



8 January 1993

Ms. Cindy Woods  
Agency of Natural Resources  
Department of Environmental Conservation  
Hazardous Materials Management Division  
103 South Main Street/West Building  
Waterbury, Vermont 05671-0404

RE: North Troy Getty (Cota's) Service Station, North Troy, Vermont.  
VTDEC Site #90-0516

Dear Ms. Woods.

Please find enclosed Griffin International's Report on the Investigation of Residual Subsurface Petroleum Contamination at the above referenced site. A copy of this report has been sent to Bay Oil, Inc.

If you have any questions, please call.

Cordially,

Christopher Hill  
Hydrogeologist

Enclosure

REPORT  
ON THE INVESTIGATION OF  
RESIDUAL SUBSURFACE PETROLEUM  
CONTAMINATION

NORTH TROY GETTY (COTA'S) SERVICE STATION  
NORTH TROY, VERMONT

VTDEC SITE #90-0516  
GRIFFIN PROJECT #3924185

JANUARY 1993

Prepared For:

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## **EXECUTIVE SUMMARY**

Griffin International, Inc. has been investigating residual subsurface petroleum contamination at the North Troy Getty Service Station in North Troy, Vermont, since May 1990. Griffin is conducting work at this site for the Bay Oil Company of Bristol, Vermont at the request of the Vermont Department of Environmental Conservation in response to the detection of residual petroleum contamination at the site during underground storage tank removals in May, 1990.

In an effort to further establish the distribution and limits of residual petroleum contamination in soils and groundwater at the site, Griffin installed three new monitoring wells in October 1992 (MW9, MW10, MW11) and collected groundwater samples from all new and existing monitoring wells. Griffin also inspected an adjacent stream and swampy area to the east of the site to determine if any residual petroleum contamination at the site was reaching that area.

Data obtained during the installation of the new monitoring wells indicates that petroleum contamination does not extend a significant distance in the upgradient or lateral directions from the former gasoline tank pit. Residual petroleum contamination appears to be contained to the former tank pit and a narrow band which extends approximately 100' downgradient of the former underground storage tank (UST) locations. No new areas of free product have been detected downgradient of the former USTs during this phase of the investigation, and only one well at the site contained free product on the recent sample date. Although the residual, dissolved phase, petroleum contamination has migrated across the property, water quality data from monitoring wells at the edge of the property indicates that contaminant concentrations at the property boundaries are low, and that no significant off property migration has occurred. There are no indications that residual petroleum contamination has reached the swampy area to the east of the site. Buildings and residences in the surrounding village of North Troy are served by a municipal water system and there appears to be little or no risk to surrounding water supplies.

Based on the data gathered during this phase of the investigation, Griffin is recommending the continued manual removal of accumulated free phase product from on-site monitoring wells in which it collects and the quarterly collection and analyses of groundwater samples from several monitoring wells to document the degradation of residual petroleum contamination.

## INTRODUCTION

This report details the results of work recently completed as part of the ongoing investigation of residual subsurface petroleum contamination at the Getty Service Station (Cota's) in North Troy, Vermont. This work has been completed by Griffin International, Inc. (Griffin) for the Bay Oil Company, Inc. of Bristol, Vermont in response to the 13 August 1992 letter from the Vermont Department of Environmental Conservation (VTDEC) to Mr. Keith Corkins of Bay Oil.

## SITE BACKGROUND

### Site Description

The site location and plan are indicated on the attached Site Location and Site Maps on Pages A1 and A2 of the Appendix. A more detailed site description is omitted from this report to avoid duplication of previously stated information. A full site description appears in Griffin's Report on the Investigation of Subsurface Petroleum Contamination: Getty Service Station: North Troy, Vermont dated June, 1990.

### Site History

A chronology of the events which have occurred since the beginning of the subsurface investigation at this site appear below in Table 1 for easy reference. Details of each event appear in Griffin's report on that stage of the work.

Date	Event
Early May 1990	3 USTs removed. 1 compartmentalized tank installed to replace previous three. Residual petroleum contamination detected during tank removals.
May 29, 1990	Site Investigation. 3 monitoring wells installed. Groundwater quality monitoring commenced.
Sept. 8, 1991	Due to observed increases in contaminant concentrations in groundwater, a fourth monitoring well is installed to help determine the limits of downgradient contamination. Groundwater quality monitoring continues.
December, 1991	Free product detected in MW4. Manual Bailing of product from monitoring well commenced. Groundwater quality monitoring continues.

**Table 1. Chronology of Events at North Troy Getty Service Station  
(Continued Next Page)**

June 2, 1992	Phase II Investigation. Monitoring Wells MW5 through MW8 installed. Remediation Feasibility Study conducted. Continued groundwater monitoring.
October 28 1992	Three additional monitoring wells, MW9 through MW11, installed to further define limits of residual petroleum contamination. Additional groundwater sampling conducted.

**Table 1. Chronology of Events at North Troy Getty Service Station.  
(Continued from previous Page)**

## **INVESTIGATIVE PROCEDURES**

To help further define the limits of residual petroleum contamination at the site, Griffin installed three additional monitoring wells (MW9, MW10, MW11) at locations specified by the VTDEC. After installation, groundwater samples were collected from all new and existing groundwater monitoring wells. The new wells were located in both azimuth and elevation for inclusion on an updated site map. Additionally, a visual inspection and PID screening was completed at the swampy area to the east of the site. A stream and drainage swale to the south of the site were also inspected. Details and results of the work completed are presented below.

### **Monitoring Well Installation**

On 28 October 1992, three monitoring wells were completed by Green Mountain Boring, Inc. of Barre, Vermont under the direct supervision of a Griffin Hydrogeologist.

The wells were installed using a hollow stem auger drill rig. Undisturbed soil cores were collected in a split spoon sampler at five foot intervals from each borehole. The soil core samples, and drill cuttings collected directly from the augers, were screened for volatile organic compounds (VOCs) using an Hnu Model PI101 photoionization detector (PID) and logged by the hydrogeologist. Soils encountered in the three boreholes generally consisted of five to ten feet of sand and gravel fill material overlying a dense, clay rich silt.

Monitoring well locations are indicated on the attached Site Map, page A2 of the Appendix. MW9 is located upgradient of the existing and former UST locations and on the west side of Route 101. MW9 was not placed due west of the former UST pit, at the proposed location, due to site restrictions which prevented drilling at that location. MW10 is also located in the upgradient direction from the former UST locations but was installed east of Route 101 on the

Getty Station property. MW11 was placed immediately downgradient of the former UST locations to establish the degree of residual petroleum contamination at that location and to potentially serve as an additional point for the recovery of free phase product via manual bailing.

No elevated PID readings were detected during the screening of the soil core samples extracted from the boreholes of MW9 and MW10. Elevated PID readings of up to 25 ppm were detected in the sand and gravel fill portion of the soil boring for MW11. PID readings declined rapidly once the borehole was advanced into the basal silts and clays. PID readings and soil characteristics observed during monitoring well installation are listed on the detailed well logs, pages A12 to A14 of the Appendix.

The monitoring wells are constructed of two inch diameter, 0.010" slot PVC well screen and attached casing. The annulus between the borehole wall and the screened section of each well contains a silica gravel pack to filter fine sediments from groundwater entering the well. The annulus of each well also contains a bentonite seal to prevent surface water from infiltrating into the borehole. Each well is protected at the surface by locking wells caps, flush mounted steel well head protection casings, and bolt down covers. The steel well protection casings are set in cement, which is contoured at the surface to prevent surface water from accumulating at the well head. Well construction details are listed on the well logs in the Appendix (pages A12-A14).

Once the wells were installed they were developed by a Griffin field technician, using a clean Teflon bailer, to remove fine sediments from the sand pack around the well screen and to draw surrounding groundwater into the monitoring well. No free phase product was detected during well development.

### **Groundwater Sampling and Analysis**

On 13 November 1992, Griffin collected groundwater samples from the three new monitoring wells and all existing monitoring wells except MW5. All samples collected were analyzed according to EPA Method 8020 which tests for benzene, toluene, ethylbenzene, xylenes (the BTEX compounds), and MTBE (methyl tertiary butyl ether, an anti-knock gasoline additive). All samples were collected according to Griffin's groundwater sampling protocol which includes well development prior to sample collection.

The laboratory analyses of the groundwater samples from the new upgradient wells MW9 and MW10 detected no petroleum related compounds. The analysis of the groundwater sample

collected from the new monitoring well MW11, immediately downgradient of the UST locations, detected benzene and toluene dissolved in the groundwater in the vicinity of this well. Of the two compounds detected in this well, only benzene was detected at a concentration above Vermont Drinking Water Standards. No free phase product was detected in the new monitoring wells.

The results of the analyses of the groundwater samples collected from all monitoring wells at the site are tabulated on pages A6 through A10 of the Appendix. The historical water quality results from MW1, MW2 and MW3, the three original monitoring wells, have been charted to aid in trend analysis. Water quality data from the remaining monitoring wells has not been charted due to the small size of the groundwater quality data sets from those wells.

The charted water quality data from MW1, MW2, and MW3 indicates a trend of decreasing contaminant concentrations in the groundwater surrounding each of these wells. The trend lines plotted through the Total BTEX data on each chart were calculated using the least squares method. In calculating the slope of each of the Total BTEX trend lines for MW1, MW2, and MW3, the first data point of each data set (5/29/90 results) was discarded due to their anomalous nature. The increase in BTEX concentrations observed in each of the three wells during the November '92 sampling is likely due to the increased seasonal precipitation which has raised the water table elevation, bringing groundwater into contact with petroleum contaminated soils. These increases are not believed to be part of a long term trend, as indicated by the trend lines through the charted water quality data from these wells. Contaminant concentrations remains significantly above Vermont Drinking Water Standards for MW1, MW2, and MW3.

Griffin was able to collect a groundwater sample from MW4 for the first time since September 1991 since no free phase product was detected in that well on the recent site visit. Total BTEX and MTBE concentrations were higher on the 13 November 1992 sample date than on 8 September 1991. This is likely a result of the free phase product which had accumulated in this well. Contaminant concentrations in this well are above Vermont Drinking Water Standards.

No groundwater sample was collected from MW5 on the recent sample date due to the presence of 4.25" of free product in that well. Lab analyses of the groundwater sample from MW6 detected no petroleum related compounds. Slight increases in contaminant concentrations were observed in the downgradient wells MW7 and MW8. Contaminant concentrations in MW7 remain below Vermont Drinking Water Standards. One compound in MW8, benzene, is above the Drinking Water Standard. A Contaminant Distribution Map showing the Total

BTEX+MTBE Concentrations in all monitoring wells sampled appears on page A4 of the Appendix.

Duplicate, trip blank and equipment blank samples indicate that adequate quality assurance/quality control was maintained during sample collection and analyses. The QA/QC results and Vermont Drinking Water Standards are tabulated on page A11 of the Appendix. No free phase product was detected in any monitoring wells other than MW5 during groundwater sample collection.

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

Prior to groundwater sampling, Griffin measured the relative water table elevations in wells MW1 through MW11. Measurements were made relative to a benchmark (top of casing at MW1), which was assigned an arbitrary elevation of 100 feet. Water level data is presented on page A5 of the Appendix.

The water table elevation in each monitoring well was calculated by subtracting the depth to water measurement (made from top of casing) from the assigned top of casing elevations. Using the water table elevations from each monitoring well, the groundwater contour map on page A3 of the Appendix was developed. Groundwater was encountered at depths ranging from two to eleven feet below grade and was determined to be flowing easterly at a gradient of approximately two percent. The groundwater trough depicted by the current groundwater contour map agrees with and supports previously developed groundwater contour maps for this site.

### **Inspection and PID Screening of Swampy Area**

Griffin completed a visual inspection and PID screening of the swampy area to the east of the site on 28 October 1992. Griffin also inspected the stream and drainage swale to the south of the site. During these inspections, signs of petroleum contamination such as iridescent petroleum sheens, petroleum odors, and stressed or dead vegetation was searched for. Additionally, the Hnu Model PI101 PID was used to screen soils at the western edge of the swamp and along the stream bank to the south for hydrocarbon vapors. During this inspection, no elevated PID readings or other detectable signs were identified. This indicates that residual petroleum contamination at the Getty Service Station is not reaching these areas at detectable levels.

## CONCLUSIONS

Based on the information gathered during this phase of work, Griffin has reached the following conclusions:

- 1) Residual petroleum contamination does not appear to extend to the vicinity's of MW9 or MW10, since no petroleum related compounds were detected in groundwater samples collected from those wells.
- 2) Dissolved phase contamination was detected in the new well MW11. Of the two compounds detected, only benzene was present at a concentration above Vermont Drinking Water Standards. No free phase product was detected in MW11.
- 3) Review of the historical water quality data from MW1, MW2, and MW3 indicates a trend of declining contaminant concentrations in groundwater in the vicinity of these wells and the former USTs.
- 4) No free phase product was detected in MW4 on the 13 November sample date. Approximately 4.25" of free phase product was detected in MW5. No product was detected in any other monitoring wells.
- 5) Dissolved phase contaminant concentrations in downgradient MW7 and MW8 increased slightly over the last five month period. The benzene concentration in MW8 is slightly above the Vermont Drinking Water Standard, while concentrations in MW7 remain below it.
- 6) Groundwater at the site flows easterly at a gradient of approximately 2%. The majority of groundwater flow is likely occurring in the sand and gravel fill overlying the basal layer of silty clay.
- 7) During inspection of the swampy area to the east of the Getty Station and the stream and drainage swale to the south, no evidence was found to indicate that residual petroleum contamination at the Getty Station was impacting surface waters in the area.

Based on these conclusions, it appears that the highest concentrations of residual, dissolved phase, groundwater contamination are located in the vicinity of the former USTs and adjacent to the trench where the pump island fuel delivery lines are buried. Lower concentrations of residual

petroleum contamination exist in the vicinities of the downgradient wells, MW7 and MW8. The trench in which the pump island fuel delivery lines are buried is likely serving as a preferential pathway for contaminant migration. Based on the relatively low contaminant concentrations observed in MW7 and MW8, it appears that residual petroleum contamination does not extend significantly beyond those wells. The absence of free phase product in MW4 on the 13 November 1992 sampling date indicates that free product recovery efforts are having success.

## **RECOMMENDATIONS**

Based on the above conclusions, Griffin recommends the following actions for this site:

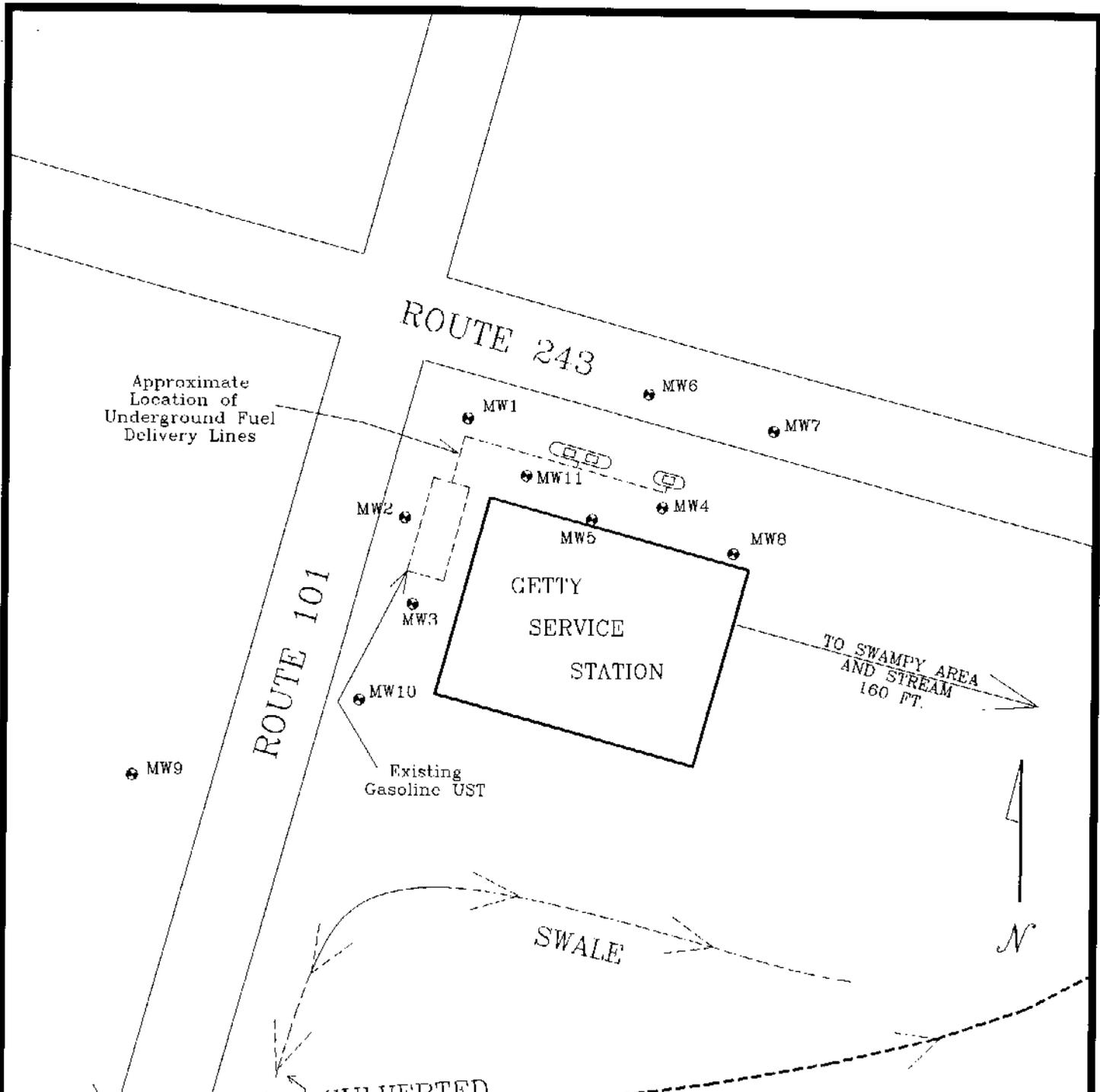
If manual bailing of MW5 is not already in progress, it should be commenced. Bay Oil is currently overseeing the bailing of product and the submittal of product recovery records. MW4 should continue to be checked regularly for free phase product, and bailed if any accumulates.

To monitor and document the reduction of contaminant concentrations at the site, Griffin recommends collecting and analyzing groundwater from monitoring wells MW1, MW2, MW3, MW4, MW5, MW6, MW7, MW8 and MW11 on a quarterly basis. Since MW9 and MW10 appear to be outside of the area where residual petroleum contamination has occurred or is likely to occur, Griffin does not recommend sampling those wells on a regular basis. The groundwater samples collected from the aforementioned monitoring wells should be analyzed according to EPA Method 8020.

If quarterly groundwater sampling is elected for the ongoing monitoring effort at this site, then the next sampling event should be scheduled for February of 1993.

# **APPENDIX**





Approximate Location of Underground Fuel Delivery Lines

ROUTE 243

ROUTE 101

GETTY SERVICE STATION

Existing Gasoline UST

TO SWAMPY AREA AND STREAM 160 FT.

SWALE

CULVERTED STREAM

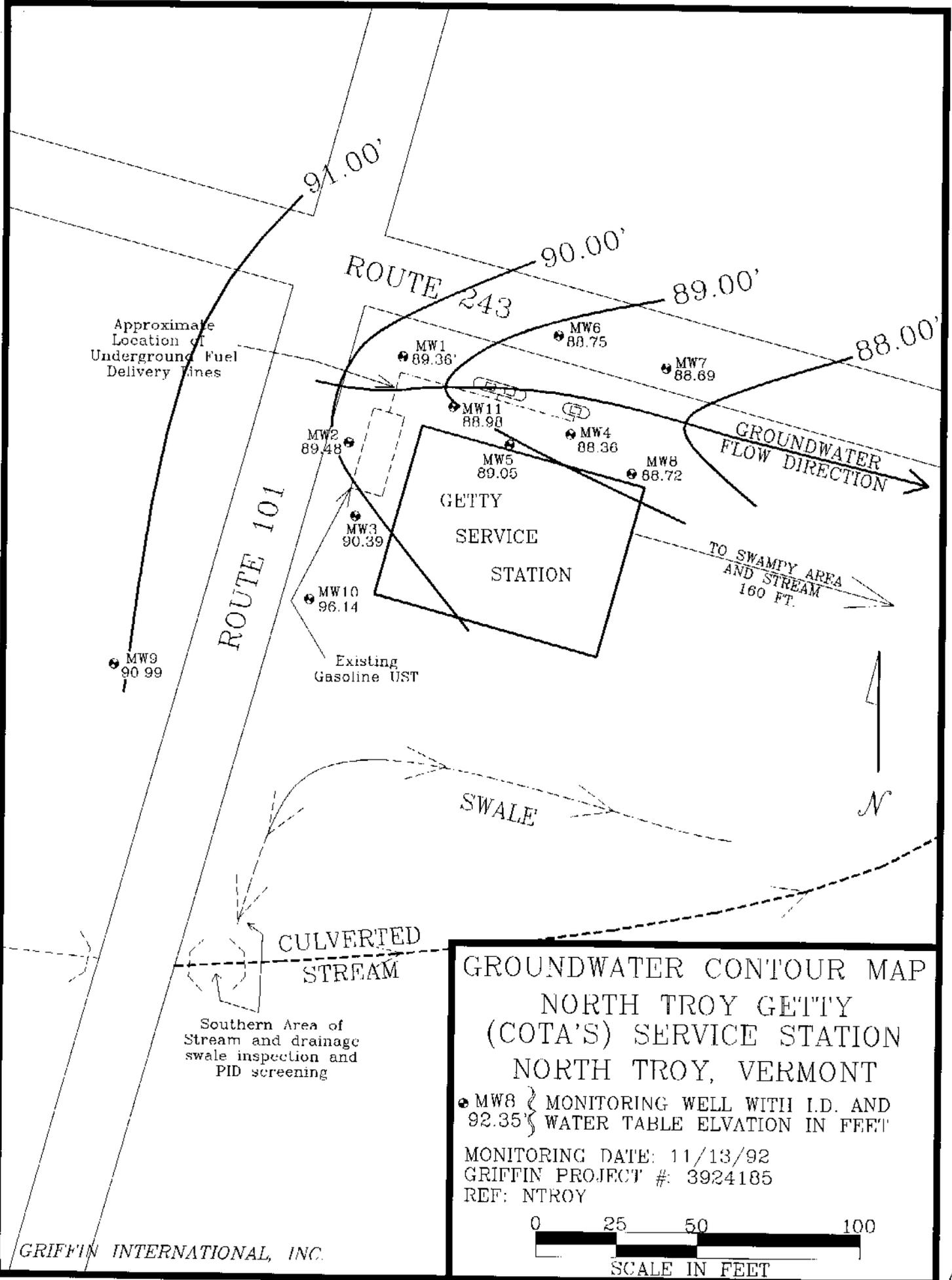
Southern Area of Stream and drainage swale inspection and PID screening

**SITE MAP**  
 NORTH TROY GETTY  
 (COTA'S) SERVICE STATION  
 NORTH TROY, VERMONT

• MW8 } MONITORING WELL WITH I.D.

DRAWN: 12/24/92  
 GRIFFIN PROJECT #: 3924185  
 REF: NTROY

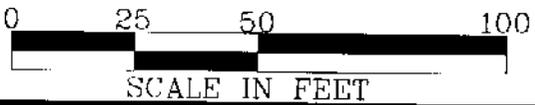
0    25    50    100  
 \_\_\_\_\_  
 SCALE IN FEET

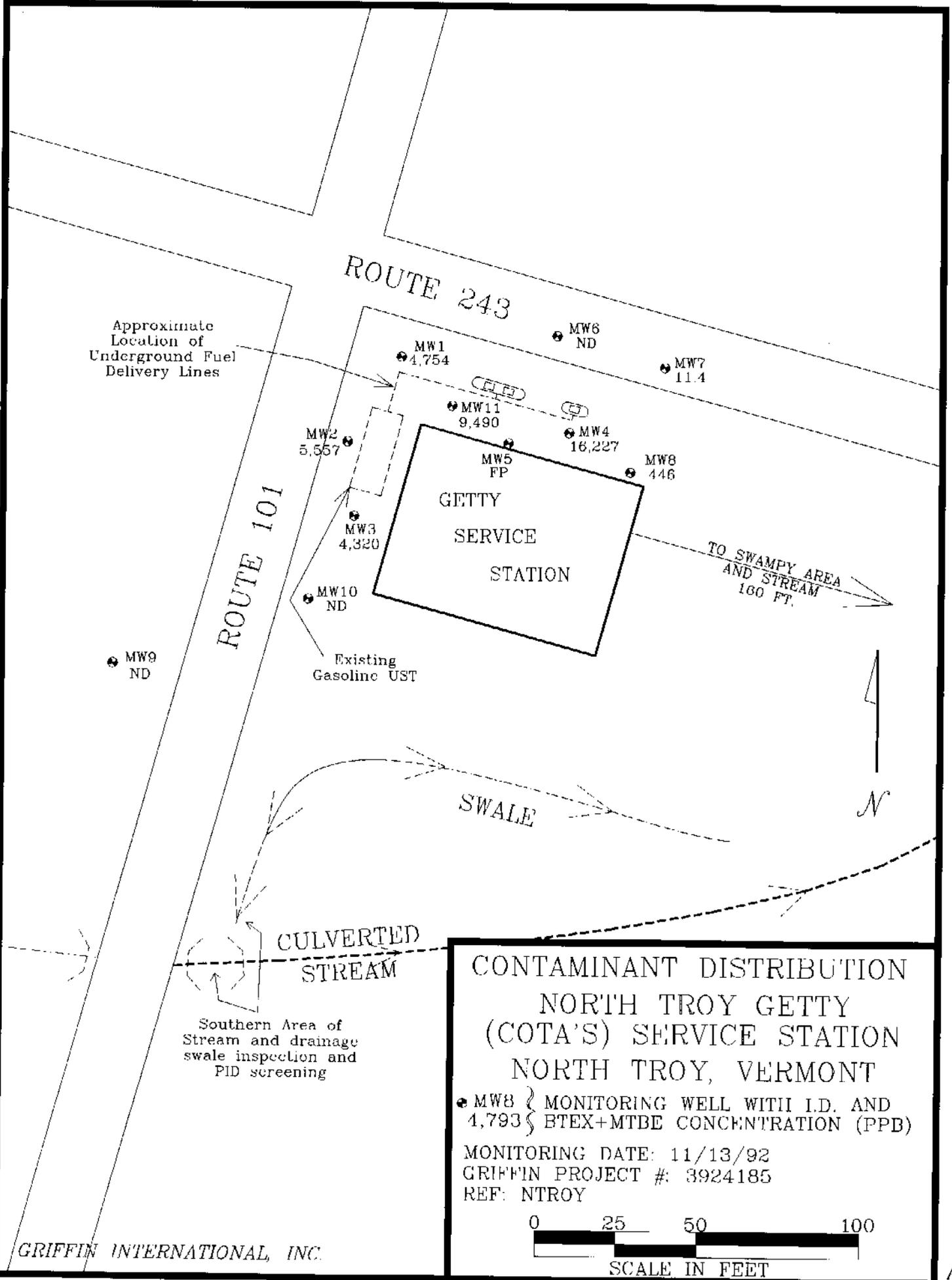


GROUNDWATER CONTOUR MAP  
 NORTH TROY GETTY  
 (COTA'S) SERVICE STATION  
 NORTH TROY, VERMONT

• MW8 } MONITORING WELL WITH I.D. AND  
 92.35' } WATER TABLE ELEVATION IN FEET

MONITORING DATE: 11/13/92  
 GRIFFIN PROJECT #: 3924185  
 REF: NTROY

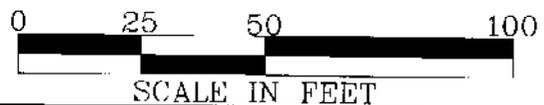




**CONTAMINANT DISTRIBUTION  
NORTH TROY GETTY  
(COTA'S) SERVICE STATION  
NORTH TROY, VERMONT**

• MW8 } MONITORING WELL WITH I.D. AND  
4,793 } BTEX+MTBE CONCENTRATION (PPB)

MONITORING DATE: 11/13/92  
GRIFFIN PROJECT #: 3924185  
REF: NTROY



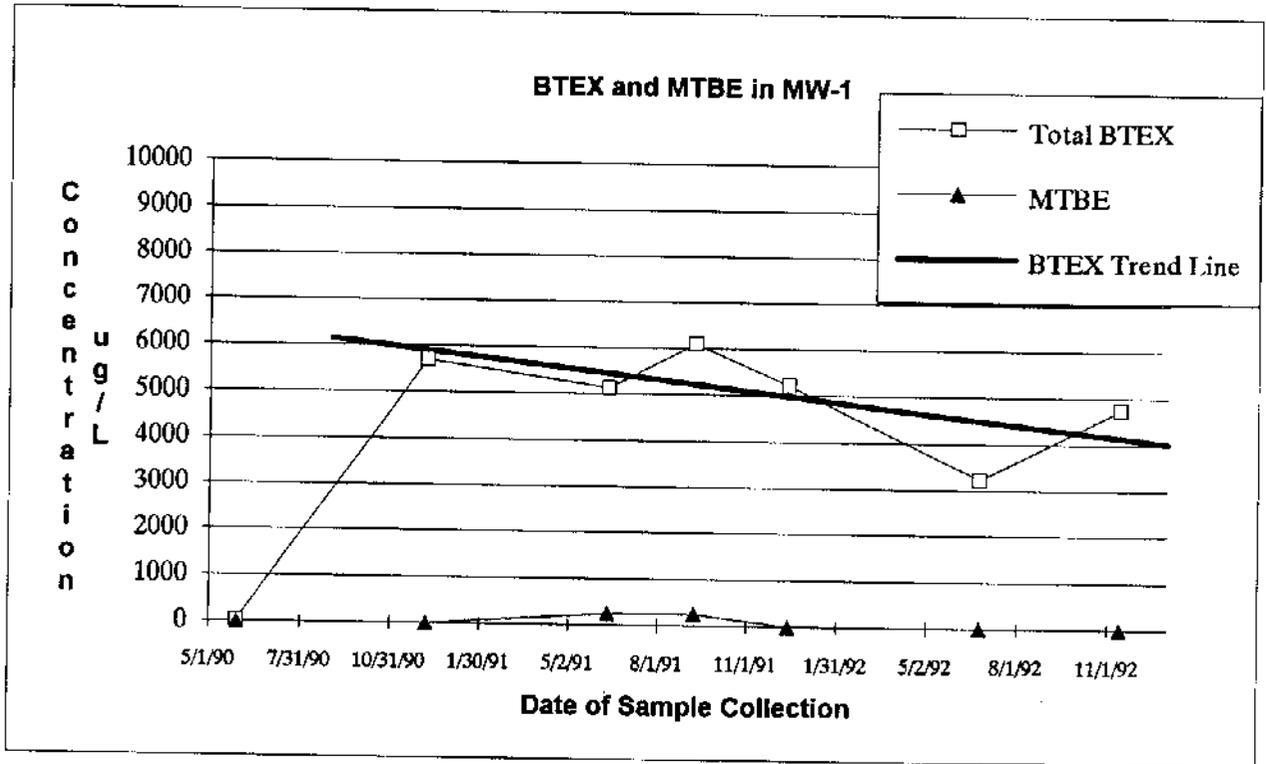
**Liquid Level Monitoring Data  
North Troy Getty (Cota's) Service Station  
North Troy, Vermont**

Monitoring Date: 11/13/92

Well I.D.	Well Depth	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	17	100.00	-	10.64	-	-	-	-	89.36
MW-2	17	98.90	-	9.42	-	-	-	-	89.48
MW-3	17	99.04	-	8.65	-	-	-	-	90.39
MW-4	17.5	98.53	-	10.17	-	-	-	-	88.36
MW-5	17	99.15	-	10.10	-	-	-	-	89.05
MW-6	17	98.02	-	9.27	-	-	-	-	88.75
MW-7	15	96.83	-	8.14	-	-	-	-	88.69
MW-8	18	98.43	-	9.71	-	-	-	-	88.72
MW-9	12.5	98.33	-	7.34	-	-	-	-	90.99
MW-10	17	98.39	-	2.25	-	-	-	-	96.14
MW-11	18	99.26	-	10.28	-	-	-	-	88.98

All Values Reported in Feet

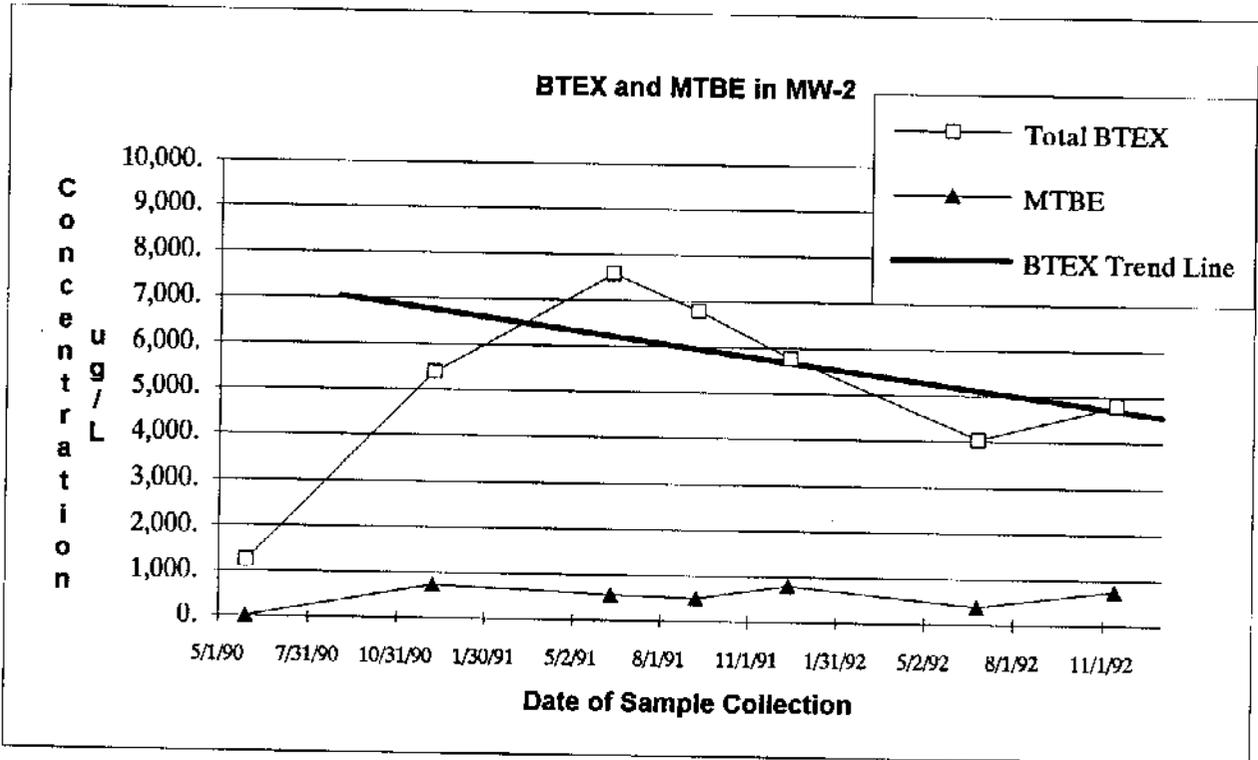
**Groundwater Quality Summary  
North Troy Getty (Cota's) Service Station  
North Troy, Vermont**



PARAMETER	Date of Sample Collection						
	5/29/90	12/7/90	6/11/91	9/8/91	12/13/91	6/25/92	11/13/92
Benzene	20.2	3,430.	3,140.	4,510.	3,500.	2,910.	3,810.
Chlorobenzene	ND	ND	ND	ND	ND	ND	ND
1,2-DCB	ND	ND	ND	ND	ND	ND	ND
1,3-DCB	ND	ND	ND	ND	ND	ND	ND
1,4-DCB	ND	154.	ND	ND	ND	ND	ND
Ethylbenzene	1.48	907.	201.	115.	138.	ND	ND
Toluene	13.6	635.	1,070.	1,080.	1,090.	320.	944.
Xylenes	5.12	573.	718.	394.	482.	ND	ND
<b>Total BTEX</b>	<b>40.4</b>	<b>6,699.</b>	<b>5,129.</b>	<b>6,099.</b>	<b>5,210.</b>	<b>3,230.</b>	<b>4,754.</b>
MTBE	ND	-	255.	255.	ND	ND	ND
<b>BTEX+MTBE</b>	<b>40.4</b>	<b>6,699.</b>	<b>5,384.</b>	<b>6,354.</b>	<b>5,210.</b>	<b>3,230.</b>	<b>4,754.</b>

All Values Reported in ug/L (ppb)  
ND - None Detected

**Groundwater Quality Summary  
North Troy Getty (Cota's) Service Station  
North Troy, Vermont**

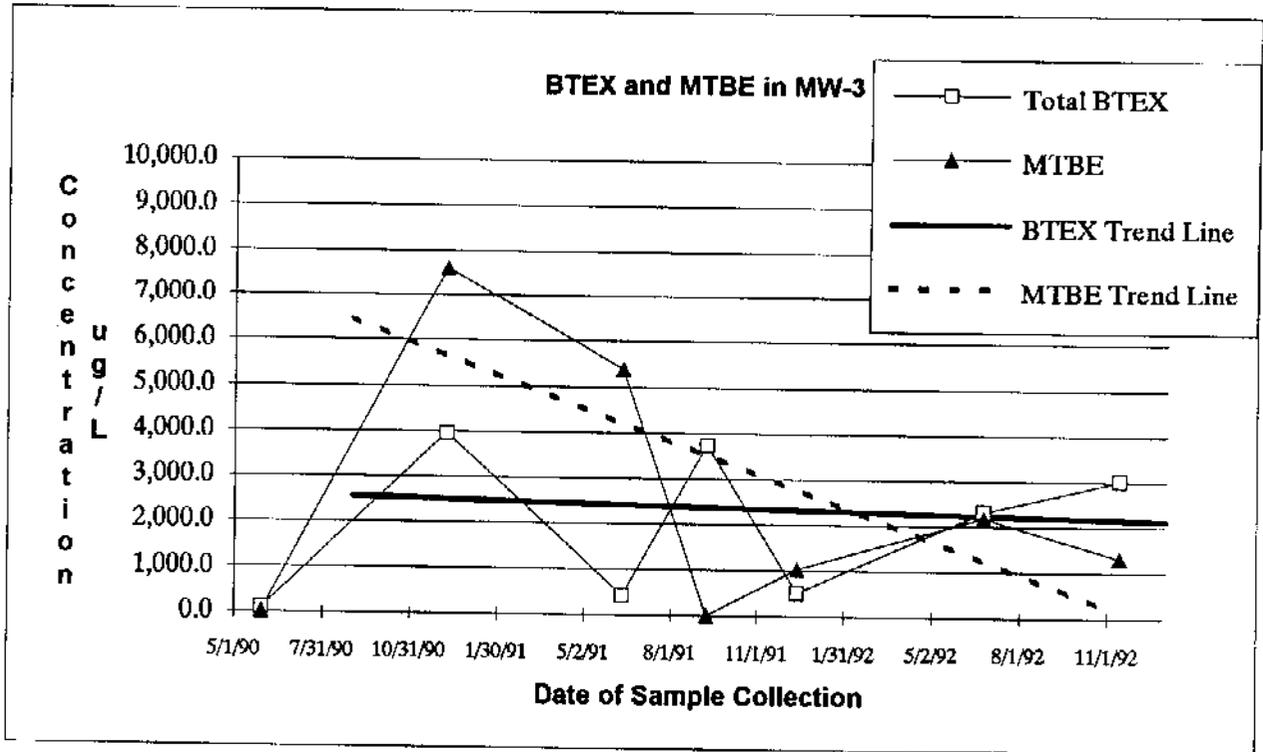


**Monitoring Well 2**

PARAMETER	Date of Sample Collection						
	5/29/90	12/7/90	6/11/91	9/8/91	12/13/91	6/25/92	11/13/92
Benzene	1,218.	3,170.	5,060.	5,830.	4,760.	3,730.	4,400.
Chlorobenzene	ND	ND	ND	ND	ND	ND	ND
1,2-DCB	ND	ND	ND	ND	ND	ND	ND
1,3-DCB	ND	ND	ND	ND	ND	ND	ND
1,4-DCB	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene	6.58	170.	694.	194.	132.	TBQ	ND
Toluene	19.9	865.	1,010.	760.	675.	306.	394.
Xylenes	ND	1,180.	809.	TBQ	217.	TBQ	ND
<b>Total BTEX</b>	<b>1,244.</b>	<b>5,385.</b>	<b>7,573.</b>	<b>6,784.</b>	<b>5,784.</b>	<b>4,036.</b>	<b>4,794.</b>
MTBE	14.3	738.	577.	516.	803.	397.	763.
<b>BTEX + MTBE</b>	<b>1,259.</b>	<b>6,123.</b>	<b>8,150.</b>	<b>7,300.</b>	<b>6,587.</b>	<b>4,433.</b>	<b>5,557.</b>

All Values Reported in ug/L (ppb)  
ND - None Detected

**Groundwater Quality Summary  
North Troy Getty (Cota's) Service Station  
North Troy, Vermont**



**Monitoring Well 3**

PARAMETER	Date of Sample Collection						
	5/29/90	12/7/90	6/11/91	9/8/91	12/13/91	6/25/92	11/13/92
Benzene	66.0	3,960.	402.	3,740.	477.	2,240.	2,650.
Chlorobenzene	ND	ND	ND	ND	ND	ND	ND
1,2-DCB	ND	ND	ND	ND	ND	ND	ND
1,3-DCB	ND	ND	ND	ND	ND	ND	ND
1,4-DCB	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene	ND	ND	ND	ND	7.68	ND	ND
Toluene	5.82	ND	22.3	TBQ	31.9	41.4	114.
Xylenes	15.9	ND	ND	ND	ND	28.5	246.
<b>Total BTEX</b>	<b>87.7</b>	<b>3,960.</b>	<b>424.</b>	<b>3,740.</b>	<b>517.</b>	<b>2,310.</b>	<b>3,010.</b>
MTBE	18.0	7,600.	5,390.	TBQ	1,030.	2,180.	1,310.
<b>BTEX+MTBE</b>	<b>105.72</b>	<b>11,560.</b>	<b>5,814.</b>	<b>3,740.</b>	<b>1,547.</b>	<b>4,490.</b>	<b>4,320.</b>

All Values Reported in ug/L (ppb)  
ND - None Detected

**Groundwater Quality Summary  
North Troy Getty (Cota's) Service Station  
North Troy, Vermont**

**Monitoring Well 4**

PARAMETER	Date of Sample Collection			
	9/8/91	12/13/91	6/25/92	11/13/92
Benzene	236.	FP	FP	1,300.
Chlorobenzene	ND	FP	FP	ND
1,2-DCB	ND	FP	FP	ND
1,3-DCB	ND	FP	FP	ND
1,4-DCB	ND	FP	FP	ND
Ethylbenzene	429.	FP	FP	1,620.
Toluene	527.	FP	FP	5,190.
Xylenes	1,110.	FP	FP	7,660.
Total BTEX	2,302.	FP	FP	15,770.
MTBE	74.	FP	FP	457.
BTEX+MTBE	2,376.	FP	FP	16,227.

FP - Free Product

**Monitoring Well 5**

PARAMETER	Date of Sample Collection		
	6/25/92	11/13/92	
Benzene	FP	FP	
Chlorobenzene	FP	FP	
1,2-DCB	FP	FP	
1,3-DCB	FP	FP	
1,4-DCB	FP	FP	
Ethylbenzene	FP	FP	
Toluene	FP	FP	
Xylenes	FP	FP	
Total BTEX	FP	FP	
MTBE	FP	FP	
BTEX+MTBE	FP	FP	

FP - Free Product

**Monitoring Well 6**

PARAMETER	Date of Sample Collection		
	6/25/92	11/13/92	
Benzene	ND	ND	
Chlorobenzene	ND	ND	
1,2-DCB	ND	ND	
1,3-DCB	ND	ND	
1,4-DCB	ND	ND	
Ethylbenzene	ND	ND	
Toluene	ND	ND	
Xylenes	ND	ND	
Total BTEX	ND	ND	
MTBE	ND	ND	
BTEX+MTBE	ND	ND	

All Values Reported in ug/L (ppb)  
ND - None Detected

**Monitoring Well 7**

PARAMETER	Date of Sample Collection		
	6/25/92	11/13/92	
Benzene	ND	ND	
Chlorobenzene	ND	ND	
1,2-DCB	ND	ND	
1,3-DCB	ND	ND	
1,4-DCB	ND	ND	
Ethylbenzene	ND	ND	
Toluene	ND	ND	
Xylenes	ND	ND	
Total BTEX	ND	ND	
MTBE	TBQ	11.4	
BTEX+MTBE	TBQ	11.4	

**Groundwater Quality Summary  
North Troy Getty (Cota's) Service Station  
North Troy, Vermont**

**Monitoring Well 8**

PARAMETER	Date of Sample Collection	
	6/25/92	11/13/92
Benzene	ND	10.7
Chlorobenzene	ND	ND
1,2-DCB	ND	ND
1,3-DCB	ND	ND
1,4-DCB	ND	ND
Ethylbenzene	ND	136.
Toluene	ND	40.5
Xylenes	ND	236.
Total BTEX	ND	423.
MTBE	16.4	22.8
BTEX+MTBE	16.4	446.

**Monitoring Well 9**

PARAMETER	Date of Sample Collection	
	11/13/92	
Benzene	ND	
Chlorobenzene	ND	
1,2-DCB	ND	
1,3-DCB	ND	
1,4-DCB	ND	
Ethylbenzene	ND	
Toluene	ND	
Xylenes	ND	
Total BTEX	ND	
MTBE	ND	
BTEX+MTBE	ND	

**Monitoring Well 10**

PARAMETER	Date of Sample Collection	
	11/13/92	
Benzene	ND	
Chlorobenzene	ND	
1,2-DCB	ND	
1,3-DCB	ND	
1,4-DCB	ND	
Ethylbenzene	ND	
Toluene	ND	
Xylenes	ND	
Total BTEX	ND	
MTBE	ND	
BTEX+MTBE	ND	

**Monitoring Well 11**

PARAMETER	Date of Sample Collection	
	11/13/92	
Benzene	8,250.	
Chlorobenzene	ND	
1,2-DCB	ND	
1,3-DCB	ND	
1,4-DCB	ND	
Ethylbenzene	ND	
Toluene	1,240.	
Xylenes	ND	
Total BTEX	9,490.	
MTBE	ND	
BTEX+MTBE	9,490.	

All Values Reported in ug/L (ppb)  
ND - None Detected

**Groundwater Quality Summary**  
**North Troy Getty (Cota's) Service Station**  
**North Troy, Vermont**

**Groundwater Quality Standards**

PARAMETER	Vermont Drinking Water Standard
Benzene	5.0*
Chlorobenzene	100**
1,2-DCB	-
1,3-DCB	-
1,4-DCB	-
Ethylbenzene	680**
Toluene	2420**
Xylenes	400**
Total BTEX	-
MTBE	40**
BTEX+MTBE	-

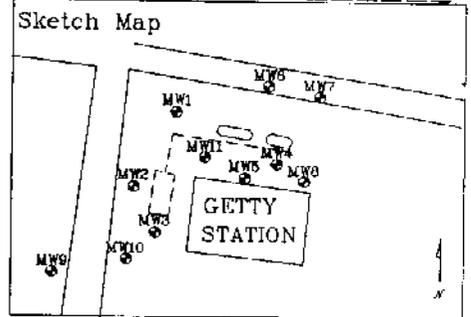
\* - Maximum Contaminant Level  
 \*\* - Health Advisory Levels  
 All Values Reported in ug/L (ppb)

**Quality Assurance and Control Sample Results**  
 Sample Collection Date: 11/13/92

PARAMETER	Trip Blank	Equip. Blank	Duplicate (MW2)
Benzene	ND	ND	4,350.
Chlorobenzene	ND	ND	ND
1,2-DCB	ND	ND	ND
1,3-DCB	ND	ND	ND
1,4-DCB	ND	ND	ND
Ethylbenzene	ND	ND	ND
Toluene	ND	ND	662.
Xylenes	ND	ND	ND
Total BTEX	ND	ND	4,912.
MTBE	ND	ND	657.
BTEX+MTBE	ND	ND	5,569.

All Values Reported in ug/L (ppb),  
 ND - None Detected

WELL NUMBER MW-11



PROJECT BAY OIL COMPANY  
 LOCATION NORTH TROY, VERMONT  
 DATE DRILLED 10/28/92 TOTAL DEPTH OF HOLE 18'  
 DIAMETER 4.5"  
 SCREEN DIA. 2" LENGTH 10' SLOT SIZE 0.010"  
 CASING DIA. 2" LENGTH 8' TYPE PVC  
 DRILLING CO. GREEN MTN. DRILLING METHOD HOLLOW STEM  
 DRILLER MANNING LOG BY P. MURRAY

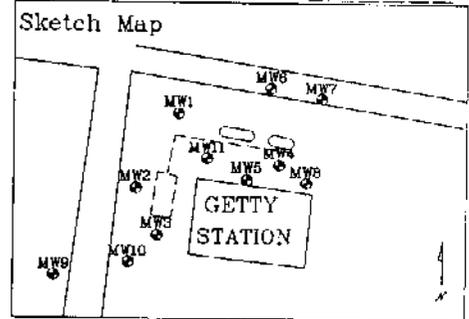
GRIFFIN INTERNATIONAL, INC

DEPTH IN FEET	WELL CONSTRUCTION	NOTES	BLOWS PER 6" OF SPOON & PID READINGS	DESCRIPTION/SOIL CLASSIFICATION (COLOR, TEXTURE, STRUCTURES)	DEPTH IN FEET
0		ROAD BOX			0
0		LOCKING WELL CAP			0
1		CONCRETE			1
2		BENTONITE	2'	0-5' SAND and GRAVEL FILL Gas Odor	2
3		WELL RISER	25 ppm		3
4					4
5		NATIVE FILL			5
6			5-7'	5-7' Tight, Moist Brown SILT	6
7			2,6,10,13	Some CLAY. No Odor	7
8		GRAVEL PACK	0.5 ppm		8
9					9
10		WELL SCREEN	10-12'		10
11			8,6,7,7		11
11			1 ppm		11
11				WATER TABLE ELEVATION	11
12				10-12' Wet Silty CLAY	12
13			15-17'		13
14			4,4,4,6		14
15			0.5 ppm		15
16				15-17' Wet gray SILT. Little CLAY.	16
17				No Odor	17
18					18
18				BASE OF EXPLORATION AT 18'	18
19		BOTTOM CAP			19
20					20
21					21
22					22
23					23
24					24
25					25
26					26

REF: NTROYLOG

WELL NUMBER MW-9

PROJECT BAY OIL COMPANY  
 LOCATION NORTH TROY, VERMONT  
 DATE DRILLED 10/28/92 TOTAL DEPTH OF HOLE 12.5'  
 DIAMETER 4.5"  
 SCREEN DIA. 2" LENGTH 10' SLOT SIZE 0.010"  
 CASING DIA. 2" LENGTH 2.5' TYPE PVC  
 DRILLING CO. GREEN MTN. DRILLING METHOD HOLLOW STEM  
 DRILLER MANNING LOG BY P. MURRAY



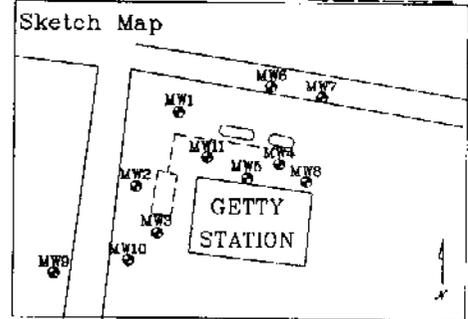
GRIFFIN INTERNATIONAL, INC

DEPTH IN FEET	WELL CONSTRUCTION	NOTES	BLOWS PER 6" OF SPOON & PID READINGS	DESCRIPTION/SOIL CLASSIFICATION (COLOR, TEXTURE, STRUCTURES)	DEPTH IN FEET
0		ROAD BOX			0
0		LOCKING WELL CAP			0
1		CONCRETE			1
2		BENTONITE		0-5' Dark Brown, Moist SILT with some SAND and GRAVEL	2
2		WELL RISER			3
3					4
4					5
5					6
6			5-7' 2,2,1,11 0 ppm	5-7' Moist to Wet SILT, SAND and GRAVEL	6
7		GRAVEL PACK			7
8				WATER TABLE ELEVATION	8
9			8-10' 0 ppm	8-10' Sample from auger is Wet Brown SILT, some SAND and Little Fine GRAVEL	9
10		WELL SCREEN			10
11				10-12' No sample collected due to flowing SAND/SILT Auger sample indicates Wet SILT and CLAY, little SAND.	11
12			12.5' 0 ppm		12
13		BOTTOM CAP		BASE OF EXPLORATION AT 12.5'	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
26					26

REF: NTROYLOG

WELL NUMBER MW-10

PROJECT BAY OIL COMPANY  
 LOCATION NORTH TROY, VERMONT  
 DATE DRILLED 10/28/92 TOTAL DEPTH OF HOLE 17'  
 DIAMETER 4.5"  
 SCREEN DIA. 2" LENGTH 10' SLOT SIZE 0.010"  
 CASING DIA. 2" LENGTH 6' TYPE PVC  
 DRILLING CO. GREEN MTN. DRILLING METHOD HOLLOW STEM  
 DRILLER MANNING LOG BY P. MURRAY



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		ROAD BOX			0
0		LOCKING WELL CAP			0
1		CONCRETE			1
2				0-5' SAND & GRAVEL FILL	2
3		WELL RISER	0-5'	WATER TABLE ELEVATION	3
4		BENTONITE	0 ppm		4
5					5
6			5-7'	5-5.25 Dry SAND and GRAVEL FILL	6
7			4,4,6,9	5.25-7' Moist to Wet Gray CLAY and SILT. Little very fine SAND. Dense.	7
8		GRAVEL PACK	0 ppm		8
9					9
10		WELL SCREEN	10-12'		10
11			5,5,8,8	10-12' Tight, Moist to Wet SILT and CLAY	11
12					12
13			15-17'		13
14			2,5,8		14
15			0 ppm	15-17' Wet to Moist SILT and CLAY	15
16					16
17				BASE OF EXPLORATION AT 17'	17
18		BOTTOM CAP			18
19					19
20					20
21					21
22					22
23					23
24					24
25					25
26					26

REF: NTROYLOG



Laboratory Services

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

LABORATORY REPORT

EPA METHOD 602 -- PURGEABLE AROMATICS

CLIENT: Griffin International  
PROJECT NAME: North Troy Getty Station  
REPORT DATE: November 30, 1992  
DATE SAMPLED: November 13, 1992  
DATE RECEIVED: November 16, 1992  
ANALYSIS DATE: November 24, 1992

PROJECT CODE: GINT1580  
REF.#: 38,675  
STATION: MW 1  
TIME SAMPLED: 15:10  
SAMPLER: P. DeAndrea

<u>Parameter</u>	<u>Detection Limit (ug/L)<sup>1</sup></u>	<u>Concentration (ug/L)</u>
Benzene	100	3,810.
Chlorobenzene	200	ND <sup>2</sup>
1,2-Dichlorobenzene	200	ND
1,3-Dichlorobenzene	200	ND
1,4-Dichlorobenzene	200	ND
Ethylbenzene	100	ND
Toluene	100	944.
Xylenes	100	ND
MTBE	500	ND

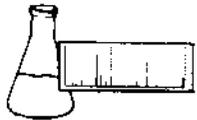
NUMBER OF UNIDENTIFIED PEAKS FOUND: 0

NOTES:

- 1 Detection limit raised due to high levels of contaminants. Sample run at 1% dilution.
- 2 None detected

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LABORATORY REPORT

EPA METHOD 602 -- PURGEABLE AROMATICS

CLIENT: Griffin International  
PROJECT NAME: North Troy Getty Station  
REPORT DATE: November 30, 1992  
DATE SAMPLED: November 13, 1992  
DATE RECEIVED: November 16, 1992  
ANALYSIS DATE: November 24, 1992

PROJECT CODE: GINT1580  
REF.#: 38,676  
STATION: MW 2  
TIME SAMPLED: 15:45  
SAMPLER: P. DeAndrea

<u>Parameter</u>	<u>Detection Limit (ug/L)<sup>1</sup></u>	<u>Concentration (ug/L)</u>
Benzene	50	4,400.
Chlorobenzene	100	ND <sup>2</sup>
1,2-Dichlorobenzene	100	ND
1,3-Dichlorobenzene	100	ND
1,4-Dichlorobenzene	100	ND
Ethylbenzene	50	ND
Toluene	50	394.
Xylenes	50	ND
MTBE	250	763.

NUMBER OF UNIDENTIFIED PEAKS FOUND: 0

NOTES:

- 1 Detection limit raised due to high levels of contaminants. Sample run at 2% dilution.
- 2 None detected

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LABORATORY REPORT

EPA METHOD 602 -- PURGEABLE AROMATICS

CLIENT: Griffin International  
PROJECT NAME: North Troy Getty Station  
REPORT DATE: November 30, 1992  
DATE SAMPLED: November 13, 1992  
DATE RECEIVED: November 16, 1992  
ANALYSIS DATE: November 24, 1992

PROJECT CODE: GINT1580  
REF.#: 38,677  
STATION: MW 3  
TIME SAMPLED: 14:45  
SAMPLER: P. DeAndrea

<u>Parameter</u>	<u>Detection Limit (ug/L)<sup>1</sup></u>	<u>Concentration (ug/L)</u>
Benzene	20	2,650.
Chlorobenzene	40	ND <sup>2</sup>
1,2-Dichlorobenzene	40	ND
1,3-Dichlorobenzene	40	ND
1,4-Dichlorobenzene	40	ND
Ethylbenzene	20	ND
Toluene	20	114.
Xylenes	20	246.
MTBE	100	1,310.

NUMBER OF UNIDENTIFIED PEAKS FOUND: 0

NOTES:

- 1 Detection limit raised due to high levels of contaminants. Sample run at 5% dilution.
- 2 None detected

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LABORATORY REPORT

EPA METHOD 602 -- PURGEABLE AROMATICS

CLIENT: Griffin International  
PROJECT NAME: North Troy Getty Station  
REPORT DATE: November 30, 1992  
DATE SAMPLED: November 13, 1992  
DATE RECEIVED: November 16, 1992  
ANALYSIS DATE: November 24, 1992

PROJECT CODE: GINT1580  
REF.#: 38,678  
STATION: MW 4  
TIME SAMPLED: 17:00  
SAMPLER: P. DeAndrea

<u>Parameter</u>	<u>Detection Limit (ug/L)<sup>1</sup></u>	<u>Concentration (ug/L)</u>
Benzene	20	1,300.
Chlorobenzene	40	ND <sup>2</sup>
1,2-Dichlorobenzene	40	ND
1,3-Dichlorobenzene	40	ND
1,4-Dichlorobenzene	40	ND
Ethylbenzene	20	1,620.
Toluene	20	5,190.
Xylenes	20	7,660.
MTBE	100	457.

NUMBER OF UNIDENTIFIED PEAKS FOUND: >25

NOTES:

- 1 Detection limit raised due to high levels of contaminants. Sample run at 5% dilution.
- 2 None detected

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LABORATORY REPORT

EPA METHOD 602 -- PURGEABLE AROMATICS

CLIENT: Griffin International  
PROJECT NAME: North Troy Getty Station  
REPORT DATE: November 30, 1992  
DATE SAMPLED: November 13, 1992  
DATE RECEIVED: November 16, 1992  
ANALYSIS DATE: November 24, 1992

PROJECT CODE: GINT1580  
REF.#: 38,679  
STATION: MW 6  
TIME SAMPLED: 13:00  
SAMPLER: P. DeAndrea

<u>Parameter</u>	<u>Detection Limit (ug/L)</u>	<u>Concentration (ug/L)</u>
Benzene	1	ND <sup>1</sup>
Chlorobenzene	2	ND
1,2-Dichlorobenzene	2	ND
1,3-Dichlorobenzene	2	ND
1,4-Dichlorobenzene	2	ND
Ethylbenzene	1	ND
Toluene	1	ND
Xylenes	1	ND
MTBE	5	7.3

NUMBER OF UNIDENTIFIED PEAKS FOUND: 0

NOTES:

1 None detected

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LABORATORY REPORT

EPA METHOD 602 -- PURGEABLE AROMATICS

CLIENT: Griffin International  
PROJECT NAME: North Troy Getty Station  
REPORT DATE: November 30, 1992  
DATE SAMPLED: November 13, 1992  
DATE RECEIVED: November 16, 1992  
ANALYSIS DATE: November 24, 1992

PROJECT CODE: GINT1580  
REF.#: 38,680  
STATION: MW 7  
TIME SAMPLED: 12:40  
SAMPLER: P. DeAndrea

<u>Parameter</u>	<u>Detection Limit (ug/L)</u>	<u>Concentration (ug/L)</u>
Benzene	1	ND <sup>1</sup>
Chlorobenzene	2	ND
1,2-Dichlorobenzene	2	ND
1,3-Dichlorobenzene	2	ND
1,4-Dichlorobenzene	2	ND
Ethylbenzene	1	ND
Toluene	1	ND
Xylenes	1	ND
MTBE	5	11.4

NUMBER OF UNIDENTIFIED PEAKS FOUND: 1

NOTES:

1 None detected

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LABORATORY REPORT

EPA METHOD 602 -- PURGEABLE AROMATICS

CLIENT: Griffin International  
PROJECT NAME: North Troy Getty Station  
REPORT DATE: November 30, 1992  
DATE SAMPLED: November 13, 1992  
DATE RECEIVED: November 16, 1992  
ANALYSIS DATE: November 24, 1992

PROJECT CODE: GINT1580  
REF.#: 38,681  
STATION: MW 8  
TIME SAMPLED: 14:10  
SAMPLER: P. DeAndrea

<u>Parameter</u>	<u>Detection Limit (ug/L)</u>	<u>Concentration (ug/L)</u>
Benzene	1	10.7
Chlorobenzene	2	ND <sup>1</sup>
1,2-Dichlorobenzene	2	ND
1,3-Dichlorobenzene	2	ND
1,4-Dichlorobenzene	2	ND
Ethylbenzene	1	136.
Toluene	1	40.5
Xylenes	1	236.
MTBE	5	22.8

NUMBER OF UNIDENTIFIED PEAKS FOUND: >25

NOTES:

1 None detected

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**LABORATORY REPORT****EPA METHOD 602 -- PURGEABLE AROMATICS**

CLIENT: Griffin International  
PROJECT NAME: North Troy Getty Station  
REPORT DATE: November 30, 1992  
DATE SAMPLED: November 13, 1992  
DATE RECEIVED: November 16, 1992  
ANALYSIS DATE: November 24, 1992

PROJECT CODE: GINT1580  
REF.#: 38,682  
STATION: MW 9  
TIME SAMPLED: 13:35  
SAMPLER: P. DeAndrea

<u>Parameter</u>	<u>Detection Limit (ug/L)</u>	<u>Concentration (ug/L)</u>
Benzene	1	ND <sup>1</sup>
Chlorobenzene	2	ND
1,2-Dichlorobenzene	2	ND
1,3-Dichlorobenzene	2	ND
1,4-Dichlorobenzene	2	ND
Ethylbenzene	1	ND
Toluene	1	ND
Xylenes	1	ND
MTBE	5	ND

NUMBER OF UNIDENTIFIED PEAKS FOUND: 1

**NOTES:**

1 None detected

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LABORATORY REPORT

EPA METHOD 602 -- PURGEABLE AROMATICS

CLIENT: Griffin International  
PROJECT NAME: North Troy Getty Station  
REPORT DATE: November 30, 1992  
DATE SAMPLED: November 13, 1992  
DATE RECEIVED: November 16, 1992  
ANALYSIS DATE: November 24, 1992

PROJECT CODE: GINT1580  
REF.#: 38,683  
STATION: MW 10  
TIME SAMPLED: 12:10  
SAMPLER: P. DeAndrea

<u>Parameter</u>	<u>Detection Limit (ug/L)</u>	<u>Concentration (ug/L)</u>
Benzene	1	ND <sup>1</sup>
Chlorobenzene	2	ND
1,2-Dichlorobenzene	2	ND
1,3-Dichlorobenzene	2	ND
1,4-Dichlorobenzene	2	ND
Ethylbenzene	1	ND
Toluene	1	ND
Xylenes	1	ND
MTBE	5	ND

NUMBER OF UNIDENTIFIED PEAKS FOUND: 0

NOTES:

1 None detected

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LABORATORY REPORT

EPA METHOD 602 -- PURGEABLE AROMATICS

CLIENT: Griffin International  
PROJECT NAME: North Troy Getty Station  
REPORT DATE: November 30, 1992  
DATE SAMPLED: November 13, 1992  
DATE RECEIVED: November 16, 1992  
ANALYSIS DATE: November 25, 1992

PROJECT CODE: GINT1580  
REF.#: 38,684  
STATION: MW 11  
TIME SAMPLED: 16:15  
SAMPLER: P. DeAndrea

<u>Parameter</u>	<u>Detection Limit (ug/L)<sup>1</sup></u>	<u>Concentration (ug/L)</u>
Benzene	50	8,250.
Chlorobenzene	100	ND <sup>2</sup>
1,2-Dichlorobenzene	100	ND
1,3-Dichlorobenzene	100	ND
1,4-Dichlorobenzene	100	ND
Ethylbenzene	50	ND
Toluene	50	1,240.
Xylenes	50	ND
MTBE	250	ND

NUMBER OF UNIDENTIFIED PEAKS FOUND: 0

NOTES:

- 1 Detection limit raised due to high levels of contaminants. Sample run at 2% dilution.
- 2 None detected

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LABORATORY REPORT

EPA METHOD 602 -- PURGEABLE AROMATICS

CLIENT: Griffin International  
PROJECT NAME: North Troy Getty Station  
REPORT DATE: November 30, 1992  
DATE SAMPLED: November 13, 1992  
DATE RECEIVED: November 16, 1992  
ANALYSIS DATE: November 24, 1992

PROJECT CODE: GINT1580  
REF.#: 38,685  
STATION: Duplicate  
TIME SAMPLED: 15:45  
SAMPLER: P. DeAndrea

<u>Parameter</u>	<u>Detection Limit (ug/L)<sup>1</sup></u>	<u>Concentration (ug/L.)</u>
Benzene	50	4,350.
Chlorobenzene	100	ND <sup>2</sup>
1,2-Dichlorobenzene	100	ND
1,3-Dichlorobenzene	100	ND
1,4-Dichlorobenzene	100	ND
Ethylbenzene	50	ND
Toluene	50	562.
Xylenes	50	ND
MTBE	250	657.

NUMBER OF UNIDENTIFIED PEAKS FOUND: 0

NOTES:

- 1 Detection limit raised due to high levels of contaminants. Sample run at 2% dilution.
- 2 None detected

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LABORATORY REPORT

EPA METHOD 602 -- PURGEABLE AROMATICS

CLIENT: Griffin International  
PROJECT NAME: North Troy Getty Station  
REPORT DATE: November 30, 1992  
DATE SAMPLED: November 13, 1992  
DATE RECEIVED: November 16, 1992  
ANALYSIS DATE: November 24, 1992

PROJECT CODE: GINT1580  
REF.#: 38,686  
STATION: Equipment Blank  
TIME SAMPLED: 13:50  
SAMPLER: P. DeAndrea

<u>Parameter</u>	<u>Detection Limit (ug/L)</u>	<u>Concentration (ug/L)</u>
Benzene	1	ND <sup>1</sup>
Chlorobenzene	2	ND
1,2-Dichlorobenzene	2	ND
1,3-Dichlorobenzene	2	ND
1,4-Dichlorobenzene	2	ND
Ethylbenzene	1	ND
Toluene	1	ND
Xylenes	1	ND
MTBE	5	ND

NUMBER OF UNIDENTIFIED PEAKS FOUND: 0

NOTES:

1 None detected

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LABORATORY REPORT

EPA METHOD 602 -- PURGEABLE AROMATICS

CLIENT: Griffin International  
PROJECT NAME: North Troy Getty Station  
REPORT DATE: November 30, 1992  
DATE SAMPLED: November 13, 1992  
DATE RECEIVED: November 16, 1992  
ANALYSIS DATE: November 24, 1992

PROJECT CODE: GINT1580  
REF.#: 38,687  
STATION: Trip Blank  
TIME SAMPLED: 7:20  
SAMPLER: P. DeAndrea

<u>Parameter</u>	<u>Detection Limit (ug/L)</u>	<u>Concentration (ug/L)</u>
Benzene	1	ND <sup>1</sup>
Chlorobenzene	2	ND
1,2-Dichlorobenzene	2	ND
1,3-Dichlorobenzene	2	ND
1,4-Dichlorobenzene	2	ND
Ethylbenzene	1	ND
Toluene	1	ND
Xylenes	1	ND
MTBE	5	ND

NUMBER OF UNIDENTIFIED PEAKS FOUND: 0

NOTES:

1 None detected

Reviewed by \_\_\_\_\_

RECEIVED 11/30/92

**CHAIN-OF-CUSTODY RECORD**

005559

Project Name: <u>North Troy Gully Station</u>	Reporting Address: <u>Griffin Int. 43 Dorset Ln Williston, VT</u>	Billing Address: <u>Same</u>
Site Location: <u>North Troy, VT</u>	Contact Name: <u>Peter Murray</u>	Sampler Name: <u>Pam DeAndrea</u>
Endyne Project Number:	Company/Phone #: <u>879-7708</u>	Company/Phone #: <u>879-7708</u>

Lab #	Sample Description	Matrix	Date/Time	Container		Field Results/Remarks	Analysis Required	Sample Preservation	Rush
				No.	Type/Size				
	MW-1	H <sub>2</sub> O	11/13 15:10	2	40 ml		COZ	HCL	
	MW-2		15:45						
	MW-3		14:45						
	MW-4		17:00			HOT			
	<del>MW-5</del>								
	MW-6		13:00						
	MW-7		12:40						
	MW-8		14:10			HOT			
	MW-9		13:35						
	MW-10		12:10						
	MW-11		16:15						
	Duplicate		15:45						

Relinquished by: Signature <u>[Signature]</u>	Received by: Signature <u>[Signature]</u>	Date/Time <u>11/13/95 12:45</u>
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Relinquished by: Signature	Received by: Signature	Date/Time
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**Requested Analyses**

1	pH	6	TKN	11	Total Solids	16	Metals (CP/AA)	21	EPA 624	26	EPA 8270
2	Chloride	7	Total P	12	TSS	17	Fecal and/or Tot.	22	EPA 625 B/N or A	27	EPA 8010
3	Ammonia N	8	Total Diss. P	13	TDS	18	COD	23	EPA 418.1	28	EPA 8020
4	Nitrite N	9	BOD <sub>5</sub>	14	Turbidity	19	BTEX	24	EPA 608 Pest/PCB	29	EPA 8060
5	Nitrate N	10	Alkalinity	15	Conductivity	20	EPA 601/602	25	EPA 8240	30	EPTOX
31	TCLP (Specify: volatiles, semi-volatiles, metals, pesticides, herbicides)										
32	Other (Specify):										

