



WASTE MANAGEMENT
DIVISION

FEB 25 10 21 AM '98

February 23, 1998

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

RE: Subsurface Investigation, Tim's Convenience Store, Marshfield, VT
(VTDEC #96-2094)

Dear Chuck:

Enclosed please find the February 1998 *Report on the Site Investigation of Subsurface Petroleum Contamination* for the Tim's Convenience Store site in Marshfield, Vermont. Mr. Timothy E. Roberts, Sr., owner of Tim's Convenience Store, requested that we forward a copy to you.

Please call, if you have any questions or comments.

Sincerely,

Timothy J. Kelly, PG
Geologist

Encl.

cc: Timothy E. Roberts, Sr., (w/o encl.)
GI#109741121

**REPORT ON THE
SITE INVESTIGATION OF SUBSURFACE
PETROLEUM CONTAMINATION**

AT

**TIM'S CONVENIENCE STORE
Route 2, Marshfield, Vermont**

WASTE MANAGEMENT
DIVISION

FEB 25 10 21 AM '98

VTDEC Site #96-2094
Griffin Proj. #109741121

FEBRUARY 1998

Prepared For:

Timothy E. Roberts, Sr.
RR#1, Box 1305
Plainfield, VT 05667

Prepared By:

GRIFFIN INTERNATIONAL, INC.
P.O. Box 943
Williston, Vermont 05495
(802) 865-4288

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I. INTRODUCTION

This report provides a summary of the tasks completed for the investigation of subsurface petroleum contamination at Tim's Convenience Store in the municipality of Plainfield, Vermont (see Site Location Map in Appendix A). Results of the following investigative tasks performed by Griffin International, Inc., (Griffin) are presented: soil sampling and evaluation of sensitive receptors in the vicinity of the Tim's Convenience Store site. Also provided are conclusions and recommendations for the site. This work has been performed based on requests from Mr. Chuck Schwer of the Vermont Department of Environmental Conservation (VTDEC) in a letter to Mr. Timothy E. Roberts, Sr., owner of Tim's Convenience Store, dated December 11, 1996. Work was performed in accordance with the January 15, 1997, *Preliminary Work Plan and Cost Estimate for Subsurface Investigation of Suspected Petroleum Contamination* at the site prepared by Griffin and approved by the VTDEC.

II. SITE BACKGROUND

A. Site Setting

The Tim's Convenience Store is located on the northwest side of Route 2 in a residential and commercial area of the Town of Marshfield, Vermont. Topography at the site generally consists of flat, broad terraces and gently sloping hills. The property is bounded to the south and southeast by Route 2, open meadow, and residential properties. To the east and west of the site are residential properties, and is a meadow immediately to the north of the site. The Winooski River flows south approximately 600 feet east of the subject property.

No supply well exists on the subject property. The area is serviced by municipal water and sanitary sewer systems. Stormwater drains off the property through the municipal system. The site is underlain by morainal sediments according to the *Surficial Geologic Map of Vermont* (Ref. 1). The bedrock underlying the site is the Gile Mountain formation, which consists of gray quartz-muscovite schist or phyllite (Ref. 2). There were no bedrock exposures observed in the immediate vicinity of the school property.

B. Site History

A routine piping replacement was performed at the site on August 10, 1996 by Bradford Oil Company. A report was subsequently submitted to the VTDEC regarding the piping replacement inspection. Elevated concentrations of volatile organic compounds (VOCs) were detected with an HNuTM portable photoionization detector (PID) in on-site soils, collected from depths of 3 to 9 feet below grade in the vicinity of the existing dispensers, at concentrations ranging from 10 to 700 parts per million (ppm). Groundwater was not reported to be in the

excavation. Low levels of VOCs (30 ppm) were also detected in the vicinity of a gasoline underground storage tank (UST) fill port.

Approximately 40 cubic yards of contaminated soils were removed from the area of the product dispensers and stockpiled on site. According to the Bradford Oil Company report, the extent of contamination was not defined in the vicinity of the product dispensers. Soils were also removed from the area around the UST fill port. According to the Bradford Oil Company report, the extent of contamination was defined in the vicinity of the UST fill port and the contaminated soils were removed and stockpiled. Clean fill material was backfilled into the excavations.

III. INVESTIGATIVE PROCEDURES

To define the extent of subsurface petroleum contamination at the Tim's Convenience Store site, the following tasks were undertaken as per the January 15, 1997, work plan: drilling of four soil borings, soil sampling and analyses for petroleum-related constituents, and an evaluation of sensitive receptors.

A. Soil Borings

The original intent of this site investigation was to install four monitoring wells. However, site conditions (refusal before groundwater encountered) prohibited the installation of monitoring wells. On January 26, 1998, four soil borings were advanced in and near the former dispenser excavation area by Adams Engineering of Underhill, Vermont, under the direct supervision of a Griffin geologist. SB1 was installed northeast of the former excavation area. SB2 was installed east of the former excavation area in a presumed downgradient area. SB3 was installed south of the former excavation area in a presumed downgradient area. SB4 was installed in the area of the former excavation.

All of the soil borings were installed using a vibratory drill rig. Continuous soil sampling was conducted using a polyethylene lined, 2-3/8-inch inside diameter coring tool. Soils were logged by the supervising geologist and screened for VOCs using an HNuTM systems Model PI-101 PID. Soils were screened using the Griffin Jar/Polyethylene Bag Headspace Screening Protocol, which conforms to state and industry standards. Soil boring logs are included in Appendix B

The four soil borings were installed to depths ranging from 10.8 feet to 15.0 feet below grade. Soils encountered in the boreholes consisted generally of medium, brown, locally grayish or olive brown fine to coarse sand with local gravel and cobbles, some silt, and local silt interbeds encountered from grade to depths ranging from 10 feet to 12.4 feet, where the sampler shoe met refusal. A drive point was used in attempts to enable further sampling. However, the drive point only advanced the borehole 0.4 to 0.7 feet further in SB1, SB2, and SB3. Sampler refusal

was met at 11.0 feet in SB4. The drive point was advanced to 15 feet in SB4, but the sampler would not penetrate further. No groundwater was encountered in any borehole. Refusal was inferred to be a hardpan surface of glacial till, based on the information provided in the piping inspection report, the soil samples collected from the boreholes, and the local surficial geology as presented in the *Surficial Geologic Map of Vermont* (Ref. 1).

No petroleum odors or staining were observed in any of the soil borings. Total VOC concentrations ranged from 0 to 6.2 ppm, as measured with the PID. The highest total VOCs concentration (6.2 ppm) was observed in the surface soils in SB2, east of the former dispenser excavation. The VOC levels decreased with depth to 0.4 ppm at 10 feet in SB2. The VOC levels in SB1, SB3, and SB4 were all detected at concentrations below 0.5 ppm. All soil cuttings were backfilled into the boreholes. Concrete was also used to fill the borings to grade. SB1 and SB4 were advanced through the asphalt of the parking lot and were therefore completed with concrete caps.

B. Soil Sampling and Analyses

In addition to screening the soil samples with a PID on-site, one soil sample was collected from each boring from the last sample before auger refusal in each soil boring. The soil samples were analyzed for VOCs by EPA Method 8020 by Endyne, Inc., laboratory of Williston, Vermont for petroleum-related constituents including benzene, toluene, ethylbenzene, xylenes (BTEX), and methyl tertiary butyl ether (MTBE). The laboratory data sheets are included in Appendix C. No BTEX compounds or MTBE were detected in any soil samples collected from the on-site soil borings.

IV. EVALUATION OF POTENTIALLY SENSITIVE RECEPTORS

The following potentially sensitive receptors in the vicinity of the Tim's Convenience Store were identified:

- the Tim's Convenience Store building;
- the Winooski River, located approximately 500 feet to the southeast.

The depth to groundwater is greater than the depth to refusal at this site. The groundwater flow direction is likely to be to the southeast toward the Winooski River. Based on this data, it is likely that the Tim's Convenience Store building is upgradient of the former excavation area near the dispensers. In addition, petroleum contamination of on-site soils is apparently limited to the area immediately below the existing dispenser island. Therefore, it is expected that risk of petroleum vapor impact to the Tim's Convenience Store building is negligible.

Approximately 40 cubic yards of contaminated soils have been excavated from the vicinity of the dispenser area and a UST fill port and stockpiled on site. Based on the available data, it appears that the significant portion of the contaminated soils have been removed. Based on the data obtained from soil excavation and drilling in the vicinity of the dispensers, it appears unlikely that residual petroleum contamination has migrated out of the area directly under the existing dispenser island.

The Tim's Convenience Store site and the municipality of Plainfield are served by municipal water and sewer. Potential petroleum contaminant leaching is likely to be inhibited by the macadam cover over the entire area of the former excavation. Given the significant distance from the former tank pit to the Winooski River and the limited extent of contamination, the current risks posed to this surface water body are likely to be minimal.

V. CONCLUSIONS

Based upon the results of the above investigative tasks, Griffin presents the following conclusions:

- 1) No groundwater was encountered in any of the four soil borings.
- 2) No petroleum contamination was detected in any soils sample collected from the soil borings and submitted for laboratory analysis
- 3) Petroleum contamination was detected at very low levels in the soil borings. It is expected that any residual adsorbed and vapor-phase petroleum compound concentrations will decrease over time with the progressive action of natural mitigative processes, including biodegradation and diffusion.
- 4) Risks posed to potentially sensitive receptors in the vicinity of the Tim's Convenience Store appear minimal, based on currently available data.

VI. RECOMMENDATIONS

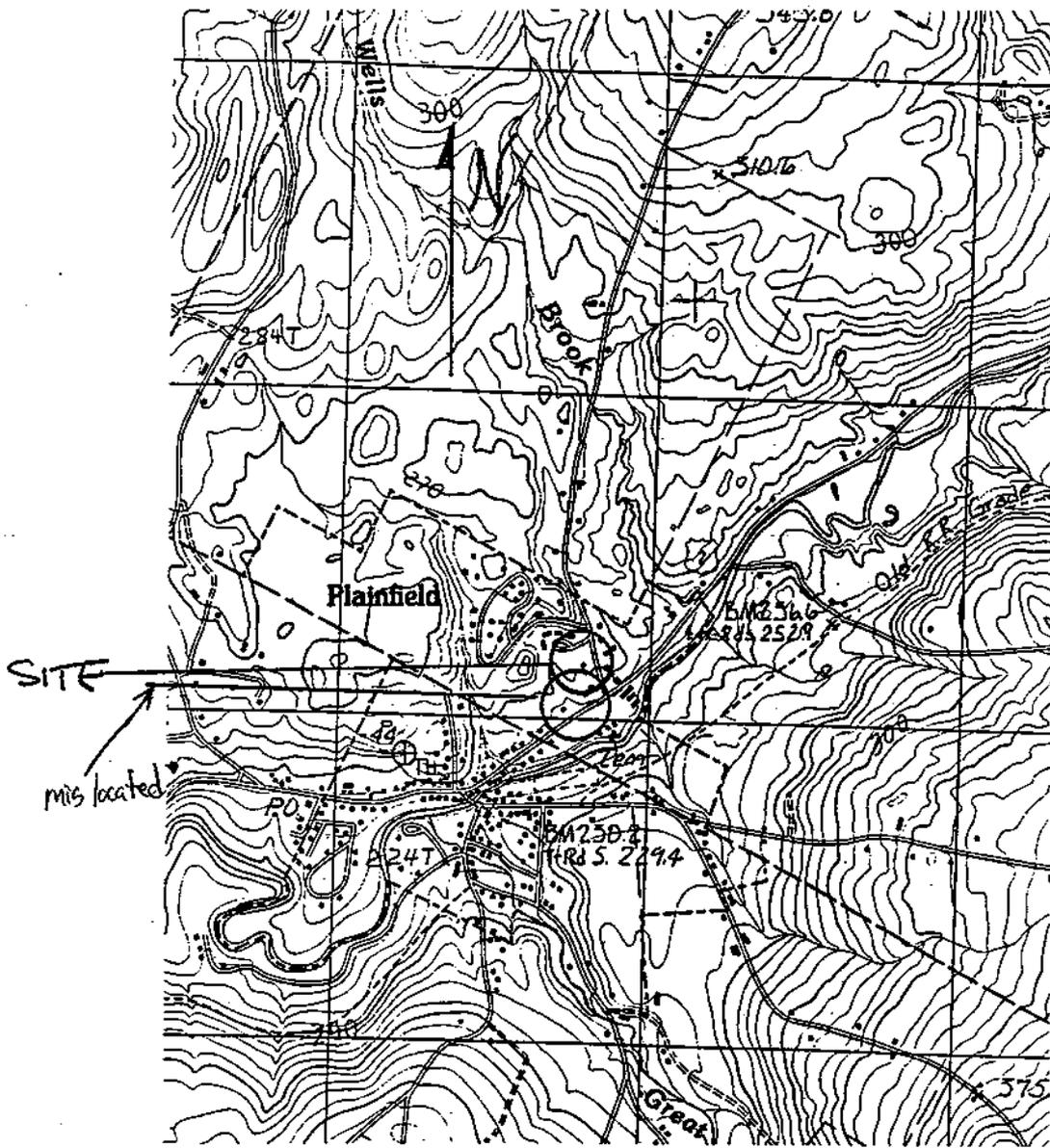
Based upon the above conclusions, Griffin recommends that no further investigative work be performed at the Tim's Convenience Store site. The on-site soil stockpile should continue to be screened for VOCs on a regular basis with a properly calibrated PID. The plastic covering should be routinely inspected and maintained. It may be necessary to re-pile the soil on a new liner every 12 months depending on the condition of the liner. This will also aid in the more efficient reduction of contaminants in the pile by adding oxygen to the soil. Further recommendations regarding petroleum contaminated stockpiled soils will be presented following screening.

REFERENCES

1. Doll, Charles G., D.P. Stewart, and P. MacClintock, eds., 1970, Surficial Geologic Map of Vermont, State of Vermont.
2. Doll, Charles G., W.M. Cady, J. B. Thompson, Jr., and M.P. Billings eds., 1961, Centennial Geologic Map of Vermont, State of Vermont.

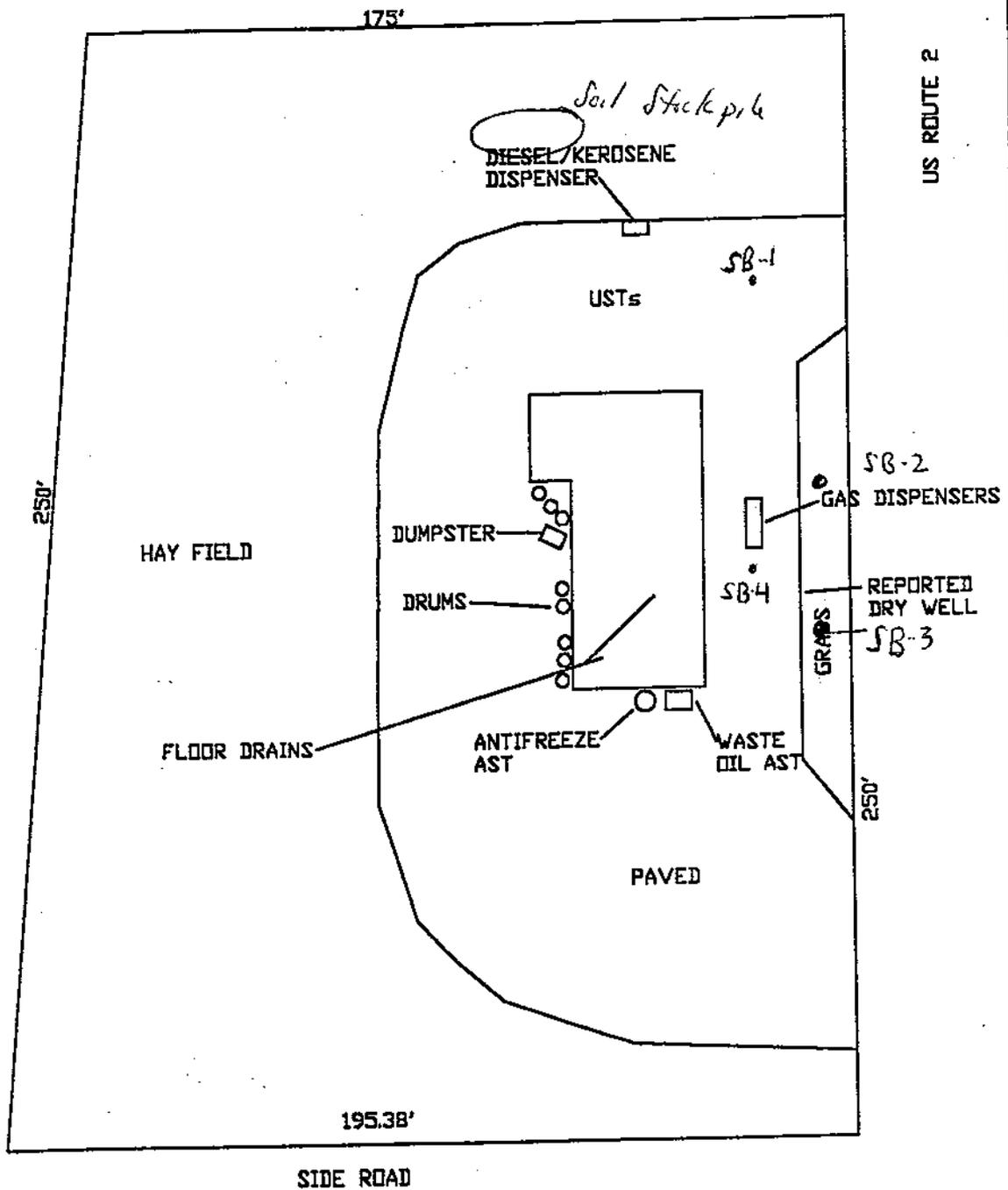
APPENDIX A

Site Maps



SITE LOCATION
Tim's Convenience Store
PLAINFIELD, VT

SOURCE:
USGS PLAINFIELD, VT QUADRANGLE
1986
SCALE 1:24000



Tim's Convenience Store
PLAINFIELD, VT

SITE SKETCH

APPENDIX B

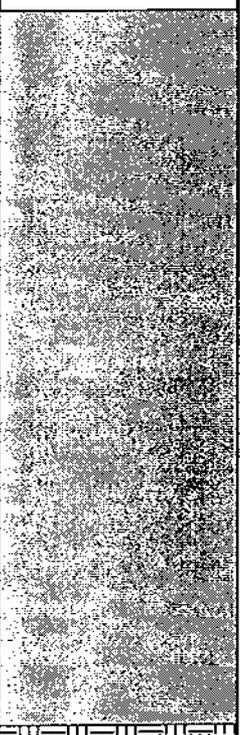
Soil Boring Logs

PROJECT TIM'S CONVENIENCE STORE
 LOCATION PLAINFIELD, VERMONT
 DATE DRILLED 1/26/98 TOTAL DEPTH OF HOLE 14.3'
 DIAMETER 2.75"
 SCREEN DIA. NA LENGTH NA SLOT SIZE NA
 CASING DIA. NA LENGTH NA TYPE NA
 DRILLING CO. ADAMS ENGR. DRILLING METHOD VIBRATORY
 DRILLER GERRY ADAMS LOG BY T. KELLY

WELL NUMBER SB1

Site
Sketch

GRIFFIN INTERNATIONAL, INC

DEPTH IN FEET	WELL CONSTRUCTION	NOTES	BLOWS PER 6" OF SPOON & PID READINGS	DESCRIPTION/SOIL CLASSIFICATION (COLOR, TEXTURE, STRUCTURES)	DEPTH IN FEET		
0				Asphalt	0		
1		NATIVE BACKFILL	0'-4.8' 0.5 ppm	Dark grayish brown SILT, some sand, little gravel, moist, (fill).	1		
2					2		
3					Medium grayish brown, fine SAND, some silt, local clay, trace weathered cobbles, no odor or stain.	3	
4						4	
5				4.8'-7.3' 0.3 ppm	Medium dark brown, fine to coarse SAND with some gravel, a little silt, trace clay (local), moist to wet, no odor or stains.	5	
6					6		
7						7	
8						8	
9					7.3'-10.1'	Push drive point, no sample collected.	9
10						10	
11					10.1'-12.7' 0.3 ppm	Same as above, locally siltier, moist, no odor or stains.	11
12						12	
13						13	
14					12.7'-14.3'	Push drive point, no sample collected.	14
15		BEDROCK		REFUSAL AT 14.3'	15		
16					16		
17					17		
18					18		
19					19		
20					20		
21					21		
22					22		
23					23		
24					24		
25					25		

PROJECT TIM'S CONVENIENCE STORE
 LOCATION PLAINFIELD, VERMONT
 DATE DRILLED 1/26/98 TOTAL DEPTH OF HOLE 10.8'
 DIAMETER 2.75"
 SCREEN DIA. NA LENGTH NA SLOT SIZE NA
 CASING DIA. NA LENGTH NA TYPE NA
 DRILLING CO. ADAMS ENGR DRILLING METHOD VIBRATORY
 DRILLER GERRY ADAMS LOG BY T. KELLY

WELL NUMBER SB2

Site Sketch

GRIFFIN INTERNATIONAL, INC

DEPTH IN FEET	WELL CONSTRUCTION	NOTES	BLOWS PER 6" OF SPOON & PID READINGS	DESCRIPTION/SOIL CLASSIFICATION (COLOR, TEXTURE, STRUCTURES)	DEPTH IN FEET	
0					0	
1			0'-4.5' 6.2 ppm	Medium dark brown, fine to medium, locally coarse, SAND with a little silt, moist, trace gravel, no odor or stains.	1	
2					2	
3					Medium olive brown, SILT and CLAY, moist, local cobbles, no odor or stains.	3
4						4
5					Same as above.	5
6			NATIVE BACKFILL	4.5'-9.5' 4.6 ppm	Medium brown SILT with some fine to medium sand, trace gravel, moist, no odor or stains.	6
7					Olive brown SILT with very fine sand interbeds < 1" thick, no odor or stains.	7
8					Orange brown to olive brown, very fine to fine SAND, moist, with some silt, no odor or stains.	8
9						9
10				9.5'-10.4' 0.4 ppm	Olive brown SILT and CLAY, no odor or stains, moist.	10
11			BEDROCK		Dark brown, fine to medium SAND, trace silt, moist, trace gravel.	11
12				10.4'-10.8'	Push drive point, no sample collected.	12
13				REFUSAL AT 10.8'	13	
14					14	
15					15	
16					16	
17					17	
18					18	
19					19	
20					20	
21					21	
22					22	
23					23	
24					24	
25					25	

PROJECT TIM'S CONVENIENCE STORE
 LOCATION PLAINFIELD, VERMONT
 DATE DRILLED 1/26/98 TOTAL DEPTH OF HOLE 13.1'
 DIAMETER 2.75"
 SCREEN DIA. NA LENGTH NA SLOT SIZE NA
 CASING DIA. NA LENGTH NA TYPE NA
 DRILLING CO. ADAMS ENGR. DRILLING METHOD VIBRATORY
 DRILLER GERRY ADAMS LOG BY T. KELLY

WELL NUMBER SB3

Site
Sketch

GRIFFIN INTERNATIONAL, INC

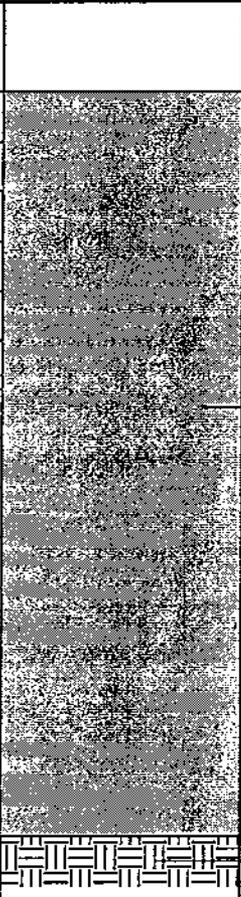
DEPTH IN FEET	WELL CONSTRUCTION	NOTES	BLOWS PER 6" OF SPOON & PID READINGS	DESCRIPTION/SOIL CLASSIFICATION (COLOR, TEXTURE, STRUCTURES)	DEPTH IN FEET		
0		NATIVE BACKFILL	0'-4.8' 0 ppm	Medium brown, fine to medium SAND with a little silt, trace gravel, moist, no odor or stains.	0		
1					1		
2					2		
3					Medium to olive brown SILT with a little clay, moist, trace gravel, no odor or stains.	3	
4						4	
5					Medium brown, fine to coarse SAND with a little fine gravel, moist, no odor.	5	
6					4.8'-9.8'	Pushed cobble, no recovery.	6
7						7	
8						8	
9						9	
10						Olive brown, fine SAND, moist, trace silt.	10
11					9.8'-12.4' 0.4 ppm	Fine to coarse SAND, little gravel, moist, no odor or stains.	11
12						12	
13				REFUSAL AT 13.1'	13		
14		BEDROCK			14		
15					15		
16					16		
17					17		
18					18		
19					19		
20					20		
21					21		
22					22		
23					23		
24					24		
25					25		

PROJECT TIM'S CONVENIENCE STORE
 LOCATION PLAINFIELD, VERMONT
 DATE DRILLED 1/26/98 TOTAL DEPTH OF HOLE 15.0'
 DIAMETER 2.75"
 SCREEN DIA. NA LENGTH NA SLOT SIZE NA
 CASING DIA. NA LENGTH NA TYPE NA
 DRILLING CO. ADAMS ENGR DRILLING METHOD VIBRATORY
 DRILLER GERRY ADAMS LOG BY T. KELLY

WELL NUMBER SB4

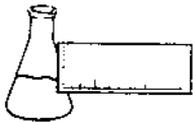
Site
Sketch

GRIFFIN INTERNATIONAL, INC

DEPTH IN FEET	WELL CONSTRUCTION	NOTES	BLOWS PER 6" OF SPOON & PID READINGS	DESCRIPTION/SOIL CLASSIFICATION (COLOR, TEXTURE, STRUCTURES)	DEPTH IN FEET
0		NATIVE BACKFILL	0'-4.8' 0 ppm	Asphalt	0
1				Medium brown SILT, little sand, trace gravel, moist, no odor or stains.	1
2				Olive brown SILT, no odor or stains.	2
3			Olive brown, fine SAND, moist, no odor or stains.	3	
4			Olive brown, fine to medium SAND, some silt, trace gravel, moist, no odor/stains.	4	
5			Medium orange brown, medium SAND, no odor or stains.	5	
6			Olive SILT with local interbeds of medium sand, no odor or stains.	6	
7			Buff fine SAND, no odor or stains.	7	
8			Fine SAND with some silt (lamina) no odor or stains.	8	
9			Medium brown, fine to coarse SAND, trace gravel, no odor or stains.	9	
10			Sampler refusal at 11.0', drive point to 15.0'.	10	
11				11	
12				12	
13				13	
14				14	
15		15			
16	BEDROCK		REFUSAL AT 15.0'	16	
17				17	
18				18	
19				19	
20				20	
21				21	
22				22	
23				23	
24				24	
25				25	

APPENDIX C

Soil Analytical Data



ENDYNE, INC.

Laboratory Services

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

109741121

REPORT OF LABORATORY ANALYSIS

CLIENT: Griffin International
PROJECT NAME: Robert's Convenience Store
DATE REPORTED: February 6, 1998
DATE SAMPLED: January 26, 1998

PROJECT CODE: GIRC1157
REF. #: 115,981 - 115,984

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

Chain of custody indicated proper sample preservation.

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.

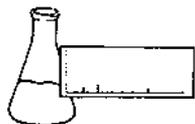
Analytical method precision and accuracy were monitored by laboratory control standards which included matrix spike, duplicate and quality control analyses. These standards were determined to be within established laboratory method acceptance limits.

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

Reviewed by,

Harry B. Locker, Ph.D.
Laboratory Director

enclosures



ENDYNE, INC.

Laboratory Services

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

LABORATORY REPORT

EPA METHOD 602 COMPOUNDS BY EPA METHOD 8260

CLIENT: Griffin International
PROJECT NAME: Robert's Convenience Store
REPORT DATE: February 6, 1998
SAMPLER: T. Kelly
DATE SAMPLED: January 26, 1998
DATE RECEIVED: January 28, 1998

PROJECT CODE: GIRC1157
ANALYSIS DATE: February 3, 1998
STATION: SB-1, 10'-12'
REF.#: 115,981
TIME SAMPLED: 1215

<u>Parameter</u>	<u>Detection Limit (ug/kg)</u>	<u>Concentration As Received (ug/kg)</u>
Benzene	10	ND ¹
Chlorobenzene	10	ND
1,2-Dichlorobenzene	10	ND
1,3-Dichlorobenzene	10	ND
1,4-Dichlorobenzene	10	ND
Ethylbenzene	10	ND
Toluene	10	ND
Xylene	20	ND
MTBE	20	ND

NUMBER OF UNIDENTIFIED PEAKS FOUND: 0

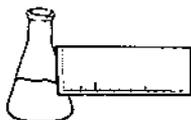
ANALYTICAL SURROGATE RECOVERY:

Dibromofluoromethane: 83.%
Toluene-d8: 108.%
4-Bromofluorobenzene: 101.%

PERCENT SOLIDS: 85.%

NOTES:

1 None detected



ENDYNE, INC.

Laboratory Services

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

LABORATORY REPORT

EPA METHOD 602 COMPOUNDS BY EPA METHOD 8260

CLIENT: Griffin International
PROJECT NAME: Robert's Convenience Store
REPORT DATE: February 6, 1998
SAMPLER: T. Kelly
DATE SAMPLED: January 26, 1998
DATE RECEIVED: January 28, 1998

PROJECT CODE: GIRC1157
ANALYSIS DATE: February 3, 1998
STATION: SB-2, 9.5'-10.4'
REF.#: 115,982
TIME SAMPLED: 1335

<u>Parameter</u>	<u>Detection Limit (ug/kg)</u>	<u>Concentration As Received (ug/kg)</u>
Benzene	10	ND ¹
Chlorobenzene	10	ND
1,2-Dichlorobenzene	10	ND
1,3-Dichlorobenzene	10	ND
1,4-Dichlorobenzene	10	ND
Ethylbenzene	10	ND
Toluene	10	ND
Xylene	20	ND
MTBE	20	ND

NUMBER OF UNIDENTIFIED PEAKS FOUND: 0

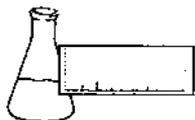
ANALYTICAL SURROGATE RECOVERY:

Dibromofluoromethane: 86.%
Toluene-d8: 109.%
4-Bromofluorobenzene: 103.%

PERCENT SOLIDS: 82.%

NOTES:

1 None detected



ENDYNE, INC.

Laboratory Services

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

LABORATORY REPORT

EPA METHOD 602 COMPOUNDS BY EPA METHOD 8260

CLIENT: Griffin International
PROJECT NAME: Robert's Convenience Store
REPORT DATE: February 6, 1998
SAMPLER: T. Kelly
DATE SAMPLED: January 26, 1998
DATE RECEIVED: January 28, 1998

PROJECT CODE: GIRC1157
ANALYSIS DATE: February 3, 1998
STATION: SB-3, 9.8'-12.4'
REF.#: 115,983
TIME SAMPLED: 1500

<u>Parameter</u>	<u>Detection Limit (ug/kg)</u>	<u>Concentration As Received (ug/kg)</u>
Benzene	10	ND ¹
Chlorobenzene	10	ND
1,2-Dichlorobenzene	10	ND
1,3-Dichlorobenzene	10	ND
1,4-Dichlorobenzene	10	ND
Ethylbenzene	10	ND
Toluene	10	ND
Xylene	20	ND
MTBE	20	ND

NUMBER OF UNIDENTIFIED PEAKS FOUND: 0

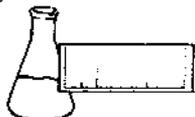
ANALYTICAL SURROGATE RECOVERY:

Dibromofluoromethane: 81.%
Toluene-d8: 114.%
4-Bromofluorobenzene: 104.%

PERCENT SOLIDS: 85.%

NOTES:

1 None detected



ENDYNE, INC.

Laboratory Services

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

LABORATORY REPORT

EPA METHOD 602 COMPOUNDS BY EPA METHOD 8260

CLIENT: Griffin International
PROJECT NAME: Robert's Convenience Store
REPORT DATE: February 6, 1998
SAMPLER: T. Kelly
DATE SAMPLED: January 26, 1998
DATE RECEIVED: January 28, 1998

PROJECT CODE: GIRC1157
ANALYSIS DATE: February 3, 1998
STATION: SB-4, 9.8'-11'
REF.#: 115,984
TIME SAMPLED: 1625

<u>Parameter</u>	<u>Detection Limit (ug/kg)</u>	<u>Concentration As Received (ug/kg)</u>
Benzene	10	ND ¹
Chlorobenzene	10	ND
1,2-Dichlorobenzene	10	ND
1,3-Dichlorobenzene	10	ND
1,4-Dichlorobenzene	10	ND
Ethylbenzene	10	ND
Toluene	10	ND
Xylene	20	ND
MTBE	20	ND

NUMBER OF UNIDENTIFIED PEAKS FOUND: 0

ANALYTICAL SURROGATE RECOVERY:

Dibromofluoromethane: 82.%
Toluene-d8: 109.%
4-Bromofluorobenzene: 102.%

PERCENT SOLIDS: 93.%

NOTES:

1 None detected

