

120 Wilkinson St. • Syracuse, New York 13204 • 315-471-6490 • Fax 315-479-6698

January 03, 2000

Mr. Harry Warner NYSDEC Spills Management Division, Region 7 615 Erie Blvd. West Syracuse, NY. 13204

> RE: High-Vacuum Extraction (HVE) Pilot Test AOI – Altmar, NY. NYSDEC # 96-14774

Dear Mr. Warner,

The purpose of this letter is to present for your review and approval, a formatted work plan for a high-vacuum extraction (HVE) pilot test for the AOI site located on Rt. 13 Altmar, NY. The test to be conducted will provide information for properly sizing a "total phase" high vacuum recovery system for remedial activities for this site. If approved, the proposed pilot test will tentatively be scheduled during the later part of February or early March of 2000. If favorable weather permits, the test could be moved up to as soon as the month of January. Also, AOI is prepared to have a third party representative from Barton & Loguidice, P.C. at the site for management and oversight purposes as requested by your office. Should you have any questions or concerns regarding the test or require further information, I can be contacted at (315) 454-4435, Ext. 15. Thank You for your prompt response to this matter.

Sincerely,

ames M. Jones

James M. Jones V Remedial Project Manager, AOI

cc: Richard A. Neugebauer, Pres. AOI Scott Blake, Field Operations Mngr. AOI Thomas J. DiCaprio, Geoscience Dept. - Clemett & Co. Inc.

ref: Barton & Loguidice, P.C.





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"High-Vacuum Extraction" (HVE) Pilot Test

Alaskan Oil Inc. Project # 326 Rt. 13 Altmar, NY. NYSDEC Spill # 96-14774

Prepared For:

NYSDEC Spills Management Division – Region 7 615 Erie Blvd. West Syracuse, NY. 13204

Prepared By:

Alaskan Oil Inc. 120 Wilkinson Street Syracuse, NY. 13204



1.0 Introduction:

Purpose

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By conducting this pilot test, data collected will be consolidated and utilized for the design and application of a total phase remedial extraction system for this site. Information gathered from strategic monitoring points chosen for this test will be reviewed and submitted for approval of the overall design and construction of this system at a later date.

Time Frame

The test will be conducted for an approximate period of two -8 hour days. During this time frame, the initial start up will begin and continue for an approximate period of eight hours. If optimum performance / results are achieved prior to the end of the initial 8 hour period, the test will be discontinued and information collected will be submitted for review.

Safety Concerns

Prior to the pilot test, the station manager will be given advanced notification of the activities to be conducted so that deliveries can be made without effecting the stores operation and the test itself. Also, utility cones, barriers and construction flagging will be placed around the testing area to ensure optimum precaution for pedestrians and traffic. An on-site tailgate meeting will also be held with all activities reviewed accordingly.

2.0 Site Location:

The site for the pilot test to be conducted is the Altmar Mini-Mart location on Rt. 13 in the village of Altmar, NY. This site to date remains to be an active Mini-Mart / Gas Station. The village of Altmar is in a rural area located approximately 45 minutes north of Syracuse and is approximately 7 miles south east of the village of Pulaski, NY. The site location has been upgraded and well maintained with the surrounding parking area sealed with pavement.

3.0 Pilot Test System:

The high-vac system being utilized for this test was designed and mounted into an enclosed trailer unit for mobilization purposes. The capabilities of the unit ranges from 0"Hg. / 72cfm. - 27"Hg. / 43cfm. The system was initially set up to accommodate mobile testing applications but can also be utilized for long term remediation projects by having "on-board" total phase petroleum hydrocarbon treatment capabilities. The manifold set up was designed to accommodate five extraction points simultaneously with primary and secondary de-watering filters placed in line to enable the unit to operate continuously without interruption. The system's power requirements can be adequately linked either by a generator unit or by hard wire from a stationary source. Proper ventilation and intrinsically safe electrical connections allows the unit to operate under extreme conditions.

NOTE: the HVES discharge stack when attached exceeds 20' above grade level.

4.0 Pilot Test Procedures:

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Prior to start up, monitoring points will be set up at MW-1, MW-6, MW-11 & MW-12. These points will be modified to accommodate both vacuum gauges and groundwater monitoring equipment. RW-1 will be set up and utilized as the main extraction point for the test with a vacuum drop tube lowered into the well at an initial depth of 2 feet below static groundwater level. Static groundwater measurements will be collected from the monitoring points and vacuum gauges will be checked for "zero" static pressure displacement.

The test will begin and set points will be checked for the first initial ten minutes at one-minute intervals for static pressure drops and water table depression. The test will continue for a period determined by maximum radius of influence observed and optimum performance curves. At the point determined by this data, the drop tube will then be lowered an additional one-foot and the test will resume under the same guidance.

4.1 Additional Points:

In the area nearest the south west corner of the station property, an additional monitoring point will be placed accordingly to a maximum depth of fifteen feet for this test. This point will allow pertinent data to be collected and utilized for determining the overall effectiveness of the high-vac system. Data collected will also be utilized for determining subsurface soil conditions in this area and allow the option for additional extraction points.

4.2 Sampling:

Monitoring of the system's performance will be conducted with "on-board" equipment (flow meters and totalizers) and a PID Meter (Photovac 2020). Influent and Effluent vapor readings will be observed with the PID meter and total fluids recovered will be sampled accordingly (Inf., Mid & Eff.) for BTEX utilizing USEPA Method 602 or Full 8021 if required. Total fluids collected will be transferred in series from the knock out vessel through the primary and secondary carbon drum system. Discharge of the fluids recovered will be transferred to the onsite storm drain. BTEX samples will be submitted accordingly to a registered environmental laboratory for a twenty-four hour turn around time frame. Analytical results received back from these samples will be reviewed and distributed accordingly.

5.0 Results:

All data generated from this pilot test will be consolidated and utilized for designing a high-vac remedial system for this site. Additional information, such as analytical results for discharge requirements, will be reviewed and submitted for compliance with a summary report to the NYSDEC Spills Division – Region 7 in Syracuse, NY.





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- MONITORING WELL
- DRINKING WATER WELL
- STORM CATCH BASIN
- GS-1- WATER LEVEL GAUGING STAFF
 - PROPERTY BOUNDARY
 - DRINKING WATER SUPPLY LINE
 - - STORM SEWER LINE WITH FLOW DIRECTION