

## Baran, Cynthia (DEP)

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From: Baran, Cynthia (DEP)  
Sent: Thursday, September 16, 2004 1:21 PM  
To: Hobill, Jonathan (DEP)  
Subject: FW: Eagle Gas product and air analysis  
Attachments: L0409661.pdf; Eagle Geolabs Air Data 082704.xls

Hi Jon:

FYI...the air sample collected from the apartment above Eagle Gas Station appears clean. Product from all three wells (including the well immediately adjacent to the abandoned 1000 gallon gasoline tanks) looks like diesel.

Eagle Gas still has not obtained access from the new property owner to the storm water outfall location.

-----Original Message-----

From: James J. Decoulos [mailto:jamesj@decoulos.com]  
Sent: Thursday, September 16, 2004 12:24 PM  
To: Baran, Cynthia (DEP)  
Subject: Eagle Gas product and air analysis

Cynthia,

Attached is the fuel product analysis from Alpha Analytical and the APH analysis from Geolabs that we discussed yesterday.

Jim

>From: Alpha Analytical <seed2@alphalab.com>  
>X-Mailer: MIME::Lite 2.117 (F2.6; A1.60; B2.12; Q2.03)  
>Date: Fri, 10 Sep 2004 15:32:33 UT  
>To: jamesj@decoulos.com  
>Subject: Laboratory Results for L0409661  
>X-NAS-Bayes: #0: 3.11053E-015; #1: 1  
>X-NAS-Classification: 0  
>X-NAS-MessageID: 5662  
>X-NAS-Validation: {8FD35744-79E1-4653-A88A-3E736253B10C}  
>  
>Content-Disposition: inline  
>Content-Length: 123  
>Content-Transfer-Encoding: binary  
>Content-Type: text/plain  
>  
>Alpha Analytical Labs  
>If you have any questions or issues with this data, please contact  
>Client  
>Services at (508) 898-9220.

James J. Decoulos, PE, LSP  
Decoulos & Company  
3 Electronics Avenue  
Danvers, MA 01923  
web: [www.decoulos.com](http://www.decoulos.com)

tel: 617-489-7795  
fax: 877-842-9629

ALPHA ANALYTICAL LABORATORIES

Eight Walkup Drive  
Westborough, Massachusetts 01581-1019  
(508) 898-9220 www.alphalab.com

MA:M-MA086 NH:200301-A CT:PH-0574 ME:MA086 RI:65 NY:11148 NJ:MA935 Army:USACE

CERTIFICATE OF ANALYSIS

Client: Decoulos & Company

Laboratory Job Number: L0409661

Address: 3 Electronics Ave

Danvers, MA 01923

Date Received: 02-SEP-2004

Attn: Mr. Jim Decoulos

Date Reported: 10-SEP-2004

Project Number: 616

Delivery Method: Alpha

Site: EAGLE GAS

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ALPHA SAMPLE NUMBER	CLIENT IDENTIFICATION	SAMPLE LOCATION
L0409661-01	DCW-7	131 MAIN, CARVER
L0409661-02	ERW-2	131 MAIN, CARVER
L0409661-03	BP-5RR	131 MAIN, CARVER

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I, the undersigned, attest under the pains and penalties of perjury that, based upon my personal inquiry of those responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

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Authorized by: James Todaro

This document electronically signed

ALPHA ANALYTICAL LABORATORIES  
NARRATIVE REPORT

Laboratory Job Number: L0409661

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TPH-8100M

L0409661-01 through -03 and the associated Laboratory Duplicate have elevated limits of detection due to the 20x dilutions required by the elevated concentrations of target compounds in the sample. The Surrogate % Recoveries were not recovered due to the dilutions required to quantitate the samples.

ALPHA ANALYTICAL LABORATORIES  
CERTIFICATE OF ANALYSIS

MA:M-MA086 NH:200301-A CT:PH-0574 ME:MA086 RI:65 NY:11148 NJ:MA935 Army:USACE

Laboratory Sample Number: L0409661-01  
DCW-7

Sample Matrix: OIL

Condition of Sample: Satisfactory

Number & Type of Containers: 1-Glass

Date Collected: 26-AUG-2004 13:30

Date Received : 02-SEP-2004

Date Reported : 10-SEP-2004

Field Prep: None

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE		ID
					PREP	ANAL	
Hydrocarbon Scan by GC 8100M							
				1 8100M	0903 16:30	0906 20:21	MS
Mineral Spirits	ND	mg/kg	200000				
Gasoline	ND	mg/kg	200000				
Fuel Oil #2/Diesel	940000	mg/kg	200000				
Fuel Oil #4	ND	mg/kg	200000				
Fuel Oil #6	ND	mg/kg	200000				
Motor Oil	ND	mg/kg	200000				
Kerosene	ND	mg/kg	200000				
Transformer Oil	ND	mg/kg	200000				
Unknown Hydrocarbon	ND	mg/kg	200000				
::							
Surrogate(s)	Recovery		QC Criteria				
o-Terphenyl	ND	%	40-140				

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES  
CERTIFICATE OF ANALYSIS

MA:M-MA086 NH:200301-A CT:PH-0574 ME:MA086 RI:65 NY:11148 NJ:MA935 Army:USACE

Laboratory Sample Number: L0409661-02	Date Collected: 26-AUG-2004 14:00
ERW-2	Date Received : 02-SEP-2004
Sample Matrix: OIL	Date Reported : 10-SEP-2004
Condition of Sample: Satisfactory	Field Prep: None
Number & Type of Containers: 1-Glass	

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE		ID
					PREP	ANAL	
<hr/>							
Hydrocarbon Scan by GC 8100M				1 8100M	0903 16:30	0906 21:25	MS
Mineral Spirits	ND	mg/kg	200000				
Gasoline	ND	mg/kg	200000				
Fuel Oil #2/Diesel	870000	mg/kg	200000				
Fuel Oil #4	ND	mg/kg	200000				
Fuel Oil #6	ND	mg/kg	200000				
Motor Oil	ND	mg/kg	200000				
Kerosene	ND	mg/kg	200000				
Transformer Oil	ND	mg/kg	200000				
Unknown Hydrocarbon	ND	mg/kg	200000				
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Surrogate(s)	Recovery		QC Criteria				
o-Terphenyl	ND	%	40-140				

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES  
CERTIFICATE OF ANALYSIS

MA:M-MA086 NH:200301-A CT:PH-0574 ME:MA086 RI:65 NY:11148 NJ:MA935 Army:USACE

Laboratory Sample Number: L0409661-03

BP-5RR

Sample Matrix:

OIL

Date Collected: 26-AUG-2004 14:30

Date Received : 02-SEP-2004

Date Reported : 10-SEP-2004

Condition of Sample: Satisfactory

Field Prep: None

Number & Type of Containers: 1-Glass

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE		ID
					PREP	ANAL	
<hr/>							
Hydrocarbon Scan by GC 8100M				1 8100M	0903 16:30	0906 22:29	MS
Mineral Spirits	ND	mg/kg	200000				
Gasoline	ND	mg/kg	200000				
Fuel Oil #2/Diesel	940000	mg/kg	200000				
Fuel Oil #4	ND	mg/kg	200000				
Fuel Oil #6	ND	mg/kg	200000				
Motor Oil	ND	mg/kg	200000				
Kerosene	ND	mg/kg	200000				
Transformer Oil	ND	mg/kg	200000				
Unknown Hydrocarbon	ND	mg/kg	200000				
<hr/>							
Surrogate(s)	Recovery		QC Criteria				
o-Terphenyl	ND	%	40-140				

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES  
QUALITY ASSURANCE BATCH DUPLICATE ANALYSIS

Laboratory Job Number: L0409661

Parameter	Value 1	Value 2	Units	RPD	RPD Limits
Hydrocarbon Scan by GC 8100M for sample(s) 01-03 (L0409661-01, WG180056)					
Mineral Spirits	ND	ND	mg/kg	NC	40
Gasoline	ND	ND	mg/kg	NC	40
Fuel Oil #2/Diesel	940000	950000	mg/kg	1	40
Fuel Oil #4	ND	ND	mg/kg	NC	40
Fuel Oil #6	ND	ND	mg/kg	NC	40
Motor Oil	ND	ND	mg/kg	NC	40
Kerosene	ND	ND	mg/kg	NC	40
Transformer Oil	ND	ND	mg/kg	NC	40
Unknown Hydrocarbon	ND	ND	mg/kg	NC	40
Surrogate(s)	Recovery				QC Criteria
o-Terphenyl	ND	ND	%	NC	40-140



ALPHA ANALYTICAL LABORATORIES  
QUALITY ASSURANCE BATCH SPIKE ANALYSES

Laboratory Job Number: L0409661

Parameter	% Recovery	QC Criteria
Hydrocarbon Scan by GC 8100M LCS for sample(s) 01-03 (WG180056)		
Petroleum Spike	119	40-140
Surrogate(s)		
o-Terphenyl	101	40-140

ALPHA ANALYTICAL LABORATORIES  
QUALITY ASSURANCE BATCH BLANK ANALYSIS

Laboratory Job Number: L0409661

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE		ID
					PREP	ANAL	
Blank Analysis for sample(s) 01-03 (WG180056-1)							
Hydrocarbon Scan by GC 8100M				1 8100M	0903 16:30	0905 00:50	MS
Mineral Spirits	ND	mg/kg	10000				
Gasoline	ND	mg/kg	10000				
Fuel Oil #2/Diesel	ND	mg/kg	10000				
Fuel Oil #4	ND	mg/kg	10000				
Fuel Oil #6	ND	mg/kg	10000				
Motor Oil	ND	mg/kg	10000				
Kerosene	ND	mg/kg	10000				
Transformer Oil	ND	mg/kg	10000				
Unknown Hydrocarbon	ND	mg/kg	10000				
Surrogate(s)	Recovery		QC Criteria				
o-Terphenyl	103.	%	40-140				

ALPHA ANALYTICAL LABORATORIES  
ADDENDUM I

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REFERENCES

1. Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - IIIA, 1997.

GLOSSARY OF TERMS AND SYMBOLS

REF Reference number in which test method may be found.  
METHOD Method number by which analysis was performed.  
ID Initials of the analyst.  
ND Not detected in comparison to the reported detection limit.

Please note that all solid samples are reported on dry weight basis unless noted otherwise.

LIMITATION OF LIABILITIES

Alpha Analytical, Inc. performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical, Inc., shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical, Inc. be held liable for any incidental consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical, Inc.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding times and splitting of samples in the field.

**GeoLabs, Inc.**  
*Environmental Laboratories*

**LABORATORY REPORT**

**PREPARED FOR:**

Decoulos & Company  
3 Electronics Avenue  
Danvers, MA 01923

**Attn:** Jim Decoulos

**PROJECT ID:** 616  
131 Main Street  
Carver, MA

**GEOLABS CERTIFICATION #:** M-MA015

LABORATORY REPORT

**SAMPLE NUMBER:** 154340

**DATE PREPARED:** September 2, 2004

**PREPARED BY:** Karen Mullally

**APPROVED BY:**

\_\_\_\_\_  
Jim Chen, Laboratory Director

**GeoLabs, Inc.**  
**Environmental Laboratories**

**SAMPLE INFORMATION**

Matrix	<input type="checkbox"/> Aqueous <input type="checkbox"/> Soil or Sediment <input checked="" type="checkbox"/> Other-Air		
Containers	<input checked="" type="checkbox"/> Satisfactory <input type="checkbox"/> Broken <input type="checkbox"/> Leaking		
Sample Preservative	Aqueous	<input type="checkbox"/> N/A <input type="checkbox"/> pH ≤ 2 <input type="checkbox"/> pH > 2   Comment:	
	Soil or	<input type="checkbox"/> N/A <input type="checkbox"/> Samples NOT preserved in MeOH or air-tight containers   ml MeOH	
	Sediment	<input type="checkbox"/> Samples received in MeOH <input type="checkbox"/> Covering soil ? <input type="checkbox"/> Not <input type="checkbox"/> 1:1+25% <input checked="" type="checkbox"/> Received in air tight container-Summa Canister <input type="checkbox"/> Other	
Temperature	<input type="checkbox"/> Received on ice <input type="checkbox"/> Received at 4° C <input type="checkbox"/> Other		

**APH ANALYTICAL RESULTS**

Method for Ranges: MADEP APH

APH Surrogate Standards

PID (2,5-Dibromotoluene)

FID (2,5-Dibromotoluene)

Method for Target Analytes: EPA-TO14A

APH ANALYTICAL RESULTS Method for Ranges: MADEP APH APH Surrogate Standards PID (2,5-Dibromotoluene) FID (2,5-Dibromotoluene) Method for Target Analytes: EPA-TO14A		Client ID:			EGA-1	
		Lab ID:			154340	
		Date Collected:			08/27/04	
		Date Received:			08/27/04	
		Date Fractions Analyzed:			08/30/04	
		Date Targets Analyzed:			08/30/04	
		Ranges Dilution Factor:			1.0	
		Targets Dilution Factor:			1.0	
Range/Target Analyte	Elut. Range	RL (ppbv)	RL (ug/m3)	Units		
Unadjusted C5-C8 Aliphatic Hydrocarbons	N/A		78.0	ug/m <sup>3</sup>	ND	
Unadjusted C9-C12 Aliphatic Hydrocarbons	N/A		78.0	ug/m <sup>3</sup>	ND	
Benzene	C5-C8 Aliph	0.386	1.23	ppbv/ug/m3	ND	
1,3-Butadiene	N/A	2.18	5.00	ppbv/ug/m3	ND	
Ethylbenzene	C5-C8 Aliph	0.54	2.34	ppbv/ug/m3	ND	
Methyl-tert-butyl ether	C5-C8 Aliph	1.39	5.00	ppbv/ug/m3	ND	
2-Methylnaphthalene*	N/A	2.38	20.0	ppbv/ug/m3	ND	
Naphthalene*	N/A	0.940	5.00	ppbv/ug/m3	ND	
Toluene	C5-C8 Aliph	0.95	3.58	ppbv/ug/m3	ND	
m-, p-Xylenes	C5-C8 Aliph	0.38	1.65	ppbv/ug/m3	ND	
o-Xylene	C9-C12 Aliph	0.46	2.00	ppbv/ug/m3	ND	
C5-C8 Aliphatic Hydrocarbons <sup>1</sup>	N/A		78.0	ug/m <sup>3</sup>	ND	
C9-C12 Aliphatic Hydrocarbons <sup>2</sup>	N/A		78.0	ug/m <sup>3</sup>	ND	
C9-C10 Aromatic Hydrocarbons	N/A		78.0	ug/m <sup>3</sup>	ND	
2,5-Dibromotoluene (PID) Surrogate Recovery						
2,5-Dibromotoluene (FID) Surrogate Recovery						
Surrogate Acceptance Range					70-130%	

<sup>1</sup>C<sub>5</sub>-C<sub>8</sub> Aliphatic Hydrocarbons exclude concentrations of Target Analytes eluting in that range

<sup>2</sup>C<sub>9</sub>-C<sub>12</sub> Aliphatic HCs exclude concentrations of Target Analytes AND C<sub>9</sub>-C<sub>10</sub> Aromatic Hydrocarbons eluting in that range

\*Compounds quantitated by TICS

**CERTIFICATION**

Were all QA/QC procedures REQUIRED by the APH Method followed? ☒ Yes ☐ No - Details attached

Were all QA/QC performance /acceptance standards achieved? ☒ Yes ☐ No - Details attached  
Were any significant modifications made to the APH method?? ☐ No ☒ Yes - Details below

Aliphatic and Aromatic ranges quantitated by GC PID/FID.

I attest under the pains and penalties of perjury that, based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge, accurate and complete.

SIGNATURE: \_\_\_\_\_

POSITION: Lab Director

PRINTED NAME: Jim Chen

DATE: 09/02/04

GEOLABS, INC.  
45 JOHNSON LANE  
BRAINTREE, MA 02184  
M-MA015

#### LIMITATIONS & EXCLUSIONS

All the professional opinions presented in this report are based solely on the scope of work conducted and sources referred to in our report. The data presented by GeoLabs in this report was collected and analyzed using generally accepted industry methods and practices at the time the report was generated. This report represents the conditions, locations and materials that were observed at the time the work was conducted. No inferences regarding other conditions, locations or materials, at a later or earlier time may be made based on the contents of the report. No other warranty, express or implied is made.

This report was prepared for the sole use of our client. Portions of the report may not be used independent of the entire report.

All analyses were performed within required holding times, in accordance with EPA protocols and using accepted QA/QC procedures. All QA/QC meets acceptable limits unless otherwise noted. The information contained in this report is, to the best of my knowledge, accurate and complete.

Any and all subsequent pages of this report are chain(s) of custody.

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