4J21033-P	S1)				Source: B	4J0626-0	)1			
Lead	0.0999		ug/ml	0.0995	0.000250	100	75-125			

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%REC

RPD

SLR Alaska Project: FIA Former Mark Air Facilities

2525 Blueberry Road, Suite 206 Project Number: 004.0184.00001 Reported: Anchorage, AK/USA 99503 Project Manager: Andy Dimitriou 12/14/04 08:06

Reporting

## EDB and DBCP by EPA Method 8011 - Quality Control North Creek Analytical - Bothell

Spike

Source

Analyte	Result	MDL Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch 4J20052: Prepared 1	10/20/04 Usin	ng Solvent Extracti	on							
Blank (4J20052-BLK1)										
1,2-Dibromoethane (EDB)	ND	0.010	ug/l							
1,2-Dibromo-3-chloropropane	ND	0.010	"							
LCS (4J20052-BS1)										
1,2-Dibromoethane (EDB)	0.050	0.010	ug/l	0.0500		100	80-120			
1,2-Dibromo-3-chloropropane	0.053	0.010	"	0.0500		106	80-120			
LCS Dup (4J20052-BSD1)										
1,2-Dibromoethane (EDB)	0.051	0.010	ug/l	0.0500		102	80-120	1.98	40	
1,2-Dibromo-3-chloropropane	0.054	0.010	"	0.0500		108	80-120	1.87	40	

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Project: FIA Former Mark Air Facilities SLR Alaska

2525 Blueberry Road, Suite 206 Project Number: 004.0184.00001 Reported: Anchorage, AK/USA 99503 Project Manager: Andy Dimitriou 12/14/04 08:06

## **Volatile Organic Compounds by EPA Method 8260B - Quality Control** North Creek Analytical - Bothell

			Reporting		Spike	Source		%REC		RPD	
Analyte	Result	MDL	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes

ND   20.0   ug/l	Batch 4J24009: Prepared 1	0/22/04 Using EP.	A 5030B	
ND   20.0   ug/l	Blank (4J24009-BLK1)			
ND	Acetone	ND	20.0 ug/l	
ND	Benzene	ND	1.00 "	
romodichloromethane romoform ND 1.00 " romomethane ND 1.00 " Retromomethane ND 1.00 " Retromomet	Bromobenzene	ND	1.00 "	
ND   1.00	Bromochloromethane	ND	1.00 "	
ND   1.00	Bromodichloromethane	ND	1.00 "	
Butanone	Bromoform	ND	1.00 "	
Butylbenzene	Bromomethane	ND	2.00 "	
Dec-Butylbenzene	2-Butanone	ND	10.0 "	
rt-Butylbenzene ND 1.00 " arbon disulfide ND 1.00 " hlorobenzene ND 1.00 " hlorobenzene ND 1.00 " hloroform ND 1.00 " hloromethane ND 1.00 " hloromethane ND 1.00 " hloromethane ND 1.00 " hloromethane ND 1.00 " Chlorotoluene ND 1.00 " Chlorotoluene ND 1.00 " Chlorotoluene ND 1.00 " Chlorotoluene ND 1.00 " Chloromethane ND 1.00 " Chloromethane ND 1.00 "  2-Dibromo-3-chloropropane ND 5.00 " 2-Dibromoethane ND 1.00 " 3-Dichlorobenzene ND 1.00 " 3-Dichlorobenzene ND 1.00 " 4-Dichlorobenzene ND 1.00 " 4-Dichlorotoluene ND 1.00 " 1-Dichlorotoluene ND 1.00 " 1-Dichlorothane ND 1.00 "	n-Butylbenzene	ND	1.00 "	
rt-Butylbenzene ND 1.00 " arbon disulfide ND 1.00 " hlorobenzene ND 1.00 " hlorobenzene ND 1.00 " hloroform ND 1.00 " hloromethane ND 1.00 " hloromethane ND 1.00 " hloromethane ND 1.00 " hloromethane ND 1.00 " chlorotoluene ND 1.00 " Chlorotoluene ND 1.00 " Chlorotoluene ND 1.00 " chloromethane ND 1.00 " clibromo-3-chloropropane ND 5.00 " c2-Dibromo-4-chloropropane ND 1.00 " c3-Dichlorobenzene ND 1.00 " c4-Dichlorobenzene ND 1.00 " c4-Dichlorobenzene ND 1.00 " c4-Dichlorobenzene ND 1.00 " c5-Dichloroethane ND 1.00 " c6-Dichloroethane ND 1.00 " c6-Dichloroethane ND 1.00 " c6-Dichloroethane ND 1.00 " c7-Dichloroethane ND 1.00 " c8-Dichloroethane ND 1.00 " c8-Dichloroethane ND 1.00 " c8-Dichloroethane ND 1.00 "	sec-Butylbenzene	ND	1.00 "	
arbon tetrachloride  ND  1.00  Inlorobenzene  ND  1.00  Inlorothane  ND  1.00  Inlorothane  ND  1.00  Inloromethane  ND	tert-Butylbenzene	ND	1.00 "	
ND	Carbon disulfide	ND	1.00 "	
hloroethane ND 1.00 " hloroethane ND 1.00 " hloromethane ND 5.00 " Chlorotoluene ND 1.00 " Chlorotoluene ND 1.00 " Chlorotoluene ND 1.00 " chloromethane ND 1.00 " 2-Dibromo-3-chloropropane ND 5.00 " 2-Dibromoethane ND 1.00 " 2-Dibromoethane ND 1.00 " 3-Dichlorobenzene ND 1.00 " 3-Dichlorobenzene ND 1.00 " 1-Dichlorobenzene ND 1.00 " 1-Dichloroethane ND 1.00 " 1-Dichloroethene ND 1.00 "	Carbon tetrachloride	ND	1.00 "	
ND	Chlorobenzene	ND	1.00 "	
ND   1.00	Chloroethane	ND	1.00 "	
Chlorotoluene         ND         1.00         "           Chlorotoluene         ND         1.00         "           ibromochloromethane         ND         1.00         "           2-Dibromo-3-chloropropane         ND         5.00         "           2-Dibromoethane         ND         1.00         "           ibromomethane         ND         1.00         "           2-Dichlorobenzene         ND         1.00         "           3-Dichlorobenzene         ND         1.00         "           4-Dichlorobenzene         ND         1.00         "           1-Dichloroethane         ND         1.00         "           1-Dichloroethane         ND         1.00         "           1-Dichloroethene         ND         1.00         "           8-1,2-Dichloroethene         ND         1.00         "	Chloroform	ND	1.00 "	
Chlorotoluene         ND         1.00         "           ibromochloromethane         ND         1.00         "           2-Dibromo-3-chloropropane         ND         5.00         "           2-Dibromoethane         ND         1.00         "           ibromomethane         ND         1.00         "           2-Dichlorobenzene         ND         1.00         "           3-Dichlorobenzene         ND         1.00         "           4-Dichlorobenzene         ND         1.00         "           ichlorodifluoromethane         ND         1.00         "           1-Dichloroethane         ND         1.00         "           2-Dichloroethane         ND         1.00         "           1-Dichloroethene         ND         1.00         "	Chloromethane	ND	5.00 "	
Section   Sect	2-Chlorotoluene	ND	1.00 "	
2-Dibromo-3-chloropropane ND 5.00 " 2-Dibromoethane ND 1.00 " ibromomethane ND 1.00 " 2-Dichlorobenzene ND 1.00 " 3-Dichlorobenzene ND 1.00 " 4-Dichlorobenzene ND 1.00 " ichlorodifluoromethane ND 1.00 " 1-Dichloroethane ND 1.00 "	4-Chlorotoluene	ND	1.00 "	
2-Dibromoethane	Dibromochloromethane	ND	1.00 "	
1.00	1,2-Dibromo-3-chloropropane	ND	5.00 "	
2-Dichlorobenzene ND 1.00 " 3-Dichlorobenzene ND 1.00 " 4-Dichlorobenzene ND 1.00 " ichlorodifluoromethane ND 1.00 " 1-Dichloroethane ND 1.00 " 2-Dichloroethane ND 1.00 " 1-Dichloroethane ND 1.00 " 1-Dichloroethane ND 1.00 " 1-Dichloroethane ND 1.00 "	1,2-Dibromoethane	ND	1.00 "	
ND   1.00	Dibromomethane	ND	1.00 "	
4-Dichlorobenzene       ND       1.00       "         ichlorodifluoromethane       ND       1.00       "         1-Dichloroethane       ND       1.00       "         2-Dichloroethane       ND       1.00       "         1-Dichloroethene       ND       1.00       "         s-1,2-Dichloroethene       ND       1.00       "	1,2-Dichlorobenzene	ND	1.00 "	
1.00	1,3-Dichlorobenzene	ND	1.00 "	
1-Dichloroethane       ND       1.00       "         2-Dichloroethane       ND       1.00       "         1-Dichloroethene       ND       1.00       "         s-1,2-Dichloroethene       ND       1.00       "	1,4-Dichlorobenzene	ND	1.00 "	
2-Dichloroethane       ND       1.00       "         1-Dichloroethene       ND       1.00       "         s-1,2-Dichloroethene       ND       1.00       "	Dichlorodifluoromethane	ND	1.00 "	
1-Dichloroethene ND 1.00 " s-1,2-Dichloroethene ND 1.00 "	1,1-Dichloroethane	ND	1.00 "	
s-1,2-Dichloroethene ND 1.00 "	1,2-Dichloroethane	ND	1.00 "	
	1,1-Dichloroethene	ND	1.00 "	
ans-1,2-Dichloroethene ND 1.00 "	cis-1,2-Dichloroethene	ND	1.00 "	
	trans-1,2-Dichloroethene	ND	1.00 "	

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SLR Alaska Project: FIA Former Mark Air Facilities

2525 Blueberry Road, Suite 206 Project Number: 004.0184.00001 Reported: Anchorage, AK/USA 99503 Project Manager: Andy Dimitriou 12/14/04 08:06

# Volatile Organic Compounds by EPA Method 8260B - Quality Control North Creek Analytical - Bothell

			Reporting		Spike	Source		%REC		RPD	
Analyte	Result	MDL	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes

Batch 4J24009: Prepared	10/22/04 Using EP.	A 5030B	
Blank (4J24009-BLK1)			
1,2-Dichloropropane	ND	1.00 ug/l	
1,3-Dichloropropane	ND	1.00 "	
2,2-Dichloropropane	ND	1.00 "	
1,1-Dichloropropene	ND	1.00 "	
cis-1,3-Dichloropropene	ND	1.00 "	
trans-1,3-Dichloropropene	ND	1.00 "	
Ethylbenzene	ND	1.00 "	
Hexachlorobutadiene	ND	1.00 "	
Methyl tert-butyl ether	ND	2.00 "	
2-Hexanone	ND	10.0 "	
Isopropylbenzene	ND	1.00 "	
p-Isopropyltoluene	ND	1.00 "	
4-Methyl-2-pentanone	ND	10.0 "	
Methylene chloride	ND	5.00 "	
Naphthalene	ND	1.00 "	
n-Propylbenzene	ND	1.00 "	
Styrene	ND	1.00 "	
1,2,3-Trichlorobenzene	ND	1.00 "	
1,2,4-Trichlorobenzene	ND	1.00 "	
1,1,1,2-Tetrachloroethane	ND	1.00 "	
,1,2,2-Tetrachloroethane	ND	1.00 "	
Γetrachloroethene	ND	1.00 "	
Γoluene	ND	1.00 "	
1,1,1-Trichloroethane	ND	1.00 "	
1,1,2-Trichloroethane	ND	1.00 "	
Γrichloroethene	ND	1.00 "	
Γrichlorofluoromethane	ND	1.00 "	
1,2,3-Trichloropropane	ND	1.00 "	
,2,4-Trimethylbenzene	ND	1.00 "	
1,3,5-Trimethylbenzene	ND	1.00 "	
Vinyl chloride	ND	1.00 "	
o-Xylene	ND	1.00 "	

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SLR Alaska Project: FIA Former Mark Air Facilities

2525 Blueberry Road, Suite 206 Project Number: 004.0184.00001 Reported: Anchorage, AK/USA 99503 Project Manager: Andy Dimitriou 12/14/04 08:06

# Volatile Organic Compounds by EPA Method 8260B - Quality Control North Creek Analytical - Bothell

Bend

Analyte	Res	ult MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 4J24009:	Prepared 10/22/04	Using EPA 5	6030B								

Blank (4J24009-BLK1)									
m,p-Xylene	ND	2.00	ug/l						
Surrogate: 1,2-DCA-d4	20.0		"	20.0	100	70-130			
Surrogate: Toluene-d8	20.0		"	20.0	100	70-130			
Surrogate: 4-BFB	20.2		"	20.0	101	70-130			
LCS (4J24009-BS1)									
Benzene	18.8	1.00	ug/l	20.0	94.0	80-120			
Chlorobenzene	18.8	1.00	"	20.0	94.0	77-120			
1,1-Dichloroethene	18.4	1.00	"	20.0	92.0	80-120			
Methyl tert-butyl ether	20.0	2.00	"	20.0	100	80-120			
Toluene	19.3	1.00	"	20.0	96.5	80-120			
Trichloroethene	18.7	1.00	"	20.0	93.5	80-120			
Surrogate: 1,2-DCA-d4	19.8		"	20.0	99.0	70-130			
Surrogate: Toluene-d8	20.4		"	20.0	102	70-130			
Surrogate: 4-BFB	20.2		"	20.0	101	70-130			
LCS Dup (4J24009-BSD1)									
Benzene	19.0	1.00	ug/l	20.0	95.0	80-120	1.06	20	
Chlorobenzene	19.0	1.00	"	20.0	95.0	77-120	1.06	20	
1,1-Dichloroethene	18.4	1.00	"	20.0	92.0	80-120	0.00	20	
Methyl tert-butyl ether	20.0	2.00	"	20.0	100	80-120	0.00	20	
Toluene	18.9	1.00	"	20.0	94.5	80-120	2.09	20	
Trichloroethene	18.2	1.00	"	20.0	91.0	80-120	2.71	20	
Surrogate: 1,2-DCA-d4	19.9		"	20.0	99.5	70-130			
Surrogate: Toluene-d8	20.0		"	20.0	100	70-130			
Surrogate: 4-BFB	20.0		"	20.0	100	70-130			

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**Portland** 

Bend

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SLR Alaska Project: FIA Former Mark Air Facilities

2525 Blueberry Road, Suite 206 Project Number: 004.0184.00001 Reported: Anchorage, AK/USA 99503 Project Manager: Andy Dimitriou 12/14/04 08:06

## **Volatile Organic Compounds by EPA Method 8260B - Quality Control** North Creek Analytical - Bothell

			Reporting		Spike	Source		%REC		RPD	
Analyte	Result	MDL	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes

Batch 4J24010: Prepared 1	10/24/04 Using EP	A 5030B	
Blank (4J24010-BLK1)			
Acetone	ND	20.0 ug/l	
Benzene	ND	1.00 "	
Bromobenzene	ND	1.00 "	
Bromochloromethane	ND	1.00 "	
Bromodichloromethane	ND	1.00 "	
Bromoform	ND	1.00 "	
Bromomethane	ND	2.00 "	
2-Butanone	ND	10.0 "	
n-Butylbenzene	ND	1.00 "	
sec-Butylbenzene	ND	1.00 "	
tert-Butylbenzene	ND	1.00 "	
Carbon disulfide	ND	1.00 "	
Carbon tetrachloride	ND	1.00 "	
Chlorobenzene	ND	1.00 "	
Chloroethane	ND	1.00 "	
Chloroform	ND	1.00 "	
Chloromethane	ND	5.00 "	
2-Chlorotoluene	ND	1.00 "	
4-Chlorotoluene	ND	1.00 "	
Dibromochloromethane	ND	1.00 "	
1,2-Dibromo-3-chloropropane	ND	5.00 "	
1,2-Dibromoethane	ND	1.00 "	
Dibromomethane	ND	1.00 "	
1,2-Dichlorobenzene	ND	1.00 "	
1,3-Dichlorobenzene	ND	1.00 "	
1,4-Dichlorobenzene	ND	1.00 "	
Dichlorodifluoromethane	ND	1.00 "	
1,1-Dichloroethane	ND	1.00 "	
1,2-Dichloroethane	ND	1.00 "	
1,1-Dichloroethene	ND	1.00 "	
cis-1,2-Dichloroethene	ND	1.00 "	
trans-1,2-Dichloroethene	ND	1.00 "	

North Creek Analytical - Bothell



Spokane

**Portland** 

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Project: FIA Former Mark Air Facilities SLR Alaska

2525 Blueberry Road, Suite 206 Project Number: 004.0184.00001 Reported: Anchorage, AK/USA 99503 Project Manager: Andy Dimitriou 12/14/04 08:06

# Volatile Organic Compounds by EPA Method 8260B - Quality Control North Creek Analytical - Bothell

			Reporting		Spike	Source		%REC		RPD	
Analyte	Result	MDL	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes

Batch 4J24010: Prepared	10/24/04 Using EP	A 5030B	
Blank (4J24010-BLK1)			
1,2-Dichloropropane	ND	1.00 ug/l	
1,3-Dichloropropane	ND	1.00 "	
2,2-Dichloropropane	ND	1.00 "	
1,1-Dichloropropene	ND	1.00 "	
cis-1,3-Dichloropropene	ND	1.00 "	
rans-1,3-Dichloropropene	ND	1.00 "	
Ethylbenzene	ND	1.00 "	
Hexachlorobutadiene	ND	1.00 "	
Methyl tert-butyl ether	ND	2.00 "	
-Hexanone	ND	10.0 "	
sopropylbenzene	ND	1.00 "	
-Isopropyltoluene	ND	1.00 "	
-Methyl-2-pentanone	ND	10.0 "	
Methylene chloride	ND	2.00 "	
Japhthalene	ND	1.00 "	
-Propylbenzene	ND	1.00 "	
tyrene	ND	1.00 "	
,2,3-Trichlorobenzene	ND	1.00 "	
,2,4-Trichlorobenzene	ND	1.00 "	
,1,1,2-Tetrachloroethane	ND	1.00 "	
,1,2,2-Tetrachloroethane	ND	1.00 "	
etrachloroethene	ND	1.00 "	
oluene	ND	1.00 "	
,1,1-Trichloroethane	ND	1.00 "	
,1,2-Trichloroethane	ND	1.00 "	
richloroethene	ND	1.00 "	
richlorofluoromethane	ND	1.00 "	
,2,3-Trichloropropane	ND	1.00 "	
,2,4-Trimethylbenzene	ND	1.00 "	
,3,5-Trimethylbenzene	ND	1.00 "	
/inyl chloride	ND	1.00 "	
-Xylene	ND	1.00 "	

North Creek Analytical - Bothell



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SLR Alaska Project: FIA Former Mark Air Facilities

2525 Blueberry Road, Suite 206 Project Number: 004.0184.00001 Reported: Anchorage, AK/USA 99503 Project Manager: Andy Dimitriou 12/14/04 08:06

# Volatile Organic Compounds by EPA Method 8260B - Quality Control North Creek Analytical - Bothell

			Reporting		Spike	Source		%REC		RPD	
Analyte	Res	sult MDL	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch 4J24010:	Prepared 10/24/04	Using EPA 5	5030B								
Diank (4124010 DI V1)											

Blank (4J24010-BLK1)									
m,p-Xylene	ND	2.00	ug/l						
Surrogate: 1,2-DCA-d4	22.0		"	20.0	110	70-130			
Surrogate: Toluene-d8	18.1		"	20.0	90.5	70-130			
Surrogate: 4-BFB	18.0		"	20.0	90.0	70-130			
LCS (4J24010-BS1)									
Benzene	17.6	1.00	ug/l	20.0	88.0	80-120			
Chlorobenzene	20.0	1.00	"	20.0	100	77-120			
1,1-Dichloroethene	19.4	1.00	"	20.0	97.0	80-120			
Methyl tert-butyl ether	20.8	2.00	"	20.0	104	80-120			
Toluene	16.0	1.00	"	20.0	80.0	80-120			
Trichloroethene	19.5	1.00	"	20.0	97.5	80-120			
Surrogate: 1,2-DCA-d4	20.2		"	20.0	101	70-130			
Surrogate: Toluene-d8	18.4		"	20.0	92.0	70-130			
Surrogate: 4-BFB	18.4		"	20.0	92.0	70-130			
LCS Dup (4J24010-BSD1)									
Benzene	18.6	1.00	ug/l	20.0	93.0	80-120	5.52	20	
Chlorobenzene	20.8	1.00	"	20.0	104	77-120	3.92	20	
1,1-Dichloroethene	19.9	1.00	"	20.0	99.5	80-120	2.54	20	
Methyl tert-butyl ether	20.8	2.00	"	20.0	104	80-120	0.00	20	
Toluene	17.2	1.00	"	20.0	86.0	80-120	7.23	20	
Trichloroethene	20.2	1.00	"	20.0	101	80-120	3.53	20	
Surrogate: 1,2-DCA-d4	20.2		"	20.0	101	70-130			
Surrogate: Toluene-d8	18.2		"	20.0	91.0	70-130			
Surrogate: 4-BFB	18.2		"	20.0	91.0	70-130			

North Creek Analytical - Bothell

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SLR Alaska Project: FIA Former Mark Air Facilities

2525 Blueberry Road, Suite 206 Project Number: 004.0184.00001 Reported: Anchorage, AK/USA 99503 Project Manager: Andy Dimitriou 12/14/04 08:06

# Volatile Organic Compounds by EPA Method 8260B - Quality Control North Creek Analytical - Bothell

			Reporting		Spike	Source		%REC		RPD	
Analyte	Result	MDL	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes

Batch 4J27030: Prepared	10/26/04 Using EP	A 5030B	
Blank (4J27030-BLK1)			
Acetone	ND	20.0 ug/l	
Benzene	ND	1.00 "	
Bromobenzene	ND	1.00 "	
Bromochloromethane	ND	1.00 "	
Bromodichloromethane	ND	1.00 "	
Bromoform	ND	1.00 "	
Bromomethane	ND	2.00 "	
2-Butanone	ND	10.0 "	
n-Butylbenzene	ND	1.00 "	
sec-Butylbenzene	ND	1.00 "	
tert-Butylbenzene	ND	1.00 "	
Carbon disulfide	ND	1.00 "	
Carbon tetrachloride	ND	1.00 "	
Chlorobenzene	ND	1.00 "	
Chloroethane	ND	1.00 "	
Chloroform	ND	1.00 "	
Chloromethane	ND	5.00 "	
2-Chlorotoluene	ND	1.00 "	
4-Chlorotoluene	ND	1.00 "	
Dibromochloromethane	ND	1.00 "	
1,2-Dibromo-3-chloropropane	ND	5.00 "	
1,2-Dibromoethane	ND	1.00 "	
Dibromomethane	ND	1.00 "	
1,2-Dichlorobenzene	ND	1.00 "	
1,3-Dichlorobenzene	ND	1.00 "	
1,4-Dichlorobenzene	ND	1.00 "	
Dichlorodifluoromethane	ND	1.00 "	
1,1-Dichloroethane	ND	1.00 "	
1,2-Dichloroethane	ND	1.00 "	
1,1-Dichloroethene	ND	1.00 "	
cis-1,2-Dichloroethene	ND	1.00 "	
trans-1,2-Dichloroethene	ND	1.00 "	

North Creek Analytical - Bothell



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SLR Alaska Project: FIA Former Mark Air Facilities

2525 Blueberry Road, Suite 206 Project Number: 004.0184.00001 Reported: Anchorage, AK/USA 99503 Project Manager: Andy Dimitriou 12/14/04 08:06

# Volatile Organic Compounds by EPA Method 8260B - Quality Control North Creek Analytical - Bothell

			Reporting		Spike	Source		%REC		RPD	
Analyte	Result	MDL	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes

Batch 4J27030: Prepared	10/26/04 Using EP.	A 5030B	
Blank (4J27030-BLK1)			
1,2-Dichloropropane	ND	1.00 ug/l	
1,3-Dichloropropane	ND	1.00 "	
2,2-Dichloropropane	ND	1.00 "	
1,1-Dichloropropene	ND	1.00 "	
cis-1,3-Dichloropropene	ND	1.00 "	
trans-1,3-Dichloropropene	ND	1.00 "	
Ethylbenzene	ND	1.00 "	
Hexachlorobutadiene	ND	1.00 "	
Methyl tert-butyl ether	ND	2.00 "	
2-Hexanone	ND	10.0 "	
Isopropylbenzene	ND	1.00 "	
p-Isopropyltoluene	ND	1.00 "	
4-Methyl-2-pentanone	ND	10.0 "	
Methylene chloride	ND	5.00 "	
Naphthalene	ND	1.00 "	
n-Propylbenzene	ND	1.00 "	
Styrene	ND	1.00 "	
1,2,3-Trichlorobenzene	ND	1.00 "	
1,2,4-Trichlorobenzene	ND	1.00 "	
1,1,1,2-Tetrachloroethane	ND	1.00 "	
1,1,2,2-Tetrachloroethane	ND	1.00 "	
Tetrachloroethene	ND	1.00 "	
Toluene	ND	1.00 "	
1,1,1-Trichloroethane	ND	1.00 "	
1,1,2-Trichloroethane	ND	1.00 "	
Trichloroethene	ND	1.00 "	
Trichlorofluoromethane	ND	1.00 "	
1,2,3-Trichloropropane	ND	1.00 "	
1,2,4-Trimethylbenzene	ND	1.00 "	
1,3,5-Trimethylbenzene	ND	1.00 "	
Vinyl chloride	ND	1.00 "	
o-Xylene	ND	1.00 "	

North Creek Analytical - Bothell



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%REC

RPD

Source

Project: FIA Former Mark Air Facilities SLR Alaska

2525 Blueberry Road, Suite 206 Project Number: 004.0184.00001 Reported: Anchorage, AK/USA 99503 Project Manager: Andy Dimitriou 12/14/04 08:06

Reporting

## Volatile Organic Compounds by EPA Method 8260B - Quality Control North Creek Analytical - Bothell

Bend

	_	_		reporting		Spike	Source		/OKEC		KI D	
Analyte	Re	esult	MDL	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch 4J27030:	Prepared 10/26/04	Using	g EPA 5	030B								
Blank (4J27030-BL	K1)											
m,p-Xylene		ND		2.00	ug/l							
Surrogate: 1,2-DCA-d4	!	19.9			"	20.0		99.5	70-130			
Surrogate: Toluene-d8		19.0			"	20.0		95.0	70-130			
Surrogate: 4-BFB		20.1			"	20.0		100	70-130			
LCS (4J27030-BS1)												
Benzene		16.9		1.00	ug/l	20.0		84.5	80-120			
Chlorobenzene		19.3		1.00	"	20.0		96.5	77-120			
1,1-Dichloroethene		18.6		1.00	"	20.0		93.0	80-120			
Methyl tert-butyl ether		18.1		2.00	"	20.0		90.5	80-120			
Toluene		18.1		1.00	"	20.0		90.5	80-120			
Trichloroethene		18.6		1.00	"	20.0		93.0	80-120			
Surrogate: 1,2-DCA-d4	!	20.3			"	20.0		102	70-130			
Surrogate: Toluene-d8		18.7			"	20.0		93.5	70-130			
Surrogate: 4-BFB		20.0			"	20.0		100	70-130			
LCS Dup (4J27030-	BSD1)											
Benzene		16.5		1.00	ug/l	20.0		82.5	80-120	2.40	20	
Chlorobenzene		18.2		1.00	"	20.0		91.0	77-120	5.87	20	
1,1-Dichloroethene		17.8		1.00	"	20.0		89.0	80-120	4.40	20	
Methyl tert-butyl ether		18.5		2.00	"	20.0		92.5	80-120	2.19	20	
Toluene		17.4		1.00	"	20.0		87.0	80-120	3.94	20	
Trichloroethene		18.2		1.00	"	20.0		91.0	80-120	2.17	20	
Surrogate: 1,2-DCA-d4	!	20.2			"	20.0		101	70-130			

20.0

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Surrogate: Toluene-d8

18.4

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92.0

70-130



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SLR Alaska Project: FIA Former Mark Air Facilities

2525 Blueberry Road, Suite 206 Project Number: 004.0184.00001 Reported: Anchorage, AK/USA 99503 Project Manager: Andy Dimitriou 12/14/04 08:06

# Polynuclear Aromatic Compounds by GC/MS with Selected Ion Monitoring - Quality Control North Creek Analytical - Bothell

Bend

			Reporting		Spike	Source		%REC		RPD	
Analyte	Result	MDL	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes

Blank (4J20011-BLK1)							
1-Methylnaphthalene	ND	0.100	ug/l				
2-Methylnaphthalene	ND	0.100	"				
Acenaphthene	ND	0.100	"				
Acenaphthylene	ND	0.100	"				
Anthracene	ND	0.100	"				
Benzo (a) anthracene	ND	0.100	"				
Benzo (a) pyrene	ND	0.100	"				
Benzo (b) fluoranthene	ND	0.100	"				
Benzo (ghi) perylene	ND	0.100	"				
Benzo (k) fluoranthene	ND	0.100	"				
Chrysene	ND	0.100	"				
Dibenz (a,h) anthracene	ND	0.100	"				
Fluoranthene	ND	0.100	"				
Fluorene	ND	0.100	"				
Indeno (1,2,3-cd) pyrene	ND	0.100	"				
Naphthalene	ND	0.100	"				
Phenanthrene	ND	0.100	"				
Pyrene	ND	0.100	"				
Surrogate: p-Terphenyl-d14	59.5		"	50.0	119	20-127	
LCS (4J20011-BS1)							
1-Methylnaphthalene	6.88	0.100	ug/l	10.0	68.8	41-120	
2-Methylnaphthalene	6.14	0.100	"	10.0	61.4	42-120	
Acenaphthene	7.20	0.100	"	10.0	72.0	34-120	
Acenaphthylene	7.19	0.100	"	10.0	71.9	36-120	
Anthracene	7.54	0.100	"	10.0	75.4	35-138	
Benzo (a) anthracene	6.89	0.100	"	10.0	68.9	41-121	
Benzo (a) pyrene	7.84	0.100	"	10.0	78.4	33-125	
Benzo (b) fluoranthene	6.97	0.100	"	10.0	69.7	35-133	
Benzo (ghi) perylene	7.83	0.100	"	10.0	78.3	25-121	
Benzo (k) fluoranthene	6.62	0.100	"	10.0	66.2	28-127	
Chrysene	8.22	0.100	"	10.0	82.2	41-120	

North Creek Analytical - Bothell



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SLR Alaska Project: FIA Former Mark Air Facilities

2525 Blueberry Road, Suite 206 Project Number: 004.0184.00001 Reported: Anchorage, AK/USA 99503 Project Manager: Andy Dimitriou 12/14/04 08:06

# Polynuclear Aromatic Compounds by GC/MS with Selected Ion Monitoring - Quality Control North Creek Analytical - Bothell

Spokane

Bend

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 4J20011: Pr	epared 10/20/04 U	sing EPA 35	20C								
LCS (4J20011-BS1)											
Dibenz (a,h) anthracene	8.58		0.100	ug/l	10.0		85.8	24-120			
Fluoranthene	7.75		0.100	"	10.0		77.5	33-137			
Fluorene	7.33		0.100	"	10.0		73.3	42-120			
Indeno (1,2,3-cd) pyrene	8.27		0.100	"	10.0		82.7	26-122			
Naphthalene	6.91		0.100	"	10.0		69.1	38-120			
Phenanthrene	7.05		0.100	"	10.0		70.5	31-127			
Pyrene	9.04		0.100	"	10.0		90.4	42-125			
Surrogate: p-Terphenyl-d14	56.8			"	50.0		114	20-127			
LCS Dup (4J20011-BSI	D1)										
1-Methylnaphthalene	7.05		0.100	ug/l	10.0		70.5	41-120	2.44	30	
2-Methylnaphthalene	6.41		0.100	"	10.0		64.1	42-120	4.30	30	
Acenaphthene	7.39		0.100	"	10.0		73.9	34-120	2.60	30	
Acenaphthylene	7.39		0.100	"	10.0		73.9	36-120	2.74	30	
Anthracene	7.84		0.100	"	10.0		78.4	35-138	3.90	30	
Benzo (a) anthracene	7.23		0.100	"	10.0		72.3	41-121	4.82	30	
Benzo (a) pyrene	8.21		0.100	"	10.0		82.1	33-125	4.61	30	
Benzo (b) fluoranthene	7.83		0.100	"	10.0		78.3	35-133	11.6	30	
Benzo (ghi) perylene	8.17		0.100	"	10.0		81.7	25-121	4.25	30	
Benzo (k) fluoranthene	6.93		0.100	"	10.0		69.3	28-127	4.58	30	
Chrysene	8.66		0.100	"	10.0		86.6	41-120	5.21	30	
Dibenz (a,h) anthracene	8.91		0.100	"	10.0		89.1	24-120	3.77	30	
Fluoranthene	8.10		0.100	"	10.0		81.0	33-137	4.42	30	
Fluorene	7.61		0.100	"	10.0		76.1	42-120	3.75	30	
Indeno (1,2,3-cd) pyrene	8.72		0.100	"	10.0		87.2	26-122	5.30	30	
Naphthalene	7.19		0.100	"	10.0		71.9	38-120	3.97	30	
Phenanthrene	7.31		0.100	"	10.0		73.1	31-127	3.62	30	
Pyrene	9.52		0.100	"	10.0		95.2	42-125	5.17	30	
Surrogate: p-Terphenyl-d14	62.7			"	50.0		125	20-127			

North Creek Analytical - Bothell

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Amar Gill, Project Manager

North Creek Analytical, Inc. **Environmental Laboratory Network** 



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SLR Alaska Project: FIA Former Mark Air Facilities

2525 Blueberry Road, Suite 206 Project Number: 004.0184.00001 Reported: Anchorage, AK/USA 99503 Project Manager: Andy Dimitriou 12/14/04 08:06

#### **Notes and Definitions**

D-08 Results in the diesel organics range are primarily due to overlap from a gasoline range product.

Е Estimated value. The reported value exceeds the calibration range of the analysis.

E-01 Estimated value. The reported value exceeds the capacity of the detector and therefore is unreliable.

I-02 This sample was analyzed outside of the recommended holding time.

S-04 The surrogate recovery for this sample is outside of established control limits due to a sample matrix effect.

DET Analyte DETECTED

ND Analyte NOT DETECTED at or above the reporting limit

NR Not Reported

Sample results reported on a dry weight basis dry

RPD Relative Percent Difference

North Creek Analytical - Bothell

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541.383.9310 fax 541.382.7588
2000 W International Airport Road, Suite A-10, Anchorage, AK 99502-1119
907.563.9200 fax 907.563.9210 **Anchorage** 

10 December 2004

Andy Dimitriou SLR Alaska 2525 Blueberry Road, Suite 206 Anchorage, AK/USA 99503

RE: FIA Former Mark Air Facilities

Enclosed are the results of analyses for samples received by the laboratory on 10/16/04 16:00. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

**Amar Gill** 

**Project Manager** 

## CASE NARRATIVE for B4J0700

Client: SLR Alaska

Project Manager: Andy Dimitriou

Project Name: FIA Former Mark Air Facilities

Project Number: 004.0184.00001

#### 1.0 DESCRIPTION OF CASE

Fifteen (15) water samples were submitted for the analysis of:

- Gasoline Range Hydrocarbons and BTEX by AK101/EPA 8021B
- Diesel Hydrocarbons and Heavy Oil by AK102 and AK103
- BTEX by EPA method 8021B
- Total Metals by EPA 6000/7000 Series Methods
- Volatile Organic Compounds by EPA Method 8260B
- Polynuclear Aromatic Compounds by GC/MS with Selected Ion Monitoring

#### 2.0 COMMENTS ON SAMPLE RECEIPT

The samples were received 16<sup>th</sup> October 2004 at a temperature of 4.8°C and logged in 21<sup>st</sup> October 2004. A Trip Blank, which was not listed on the COC, was received in addition to the project samples. The COC was amended to note the receipt of the Trip Blank, which was then logged in and placed on hold.

#### 3.0 PREPARATION AND ANALYSIS

#### Gasoline Range Hydrocarbons and BTEX by AK101/EPA 8021B

No additional anomalies or discrepancies were associated with this analysis other than those already qualified in the data.

#### Diesel Hydrocarbons and Heavy Oil by AK102 and AK103

No additional anomalies or discrepancies were associated with this analysis other than those already qualified in the data.

#### BTEX by EPA method 8021B

No additional anomalies or discrepancies were associated with this analysis other than those already qualified in the data.

Amar Gill Project Manager

North Creek Analytical

#### CASE NARRATIVE for B4J0700

#### Total Metals by EPA 6000/7000 Series Methods

No additional anomalies or discrepancies were associated with this analysis other than those already qualified in the data.

#### Volatile Organic Compounds by EPA Method 8260B

No additional anomalies or discrepancies were associated with this analysis other than those already qualified in the data.

#### Polynuclear Aromatic Compounds by GC/MS with Selected Ion Monitoring

The project samples were extracted in analytical batch 4J21019. The percent recoveries of spike compounds, Acenaphthylene and Benzo(a)Pyrene were below control limits in the analytical batch Blank Spike Duplicate (BSD). The Relative Percent Difference (RPD) for each spike compounds Acenaphthylene and Benzo(a)Pyrene, Benzo(g,h,I)perylene, Indene(1,2,3-cd)Pyrene and Pyrene was outside control limits. The additional sample volume remained to allow for re-extraction of the samples. The samples were re-extracted outside holding time in analytical batch 4K18062. The percent recovery of spike compound Benzo(K)fluoranthene was above control limits in the analytical batch BSD. All project samples extracted in analytical batch 4K18062 were non-detect for this compound so no further action was deemed necessary. Both the initial and re-extracted data were provided for completeness. No additional anomalies or discrepancies were associated with this analysis other than those already qualified in the data.

Amar Gill Project Manager North Creek Analytical

2 of 2



11720 North Creek Pkwy N Suite 400, Bothell, WA 98011-9508 11115 E Montgomery Suite B, Spokane, WA 99206-4776 9405 SW Nimbus Ave, Beaverton, OR 97008-7132 20332 Empire Ave Suite F-1, Bend, OR 99701-5711 3209 Denali St, Anchorage, AK 99503-4030 425-420-9200 FAX 420-9210 🔀 509-924-9200 FAX 924-9290 FAX 906-9210

503-906-9200

541-383-9310 FAX 382-7588 907-334-9200 FAX 334-9210

		IAIN C	<u>)F C</u>	CUS	TO	DY	RE	PO.	RT							Work O	rder #	: B4	J0700	$\circ$
CLIENT: FIA (ADD						INV	OICE	TO:											REQUEST	
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ADDRESS: 2525 /	Blueberry	16d., 27	2 20.	6												, .	Organic &	Inorganic	Analyses	
Attn. Andy Dimitria PHONE: 907. 222-1112	age, AK 9	99507														7	5	4 3	2 1	<1
PHONE: 907, 222-11/2	FAX: 907.	222,7113				P.O. 1	NUMI	BER:								STD.	Petroleum	Hydrocart	on Analyses	
PROJECT NAME: FORD	ner Mark	Air						PRES	ERV	ATIVI	Ξ					<b>X</b>	4	3 2	1 <1	
PROJECT NUMBER:	ilities		HCI	HCI	HCI	HCI		_	HAD							STD.				_
009	7.0184.00	00 ]					REQ			NALY	SES					<b>O</b> 1	THER	Specify:		
SAMPLED BY: D. Filler			1 2	_	ہے ا	~	760	8270	1 2	3					L	* Turnarou	nd Requests i	ess than stand	lard may incur Rush	Charges.
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IDENTIFICATION	DATE/	TIME	BTEX EPA 8021	Ø 4	₹ ₹	Q 4	2 6	C. 22	4e	_						(W, S, O)	CONT.	CO	MMENTS	WOID
Mw-2	10-14-04	1735		X	$\times$		X		X							W	9			01
WP-7	10-14-04	1635		X	X	X	X									W	8			02
WP-5	10.14.04	1910		X	X	X	X	;								W	8			03
WP-12	10.15.04	0720	X	X				X								W	5\$			04
MW-7	10-15-04	0810	X	X	X			X								N	7			05
WP-11N (G)	10-15.04	0920	藻	X	X		X	X	X							W	11			06
WF-IIN (B)	10-15-04	0940		X	X		X	X	X							W	11			07
WP-10	10-15-04	1040	X	X	X			X								W	7			08
MW-1	10-15-04	1145	X		X	X	X		X							W	9			09
0 MW-3	10-15-04	1700	X		X	X	$\times$		$\times$							W	9			10
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OC REV 1/03									_							(	WCS	, 4	MP:	1 of 2



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541-383-9310 FAX 382-7588 907-334-9200 FAX 334-9210

CHAIN OF CUSTODY REPORT

	AIN O	F C	UST	O	DY	<u>RE</u>	PO	RT							Work O	rder #	: BHJ2	700	
CLIENT: FIA/ADOTAPF					INV	DICE '	TO:			_							ROUND RI		Į.
REPORT TO: SLR Alaska ADDRESS: 2525 Blue berry Anchorage, AK			206			54	-R A	Has	Ka					:	( \\ \dag{\tau} \( \bar{\tau} \)	Organic &	Business Day Inorganic Ana	llyses	
				ŀ	P.O. N	JUMF	BER:								STD	5 Petroleum	Hydrocarbon	2 1	<1
PHONE: 207.222-1112 FAX: 907.2 PROJECT NAME: Former Mark All	Facilit	er	*	l			PRES	ERV	TIVE							4	3 2	1 <1	
PROJECT NUMBER: 004.0184.000	1		Hel i	44	401	401	•	Huo.							STD.			نثنا لث	
SAMPLED BY: D. Filler	}	2		<u>-</u> "T	·		UEST	_	NALY	SES	T	1	I		<u> </u>	THER	Specify:		
CLIENT SAMPLE SAMPLI IDENTIFICATION DATE/TI	NG ME	BTEX PA 8021	670 4K 10:	44.107	RE 103	13c 184 826	14 82.70	cad of							MATRIX (W, S, O)	# OF CONT.	LOCAT	TON /	NCA WO ID
1 Mw-8 10.15.04		X		<u> </u>		- 145	X	7							. W	7			
2 WP-13 10-15-04	1430	X	,	X			X								W	7			12
3 MW-6 10:15.04	1635	$\times$		X	X	Χ		X							W	9			13
4 MW-7A 10-15-04	1810		^2	$\times$											W	2	Dup of	,-7	14
5 WP-11A 10-15-04	1600					X									W	3	Dup of WP	-11N(G)	15
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PRINT NAME:	FIRM:			_	DATE: TIME:					VED BY					FIRM:	•		DATE: TIME:	
ADDITIONAL REMARKS:															L.	NCS	TEMP:		2 <sub>0F</sub> 2



# Revised Chain of Custody

11720 North Creek Pkwy N Suite 400, Bothell, WA 98011-9508
11115 E Montgomery Suite B, Spokane, WA 99206-4776
9405 SW Nimbus Ave, Beaverton, OR 97008-7132
20332 Empire Ave Suite F-1, Bend, OR 99701-5711
3200 David St. Applying A 48 00503 4030
503-906-9200
5AX 382-7588
5AX 382-7588

												3209 L	Jenaii S	it, Anci	_	AK 99303-40		907-334-9200 F		
	CH	AIN C	)F (	CUS	TO	DΥ	RE	PO	RT							Work O	rder #	: BHJC	5700	$\supset$
CLIENT: FIA/A	DOT 4PF					INV	OICE	TO:										ROUND REQ		
REPORT TO: SLR	41 aska	_				1	5)	-R &	2/	100							in	Business Days *		
ADDRESS: 2525	- Blue berr	y Rd,	ste	206	e	ŀ	<u>ـ</u> ر	-;\ <i>'</i>	د حرب	* <b>C</b>							Organic &	Inorganic Analys	es	
Anch	norage, At	9950	3							_						X61 7	5	4 3 2		<1
PHONE: 967.222.1112 PROJECT NAME: Food	FAX: 907.	2221113	3			P.O. 1	NUM	BER:								(STD)	Petroleum	Hydrocarbon Ana	llyses	_
PROJECT NAME: Form	ner Mark Ad	r Facilit						_	ERV	ATIVI	3					Į <b>∠</b>	4	3 2 1	<1	
PROJECT NUMBER: 00	4.0184.000	oci	HCI	HU	44	441			Hus	_	<u> </u>					SID				_
		·		,	<del>,</del>	·	REC	UEST	ED A	NAL	YSES					O'	THER	Specify:		
SAMPLED BY: D.F.	lles		ا کے کے	2	ىہ	2	1 %	12	3							* Turnarou	Organic & Inorganic Analy 7 5 4 3 Petroleum Hydrocarbon An 1 4 3 2  OTHER Specify:  round Requests less than standard may X # OF LOCATIC COMMEN  7 7 9 2 Dyp of Mw-	ncur Rush (	Jarges.	
CLIENT SAMPLE IDENTIFICATION	SAMPL DATE/I		BTE)	526 4K6	DRO AK 10	R.R.O. 74K103	V3C 674 8	P4# E/48	Lead 6000/7							MATRIX (W, S, O)		LOCATION COMMEN		NCA WO ID
1 Mw_8	10-15-04	1345	X		X			X								$\searrow$	7			11
2 WR-13	10-15.04	1430	X		X			X								W	7			12
3 MW-6	10.15.04	1635	X		X	X	X		X							W	9			13
4 MW-7A	10-15-04	1810			X											N	2	Dro of	.7	14
s WP-11A	10-15-04	1600	<u> </u>				X									W	3	Dup of WP-1	IN (&)	15
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Anchorage

SLR Alaska Project: FIA Former Mark Air Facilities

2525 Blueberry Road, Suite 206 Project Number: 004.0184.00001 Reported: Anchorage, AK/USA 99503 Project Manager: Andy Dimitriou 12/10/04 16:18

### ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
MW-2	B4J0700-01	Water	10/14/04 17:35	10/16/04 16:00
WP-7	B4J0700-02	Water	10/14/04 16:35	10/16/04 16:00
WP-5	B4J0700-03	Water	10/14/04 19:10	10/16/04 16:00
WP-12	B4J0700-04	Water	10/15/04 07:20	10/16/04 16:00
MW-7	B4J0700-05	Water	10/15/04 08:10	10/16/04 16:00
WP-11N(G)	B4J0700-06	Water	10/15/04 09:20	10/16/04 16:00
WP-11N(B)	B4J0700-07	Water	10/15/04 09:40	10/16/04 16:00
WP-10	B4J0700-08	Water	10/15/04 10:40	10/16/04 16:00
MW-1	B4J0700-09	Water	10/15/04 11:45	10/16/04 16:00
MW-3	B4J0700-10	Water	10/15/04 13:00	10/16/04 16:00
MW-8	B4J0700-11	Water	10/15/04 13:45	10/16/04 16:00
WP-13	B4J0700-12	Water	10/15/04 14:30	10/16/04 16:00
MW-6	B4J0700-13	Water	10/15/04 16:35	10/16/04 16:00
MW-7A	B4J0700-14	Water	10/15/04 18:10	10/16/04 16:00
WP-11A	B4J0700-15	Water	10/15/04 16:00	10/16/04 16:00

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Project: FIA Former Mark Air Facilities SLR Alaska

Project Number: 004.0184.00001 2525 Blueberry Road, Suite 206 Reported: Anchorage, AK/USA 99503 Project Manager: Andy Dimitriou 12/10/04 16:18

## Gasoline Range Hydrocarbons (n-Hexane to <n-Decane) by AK101 North Creek Analytical - Bothell

Analyte	Result	MDL I	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-2 (B4J0700-01) Water San	npled: 10/14/04 1	7:35 Rec	eived: 10/	16/04 16:	:00					
Gasoline Range Hydrocarbons	ND		50.0	ug/l	1	4J27003	10/27/04	10/27/04	AK 101	
Surrogate: 4-BFB (FID)	92.1 %		60-12	20		"	"	"	"	
WP-7 (B4J0700-02) Water Sam	pled: 10/14/04 16	5:35 Rece	ived: 10/1	6/04 16:0	00					
Gasoline Range Hydrocarbons	ND		50.0	ug/l	1	4J27003	10/27/04	10/27/04	AK 101	
Surrogate: 4-BFB (FID)	99.6 %		60-12	20		"	"	"	"	
WP-5 (B4J0700-03) Water Sam	pled: 10/14/04 19	):10 Rece	ived: 10/1	6/04 16:0	00					
Gasoline Range Hydrocarbons	ND		50.0	ug/l	1	4J27003	10/27/04	10/27/04	AK 101	
Surrogate: 4-BFB (FID)	101 %		60-12	20		"	"	"	"	
WP-11N(G) (B4J0700-06) Water	Sampled: 10/1:	5/04 09:20	Received	1: 10/16/	04 16:00					
Gasoline Range Hydrocarbons	75.3		50.0	ug/l	1	4J27003	10/27/04	10/27/04	AK 101	
Surrogate: 4-BFB (FID)	108 %		60-12	20		"	"	"	"	
WP-11N(B) (B4J0700-07) Water	Sampled: 10/15	5/04 09:40	Received	l: 10/16/0	04 16:00					
Gasoline Range Hydrocarbons	ND		50.0	ug/l	1	4J27003	10/27/04	10/27/04	AK 101	
Surrogate: 4-BFB (FID)	103 %		60-12	20		"	"	"	"	

North Creek Analytical - Bothell

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20332 Empire Avenue, Suite F-1, Bend, OR 97701-5711 541.383.9310 fax 541.382.7588 Bend

Anchorage 2000~W International Airport Road, Suite A-10, Anchorage, AK 99502-1119 907.563.9200 fax 907.563.9210

SLR Alaska Project: FIA Former Mark Air Facilities

2525 Blueberry Road, Suite 206 Project Number: 004.0184.00001 Reported: Anchorage, AK/USA 99503 Project Manager: Andy Dimitriou 12/10/04 16:18

## Gasoline Hydrocarbons (n-Hexane to <n-Decane) and BTEX by AK101/EPA 8021B North Creek Analytical - Bothell

Spokane

Analyte	Result MI	Reporting DL Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
WP-12 (B4J0700-04) Water	Sampled: 10/15/04 07:20	Received: 10/	16/04 16	:00					
Gasoline Range Hydrocarbons	1560	50.0	ug/l	1	4J27003	10/27/04	10/27/04	AK 101	
Benzene	51.8	0.200	"	"	"	"	"	"	
Toluene	4.51	0.500	"	"	"	"	"	"	
Ethylbenzene	174	2.50	"	5	"	"	10/27/04	"	
Xylenes (total)	25.5	1.00	"	1	"	"	10/27/04	"	
Surrogate: 4-BFB (FID)	197 %	60-12	20		"	"	"	"	S-04
Surrogate: 4-BFB (PID)	128 %	68-14	40		"	"	"	"	
MW-7 (B4J0700-05) Water S	Sampled: 10/15/04 08:10	Received: 10/	16/04 16:	:00					
Gasoline Range Hydrocarbons	3310	500	ug/l	10	4J27003	10/27/04	10/27/04	AK 101	
Benzene	130	2.00	"	"	"	"	"	"	
Toluene	23.3	5.00	"	"	"	"	"	"	
Ethylbenzene	305	5.00	"	"	"	"	"	"	
Xylenes (total)	934	10.0	"	"	"	"	"	"	
Surrogate: 4-BFB (FID)	146 %	60-12	20		"	"	"	"	S-04
Surrogate: 4-BFB (PID)	112 %	68-14	40		"	"	"	"	
WP-10 (B4J0700-08) Water	Sampled: 10/15/04 10:40	Received: 10/	16/04 16	:00					
Gasoline Range Hydrocarbons	178	50.0	ug/l	1	4J27003	10/27/04	10/27/04	AK 101	
Benzene	1.99	0.200	"	"	"	"	"	"	
Toluene	1.38	0.500	"	"	"	"	"	"	
Ethylbenzene	ND	0.500	"	"	"	"	"	"	
Xylenes (total)	20.0	1.00	"	"	"	"	"	"	
Surrogate: 4-BFB (FID)	119 %	60-12	20		"	"	"	"	
Surrogate: 4-BFB (PID)	109 %	68-14	40		"	"	"	"	

North Creek Analytical - Bothell

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Bend

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Anchorage 2000~W International Airport Road, Suite A-10, Anchorage, AK 99502-1119 907.563.9200 fax 907.563.9210

SLR Alaska Project: FIA Former Mark Air Facilities

Project Number: 004.0184.00001 2525 Blueberry Road, Suite 206 Reported: Anchorage, AK/USA 99503 Project Manager: Andy Dimitriou 12/10/04 16:18

## Diesel Hydrocarbons (C10-C25) by AK102 North Creek Analytical - Bothell

			_						
Analyte	Result M	Reporting DL Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-2 (B4J0700-01) Water	Sampled: 10/14/04 17:35	Received: 10/	16/04 16	:00					
Diesel Range Hydrocarbons	0.409	0.100	mg/l	1	4J27011	10/27/04	10/28/04	AK 102	
Surrogate: 2-FBP	96.3 %	50-1.	50		"	"	"	"	
MW-7 (B4J0700-05) Water	Sampled: 10/15/04 08:10	Received: 10/	16/04 16	:00					
Diesel Range Hydrocarbons	1.96	0.400	mg/l	1	4J27067	10/27/04	10/29/04	AK 102	
Surrogate: 2-FBP	81.1 %	50-1.	50		"	"	"	"	
Surrogate: Octacosane	87.9 %	50-1.	50		"	"	"	"	
WP-11N(G) (B4J0700-06) W	ater Sampled: 10/15/04	09:20 Receive	d: 10/16/	04 16:00					
Diesel Range Hydrocarbons	ND	0.400	mg/l	1	4J27067	10/27/04	10/29/04	AK 102	
Surrogate: 2-FBP	72.0 %	50-1.	50		"	"	"	"	
WP-11N(B) (B4J0700-07) W	ater Sampled: 10/15/04	09:40 Received	d: 10/16/	04 16:00					
<b>Diesel Range Hydrocarbons</b>	1.47	0.400	mg/l	1	4J27067	10/27/04	10/29/04	AK 102	
Surrogate: 2-FBP	86.2 %	50-1.	50		"	"	"	"	
WP-10 (B4J0700-08) Water	Sampled: 10/15/04 10:4	Received: 10	/16/04 16	5:00					
Diesel Range Hydrocarbons	1.36	0.400	mg/l	1	4J27067	10/27/04	10/29/04	AK 102	
Surrogate: 2-FBP	85.8 %	50-1.	50		"	"	"	"	
MW-8 (B4J0700-11) Water	Sampled: 10/15/04 13:45	Received: 10/	16/04 16	:00					
<b>Diesel Range Hydrocarbons</b>	1.54	0.400	mg/l	1	4J27067	10/27/04	10/29/04	AK 102	
Surrogate: 2-FBP	78.9 %	50-1.	50		"	"	"	"	
WP-13 (B4J0700-12) Water	Sampled: 10/15/04 14:3	0 Received: 10	/16/04 16	5:00					
<b>Diesel Range Hydrocarbons</b>	4.87	0.400	mg/l	1	4J27067	10/27/04	10/29/04	AK 102	
Surrogate: 2-FBP	88.7 %	50-1.	50		"	"	"	"	

North Creek Analytical - Bothell

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SLR Alaska Project: FIA Former Mark Air Facilities

Project Number: 004.0184.00001 2525 Blueberry Road, Suite 206 Reported: Anchorage, AK/USA 99503 Project Manager: Andy Dimitriou 12/10/04 16:18

## Diesel Hydrocarbons (C10-C25) by AK102 North Creek Analytical - Bothell

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-7A (B4J0700-14) Water	Sampled: 10/15/0	4 18:10	Received: 10	0/16/04 1	6:00					
Diesel Range Hydrocarbons	2.22		0.400	mg/l	1	4J27067	10/27/04	10/29/04	AK 102	
Surrogate: 2-FBP	82.1 %		50-15	50		"	"	"	"	

North Creek Analytical - Bothell

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Project: FIA Former Mark Air Facilities SLR Alaska

2525 Blueberry Road, Suite 206 Project Number: 004.0184.00001 Reported: Anchorage, AK/USA 99503 Project Manager: Andy Dimitriou 12/10/04 16:18

## Diesel Hydrocarbons (C10-C25) and Heavy Oil (C25-C36) by AK102 and AK103 North Creek Analytical - Bothell

Spokane

				•						
Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
WP-7 (B4J0700-02) Water	Sampled: 10/14/04	16:35 I	Received: 10/1	6/04 16:0	00					
Diesel Range Hydrocarbons	0.0770	0.0260	0.100	mg/l	1	4J27011	10/27/04	10/28/04	AK102/103	J
Residual Range Organics	ND	0.100	0.750	"	"	"	"	"	"	
Surrogate: 2-FBP	80.3 %		50-13	50		"	"	"	"	
Surrogate: Octacosane	99.1 %		50-13	50		"	"	"	"	
WP-5 (B4J0700-03) Water	Sampled: 10/14/04	19:10 I	Received: 10/1	6/04 16:0	00					
<b>Diesel Range Hydrocarbons</b>	0.290	0.0260	0.100	mg/l	1	4J27011	10/27/04	10/28/04	AK102/103	
Residual Range Organics	0.229	0.100	0.750	"	"	"	"	"	"	J
Surrogate: 2-FBP	95.5 %		50-13	50		"	"	"	"	
Surrogate: Octacosane	116 %		50-13	50		"	"	"	"	
MW-1 (B4J0700-09) Water	Sampled: 10/15/0	4 11:45	Received: 10/	16/04 16:	:00					
Diesel Range Hydrocarbons	0.188	0.104	0.400	mg/l	1	4J27067	10/27/04	10/29/04	AK102/103	J
Residual Range Organics	ND	0.400	3.00	"	"	"	"	"	"	
Surrogate: 2-FBP	71.0 %		50-13	50		"	"	"	"	
Surrogate: Octacosane	84.8 %		50-13	50		"	"	"	"	
MW-3 (B4J0700-10) Water	Sampled: 10/15/0	4 13:00	Received: 10/	16/04 16:	:00					
<b>Diesel Range Hydrocarbons</b>	0.160	0.104	0.400	mg/l	1	4J27067	10/27/04	10/29/04	AK102/103	J
Residual Range Organics	ND	0.400	3.00	"	"	"	"	"	"	
Surrogate: 2-FBP	80.9 %		50-13	50		"	"	"	"	
Surrogate: Octacosane	88.8 %		50-13	50		"	"	"	"	
MW-6 (B4J0700-13) Water	Sampled: 10/15/0	4 16:35	Received: 10/	16/04 16:	:00					
Diesel Range Hydrocarbons	0.242	0.104	0.400	mg/l	1	4J27067	10/27/04	10/29/04	AK102/103	J
Residual Range Organics	ND	0.400	3.00	"	"	"	"	"	"	
Surrogate: 2-FBP	73.8 %		50-13	50		"	"	"	"	
Surrogate: Octacosane	91.9 %		50-13	50		"	"	"	"	

North Creek Analytical - Bothell

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SLR Alaska Project: FIA Former Mark Air Facilities

2525 Blueberry Road, Suite 206 Project Number: 004.0184.00001 Reported: Anchorage, AK/USA 99503 Project Manager: Andy Dimitriou 12/10/04 16:18

## BTEX by EPA Method 8021B **North Creek Analytical - Bothell**

	110	Ten Creek i		- DO					
Analyte	Result ME	Reporting DL Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Note
MW-1 (B4J0700-09) Water	Sampled: 10/15/04 11:45	Received: 10/	16/04 16:	00					
Benzene	ND	0.200	ug/l	1	4J27003	10/27/04	10/27/04	EPA 8021B	
Toluene	ND	0.500	"	"	"	"	"	"	
Ethylbenzene	0.512	0.500	"	"	"	"	"	"	
Xylenes (total)	1.48	1.00	"	"	"	"	"	"	
Surrogate: 4-BFB (PID)	93.3 %	68-14	40		"	"	"	"	
MW-3 (B4J0700-10) Water	Sampled: 10/15/04 13:00	Received: 10/	16/04 16:	00					
Benzene	ND	0.200	ug/l	1	4J27003	10/27/04	10/27/04	EPA 8021B	
Toluene	ND	0.500	"	"	"	"	"	"	
Ethylbenzene	0.660	0.500	"	"	"	"	"	"	
Xylenes (total)	1.70	1.00	"	"	"	"	"	"	
Surrogate: 4-BFB (PID)	92.5 %	68-14	40		"	"	"	"	
MW-8 (B4J0700-11) Water	Sampled: 10/15/04 13:45	Received: 10/	16/04 16:	00					
Benzene	51.5	2.00	ug/l	10	4J27003	10/27/04	10/28/04	EPA 8021B	
Toluene	41.7	5.00	"	"	"	"	"	"	
Ethylbenzene	90.4	5.00	"	"	"	"	"	"	
Xylenes (total)	1030	10.0	"	"	"	"	"	"	
Surrogate: 4-BFB (PID)	104 %	68-14	40		"	"	"	"	
WP-13 (B4J0700-12) Water	Sampled: 10/15/04 14:30	Received: 10	/16/04 16	:00					
Benzene	0.532	0.200	ug/l	1	4J27003	10/27/04	10/27/04	EPA 8021B	
Toluene	2.08	0.500	"	"	"	"	"	"	
Ethylbenzene	42.3	0.500	"	"	"	"	"	"	
Xylenes (total)	9.95	1.00	"	"	"	"	"	"	
Surrogate: 4-BFB (PID)	127 %	68-14	40		"	"	"	"	

North Creek Analytical - Bothell

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SLR Alaska Project: FIA Former Mark Air Facilities

Project Number: 004.0184.00001 2525 Blueberry Road, Suite 206 Reported: Anchorage, AK/USA 99503 Project Manager: Andy Dimitriou 12/10/04 16:18

## BTEX by EPA Method 8021B North Creek Analytical - Bothell

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-6 (B4J0700-13) Water	Sampled: 10/15/04	16:35 R	eceived: 10/1	16/04 16:	00					
Benzene	ND		0.200	ug/l	1	4J27003	10/27/04	10/27/04	EPA 8021B	
Toluene	ND		0.500	"	"	"	"	"	"	
Ethylbenzene	0.948		0.500	"	"	"	"	"	"	
Xylenes (total)	3.73		1.00	"	"	"	"	"	"	
Surrogate: 4-BFB (PID)	97.3 %		68-14	0		"	"	"	"	

North Creek Analytical - Bothell

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SLR Alaska Project: FIA Former Mark Air Facilities

Project Number: 004.0184.00001 2525 Blueberry Road, Suite 206 Reported: Anchorage, AK/USA 99503 Project Manager: Andy Dimitriou 12/10/04 16:18

## Total Metals by EPA 6000/7000 Series Methods **North Creek Analytical - Bothell**

Bend

Analyte	Result	Reporting MDL Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-2 (B4J0700-01) Water	Sampled: 10/14/04 17:	35 Received: 10/	16/04 16	:00					
Lead	ND	0.00100	mg/l	1	4J26027	10/26/04	10/28/04	EPA 6020	
WP-11N(G) (B4J0700-06) W	ater Sampled: 10/15/0	04 09:20 Receive	d: 10/16	/04 16:00					
Lead	ND	0.00100	mg/l	1	4J25049	10/25/04	10/28/04	EPA 6020	
WP-11N(B) (B4J0700-07) W	ater Sampled: 10/15/0	04 09:40 Received	d: 10/16/	04 16:00					
Lead	ND	0.00100	mg/l	1	4J25049	10/25/04	10/28/04	EPA 6020	
MW-1 (B4J0700-09) Water	Sampled: 10/15/04 11:	45 Received: 10/	16/04 16	:00					
Lead	0.00241	0.00100	mg/l	1	4J25049	10/25/04	10/28/04	EPA 6020	_
MW-3 (B4J0700-10) Water	Sampled: 10/15/04 13:	00 Received: 10/	16/04 16	:00					
Lead	ND	0.00100	mg/l	1	4J25049	10/25/04	10/28/04	EPA 6020	
MW-6 (B4J0700-13) Water	Sampled: 10/15/04 16:	35 Received: 10/	16/04 16	:00					
Lead	0.0232	0.00100	mg/l	1	4J25049	10/25/04	10/28/04	EPA 6020	

North Creek Analytical - Bothell

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SLR Alaska Project: FIA Former Mark Air Facilities

2525 Blueberry Road, Suite 206 Project Number: 004.0184.00001 Reported: Anchorage, AK/USA 99503 Project Manager: Andy Dimitriou 12/10/04 16:18

## **Volatile Organic Compounds by EPA Method 8260B** North Creek Analytical - Bothell

Spokane

Bend

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-2 (B4J0700-01) Water	Sampled: 10/14/04 1	7:35 Re	ceived: 10/	16/04 16:	00					
Acetone	ND		20.0	ug/l	1	4J27051	10/28/04	10/28/04	EPA 8260B	
Benzene	ND		1.00	"	"	"	"	"	"	
Bromobenzene	ND		1.00	"	"	"	"	"	"	
Bromochloromethane	ND		1.00	"	"	"	"	"	"	
Bromodichloromethane	ND		1.00	"	"	"	"	"	"	
Bromoform	ND		1.00	"	"	"	"	"	"	
Bromomethane	ND		2.00	"	"	"	"	"	"	
2-Butanone	ND		10.0	"	"	"	"	"	"	
n-Butylbenzene	ND		1.00	"	"	"	"	"	"	
sec-Butylbenzene	ND		1.00	"	"	"	"	"	"	
tert-Butylbenzene	ND		1.00	"	"	"	"	"	"	
Carbon disulfide	ND		1.00	"	"	"	"	"	"	
Carbon tetrachloride	ND		1.00	"	"	"	"	"	"	
Chlorobenzene	ND		1.00	"	"	"	"	"	"	
Chloroethane	ND		1.00	"	"	"	"	"	"	
Chloroform	ND		1.00	"	"	"	"	"	"	
Chloromethane	ND		5.00	"	"	"	"	"	"	
2-Chlorotoluene	ND		1.00	"	"	"	"	"	"	
4-Chlorotoluene	ND		1.00	"	"	"	"	"	"	
Dibromochloromethane	ND		1.00	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND		5.00	"	"	"	"	"	"	
1,2-Dibromoethane	ND		1.00	"	"	"	"	"	"	
Dibromomethane	ND		1.00	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND		1.00	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND		1.00	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND		1.00	"	"	"	"	"	"	
Dichlorodifluoromethane	ND		1.00	"	"	"	"	"	"	
1,1-Dichloroethane	ND		1.00	"	"	"	"	"	"	
1,2-Dichloroethane	ND		1.00	"	"	"	"	"	"	
1,1-Dichloroethene	ND		1.00	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND		1.00	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND		1.00	"	"	"	"	"	"	
1,2-Dichloropropane	ND		1.00	"	"	"	"	"	"	
1,3-Dichloropropane	ND		1.00	"	"	"	"	"	"	
2,2-Dichloropropane	ND		1.00	"	"	"	"	"	"	
1,1-Dichloropropene	ND		1.00	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND		1.00	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND		1.00	"	"	"	"	"	"	

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SLR Alaska Project: FIA Former Mark Air Facilities

Project Number: 004.0184.00001 2525 Blueberry Road, Suite 206 Reported: Anchorage, AK/USA 99503 Project Manager: Andy Dimitriou 12/10/04 16:18

## **Volatile Organic Compounds by EPA Method 8260B** North Creek Analytical - Bothell

Spokane

Analyte	Result	MDL Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-2 (B4J0700-01) Water	Sampled: 10/14/04 17	:35 Received: 10	/16/04 16:	00					
Ethylbenzene	ND	1.00	ug/l	1	4J27051	10/28/04	10/28/04	EPA 8260B	
Hexachlorobutadiene	ND	1.00	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	2.00	"	"	"	"	"	"	
2-Hexanone	ND	10.0	"	"	"	"	"	"	
Isopropylbenzene	ND	1.00	"	"	"	"	"	"	
p-Isopropyltoluene	ND	1.00	"	"	"	"	"	"	
4-Methyl-2-pentanone	ND	10.0	"	"	"	"	"	"	
Methylene chloride	ND	5.00	"	"	"	"	"	"	
Naphthalene	ND	1.00	"	"	"	"	"	"	
n-Propylbenzene	ND	1.00	"	"	"	"	"	"	
Styrene	ND	1.00	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	1.00	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	1.00	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	1.00	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	1.00	"	"	"	"	"	"	
Tetrachloroethene	ND	1.00	"	"	"	"	"	"	
Toluene	ND	1.00	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	1.00	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	1.00	"	"	"	"	"	"	
Trichloroethene	ND	1.00	"	"	"	"	"	"	
Trichlorofluoromethane	ND	1.00	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	1.00	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	1.00	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	1.00	"	"	"	"	"	"	
Vinyl chloride	ND	1.00	"	"	"	"	"	"	
o-Xylene	ND	1.00	"	"	"	"	"	"	
m,p-Xylene	ND	2.00	"	"	"	"	"	"	
Surrogate: 1,2-DCA-d4	102 %	70-1	30		"	"	"	"	
Surrogate: Toluene-d8	96.0 %	70-1	30		"	"	"	"	
Surrogate: 4-BFB	102 %	70-1	30		"	"	"	"	

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SLR Alaska Project: FIA Former Mark Air Facilities

2525 Blueberry Road, Suite 206 Project Number: 004.0184.00001 Reported: Anchorage, AK/USA 99503 Project Manager: Andy Dimitriou 12/10/04 16:18

#### **Volatile Organic Compounds by EPA Method 8260B** North Creek Analytical - Bothell

Spokane

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
WP-7 (B4J0700-02) Water	Sampled: 10/14/04 16:	:35 R	eceived: 10/1	6/04 16:0	00					Q-24
Acetone	ND		20.0	ug/l	1	4J27051	10/28/04	10/28/04	EPA 8260B	
Benzene	ND		1.00	"	"	"	"	"	"	
Bromobenzene	ND		1.00	"	"	"	"	"	"	
Bromochloromethane	ND		1.00	"	"	"	"	"	"	
Bromodichloromethane	ND		1.00	"	"	"	"	"	"	
Bromoform	ND		1.00	"	"	"	"	"	"	
Bromomethane	ND		2.00	"	"	"	"	"	"	
2-Butanone	ND		10.0	"	"	"	"	"	"	
n-Butylbenzene	ND		1.00	"	"	"	"	"	"	
sec-Butylbenzene	ND		1.00	"	"	"	"	"	"	
tert-Butylbenzene	ND		1.00	"	"	"	"	"	"	
Carbon disulfide	ND		1.00	"	"	"	"	"	"	
Carbon tetrachloride	ND		1.00	"	"	"	"	"	"	
Chlorobenzene	ND		1.00	"	"	"	"	"	"	
Chloroethane	ND		1.00	"	"	"	"	"	"	
Chloroform	ND		1.00	"	"	"	"	"	"	
Chloromethane	ND		5.00	"	"	"	"	"	"	
2-Chlorotoluene	ND		1.00	"	"	"	"	"	"	
4-Chlorotoluene	ND		1.00	"	"	"	"	"	"	
Dibromochloromethane	ND		1.00	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND		5.00	"	"	"	"	"	"	
1,2-Dibromoethane	ND		1.00	"	"	"	"	"	"	
Dibromomethane	ND		1.00	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND		1.00	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND		1.00	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND		1.00	"	"	"	"	"	"	
Dichlorodifluoromethane	ND		1.00	"	"	"	"	"	"	
1,1-Dichloroethane	ND		1.00	"	"	"	"	"	"	
1,2-Dichloroethane	ND		1.00	"	"	"	"	"	"	
1,1-Dichloroethene	ND		1.00	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND		1.00	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND		1.00	"	"	"	"	"	"	
1,2-Dichloropropane	ND		1.00	"	"	"	"	"	"	
1,3-Dichloropropane	ND		1.00	"	"	"	"	"	"	
2,2-Dichloropropane	ND		1.00	"	"	"	"	"	"	
1,1-Dichloropropene	ND		1.00	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND		1.00	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND		1.00	"	"	"	"	"	"	
mans-1,3-Diemoropropene	ND		1.00							

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SLR Alaska Project: FIA Former Mark Air Facilities

Project Number: 004.0184.00001 2525 Blueberry Road, Suite 206 Reported: Anchorage, AK/USA 99503 Project Manager: Andy Dimitriou 12/10/04 16:18

### **Volatile Organic Compounds by EPA Method 8260B** North Creek Analytical - Bothell

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
WP-7 (B4J0700-02) Water	Sampled: 10/14/04 16	:35 Re	ceived: 10/1	6/04 16:0	0					Q-24
Ethylbenzene	ND		1.00	ug/l	1	4J27051	10/28/04	10/28/04	EPA 8260B	
Hexachlorobutadiene	ND		1.00	"	"	"	"	"	"	
Methyl tert-butyl ether	ND		2.00	"	"	"	"	"	"	
2-Hexanone	ND		10.0	"	"	"	"	"	"	
Isopropylbenzene	ND		1.00	"	"	"	"	"	"	
p-Isopropyltoluene	ND		1.00	**	"	"	"	"	"	
4-Methyl-2-pentanone	ND		10.0	"	"	"	"	"	"	
Methylene chloride	ND		5.00	"	"	"	"	"	"	
Naphthalene	ND		1.00	"	"	"	"	"	"	
n-Propylbenzene	ND		1.00	"	"	"	"	"	"	
Styrene	ND		1.00	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND		1.00	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND		1.00	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND		1.00	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND		1.00	"	"	"	"	"	"	
Tetrachloroethene	ND		1.00	"	"	"	"	"	"	
Toluene	ND		1.00	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND		1.00	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND		1.00	"	"	"	"	"	"	
Trichloroethene	ND		1.00	"	"	"	"	"	"	
Trichlorofluoromethane	22.0		1.00	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND		1.00	**	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND		1.00	**	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND		1.00	"	"	"	"	"	"	
Vinyl chloride	ND		1.00	"	"	"	"	"	"	
o-Xylene	ND		1.00	"	"	"	"	"	"	
m,p-Xylene	ND		2.00	"	"	"	"	"	"	
Surrogate: 1,2-DCA-d4	103 %		70-13	0		"	"	"	"	
Surrogate: Toluene-d8	96.0 %		70-13	0		"	"	"	"	
Surrogate: 4-BFB	99.0 %		70-13			"	"	"	"	

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SLR Alaska Project: FIA Former Mark Air Facilities

Project Number: 004.0184.00001 2525 Blueberry Road, Suite 206 Reported: Anchorage, AK/USA 99503 Project Manager: Andy Dimitriou 12/10/04 16:18

#### **Volatile Organic Compounds by EPA Method 8260B** North Creek Analytical - Bothell

Spokane

Analyte	Result	MDL Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
WP-5 (B4J0700-03) Water	Sampled: 10/14/04 19:	10 Received: 10/1	6/04 16:0	0					
Acetone	ND	20.0	ug/l	1	4J27051	10/28/04	10/28/04	EPA 8260B	
Benzene	ND	1.00	"	"	"	"	"	"	
Bromobenzene	ND	1.00	"	"	"	"	"	"	
Bromochloromethane	ND	1.00	"	"	"	"	"	"	
Bromodichloromethane	ND	1.00	"	"	"	"	"	"	
Bromoform	ND	1.00	"	"	"	"	"	"	
Bromomethane	ND	2.00	"	"	"	"	"	"	
2-Butanone	ND	10.0	**	"	"	"	"	"	
n-Butylbenzene	ND	1.00	**	"	"	"	"	"	
sec-Butylbenzene	ND	1.00	**	"	"	"	"	"	
tert-Butylbenzene	ND	1.00	**	"	"	"	"	"	
Carbon disulfide	ND	1.00	**	"	"	"	"	"	
Carbon tetrachloride	ND	1.00	"	"	"	"	"	"	
Chlorobenzene	ND	1.00	"	"	"	"	"	"	
Chloroethane	ND	1.00	"	"	"	"	"	"	
Chloroform	ND	1.00	"	"	"	"	"	"	
Chloromethane	ND	5.00	"	"	"	"	"	"	
2-Chlorotoluene	ND	1.00	**	"	"	"	"	"	
4-Chlorotoluene	ND	1.00	**	"	"	"	"	"	
Dibromochloromethane	ND	1.00	**	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	5.00	**	"	"	"	"	"	
1,2-Dibromoethane	ND	1.00	**	"	"	"	"	"	
Dibromomethane	ND	1.00	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	1.00	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	1.00	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	1.00	"	"	"	"	"	"	
Dichlorodifluoromethane	ND	1.00	"	"	"	"	"	"	
1,1-Dichloroethane	ND	1.00	"	"	"	"	"	"	
1,2-Dichloroethane	ND	1.00	"	"	"	"	"	"	
1,1-Dichloroethene	ND	1.00	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	1.00	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	1.00	"	"	"	"	"	"	
1,2-Dichloropropane	ND	1.00	"	"	"	"	"	"	
1,3-Dichloropropane	ND	1.00	"	"	"	"	"	"	
2,2-Dichloropropane	ND	1.00	"	"	"	"	"	"	
1,1-Dichloropropene	ND	1.00	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	1.00	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	1.00	"	"	"	"		"	

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SLR Alaska Project: FIA Former Mark Air Facilities

Project Number: 004.0184.00001 2525 Blueberry Road, Suite 206 Reported: Anchorage, AK/USA 99503 Project Manager: Andy Dimitriou 12/10/04 16:18

#### **Volatile Organic Compounds by EPA Method 8260B** North Creek Analytical - Bothell

Spokane

Analyte	Result	Reporting MDL Limit		Dilution	Batch	Prepared	Analyzed	Method	Notes
WP-5 (B4J0700-03) Water	Sampled: 10/14/04 19:	10 Received: 10	/16/04 16:	00					
Ethylbenzene	ND	1.00	_	1	4J27051	10/28/04	10/28/04	EPA 8260B	
Hexachlorobutadiene	ND	1.00	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	2.00	"	"	"	"	"	"	
2-Hexanone	ND	10.0	"	"	"	"	"	"	
Isopropylbenzene	ND	1.00	"	"	"	"	"	"	
p-Isopropyltoluene	ND	1.00	"	"	"	"	"	"	
4-Methyl-2-pentanone	ND	10.0	"	"	"	"	"	"	
Methylene chloride	ND	5.00	"	"	"	"	"	"	
Naphthalene	ND	1.00	"	"	"	"	"	"	
n-Propylbenzene	ND	1.00	"	"	"	"	"	"	
Styrene	ND	1.00	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	1.00	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	1.00	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	1.00	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	1.00	"	"	"	"	"	"	
Tetrachloroethene	ND	1.00	"	"	"	"	"	"	
Toluene	2.10	1.00	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	1.00	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	1.00	"	"	"	"	"	"	
Trichloroethene	ND	1.00	"	"	"	"	"	"	
Trichlorofluoromethane	2.31	1.00	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	1.00	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	1.06	1.00	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	1.00	"	"	"	"	"	"	
Vinyl chloride	ND	1.00	"	"	"	"	"	"	
o-Xylene	ND	1.00		"	"	"	"	m .	
m,p-Xylene	2.53	2.00		"	"	"	"	"	
Surrogate: 1,2-DCA-d4	102 %	70-	130		"	"	"	"	
Surrogate: Toluene-d8	95.0 %	70-	130		"	"	"	"	
Surrogate: 4-BFB	100 %	70-	130		"	"	"	"	

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SLR Alaska Project: FIA Former Mark Air Facilities

2525 Blueberry Road, Suite 206 Project Number: 004.0184.00001 Reported: Anchorage, AK/USA 99503 Project Manager: Andy Dimitriou 12/10/04 16:18

#### **Volatile Organic Compounds by EPA Method 8260B** North Creek Analytical - Bothell

Spokane

Analyte	Result MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Note
WP-11N(G) (B4J0700-06) Water	Sampled: 10/15/04 09:20	Receive	d: 10/16/	04 16:00					
Acetone	ND	20.0	ug/l	1	4J27051	10/28/04	10/28/04	EPA 8260B	
Benzene	ND	1.00	"	"	"	"	"	"	
Bromobenzene	ND	1.00	"	"	"	"	"	"	
Bromochloromethane	ND	1.00	"	"	"	"	"	"	
Bromodichloromethane	ND	1.00	"	"	"	"	"	"	
Bromoform	ND	1.00	"	"	"	"	"	"	
Bromomethane	ND	2.00	"	"	"	"	"	"	
2-Butanone	ND	10.0	"	"	"	"	"	"	
n-Butylbenzene	ND	1.00	"	"	"	"	"	"	
sec-Butylbenzene	ND	1.00	"	"	"	"	"	"	
tert-Butylbenzene	ND	1.00	"	"	"	"	"	"	
Carbon disulfide	ND	1.00	"	"	"	"	"	"	
Carbon tetrachloride	ND	1.00	"	"	"	"	"	"	
Chlorobenzene	ND	1.00	"	"	"	"	"	"	
Chloroethane	ND	1.00	"	"	"	"	"	"	
Chloroform	ND	1.00	"	"	"	"	"	"	
Chloromethane	ND	5.00	"	"	"	"	"	"	
2-Chlorotoluene	ND	1.00	"	"	"	"	"	"	
4-Chlorotoluene	ND	1.00	"	"	"	"	"	"	
Dibromochloromethane	ND	1.00	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	5.00	"	"	"	"	"	"	
1,2-Dibromoethane	ND	1.00	"	"	"	"	"	"	
Dibromomethane	ND	1.00	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	1.00	"	"		"	"	"	
1,3-Dichlorobenzene	ND	1.00	"	"		"	"	"	
1,4-Dichlorobenzene	ND	1.00	"	"	,,	"	"	"	
Dichlorodifluoromethane	ND	1.00	"	"		"	"	"	
1,1-Dichloroethane	ND	1.00	"	"		"	"	"	
1,2-Dichloroethane	ND	1.00	"	"	,,	"	"	"	
1,1-Dichloroethene	ND	1.00	"	"	,,	"	"	"	
cis-1,2-Dichloroethene	ND	1.00	"	"	,,	"	"	"	
trans-1,2-Dichloroethene	ND ND	1.00	"	"	,,	"	,,	,,	
1,2-Dichloropropane	ND ND	1.00	"	"	"	"	"	"	
			"	"	,,	,,	,,		
1,3-Dichloropropane	ND ND	1.00	"	"	,,	"	"		
2,2-Dichloropropane	ND ND	1.00	"	"	,,	"	,,		
1,1-Dichloropropene	ND ND	1.00	.,	"	.,	"	,,	"	
cis-1,3-Dichloropropene	ND	1.00	,,	"	.,	"	,,	"	
trans-1,3-Dichloropropene	ND	1.00	"	"	п	"	"	"	

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SLR Alaska Project: FIA Former Mark Air Facilities

Project Number: 004.0184.00001 2525 Blueberry Road, Suite 206 Reported: Anchorage, AK/USA 99503 Project Manager: Andy Dimitriou 12/10/04 16:18

#### **Volatile Organic Compounds by EPA Method 8260B** North Creek Analytical - Bothell

Spokane

Bend

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
WP-11N(G) (B4J0700-06) Water	Sampled: 10	/15/04 09:20	Received	l: 10/16/0	04 16:00					
Ethylbenzene	4.08		1.00	ug/l	1	4J27051	10/28/04	10/28/04	EPA 8260B	
Hexachlorobutadiene	ND		1.00	"	"	"	"	"	"	
Methyl tert-butyl ether	ND		2.00	"	"	"	"	"	"	
2-Hexanone	ND		10.0	"	"	"	"	"	"	
Isopropylbenzene	ND		1.00	"	"	"	"	"	"	
p-Isopropyltoluene	ND		1.00	"	"	"	"	"	"	
4-Methyl-2-pentanone	ND		10.0	"	"	"	"	"	"	
Methylene chloride	ND		5.00	"	"	"	"	"	"	
Naphthalene	3.10		1.00	"	"	"	"	"	"	
n-Propylbenzene	1.17		1.00	"	"	"	"	"	"	
Styrene	ND		1.00	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND		1.00	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND		1.00	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND		1.00	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND		1.00	"	"	"	"	"	"	
Tetrachloroethene	ND		1.00	"	"	"	"	"	"	
Toluene	5.95		1.00	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND		1.00	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND		1.00	"	"	"	"	"	"	
Trichloroethene	ND		1.00	"	"	"	"	"	"	
Trichlorofluoromethane	ND		1.00	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND		1.00	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	3.44		1.00	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	1.24		1.00	"	"	"	"	"	"	
Vinyl chloride	ND		1.00	"	"	"	"	"	"	
o-Xylene	2.96		1.00	**	"	"	"	"	"	
m,p-Xylene	10.2		2.00	"	"	"	"	"	"	
Surrogate: 1,2-DCA-d4	103 %		70-13	0		"	"	"	"	
Surrogate: Toluene-d8	95.0 %		70-13	0		"	"	"	"	
Surrogate: 4-BFB	97.5 %		70-13	0		"	"	"	"	

North Creek Analytical - Bothell



Spokane

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SLR Alaska Project: FIA Former Mark Air Facilities

2525 Blueberry Road, Suite 206 Project Number: 004.0184.00001 Reported: Anchorage, AK/USA 99503 Project Manager: Andy Dimitriou 12/10/04 16:18

#### **Volatile Organic Compounds by EPA Method 8260B** North Creek Analytical - Bothell

	Result	MDL	porting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Note
WP-11N(B) (B4J0700-07) Water	Sampled: 10/15/	04 09:40 R	Received	: 10/16/0	4 16:00					
Acetone	ND		20.0	ug/l	1	4J28019	10/28/04	10/28/04	EPA 8260B	
Benzene	ND		1.00	"	"	"	"	"	"	
Bromobenzene	ND		1.00	"	"	"	"	"	"	
Bromochloromethane	ND		1.00	**	"	"	"	"	"	
Bromodichloromethane	ND		1.00	**	"	"	"	"	"	
Bromoform	ND		1.00	**	"	"	"	"	"	
Bromomethane	ND		2.00	**	"	"	"	"	"	
2-Butanone	ND		10.0	"	"	"	"	"	"	
n-Butylbenzene	ND		1.00	"	"	"	"	"	"	
sec-Butylbenzene	ND		1.00	"	"	"	"	"	m .	
tert-Butylbenzene	ND		1.00	"	"	"	"	"	m .	
Carbon disulfide	ND		1.00	"	"	"	"	"	"	
Carbon tetrachloride	ND		1.00	"	"	"	"	"	m .	
Chlorobenzene	ND		1.00	**	"	"	"	"	"	
Chloroethane	ND		1.00	**	"	"	"	"	"	
Chloroform	ND		1.00	**	"	"	"	"	"	
Chloromethane	ND		5.00	**	"	"	"	"	"	
2-Chlorotoluene	ND		1.00	"	"	"	"	"	"	
4-Chlorotoluene	ND		1.00	"	"	"	"	"	"	
Dibromochloromethane	ND		1.00	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND		5.00	"	"	"	"	"	"	
1,2-Dibromoethane	ND		1.00	"	"	"	"	"	"	
Dibromomethane	ND		1.00	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND		1.00	"	"	"	"	"	n .	
1,3-Dichlorobenzene	ND		1.00	"	"	"	"	"	m .	
1,4-Dichlorobenzene	ND		1.00	"	"	"	"	"	m .	
Dichlorodifluoromethane	ND		1.00	"	"	"	"	"	"	
1,1-Dichloroethane	1.14		1.00	"	"	"	"	"	"	
1,2-Dichloroethane	ND		1.00	"	"	"	"	"	"	
1,1-Dichloroethene	ND		1.00	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND		1.00	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND		1.00	"	"	"	"	"	"	
1,2-Dichloropropane	ND		1.00	"	"	"	"	"	"	
1,3-Dichloropropane	ND		1.00	"	"	"	"	"	"	
2,2-Dichloropropane	ND		1.00	"	"	"	"	"	"	
1,1-Dichloropropene	ND		1.00	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND ND		1.00	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND ND		1.00	,,	"	"	"	"	"	

North Creek Analytical - Bothell



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SLR Alaska Project: FIA Former Mark Air Facilities

Project Number: 004.0184.00001 2525 Blueberry Road, Suite 206 Reported: Anchorage, AK/USA 99503 Project Manager: Andy Dimitriou 12/10/04 16:18

### **Volatile Organic Compounds by EPA Method 8260B** North Creek Analytical - Bothell

Spokane

Bend

Analyte	Result	MDL I	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
WP-11N(B) (B4J0700-07) Water	Sampled: 10/	15/04 09:40	Received	: 10/16/0	4 16:00					
Ethylbenzene	1.04		1.00	ug/l	1	4J28019	10/28/04	10/28/04	EPA 8260B	
Hexachlorobutadiene	ND		1.00	"	"	"	"	"	"	
Methyl tert-butyl ether	ND		2.00	"	"	"	"	"	"	
2-Hexanone	ND		10.0	"	"	"	"	"	"	
Isopropylbenzene	ND		1.00	"	"	"	"	"	"	
p-Isopropyltoluene	ND		1.00	"	"	"	"	"	"	
4-Methyl-2-pentanone	ND		10.0	"	"	"	"	"	"	
Methylene chloride	ND		5.00	"	"	"	"	"	"	
Naphthalene	ND		1.00	"	"	"	"	"	"	
n-Propylbenzene	ND		1.00	"	"	"	"	"	"	
Styrene	ND		1.00	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND		1.00	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND		1.00	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND		1.00	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND		1.00	"	"	"	"	"	"	
Tetrachloroethene	ND		1.00	"	"	"	"	"	"	
Toluene	1.84		1.00	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND		1.00	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND		1.00	"	"	"	"	"	"	
Trichloroethene	2.41		1.00	"	"	"	"	"	"	
Trichlorofluoromethane	ND		1.00	"	"	"	"	"	m .	
1,2,3-Trichloropropane	ND		1.00	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	1.11		1.00	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND		1.00	"	"	"	"	"	"	
Vinyl chloride	ND		1.00	"	"	"	"	"	"	
o-Xylene	ND		1.00	"	"	"	"	"	"	
m,p-Xylene	2.83		2.00	"	"	"	"	"	"	
Surrogate: 1,2-DCA-d4	101 %		70-13	0		"	"	"	"	
Surrogate: Toluene-d8	96.5 %		70-13	0		"	"	"	"	
Surrogate: 4-BFB	100 %		70-13			"	"	"	"	

North Creek Analytical - Bothell



SLR Alaska

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Project: FIA Former Mark Air Facilities Project Number: 004.0184.00001 2525 Blueberry Road, Suite 206 Reported: Anchorage, AK/USA 99503 Project Manager: Andy Dimitriou 12/10/04 16:18

#### **Volatile Organic Compounds by EPA Method 8260B** North Creek Analytical - Bothell

Spokane

Bend Anchorage

Analyte	Result	MDL Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-1 (B4J0700-09) Water	Sampled: 10/15/04 11	:45 Received: 10/	16/04 16:	00					
Acetone	ND	20.0	ug/l	1	4J28019	10/28/04	10/28/04	EPA 8260B	
Benzene	ND	1.00	"	"	"	"	"	"	
Bromobenzene	ND	1.00	"	"	"	"	"	"	
Bromochloromethane	ND	1.00	"	"	"	"	"	"	
Bromodichloromethane	ND	1.00	"	"	"	"	"	"	
Bromoform	ND	1.00	"	"	"	"	"	"	
Bromomethane	ND	2.00	"	"	"	"	"	"	
2-Butanone	ND	10.0	"	"	"	"	"	"	
n-Butylbenzene	ND	1.00	"	"	"	"	"	"	
sec-Butylbenzene	ND	1.00	"	"	"	"	"	"	
tert-Butylbenzene	ND	1.00	"	"	"	"	"	"	
Carbon disulfide	ND	1.00	"	"	"	"	"	"	
Carbon tetrachloride	ND	1.00	"	"	"	"	"	"	
Chlorobenzene	ND	1.00	"	"	"	"	"	"	
Chloroethane	ND	1.00	"	"	"	"	"	"	
Chloroform	ND	1.00	"	"	"	"	"	"	
Chloromethane	ND	5.00	"	"	"	"	"	"	
2-Chlorotoluene	ND	1.00	"	"	"	"	"	"	
4-Chlorotoluene	ND	1.00	"	"	"	"	"	"	
Dibromochloromethane	ND	1.00	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	5.00	"	"	"	"	"	"	
1,2-Dibromoethane	ND	1.00	"	"	"	"	"	"	
Dibromomethane	ND	1.00	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	1.00	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	1.00	"	"	"	"	"	m .	
1,4-Dichlorobenzene	ND	1.00	"	"	"	"	"	"	
Dichlorodifluoromethane	ND	1.00	"	"	"	"	"	"	
1,1-Dichloroethane	ND	1.00	"	"	"	"	"	"	
1,2-Dichloroethane	ND	1.00	"	"	"	"	"	"	
1,1-Dichloroethene	ND	1.00	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	1.00	"	"	"	"	"	m .	
trans-1,2-Dichloroethene	ND	1.00	"	"	"	"	"	n	
1,2-Dichloropropane	ND	1.00	"	"	"	"	"	"	
1,3-Dichloropropane	ND	1.00	"	"	"	"	"	"	
2,2-Dichloropropane	ND	1.00	"	"	"	"	"	"	
1,1-Dichloropropene	ND	1.00	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	1.00	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	1.00	"	"	"	"	"	"	

North Creek Analytical - Bothell



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SLR Alaska Project: FIA Former Mark Air Facilities

Project Number: 004.0184.00001 2525 Blueberry Road, Suite 206 Reported: Anchorage, AK/USA 99503 Project Manager: Andy Dimitriou 12/10/04 16:18

#### **Volatile Organic Compounds by EPA Method 8260B** North Creek Analytical - Bothell

Spokane

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-1 (B4J0700-09) Water	Sampled: 10/15/04 1	1:45 Re	eceived: 10/1	6/04 16:	00					
Ethylbenzene	ND		1.00	ug/l	1	4J28019	10/28/04	10/28/04	EPA 8260B	
Hexachlorobutadiene	ND		1.00	"	"	"	"	"	"	
Methyl tert-butyl ether	ND		2.00	"	"	"	"	"	"	
2-Hexanone	ND		10.0	"	"	"	"	"	"	
Isopropylbenzene	ND		1.00	"	"	"	"	"	"	
p-Isopropyltoluene	ND		1.00	"	"	"	"	"	"	
4-Methyl-2-pentanone	ND		10.0	"	"	"	"	"	"	
Methylene chloride	ND		5.00	"	"	"	"	"	"	
Naphthalene	ND		1.00	"	"	"	"	"	"	
n-Propylbenzene	ND		1.00	"	"	"	"	"	"	
Styrene	ND		1.00	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND		1.00	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND		1.00	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND		1.00	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND		1.00	"	"	"	"	"	"	
Tetrachloroethene	ND		1.00	"	"	"	"	"	"	
Toluene	ND		1.00	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND		1.00	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND		1.00	"	"	"	"	"	"	
Trichloroethene	ND		1.00	"	"	"	"	"	"	
Trichlorofluoromethane	ND		1.00	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND		1.00	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	1.22		1.00	"	"	"	"	"	**	
1,3,5-Trimethylbenzene	ND		1.00	"	"	"	"	"	"	
Vinyl chloride	ND		1.00	"	"	"	"	"	"	
o-Xylene	ND		1.00	"	"	"	"	"	"	
m,p-Xylene	ND		2.00	"	"	"	"	"	"	
Surrogate: 1,2-DCA-d4	110 %		70-13	0		"	"	"	"	
Surrogate: Toluene-d8	97.5 %		70-13	0		"	"	"	"	
Surrogate: 4-BFB	102 %		70-13	0		"	"	"	"	

North Creek Analytical - Bothell



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SLR Alaska Project: FIA Former Mark Air Facilities

Project Number: 004.0184.00001 2525 Blueberry Road, Suite 206 Reported: Anchorage, AK/USA 99503 Project Manager: Andy Dimitriou 12/10/04 16:18

#### **Volatile Organic Compounds by EPA Method 8260B** North Creek Analytical - Bothell

Spokane

Bend

Analyte	Result M	Reporting IDL Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-3 (B4J0700-10) Water	Sampled: 10/15/04 13:0	0 Received: 10/	16/04 16:	00					
Acetone	ND	20.0	ug/l	1	4J28019	10/28/04	10/28/04	EPA 8260B	
Benzene	ND	1.00	"	"	"	"	"	"	
Bromobenzene	ND	1.00	"	"	"	"	"	"	
Bromochloromethane	ND	1.00	"	"	"	"	"	"	
Bromodichloromethane	ND	1.00	"	"	"	"	"	"	
Bromoform	ND	1.00	"	"	"	"	"	"	
Bromomethane	ND	2.00	"	"	"	"	"	"	
2-Butanone	ND	10.0	"	"	"	"	"	"	
n-Butylbenzene	ND	1.00	"	"	"	"	"	"	
sec-Butylbenzene	ND	1.00	"	"	"	"	"	"	
tert-Butylbenzene	ND	1.00	"	"	"	"	"	"	
Carbon disulfide	ND	1.00	"	"	"	"	"	"	
Carbon tetrachloride	ND	1.00	"	"	"	"	"	"	
Chlorobenzene	ND	1.00	"	"	"	"	"	"	
Chloroethane	ND	1.00	"	"	"	"	"	"	
Chloroform	ND	1.00	"	"	"	"	"	"	
Chloromethane	ND	5.00	"	"	"	"	"	"	
2-Chlorotoluene	ND	1.00	"	"	"	"	"	"	
4-Chlorotoluene	ND	1.00	"	"	"	"	"	"	
Dibromochloromethane	ND	1.00	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	5.00	"	"	"	"	"	"	
1,2-Dibromoethane	ND	1.00	"	"	"	"	"	"	
Dibromomethane	ND	1.00	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	1.00	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	1.00	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	1.00	"	"	"	"	"	"	
Dichlorodifluoromethane	ND	1.00	"	"	"	"	"	"	
1,1-Dichloroethane	ND	1.00	"	"	"	"	"	"	
1,2-Dichloroethane	ND	1.00	"	"	"	"	"	"	
1,1-Dichloroethene	ND	1.00	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	1.00	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	1.00	"	"	"	"	"	"	
1,2-Dichloropropane	ND	1.00	"	"	"	"	"	"	
1,3-Dichloropropane	ND	1.00	"	"	"	"	"	"	
2,2-Dichloropropane	ND	1.00	"	"	"	"	"	"	
1,1-Dichloropropene	ND	1.00	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	1.00	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	1.00	"	"	"	"	"	"	

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SLR Alaska Project: FIA Former Mark Air Facilities

Project Number: 004.0184.00001 2525 Blueberry Road, Suite 206 Reported: Anchorage, AK/USA 99503 Project Manager: Andy Dimitriou 12/10/04 16:18

### **Volatile Organic Compounds by EPA Method 8260B** North Creek Analytical - Bothell

Analyte	Result	Reportin MDL Lin		Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-3 (B4J0700-10) Water	Sampled: 10/15/04 13	:00 Received:	10/16/04 16	:00					
Ethylbenzene	ND	1.0	00 ug/l	1	4J28019	10/28/04	10/28/04	EPA 8260B	
Hexachlorobutadiene	ND	1.0	00 "	"	"	"	"	"	
Methyl tert-butyl ether	ND	2.0	00 "	"	"	"	"	"	
2-Hexanone	ND	10	.0 "	"	"	"	"	"	
Isopropylbenzene	ND	1.0	00 "	"	"	"	"	"	
p-Isopropyltoluene	ND	1.0	00 "	"	"	"	"	"	
4-Methyl-2-pentanone	ND	10	.0 "	"	"	"	"	"	
Methylene chloride	ND	5.0	00 "	"	"	"	"	"	
Naphthalene	ND	1.0	00 "	"	"	"	"	"	
n-Propylbenzene	ND	1.0	00 "	"	"	"	"	"	
Styrene	ND	1.0	00 "	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	1.0	00 "	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	1.0	00 "	"	"	"	"	"	
1,1,2-Tetrachloroethane	ND	1.0	00 "	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	1.0	00 "	"	"	"	"	"	
Tetrachloroethene	ND	1.0	00 "	"	"	"	"	"	
Toluene	ND	1.0		"	"	"	"	"	
1,1,1-Trichloroethane	ND	1.0	00 "	"	"	"	"	"	
1,1,2-Trichloroethane	ND	1.0		"	"	"	"	"	
Trichloroethene	ND	1.0	00 "	"	"	"	"	"	
Trichlorofluoromethane	27.3	1.0	00 "	"	"	"	"	"	
1,2,3-Trichloropropane	ND	1.0	00 "	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	1.0		"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	1.0		"	"	"	"	"	
Vinyl chloride	ND	1.0		"	"	"	"	"	
o-Xylene	ND	1.0		"	"	"	"	"	
m,p-Xylene	ND	2.0		"	"	"	"	"	
Surrogate: 1,2-DCA-d4	102 %	70	0-130		"	"	"	"	
Surrogate: Toluene-d8	96.0 %	70	0-130		"	"	"	"	
Surrogate: 4-BFB	96.0 %	70	0-130		"	"	"	"	

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SLR Alaska Project: FIA Former Mark Air Facilities

Project Number: 004.0184.00001 2525 Blueberry Road, Suite 206 Reported: Anchorage, AK/USA 99503 Project Manager: Andy Dimitriou 12/10/04 16:18

#### **Volatile Organic Compounds by EPA Method 8260B** North Creek Analytical - Bothell

Spokane

Analyte	Result M	Reporting DL Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Note
MW-6 (B4J0700-13) Water	Sampled: 10/15/04 16:35	Received: 10/	16/04 16:	00					
Acetone	ND	20.0	ug/l	1	4J28019	10/28/04	10/28/04	EPA 8260B	
Benzene	ND	1.00	"	"	"	"	"	"	
Bromobenzene	ND	1.00	"	"	"	"	"	"	
Bromochloromethane	ND	1.00	"	"	"	"	"	"	
Bromodichloromethane	ND	1.00	"	"	"	"	"	"	
Bromoform	ND	1.00	"	"	"	"	"	"	
Bromomethane	ND	2.00	"	"	"	"	"	"	
2-Butanone	ND	10.0	"	"	"	"	"	"	
n-Butylbenzene	ND	1.00	"	"	"	"	"	"	
sec-Butylbenzene	ND	1.00	"	"	"	"	"	"	
tert-Butylbenzene	ND	1.00	"	"	"	"	"	"	
Carbon disulfide	ND	1.00	"	"	"	"	"	"	
Carbon tetrachloride	ND	1.00	"	"	"	"	"	"	
Chlorobenzene	ND	1.00	"	"	"	"	"	"	
Chloroethane	ND	1.00	"	"	"	"	"	"	
Chloroform	ND	1.00	"	"	"	"	"	"	
Chloromethane	ND	5.00	"	"	"	"	"	"	
2-Chlorotoluene	ND	1.00	"	"	"	"	"	"	
4-Chlorotoluene	ND	1.00	"	"	"	"	"	"	
Dibromochloromethane	ND	1.00	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	5.00	"	"	"	"	"	"	
1,2-Dibromoethane	ND	1.00	"	"	"	"	"	"	
Dibromomethane	ND	1.00	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	1.00	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	1.00	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	1.00	"	"	"	"	"	"	
Dichlorodifluoromethane	ND	1.00	"	"	"	"	"	"	
1,1-Dichloroethane	ND	1.00	"	"	"	"	"	"	
1,2-Dichloroethane	ND	1.00	"	"	"	"	"	"	
1,1-Dichloroethene	ND	1.00	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	1.00	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	1.00	"	"	"	"	"	"	
1,2-Dichloropropane	ND	1.00	"	"	"	"	"	"	
1,3-Dichloropropane	ND	1.00	"	"	"	"	"	"	
2,2-Dichloropropane	ND	1.00	"	"	"	"	"	"	
1,1-Dichloropropene	ND	1.00	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	1.00	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	1.00	"	"	"	"	"	"	

North Creek Analytical - Bothell



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SLR Alaska Project: FIA Former Mark Air Facilities

Project Number: 004.0184.00001 2525 Blueberry Road, Suite 206 Reported: Anchorage, AK/USA 99503 Project Manager: Andy Dimitriou 12/10/04 16:18

### **Volatile Organic Compounds by EPA Method 8260B** North Creek Analytical - Bothell

Analyte	Result	MDL Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-6 (B4J0700-13) Water	Sampled: 10/15/04 16:	35 Received: 10/	16/04 16:	00					
Ethylbenzene	ND	1.00	ug/l	1	4J28019	10/28/04	10/28/04	EPA 8260B	
Hexachlorobutadiene	ND	1.00	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	2.00	"	"	"	"	"	"	
2-Hexanone	ND	10.0	"	"	"	"	"	"	
Isopropylbenzene	ND	1.00	"	"	"	"	"	"	
p-Isopropyltoluene	ND	1.00	"	"	"	"	"	"	
4-Methyl-2-pentanone	ND	10.0	"	"	"	"	"	"	
Methylene chloride	ND	5.00	"	"	"	"	"	"	
Naphthalene	1.04	1.00	"	"	"	"	"	"	
n-Propylbenzene	ND	1.00	"	"	"	"	"	"	
Styrene	ND	1.00	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	1.00	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	1.00	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	1.00	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	1.00	"	"	"	"	"	"	
Tetrachloroethene	ND	1.00	"	"	"	"	"	"	
Toluene	ND	1.00	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	1.00	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	1.00	"	"	"	"	"	"	
Trichloroethene	ND	1.00	"	"	"	"	"	"	
Trichlorofluoromethane	ND	1.00	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	1.00	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	1.21	1.00	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	1.00	"	"	"	"	"	"	
Vinyl chloride	ND	1.00	"	"	"	"	"	"	
o-Xylene	1.16	1.00	"	"	"	"	"	"	
m,p-Xylene	2.25	2.00	"	"	"	"	"	"	
Surrogate: 1,2-DCA-d4	102 %	70-1.	30		"	"	"	"	
Surrogate: Toluene-d8	98.0 %	70-1.	30		"	"	"	"	
Surrogate: 4-BFB	101 %	70-1.	30		"	"	"	"	

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SLR Alaska Project: FIA Former Mark Air Facilities

2525 Blueberry Road, Suite 206 Project Number: 004.0184.00001 Reported: Anchorage, AK/USA 99503 Project Manager: Andy Dimitriou 12/10/04 16:18

#### **Volatile Organic Compounds by EPA Method 8260B** North Creek Analytical - Bothell

Sampled: 10/15/04			Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
	16:00	Received: 1	0/16/04 1	6:00					
ND		20.0	ug/l	1	4J28019	10/28/04	10/28/04	EPA 8260B	
ND		1.00	"	"	"	"	"	"	
ND		1.00	"	"	"	"	"	"	
ND		1.00	"	"	"	"	"	"	
ND		1.00	"	"	"	"	"	"	
ND		1.00	"	"	"	"	"	"	
ND		2.00	"	"	"	"	"	"	
ND		10.0	"	"	"	"	"	"	
ND		1.00	"	"	"	"	"	"	
ND		1.00	"	"	"	"	"	"	
ND		1.00	"	"	"	"	"	"	
ND		1.00	"	"	"	"	"	"	
ND		1.00	"	"	"	"	"	"	
ND		1.00	"	"	"	"	"	"	
ND		1.00	"	"	"	"	"	"	
ND		1.00	"	"	"	"	"	"	
ND		5.00	"	"	"	"	"	"	
ND		1.00	"	"	"	"	"	"	
ND		1.00	"	"	"	"	"	"	
ND		1.00	"	"	"	"	"	"	
ND		5.00	"	"	"	"	"	"	
ND		1.00	"	"	"	"	"	"	
ND		1.00	"	"	"	"	"	"	
ND		1.00	"	"	"	"	"	"	
ND		1.00	"	"	"	"	"	"	
ND		1.00	"	"	"	"	"	"	
ND		1.00	"	"	"	"	"	"	
ND		1.00	"	"	"	"	"	"	
ND		1.00	"	"	"	"	"	"	
ND		1.00	"	"	"	"	"	"	
ND		1.00	"	"	"	"	"	"	
ND		1.00	"	"	"	"	"	"	
			"	"	"	"	"	"	
			"	"	"	"	"	"	
			"	"	"	"	"	"	
			"	"	"	"	"	"	
			"	"	"	"	"	"	
			"	"	"	"	"	"	
	ND N	ND N	ND       1.00         ND       1.00         ND       1.00         ND       1.00         ND       1.00         ND       10.0         ND       1.00         ND       1.	ND	ND	ND ND 1.00 ND ND ND 1.00 ND ND 1.00 ND ND 1.00 ND ND 1.00 ND ND ND ND 1.00 ND ND ND ND 1.00 ND ND ND ND ND 1.00 ND	ND  ND  1.00  ND  1.00  ND  1.00  ND  ND  ND  1.00  ND  1.	ND ND 1.00 ND 1.00 ND ND 1.00 ND 1.00 ND ND 1.00 ND ND 1.00 ND ND ND ND 1.00 ND	ND  1.00  ND  ND  ND  ND  1.00  ND  ND  ND  ND  1.00  ND  ND  ND  ND  1.00  ND  ND  ND  ND  1.00  ND  ND  ND  ND  ND  ND  1.00  ND  ND  ND  ND  ND  ND  ND  ND  ND

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SLR Alaska Project: FIA Former Mark Air Facilities

Project Number: 004.0184.00001 2525 Blueberry Road, Suite 206 Reported: Anchorage, AK/USA 99503 Project Manager: Andy Dimitriou 12/10/04 16:18

#### **Volatile Organic Compounds by EPA Method 8260B** North Creek Analytical - Bothell

Spokane

Analyte	Result	MDL Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
WP-11A (B4J0700-15) Water	Sampled: 10/15/04	16:00 Received:	10/16/04 1	6:00					
Ethylbenzene	2.16	1.00	ug/l	1	4J28019	10/28/04	10/28/04	EPA 8260B	
Hexachlorobutadiene	ND	1.00	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	2.00	"	"	"	"	"	"	
2-Hexanone	ND	10.0	"	"	"	"	"	"	
Isopropylbenzene	ND	1.00	"	"	"	"	"	"	
p-Isopropyltoluene	ND	1.00	"	"	"	"	"	"	
4-Methyl-2-pentanone	ND	10.0	"	"	"	"	"	"	
Methylene chloride	ND	5.00	"	"	"	"	"	"	
Naphthalene	1.50	1.00	"	"	"	"	"	"	
n-Propylbenzene	ND	1.00	"	"	"	"	"	"	
Styrene	ND	1.00	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	1.00	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	1.00	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	1.00	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	1.00	"	"	"	"	"	"	
Tetrachloroethene	ND	1.00	"	"	"	"	"	"	
Toluene	2.62	1.00	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	1.00	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	1.00	"	"	"	"	"	"	
Trichloroethene	ND	1.00	"	"	"	"	"	"	
Trichlorofluoromethane	ND	1.00	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	1.00	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	2.30	1.00	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	1.00	"	"	"	"	"	"	
Vinyl chloride	ND	1.00	"	"	"	"	"	"	
o-Xylene	1.41	1.00	"	"	"	"	"	"	
m,p-Xylene	5.37	2.00	"	"	"	"	"	"	
Surrogate: 1,2-DCA-d4	100 %	70-	130		"	"	"	"	
Surrogate: Toluene-d8	98.0 %	70-	130		"	"	"	"	
Surrogate: 4-BFB	110 %	70-	130		"	"	"	"	

North Creek Analytical - Bothell



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SLR Alaska Project: FIA Former Mark Air Facilities

2525 Blueberry Road, Suite 206 Project Number: 004.0184.00001 Reported: Anchorage, AK/USA 99503 Project Manager: Andy Dimitriou 12/10/04 16:18

### Polynuclear Aromatic Compounds by GC/MS with Selected Ion Monitoring North Creek Analytical - Bothell

Spokane

2-Methylnaphthalene         1.70         0.500         " </th <th>Analyte</th> <th>Result</th> <th>MDL</th> <th>Reporting Limit</th> <th>Units</th> <th>Dilution</th> <th>Batch</th> <th>Prepared</th> <th>Analyzed</th> <th>Method</th> <th>Notes</th>	Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Acenaphthlene	WP-12 (B4J0700-04) Water 5	Sampled: 10/15/04 07	7:20 R	Received: 10/	16/04 16	:00					
Acenaphthene ND 0.500 " " " " " " " " " X Acenaphthylene ND 0.500 " " " " " " " " " " " " X Acenaphthylene ND 0.500 " " " " " " " " " " " " " X Acenaphthylene ND 0.500 " " " " " " " " " " " " " " X Acenaphthylene ND 0.500 " " " " " " " " " " " " " " " " X Acenaphthylene ND 0.500 " " " " " " " " " " " " " " " " X Benzo (a) anthracene ND 0.500 " " " " " " " " " " " " " " " " X Benzo (b) fluoranthene ND 0.500 " " " " " " " " " " " " " " " " X Benzo (b) fluoranthene ND 0.500 " " " " " " " " " " " " " " " " " X Benzo (b) fluoranthene ND 0.500 " " " " " " " " " " " " " " " " " "	1-Methylnaphthalene	7.10		0.500	ug/l	5	4J21019	10/21/04	11/04/04	8270C-SIM	
Accesaphithylene   ND	2-Methylnaphthalene	1.70		0.500	"	"	"	"	"	"	
Anthracene         ND         0.500         "	Acenaphthene	ND		0.500	"	"	"	"	"	"	
Benzo (a) anthracene	Acenaphthylene	ND		0.500	"	"	"	"	"	"	X
Benzo (a) partene	Anthracene	ND		0.500	"	"	"	"	"	"	
Benzo (b) fluoranthene   ND	Benzo (a) anthracene	ND		0.500	"	"	"	"	"	"	
Bernzo (kh) perylene   ND	Benzo (a) pyrene	ND		0.500	"	"	"	"	"	"	X
Benzo (k) fluoranthene   ND   0.500   "   "   "   "   "   "   "   "   "	Benzo (b) fluoranthene	ND		0.500	"	"	"	"	"	"	
Chrysene         ND         0.500         "         <	Benzo (ghi) perylene	ND		0.500	"	"	"	"	"	"	X
Dibenz (a,h) anthracene	Benzo (k) fluoranthene	ND		0.500	"	"	"	"	"	"	
Fluoranthene ND 0.500 " " " " " " " " " " Fluorene ND 0.500 " " " " " " " " " " " " " " " " " "	Chrysene	ND		0.500	"	"	"	"	"	"	
Fluoramene	Dibenz (a,h) anthracene	ND		0.500	"	"	"	"	"	"	
NB	Fluoranthene	ND		0.500	"	"	"	"	"	"	
Naphthalene         17.5         0.500         "         X	Fluorene	ND		0.500	"	"	"	"	"	"	
Prene	Indeno (1,2,3-cd) pyrene	ND		0.500	"	"	"	"	"	"	X
Pyrene   ND   0.500   "	Naphthalene	17.5		0.500	"	"	"	"	"	"	
Surrogate: p-Terphenyl-d14         69.8 %         20-127         " " " " " " "           WP-12 (B4J0700-04RE1) Water         Sampled: 10/15/04 07:20         Received: 10/16/04 16:00         Q-29           1-Methylnaphthalene         13.1         0.500 ug/l         5 4K18062         11/18/04         11/30/04         8270C-SIM           2-Methylnaphthalene         3.10         0.500 " " " " " " " " " " " " " " " " " "	Phenanthrene	ND		0.500	"	"	"	"	"	"	
WP-12 (B4J0700-04RE1) Water         Sampled: 10/15/04 07:20         Received: 10/16/04 16:00         Q-29           1-Methylnaphthalene         13.1         0.500         ug/l         5         4K18062         11/18/04         11/30/04         8270C-SIM           2-Methylnaphthalene         3.10         0.500         "	Pyrene	ND		0.500	"	"	"	"	"	"	X
1-Methylnaphthalene	Surrogate: p-Terphenyl-d14	69.8 %		20-12	7		"	"	"	"	
2-Methylnaphthalene         3.10         0.500         " </td <td>WP-12 (B4J0700-04RE1) Water</td> <td>er Sampled: 10/15/0</td> <td>04 07:2</td> <td>0 Received</td> <td>: 10/16/0</td> <td>4 16:00</td> <td></td> <td></td> <td></td> <td></td> <td>Q-29</td>	WP-12 (B4J0700-04RE1) Water	er Sampled: 10/15/0	04 07:2	0 Received	: 10/16/0	4 16:00					Q-29
2-Methylnaphthalene         3.10         0.500         " </td <td>1-Methylnaphthalene</td> <td>13.1</td> <td></td> <td>0.500</td> <td>ug/l</td> <td>5</td> <td>4K18062</td> <td>11/18/04</td> <td>11/30/04</td> <td>8270C-SIM</td> <td></td>	1-Methylnaphthalene	13.1		0.500	ug/l	5	4K18062	11/18/04	11/30/04	8270C-SIM	
Acenaphthylene         0.952         0.500         "	2-Methylnaphthalene	3.10		0.500		"	"	"	"	"	
Anthracene ND 0.500 " " " " " " " " " " " " " " " " " "	Acenaphthene	ND		0.500	"	"	"	"	"	"	
Anthracene ND 0.500 " " " " " " " " " " " " " " " " " "	Acenaphthylene	0.952		0.500	"	"	"	"	"	"	
Benzo (a) pyrene       ND       0.500       "	Anthracene	ND		0.500	"	"	"	"	"	"	
Benzo (a) pyrene       ND       0.500       "	Benzo (a) anthracene	ND		0.500	"	"	"	"	"	"	
Benzo (b) fluoranthene         ND         0.500         "<	* /	ND		0.500	"	"	"	"	"	"	
Benzo (ghi) perylene         ND         0.500         " <td></td> <td>ND</td> <td></td> <td>0.500</td> <td>"</td> <td>"</td> <td>"</td> <td>"</td> <td>"</td> <td>"</td> <td></td>		ND		0.500	"	"	"	"	"	"	
Benzo (k) fluoranthene         ND         0.500         "         "         "         "         "         "         X           Chrysene         ND         0.500         "		ND		0.500	"	"	"	"	"	"	
Chrysene         ND         0.500         "         <	(C) 1	ND		0.500	"	"	"	"	"	"	X
Fluoranthene ND 0.500 " " " " " " " " " " " " " " " " " "	* /	ND		0.500	"	"	"	"	"	"	
Fluoranthene         ND         0.500         "	Dibenz (a,h) anthracene	ND		0.500	"	"	"	"	"	"	
Fluorene ND 0.500 " " " " " " " " " " Indeno (1,2,3-cd) pyrene ND 0.500 " " " " " " " " " " " " " " Naphthalene 28.5 0.500 " " " " " " " " " " " " " " " " " "	Fluoranthene				"	"	"	"	"	"	
Indeno (1,2,3-cd) pyrene         ND         0.500         "	Fluorene			0.500	"	"	"	"	"	"	
Naphthalene 28.5 0.500 " " " " " "					"	"	"	"	"	"	
	Naphthalene	28.5		0.500	"	"	"	"	"	"	
	Phenanthrene	ND		0.500	"	"	"	"	"	"	

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SLR Alaska Project: FIA Former Mark Air Facilities

2525 Blueberry Road, Suite 206 Project Number: 004.0184.00001 Reported: Anchorage, AK/USA 99503 Project Manager: Andy Dimitriou 12/10/04 16:18

#### Polynuclear Aromatic Compounds by GC/MS with Selected Ion Monitoring North Creek Analytical - Bothell

Spokane

Bend

			CICCKI		cai - Do					
Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
WP-12 (B4J0700-04RE1) Water	Sampled: 10/15	5/04 07:20	Received	l: 10/16/0	4 16:00					Q-29
Pyrene	ND		0.500	ug/l	5	4K18062	11/18/04	11/30/04	8270C-SIM	_
Surrogate: p-Terphenyl-d14	66.8 %		20-12	27		"	"	"	"	
MW-7 (B4J0700-05) Water San	mpled: 10/15/04 0	8:10 Re	ceived: 10/	16/04 16:	00					
1-Methylnaphthalene	56.3		2.00	ug/l	20	4J21019	10/21/04	11/05/04	8270C-SIM	
2-Methylnaphthalene	65.9		2.00	"	"	"	"	"	"	
Acenaphthene	ND		2.00	"	"	"	"	"	"	
Acenaphthylene	ND		2.00	"	"	"	"	"	"	X
Anthracene	ND		2.00	"	"	"	"	"	"	
Benzo (a) anthracene	ND		2.00	"	"	"	"	"	"	
Benzo (a) pyrene	ND		2.00	"	"	"	"	"	"	X
Benzo (b) fluoranthene	ND		2.00	"	"	"	"	"	"	
Benzo (ghi) perylene	ND		2.00	"	"	"	"	"	"	X
Benzo (k) fluoranthene	ND		2.00	"	"	"	"	"	"	
Chrysene	ND		2.00	"	"	"	"	"	"	
Dibenz (a,h) anthracene	ND		2.00	"	"	"	"	"	"	
Fluoranthene	ND		2.00	"	"	"	"	"	"	
Fluorene	ND		2.00	"	"	"	"	"	"	
Indeno (1,2,3-cd) pyrene	ND		2.00	"	"	"	"	"	"	X
Naphthalene	207		2.00	"	"	"	"	"	"	
Phenanthrene	ND		2.00	"	"	"	"	"	"	
Pyrene	ND		2.00	"	"	"	"	"	"	X
Surrogate: p-Terphenyl-d14	74.9 %		20-12	27		"	"	"	"	
MW-7 (B4J0700-05RE1) Water	Sampled: 10/15	/04 08:10	Received	: 10/16/04	16:00					Q-29
1-Methylnaphthalene	103		2.00	ug/l	20	4K18062	11/18/04	11/30/04	8270C-SIM	
2-Methylnaphthalene	122		2.00	"	"	"	"	"	"	
Acenaphthene	ND		2.00	"	"	"	"	"	"	
Acenaphthylene	ND		2.00	"	"	"	"	"	"	
Anthracene	ND		2.00	"	"	"	"	"	"	
Benzo (a) anthracene	ND		2.00	"	"	"	"	"	"	
Benzo (a) pyrene	ND		2.00	"	"	"	"	"	"	
Benzo (b) fluoranthene	ND		2.00	"	"	"	"	"	"	
Benzo (ghi) perylene	ND		2.00	"	"	"	"	"	"	
Benzo (k) fluoranthene	ND		2.00	"	"	"	"	"	"	X
Chrysene	ND		2.00	"	"	"	"	"	"	
Dibenz (a,h) anthracene	ND		2.00	"	"	"	"	"	"	
Fluoranthene	ND		2.00	"	"	"	"	"	"	

North Creek Analytical - Bothell

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North Creek Analytical, Inc. **Environmental Laboratory Network** 



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SLR Alaska Project: FIA Former Mark Air Facilities

2525 Blueberry Road, Suite 206 Project Number: 004.0184.00001 Reported: Anchorage, AK/USA 99503 Project Manager: Andy Dimitriou 12/10/04 16:18

### Polynuclear Aromatic Compounds by GC/MS with Selected Ion Monitoring North Creek Analytical - Bothell

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-7 (B4J0700-05RE1) Water	Sampled: 10/15	/04 08:10	Received	: 10/16/0	4 16:00					Q-29
Fluorene	ND		2.00	ug/l	20	4K18062	11/18/04	11/30/04	8270C-SIM	
Indeno (1,2,3-cd) pyrene	ND		2.00	"	"	"	"	"	"	
Naphthalene	328		2.00	"	"	"	"	"	"	
Phenanthrene	ND		2.00	"	"	"	"	"	"	
Pyrene	ND		2.00	"	"	"	"	"	"	
Surrogate: p-Terphenyl-d14	55.7 %		20-12	?7		"	"	"	"	
WP-11N(G) (B4J0700-06) Water	Sampled: 10/1	5/04 09:20	Received	d: 10/16/	04 16:00					
1-Methylnaphthalene	0.192		0.100	ug/l	1	4J21019	10/21/04	11/04/04	8270C-SIM	
2-Methylnaphthalene	0.146		0.100	"	"	"	"	"	"	
Acenaphthene	ND		0.100	"	"	"	"	"	"	
Acenaphthylene	ND		0.100	"	"	"	"	"	"	X
Anthracene	ND		0.100	"	"	"	"	"	"	
Benzo (a) anthracene	ND		0.100	"	"	"	"	"	"	
Benzo (a) pyrene	ND		0.100	"	"	"	"	"	"	X
Benzo (b) fluoranthene	ND		0.100	"	"	"	"	"	"	
Benzo (ghi) perylene	ND		0.100	"	"	"	"	"	"	X
Benzo (k) fluoranthene	ND		0.100	"	"	"	"	"	"	
Chrysene	ND		0.100	"	"	"	"	"	"	
Dibenz (a,h) anthracene	ND		0.100	"	"	"	"	"	"	
Fluoranthene	ND		0.100	"	"	"	"	"	"	
Fluorene	ND		0.100	"	"	"	"	"	"	
Indeno (1,2,3-cd) pyrene	ND		0.100	"	"	"	"	"	"	X
Naphthalene	0.468		0.100	"	"	"	"	"	"	
Phenanthrene	ND		0.100	"	"	"	"	"	"	
Pyrene	ND		0.100	"	"	"	"	"	"	X

20-127

North Creek Analytical - Bothell

Surrogate: p-Terphenyl-d14

74.2 %



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SLR Alaska Project: FIA Former Mark Air Facilities

2525 Blueberry Road, Suite 206 Project Number: 004.0184.00001 Reported: Anchorage, AK/USA 99503 Project Manager: Andy Dimitriou 12/10/04 16:18

#### Polynuclear Aromatic Compounds by GC/MS with Selected Ion Monitoring North Creek Analytical - Bothell

Spokane

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
WP-11N(G) (B4J0700-06RE1) Water	Sampled	: 10/15/04	09:20 Rec	eived: 10	/16/04 16:0	00				Q-29
1-Methylnaphthalene	ND		0.100	ug/l	1	4K18062	11/18/04	11/30/04	8270C-SIM	
2-Methylnaphthalene	ND		0.100	"	"	"	"	"	"	
Acenaphthene	ND		0.100	"	"	"	"	"	"	
Acenaphthylene	ND		0.100	"	"	"	"	"	"	
Anthracene	ND		0.100	"	"	"	"	"	"	
Benzo (a) anthracene	ND		0.100	"	"	"	"	"	"	
Benzo (a) pyrene	ND		0.100	"	"	"	"	"	"	
Benzo (b) fluoranthene	ND		0.100	"	"	"	"	"	"	
Benzo (ghi) perylene	ND		0.100	"	"	"	"	"	"	
Benzo (k) fluoranthene	ND		0.100	"	"	"	"	"	"	X
Chrysene	ND		0.100	"	"	"	"	"	"	
Dibenz (a,h) anthracene	ND		0.100	"	"	"	"	"	"	
Fluoranthene	ND		0.100	"	"	"	"	"	"	
Fluorene	ND		0.100	"	"	"	"	"	"	
Indeno (1,2,3-cd) pyrene	ND		0.100	"	"	"	"	"	"	
Naphthalene	ND		0.100	"	"	"	"	"	"	
Phenanthrene	ND		0.100	"	"	"	"	"	"	
Pyrene	ND		0.100	"	"	"	"	"	"	
Surrogate: p-Terphenyl-d14	74.2 %	·	20-12	7		"	"	"	"	·

WF-111N(B) (B430/00-07) Water	Sampleu: 10/13/04 09:40	Received	1. 10/10/04	10.00					
1-Methylnaphthalene	0.146	0.100	ug/l	1	4J21019	10/21/04	11/04/04	8270C-SIM	
2-Methylnaphthalene	0.157	0.100	"	"	"	"	"	"	
Acenaphthene	ND	0.100	"	"	"	"	"	"	
Acenaphthylene	ND	0.100	"	"	"	"	"	"	X
Anthracene	ND	0.100	"	"	"	"	"	"	
Benzo (a) anthracene	ND	0.100	"	"	"	"	"	"	
Benzo (a) pyrene	ND	0.100	"	"	"	"	"	"	X
Benzo (b) fluoranthene	ND	0.100	"	"	"	"	"	"	
Benzo (ghi) perylene	ND	0.100	"	"	"	"	"	"	X
Benzo (k) fluoranthene	ND	0.100	"	"	"	"	"	"	
Chrysene	ND	0.100	"	"	"	"	"	"	
Dibenz (a,h) anthracene	ND	0.100	"	"	"	"	"	"	
Fluoranthene	ND	0.100	"	"	"	"	"	"	
Fluorene	ND	0.100	"	"	"	"	"	"	
Indeno (1,2,3-cd) pyrene	ND	0.100	"	"	"	"	"	"	X
Naphthalene	0.322	0.100	"	"	"	"	"	"	
Phenanthrene	ND	0.100	"	"	"	"	"	n	

North Creek Analytical - Bothell



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SLR Alaska Project: FIA Former Mark Air Facilities

2525 Blueberry Road, Suite 206 Project Number: 004.0184.00001 Reported: Anchorage, AK/USA 99503 Project Manager: Andy Dimitriou 12/10/04 16:18

#### Polynuclear Aromatic Compounds by GC/MS with Selected Ion Monitoring **North Creek Analytical - Bothell**

Spokane

	-	NOTHI CIECK I	Anaryu	Cai - Du	tileli				
Analyte	Result	Reporting MDL Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
WP-11N(B) (B4J0700-07) W	ater Sampled: 10/15/	04 09:40 Received	d: 10/16/0	04 16:00					
Pyrene	ND	0.100	ug/l	1	4J21019	10/21/04	11/04/04	8270C-SIM	X
Surrogate: p-Terphenyl-d14	67.8 %	20-1.	27		"	"	"	"	
WP-11N(B) (B4J0700-07RE)	1) Water Sampled: 10	0/15/04 09:40 Rec	eived: 10	/16/04 16:0	00				Q-29
1-Methylnaphthalene	0.169	0.100	ug/l	1	4K18062	11/18/04	11/30/04	8270C-SIM	
2-Methylnaphthalene	0.181	0.100	"	"	"	"	"	"	
Acenaphthene	ND	0.100	"	"	"	"	"	"	
Acenaphthylene	ND	0.100	"	"	"	"	"	"	
Anthracene	ND	0.100	"	"	"	"	"	"	
Benzo (a) anthracene	0.129	0.100	"	"	"	"	"	"	
Benzo (a) pyrene	ND	0.100	"	"	"	"	"	"	
Benzo (b) fluoranthene	ND	0.100	"	"	"	"	"	"	
Benzo (ghi) perylene	ND	0.100	"	"	"	"	"	"	
Benzo (k) fluoranthene	ND	0.100	"	"	"	"	"	"	X
Chrysene	0.112	0.100	"	"	"	"	"	"	
Dibenz (a,h) anthracene	ND	0.100	"	"	"	"	"	"	
Fluoranthene	ND	0.100	"	"	"	"	"	"	
Fluorene	ND	0.100	"	"	"	"	"	"	
Indeno (1,2,3-cd) pyrene	ND	0.100	"	"	"	"	"	"	
Naphthalene	0.277	0.100	"	"	"	"	"	"	
Phenanthrene	ND	0.100	"	"	"	"	"	"	
Pyrene	ND	0.100	"	"	"	"	"	"	
Surrogate: p-Terphenyl-d14	77.1 %	20-1.	27		"	"	"	"	
WP-10 (B4J0700-08) Water	Sampled: 10/15/04 10	:40 Received: 10	/16/04 16	:00					
1-Methylnaphthalene	7.16	0.100	ug/l	1	4J21019	10/21/04	11/04/04	8270C-SIM	
2-Methylnaphthalene	5.78	0.100	"	"	"	"	"	"	
Acenaphthene	ND	0.100	"	"	"	"	"	"	
Acenaphthylene	ND	0.100	"	"	"	"	"	"	X
Anthracene	ND	0.100	"	"	"	"	"	"	
Benzo (a) anthracene	ND	0.100	"	"	"	"	"	"	
Benzo (a) pyrene	ND	0.100	"	"	"	"	"	"	X
Benzo (b) fluoranthene	ND	0.100	"	"	"	"	"	"	
Benzo (ghi) perylene	ND	0.100	"	"	"	"	"	"	X
Benzo (k) fluoranthene	ND	0.100	"	"	"	"	"	"	
Chrysene	ND	0.100	"	"	"	"	"	"	
Dibenz (a,h) anthracene	ND	0.100	"	"	"	"	"	"	

0.100

North Creek Analytical - Bothell

ND

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Fluoranthene



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SLR Alaska Project: FIA Former Mark Air Facilities

2525 Blueberry Road, Suite 206 Project Number: 004.0184.00001 Reported: Anchorage, AK/USA 99503 Project Manager: Andy Dimitriou 12/10/04 16:18

### Polynuclear Aromatic Compounds by GC/MS with Selected Ion Monitoring North Creek Analytical - Bothell

Bend

Analyte	Result	Reporting MDL Limit		Dilution	Batch	Prepared	Analyzed	Method	Notes
WP-10 (B4J0700-08) Water	Sampled: 10/15/04 1	0:40 Received:	10/16/04 16	:00					
Fluorene	0.169	0.10	ug/l	1	4J21019	10/21/04	11/04/04	8270C-SIM	
Indeno (1,2,3-cd) pyrene	ND	0.10	"	"	"	"	"	"	X
Naphthalene	5.34	0.10	"	"	"	"	"	"	
Phenanthrene	ND	0.10	) "	"	"	"	"	"	
Pyrene	ND	0.10	"	"	"	"	"	"	X
Surrogate: p-Terphenyl-d14	64.7 %	20-	127		"	"	"	"	
WP-10 (B4J0700-08RE1) Wat	er Sampled: 10/15/	/04 10:40 Receiv	ed: 10/16/0	04 16:00					Q-29
1-Methylnaphthalene	11.0	0.10	ug/l	1	4K18062	11/18/04	11/30/04	8270C-SIM	
2-Methylnaphthalene	8.82	0.10	) "	"	"	"	"	"	
Acenaphthene	0.141	0.10	) "	"	"	"	"	"	
Acenaphthylene	ND	0.10	) "	"	"	"	"	"	
Anthracene	ND	0.10	) "	"	"	"	"	"	
Benzo (a) anthracene	ND	0.10	) "	"	"	"	"	"	
Benzo (a) pyrene	ND	0.10	) "	"	"	"	"	"	
Benzo (b) fluoranthene	ND	0.10	"	"	"	"	"	"	
Benzo (ghi) perylene	ND	0.100	) "	"	"	"	"	"	
Benzo (k) fluoranthene	ND	0.10	"	"	"	"	"	"	X
Chrysene	ND	0.10	) "	"	"	"	"	"	
Dibenz (a,h) anthracene	ND	0.10	) "	"	"	"	"	"	
Fluoranthene	ND	0.10	) "	"	"	"	"	"	
Fluorene	0.240	0.100	) "	"	"	"	"	"	
Indeno (1,2,3-cd) pyrene	ND	0.10	) "	"	"	"	"	"	
Naphthalene	6.26	0.10	) "	"	"	"	"	"	
Phenanthrene	ND	0.10	"	"	"	"	"	"	
Pyrene	ND	0.100	) "	"	"	"	"	"	

North Creek Analytical - Bothell

Surrogate: p-Terphenyl-d14

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20-127

Amar Gill, Project Manager

71.0 %



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SLR Alaska Project: FIA Former Mark Air Facilities

2525 Blueberry Road, Suite 206 Project Number: 004.0184.00001 Reported: Anchorage, AK/USA 99503 Project Manager: Andy Dimitriou 12/10/04 16:18

#### Polynuclear Aromatic Compounds by GC/MS with Selected Ion Monitoring North Creek Analytical - Bothell

Analyte	Result	Reporting MDL Limit		Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-8 (B4J0700-11) Water	Sampled: 10/15/04 13:	45 Received: 1	0/16/04 16	:00					
1-Methylnaphthalene	46.5	1.00	0 ug/l	10	4J21019	10/21/04	11/05/04	8270C-SIM	
2-Methylnaphthalene	36.3	1.00	) "	"	"	"	"	"	
Acenaphthene	ND	1.00	) "	"	"	"	"	"	
Acenaphthylene	ND	1.00	) "	"	"	"	"	"	X
Anthracene	ND	1.00	) "	"	"	"	"	"	
Benzo (a) anthracene	ND	1.00	) "	"	"	"	"	"	
Benzo (a) pyrene	ND	1.00	) "	"	"	"	"	"	X
Benzo (b) fluoranthene	ND	1.00	) "	"	"	"	"	"	
Benzo (ghi) perylene	ND	1.00	) "	"	"	"	"	"	X
Benzo (k) fluoranthene	ND	1.00	) "	"	"	"	"	"	
Chrysene	ND	1.00	) "	"	"	"	"	"	
Dibenz (a,h) anthracene	ND	1.00	) "	"	"	"	"	"	
Fluoranthene	ND	1.00	) "	"	"	"	"	"	
Fluorene	ND	1.00	) "	"	"	"	"	"	
Indeno (1,2,3-cd) pyrene	ND	1.00	) "	"	"	"	"	"	X
Naphthalene	115	1.00	) "	"	"	"	"	"	
Phenanthrene	ND	1.00	) "	"	"	"	"	"	
Pyrene	ND	1.00	) "	"	"	"	"	"	X
Surrogate: p-Terphenyl-d14	70.8 %	20	-127		"	"	"	"	
MW-8 (B4J0700-11RE1) Wate	er Sampled: 10/15/0	4 13:45 Receiv	ed: 10/16/0	4 16:00					Q-29
1-Methylnaphthalene	57.3	1.00	) ug/l	10	4K18062	11/18/04	11/30/04	8270C-SIM	
2-Methylnaphthalene	41.1	1.00	) "	"	"	"	"	"	
Acenaphthene	ND	1.00	) "	"	"	"	"	"	
Acenaphthylene	ND	1.00	) "	"	"	"	"	"	
Anthracene	ND	1.00	) "	"	"	"	"	"	
Benzo (a) anthracene	ND	1.00	) "	"	"	"	"	"	
Benzo (a) pyrene	ND	1.00	) "	"	"	"	"	"	
Benzo (b) fluoranthene	ND	1.00	) "	"	"	"	"	"	
Benzo (ghi) perylene	ND	1.00	) "	"	"	"	"	"	
Benzo (k) fluoranthene	ND	1.00	) "	"	"	"	"	"	X
Chrysene	ND	1.00	) "	"	"	"	"	"	
Dibenz (a,h) anthracene	ND	1.00	) "	"	"	"	"	"	
Fluoranthene	ND	1.00	) "	"	"	"	"	"	
Fluorene	ND	1.00	) "	"	"	"	"	"	
Indeno (1,2,3-cd) pyrene	ND	1.00	) "	"	"	"	"	"	
Naphthalene	114	1.00	) "	"	"	"	"	"	
Phenanthrene	ND	1.00	) "	"	"	"	"	"	

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### Polynuclear Aromatic Compounds by GC/MS with Selected Ion Monitoring North Creek Analytical - Bothell

Bend

		1 (01 (11	CICCKI	inary th	cai - Do					
Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-8 (B4J0700-11RE1) Water	Sampled: 10/15/	04 13:45	Received	: 10/16/04	16:00					Q-29
Pyrene	ND		1.00	ug/l	10	4K18062	11/18/04	11/30/04	8270C-SIM	
Surrogate: p-Terphenyl-d14	60.6 %		20-12	27		"	"	"	"	
WP-13 (B4J0700-12) Water Sar	mpled: 10/15/04 1	4:30 Re	ceived: 10/	16/04 16:	00					
1-Methylnaphthalene	2.69		0.200	ug/l	2	4J21019	10/21/04	11/05/04	8270C-SIM	
2-Methylnaphthalene	2.85		0.200	"	"	"	"	"	"	
Acenaphthene	ND		0.200	**	"	"	"	"	"	
Acenaphthylene	ND		0.200	"	"	"	"	"	"	X
Anthracene	ND		0.200	"	"	"	"	"	"	
Benzo (a) anthracene	ND		0.200	"	"	"	"	"	"	
Benzo (a) pyrene	ND		0.200	"	"	"	"	"	"	X
Benzo (b) fluoranthene	ND		0.200	"	"	"	"	"	"	
Benzo (ghi) perylene	ND		0.200	"	"	"	"	"	"	X
Benzo (k) fluoranthene	ND		0.200	"	"	"	"	"	"	
Chrysene	ND		0.200	"	"	"	"	"	"	
Dibenz (a,h) anthracene	ND		0.200	"	"	"	"	"	"	
Fluoranthene	ND		0.200	"	"	"	"	"	"	
Fluorene	ND		0.200	**	"	"	"	"	"	
Indeno (1,2,3-cd) pyrene	ND		0.200	"	"	"	"	"	"	X
Naphthalene	43.0		0.200	**	"	"	"	"	"	
Phenanthrene	ND		0.200	"	"	"	"	"	"	
Pyrene	ND		0.200	"	"	"	"	"	"	X
Surrogate: p-Terphenyl-d14	60.6 %		20-12	27		"	"	"	"	
WP-13 (B4J0700-12RE1) Water	Sampled: 10/15	/04 14:30	Received	: 10/16/0	4 16:00					Q-29
1-Methylnaphthalene	ND		0.200	ug/l	2	4K18062	11/18/04	11/30/04	8270C-SIM	
2-Methylnaphthalene	ND		0.200	"	"	"	"	"	"	
Acenaphthene	ND		0.200	"	"	"	"	"	"	
Acenaphthylene	0.792		0.200	"	"	"	"	"	"	
Anthracene	ND		0.200	"	"	"	"	"	"	
Benzo (a) anthracene	ND		0.200	"	"	"	"	"	"	
Benzo (a) pyrene	ND		0.200	"	"	"	"	"	"	
Benzo (b) fluoranthene	ND		0.200	"	"	"	"	"	"	
Benzo (ghi) perylene	ND		0.200	"	"	"	"	"	"	
Benzo (k) fluoranthene	ND		0.200	"	"	"	"	"	"	X
Chrysene	ND		0.200	"	"	"	"	"	"	
Dibenz (a,h) anthracene	ND		0.200	"	"	"	"	"	"	

North Creek Analytical - Bothell



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SLR Alaska Project: FIA Former Mark Air Facilities

2525 Blueberry Road, Suite 206 Project Number: 004.0184.00001 Reported: Anchorage, AK/USA 99503 Project Manager: Andy Dimitriou 12/10/04 16:18

#### Polynuclear Aromatic Compounds by GC/MS with Selected Ion Monitoring North Creek Analytical - Bothell

Spokane

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
WP-13 (B4J0700-12RE1) Water	Sampled: 10/1	5/04 14:30	Received	: 10/16/0	4 16:00					Q-29
Fluorene	ND		0.200	ug/l	2	4K18062	11/18/04	11/30/04	8270C-SIM	
Indeno (1,2,3-cd) pyrene	ND		0.200	"	"	"	"	"	"	
Naphthalene	ND		0.200	"	"	"	"	"	"	
Phenanthrene	ND		0.200	"	"	"	"	"	"	
Pyrene	ND		0.200	"	"	"	"	"	"	
Surrogate: p-Terphenyl-d14	67.0 %		20-12	27		"	"	"	"	

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Spokane

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%REC

**RPD** 

SLR Alaska Project: FIA Former Mark Air Facilities

Project Number: 004.0184.00001 2525 Blueberry Road, Suite 206 Reported: Anchorage, AK/USA 99503 Project Manager: Andy Dimitriou 12/10/04 16:18

# Gasoline Range Hydrocarbons (n-Hexane to <n-Decane) by AK101 - Quality Control North Creek Analytical - Bothell

Spike

Source

Reporting

			recporting		Spine	Boarce		/orce		IG D	
Analyte	Result	MDL	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch 4J27003: Prepared 10/2	27/04 Usii	ng EPA 5	030B (P/T	)							
Blank (4J27003-BLK1)											
Gasoline Range Hydrocarbons	ND		50.0	ug/l							
Surrogate: 4-BFB (FID)	47.7			"	48.0		99.4	60-120			
LCS (4J27003-BS1)											
Gasoline Range Hydrocarbons	424		50.0	ug/l	502		84.5	60-120			
Surrogate: 4-BFB (FID)	53.4			"	48.0		111	60-120			
LCS Dup (4J27003-BSD1)											
Gasoline Range Hydrocarbons	411		50.0	ug/l	502		81.9	60-120	3.11	20	
Surrogate: 4-BFB (FID)	54.8			"	48.0		114	60-120			
Matrix Spike (4J27003-MS1)						Source: I	34J0700-0	)1			
Gasoline Range Hydrocarbons	412		50.0	ug/l	502	12.9	79.5	60-120			
Surrogate: 4-BFB (FID)	55.8			"	48.0		116	60-120			
Matrix Spike Dup (4J27003-MSD1)						Source: I	34J0700-0	)1			
Gasoline Range Hydrocarbons	390		50.0	ug/l	502	12.9	75.1	60-120	5.49	20	
Surrogate: 4-BFB (FID)	55.1			"	48.0		115	60-120			

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> North Creek Analytical, Inc. **Environmental Laboratory Network**



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Project: FIA Former Mark Air Facilities SLR Alaska

2525 Blueberry Road, Suite 206 Project Number: 004.0184.00001 Reported: Anchorage, AK/USA 99503 Project Manager: Andy Dimitriou 12/10/04 16:18

# Gasoline Hydrocarbons (n-Hexane to <n-Decane) and BTEX by AK101/EPA 8021B - Quality Control North Creek Analytical - Bothell

Analyte	Result	Reporting MDL Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 4J27003: Prepared 10	0/27/04 Usin	g EPA 5030B (P/	Γ)							
Blank (4J27003-BLK1)										
Gasoline Range Hydrocarbons	ND	50.0	ug/l							
Benzene	ND	0.200	"							
Toluene	ND	0.500	"							
Ethylbenzene	ND	0.500	"							
Xylenes (total)	ND	1.00	"							
Surrogate: 4-BFB (FID)	47.7		"	48.0		99.4	60-120			
Surrogate: 4-BFB (PID)	43.9		"	48.0		91.5	68-140			
LCS (4J27003-BS1)										
Gasoline Range Hydrocarbons	424	50.0	ug/l	502		84.5	60-120			
Benzene	6.32	0.200	"	6.21		102	80-120			
Toluene	35.0	0.500	"	34.9		100	80-120			
Ethylbenzene	9.22	0.500	"	8.38		110	80-120			
Xylenes (total)	45.0	1.00	"	40.6		111	80-120			
Surrogate: 4-BFB (FID)	53.4		"	48.0		111	60-120			
Surrogate: 4-BFB (PID)	45.9		"	48.0		95.6	68-140			
LCS Dup (4J27003-BSD1)										
Gasoline Range Hydrocarbons	411	50.0	ug/l	502		81.9	60-120	3.11	20	
Benzene	6.25	0.200	"	6.21		101	80-120	1.11	25	
Toluene	34.7	0.500	"	34.9		99.4	80-120	0.861	25	
Ethylbenzene	9.02	0.500	"	8.38		108	80-120	2.19	25	
Xylenes (total)	43.9	1.00	"	40.6		108	80-120	2.47	25	
Surrogate: 4-BFB (FID)	54.8		"	48.0		114	60-120			
Surrogate: 4-BFB (PID)	46.1		"	48.0		96.0	68-140			
Matrix Spike (4J27003-MS1)					Source: I	<b>34J0700-</b> 0	1			
Gasoline Range Hydrocarbons	412	50.0	ug/l	502	12.9	79.5	60-120			
Benzene	6.32	0.200	"	6.21	ND	102	46-130			
Toluene	35.0	0.500	"	34.9	0.612	98.5	60-124			
Ethylbenzene	9.23	0.500	"	8.38	0.285	107	56-141			
Xylenes (total)	44.9	1.00	"	40.6	1.10	108	66-132			
Surrogate: 4-BFB (FID)	55.8		"	48.0		116	60-120			

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SLR Alaska Project: FIA Former Mark Air Facilities

2525 Blueberry Road, Suite 206 Project Number: 004.0184.00001 Reported: Anchorage, AK/USA 99503 Project Manager: Andy Dimitriou 12/10/04 16:18

# Gasoline Hydrocarbons (n-Hexane to <n-Decane) and BTEX by AK101/EPA 8021B - Quality Control North Creek Analytical - Bothell

			Reporting		Spike	Source		%REC		RPD	
Analyte	Result	MDL	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes

Batch 4J27003:	<b>Prepared 10/27/04</b>	Using EPA	5030B (P/T)
----------------	--------------------------	-----------	-------------

Matrix Spike (4J27003-MS1)					Source: B	34J0700-	01		
Surrogate: 4-BFB (PID)	46.1		ug/l	48.0		96.0	68-140		
Matrix Spike Dup (4J27003-MSD	1)				Source: B	34J0700-	01		
Gasoline Range Hydrocarbons	390	50.0	ug/l	502	12.9	75.1	60-120	5.49	20
Benzene	6.19	0.200	"	6.21	ND	99.7	46-130	2.08	40
Toluene	34.5	0.500	"	34.9	0.612	97.1	60-124	1.44	40
Ethylbenzene	8.96	0.500	"	8.38	0.285	104	56-141	2.97	40
Xylenes (total)	43.9	1.00	"	40.6	1.10	105	66-132	2.25	40
Surrogate: 4-BFB (FID)	55.1		"	48.0		115	60-120		
Surrogate: 4-BFB (PID)	46.2		"	48.0		96.2	68-140		

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SLR Alaska Project: FIA Former Mark Air Facilities

2525 Blueberry Road, Suite 206 Project Number: 004.0184.00001 Reported: Anchorage, AK/USA 99503 Project Manager: Andy Dimitriou 12/10/04 16:18

# Diesel Hydrocarbons (C10-C25) by AK102 - Quality Control North Creek Analytical - Bothell

Analyte		Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 4J27011:	Prepared 10	/27/04 Usi	ng EPA 35	520C								
Blank (4J27011-Bl	LK1)											
Diesel Range Hydroca	urbons	ND		0.100	mg/l							
Surrogate: 2-FBP		0.219			"	0.250		87.6	50-150			
LCS (4J27011-BS1	.)											
Diesel Range Hydroca	rbons	1.65		0.100	mg/l	1.87		88.2	75-125			
Surrogate: 2-FBP		0.229			"	0.250		91.6	50-150			
LCS Dup (4J27011	-BSD1)											
Diesel Range Hydroca	rbons	1.67		0.100	mg/l	1.87		89.3	75-125	1.20	20	
Surrogate: 2-FBP		0.232			"	0.250		92.8	50-150			
Batch 4J27067:	Prepared 10	/27/04 Usi	ng EPA 35	520C								
Blank (4J27067-Bl	LK1)											
Diesel Range Hydroca	rbons	ND		0.100	mg/l							
Surrogate: 2-FBP		0.206			"	0.250		82.4	50-150			
LCS (4J27067-BS1	.)											
Diesel Range Hydroca	rbons	1.43		0.100	mg/l	1.87		76.5	75-125			
Surrogate: 2-FBP		0.174			"	0.250		69.6	50-150			
LCS Dup (4J27067	7-BSD1)											
Diesel Range Hydroca	rbons	1.63		0.100	mg/l	1.87		87.2	75-125	13.1	20	
Surrogate: 2-FBP		0.194			"	0.250		77.6	50-150			

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Project: FIA Former Mark Air Facilities SLR Alaska

2525 Blueberry Road, Suite 206 Project Number: 004.0184.00001 Reported: Anchorage, AK/USA 99503 Project Manager: Andy Dimitriou 12/10/04 16:18

# Diesel Hydrocarbons (C10-C25) and Heavy Oil (C25-C36) by AK102 and AK103 - Quality Control North Creek Analytical - Bothell

Spokane

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 4J27011: Prepared 10	)/27/04 Usi	ng EPA 3	520C								
Blank (4J27011-BLK1)											
Diesel Range Hydrocarbons	0.0423	0.0260	0.100	mg/l							
Residual Range Organics	ND	0.100	0.750	"							
Surrogate: 2-FBP	0.219			"	0.250		87.6	50-150			
Surrogate: Octacosane	0.237			"	0.240		98.8	50-150			
LCS (4J27011-BS1)											
Diesel Range Hydrocarbons	1.65	0.0260	0.100	mg/l	1.87		88.2	75-125			
Surrogate: 2-FBP	0.229			"	0.250		91.6	50-150			
LCS (4J27011-BS2)											
Residual Range Organics	1.55	0.100	0.750	mg/l	2.00		77.5	60-120			
Surrogate: Octacosane	0.221			"	0.240		92.1	50-150			
LCS Dup (4J27011-BSD1)											
Diesel Range Hydrocarbons	1.67	0.0260	0.100	mg/l	1.87		89.3	75-125	1.20	20	
Surrogate: 2-FBP	0.232			"	0.250		92.8	50-150			
LCS Dup (4J27011-BSD2)											
Residual Range Organics	1.56	0.100	0.750	mg/l	2.00		78.0	60-120	0.643	20	
Surrogate: Octacosane	0.214			"	0.240		89.2	50-150			
Batch 4J27067: Prepared 10	)/27/04 Usi	ng EPA 3	520C								
Blank (4J27067-BLK1)											
Diesel Range Hydrocarbons	0.0313	0.0260	0.100	mg/l							
Residual Range Organics	ND	0.100	0.750	"							
Surrogate: 2-FBP	0.206			"	0.250		82.4	50-150			
Surrogate: Octacosane	0.214			"	0.240		89.2	50-150			

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SLR Alaska Project: FIA Former Mark Air Facilities

2525 Blueberry Road, Suite 206 Project Number: 004.0184.00001 Reported: Anchorage, AK/USA 99503 Project Manager: Andy Dimitriou 12/10/04 16:18

# Diesel Hydrocarbons (C10-C25) and Heavy Oil (C25-C36) by AK102 and AK103 - Quality Control North Creek Analytical - Bothell

Spokane

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 4J27067: Prepared	10/27/04 Usin	ng EPA 3	520C								
LCS (4J27067-BS1)											
Diesel Range Hydrocarbons	1.43	0.0260	0.100	mg/l	1.87		76.5	75-125			
Surrogate: 2-FBP	0.174			"	0.250		69.6	50-150			
LCS (4J27067-BS2)											
Residual Range Organics	1.77	0.100	0.750	mg/l	2.00		88.5	60-120			
Surrogate: Octacosane	0.233			"	0.240		97.1	50-150			
LCS Dup (4J27067-BSD1)											
Diesel Range Hydrocarbons	1.63	0.0260	0.100	mg/l	1.87		87.2	75-125	13.1	20	
Surrogate: 2-FBP	0.194			"	0.250		77.6	50-150			
LCS Dup (4J27067-BSD2)											
Residual Range Organics	1.80	0.100	0.750	mg/l	2.00		90.0	60-120	1.68	20	
Surrogate: Octacosane	0.223			"	0.240		92.9	50-150			

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SLR Alaska Project: FIA Former Mark Air Facilities

2525 Blueberry Road, Suite 206 Project Number: 004.0184.00001 Reported: Anchorage, AK/USA 99503 Project Manager: Andy Dimitriou 12/10/04 16:18

# BTEX by EPA Method 8021B - Quality Control North Creek Analytical - Bothell

			Reporting		Spike	Source		%REC		RPD	
Analyte	Result	MDL	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch 4J27003: Pr	repared 10/27/04 U	sing EPA 5	030B (P/T	)							
Blank (4J27003-BLK1	)										
Benzene	ND		0.200	ug/l							
Toluene	ND		0.500	"							
Ethylbenzene	ND		0.500	"							
Xylenes (total)	ND		1.00	"							
Surrogate: 4-BFB (PID)	43.9			"	48.0		91.5	68-140			
LCS (4J27003-BS1)											
Benzene	6.32		0.200	ug/l	6.21		102	80-120			
Toluene	35.0		0.500	"	34.9		100	80-120			
Ethylbenzene	9.22		0.500	"	8.38		110	80-120			
Xylenes (total)	45.0		1.00	"	40.6		111	80-120			
Surrogate: 4-BFB (PID)	45.9			"	48.0		95.6	68-140			
LCS Dup (4J27003-BS	D1)										
Benzene	6.25		0.200	ug/l	6.21		101	80-120	1.11	25	
Toluene	34.7		0.500	"	34.9		99.4	80-120	0.861	25	
Ethylbenzene	9.02		0.500	"	8.38		108	80-120	2.19	25	
Xylenes (total)	43.9		1.00	"	40.6		108	80-120	2.47	25	
Surrogate: 4-BFB (PID)	46.1			"	48.0		96.0	68-140			
Matrix Spike (4J27003	-MS1)					Source: I	34J0700-0	)1			
Benzene	6.32		0.200	ug/l	6.21	ND	102	46-130			
Toluene	35.0		0.500	"	34.9	0.612	98.5	60-124			
Ethylbenzene	9.23		0.500	"	8.38	0.285	107	56-141			
Xylenes (total)	44.9		1.00	"	40.6	1.10	108	66-132			
Surrogate: 4-BFB (PID)	46.1			"	48.0		96.0	68-140			
Matrix Spike Dup (4J2	27003-MSD1)					Source: I	34J0700-0	)1			
Benzene	6.19		0.200	ug/l	6.21	ND	99.7	46-130	2.08	40	
Toluene	34.5		0.500	"	34.9	0.612	97.1	60-124	1.44	40	
Ethylbenzene	8.96		0.500	"	8.38	0.285	104	56-141	2.97	40	
Xylenes (total)	43.9		1.00	"	40.6	1.10	105	66-132	2.25	40	
Surrogate: 4-BFB (PID)	46.2			"	48.0		96.2	68-140			

North Creek Analytical - Bothell



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SLR Alaska Project: FIA Former Mark Air Facilities

2525 Blueberry Road, Suite 206 Project Number: 004.0184.00001 Reported: Anchorage, AK/USA 99503 Project Manager: Andy Dimitriou 12/10/04 16:18

## Total Metals by EPA 6000/7000 Series Methods - Quality Control North Creek Analytical - Bothell

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 4J25049:	Prepared 10/25/04 U	sing EPA 3	8020A								
Blank (4J25049-Bl	LK1)										
Lead	ND		0.00100	mg/l							
LCS (4J25049-BS1	)										
Lead	0.0798		0.00100	mg/l	0.0800		99.8	80-120			
LCS Dup (4J25049	D-BSD1)										
Lead	0.0790		0.00100	mg/l	0.0800		98.8	80-120	1.01	20	
Matrix Spike (4J2:	5049-MS1)					Source: B	<b>4J0737-</b> 0	5			
Lead	0.0777		0.00100	mg/l	0.0800	0.00127	95.5	78-125			
Matrix Spike (4J2:	5049-MS2)					Source: B	<b>4J0762-</b> 0	)2			
Lead	0.0784		0.00100	mg/l	0.0800	0.000570	97.3	78-125			
Matrix Spike Dup	(4J25049-MSD1)					Source: B	<b>4J0737-</b> 0	)5			
Lead	0.0793		0.00100	mg/l	0.0800	0.00127	97.5	78-125	2.04	20	
Matrix Spike Dup	(4J25049-MSD2)					Source: B	<b>4J0762-</b> 0	2			
Lead	0.0786		0.00100	mg/l	0.0800	0.000570	97.5	78-125	0.255	20	
Post Spike (4J2504	19-PS1)					Source: B	4J0737-0	)5			
Lead	0.0976			ug/ml	0.0995	0.00127	96.8	75-125			
Batch 4J26027:	Prepared 10/26/04 U	sing EPA 3	3020A								
Blank (4J26027-Bl	,										
Lead	ND		0.00100	mg/l							

North Creek Analytical - Bothell

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SLR Alaska Project: FIA Former Mark Air Facilities

2525 Blueberry Road, Suite 206 Project Number: 004.0184.00001 Reported: Anchorage, AK/USA 99503 Project Manager: Andy Dimitriou 12/10/04 16:18

## Total Metals by EPA 6000/7000 Series Methods - Quality Control North Creek Analytical - Bothell

Spokane

Analyte	R	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 4J26027:	Prepared 10/26/04	4 Using	g EPA 3	020A								
LCS (4J26027-BS1)	)											
Lead	0.	.0744		0.00100	mg/l	0.0800		93.0	80-120			
LCS Dup (4J26027	-BSD1)											
Lead	0.	.0737		0.00100	mg/l	0.0800		92.1	80-120	0.945	20	
Matrix Spike (4J26	6027-MS1)						Source: B	34J0829-0	)1			
Lead	0.	.0769		0.00100	mg/l	0.0800	ND	96.1	78-125			
Matrix Spike Dup (	(4J26027-MSD1)						Source: B	34J0829-0	)1			
Lead	0.	.0752		0.00100	mg/l	0.0800	ND	94.0	78-125	2.24	20	
Post Spike (4J2602	7-PS1)						Source: B	34J0829-0	)1			
Lead	0.	.0961			ug/ml	0.0995	ND	96.6	75-125			

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Project: FIA Former Mark Air Facilities SLR Alaska

2525 Blueberry Road, Suite 206 Project Number: 004.0184.00001 Reported: Anchorage, AK/USA 99503 Project Manager: Andy Dimitriou 12/10/04 16:18

## **Volatile Organic Compounds by EPA Method 8260B - Quality Control** North Creek Analytical - Bothell

			Reporting		Spike	Source		%REC		RPD	
Analyte	Result	MDL	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes

10/28/04 Using EP.	A 5030B
ND	20.0 ug/l
ND	1.00 "
ND	2.00 "
ND	10.0 "
ND	1.00 "
ND	5.00 "
ND	1.00 "
ND	1.00 "
ND	1.00 "
ND	5.00 "
ND	1.00 "
	ND N

North Creek Analytical - Bothell



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SLR Alaska Project: FIA Former Mark Air Facilities

2525 Blueberry Road, Suite 206 Project Number: 004.0184.00001 Reported: Anchorage, AK/USA 99503 Project Manager: Andy Dimitriou 12/10/04 16:18

# Volatile Organic Compounds by EPA Method 8260B - Quality Control North Creek Analytical - Bothell

Anchorage

			Reporting		Spike	Source		%REC		RPD	
Analyte	Result	MDL	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes

Batch 4J27051: Prepared	10/28/04 Using EP	A 5030B	
Blank (4J27051-BLK1)			
1,2-Dichloropropane	ND	1.00 ug/l	
1,3-Dichloropropane	ND	1.00 "	
2,2-Dichloropropane	ND	1.00 "	
1,1-Dichloropropene	ND	1.00 "	
cis-1,3-Dichloropropene	ND	1.00 "	
trans-1,3-Dichloropropene	ND	1.00 "	
Ethylbenzene	ND	1.00 "	
Hexachlorobutadiene	ND	1.00 "	
Methyl tert-butyl ether	ND	2.00 "	
2-Hexanone	ND	10.0 "	
Isopropylbenzene	ND	1.00 "	
p-Isopropyltoluene	ND	1.00 "	
4-Methyl-2-pentanone	ND	10.0 "	
Methylene chloride	ND	5.00 "	
Naphthalene	ND	1.00 "	
n-Propylbenzene	ND	1.00 "	
Styrene	ND	1.00 "	
1,2,3-Trichlorobenzene	ND	1.00 "	
1,2,4-Trichlorobenzene	ND	1.00 "	
1,1,1,2-Tetrachloroethane	ND	1.00 "	
1,1,2,2-Tetrachloroethane	ND	1.00 "	
Tetrachloroethene	ND	1.00 "	
Toluene	ND	1.00 "	
1,1,1-Trichloroethane	ND	1.00 "	
1,1,2-Trichloroethane	ND	1.00 "	
Trichloroethene	ND	1.00 "	
Trichlorofluoromethane	ND	1.00 "	
1,2,3-Trichloropropane	ND	1.00 "	
1,2,4-Trimethylbenzene	ND	1.00 "	
1,3,5-Trimethylbenzene	ND	1.00 "	
Vinyl chloride	ND	1.00 "	
o-Xylene	ND	1.00 "	

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SLR Alaska Project: FIA Former Mark Air Facilities

2525 Blueberry Road, Suite 206 Project Number: 004.0184.00001 Reported: Anchorage, AK/USA 99503 Project Manager: Andy Dimitriou 12/10/04 16:18

## Volatile Organic Compounds by EPA Method 8260B - Quality Control North Creek Analytical - Bothell

			Reporting		Spike	Source		%REC		RPD	
Analyte	Result	MDL	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes

Blank (4J27051-BLK1)									
m,p-Xylene	ND	2.00	ug/l						
Surrogate: 1,2-DCA-d4	20.4		"	20.0	102	70-130			
Surrogate: Toluene-d8	20.3		"	20.0	102	70-130			
Surrogate: 4-BFB	19.8		"	20.0	99.0	70-130			
LCS (4J27051-BS1)									
Benzene	19.9	1.00	ug/l	20.0	99.5	80-120			
Chlorobenzene	19.4	1.00	"	20.0	97.0	77-120			
1,1-Dichloroethene	20.1	1.00	"	20.0	100	80-120			
Methyl tert-butyl ether	20.1	2.00	"	20.0	100	80-120			
Toluene	20.3	1.00	"	20.0	102	80-120			
Trichloroethene	19.0	1.00	"	20.0	95.0	80-120			
Surrogate: 1,2-DCA-d4	19.3		"	20.0	96.5	70-130			
Surrogate: Toluene-d8	20.4		"	20.0	102	70-130			
Surrogate: 4-BFB	20.8		"	20.0	104	70-130			
LCS Dup (4J27051-BSD1)									
Benzene	19.7	1.00	ug/l	20.0	98.5	80-120	1.01	20	
Chlorobenzene	18.9	1.00	"	20.0	94.5	77-120	2.61	20	
1,1-Dichloroethene	19.7	1.00	"	20.0	98.5	80-120	2.01	20	
Methyl tert-butyl ether	20.3	2.00	"	20.0	102	80-120	0.990	20	
Toluene	19.9	1.00	"	20.0	99.5	80-120	1.99	20	
Trichloroethene	18.8	1.00	"	20.0	94.0	80-120	1.06	20	
Surrogate: 1,2-DCA-d4	19.8		"	20.0	99.0	70-130			
Surrogate: Toluene-d8	20.1		"	20.0	100	70-130			
Surrogate: 4-BFB	20.6		"	20.0	103	70-130			

North Creek Analytical - Bothell

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SLR Alaska Project: FIA Former Mark Air Facilities

2525 Blueberry Road, Suite 206 Project Number: 004.0184.00001 Reported: Anchorage, AK/USA 99503 Project Manager: Andy Dimitriou 12/10/04 16:18

## Volatile Organic Compounds by EPA Method 8260B - Quality Control North Creek Analytical - Bothell

			Reporting		Spike	Source		%REC		RPD	
Analyte	Result	MDL	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes

Blank (4J28019-BLK1)           Acetone         ND         20.0         ug/l           Benzene         ND         1.00         "           Bromobenzene         ND         1.00         "           Bromochloromethane         ND         1.00         "           Bromodichloromethane         ND         1.00         "           Bromoform         ND         1.00         "           Bromomethane         ND         2.00         "           2-Butanone         ND         10.0         "           n-Butylbenzene         ND         1.00         "           sec-Butylbenzene         ND         1.00         "
Acetone         ND         20.0 ug/l           Benzene         ND         1.00 "           Bromobenzene         ND         1.00 "           Bromochloromethane         ND         1.00 "           Bromodichloromethane         ND         1.00 "           Bromoform         ND         1.00 "           Bromomethane         ND         2.00 "           2-Butanone         ND         10.0 "           n-Butylbenzene         ND         1.00 "           sec-Butylbenzene         ND         1.00 "
Bromobenzene         ND         1.00         "           Bromochloromethane         ND         1.00         "           Bromodichloromethane         ND         1.00         "           Bromoform         ND         1.00         "           Bromomethane         ND         2.00         "           2-Butanone         ND         10.0         "           n-Butylbenzene         ND         1.00         "           sec-Butylbenzene         ND         1.00         "
Bromochloromethane ND 1.00 " Bromodichloromethane ND 1.00 " Bromoform ND 1.00 " Bromomethane ND 2.00 " 2-Butanone ND 10.0 " n-Butylbenzene ND 1.00 " sec-Butylbenzene ND 1.00 "
Bromodichloromethane ND 1.00 " Bromoform ND 1.00 " Bromomethane ND 2.00 " 2-Butanone ND 10.0 " n-Butylbenzene ND 1.00 " sec-Butylbenzene ND 1.00 "
Bromoform         ND         1.00         "           Bromomethane         ND         2.00         "           2-Butanone         ND         10.0         "           n-Butylbenzene         ND         1.00         "           sec-Butylbenzene         ND         1.00         "
Bromomethane ND 2.00 " 2-Butanone ND 10.0 " n-Butylbenzene ND 1.00 " sec-Butylbenzene ND 1.00 "
2-Butanone ND 10.0 " n-Butylbenzene ND 1.00 " sec-Butylbenzene ND 1.00 "
n-Butylbenzene ND 1.00 " sec-Butylbenzene ND 1.00 "
sec-Butylbenzene ND 1.00 "
tert-Butylbenzene ND 1.00 "
Carbon disulfide ND 1.00 "
Carbon tetrachloride ND 1.00 "
Chlorobenzene ND 1.00 "
Chloroethane ND 1.00 "
Chloroform ND 1.00 "
Chloromethane ND 5.00 "
2-Chlorotoluene ND 1.00 "
4-Chlorotoluene ND 1.00 "
Dibromochloromethane ND 1.00 "
1,2-Dibromo-3-chloropropane ND 5.00 "
1,2-Dibromoethane ND 1.00 "
Dibromomethane ND 1.00 "
1,2-Dichlorobenzene ND 1.00 "
1,3-Dichlorobenzene ND 1.00 "
1,4-Dichlorobenzene ND 1.00 "
Dichlorodifluoromethane ND 1.00 "
1,1-Dichloroethane ND 1.00 "
1,2-Dichloroethane ND 1.00 "
1,1-Dichloroethene ND 1.00 "
cis-1,2-Dichloroethene ND 1.00 "
trans-1,2-Dichloroethene ND 1.00 "

North Creek Analytical - Bothell



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Project: FIA Former Mark Air Facilities SLR Alaska

2525 Blueberry Road, Suite 206 Project Number: 004.0184.00001 Reported: Anchorage, AK/USA 99503 Project Manager: Andy Dimitriou 12/10/04 16:18

#### **Volatile Organic Compounds by EPA Method 8260B - Quality Control** North Creek Analytical - Bothell

			Reporting		Spike	Source		%REC		RPD	
Analyte	Result	MDL	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes

Batch 4J28019: P	repared 10/28/04 Usin	g EPA 5030B		
Blank (4J28019-BLK1				
1,2-Dichloropropane	ND	1.00	ug/l	
1,3-Dichloropropane	ND	1.00	"	
2,2-Dichloropropane	ND	1.00	"	
1,1-Dichloropropene	ND	1.00	"	
cis-1,3-Dichloropropene	ND	1.00	"	
trans-1,3-Dichloropropene	ND	1.00	"	
Ethylbenzene	ND	1.00	"	
Hexachlorobutadiene	ND	1.00	"	
Methyl tert-butyl ether	ND	2.00	"	
2-Hexanone	ND	10.0	"	
Isopropylbenzene	ND	1.00	"	
p-Isopropyltoluene	ND	1.00	"	
4-Methyl-2-pentanone	ND	10.0	"	
Methylene chloride	ND	2.00	"	
Naphthalene	ND	1.00	"	
n-Propylbenzene	ND	1.00	"	
Styrene	ND	1.00	"	
1,2,3-Trichlorobenzene	ND	1.00	"	
1,2,4-Trichlorobenzene	ND	1.00	"	
1,1,1,2-Tetrachloroethane	ND	1.00	"	
1,1,2,2-Tetrachloroethane	ND	1.00	"	
Tetrachloroethene	ND	1.00	"	
Toluene	ND	1.00	"	
1,1,1-Trichloroethane	ND	1.00	"	
1,1,2-Trichloroethane	ND	1.00	"	
Trichloroethene	ND	1.00	"	
Trichlorofluoromethane	ND	1.00	"	
1,2,3-Trichloropropane	ND	1.00	"	
1,2,4-Trimethylbenzene	ND	1.00	"	
1,3,5-Trimethylbenzene	ND	1.00	"	
Vinyl chloride	ND	1.00	"	
o-Xylene	ND	1.00	"	

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SLR Alaska Project: FIA Former Mark Air Facilities

2525 Blueberry Road, Suite 206 Project Number: 004.0184.00001 Reported: Anchorage, AK/USA 99503 Project Manager: Andy Dimitriou 12/10/04 16:18

## Volatile Organic Compounds by EPA Method 8260B - Quality Control North Creek Analytical - Bothell

				Reporting		Spike	Source		%REC		RPD	
Analyte		Result	MDL	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
D . 1 470040 3	ъ .	1.40/00/04 TT 1	ED + 50	30B								

Blank (4J28019-BLK1)									
m,p-Xylene	ND	2.00	ug/l						
Surrogate: 1,2-DCA-d4	20.6		"	20.0	103	70-130			
Surrogate: Toluene-d8	19.8		"	20.0	99.0	70-130			
Surrogate: 4-BFB	20.2		"	20.0	101	70-130			
LCS (4J28019-BS1)									
Benzene	19.2	1.00	ug/l	20.0	96.0	80-120			
Chlorobenzene	18.7	1.00	"	20.0	93.5	77-120			
1,1-Dichloroethene	19.3	1.00	"	20.0	96.5	80-120			
Methyl tert-butyl ether	21.7	2.00	"	20.0	108	80-120			
Toluene	19.0	1.00	"	20.0	95.0	80-120			
Trichloroethene	20.4	1.00	"	20.0	102	80-120			
Surrogate: 1,2-DCA-d4	19.7		"	20.0	98.5	70-130			
Surrogate: Toluene-d8	19.3		"	20.0	96.5	70-130			
Surrogate: 4-BFB	20.9		"	20.0	104	70-130			
LCS Dup (4J28019-BSD1)									
Benzene	18.3	1.00	ug/l	20.0	91.5	80-120	4.80	20	
Chlorobenzene	18.2	1.00	"	20.0	91.0	77-120	2.71	20	
1,1-Dichloroethene	19.2	1.00	"	20.0	96.0	80-120	0.519	20	
Methyl tert-butyl ether	20.9	2.00	"	20.0	104	80-120	3.76	20	
Toluene	18.6	1.00	"	20.0	93.0	80-120	2.13	20	
Trichloroethene	19.7	1.00	"	20.0	98.5	80-120	3.49	20	
Surrogate: 1,2-DCA-d4	19.5		"	20.0	97.5	70-130			
Surrogate: Toluene-d8	19.2		"	20.0	96.0	70-130			
Surrogate: 4-BFB	20.3		"	20.0	102	70-130			

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SLR Alaska Project: FIA Former Mark Air Facilities

2525 Blueberry Road, Suite 206 Project Number: 004.0184.00001 Reported: Anchorage, AK/USA 99503 Project Manager: Andy Dimitriou 12/10/04 16:18

## Polynuclear Aromatic Compounds by GC/MS with Selected Ion Monitoring - Quality Control North Creek Analytical - Bothell

			Reporting		Spike	Source		%REC		RPD	
Analyte	Result	MDL	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes

Batch 4J21019: Prepared	10/21/04 Using EP.	A 3520C					
Blank (4J21019-BLK1)							
1-Methylnaphthalene	ND	0.100	ug/l				
2-Methylnaphthalene	ND	0.100	"				
Acenaphthene	ND	0.100	"				
Acenaphthylene	ND	0.100	"				X
Anthracene	ND	0.100	"				
Benzo (a) anthracene	ND	0.100	"				
Benzo (a) pyrene	ND	0.100	"				X
Benzo (b) fluoranthene	ND	0.100	"				
Benzo (ghi) perylene	ND	0.100	"				X
Benzo (k) fluoranthene	ND	0.100	"				
Chrysene	ND	0.100	"				
Dibenz (a,h) anthracene	ND	0.100	"				
Fluoranthene	ND	0.100	"				
Fluorene	ND	0.100	"				
Indeno (1,2,3-cd) pyrene	ND	0.100	"				X
Naphthalene	ND	0.100	"				
Phenanthrene	ND	0.100	"				
Pyrene	ND	0.100	"				X
Surrogate: p-Terphenyl-d14	38.6		"	50.0	77.2	20-127	
LCS (4J21019-BS2)							
1-Methylnaphthalene	6.98	0.100	ug/l	10.0	69.8	41-120	
2-Methylnaphthalene	6.16	0.100	"	10.0	61.6	42-120	
Acenaphthene	7.08	0.100	"	10.0	70.8	34-120	
Acenaphthylene	7.03	0.100	"	10.0	70.3	36-120	X
Anthracene	7.89	0.100	"	10.0	78.9	35-138	
Benzo (a) anthracene	7.17	0.100	"	10.0	71.7	41-121	
Benzo (a) pyrene	7.96	0.100	"	10.0	79.6	33-125	X
Benzo (b) fluoranthene	7.19	0.100	"	10.0	71.9	35-133	
Benzo (ghi) perylene	7.71	0.100	"	10.0	77.1	25-121	X
Benzo (k) fluoranthene	7.51	0.100	"	10.0	75.1	28-127	
Chrysene	8.10	0.100	"	10.0	81.0	41-120	

North Creek Analytical - Bothell



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SLR Alaska Project: FIA Former Mark Air Facilities

2525 Blueberry Road, Suite 206 Project Number: 004.0184.00001 Reported: Anchorage, AK/USA 99503 Project Manager: Andy Dimitriou 12/10/04 16:18

## Polynuclear Aromatic Compounds by GC/MS with Selected Ion Monitoring - Quality Control North Creek Analytical - Bothell

Bend

Analyte		Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 4J21019:	Prepared 10/21	/04 Usir	ng EPA 3	3520C								
LCS (4J21019-BS2)												
Dibenz (a,h) anthracene		8.76		0.100	ug/l	10.0		87.6	24-120			
Fluoranthene		8.34		0.100	"	10.0		83.4	33-137			
Fluorene		7.35		0.100	"	10.0		73.5	42-120			
Indeno (1,2,3-cd) pyrene		8.37		0.100	"	10.0		83.7	26-122			X
Naphthalene		6.87		0.100	"	10.0		68.7	38-120			
Phenanthrene		7.40		0.100	"	10.0		74.0	31-127			
Pyrene		8.67		0.100	"	10.0		86.7	42-125			X
Surrogate: p-Terphenyl-	d14	34.1			"	50.0		68.2	20-127			
LCS Dup (4J21019-F	BSD2)											
1-Methylnaphthalene		6.69		0.100	ug/l	10.0		66.9	41-120	4.24	30	
2-Methylnaphthalene		5.91		0.100	"	10.0		59.1	42-120	4.14	30	
Acenaphthene		6.69		0.100	"	10.0		66.9	34-120	5.66	30	
Acenaphthylene		1.57		0.100	"	10.0		15.7	36-120	127	30	X
Anthracene		6.77		0.100	"	10.0		67.7	35-138	15.3	30	
Benzo (a) anthracene		6.39		0.100	"	10.0		63.9	41-121	11.5	30	
Benzo (a) pyrene		2.41		0.100	"	10.0		24.1	33-125	107	30	X
Benzo (b) fluoranthene		7.57		0.100	"	10.0		75.7	35-133	5.15	30	
Benzo (ghi) perylene		3.59		0.100	"	10.0		35.9	25-121	72.9	30	X
Benzo (k) fluoranthene		5.73		0.100	"	10.0		57.3	28-127	26.9	30	
Chrysene		7.67		0.100	"	10.0		76.7	41-120	5.45	30	
Dibenz (a,h) anthracene		8.28		0.100	"	10.0		82.8	24-120	5.63	30	
Fluoranthene		7.68		0.100	"	10.0		76.8	33-137	8.24	30	
Fluorene		7.40		0.100	"	10.0		74.0	42-120	0.678	30	
Indeno (1,2,3-cd) pyrene		4.60		0.100	"	10.0		46.0	26-122	58.1	30	X
Naphthalene		6.88		0.100	"	10.0		68.8	38-120	0.145	30	
Phenanthrene		7.38		0.100	"	10.0		73.8	31-127	0.271	30	
Pyrene		5.71		0.100	"	10.0		57.1	42-125	41.2	30	X
Surrogate: p-Terphenyl-	d14	41.2			"	50.0		82.4	20-127			

North Creek Analytical - Bothell

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Rotch 4K18062.

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SLR Alaska Project: FIA Former Mark Air Facilities

Prepared 11/18/04 Using FPA 3520C

2525 Blueberry Road, Suite 206 Project Number: 004.0184.00001 Reported: Anchorage, AK/USA 99503 Project Manager: Andy Dimitriou 12/10/04 16:18

## Polynuclear Aromatic Compounds by GC/MS with Selected Ion Monitoring - Quality Control North Creek Analytical - Bothell

			Reporting		Spike	Source		%REC		RPD	
Analyte	Result	MDL	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes

Batch 4K18062: Prepared	l 11/18/04 Using El	PA 3520C					
Blank (4K18062-BLK1)							
1-Methylnaphthalene	ND	0.100	ug/l				
2-Methylnaphthalene	ND	0.100	"				
Acenaphthene	ND	0.100	"				
Acenaphthylene	ND	0.100	"				
Anthracene	ND	0.100	"				
Benzo (a) anthracene	ND	0.100	"				
Benzo (a) pyrene	ND	0.100	"				
Benzo (b) fluoranthene	ND	0.100	"				
Benzo (ghi) perylene	ND	0.100	"				
Benzo (k) fluoranthene	ND	0.100	"				
Chrysene	ND	0.100	"				
Dibenz (a,h) anthracene	ND	0.100	"				
Fluoranthene	ND	0.100	"				
Fluorene	ND	0.100	"				
Indeno (1,2,3-cd) pyrene	ND	0.100	"				
Naphthalene	ND	0.100	"				
Phenanthrene	ND	0.100	"				
Pyrene	ND	0.100	"				
Surrogate: p-Terphenyl-d14	35.8		"	50.0	71.6	20-127	
LCS (4K18062-BS2)							
1-Methylnaphthalene	22.5	0.100	ug/l	20.0	112	41-120	
2-Methylnaphthalene	21.1	0.100	"	20.0	106	42-120	
Acenaphthene	20.3	0.100	"	20.0	102	34-120	
Acenaphthylene	21.2	0.100	"	20.0	106	36-120	
Anthracene	25.3	0.100	"	20.0	126	35-138	
Benzo (a) anthracene	18.2	0.100	"	20.0	91.0	41-121	
Benzo (a) pyrene	22.5	0.100	"	20.0	112	33-125	
Benzo (b) fluoranthene	25.4	0.100	"	20.0	127	35-133	
Benzo (ghi) perylene	19.3	0.100	"	20.0	96.5	25-121	
Benzo (k) fluoranthene	24.4	0.100	"	20.0	122	28-127	
Chrysene	21.9	0.100	"	20.0	110	41-120	

North Creek Analytical - Bothell



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SLR Alaska Project: FIA Former Mark Air Facilities

2525 Blueberry Road, Suite 206 Project Number: 004.0184.00001 Reported: Anchorage, AK/USA 99503 Project Manager: Andy Dimitriou 12/10/04 16:18

## Polynuclear Aromatic Compounds by GC/MS with Selected Ion Monitoring - Quality Control North Creek Analytical - Bothell

Analyte	Resi	ılt MD	Reporting L Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 4K18062:	Prepared 11/18/04	Using EP	A 3520C								
LCS (4K18062-BS2)											
Dibenz (a,h) anthracene	20	.3	0.100	ug/l	20.0		102	24-120			
Fluoranthene	23	.7	0.100	"	20.0		118	33-137			
Fluorene	23	.4	0.100	"	20.0		117	42-120			
Indeno (1,2,3-cd) pyrene	19	.4	0.100	"	20.0		97.0	26-122			
Naphthalene	20	.6	0.100	"	20.0		103	38-120			
Phenanthrene	21	.3	0.100	"	20.0		106	31-127			
Pyrene	19	.4	0.100	"	20.0		97.0	42-125			
Surrogate: p-Terphenyl-d	114 32	.4		"	50.0		64.8	20-127			
LCS Dup (4K18062-B	BSD2)										
1-Methylnaphthalene	23	.3	0.100	ug/l	20.0		116	41-120	3.49	30	
2-Methylnaphthalene	22	.6	0.100	"	20.0		113	42-120	6.86	30	
Acenaphthene	20	.8	0.100	"	20.0		104	34-120	2.43	30	
Acenaphthylene	21	.4	0.100	"	20.0		107	36-120	0.939	30	
Anthracene	25	.2	0.100	"	20.0		126	35-138	0.396	30	
Benzo (a) anthracene	18	.8	0.100	"	20.0		94.0	41-121	3.24	30	
Benzo (a) pyrene	23	.0	0.100	"	20.0		115	33-125	2.20	30	
Benzo (b) fluoranthene	25	.3	0.100	"	20.0		126	35-133	0.394	30	
Benzo (ghi) perylene	19	.2	0.100	"	20.0		96.0	25-121	0.519	30	
Benzo (k) fluoranthene	26	.3	0.100	"	20.0		132	28-127	7.50	30	
Chrysene	22	.3	0.100	"	20.0		112	41-120	1.81	30	
Dibenz (a,h) anthracene	20	.6	0.100	"	20.0		103	24-120	1.47	30	
Fluoranthene	24	.0	0.100	"	20.0		120	33-137	1.26	30	
Fluorene	24	.1	0.100	"	20.0		120	42-120	2.95	30	
Indeno (1,2,3-cd) pyrene	19	.5	0.100	"	20.0		97.5	26-122	0.514	30	
Naphthalene	22	.2	0.100	"	20.0		111	38-120	7.48	30	
Phenanthrene	21	.3	0.100	"	20.0		106	31-127	0.00	30	
Pyrene	19	.1	0.100	"	20.0		95.5	42-125	1.56	30	
Surrogate: p-Terphenyl-d	114 31	.8		"	50.0		63.6	20-127			

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SLR Alaska Project: FIA Former Mark Air Facilities

2525 Blueberry Road, Suite 206 Project Number: 004.0184.00001 Reported: Anchorage, AK/USA 99503 Project Manager: Andy Dimitriou 12/10/04 16:18

#### **Notes and Definitions**

J Estimated value.

Q-24 This sample was received at a pH>2 and analyzed outside of the method recommended hold time of seven days for unpreserved or

inadequately preserved samples.

This sample was prepared outside of the method established holding time. Q-29

S-04 The surrogate recovery for this sample is outside of established control limits due to a sample matrix effect.

Χ See case narrative.

DET Analyte DETECTED

ND Analyte NOT DETECTED at or above the reporting limit

NR Not Reported

Sample results reported on a dry weight basis dry

RPD Relative Percent Difference

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01 December 2004

Andy Dimitriou SLR Alaska 2525 Blueberry Road, Suite 206 Anchorage, AK/USA 99503

RE: FIA Former Mark Air Facilities

Enclosed are the results of analyses for samples received by the laboratory on 11/04/04 14:45. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

**Amar Gill** 

**Project Manager** 

#### CASE NARRATIVE for B4K0219

Client: SLR Alaska

Project Manager: Andy Dimitriou

Project Name: FIA Former Mark Air Facilities

Project Number: 004.0184.00001

#### 1.0 DESCRIPTION OF CASE

Five (5) water samples were submitted for the analysis of:

- Residual Range Organics by AK103
- Gasoline Range Hydrocarbons and BTEX by AK101/EPA 8021B
- Total Metals by EPA 6000/7000 Series Methods
- Polynuclear Aromatic Compounds by GC/MS with Selected Ion Monitoring

#### 2.0 COMMENTS ON SAMPLE RECEIPT

The samples were received 4<sup>th</sup> November 2004 at a temperature of 3.4°C and logged in 6<sup>th</sup> November 2004.

#### 3.0 PREPARATION AND ANALYSIS

#### Residual Range Organics by AK103

No additional anomalies or discrepancies were associated with this analysis other than those already qualified in the data.

#### Gasoline Range Hydrocarbons and BTEX by AK101/EPA 8021B

No additional anomalies or discrepancies were associated with this analysis other than those already qualified in the data.

#### Total Metals by EPA 6000/7000 Series Methods

No additional anomalies or discrepancies were associated with this analysis other than those already qualified in the data.

#### Polynuclear Aromatic Compounds by GC/MS with Selected Ion Monitoring

No additional anomalies or discrepancies were associated with this analysis other than those already qualified in the data.

Amar Gill Project Manager

North Creek Analytical



COC REV 3/99

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FAX 906-9210 (503) 906-9200 (541) 383-9310 FAX 382-7588

**CHAIN OF CUSTODY REPORT** 

Work Order #: 🚧 TURNAROUND REQUEST in Business Days\* INVOICETO: SLR ALASKA ADOT+PF Organic & Inorganic Analyses REPORT TO: SER ALASKA ADDRESS: 3521 International St Petroleum Hydrocarbon Analyses PHONE: 907-455-9005 FAX: 907-455-9015 P.O. NUMBER: 004. 0184. 60001 PROJECT NAME: FORMER MARKAIR FACILITIES REQUESTED ANALYSES Please Specify OTHER PROJECT NUMBER: 004.0184.00001 SAMPLED BY: Sally Swenson \*Turnaround Requests less than standard may incur Rush Charges. NCA WO CLIENT SAMPLE MATRIX # OF SAMPLING COMMENTS ID (W, S, O)CONT. DATE/TIME **IDENTIFICATION** W MW-6 MW-10 MW-8 4. MW-12 5. TRIP BLANK 10. 12. 13. 14. 15. DATE: 11.2.04 RECEIVED BY: DOWN RELINQUISHED BY: TIME: /207) FIRM: NCA TIME PRINT NAME: PRINT FIRM: 51 PRINT NAME: DATE: DATE: RECEIVED BY: RELINQUISHED BY TIME: PRINT NAME: PRINT NAME: TIME: FIRM: ADDITIONAL REMARKS:



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Bend

Anchorage

SLR Alaska Project: FIA Former Mark Air Facilities

2525 Blueberry Road, Suite 206 Project Number: 004.0184.00001 Reported: Anchorage, AK/USA 99503 Project Manager: Andy Dimitriou 12/01/04 19:06

#### ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
MW-6	B4K0219-01	Water	11/02/04 12:00	11/04/04 14:45
MW-10	B4K0219-02	Water	11/02/04 13:00	11/04/04 14:45
MW-8	B4K0219-03	Water	11/02/04 15:00	11/04/04 14:45
MW-12	B4K0219-04	Water	11/02/04 16:00	11/04/04 14:45
TRIP BLANK	B4K0219-05	Water	11/02/04 12:00	11/04/04 14:45

North Creek Analytical - Bothell

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SLR Alaska Project: FIA Former Mark Air Facilities

Project Number: 004.0184.00001 2525 Blueberry Road, Suite 206 Reported: Anchorage, AK/USA 99503 Project Manager: Andy Dimitriou 12/01/04 19:06

#### Residual Range Organics (C25-C36) by AK 103 North Creek Analytical - Bothell

		Reporting							
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-6 (B4K0219-01) Water	Sampled: 11/02/04 12	:00 Receive	ed: 11/04/0	4 14:45					
Residual Range Organics	ND	0.750	mg/l	1	4K09009	11/09/04	11/10/04	AK 103	
Surrogate: Octacosane	88.2 %	50-150			"	"	"	"	
MW-10 (B4K0219-02) Water	Sampled: 11/02/04 1	3:00 Receiv	ed: 11/04/	04 14:45					
Residual Range Organics	ND	0.750	mg/l	1	4K09009	11/09/04	11/10/04	AK 103	
Surrogate: Octacosane	85.6 %	50-150			"	"	"	"	

North Creek Analytical - Bothell

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> North Creek Analytical, Inc. Environmental Laboratory Network



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SLR Alaska Project: FIA Former Mark Air Facilities

2525 Blueberry Road, Suite 206 Project Number: 004.0184.00001 Reported: Anchorage, AK/USA 99503 Project Manager: Andy Dimitriou 12/01/04 19:06

## Gasoline Hydrocarbons (n-Hexane to <n-Decane) and BTEX by AK101/EPA 8021B North Creek Analytical - Bothell

		Reporting							
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-8 (B4K0219-03) Water Samp	led: 11/02/04 15	:00 Receive	ed: 11/04/04	4 14:45					
Gasoline Range Hydrocarbons	2200	50.0	ug/l	1	4K11002	11/11/04	11/12/04	AK 101	
Benzene	18.0	0.200	"	"	"	"	"	"	
Toluene	10.0	0.500	"	"	"	"	"	"	
Ethylbenzene	67.9	0.500	"	"	"	"	"	"	
Surrogate: 4-BFB (FID)	>200 %	60-120			"	"	"	"	S-04
Surrogate: 4-BFB (PID)	147 %	68-140			"	"	"	"	S-04
MW-8 (B4K0219-03RE1) Water S	ampled: 11/02/0	04 15:00 Re	ceived: 11/	04/04 14:45					
Xylenes (total)	550	5.00	ug/l	5	4K12008	11/12/04	11/12/04	AK 101	
Surrogate: 4-BFB (PID)	110 %	68-140			"	"	"	"	
MW-12 (B4K0219-04) Water Sam	pled: 11/02/04 1	6:00 Receiv	ved: 11/04/	04 14:45					
Gasoline Range Hydrocarbons	2020	50.0	ug/l	1	4K11002	11/11/04	11/12/04	AK 101	
Benzene	15.8	0.200	"	"	"	"	"	"	
Toluene	7.89	0.500	"	"	"	"	"	"	
Ethylbenzene	63.8	0.500	"	"	"	"	"	"	
Surrogate: 4-BFB (FID)	>200 %	60-120			"	"	"	"	S-04
Surrogate: 4-BFB (PID)	146 %	68-140			"	"	"	"	S-04
MW-12 (B4K0219-04RE1) Water	Sampled: 11/02	/04 16:00 R	eceived: 11	/04/04 14:4	5				
Xylenes (total)	498	5.00	ug/l	5	4K12008	11/12/04	11/13/04	AK 101	
Surrogate: 4-BFB (PID)	107 %	68-140			"	"	"	"	
TRIP BLANK (B4K0219-05) Water	Sampled: 11/	02/04 12:00	Received:	11/04/04 14	1:45				
Gasoline Range Hydrocarbons	ND	50.0	ug/l	1	4K11002	11/11/04	11/12/04	AK 101	
Benzene	ND	0.200	"	"	"	"	"	n	
Toluene	ND	0.500	"	"	"	"	"	n	
Ethylbenzene	ND	0.500	"	"	"	"	"	"	
Xylenes (total)	ND	1.00	"	"	"	"	"	"	
Surrogate: 4-BFB (FID)	94.6 %	60-120			"	"	"	"	
Surrogate: 4-BFB (PID)	89.0 %	68-140			"	"	"	"	

North Creek Analytical - Bothell

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SLR Alaska Project: FIA Former Mark Air Facilities

Project Number: 004.0184.00001 2525 Blueberry Road, Suite 206 Reported: Anchorage, AK/USA 99503 Project Manager: Andy Dimitriou 12/01/04 19:06

#### BTEX by EPA Method 8021B North Creek Analytical - Bothell

Anchorage

Analyte	l Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-6 (B4K0219-01) Water	Sampled: 11/02/04 12:00	Receive	d: 11/04/04	1 14:45					
Benzene	ND	0.200	ug/l	1	4K12008	11/12/04	11/12/04	EPA 8021B	
Toluene	ND	0.500	"	"	"	"	"	"	
Ethylbenzene	ND	0.500	"	"	"	"	"	"	
Xylenes (total)	ND	1.00	"	"	"	"	"	n .	
Surrogate: 4-BFB (PID)	92.3 % 6	8-140			"	"	"	"	
MW-10 (B4K0219-02) Water	Sampled: 11/02/04 13:0	00 Receiv	ed: 11/04/0	)4 14:45					
Benzene	ND	0.200	ug/l	1	4K15005	11/15/04	11/15/04	EPA 8021B	
Toluene	ND	0.500	"	"	"	"	"	"	
Ethylbenzene	ND	0.500	"	"	"	"	"	"	
Xylenes (total)	ND	1.00	"	"	"	"	"	"	
Surrogate: 4-BFB (PID)	88.3 % 6	8-140			"	"	"	"	

North Creek Analytical - Bothell

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SLR Alaska Project: FIA Former Mark Air Facilities

Project Number: 004.0184.00001 2525 Blueberry Road, Suite 206 Reported: Anchorage, AK/USA 99503 Project Manager: Andy Dimitriou 12/01/04 19:06

#### Total Metals by EPA 6000/7000 Series Methods North Creek Analytical - Bothell

Spokane

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-6 (B4K0219-01) Water	Sampled: 11/02/04 12	:00 Receive	d: 11/04/04	1 14:45					
Lead	0.00354	0.00100	mg/l	1	4K06009	11/06/04	11/12/04	EPA 6020	
MW-10 (B4K0219-02) Water	Sampled: 11/02/04 1	3:00 Receiv	ed: 11/04/(	)4 14:45					
Lead	0.00364	0.00100	mg/l	1	4K06009	11/06/04	11/12/04	EPA 6020	

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SLR Alaska Project: FIA Former Mark Air Facilities

2525 Blueberry Road, Suite 206 Project Number: 004.0184.00001 Reported: Anchorage, AK/USA 99503 Project Manager: Andy Dimitriou 12/01/04 19:06

#### Polynuclear Aromatic Compounds by GC/MS with Selected Ion Monitoring North Creek Analytical - Bothell

Spokane

		Reporting		_					
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Note
MW-8 (B4K0219-03) Water	Sampled: 11/02/04 15	:00 Received	1: 11/04/04	1 14:45					
1-Methylnaphthalene	41.6	0.500	ug/l	5	4K09010	11/09/04	11/16/04	8270C-SIM	
2-Methylnaphthalene	30.5	0.500	"	"	"	"	"	"	
Acenaphthene	ND	0.500	"	"	"	"	"	"	
Acenaphthylene	ND	0.500	"	"	"	"	"	"	
Anthracene	ND	0.500	"	"	"	"	"	"	
Benzo (a) anthracene	ND	0.500	"	"	"	"	"	"	
Benzo (a) pyrene	ND	0.500	"	"	"	"	"	"	
Benzo (b) fluoranthene	ND	0.500	"	"	"	"	"	"	
Benzo (ghi) perylene	ND	0.500	"	"	"	"	"	"	
Benzo (k) fluoranthene	ND	0.500	"	"	"	"	"	"	
Chrysene	ND	0.500	"	"	"	"	"	"	
Dibenz (a,h) anthracene	ND	0.500	"	"	"	"	"	"	
Fluoranthene	ND	0.500	"	"	"	"	"	"	
Fluorene	0.602	0.500	"	"	"	"	"	"	
Indeno (1,2,3-cd) pyrene	ND	0.500	"	"	"	"	"	"	
Naphthalene	86.2	0.500	"	"	"	"	"	"	
Phenanthrene	ND	0.500	"	"	"	"	"	"	
Pyrene	ND	0.500	"	"	"	"	"	"	
Surrogate: p-Terphenyl-d14	58.8 %	20-127			"	"	"	"	
MW-12 (B4K0219-04) Water	Sampled: 11/02/04 1	6:00 Receive	ed: 11/04/0	04 14:45					
1-Methylnaphthalene	33.0	0.200	ug/l	2	4K09010	11/09/04	11/16/04	8270C-SIM	
2-Methylnaphthalene	22.5	0.200	"	"	"	"	"	"	
Acenaphthene	ND	0.200				"		"	
Acenaphthylene		0.200	"	"	"	"	"	"	
Anthracene	ND	0.200	"	"	"	"	"	"	
Antinacene									
Benzo (a) anthracene	ND	0.200	"	"	"	"	"	"	
Benzo (a) anthracene	ND ND	0.200 0.200	"	"	"	"	"	"	
Benzo (a) anthracene Benzo (a) pyrene	ND ND ND	0.200 0.200 0.200	" "	"	" "	"	" "	11 11	
	ND ND ND ND	0.200 0.200 0.200 0.200	" "	" " "	" "	" " "	" " "	11 11 11	
Benzo (a) anthracene Benzo (a) pyrene Benzo (b) fluoranthene Benzo (ghi) perylene	ND ND ND ND	0.200 0.200 0.200 0.200 0.200	" " " " " " " " " " " " " " " " " " " "	11 11 11	" " " " " " " " " " " " " " " " " " " "	" " " " " " " " " " " " " " " " " " " "	n n n	11 11 11	
Benzo (a) anthracene Benzo (a) pyrene Benzo (b) fluoranthene Benzo (ghi) perylene Benzo (k) fluoranthene	ND ND ND ND ND ND	0.200 0.200 0.200 0.200 0.200 0.200	" " " " " " " " " " " " " " " " " " " "	" " " " " "	" " " " " " " " " " " " " " " " " " " "	" " " " " " " " " " " " " " " " " " " "	n n n	11 11 11 11	
Benzo (a) anthracene Benzo (a) pyrene Benzo (b) fluoranthene Benzo (ghi) perylene Benzo (k) fluoranthene Chrysene	ND ND ND ND ND ND	0.200 0.200 0.200 0.200 0.200 0.200 0.200	n n n	" " " " " " "	" " " " " " " " " " " " " " " " " " "	11 11 11 11 11	n n n n	11 11 11 11	
Benzo (a) anthracene Benzo (a) pyrene Benzo (b) fluoranthene Benzo (ghi) perylene Benzo (k) fluoranthene Chrysene Dibenz (a,h) anthracene	ND	0.200 0.200 0.200 0.200 0.200 0.200 0.200 0.200	11 11 11 11 11	" " " " " " " "	" " " " " " " " " " " " " " " " " " "	0	n n n n	11 11 11 11 11	
Benzo (a) anthracene Benzo (a) pyrene Benzo (b) fluoranthene Benzo (ghi) perylene Benzo (k) fluoranthene Chrysene Dibenz (a,h) anthracene Fluoranthene	ND	0.200 0.200 0.200 0.200 0.200 0.200 0.200 0.200 0.200	0 0 0 0 0	" " " " " " " " " " "	" " " " " " " " " " " " " " " " " " "	0	n n n n	11 11 11 11 11 11 11 11 11 11 11 11 11	
Benzo (a) anthracene Benzo (a) pyrene Benzo (b) fluoranthene	ND N	0.200 0.200 0.200 0.200 0.200 0.200 0.200 0.200 0.200 0.200	" " " " " " " " " " "	" " " " " " " " " " " "	" " " " " " " " " " " " " " " " " " "	0	n n n n		
Benzo (a) anthracene Benzo (a) pyrene Benzo (b) fluoranthene Benzo (ghi) perylene Benzo (k) fluoranthene Chrysene Dibenz (a,h) anthracene Fluoranthene	ND N	0.200 0.200 0.200 0.200 0.200 0.200 0.200 0.200 0.200 0.200 0.200							

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SLR Alaska Project: FIA Former Mark Air Facilities

2525 Blueberry Road, Suite 206 Project Number: 004.0184.00001 Reported: Anchorage, AK/USA 99503 Project Manager: Andy Dimitriou 12/01/04 19:06

#### Polynuclear Aromatic Compounds by GC/MS with Selected Ion Monitoring North Creek Analytical - Bothell

		Reporting							
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-12 (B4K0219-04) Water	Sampled: 11/02/04 1	6:00 Receiv	ed: 11/04/	04 14:45					
Pyrene	ND	0.200	ug/l	2	4K09010	11/09/04	11/16/04	8270C-SIM	
Surrogate: p-Terphenyl-d14	66.0 %	20-127			"	"	"	"	_

North Creek Analytical - Bothell

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Project: FIA Former Mark Air Facilities SLR Alaska

2525 Blueberry Road, Suite 206 Project Number: 004.0184.00001 Reported: Anchorage, AK/USA 99503 Project Manager: Andy Dimitriou 12/01/04 19:06

## Residual Range Organics (C25-C36) by AK 103 - Quality Control North Creek Analytical - Bothell

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 4K09009: Prepared 11/09/04	Using I	EPA 3520C								
Blank (4K09009-BLK1)										
Residual Range Organics	ND	0.750	mg/l							
Surrogate: Octacosane	0.205		"	0.240		85.4	50-150			
LCS (4K09009-BS2)										
Residual Range Organics	1.60	0.750	mg/l	2.00		80.0	60-120			
Surrogate: Octacosane	0.194		"	0.240		80.8	50-150			
LCS Dup (4K09009-BSD2)										
Residual Range Organics	1.90	0.750	mg/l	2.00		95.0	60-120	17.1	20	
Surrogate: Octacosane	0.209		"	0.240		87.1	50-150			

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%REC

RPD

SLR Alaska Project: FIA Former Mark Air Facilities

Reporting

2525 Blueberry Road, Suite 206 Project Number: 004.0184.00001 Reported: Anchorage, AK/USA 99503 Project Manager: Andy Dimitriou 12/01/04 19:06

## Gasoline Hydrocarbons (n-Hexane to <n-Decane) and BTEX by AK101/EPA 8021B - Quality Control North Creek Analytical - Bothell

Spike

		Reporting		Spike	Source		/OKEC		KI D	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch 4K11002: Prepared 11/11	1/04 Using E	PA 5030B	(P/T)							
Blank (4K11002-BLK1)										
Gasoline Range Hydrocarbons	ND	50.0	ug/l							
Benzene	ND	0.200	"							
Γoluene	ND	0.500	"							
Ethylbenzene	ND	0.500	"							
Kylenes (total)	ND	1.00	"							
Surrogate: 4-BFB (FID)	47.4		"	48.0		98.8	60-120			
'urrogate: 4-BFB (PID)	44.8		"	48.0		93.3	68-140			
LCS (4K11002-BS1)										
Gasoline Range Hydrocarbons	565	50.0	ug/l	502		113	60-120			
Benzene	6.17	0.200	"	6.21		99.4	80-120			
Toluene	34.4	0.500	"	34.9		98.6	80-120			
Ethylbenzene	9.08	0.500	"	8.38		108	80-120			
Kylenes (total)	44.4	1.00	"	40.6		109	80-120			
Surrogate: 4-BFB (FID)	55.7		"	48.0		116	60-120			
Surrogate: 4-BFB (PID)	45.9		"	48.0		95.6	68-140			
LCS Dup (4K11002-BSD1)										
Gasoline Range Hydrocarbons	547	50.0	ug/l	502		109	60-120	3.24	20	
Benzene	6.14	0.200	"	6.21		98.9	80-120	0.487	25	
oluene	34.3	0.500	"	34.9		98.3	80-120	0.291	25	
Ethylbenzene	8.96	0.500	"	8.38		107	80-120	1.33	25	
Kylenes (total)	43.9	1.00	"	40.6		108	80-120	1.13	25	
urrogate: 4-BFB (FID)	51.8		"	48.0		108	60-120			
Surrogate: 4-BFB (PID)	46.1		"	48.0		96.0	68-140			
Matrix Spike (4K11002-MS1)					Source: F	34J1036-1	1			
Gasoline Range Hydrocarbons	608	50.0	ug/l	502	141	93.0	60-120			
Benzene	6.84	0.200	"	6.21	0.753	98.0	46-130			
Coluene	32.1	0.500	"	34.9	0.232	91.3	60-124			
Ethylbenzene	8.69	0.500	"	8.38	ND	104	56-141			
Kylenes (total)	42.0	1.00	"	40.6	1.06	101	66-132			
Surrogate: 4-BFB (FID)	55.4		"	48.0		115	60-120			
Surrogate: 4-BFB (PID)	47.3		"	48.0		98.5	68-140			

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SLR Alaska Project: FIA Former Mark Air Facilities

2525 Blueberry Road, Suite 206 Project Number: 004.0184.00001 Reported: Anchorage, AK/USA 99503 Project Manager: Andy Dimitriou 12/01/04 19:06

## Gasoline Hydrocarbons (n-Hexane to <n-Decane) and BTEX by AK101/EPA 8021B - Quality Control North Creek Analytical - Bothell

Spokane

			Reporting		Spike	Source		%REC		RPD	
Analyte		Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch 4K11002:	<b>Prepared 11/11/04</b>	Using E	PA 5030B	(P/T)							
Matrix Spike Dup (	4K11002-MSD1)					Source: I	<b>34J1036-</b> 1	11			
Gasoline Range Hydrod	carbons	551	50.0	ug/l	502	141	81.7	60-120	9.84	20	
Benzene		6.19	0.200	"	6.21	0.753	87.6	46-130	9.98	40	
Toluene		29.4	0.500	"	34.9	0.232	83.6	60-124	8.78	40	
Ethylbenzene		7.78	0.500	"	8.38	ND	92.8	56-141	11.1	40	
Xylenes (total)		38.5	1.00	"	40.6	1.06	92.2	66-132	8.70	40	
Surrogate: 4-BFB (FID	))	56.4		"	48.0		118	60-120			
Surrogate: 4-BFB (PID	))	48.3		"	48.0		101	68-140			
Batch 4K12008:	<b>Prepared 11/12/04</b>	Using E	PA 5030B	(P/T)							
Blank (4K12008-BI	LK1)										
Xylenes (total)		ND	1.00	ug/l							
Surrogate: 4-BFB (PID	))	42.6		"	48.0		88.8	68-140			
LCS (4K12008-BS1	)										
Xylenes (total)		40.3	1.00	ug/l	40.6		99.3	80-120			
Surrogate: 4-BFB (PID	0)	46.4		"	48.0		96.7	68-140			
LCS Dup (4K12008	3-BSD1)										
Xylenes (total)		42.3	1.00	ug/l	40.6		104	80-120	4.84	25	
Surrogate: 4-BFB (PID	))	46.5		"	48.0		96.9	68-140			
Matrix Spike (4K12	2008-MS1)					Source: I	34K0223-	01			
Xylenes (total)		45.8	1.00	ug/l	40.6	ND	113	66-132			
Surrogate: 4-BFB (PID	))	46.9		"	48.0		97.7	68-140			
Matrix Spike Dup (	4K12008-MSD1)					Source: I	34K0223-	01			
Xylenes (total)		46.3	1.00	ug/l	40.6	ND	114	66-132	1.09	40	
Surrogate: 4-BFB (PID	))	46.6		"	48.0		97.1	68-140			

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SLR Alaska Project: FIA Former Mark Air Facilities

Project Number: 004.0184.00001 2525 Blueberry Road, Suite 206 Reported: Anchorage, AK/USA 99503 Project Manager: Andy Dimitriou 12/01/04 19:06

#### BTEX by EPA Method 8021B - Quality Control North Creek Analytical - Bothell

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch 4K12008: Prepared 11/12/0	4 Using l	EPA 5030B	(P/T)							
Blank (4K12008-BLK1)										
Benzene	ND	0.200	ug/l							
Toluene	ND	0.500	"							
Ethylbenzene	ND	0.500	"							
Xylenes (total)	ND	1.00	"							
Surrogate: 4-BFB (PID)	42.6		"	48.0		88.8	68-140			
LCS (4K12008-BS1)										
Benzene	5.64	0.200	ug/l	6.21		90.8	80-120			
Toluene	31.4	0.500	"	34.9		90.0	80-120			
Ethylbenzene	8.26	0.500	"	8.38		98.6	80-120			
Xylenes (total)	40.3	1.00	"	40.6		99.3	80-120			
Surrogate: 4-BFB (PID)	46.4		"	48.0		96.7	68-140			
LCS Dup (4K12008-BSD1)										
Benzene	5.91	0.200	ug/l	6.21		95.2	80-120	4.68	25	
Toluene	32.9	0.500	"	34.9		94.3	80-120	4.67	25	
Ethylbenzene	8.63	0.500	"	8.38		103	80-120	4.38	25	
Xylenes (total)	42.3	1.00	"	40.6		104	80-120	4.84	25	
Surrogate: 4-BFB (PID)	46.5		"	48.0		96.9	68-140			
Matrix Spike (4K12008-MS1)					Source: E	34K0223-	01			
Benzene	6.43	0.200	ug/l	6.21	ND	104	46-130			
Toluene	35.9	0.500	"	34.9	0.112	103	60-124			
Ethylbenzene	9.33	0.500	"	8.38	ND	111	56-141			
Xylenes (total)	45.8	1.00	"	40.6	ND	113	66-132			
Surrogate: 4-BFB (PID)	46.9		"	48.0		97.7	68-140			
Matrix Spike Dup (4K12008-MSD1)					Source: E	34K0223-	01			
Benzene	6.54	0.200	ug/l	6.21	ND	105	46-130	1.70	40	
Toluene	36.5	0.500	"	34.9	0.112	104	60-124	1.66	40	
Ethylbenzene	9.40	0.500	"	8.38	ND	112	56-141	0.747	40	
Xylenes (total)	46.3	1.00	"	40.6	ND	114	66-132	1.09	40	
Surrogate: 4-BFB (PID)	46.6		"	48.0		97.1	68-140			

North Creek Analytical - Bothell



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SLR Alaska Project: FIA Former Mark Air Facilities

Project Number: 004.0184.00001 2525 Blueberry Road, Suite 206 Reported: Anchorage, AK/USA 99503 Project Manager: Andy Dimitriou 12/01/04 19:06

#### BTEX by EPA Method 8021B - Quality Control North Creek Analytical - Bothell

Anchorage

			Reporting		Spike	Source		%REC		RPD	
Analyte		Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch 4K15005:	Prepared 11/15/04	Using 1	EPA 5030B	(P/T)							
Blank (4K15005-BLK	(1)										
Benzene		ND	0.200	ug/l							
Toluene		ND	0.500	"							
Ethylbenzene		ND	0.500	"							
Xylenes (total)		ND	1.00	"							
Surrogate: 4-BFB (PID)		41.8		"	48.0		87.1	68-140			
LCS (4K15005-BS1)											
Benzene		6.30	0.200	ug/l	6.21		101	80-120			
Toluene		33.3	0.500	"	34.9		95.4	80-120			
Ethylbenzene		9.21	0.500	"	8.38		110	80-120			
Xylenes (total)		44.4	1.00	"	40.6		109	80-120			
Surrogate: 4-BFB (PID)		46.4		"	48.0		96.7	68-140			
LCS Dup (4K15005-B	SD1)										
Benzene		6.46	0.200	ug/l	6.21		104	80-120	2.51	25	
Toluene		33.8	0.500	"	34.9		96.8	80-120	1.49	25	
Ethylbenzene		9.31	0.500	"	8.38		111	80-120	1.08	25	
Xylenes (total)		44.9	1.00	"	40.6		111	80-120	1.12	25	
Surrogate: 4-BFB (PID)		46.7		"	48.0		97.3	68-140			
Matrix Spike (4K1500	05-MS1)					Source: E	34K0193-	02			
Benzene		6.80	0.200	ug/l	6.21	ND	110	46-130			
Toluene		35.0	0.500	"	34.9	ND	100	60-124			
Ethylbenzene		9.44	0.500	"	8.38	ND	113	56-141			
Xylenes (total)		46.1	1.00	"	40.6	ND	114	66-132			
Surrogate: 4-BFB (PID)		46.0		"	48.0		95.8	68-140			
Matrix Spike Dup (4F	K15005-MSD1)					Source: E	34K0193-	02			
Benzene		6.45	0.200	ug/l	6.21	ND	104	46-130	5.28	40	
Toluene		35.4	0.500	"	34.9	ND	101	60-124	1.14	40	
Ethylbenzene		9.20	0.500	"	8.38	ND	110	56-141	2.58	40	
Xylenes (total)		45.1	1.00	"	40.6	ND	111	66-132	2.19	40	
Surrogate: 4-BFB (PID)		45.9		"	48.0		95.6	68-140			

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%REC

RPD

SLR Alaska Project: FIA Former Mark Air Facilities

Reporting

2525 Blueberry Road, Suite 206 Project Number: 004.0184.00001 Reported: Anchorage, AK/USA 99503 Project Manager: Andy Dimitriou 12/01/04 19:06

## Total Metals by EPA 6000/7000 Series Methods - Quality Control North Creek Analytical - Bothell

Spike

Analyte		Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch 4K06009:	<b>Prepared 11/06/04</b>	Using E	PA 3020A								
Blank (4K06009-BL	K1)										
Lead		ND	0.00100	mg/l							
LCS (4K06009-BS1)	)										
Lead		0.0802	0.00100	mg/l	0.0800		100	80-120			
LCS Dup (4K06009-	-BSD1)										
Lead		0.0773	0.00100	mg/l	0.0800		96.6	80-120	3.68	20	
Matrix Spike (4K06	009-MS1)					Source: B	4K0150-0	02			
Lead		0.0815	0.00100	mg/l	0.0800	0.000630	101	78-125			
Matrix Spike Dup (4	4K06009-MSD1)					Source: B	4K0150-0	02			
Lead		0.0796	0.00100	mg/l	0.0800	0.000630	98.7	78-125	2.36	20	
Post Spike (4K06009	9-PS1)					Source: B	4K0150-0	02			
Lead		0.0973		ug/ml	0.0995	0.000630	97.2	75-125			

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SLR Alaska Project: FIA Former Mark Air Facilities

2525 Blueberry Road, Suite 206 Project Number: 004.0184.00001 Reported: Anchorage, AK/USA 99503 Project Manager: Andy Dimitriou 12/01/04 19:06

## Polynuclear Aromatic Compounds by GC/MS with Selected Ion Monitoring - Quality Control **North Creek Analytical - Bothell**

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch 4K09010: Prepared 11/09/04	Using	EPA 3520C								
Blank (4K09010-BLK1)										
1-Methylnaphthalene	ND	0.100	ug/l							
2-Methylnaphthalene	ND	0.100	"							
Acenaphthene	ND	0.100	"							
Acenaphthylene	ND	0.100	"							
Anthracene	ND	0.100	"							
Benzo (a) anthracene	ND	0.100	"							
Benzo (a) pyrene	ND	0.100	"							
Benzo (b) fluoranthene	ND	0.100	"							
Benzo (ghi) perylene	ND	0.100	"							
Benzo (k) fluoranthene	ND	0.100	"							
Chrysene	ND	0.100	"							
Dibenz (a,h) anthracene	ND	0.100	"							
Fluoranthene	ND	0.100	"							
Fluorene	ND	0.100	"							
Indeno (1,2,3-cd) pyrene	ND	0.100	"							
Naphthalene	ND	0.100	"							
Phenanthrene	ND	0.100	"							
Pyrene	ND	0.100	"							
Surrogate: p-Terphenyl-d14	56.1		"	50.0		112	20-127			
LCS (4K09010-BS2)										
1-Methylnaphthalene	13.8	0.100	ug/l	20.0		69.0	41-120			
2-Methylnaphthalene	14.2	0.100	"	20.0		71.0	42-120			
Acenaphthene	17.7	0.100	"	20.0		88.5	34-120			
Acenaphthylene	19.2	0.100	"	20.0		96.0	36-120			
Anthracene	23.2	0.100	"	20.0		116	35-138			
Benzo (a) anthracene	19.6	0.100	"	20.0		98.0	41-121			
Benzo (a) pyrene	23.4	0.100	"	20.0		117	33-125			
Benzo (b) fluoranthene	25.5	0.100	"	20.0		128	35-133			
Benzo (ghi) perylene	17.2	0.100	"	20.0		86.0	25-121			
Benzo (k) fluoranthene	21.1	0.100	"	20.0		106	28-127			
Chrysene	21.1	0.100	"	20.0		106	41-120			
Dibenz (a,h) anthracene										
	16.4	0.100	"	20.0		82.0	24-120			
Fluoranthene	16.4 19.7	0.100 0.100	"	20.0 20.0		82.0 98.5	24-120 33-137			

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## Polynuclear Aromatic Compounds by GC/MS with Selected Ion Monitoring - Quality Control **North Creek Analytical - Bothell**

			Reporting		Spike	Source		%REC		RPD	
Analyte		Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch 4K09010:	<b>Prepared 11/09/04</b>	Using El	PA 3520C								
LCS (4K09010-BS2)											
Indeno (1,2,3-cd) pyrene		16.0	0.100	ug/l	20.0		80.0	26-122			
Naphthalene		14.1	0.100	"	20.0		70.5	38-120			
Phenanthrene		19.7	0.100	"	20.0		98.5	31-127			
Pyrene		23.0	0.100	"	20.0		115	42-125			
Surrogate: p-Terphenyl-	d14	53.8		"	50.0		108	20-127			
LCS Dup (4K09010-	BSD2)										
1-Methylnaphthalene		12.6	0.100	ug/l	20.0		63.0	41-120	9.09	30	
2-Methylnaphthalene		12.7	0.100	"	20.0		63.5	42-120	11.2	30	
Acenaphthene		15.4	0.100	"	20.0		77.0	34-120	13.9	30	
Acenaphthylene		16.8	0.100	"	20.0		84.0	36-120	13.3	30	
Anthracene		19.4	0.100	"	20.0		97.0	35-138	17.8	30	
Benzo (a) anthracene		15.8	0.100	"	20.0		79.0	41-121	21.5	30	
Benzo (a) pyrene		18.6	0.100	"	20.0		93.0	33-125	22.9	30	
Benzo (b) fluoranthene		20.5	0.100	"	20.0		102	35-133	21.7	30	
Benzo (ghi) perylene		15.0	0.100	"	20.0		75.0	25-121	13.7	30	
Benzo (k) fluoranthene		15.8	0.100	"	20.0		79.0	28-127	28.7	30	
Chrysene		17.7	0.100	"	20.0		88.5	41-120	17.5	30	
Dibenz (a,h) anthracene		13.5	0.100	"	20.0		67.5	24-120	19.4	30	
Fluoranthene		15.9	0.100	"	20.0		79.5	33-137	21.3	30	
Fluorene		16.2	0.100	"	20.0		81.0	42-120	19.5	30	
Indeno (1,2,3-cd) pyrene		13.4	0.100	"	20.0		67.0	26-122	17.7	30	
Naphthalene		12.9	0.100	"	20.0		64.5	38-120	8.89	30	
Phenanthrene		17.0	0.100	"	20.0		85.0	31-127	14.7	30	
Pyrene		20.2	0.100	"	20.0		101	42-125	13.0	30	
Surrogate: p-Terphenyl-	d14	46.2		"	50.0		92.4	20-127			

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Project Number: 004.0184.00001 2525 Blueberry Road, Suite 206 Reported: Anchorage, AK/USA 99503 Project Manager: Andy Dimitriou 12/01/04 19:06

Anchorage

#### **Notes and Definitions**

S-04 The surrogate recovery for this sample is outside of established control limits due to a sample matrix effect.

DET Analyte DETECTED

Analyte NOT DETECTED at or above the reporting limit ND

NR Not Reported

Sample results reported on a dry weight basis dry

RPD Relative Percent Difference

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North Creek Analytical, Inc. Environmental Laboratory Network Amar Gill, Project Manager

## APPENDIX B PHOTOGRAPHIC LOG

## **APPENDIX C**

## SOIL BORING LOGS, MONITORING WELL AND WELL POINT COMPLETION DETAILS, AND MONITORING WELL SAMPLING DATA SHEETS

# APPENDIX D FIELD NOTES

## APPENDIX E WELL SURVEY DATA

## APPENDIX F IDW INVENTORY AND DISPOSITION