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2nd floor Reception

RESPONSE ACTION OUTCOME

Prepared for:
Speedy Lube, Inc.
633 North Main Street, Randolph, MA
3-15188

Prepared by:
Decoulos & Company

Date: June 18, 2004

DECOULOS & COMPANY
ENVIRONMENTAL ENGINEERING & LAND PLANNING

VIA HAND DELIVERY

RECEIVED
Commonwealth of Massachusetts
JUN 18 2004
DEP/BOSTON
2nd Floor Reception

Friday, June 18, 2004

Bureau of Waste Site Cleanup
DEP – Northeast Region
205 Lowell Street
Wilmington, MA 01887

RE: 633 North Main Street, Randolph, MA; DEP RTNs 3-15188 and 3-15653; NON-NE-03-3A108

Dear Sir or Madam:

On behalf of Speedy Lube, Inc., Decoulos & Company is pleased to submit this Response Action Outcome (RAO) Report for the above referenced property. The property is closed out under a Class A-3 RAO. The property has been impacted by two separate releases and both releases have been assessed and monitored in this RAO.

The Risk Characterization in the RAO has determined that there is *No Significant Risk* to public health, safety, welfare or the environment from the remaining constituents within the groundwater on the Site. There is however a potentially *Significant Risk* to public health, safety, welfare or the environment from the remaining petroleum constituents within the soil on the Site.

As a result of the risk characterization, an Activity and Use Limitation was recorded at the Norfolk Registry of Deeds on June 14, 2002 in Book 16737, Page 300 to limit the use of the Site to commercial or industrial uses.

On November 6, 2003, the Department issued a Notice of Noncompliance (NON) to Speedy Lube relative to the submission of an RAO on June 18, 2002. The NON alleges that the original RAO failed to consider an upward trend in groundwater concentrations and suggested that the underground piping or dispenser islands were a likely source of petroleum that the RAO failed to consider.

Additional groundwater and soil gas data, together with line testing results, support the original conclusions and opinion reached in filing the RAO on June 18, 2002. The latest information is incorporated in this RAO.

We appreciate your cooperation and support in addressing the risk characterization issues. Please feel free to call or email if you have any questions or concerns. Thank you.

Very truly yours,

James J. Decoulos, PE, LSP
jamesj@decoulos.com

cc: Speedy Lube, Inc.

3 ELECTRONICS AVENUE, DANVERS, MASSACHUSETTS 01923
TEL: 617.489.7795 FAX: 877.842.9629
WWW.DECOULOS.COM

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Massachusetts Department of Environmental Protection
Bureau of Waste Site Cleanup

BWSC104 J.K.

RESPONSE ACTION OUTCOME (RAO) STATEMENT

Pursuant to 310 CMR 40.0580 (Subpart E) & 40.1056 (Subpart J)

Release Tracking Number
3 - 15188

A. SITE LOCATION:

1. Site Name/Location Aid: Speedy Lube, Inc.

2. Street Address: 633 North Main Street

3. City/Town: Randolph 4. ZIP Code: _____

☑ 5. Check here if a Tier Classification Submittal has been provided to DEP for this disposal site.
☐ a. Tier 1A ☐ b. Tier 1B ☐ c. Tier 1C ☑ d. Tier 2

6. If a Tier I Permit has been issued, provide Permit Number: _____

B. THIS FORM IS BEING USED TO: (check all that apply)

1. List Submittal Date of RAO Statement (if previously submitted): 06/18/2002 (mm/dd/yyyy)

☑ 2. Submit a **Response Action Outcome (RAO) Statement**

☑ a. Check here if this RAO Statement covers additional Release Tracking Numbers (RTNs). RTNs that have been previously linked to a Primary Tier Classified RTN do not need to be listed here.

b. Provide additional Release Tracking Number(s) covered by this RAO Statement. 3 - 15653 ☐ - _____

☐ 3. Submit a **Revised Response Action Outcome Statement**

☐ a. Check here if this Revised RAO Statement covers additional Release Tracking Numbers (RTNs), not listed on the RAO Statement or previously submitted Revised RAO Statements . RTNs that have been previously linked to a Primary Tier Classified RTN do not need to be listed here.

b. Provide additional Release Tracking Number(s) covered by this RAO Statement. ☐ - _____ ☐ - _____

☐ 4. Submit a **Response Action Outcome Partial (RAO-P) Statement**

Check above box, if any Response Actions remain to be taken to address conditions associated with this disposal site having the Primary RTN listed in the header section of this transmittal form. This RAO Statement will record only an RAO-Partial Statement for that RTN. A final RAO Statement will need to be submitted that references all RAO-Partial Statements and, if applicable, covers any remaining conditions not covered by the RAO-Partial Statements.

☐ 5. Submit an optional **Phase I Completion Statement** supporting an RAO Statement

☐ 6. Submit a **Periodic Review Opinion** evaluating the status of a Temporary Solution for a Class C RAO Statement (Section E is optional)

☐ 7. Submit a **Retraction** of a previously submitted **Response Action Outcome Statement** (Sections D & E are not required)

(All sections of this transmittal form must be filled out unless otherwise noted above)

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JUN 18 2004
DEP
NORTHEAST REGIONAL OFFICE

C. DESCRIPTION OF RESPONSE ACTIONS: (check all that apply, for volumes list cumulative amounts)

- [x] 1. Assessment and/or Monitoring Only
- [ ] 2. Temporary Covers or Caps
- [ ] 3. Deployment of Absorbent or Containment Materials
- [ ] 4. Temporary Water Supplies
- [ ] 5. Structure Venting System
- [ ] 6. Temporary Evacuation or Relocation of Residents
- [ ] 7. Product or NAPL Recovery
- [ ] 8. Fencing and Sign Posting
- [ ] 9. Groundwater Treatment Systems
- [ ] 10. Soil Vapor Extraction
- [ ] 11. Bioremediation
- [ ] 12. Air Sparging
- [ ] 13. Removal of Contaminated Soils

[ ] a. Re-use, Recycling or Treatment [ ] i. On Site Estimated volume in cubic yards _____

[ ] ii. Off Site Estimated volume in cubic yards _____

iia. Facility Name: _____ Town: _____ State: _____

iib. Facility Name: _____ Town: _____ State: _____

iii. Describe: _____

[ ] b. Landfill

[ ] i. Cover Estimated volume in cubic yards _____

Facility Name: _____ Town: _____ State: _____

[ ] ii. Disposal Estimated volume in cubic yards _____

Facility Name: _____ Town: _____ State: _____

[ ] 14. Removal of Drums, Tanks or Containers:

a. Describe Quantity and Amount: _____

_____

b. Facility Name: _____ Town: _____ State: _____

c. Facility Name: _____ Town : _____ State: _____

C. DESCRIPTION OF RESPONSE ACTIONS (cont.): (check all that apply, for volumes list cumulative amounts)

☐ 15. Removal of Other Contaminated Media:

a. Specify Type and Volume: _____

_____

b. Facility Name: _____ Town: _____ State: _____

c. Facility Name: _____ Town: _____ State: _____

☐ 16. Other Response Actions:

Describe: _____

_____

☐ 17. Use of Innovative Technologies:

Describe: _____

D. RESPONSE ACTION OUTCOME CLASS:

Specify the Class of Response Action Outcome that applies to the disposal site, or site of the Threat of Release.
Select **ONLY** one Class.

☐ 1. **Class A-1 RAO:** Specify one of the following:

☐ a. Contamination has been reduced to background levels. ☐ b. A Threat of Release has been eliminated.

☐ 2. **Class A-2 RAO:** You **MUST** provide justification that reducing contamination to or approaching background levels is infeasible.

☑ 3. **Class A-3 RAO:** You **MUST** provide an implemented Activity and Use Limitation (AUL) and justification that reducing contamination to or approaching background levels is infeasible.

☐ 4. **Class A-4 RAO:** You **MUST** provide an implemented AUL, justification that reducing contamination to or approaching background levels is infeasible, and justification that reducing contamination to less than Upper Concentration Limits (UCLs) 15 feet below ground surface or below an engineered barrier is infeasible. If the permanent solution relies upon an engineered barrier, you must also provide a Phase III report justifying the selection of the engineered barrier.

D. RESPONSE ACTION OUTCOME CLASS (cont.):

☐ **5. Class B-1 RAO: Specify one of the following:**

☐ a. Contamination is consistent with background levels ☐ b. Contamination is NOT consistent with background levels.

☐ **6. Class B-2 RAO:** You **MUST** provide an implemented AUL.

☐ **7. Class B-3 RAO:** You **MUST** provide an implemented AUL and justification that reducing contamination to less than Upper Concentration Limits (UCLs) 15 feet below ground surface is infeasable.

☐ **8. Class C RAO:** Specify one:

☐ a. Monitoring ☐ b. Passive Operation and Maintenance

☐ c. Active Operation and Maintenance (defined at 310 CMR 40.0006)

E. RESPONSE ACTION OUTCOME INFORMATION:

1. Specify the Risk Characterization Method(s) used to achieve the RAO described above:

☑ a. Method 1 ☑ b. Method 2 ☐ c. Method 3

☐ d. Method Not Applicable-Contamination reduced to or consistent with background, or Threat of Release abated

2. Specify all Soil and Groundwater Categories. More than one Soil Category and more than one Groundwater Category may apply at a Site. Be sure to check off all **APPLICABLE** categories.

a. Soil Category(ies) Applicable:

☐ i. S-1/GW-1	☐ iv. S-2/GW-1	☐ vii. S-3/GW-1
☐ ii. S-1/GW-2	☑ v. S-2/GW-2	☐ viii. S-3/GW-2
☐ iii. S-1/GW-3	☑ vi. S-2/GW-3	☐ ix. S-3/GW-3

b. Groundwater Category(ies) Impacted:

☐ i. GW-1 ☑ ii. GW-2 ☑ iii. GW-3 ☐ iv. No Groundwater Impacted

3. Specify remediation conducted.

☐ a. Check here if soil remediation was conducted.

☐ b. Check here if groundwater remediation was conducted.

4. Estimate the number of acres this RAO Statement applies to: 0.3

F. LSP SIGNATURE AND STAMP:

I attest under the pains and penalties of perjury that I have personally examined and am familiar with this transmittal form, including any and all documents accompanying this submittal. In my professional opinion and judgment based upon application of (i) the standard of care in 309 CMR 4.02(1), (ii) the applicable provisions of 309 CMR 4.02(2) and (3), and 309 CMR4.03(2), and (iii) the provisions of 309 CMR 4.03(3), to the best of my knowledge, information and belief,

> *if Section B indicates that either an RAO Statement, Phase I Completion Statement and/or Periodic Review Opinion is being provided,* the response action(s) that is (are) the subject of this submittal (i) has (have) been developed and implemented in accordance with the applicable provisions of M.G.L. c. 21E and 310 CMR 40.0000, (ii) is (are) appropriate and reasonable to accomplish the purposes of such response action(s) as set forth in the applicable provisions of M.G.L. c. 21E and 310 CMR 40.0000, and (iii) comply(ies) with the identified provisions of all orders, permits, and approvals identified in this submittal.

I am aware that significant penalties may result, including, but not limited to, possible fines and imprisonment, if I submit information which I know to be false, inaccurate or materially incomplete.

1. LSP #: 9360

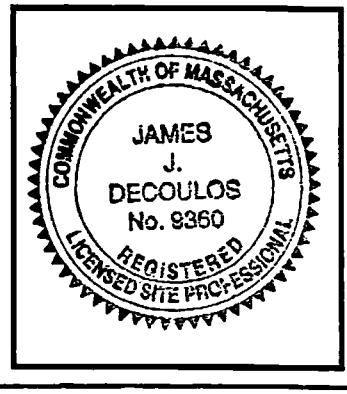
2. First Name: James 3. Last Name: Decoulos

4. Telephone: (617) 489-7795 5. Ext.: 6. FAX: (877) 842-9629

Signature:

8. Date: 06/18/2004
mm/dd/yyyy

9. LSP Stamp:



G. PERSON MAKING SUBMITTAL:

1. Check all that apply: ☐ a. change in contact name ☐ b. change of address ☐ c. change in the person undertaking response actions

2. Name of Organization: Speedy Lube, Inc.

3. Contact First Name: Eyad 4. Last Name: Badawi

5. Street: 633 North Main Street 6. Title: Treasurer & Clerk

7. City/Town: Randolph 8. State: MA 9. ZIP Code: 02368-0000

10. Telephone: (781) 961-4881 11. Ext.: 12. FAX:

H. RELATIONSHIP TO RELEASE OR THREAT OF RELEASE OF PERSON MAKING SUBMITTAL:

☑ 1. RP or PRP ☑ a. Owner ☐ b. Operator ☐ c. Generator ☐ d. Transporter

☐ e. Other RP or PRP Specify: _____

☐ 2. Fiduciary, Secured Lender or Municipality with Exempt Status (as defined by M.G.L. c. 21E, s. 2)

☐ 3. Agency or Public Utility on a Right of Way (as defined by M.G.L. c. 21E, s. 5(j))

☐ 4. Any Other Person Making Submittal Specify Relationship: _____

I. REQUIRED ATTACHMENT AND SUBMITTALS:

☑ 1. Check here if the Response Action(s) on which this opinion is based, if any, are (were) subject to any order(s), permit(s) and/or approval(s) issued by DEP or EPA. If the box is checked, you MUST attach a statement identifying the applicable provisions thereof.

☐ 2. Check here to certify that the Chief Municipal Officer and the Local Board of Health have been notified of the submittal of an RAO Statement that relies on the public way/rail right-of-way exemption from the requirements of an AUL.

☑ 3. Check here to certify that the Chief Municipal Officer and the Local Board of Health have been notified of the submittal of a RAO Statement with instructions on how to obtain a full copy of the report.

☑ 4. Check here to certify that documentation is attached specifying the location of the Site, or the location and boundaries of the Disposal Site subject to this RAO Statement. If submitting an RAO Statement for a PORTION of a Disposal Site, you must document the location and boundaries for both the portion subject to this submittal and, to the extent defined, the entire Disposal Site.

☑ 5. Check here if required to submit one or more AULs. You must submit an AUL Transmittal Form (BWSC113) and a copy of each implemented AUL related to this RAO Statement. Specify the type of AUL(s) below: (required for Class A-3, A-4, B-2, B-3 RAO Statements)

☑ a. Notice of Activity and Use Limitation b. Number of Notices submitted: 1

☐ c. Grant of Environmental Restriction d. Number of Grants submitted: _____

☐ 6. If an RAO Compliance Fee is required for any of the RTNs listed on this transmittal form, check here to certify that an RAO Compliance Fee was submitted to DEP, P. O. Box 4062, Boston, MA 02211.

☐ 7. Check here if any non-updatable information provided on this form is incorrect, e.g. Site Address/Location Aid. Send corrections to the DEP Regional Office.

☑ 8. Check here to certify that the LSP Opinion containing the material facts, data, and other information is attached.

J. CERTIFICATION OF PERSON MAKING SUBMITTAL:

1. I, Eyad Badawi, attest under the pains and penalties of perjury (i) that I have personally examined and am familiar with the information contained in this submittal, including any and all documents accompanying this transmittal form, (ii) that, based on my inquiry of those individuals immediately responsible for obtaining the information, the material information contained in this submittal is, to the best of my knowledge and belief, true, accurate and complete, and (iii) that I am fully authorized to make this attestation on behalf of the entity legally responsible for this submittal. I/the person or entity on whose behalf this submittal is made am/is aware that there are significant penalties, including, but not limited to, possible fines and imprisonment, for willfully submitting false, inaccurate, or incomplete information.

2. By: _____ (Signature) 3. Title: Treasurer & Clerk

4. For: Speedy Lube, Inc. (Name of person or entity recorded in Section G) 5. Date: 06/18/2004 mm/dd/yyyy

☐ 6. Check here if the address of the person providing certification is different from address recorded in Section G.

7. Street: _____

8. City/Town: _____ 9. State: _____ 10. ZIP Code: _____

11. Telephone: _____ 12. Ext.: _____ 13. FAX: _____

YOU MUST LEGIBLY COMPLETE ALL RELEVANT SECTIONS OF THIS FORM OR DEP MAY RETURN THE DOCUMENT AS INCOMPLETE. IF YOU SUBMIT AN INCOMPLETE FORM, YOU MAY BE PENALIZED FOR MISSING A REQUIRED DEADLINE.

Date Stamp (DEP USE ONLY:)

Massachusetts Department of Environmental Protection — **BWSC-113**

Bureau of Waste Site Cleanup

ACTIVITY & USE LIMITATION (AUL) TRANSMITTAL FORM

Pursuant to 310 CMR 40.1056 and 40.1070 - 40.1084 (Subpart J)

Release Tracking Number: 3 - 15188

A. LOCATION OF DISPOSAL SITE AND PROPERTY SUBJECT TO AUL:

Disposal Site Name: Speedy Lube

Street: 633 North Main Street Location:

City/Town: Randolph ZIP Code: 02368

Address of property subject to AUL, if different than above. Street:

City/Town: ZIP Code:

☑ Check here if this Disposal Site is Tier Classified.

If the Disposal Site subject to the AUL is also subject to a Tier I Permit, provide the Permit Number:

Related Release Tracking Numbers affected by this AUL:

B. THIS FORM IS BEING USED TO: (check one)

☑ Submit a certified copy of a **Notice of Activity and Use Limitation**, pursuant to 310 CMR 40.1074 (complete all sections of this form).

☐ Submit a certified copy of an **Amended Notice of Activity and Use Limitation**, pursuant to 310 CMR 40.1081(4) (complete all sections of this form).

☐ Submit a certified copy of a **Termination of a Notice of Activity and Use Limitation**, pursuant to 310 CMR 40.1083(3) (complete all sections of this form).

☐ Submit a certified copy of a **Grant of Environmental Restriction**, pursuant to 310 CMR 40.1071, (complete all sections of this form).

☐ Submit a certified copy of an **Amendment of Environmental Restriction**, pursuant to 310 CMR 40.1081(3) (complete all sections of this form).

☐ Submit a certified copy of a **Release of Environmental Restriction**, pursuant to 310 CMR 40.1083(2) (complete all sections of this form).

You must attach all supporting documentation for the use of form indicated, including copies of any Legal Notices and Notices to Public Officials required by 310 CMR 40.1400.

C. AUL INFORMATION:

Date AUL was recorded and/or registered with Registry of Deeds and/or Land Registration Office: June 14, 2002

Name of Registry of Deeds and/or Land Registration Office where AUL was recorded and/or registered: Norfolk

Book and Page Number and/or Document Number of recorded and/or registered AUL:

D. PERSON SUBMITTING AUL TRANSMITTAL FORM:

Name of Organization: Speedy Lube, Inc.

Name of Contact: Eyad Badawi Title: Vice President and Treasurer

Street: 633 North Main Street

City/Town: Randolphj State: MA ZIP Code: 02368

Telephone 781-961-4881 Ext.: FAX: (optional)

E. OWNER OF PROPERTY, IF NOT PERSON SUBMITTING AUL TRANSMITTAL FORM:

Provide a mailing address for the owner of the property if that person is not submitting the AUL Transmittal Form. Provide addresses for additional owners on an attachment.

Name of Organization:

Name of Contact: Title:

Street:

City/Town: State: ZIP Code:

Telephone Ext.: FAX: (optional)

Massachusetts Department of Environmental Protection
Bureau of Waste Site Cleanup

BWSC-113

ACTIVITY & USE LIMITATION (AUL) TRANSMITTAL FORM

Pursuant to 310 CMR 40.1056 and 40.1070 - 40.1084 (Subpart J)

Release Tracking Number: 3 - 15188

F. RELATIONSHIP TO DISPOSAL SITE OF PERSON SUBMITTING AUL TRANSMITTAL FORM: (check one)

- [x] RP or PRP — Specify: (•) Owner ( ) Operator ( ) Generator ( ) Transporter — Other RP or PRP: _____
- [ ] Fiduciary, Secured Lender or Municipality with Exempt Status (as defined by M.G.L. c. 21E, s. 2)
- [ ] Agency or Public Utility on a Right of Way (as defined by M.G.L. c. 21E, s. 5(j))
- [ ] Any Other Person Submitting AUL — Specify Relationship: _____

G. CERTIFICATION OF PERSON SUBMITTING AUL TRANSMITTAL FORM:

I, Eyad Badawi, attest under the pains and penalties of perjury (i) that I have personally examined and am familiar with the information contained in this submittal, including any and all documents accompanying this transmittal form, (ii) that, based on my inquiry of those individuals immediately responsible for obtaining the information, the material information contained in this submittal is, to the best of my knowledge and belief, true, accurate and complete, and (iii) that I am fully authorized to make this attestation on behalf of the entity legally responsible for this submittal. I/the person or entity on whose behalf this submittal is made am/is aware that there are significant penalties, including, but not limited to, possible fines and imprisonment, for willfully submitting false, inaccurate, or incomplete

By: _____ (signature) Title: Vice President and Treasurer

For: Speedy Lube, Inc. (print name of person or entity recorded in Section D) Date: June 14, 2002

Enter address of person providing certification, if different from address recorded in Section

Street: _____

City/Town: _____ State: _____ ZIP Code: _____

Telephone _____ Ext.: _____ FAX: (optional) _____

YOU MUST COMPLETE ALL RELEVANT SECTIONS OF THIS FORM OR DEP MAY RETURN THE DOCUMENT AS INCOMPLETE. IF YOU SUBMIT AN INCOMPLETE FORM, YOU MAY BE PENALIZED FOR MISSING A REQUIRED DEADLINE. AND YOU MAY INCUR ADDITIONAL COMPLIANCE FEES.

2.0 BACKGROUND

2.1 Site Description

The property is described by the Town of Randolph Assessors as on Map 30, Block C, Lot 6.1A and is recorded at the Norfolk Registry of Deeds in Book 9310, Page 747 (the Site) (see locus on Figure 1).

The U.S. Geological Survey (USGS) map of Norwood, Massachusetts dated 1985 shows the Site located approximately 54 meters above the National Geodetic Vertical Datum of 1929. Horizontal coordinates within the Universal Transverse Mercator (UTM) system are 4,671,450 mN, and 330,450 mE.

The Site fronts on both North Main Street and Orchard Street. Entrance onto the Site from North Main Street is from two curb cut openings, one lying on the northerly portion of the Site and the other on the southerly. Entrance onto the Site from Orchard Street is predominately from one curb cut opening.

The land is improved by a one story wood framed commercial building on a concrete slab (see Figure 2). The commercial building has a postal address of 633 North Main Street.

The Site lies within a residential zoning district as shown on the current Zoning Map of the Town of Randolph. On January 21, 1993, the Randolph Zoning Board of Appeals approved an upgraded commercial use for the Site and the plan accepted for this approval was recorded at the Norfolk Registry as Number 124-1993 in Plan Book 412.

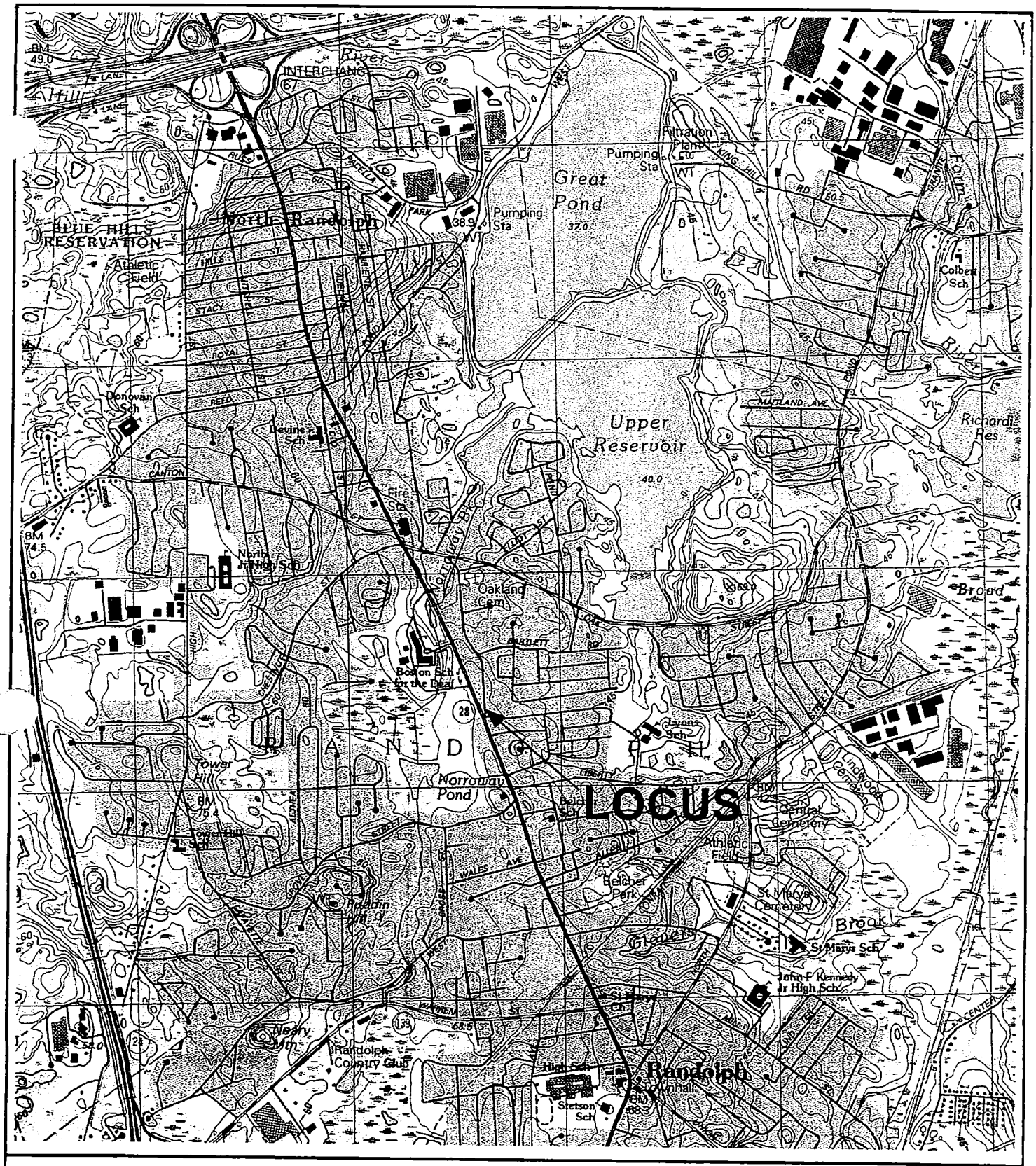
2.2 Current Use

The Site is currently used for retail vehicle fueling and light automotive repair. The vehicle fueling operation utilizes one 12,000 gallon double-walled fiberglass underground storage tank (UST) for fuel storage. The UST is split to provide storage for 9,000 gallons of regular fuel and 3,000 gallons of premium gasoline. Double-walled fiberglass piping distributes fuel product to the fuel dispenser pumps as shown on Figure 2. The fuel dispenser island is covered by an overhead canopy. The entire UST system is monitored and automatically gauged by a Veeder-Root TLS-350 Monitoring System. Recent line testing of the UST system is provided in Appendix A.

The automotive repair shop conducts very general mechanical automotive repair. The repairs primary include tire replacement and oil changes. No body work or painting is conducted on Site.

The Site is nearly all paved. Areas that are not part of traffic flow for fueling or repair are used to store vehicles on a temporary basis.

The building is serviced by underground town water and sewer service and is heated by fuel oil. Electric and telephone utilities are serviced by overhead wiring from Orchard Street. Two 275 gallon fuel oil tanks are located outside the commercial building on the west side of the building as shown in Figure 2. The fuel tanks appeared in good condition with no evidence of tank or piping failure.



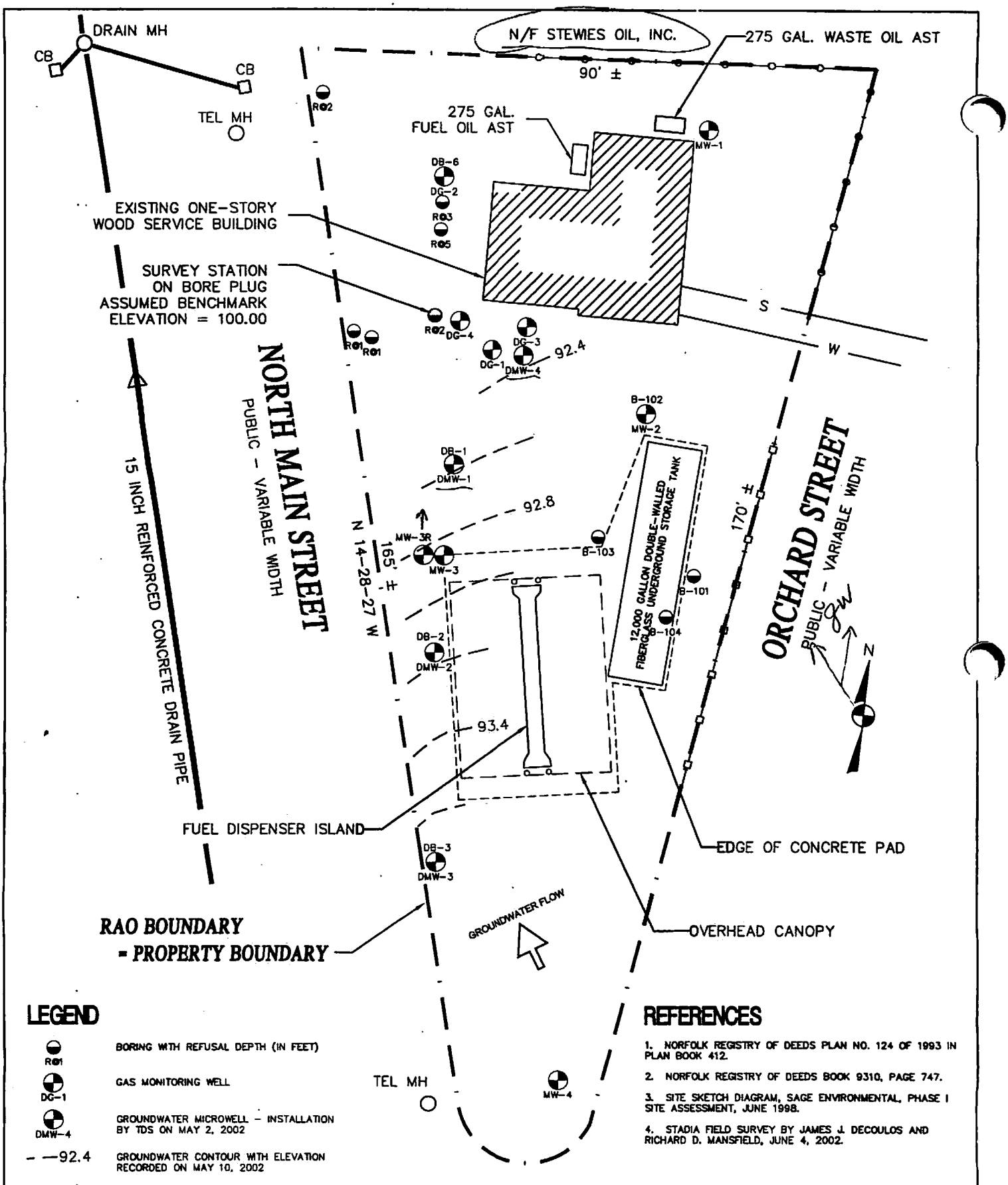
REFERENCE:

USGS QUADRANGLE
NORWOOD, MA
DATE: 1985
SCALE: 1:25 000

LOCUS MAP

FIGURE 1

DECOULOS & COMPANY



LEGEND

- R@1 — BORING WITH REFUSAL DEPTH (IN FEET)
- DG-1 — GAS MONITORING WELL
- DMW-4 — GROUNDWATER MICROWELL - INSTALLATION BY TDS ON MAY 2, 2002
- —92.4 — GROUNDWATER CONTOUR WITH ELEVATION RECORDED ON MAY 10, 2002

REFERENCES

1. NORFOLK REGISTRY OF DEEDS PLAN NO. 124 OF 1993 IN PLAN BOOK 412.
2. NORFOLK REGISTRY OF DEEDS BOOK 9310, PAGE 747.
3. SITE SKETCH DIAGRAM, SAGE ENVIRONMENTAL, PHASE I SITE ASSESSMENT, JUNE 1998.
4. STADIA FIELD SURVEY BY JAMES J. DECOULOS AND RICHARD D. MANSFIELD, JUNE 4, 2002.

DECOULOS & COMPANY
3 ELECTRONICS AVE, DANVERS, MA 01923
WWW.DECOULOS.COM
617.489.7795

EXISTING CONDITIONS
633 NORTH MAIN STREET
RANDOLPH, MASSACHUSETTS

DATE: JUNE 2004
SCALE: 1" = 20'
FIGURE NO. 2

residential

2.3 Current Abutting Uses

The site is abutted to the north by a commercial business known as Stewies Oil, Inc. Stewies distributes heating oil and sells diesel fuel from the location. The fuel is stored in an above ground storage tank.

Remaining abutting uses to the east, south and west are the public ways of North Main Street and Orchard Street.

3.0 UST AND MCP COMPLIANCE

Since approximately 1935, the Site has been used as a retail gasoline filling station. On June 11, 1997, a release of petroleum was reported to the Massachusetts Department of Environmental Protection (DEP) pursuant to G.L. c.21E and the Massachusetts Contingency Plan (MCP). The release was assigned tracking number 3-15188 by DEP and apparently associated with a 2,000 gallon underground storage tank (UST) removed by RC Construction in June of 1997. According to Captain Rogers of the Randolph Fire Department, no records or disposal receipts are available.

On October 27, 1997, another release of petroleum was reported to DEP as a result of the removal of two 6,000 gallon USTs. DEP assigned tracking number 3-15653 to the release. A total of 275.05 tons of petroleum contaminated soil from the release was recycled at Bardon Trimount in Stoughton, MA.

SAGE Environmental, Inc. of Pawtucket, RI (SAGE) oversaw the work related to the second reported release. SAGE conducted subsurface investigations on February 13, 1998 to evaluate the extent of the releases and subsequently submitted the following reports to DEP: an Immediate Response Action Plan on December 17, 1997; an Immediate Response Action Outcome Statement in May of 1998; and, a Phase I Initial Site Investigation and Tier Classification in June of 1998. Documentation regarding the disposal of contaminated soil and the USTs is included in these reports.

In the Phase I report dated June of 1998, SAGE tier classified the Site as Tier II with a score of 171.

4.0 SOIL AND GROUNDWATER SAMPLING

Due to the need for additional downgradient groundwater data, additional soil borings and monitoring wells were advanced by Technical Drilling Services, Inc. of Sterling, MA (TDS) on May 8, 2002. Decoulos & Company personnel oversaw the operation of a GeoProbe™ 54DT direct push probing machine. Eleven borings were advanced and four were completed as micro-monitoring wells. Soil was screened with a Thermo-Electron 580B photo-ionization detector (PID) calibrated that morning by Spectra Environmental of Reading, MA. Logs from the soil investigation are provided in Appendix B. Positive PID readings are presented in the logs on the right side of each page.

Based upon PID readings, soil samples from the boring investigation were collected for laboratory analysis. The samples with the highest PID readings were collected and analyzed for volatile petroleum hydrocarbons (VPHs) (see Table 1 and Laboratory Certificates of Analysis in Appendix B).

Borings in the northwestern portion of the Site were unable to penetrate the groundwater table. Refusal was encountered by bedrock from depths ranging between one and five feet below grade. The borings are identified on Figure 2 with their respective refusal depths.

Two of the borings were completed as gas monitoring wells DG-1 and DG-2 as shown on Figure 2. The wells were set to provide soil gas data points if necessary.

Pre-existing monitoring well MW-3 was without a cover. Soil had been placed within the well frame and the soil filled the well to the top of the casing. Due to its location, stormwater runoff from the concrete pad was likely to flow directly into MW-3 from the surface. As a result of this potential source point, the top three inches of the well were cleaned out and concrete was set to the top of the frame.

The downgradient location of MW-3R (from MW-3) created a potential unreliable groundwater point. Two of the micro-wells set on May 8th (DMW-1 and DMW-2) were designed to provide more representative groundwater conditions at this location on Site.

Groundwater samples were collected from new micro-wells DMW-1, DMW-2, DMW-3 and DMW-4 and existing micro-well MW-3R on May 10, 2002. The depth to the static groundwater interface and total well depth were measured to the nearest 0.01 foot with an Environmental Instruments groundwater interface probe prior to sampling activities. The groundwater depth measurement, as well as a description of the odor and appearance of the groundwater, was logged in the field. A slight sheen was noted in the groundwater from DMW-2 with gray/brown sediment and a slight/mild petroleum odor observed in all the wells sampled.

Each well was purged with a GeoPump 2 low flow peristaltic pump equipped with dedicated polyethylene tubing until approximately three well volumes were removed. The wells were allowed to recharge and stabilize prior to sample collection. The groundwater samples were filtered with dedicated Waterra 0.45 micron filters due to the sediment withdrawn with the water. The samples were collected in properly preserved, laboratory prepared containers, placed in an ice chest and delivered to the GeoLabs, Inc. certified laboratory on May 13, 2002. The groundwater samples were analyzed for volatile petroleum hydrocarbons (VPHs) according to DEP protocols on a standard two-week turn-around.

A level survey was conducted on the Site and elevations established for the top of the well casings on June 4, 2002. It was determined that groundwater flow was in a north-northwesterly direction based on the survey and groundwater depth data collected. Local groundwater flow direction will likely be influenced by surface and subsurface structures and utilities in and adjacent to the Site.

Positive Lab Results for Soil Samples
633 North Main Street
Randolph, MA
Table 1

										Method 1				Upper
										S-1 Soil		S-2 Soil		Conc.
Sample ID:	B-101/S-3	B-102/S-3	B-103/S-3	B-104/S-3	DB-1/S-2	DB-2/S-1	DB-3/S-3	DB-6/S-1	Average	GW 2	GW 3	GW 2	GW 3	Limit
Date:	2/13/1998	2/13/1998	2/13/1998	2/13/1998	5/8/2002	5/8/2002	5/8/2002	5/8/2002	Soil					
Units:	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
Depth (ft):	8-12	8-12	8-12	8-12	4-8	0-4	8-12	0-4						
VPHs														
C5-C8 Aliphatics	36	38	36	36	61.9	56.6	[redacted]	1.8	76	100	100	500	500	5,000
C9-C12 Aliphatics	18	14	17	14	51.6	72.9	138	ND	41	1,000	1,000	2,500	2,500	20,000
C9-C10 Aromatics	[redacted]	[redacted]	[redacted]	[redacted]	23.9	58.1	86.2	ND	75	100	100	500	500	5,000
VPH Target Analytes														
Benzene	ND	ND	ND	ND	ND	ND	ND	ND	0.2	40	40	60	60	2,000
Ethylbenzene	1.5	1.6	1.9	1.2	1.43	1.03	2.32	ND	1	500	500	1,000	500	10,000
MTBE	ND	ND	ND	ND	0.868	ND	ND	ND	0.2	100	100	200	200	5,000
Naphthalene	2	1.6	1.8	1.7	1.93	4.02	3.56	ND	2	100	100	1,000	1,000	10,000
Toluene	ND	ND	0.29	ND	ND	ND	ND	ND	0.2	500	500	500	1,000	10,000
m-,p-Xylenes	8.8	8.4	9.3	8.2	2.56	7.92	12.6	ND	7	500	500	500	1,000	10,000
o-Xylene	3.5	3.3	3.4	2.9	ND	3.96	4.14	ND	3	500	500	500	1,000	10,000

NOTES
Non detects set at one half of reportable limit
[redacted]

The elevation data from the new micro-wells was as follows:

Groundwater Elevation Data
Table 2

	Well Casing Elevation	Total Well Depth	Groundwater Depth 05/10/02	Groundwater Elevation 05/10/02
DMW-1	100.25	14.20	7.72	92.53
DMW-2	100.64	13.30	7.44	93.20
DMW-3	101.04	12.10	7.30	93.74
DMW-4	100.25	14.08	7.90	92.35

Confirmatory groundwater samples were collected from the previously sampled on-site micro-wells DMW-1, DMW-2, DMW-3, DMW-4 and MW-3R on June 4, 2002. Groundwater depth measurements were not collected since dedicated tubing was present in each of the micro-wells. A description of the odor and appearance of the groundwater, was logged in the field prior to sample collection. A gray/ brown sediment and a slight/mild petroleum odor was observed in all the wells sampled.

Each well was purged with a GeoPump 2 low flow peristaltic pump equipped with previously installed, dedicated polyethylene tubing until approximately three well volumes were removed. The wells were allowed to recharge and stabilize prior to sample collection. The groundwater samples were filtered with dedicated Waterra 0.45 micron filters due to the sediment withdrawn with the water. The samples were collected in properly preserved, laboratory prepared containers, placed in an ice chest and delivered to the GeoLabs, Inc. on June 5, 2002. The groundwater samples were analyzed for VPHs according to DEP protocols on a standard two-week turn-around.

Two additional rounds of groundwater samples were collected on November 12, 2003 and March 15, 2004. All of the groundwater analytical data is presented in Table 3 with the Laboratory Certificates of Analysis in Appendix C.

Positive Lab Results for Groundwater Samples
633 North Main Street
Randolph, MA
Table 3

Sample ID:	DMW-1	DMW-1	DMW-1	DMW-Y	DMW-1	AVG DMW-1	DMW-2	DMW-2	DMW-2	DMW-2	AVG DMW-2	DMW-3	DMW-3	DMW-3	DMW-3	DMW-3	AVG DMW-3	MCP Method 1 Standards			Upper Conc. Limit
Date:	5/10/02	6/4/02	11/12/03	11/12/03	3/15/04		5/10/02	6/4/02	11/12/03	3/15/04		5/10/02	6/4/02	6/4/02	11/12/03	3/15/04		GW 1	GW 2	GW 3	
Units:	µg/L	µg/L	µg/L	µg/L	µg/L		µg/L	µg/L	µg/L	µg/L		µg/L	µg/L	µg/L	µg/L	µg/L		µg/L	µg/L	µg/L	µg/L
VPH Target Analytes																					
Benzene	2,220	5,970	3,750	2,860	2,000	*3,360*	780	735	935	421	*718*	ND	ND	6	ND	ND	*3*	5	2,000	7,000	70,000
Ethylbenzene	655	1,510	1,990	815	1,610	*1,316*	834	794	1,280	674	*896*	112	44	51	ND	7	*43*	700	30,000	4,000	100,000
MTBE	2,550	19,300	5,760	4,500	2,340	*6,890*	111	64	ND	182	*120*	22	ND	ND	ND	ND	*6*	70	50,000	50,000	100,000
Naphthalene	246	327	ND	ND	465	*408*	404	183	ND	718	*451*	ND	22	35	ND	ND	*17*	20	6,000	6,000	60,000
Toluene	2,190	1,940	1,250	1,040	2,330	*1,750*	4,090	7,000	4,400	2,430	*4,480*	38	42	32	ND	ND	*23*	1,000	6,000	50,000	100,000
m-,p-Xylenes	3,750	5,910	6,220	2,870	5,230	*4,796*	4,250	12,900	6,590	3,950	*6,923*	523	376	423	14	16	*271*	10,000	6,000	6,000	100,000
o-Xylene	1,250	1,350	1,660	830	1,480	*1,314*	1,860	5,910	3,500	2,230	*3,375*	256	201	204	17	20	*140*	10,000	6,000	50,000	100,000
VPHs																					
C5-C8 Aliphatics	ND	ND	ND	ND	ND	*1,040*	ND	4,100	2,670	ND	*1,843*	921	928	1,310	185	95	*688*	400	1,000	4,000	100,000
C9-C12 Aliphatics	ND	ND	ND	ND	ND	*390*	ND	ND	ND	ND	*338*	ND	ND	ND	ND	ND	*41*	4,000	1,000	20,000	100,000
C9-C10 Aromatics	ND	ND	6,620	3,540	4,510	*3,759*	3,070	6,720	7,720	5,670	*5,795*	827	ND	1,770	436	308	*723*	200	5,000	4,000	100,000

Sample ID:	DMW-4	DMW-4	DMW-4	DMW-X	DMW-4	AVG DMW-4	MW-3R	MW-3R	MW-3R	MW-3R	MW-X	AVG MW-3R	MCP Method 1 Standards			Upper Conc. Limit
Date:	5/10/02	6/4/02	11/12/03	11/12/03	3/15/04		5/10/02	6/4/02	11/12/03	3/15/04	3/15/04		GW 1	GW 2	GW 3	
Units:	µg/L	µg/L	µg/L	µg/L	µg/L		µg/L	µg/L	µg/L	µg/L	µg/L		µg/L	µg/L	µg/L	µg/L
VPH Target Analytes																
Benzene	1,500	968	157	172	434	*646*	2,350	4,240	3,020	1,600	1,650	*2,572*	5	2,000	7,000	70,000
Ethylbenzene	183	24	ND	ND	98	*66*	673	2,590	1,800	1,220	1,280	*1,513*	700	30,000	4,000	100,000
MTBE	34,200	69,800	6,670	8,390	5,050	*24,822*	698	778	ND	97	103	*360*	70	50,000	50,000	100,000
Naphthalene	34	ND	ND	ND	40	*37*	136	453	ND	426	451	*393*	20	6,000	6,000	60,000
Toluene	221	ND	ND	ND	57	*61*	11,800	19,200	7,900	5,480	5,380	*9,952*	1,000	6,000	50,000	100,000
m-,p-Xylenes	594	31	91	91	204	*202*	10,700	15,700	7,900	5,290	5,690	*9,056*	10,000	6,000	6,000	100,000
o-Xylene	181	10	ND	ND	46	*52*	4,290	6,750	3,310	2,430	2,590	*3,874*	10,000	6,000	50,000	100,000
VPHs																
C5-C8 Aliphatics	ND	ND	ND	ND	ND	*880*	ND	ND	ND	1,340	1,860	*1,440*	400	1,000	4,000	100,000
C9-C12 Aliphatics	ND	ND	ND	ND	ND	*168*	ND	ND	ND	ND	ND	*330*	4,000	1,000	20,000	100,000
C9-C10 Aromatics	544	59	ND	3,690	294	*972*	6,940	7,640	8,110	4,540	4,790	*6,404*	200	5,000	4,000	100,000

NOTES
Non detects set at one half of reportable limit
Method 1 GW-2 or GW-3 Exceedance

5.0 SOIL GAS SAMPLING

A soil gas investigation was conducted by Decoulos & Company personnel on June 4, 2002 due to the exceedance of Method 1 GW-2 groundwater standards for various parameters in the on-site micro-wells. The gas samples were collected from overburden gas wells DG-1 and DG-2 installed by TDS on May 8, 2002. The boreholes had been installed with 0.75 inch PVC slotted screen to grade and completed with a roadbox cemented in place atop the wells (see logs in Appendix B).

Sample DG-2 was collected on the western side of the building on Site. The location of the sample is directly beneath an area where vehicles are intermittently parked. The paved surface in this area is stained as seen in Photograph B of Figure 3.

Dedicated polyethylene tubing was installed to the bottom of each gas well with a tight rubber stopper seal between the well and tubing prior to sampling. The seal was installed prior to sample collection to prevent a short circuit with ambient air. Six liter, non-regulated, Summa canisters were then connected to the tubing and grab samples collected from each boring for two minutes. The canisters were shipped to GeoLabs, Inc. of Braintree, MA the following day to be analyzed for APHs according to MA DEP protocols.

On June 9, 2004, two additional soil gas samples were collected in front of the Speedy Lube building. The soil gas was collected from 18 inch deep bore holes that were approximately one inch in diameter. The bores were established with a Hitachi hammer drill model no. 38YE.

Polyethylene tubing was installed to the bottom of each gas well with a tight rubber stopper seal between the well and tubing prior to sampling. Six liter, non-regulated, Summa canisters were then connected to the tubing and grab samples collected from each boring for two minutes. The canisters were shipped to GeoLabs, Inc. of Braintree, MA the same day to be analyzed for APHs.

The samples are identified as DG-3 and DG-4 as shown on Figure 2 (the field samples were identified as SLGA-1 and SLGA-2, respectively). After the soil gas sample collection, the wells were backfilled with the bored debris and secured from surface infiltration with a plumbers epoxy sealant.

6.0 RISK CHARACTERIZATION

A Method 1 and Method 2 Risk Characterization was used to characterize the risk to human health, safety, welfare and the environment at the disposal site defined by RTNs 3-15188 and 3-15653 in accordance with the Massachusetts Contingency Plan, 310 CMR 40.0980. The Site includes the area defined by the property boundaries. The Method 2 Risk Characterization included modification of selected Method 1 Standards according to procedures outlined in DEP Policy WSC #02-411: *Characterizing Risks posed by Petroleum Contaminated Sites: Implementation of MADEP VPH/EPH Approach, Final Draft,* October, 2002.

The risk characterization determined that a condition of *No Significant Risk* exists for the entire Site when conditions are applied limiting the Site to its current or similar commercial uses. The *Application of Activity and Use Limitation* was conducted in accordance with the Massachusetts Contingency Plan, 310 CMR 40.1012. This Method 2 Risk Characterization therefore supports a Class A-3 Response Action Outcome. Steps in the characterization of risk follow.

WEST SIDE OF SPEEDY LUBE BUILDING
LOOKING NORTH

PHOTOGRAPH A

WEST SIDE OF SPEEDY LUBE BUILDING
LOOKING SOUTH

PHOTOGRAPH B

REFERENCE:

PHOTOGRAPHS SHOT
ON APRIL 17, 2002 AND MAY 8, 2002

SPEEDY LUBE PHOTOGRAPHS

FIGURE 3

6.1 Current and Foreseeable Site Uses

The Site is currently used for retail automotive repair service and the retail dispensing of gasoline. Groundwater contamination originating at the Site appears to be limited to the Site. For purposes of this risk characterization, we consider the Site as the disposal site. Because of the good commercial location and business zoning, foreseeable site uses include its existing use and continued commercial development. A change in the use of the Site would potentially result in increased risks of exposure to impacted soil and groundwater during construction activities and through modified use of the Site and buildings. The application of an Activity Use Limitation on the Site ensures review of the potential risks of exposure to the levels of impacted soil and groundwater then present at the Site. The review would be conducted by a Licensed Site Professional prior to development of the Site to evaluate the risks of exposure during construction and following modification of the Site to its proposed uses. The Activity and Use Limitation will, therefore, be applied and recorded in accordance with the Massachusetts Contingency Plan, 310 CMR 40.1012 and 40.1074, respectively.

6.2 Nature and Extent of Contamination

Contamination with petroleum hydrocarbons has been identified in the soil and groundwater at the Site. These residuals are believed to have originated from the storage of gasoline on Site.

Decoulos & Company conducted field inspections and investigations from April, 2002 to June, 2004 to characterize the current nature and extent of the contamination. As described previously in this report, the field investigation studies included the collection of groundwater samples from both a pre-existing monitoring well and new monitoring wells; the collection of soil samples; and, the collection of soil gas samples adjacent to the Site building. Four soil gas samples have been collected within thirty feet of the commercial Site building.

Soil sample analysis results recorded in previous reports for the Site and recent field activities are presented in Table 1. The February 13, 1998 (from SAGE) and May 8, 2002 results conclude that concentrations for most VPH target analytes were below applicable S1, GW-2 standards. The VPH range C_9-C_{10} Aromatics detected in the February 13, 1998 soil samples were slightly above the S1, GW2 soil standard of 100 milligrams per kilogram (mg/kg). The most recent soil sample analysis results conclude that the concentrations of C_5-C_8 Aliphatics, C_9-C_{12} Aliphatics, and C_9-C_{10} Aromatics were below the applicable S1, GW-2 standards of 100, 1,000 and 100 mg/kg, respectively, with the exception of the 342 mg/kg concentration detected in sample DB-3/S-3.

Groundwater sample analysis results from four rounds of field activities conducted on May 10, 2002; June 4, 2002; November 12, 2003; and, March 15, 2004; along with the applicable Method 1 standards, are presented in Table 3. These results show that the concentrations of the VPH target analyte benzene detected in DMW-1 from all four rounds exceeded the applicable Method 1, GW-2/GW-3 groundwater standard. Monitoring well MW-3R showed an exceedance of benzene in the first three rounds of sampling. The MTBE concentration detected in the DMW-4 groundwater sample collected on June 4, 2002 exceeded the applicable Method 1, GW-2/GW-3 standard. This MTBE reading was the only exceedance of GW-2/GW-3 for all groundwater samples collected. The average MTBE concentration at DMW-4 is 24,822 ug/l (the GW-2/GW-3 standard is 50,000 ug/l).

Toluene and m,p-xylene concentrations from DMW-2 and MW-3R also exceeded the Method 1, GW-2/GW-3 standards for these constituents. The last round of samples collected on March 15, 2004 however showed these concentrations below the GW-2/GW-3 standards.

The average concentrations of VPH range C_5-C_8 Aliphatics detected in the DMW-1, DMW-4 and DMW-3R samples exceeded applicable Method 1, GW-2/GW-3 standards possibly due to elevated reporting limits (RLs) from the laboratory. The Method 1, GW-2 standard for the C_5-C_8 Aliphatics and the C_9-C_{10} Aromatics were exceeded in the average concentrations of samples collected form DMW-2 and DMW-3R.

The soil gas analysis results of the samples collected on June 4, 2002 and June 9, 2004 are presented in Table 4 along with the development of site specific Method 2, GW-2/GW-3 standards.

6.3 Background Conditions and Contaminants of Concern

The Site is a suburban property in a residential zone located along a business secondary state highway. According to Randolph Fire Department records, it has been used as an automotive fueling station since approximately 1935. The Site, therefore, has a long history of automotive use and surficial soils would be expected to be impacted with pyrogenic polynuclear aromatic hydrocarbons (PAHs) associated with automotive exhaust residuals. Subsurface soils would also be expected to be contaminated with pyrogenic PAHs in areas where asphalt, urban fill, or surface soils have become intermixed. Background conditions on the Site would therefore be expected to include pyrogenic PAHs and other petroleum residuals.

Site-specific background values were not determined during this study. As a default, background concentrations of PAHs cited by MADEP as "Urban Background" in draft guidance (MADEP: Draft *Proposed Changes: Guidance for Disposal Site Risk Characterization,* February 1997), will be used instead. In the absence of default background concentrations for petroleum fractions in soil and groundwater, and as a conservative measure, background for the petroleum fractions is assumed to be non-detect.

Based upon the field activities of both SAGE and Decoulos, contaminants of concern identified at the Site include petroleum residuals associated with gasoline: benzene, toluene, MTBE, xylenes and the VPH fractions.

6.4 Applicability of Method 2

A Method 2 Risk Characterization is appropriate for characterization of the risk of harm to human health, safety, public welfare and the environment for exposure to petroleum constituents identified at this Site because:

- The contamination is limited to soil and groundwater,
- There are no contaminants that bioaccumulate within the top two feet of soil, and
- Method 1 Standards have been promulgated by MADEP for the contaminants of concern.

6.5 Applicable Soil and Groundwater Categories

6.5.1 Groundwater Categories

Under the MCP, groundwater is categorized as GW-1, GW-2 and GW-3. GW-1 addresses groundwater as a potential drinking water source. GW-2 addresses the potential for volatilization and entrainment of contaminants into occupied buildings and is applicable within 30 feet of occupied buildings where the average depth to groundwater is 15 feet or less. GW-3 addresses the potential for discharge of groundwater to surface water.

GW-1 is not applicable at this Site since the area is not categorized as a current or potential drinking water resource area and the Site is located within 500 feet of a known private drinking water supply well. GW-2 is applicable as the Site is occupied by a commercial building and within 30 feet of an adjacent commercial building. GW-3 is applicable throughout the Site since GW-3 is applicable at all locations due to the potential for groundwater to enter a surface water body.

In accordance with the Massachusetts Contingency Plan, 310 CMR 40.0980, a Method 2 Risk Characterization was used to characterize the risk to human health, safety, welfare and the environment at the disposal site defined by RTN 3-14992. The Site includes the area defined by the property boundaries. The Method 2 Risk Characterization included modification of selected Method 1 Standards according to procedures outlined in MADEP, *Characterizing Risks posed by Petroleum Contaminated Sites: Implementation of MADEP VPH/EPH Approach, Final Draft,* June, 2001.

The risk characterization determined that a condition of *No Significant Risk* exists for portions of the Site and that restrictions on future uses are required. This Method 2 Risk Characterization therefore supports a Class A-3 Response Action Outcome. Steps in the characterization of risk follow.

6.5.2 Soil Categories

MCP soil standards consider the direct effects of contact exposure to contaminants in the soil as well as the leaching potential and impact upon groundwater quality. Method 1 soil standards have been promulgated for nine categories corresponding to three degrees of soil exposure and three types of groundwater exposure: S-1/GW-1, S-1/GW-2, S-1/GW-3; S-2/GW-1, S-1/GW-2, S-2/GW-3; S-2/GW-1, S-2/GW-2, S-2/GW-3. The soil categories (S-1, S-2, and S-3) are based on exposure as a function of the type of receptor, the frequency and intensity of exposure, and the accessibility of the contaminated soil.

The MCP requires that the soil category be evaluated for a Site based on the current and foreseeable uses of the property. The Site is currently a commercial vehicle service station and retail fuel dispensing facility. The Site is in an area accepted by the Randolph Zoning Board of Appeals for commercial use and located on a busy secondary state highway. There are residential properties located in the vicinity of the Site to the east and south. It is likely that the Site will be used as it is now or further developed for commercial use. The development of the

Site may or may not entail construction or use of the property which may pose an increased risk of exposure to impacted soil and groundwater. For this reason, an Activity and Use Limitation has been applied and recorded for the Site. This allows the Site soils to be evaluated relative to the MCP Method 1 soil standards for S2 soils in GW-2/GW-3 groundwater areas for preparation of this RAO.

6.6 Exposure Points and Exposure Point Concentrations

6.6.1 Soil

Under the MCP, the exposure point for contact with contaminated soil is defined as the average concentration in the area of the contamination. If all detected concentrations are less than the applicable Method 1 or 2 Standards, however, calculation of an average is not required and the result at each individual sampling point can be compared directly with the applicable standard. Table 1 presented the soil sample results compiled from a recent investigation by Decoulos and previous data presented by SAGE in 1998. There were no VPH target analytes detected in samples analyzed in February 1998 or May 2002 in concentrations which exceeded MCP Method 1 standards for S-2 soils in GW2/GW-3 groundwater areas. The analytical results of all four soil samples collected on February 13, 1998 equaled or slightly exceeded Method 1, S-2 soil in GW-2/GW-3 groundwater standards for VPH range C_9-C_{10} Aromatics. The concentrations of this VPH range were lower in the May 8, 2002 soil sample round and the average was well below the applicable standard. The concentration of C_5-C_8 Aliphatics detected in May 8, 2002 sample DB-3/S-3 exceeded the Method 1, S-1 in GW-2/GW-3 standard, however, when this sample is averaged with the previous and recent sample analyses the result is well below the applicable standard.

6.6.2 Groundwater

Exposure point concentrations for groundwater under Method 1 or Method 2 Risk Characterizations are defined as the concentration of contaminants detected at each individual monitoring point. However, GW-2 Standards are only applicable where the average depth to groundwater is less than 15 feet and at points within 30 feet of an occupied building. GW-2 standards are applicable at DMW-1 and DMW-4.

Where GW-2 concentrations are exceeded, the MCP allows for Method 2 modifications using directly measured soil gas concentrations. Because the soil gas results were measured for the VPH ranges and target analytes range rather than modeled from groundwater, they more directly represent the exposure point concentrations for entrainment of soil vapors into an occupied building. Soil gas results adjacent to the commercial Site building are presented in Table 4.

6.7 Comparison with Method 1 Standards

6.7.1 Soil

Method 1 S2/GW2 and S2/GW3 Soil Standards are met for all the Contaminants of Concern when averaged over the Site and two rounds of soil sample collection as shown in Table 1. An Activity and Use Limitation has been applied and recorded for the Site. The Activity and Use Limitation allows for the evaluation of Contaminants of Concern using Method 1 S1/GW2 and S1/GW3 standards. Based on a comparison with the Method 1 S2/GW2 and S2/GW3 Soil Standards, a condition of *No Significant Risk* exists for soil exposure under current uses of the Site. The results from the soil investigation represent the exposure point concentrations for the soil points.

6.7.2 Groundwater

Applicable Method 1 GW2 and GW3 Standards are met for many Contaminants of Concern as shown on Table 3. However, the Method 1 Groundwater Standards are exceeded for the following contaminants:

Method 1 GW2 Exceedance:

- C5-C8 Aliphatics in DMW-1, DMW-2, MW-3R
- C9-C10 Aromatics in DMW-2, MW-3R
- Benzene in DMW-1, MW-3R
- Toluene in MW-3R
- m-,p-Xylenes in DMW-2, MW-3R

The only Method 1 GW2 standard exceedance within 30 feet of the commercial building was at DMW-1. This exceedance was *not based upon detectable levels of the C_5-C_8 Aliphatic range* but by averaging one half of the detectable levels from each round of analysis.

6.8 Development of Method 2 Standards for Groundwater

To more accurately evaluate site-specific risks, we developed a Method 2 Standard for the VPH fractions and target analytes that exceeded the applicable Method 1 Standard. Development of the Method 2 Standard was conducted according to guidance provided in DEP Policy WSC #02-411: *Characterizing Risks posed by Petroleum Contaminated Sites: Implementation of MADEP VPH/EPH Approach, Final Draft,* October, 2002.

6.8.1 Method 2 GW-2 Standards

Table 4 presents development of the Method 2 GW-2 Standard for the C5-C8 aliphatic range and the C9-C10 Aromatic range. Air data is not currently available for characterizing site specific risks of exposure to MTBE using the Method 2 procedure. The risks associated with MTBE will be evaluated assumed to be incorporated into the C9-C10 Aromatics analysis (the only MTBE exceedance of the Method 1 GW-2 Standard occurred on June 4, 2002).

Development of Method 2 Standards - GW2
Comparison of Soil Gas Results and No Impact Soil Gas Values
633 North Main Street
Randolph, MA
Table 4

									Calculated Method 2 Standard		
Date Collected:		6/5/2002	~~6/5/2002~~	6/9/2004	6/9/2004	MADEP No Impact[1] Soil Gas	Maximum GW Result	Average GW Result	Calculated [2,3] Method 2 GW2	Calculated [4] Method 2 GW2	Ceiling Concentration GW2
Sample ID:		DG-1	~~DG-2~~	DG-3	DG-4	Estimate					
Parameter	Units:	ug/m^3	~~ug/m^3~~	ug/m^3	ug/m^3	ug/m^3	ug/L	ug/L	ug/L	ug/L	ug/L
Benzene		ND	~~2,880~~	5	10		[redacted]	1,501			
Ethylbenzene		ND	~~ND~~	4	5		2,590	767			
MTBE		ND	~~29,200~~	106	53		[redacted]	6,440			100,000
Naphthalene		ND	~~ND~~	ND	ND		718	261			
Toluene		ND	~~ND~~	16	17		[redacted]	3,253			
m-,p-Xylenes		3.25	~~390~~	13	21		[redacted]	4,249			
o-Xylene		ND	~~ND~~	5	9		[redacted]	1,751			
C5-C8 Aliphatic		1,630	~~239,000~~	2,056	1,267	170,000	[redacted]	1,178	48,748	62,963	50,000
C9-C12 Aliphatic		1,880	~~6,090~~	ND	ND	180,000	563	253	23,590	55,385	50,000
C9-C10 Aromatic		ND	~~181~~	1,630	1,670	160,000	[redacted]	3,531	253,704	9,696,970	50,000

NOTES

[redacted] Method 1 GW2 Exceedance

[1] Based upon: MADEP *Background Documentation for the Development of the MCP Numerical Standards* 1994 and Implementation of MADEP VPH/EPH Approach Oct 1997

[2] Results from DG-2 were not factored. See discussion in Section 6.8.1.

[3] Assume gas transport coefficient = average gw concentration divided by average soil gas concentration. Multiply this coefficient by MADEP "no impact" soil gas value to calculate Method 2 GW2 Standard. Then default to 50,000 ppb where calculated GW2 > 50,000 ppb.

[4] Using equation from 310 CMR 40.0983(2)(C)

Soil gas samples were obtained and analyzed to rule out the impact to indoor air at the building on the Site. Samples DG-1 and DG-2 were collected from a depth of approximately 36 inches below grade and samples DG-3 and DG-4 were collected from a depth of approximately 18 inches below grade. Each soil gas sample was analyzed for Air-Phase Petroleum Hydrocarbons (APHs) as described earlier in this report. Detected concentrations were then compared with "No Impact" soil gas concentrations estimated by DEP based on background considerations. Averaged site concentrations for DG-1, DG-3 and DG-4 are less than the estimated "No Impact" concentrations and a condition of *No Significant Risk* with respect to vapor entrainment is demonstrated.

After an examination of the soil gas locations and the APH results from the four samples it was decided to eliminate sample DG-2 from analysis. The sample was collected from underneath an area that is used frequently to park and store vehicles for repair. As can be seen from Photograph B in Figure 3, the general area of DG-2 is heavily stained with vehicle drippings. The results from DG-2 are more indicative of the localized condition of vehicle storage rather than an indicator of underground hydrocarbon migration from the former source of the release on Site.

Using the "No Impact" concentrations for soil gas, we back-calculated to Method 2 GW2 Standards. For the contaminants of concern, the calculated Method 2 GW2 Standards were as follows:

Contaminant of Concern	Most Conservative Calculated Method 2 Standard
• C5-C8 Aliphatics	48,748 ug/l
• C9-C10 Aromatics	50,000 ug/l

Groundwater concentrations on the Site are less than the Method 1 GW2 Standards and the calculated Method 2 GW2 Standards. These results confirm that a condition of *No Significant Risk* exists with respect to vapor entrainment.

6.8.2 Method 2 GW-3 Standards

Groundwater concentrations of VPH ranges and target analytes at the Site are all less than the Method 1 standards for GW3 with the exception of the m,p-xylenes and C9-C10 Aliphatics.

The GW3 discharge point is a stormwater outfall into Norroway Brook along Chestnut Street. The distance from the Site, assuming that the groundwater is being "short-circuited" along a 15 inch reinforced concrete drain pipe, is approximately 900 feet. Norroway Brook discharges into a public drinking water supply reservoir.

According to Randolph Engineer Stephen P. Levreault, the drainage line was installed in the 1930s. Backfill material would not be expected to be unusually pervious, as the reinforced concrete pipe was capable of withstanding large backfill forces during construction.

The Method 2 Standards for GW-3 developed for the m,p-xylenes and C9-C10 Aliphatics are presented in Table 5. Based on the analysis presented in the table, the results demonstrate that a condition of *No Significant Risk* exists with respect to surface water discharge.

6.9 Summary of Characterization of Risk to Public Health and the Environment

This risk characterization has demonstrated that site conditions poses *No Significant Risk* to human health or the environment for the foreseeable period of time. The following specific criteria are presented:

Characterization of Risk due to Soil Exposure

- The average soil concentrations on the Site are less than Method 1 S1/GW2 and S1/GW3 Soil Standards for all Contaminants of Concern. Therefore, a condition of *No Significant Risk* exists for soil exposure under all potential future uses of the Site and it is not necessary to implement any use restrictions.

Characterization of Risk to Human Health from Exposure to Groundwater

- GW1 Standards are not applicable to the Site.
- Method 1 GW2 Standards are met within 30 feet of the commercial building for all parameters.
- Calculated Method 2 GW2 Standards are met for all wells on Site.
- Therefore, a condition of *No Significant Risk* exists with respect to human health for any foreseeable period of time.

Characterization of Risk to the Environment from Discharge of Groundwater

- Groundwater concentrations are less than Method 1 Standards for all parameters.
- Since all concentrations are less than Method 1 Standards, a condition of *No Significant Risk* exists with respect to surface water discharge from the Site.

6.10 Characterization of Risk to Public Welfare

As required by the MCP, we also evaluated the risk of harm to public welfare. Site conditions do not represent nuisance conditions, nor will they result in a loss of property value or a restriction of use of either building on the Site. In addition, concentrations of contaminants are less than Upper Concentration Limits for both soil and groundwater. Thus, a level of *No Significant Risk* to public welfare exists under current and foreseeable future conditions.

Development of Method 2 Standards - GW3
Method 2 Calculations for Groundwater Discharge Concentrations
at Surface Water Discharge Point 900 feet from Source Area
633 North Main Street
Randolph, MA
Table 5

Lab ID: / Date Collected: / Sample ID:		DMW-2 Average	Calc. Conc. ff. transport 900 feet	MW-3R Average	Calc. Conc. ff. transport 900 feet	UCLs	GW1	Method 1 GW2	GW3	MADEP Discharge Concen. Guideline	Calculated Method 2 Standard for discharge 900 feet from source	UCL-Default Method 2 GW3 Standard
Parameter	Units:	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
m-,p-Xylenes		[redacted]	120	[redacted]	156	100,000	10,000	6,000	6,000	400	231,486	100,000
C9-C10 Aromatics		[redacted]	100	[redacted]	111	100,000	200	5,000	4,000	400	231,486	100,000

C5-C8 Aliphatics and C9-C10 Aromatics calculated dilution factors for transport 1000 feet = 0.0160 (Figure 4-1, *Implementation of MADEP VPH/EPH Approach*, October 1997).

Assume 100% discharge without further dilution by receiving water.

[redacted]

6.11 Characterization of Risk to Public Safety

The risk of harm to public safety, as described in 310 CMR 40.0960, was evaluated for the disposal site. The Site does not contain the following items related to a release of oil or hazardous materials:

- There are no rusted or corroded drums or containers, open pits or lagoons on the Site.
- There is no threat of fire or explosion, or the presence of explosive vapors on the Site.
- There are no uncontainerized materials exhibiting the characteristics of corrosivity, reactivity or flammability on the Site.

Based on the foregoing, a condition of *No Significant Risk* with respect to Public Safety exists.

7.0 FEASIBILITY OF RESTORATION TO BACKGROUND

A review of the residual groundwater contamination indicates that background levels have not been achieved. However, the source of the elevated constituents, the former USTs and the petroleum contaminated soil have all been removed. Additional remedial activities to remove further soil and treat groundwater contamination would be the primary alternative. The benefit to be achieved would be a slow and gradual restoration of groundwater quality. However, no benefit would be achieved in terms of risk reduction. The additional cost of further soil removal and groundwater remedial actions does not justify the incremental benefit of risk reduction, environmental restoration and monetary and non-pecuniary values, pursuant to 310 CMR 40.860(6)(a).

Given that groundwater concentrations are expected to decrease over time through natural attenuation, the costs of additional remedial actions far outweigh the benefit of achieving background at the location. Therefore, the achievement of background is not considered feasible and the levels of residual contamination have been reduced to levels approaching background to the most practical extent feasible.

8.0 SUMMARY AND CONCLUSIONS

The property is described by the Town of Randolph Assessors as on Map 30, Block C, Lot 6.1A and is recorded at the Norfolk Registry of Deeds in Book 9310, Page 747. The Site fronts on both North Main Street and Orchard Street.

The land is improved by a one story wood framed commercial building on a concrete slab. The commercial building has a postal address of 633 North Main Street. On January 21, 1993, the Randolph Zoning Board of Appeals approved an upgraded commercial use for the Site and the plan accepted for this approval was recorded at the Norfolk Registry as Number 124-1993 in Plan Book 412.

Since approximately 1935, the Site has been used as a retail gasoline filling station. On June 11, 1997, a release of petroleum was reported to the Massachusetts Department of Environmental Protection (DEP) pursuant to G.L. c.21E and the Massachusetts Contingency Plan (MCP). The release was assigned tracking number 3-15188 by DEP and apparently associated with a 2,000 gallon underground storage tank (UST) removed by RC Construction in June of 1997.

On October 27, 1997, another release of petroleum was reported to DEP as a result of the removal of two 6,000 gallon USTs. DEP assigned tracking number 3-15653 to the release. A total of 275.05 tons of petroleum contaminated soil from the release was recycled at Bardon Trimount in Stoughton, MA.

The Site is currently used for retail vehicle fueling and light automotive repair. The vehicle fueling operation utilizes one 12,000 gallon double-walled fiberglass underground storage tank (UST) for fuel storage. The UST is split to provide storage for 9,000 gallons of regular fuel and 3,000 gallons of premium gasoline. Double-walled fiberglass piping distributes fuel product to the fuel dispenser pumps as shown on Figure 3. The fuel dispenser island is covered by an overhead canopy. The entire UST system is monitored and automatically gauged by a Veeder-Root TLS-350 Monitoring System.

Full documentation on the Site history and compliance with the MCP was documented in reports prepared by SAGE. Additionally, soil, groundwater and soil gas data was collected by Decoulos & Company personnel.

The site investigations and risk characterization have determined that there is *No Significant Risk* to public health, safety, welfare or the environment from the remaining petroleum constituents within groundwater on the Site and a potentially *Significant Risk* to public health, safety, welfare or the environment from the remaining petroleum constituents within the soil on the Site.

As a result of the risk characterization, an Activity and Use Limitation was recorded at the Norfolk Registry of Deeds on June 14, 2002 in Book 16737, Page 300 to limit the use of the Site to commercial or industrial uses.

9.0 REFERENCES

Background Documentation for the Development of the MCP Numerical Standards, MADEP Bureau of Waste Site Cleanup and Office of Research and Standards, April, 1994.

DEP Policy WSC #02-411: Characterizing Risks posed by Petroleum Contaminated Sites: Implementation of MADEP VPH/EPH Approach, Final Draft, October, 2002.

Guidance for Disposal Site Risk Characterization, MADEP Bureau of Waste Site Cleanup and Office of Research and Standards, July, 1995.

Immediate Response Action Plan, SAGE Environmental, Inc., December, 1997

Immediate Response Action Outcome Statement, SAGE Environmental, Inc., May, 1998

Massachusetts Contingency Plan, 310 CMR 40.0000

Phase I Initial Site Investigation, SAGE Environmental, Inc., June, 1998

Standard References for Monitoring Wells, MADEP

APPENDIX A
UST TIGHTNESS TESTING

Ameritest
Petroleum
Corporation

A WHITCO/AMERITEST CORPORATION
PO BOX 41628
PROVIDENCE, RI 02940 - 1628
1-888-980-TEST
Phone 401-725-0981 Fax 401-726-4518
www.ameritestpetroleum.com

PRODUCT LINE TEST CERTIFICATION

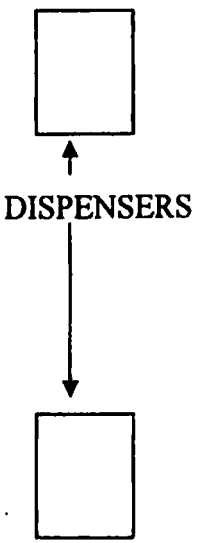
TEST LOCATION: SPEEDY LUBE 633 MAIN STREET RANDOLPH, MA 02363	**CERTIFIED TECHNICIANS: MARK B. HAWKINS: AL/TX243 RAY COTHRUM: 071098U1033**		
CONTACT: OWNER: EYAD BADAWI	**PHONE: 781-961-4881 FAX:**		
TEST DATE: 2/24/2004 TIME: 9 AM	**FACILITY UST ID: UNKNOWN**		
TEST TYPE: PETRO-TITE	**LINE ONE**	**LINE TWO**	**LINE THREE**
LINE CONSTRUCTION	ENVIRON FLEX	ENVIRON FLEX	
WEATHER /TEMP	COOL	COOL	
PUMP TYPE SUBMERSIBLE	SUBMERSIBLE	SUBMERSIBLE	
COVER ABOVE LINES	CONCRETE	CONCRETE	
DEPTH OF LINES FROM GRADE	36 INCHES	36 INCHES	
TEST RESULTS (PASS OR FAIL):	**PASS**	**PASS**	

LINE IDENTIFICATION	TIME	START TEST	PRESSURIZE LINE TO		VOLUME READING		NET CHANGE	BLEED BACK
LINE ONE: REGULAR UL 9000GALLON	MILITARY		BEFORE	AFTER	BEFORE	AFTER .270		
	1030	**START TEST**	60.0	60.0	.270	.270	+.000	
	1045		60.0	60.0	.270	.270	+.000	
	1100		60.0	60.0	.270	.270	+.000	
	1115	**END TEST**	60.0	60.0	.270	.270	+.000	
	1130	**BLEED BACK**	60.0	0.0	.270	.305	+.035	O.K.
LINE TWO: SUPER UL 3000 GAL	MILITARY		BEFORE	AFTER	BEFORE	AFTER .230		
	1030	**START TEST**	60.0	60.0	.230	.230	+.000	
	1045		60.0	60.0	.230	.230	+.000	
	1100		60.0	60.0	.230	.230	+.000	
	1115	**END TEST**	60.0	60.0	.230	.230	+.000	
	1130	**BLEED BACK**	60.0	0.0	.230	.262	+.032	OK
LINE IDENTIFICATION:		**MEETS CRITERIA**	**NET VOLUME PER HOUR**		**DATE TESTED**		**PASS OR FAIL**	
ONE: 9000 GAL REG UL		YES	+.000		2/24/2004		PASS	
TWO: 3000 GAL SUPER UL		YES	+.000		2/24/2004		PASS	

Ameritest
Petroleum
Corporation

A WHITCO/AMERITEST CORPORATION
PO BOX 41628
PROVIDENCE, RI 02940-16628
1-888-980-TEST
Phone 401-725-0981 Fax 401-726-4518
www.ameritestpetroleum.com

LOCATION MAP: SPEEDY LUBE 633 MAIN ST, RANDOLPH MA 02363
EYAD BADAWI 781-961-4881

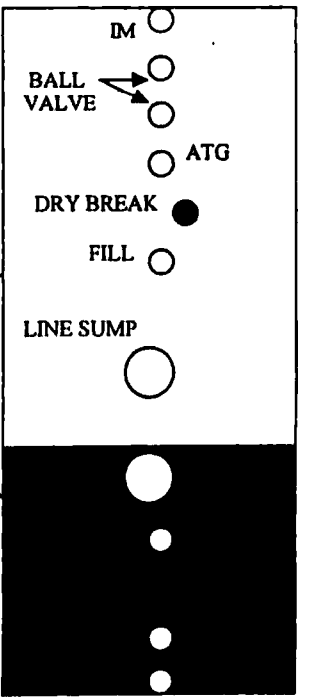


ONE TANK-

TWO COMPARTMENTS:

9000 GALLON REGULAR UL

3000 GALLON SUPER UL



NEXTEST

P.O. BOX 67, MANVILLE, RI 02838
Ph. (401) 723-0247 Fax (401) 723-0248

ANNUAL LINE LEAK DETECTOR TEST FORM FOR UNDERGROUND STORAGE TANK SYSTEMS

Facility Name: Speedy Lube Inc

Facility Address: 633 North Main St City: Randolph, MA Zip: 02368

Test Information and Results

Tank Number: (for split tanks use 1(a), (b))	Tank # 1a	Tank # 1b	Tank #	Tank #	Tank #
Product Stored: (gas, diesel, etc.)	Regular	Super			
Capacity: (gallons)	9000	3000			
LLD Manufacturer:	Red Jacket	Red Jacket			
LLD Model Number:	FXIV	FXIV			
Tested Leak Rate: (gallons per hour)	2.80	2.90			
Results:	Pass Fail	Pass Fail	Pass Fail	Pass Fail	Pass Fail

Complete following only if any of the above LLDs have failed and replaced with NEW LLDs.

REPLACED LLD Manufacturer:					
LLD Model Number:					
Tested Leak Rate: (3 gallons per hour max.)					
Results:	Pass Fail	Pass Fail	Pass Fail	Pass Fail	Pass Fail

If a failed LLD test was reported and not repaired, **describe how and when detector** will be corrected:

Verification – I, hereby, verify that the automatic line leak detectors were tested to confirm that they are operating according to manufacturers' recommendations.

LLD Manufacturer / Tester Certification Number: Red Jacket / _____

Technician Name (print): Bryan Courtney Testing Company Name: NEXTEST Inc

Testing Co. Address / State / Zip P.O. Box 67 Manville, RI 02838

Signature: Bryan Courtney Phone No.: (401) 723-0247 Date of Test: 1-21-04

May 2002

NEXTEST

P.O. BOX 67, MANVILLE, RI 02838
Ph. (401) 723-0247 Fax (401) 723-0248

Facility Name: Speedy Lube Inc

Facility Address: 633 North Main St. City: Randolph, MA Zip: 02368

A. Results of Annual Leak Monitoring Test

Complete the following checklist using: Y=yes, N=no, N/A=not applicable
If your answer is No, then describe on the reverse side of this form how and when these items will be corrected.

1. Leak monitor manufacturer's name and model number: Veeder Root TLS-300C

		Tank #: 1	2			
2.	Leak monitor console assignments are correctly programmed and labeled for all sensors.	Y	Y			
3.	Tank secondary containment sensor is positioned per manufacturers recommendation.	Y	Y			
4.	Piping secondary containment (piping, intermediate, and or dispenser sump) sensors are positioned per manufacturer recommendation.	Y	Y			
5.	Brine level of the tank interstitial space is within the manufacturers operating range.	Y	Y			
6.	The secondary containment and the piping sumps are free of liquid.	Y	Y			
7.	All sensors were visually inspected, manually tested, and confirmed operational.	Y	Y			
8.	The leak monitor console audible alarm is operational.	Y				
9.	The leak monitor console visual alarms are operational.	Y				
10.	The communication equipment (e.g. modem) is operational for leak monitoring systems and will relay alarms to a remote station.	N/A				
11.	**The leak monitoring console and sensors are in proper operation.**	Y				

B. Verification

I hereby verify that the equipment identified in this document was tested for proper operation in performance of the original design function in accordance with the manufacturers' requirements. Attached to this form is information (if available, system set-up reports) necessary to verify that this information is correct.

Technician Name (print): Bryan Conroyer Testing Company Name: NEXTEST LLC

Testing Co. Address / State / Zip: P.O. Box 67 Manville, RI 02838

Signature: Bryan Conroyer Phone No.: (401) 723-0247 Date: 1-21-04

NEXTEST

P.O. BOX 67, MANVILLE, RI 02838
Ph. (401) 723-0247 Fax (401) 723-0248

Stage II Vapor Recovery Test

1. Petrol Gas/SPEEDY LUBE INC — Name of Gas Station
2. 10-20-03 — Date of Test
3. 633 North Main St. — Street Address
4. Randolph — City; MA — State; 02368 — Zip Code
5. Ed Badawi — Stage II Responsible Official
6. (781) 961-4881 — Phone Number of Stage II Responsible Official

7. Were all tests observed by a D.E.P. Official?.....Yes (No)
8. Are the test results attached to this form?.....(Yes) No

****

TEST CONCLUSIONS (circle one for each test)

(PASS)	FAIL	NOT APPLICABLE	Pressure Decay Test (Leak Test)
PASS	FAIL	(NOT APPLICABLE)	Liquid Blockage Test (Wet Test)
PASS	FAIL	(NOT APPLICABLE)	Dynamic Backpressure Test (Dry Test)
PASS	FAIL	(NOT APPLICABLE)	Air / Liquid Volume Ratio Test
(PASS)	FAIL	NOT APPLICABLE	Vapor Tie Test
(PASS)	FAIL	NOT APPLICABLE	P/V Relief Vent

****

The undersigned certifies that he/she is an authorized agent of the owner of the Stage II Vapor Recovery System or a duly authorized representative of such agent. "I have personally examined and am familiar with the information submitted in this document and all attachments and certify that based on a reasonable investigation, including my inquiry of those individuals responsible for obtaining the information, the submitted information is true, accurate and complete to the best of my knowledge and belief, and I understand that any false statement made in this document or its attachments may be punishable as a criminal offense."

Signature and Address of Authorized Agent

Bryan Cournoyer — Sign Name; Bryan Cournoyer — Print Name

TC-034 — Certificate Number; NEXTEST — Company Name

P.O. BOX 67 — Mailing Address; MANVILLE — City; RI — State; 02838 — Zip Code

SUMMARY OF PRESSURE DECAY TEST RESULTS

Test Site Name & Address:

Petrol Gas
633 N. Main St.
Randolph, MA 02368

Testing Firm's Name & Address:

NEXTEST
P.O. BOX 67
MANVILLE, RI 02838

Site Stage II System Type

Vac-Assist	
Balance	X
Healy	
2-Point	X
Coaxial	
Manifolded	YES

Stage-II System Executive Order # G-70-52-AM

Test Date: 10/20/03

Test Times:

Run A:	10:30
Run B:	10:55
Run C:	

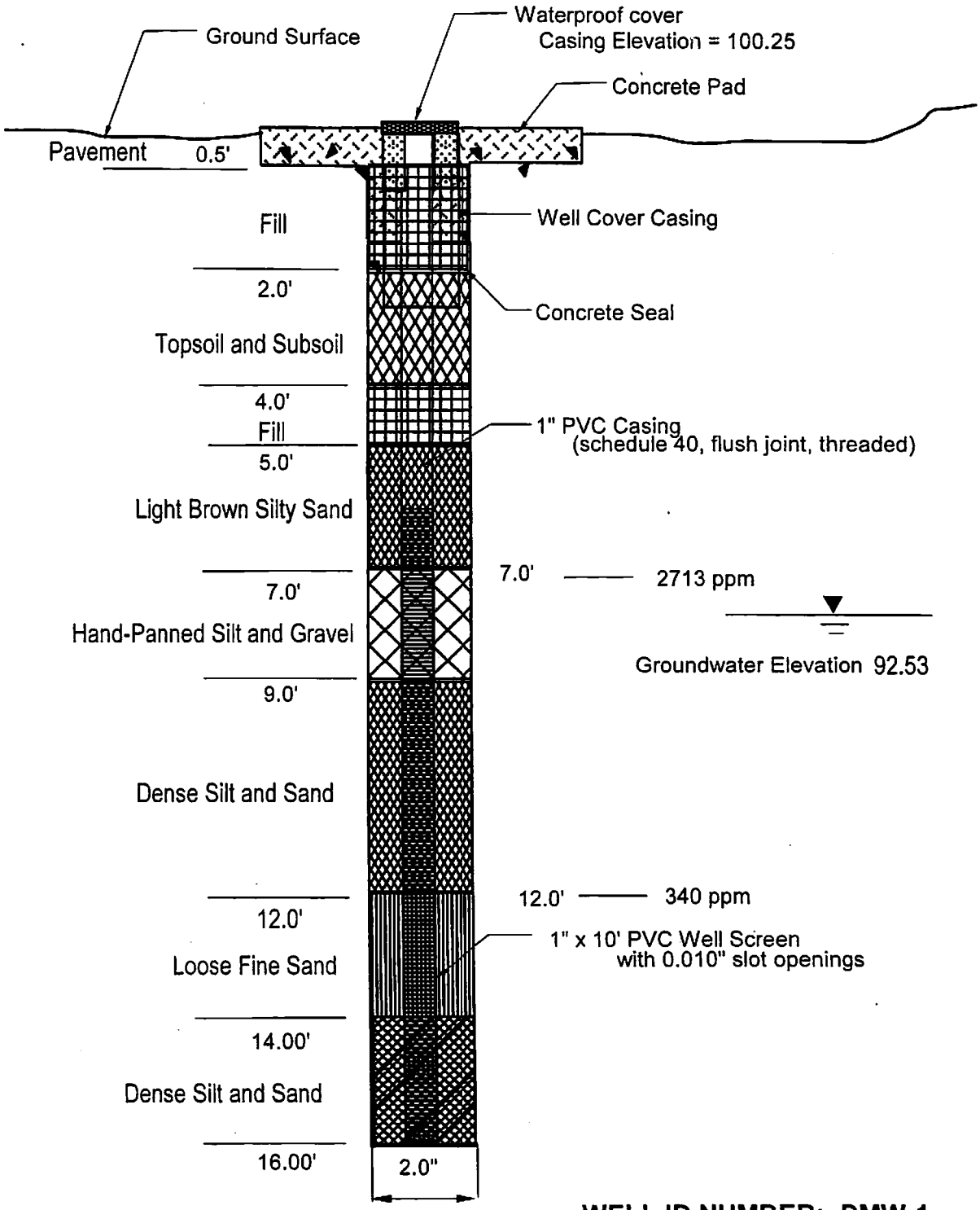
Test Results

Tank #	1	2	3	4
Product Grade:	Regular	Super		
Actual Tank Capacity (gallons)	9,000	3,000		
Gasoline Volume (gallons)	2,657	1,665		
Ullage (gallons) T= 7,636	6,268	1,368		
Initial Pressure (inches H2O)	10.00			
Pressure after 1 min., in. H_2O	10.00			
Pressure after 2 min., in. H_2O	9.90			
Pressure after 3 min., in. H_2O	9.80			
Pressure after 4 min., in. H_2O	9.70			
Pressure after 5 min., in. H_2O	9.60			

Results/Comments: PASS

Test Conducted By: Bryan Cournoyer **Date:** 10/20/03

APPENDIX B
MONITORING WELL BORING LOGS



WELL ID NUMBER: DMW-1

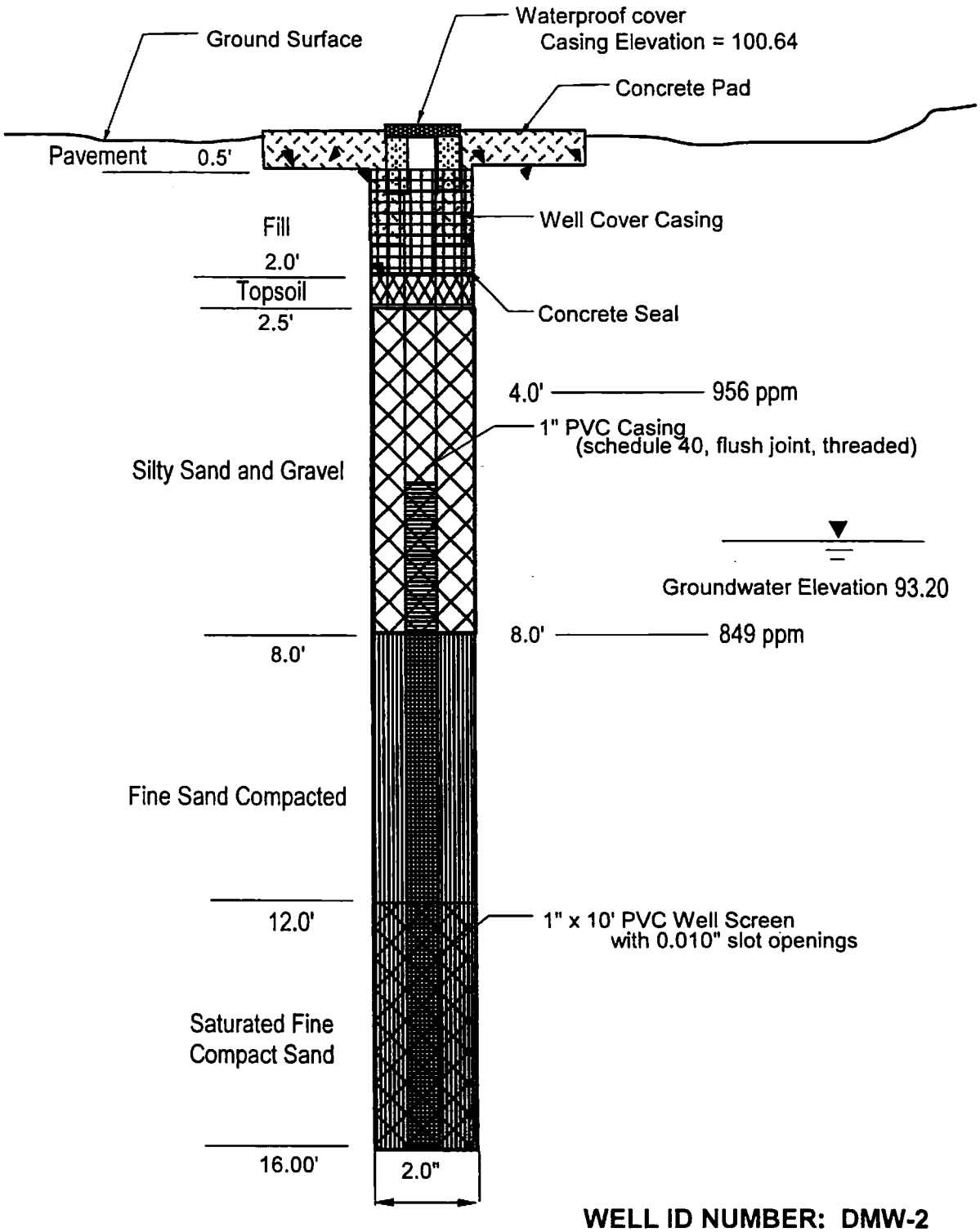
DRILLING METHOD:
DIRECT PUSH PROBE

DB-1/DMW-1 BORING LOG

(NOT TO SCALE)

DECOULOS & COMPANY

SITE LOCATION: 633 N. MAIN STREET, RANDOLPH, MA



WELL ID NUMBER: DMW-2

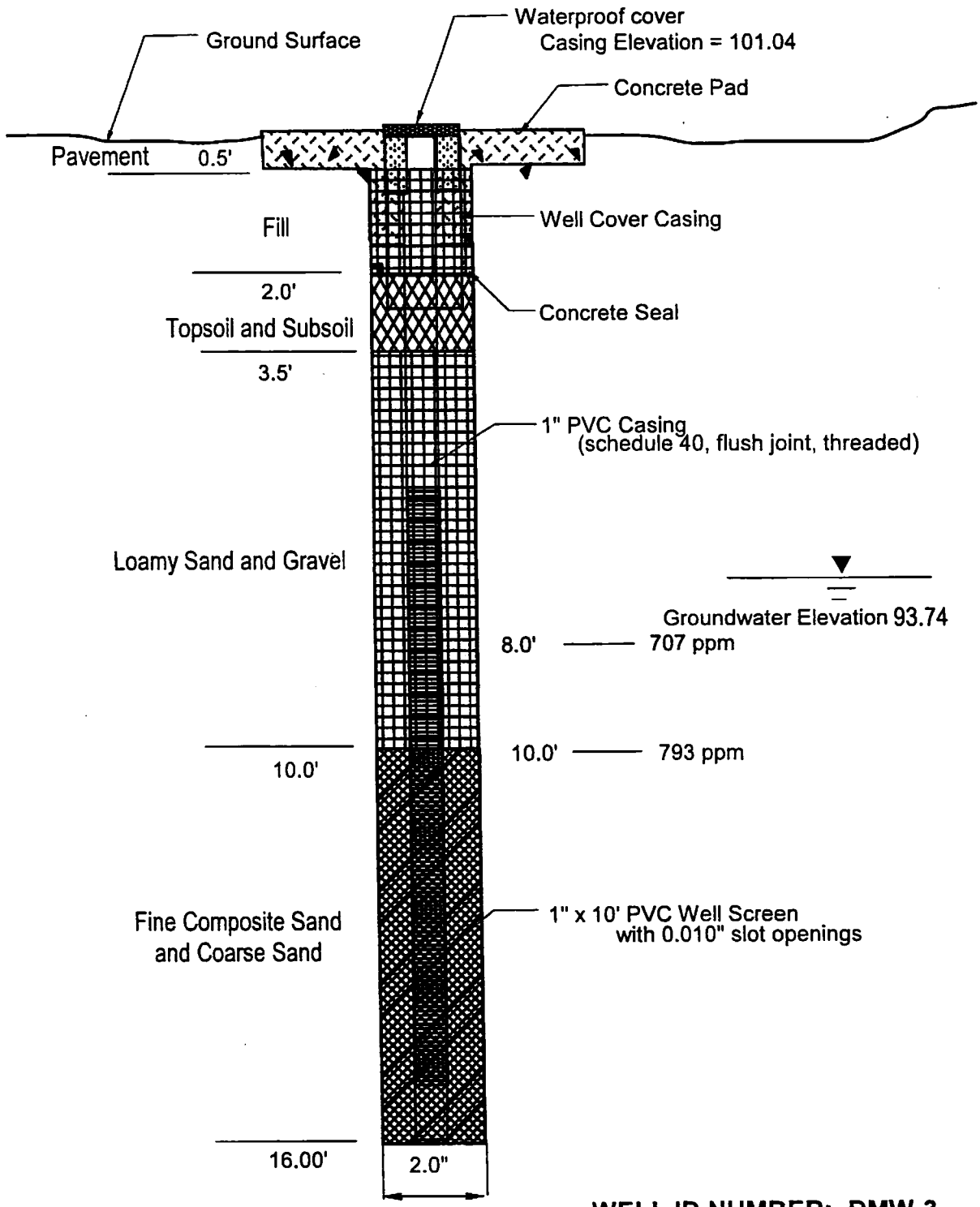
DRILLING METHOD:
DIRECT PUSH PROBE

DB-2/DMW-2 BORING LOG

(NOT TO SCALE)

DECOULOS & COMPANY

SITE LOCATION: 633 N. MAIN STREET, RANDOLPH, MA



WELL ID NUMBER: DMW-3

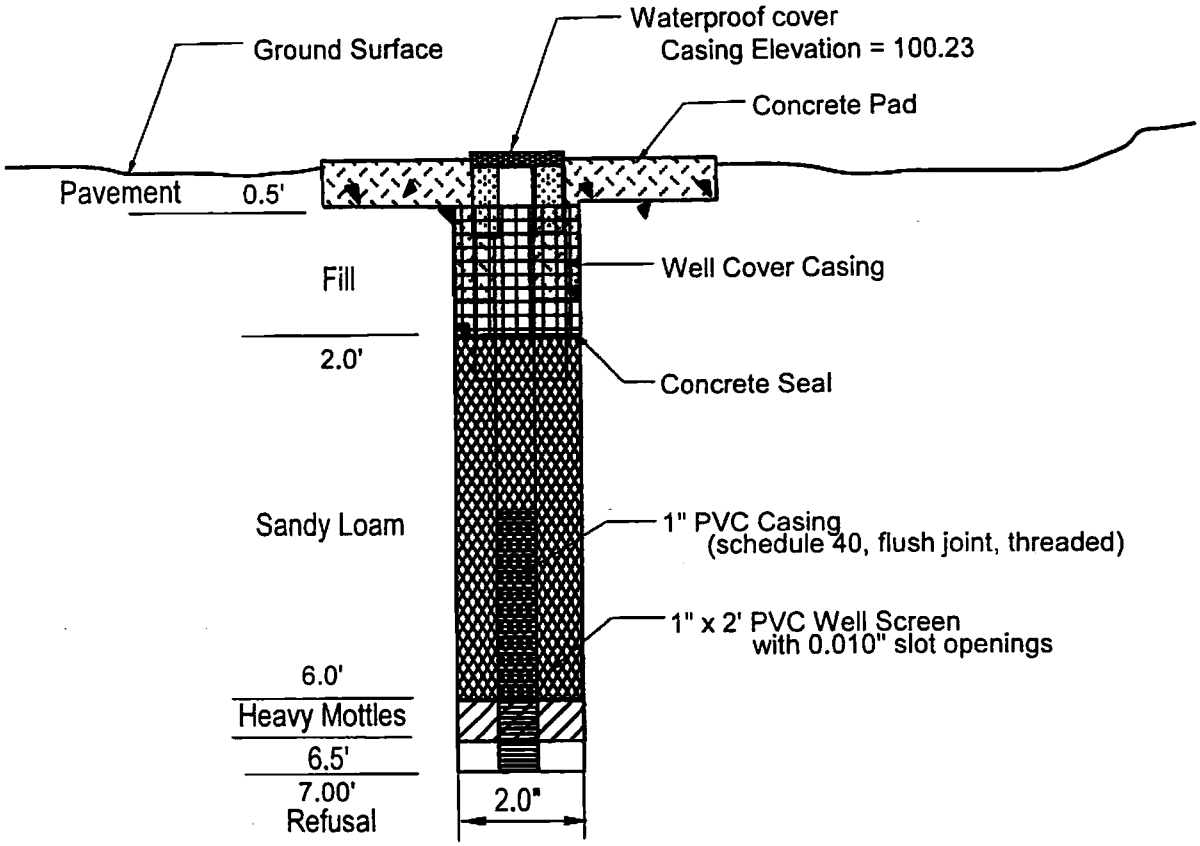
DRILLING METHOD:
DIRECT PUSH PROBE

DB-3/DMW-3 BORING LOG

(NOT TO SCALE)

DECOULOS & COMPANY

SITE LOCATION: 633 N. MAIN STREET, RANDOLPH, MA



WELL ID NUMBER: DG-1

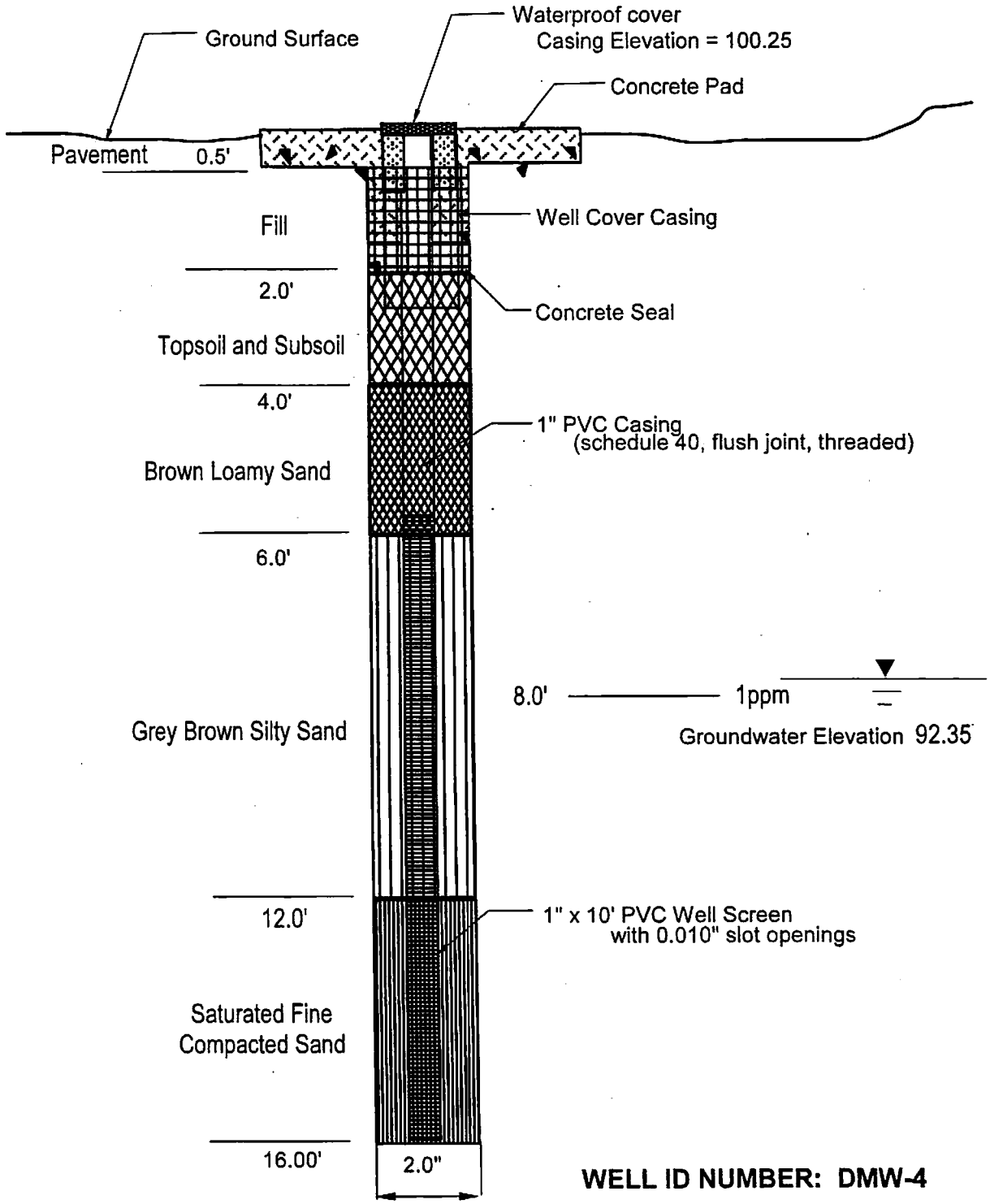
DRILLING METHOD:
DIRECT PUSH PROBE

DB-4/DG-1 BORING LOG

(NOT TO SCALE)

DECOULOS & COMPANY

SITE LOCATION: 633 N. MAIN STREET, RANDOLPH, MA



WELL ID NUMBER: DMW-4

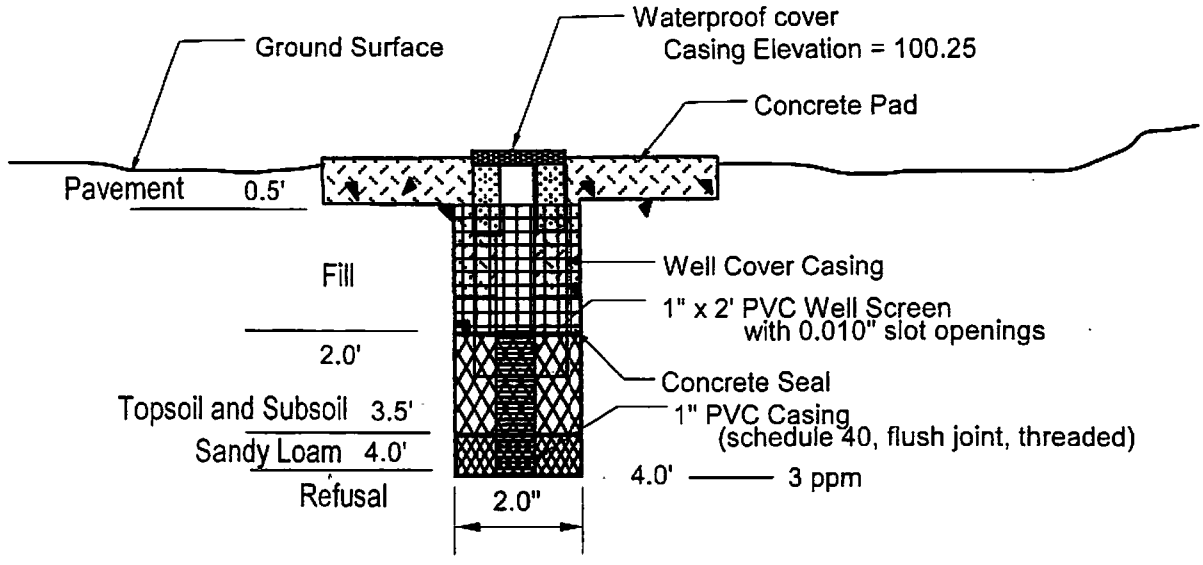
DRILLING METHOD:
DIRECT PUSH PROBE

DB-5/DMW-4 BORING LOG

(NOT TO SCALE)

DECOULOS & COMPANY

SITE LOCATION: 633 N. MAIN STREET, RANDOLPH, MA



WELL ID NUMBER: DG-2

DRILLING METHOD:
DIRECT PUSH PROBE

DB-6/DG-2 BORING LOG

(NOT TO SCALE)

DECOULOS & COMPANY

SITE LOCATION: 633 N. MAIN STREET, RANDOLPH, MA

APPENDIX C
LABORATORY CERTIFICATES OF ANALYSIS

GeoLabs, Inc.

Environmental Laboratories

LABORATORY REPORT

PREPARED FOR:

Decoulos & Company
248 Andover Street
Peabody, MA 01960

Attn: Jim Decoulos

PROJECT ID:	608 633 North Main Randolph
GEOLABS CERTIFICATION #:	M-MA015
SAMPLE NUMBER:	122620 - 122624
DATE PREPARED:	May 15, 2002
PREPARED BY:	Christine Johnson
APPROVED BY:	Jim Chen, Laboratory Director/Date

Location: 45 Johnson Lane
Braintree, MA 02184

Phone: (781) 848-7844
Fax: (781) 848-7811

SAMPLE INFORMATION

Matrix	☐ Aqueous ☒ Soil ☐ Sediment ☐ Other		
Containers	☒ Satisfactory ☐ Broken ☐ Leaking		
Sample Preservative	Aqueous	☒ N/A ☐ pH ≤ 2 ☐ pH > 2 Comment:	
	Soil or Sediment	☐ N/A ☐ Samples NOT preserved in MeOH or air-tight containers	ml MeOH
		☒ Samples received in MeOH ☒ Covering soil ? ☐ Not	☒1:1±25%
		☐ Received in air tight container	☐ Other
Temperature	☒ Received on ice ☐ Received at 4° C ☐ Other		

VPH ANALYTICAL RESULTS

Method for Ranges: MADEP VPH GC/MS
Method for Target Analytes: MA VPH - GC/MS
VPH Surrogate Standards
2,5-Dibromotoluene
1,2-DCE
Toluene-d8
BFB

Client ID:				DB-1/S-2	DB-2/S-1	DB-3/S-3
Lab ID:				122620	122621	122622
Date Collected:				05/08/02	05/08/02	05/08/02
Date Received:				05/09/02	05/09/02	05/09/02
Date Analyzed:				05/10/02	05/10/02	05/10/02
Dilution Factor:				1.0	1.0	1.0
Total solids (%):				91	91	90
Range/Target Analyte		Elut. Range	RL	Units			
Unadjusted C5-C8 Aliphatics1		N/A	1.50	mg/Kg	66.8	65.5	357
Unadjusted C9-C12 Aliphatics1		N/A	0.50	mg/Kg	75.5	135	228
Benzene		C5-C8 Aliph	0.50	mg/Kg	ND	ND	ND
Ethylbenzene		C5-C8 Aliph	0.50	mg/Kg	1.43'	1.03	2.32
Methyl-tert-butyl ether		C5-C8 Aliph	0.25	mg/Kg	0.868	ND	ND
Naphthalene		N/A	1.00	mg/Kg	1.93	4.02	3.56
Toluene		C5-C8 Aliph	0.50	mg/Kg	ND	ND	ND
m-,p-Xylenes		C5-C8 Aliph	0.50	mg/Kg	2.56	7.92	12.6
o-Xylene		C9-C12 Aliph.	0.50	mg/Kg	ND	3.96	4.14
C5-C8 Aliphatic Hydrocarbons2		N/A	1.50	mg/Kg	61.9	56.6	342
C9-C12 Aliphatic Hydrocarbons3		N/A	0.50	mg/Kg	51.6	72.9	138
C9-C10 Aromatic Hydrocarbons		N/A	0.50	mg/Kg	23.9	58.1	86.2
1,2-DCE Surrogate Recovery					93%	104%	110%
Toluene-d8 Surrogate % Recovery					97%	100%	104%
BFB Surrogate % Recovery					100%	104%	102%
2,5-Dibromotoluene Surrogate % Recovery					84%	105%	93%
Surrogate Acceptance Range					70-130%	70-130%	70-130%

[1]Hydrocarbon ranges exclude concentrations of any surrogate(s) and/or internal standards eluting in that range

[2]C_5-C_8 Aliphatic Hydrocarbons exclude concentrations of Target Analytes eluting in that range

[3]C_9-C_{12} Aliphatic HCs exclude concentrations of Target Analytes AND C_9-C_{10} Aromatic Hydrocarbons eluting in that range

CERTIFICATION

Were all QA/QC procedures REQUIRED by the VPH 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 VPH method? ☐ No ☒ Yes - Details below

Aromatic and aliphatic ranges are quantitated by GC/MS Total Ion Chromatogram and all targets are quantitated by GC/MS Selected Ion Measurements.

I attest under the pains and penalties of perjury that, based upon my inquiry of those individuals immedately 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: 05/15/02

SAMPLE INFORMATION

Matrix	☐ Aqueous ☒ Soil ☐ Sediment ☐ Other		
Containers	☒ Satisfactory ☐ Broken ☐ Leaking		
Sample Preservative	Aqueous	☒ N/A ☐ pH ≤ 2 ☐ pH > 2 Comment:	
	Soil or Sediment	☐ N/A ☐ Samples NOT preserved in MeOH or air-tight containers	ml MeOH
		☒ Samples received in MeOH ☒ Covering soil ? ☐ Not	☒ 1:1±25%
		☐ Received in air tight container	☐ Other
Temperature	☒ Received on ice ☐ Received at 4° C ☐ Other		

VPH ANALYTICAL RESULTS

Method for Ranges: MADEP VPH GC/MS
Method for Target Analytes: MA VPH - GC/MS
VPH Surrogate Standards
2,5-Dibromotoluene
1,2-DCE
Toluene-d8
BFB

Client ID:	DB-6/S-1					
Lab ID:	122623					
Date Collected:	05/08/02					
Date Received:	05/09/02					
Date Analyzed:	05/10/02					
Dilution Factor:	1.0					
Total solids (%):	91					

Range/Target Analyte	Elut. Range	RL	Units			
Unadjusted C5-C8 Aliphatics1	N/A	1.50	mg/Kg	**1.80**		
Unadjusted C9-C12 Aliphatics1	N/A	0.50	mg/Kg	ND		
Benzene	C5-C8 Aliph	0.50	mg/Kg	ND		
Ethylbenzene	C5-C8 Aliph	0.50	mg/Kg	ND		
Methyl-tert-butyl ether	C5-C8 Aliph	0.25	mg/Kg	ND		
Naphthalene	N/A	1.00	mg/Kg	ND		
Toluene	C5-C8 Aliph	0.50	mg/Kg	ND		
m-,p-Xylenes	C5-C8 Aliph	0.50	mg/Kg	ND		
o-Xylene	C9-C12 Aliph.	0.50	mg/Kg	ND		
C5-C8 Aliphatic Hydrocarbons2	N/A	1.50	mg/Kg	**1.80**		
C9-C12 Aliphatic Hydrocarbons3	N/A	0.50	mg/Kg	ND		
C9-C10 Aromatic Hydrocarbons	N/A	0.50	mg/Kg	ND		
1,2-DCE Surrogate Recovery				106%		
Toluene-d8 Surrogate % Recovery				96%		
BFB Surrogate % Recovery				103%		
2,5-Dibromotoluene Surrogate % Recovery				82%		
Surrogate Acceptance Range				70-130%		

[1]Hydrocarbon ranges exclude concentrations of any surrogate(s) and/or internal standards eluting in that range

[2]C_5-C_8 Aliphatic Hydrocarbons exclude concentrations of Target Analytes eluting in that range

[3]C_9-C_{12} Aliphatic HCs exclude concentrations of Target Analytes AND C_9-C_{10} Aromatic Hydrocarbons eluting in that range

CERTIFICATION

Were all QA/QC procedures REQUIRED by the VPH 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 VPH method? ☐ No ☒ Yes - Details below

Aromatic and aliphatic ranges are quantitated by GC/MS Total Ion Chromatogram and all targets are quantitated by GC/MS Selected Ion Measurements.

I attest under the pains and penalties of perjury that, based upon my inquiry of those individuals immedately 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: 05/15/02

CLIENT NAME:	**DECOULOS & COMPANY**	PROJECT ID:	633 NORTH MAIN
SAMPLE TYPE:	SOIL	REPORT DATE:	05/15/02
COLLECTION DATE:	05/08/02	ANALYZED BY:	AS 05/14/02
REC'D BY LAB:	05/09/02	EXTRACTION DATE:	N/A
COLLECTED BY:	CLIENT	DIGESTION DATE:	N/A

TOTAL SOLIDS

SAMPLE NUMBER	SAMPLE LOCATION	TOTAL SOLIDS (%)	DETECTION LIMIT (%)
122624	633 NORTH MAIN	**91.0**	1.0

Method Reference:

EPA Method 160.3 (1)

1) U.S. EPA 1983. "Methods for Chemical Analysis of Water and Wastes." EPA-600/4-79-020, EPA, EMSL, Cincinnati, Ohio 45268.

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.

GeoLabs, Inc.
Environmental Laboratories
10 Plain Street
Braintree, MA 02184
Office: 781-848-7844
Fax: 781-848-7811

Turnaround Time
RUSH: 24hrs ☐ 48hrs ☐ 72hrs ☐
STANDARD: 5 Days ✓ Rush
Approved By:

Page 1 of 1

SPECIAL INSTRUCTIONS

Rec'd on ice JM 5/9/02

Client: DECOULOS + CO
Address: 248 ANDOVER ST
PEABODY, MA 01960
Phone: 978-532-8154
Fax: 978-359-6034
Contact: JIM DECOULOS
E-mail: JAMES J@ DECOULOS.COM

Project Number: 608
Project Location: 633 NORTH MAIN
RANDOLPH
Purchase Order #:
Collected By: JJD

ANALYSES REQUESTED

SAMPLE ID	COLLECTION DATE	COLLECTION TIME	COLLECTION SAMPLED BY	SAMPLE LOCATION	CONTAINER TYPE	CONTAINER QUANT	MATRIX	COMP	GRAB	PRES	GEOLABS SAMPLE NUMBER	VPH								TEMPERATURE	LAB pH
DB-1/S-2	5/8	1030	JJD		V	1	S	X			122620	X								14°	
DB-2/S-1	"	1100	"		"	"	"	"			122621	X								"	
DB-3/S-3	"	1200	"		"	"	"	"			122622	X								"	
DB-6/S-1	"	1300	"		"	"	"	"			122623	X								"	
% SOLIDS											122624	— use as % solids									

CONTAINER CODES:
A = Amber
B = Bag
G = Glass
P = Plastic
S = Sum[illegible] Canister
O = Oth[illegible] = VOA

MATRIX CODES:
GW = Ground Water
WW = Wastewater
DW = Drinking Water
SL = Sludge
S = Soil A = Air
O = Oil OT = Other

PRESERVATIVE CODES:
1 = HCl 7 = ICE
2 = HNO_3
3 = H_2SO_4
4 = $Na_2S_2O_3$
5 = NaOH
6 = MeOH

Relinquished By: Date/Time 5/9/02 0830
Relinquished By: 5/9/02 3:50
Relinquished By:

Received By: Date/Time: 5/9/02 0815
Received By: 5/9/02 1550
Received By GeoLabs:

GEOLABS CHAIN OF CUSTODY

GeoLabs, Inc.

Environmental Laboratories

LABORATORY REPORT

PREPARED FOR:

Decoulos & Company
248 Andover Street
Peabody, MA 01960

Attn: Jim Decoulos

PROJECT ID:	608 633 North Main Street Randolph, MA
GEOLABS CERTIFICATION #:	M-MA015 .
SAMPLE NUMBER:	122715-122719
DATE PREPARED:	May 17, 2002
PREPARED BY:	Christine Johnson
APPROVED BY:	Jim Chen, Laboratory Director/Date

SAMPLE INFORMATION

Matrix	☒ Aqueous ☐ Soil ☐ Sediment ☐ Other		
Containers	☒ Satisfactory ☐ Broken ☐ Leaking		
Sample Preservative	Aqueous	☐ N/A ☒ pH ≤ 2 ☐ pH > 2 Comment:	
	Soil or Sediment	☐ N/A ☐ Samples NOT preserved in MeOH or air-tight containers	ml MeOH
		☐ Samples received in MeOH ☐ Covering soil ? ☐ Not	☐1:1±25%
		☐ Received in air tight container	☐ Other
Temperature	☒ Received on ice ☐ Received at 4° C ☐ Other		

VPH ANALYTICAL RESULTS

Method for Ranges: MADEP VPH
Method for Target Analytes: MADEP VPH
VPH Surrogate Standards
PID (2,5-Dibromotoluene)
FID (2,5-Dibromotoluene)

Client ID:	DMW4-101
Lab ID:	122715
Date Collected:	05/10/02
Date Received:	05/13/02
Date Analyzed:	05/17/02
Dilution Factor:	1.0 / 100*
Total solids (%):	N/A

Range/Target Analyte	Elut. Range	RL	Units	
Unadjusted C_5-C_8 Aliphatics[1]	N/A	4000*	ug/L	**21500**
Unadjusted C_9-C_{12} Aliphatics[1]	N/A	1500*	ug/L	ND
Methyl tert-butyl ether	C_5-C_8 Aliph.	500*	ug/L	**34200**
Benzene	C_5-C_8 Aliph.	500*	ug/L	**1500**
Toluene	C_5-C_8 Aliph.	5	ug/L	**221**
Ethylbenzene	C_9-C_{12} Aliph.	5	ug/L	**183**
m&p-Xylenes	C_9-C_{12} Aliph.	5	ug/L	**594**
o-Xylene	C_9-C_{12} Aliph.	5	ug/L	**181**
Naphthalene	N/A	20	ug/L	**33.6**
C_5-C_8 Aliphatic Hydrocarbons[1,2]	N/A	4000*	ug/L	ND
C_9-C_{12} Aliphatic Hydrocarbons[1,3]	N/A	1500*	ug/L	ND
C_9-C_{10} Aromatic Hydrocarbons[1]	C_9-C_{12} Aliph.	55.0	ug/L	**544**
2,5-Dibromotoluene (PID) Surrogate Recovery				105%
2,5-Dibromotoluene (FID) Surrogate Recovery				105%
Surrogate Acceptance Range				70-130%

[1]Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range
[2]C_5-C_8 Aliphatic Hydrocarbons exclude the concentration of Target Analytes eluting in that range
[3]C_9-C_{12} Aliphatic Hydrocarbons exclude conc of Target Analytes eluting in that range AND concentration of C_9-C_{10} Aromatic Hydrocarbons

CERTIFICATION

Were all QA/QC procedures REQUIRED by the VPH 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 VPH method, as specified in Sect 11.3.? ☒ No

I attest under the pains and penalties of perjury that, based upon my inquiry of those individuals immedately 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: 05/17/02

SAMPLE INFORMATION

Matrix	☒ Aqueous ☐ Soil ☐ Sediment ☐ Other		
Containers	☒ Satisfactory ☐ Broken ☐ Leaking		
Sample Preservative	Aqueous	☐ N/A ☒ pH ≤ 2 ☐ pH > 2 Comment:	
	Soil or Sediment	☐ N/A ☐ Samples NOT preserved in MeOH or air-tight containers	ml MeOH
		☐ Samples received in MeOH ☐ Covering soil ? ☐ Not	☐1:1±25%
		☐ Received in air tight container	☐ Other
Temperature	☒ Received on ice ☐ Received at 4° C ☐ Other		

VPH ANALYTICAL RESULTS

Method for Ranges: MADEP VPH
Method for Target Analytes: MADEP VPH
VPH Surrogate Standards
PID (2,5-Dibromotoluene)
FID (2,5-Dibromotoluene)

Client ID:	DMW3-102
Lab ID:	122716
Date Collected:	05/10/02
Date Received:	05/13/02
Date Analyzed:	05/17/02
Dilution Factor:	1.0 / 5.0*
Total solids (%):	N/A

Range/Target Analyte	Elut. Range	RL	Units			
Unadjusted C_5-C_8 Aliphatics[1]	N/A	40	ug/L	**980**		
Unadjusted C_9-C_{12} Aliphatics[1]	N/A	75*	ug/L	**367**		
Methyl tert-butyl ether	C_5-C_8 Aliph.	5	ug/L	**21.5**		
Benzene	C_5-C_8 Aliph.	5	ug/L	ND		
Toluene	C_5-C_8 Aliph.	5	ug/L	**37.5**		
Ethylbenzene	C_9-C_{12} Aliph.	5	ug/L	**112**		
m&p-Xylenes	C_9-C_{12} Aliph.	5	ug/L	**523**		
o-Xylene	C_9-C_{12} Aliph.	5	ug/L	**256**		
Naphthalene	N/A	20	ug/L	ND		
C_5-C_8 Aliphatic Hydrocarbons[1,2]	N/A	40	ug/L	**921**		
C_9-C_{12} Aliphatic Hydrocarbons[1,3]	N/A	75	ug/L	ND		
C_9-C_{10} Aromatic Hydrocarbons[1]	C_9-C_{12} Aliph.	55	ug/L	**827**		
2,5-Dibromotoluene (PID) Surrogate Recovery				99%		
2,5-Dibromotoluene (FID) Surrogate Recovery				96%		
Surrogate Acceptance Range				70-130%		

[1]Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range
[2]C_5-C_8 Aliphatic Hydrocarbons exclude the concentration of Target Analytes eluting in that range
[3]C_9-C_{12} Aliphatic Hydrocarbons exclude conc of Target Analytes eluting in that range AND concentration of C_9-C_{10} Aromatic Hydrocarbons

CERTIFICATION

Were all QA/QC procedures REQUIRED by the VPH 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 VPH method, as specified in Sect 11.3.? ☒ No

I attest under the pains and penalties of perjury that, based upon my inquiry of those individuals immedately 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: 05/17/02

SAMPLE INFORMATION

Matrix	☒ Aqueous ☐ Soil ☐ Sediment ☐ Other		
Containers	☒ Satisfactory ☐ Broken ☐ Leaking		
Sample Preservative	Aqueous	☐ N/A ☒ pH ≤ 2 ☐ pH > 2 Comment:	
	Soil or Sediment	☐ N/A ☐ Samples NOT preserved in MeOH or air-tight containers	ml MeOH
		☐ Samples received in MeOH ☐ Covering soil ? ☐ Not	☐1:1±25%
		☐ Received in air tight container	☐ Other
Temperature	☒ Received on ice ☐ Received at 4° C ☐ Other		

VPH ANALYTICAL RESULTS

Method for Ranges: MADEP VPH
Method for Target Analytes: MADEP VPH
VPH Surrogate Standards
PID (2,5-Dibromotoluene)
FID (2,5-Dibromotoluene)

Client ID:	DMW2-103
Lab ID:	122717
Date Collected:	05/10/02
Date Received:	05/13/02
Date Analyzed:	05/17/02
Dilution Factor:	20 / 1.0*
Total solids (%):	N/A

Range/Target Analyte	Elut. Range	RL	Units	
Unadjusted C_5-C_8 Aliphatics[1]	N/A	800	ug/L	**3650**
Unadjusted C_9-C_{12} Aliphatics[1]	N/A	300	ug/L	**7140**
Methyl tert-butyl ether	C_5-C_8 Aliph.	5.0*	ug/L	**111**
Benzene	C_5-C_8 Aliph.	5.0*	ug/L	**780**
Toluene	C_5-C_8 Aliph.	100	ug/L	**4090**
Ethylbenzene	C_9-C_{12} Aliph.	5.0*	ug/L	**834**
m&p-Xylenes	C_9-C_{12} Aliph.	100	ug/L	**4250**
o-Xylene	C_9-C_{12} Aliph.	100	ug/L	**1860**
Naphthalene	N/A	20*	ug/L	**404**
C_5-C_8 Aliphatic Hydrocarbons[1,2]	N/A	800	ug/L	ND
C_9-C_{12} Aliphatic Hydrocarbons[1,3]	N/A	300	ug/L	ND
C_9-C_{10} Aromatic Hydrocarbons[1]	C_9-C_{12} Aliph.	1100	ug/L	**3070**
2,5-Dibromotoluene (PID) Surrogate Recovery				101%
2,5-Dibromotoluene (FID) Surrogate Recovery				95%
Surrogate Acceptance Range				70-130%

[1]Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range
[2]C_5-C_8 Aliphatic Hydrocarbons exclude the concentration of Target Analytes eluting in that range
[3]C_9-C_{12} Aliphatic Hydrocarbons exclude conc of Target Analytes eluting in that range AND concentration of C_9-C_{10} Aromatic Hydrocarbons

CERTIFICATION

Were all QA/QC procedures REQUIRED by the VPH 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 VPH method, as specified in Sect 11.3.? ☒ No

I attest under the pains and penalties of perjury that, based upon my inquiry of those individuals immedately 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: 05/17/02

SAMPLE INFORMATION

Matrix	☒ Aqueous ☐ Soil ☐ Sediment ☐ Other		
Containers	☒ Satisfactory ☐ Broken ☐ Leaking		
Sample Preservative	Aqueous	☐ N/A ☒ pH ≤ 2 ☐ pH > 2 Comment:	
	Soil or Sediment	☐ N/A ☐ Samples NOT preserved in MeOH or air-tight containers	ml MeOH
		☐ Samples received in MeOH ☐ Covering soil ? ☐ Not	☐1:1±25%
		☐ Received in air tight container	☐ Other
Temperature	☒ Received on ice ☐ Received at 4° C ☐ Other		

VPH ANALYTICAL RESULTS

Method for Ranges: MADEP VPH
Method for Target Analytes: MADEP VPH
VPH Surrogate Standards
PID (2,5-Dibromotoluene)
FID (2,5-Dibromotoluene)

Client ID:	DMW1-104
Lab ID:	122718
Date Collected:	05/10/02
Date Received:	05/13/02
Date Analyzed:	05/17/02
Dilution Factor:	50 / 1.0*
Total solids (%):	N/A

Range/Target Analyte	Elut. Range	RL	Units			
Unadjusted C_5-C_8 Aliphatics[1]	N/A	2000	ug/L	**4700**		
Unadjusted C_9-C_{12} Aliphatics[1]	N/A	750	ug/L	**4820**		
Methyl tert-butyl ether	C_5-C_8 Aliph.	250	ug/L	**2550**		
Benzene	C_5-C_8 Aliph.	250	ug/L	**2220**		
Toluene	C_5-C_8 Aliph.	250	ug/L	**2190**		
Ethylbenzene	C_9-C_{12} Aliph.	250	ug/L	**655**		
m&p-Xylenes	C_9-C_{12} Aliph.	250	ug/L	**3750**		
o-Xylene	C_9-C_{12} Aliph.	250	ug/L	**1250**		
Naphthalene	N/A	20*	ug/L	**246**		
C_5-C_8 Aliphatic Hydrocarbons[1,2]	N/A	2000	ug/L	ND		
C_9-C_{12} Aliphatic Hydrocarbons[1,3]	N/A	750	ug/L	ND		
C_9-C_{10} Aromatic Hydrocarbons[1]	C_9-C_{12} Aliph.	2750	ug/L	ND		
2,5-Dibromotoluene (PID) Surrogate Recovery				106%		
2,5-Dibromotoluene (FID) Surrogate Recovery				104%		
Surrogate Acceptance Range				70-130%		

[1]Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range
[2]C_5-C_8 Aliphatic Hydrocarbons exclude the concentration of Target Analytes eluting in that range
[3]C_9-C_{12} Aliphatic Hydrocarbons exclude conc of Target Analytes eluting in that range AND concentration of C_9-C_{10} Aromatic Hydrocarbons

CERTIFICATION

Were all QA/QC procedures REQUIRED by the VPH 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 VPH method, as specified in Sect 11.3.? ☒ No

I attest under the pains and penalties of perjury that, based upon my inquiry of those individuals immedately 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: 05/17/02

SAMPLE INFORMATION

Matrix	☒ Aqueous ☐ Soil ☐ Sediment ☐ Other		
Containers	☒ Satisfactory ☐ Broken ☐ Leaking		
Sample Preservative	Aqueous	☐ N/A ☒ pH ≤ 2 ☐ pH > 2 Comment:	
	Soil or Sediment	☐ N/A ☐ Samples NOT preserved in MeOH or air-tight containers	ml MeOH
		☐ Samples received in MeOH ☐ Covering soil ? ☐ Not	☐1:1±25%
		☐ Received in air tight container	☐ Other
Temperature	☒ Received on ice ☐ Received at 4° C ☐ Other		

VPH ANALYTICAL RESULTS

Method for Ranges: MADEP VPH
Method for Target Analytes: MADEP VPH
VPH Surrogate Standards
PID (2,5-Dibromotoluene)
FID (2,5-Dibromotoluene)

Client ID:	MW-34
Lab ID:	122719
Date Collected:	05/10/02
Date Received:	05/13/02
Date Analyzed:	05/17/02
Dilution Factor:	50 / 1.0*
Total solids (%):	N/A

Range/Target Analyte	Elut. Range	RL	Units		
Unadjusted C_5-C_8 Aliphatics[1]	N/A	2000	ug/L	9530	
Unadjusted C_9-C_{12} Aliphatics[1]	N/A	750	ug/L	17200	
Methyl tert-butyl ether	C_5-C_8 Aliph.	250	ug/L	698	
Benzene	C_5-C_8 Aliph.	250	ug/L	2350	
Toluene	C_5-C_8 Aliph.	250	ug/L	11800	
Ethylbenzene	C_9-C_{12} Aliph.	5.0*	ug/L	673	
m&p-Xylenes	C_9-C_{12} Aliph.	250	ug/L	10700	
o-Xylene	C_9-C_{12} Aliph.	250	ug/L	4290	
Naphthalene	N/A	20*	ug/L	136	
C_5-C_8 Aliphatic Hydrocarbons[1,2]	N/A	2000	ug/L	ND	
C_9-C_{12} Aliphatic Hydrocarbons[1,3]	N/A	750	ug/L	ND	
C_9-C_{10} Aromatic Hydrocarbons[1]	C_9-C_{12} Aliph.	2750	ug/L	6940	
2,5-Dibromotoluene (PID) Surrogate Recovery				110%	
2,5-Dibromotoluene (FID) Surrogate Recovery				107%	
Surrogate Acceptance Range				70-130%	

[1]Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range
[2]C_5-C_8 Aliphatic Hydrocarbons exclude the concentration of Target Analytes eluting in that range
[3]C_9-C_{12} Aliphatic Hydrocarbons exclude conc of Target Analytes eluting in that range AND concentration of C_9-C_{10} Aromatic Hydrocarbons

CERTIFICATION

Were all QA/QC procedures REQUIRED by the VPH 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 VPH method, as specified in Sect 11.3.? ☒ No

I attest under the pains and penalties of perjury that, based upon my inquiry of those individuals immedately 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: 05/17/02

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.

GeoLabs, Inc.
Environmental Laboratories
45 Johnson Lane
Braintree, MA 02184
Office: 781-848-7844
Fax: 781-848-7811

Turnaround Time
RUSH: 24hrs ☐ 48hrs ☐ 72hrs ☐
STANDARD: 5 Days ✓
Rush Approved by:

Page 1 of 1

SPECIAL INSTRUCTIONS
Rec'd on ice JM 5/13/02

Client: DECOULOS + CO
Address: 298 ANDOVER ST
PEABODY, MA 01960
Phone: 978-532-8154
Fax:
Contact: JIM DECOULOS
E-mail: JAMESJ@DECOULOS.COM

Project Number: 608
Project Location: 633 NORTH MAIN ST.
RANDOLPH
Purchase Order #:
Collected By: RICK MANSFIELD

ANALYSES REQUESTED

SAMPLE ID	COLLECTION DATE	COLLECTION TIME	COLLECTION SAMPLED BY	SAMPLE LOCATION	CONTAINER TYPE	CONTAINER QUANT	MATRIX	COMP	GRAB	PRES	GEOLABS SAMPLE NUMBER	VPH								TEMPERATURE	LAB PH
DMW4-101	5/10/02	0850		DMW4	V	2	GW		X	1/1	122715	X								4.0	
DMW3-102	"	0940		DMW3	"	"	"		"	"	122716	"								"	
DMW2-103	"	1010		DMW2	"	"	"		"	"	122717	"								"	
DMW1-104	"	1115		DMW1	"	"	"		"	"	122718	"								"	
MW-3R-105	"	1120		MW-3R	"	"	"		"	"	122719	"								"	
~~DMW5-106~~	~~"~~	~~1345~~		~~DMW5~~	~~"~~	~~"~~	~~"~~		~~"~~	~~"~~		~~"~~								~~"~~	

JW

CONTAINER CODES:
A = Amber
B = Bag
G = Glass
P = Plastic
S = Summa Canister
O = C[illegible] V = VOA

MATRIX CODES:
GW = Ground Water
WW = Wastewater
DW = Drinking Water
SL = Sludge
S = Soil A = Air
O = Oil OT = Other

PRESERVATIVE CODES:
1 = HCl 7 = ICE
2 = HNO_3
3 = H_2SO_4
4 = $Na_2S_2O_3$
5 = NaOH
6 = MeOH

Relinquished By:	Date/Time	Received By:	Date/Time:
			5/11/02 0930
Relinquished By:	5/13/02 0800	Received By:	5-13-02 7:00
Relinquished By:	5-13-02 1:40	Received By: GeoLabs:	5/13/02 1:40

GEOLABS CHAIN OF CUSTODY

GeoLabs, Inc.

Environmental Laboratories

LABORATORY REPORT

PREPARED FOR:

Decoulos & Company
248 Andover Street
Peabody, MA 01960

Attn: Jim Decoulos

PROJECT ID:	608 Speedy Lube 633 N. Main Street Randolph, MA
GEOLABS CERTIFICATION #:	M-MA015
SAMPLE NUMBER:	123449 - 123456
DATE PREPARED:	June 13, 2002
PREPARED BY:	Christine Johnson

APPROVED BY: _____

Jim Chen, Laboratory Director/Date

Location: 45 Johnson Lane
Braintree, MA 02184

Phone: (781) 848-7844
Fax: (781) 848-7811

SAMPLE INFORMATION

Matrix	☒ Aqueous ☐ Soil ☐ Sediment ☐ Other		
Containers	☒ Satisfactory ☐ Broken ☐ Leaking		
Sample Preservative	Aqueous	☐ N/A ☒ pH ≤ 2 ☐ pH > 2 Comment:	
	Soil or Sediment	☐ N/A ☐ Samples NOT preserved in MeOH or air-tight containers	ml MeOH
		☐ Samples received in MeOH ☐ Covering soil ? ☐ Not	☐1:1±25%
		☐ Received in air tight container	☐ Other
Temperature	☒ Received on ice ☐ Received at 4° C ☐ Other		

VPH ANALYTICAL RESULTS

Method for Ranges: MADEP VPH
Method for Target Analytes: MADEP VPH
VPH Surrogate Standards
PID (2,5-Dibromotoluene)
FID (2,5-Dibromotoluene)

				Client ID:	DMW-4	
				Lab ID:	123449	
				Date Collected:	06/04/02	
				Date Received:	06/05/02	
				Date Analyzed:	06/11/02	
				Dilution Factor:	1.0 / 100*	
				Total solids (%):	N/A	
Range/Target Analyte	Elut. Range	RL	Units			
Unadjusted C_5-C_8 Aliphatics[1]	N/A	4000*	ug/L	36100		
Unadjusted C_9-C_{12} Aliphatics[1]	N/A	15	ug/L	125		
Methyl tert-butyl ether	C_5-C_8 Aliph.	500*	ug/L	69800		
Benzene	C_5-C_8 Aliph.	5	ug/L	968		
Toluene	C_5-C_8 Aliph.	5	ug/L	ND		
Ethylbenzene	C_9-C_{12} Aliph.	5	ug/L	23.7		
m&p-Xylenes	C_9-C_{12} Aliph.	5	ug/L	30.5		
o-Xylene	C_9-C_{12} Aliph.	5	ug/L	9.80		
Naphthalene	N/A	20	ug/L	ND		
C_5-C_8 Aliphatic Hydrocarbons[1,2]	N/A	4000*	ug/L	ND		
C_9-C_{12} Aliphatic Hydrocarbons[1,3]	N/A	15	ug/L	ND		
C_9-C_{10} Aromatic Hydrocarbons[1]	C_9-C_{12} Aliph.	55	ug/L	58.9		
2,5-Dibromotoluene (PID) Surrogate Recovery				103%		
2,5-Dibromotoluene (FID) Surrogate Recovery				103%		
Surrogate Acceptance Range				70-130%		

[1]Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range
[2]C_5-C_8 Aliphatic Hydrocarbons exclude the concentration of Target Analytes eluting in that range
[3]C_9-C_{12} Aliphatic Hydrocarbons exclude conc of Target Analytes eluting in that range AND concentration o$_9$-C_{10} Aromatic Hydrocarbons

CERTIFICATION

Were all QA/QC procedures REQUIRED by the VPH 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 VPH method, as specified in Sect 11.3.? ☒ No

I attest under the pains and penalties of perjury that, based upon my inquiry of those individuals immedately 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: 06/13/02

SAMPLE INFORMATION

Matrix	☒ Aqueous ☐ Soil ☐ Sediment ☐ Other		
Containers	☒ Satisfactory ☐ Broken ☐ Leaking		
Sample Preservative	Aqueous	☐ N/A ☒ pH ≤ 2 ☐ pH > 2 Comment:	
	Soil or Sediment	☐ N/A ☐ Samples NOT preserved in MeOH or air-tight containers	ml MeOH
		☐ Samples received in MeOH ☐ Covering soil ? ☐ Not	☐1:1±25%
		☐ Received in air tight container	☐ Other
Temperature	☒ Received on ice ☐ Received at 4° C ☐ Other		

VPH ANALYTICAL RESULTS
Method for Ranges: MADEP VPH
Method for Target Analytes: MADEP VPH
VPH Surrogate Standards
PID (2,5-Dibromotoluene)
FID (2,5-Dibromotoluene)

Client ID:	DMW-1
Lab ID:	123450
Date Collected:	06/04/02
Date Received:	06/05/02
Date Analyzed:	06/11/02
Dilution Factor:	100 / 1.0*
Total solids (%):	N/A

Range/Target Analyte	Elut. Range	RL	Units	
Unadjusted C_5-C_8 Aliphatics[1]	N/A	4000	ug/L	18100
Unadjusted C_9-C_{12} Aliphatics[1]	N/A	1500	ug/L	8920
Methyl tert-butyl ether	C_5-C_8 Aliph.	500	ug/L	19300
Benzene	C_5-C_8 Aliph.	500	ug/L	5970
Toluene	C_5-C_8 Aliph.	500	ug/L	1940
Ethylbenzene	C_9-C_{12} Aliph.	500	ug/L	1510
m&p-Xylenes	C_9-C_{12} Aliph.	500	ug/L	5910
o-Xylene	C_9-C_{12} Aliph.	500	ug/L	1350
Naphthalene	N/A	20*	ug/L	327
C_5-C_8 Aliphatic Hydrocarbons[1,2]	N/A	4000	ug/L	ND
C_9-C_{12} Aliphatic Hydrocarbons[1,3]	N/A	1500	ug/L	ND
C_9-C_{10} Aromatic Hydrocarbons[1]	C_9-C_{12} Aliph.	5500	ug/L	ND
2,5-Dibromotoluene (PID) Surrogate Recovery				110%
2,5-Dibromotoluene (FID) Surrogate Recovery				108%
Surrogate Acceptance Range				70-130%

[1]Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range
[2]C_5-C_8 Aliphatic Hydrocarbons exclude the concentration of Target Analytes eluting in that range
[3]C_9-C_{12} Aliphatic Hydrocarbons exclude conc of Target Analytes eluting in that range AND concentration of C_9-C_{10} Aromatic Hydrocarbons

CERTIFICATION

Were all QA/QC procedures REQUIRED by the VPH 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 VPH method, as specified in Sect 11.3.? ☒ No

I attest under the pains and penalties of perjury that, based upon my inquiry of those individuals immedately 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: 06/13/02

SAMPLE INFORMATION

Matrix	☒ Aqueous ☐ Soil ☐ Sediment ☐ Other		
Containers	☒ Satisfactory ☐ Broken ☐ Leaking		
Sample Preservative	Aqueous	☐ N/A ☒ pH ≤ 2 ☐ pH > 2 Comment:	
	Soil or Sediment	☐ N/A ☐ Samples NOT preserved in MeOH or air-tight containers	ml MeOH
		☐ Samples received in MeOH ☐ Covering soil ? ☐ Not	☐1:1±25%
		☐ Received in air tight container	☐ Other
Temperature	☒ Received on ice ☐ Received at 4° C ☐ Other		

VPH ANALYTICAL RESULTS

Method for Ranges: MADEP VPH
Method for Target Analytes: MADEP VPH
VPH Surrogate Standards
PID (2,5-Dibromotoluene)
FID (2,5-Dibromotoluene)

Client ID:	MW-3R
Lab ID:	123451
Date Collected:	06/04/02
Date Received:	06/05/02
Date Analyzed:	06/11/02
Dilution Factor:	100 / 1.0*
Total solids (%):	N/A

Range/Target Analyte	Elut. Range	RL	Units			
Unadjusted C_5-C_8 Aliphatics[1]	N/A	4000	ug/L	20900		
Unadjusted C_9-C_{12} Aliphatics[1]	N/A	1500	ug/L	23700		
Methyl tert-butyl ether	C_5-C_8 Aliph.	5.0*	ug/L	778		
Benzene	C_5-C_8 Aliph.	500	ug/L	4240		
Toluene	C_5-C_8 Aliph.	500	ug/L	19200		
Ethylbenzene	C_9-C_{12} Aliph.	500	ug/L	2590		
m&p-Xylenes	C_9-C_{12} Aliph.	500	ug/L	15700		
o-Xylene	C_9-C_{12} Aliph.	500	ug/L	6750		
Naphthalene	N/A	20*	ug/L	453		
C_5-C_8 Aliphatic Hydrocarbons[1,2]	N/A	4000	ug/L	ND		
C_9-C_{12} Aliphatic Hydrocarbons[1,3]	N/A	1500	ug/L	ND		
C_9-C_{10} Aromatic Hydrocarbons[1]	C_9-C_{12} Aliph.	5500	ug/L	7640		
2,5-Dibromotoluene (PID) Surrogate Recovery				103%		
2,5-Dibromotoluene (FID) Surrogate Recovery				102%		
Surrogate Acceptance Range				70-130%		

[1]Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range
[2]C_5-C_8 Aliphatic Hydrocarbons exclude the concentration of Target Analytes eluting in that range
[3]C_9-C_{12} Aliphatic Hydrocarbons exclude conc of Target Analytes eluting in that range AND concentration o$_9$-C_{10} Aromatic Hydrocarbons

CERTIFICATION

Were all QA/QC procedures REQUIRED by the VPH 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 VPH method, as specified in Sect 11.3.? ☒ No

I attest under the pains and penalties of perjury that, based upon my inquiry of those individuals immedately 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: 06/13/02

SAMPLE INFORMATION

Matrix	☒ Aqueous ☐ Soil ☐ Sediment ☐ Other		
Containers	☒ Satisfactory ☐ Broken ☐ Leaking		
Sample Preservative	Aqueous	☐ N/A ☒ pH ≤ 2 ☐ pH > 2 Comment:	
	Soil or Sediment	☐ N/A ☐ Samples NOT preserved in MeOH or air-tight containers	ml MeOH
		☐ Samples received in MeOH ☐ Covering soil ? ☐ Not	☐1:1±25%
		☐ Received in air tight container	☐ Other
Temperature	☒ Received on ice ☐ Received at 4° C ☐ Other		

VPH ANALYTICAL RESULTS

Method for Ranges: MADEP VPH
Method for Target Analytes: MADEP VPH
VPH Surrogate Standards
PID (2,5-Dibromotoluene)
FID (2,5-Dibromotoluene)

Client ID:	DMW-2
Lab ID:	123452
Date Collected:	06/04/02
Date Received:	06/05/02
Date Analyzed:	06/11/02
Dilution Factor:	100 / 1.0*
Total solids (%):	N/A

Range/Target Analyte	Elut. Range	RL	Units	
Unadjusted C_5-C_8 Aliphatics[1]	N/A	4000	ug/L	11900
Unadjusted C_9-C_{12} Aliphatics[1]	N/A	1500	ug/L	19800
Methyl tert-butyl ether	C_5-C_8 Aliph.	5.0*	ug/L	63.9
Benzene	C_5-C_8 Aliph.	5.0*	ug/L	735
Toluene	C_5-C_8 Aliph.	500	ug/L	7000
Ethylbenzene	C_9-C_{12} Aliph.	5.0*	ug/L	794
m&p-Xylenes	C_9-C_{12} Aliph.	500	ug/L	12900
o-Xylene	C_9-C_{12} Aliph.	500	ug/L	5910
Naphthalene	N/A	20*	ug/L	183
C_5-C_8 Aliphatic Hydrocarbons[1,2]	N/A	4000	ug/L	4100
C_9-C_{12} Aliphatic Hydrocarbons[1,3]	N/A	1500	ug/L	ND
C_9-C_{10} Aromatic Hydrocarbons[1]	C_9-C_{12} Aliph.	5500	ug/L	6720
2,5-Dibromotoluene (PID) Surrogate Recovery				110%
2,5-Dibromotoluene (FID) Surrogate Recovery				112%
Surrogate Acceptance Range				70-130%

[1]Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range
[2]C_5-C_8 Aliphatic Hydrocarbons exclude the concentration of Target Analytes eluting in that range
[3]C_9-C_{12} Aliphatic Hydrocarbons exclude conc of Target Analytes eluting in that range AND concentration of C_9-C_{10} Aromatic Hydrocarbons

CERTIFICATION

Were all QA/QC procedures REQUIRED by the VPH 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 VPH method, as specified in Sect 11.3.? ☒ No

I attest under the pains and penalties of perjury that, based upon my inquiry of those individuals immedately 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: 06/13/02

SAMPLE INFORMATION

Matrix	☒ Aqueous ☐ Soil ☐ Sediment ☐ Other		
Containers	☒ Satisfactory ☐ Broken ☐ Leaking		
Sample Preservative	Aqueous	☐ N/A ☒ pH ≤ 2 ☐ pH > 2 Comment:	
	Soil or Sediment	☐ N/A ☐ Samples NOT preserved in MeOH or air-tight containers	ml MeOH
		☐ Samples received in MeOH ☐ Covering soil ? ☐ Not	☐1:1±25%
		☐ Received in air tight container	☐ Other
Temperature	☒ Received on ice ☐ Received at 4° C ☐ Other		

VPH ANALYTICAL RESULTS
Method for Ranges: MADEP VPH
Method for Target Analytes: MADEP VPH
VPH Surrogate Standards
PID (2,5-Dibromotoluene)
FID (2,5-Dibromotoluene)

Client ID:	DMW-3
Lab ID:	123453
Date Collected:	06/04/02
Date Received:	06/05/02
Date Analyzed:	06/11/02
Dilution Factor:	1.0 / 10.0*
Total solids (%):	N/A

Range/Target Analyte	Elut. Range	RL	Units			
Unadjusted C_5-C_8 Aliphatics[1]	N/A	40	ug/L	**970**		
Unadjusted C_9-C_{12} Aliphatics[1]	N/A	150*	ug/L	**619**		
Methyl tert-butyl ether	C_5-C_8 Aliph.	5	ug/L	ND		
Benzene	C_5-C_8 Aliph.	5	ug/L	ND		
Toluene	C_5-C_8 Aliph.	5	ug/L	**42.0**		
Ethylbenzene	C_9-C_{12} Aliph.	5	ug/L	**43.8**		
m&p-Xylenes	C_9-C_{12} Aliph.	5	ug/L	**376**		
o-Xylene	C_9-C_{12} Aliph.	5	ug/L	**201**		
Naphthalene	N/A	20	ug/L	**21.9**		
C5-C8 Aliphatic Hydrocarbons[1,2]	N/A	40	ug/L	**928**		
C_9-C_{12} Aliphatic Hydrocarbons[1,3]	N/A	150*	ug/L	ND		
C_9-C_{10} Aromatic Hydrocarbons[1]	C_9-C_{12} Aliph.	550*	ug/L	ND		
2,5-Dibromotoluene (PID) Surrogate Recovery				103%		
2,5-Dibromotoluene (FID) Surrogate Recovery				97%		
Surrogate Acceptance Range				70-130%		

[1]Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range
[2]C_5-C_8 Aliphatic Hydrocarbons exclude the concentration of Target Analytes eluting in that range
[3]C_9-C_{12} Aliphatic Hydrocarbons exclude conc of Target Analytes eluting in that range AND concentration of C_9-C_{10} Aromatic Hydrocarbons

CERTIFICATION

Were all QA/QC procedures REQUIRED by the VPH 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 VPH method, as specified in Sect 11.3.? ☒ No

I attest under the pains and penalties of perjury that, based upon my inquiry of those individuals immedately 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: 06/13/02

SAMPLE INFORMATION

Matrix	☒ Aqueous ☐ Soil ☐ Sediment ☐ Other		
Containers	☒ Satisfactory ☐ Broken ☐ Leaking		
Sample Preservative	Aqueous	☐ N/A ☒ pH ≤ 2 ☐ pH > 2 Comment:	
	Soil or Sediment	☐ N/A ☐ Samples NOT preserved in MeOH or air-tight containers	ml MeOH
		☐ Samples received in MeOH ☐ Covering soil ? ☐ Not	☐1:1±25%
		☐ Received in air tight container	☐ Other
Temperature	☒ Received on ice ☐ Received at 4° C ☐ Other		

VPH ANALYTICAL RESULTS
Method for Ranges: MADEP VPH
Method for Target Analytes: MADEP VPH
VPH Surrogate Standards
PID (2,5-Dibromotoluene)
FID (2,5-Dibromotoluene)

Client ID:	DMW-3A
Lab ID:	123454
Date Collected:	06/04/02
Date Received:	06/05/02
Date Analyzed:	06/11/02
Dilution Factor:	1.0 / 10.0*
Total solids (%):	N/A

Range/Target Analyte	Elut. Range	RL	Units			
Unadjusted C_5-C_8 Aliphatics[1]	N/A	400*	ug/L	1350		
Unadjusted C_9-C_{12} Aliphatics[1]	N/A	150*	ug/L	2300		
Methyl tert-butyl ether	C_5-C_8 Aliph.	5	ug/L	ND		
Benzene	C_5-C_8 Aliph.	5	ug/L	5.60		
Toluene	C_5-C_8 Aliph.	5	ug/L	32.2		
Ethylbenzene	C_9-C_{12} Aliph.	5	ug/L	51.0		
m&p-Xylenes	C_9-C_{12} Aliph.	5	ug/L	423		
o-Xylene	C_9-C_{12} Aliph.	5	ug/L	204		
Naphthalene	N/A	20	ug/L	35.0		
C5-C8 Aliphatic Hydrocarbons[1,2]	N/A	400*	ug/L	1310		
C9-C12 Aliphatic Hydrocarbons[1,3]	N/A	150*	ug/L	ND		
C_9-C_{10} Aromatic Hydrocarbons[1]	C_9-C_{12} Aliph.	550*	ug/L	1770		
2,5-Dibromotoluene (PID) Surrogate Recovery				104%		
2,5-Dibromotoluene (FID) Surrogate Recovery				107%		
Surrogate Acceptance Range				70-130%		

[1]Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range
[2]C_5-C_8 Aliphatic Hydrocarbons exclude the concentration of Target Analytes eluting in that range
[3]C_9-C_{12} Aliphatic Hydrocarbons exclude conc of Target Analytes eluting in that range AND concentration of C_9-C_{10} Aromatic Hydrocarbons

CERTIFICATION

Were all QA/QC procedures REQUIRED by the VPH 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 VPH method, as specified in Sect 11.3.? ☒ No

I attest under the pains and penalties of perjury that, based upon my inquiry of those individuals immedately 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: 06/13/02

SAMPLE INFORMATION

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

APH ANALYTICAL RESULTS

Method for Ranges: MADEP APH 97-12 GC/MS
APH Surrogate Standards 2,5-Dibromotoluene
1,2-DCE
Toluene-d8
BFB
Method for Target Analytes: EPA-TO14A

Client ID:	DG2-101
Lab ID:	123455
Date Collected:	06/04/02
Date Received:	06/05/02
Date Fractions Analyzed:	06/11/02
Date Targets Analyzed:	06/12/02
Ranges Dilution Factor:	1.0
Targets Dilution Factor:	90.0

Range/Target Analyte	Elut. Range	RL (ppbv)	RL (ug/m3)	Units		
Unadjusted C5-C8 Aliphatic Hydr	N/A		85.0	ug/m³	**271000**	
Unadjusted C9-C12 Aliphatic Hyd	N/A		90.0	ug/m³	**6270**	
Benzene	C5-C8 Aliph	81.00	258.30	ppbv/ug/m3	**900 / 2880**	
*1,3-Butadiene**	N/A	1800.0	4140.0	ppbv/ug/m3	ND	
Ethylbenzene	C5-C8 Aliph	48.60	210.6	ppbv/ug/m3	ND	
Methyl-tert-butyl ether	C5-C8 Aliph	900.0	3240.0	ppbv/ug/m3	**8100 / 29200**	
*2-Methylnaphthalene**	N/A	1800.0	10620	ppbv/ug/m3	ND	
*Naphthalene**	N/A	1800.0	9540	ppbv/ug/m3	ND	
Toluene	C5-C8 Aliph	85.50	322.2	ppbv/ug/m3	ND	
m-,p-Xylenes	C5-C8 Aliph	34.20	148.5	ppbv/ug/m3	**90.0 / 390**	
o-Xylene	C9-C12 Aliph.	41.40	180.00	ppbv/ug/m3	ND	
C5-C8 Aliphatic Hydrocarbons'	N/A		85.0	ug/m³	**239000**	
C9-C12 Aliphatic Hydrocarbons"	N/A		90.0	ug/m³	**6090**	
C9-C10 Aromatic Hydrocarbons	N/A		80.0	ug/m³	**181**	
2,5-Dibromotoluene Surrogate Recovery					99%	
1,2-DCE Surrogate Recovery					59%	
Toluene-d8 Surrogate % Recovery					102%	
BFB Surrogate % Recovery					98%	
Surrogate Acceptance Range					70-130%	

'C_5-C_8 Aliphatic Hydrocarbons exclude concentrations of Target Analytes eluting in that ran
"C_9-C_{12} Aliphatic HCs exclude concentrations of Target Analytes AND $_b$$C_{10}$ Aromatic Hydrocarbons eluting in that range
*Compounds quantitated by TICS

CERTIFICATION ***Matrix interference confirmed by re-run**

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 ranges quantitated by GC/MS Total Ion Chromatogram and all targets and Aromatic ranges were quantitated by GC/MS Selected Ion Measurements.

I attest under the pains and penalties of perjury that, based upon my inquiry of those individuals immedately 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: 06/13/02

SAMPLE INFORMATION

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

APH ANALYTICAL RESULTS
Method for Ranges: MADEP APH 97-12 GC/MS
APH Surrogate Standards 2,5-Dibromotoluene
1,2-DCE
Toluene-d8
BFB
Method for Target Analytes: EPA-TO14A

Client ID:	DG1-102
Lab ID:	123456
Date Collected:	06/04/02
Date Received:	06/05/02
Date Fractions Analyzed:	06/11/02
Date Targets Analyzed:	06/12/02
Ranges Dilution Factor:	1.0
Targets Dilution Factor:	1.0

Range/Target Analyte	Elut. Range	RL (ppbv)	RL (ug/m3)	Units	
Unadjusted C_5-C_8 Aliphatic Hydr	N/A		85.0	ug/m³	**1630**
Unadjusted C_9-C_{12} Aliphatic Hyd	N/A		90.0	ug/m³	**1880**
Benzene	C5-C8 Aliph	0.90	2.87	ppbv/ug/m3	ND
*1,3-Butadiene**	N/A	20.0	46.0	ppbv/ug/m3	ND
Ethylbenzene	C5-C8 Aliph	0.54	2.34	ppbv/ug/m3	ND
*Methyl-tert-butyl ether**	C5-C8 Aliph	10.0	36.0	ppbv/ug/m3	ND
*2-Methylnaphthalene**	N/A	20.0	118	ppbv/ug/m3	ND
*Naphthalene**	N/A	20.0	106	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	**0.75 / 3.25**
o-Xylene	C9-C12 Aliph.	0.46	2.00	ppbv/ug/m3	ND
C_5-C_8 Aliphatic Hydrocarbons'	N/A		85.0	ug/m³	**1630**
C_9-C_{12} Aliphatic Hydrocarbons"	N/A		90.0	ug/m³	**1880**
C_9-C_{10} Aromatic Hydrocarbons	N/A		80.0	ug/m³	ND
2,5-Dibromotoluene Surrogate Recovery					88%
1,2-DCE Surrogate Recovery					61%
Toluene-d8 Surrogate % Recovery					98%
BFB Surrogate % Recovery					102%
Surrogate Acceptance Range					70-130%

'C_5-C_8 Aliphatic Hydrocarbons exclude concentrations of Target Analytes eluting in that ran
"C_9-C_{12} Aliphatic HCs exclude concentrations of Target Analytes AND $_9$-C_{10} Aromatic Hydrocarbons eluting in that range
*Compounds quantitated by TICS

CERTIFICATION **"Matrix interference confirmed by re-run**

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 ranges quantitated by GC/MS Total Ion Chromatogram and all targets and Aromatic ranges were quantitated by GC/MS Selected Ion Measurements.

I attest under the pains and penalties of perjury that, based upon my inquiry of those individuals immedately 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: 06/13/02

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.

GeoLabs, Inc.

Environmental Laboratories

LABORATORY REPORT

PREPARED FOR:

Decoulos & Company
3 Electronics Avenue
Danvers, MA 01923

Attn: Jim Decoulos

PROJECT ID:	608 633 N. Main Street Randolph, MA
GEOLABS CERTIFICATION #:	M-MA015
SAMPLE NUMBER:	141658 - 141664
DATE PREPARED:	November 24, 2003
PREPARED BY:	Christine Johnson

APPROVED BY:

Jim Chen, Laboratory Director/Date

GeoLabs, Inc.
Environmental Laboratories

MADEP MCP Response Action Analytical Report Certification Form

Laboratory Name:	GeoLabs, Inc.	Project #:	608
Project Location:	633 N. Main Street	MADEP RTN:	

This form provides certifications for the following data set: 141658 - 141664

Sample matrices: Groundwater (x) Soil / Sediment ( ) Drinking Water ( ) Other ( )

MCP SW-846 Methods Used	8260B ( )	8151A ( )	8330 ( )	6010B ( )	7470/1A ( )	Other: ( )
	8270C ( )	8081A ( )	VPH (x)	6020 ( )	9014M[2] ( )	
	8082 ( )	8021B ( )	EPH ( )	7000 S[3] ( )		

As specified in MADEP Compendium of Analytical Methods (Check all that apply)

1- List Release Tracking Number (RTN), if known
2- M - SW-846 Method 9014 or MADEP Physiologically Available Cyanide (PAC) Method
3- S - SW-846 Methods 7000 Series (List individual method and analyte)

An affirmative response to questions A, B, and C is required for "*Presumptive Certainty*" status

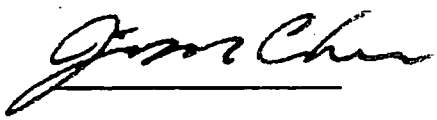
A	Were all samples received by the laboratory in a condition consistent with that described on the Chain-of-Custody documentation for the date set?	Yes (x)	No[1] ( )
B	Were all QA/QC procedures required for the specified analytical method(s) included in this report followed, including the requirement to note and discuss in a narrative QC data that did not meet appropriate performance standards or guidelines?	Yes (x)	No[1] ( )
C	Does the analytical data included in this report meet all the requirements for "Presumptive Certainty", as described in Section 2.0 of the MADEP documents CAM VII A, "Quality Assurance and Quality Control Guidelines for the Acquisition and Reporting of Analytical Data"?	Yes (x)	No[1] ( )

A response to questions D and E below is required for "*Presumptive Certainty*" status

D	Were all QC performance standards and recommendations for the specified methods achieved?	Yes (x)	No[1] ( )
E	Were results for all analyte-list compounds/elements for the specified method(s) reported?	Yes (x)	No[1] ( )

[1]All NO answers must be addressed in an attached Environmental Laboratory case narrative.

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 analytical report is, to the best of my knowledge and belief, accurate and complete.

Signature:  Position: Lab Director

Printed Name: Jim Chen Date: November 24, 2003

GeoLabs, Inc.

Environmental Laboratories

Case Narrative

Project ID: 608
Client Name: Decoulos & Company

Sample Number: 141658 - 141664
Received: 11/24/03

Physical Condition of Samples

This project was received by the laboratory in satisfactory condition. The sample(s) were received undamaged, in appropriate containers with the correct preservation.

Project Documentation

This project was accompanied by satisfactory Chain of Custody documentation. The sample container label(s) agreed with the Chain of Custody.

Analysis of Sample(s)

No analytical anomalies or non-conformances were noted by the laboratory during the processing of these sample(s).

SAMPLE INFORMATION

Matrix	☒ Aqueous ☐ Soil ☐ Sediment ☐ Other		
Containers	☒ Satisfactory ☐ Broken ☐ Leaking		
Sample Preservative	Aqueous	☐ N/A ☒ pH ≤ 2 ☐ pH > 2 Comment:	
	Soil or Sediment	☐ N/A ☐ Samples NOT preserved in MeOH or air-tight containers	ml MeOH
		☐ Samples received in MeOH ☐ Covering soil ? ☐ Not	☐1:1±25%
		☐ Received in air tight container	☐ Other
Temperature	☒ Received on ice ☐ Received at 4° C ☐ Other		

VPH ANALYTICAL RESULTS

Method for Ranges: MADEP VPH
Method for Target Analytes: MADEP VPH
VPH Surrogate Standards
PID (2,5-Dibromotoluene)
FID (2,5-Dibromotoluene)

				Client ID:	DMW-1	DMW-2
				Lab ID:	141658	141659
				Date Collected:	11/12/03	11/12/03
				Date Received:	11/13/03	11/13/03
				Date Analyzed:	11/21/03	11/21/03
				Dilution Factor:	50	50
				Total solids (%):	N/A	N/A
Range/Target Analyte	Elut. Range	RL	Units			
Unadjusted C_5-C_8 Aliphatics[1]	N/A	2000	ug/L		**10900**	**8000**
Unadjusted C_9-C_{12} Aliphatics[1]	N/A	750	ug/L		**3030**	**3070**
Methyl tert-butyl ether	C_5-C_8 Aliph.	250	ug/L		**5760**	ND
Benzene	C_5-C_8 Aliph.	250	ug/L		**3750**	**935**
Toluene	C_5-C_8 Aliph.	250	ug/L		**1250**	**4400**
Ethylbenzene	C_9-C_{12} Aliph.	250	ug/L		**1990**	**1280**
m&p-Xylenes	C_9-C_{12} Aliph.	250	ug/L		**6220**	**6590**
o-Xylene	C_9-C_{12} Aliph.	250	ug/L		**1660**	**3500**
Naphthalene	N/A	1000	ug/L		ND	ND
C_5-C_8 Aliphatic Hydrocarbons[1,2]	N/A	2000	ug/L		ND	**2670**
C_9-C_{12} Aliphatic Hydrocarbons[1,3]	N/A	750	ug/L		ND	ND
C_9-C_{10} Aromatic Hydrocarbons[1]	C_9-C_{12} Aliph.	2750	ug/L		**6620**	**7720**
2,5-Dibromotoluene (PID) Surrogate Recovery					91%	91%
2,5-Dibromotoluene (FID) Surrogate Recovery					97%	89%
Surrogate Acceptance Range					70-130%	70-130%

[1]Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range
[2]C_5-C_8 Aliphatic Hydrocarbons exclude the concentration of Target Analytes eluting in that range
[3]C_9-C_{12} Aliphatic Hydrocarbons exclude conc of Target Analytes eluting in that range AND concentration of C_9-C_{10} Aromatic Hydrocarbons

CERTIFICATION

Were all QA/QC procedures REQUIRED by the VPH 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 VPH method, as specified in Sect 11.3.? ☒ No

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

SIGNATURE: Jim Chen POSITION: Lab Director

PRINTED NAME: Jim Chen DATE: 11/24/03

SAMPLE INFORMATION

Matrix	☒ Aqueous ☐ Soil ☐ Sediment ☐ Other		
Containers	☒ Satisfactory ☐ Broken ☐ Leaking		
Sample Preservative	Aqueous	☐ N/A ☒ pH ≤ 2 ☐ pH > 2 Comment:	
	Soil or Sediment	☐ N/A ☐ Samples NOT preserved in MeOH or air-tight containers	ml MeOH
		☐ Samples received in MeOH ☐ Covering soil ? ☐ Not	☐1:1±25%
		☐ Received in air tight container	☐ Other
Temperature	☒ Received on ice ☐ Received at 4° C ☐ Other		

VPH ANALYTICAL RESULTS

Method for Ranges: MADEP VPH
Method for Target Analytes: MADEP VPH
VPH Surrogate Standards
PID (2,5-Dibromotoluene)
FID (2,5-Dibromotoluene)

Client ID:	DMW-3
Lab ID:	141660
Date Collected:	11/12/03
Date Received:	11/13/03
Date Analyzed:	11/21/03
Dilution Factor:	1.0
Total solids (%):	N/A

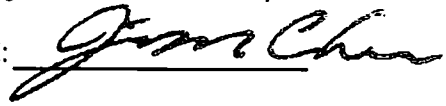
Range/Target Analyte	Elut. Range	RL	Units	
Unadjusted C_5-C_8 Aliphatics[1]	N/A	40	ug/L	185
Unadjusted C_9-C_{12} Aliphatics[1]	N/A	15	ug/L	88.1
Methyl tert-butyl ether	C_5-C_8 Aliph.	5	ug/L	ND
Benzene	C_5-C_8 Aliph.	5	ug/L	ND
Toluene	C_5-C_8 Aliph.	5	ug/L	ND
Ethylbenzene	C_9-C_{12} Aliph.	5	ug/L	ND
m&p-Xylenes	C_9-C_{12} Aliph.	5	ug/L	14.3
o-Xylene	C_9-C_{12} Aliph.	5	ug/L	16.6
Naphthalene	N/A	20	ug/L	ND
C_5-C_8 Aliphatic Hydrocarbons[1,2]	N/A	40	ug/L	185
C_9-C_{12} Aliphatic Hydrocarbons[1,3]	N/A	15	ug/L	ND
C_9-C_{10} Aromatic Hydrocarbons[1]	C_9-C_{12} Aliph.	55	ug/L	436
2,5-Dibromotoluene (PID) Surrogate Recovery				[redacted]
2,5-Dibromotoluene (FID) Surrogate Recovery				[redacted]
Surrogate Acceptance Range				70-130%

[1]Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range
[2]C_5-C_8 Aliphatic Hydrocarbons exclude the concentration of Target Analytes eluting in that range
[3]C_9-C_{12} Aliphatic Hydrocarbons exclude conc of Target Analytes eluting in that range AND concentration of C_9-C_{10} Aromatic Hydrocarbons

CERTIFICATION

Were all QA/QC procedures REQUIRED by the VPH 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 VPH method, as specified in Sect 11.3.? ☒ No

I attest under the pains and penalties of perjury that, based upon my inquiry of those individuals immedately 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: 11/24/03

SAMPLE INFORMATION

Matrix	☒ Aqueous ☐ Soil ☐ Sediment ☐ Other		
Containers	☒ Satisfactory ☐ Broken ☐ Leaking		
Sample Preservative	Aqueous	☐ N/A ☒ pH ≤ 2 ☐ pH > 2 Comment:	
	Soil or Sediment	☐ N/A ☐ Samples NOT preserved in MeOH or air-tight containers	ml MeOH
		☐ Samples received in MeOH ☐ Covering soil ? ☐ Not	☐1:1±25%
		☐ Received in air tight container	☐ Other
Temperature	☒ Received on ice ☐ Received at 4° C ☐ Other		

VPH ANALYTICAL RESULTS

Method for Ranges: MADEP VPH
Method for Target Analytes: MADEP VPH
VPH Surrogate Standards
PID (2,5-Dibromotoluene)
FID (2,5-Dibromotoluene)

Client ID:	DMW-4
Lab ID:	141661
Date Collected:	11/12/03
Date Received:	11/13/03
Date Analyzed:	11/21/03
Dilution Factor:	10 / 20*
Total solids (%):	N/A

Range/Target Analyte	Elut. Range	RL	Units	
Unadjusted C_5-C_8 Aliphatics[1]	N/A	400	ug/L	**6670**
Unadjusted C_9-C_{12} Aliphatics[1]	N/A	150	ug/L	ND
Methyl tert-butyl ether	C_5-C_8 Aliph.	100*	ug/L	**6670**
Benzene	C_5-C_8 Aliph.	50	ug/L	**157**
Toluene	C_5-C_8 Aliph.	50	ug/L	ND
Ethylbenzene	C_9-C_{12} Aliph.	50	ug/L	ND
m&p-Xylenes	C_9-C_{12} Aliph.	50	ug/L	**91.0**
o-Xylene	C_9-C_{12} Aliph.	50	ug/L	ND
Naphthalene	N/A	200	ug/L	ND
C_5-C_8 Aliphatic Hydrocarbons[1,2]	N/A	400	ug/L	ND
C_9-C_{12} Aliphatic Hydrocarbons[1,3]	N/A	150	ug/L	ND
C_9-C_{10} Aromatic Hydrocarbons[1]	C_9-C_{12} Aliph.	550	ug/L	ND
2,5-Dibromotoluene (PID) Surrogate Recovery				[redacted]
2,5-Dibromotoluene (FID) Surrogate Recovery				[redacted]
Surrogate Acceptance Range				70-130%

[1]Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range
[2]C_5-C_8 Aliphatic Hydrocarbons exclude the concentration of Target Analytes eluting in that range
[3]C_9-C_{12} Aliphatic Hydrocarbons exclude conc of Target Analytes eluting in that range AND concentration of C_9-C_{10} Aromatic Hydrocarbons

CERTIFICATION

Were all QA/QC procedures REQUIRED by the VPH 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 VPH method, as specified in Sect 11.3.? ☒ No

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

SIGNATURE: Jim Chen POSITION: Lab Director

PRINTED NAME: Jim Chen DATE: 11/24/03

SAMPLE INFORMATION

Matrix	☒ Aqueous ☐ Soil ☐ Sediment ☐ Other		
Containers	☒ Satisfactory ☐ Broken ☐ Leaking		
Sample Preservative:	Aqueous	☐ N/A ☒ pH ≤ 2 ☐ pH > 2 Comment:	
	Soil or Sediment	☐ N/A ☐ Samples NOT preserved in MeOH or air-tight containers	ml MeOH
		☐ Samples received in MeOH ☐ Covering soil ? ☐ Not	☐1:1±25%
		☐ Received in air tight container	☐ Other
Temperature	☒ Received on ice ☐ Received at 4° C ☐ Other		

VPH ANALYTICAL RESULTS

Method for Ranges: MADEP VPH
Method for Target Analytes: MADEP VPH
VPH Surrogate Standards
PID (2,5-Dibromotoluene)
FID (2,5-Dibromotoluene)

Client ID:	MW-3R
Lab ID:	141662
Date Collected:	11/12/03
Date Received:	11/13/03
Date Analyzed:	11/21/03
Dilution Factor:	50
Total solids (%):	N/A

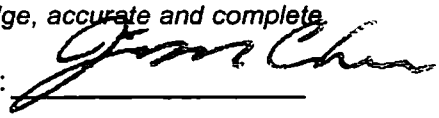
Range/Target Analyte	Elut. Range	RL	Units	
Unadjusted C_5-C_8 Aliphatics[1]	N/A	2000	ug/L	**12500**
Unadjusted C_9-C_{12} Aliphatics[1]	N/A	750	ug/L	**3550**
Methyl tert-butyl ether	C_5-C_8 Aliph.	250	ug/L	ND
Benzene	C_5-C_8 Aliph.	250	ug/L	**3020**
Toluene	C_5-C_8 Aliph.	250	ug/L	**7900**
Ethylbenzene	C_9-C_{12} Aliph.	250	ug/L	**1800**
m&p-Xylenes	C_9-C_{12} Aliph.	250	ug/L	**7900**
o-Xylene	C_9-C_{12} Aliph.	250	ug/L	**3310**
Naphthalene	N/A	1000	ug/L	ND
C_5-C_8 Aliphatic Hydrocarbons[1,2]	N/A	2000	ug/L	ND
C_9-C_{12} Aliphatic Hydrocarbons[1,3]	N/A	750	ug/L	ND
C_9-C_{10} Aromatic Hydrocarbons[1]	C_9-C_{12} Aliph.	2750	ug/L	**8110**
2,5-Dibromotoluene (PID) Surrogate Recovery				[redacted]
2,5-Dibromotoluene (FID) Surrogate Recovery				[redacted]
Surrogate Acceptance Range				70-130%

[1]Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range
[2]C_5-C_8 Aliphatic Hydrocarbons exclude the concentration of Target Analytes eluting in that range
[3]C_9-C_{12} Aliphatic Hydrocarbons exclude conc of Target Analytes eluting in that range AND concentration of C_9-C_{10} Aromatic Hydrocarbons

CERTIFICATION

Were all QA/QC procedures REQUIRED by the VPH 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 VPH method, as specified in Sect 11.3.? ☒ No

I attest under the pains and penalties of perjury that, based upon my inquiry of those individuals immedately 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: 11/24/03

SAMPLE INFORMATION

Matrix	☒ Aqueous ☐ Soil ☐ Sediment ☐ Other		
Containers	☒ Satisfactory ☐ Broken ☐ Leaking		
Sample Preservative:	Aqueous	☐ N/A ☒ pH ≤ 2 ☐ pH > 2 Comment:	
	Soil or Sediment	☐ N/A ☐ Samples NOT preserved in MeOH or air-tight containers	ml MeOH
		☐ Samples received in MeOH ☐ Covering soil ? ☐ Not	☐1:1±25%
		☐ Received in air tight container	☐ Other
Temperature	☒ Received on ice ☐ Received at 4° C ☐ Other		

VPH ANALYTICAL RESULTS

Method for Ranges: MADEP VPH
Method for Target Analytes: MADEP VPH
VPH Surrogate Standards
PID (2,5-Dibromotoluene)
FID (2,5-Dibromotoluene)

Client ID:	DMW-X
Lab ID:	141663
Date Collected:	11/12/03
Date Received:	11/13/03
Date Analyzed:	11/21/03
Dilution Factor:	5.0 / 20*
Total solids (%):	N/A

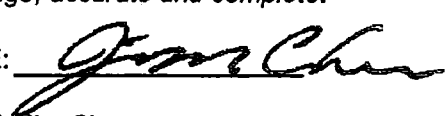
Range/Target Analyte	Elut. Range	RL	Units	
Unadjusted C_5-C_8 Aliphatics[1]	N/A	200	ug/L	**8390**
Unadjusted C_9-C_{12} Aliphatics[1]	N/A	75	ug/L	**79.5**
Methyl tert-butyl ether	C_5-C_8 Aliph.	100*	ug/L	**8390**
Benzene	C_5-C_8 Aliph.	25	ug/L	**172**
Toluene	C_5-C_8 Aliph.	25	ug/L	ND
Ethylbenzene	C_9-C_{12} Aliph.	25	ug/L	ND
m&p-Xylenes	C_9-C_{12} Aliph.	25	ug/L	**90.5**
o-Xylene	C_9-C_{12} Aliph.	25	ug/L	ND
Naphthalene	N/A	100	ug/L	ND
C_5-C_8 Aliphatic Hydrocarbons[1,2]	N/A	200	ug/L	ND
C_9-C_{12} Aliphatic Hydrocarbons[1,3]	N/A	75	ug/L	ND
C_9-C_{10} Aromatic Hydrocarbons[1]	C_9-C_{12} Aliph.	275	ug/L	**3690**
2,5-Dibromotoluene (PID) Surrogate Recovery				[redacted]
2,5-Dibromotoluene (FID) Surrogate Recovery				[redacted]
Surrogate Acceptance Range				70-130%

[1]Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range
[2]C_5-C_8 Aliphatic Hydrocarbons exclude the concentration of Target Analytes eluting in that range
[3]C_9-C_{12} Aliphatic Hydrocarbons exclude conc of Target Analytes eluting in that range AND concentration of C_9-C_{10} Aromatic Hydrocarbons

CERTIFICATION

Were all QA/QC procedures REQUIRED by the VPH 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 VPH method, as specified in Sect 11.3.? ☒ No

I attest under the pains and penalties of perjury that, based upon my inquiry of those individuals immedately 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: 11/24/03

SAMPLE INFORMATION

Matrix	☒ Aqueous ☐ Soil ☐ Sediment ☐ Other		
Containers	☒ Satisfactory ☐ Broken ☐ Leaking		
Sample Preservative	Aqueous	☐ N/A ☒ pH ≤ 2 ☐ pH > 2 Comment:	
	Soil or Sediment	☐ N/A ☐ Samples NOT preserved in MeOH or air-tight containers	ml MeOH
		☐ Samples received in MeOH ☐ Covering soil ? ☐ Not	☐1:1±25%
		☐ Received in air tight container	☐ Other
Temperature	☒ Received on ice ☐ Received at 4° C ☐ Other		

VPH ANALYTICAL RESULTS

Method for Ranges: MADEP VPH
Method for Target Analytes: MADEP VPH
VPH Surrogate Standards
PID (2,5-Dibromotoluene)
FID (2,5-Dibromotoluene)

Client ID:	DMW-Y
Lab ID:	141664
Date Collected:	11/12/03
Date Received:	11/13/03
Date Analyzed:	11/21/03
Dilution Factor:	50
Total solids (%):	N/A

Range/Target Analyte	Elut. Range	RL	Units	
Unadjusted C_5-C_8 Aliphatics[1]	N/A	2000	ug/L	**9760**
Unadjusted C_9-C_{12} Aliphatics[1]	N/A	750	ug/L	**1800**
Methyl tert-butyl ether	C_5-C_8 Aliph.	250	ug/L	**4500**
Benzene	C_5-C_8 Aliph.	250	ug/L	**2860**
Toluene	C_5-C_8 Aliph.	250	ug/L	**1040**
Ethylbenzene	C_9-C_{12} Aliph.	250	ug/L	**815**
m&p-Xylenes	C_9-C_{12} Aliph.	250	ug/L	**2870**
o-Xylene	C_9-C_{12} Aliph.	250	ug/L	**830**
Naphthalene	N/A	1000	ug/L	ND
C5-C8 Aliphatic Hydrocarbons[1,2]	N/A	2000	ug/L	ND
C9-C12 Aliphatic Hydrocarbons[1,3]	N/A	750	ug/L	ND
C_9-C_{10} Aromatic Hydrocarbons[1]	C_9-C_{12} Aliph.	2750	ug/L	**3540**
2,5-Dibromotoluene (PID) Surrogate Recovery				[redacted]
2,5-Dibromotoluene (FID) Surrogate Recovery				[redacted]
Surrogate Acceptance Range				70-130%

[1]Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range
[2]C_5-C_8 Aliphatic Hydrocarbons exclude the concentration of Target Analytes eluting in that range
[3]C_9-C_{12} Aliphatic Hydrocarbons exclude conc of Target Analytes eluting in that range AND concentration of C_9-C_{10} Aromatic Hydrocarbons

CERTIFICATION

Were all QA/QC procedures REQUIRED by the VPH 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 VPH method, as specified in Sect 11.3.? ☒ No

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

SIGNATURE: [signature] POSITION: Lab Director

PRINTED NAME: Jim Chen DATE: 11/24/03

Matrix: Water µg/L	LCS %	Limit	BLANK
MTBE	111%	70-130%	ND
Benzene	99%	70-130%	ND
Toluene	119%	70-130%	ND
Ethyl Benzene	111%	70-130%	ND
m,p-xylene	128%	70-130%	ND
o-xylene	119%	70-130%	ND
Naphthalene	112%	70-130%	ND
Surrogate Recoveries:			
2,5-Dibromotoluene (PID)	101%		
2,5-Dibromotoluene (FID)	103%		

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.

This lab report meets all requirements of NELAC unless otherwise noted.

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

GeoLabs, Inc.
Environmental Laboratories
45 Johnson Lane
Braintree, MA 02184
Phone: 781-848-7844
Fax: 781-848-7811

Turnaround Time
RUSH: 24hrs ☐ 48hrs ☐ 72hrs ☐ Rush
STANDARD: 5 Days ✓
Approved By: ____

Page 1 of 1

SPECIAL INSTRUCTIONS

on Ice

Client: DECOULOS + CO
Address: 3 ELECTRONICS AVE
DANVERS MA 01923
Phone: 617-489-7795
Fax: 877-842-9629
Contact: JIM
E-mail: JAMESJ@DECOULOS.COM

Project Number: 608
Project Location: 633 N. MAIN ST
RANDOLPH
Purchase Order #:
Collected By: JJD

ANALYSES REQUESTED

SAMPLE ID	COLLECTION DATE	COLLECTION TIME	COLLECTION SAMPLED BY	SAMPLE LOCATION	CONTAINER TYPE	CONTAINER QUANT	MATRIX	COMP	GRAB	PRES	GEOLABS SAMPLE NUMBER	VPH								TEMPERATURE	LAB pH
DMW-1	11/12	1640	JJD		V	2	GW		X	1/1	141658	X								3/4	
DMW-2		1404									141659	X									
DMW-3		1316									141660	X									
DMW-4		1520									141661	X									
MW-3R		1602									141662	X									
DMW-X											141663	X									
DMW-Y											141664	X									

CONTAINER CODES:	MATRIX CODES:	PRESERVATIVE CODES:
A = Amber	GW = Ground Water	1 = HCl 7 = ICE
B = Bag	WW = Wastewater	2 = HNO_3
G = Glass	DW = Drinking Water	3 = H_2SO_4
P = Plastic	SL = Sludge	4 = $Na_2S_2O_3$
S = Summa Canister	S = Soil A = Air	5 = NaOH
O = Other VOA	O = Oil OT = Other	6 = MeOH

Relinquished By:	Date/Time	Received By:	Date/Time:
	11/13/03 0600	E. Connor	11-13 6:45
Relinquished By: 11-13-03 E. Connor	12:30	Received By:	11-13-03 12:30
Relinquished By:		Received By GeoLabs:	

GEOLABS CHAIN OF CUSTODY

GeoLabs, Inc.

Environmental Laboratories

LABORATORY REPORT

PREPARED FOR:

Decoulos & Company
3 Electronics Avenue
Danvers, MA 01923

Attn: Jim Decoulos

PROJECT ID:	Petrol Gas Station Randolph, MA
GEOLABS CERTIFICATION #:	M-MA015
SAMPLE NUMBER:	146540 - 146545
DATE PREPARED:	March 22, 2004
PREPARED BY:	Christine Johnson
APPROVED BY:	Jim Chen, Laboratory Director

GeoLabs, Inc.
Environmental Laboratories

MADEP MCP Response Action Analytical Report Certification Form

Laboratory Name:	GeoLabs, Inc.	Project #:	Petrol Gas Station
Project Location:	Randolph, MA	MADEP RTN:	

This form provides certifications for the following data set: 146540 - 146545

Sample matrices: Groundwater (x) Soil / Sediment ( ) Drinking Water ( ) Other ( )

MCP SW-846 Methods Used	8260B ( )	8151A ( )	8330 ( )	6010B ( )	7470/1A ( )	Other: ( )
	8270C ( )	8081A ( )	VPH (x)	6020 ( )	9014M[2] ( )	
	8082 ( )	8021B ( )	EPH ( )	7000 S[3] ( )		

As specified in MADEP Compendium of Analytical Methods (Check all that apply)

1- List Release Tracking Number (RTN), if known
2- M - SW-846 Method 9014 or MADEP Physiologically Available Cyanide (PAC) Method
3- S - SW-846 Methods 7000 Series (List individual method and analyte)

An affirmative response to questions A, B, and C is required for "*Presumptive Certainty*" status

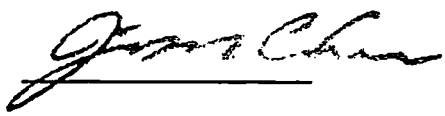
A	Were all samples received by the laboratory in a condition consistent with that described on the Chain-of-Custody documentation for the date set?	Yes (x)	No[1] ( )
B	Were all QA/QC procedures required for the specified analytical method(s) included in this report followed, including the requirement to note and discuss in a narrative QC data that did not meet appropriate performance standards or guidelines?	Yes (x)	No[1] ( )
C	Does the analytical data included in this report meet all the requirements for "Presumptive Certainty", as described in Section 2.0 of the MADEP documents CAM VII A, "Quality Assurance and Quality Control Guidelines for the Acquisition and Reporting of Analytical Data"?	Yes (x)	No[1] ( )

A response to questions D and E below is required for "*Presumptive Certainty*" status

D	Were all QC performance standards and recommendations for the specified methods achieved?	Yes (x)	No[1] ( )
E	Were results for all analyte-list compounds/elements for the specified method(s) reported?	Yes (x)	No[1] ( )

[1]All NO answers must be addressed in an attached Environmental Laboratory case narrative.

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 analytical report is, to the best of my knowledge and belief, accurate and complete.

Signature:  Position: Lab Director

Printed Name: Jim Chen Date: March 22, 2004

GeoLabs, Inc.

Environmental Laboratories

Case Narrative

Project ID: Petrol Gas Station
Client Name: Decoulos & Company

Sample Number: 146540 - 146545
Received: 03/15/04

Physical Condition of Samples

This project was received by the laboratory in satisfactory condition. The sample (s) were received undamaged, in appropriate containers with the correct preservation, with the following exceptions.

1. Samples received with temperatures at 11° C

Project Documentation

This project was accompanied by satisfactory Chain of Custody documentation. The sample container label(s) agreed with the Chain of Custody.

Analysis of Sample(s)

No analytical anomalies or non-conformances were noted by the laboratory during the processing of these sample(s).

SAMPLE INFORMATION

Matrix	☒ Aqueous ☐ Soil ☐ Sediment ☐ Other		
Containers	☒ Satisfactory ☐ Broken ☐ Leaking		
Sample Preservative:	Aqueous	☐ N/A ☒ pH ≤ 2 ☐ pH > 2 Comment:	
	Soil or Sediment	☐ N/A ☐ Samples NOT preserved in MeOH or air-tight containers	ml MeOH
		☐ Samples received in MeOH ☐ Covering soil ? ☐ Not	☐1:1±25%
		☐ Received in air tight container	☐ Other
Temperature	☒ Received on ice ☐ Received at 4° C ☐ Other		

VPH ANALYTICAL RESULTS

Method for Ranges: MADEP VPH
Method for Target Analytes: MADEP VPH
VPH Surrogate Standards
PID (2,5-Dibromotoluene)
FID (2,5-Dibromotoluene)

Client ID:	DMW-1
Lab ID:	146540
Date Collected:	03/15/04
Date Received:	03/15/04
Date Analyzed:	03/19/04
Dilution Factor:	10
Total solids (%):	N/A

Range/Target Analyte	Elut. Range	RL	Units			
Unadjusted C_5-C_8 Aliphatics[1]	N/A	400	ug/L	7780		
Unadjusted C_9-C_{12} Aliphatics[1]	N/A	150	ug/L	3220		
Methyl tert-butyl ether	C_5-C_8 Aliph.	50	ug/L	2340		
Benzene	C_5-C_8 Aliph.	50	ug/L	3030		
Toluene	C_5-C_8 Aliph.	50	ug/L	2330		
Ethylbenzene	C_9-C_{12} Aliph.	50	ug/L	1610		
m&p-Xylenes	C_9-C_{12} Aliph.	50	ug/L	5230		
o-Xylene	C_9-C_{12} Aliph.	50	ug/L	1480		
Naphthalene	N/A	200	ug/L	465		
C_5-C_8 Aliphatic Hydrocarbons[1,2]	N/A	400	ug/L	ND		
C_9-C_{12} Aliphatic Hydrocarbons[1,3]	N/A	150	ug/L	ND		
C_9-C_{10} Aromatic Hydrocarbons[1]	C_9-C_{12} Aliph.	550	ug/L	4510		
2,5-Dibromotoluene (PID) Surrogate Recovery				[redacted]		
2,5-Dibromotoluene (FID) Surrogate Recovery				[redacted]		
Surrogate Acceptance Range				70-130%		

[1]Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range
[2]C_5-C_8 Aliphatic Hydrocarbons exclude the concentration of Target Analytes eluting in that range
[3]C_9-C_{12} Aliphatic Hydrocarbons exclude conc of Target Analytes eluting in that range AND concentration of C_9-C_{10} Aromatic Hydrocarbons

CERTIFICATION

Were all QA/QC procedures REQUIRED by the VPH 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 VPH method, as specified in Sect 11.3.? ☒ No

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

SIGNATURE: Jim Chen POSITION: Lab Director

PRINTED NAME: Jim Chen DATE: 03/22/04

SAMPLE INFORMATION

Matrix	☒ Aqueous ☐ Soil ☐ Sediment ☐ Other		
Containers	☒ Satisfactory ☐ Broken ☐ Leaking		
Sample Preservative	Aqueous	☐ N/A ☒ pH ≤ 2 ☐ pH > 2 Comment:	
	Soil or Sediment	☐ N/A ☐ Samples NOT preserved in MeOH or air-tight containers	ml MeOH
		☐ Samples received in MeOH ☐ Covering soil ? ☐ Not	☐1:1±25%
		☐ Received in air tight container	☐ Other
Temperature	☒ Received on ice ☐ Received at 4° C ☐ Other		

VPH ANALYTICAL RESULTS

Method for Ranges: MADEP VPH

Method for Target Analytes: MADEP VPH

VPH Surrogate Standards

PID (2,5-Dibromotoluene)

FID (2,5-Dibromotoluene)

Client ID:	DMW-3
Lab ID:	146541
Date Collected:	03/15/04
Date Received:	03/15/04
Date Analyzed:	03/19/04
Dilution Factor:	1.0
Total solids (%):	N/A

Range/Target Analyte	Elut. Range	RL	Units			
Unadjusted C_5-C_8 Aliphatics[1]	N/A	40	ug/L	**95.3**		
Unadjusted C_9-C_{12} Aliphatics[1]	N/A	15	ug/L	**89.3**		
Methyl tert-butyl ether	C_5-C_8 Aliph.	5	ug/L	ND		
Benzene	C_5-C_8 Aliph.	5	ug/L	ND		
Toluene	C_5-C_8 Aliph.	5	ug/L	ND		
Ethylbenzene	C_9-C_{12} Aliph.	5	ug/L	**6.80**		
m&p-Xylenes	C_9-C_{12} Aliph.	5	ug/L	**16.3**		
o-Xylene	C_9-C_{12} Aliph.	5	ug/L	**20.2**		
Naphthalene	N/A	20	ug/L	ND		
C_5-C_8 Aliphatic Hydrocarbons[1,2]	N/A	40	ug/L	**95.3**		
C_9-C_{12} Aliphatic Hydrocarbons[1,3]	N/A	15	ug/L	ND		
C_9-C_{10} Aromatic Hydrocarbons[1]	C_9-C_{12} Aliph.	55	ug/L	**308**		
2,5-Dibromotoluene (PID) Surrogate Recovery				[redacted]%		
2,5-Dibromotoluene (FID) Surrogate Recovery				[redacted]%		
Surrogate Acceptance Range				70-130%		

[1]Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range

[2]C_5-C_8 Aliphatic Hydrocarbons exclude the concentration of Target Analytes eluting in that range

[3]C_9-C_{12} Aliphatic Hydrocarbons exclude conc of Target Analytes eluting in that range AND concentration of C_9-C_{10} Aromatic Hydrocarbons

CERTIFICATION

Were all QA/QC procedures REQUIRED by the VPH 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 VPH method, as specified in Sect 11.3.? ☒ No

I attest under the pains and penalties of perjury that, based upon my inquiry of those individuals immedately 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: 03/22/04

SAMPLE INFORMATION

Matrix	☒ Aqueous ☐ Soil ☐ Sediment ☐ Other		
Containers	☒ Satisfactory ☐ Broken ☐ Leaking		
Sample Preservative	Aqueous	☐ N/A ☒ pH ≤ 2 ☐ pH > 2 Comment:	
	Soil or Sediment	☐ N/A ☐ Samples NOT preserved in MeOH or air-tight containers	ml MeOH
		☐ Samples received in MeOH ☐ Covering soil ? ☐ Not	☐1:1±25%
		☐ Received in air tight container	☐ Other
Temperature	☒ Received on ice ☐ Received at 4° C ☐ Other		

VPH ANALYTICAL RESULTS

Method for Ranges: MADEP VPH
Method for Target Analytes: MADEP VPH
VPH Surrogate Standards
PID (2,5-Dibromotoluene)
FID (2,5-Dibromotoluene)

Client ID:	DMW-4
Lab ID:	146542
Date Collected:	03/15/04
Date Received:	03/15/04
Date Analyzed:	03/19/04
Dilution Factor:	1.0 / 10*
Total solids (%):	N/A

Range/Target Analyte	Elut. Range	RL	Units			
Unadjusted C_5-C_8 Aliphatics[1]	N/A	400*	ug/L	5050		
Unadjusted C_9-C_{12} Aliphatics[1]	N/A	15	ug/L	133		
Methyl tert-butyl ether	C_5-C_8 Aliph.	50*	ug/L	5050		
Benzene	C_5-C_8 Aliph.	5	ug/L	434		
Toluene	C_5-C_8 Aliph.	5	ug/L	57.1		
Ethylbenzene	C_9-C_{12} Aliph.	5	ug/L	98.4		
m&p-Xylenes	C_9-C_{12} Aliph.	5	ug/L	204		
o-Xylene	C_9-C_{12} Aliph.	5	ug/L	45.8		
Naphthalene	N/A	20	ug/L	39.7		
C_5-C_8 Aliphatic Hydrocarbons[1,2]	N/A	400*	ug/L	ND		
C_9-C_{12} Aliphatic Hydrocarbons[1,3]	N/A	15	ug/L	ND		
C_9-C_{10} Aromatic Hydrocarbons[1]	C_9-C_{12} Aliph.	55	ug/L	294		
2,5-Dibromotoluene (PID) Surrogate Recovery				87%		
2,5-Dibromotoluene (FID) Surrogate Recovery				107%		
Surrogate Acceptance Range				70-130%		

[1]Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range
[2]C_5-C_8 Aliphatic Hydrocarbons exclude the concentration of Target Analytes eluting in that range
[3]C_9-C_{12} Aliphatic Hydrocarbons exclude conc of Target Analytes eluting in that range AND concentration of C_9-C_{10} Aromatic Hydrocarbons

CERTIFICATION

Were all QA/QC procedures REQUIRED by the VPH 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 VPH method, as specified in Sect 11.3.? ☒ No

I attest under the pains and penalties of perjury that, based upon my inquiry of those individuals immedately 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: 03/22/04

SAMPLE INFORMATION

Matrix	☒ Aqueous ☐ Soil ☐ Sediment ☐ Other		
Containers	☒ Satisfactory ☐ Broken ☐ Leaking		
Sample Preservative	Aqueous	☐ N/A ☒ pH ≤ 2 ☐ pH > 2 Comment:	
	Soil or Sediment	☐ N/A ☐ Samples NOT preserved in MeOH or air-tight containers	ml MeOH
		☐ Samples received in MeOH ☐ Covering soil ? ☐ Not	☐1:1±25%
		☐ Received in air tight container	☐ Other
Temperature	☒ Received on ice ☐ Received at 4° C ☐ Other		

VPH ANALYTICAL RESULTS

Method for Ranges: MADEP VPH

Method for Target Analytes: MADEP VPH

VPH Surrogate Standards

PID (2,5-Dibromotoluene)

FID (2,5-Dibromotoluene)

Client ID:	DMW-2
Lab ID:	146543
Date Collected:	03/15/04
Date Received:	03/15/04
Date Analyzed:	03/19/04
Dilution Factor:	10
Total solids (%):	N/A

Range/Target Analyte	Elut. Range	RL	Units		
Unadjusted C_5-C_8 Aliphatics[1]	N/A	400	ug/L	2390	
Unadjusted C_9-C_{12} Aliphatics[1]	N/A	150	ug/L	3000	
Methyl tert-butyl ether	C_5-C_8 Aliph.	5.0*	ug/L	182	* no dilution
Benzene	C_5-C_8 Aliph.	5.0*	ug/L	421	* no dilution
Toluene	C_5-C_8 Aliph.	50	ug/L	2430	
Ethylbenzene	C_9-C_{12} Aliph.	50	ug/L	674	
m&p-Xylenes	C_9-C_{12} Aliph.	50	ug/L	3950	
o-Xylene	C_9-C_{12} Aliph.	50	ug/L	2230	
Naphthalene	N/A	200	ug/L	718	
C_5-C_8 Aliphatic Hydrocarbons[1,2]	N/A	400	ug/L	ND	
C_9-C_{12} Aliphatic Hydrocarbons[1,3]	N/A	150	ug/L	ND	
C_9-C_{10} Aromatic Hydrocarbons[1]	C_9-C_{12} Aliph.	550	ug/L	5670	
2,5-Dibromotoluene (PID) Surrogate Recovery				[redacted]%	
2,5-Dibromotoluene (FID) Surrogate Recovery				[redacted]%	
Surrogate Acceptance Range				70-130%	

[1]Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range

[2]C_5-C_8 Aliphatic Hydrocarbons exclude the concentration of Target Analytes eluting in that range

[3]C_9-C_{12} Aliphatic Hydrocarbons exclude conc of Target Analytes eluting in that range AND concentration of C_9-C_{10} Aromatic Hydrocarbons

CERTIFICATION

Were all QA/QC procedures REQUIRED by the VPH 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 VPH method, as specified in Sect 11.3.? ☒ No

I attest under the pains and penalties of perjury that, based upon my inquiry of those individuals immedately 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: 03/22/04

SAMPLE INFORMATION

Matrix	☒ Aqueous ☐ Soil ☐ Sediment ☐ Other		
Containers	☒ Satisfactory ☐ Broken ☐ Leaking		
Sample Preservative	Aqueous	☐ N/A ☒ pH ≤ 2 ☐ pH > 2 Comment:	
	Soil or Sediment	☐ N/A ☐ Samples NOT preserved in MeOH or air-tight containers	ml MeOH
		☐ Samples received in MeOH ☐ Covering soil ? ☐ Not	☐1:1±25%
		☐ Received in air tight container	☐ Other
Temperature	☒ Received on ice ☐ Received at 4° C ☐ Other		

VPH ANALYTICAL RESULTS

Method for Ranges: MADEP VPH
Method for Target Analytes: MADEP VPH
VPH Surrogate Standards
PID (2,5-Dibromotoluene)
FID (2,5-Dibromotoluene)

Client ID:	MW-3R		
Lab ID:	146544		
Date Collected:	03/15/04		
Date Received:	03/15/04		
Date Analyzed:	03/19/04		
Dilution Factor:	10.0		
Total solids (%):	N/A		

Range/Target Analyte	Elut. Range	RL	Units			
Unadjusted C_5-C_8 Aliphatics[1]	N/A	400	ug/L	**8520**		
Unadjusted C_9-C_{12} Aliphatics[1]	N/A	150	ug/L	**3440**		
Methyl tert-butyl ether	C_5-C_8 Aliph.	5.0*	ug/L	**97.2**	* no dilution	
Benzene	C_5-C_8 Aliph.	50	ug/L	**1600**		
Toluene	C_5-C_8 Aliph.	50	ug/L	**5480**		
Ethylbenzene	C_9-C_{12} Aliph.	50	ug/L	**1220**		
m&p-Xylenes	C_9-C_{12} Aliph.	50	ug/L	**5290**		
o-Xylene	C_9-C_{12} Aliph.	50	ug/L	**2430**		
Naphthalene	N/A	20.0*	ug/L	**426**	* no dilution	
C_5-C_8 Aliphatic Hydrocarbons[1,2]	N/A	400	ug/L	**1340**		
C_9-C_{12} Aliphatic Hydrocarbons[1,3]	N/A	150	ug/L	ND		
C_9-C_{10} Aromatic Hydrocarbons[1]	C_9-C_{12} Aliph.	550	ug/L	**4540**		
2,5-Dibromotoluene (PID) Surrogate Recovery				[illegible]		
2,5-Dibromotoluene (FID) Surrogate Recovery				[illegible]		
Surrogate Acceptance Range				70-130%		

[1]Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range
[2]C_5-C_8 Aliphatic Hydrocarbons exclude the concentration of Target Analytes eluting in that range
[3]C_9-C_{12} Aliphatic Hydrocarbons exclude conc of Target Analytes eluting in that range AND concentration of C_9-C_{10} Aromatic Hydrocarbons

CERTIFICATION

Were all QA/QC procedures REQUIRED by the VPH 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 VPH method, as specified in Sect 11.3.? ☒ No

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

SIGNATURE: Jim Chen POSITION: Lab Director

PRINTED NAME: Jim Chen DATE: 03/22/04

SAMPLE INFORMATION

Matrix	☒ Aqueous ☐ Soil ☐ Sediment ☐ Other		
Containers	☒ Satisfactory ☐ Broken ☐ Leaking		
Sample Preservative	Aqueous	☐ N/A ☒ pH ≤ 2 ☐ pH > 2 Comment:	
	Soil or Sediment	☐ N/A ☐ Samples NOT preserved in MeOH or air-tight containers	ml MeOH
		☐ Samples received in MeOH ☐ Covering soil ? ☐ Not	☐1:1±25%
		☐ Received in air tight container	☐ Other
Temperature	☒ Received on ice ☐ Received at 4° C ☐ Other		

VPH ANALYTICAL RESULTS

Method for Ranges: MADEP VPH
Method for Target Analytes: MADEP VPH
VPH Surrogate Standards
PID (2,5-Dibromotoluene)
FID (2,5-Dibromotoluene)

				Client ID:	MW-X	
				Lab ID:	146545	
				Date Collected:	03/15/04	
				Date Received:	03/15/04	
				Date Analyzed:	03/19/04	
				Dilution Factor:	10	
				Total solids (%):	N/A	
Range/Target Analyte	Elut. Range	RL	Units			
Unadjusted C_5-C_8 Aliphatics[1]	N/A	400	ug/L	8990		
Unadjusted C_9-C_{12} Aliphatics[1]	N/A	150	ug/L	3610		
Methyl tert-butyl ether	C_5-C_8 Aliph.	5.0*	ug/L	103	* no dilution	
Benzene	C_5-C_8 Aliph.	50	ug/L	1650		
Toluene	C_5-C_8 Aliph.	50	ug/L	5380		
Ethylbenzene	C_9-C_{12} Aliph.	50	ug/L	1280		
m&p-Xylenes	C_9-C_{12} Aliph.	50	ug/L	5690		
o-Xylene	C_9-C_{12} Aliph.	50	ug/L	2590		
Naphthalene	N/A	20.0*	ug/L	451	* no dilution	
C_5-C_8 Aliphatic Hydrocarbons[1,2]	N/A	400	ug/L	1860		
C_9-C_{12} Aliphatic Hydrocarbons[1,3]	N/A	150	ug/L	ND		
C_9-C_{10} Aromatic Hydrocarbons[1]	C_9-C_{12} Aliph.	550	ug/L	4790		
2,5-Dibromotoluene (PID) Surrogate Recovery				[redacted]		
2,5-Dibromotoluene (FID) Surrogate Recovery				[redacted]		
Surrogate Acceptance Range				70-130%		

[1]Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range
[2]C_5-C_8 Aliphatic Hydrocarbons exclude the concentration of Target Analytes eluting in that range
[3]C_9-C_{12} Aliphatic Hydrocarbons exclude conc of Target Analytes eluting in that range AND concentration of C_9-C_{10} Aromatic Hydrocarbons

CERTIFICATION

Were all QA/QC procedures REQUIRED by the VPH 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 VPH method, as specified in Sect 11.3.? ☒ No

I attest under the pains and penalties of perjury that, based upon my inquiry of those individuals immedately 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: 03/22/04

Matrix:	Water	µg/L	LCS %	Limit	BLANK
MTBE			86%	70-130%	ND
Benzene			85%	70-130%	ND
Toluene			102%	70-130%	ND
Ethyl Benzene			93%	70-130%	ND
m,p-xylene			116%	70-130%	ND
o-xylene			99%	70-130%	ND
Naphthalene			101%	70-130%	ND
Surrogate Recoveries:					
2,5-Dibromotoluene (PID)			89%		
2,5-Dibromotoluene (FID)			110%		

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.

This lab report meets all requirements of NELAC unless otherwise noted.

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

GeoLabs, Inc.
Environmental Laboratories
45 Johnson Lane
Braintree, MA 02184
Phone: 781-848-7844
Fax: 781-848-7811

Turnaround Time
RUSH: 24hrs ☐ 48hrs ☐ 72hrs ☐ STANDARD: 5 Days ✓ Rush ☐ Approved By: ☐

Page 1 of 1

SPECIAL INSTRUCTIONS

Client: Decoulos + Co
Address:
Phone: 617-489-7795
Fax: 877-842-9629
Contact: James
E-mail:

Project Number:
Project Location: Petrol Gas Station Randolph, MA.
Purchase Order #:
Collected By: M. Connors

ANALYSES REQUESTED

SAMPLE ID	COLLECTION DATE	COLLECTION TIME	COLLECTION SAMPLED BY	SAMPLE LOCATION	CONTAINER TYPE	CONTAINER QUANT	MATRIX	COMP	GRAB	PRES	GEOLABS SAMPLE NUMBER	VPH								TEMPERATURE	LAB pH
DMW-1	3/15/04		MC		V	2	GW		✓	1+7	146540	✓									11.0	
DMW-3	↓		↓		V	2	↓		✓	1+7	146541	✓										
DMW-4					V	2			✓	1+7	146542	✓										
DMW-2					V	2			✓	1+7	146543	✓										
MW-3R					V	2			✓	1+7	146544	✓										
MW-X					V	2			✓	1+7	146545	✓									↓	

CONTAINER CODES:
A = Amber
B = Bag
G = Glass
P = Plastic
S = Summa Canister
O = Other V = VOA

MATRIX CODES:
GW = Ground Water
WW = Wastewater
DW = Drinking Water
SL = Sludge
S = Soil A = Air
O = Oil OT = Other

PRESERVATIVE CODES:
1 = HCl 7 = ICE
2 = HNO_3
3 = H_2SO_4
4 = $Na_2S_2O_3$
5 = NaOH
6 = MeOH

Relinquished By:	Date/Time	Received By:	Date/Time:
M. Connors	3/15/04		
Relinquished By:		Received By:	
Relinquished By:		Received By GeoLabs:	3/15/04 1350

GEOLABS CHAIN OF CUSTODY

GeoLabs, Inc.

Environmental Laboratories

LABORATORY REPORT

PREPARED FOR:

Decoulos & Company
3 Electronics Avenue
Danvers, MA 01923

Attn: Jim Decoulos

PROJECT ID:	633 Main Street Randolph,
GEOLABS CERTIFICATION #:	M-MA015
SAMPLE NUMBER:	150258-150259
DATE PREPARED:	June 15, 2004
PREPARED BY:	Karen Mullally
APPROVED BY:	Jim Chen, Laboratory Director

GeoLabs, Inc.

Environmental Laboratories

SAMPLE INFORMATION

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

APH ANALYTICAL RESULTS	Client ID:	s/ga-1	s/ga-2
Method for Ranges: MADEP APH	Lab ID:	150258	150259
APH Surrogate Standards	Date Collected:	06/09/04	06/09/04
PID (2,5-Dibromotoluene)	Date Received:	06/09/04	06/09/04
FID (2,5-Dibromotoluene)	Date Fractions Analyzed:	06/15/04	06/15/04
Method for Target Analytes: EPA-TO14A	Date Targets Analyzed:	06/14/04	06/14/04
	Ranges Dilution Factor:	1.0	1.0
	Targets Dilution Factor:	1.0	1.0

Range/Target Analyte	Elut. Range	RL (ppbv)	RL (ug/m3)	Units		
Unadjusted C5-C8 Aliphatic Hydrc	N/A		78.0	ug/m³	2200	1373
Unadjusted C9-C12 Aliphatic Hydr	N/A		78.0	ug/m³	548	412
Benzene	C5-C8 Aliph	0.386	1.23	ppbv/ug/m3	1.54/4.92	3.21/10.3
*1,3-Butadiene**	N/A	2.18	5.00	ppbv/ug/m3	ND	ND
Ethylbenzene	C5-C8 Aliph	0.54	2.34	ppbv/ug/m3	0.810/3.51	1.17/5.07
Methyl-tert-butyl ether*	C5-C8 Aliph	1.39	5.00	ppbv/ug/m3	29.6/106	14.6/52.5
*2-Methylnaphthalene**	N/A	2.38	20.0	ppbv/ug/m3	ND	ND
*Naphthalene**	N/A	0.940	5.00	ppbv/ug/m3	ND	ND
Toluene	C5-C8 Aliph	0.95	3.58	ppbv/ug/m3	4.15/15.6	4.54/17.1
m-,p-Xylenes	C5-C8 Aliph	0.38	1.65	ppbv/ug/m3	3.03/13.1	4.79/20.8
o-Xylene	C9-C12 Aliph.	0.46	2.00	ppbv/ug/m3	1.17/5.07	1.97/8.54
C5-C8 Aliphatic Hydrocarbons[1]	N/A		78.0	ug/m³	2056	1267
C9-C12 Aliphatic Hydrocarbons[2]	N/A		78.0	ug/m³	ND	ND
C9-C10 Aromatic Hydrocarbons	N/A		78.0	ug/m³	1630	1670
2,5-Dibromotoluene (PID) Surrogate Recovery					130%	114%
2,5-Dibromotoluene (FID) Surrogate Recovery					122%	107%
Surrogate Acceptance Range					70-130%	70-130%

[1] C_5-C_8 Aliphatic Hydrocarbons exclude concentrations of Target Analytes eluting in that range

[2] C_9-C_{12} Aliphatic HCs exclude concentrations of Target Analytes AND C_9-C_{10} 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 immedately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge, accurate and complete.

SIGNATURE: Jim Chen POSITION: Lab Director

PRINTED NAME: Jim Chen DATE: 06/15/04

06/10/2004 WED 9:40 FAX 1 781 848 7811 GEO LABS INC

GeoLabs, Inc.
Environmental Laboratories
45 Johnson Lane
Braintree, MA 02184
Phone: 781-848-7844
Fax: 781-848-7811

Turnaround Time
RUSH: 24hr / 48hr / 72hr — STANDARD 5 Day — Rights — Approved By:

SPECIAL INSTRUCTIONS

Note: Dust in can SLgA-2

Client: Decoulos & Co.
Address: 3 Electronics Ave. Danvers, MA. 01923
Phone: 617-489-7995
Fax: 877-842-9629
Contact:
E-mail:

Project Number: 1008
Project Location: 633 Main St. Randolph, Petrol Gas Station
Purchase Order #:
Collected By:

ANALYSES REQUESTED

SAMPLE ID	COLLECTION DATE	COLLECTION TIME	SAMPLED BY	SAMPLE LOCATION	CONTAINER TYPE	CONTAINER QUANT	MATRIX	COMP	GRAB	PRES	GEOLABS SAMPLE NUMBER	APH								TEMPERATURE	LAB pH
Slga-1	6/9	11:30			S	1	A		✓		150258	✓									
Slga-2	6/9	11:45			S	1	A		✓		150259	✓									

CONTAINER CODES:
A = Amber
B = Bag
G = Glass
P = Plastic
S = Summa Canister
O = Other V = VOA

MATRIX CODES:
GW = Ground Water
WW = Wastewater
DW = Drinking Water
SL = Sludge
S = Soil A = Air
O = Oil OT = Other

PRESERVATIVE CODES:
1 = HCl 7 = ICE
2 = HNO_3
3 = H_2SO_4
4 = $Na_2S_2O_3$
5 = NaOH
6 = MeOH

Relinquished By:	Date/Time	Received By:	Date/Time:
[signature]	6/9/04 1145	M. C[signature]	6/9/04 11:45
Relinquished By: [signature]	6/9/04 12:25	Received By:	
Relinquished By:		Received By GeoLabs: S[signature] 6-9-04 1225	

GEOLABS CHAIN OF CUSTODY

APPENDIX D
ACTIVITY AND USE LIMITATION

14/20

NOTICE OF ACTIVITY AND USE LIMITATION
M.G.L. c. 21E, §6 and 310 CMR 40.0000

Disposal Site Name: Speedy Lube, 633 North Main Street, Randolph

This Notice of Activity and Use Limitation ("Notice") is made as of this 14th day of June, 2002, by Speedy Lube, Inc., a Massachusetts corporation, together with their successors and assigns (collectively, "Owner").

WITNESSETH:

WHEREAS, Speedy Lube, Inc., a Massachusetts corporation, is the owner in fee simple of that certain parcel of land located in Randolph, Norfolk County, Massachusetts, with the buildings and improvements thereon ("Property");

WHEREAS, said parcel of land, which is more particularly bounded and described in Exhibit A, attached hereto and made a part hereof is subject to this Notice of Activity and Use Limitation. The deed for the Property is recorded with the Norfolk Registry of Deeds in Book 9310, Page 747. The Property is shown on a plan recorded at said Registry as No. 124-1993 in Plan Book 412 to which plan reference can be made for a more particular description.

WHEREAS, the entire Property is subject to this Notice of Activity and Use Limitation.

WHEREAS, the Property comprises a Disposal Site as the result of a release of petroleum. Exhibit B is a sketch plan showing the Property which is subject to this Notice of Activity and Use Limitation. Exhibit B is attached hereto and made a part hereof; and

WHEREAS, one or more response actions have been selected for the Disposal Site in accordance with G.L. c.21E ("Chapter 21E") and the Massachusetts Contingency Plan, 310 CMR 40.0000 ("MCP"). Said response actions are based upon (a) the restriction of human access to and contact with oil or hazardous material in soil and (b) the restriction of certain activities occurring in, on, through, over or under the Property. The basis for such restrictions is set forth in an Activity and Use Limitation Opinion ("AUL Opinion" dated June 14, 2002, (which is attached hereto as Exhibit C and made a part hereof);

1025 15

02 JUN 14 PM 2:14

NOW, THEREFORE, notice is hereby given that the activity and use limitations set forth in said AUL Opinion are as follows:

1. Permitted Activities and Uses Set Forth in the AUL Opinion. The AUL Opinion provides that a condition of No Significant Risk to health, safety, public welfare or the environment exists for any foreseeable period of time (pursuant to 310 CMR 40.0000) so long as any of the following activities and uses occur on the Property:

(i) Commercial or industrial uses and activities associated therewith, including, but not limited to, pedestrian or vehicular traffic, landscaping, and routine maintenance of landscaped areas, which do not cause or result in the disturbance or the relocation of contaminated soil located at 3 to 15 feet below surface grade;

(ii) Short-term (three months or less) underground utility or construction activities including, but not limited to, excavation (including emergency repair of underground utility lines), which are likely to disturb contaminated soil located at 3 to 15 feet below surface grade, provided that such activities are conducted in accordance with Obligations/Conditions (i) and (ii) in Section 3 of this Activity and Use Limitation Opinion ("Opinion"), the soil management procedures of the MCP cited at 310 CMR 40.0030, and all applicable worker health and safety practices pursuant to 310 CMR 40.0018;

(iii) Activities and uses which are not identified in this Opinion as being inconsistent with maintaining a condition of No Significant Risk; and

(iv) Such other activities and uses which, in the Opinion of an LSP, shall present no greater risk of harm to health, safety, public welfare, or the environment than the activities and uses set forth in this Paragraph.

2. Activities and Uses Inconsistent with the AUL Opinion. Activities and uses which are inconsistent with the objectives of this Notice, and which, if implemented at the Property, may result in a significant risk of harm to health, safety, public welfare or the environment or in a substantial hazard, are as follows:

(i) Use of the portion of the property as a residence, school (with the exception of adult education), daycare, nursery, recreational area (such as a park or athletic fields), or any other use at which a child's presence is likely;

(ii) Any activity including, but not limited to, excavation which is likely to disturb contaminated soil located at 3 to 15 feet below surface grade associated with underground utility or construction work, without prior development and implementation of a Soil Management Plan and a Health and Safety Plan in accordance with Obligations (I) and (ii) of Section 3 of the AUL;

(ii) Any activity which is likely to disturb contaminated soil located at 3 to 15 feet below surface grade for a period of time greater than three months, unless such activity is first evaluated by an LSP who renders an Opinion stating that such activity is consistent with maintaining a condition of No Significant Risk and that such activity is conducted in accordance with Obligations (i) and (ii) of Section 3 of this AUL; and

(iii) Relocation of contaminated soil located at 3 to 15 feet below surface grade, unless such relocation is first evaluated by an LSP who renders an Opinion stating that such relocation is consistent with maintaining a condition of No Significant Risk.

3. Obligations and Conditions Set Forth in the AUL Opinion. If applicable, obligations or conditions to be undertaken or maintained at the Property to maintain a condition of No Significant Risk as set forth in the AUL Opinion shall include the following:

(i) A Soil Management Plan must be prepared by a Licensed Site Professional (LSP) prior to the commencement of any activity which is likely to disturb contaminated soil located at 3 to 15 feet below surface grade. The Soil Management Plan should describe appropriate soil management characterization storage, transport and disposal procedures in accordance with the provisions of the MCP cited at 310 CMR 40.0030 et seq. Workers who may come in contact with the contaminated soil should be appropriately trained on the requirements of the Plan, and the Plan must remain available on-site throughout the course of the project;

(ii) A Health and Safety Plan must be prepared and implemented prior to the commencement of any activity which may result in the disturbance of contaminated soil located at 3 to 15 feet below surface grade. The Health and Safety Plan should be prepared by a Certified Industrial Hygienist or other qualified individual appropriately trained in worker health and safety procedures and requirements. The Plan should specify the type of personal protection, engineering controls, and environmental monitoring necessary to prevent worker and other potential receptor exposures to contaminated soil through ingestion, dermal contact, and inhalation. Workers who may come in contact with the contaminated soil should be appropriately trained on the requirements of the Plan, and the Plan must remain available on-site throughout the course of the project; and

(iii) The contaminated soil located at 3 to 15 feet below surface grade must remain at depth and may not be relocated, unless such activity is first evaluated by an LSP who renders an Opinion which states that such activity poses no greater risk of harm to health, safety, public welfare, or the environment and ensures that a condition of No Significant Risk is maintained.

4. Proposed Changes in Activities and Uses. Any proposed changes in activities and uses at the Property which may result in higher levels of exposure to oil or hazardous material than currently exist shall be evaluated by an LSP who shall render an Opinion, in accordance with 310 CMR 40.1080 et seq., as to whether the proposed changes will present a significant risk of harm to health, safety, public welfare or the environment. Any and all requirements set forth in the Opinion to meet the objective of this Notice shall be satisfied before any such activity or use is commenced.

5. Violation of a Response Action Outcome. The activities, uses or exposures upon which this Notice is based shall not change at any time to cause a significant risk of harm to health, safety, public welfare, or the environment or to create substantial hazards due to exposure to oil or hazardous material without the prior evaluation by an LSP in accordance with 310 CMR 40.1080 et seq., and without additional response actions, if necessary, to achieve or maintain a condition of No Significant Risk or to eliminate substantial hazards.

If the activities, uses, or exposures upon which this Notice is based change without the prior evaluation and additional response actions determined to be necessary by an LSP in accordance with 310 CMR 40.1080 et seq., the owner or operator of the Property subject to this Notice at the time that the activities, uses or exposures change, shall comply with the requirements set forth in 310 CMR 40.0020.

6. Incorporation Into Deeds, Mortgages, Leases, and Instruments of Transfer. This Notice shall be incorporated either in full or by reference into all deeds, easements, mortgages, leases, licenses, occupancy agreements or any other instrument of transfer, whereby an interest in or a right to use the Property or a portion thereof is conveyed.

Owner hereby authorizes and consents to the filing and recordation or registration of this Notice, said Notice to become effective when executed under seal by the undersigned LSP, and recorded or registered with the appropriate Registry of Deeds and Land Registration Office.

WITNESS the execution hereof under seal this 14th day of June, 2002.

Eyad Badawi, Vice-President and Treasurer
Speedy Lube, Inc.

COMMONWEALTH OF MASSACHUSETTS

NORFOLK, SS June 14, 2002

Then personally appeared the above named Eyad Badawi and acknowledged the foregoing instrument to be their free act and deed before me,

Notary Public

My Commission Expires: My Commission Expires May 15, 2003

The undersigned LSP hereby certifies that he executed the aforesaid Activity and Use Limitation attached hereto as Exhibit C and made a part hereof and that in his Opinion this Notice of Activity and Use Limitation is consistent with the terms set forth in said Activity and Use Limitation Opinion.

James J. Decoulos, LSP

COMMONWEALTH OF MASSACHUSETTS

NORFOLK, SS June 14, 2002

Then personally appeared the above named James J. Decoulos and acknowledged the foregoing instrument to be his free act and deed before me,

Notary Public

My Commission Expires:

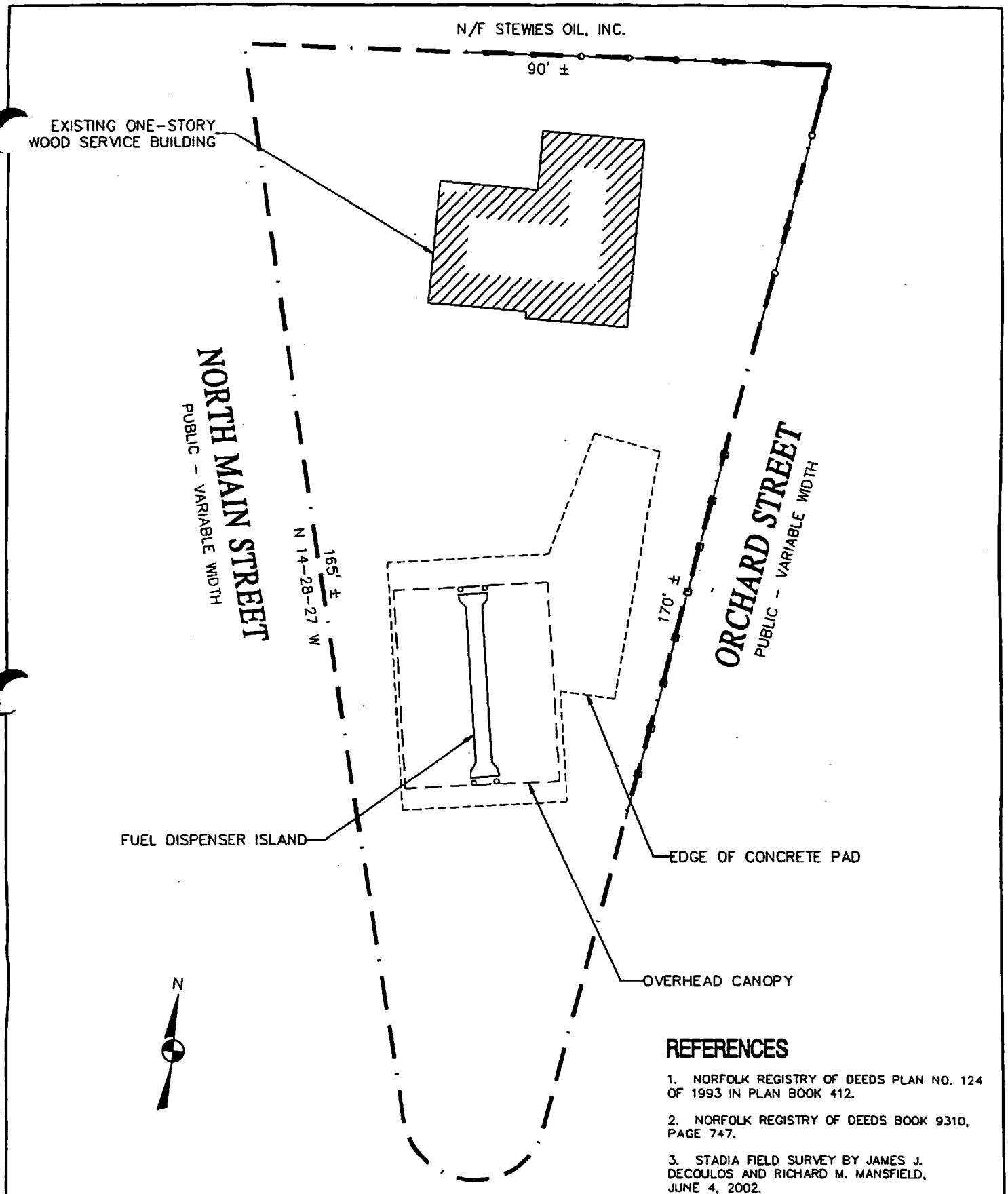
My Commission Expires
May 15, 2003

EXHIBIT A

(Description of Parcel of Land Containing Area Subject to AUL)

The land in Randolph, with the buildings thereon, bounded and described as set forth in a deed recorded at the Norfolk Registry of Deeds in Book 9310, Page 747.

Containing approximately 10,019 square feet of land as shown on plan entitled "Plan of Land showing existing conditions and proposed improvements, 633 North Main Street, Randolph, Massachusetts, Scale: 1"= 20', Date: 11-13-92, by Don Rosa, Professional Land Surveyor, 54 Liberty Street, Randolph, MA", recorded with Norfolk Registry of Deeds as No. 124-1993 in Plan Book 412.



REFERENCES

1. NORFOLK REGISTRY OF DEEDS PLAN NO. 124 OF 1993 IN PLAN BOOK 412.

2. NORFOLK REGISTRY OF DEEDS BOOK 9310, PAGE 747.

3. STADIA FIELD SURVEY BY JAMES J. DECOULOS AND RICHARD M. MANSFIELD, JUNE 4, 2002.

DECOULOS & COMPANY
48 ANDOVER ST, PEABODY, MA 01960
WWW.DECOULOS.COM
978 532 8154

EXHIBIT B
633 NORTH MAIN STREET
RANDOLPH, MASSACHUSETTS

DATE
JUNE 2002
SCALE
1" = 20'
FIGURE NO.
1

EXHIBIT C

ACTIVITY AND USE LIMITATION OPINION

In accordance with the requirements of 310 CMR 40.1074, this Activity and Use Limitation Opinion has been prepared for a parcel of land owned by Speedy Lube, Inc., a Massachusetts corporation, located at 633 North Main Street, Randolph, Norfolk County, Massachusetts. The land is defined on a plan recorded at the Norfolk Registry of Deeds as No. 124-1993 in Plan Book 412 (the Site). As of the date of this Activity and Use Limitation Opinion, the property is zoned for residential use and has been granted a variance by the Randolph Zoning Board of Appeals to conduct its commercial operation. The Site remains completely paved with a building and improvements thereon.

Site History

The Site has been used for commercial purposes. A one story commercial building lies on the northern portion of the Site as shown on Exhibit B. The commercial building is currently used for automotive service and the retail sale of gasoline and conveniences.

According to the Sanborn Fire Insurance Maps, the property has been used as a gasoline filling station since at least 1948. Prior to 1919, the Site was vacant.

[Note: The "MCP" is the Commonwealth of Massachusetts' code of regulations for the notification, assessment and cleanup of disposal sites where a release of oil or hazardous materials has occurred]

Field investigations have been conducted at the Site between 1997 and 2002. The results of the investigations indicate that volatile petroleum hydrocarbon levels exceed the MCP Method 1 S-1 Soil Standards in soil located at 3 to 15 feet below the surface in the portion of the property surrounding the fuel dispenser island (See Exhibit B, Sketch Plan). Volatile petroleum hydrocarbons were also detected in groundwater samples collected from on-site monitoring wells during various sampling events between 1997 and 2002. The groundwater contaminants are not considered a risk to human health, safety, welfare or the environment.

[Note: The "MCP Method 1 Cleanup Standards", refer to numerical standards for chemical contaminants in soil and groundwater which are published in the MCP. The soil standards are broken into three soil categories: S-1, S-2, and S-3. The S-1 Soil Standards are the most strict, or lowest, numerical values since they were derived to be protective of a residential exposure scenario by considering a receptor's incidental ingestion and dermal contact exposures to soil while gardening and playing. The S-2 and S-3 numerical standards are less strict and therefore higher, having been developed using passive recreational and construction-related exposure scenarios, respectively.]

Reason for Activity and Use Limitation

A Method 1 Risk Characterization was conducted to evaluate the risk posed by contamination remaining in soil at the Site. Using the Method 1 approach, concentrations of volatile petroleum hydrocarbons remaining in soil were compared to the MCP Method 1 Soil Standards to determine if the Site poses a risk for current and future activities and uses.

The Method 1 Risk Characterization concluded that the site poses No Significant Risk to health, safety, public welfare or the environment for current conditions of commercial use on the property because contaminant concentrations remaining in soil met the applicable Method 1, S-2 and S-3 Soil Standards for the Site.

However, since levels of volatile petroleum hydrocarbons in soil located at 3 to 15 feet below surface grade on the Site exceeded their respective Method 1 S-1 Standards, an unacceptable risk exists should future activities and uses of the Site result in unrestricted human exposure to the soil, such as those associated with a child's exposure through direct contact or ingestion. Therefore, in order to ensure that such exposures do not occur and that a condition of No Significant Risk be maintained for future activities and uses, an Activity and Use Limitation is required to restrict certain activities and uses of the Site.

Permitted Activities and Uses

(i) Commercial or industrial uses and activities associated therewith, including, but not limited to, pedestrian or vehicular traffic, landscaping, and routine maintenance of landscaped areas, which do not cause or result in the disturbance or the re-location of contaminated soil located at 3 to 15 feet below surface grade;

(ii) Short-term (three months or less) underground utility or construction activities including, but not limited to, excavation (including emergency repair of underground utility lines), which are likely to disturb contaminated soil located at 3 to 15 feet below surface grade, provided that such activities are conducted in accordance with Obligations/Conditions (i) and (ii) in Section 3 of this Activity and Use Limitation Opinion ("Opinion"), the soil management procedures of the MCP cited at 310 CMR 40.0030, and all applicable worker health and safety practices pursuant to 310 CMR 40.0018;

(iii) Activities and uses which are not identified in this Opinion as being inconsistent with maintaining a condition of No Significant Risk; and

(iv) Such other activities and uses which in the Opinion of an LSP, shall present no greater risk of harm to health safety, public welfare, or the environment than the activities and uses set forth in this Paragraph.

Activities and Uses Inconsistent with AUL Opinion

(i) Use of the Site as a residence, school (with the exception of adult education), daycare, nursery, recreational area (such as a park or athletic fields), or any other use at which a child's presence is likely;

(ii) Any activity on the Site including, but not limited to, excavation, which is likely to disturb contaminated soil located at 3 to 15 feet below surface grade associated with underground utility or construction work, without prior development and implementation of a Soil Management Plan and a Health and Safety Plan in accordance with Obligations (i) and (ii) of Section 3 of the AUL;

(iii) Any activity on the Site which is likely to disturb contaminated soil located at 3 to 15 feet below surface grade for a period of time greater than three months, unless such activity is first evaluated by an LSP who renders an Opinion stating that such activity is consistent with maintaining a condition of No Significant Risk and that such activity is conducted in accordance with Obligations (i) and (ii) of Section 3 of this AUL; and

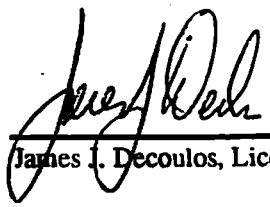
(iv) Relocation of contaminated soil located at 3 to 15 feet below surface grade on the Site, unless such relocation is first evaluated by an LSP who renders an Opinion stating that such relocation is consistent with maintaining a condition of No Significant Risk.

Obligations and Conditions

(i) A Soil Management Plan must be prepared by a Licensed Site Professional (LSP) prior to the commencement of any activity which is likely to disturb contaminated soil located at 3 to 15 feet below surface grade on the Site. The Soil Management Plan should describe appropriate soil management, characterization, storage, transport and disposal procedures in accordance with the provisions of the MCP cited at 310 CMR 40.0030 et seq. Workers who may come in contact with the contaminated soil should be appropriately trained on the requirements of the Plan, and the Plan must remain available on-site throughout the course of the project;

(ii) A Health and Safety Plan must be prepared and implemented prior to the commencement of any activity which may result in the disturbance of contaminated soil located at 3 to 15 feet below surface grade on the Site. The Health and Safety Plan should be prepared by a Certified Industrial Hygienist or other qualified individual appropriately trained in worker health and safety procedures and requirements. The Plan should specify the type personal protection, engineering controls, and environmental monitoring necessary to prevent worker and other potential receptor exposures to contaminated soil through ingestion, dermal contact, and inhalation. Workers who may come in contact with the contaminated soil should be appropriately trained on the requirements of the Plan, and the Plan must remain available on-site throughout the course of the project; and

(iii) The contaminated soil located at 3 to 15 feet below surface grade on the Site must remain at depth and may not be relocated, unless such activity is first evaluated by an LSP who renders an Opinion which states that such activity poses no greater risk of harm to health, safety, public welfare, or the environment and ensures that a condition of No Significant Risk is maintained.



James J. Decoulos, Licensed Site Professional

DATE: June 14, 2002

Massachusetts Department of Environmental Protection **BWSC-114**

Bureau of Waste Site Cleanup

Release Tracking Number

3 - 15188

ACTIVITY & USE LIMITATION (AUL) OPINION FORM

Pursuant to 310 CMR 40.1070 - 40.1084 (Subpart J)

COMPLETE THIS FORM AND ATTACH AS AN EXHIBIT TO THE AUL DOCUMENT TO BE RECORDED AND/OR REGISTERED WITH THE REGISTRY OF DEEDS AND/OR LAND REGISTRATION OFFICE.

A. LOCATION OF DISPOSAL SITE AND PROPERTY SUBJECT TO AUL:

Disposal Site Name: Speedy Lube

Street: 633 North Main Street Location

City/Town: Randolph ZIP Code: 02368

Address of property subject to AUL, if different than above. Street:

City/Town: ZIP Code:

B. THIS FORM IS BEING USED TO: (check one)

- [x] Provide the LSP Opinion for a **Notice of Activity and Use Limitation**, pursuant to 310 CMR 40.1074 (complete all sections of this form).
- [ ] Provide the LSP Opinion for an **Amended Notice of Activity and Use Limitation**, pursuant to 310 CMR 40.1081(4) (complete all sections of this form).
- [ ] Provide the LSP Opinion for a **Termination of a Notice of Activity and Use Limitation**, pursuant to 310 CMR 40.1083(3) (complete all sections of this form).
- [ ] Provide the LSP Opinion for a **Grant of Environmental Restriction**, pursuant to 310 CMR 40.1071, (complete all sections of this form).
- [ ] Provide the LSP Opinion for an **Amendment of Environmental Restriction**, pursuant to 310 CMR 40.1081(3) (complete all sections of this form).
- [ ] Provide the LSP Opinion for a **Release of Environmental Restriction**, pursuant to 310 CMR 40.1083(2) (complete all sections of this form).

C. LSP OPINION:

I attest under the pains and penalties of perjury that I have personally examined and am familiar with this submittal, including any and all documents accompanying this submittal. In my professional opinion and judgment based upon application of (i) the standard of care in 309 CMR 4.02(1), (ii) the applicable provisions of 309 CMR 4.02(2) and (3), and (iii) the provisions of 309 CMR 4.03(5), to the best of my knowledge,

> *if Section B indicates that a **Notice of Activity and Use Limitation** is being registered and/or recorded*, the Activity and Use Limitation that is the subject of this submittal (i) is being provided in accordance with the applicable provisions of M.G.L. c. 21E and 310 CMR 40.0000 and (ii) complies with 310 CMR 40.1074(1)(b);

> *if Section B indicates that an **Amended Notice of Activity and Use Limitation** is being registered and/or recorded*, the Activity and Use Limitation that is the subject of this submittal (i) is being provided in accordance with the applicable provisions of M.G.L. c. 21E and 310 CMR 40.0000 and (ii) complies with 310 CMR 40.1080(1) and 40.1081(1);

> *if Section B indicates that a **Termination of a Notice of Activity and Use Limitation** is being registered and/or recorded*, the Activity and Use Limitation that is the subject of this submittal (i) is being provided in accordance with the applicable provisions of M.G.L. c. 21E and 310 CMR 40.0000 and (ii) complies with 310 CMR 40.1083(3)(a);

> *if Section B indicates that a **Grant of Environmental Restriction** is being registered and/or recorded*, the Activity and Use Limitation that is the subject of this submittal (i) is being provided in accordance with the applicable provisions of M.G.L. c. 21E and 310 CMR 40.0000 and (ii) complies with 310 CMR 40.1071(1)(b);

> *if Section B indicates that an **Amendment to a Grant of Environmental Restriction** is being registered and/or recorded*, the Activity and Use Limitation that is the subject of this submittal (i) is being provided in accordance with the applicable provisions of M.G.L. c. 21E and 310 CMR 40.0000 and (ii) complies with 310 CMR 40.1080(1) and 40.1081(1);

> *if Section B indicates that a **Release of Grant of Environmental Restriction** is being registered and/or recorded*, the Activity and Use Limitation that is the subject of this submittal (i) is being provided in accordance with the applicable provisions of M.G.L. c. 21E and 310 CMR 40.0000 and (ii) complies with 310 CMR 40.1083(3)(a).

I am aware that significant penalties may result, including, but not limited to, possible fines and imprisonment, if I submit information which I know to be false, inaccurate or materially incomplete.

- [ ] Check here if the Response Action(s) on which this opinion is based, if any, are (were) subject to any order(s), permit(s) and/or approval(s) issued by DEP or EPA. If the box is checked, you MUST attach a statement identifying the applicable provisions thereof.

SECTION C IS CONTINUED ON THE NEXT PAGE.

Massachusetts Department of Environmental Protection
Bureau of Waste Site Cleanup

BWSC-114

ACTIVITY & USE LIMITATION (AUL) OPINION FORM

Pursuant to 310 CMR 40.1070 - 40.1084 (Subpart J)

Release Tracking Number: 3 - 15188

C. LSP OPINION: (continued)

LSP Name: James J. Decoulos LSP #: 9360 Stamp:

Telephone 978-532-8154 Ext.:

FAX: 978-359-6034

LSP Signature:

Date: 6/14/02

COMMONWEALTH OF MASSACHUSETTS
JAMES
J.
DECOULOS
No. 9360
REGISTERED
LICENSED SITE PROFESSIONAL

YOU MUST COMPLETE ALL RELEVANT SECTIONS OF THIS FORM OR DEP MAY FIND THE DOCUMENT TO BE INCOMPLETE.