

WILLIAM E.

**DAILEY** INC.

ESTABLISHED 1927

SMS# 98-2525



READY MIX CONCRETE • ASPHALT PAVEMENT • ROAD MATERIALS

February 24, 1999

Mr. Chuck Schwer  
VT Department of Environmental Conservation  
Waste Management Division  
103 South Main Street / West Bldg.  
Waterbury, VT 05671-0404

Feb 25 10 21 AM '99

RE: Results of oil recovery from temporary well, Wm. E. Dailey, Inc. Route 7A, Shaftsbury, VT Facility #73.

Dear Mr. Schwer:

These results are from the oil recovery process conducted at a temporary 4" ID PVC well constructed at the Wm. E. Dailey, Inc. yard in Shaftsbury, VT. As was discuss with you in November 1998 the recovery process was conducted using sorbent material in the temporary recovery well.

At the time of the UST removal, there was an isolated pocket of water that had infiltrated the ground around UST 1. This water had been trapped by the impermeable layer of clay like silt at the bottom of the excavation. It was into this isolated pocket of water that the residual fuel oil was released. The original estimated volume of residual fuel oil released in my estimation was incorrect. The actual release may have been much less as concluded from the recovery process.

At no point during the recovery process was there a measurable quantity of residual product in the recovery well. As the recovery process progressed there were noticeable reductions in the presents of residual product. However, the volume of water in the well decreased as a result of the recovery and not due to percolation. Furthermore, there are no visible indications of residual product down gradient from the recovery well.

Enclosed is a copy of the recovery log for your review. The recovery log and test sample results indicate that the potential risk to area receptors have been minimized and Griffin's recommendation for additional sampling in November 1999 is a logical approach to ensure reductions in dissolved petroleum compounds.

If you have any questions, concerns, comments about this matter please call me at 802-442-9923.

Sincerely,

James Logan  
Safety Director

Enclosure

RR1A - BOX 51  
ROUTE 7A

SHAFTSBURY, VERMONT 05262

802-442-9923  
FAX 442-9927

## Oil Recovery Shaftsbury UST

A temporary 4" ID PVC recovery well was installed at the oil release site on October 29, 1998. The Well is 19' 3" in depth from the top of the pipe. An absorbent boom was placed in the well at a depth of 18' 7" on November 2, 1998 to begin recovery measures. The following is a log of the recovery process.

DATE	TIME	INCHES OF WATER	THICKNESS OF OIL
11-2-98	16:30	17.5	Film
11-3-98	13:45	17	Film
11-4-98	14:15	17	Film
11-5-98	10:30	15	Film
11-6-98	11:00	14.5	Film
11-9-98	11:00	14	Film
11-10-98	11:15	14	Film (new absorbent boom was installed)
11-11-98	10:00	13.5	Film
11-12-98	10:30	13.5	Film
11-13-98	10:00	13.5	Slight Trace
11-16-98	9:45	13	Slight Trace
11-23-98	11:30	13	Slight Trace
11-30-98	9:00	13	Slight Trace
12-7-98	1:30	13	No visible sign
12-14-98	10:00	12.5	No visible sign
12-21-98	10:00	12.5	No visible sign
12-22-98	Griffin International, Inc. took samples for analysis		

**Note:**

At no time during the recovery process was there a measurable amount of free product in the temporary well.



107-3 12-22-98

February 19, 1999

Mr. James Logan  
William E. Dailey, Inc.  
RR 1A - Box 51  
Shaftsbury, VT 05262

RE: Report of Results of Monitoring Well Sampling and Sample Analysis, William Dailey Yard, Route 7A, Shaftsbury, VT, Facility #73.

Dear Mr. Logan:

This report discusses the results of sampling and analysis of a groundwater sample collected by a Griffin International, Inc., (Griffin) representative from a temporary 4" ID PVC recovery well at the William E. Dailey Yard, Shaftsbury, Vermont, on December 22, 1998. The temporary recovery well and gravel pack were installed within the boundary of the visible product plume of No. 2 fuel oil spilled during an underground storage tank (UST) removal on October 29, 1998. A Site Expressway notification form was submitted to the Vermont Department of Environmental Conservation (VTDEC) with the UST Closure report dated November 11, 1998, to initiate work. This sample was collected in accordance with the work plan dated November 20, 1998, verbally approved by Mr. Jim Logan of William E. Dailey on December 16, 1998. Verbal approval of the approach outlined in the November 20, 1998, work scope was given by Mr. Chuck Schwer of the VTDEC to Mr. Logan and reported to Mr. Timothy Kelly of Griffin by Mr. Logan in a telephone conversation on December 16, 1998.

Residual product was removed from the well using sorbent pads by Mr. Logan in the period between November 2, 1998, to December 16, 1998. On December 16, 1998, Mr. Logan verbally informed Griffin that no residual product had been observed in the well or recovered from the well for several weeks. Results of the product removal and well inspections will be forwarded to the VTDEC by Mr. Logan under separate cover.

The depth to the water in the recovery well was measured using an interface probe on December 22, 1998. No free phase product was present in the well on December 22, 1998. A groundwater sample was collected on December 22, 1998, using a disposable bailer. The groundwater sample was analyzed by EPA Method 8021B by Endyne, Inc., laboratory of Williston, Vermont, for

Mr. James Logan  
February 19, 1999  
Page 2

petroleum-related constituents including benzene, toluene, ethylbenzene, and xylenes (BTEX) compounds and methyl tertiary butyl ether (MTBE) and by Modified EPA Method 8100 for total petroleum hydrocarbons (TPHs). A trip blank quality control (QC) sample was also collected and analyzed by EPA Method 8021B. Analytical results are attached. Analytical results of the trip blank sample indicate that adequate Quality Assurance/ Quality Control was maintained throughout sample collection and analyses.

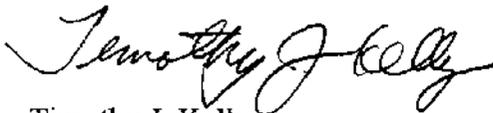
+ MTBE

1,2,4-Trimethylbenzene, 1,3,5-trimethylbenzene, and naphthalene were detected at concentrations above their respective Vermont Groundwater Enforcement Standards (VGES) in the samples collected from the temporary well. Select other petroleum-related compounds were detected at concentrations well below their applicable VGES. TPHs were detected at a concentration of 10.7 mg/L. There is no VGES for TPHs. The VGES have been added to the laboratory report for reference.

Based on the available data, the risk to area receptors, including the Paran Creek and an unnamed tributary to the Paran Creek, has been reduced due to the removal of free product from the environment. Based on the available data, Griffin recommends that one additional sample be collected from the temporary well in November of 1999 to confirm the reduction of the concentration of dissolved petroleum compounds in the temporary well. The sample should be analyzed by EPA Method 8021B. Recommendations for any additional work that is warranted will be made depending on the results of the sampling of the temporary well.

Please call me if you have any questions regarding these results.

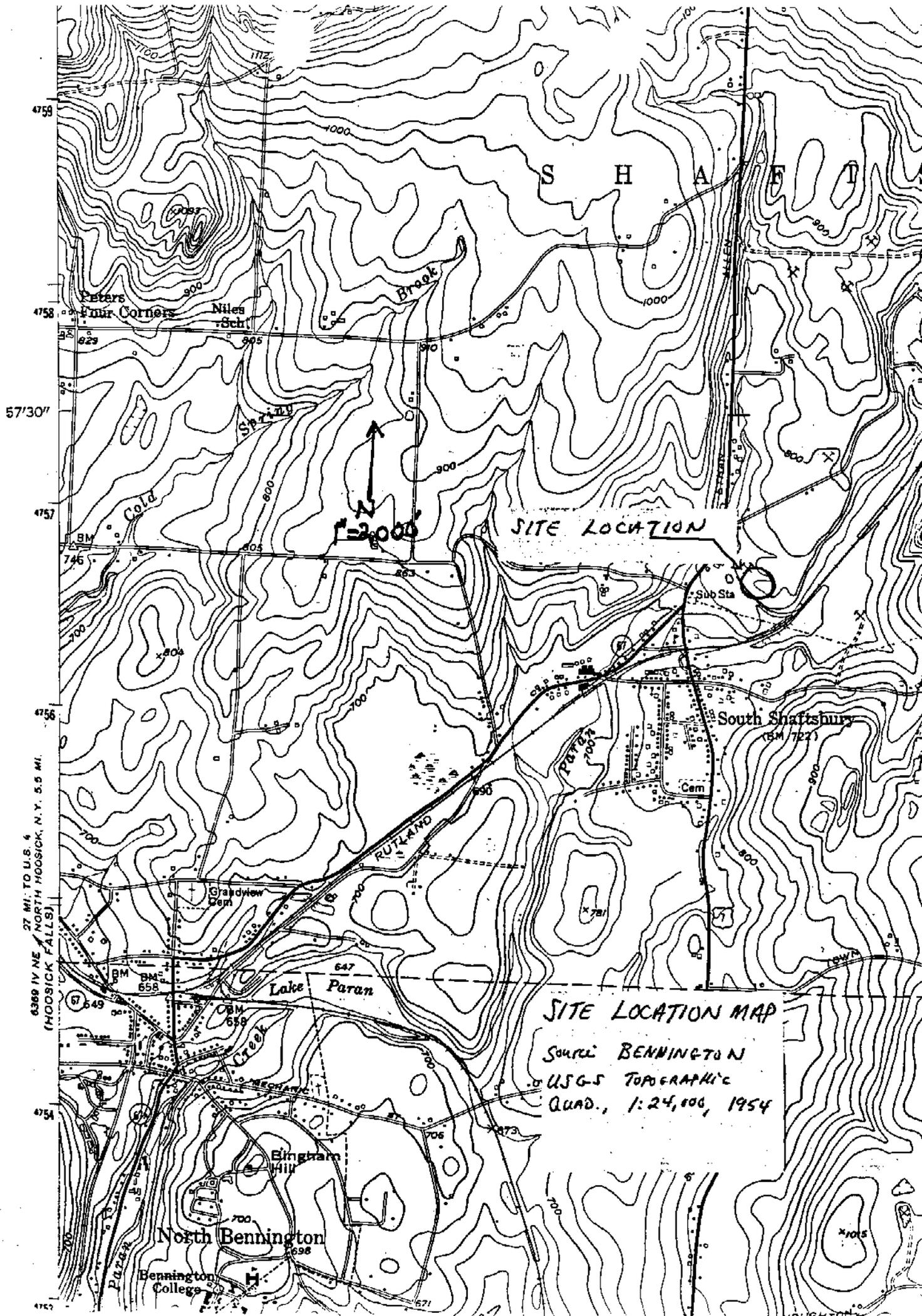
Sincerely,



Timothy J. Kelly  
Senior Staff Geologist

Encl.

cc: Chuck Schwer, VTDEC  
GI #89841342



27 MI. TO U.S. 4  
6369 IV NE NORTH HOOSICK, N.Y. 5.5 MI.  
(HOOSICK FALLS)

↑  
N  
1:24,000

SITE LOCATION

South Shaftsbury  
(BM 722)

SITE LOCATION MAP

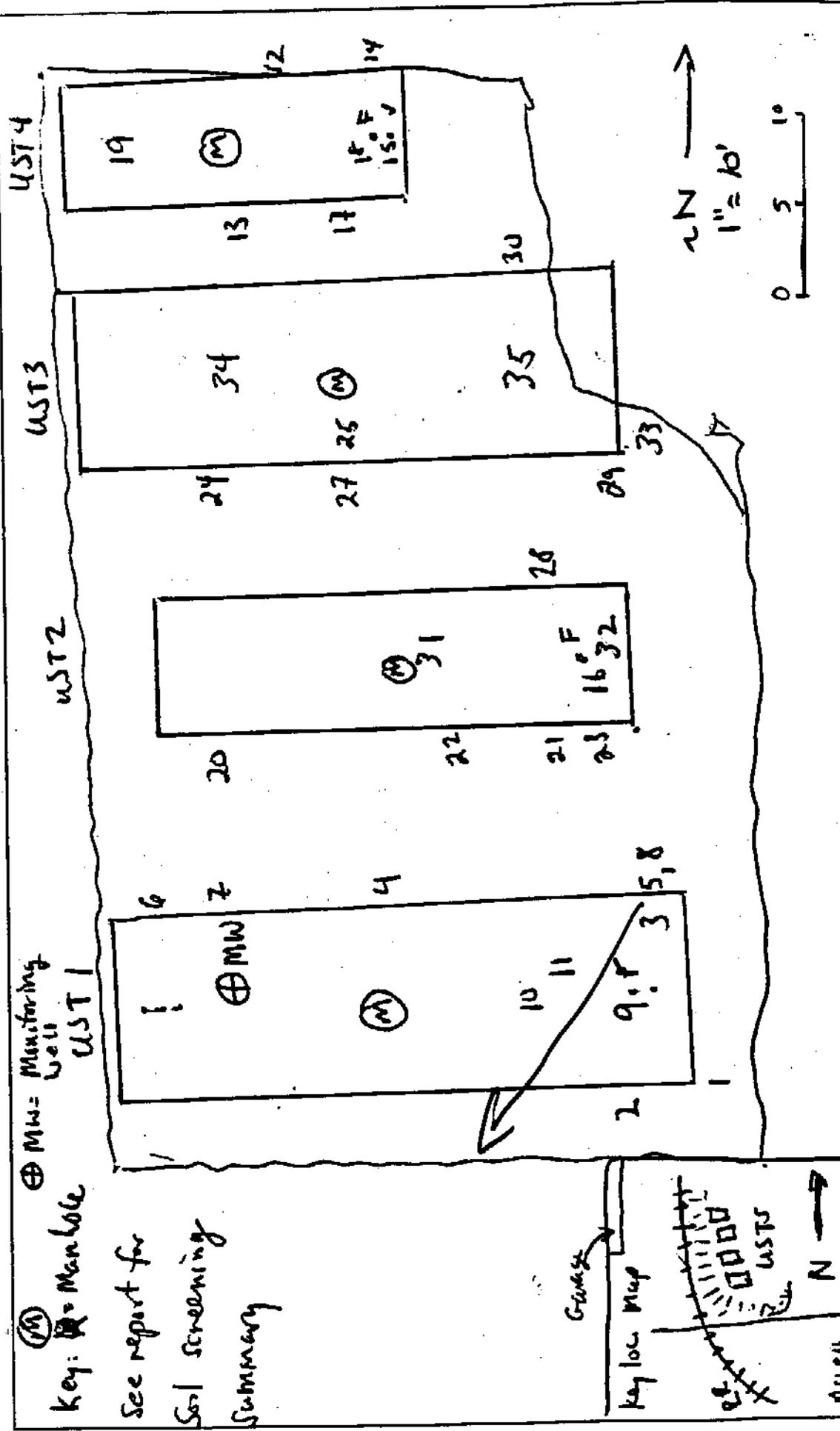
Source BENNINGTON  
USGS TOPOGRAPHIC  
QUAD., 1:24,000, 1954

North Bennington  
698

Bennington College

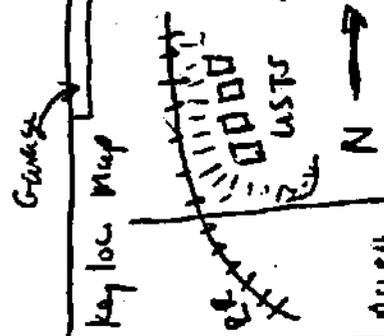
Ground  
 slopes  
 SW analysis  
 to tank  
 fill  
 GW  
 2/5

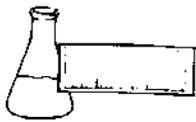
SITE SKETCH



⊕ MW = Monitoring Well  
 ⊕ M = Manhole  
 UST 1

See report for  
 Soil screening  
 Summary





**ENDYNE, INC.**

89841342

Laboratory Services

32 James Brown Drive  
Williston, Vermont 05495  
(802) 879-4333  
FAX 879-7103

REPORT OF LABORATORY ANALYSIS

CLIENT: Griffin International  
PROJECT NAME: W.E. Dailey  
REPORT DATE: January 5, 1999  
DATE SAMPLED: December 22, 1998

PROJECT CODE: GIWE1269  
REF.#: 133,106 - 133,107

Enclosed please find the results of the analyses performed for the samples referenced on the attached chain of custody. Chain of custody indicated sample preservation with HCl.

All samples were prepared and analyzed by requirements outlined in the referenced method and within the specified holding times. All instrumentation was calibrated with the appropriate frequency and verified by the requirements outlined in the referenced method. Blank contamination was not observed at levels affecting the analytical results.

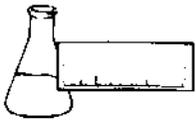
Analytical method precision and accuracy was monitored by laboratory control standards which included matrix spike, duplicate and quality control analyses. These standards were determined to be within established laboratory method acceptance limits.

Individual sample performance was monitored by the addition of surrogate analytes to each sample. All surrogate recovery data was determined to be within laboratory QA/QC guidelines unless otherwise noted.

Reviewed by,

Harry B. Locker, Ph.D.  
Laboratory Director

enclosures



32 James Brown Drive  
Williston, Vermont 05495  
(802) 879-4333  
FAX 879-7103

### EPA METHOD 8021B--PURGEABLE AROMATICS

CLIENT: Griffin International  
PROJECT NAME: W.E. Dailey  
CLIENT PROJ. #: 89841342

DATE RECEIVED: December 23, 1998  
REPORT DATE: January 5, 1999  
PROJECT CODE: GIWE1269

Ref. #:	133,106	133,107			
Site:	Trip Blank	Sample	<i>Vermont</i>		
Date Sampled:	12/22/98	12/22/98	<i>Groundwater</i>		
Time Sampled:	7:35	11:22	<i>Enforce ment</i>		
Sampler:	R. Basile	R. Basile	<i>Standards</i>		
Date Analyzed:	12/30/98	12/31/98	<i>(ug/L)</i>		
UIP Count:	0	>10	<i>TK 2/18/98</i>		
Dil. Factor (%):	100	20			
Surr % Rec. (%):	87	104			
Parameter	Conc. (ug/L)	Conc. (ug/L)			
MTBE	<10	<50	<i>40</i>		
Benzene	<1	<5	<i>5</i>		
Toluene	<1	<5	<i>1,000</i>		
Ethylbenzene	<1	15.4	<i>700</i>		
Xylenes	<1	138.	<i>10,000</i>		
1,3,5 Trimethyl Benzene	<1	77.7	<i>4</i>		
1,2,4 Trimethyl Benzene	<1	216.	<i>5</i>		
Naphthalene	<1	138.	<i>20</i>		

Note: UIP = Unidentified Peaks    TBQ = Trace Below Quantitation    NI = Not Indicated

Project Name: **L. DALEY**  
 Site Location: **LAFFS BURY, VT**  
 Endyne Project Number: **G1WE1269**  
 Reporting Address: **GRIFFIN**  
 Billing Address:  
 Company: **KELLY**  
 Contact Name/Phone #: **703 23106 108**  
 Sampler Name: **RAB BASILE**  
 Phone #:

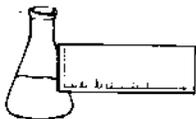
Lab #	Sample Location	Matrix	G R A B	C O M P	Date/Time	Sample Containers		Field Results/Remarks	Analysis Required	Sample Preservation	Rush
						No.	Type/Size				
33106	TEEP BANK	H <sub>2</sub> O	Yes		7:35	2	40ml		8021B	HK1	
33107	SAMPLE				11:32				8002(PH)		

Retinquished by: Signature *[Signature]* Received by: Signature *[Signature]* Date/Time **12/23/98 10:20**  
 Retinquished by: Signature *[Signature]* Received by: Signature *[Signature]* Date/Time **12/23/98 10:20**

New York State Project: Yes  No

Requested Analyses

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	
	pH	TKN	Total Solids																									
	Chloride	Total P	TSS																									
	Ammonia N	Total Diss P	TDS																									
	Nitrate N	BOD <sub>5</sub>	Turbidity																									
	Nitrate N	Alkalinity	Conductivity																									
	TCLP (Specify: volatiles, semi-volatiles, metals, pesticides, herbicides)																											
	Other (Specify):																											



**ENDYNE, INC.**

89841342

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REPORT OF LABORATORY ANALYSIS

CLIENT: Griffin International  
PROJECT NAME: W.E & Dailey  
DATE REPORTED: January 13, 1998  
DATE SAMPLED: Decmeber 22, 1998

PROJECT CODE: GIWE1270  
REF. #:133,108

Enclosed please find the results of the analyses performed for the samples referenced on the attached chain of custody record.

Chain of custody indicated sample preservation with HCl.

All samples were prepared and analyzed by requirements outlined in the referenced methods and within the specified holding times.

All instrumentation was calibrated with the appropriate frequency and verified by the requirements outlined in the referenced methods.

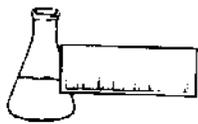
Blank contamination was not observed at levels affecting the analytical results.

Analytical method precision and accuracy was monitored by laboratory control standards which included matrix spike, duplicate and quality control analyses. These standards were determined to be within established laboratory method acceptance limits.

Reviewed by,

Harry B. Locker, Ph.D.  
Laboratory Director

enclosures



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Laboratory Services

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LABORATORY REPORT

TOTAL PETROLEUM HYDROCARBONS (TPH) BY MODIFIED EPA METHOD 8100

DATE: January 13, 1999  
CLIENT: Griffin International  
PROJECT: W.E & Dailey  
PROJECT CODE: GIWE1270  
COLLECTED BY: Rob Basile  
DATE SAMPLED: December 22, 1998  
DATE RECEIVED: December 23, 1998

Reference #	Sample ID	Concentration (mg/L) <sup>1</sup>
133,108	Sample; 11:22	10.7

Notes:

- 1 Values quantitated based on the response of #2 Fuel Oil. Method detection limit is 0.4 mg/L.
- 2 None Detected