



**ENVIRONMENTAL COMPLIANCE SERVICES, INC.**

DEC 5 10 51 AM '97

December 3, 1997

Chuck Schwer  
Sites Management Section  
VT DEC Waste Management Division  
103 South Main Street/West Office  
Waterbury, VT 05671-0404

**RE: Pittsfield Fire Department  
Site #92-1551**

Dear Mr. Schwer:

On behalf of the Town of Pittsfield, Environmental Compliance Services, Inc. (ECS) is pleased to submit the results of soil screening and groundwater analyses conducted at the above-referenced site.

If you have any questions or require further information, please contact me at 802-257-1195.

Sincerely,  
Environmental Compliance Services, Inc.

David C. Balk, P.G.  
Project Manager

Enclosure

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**ENVIRONMENTAL COMPLIANCE SERVICES, INC.**

November 21, 1997  
Job # 40070  
Document # Summary. Lt

Suana Bicek  
Town of Pittsfield  
PO Box 651  
Pittsfield VT 05762

Re: Pittsfield Fire Department

Dear Ms. Bicek:

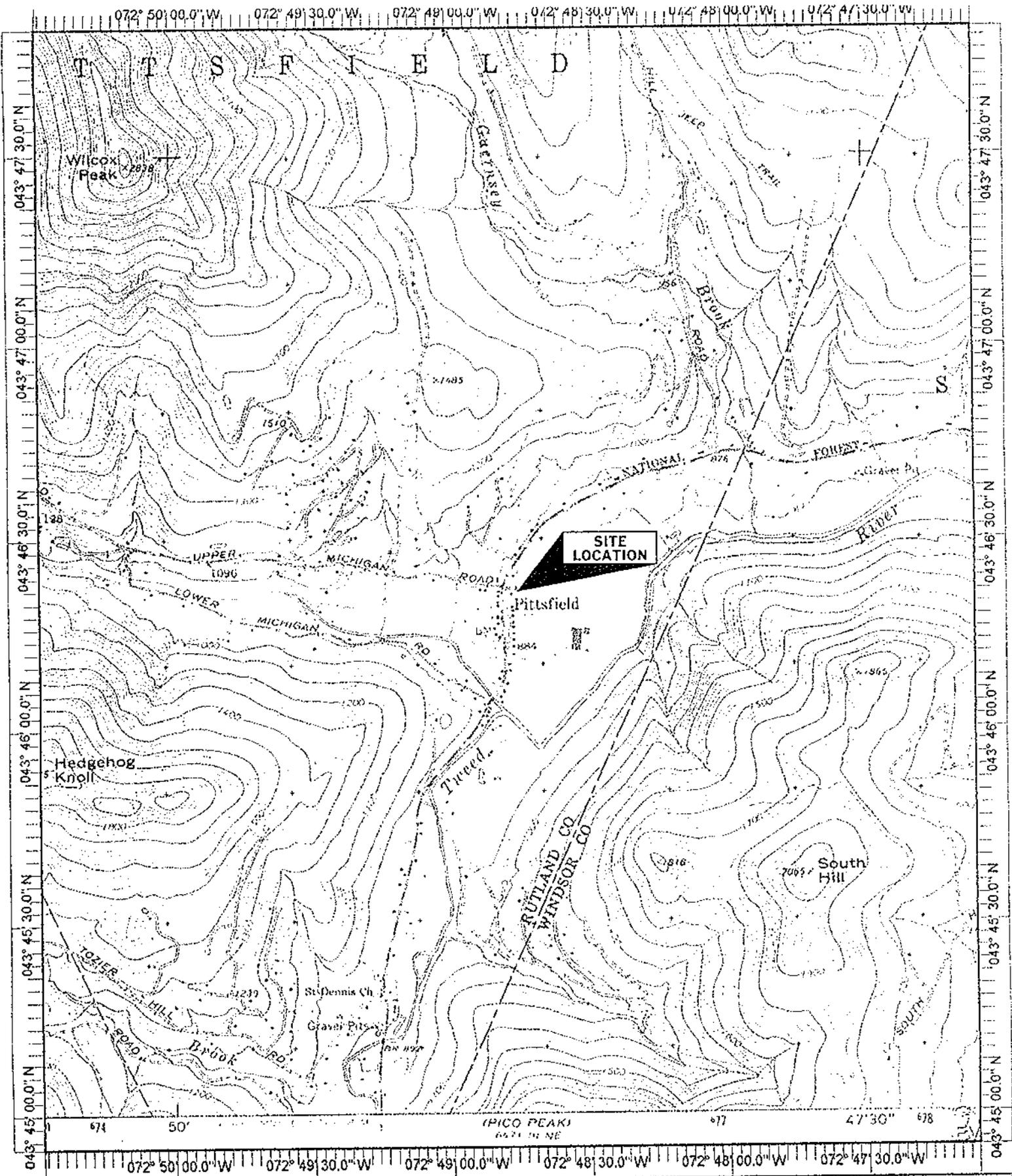
On October 31, 1997, I was onsite to oversee the location of testpits in and around the former tank grave at the Pittsfield Fire Department located on Route 100 (see Site Locus map enclosed). During excavation of the testpits, soils were screened with a Photovac Model 2020 Photoionization Detector (PID) for the presence of Volatile Organic Compound (VOC) concentrations using bag head space screening protocol. No contamination was detected during the excavations which were dug to the depth of 9 feet (see Site Sketch map enclosed). Soils consisted of brown sand, gravel, and large cobbles with some boulders to the depth of 8 feet. Significant iron oxidation and groundwater were encountered at 7 feet. A clay layer was evident from 8 feet to the extent of the testpit.

The onsite building is built on slab and is not occupied. The Bonin residence to the north of the site is approximately 300 feet topographically upgradient. A drilled well over 100 feet deep supplies the Bonin residence with water. The Pitt Stop Store well to the south is located approximately 150 feet from the tank grave, it should be noted that the Pitt Stop Store is a gas station. Groundwater collected from both wells and the tank grave was sampled for VOCs via EPA Method 8020 (see enclosed lab data). The remaining upgradient wells were not sampled due to the lack of detectable contamination in the testpits as well as the substantial distance to the well head.

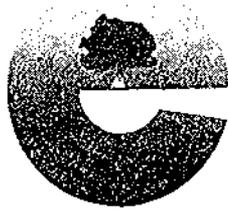
If there are any questions regarding this letter please do not hesitate to contact me at (802) 257-1195.

Sincerely,  
ENVIRONMENTAL COMPLIANCE SERVICES, INC.

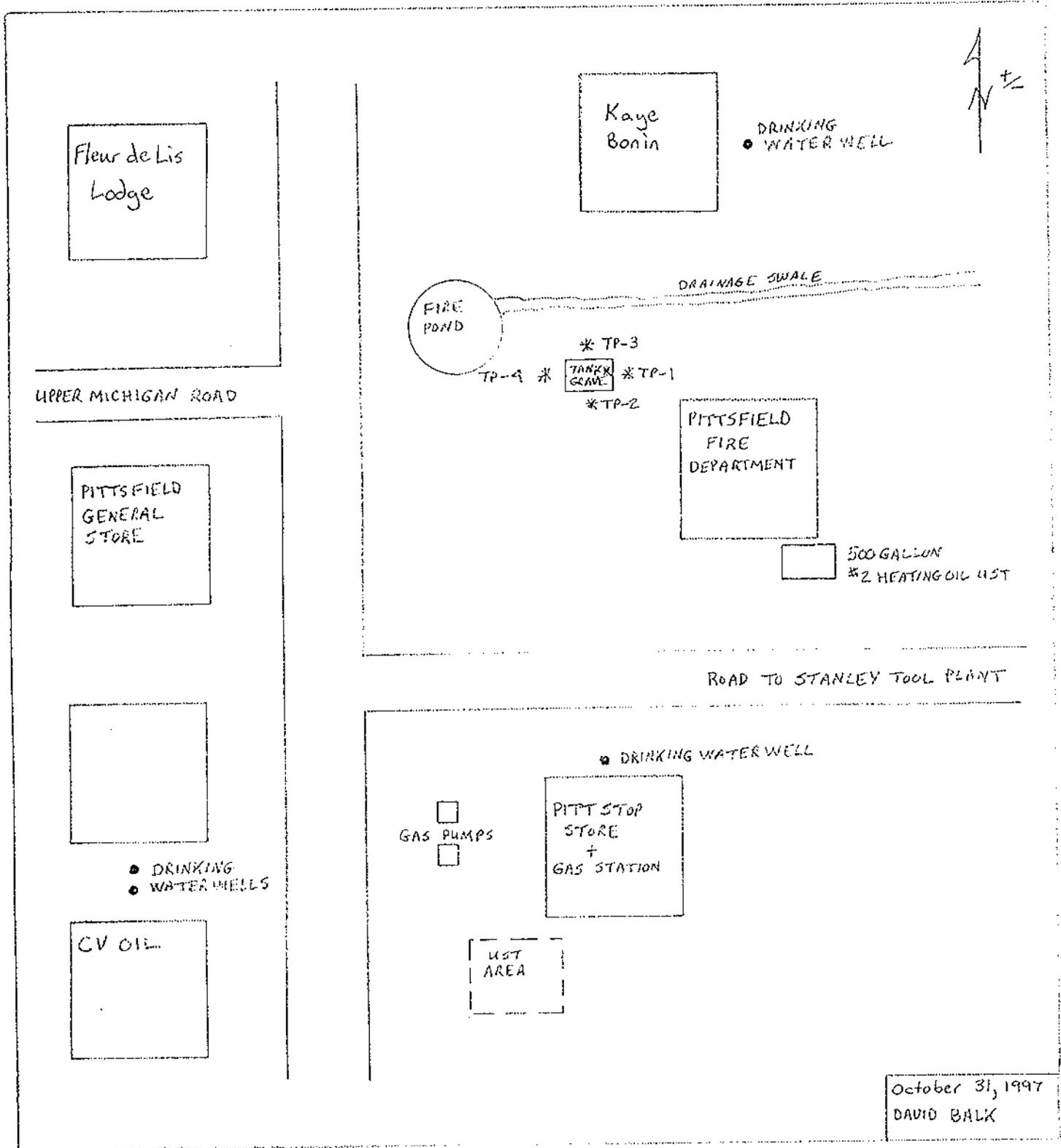
David Balk, P.G.  
Project Manager



|  |  |
|--|--|
| <p>Name: ROCHESTER<br/>         Date: 10/27/97<br/>         Scale: 1 inch equals 2000 feet</p> | <p>Location: 043° 46' 22.2" N 072° 48' 47.6" W<br/>         Caption: Pittsfield Fire Department<br/>         Route 100<br/>         Pittsfield, VT</p> |
|--|--|



**ENVIRONMENTAL COMPLIANCE SERVICES, INC.**





**SPECTRUM ANALYTICAL, INC.**

Massachusetts Certification M-MA 138  
Connecticut Approval # PH 0777  
Rhode Island # 98 & Maine # n/a  
New Hampshire ID # 253896  
New York ID # 11393  
Florida HRS87448

*ECS, Inc.  
157 Old Guilford Road, #6  
Brattleboro, VT 05301*

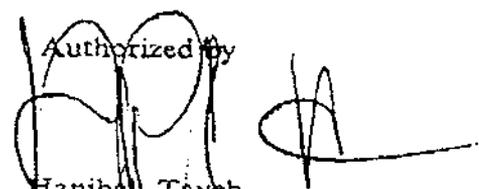
*November 8, 1997*

*Attn: Susan Pittenger*

**Client Project No.: 40030**

**Location: Pittsfield Fire Dpt-Ptsfld, VT**

| <u>Lab ID No.</u> | <u>Client ID</u> | <u>Analysis Requested</u> |
|-------------------|------------------|---------------------------|
| AA89636           | TANKGRAV         | EPA Method 602            |
| AA89637           | BONIN            | EPA Method 602            |
| AA89638           | PITTSTOP         | EPA Method 602            |
| AA89639           | TRIP             | EPA Method 602            |

Authorized by  
  
 Hanibal Tayeh  
 President/Laboratory Director

**ENVIRONMENTAL ANALYSES**

**SPECTRUM ANALYTICAL, INC.****Laboratory Report**

Sample ID: TANKGRAV  
Lab ID No: AA89636

Location: Pittsfield Fire Dpt-Pittsfield, VT  
Client Job No: 40030

Matrix: Water  
Sampled on 10/31/97 by ECS-VT  
Received on 11/03/97 by MBR  
QC and Data Review by

Preservative: Refrigeration, HCl  
Container: 2 VOA Vials  
Condition of Sample as Received: Satisfactory  
Delivered by: Courier

**Volatile Aromatics****EPA Method 602/8020**

| Parameter                  | Result (ug/L) | MDL | Analyzed | Analyst |
|----------------------------|---------------|-----|----------|---------|
| Benzene                    | Not detected  | 1   | 11/08/97 | NB      |
| Toluene                    | Not detected  | 1   | 11/08/97 | NB      |
| Ethylbenzene               | Not detected  | 1   | 11/08/97 | NB      |
| m,p-Xylenes                | Not detected  | 4   | 11/08/97 | NB      |
| o-Xylene                   | Not detected  | 1   | 11/08/97 | NB      |
| Chlorobenzene              | Not detected  | 1   | 11/08/97 | NB      |
| 1,2-Dichlorobenzene        | Not detected  | 1   | 11/08/97 | NB      |
| 1,3-Dichlorobenzene        | Not detected  | 1   | 11/08/97 | NB      |
| 1,4-Dichlorobenzene        | Not detected  | 1   | 11/08/97 | NB      |
| Methyl-t-butyl-ether       | Not detected  | 1   | 11/08/97 | NB      |
| TFT Surrogate Recovery (%) | 118           |     | 11/08/97 | NB      |
| BFB Surrogate Recovery (%) | Not detected  |     | 11/08/97 | NB      |

**SPECTRUM ANALYTICAL, INC.**

## Laboratory Report

Sample ID: BONIN  
Lab ID No: AA89637Location: Pittsfield Fire Dpt-Ptssfld,VT  
Client Job No: 40030Matrix: Water  
Sampled on 10/31/97 by ECS-VT  
Received on 11/03/97 by MBR  
QC and Data Review byPreservative: Refrigeration, HCl  
Container: 2 VOA Vials  
Condition of Sample as Received: Satisfactory  
Delivered by: Courier**Volatile Aromatics**

EPA Method 602/8020

| Parameter                  | Result (ug/L) | MDL | Analyzed | Analyst |
|----------------------------|---------------|-----|----------|---------|
| Benzene                    | Not detected  | 1   | 11/08/97 | NB      |
| Toluene                    | Not detected  | 1   | 11/08/97 | NB      |
| Ethylbenzene               | Not detected  | 1   | 11/08/97 | NB      |
| m,p-Xylenes                | Not detected  | 2   | 11/08/97 | NB      |
| o-Xylene                   | Not detected  | 1   | 11/08/97 | NB      |
| Chlorobenzene              | Not detected  | 1   | 11/08/97 | NB      |
| 1,2-Dichlorobenzene        | Not detected  | 1   | 11/08/97 | NB      |
| 1,3-Dichlorobenzene        | Not detected  | 1   | 11/08/97 | NB      |
| 1,4-Dichlorobenzene        | Not detected  | 1   | 11/08/97 | NB      |
| Methyl-t-butyl-ether       | Not detected  | 1   | 11/08/97 | NB      |
| TFT Surrogate Recovery (%) | 122           |     | 11/08/97 | NB      |
| BFB Surrogate Recovery (%) | Not detected  |     | 11/08/97 | NB      |

**SPECTRUM ANALYTICAL, INC.**  
Laboratory Report

Sample ID: **PITTSTOP**  
Lab ID No: **AA89638**

Location: **Pittsfield Fire Dpt-Ptssfld,VT**  
Client Job No: **40030**

Matrix: Water  
Sampled on 10/31/97 by ECS-VT  
Received on 11/03/97 by MBR  
QC and Data Review by

Preservative: Refrigeration, HCl  
Container: 2 VOA Vials  
Condition of Sample as Received: Satisfactory  
Delivered by: Courier

**Volatile Aromatics**  
EPA Method 602/8020

| Parameter                  | Result (ug/L) | MDL | Analyzed | Analyst |
|----------------------------|---------------|-----|----------|---------|
| Benzene                    | Not detected  | 1   | 11/08/97 | NB      |
| Toluene                    | Not detected  | 1   | 11/08/97 | NB      |
| Ethylbenzene               | Not detected  | 1   | 11/08/97 | NB      |
| m,p-Xylenes                | Not detected  | 2   | 11/08/97 | NB      |
| o-Xylene                   | Not detected  | 1   | 11/08/97 | NB      |
| Chlorobenzene              | Not detected  | 1   | 11/08/97 | NB      |
| 1,2-Dichlorobenzene        | Not detected  | 1   | 11/08/97 | NB      |
| 1,3-Dichlorobenzene        | Not detected  | 1   | 11/08/97 | NB      |
| 1,4-Dichlorobenzene        | Not detected  | 1   | 11/08/97 | NB      |
| Methyl-t-butyl-ether       | Not detected  | 1   | 11/08/97 | NB      |
| TFT Surrogate Recovery (%) | 114           |     | 11/08/97 | NB      |
| BFB Surrogate Recovery (%) | Not detected  |     | 11/08/97 | NB      |

**SPECTRUM ANALYTICAL, INC.****Laboratory Report**

Sample ID: TRIP  
Lab ID No: AA89639

Location: Pittsfield Fire Dpt-Ptssfld,VT  
Client Job No: 40030

Matrix: Water  
Sampled on 10/31/97 by ECS-VT  
Received on 11/03/97 by MBR  
QC and Data Review by

Preservative: Refrigeration, HCl  
Container: 1 VOA Vial  
Condition of Sample as Received: Satisfactory  
Delivered by: Courier

**Volatile Aromatics**

EPA Method 602/8020

| Parameter                  | Result (ug/L) | MDL | Analyzed | Analyst |
|----------------------------|---------------|-----|----------|---------|
| Benzene                    | Not detected  | 1   | 11/08/97 | NB      |
| Toluene                    | Not detected  | 1   | 11/08/97 | NB      |
| Ethylbenzene               | Not detected  | 1   | 11/08/97 | NB      |
| m,p-Xylenes                | Not detected  | 2   | 11/08/97 | NB      |
| o-Xylene                   | Not detected  | 1   | 11/08/97 | NB      |
| Chlorobenzene              | Not detected  | 1   | 11/08/97 | NB      |
| 1,2-Dichlorobenzene        | Not detected  | 1   | 11/08/97 | NB      |
| 1,3-Dichlorobenzene        | Not detected  | 1   | 11/08/97 | NB      |
| 1,4-Dichlorobenzene        | Not detected  | 1   | 11/08/97 | NB      |
| Methyl-t-butyl-ether       | Not detected  | 1   | 11/08/97 | NB      |
| TFT Surrogate Recovery (%) | 121           |     | 11/08/97 | NB      |
| BFB Surrogate Recovery (%) | Not detected  |     | 11/08/97 | NB      |

**Spectrum Analytical, Inc.**  
**Laboratory Report Supplement**

References

- Methods for the Determination of Organic Compounds in Drinking Water. EPA-600/4-88/039. EMSL 1988.
- Methods for Chemical Analysis of Water and Wastes. EPA 600/4-79-020. EMSL 1983.
- Methods for Organic Chemical Analysis of Municipal and Industrial Wastewater. EPA 600/4-82-057. EMSL 1982.
- Test Methods for Evaluating Solid Waste. Physical/Chemical Methods. EPA SW-846. 1986.
- Standard Methods for the Examination of Water and Wastes. APHA-AWWA-WPCF. 16th Edition. 1985.
- Standard Methods for Comparison of Waterborne Petroleum Oils by Gas Chromatography. ASTM D 3328. 1982.
- Oil Spill Identification System. U.S. Coast Guard CG-D-52-77. 1977.
- Handbook for Analytical Quality Control in Water and Wastewater Laboratories. EPA 600/4-79-019. EMSL 1979.
- Choosing Cost-Effective QA/QC (Quality Assurance/Quality Control) Programs for Chemical Analyses. EPA-600/4-85/056. EMSL 1985.

Report Notations

|                                 |   |  |
|---------------------------------|---|--|
| Not Detected, Not Det, ND or nd | = | The compound was not detected at a concentration equal to or above the established method detection limit. |
| NC                              | = | Not Calculated   |
| NCL                             | = | EPA Maximum Contamination Level  |
| VOA                             | = | Volatile Organic Analysis  |
| BFB                             | = | 4-Bromofluorobenzene (an EPA 624 Surrogate)  |
| p-DFB                           | = | 1,4-Difluorobenzene (an EPA 624 Surrogate)   |
| CLB-d5                          | = | Chlorobenzene-d5 (an EPA 624 Surrogate)  |
| BCP                             | = | 2-Bromo-1-chloropropane (an EPA 601 Surrogate)   |
| TFT                             | = | a,a,e-Trifluorotoluene (an EPA 602 Surrogate)  |
| Decachlorobiphenyl              | = | (an EPA 608/8080 Surrogate)  |

Definitions

**Surrogate Recovery** = The recovery (expressed as a percent) of a non method analyte (see surrogates listed above) added to the sample for the purpose of monitoring system performance.

**Matrix Spike Recovery** = The recovery (expressed as a percent) of method analytes added to the sample for the purpose of determining any effect of sample composition on analyte recovery.

**Laboratory Replicate** = Two sample aliquots taken in the analytical laboratory and analyzed separately with identical procedures. Analyses of laboratory duplicates give a measure of the precision associated with laboratory procedures, but not with sample collection, preservation, or storage procedures.

**Field Duplicate** = Two separate samples collected at the same time and place under identical circumstances and treated exactly the same throughout field and laboratory procedures. Analysis of Field duplicates give a measure of the precision associated with sample collection, preservation and storage, as well as with laboratory procedures.

**Relative Percent Difference (%RPD)** = The precision measurement obtained on duplicate/replicate analyses. %RPD is calculated as:

$$\%RPD = \frac{(\text{value1} - \text{value2})}{\text{avg. value}} * 100\%$$

