

99.067



April 6, 1999

Mr. Marc Roy
Department of Environmental Conservation
Waste Management Division
103 South Street- West Building
Waterbury, VT 05671-0404

RE: Emergency Spill Response; Jean Clark Residence; Well Water Sampling Analysis
Route 14, East Montpelier, DEC Spill # 99-06~~8~~⁷ (NCES Project # 2119)

Dear Mr. Roy:

North Country Environmental Services, Inc., (NCES) is pleased to present the following summary of potable water well analysis at the Clark and Brown residences in East Montpelier. The potable water wells at both residences were tested in order to confirm the condition of the groundwater. All well water sampling was performed in accordance with your faxed letter dated March 8, 1999.

On March 12, 1999, a representative of NCES was on site to sample the Clark's and neighboring Brown's drinking water supply. NCES personnel allowed the drinking water supplies at both residences to run for approximately 5-10 minutes before samples were taken for lab analysis. No discernable visual or olfactory evidence of petroleum products was noticed at either sampling location. Samples were taken from each residence for Volatile Organic Compounds (VOC) 8260B and 8100m Total Petroleum Hydrocarbons (TPH) Analysis. All samples were properly preserved and sent under chain of custody to Green Mountain Laboratories, Inc., of Middlesex, Vermont (a copy of the laboratory report is attached).

In a laboratory report received March 31, 1999, no petroleum compounds were detected above Vermont Groundwater Enforcement Standards. TPH results for both the Clark residence and the Brown residence, were less than 1 mg/l (PPM). In addition no detectable VOC compounds were detected in either well.

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Based on field observations and spill response activities, NCEC stands by its original recommendation for additional site investigation to determine the extent of soil contamination and assess the impact (if any) to groundwater. Should you have any questions regarding this information, please contact me at the letterhead address and telephone number.

Respectfully,

North Country Environmental Services, Inc.



Thomas A. Benoit
Environmental Engineer

99-067

GREEN MOUNTAIN LABORATORIES, INC.27 Cross Road
Middlesex, Vermont 05602

Phone (802) 223 - 1468

Fax (802) 223 - 8688

LABORATORY RESULTS

CLIENT NAME:	North Country Environmental Services	REFERENCE NO.:	5025
ADDRESS:	31 Granite Street, Suite 8 Milford, MA 01757	PROJECT NO.:	2119
SAMPLE LOCATION:	Jean Clark Residence	DATE OF SAMPLE:	03/12/99
SAMPLER:	Thomas Benoit	DATE OF RECEIPT:	03/12/99
ATTENTION:	P. Aldrich	DATE OF ANALYSIS:	03/19/99
		DATE OF REPORT:	03/22/99

Pertaining to the analyses of specimens submitted under the accompanying chain of custody form, please note the following:

- Samples submitted for analysis were preserved with HCl. However, all samples arrived at the laboratory with a pH of greater than two.
- Specimens were processed and examined according to the procedures outlined in the specified method.
- Holding times were honored.
- Instruments were appropriately tuned and calibrations were checked with the frequencies required in the specified method.
- Blank contamination was not observed at levels interfering with the analytical results.
- In the initial calibration Hexachlorobutadiene exceeded fifteen percent relative standard deviation (RSD). However, the average percent RSD of all target analytes was 7.3 percent.
- Continuing Calibration standards were monitored at intervals indicated in the specified method. The compounds Naphthalene and 1,2,3-Trichlorobenzene exceeded twenty percent deviation (D) from the initial calibration for the standard acquired during the analytical window. However, neither of these compounds were detected in the samples and the average percent D of all target analytes from the initial calibration was 6.1 percent.
- The efficiency of analyte recovery for individual samples was monitored by the addition of surrogate analyte to all samples, standards, and blanks. Surrogate recoveries were found to be within laboratory QA/QC acceptance limits, unless noted otherwise.

Reviewed by:

Sarah Hallock
Quality Assurance Officer

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Green Mountain Laboratories, Inc.27 Cross Road
Middlesex, Vermont 05602

Phone (802) 223-1488

Fax (802) 223-8688

LABORATORY RESULTS

CLIENT NAME:	North Country Environmental	REF #:	5025
CLIENT ADDRESS:	31 Granite Street, Suite 8	PROJECT NO.:	2119
	Milford, MA 01757	DATE OF SAMPLE:	03/12/99
PROJECT NAME:	Jean Clark Residence	DATE OF RECEIPT:	03/12/99
SAMPLER:	Thomas Benoit	DATE OF ANALYSIS:	03/18/99
ATTENTION:	P. Aldrich	DATE OF REPORT:	03/28/99

Total Petroleum Hydrocarbons (TPH) by EPA Method 8100M (mg/L - ppm)

Sample	PQL	TPH Results
Jean Clark Residence S-2	1.0	<1.0
Brown Residence S-4	1.0	<1.0

PQL= Practical Quantitation Limit

Reviewed by:

Sarah Hallock
Quality Assurance Officer

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GREEN MOUNTAIN LABORATORIES, INC.

27 Cross Road
Middlesex, Vermont 05602

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GML REF. #: 5025
STATION: JEAN CLARK RESIDENCE S-1
ANALYSIS DATE: 03/19/99
DATE SAMPLED: 03/12/99
SAMPLE TYPE: WATER

METHOD 8260B

PARAMETERS	PQL	µg/L	PARAMETERS	PQL	µg/L
Benzene	2	ND	trans-1,3-Dichloropropene	2	ND
Bromobenzene	2	ND	Ethylbenzene	2	ND
Bromochloromethane	5	ND	Hexachlorobutadiene	5	ND
Bromodichloromethane	2	ND	Isopropylbenzene	2	ND
Bromoform	5	ND	p-Isopropyltoluene	2	ND
Bromomethane	5	ND	Methyl-t-butyl-ether (MTBE)	5	ND
n-Butylbenzene	2	ND	Methylene Chloride	5	ND
sec-Butylbenzene	2	ND	Naphthalene	5	ND
tert-Butylbenzene	2	ND	n-Propylbenzene	2	ND
Carbon Tetrachloride	2	ND	Styrene	2	ND
Chlorobenzene	2	ND	1,1,1,2-Tetrachloroethane	2	ND
Chloroethane	5	ND	1,1,2,2-Tetrachloroethane	5	ND
Chloroform	5	ND	Tetrachloroethylene	2	ND
Chloromethane	2	ND	Toluene	2	ND
o-Chlorotoluene	2	ND	1,2,3-Trichlorobenzene	5	ND
p-Chlorotoluene	2	ND	1,2,4-Trichlorobenzene	5	ND
1,2-Dibromo-3-chloropropane	5	ND	1,1,1-Trichloroethane	5	ND
Dibromochloromethane	2	ND	1,1,2-Trichloroethane	2	ND
1,2-Dibromoethane (EDB)	2	ND	Trichloroethylene (TCE)	2	ND
Dibromomethane	2	ND	Trichlorofluoromethane	5	ND
o-Dichlorobenzene	2	ND	1,2,3-Trichloropropane	5	ND
m-Dichlorobenzene	2	ND	1,2,4-Trimethylbenzene	2	ND
p-Dichlorobenzene	2	ND	1,3,5-Trimethylbenzene	2	ND
Dichlorodifluoromethane	5	ND	Vinyl Chloride	5	ND
1,1-Dichloroethane	5	ND	o-Xylene	2	ND
1,2-Dichloroethane	2	ND	m + p-Xylene	4	ND
1,1-Dichloroethylene	5	ND			
cis-1,2-Dichloroethylene	5	ND	Surrogates:		
trans-1,2-Dichloroethylene	5	ND	Dibromofluoromethane	98.7 %	
1,2-Dichloropropane	2	ND	Toluene-D8	102 %	
1,3-Dichloropropane	2	ND	4-Bromofluorobenzene	100 %	
2,2-Dichloropropane	5	ND			
1,1-Dichloropropene	5	ND			
cis-1,3-Dichloropropene	2	ND			

ND - Not Detected

BPQL = Below Practical Quantitation Limits

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GREEN MOUNTAIN LABORATORIES, INC.

27 Cross Road

Middlesex, Vermont 05602

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Fax (802) 223 - 8688

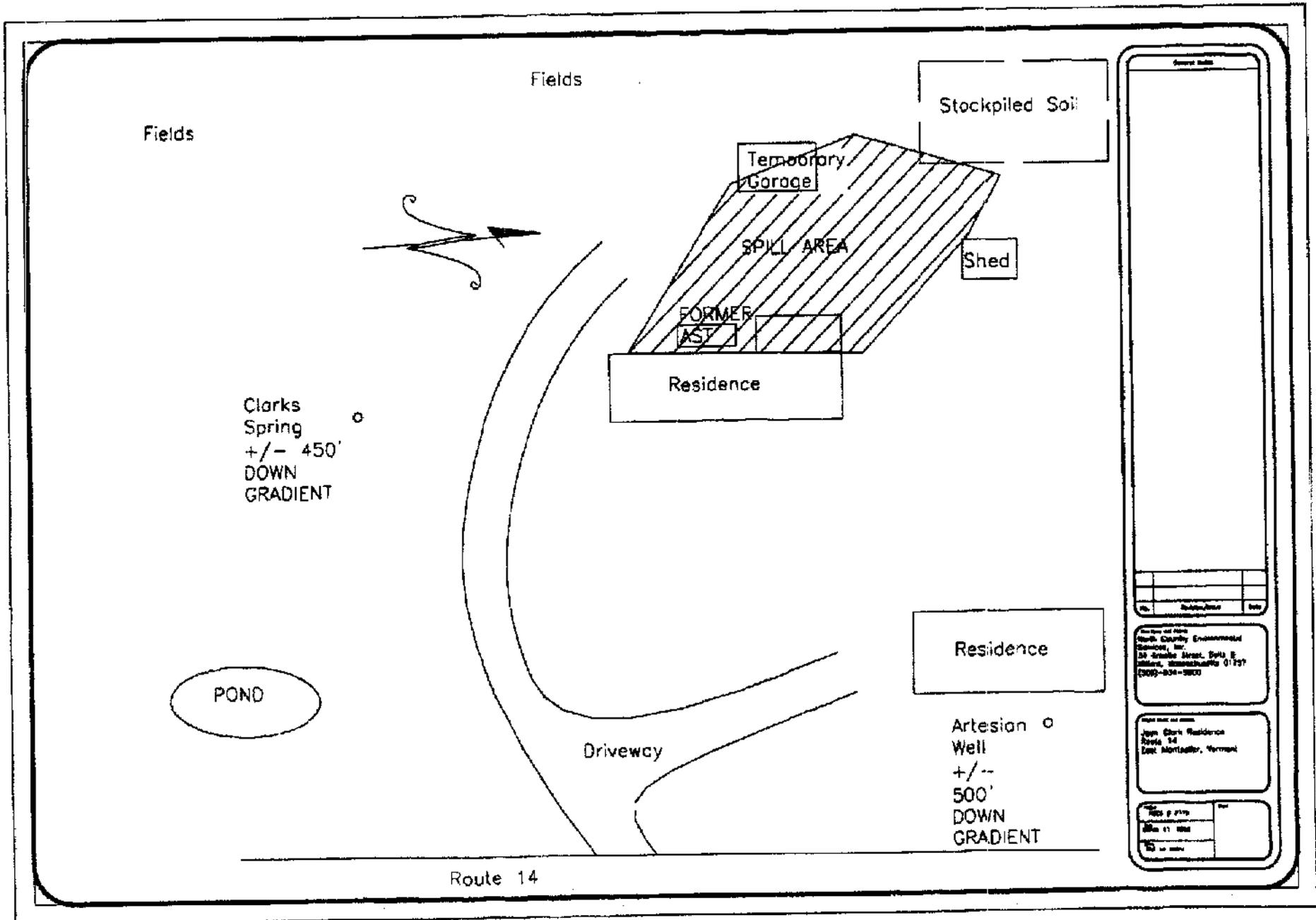
GML REF. #: 5025
 STATION: BROWN RESIDENCE S-3
 ANALYSIS DATE: 03/19/99
 DATE SAMPLED: 03/12/99
 SAMPLE TYPE: WATER

METHOD 8260B

PARAMETERS	PQL	µg/L	PARAMETERS	PQL	µg/L
Benzene	2	ND	trans-1,3-Dichloropropene	2	ND
Bromobenzene	2	ND	Ethylbenzene	2	ND
Bromochloromethane	5	ND	Hexachlorobutadiene	5	ND
Bromodichloromethane	2	ND	Isopropylbenzene	2	ND
Bromoform	5	ND	p-Isopropyltoluene	2	ND
Bromomethane	5	ND	Methyl-t-butyl-ether (MTBE)	5	ND
n-Butylbenzene	2	ND	Methylene Chloride	5	ND
sec-Butylbenzene	2	ND	Naphthalene	5	ND
tert-Butylbenzene	2	ND	n-Propylbenzene	2	ND
Carbon Tetrachloride	2	ND	Styrene	2	ND
Chlorobenzene	2	ND	1,1,1,2-Tetrachloroethane	2	ND
Chloroethane	5	ND	1,1,2,2-Tetrachloroethane	5	ND
Chloroform	5	ND	Tetrachloroethylene	2	ND
Chloromethane	2	ND	Toluene	2	ND
o-Chlorotoluene	2	ND	1,2,3-Trichlorobenzene	5	ND
p-Chlorotoluene	2	ND	1,2,4-Trichlorobenzene	5	ND
1,2-Dibromo-3-chloropropane	5	ND	1,1,1-Trichloroethane	5	ND
Dibromochloromethane	2	ND	1,1,2-Trichloroethane	2	ND
1,2-Dibromoethane (EDB)	2	ND	Trichloroethylene (TCE)	2	ND
Dibromomethane	2	ND	Trichlorofluoromethane	5	ND
o-Dichlorobenzene	2	ND	1,2,3-Trichloropropane	5	ND
m-Dichlorobenzene	2	ND	1,2,4-Trimethylbenzene	2	ND
p-Dichlorobenzene	2	ND	1,3,5-Trimethylbenzene	2	ND
Dichlorodifluoromethane	5	ND	Vinyl Chloride	5	ND
1,1-Dichloroethane	5	ND	o-Xylene	2	ND
1,2-Dichloroethane	2	ND	m + p-Xylene	4	ND
1,1-Dichloroethylene	5	ND			
cis-1,2-Dichloroethylene	5	ND	Surrogates:		
trans-1,2-Dichloroethylene	5	ND	Dibromofluoromethane	97.3 %	
1,2-Dichloropropane	2	ND	Toluene-D8	104 %	
1,3-Dichloropropane	2	ND	4-Bromofluorobenzene	101 %	
2,2-Dichloropropane	5	ND			
1,1-Dichloropropene	5	ND			
cis-1,3-Dichloropropane	2	ND			

ND - Not Detected

BPQL = Below Practical Quantitation Limits



General Notes

No.	Description	Date

Prepared and Issued by:
 North County Environmental Services, Inc.
 24 Granite Street, Suite B
 Milford, Massachusetts 01757
 (508)-634-9800

Prepared for:
 John Clark Residence
 Route 14
 East Montpelier, Vermont

Date of Issue	
Scale	

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