



09/25/00 09:58 AM

September 25, 2000

Mr. Chuck Schwer  
Supervisor, Sites Management Section  
VTDEC WMD  
103 South Main St./ West Bldg.  
Waterbury, VT 05671-0404

RE: Initial Investigation of Subsurface Petroleum Contamination at McGann's Mobil  
West Rutland, Vermont. VTDEC #89-0356

Dear Mr. Schwer:

Enclosed please find the September 2000 report titled *Initial Investigation of Subsurface Petroleum Contamination at McGann's Mobil*. Please do not hesitate to call, if you have any questions or comments.

Sincerely,

A handwritten signature in black ink that reads "Robert Higgins". The signature is written in a cursive, flowing style.

Robert Higgins  
Engineer

Enc.

cc: Mr. Ed McGann, McGann's Mobil  
GI Project #40041688

**INITIAL INVESTIGATION OF  
SUBSURFACE PETROLEUM CONTAMINATION AT  
MCGANN'S MOBIL**

**SEPTEMBER 2000**

**Site Location:**

**McGann's Mobil  
169 North Main Street  
West Rutland, VT**

**GI Project # 40041688**

**VTDEC # 89-0356**

**Mr. Ed McGann  
169 N. Main Street  
West Rutland, VT 05777**

**Prepared By:**



**P.O. Box 943 / 20 Commerce Street Williston, VT 05495 (802) 865-4288**



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## I. INTRODUCTION

This report summarizes the initial investigation of subsurface petroleum contamination at the McGann's Mobil site located at 169 North Main Street in West Rutland, Vermont (see Site Location Map in Appendix A). Petroleum contamination was detected in soil samples collected during the permanent closure of two 6,000-gallon gasoline underground storage tanks (USTs) on November 24, 1997. The State of Vermont, Department of Environmental Conservation (VTDEC) has requested that a site investigation be conducted at this location, as indicated in letters from Mr. Chuck Schwer of the VTDEC, dated April 21, 1998, May 22, 1998, and April 6, 2000. Griffin International, Inc. (Griffin) has been retained by Mr. Ed McGann to carry out this investigation.

The investigation consisted of the following tasks:

- Groundwater sample collection from three existing site monitoring wells for laboratory analysis.
- Determination of groundwater flow direction and gradient.
- A survey of potential sensitive receptors in the vicinity of the site.
- Assessment of on-site contaminated soil stockpile.
- Preparation of a summary report (this document).

Work was conducted in accordance with Griffin's Work Plan and Cost Estimate for an Initial Site Investigation prepared on April 14, 2000. This Work Plan and Cost Estimate was approved by Mr. Chuck Schwer of the VTDEC in a letter to Mr. Ed McGann, dated June 14, 2000. This site was initially listed as VTDEC Site #89-0356 following the detection of subsurface contamination during the closure of two 2,000-gallon gasoline USTs in June 1989.

## II. SITE BACKGROUND

### A. Site History

Griffin conducted a site file review at the VTDEC office in Waterbury, Vermont on April 27, 1998. According to information observed in the site file, two 2,000-gallon gasoline USTs were removed from the subsurface at the site on June 15, 1989. One of the USTs was observed to be in poor condition and was noted to have been leaking fuel at some point. Two monitoring wells (89-1 and 89-2) were installed at that time (these two monitoring wells were not located during this June 2000 investigative effort and are believed to have been destroyed between 1989 and 2000). On February 14, 1991 samples were collected from these wells and were submitted for laboratory analysis for the presence of petroleum compounds per EPA Method 8020. Each of the samples contained elevated concentrations of compounds targeted by the analysis above the Vermont Groundwater Enforcement Standards (VGES). No additional investigative or



monitoring efforts are recorded to have occurred at the site following the February 14, 1991 monitoring event.

On November 24, 1997, Griffin inspected the removal of two 6,000-gallon single-walled steel gasoline USTs. These USTs were used to store gasoline for retail sale to motor vehicles. The USTs were observed to be in good condition with no holes or seeps identified. These USTs were replaced with two new 6,000-gallon double-walled gasoline USTs [1].

Volatile organic compound (VOC) concentrations, measured with an HNu<sup>TM</sup> photoionization detector (PID) equipped with a 10.2 eV bulb, ranged from 8 parts per million (ppm) to 220 ppm in soils located in the vicinity of the USTs and the associated piping system [1].

Soils in the excavation consisted of coarse to fine gravel and coarse to fine sand with some silt and clay from grade to a depth of approximately 7 feet. There were several large cobbles observed on the edges of the excavation. Below depths of 7 feet, coarse to fine sand was observed; these soils were stained gray and contained a strong odor resembling weathered gasoline. Groundwater was encountered at approximately 7 feet below grade; a petroleum sheen was visible on the groundwater. Bedrock was not encountered in the excavation [1].

In order to accommodate the new USTs, 50 cubic yards of petroleum contaminated soils were stockpiled and polyencapsulated on the property to the south of the station (see the Site Map, Appendix A).

For further information regarding the permanent closure of the two 6000-gallon USTs please refer to Griffin's November 26, 1997 Underground Storage Tank Closure Report letter.

## **B. Site Description**

The subject property is located along Route 4A in West Rutland, Vermont. The McGann property consists of one auto repair shop building situated on a concrete slab foundation. The remainder of the site is occupied by paved and unpaved driveway/parking areas, one gasoline dispenser island for motor vehicles, and grassy areas.

General topography across the site is relatively flat. The subject site is located at approximately 500 feet above sea level. Based on field observations and a review of the United States Geological Survey (USGS) West Rutland, VT topographic map and topographic field observations, groundwater beneath the site is inferred to flow in an easterly direction, toward the Clarendon River. The Clarendon River is located approximately 2,000 feet to the southeast of the site.

The site is abutted to the north by Route 4A, across which are residential and commercial properties. To the east and south, the site is abutted by commercial properties. To the west, the

site is abutted by a recreation park. According to Mr. McGann, the site and properties in the vicinity are serviced by the municipal water supply.

Three groundwater monitoring wells currently exist at the subject site. The history of these monitoring wells is not known. There are no known well construction diagrams available for these monitoring wells.

### ***C. Site Geologic Setting***

According to the Centennial Geologic Map of Vermont [2], the site is underlain by Providence Island dolomite, which consists of blue-gray limestone with irregular spots of light buff dolomite. As per the Surficial Geologic Map of Vermont, the soils are primarily lake bottom sediments of silt, silty clay, and clay [3].

## **III. INVESTIGATIVE PROCEDURES**

### ***A. Determination of Groundwater Flow Direction and Gradient***

The existing monitoring well locations and elevations, along with other site features, were surveyed on June 27, 2000 for inclusion on the Site Map (Appendix A). Also on this date, depth to water measurements were taken with use of a Keck<sup>TM</sup> interface probe in the three on-site monitoring wells. These measurements were subtracted from the top of casing elevations, which were determined relative to an arbitrary datum of 100 feet at the top of the casing for MW2, to determine the water table elevation at each of the wells. Groundwater level data are recorded in Appendix B.

As displayed on the groundwater contour map included in Appendix A, the groundwater flow for June 27, 2000 was estimated to be directed toward the north-northeast at an average gradient of 0.3%. No free phase petroleum product was observed in the monitoring wells gauged on this date.

Under this flow regime, monitoring wells MW1 and MW3 are located downgradient of the former/current USTs; and monitoring well MW2 is located cross-gradient of the former/current USTs. There are no monitoring wells located downgradient of the former dispenser island.

### ***B. Groundwater Sample Collection and Analysis***

On June 27, 2000, samples of the groundwater were collected from monitoring wells MW1, MW2, and MW3. Samples were analyzed per EPA Method 8021B for benzene, toluene, ethylbenzene, and xylenes (BTEX), methyl tertiary butyl ether (MTBE), 1,3,5-trimethyl benzene

(TMB), 1,2,4-TMB, and naphthalene. Results of the laboratory analyses for wells sampled are summarized in Appendix C. Laboratory report forms are presented in Appendix D.

Monitoring well MW1 was non-detect for compounds targeted by the analysis. The compounds 1,3,5-TMB and 1,2,4-TMB were present in the sample collected from monitoring well MW2 at concentrations above their respective VGES. Concentrations of ethylbenzene, xylenes, and naphthalene were reported below their respective VGES in the sample collected from MW2. Benzene, 1,3,5-TMB, 1,2,4-TMB, and naphthalene were detected in the sample collected from MW3 at concentrations above the respective VGES; concentrations of toluene, ethylbenzene, and xylenes were detected below their applicable VGES in the sample collected from monitoring well MW3.

Total 8021B VOC results were plotted on the site map to generate the Contaminant Concentration Map presented in Appendix A. The June 27, 2000 contaminant distribution indicates that contaminant concentrations are present to the northeast and east side of the former/current USTs. The upgradient and down-gradient extents of the contaminant plume have not been fully defined.

Samples were collected according to Griffin's groundwater sampling protocol which complies with industry and state standards. Results from the analyses of the trip blank sample and duplicate sample indicate that adequate quality assurance and control (QA/QC) were maintained during sample collection and analysis.

### ***C. Soil Stockpile Screening***

On June 27, 2000, Griffin conducted screening of the 50 cubic yard soil stockpile for VOCs using an HNu<sup>TM</sup> Model HW-101 PID equipped with a 10.2 electron-volt lamp. Prior to screening, the PID was properly calibrated according to Griffin protocol and the manufacturer's recommendation. Eight soil samples were collected from the stockpile with the use of a hand auger; the sample locations were distributed in location and depth to yield samples statistically representative of the stockpile. Screening was conducted via Griffin's Jar/Polyethylene Bag Headspace Screening Protocol which meets State and industry standards. Soil screening results are summarized in the table below.

<i>Sample #</i>	<i>Depth (feet)</i>	<i>VOCs (ppm)</i>
1	4	0.2
2	4	0.2
3	3.5	0.4
4	3	0.3
5	2.5	0.6
6	3	0.3
7	4	1.2
8	2.5	0.4
Average		0.5

The average concentration of VOCs in the soil pile was 0.5 ppm. No visual or olfactory indications of petroleum contamination were evident.

#### ***D. Sensitive Receptor Risk Assessment***

A visual survey of the area surrounding the site was conducted during this monitoring event. Based on these observations, an estimate of the potential risk to identified receptors was made based on proximity to the source area.

##### *Water Supplies*

According to Mr. Bruce Atkinson of the West Rutland Water Department, the site building and buildings in the vicinity of the site have connections to municipal sanitary sewer and water systems [5]. The source of water for this area of West Rutland is an aquifer and storage reservoir located at the end of Fairview Street, approximately one-third to one-half mile southeast of the McGann Mobil site. According to Mr. Atkinson, the water source was sampled on August 1, 2000 for the presence of VOCs. The sample was submitted to SciTest Laboratory of Randolph, Vermont for analysis per EPA Method 524.2. According to Mr. Atkinson, none of the compounds targeted by the analysis were detected in excess of method detection limits.

Due to the distance between the water source and the site, and the fact that no VOCs were detected in the drinking water sample collected from the municipal supply on August 1, 2000, the municipal water supply is likely at little risk of contamination from the petroleum contamination present at the McGann Mobil site.

##### *Buildings in the Vicinity*

The service building is the only building located on the subject property. The on-site building is constructed on a slab foundation. The nearest building to McGann's Mobil is Bailey Motors located to the east of the site beyond a drainage swale. This building is also constructed on a slab foundation. The nearest residence is located southwest of the site in a hydraulically cross-gradient direction. To the north, across Route 4a are the Westside Napa, an apartment house; and the Rite Aide Pharmacy, the foundation construction of these buildings is not known.

Due to the fact that the downgradient extent of the contaminant plume has not been defined, it is possible that area buildings may be at risk of petroleum vapor migration.

The majority of the area downgradient of the source site is paved reducing potential risk of exposure to petroleum compounds through dermal contact with soils or inhalation of vapors.

##### *Surface Water*



The closest surface water body is the Clarendon River, located approximately 2,000 feet southeast of the site. Given the relatively low source area strength, and the distance between the water body and the source, the Clarendon River is not anticipated to be at risk from the subject site.

#### *Utility Corridors*

Water and sewer service are provided to the on site building via underground utility corridors. Groundwater is found at approximately 6.5 to 7.5 feet below grade at the site; this elevation is deeper than the elevation (4 to 5 feet below grade) where utilities are typically found. Based on visual inspection, several underground utilities exist in the vicinity of the site (i.e., storm sewer, sanitary sewer, a drainage swale, and municipal water service). Given the relatively low source strength and the groundwater elevation at the site, the potential for dissolved contaminant migration through utility corridors is considered negligible.

#### **IV. CONCLUSIONS**

Based on the initial site investigation of petroleum contamination associated with the permanent closure of two 6,000-gallon gasoline USTs, the following conclusions are offered:

1. As displayed on the groundwater contour map included in Appendix A, the groundwater flow direction for June 27, 2000 was estimated to be directed toward the north-northeast at a gradient of 0.3%.
2. No free phase petroleum product was observed in the monitoring wells gauged on June 27, 2000.
3. Monitoring well MW1 was non-detect for compounds targeted by the laboratory analysis.
4. The compounds 1,3,5-TMB and 1,2,4-TMB were present in the sample collected from monitoring well MW2 at concentrations above their respective VGES. Concentrations of ethylbenzene, xylenes, and naphthalene were reported below their respective VGES in the sample collected from MW2.
5. Benzene, 1,3,5-TMB, 1,2,4-TMB, and naphthalene were detected in the sample collected from MW3 at concentrations above the respective VGES; concentrations of toluene, ethylbenzene, and xylenes were detected below their applicable VGES in the sample collected from monitoring well MW3.
6. The downgradient extent of the contaminant plume has not been defined.

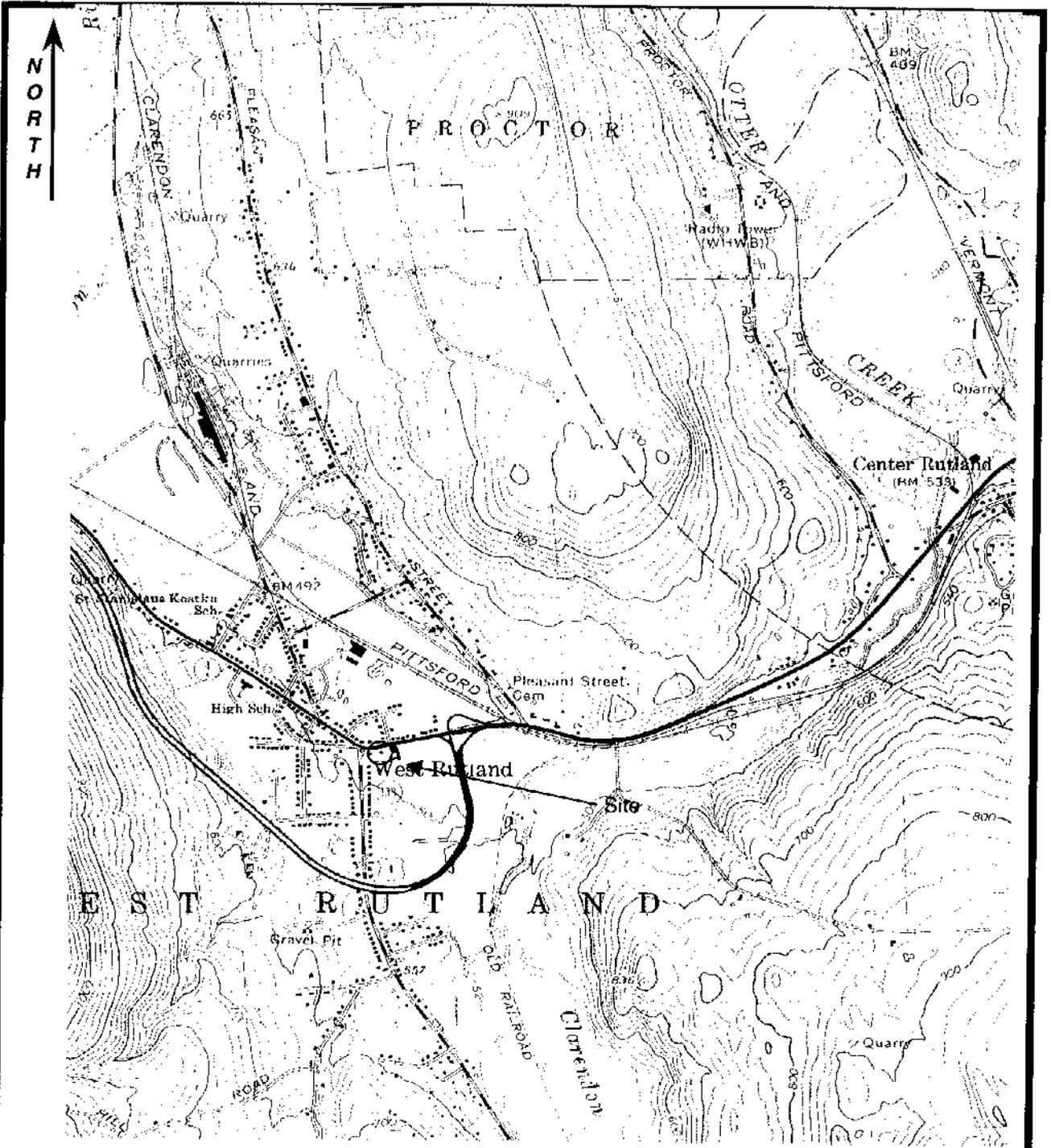


## **REFERENCES**

1. Griffin International, Inc., *UST Closure Report, McGanns Mobil, West Rutland, Vermont*, November 26, 1997
2. Doll, Charles G., ed., 1961, *Centennial Geologic Map of Vermont*, State of Vermont.
3. Doll, Charles G., ed., 1970, *Surficial Geologic Map of Vermont*, State of Vermont.
4. VTDEC Waste Management Division, Waterbury, VT, historical information, April 27, 1998.
5. Mr. Bruce Atkinson, West Rutland Water Department, telephone interview, September 19, 2000.

# Appendix A

## Maps



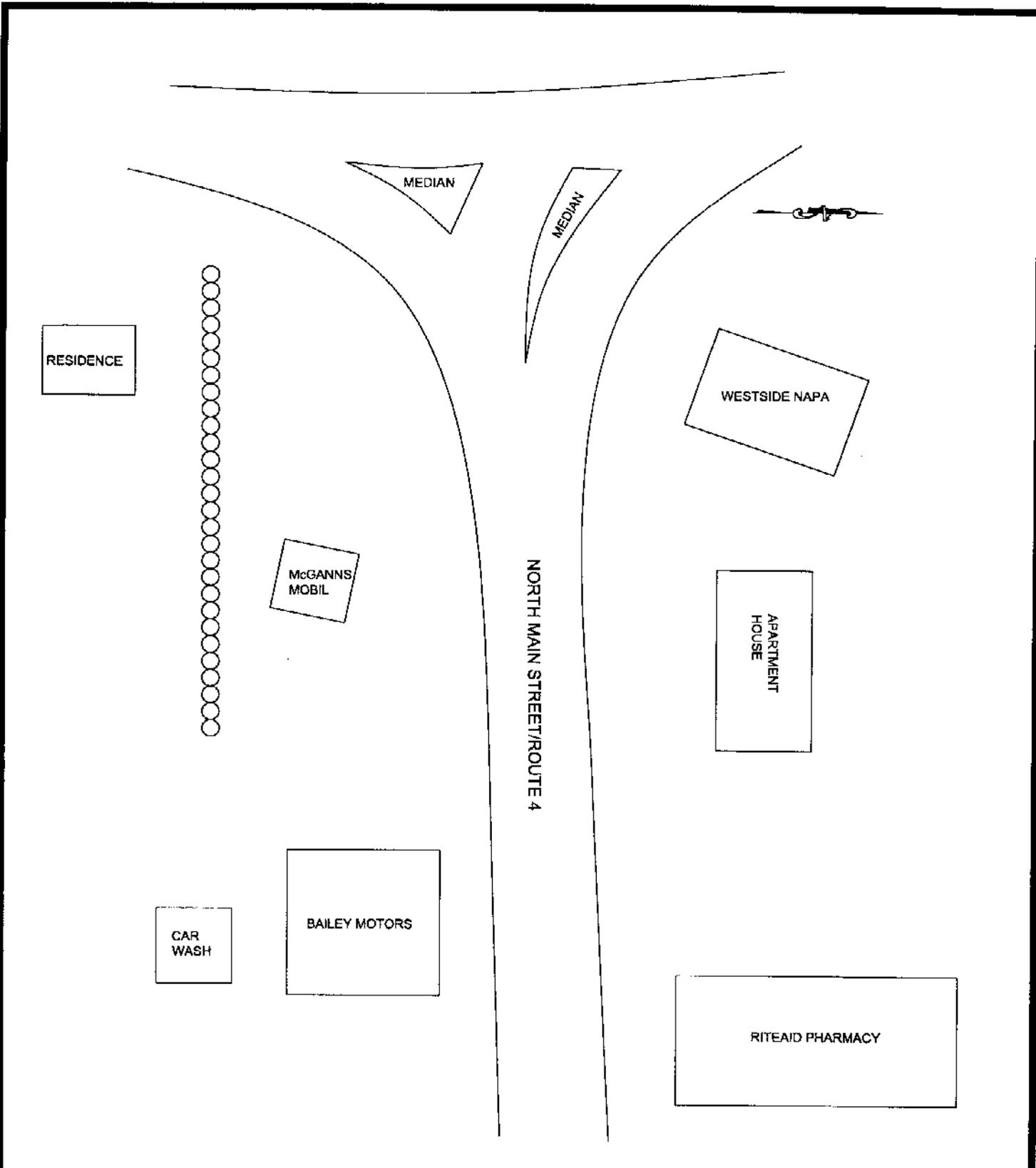
Griffin Job Number: 40041688 VTDEC Site#: 89-0356  
 Source: USGS Mapping West Rutland Quadrangle 1972



**McGanns Mobil  
 West Rutland, Vermont**

Site Location Map  
 USGS Mapping

Date: 09/19/00 Drawing No. 0 Scale: 1:24,000 By: RH



JOB #: 40041688

VTDEC SITE #: 89-0356

BASED ON FIELD OBSERVATIONS BY GRIFFIN INTERNATIONAL, 8/27/00



# McGANN'S MOBIL

169 NORTH MAIN STREET  
WEST RUTLAND, VERMONT

## AREA MAP

DATE: 9/18/00

DWG.#: 1

SCALE: NTS

DRN.: MP

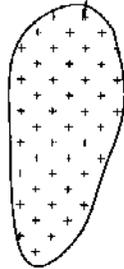
APP.: RH

FORMER LOCATION OF (2)-6,000 GAL. GASOLINE USTs REMOVED 11/24/97 AND (2)-2,000 GAL. USTs REMOVED 6/15/88; CURRENT LOCATION OF (2)-6,000 GAL. GASOLINE USTs, INSTALLED NOV. 1997

GRASS

TREE LINE

APPROXIMATE LOCATION OF PETROLEUM CONTAMINATED SOIL PILE



MW2

MW1

MW3

TANK PAD

PUMP ISLAND

SIDEWALK

NORTH MAIN STREET/ROUTE 4A

PAVEMENT

McGANNS MOBIL

SIDEWALK

DRAINAGE SWALE

**LEGEND**

- MW1 MONITORING WELL
- CATCH BASIN

JOB #: 40041688

VTDEC SITE #: 88-0368

SITE SURVEY BY GRIFFIN INTERNATIONAL, 6/27/00



**McGANNS MOBIL**

169 NORTH MAIN STREET  
WEST RUTLAND, VERMONT

**SITE MAP**

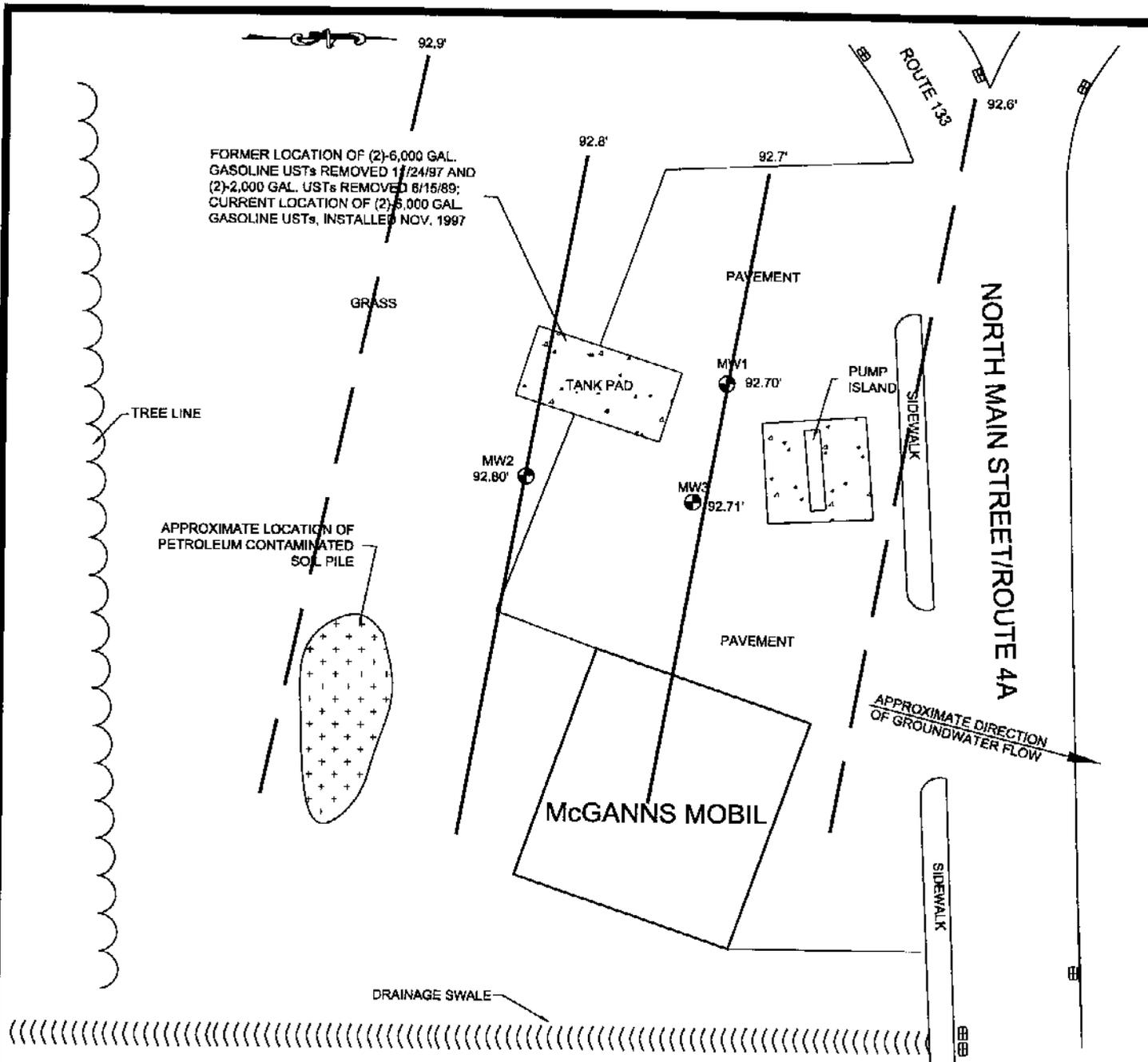
DATE: 9/18/00

DWG.#: 2

SCALE: 1" = 30'

DRN.: MP

APP.: RH



**LEGEND**

- MW1 92.70' MONITORING WELL WITH GROUNDWATER ELEVATION (ft)
- ☐ CATCH BASIN
- 92.8' GROUNDWATER CONTOUR ELEVATION (ft) (DASHED WHERE INFERRED)

JOB #: 40041688

VTDEC SITE #: 89-0356

SITE SURVEY BY GRIFFIN INTERNATIONAL, 6/27/00



**McGANN'S MOBIL**

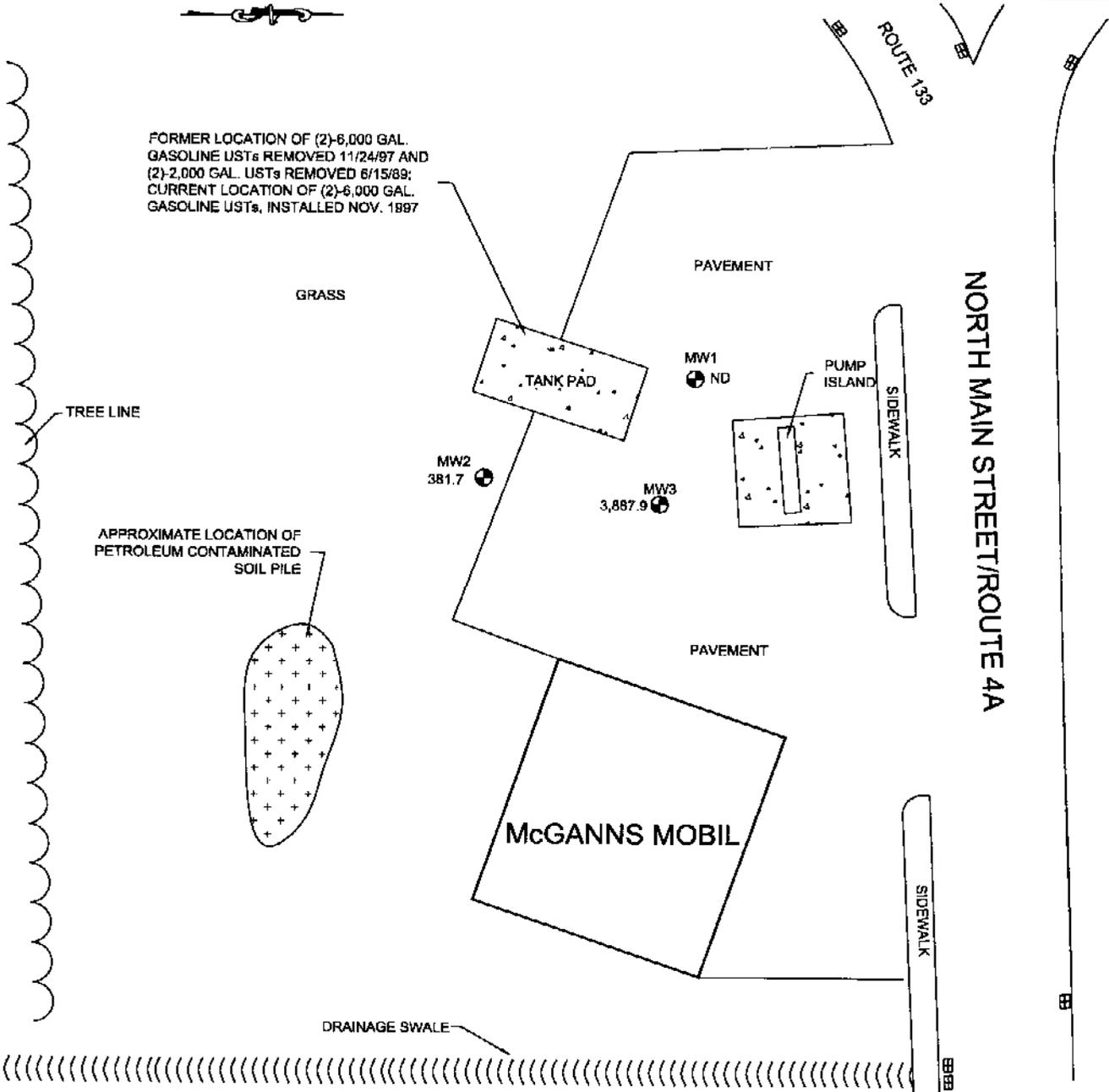
169 NORTH MAIN STREET  
WEST RUTLAND, VERMONT

**GROUNDWATER CONTOUR MAP**

MEASURED: 6/27/00

DATE: 9/18/00	DWG. #: 3	SCALE: 1" = 30'	DRN.: MP
			APP.: RH

FORMER LOCATION OF (2)-6,000 GAL. GASOLINE USTs REMOVED 11/24/87 AND (2)-2,000 GAL. USTs REMOVED 6/15/89; CURRENT LOCATION OF (2)-6,000 GAL. GASOLINE USTs, INSTALLED NOV. 1997



**LEGEND**

- MW2  
● 381.7    MONITORING WELL WITH TOTAL VOC CONCENTRATION (ppb)
- ▣    CATCH BASIN
- ND    NON-DETECT

JOB #: 40041688

VTDEC SITE #: 89-0356

SITE SURVEY BY GRIFFIN INTERNATIONAL, 8/27/00



**McGANN'S MOBIL**

169 NORTH MAIN STREET  
WEST RUTLAND, VERMONT

**CONTAMINANT CONCENTRATION MAP**

SAMPLED: 8/27/00

DATE: 8/18/00

DWG.#: 4

SCALE: 1" = 30'

DRN.: MP

APP.: RH

# Appendix B

## Liquid Level Monitoring Data

### Liquid Level Monitoring Data

Monitoring Date: 6/27/00

Well I.D.	Top of Casing Elevation	Depth To Product	Depth To Water	Product Thickness	Specific Gravity Of Product	Hydro Equivalent	Corrected Depth To Water	Corrected Water Table Elevation
MW-1	99.27	-	6.57	-	-	-	-	92.70
MW-2	100.00	-	7.20	-	-	-	-	92.80
MW-3	99.18	-	6.47	-	-	-	-	92.71

Values presented in units of feet

Top-of-casing data from Griffin survey 6/27/00

Arbitrary datum of 100 feet set at top-of-casing for MW-2

# Appendix C

## **Groundwater Quality Summary**

### Groundwater Quality Summary

PARAMETER	MW1			Enforcement Standard
	6/27/00			
Benzene	<1.0			5
Toluene	<1.0			1,000
Ethylbenzene	<1.0			700
Xylenes	<1.0			10,000
Total BTEX				-
MTBE	<10.0			40
1,3,5-Trimethylbenzene	<1.0			4
1,2,4-Trimethylbenzene	<1.0			5
Naphthalene	<1.0			20
Total VOCs				-

PARAMETER	MW2			Enforcement Standard
	6/27/00			
Benzene	<5.0			5
Toluene	<5.0			1,000
Ethylbenzene	<b>30.0</b>			700
Xylenes	<b>179.</b>			10,000
Total BTEX	<b>209.0</b>			-
MTBE	<60.0			40
1,3,5-Trimethylbenzene	<b>59.7</b>			4
1,2,4-Trimethylbenzene	<b>106.</b>			5
Naphthalene	<b>7.0</b>			20
Total VOCs	<b>381.7</b>			-

PARAMETER	MW3			Enforcement Standard
	6/27/00			
Benzene	<b>503.</b>			5
Toluene	<b>54.9</b>			1,000
Ethylbenzene	<b>408.</b>			700
Xylenes	<b>2,110.</b>			10,000
Total BTEX	<b>3075.9</b>			-
MTBE	<200			40
1,3,5-Trimethylbenzene	<b>171.</b>			4
1,2,4-Trimethylbenzene	<b>518.</b>			5
Naphthalene	<b>123.</b>			20
Total VOCs	<b>3887.9</b>			-

VGES = Vermont Groundwater Enforcement Standard (1/20/00)

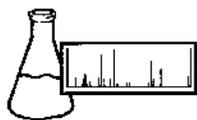
All Values Reported in ug/L (ppb)

Detections are in **bold**.

<1 - less than detection limit (1)

Analysis by EPA Method 8021B.

>VGES  
NA - not analyzed



**ENDYNE, INC.**

Laboratory Services

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

LABORATORY REPORT

Griffin International  
PO Box 943  
Williston, VT 05495  
Attn: Rob Higgins

PROJECT: McGanns Mobil/#40041688  
ORDER ID: 8143  
RECEIVE DATE: June 28, 2000  
REPORT DATE: July 6, 2000

Enclosed please find the results of the analyses performed for the samples referenced on the attached chain of custody. Different groups of analyses may be reported under separate cover.

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, unless otherwise noted.

Reviewed by,

Harry B. Locker, Ph.D.  
Laboratory Director

enclosures



### LABORATORY REPORT

CLIENT: Griffin International

ORDER ID: 8143

PROJECT: McGanns Mobil/#40041688

DATE RECEIVED: June 28, 2000

REPORT DATE: July 6, 2000

SAMPLER: DT/LT

Site: Trip Blank Ref. Number: 157686 Anal. Method: SW 8021B Date Sampled: 6/27/00 Time Sampled: 7:12 AM Analysis Date: 7/2/00 Analyst: 555		Site: Duplicate Ref. Number: 157688 Anal. Method: SW 8021B Date Sampled: 6/27/00 Time Sampled: 2:05 PM Analysis Date: 7/3/00 Analyst: 555		Site: MW #1 Ref. Number: 157690 Anal. Method: SW 8021B Date Sampled: 6/27/00 Time Sampled: 2:30 PM Analysis Date: 7/2/00 Analyst: 555	
<u>Parameter</u>	<u>Results ug/L</u>	<u>Parameter</u>	<u>Results ug/L</u>	<u>Parameter</u>	<u>Results ug/L</u>
MTBE	< 10.0	MTBE	< 200	MTBE	< 10.0
Benzene	< 1.0	Benzene	534.	Benzene	< 1.0
Toluene	< 1.0	Toluene	60.9	Toluene	< 1.0
Ethylbenzene	< 1.0	Ethylbenzene	447.	Ethylbenzene	< 1.0
Xylenes, Total	< 1.0	Xylenes, Total	2,340.	Xylenes, Total	< 1.0
1,3,5 Trimethyl Benzene	< 1.0	1,3,5 Trimethyl Benzene	181.	1,3,5 Trimethyl Benzene	< 1.0
1,2,4 Trimethyl Benzene	< 1.0	1,2,4 Trimethyl Benzene	567.	1,2,4 Trimethyl Benzene	< 1.0
Naphthalene	< 1.0	Naphthalene	135.	Naphthalene	< 1.0
UIP's	0.	UIP's	>10.	UIP's	0.
Surrogate 1	92.0%	Surrogate 1	89.0%	Surrogate 1	90.0%
Site: MW #3 Ref. Number: 157687 Anal. Method: SW 8021B Date Sampled: 6/27/00 Time Sampled: 2:05 PM Analysis Date: 7/3/00 Analyst: 555		Site: MW #2 Ref. Number: 157689 Anal. Method: SW 8021B Date Sampled: 6/27/00 Time Sampled: 2:23 PM Analysis Date: 7/3/00 Analyst: 555			
<u>Parameter</u>	<u>Results ug/L</u>	<u>Parameter</u>	<u>Results ug/L</u>		
MTBE	< 200.	MTBE	< 50.0		
Benzene	503.	Benzene	< 5.0		
Toluene	54.9	Toluene	< 5.0		
Ethylbenzene	408.	Ethylbenzene	30.0		
Xylenes, Total	2,110.	Xylenes, Total	179.		
1,3,5 Trimethyl Benzene	171.	1,3,5 Trimethyl Benzene	59.7		
1,2,4 Trimethyl Benzene	518.	1,2,4 Trimethyl Benzene	106.		
Naphthalene	123.	Naphthalene	7.0		
UIP's	>10.	UIP's	>10.		
Surrogate 1	91.0%	Surrogate 1	96.0%		



ENDYNE, INC.

160 James Brown Drive  
Williston, Vermont 05495  
(802) 879-4333

# 40041688

CHAIN-OF-CUSTODY-RECORD

39247

Project Name: <i>McGANN'S MOBILE</i> <i>W. RUTLAND</i>		Reporting Address: <i>GRIFFIN</i>		Billing Address:	
Endyne Order ID: (Lab Use Only) <i>8143</i>	<i>1-0</i> <i>-1</i> <i>-S</i>	Company: Contact Name/Phone #: <i>ROB HIGGINS</i>		Sampler Name: <i>DOM TO GRABBER</i> Phone #: <i>LAURA TERRALL</i>	

Ref # (Lab Use Only)	Sample Identification	Matrix	G R A B	C O M P	Date/Time	Sample Containers		Field Results/Remarks	Analysis Required	Sample Preservation	Rush
						No.	Type/Size				
157686	TRIP BLANK	<i>Hand</i>	<i>X</i>		<i>07:12</i>	<i>2</i>	<i>40ml</i>		<i>19</i>	<i>HCC</i>	
157687	<i>mu#3</i>	<i>↓</i>	<i>↓</i>		<i>14:05</i>	<i>↓</i>	<i>↓</i>		<i>↓</i>	<i>↓</i>	
157688	DUPPLICATE	<i>↓</i>	<i>↓</i>		<i>14:05</i>	<i>↓</i>	<i>↓</i>		<i>↓</i>	<i>↓</i>	
157689	<i>mu#2</i>	<i>↓</i>	<i>↓</i>		<i>14:23</i>	<i>↓</i>	<i>↓</i>		<i>↓</i>	<i>↓</i>	
157690	<i>mu#1</i>	<i>↓</i>	<i>↓</i>		<i>14:30</i>	<i>↓</i>	<i>↓</i>		<i>↓</i>	<i>↓</i>	

Relinquished by: <i>Dom Terry</i>	Date/Time: <i>6/27/00 17:15</i>	Received by: <i>Stacy Benjamin</i>	Date/Time: <i>6-28-00 10:39am</i>	Received by: <i>Austin Horvath</i>	Date/Time: <i>6-28-00 10:40</i>
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New York State Project: Yes \_\_\_ No

Requested Analyses

1	pH	6	TKN	11	Total Solids	16	Sulfate	21	1664 TPH/FOG	26	8270 PAH
2	Chloride	7	Total P	12	TSS	17	Coliform (Specify)	22	8015 GRO	27	PP13 Metals
3	Ammonia N	8	Total Diss. P	13	TDS	18	COD	23	8015 DRO	28	RCRA8 Metals
4	Nitrite N	9	BOD	14	Turbidity	19	8021B	24	8260/8260B	29	
5	Nitrate N	10	Alkalinity	15	Conductivity	20	8010/8020	25	8270 B/N or Acid	30	
31	Metals (As Is, Total, Diss.) Ag, Al, As, B, Ba, Be, Ca, Cd, Co, Cr, Cu, Fe, Hg, K, Mg, Mn, Mo, Na, Ni, Pb, Sb, Se, Si, Sr, Ti, Tl, V, Zn										
32	TCLP (Specify: volatiles, semi-volatiles, metals, pesticides, herbicides)					33					
34	Other										

**CHAIN-OF-CUSTODY-RECORD**

3000

Project Name: <i>WATER</i>		Reporting Address: <i>100 W. 10th St</i>	Billing Address:
Endyne Order ID: (Lab Use Only)	-O -I -S	Company: Contact Name/Phone #: <i>W. W. W. W.</i>	Sampler Name: Phone #: <i>1-800-234-5678</i>

Ref # (Lab Use Only)	Sample Identification	Matrix	G R A B	C O M P	Date/Time	Sample Containers		Field Results/Remarks	Analysis Required	Sample Preservation	Rush
						No.	Type/Size				
	<i>100 W. 10th St</i>	<i>Water</i>	<i>✓</i>		<i>10/12</i>	<i>1</i>	<i>100 mL</i>		<i>10</i>	<i>100</i>	
	<i>100 W. 10th St</i>		<i>↓</i>		<i>10/12</i>	<i>1</i>	<i>100 mL</i>				
	<i>100 W. 10th St</i>		<i>↓</i>		<i>10/12</i>	<i>1</i>	<i>100 mL</i>				
	<i>100 W. 10th St</i>		<i>↓</i>		<i>10/12</i>	<i>1</i>	<i>100 mL</i>				
	<i>100 W. 10th St</i>		<i>↓</i>		<i>10/12</i>	<i>1</i>	<i>100 mL</i>				

Relinquished by: <i>[Signature]</i>	Date/Time: <i>10/12/12</i>	Received by: <i>[Signature]</i>	Date/Time: <i>10/12/12</i>	Received by: <i>[Signature]</i>	Date/Time: <i>10/12/12</i>
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New York State Project: Yes  No  Requested Analyses

1	pH	6	TKN	11	Total Solids	16	Sulfate	21	1664 TPH/FOG	26	8270 PAH
2	Chloride	7	Total P	12	TSS	17	Coliform (Specify)	22	8015 GRO	27	PP13 Metals
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31	Metals (As Is, Total, Diss.) Ag, Al, As, B, Ba, Be, Ca, Cd, Co, Cr, Cu, Fe, Hg, K, Mg, Mn, Mo, Na, Ni, Pb, Sb, Se, Si, Sr, Ti, Tl, V, Zn										
32	TCLP (Specify: volatiles, semi-volatiles, metals, pesticides, herbicides)					33					
34	Other										