

1401 Erie Blvd. East Syracuse, NY 13210 Phone 315-478-2374 Fax 315-478-2107

ALASKAN OIL, INC. PRELIMINARY SUBSURFACE INVESTIGATION

ROUTE 13 & CEMETERY STREET ALTMAR, NEW YORK

NYSDEC SPILL ID #9614774



1401 Erie Blvd. East Syracuse, NY 13210 Phone 315-478-2374 Fax 315-478-2107

ALASKAN OIL, INC. ROUTE 13 & CEMETERY STREET ALTMAR, NEW YORK

NYSDEC SPILL NO. 9614774

PRELIMINARY SUBSURFACE INVESTIGATION

PREPARED FOR:

Alaskan Oil, Inc. 500 Solar Street Syracuse, New York

&

New York State Department of Environmental Conservation

PREPARED BY:

Certified Environmental Services, Inc. 1401 Erie Boulevard East Syracuse, New York



1401 Erie Blvd. East Syracuse, NY 13210 Phone 315-478-2374 Fax 315-478-2107

TABLE OF CONTENTS

	SECTION	<u>PAGE</u>
1.0	INTRODUCTION	1
2.0	SCOPE OF WORK	5
	 2.1 Soil Boring Advancement 2.2 Soil Analytical Sampling 2.3 Groundwater Monitoring Well Installation 2.4 Groundwater Monitoring Well Development and Survey 2.5 Groundwater Analytical Sampling 	6 7 7 8 8
3.0	LABORATORY ANALYTICAL RESULTS	10
	3.1 Soil Laboratory Analytical Results3.2 Groundwater Analytical Results	10 11
4.0	CONCLUSIONS	12
5.0	RECOMMENDATIONS	13

APPENDICES

Appendix A

Figure - 1	Site Map/Soil Boring and Groundwater Monitoring Well Locations
Figure - 2	Groundwater Elevation Contour and Flow Direction Map
Figure - 3	USGS Topographic Map, Richland Quadrangle Partial

Appendix B

Soil Boring Logs Groundwater Monitoring Well Construction Details

Appendix C

Summary of Soil and Groundwater Laboratory Analytical Data Groundwater Elevation Data

Appendix D

Soil Laboratory Analytical Reports Groundwater Laboratory Analytical Reports



1401 Erie Blvd. East Syracuse, NY 13210 Phone 315-478-2374 Fax 315-478-2107

1.0 INTRODUCTION

On behalf of Alaskan Oil, Inc. (AOI), Certified Environmental Services, Inc. (CES) is pleased to submit this preliminary subsurface soil and groundwater investigation report associated with the AOI property located at Route 13 & Cemetery Street, Altmar, New York. This investigation was conducted in accordance with the Multi-Site Response Program/Voluntary Cleanup Agreement (Agreement), Index Number D7-0002-95-09, between Alaskan Oil and the New York State Department of Environmental Conservation (NYSDEC). As such, to maintain compliance with the Agreement the site must be closed under either Tier 0, Tier I, Tier II or Tier III as outlined in the Agreement.

As specified in the Agreement, site closure under Tier 0 would occur when initial response actions to a spill result in the removal of most if not all of the petroleum-contaminated material spilled and/or the impacted soil before off-site impacts to the groundwater occur. Also, Tier 0 closure may occur if the NYSDEC assessment of the site finds that it is not likely to pose an unacceptable level of risk because the spilled material has been removed. Tier I closure involves development of site conceptual exposure scenarios (SCES) for the source-pathway-receptor-route combinations through which potential routes of human exposure may result in the uptake of chemicals. Both current and potential future conditions must be examined. Once developed, site concentrations from relevant SCES are compared to established Tier I levels. If site concentrations are found at or below Tier I levels, the site would be closed under Tier I. Site closure under Tier II and III involves development of site specific target levels. Closure under Tier II or III is pursued only if Tier 0 and Tier I closure is not possible.

In an effort to identify and delineate soil and groundwater petroleum hydrocarbon contamination, on March 24, 1997 six (6) soil borings were advanced and four groundwater monitoring wells were installed beneath the AOI property. A scaled map of the site which illustrates the location of the soil borings and groundwater monitoring well locations is included as Figure 1 in Appendix A.



1.0 INTRODUCTION (Cont'd)

Rotary hollow stem augers were utilized to advance the soil borings. Soil grab samples were retrieved from two inch diameter split spoon samplers. The soils retrieved during drilling activities were screened for volatile organic compounds (VOC's) utilizing a photoionization detector (PID) meter. Soils retrieved from two to eight feet below grade at monitoring well MW-1 exhibited PID readings ranging from 126 to 1,110 parts per million (ppm). Soils retrieved from monitoring wells MW-2, MW-3 or MW-4 and soil borings SB-1 and SB-2 did not exhibit PID headspace readings above background concentrations.

Soil grab samples collected from four (4) to six (6) feet below grade for soil borings MW-2, MW-3, SB-1 and SB-2 and from six (6) to eight (8) feet below grade for soil borings MW-1 and MW-4. The six soil grab samples were submitted to CES environmental laboratory for VOC analyses in accordance with USEPA Method 8021 and semi-volatile organic compound (SVOC) analyses in accordance with USEPA Method 8270.

Laboratory analytical results from the soil samples collected from MW-3, MW-4 and SB-1 indicate compliance with NYSDEC Spill Technology And Remediation Series (STARS) guidance values for the VOC and SVOC parameters and detection limits for which the analyses was conducted. Laboratory analytical results from the soil samples collected from MW-1, MW-2 and SB-2 indicate compliance with NYSDEC STARS guidance values for the SVOC's however, indicated numerous VOC concentrations which exceed NYSDEC STARS TCLP alternative guidance values. Results from laboratory analyses conducted on the soil sample collected from MW-1 identified a total BTEX concentration of 3,285 parts per billion (ppb) or 3.3ppm.



1.0 INTRODUCTION (Cont'd)

As outlined in Section I.B.2(b)(i) of the Voluntary Agreement, saturated soils are those soils which exhibit a level of total BTEX (Benzene, Toluene, Ethylbenzene, and Xylene) greater than 300ppm or a level of polyaromatic hydrocarbons (PAH), as defined by NYSDEC STARS memorandum #2, greater than 500ppm as measured on a composite sample by a PID; or if laboratory analytical methods are used, with a level of total BTEX greater than 2000ppm or PAH greater than 2500ppm. Therefore, those contaminated soils found on-site are not considered saturated and may be evaluated under Tier I closure criteria for the site.

Once installed the monitoring wells were developed, surveyed and sampled by CES personnel. Groundwater samples were then submitted to CES laboratory for volatile analyses in accordance with USEPA Method 8021 and semi-volatile analyses in accordance with USEPA Method 8100. Results from the USEPA Methods 8021 and 8100 laboratory analyses conducted on the groundwater samples collected from MW-2, MW-3 and MW-4 indicate compliance with NYSDEC Water Quality Standards and Guidance Values. Results from the USEPA Method 8021 analyses conducted on the groundwater sample collected from MW-1 detected numerous concentrations of contaminants exceeding NYSDEC Water Quality Standards and Guidance Values. Results from the USEPA Method 8100 laboratory analyses conducted on the groundwater sample collected from MW-1 revealed a concentration of Naphthalene (193 µg/L) which exceeded NYSDEC Water Quality Standards and Guidance Values by 183 $\mu g/L$.

A groundwater elevation contour and flow direction map was created utilizing the relative elevation and position survey information and groundwater elevation data collected on March 26, 1997. As expected, the contoured groundwater elevation data indicates that the groundwater beneath the AOI facility is flowing west to southwesterly across the site. The March 26, 1997 groundwater elevation data is included as Appendix C.



1.0 INTRODUCTION (Cont'd)

An additional water sample was collected on March 28, 1997 from the kitchen sink in the mini-mart building. The sample was submitted for laboratory analysis in accordance with USEPA Method 8021. Results of laboratory analysis did not reveal the presence of a detectable concentration of petroleum contaminants for the laboratory parameters and detection limits for which the analysis was conducted. Therefore, the sample collected from the on-site drinking water well indicates compliance with NYSDEC Water Quality Standards and Guidance Values. In protection of the on-site drinking water supply, CES recommends that an activated carbon water treatment system be installed on the drinking water supply at the station. The system should be routinely sampled and analyzed in accordance with USEPA Method 503.1 plus Methyl-t-Butyl Ether (MTBE).

CES recommends that three additional groundwater monitoring wells be installed surrounding the Alaskan Oil property. Proposed well MW-5 should be installed on the west side of Route 13 to delineate the downgradient edge of the plume. Proposed well MW-6 should be installed in the northwest corner of the AOI property or in the NYSDOT Route 13 Right-of-Way. Monitoring well MW-7 should be installed in the NYSDOT Right-of-Way on the south side of Cemetery Street. CES recommends that monitoring wells MW-1 through MW-4 and proposed wells MW-5, MW-6 and MW-7 be sampled on a quarterly basis for analyses in accordance with USEPA Methods 8021 and 8100.

Following the installation and sampling of the additional groundwater monitoring well, a Risk-Based Corrective Action (RBCA) evaluation of the site will be performed. The evaluation will include conducting a full receptor survey along with developing site conceptual exposure scenarios (SCES) for the source-pathway-receptor-route combinations through which potential routes of human exposure may result. Following the installation and sampling of the additional monitoring wells and soil mitigation, soil and groundwater concentrations associated with the site will be compared to relevant RBCA closure values. Please note that drinking water supply wells service the site and surrounding vicinity. The location of all downgradient drinking water wells will be identified during the receptor survey.



2.0 SCOPE OF WORK

AOI provided the equipment, labor and materials to advance the soil borings and install the groundwater monitoring wells. Certified Environmental Services, Inc. (CES), an environmental laboratory and consulting firm, was retained by AOI to provide a geologist on-site during the drilling activities to visually classify the soil samples retrieved and screen soil for volatile organic compounds (VOC's) with a photoionization detector (PID) meter. CES personnel composited individual soil grab samples and collected groundwater samples. Soil and groundwater samples were submitted to CES NYSDOH approved laboratory (Environmental Laboratory Approval Program #11246) for analyses.

2.1 Soil Boring Advancement

A preliminary subsurface investigation was conducted to identify and delineate soil and groundwater petroleum hydrocarbon contamination beneath the Alaskan Oil, Inc. (AOI) property located at Route 13 & Cemetery Street in Altmar, New York. A total of six (6) soil borings (MW-1, MW-2, MW-3, MW-4, SB-1 and SB-2) were advanced across the AOI property. Four of the soil borings were completed as monitoring wells MW-1, MW-2, MW-3 and MW-4. A scaled map of the site illustrating the location of the soil borings and groundwater monitoring well locations is included as Figure 1 in Appendix A.

The six (6) soil borings were advanced to desired depth utilizing 4 1/4-inch inside diameter (I.D.) hollow stem augers. Soil samples were recovered continuously in accordance with ASTM Method 1586-D (Split-Barrel Sampling) using a 2-inch outside diameter (O.D.) split-barrel sampler.



2.1 Soil Boring Advancement (Cont'd)

Soil encountered during the advancement of the six (6) soil borings was composed of predominantly brown fine sand and silt with varying percentages of other constituents such as course and medium sand. During the soil boring advancement, groundwater was encountered at approximately four feet below grade. Soil retrieved from the split spoon sampling tubes were screened for VOC's with a PID meter. As indicated on the soil boring logs provided in Appendix B, PID soil headspace readings were measured as high as 1,110ppm at two to four feet below grade during the advancement of soil boring MW-1. No PID soil readings were measured in remaining soil borings.

2.2 Soil Analytical Sampling

Soil grab samples were collected from the soil samples recovered from four (4) to six (6) feet below grade for MW-2, MW-3, SB-1 and SB-2, and from six (6) to eight (8) feet below grade for MW-1 and MW-4. Soil samples were placed in laboratory supplied glass jars, preserved on ice, and transported accompanied by Chain-of-Custody documentation to CES laboratory located in Syracuse, New York. The soil samples were submitted to CES laboratory for total analyses in accordance with United States Environmental Protection Agency (USEPA) Method 8021 and USEPA Method 8270.



2.3 Groundwater Monitoring Well Installation

Upon reaching the desired depth at four (4) designated soil boring locations, a groundwater monitoring well was installed into the boreholes. The groundwater monitoring wells were constructed of a ten (10) foot length of 0.010-inch slot size, Schedule 40 PVC screen and an appropriate length of 2-inch I.D. Schedule 40 riser. The annulus between the soil boring side and the monitoring well material was filled from the bottom of the soil boring to above the top of the well screen with #3Q washed silica sand filter pack. A bentonite seal was installed above the sand filter pack. Α cement/bentonite grout was installed into the well annulus from the top of the bentonite seal to the ground surface. The monitoring well screen was positioned in the soil boring so as the groundwater table would consistently intersect the wells screened interval. An attempt was made to screen the groundwater table with the monitoring well screen to aid in the identification of possible petroleum which may have been floating atop the groundwater. At the ground surface each monitoring well was finished at grade with a flushmount protective casing and a locking compression cap. The Groundwater Monitoring Well Construction Details and Soil Boring Logs are included in Appendix B.

2.4 Groundwater Monitoring Well Development and Survey

Upon completion of the four (4) groundwater monitoring wells, each well was developed utilizing a bottom filling disposable bailer. The monitoring wells were developed to remove suspended fine material from the well and entrained fine material from the sand filter pack.

Following the installation of the groundwater monitoring wells and casing, a relative horizontal position and elevation survey was conducted on the top of the well casings. The relative elevation and horizontal position of the top of each groundwater monitoring well was surveyed to the nearest one-one hundredth (0.01) of a foot in relation to a benchmark arbitrarily established on the AOI property. The monitoring well relative elevation and horizontal position and horizontal position and gradient.



2.4 Groundwater Monitoring Well Development and Survey (Cont'd)

A groundwater elevation contour and flow direction map was created utilizing the relative elevation and position survey information and groundwater elevation data collected on March 26, 1997. The contoured groundwater elevation data indicates that the groundwater beneath the AOI facility is flowing westerly to southwesterly across the site. The March 26, 1997 groundwater elevation data is included as Appendix C. A partial copy of a USGS Topographic Map is included as Figure 3 in Appendix A. The topographic map illustrates a small drainage creek is located to the west of the site and flows approximately three-quarters of a mile to the Salmon River.

2.5 Groundwater Analytical Sampling

On March 26, 1997 a groundwater sample was recovered from each of the four (4) groundwater monitoring wells and submitted for laboratory analyses. The following procedures were utilized to obtain groundwater samples from monitoring wells MW-1, MW-2, MW-3 and MW-4:

- 1. Prior to the initiation of evacuation activities, each well was visually inspected for signs of damage, tampering or any other unusual observations.
- 2. Water levels were measured to the nearest 1/100th of a foot using an electronic water level indicator. The measurement was noted on the sample characterization sheet to determine the volume of water in the well. The water level indicator probe and associated cable were cleaned between wells to prevent cross contamination.
- **3.** Water in the well was checked for pH and temperature using portable field instrumentation.



2.5 Groundwater Analytical Sampling (Cont'd)

- After completing initial field measurements, each well was evacuated using dedicated PVC bailers in a manner which created the least turbidity. CES personnel evacuated approximately three (3) to five (5) well volumes or to dryness from each well. Purged volumes are identified on chain-of-custody information sheets.
- 5. The wells were allowed to adequately recharge prior to collecting samples. Field parameters were again checked using the portable field instrumentation. Field instrumentation was calibrated at the beginning of the day and periodically checked and recelebrated in accordance with the manufacturers specifications.
- **6.** Samples were collected in the appropriate bottles along with the required preservatives for the analyses to be performed.
- 7. Trip blanks and replicate samples were collected and submitted to the laboratory along with the samples.
- 8. Sample Characterization/Chain-of-Custody forms were completed prior to samples leaving the site.
- 9. Samples were packed in shipping cartons and placed on ice to keep samples cool during transport to the laboratory. Upon arriving at the laboratory, the samples were signed for by CES' Log-In personnel to maintain the chain of custody. Each sample was assigned an identification number (Log Number) for tracking purposes.



3.0 LABORATORY ANALYTICAL RESULTS

3.1 Soil Laboratory Analytical Results

As mentioned in Section 2.2, soil samples were collected from six (6) to eight (8) feet below grade for MW-1 and MW-4, and from four (4) to six (6) feet below grade for MW-2, MW-3, SB-1 and SB-2. The six soil samples were submitted for laboratory analyses for VOC contaminant concentrations following USEPA Method 8021 and SVOC contaminant concentrations following USEPA Method 8270. USEPA Method 8270 laboratory analytical results from the six (6) soil samples collected from MW-1, MW-2, MW-3, MW-4, SB-1 and SB-2 indicate compliance with NYSDEC STARS guidance values for the parameters and detection limits for which the analyses was conducted on the soil samples collected from MW-3, MW-4 and SB-1 indicates compliance with NYSDEC STARS guidance values for the vOC parameters and detection limits for which the analyses was conducted.

Results from the USEPA Method 8021 laboratory analyses conducted on the soil sample collected from MW-1 identified concentrations of Benzene (575 µg/Kg), Ethylbenzene (270 µg/Kg), Toluene (1,140 µg/Kg), O-Xylene (330 µg/Kg), M-Xylene (970 µg/Kg), 1,2,4-Trimethylbenzene (590 µg/Kg), 1,3,5-Trimethylbenzene (207 µg/Kg) and n-Butylbenzene (235 µg/Kg) which exceed NYSDEC STARS guidance values. Benzene exceeds NYSDEC STARS guidance values by 561 µg/Kg, Ethylbenzene by 170 µg/Kg, Toluene by 1,040 µg/Kg, O-Xylene by 230 µg/Kg, M-Xylene by 870 µg/Kg, 1,2,4-Trimethylbenzene by 490 µg/Kg, 1,3,5-Trimethylbenzene by 107 µg/Kg and n-Butylbenzene by 135 µg/Kg.

Results from the USEPA Method 8021 laboratory analyses conducted on the soil sample collected from MW-2 identified concentrations of Toluene (190 μ g/Kg), O-Xylene (140 μ g/Kg), M-Xylene (220 μ g/Kg) and 1,2,4-Trimethylbenzene (200 μ g/Kg) which exceed NYSDEC STARS guidance values. Toluene exceeds NYSDEC STARS guidance values by 90 μ g/Kg, O-Xylene by 40 μ g/Kg, M-Xylene by 120 μ g/Kg and 1,2,4-Trimethylbenzene by 100 μ g/Kg.



3.1 Soil Laboratory Analytical Results (Cont'd)

Results from the USEPA Method 8021 laboratory analyses conducted on the soil sample collected from SB-2 identified concentrations of Benzene (104 μ g/Kg) and Toluene (150 μ g/Kg) which exceed NYSDEC STARS guidance values. Benzene exceeds NYSDEC STARS guidance values by 90 μ g/Kg and Toluene by 50 μ g/Kg.

3.2 Groundwater Laboratory Analytical Results

The recovered groundwater samples were submitted to CES for laboratory analyses for VOC contaminant concentrations following USEPA Method 8021 and SVOC contaminant concentrations following USEPA Method 8100. Results of laboratory analyses conducted on the groundwater samples collected from monitoring wells MW-2, MW-3 and MW-4 did not indicate the presence of a detectable concentration of VOC or SVOC contaminants for the laboratory parameters and detection limits for which the analyses was conducted therefore indicating compliance with NYSDEC Water Quality Standards and Guidance Values.

Results from the USEPA Method 8021 analyses conducted on the groundwater sample collected from MW-1 detected concentrations of Benzene (4,100 μ g/L), Ethylbenzene (715 μ g/L), Toluene (6,000 μ g/L), o-Xylene (1,400 µg/L), m-Xylene (3,000 µg/L), n-Propylbenzene (118 µg/L), 1,2,4-Trimethylbenzene (820 µg/L), 1,3,5-Trimethylbenzene (316 µg/L), n-Butylbenzene (130 µg/L) and Naphthalene (160 µg/L) which exceed NYSDEC Water Quality Standards and Guidance Values. Benzene exceeded NYSDEC Water Quality Standards and Guidance Values by 4099.3 µg/L, Ethylbenzene by 710 µg/L, Toluene by 595 µg/L, o-Xylene by 1395 µg/L, m-Xylene by 2995 µg/L, n-Propylbenzene by 113 µg/L, 1,2,4-Trimethylbenzene by 815 µg/L, 1,3,5-Trimethylbenzene by 311 µg/L, n-Butylbenzene by 125 μ g/L and Naphthalene by 155 μ g/L. Results from the USEPA Method 8100 laboratory analyses conducted on the groundwater sample collected from MW-1 revealed a concentration of Naphthalene (193 µg/L) which exceeded NYSDEC Water Quality Standards and Guidance Values by 183 µg/L.



3.2 Groundwater Laboratory Analytical Results (Cont'd)

An additional sample was collected from the kitchen sink of the minimart located on-site. The water ran for three minutes prior to sampling. The sample was submitted for laboratory analysis in accordance with USEPA Method 8021. Results from laboratory analysis did not indicate the presence of a detectable concentration of contaminants for the laboratory parameters and detection limits for which the analysis was conducted. Therefore the on-site drinking water supply indicates compliance with NYSDEC Water Quality Standards and Guidance Values. The groundwater laboratory analytical data is summarized on in Appendix C and the groundwater laboratory analytical reports are included in Appendix D.

4.0 CONCLUSIONS

The findings of this preliminary subsurface soil and groundwater investigation at the Alaskan Oil property located at Route 13 & Cemetery Street, Altmar, New York, indicates the presence of some petroleum contaminated soil and groundwater. The investigation included the advancement of six (6) soil borings and installation of four (4) groundwater monitoring wells. Groundwater was encountered at approximately four feet below grade, bedrock was not encountered during drilling activities.

Results from laboratory analyses conducted on the soil samples collected from MW-3, MW-4 and SB-1 indicate compliance with NYSDEC STARS guidance values for the VOC and SVOC parameters and detection limits for which the analyses was conducted. Results from laboratory analyses conducted on the soil samples collected from MW-1, MW-2 and SB-2 indicate numerous parameters which exceed NYSDEC STARS guidance values.



4.0 CONCLUSIONS (Cont'd)

Results from the USEPA Method 8021 and USEPA Method 8100 laboratory analyses conducted on the groundwater samples collected from MW-2, MW-3 and MW-4 indicate compliance with NYSDEC Water Quality Standards and Guidance Values. Results from the USEPA Method 8100 laboratory analyses conducted on the groundwater sample collected from MW-1 detected a concentration of Naphthalene which exceeds NYSDEC Water Quality Standards and Guidance Values. Results from the USEPA Method 8021 analyses conducted on the sample collected from monitoring well MW-1 identified numerous compounds at concentrations which exceed NYSDEC Water Quality Standards and Guidance Values.

5.0 **RECOMMENDATIONS**

CES recommends that three additional groundwater monitoring wells be installed surrounding the Alaskan Oil property. Proposed well MW-5 should be installed on the west side of Route 13 to delineate the downgradient edge of the plume. Proposed well MW-6 should be installed in the northwest corner of the AOI property or in the NYSDOT Route 13 Right-of-Way. Monitoring well MW-7 should be installed in the NYSDOT Right-of-Way on the south side of Cemetery Street. CES recommends that monitoring wells MW-1 through MW-4 and proposed wells MW-5, MW-6 and MW-7 be sampled on a quarterly basis for analyses in accordance with USEPA Methods 8021 and 8100.

Following the installation and sampling of the additional groundwater monitoring well, a Risk-Based Corrective Action (RBCA) evaluation of the site will be performed. The evaluation will include conducting a full receptor survey along with developing site conceptual exposure scenarios (SCES) for the source-pathway-receptor-route combinations through which potential routes of human exposure may result. Following the installation and sampling of the additional monitoring wells and soil mitigation, soil and groundwater concentrations associated with the site will be compared to relevant RBCA closure values. Please note that drinking water supply wells service the site and surrounding vicinity. The location of all downgradient drinking water wells will be identified during the receptor survey.



APPENDIX A

Figure 1: Site Map Figure 2: Groundwater Elevation Map









APPENDIX B

Soil Boring Logs Groundwater Monitoring Well Construction Details



1401 Erie Blvd. East Syracuse, NY 13210 Phone 315-478-2374 Fax 315-478-2107

MONITORING WELL #1 BORING LOG

PROJECT:	AOI #326 Altmar Mini-Mart	DATE: March 24, 1997
LOCATION:	Rte 13 & Cemetery Rd. Altmar, NY	BORING LOCATION: 79'NW of SW corner of building and 55'W of NW corner of building
GEOLOGIST: DRILLING	David E. Broach	BORING DESIGNATION: MW-1
CONTRACTOR: DRILLER(S):	Alaskan Remediation Scott Blake	GROUNDWATER: 4' BACKGROUND PID= 0.0ppm

DEPTH (ft)	BLOW COUNT (/ft)	PID READINGS (ppm)	SOIL IDENTIFICATION	OBSERVATIONS R = Recovery
1'-2'	18	75	6" Asphalt; Brown fine SAND and SILT, little med./course SAND, dry	R = 8"
2'-4'	20 36	1,110	Brown fine SAND and SILT, little med./course SAND, moist	R = 16"
4'-6'	12 17	126	Brown fine SAND and SILT, little med./course SAND, wet	R = 4"
6'- 8'	8 16	864	Brown fine SAND and SILT, little med./course SAND, wet	R = 18"
8'-10'	8 10	136	Brown fine SAND and SILT, little med./course SAND, wet	R = 12"
10'-12 '	4 3	58	Brown fine SAND and SILT, little med./course SAND, wet	R = 10"

NOTE: Method of Investigation: Hollow Stem Auger

Classification visual by Geologist

R = Recovery from 2" diameter, 2' split spoon sampler

Blow Count = Number of 30" drops with 140 lb. hammer per 1'

N/A = Not Applicable



GEOLOGIST:

DRILLER(S):

CONTRACTOR:

DRILLING

1401 Erie Blvd. East Syracuse, NY 13210 Phone 315-478-2374 Fax 315-478-2107

MONITORING WELL #2 BORING LOG

PROJECT:	AOI #326 Altmar Mini-Mart	
LOCATION:	Rte 13 & Cemetery Rd.	

Altmar. NY

Scott Blake

David E. Broach

Alaskan Remediation

DATE: March 24, 1997

BORING LOCATION: 36'SE from SW corner of building and 30'SW from SE corner of building

BORING DESIGNATION: MW-2

GROUNDWATER: 4' BACKGROUND PID= 0.0ppm

DEPTH (ft)	BLOW COUNT (/ft)	PID READINGS (ppm)	SOIL IDENTIFICATION	OBSERVATIONS R = Recovery
1'-2'	19	0	6" Asphalt; Brown fine SAND and SILT, little med./course SAND, dry	R = 10"
2'-4'	8 4	0	Brown fine SAND and SILT, little med./course SAND, damp	R = 12"
4'-6'	4 10	0	Brown fine SAND and SILT, little med./course SAND, wet	R = 12"
6'-8'	8 10	0	Brown fine SAND and SILT, little med./course SAND, wet	R = 16"
8'-10'	8 5	0	Brown fine SAND and SILT, little med./course SAND, wet	R = 16"
10'-12'	4 4	0	Brown fine SAND and SILT, little med./course SAND, wet	R = 10"

NOTE: Method of Investigation: Hollow Stem Auger

Classification visual by Geologist

R = Recovery from 2" diameter, 2' split spoon sampler

Blow Count = Number of 30" drops with 140 lb. hammer per 1'

N/A = Not Applicable



1401 Erie Blvd. East Syracuse, NY 13210 Phone 315-478-2374 Fax 315-478-2107

MONITORING WELL #3 BORING LOG

PROJECT:	AOI #326 Altmar Mini-Mart	DATE: March 24, 1997
LOCATION:	Rte 13 & Cemetery Rd. Altmar, NY	BORING LOCATION: 44'NE from SE corner of building and 23'E of NE corner of building
GEOLOGIST:	David E. Broach	BORING DESIGNATION: MW-3
CONTRACTOR: DRILLER(S):	Alaskan Remediation Scott Blake	GROUNDWATER: 4' BACKGROUND PID= 0.0ppm

DEPTH (ft)	BLOW COUNT (/ft)	PID READINGS (ppm)	SOIL IDENTIFICATION	OBSERVATIONS R = Recovery
1'-2'	11	0	4" Asphalt; Brown fine SAND and SILT, little med./course SAND, dry	R = 8"
2'-4'	8 7	0	Brown fine SAND and SILT, little med./course SAND, damp	R = 16"
4'-6'	2 7	0	Brown fine SAND and SILT, little med./course SAND, wet	R = 16"
6'-8'	5 5	0	Brown fine SAND and SILT, little med./course SAND, wet	R = 16"
8'-10'	16 23	0	Brown fine SAND and SILT, little med./course SAND, wet	R = 16"
10'-12'	5 13	0	Brown fine SAND and SILT, little med./course SAND, wet	R = 10"

NOTE: Method of Investigation: Hollow Stem Auger Classification visual by Geologist R = Recovery from 2" diameter, 2' split spoon sampler Blow Count = Number of 30" drops with 140 lb. hammer per 1' N/A = Not Applicable



DRILLER(S):

Certified Environmental Services, Inc.

1401 Erie Blvd. East Syracuse, NY 13210 Phone 315-478-2374 Fax 315-478-2107

MONITORING WELL #4 BORING LOG

PROJECT:	AOI #326 Altmar Mini-Mart
LOCATION:	Rte 13 & Cemetery Rd. Altmar, NY
GEOLOGIST:	David E. Broach
CONTRACTOR:	Alaskan Remediation

Alaskan Remediation Scott Blake

DATE: March 24, 1997

BORING LOCATION: 59'N from NE corner of building and 65'NE from NW corner of building

BORING DESIGNATION: MW-4

GROUNDWATER: 4' **BACKGROUND PID**= 0.0ppm

DEPTH (ft)	BLOW COUNT (/ft)	PID READINGS (ppm)	SOIL IDENTIFICATION	OBSERVATIONS R = Recovery
1'-2'	20	0	4" Asphalt; Brown fine SAND and SILT, little med./course SAND, dry	R ≍ 8"
2'-4'	11 7	0	Brown fine SAND and SILT, little med./course SAND, damp	R = 16"
4'-6'	8 3	0	Brown fine SAND and SILT, little med./course SAND, wet	R = 8"
6'-8'	9 4	0	Brown fine SAND and SILT, little med./course SAND, wet	R = 16"
8'-10'	26 23	0	Brown fine SAND and SILT, little med./course SAND, wet	R = 12"
10'-12'	25 24	0	Brown fine SAND and SILT, little med./course SAND, wet	R = 16"

NOTE: Method of Investigation: Hollow Stem Auger

Classification visual by Geologist

R = Recovery from 2" diameter, 2' split spoon sampler

Blow Count = Number of 30" drops with 140 lb. hammer per 1'

N/A = Not Applicable



1401 Erie Blvd. East Syracuse, NY 13210 Phone 315-478-2374 Fax 315-478-2107

SOIL BORING #1 BORING LOG

PROJECT:	AOI #326 Altmar Mini-Mart	DATE: March 24, 1997
LOCATION:	Rte 13 & Cemetery Rd. Altmar, NY	BORING LOCATION: 48'SE from NE corner of building and 25'E from SE corner of building
GEOLOGIST: DRILLING	David E. Broach	BORING DESIGNATION: SB-1
CONTRACTOR: DRILLER(S):	Alaskan Remediation Scott Blake	GROUNDWATER: 4' BACKGROUND PID= 0.0ppm

DEPTH (ft)	BLOW COUNT (/ft)	PID READINGS (ppm)	SOIL IDENTIFICATION	OBSERVATIONS R = Recovery
1'-2'	17 17	0	4" Asphalt; Brown fine SAND and SILT, little med./course SAND, dry	R = 8"
2'-4'	13 13	0	Brown fine SAND and SILT, little med./course SAND, damp	R = 12"
4'-6'	7 6	0	Brown fine SAND and SILT, little med./course SAND, wet	R = 16"

NOTE: Method of Investigation: Hollow Stem Auger

Classification visual by Geologist

R = Recovery from 2" diameter, 2' split spoon sampler

Blow Count = Number of 30" drops with 140 lb. hammer per 1' N/A = Not Applicable



1401 Erie Blvd. East Syracuse, NY 13210 Phone 315-478-2374 Fax 315-478-2107

SOIL BORING #2 BORING LOG

PROJECT:	AOI #326 Altmar Mini-Mart	DATE: March 24, 1997
LOCATION:	Rte 13 & Cemetery Rd. Altmar, NY	BORING LOCATION: 28'SW from NW corner of building and 18'NW from SW corner of building
GEOLOGIST: DBILLING	David E. Broach	BORING DESIGNATION: SB-2
CONTRACTOR: DRILLER(S):	Alaskan Remediation Scott Blake	GROUNDWATER: 4' BACKGROUND PID= 0.0ppm

DEPTH (ft)	BLOW COUNT (/ft)	PID READINGS (ppm)	SOIL IDENTIFICATION	OBSERVATIONS R = Recovery
1'-2'	18	0	4" Asphalt; Brown fine SAND and SILT, little med./course SAND, dry	R = 10"
2'-4'	13 10	0	Brown fine SAND and SILT, little med./course SAND, damp	R = 16"
4'-6'	8 5	0	Brown fine SAND and SILT, little med./course SAND, wet	R = 16"

NOTE: Method of Investigation: Hollow Stem Auger Classification visual by Geologist R = Recovery from 2" diameter, 2' split spoon sampler Blow Count = Number of 30" drops with 140 lb. hammer per 1'

N/A = Not Applicable



MONITORING WELL BORING LOG



CES

Certified Environmental Services, Inc.

MONITORING WELL BORING LOG

1401 Erie Boulevard East Syracuse, New York 13210 Ph (315) 478-2374 Fax (315) 478-2107





MONITORING WELL BORING LOG

1401 Erie Boulevard East Syracuse, New York 13210 Ph (315) 478-2374 Fax (315) 478-2107





MONITORING WELL BORING LOG





APPENDIX C

Summary of Soil and Groundwater Analytical Data Groundwater Elevation Data



Alaskan Oil, Inc. Route 13 and Cemetery Road, Altmar, New York (AOI/PEF Site #326) Soil Analytical File

	MW-1 (6-8')	MW-2 (4-6')	MW-3 (4-6')	MW-4 (6-8')	SB-1 (4-6')	SB-2 (4-6')
Method 8021 Total	Soil	Soil	Soil	Soil	Soil	Soil
	March 24, 1997	March 24, 1997	March 24, 1997	March 24, 1997	March 25, 1997	March 25, 1997
Benzene	575 ug/Kg	< 14 ug/Kg	<pre>< 14 ug/Kg</pre>	< 14 ug/Kg	< 14 ug/Kg	104 ug/Kg
Ethylbenzene	270 ug/Kg	91 ug/Kg	< 50 ug/Kg	< 50 ug/Kg	< 50 ug/Kg	< 50 ug/Kg
Toluene	1140 ug/Kg	190 ug/Kg	< 50 ug/Kg	< 50 ug/Kg	< 50 ug/Kg	150 ug/Kg
O-Xylene	330 ug/Kg	140 ug/Kg	< 50 ug/Kg	< 50 ug/Kg	< 50 ug/Kg	< 50 ug/Kg
M-Xylene	*970 ug/Kg	* 220 ug/Kg	< 50 ug/Kg	< 50 ug/Kg	< 50 ug/Kg	< 50 ug/Kg
P-Xylene	*	*	< 50 ug/Kg	< 50 ug/Kg	< 50 ug/Kg	< 50 ug/Kg
Isopropylbenzene	< 100 ug/Kg	< 100 ug/Kg	< 50 ug/Kg	< 50 ug/Kg	< 50 ug/Kg	< 50 ug/Kg
N-Propylbenzene	< 100 ug/Kg	< 100 ug/Kg	< 50 ug/Kg	< 50 ug/Kg	< 50 ug/Kg	< 50 ug/Kg
P-Isopropyltoluene	< 100 ug/Kg	< <u>10</u> 0 ug/Kg	< 50 ug/Kg	< 50 ug/Kg	< 50 ug/Kg	< 50 ug/Kg
1,2,4-Trimethylbenzene	590 ug/Kg	200 ug/Kg	< 50 ug/Kg	< 50 ug/Kg	< <u>50 ug/Kg</u>	< 50 ug/Kg
1,3,5-Trimethylbenzene	207 ug/Kg	< 100 ug/Kg	< 50 ug/Kg	< 50 ug/Kg	< 50 ug/Kg	< 50 ug/Kg
N-Butylbenzene	235 ug/Kg	< 100 ug/Kg	< 50 ug/Kg	< 50 ug/Kg	< 50 ug/Kg	< 50 ug/Kg
Sec-Butylbenzene	< 100 ug/Kg	< 100 ug/Kg	< 50 ug/Kg	< 50 ug/Kg	< 50 ug/Kg	< 50 ug/Kg
Naphthalene	< 200 ug/Kg	< 200 ug/Kg	< 200 ug/Kg	< 200 ug/Kg	< 200 ug/Kg	< 200 ug/Kg
Methyl-t-Butyl Ether	< 500 ug/Kg	< 500 ug/Kg	< 500 ug/Kg	< 500 ug/Kg	< 500 ug/Kg	< 500 ug/Kg
Method 8270						
Naphthalene	< 100 ug/Kg	< 100 ua/Ka	< 100 ua/Ka	< 100 µa/Ka	< 100 ua/Ka	130 ua/Ka
Acenaphthylene	< 100 ug/Ka	< 100 ug/Kg	< 100 ug/Kg	< 100 ug/Kg	< 100 ug/Kg	< 100 ua/Ka
Acenaphthene	< 100 ug/Kg	< 100 ua/Ka	< 100 ua/Ka	< 100 ug/Kg	< 100 ua/Ka	< 100 ua/Ka
Fluorene	< 100 ug/Kg	< 100 ug/Kg	< 100 ug/Kg	< 100 ug/Kg	< 100 ug/Kg	< 100 ug/Kg
Phenanthrene	< 100 ug/Kg	< 100 ug/Kg	130 ug/Kg	130 ug/Kg	150 ug/Kg	< 100 ug/Kg
Anthracene	< 100 ug/Kg	< 100 ug/Kg	< 100 ug/Kg	< 100 ug/Kg	< 100 ug/Kg	< 100 ug/Kg
Fluoranthene	< 100 ug/Kg	< 100 ug/Kg	120 ug/Kg	130 ug/Kg	150 ug/Kg	< 100 ug/Kg
Pyrene	< 100 ug/Kg	< 100 ug/Kg	< 100 ug/Kg	180 ug/Kg	190 ug/Kg	< 100 ug/Kg
Benzo(a)Anthracene	< 100 ug/Kg	< 100 ug/Kg	< 100 ug/Kg	< 100 ug/Kg	< 100 ug/Kg	< 100 ug/Kg
Chrysene	< 100 ug/Kg	< 100 ug/Kg	< 100 ug/Kg	< 100 ug/Kg	< 100 ug/Kg	< 100 ug/Kg
Benzo(b)Fluoranthene	< 100 ug/Kg	< 100 ug/Kg	< 100 ug/Kg	< 100 ug/Kg	< 100 ug/Kg	< 100 ug/Kg
Benzo(k)Fluoranthene	< 100 ug/Kg	< 100 ug/Kg	< 100 ug/Kg	< 100 ug/Kg	< 100 ug/Kg	< 100 ug/Kg
Benzo(a)Pyrene	< 100 ug/Kg	< 100 ug/Kg	< 100 ug/Kg	< 100 ug/Kg	< 100 ug/Kg	< 100 ug/Kg
Indeno(1,2,3-cd)Pyrene	< 100 ug/Kg	< 100 ug/Kg	< 100 ug/Kg	< 100 ug/Kg	< 100 ug/Kg	< 100 ug/Kg
Dibenzo(a,h)Anthracene	< 100 ug/Kg	< 100 ug/Kg	< 100 ug/Kg	< 100 ug/Kg	< 100 ug/Kg	< 100 ug/Kg
Benzo(ghi)Perylene	< 100 ug/Kg	< 100 ug/Kg	< 100 ug/Kg	< 100 ug/Kg	< 100 ug/Kg	< 100 ug/Kg



Alaskan Oil, Inc. Route 13 and Cemetery Road, Altmar, New York (AOI/PEF Site #326) Groundwater Monitoring Analytical History File

	IMVV-1	MW-2	MW-3	MW-4
Method 8021	Groundwater	Groundwater	Groundwater	Groundwater
	March 26, 1997	March 26, 1997	March 26, 1997	March 26, 1997
Benzene	4100 ug/L	<0.7 ug/L	<0.7 ug/L	<0.7 ug/L
Ethylbenzene	715 ug/L	1 ug/L	<1 ug/L	<1 ug/L
Toluene	6000 ug/L	<1 ug/L	<pre><1 ug/L</pre>	<1_ug/L
O-Xylene	1400 ug/L	<1 ug/L	<1 ug/L	<1 ug/L
M-Xylene	*3000 ug/L	<1 ug/L	<1 ug/L	_<1 ug/L
P-Xylene	*	<1 ug/L	<1 ug/L	<1 ug/L
Isopropylbenzene	< 50 ug/L	<1 ug/L	<1 ug/L	<1 ug/L
N-Propylbenzene	118 ug/L	<1 ug/L	<1 ug/L	<1 ug/L
P-Isopropyltoluene	< 50 ug/L	<1 ug/L	<1 ug/L	<1 ug/L
1,2,4-Trimethylbenzene	820 ug/L	<1 ug/L	<1 ug/L	<1 ug/L
1,3,5-Trimethylbenzene	316 ug/L	<1 ug/L	<1 ug/L	<1 ug/L
N-Butylbenzene	130 ug/L	<1 ug/L	<1 ug/L	<1 ug/L
Sec-Butylbenzene	< 50 ug/L	<1 ug/L	<1 ug/L	<1 ug/L
Naphthalene	160 ug/L	<5 ug/L	<5 ug/L	<5 ug/L
Methyl-t-Butyl Ether	< 100 ug/L	_ < 5 ug/L	< 5 ug/L	< 5 ug/L
Method 8100				
Anthracene	<5 ug/L	<5 ug/L	<5 ug/L	<5 ug/L
Fluorene	<5 ug/L	<5 ug/L	<5 ug/L	<5 ug/L
Phenantrene	<5 ug/L	<5_ug/L	<5 ug/L	<5 ug/L
Pyrene	<5 ug/L	<u><</u> 5 ug/L	<5 ug/L	<5 ug/L
Acenaphthene	<5 ug/L	<5 ug/L	<5 ug/L	<5 ug/L
Benzo(a)Anthracene	<5 ug/L	<5 ug/L	<5 ug/L	<5 ug/L
Fluoranthene	<5 ug/L	<5 ug/L	<5 ug/L	<5 ug/L
Benzo(b)Fluoranthene	<5 ug/L	<5 ug/L	<5 ug/L	<5 ug/L
Benzo(k)Fluoranthene	<5 ug/L	<5 ug/L	<5 ug/L	<5 ug/L
Chrysene	<5 ug/L	<5 ug/L	<5 ug/L	<5 ug/L
Benzo(a)pyrene	<5 ug/L	<5 ug/L	<5 ug/L	<5 ug/L
Benzo(ghi)Perylene	<5 ug/L	<5 ug/L	<5 ug/L	<5 ug/L
Indeno(1,2,3-cd)Pyrene	<5 ug/L	<5 ug/L	<5 ug/L	<5 ug/L
Dibenzo(a,h)Anthracene	<5 ug/L	<5 ug/L	<5 ug/L	<5 ug/L
Naphthalene	193 ug/L	<5 ug/L	<5 ug/L	<5 ug/L
Acenaphthylene	<5 ug/L	<5 ug/L	<5 ug/L	<5 ug/L



APPENDIX D

Soil and Groundwater Laboratory Analytical Reports



1401 Erie Blvd. East Syracuse, NY 13210 Phone 315-478-2374 Fax 315-478-2107

REPORT OF ANALYSES

PROJECT NAME: AOI/PEF, #326-Altmar DATE: 04/14/97

ALASKAN OIL 500 SOLAR STREET SYRACUSE, NY 13204-Attn: MR. RICH NEUGEBAUER

SAMPLE NUMBER-130906SAMPLE ID-MW-1 (6-8)SAMPLE MATRIX-SODATE SAMPLED-03/24/97TIMESAMPLED-0800DATE RECEIVED-03/26/97SAMPLER-David E.BroachRECEIVED BY-CAMTIME RECEIVED-1110DELIVERED BY-David BroachTYPESAMPLE-Grab

Page 1 of 2

			SAMPLE PREP	ANALYSIS			
	ANALYSIS	METHOD	DATE BY	DATE	TIME	BY RESUL	LT UNITS
	EPA 8021 Scan	EPA 8021	03/28/97 KSA	04/09/97	F	T.D	
	Benzene	EPA 8021	03/28/97 KSA	04/09/97	Ē	SLD 57	75 ua/Ka
	Ethylbenzene	EPA 8021	03/28/97 KSA	04/09/97	E	SLD 27	70 ug/Kg
-	Toluene	EPA 8021	03/28/97 KSA	04/09/97	Ē	BLD 114	10 ug/Kg
-	o-Xylene	EPA 8021	03/28/97 KSA	04/09/97	E	SLD 33	30 uq/Kq
	m-Xylene	EPA 8021	03/28/97 KSA	04/09/97	E	SLD 970)* ug/Kg
	p-Xylene	EPA 8021	03/28/97 KSA	04/09/97	E	LD	* ug/Kg
	Isopropylbenzene	EPA 8021	03/28/97 KSA	04/09/97	E	SLD < 10	0 ug/Kg
-	n-Propylbenzene	EPA 8021	03/28/97 KSA	04/09/97	E	LD < 10	0 ug/Kg
	p-Isopropyltoluene	EPA 8021	03/28/97 KSA	04/09/97	Е	SLD < 10	0 ug/Kg
	1,2,4-Trimethylbenzene	EPA 8021	03/28/97 KSA	04/09/97	E	LD 59	0 ug/Kg
-	1,3,5-Trimethylbenzene	EPA 8021	03/28/97 KSA	04/09/97	E	SLD 20)7 ug/Kg
_	n-Butylbenzene	EPA 8021	03/28/97 KSA	04/09/97	E	LD 23	5 ug/Kg
	sec-Butylbenzene	EPA 8021	03/28/97 KSA	04/09/97	Б	LD < 10	0 ug/Kg
	Naphthalene	EPA 8021	03/28/97 KSA	04/09/97	E	SLD < 20	0 ug/Kg
	Methyl-t-Butyl Ether	EPA 8021	03/28/97 KSA	04/09/97	В	LD < 50	0 ug/Kg
	EPA 8270 PAH's	EPA 8270	04/01/97 KSA	04/11/97	K	MS	
	Naphthalene	EPA 8270	04/01/97 KSA	04/11/97	K	MS < 10	0 ug/Kg
	Acenaphthylene	EPA 8270	04/01/97 KSA	04/11/97	K	MS < 10	0 ug/Kg
-	Acenaphthene	EPA 8270	04/01/97 KSA	04/11/97	K	MS < 10	0 ug/Kg
	Fluorene	EPA 8270	04/01/97 KSA	04/11/97	K	MS < 10	0 ug/Kg



1401 Erie Blvd. East Syracuse, NY 13210 Phone 315-478-2374 Fax 315-478-2107

Page 2 of 2

CONTINUATION OF DATA FOR SAMPLE NUMBER 130906

-	ANALYSIS	METHOD	SAMPLE PREP DATE BY	ANALYSIS DATE TIME	BY	RESULT UNIT	rs
	Phenanthrene	EPA 8270	04/01/97 KSA	04/11/97	KMS	< 100 ug/H	Χg
	Anthracene	EPA 8270	04/01/97 KSA	04/11/97	KMS	< 100 ug/H	Χġ
-	Fluoranthene	EPA 8270	04/01/97 KSA	04/11/97	KMS	< 100 ug/H	Χġ
-	Pyrene	EPA 8270	04/01/97 KSA	04/11/97	KMS	< 100 ug/H	Χġ
	Benzo(a)Anthracene	EPA 8270	04/01/97 KSA	04/11/97	KMS	< 100 ug/H	Χġ
	Chrysene	EPA 8270	04/01/97 KSA	04/11/97	KMS	< 100 ug/H	Χġ
-	Benzo(b)Fluoranthene	EPA 8270	04/01/97 KSA	04/11/97	KMS	< 100 ug/H	٢ġ
-	Benzo(k)Fluoranthene	EPA 8270	04/01/97 KSA	04/11/97	KMS	< 100 ug/H	Χġ
	Benzo(a)Pyrene	EPA 8270	04/01/97 KSA	04/11/97	KMS	< 100 ug/H	٢ġ
	Indeno(1,2,3-cd)Pyrene	EPA 8270	04/01/97 KSA	04/11/97	KMS	< 100 ug/H	٢ġ
	Dibenzo(a,h)Anthracene	EPA 8270	04/01/97 KSA	04/11/97	KMS	< 100 ug/H	٢ġ
-	Benzo(ghi)Perylene	EPA 8270	04/01/97 KSA	04/11/97	KMS	< 100 ug/H	٢ġ

Environmental Services, Inc.

Chromatographically, para and meta-Xylene co-elutes on the gas chromatogram. The reported value may therefore represent either of these compounds or a combination thereof.

NYSDOH LAB ID NO. 11246

APPROVED BY:_____

.



1401 Erie Blvd. East Syracuse, NY 13210 Phone 315-478-2374 Fax 315-478-2107

REPORT OF ANALYSES

PROJECT NAME: AOI/PEF, #326-Altmar DATE: 04/14/97

ALASKAN OIL 500 SOLAR STREET SYRACUSE, NY 13204-Attn: MR. RICH NEUGEBAUER

SAMPLE NUMBER- 130907	SAMPLE ID- MW-2 (4-6)	SAMPLE MATRIX- SO
DATE SAMPLED- 03/24/97		TIME SAMPLED- 1115
DATE RECEIVED- 03/26/97	SAMPLER- David E. Broach	RECEIVED BY- CAM
TIME RECEIVED- 1110	DELIVERED BY- David Broach	TYPE SAMPLE- Grab

Page 1 of 2

			SAMPLE PREP	ANALYSIS		
	ANALYSIS	METHOD	DATE BY	DATE	TIME BY	RESULT UNITS
	EPA 8021 Scan	EPA 8021	03/28/97 KSA	04/10/97	BLD	
	Benzene	EPA 8021	03/28/97 KSA	04/10/97	BLD	< 14 ug/Kg
	Ethylbenzene	EPA 8021	03/28/97 KSA	04/10/97	BLD	91 ug/Kg
	Toluene	EPA 8021	03/28/97 KSA	04/10/97	BLD	190 ug/Kg
	o-Xylene	EPA 8021	03/28/97 KSA	04/10/97	BLD	140 ug/Kg
	m-Xylene	EPA 8021	03/28/97 KSA	04/10/97	BLD	220* ug/Kg
	p-Xylene	EPA 8021	03/28/97 KSA	04/10/97	BLD	* ug/Kg
	Isopropylbenzene	EPA 8021	03/28/97 KSA	04/10/97	BLD	< 100 ug/Kg
	n-Propylbenzene	EPA 8021	03/28/97 KSA	04/10/97	BLD	< 100 ug/Kg
	p-Isopropyltoluene	EPA 8021	03/28/97 KSA	04/10/97	BLD	< 100 ug/Kg
	1,2,4-Trimethylbenzene	EPA 8021	03/28/97 KSA	04/10/97	BLD	200 ug/Kg
***	1,3,5-Trimethylbenzene	EPA 8021	03/28/97 KSA	04/10/97	BLD	< 100 ug/Kg
	n-Butylbenzene	EPA 8021	03/28/97 KSA	04/10/97	BLD	< 100 ug/Kg
	sec-Butylbenzene	EPA 8021	03/28/97 KSA	04/10/97	BLD	< 100 ug/Kg
	Naphthalene	EPA 8021	03/28/97 KSA	04/10/97	BLD	< 200 ug/Kg
	Methyl-t-Butyl Ether	EPA 8021	03/28/97 KSA	04/10/97	BLD	< 500 ug/Kg
	EPA 8270 PAH's	EPA 8270	04/01/97 KSA	04/11/97	KMS	57 5
	Naphthalene	EPA 8270	04/01/97 KSA	04/11/97	KMS	< 100 ug/Kg
	Acenaphthylene	EPA 8270	04/01/97 KSA	04/11/97	KMS	< 100 ug/Kg
	Acenaphthene	EPA 8270	04/01/97 KSA	04/11/97	KMS	< 100 ug/Kg
	Fluorene	EPA 8270	04/01/97 KSA	04/11/97	KMS	< 100 ug/Kg



1401 Erie Blvd. East Syracuse, NY 13210 Phone 315-478-2374 Fax 315-478-2107

Page 2 of 2

CONTINUATION OF DATA FOR SAMPLE NUMBER 130907

	ANALYSIS	METHOD	SAMPLE PREP DATE BY	ANALYSIS DATE TIME	BY	RESULT	UNITS
	Phenanthrene	EPA 8270	04/01/97 KSA	04/11/97	KMS	< 100	ug/Kg
	Anthracene	EPA 8270	04/01/97 KSA	04/11/97	KMS	< 100	ug/Kg
	Fluoranthene	EPA 8270	04/01/97 KSA	04/11/97	KMS	< 100	ug/Kg
_	Pyrene	EPA 8270	04/01/97 KSA	04/11/97	KMS	< 100	ug/Kg
	Benzo(a)Anthracene	EPA 8270	04/01/97 KSA	04/11/97	KMS	< 100	ug/Kg
	Chrysene	EPA 8270	04/01/97 KSA	04/11/97	KMS	< 100	ug/Kg
-	Benzo(b)Fluoranthene	EPA 8270	04/01/97 KSA	04/11/97	KMS	< 100	ug/Kg
	Benzo(k)Fluoranthene	EPA 8270	04/01/97 KSA	04/11/97	KMS	< 100	ug/Kg
	Benzo(a) Pyrene	EPA 8270	04/01/97 KSA	04/11/97	KMS	< 100	ug/Kg
	Indeno(1,2,3-cd)Pyrene	EPA 8270	04/01/97 KSA	04/11/97	KMS	< 100	ug/Kg
.	Dibenzo(a,h)Anthracene	EPA 8270	04/01/97 KSA	04/11/97	KMS	< 100	ug/Kg
	Benzo(ghi)Perylene	EPA 8270	04/01/97 KSA	04/11/97	KMS	< 100	ug/Kg

*Chromatographically, para and meta-Xylene co-elutes on the gas chromatogram. The reported value may therefore represent either of these compounds or a combination thereof.

NYSDOH LAB ID NO. 11246

1 Jaba A APPROVED BY:

.



1401 Erie Blvd. East Syracuse, NY 13210 Phone 315-478-2374 Fax 315-478-2107

REPORT OF ANALYSES

PROJECT NAME: AOI/PEF, #326-Altmar DATE: 04/14/97

ALASKAN OIL 500 SOLAR STREET SYRACUSE, NY 13204-Attn: MR. RICH NEUGEBAUER

	SAMPLE NUMBER- 130908	SAMPLE ID- MW-3 (4-6)	SAMPLE MATRIX- SO
۳	DATE SAMPLED- 03/24/97		TIME SAMPLED- 1445
	DATE RECEIVED- 03/26/97	SAMPLER- David E. Broach	RECEIVED BY- CAM
	TIME RECEIVED- 1110	DELIVERED BY- David Broach	TYPE SAMPLE- Grab

Page 1 of 2

				SAMPLE F	REP	ANALYSIS				
فمعنف	ANALYSIS	MET	HOD	DATE	BY	DATE	TIME	BY	RESULT	UNITS
-	EPA 8021 Scan	EPA	8021	03/28/97	KSA	04/10/97		BLD		
	Benzene	EPA	8021	03/28/97	KSA	04/10/97		BLD	< 14	ug/Kg
	Ethylbenzene	EPA	8021	03/28/97	KSA	04/10/97		BLD	< 50	ug/Kg
	Toluene	EPA	8021	03/28/97	KSA	04/10/97		BLD	< 50	ug/Kg
	o-Xylene	EPA	8021	03/28/97	KSA	04/10/97		BLD	< 50	ug/Kg
	m-Xylene	EPA	8021	03/28/97	KSA	04/10/97		BLD	< 50	ug/Kg
	p-Xylene	EPA	8021	03/28/97	KSA	04/10/97		BLD	< 50	ug/Kg
•	Isopropylbenzene	EPA	8021	03/28/97	KSA	04/10/97		BLD	< 50	ug/Kg
	n-Propylbenzene	EPA	8021	03/28/97	KSA	04/10/97		BLD	< 50	ug/Kg
	p-Isopropyltoluene	EPA	8021	03/28/97	KSA	04/10/97		BLD	< 50	ug/Kg
	1,2,4-Trimethylbenzene	EPA	8021	03/28/97	KSA	04/10/97		BLD	< 50	ug/Kg
ک	1,3,5-Trimethylbenzene	EPA	8021	03/28/97	KSA	04/10/97		BLD	< 50	ug/Kg
	n-Butylbenzene	EPA	8021	03/28/97	KSA	04/10/97		BLD	< 50	ug/Kg
	sec-Butylbenzene	EPA	8021	03/28/97	KSA	04/10/97		BLD	< 50	ug/Kg
	Naphthalene	EPA	8021	03/28/97	KSA	04/10/97		BLD	< 200	ug/Kg
الله	Methyl-t-Butyl Ether	EPA	8021	03/28/97	KSA	04/10/97		BLD	< 500	ug/Kg
	EPA 8270 PAH's	EPA	8270	04/01/97	KSA	04/11/97		KMS		2. 2
	Naphthalene	EPA	8270	04/01/97	KSA	04/11/97		KMS	< 100	ug/Kg
	Acenaphthylene	EPA	8270	04/01/97	KSA	04/11/97		KMS	< 100	ug/Kg
اللك	Acenaphthene	EPA	8270	04/01/97	KSA	04/11/97		KMS	< 100	ug/Kg
	Fluorene	EPA	8270	04/01/97	KSA	04/11/97		KMS	< 100	ug/Kg



1401 Erie Blvd. East Syracuse, NY 13210 Phone 315-478-2374 Fax 315-478-2107

Page 2 of 2

CONTINUATION OF DATA FOR SAMPLE NUMBER 130908

-	ANALYSIS	METHOD	SAMPLE PREP Date by	ANALYSIS DATE TIME	BY	RESULT	UNITS
	Phenanthrene	EPA 8270	04/01/97 KSA	04/11/97	KMS	130	ug/Kg
	Anthracene	EPA 8270	04/01/97 KSA	04/11/97	KMS	< 100	ug/Kg
	Fluoranthene	EPA 8270	04/01/97 KSA	04/11/97	KMS	120	ug/Kg
	Pyrene	EPA 8270	04/01/97 KSA	04/11/97	KMS	< 100	ug/Kg
	Benzo(a)Anthracene	EPA 8270	04/01/97 KSA	04/11/97	KMS	< 100	ug/Kg
	Chrysene	EPA 8270	04/01/97 KSA	04/11/97	KMS	< 100 1	ug/Kg
-	Benzo(b)Fluoranthene	EPA 8270	04/01/97 KSA	04/11/97	KMS	< 100 t	ug/Kg
	Benzo(k)Fluoranthene	EPA 8270	04/01/97 KSA	04/11/97	KMS	< 100 1	ug/Kg
	Benzo(a)Pyrene	EPA 8270	04/01/97 KSA	04/11/97	KMS	< 100 1	ug/Kg
	Indeno(1,2,3-cd)Pyrene	EPA 8270	04/01/97 KSA	04/11/97	KMS	< 100 1	ug/Kg
-	Dibenzo(a, h)Anthracene	EPA 8270	04/01/97 KSA	04/11/97	KMS	< 100 x	ug/Kg
	Benzo(ghi)Perylene	EPA 8270	04/01/97 KSA	04/11/97	KMS	< 100 1	ug/Kg

NYSDOH LAB ID NO. 11246

APPROVED BY:

Baba A γ



1401 Erie Blvd. East Syracuse, NY 13210 Phone 315-478-2374 Fax 315-478-2107

REPORT OF ANALYSES

PROJECT NAME: AOI/PEF, #326-Altmar
DATE: 04/14/97

- 500 SOLAR STREET SYRACUSE, NY 13204-Attn: MR. RICH NEUGEBAUER
- SAMPLE NUMBER-130909SAMPLE ID-MW-4 (6-8)SAMPLE MATRIX-SODATE SAMPLED-03/25/97TIME SAMPLED-0915DATE RECEIVED-03/26/97SAMPLER-David E.BroachRECEIVED BY-CAMTIME RECEIVED-1110DELIVERED BY-David BroachTYPE SAMPLE-Grab
- Page 1 of 2

ALASKAN OIL

				SAMPLE P	REP	ANALYSIS				
-	ANALYSIS	MET	HOD	DATE	BY	DATE	TIME	BY	RESULT	UNITS
-	EPA 8021 Scan	EPA	8021	03/28/97	KSA	04/10/97		BLD		
	Benzene	EPA	8021	03/28/97	KSA	04/10/97		BLD	< 14	ug/Kg
	Ethylbenzene	EPA	8021	03/28/97	KSA	04/10/97		BLD	< 50	uq/Kq
.	Toluene	EPA	8021	03/28/97	KSA	04/10/97		BLD	< 50	ug/Kg
	o-Xylene	EPA	8021	03/28/97	KSA	04/10/97		BLD	< 50	ug/Kg
	m-Xylene	EPA	8021	03/28/97	KSA	04/10/97		BLD	< 50	ug/Kg
	p-Xylene	EPA	8021	03/28/97	KSA	04/10/97		BLD	< 50	ug/Kg
	Isopropylbenzene	EPA	8021	03/28/97	KSA	04/10/97		BLD	< 50	ug/Kg
	n-Propylbenzene	EPA	8021	03/28/97	KSA	04/10/97		BLD	< 50	ug/Kg
	p-Isopropyltoluene	EPA	8021	03/28/97	KSA	04/10/97		BLD	< 50	ug/Kg
	1,2,4-Trimethylbenzene	EPA	8021	03/28/97	KSA	04/10/97		BLD	< 50	ug/Kg
لاف	1,3,5-Trimethylbenzene	EPA	8021	03/28/97	KSA	04/10/97		BLD	< 50	ug/Kg
	n-Buty1benzene	EPA	8021	03/28/97	KSA	04/10/97		BLD	< 50	ug/Kg
	sec-Butylbenzene	EPA	8021	03/28/97	KSA	04/10/97		BLD	< 50	ug/Kg
	Naphthalene	EPA	8021	03/28/97	KSA	04/10/97		BLD	< 200	ug/Kg
لثثث	Methyl-t-Butyl Ether	EPA	8021	03/28/97	KSA	04/10/97		BLD	< 500	ug/Kg
	EPA 8270 PAH's	EPA	8270	04/01/97	KSA	04/11/97		KMS		
	Naphthalene	EPA	8270	04/01/97	KSA	04/11/97		KMS	< 100	ug/Kg
	Acenaphthylene	EPA	8270	04/01/97	KSA	04/11/97		KMS	< 100	ug/Kg
لتنتق	Acenaphthene	EPA	8270	04/01/97	KSA	04/11/97		KMS	< 100	ug/Kg
	Fluorene	EPA	8270	04/01/97	KSA	04/11/97		KMS	< 100	ug/Kg



1401 Erie Blvd. East Syracuse, NY 13210 Phone 315-478-2374 Fax 315-478-2107

Page 2 of 2

CONTINUATION OF DATA FOR SAMPLE NUMBER 130909

-	ANALYSIS	METHOD	SAMPLE PREP DATE BY	ANALYSIS DATE	TIME BY	RESULT	UNITS
	Phenanthrene	EPA 8270	04/01/97 KSA	04/11/97	KMS	130	ug/Kg
	Anthracene	EPA 8270	04/01/97 KSA	04/11/97	KMS	< 100	ug/Kg
	Fluoranthene	EPA 8270	04/01/97 KSA	04/11/97	KMS	130	ug/Kg
	Pyrene	EPA 8270	04/01/97 KSA	04/11/97	KMS	180	ug/Kg
	Benzo(a)Anthracene	EPA 8270	04/01/97 KSA	04/11/97	KMS	< 100	ug/Kg
	Chrysene	EPA 8270	04/01/97 KSA	04/11/97	KMS	< 100	ug/Kg
	Benzo(b)Fluoranthene	EPA 8270	04/01/97 KSA	04/11/97	KMS	< 100	ug/Kg
	Benzo(k)Fluoranthene	EPA 8270	04/01/97 KSA	04/11/97	KMS	< 100	ug/Kg
	Benzo(a)Pyrene	EPA 8270	04/01/97 KSA	04/11/97	KMS	< 100	ug/Kg
	Indeno(1,2,3-cd)Pyrene	EPA 8270	04/01/97 KSA	04/11/97	KMS	< 100	ug/Kg
-	Dibenzo(a,h)Anthracene	EPA 8270	04/01/97 KSA	04/11/97	KMS	< 100	ug/Kg
	Benzo(ghi)Perylene	EPA 8270	04/01/97 KSA	04/11/97	KMS	< 100	ug/Kg

NYSDOH LAB ID NO. 11246

APPROVED BY:

Dabary.



1401 Erie Blvd. East Syracuse, NY 13210 Phone 315-478-2374 Fax 315-478-2107

REPORT OF ANALYSES

PROJECT NAME: AOI/PEF, #326-Altmar DATE: 04/14/97

- ALASKAN OIL 500 SOLAR STREET SYRACUSE, NY 13204-Attn: MR. RICH NEUGEBAUER
- SAMPLE NUMBER-130910SAMPLE ID-SB-1 (4-6)SAMPLE MATRIX-SODATE SAMPLED-03/25/97TIMETIMESAMPLED-1110DATE RECEIVED-03/26/97SAMPLER-David E.BroachRECEIVED BY-CAMTIME RECEIVED-1110DELIVERED BY-David BroachTYPESAMPLE-Grab
- Page 1 of 2

فتعتر

				SAMPLE P	REP	ANALYSIS				
	ANALYSIS	METI	HOD	DATE	BY	DATE	TIME	BY	RESULT	UNITS
-										
	EPA 8021 Scan	EPA	8021	03/28/97	KSA	04/10/97		BLD		
	Benzene	EPA	8021	03/28/97	KSA	04/10/97		BLD	< 14	ug/Kg
	Ethylbenzene	EPA	8021	03/28/97	KSA	04/10/97		BLD	< 50	ug/Kg
	Toluene	EPA	8021	03/28/97	KSA	04/10/97		BLD	< 50	ug/Kg
	o-Xylene	EPA	8021	03/28/97	KSA	04/10/97		BLD	< 50	ug/Kg
	m-Xylene	EPA	8021	03/28/97	KSA	04/10/97		BLD	< 50	ug/Kg
	p-Xylene	EPA	8021	03/28/97	KSA	04/10/97		BLD	< 50	ug/Kg
نان	Isopropylbenzene	EPA	8021	03/28/97	KSA	04/10/97		BLD	< 50	ug/Kg
	n-Propylbenzene	EPA	8021	03/28/97	KSA	04/10/97		BLD	< 50	ug/Kg
	p-Isopropyltoluene	EPA	8021	03/28/97	KSA	04/10/97		BLD	< 50	ug/Kg
	1,2,4-Trimethylbenzene	EPA	8021	03/28/97	KSA	04/10/97		BLD	< 50	ug/Kg
	1,3,5-Trimethylbenzene	EPA	8021	03/28/97	KSA	04/10/97		BLD	< 50	ug/Kg
	n-Butylbenzene	EPA	8021	03/28/97	KSA	04/10/97		BLD	< 50	ug/Kg
	sec-Buty1benzene	EPA	8021	03/28/97	KSA	04/10/97		BLD	< 50	ug/Kg
	Naphthalene	EPA	8021	03/28/97	KSA	04/10/97		BLD	< 200	ug/Kg
	Methyl-t-Butyl Ether	EPA	8021	03/28/97	KSA	04/10/97		BLD	< 500	ug/Kg
	EPA 8270 PAH's	EPA	8270	04/01/97	KSA	04/11/97		KMS		
	Naphthalene	EPA	8270	04/01/97	KSA	04/11/97		KMS	< 100	ug/Kg
	Acenaphthylene	EPA	8270	04/01/97	KSA	04/11/97		KMS	< 100	ug/Kg
	Acenaphthene	EPA	8270	04/01/97	KSA	04/11/97		KMS	< 100	ug/Kg
	Fluorene	EPA	8270	04/01/97	KSA	04/11/97		KMS	< 100	ug/Kg



1401 Erie Blvd. East Syracuse, NY 13210 Phone 315-478-2374 Fax 315-478-2107

Page 2 of 2

CONTINUATION OF DATA FOR SAMPLE NUMBER 130910

	ANALYSIS	METHOD	SAMPLE PREP DATE BY	ANALYSIS DATE TIME	вү	RESULT UNITS
	Phenanthrene	EPA 8270	04/01/97 KSA	04/11/97	KMS	150 ug/Kg
	Anthracene	EPA 8270	04/01/97 KSA	04/11/97	KMS	< 100 ug/Kg
-	Fluoranthene	EPA 8270	04/01/97 KSA	04/11/97	KMS	150 ug/Kg
	Pyrene	EPA 8270	04/01/97 KSA	04/11/97	KMS	190 ug/Kg
	Benzo(a)Anthracene	EPA 8270	04/01/97 KSA	04/11/97	KMS	< 100 ug/Kg
	Chrysene	EPA 8270	04/01/97 KSA	04/11/97	KMS	< 100 ug/Kg
	Benzo(b)Fluoranthene	EPA 8270	04/01/97 KSA	04/11/97	KMS	< 100 ug/Kg
	Benzo(k)Fluoranthene	EPA 8270	04/01/97 KSA	04/11/97	KMS	< 100 ug/Kg
	Benzo(a)Pyrene	EPA 8270	04/01/97 KSA	04/11/97	KMS	< 100 ug/Kg
	Indeno(1,2,3-cd)Pyrene	EPA 8270	04/01/97 KSA	04/11/97	KMS	< 100 ug/Kg
	Dibenzo(a,h)Anthracene	EPA 8270	04/01/97 KSA	04/11/97	KMS	< 100 ug/Kg
	Benzo(ghi)Perylene	EPA 8270	04/01/97 KSA	04/11/97	KMS	< 100 ug/Kg

. Dabar APPROVED BY:

NYSDOH LAB ID NO. 11246



1401 Erie Blvd. East Syracuse, NY 13210 Phone 315-478-2374 Fax 315-478-2107

REPORT OF ANALYSES

PROJECT NAME: AOI/PEF, #326-Altmar DATE: 04/14/97

ALASKAN OIL 500 SOLAR STREET SYRACUSE, NY 13204-Attn: MR. RICH NEUGEBAUER

SAMPLE NUMBER-130911SAMPLE ID-SB-2 (4-6)SAMPLE MATRIX-SODATE SAMPLED-03/25/97TIMESAMPLED-1150DATE RECEIVED-03/26/97SAMPLER-David E.BroachRECEIVED BY-CAMTIME RECEIVED-1110DELIVERED BY-David BroachTYPESAMPLE-Grab

Page 1 of 2

.

			SAMPLE PREP	ANALYSIS			
	ANALYSIS	METHOD	DATE BY	DATE	TIME BY	RESULT	UNITS
	ED3 9021 Casa	BD3 0001	02/20/07 YON	04/10/07	DID		
	EPA 8021 Scan	EPA 8021	03/28/9/ KSA	04/10/9/	BLD		•
	Benzene	EPA 8021	03/28/97 KSA	04/10/97	BLD	104	ug/Kg
	Ethylbenzene	EPA 8021	03/28/97 KSA	04/10/97	BLD	< 50	ug/Kg
	Toluene	EPA 8021	03/28/97 KSA	04/10/97	BLD	150	ug/Kg
	o-Xylene	EPA 8021	03/28/97 KSA	04/10/97	BLD	< 50	ug/Kg
	m-Xylene	EPA 8021	03/28/97 KSA	04/10/97	BLD	< 50	ug/Kg
	p-Xylene	EPA 8021	03/28/97 KSA	04/10/97	BLD	< 50	ug/Kg
	Isopropylbenzene	EPA 8021	03/28/97 KSA	04/10/97	BLD	< 50	ug/Kg
	n-Propylbenzene	EPA 8021	03/28/97 KSA	04/10/97	BLD	< 50	ug/Kg
	p-Isopropyltoluene	EPA 8021	03/28/97 KSA	04/10/97	BLD	< 50	ug/Kg
	1,2,4-Trimethylbenzene	EPA 8021	03/28/97 KSA	04/10/97	BLD	< 50	ug/Kg
.	1,3,5-Trimethylbenzene	EPA 8021	03/28/97 KSA	04/10/97	BLD	< 50	ug/Kg
	n-Butylbenzene	EPA 8021	03/28/97 KSA	04/10/97	BLD	< 50	ug/Kg
	sec-Butylbenzene	EPA 8021	03/28/97 KSA	04/10/97	BLD	< 50	ug/Kg
	Naphthalene	EPA 8021	03/28/97 KSA	04/10/97	BLD	< 200	ug/Kg
	Methyl-t-Butyl Ether	EPA 8021	03/28/97 KSA	04/10/97	BLD	< 500	ug/Kg
	EPA 8270 PAH's	EPA 8270	04/01/97 KSA	04/11/97	KMS		
	Naphthalene	EPA 8270	04/01/97 KSA	04/11/97	KMS	< 100	ug/Kg
	Acenaphthylene	EPA 8270	04/01/97 KSA	04/11/97	KMS	< 100	ug/Kg
	Acenaphthene	EPA 8270	04/01/97 KSA	04/11/97	KMS	< 100	ug/Kg
	Fluorene	EPA 8270	04/01/97 KSA	04/11/97	KMS	< 100	ug/Kg



1401 Erie Blvd. East Syracuse, NY 13210 Phone 315-478-2374 Fax 315-478-2107

Page 2 of 2

CONTINUATION OF DATA FOR SAMPLE NUMBER 130911

-	ANALYSIS	METHOD	SAMPLE PREP DATE BY	ANALYSIS DATE	TIME BY	RESULT U	NITS
	Phenanthrene	EPA 8270	04/01/97 KSA	04/11/97	KMS	130 ug	g/Kg
	Anthracene	EPA 8270	04/01/97 KSA	04/11/97	KMS	< 100 ug	g/Kg
	Fluoranthene	EPA 8270	04/01/97 KSA	04/11/97	KMS	< 100 ug	g/Kg
_	Pyrene	EPA 8270	04/01/97 KSA	04/11/97	KMS	< 100 ug	g/Kg
	Benzo(a)Anthracene	EPA 8270	04/01/97 KSA	04/11/97	KMS	< 100 ug	g/Kg
	Chrysene	EPA 8270	04/01/97 KSA	04/11/97	KMS	< 100 uç	g/Kg
	Benzo(b)Fluoranthene	EPA 8270	04/01/97 KSA	04/11/97	KMS	< 100 uç	g/Kg
	Benzo(k)Fluoranthene	EPA 8270	04/01/97 KSA	04/11/97	KMS	< 100 uç	g/Kg
	Benzo(a)Pyrene	EPA 8270	04/01/97 KSA	04/11/97	KMS	< 100 uç	g/Kg
	Indeno(1,2,3-cd)Pyrene	EPA 8270	04/01/97 KSA	04/11/97	KMS	< 100 uç	g/Kg
لتتن	Dibenzo(a,h)Anthracene	EPA 8270	04/01/97 KSA	04/11/97	KMS	< 100 uç	g/Kg
	Benzo(ghi)Perylene	EPA 8270	04/01/97 KSA	04/11/97	KMS	< 100 uç	g/Kg

By: Valana G. cſ APPROVED BY:

NYSDOH LAB ID NO. 11246



1401 Erie Blvd. East Syracuse, NY 13210 Phone 315-478-2374 Fax 315-478-2107

CHAIN OF CUSTODY RECORD

Company: _		<u> </u>			Phor	ne:		Ana	alys	is			
Address: _				_	Fa	ıx:							
Contact Person:	D Brot (print):	uh			P.O. Proje	#: ct: <u></u> ph.ch 5. B	F#32 mrv+	6					/
SAMPLE NO.	COLLI DATE	ECTED TIME	C O M	M G T R R A I B X	SAMPLE	ELOCATION	# OF CONT.					COMMEN	TS
0406	3/24/41	(Arrest)		<u>}</u> >	1103-0	U-Bre		2	: 2				
0907	3.12%				5000-2		2	,	4				
1908	3/2,	Contraction of the		¥ 2	and 3	here a			e 4				
10909	3/24	1.15			Carriel - La	(v-8 			e ,				
9/0	300	MAX.		r þ	58-1		-						
2911	3/25	1152		k S				, ,	~			 	
											-	 	
										_		 	
				-						-	-	 	
			╎┤	-					-	+		 	
Relinquished	l By:				Date 3/56/97	Time	Received By	 :				 Date	Time
Relinquished	I By:				Date	Time	Received by	Lab::	\sim		·	 Date	Time

White - CES's Copy • Canary - Return to Client with Report • Pink - Client's Initital Copy



1401 Erie Blvd. East Syracuse, NY 13210 Phone 315-478-2374 Fax 315-478-2107

REPORT OF ANALYSES

ALASKAN OIL 500 SOLAR STREET SYRACUSE, NY 13204-Attn: MR. RICH NEUGEBAUER PROJECT NAME: AOI/PEF, #326-Altmar DATE: 04/09/97

	SAMPLE NUMBER- 130919	SAMPLE ID- MW-1	SAMPLE MATRIX- WA
-	DATE SAMPLED- 03/26/97		TIME SAMPLED- 1145
	DATE RECEIVED- 03/26/97	SAMPLER- Paul Conley	RECEIVED BY- CAM
	TIME RECEIVED- 1400	DELIVERED BY- Paul Conley	TYPE SAMPLE- Grab

Page 1 of 2

			SAMPLE PRE	P ANALYSIS		
	ANALYSIS	METHOD	DATE	BY DATE	TIME BY	RESULT UNITS
	EPA 8021 Scan	EPA 8021		04/05/97	BLD	
	Benzene	EPA 8021		04/05/97	BLD	4100 ug/L
	Ethylbenzene	EPA 8021		04/05/97	BLD	715 ug/L
	Toluene	EPA 8021		04/05/97	BLD	6000 ug/L
	o-Xylene	EPA 8021		04/05/97	BLD	1400 ug/L
	m-Xylene	EPA 8021		04/05/97	BLD	3000* ug/L
	p-Xylene	EPA 8021		04/05/97	BLD	* ug/L
	Isopropylbenzene	EPA 8021		04/05/97	BLD	< 50 ug/L
	n-Propylbenzene	EPA 8021		04/05/97	BLD	118 ug/L
	p-Isopropyltoluene	EPA 8021		04/05/97	BLD	< 50 ug/L
	1,2,4-Trimethylbenzene	EPA 8021		04/05/97	BLD	820 ug/L
	1,3,5-Trimethy1benzene	EPA 8021		04/05/97	BLD	316 ug/L
	n-Butylbenzene	EPA 8021		04/05/97	BLD	130 ug/L
	sec-Butylbenzene	EPA 8021		04/05/97	BLD	< 50 ug/L
	Naphthalene	EPA 8021		04/05/97	BLD	160 ug/L
-	Methyl-t-Butyl Ether	EPA 8021		04/05/97	BLD	< 100 ug/L
-	EPA 8100 SCAN	EPA 8100	03/28/97 К	SA 04/08/97	KMS	
	ANTHRACENE	EPA 8100	03/28/97 К	SA 04/08/97	KMS	< 5 ug/L
	FLUORENE	EPA 8100	03/28/97 К	SA 04/08/97	KMS	< 5 ug/L
	PHENANTHRENE	EPA 8100	03/28/97 К	SA 04/08/97	KMS	< 5 ug/L
	PYRENE	EPA 8100	03/28/97 K	SA 04/08/97	KMS	< 5 ug/L



1401 Erie Blvd. East Syracuse, NY 13210 Phone 315-478-2374 Fax 315-478-2107

Page 2 of 2

CONTINUATION OF DATA FOR SAMPLE NUMBER 130919

			SAMPLE PREP	ANALYSIS		
	ANALYSIS	METHOD	DATE BY	DATE	TIME BY	RESULT UNITS
		ED3 0100	02/20/07 VCA	04/09/07	VMC	< 5 ug/L
	ACENAPHTHENE	EPA 0100	03/20/9/ KSA	04/00/3/	NH0	< 5 ug/b
	BENZO (A) ANTHRACENE	EPA 8100	03/28/97 KSA	04/08/97	KMS	< 5 ug/L
-	FLUORANTHENE	EPA 8100	03/28/97 KSA	04/08/97	KMS	< 5 ug/L
-	BENZO (B) FLUORANTHENE	EPA 8100	03/28/97 KSA	04/08/97	KMS	< 5 ug/L
	BENZO (K) FLUORANTHENE	EPA 8100	03/28/97 KSA	04/08/97	KMS	< 5 ug/L
	CHRYSENE	EPA 8100	03/28/97 KSA	04/08/97	KMS	< 5 ug/L
	BENZO (A) PYRENE	EPA 8100	03/28/97 KSA	04/08/97	KMS	< 5 ug/L
	BENZO(G,H,I)PERYLENE	EPA 8100	03/28/97 KSA	04/08/97	KMS	< 5 ug/L
	INDENO(1,2,3-CD)PYRENE	EPA 8100	03/28/97 KSA	04/08/97	KMS	< 5 ug/L
-	DIBENZ(A,H)ANTHRACENE	EPA 8100	03/28/97 KSA	04/08/97	KMS	< 5 ug/L
_	NAPHTHALENE	EPA 8100	03/28/97 KSA	04/08/97	KMS	193 ug/L
	ACENAPHTHYLENE	EPA 8100	03/28/97 KSA	04/08/97	KMS	< 5 ug/L

Chromatographically, para and meta-Xylene co-elutes on the gas chromatogram. The reported value may therefore represent either of these compounds or a combination thereof.

NYSDOH LAB ID NO. 11246

APPROVED BY:_

1 Jaba 1

	Certified Environmental Services, Inc.MONITORING WELL SAMPLE CHARACTERIZATION & CHAIN-OF-CUSTODY1401 Erie Boulevard East Syracuse, New York 13210 Ph (315) 478-2374Fax (315) 478-2107
-	CLIENT: <u>A.O.I</u> CONTACT: <u>Richard Nugerbauer</u> LOCATION: <u>ALTMAR MINI MART # 326</u> WELL TYPE/SIZE: <u>2"PVC</u>
	WELL PURGING & SAMPLING:Date: $3-26-97$ Purge Start Time: $/111/0$ Purge End Time: $/1120$ Total Well Depth $/0.86'$ # Well Volumes Purged 1.033 $color_LTRrown_DrkBrown_Depth to Water /1.81'Total Volume Purged 1CAllon/DrlTurbidity M/H/HWell Volume 0.968Final Depth to Water 0dor_None/51.947odor_None/51.947Purge Method PVC BAilerSAMPLE COLLECTED:Time 11:45Date 3-26-97$
	WEATHER CONDITIONS: Cold, Windy SNOwY FIELD PARAMETERS: pH pH Calibration Conductivity Temperature Initial Reading @ 4.0 std =
	SAMPLE PRESERVATION: Date $3 - 26 - 97$ Time $11' \cdot 45$ By P. Colley Date $1 + 250$ Ime $11' \cdot 45$ By P. Colley Preservative: $\Box H_2S0$ Colley \Box other (Identify) \Box NaOH X HCl \Box Na $_2S_2O_3$ X Cooled to 4° C \Box other (Identify) \Box Was Sample Filtered? X NO \Box Yes Date: $Time:$
	SAMPLE CONTAINERS & QUANTITIES: A Quart Jar (Glass w/Teflon Liner) D 500 ml Plastic Cylinder U 3/2 Gallon (Plastic)
	PARAMETERS: □ See Attached Proposal/List □ NYSDEC Part 360 Routine □ NYSDEC Part 360 Baseline XEPA 8021 □ EPA 503.1 □ 8270 (Base Neutrals) □ NYSDOH 310-13 □ EPA 624 □ EPA 601/602 NOTES: USEPA MeThod 8/000 .
	Collected By <u>PAUL Conlet</u> Delivered By <u>Jour Conlet</u> Received.By <u>Theretone</u> Date <u>3-26-97</u> Time <u>14:00</u> Date <u>3/26/97</u> Time <u>14:00</u>



1401 Erie Blvd. East Syracuse, NY 13210 Phone 315-478-2374 Fax 315-478-2107

REPORT OF ANALYSES

ALASKAN OIL 500 SOLAR STREET SYRACUSE, NY 13204-

PROJECT NAME: AOI/PEF, #326-Altmar DATE: 04/09/97

.

Attn: MR. RICH NEUGEBAUER

SAMPLE NUMBER- 130918	SAMPLE ID- MW-2	SAMPLE MATRIX- WA
DATE SAMPLED- 03/26/97		TIME SAMPLED- 1140
DATE RECEIVED- 03/26/97	SAMPLER- Paul Conley	RECEIVED BY- CAM
TIME RECEIVED- 1400	DELIVERED BY- Paul Conley	TYPE SAMPLE- Grab

Page 1 of 2

-

			SAMPLE PREP	ANALYSIS		
	ANALYSIS	METHOD	DATE BY	DATE	TIME BY	RESULT UNITS
	EPA 8021 Scan	EPA 8021		04/05/97	BLD	
	Benzene	EPA 8021		04/05/97	BLD	< 0.7 ug/L
	Ethylbenzene	EPA 8021		04/05/97	BLD	< 1.0 ug/L
	Toluene	EPA 8021		04/05/97	BLD	< 1.0 ug/L
	o-Xylene	EPA 8021		04/05/97	BLD	< 1.0 ug/L
-	m-Xylene	EPA 8021		04/05/97	BLD	< 1.0 ug/L
-	p-Xylene	EPA 8021		04/05/97	BLD	< 1.0 ug/L
	Isopropylbenzene	EPA 8021		04/05/97	BLD	< 1.0 ug/L
	n-Propylbenzene	EPA 8021		04/05/97	BLD	< 1.0 ug/L
	p-Isopropyltoluene	EPA 8021		04/05/97	BLD	< 1.0 ug/L
	1,2,4-Trimethylbenzene	EPA 8021		04/05/97	BLD	< 1.0 ug/L
	1,3,5-Trimethylbenzene	EPA 8021		04/05/97	BLD	< 1.0 ug/L
	n-Butylbenzene	EPA 8021		04/05/97	BLD	< 1.0 ug/L
	sec-Butylbenzene	EPA 8021		04/05/97	BLD	< 1.0 ug/L
	Naphthalene	EPA 8021		04/05/97	BLD	< 5.0 ug/L
-	Methyl-t-Butyl Ether	EPA 8021		04/05/97	BLD	< 5.0 ug/L
-	EPA 8100 SCAN	EPA 8100	03/28/97 KSA	04/03/97	KMS	
	ANTHRACENE	EPA 8100	03/28/97 KSA	04/03/97	KMS	< 5 ug/L
	FLUORENE	EPA 8100	03/28/97 KSA	04/03/97	KMS	< 5 ug/L
	PHENANTHRENE	EPA 8100	03/28/97 KSA	04/03/97	KMS	< 5 ug/L
	PYRENE	EPA 8100	03/28/97 KSA	04/03/97	KMS	< 5 ug/L



1401 Erie Blvd. East Syracuse, NY 13210 Phone 315-478-2374 Fax 315-478-2107

Page 2 of 2

CONTINUATION OF DATA FOR SAMPLE NUMBER 130918

			SAMPLE PF	REP	ANALYSIS				
	ANALYSIS	METHOD	DATE	BY	DATE	TIME	BY	RESULT	UNITS
	ACENAPHTHENE	EPA 810	00 03/28/97	KSA	04/03/97		KMS	< 5	ug/L
	BENZO (A) ANTHRACENE	EPA 810	00 03/28/97	KSA	04/03/97		KMS	< 5	ug/L
	FLUORANTHENE	EPA 810	00 03/28/97	KSA	04/03/97		KMS	< 5	ug/L
	BENZO(B)FLUORANTHENE	EPA 810	00 03/28/97	KSA	04/03/97		KMS	< 5	ug/L
	BENZO(K) FLUORANTHENE	EPA 810	00 03/28/97	KSA	04/03/97		KMS	< 5	ug/L
	CHRYSENE	EPA 810	00 03/28/97	KSA	04/03/97		KMS	< 5	ug/L
	BENZO(A) PYRENE	EPA 810	00 03/28/97	KSA	04/03/97		KMS	< 5	ug/L
	BENZO(G,H,I)PERYLENE	EPA 810	00 03/28/97	KSA	04/03/97		KMS	< 5	ug/L
	INDENO(1,2,3-CD)PYRENE	EPA 810	00 03/28/97	KSA	04/03/97		KMS	< 5	ug/L
مستنغر	DIBENZ(A,H)ANTHRACENE	EPA 810	00 03/28/97	KSA	04/03/97		KMS	< 5	ug/L
-	NAPHTHALENE	EPA 810	00 03/28/97	KSA	04/03/97		KMS	< 5	ug/L
	ACENAPHTHYLENE	EPA 810	00 03/28/97	KSA	04/03/97		KMS	< 5	ug/L

NYSDOH LAB ID NO. 11246

APPROVED BY:

1 Jalant

CErtified MONITORING WELL 1401 Erie Boulevard East Environmental SAMPLE CHARACTERIZATION Syracuse, New York 13210 Services, Inc. & CHAIN-OF-CUSTODY Ph (315) 478-2374
CLIENT: A.OI. CLIENT: A.OI. LOG NO. 130918 DOTACT: Richaid Number Well NO. HOT HEF. Well TYPE/SIZE:
WELL PURGING & SAMPLING:Date: $3 - 26 - 97$ Purge Start Time: $11'0$ Purge End Time: $11'10$ Total Well Depth $12.02'$ # Well Volumes Purged 5.2 $color LT Brown/$ Depth to Water $4.82'$ Total Volume Purged $6 - A/lons$ Turbidity $M/M/M$ Well Volume 1.152 Final Depth to Water $odor$ $None/sloth$ Purge Method $PVC BAiler$ SAMPLE COLLECTED:Time $11'.40$ Date $3 - 26 - 97$
WEATHER CONDITIONS: Cold, WindY, SnowY FIELD PARAMETERS: pH pH Calibration Conductivity Temperature Initial Reading @ 4.0 Std = Intermediate Reading @ 7.0 Std = Redox Final Reading @ Std =
SAMPLE_PRESERVATION: Time //: 40 By P. Conley_ Date 3-26-97 Time //: 40 By P. Conley_ Preservative: D H ₂ SO ₄ D HNO ₃ D NaOH X HCl D Na ₂ S ₂ O ₃ Conley_ Other (Identify) Was Sample Filtered? Q NO D Yes Date:
SAMPLE CONTAINERS & QUANTITIES: Quart Jar (Glass w/Teflon Liner) Z 500 ml Plastic Cylinder D Pint Jar (Glass w/Teflon Liner) 3 Gallon (Plastic)
PARAMETERS: □ See Attached Proposal/List NYSDEC Part 360 Routine □ NYSDEC Part 360 Baseline 8270 (Base Neutrals) □ NYSDOH 310-13 NOTES: LKEPA Method B/00
Collected By PAUL Contet Date 3-26-97 Delivered By Marine Mique Date 3/26/97 Time 14:00 Received By Marine Mique Date 3/26/97 Time 14:00



Services, Inc.

1401 Erie Blvd. East Syracuse, NY 13210 Phone 315-478-2374 Fax 315-478-2107

REPORT OF ANALYSES

ALASKAN OIL 500 SOLAR STREET SYRACUSE, NY 13204PROJECT NAME: AOI/PEF, #326-Altmar DATE: 04/09/97

Attn: MR. RICH NEUGEBAUER

SAMPLE NUMBER- 130920 SAMPLE ID- MW-3 SAMPLE MATRIX- WA DATE SAMPLED- 03/26/97 TIME SAMPLED- 1150 DATE RECEIVED- 03/26/97 SAMPLER- Paul Conley RECEIVED BY- CAM TIME RECEIVED- 1400 DELIVERED BY- Paul Conley TYPE SAMPLE- Grab

Page 1 of 2

				SAMPLE	PREP	ANALYSIS				
-	ANALYSIS	MET	HOD	DATE	BY	DATE	TIME	BY	RESULT	UNITS
	EPA 8021 Scan	EPA	8021			04/05/97		BLD		
	Benzene	EPA	8021			04/05/97		BLD	< 0.7	ug/L
	Ethylbenzene	EPA	8021			04/05/97		BLD	< 1.0	ug/L
	Toluene	EPA	8021			04/05/97		BLD	< 1.0	ug/L
	o-Xylene	EPA	8021			04/05/97		BLD	< 1.0	ug/L
-	m-Xylene	EPA	8021			04/05/97		BLD	< 1.0	ug/L
_	p-Xylene	EPA	8021			04/05/97		BLD	< 1.0	ug/L
	Isopropylbenzene	EPA	8021			04/05/97		BLD	< 1.0	ug/L
	n-Propylbenzene	EPA	8021			04/05/97		BLD	< 1.0	ug/L
۲	p-Isopropyltoluene	EPA	8021			04/05/97		BLD	< 1.0	ug/L
	1,2,4-Trimethylbenzene	EPA	8021			04/05/97		BLD	< 1.0	ug/L
	1,3,5-Trimethylbenzene	EPA	8021			04/05/97		BLD	< 1.0	ug/L
ک	n-Butylbenzene	EPA	8021			04/05/97		BLD	< 1.0	ug/L
	sec-Butylbenzene	EPA	8021			04/05/97		BLD	< 1.0	ug/L
	Naphthalene	EPA	8021			04/05/97		BLD	< 5.0	ug/L
_	Methyl-t-Butyl Ether	EPA	8021			04/05/97		BLD	< 5.0	ug/L
	EPA 8100 SCAN	EPA	8100	03/28/9	7 KSA	04/03/97		KMS		
	ANTHRACENE	EPA	8100	03/28/9	7 KSA	04/03/97		KMS	< 5	ug/L
	FLUORENE	EPA	8100	03/28/9	7 KSA	04/03/97		KMS	< 5	ug/L
	PHENANTHRENE	EPA	8100	03/28/9	7 KSA	04/03/97		KMS	< 5	ug/L
	PYRENE	EPA	8100	03/28/9	7 KSA	04/03/97		KMS	< 5	ug/L



1401 Erie Blvd. East Syracuse, NY 13210 Phone 315-478-2374 Fax 315-478-2107

a

Page 2 of 2

CONTINUATION OF DATA FOR SAMPLE NUMBER 130920

				SAMPLE P	REP	ANALYSIS				
	ANALYSIS	METI	HOD	DATE	BY	DATE	TIME	BY	RESULT	UNITS
-	ACENADHTHENE	FDA	8100	03/28/97	KCD	04/03/97		KNG	< 5	ug/L
	BENZO(A) ANTHRACENE	EPA	8100	03/28/97	KSA	04/03/97		KMS	< 5	ug/L ug/L
	FLUORANTHENE	EPA	8100	03/28/97	KSA	04/03/97		KMS	< 5	ug/L
	BENZO(B)FLUORANTHENE	EPA	8100	03/28/97	KSA	04/03/97		KMS	< 5	ug/L
	BENZO (K) FLUORANTHENE	EPA	8100	03/28/97	KSA	04/03/97		KMS	< 5	ug/L
	CHRYSENE	EPA	8100	03/28/97	KSA	04/03/97		KMS	< 5	ug/L
	BENZO(A) PYRENE	EPA	8100	03/28/97	KSA	04/03/97		KMS	< 5	ug/L
	BENZO(G, H, I) PERYLENE	EPA	8100	03/28/97	KSA	04/03/97		KMS	< 5	ug/L
	INDENO(1,2,3-CD)PYRENE	EPA	8100	03/28/97	KSA	04/03/97		KMS	< 5	ug/L
	DIBENZ(A,H)ANTHRACENE	EPA	8100	03/28/97	KSA	04/03/97		KMS	< 5	ug/L
-	NAPHTHALENE	EPA	8100	03/28/97	KSA	04/03/97		KMS	< 5	ug/L
	ACENAPHTHYLENE	EPA	8100	03/28/97	KSA	04/03/97		KMS	< 5	ug/L

NYSDOH LAB ID NO. 11246

Daba APPROVED BY:

	CES
ł	

MONITORING WELL SAMPLE CHARACTERIZATION & CHAIN-OF-CUSTODY

1401 Erie Boulevard East Syracuse, New York 13210 Ph (315) 478-2374 Fax (315) 478-2107

CLIENT: <u>A.O.T</u>	LOG NO. 130920
CONTACT: RICHAIL NURGENBAUER	WELL NO. MW # 3
LOCATION: AITMAR MINI MART #326	WELL TYPE/SIZE: 2"PVC
WELL PURGING & SAMPLING: Date: $\frac{1120}{3-26-77}$ Purge Start Ti	me: 1/20 Purge End Time: 11:30
Total Well Depth <u>12.17</u> # Well Volumes Purged <u>4</u>	,18 color <u>Clear</u> /LTIBrown
Depth to Water 3,21 Total Volume Purged 60	FAllons Turbidity M/M/M
Well Volume	odor NONE
Purge Method PVC BAI/Pr SAMPLE COLLECTED: Time_	11:50 Date 3-26-97
WEATHER CONDITIONS: Cold, WINdy, SNOWY	
FIELD PARAMETERS: pH pH Calibration	Conductivity Temperature
Initial Reading @ 4.0 std =	
Intermediate Reading @ 7.0 std =	Redox
Final Reading @ Sta =	
SAMPLE PRESERVATION:	P Con Parts
Date $3 - 20^{\circ}$ Time 77.50 By	Ticorag
Preservative: $\Box H_2SO_4$ $\Box HNO_3$ $\Box NaOH A HCI \Box Na_2S_2O_3$	A Cooled to 4° C
U Other (Identify)	
Was Sample Filtered? A No 🗆 Yes Date:	Time:
SAMPLE CONTAINERS & QUANTITIES:	
Quart Jar (Glass w/Teflon Liner) 2 2 40 ml	Vial with Teflon Liner 2
Gallon (Plastic) Image: Control of the control of t	ar (Glass W/Terion Liner
PARAMETERS: U See Attached Proposal/List	
□ NISDEC Part 360 Routine □ NISDEC Part 360 Baseline □ 8270 (Base Neutrals) □ NISDOH 310-13	EPA 6021 EPA 503.1
USEPA Method SIDO	
P. Coller	3-26-97
Collected By Date	3-26-97 min 14:20
Delivered By that we have been bate	2/2/1/97 1UM
Received By Date	$= - \underbrace{- \underbrace{- \underbrace{- \underbrace{- \underbrace{- \underbrace{- \underbrace{- \underbrace{- \underbrace{-$



1401 Erie Blvd. East Syracuse, NY 13210 Phone 315-478-2374 Fax 315-478-2107

REPORT OF ANALYSES

ALASKAN OIL
 500 SOLAR STREET
 SYRACUSE, NY 13204 Attn: MR. RICH NEUGEBAUER

PROJECT NAME: AOI/PEF, #326-Altmar DATE: 04/09/97

- SAMPLE NUMBER-130921SAMPLE ID-MW-4SAMPLE MATRIX-WADATE SAMPLED-03/26/97TIMETIMESAMPLED-1155DATE RECEIVED-03/26/97SAMPLER-PaulConleyRECEIVED BY-CAMTIME RECEIVED-1400DELIVEREDBY-PaulConleyTYPESAMPLE-Grab
- Page 1 of 2

				SAMPLE	PREP	ANALYSIS				
•	ANALYSIS	METHOD)	DATE	BY	DATE	TIME	BY	RESULT	UNITS
	EPA 8021 Scan	EPA 80	21			04/05/97		BLD		
	Benzene	EPA 80	21			04/05/97		BLD	< 0.7	ug/L
	Ethylbenzene	EPA 80	21			04/05/97		BLD	< 1.0	ug/L
	Toluene	EPA 80	21			04/05/97		BLD	< 1.0	ug/L
	o-Xylene	EPA 80	21			04/05/97		BLD	< 1.0	ug/L
	m-Xylene	EPA 80	21			04/05/97		BLD	< 1.0	ug/L
-	p-Xylen e	EPA 80	21			04/05/97		BLD	< 1.0	ug/L
	Isopropylbenzene	EPA 80	21			04/05/97		BLD	< 1.0	ug/L
	n-Propylbenzene	EPA 80	21			04/05/97		BLD	< 1.0	ug/L
	p-Isopropyltoluene	EPA 80	21			04/05/97		BLD	< 1.0	ug/L
	1,2,4-Trimethylbenzene	EPA 80	21			04/05/97		BLD	< 1.0	ug/L
	1,3,5-Trimethylbenzene	EPA 80	21			04/05/97		BLD	< 1.0	ug/L
-	n-Butylbenzene	EPA 80	21			04/05/97		BLD	< 1.0	ug/L
	sec-Butylbenzene	EPA 80	21			04/05/97		BLD	< 1.0	ug/L
	Naphthalene	EPA 80	21			04/05/97		BLD	< 5.0	ug/L
-	Methyl-t-Butyl Ether	EPA 80	21			04/05/97		BLD	< 5.0	ug/L
•	EPA 8100 SCAN	EPA 81	00	03/28/9	7 KSA	04/03/97		KMS		
	ANTHRACENE	EPA 81	00	03/28/9	7 KSA	04/03/97		KMS	< 5	ug/L
	FLUORENE	EPA 81	00	03/28/9	7 KSA	04/03/97		KMS	< 5	ug/L
	PHENANTHRENE	EPA 81	00	03/28/9	7 KSA	04/03/97		KMS	< 5	ug/L
	PYRENE	EPA 81	0 0	03/28/9	7 KSA	04/03/97		KMS	< 5	ug/L



1401 Erie Blvd. East Syracuse, NY 13210 Phone 315-478-2374 Fax 315-478-2107

Page 2 of 2

CONTINUATION OF DATA FOR SAMPLE NUMBER 130921

			SAMPLE PREP	ANALYSIS		
	ANALYSIS	METHOD	DATE BY	DATE	TIME BY	RESULT UNITS
	ACENAPHTHENE	EPA 8100	03/28/97 KSA	04/03/97	KMS	< 5 ug/L
	BENZO (A) ANTHRACENE	EPA 8100	03/28/97 KSA	04/03/97	KMS	< 5 ug/L
•	FLUORANTHENE	EPA 8100	03/28/97 KSA	04/03/97	KMS	< 5 ug/L
	BENZO(B)FLUORANTHENE	EPA 8100	03/28/97 KSA	04/03/97	KMS	< 5 ug/L
	BENZO(K) FLUORANTHENE	EPA 8100	03/28/97 KSA	04/03/97	KMS	< 5 ug/L
	CHRYSENE	EPA 8100	03/28/97 KSA	04/03/97	KMS	< 5 ug/L
	BENZO(A) PYRENE	EPA 8100	03/28/97 KSA	04/03/97	KMS	< 5 ug/L
	BENZO(G,H,I)PERYLENE	EPA 8100	03/28/97 KSA	04/03/97	KMS	< 5 ug/L
	INDENO(1,2,3-CD)PYRENE	EPA 8100	03/28/97 KSA	04/03/97	KMS	< 5 ug/L
-	DIBENZ(A,H)ANTHRACENE	EPA 8100	03/28/97 KSA	04/03/97	KMS	< 5 ug/L
	NAPHTHALENE	EPA 8100	03/28/97 KSA	04/03/97	KMS	< 5 ug/L
	ACENAPHTHYLENE	EPA 8100	03/28/97 KSA	04/03/97	KMS	< 5 ug/L

NYSDOH LAB ID NO. 11246

APPROVED BY:

Jabar

	CES	Certified Environmental Services, Inc.	MONI SAMPLE CI & CHAI	TORING WELL HARACTERIZATION N-OF-CUSTODY	1401 Erie I N Syracuse, N Ph (315) 478-237	Boulevard East Iew York 13210 74 Fax (315) 478-2107
	CLIENT: CONTACT: LOCATION:	4. O. I. haid Nuegeni LTMAR Mini I	64000 4417 #32	6	LOG NO. / / WELL NO. MO WELL TYPE/SIZE	30921 w #4 s:2" pv c
	WELL PURGING Total Well De Depth to Wate Well Volume Purge Method WEATHER CONDI FIELD PARAMET Initial Readi Intermediate	$\frac{\mathcal{E} \text{ SAMPLING:}}{\operatorname{pth}} Da$ $\frac{1}{1, 12}$ $\frac{1, 067}{1, 067}$ $\frac{9VC BAI/er}{1000000000000000000000000000000000000$	te: <u>3~26~9</u> 7 # well volu Total volu Final Dept SAMPLE COLU <i>Wi~JY, SN OC</i> pH Ca @ 4. @ 7.	Purge Start Time umes Purged 3,2 ne Purged 3.5 n to Water LECTED: Time_/ u// alibration 0 Std = 0 Std =	a: 1/:30 Purge QS Color DrY Turbi Odor_ Odor_ 1:55 Date_ Conductivit	End Time: <u>///40</u> Light Brown dity <u>M / H / H</u> <u>Avone</u> 3-26-97 Sy Temperature Redox
	Final Reading <u>SAMPLE PRESER</u> Date <u>3-26</u> Preservative: Other (Ident Was Sample Fil	VATION: ~ 97 \Box H ₂ SO ₄ \Box HNO ₃ tify) Ltered? K NO	 	By ////////////////////////////////	P. Corley Cooled to 4° C Time:	
" "]	SAMPLE CONTAIN Quart Jar (C 500 ml Plast 3 % Gallon (P)	NERS & QUANTITIES Glass w/Teflon Li tic Cylinder lastic)	.ner) <u>2</u>	↓ 40 ml Via □ Pint Jar □ Other	al with Teflon L. (Glass w/Teflon	iner Z
	PARAMETERS: NYSDEC Part 8270 (Base N NOTES: <u>USE</u>	□ See Attach 360 Routine Neutrals) PA MCThud	ed Proposal/Li INYSDEC Part NYSDOH 310- S/UD	st 360 Baseline 13	Сера 8021 Пера 624	□ EPA 503.1 □ EPA 601/602
	Collected By _ Delivered By _ Received By _	P. Corley	guel	Date Date _ Date _	3-26.97 3-26.97 3/26/97	Time <u>14:00</u> Time <u>14:07</u>



1401 Erie Blvd. East Syracuse, NY 13210 Phone 315-478-2374 Fax 315-478-2107

REPORT OF ANALYSES

ALASKAN OIL 500 SOLAR STREET SYRACUSE, NY 13204-Attn: MR. RICH NEUGEBAUER

PROJECT NAME: AOI/PEF, #326-Altmar DATE: 04/09/97

SAMPLE NUMBER- 130922	SAMPLE ID- Trip Blank	SAMPLE MATRIX- WA
DATE SAMPLED- 03/26/97		
DATE RECEIVED- 03/26/97	SAMPLER- Paul Conley	RECEIVED BY- CAM
TIME RECEIVED- 1400	DELIVERED BY- Paul Conley	TYPE SAMPLE- Grab

Page 1 of 1

-	ANALYSIS	METHOD	ANALYSIS DATE	TIME BY	RESULT	UNITS
	EPA 8021 Scan	EPA 8021	04/05/97	BLD		
	Benzene	EPA 8021	04/05/97	BLD	< 0.7	ug/L
	Ethylbenzene	EPA 8021	04/05/97	BLD	< 1.0	ug/L
	Toluene	EPA 8021	04/05/97	BLD	< 1.0	ug/L
	o-Xylene	EPA 8021	04/05/97	BLD	< 1.0	ug/L
-	m-Xylene	EPA 8021	04/05/97	BLD	< 1.0	ug/L
	p-Xylene	EPA 8021	04/05/97	BLD	< 1.0	ug/L
	Isopropylbenzene	EPA 8021	04/05/97	BLD	< 1.0	ug/L
	n-Propylbenzene	EPA 8021	04/05/97	BLD	< 1.0	ug/L
	p-Isopropyltoluene	EPA 8021	04/05/97	BLD	< 1.0	ug/L
	1,2,4-Trimethylbenzene	EPA 8021	04/05/97	BLD	< 1.0	ug/L
	1,3,5-Trimethylbenzene	EPA 8021	04/05/97	BLD	< 1.0	ug/L
	n-Butylbenzene	EPA 8021	04/05/97	BLD	< 1.0	ug/L
-	sec-Butylbenzene	EPA 8021	04/05/97	BLD	< 1.0	ug/L
	Naphthalene	EPA 8021	04/05/97	BLD	< 5.0	ug/L
	Methyl-t-Butyl Ether	EPA 8021	04/05/97	BLD	< 5.0	ug/L

Jaha

APPROVED BY:



1401 Erie Elvd. East Syracuse. NY 13210 Phone 315-478-2374 Fax 315-478-2107

SAMPLE CHARACTERIZATION/CHAIN-OF-CUSTODY

 CLIENT: <u>A.O.T.</u> CONTACT: <u>Richald Nuegenbauer</u> PE# ()
SAMPLING INFORMATION: SAMPLE ID: <u>Trip Blavks</u> Location: <u>A LTMAR Mini Mait #326</u> SAMPLE TYPE: [] Soil & Water [] Oil [] Wipe [] Air [] COLLECTION TECHNIQUE: [] Composite X Grab [] Wipe [] Flow Composite []
CCMPOSITE: (Start) Date Time By (Finish) Date Time By GRAB: Date Time By
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$
SAMPLE CONTAINERS: Container Qty Qty Quart Jar (Glass w/Teflon Liner) \$40 ml Vial with Teflon Liner 2 Solo ml Plastic Cylinder Quart Jar (Glass w/o Teflon Liner) \$2 Gallon (Plastic) I Pint Jar (Glass w/o Teflon Liner) Coliform Cup I Pint Jar (Glass w/o Teflon Liner) Other
PARAVETERS: E See Attached Proposal/List
Collected By P. Conley Date 3-26-97 Delivered By Maxime Marie Date 3-26-97 Time 14:00 Received By Maxime Marie Date 32697 Time 14:00 Received By Date Time



1401 Erie Blvd. East Syracuse, NY 13210 Phone 315-478-2374 Fax 315-478-2107

REPORT OF ANALYSES

ALASKAN OIL 500 SOLAR STREET SYRACUSE, NY 13204-Attn: MR. RICH NEUGEBAUER PROJECT NAME: AOI/PEF, #326-Altmar DATE: 04/10/97

-	SAMPLE NUMBER- 131047	SAMPLE ID- Mini Mart-Kitchen Sink	SAMPLE MATRIX- WA
	DATE SAMPLED- 03/28/97		TIME SAMPLED- 1815
	DATE RECEIVED- 03/31/97	SAMPLER- Kevin R. Rowe	RECEIVED BY- CAM
	TIME RECEIVED- 0930	DELIVERED BY- Kevin R. Rowe	TYPE SAMPLE- Grab

Page 1 of 1

-	ANALYSIS	METHOD	ANALYSIS DATE	TIME	BY	RESULT	UNITS
	EPA 8021 Scan	EPA 8021	04/09/97		BLD		
•	Benzene	EPA 8021	04/09/97		BLD	< 0.7	ug/L
	Ethylbenzene	EPA 8021	04/09/97		BLD	< 1.0	ug/L
	Toluene	EPA 8021	04/09/97		BLD	< 1.0	ug/L
	o-Xylene	EPA 8021	04/09/97		BLD	< 1.0	ug/L
-	m-Xylene	EPA 8021	04/09/97		BLD	< 1.0	ug/L
	p-Xylene	EPA 8021	04/09/97		BLD	< 1.0	ug/L
	Isopropylbenzene	EPA 8021	04/09/97		BLD	< 1.0	ug/L
	n-Propylbenzene	EPA 8021	04/09/97		BLD	< 1.0	ug/L
-	p-Isopropyltoluene	EPA 8021	04/09/97		BLD	< 1.0	ug/L
	1,2,4-Trimethylbenzene	EPA 8021	04/09/97		BLD	< 1.0	ug/L
	1,3,5-Trimethylbenzene	EPA 8021	04/09/97		BLD	< 1.0	ug/L
-	n-Butylbenzene	EPA 8021	04/09/97	,	BLD	< 1.0	ug/L
-	sec-Butylbenzene	EPA 8021	04/09/97		BLD	< 1.0	ug/L
	Naphthalene	EPA 8021	04/09/97		BLD	< 5.0	ug/L
	Methyl-t-Butyl Ether	EPA 8021	04/09/97		BLD	< 5.0	ug/L

Dabar

NYSDOH LAB ID NO. 11246 APPROVED BY: /



1401 Erie Blvd. East Syracuse, NY 13210 Phone 315-478-2374 Fax 315-478-2107

REPORT OF ANALYSES

PROJECT NAME: AOI/PEF, #326-Altmar DATE: 04/10/97

ALASKAN OIL 500 SOLAR STREET SYRACUSE, NY 13204-Attn: MR. RICH NEUGEBAUER

SAMPLE NUMBER- 131048 SAMPLE ID- Trip Blank SAMPLE MATRIX- WA TIME SAMPLED- 1000 DATE SAMPLED- 03/28/97 RECEIVED BY- CAM DATE RECEIVED- 03/31/97 SAMPLER- Kevin R. Rowe TIME RECEIVED- 0930 DELIVERED BY- Kevin R. Rowe TYPE SAMPLE- Grab

Page 1 of 1

			ANALYSIS				
	ANALYSIS	METHOD	DATE	TIME	BY	RESULT	UNITS
	EPA 8021 Scan	EPA 8021	04/09/97	I	BLD		
	Benzene	EPA 8021	04/09/97	I	BLD	< 0.7	ug/L
—	Ethylbenzene	EPA 8021	04/09/97	E	BLD	< 1.0	ug/L
	Toluene	EPA 8021	04/09/97	I	BLD	< 1.0	ug/L
	o-Xylene	EPA 8021	04/09/97	E	BLD	< 1.0	ug/L
-	m-Xylene	EPA 8021	04/09/97	E	BLD	< 1.0	ug/L
	p-Xylene	EPA 8021	04/09/97	E	BLD	< 1.0	ug/L
	Isopropylbenzene	EPA 8021	04/09/97	F	BLD	< 1.0	ug/L
	n-Propylbenzene	EPA 8021	04/09/97	E	BLD	< 1.0	ug/L
	p-Isopropyltoluene	EPA 8021	04/09/97	E	BLD	< 1.0	ug/L
	1,2,4-Trimethylbenzene	EPA 8021	04/09/97	E	BLD	< 1.0	ug/L
	1,3,5-Trimethylbenzene	EPA 8021	04/09/97	F	BLD	< 1.0	ug/L
	n-Butylbenzene	EPA 8021	04/09/97	. E	BLD	< 1.0	ug/L
	sec-Butylbenzene	EPA 8021	04/09/97	E	3LD	< 1.0	uq/L
	Naphthalene	EPA 8021	04/09/97	E	BLD	< 5.0	ug/L
	Methyl-t-Butyl Ether	EPA 8021	04/09/97	E	3LD	< 5.0	ug/L

Jaba

APPROVED BY:



.

1

Certified Environmental Services, Inc.

1401 Erie Blvd. East Syracuse, NY 13210 Phone 315-478-2374 Fax 315-478-2107

CHAIN OF CUSTODY RECORD

Company: Marchage and that Phone:							Analysis								
Address:		af tro T			Fa	Fax:									/
Contact Person: <u>Figure Management</u> Sampled By (print):					P.O. #:						/			/	
SAMPLE NO.	COLL	ECTED TIME	C O M P	G R A B		LOCATION	# OF CONT.						соммі	ENTS	
1/14+1	2.2.7	1515	†		Mart 4	Capitan Card	2				ſ	4		7.	47
1048	3 4 3 4 7			()	The	Mark	1	×.				14.5			···
													ļ.		A lore to
												E.A.F. a	9 I I	s 4	
													<u>-</u>	1	and in
												15 63	2. <i>[</i>	i int	
												. Contrary			
												,			
Relinquishe	d By:	¢ to the second			Date	Time	Received By	/: /:				۱	Date		Time
Relinquishe	d By:				Date	Time	Received by	Lab)::)	22		Date		Time

White - CES's Copy • Canary - Return to Client with Report • Pink - Client's Initial Copy