



Jul 5 11 20 AM '95

103 SOUTH MAIN STREET  
WATERBURY, VT 05671-0404

July 3, 1995

Mr. Richard Spiese  
State of Vermont  
Department of Environmental Conservation  
Hazardous Materials Management Division  
103 South Main Street  
Waterbury, VT 05671-0404

RE: Report on the Investigation of Subsurface Petroleum Contamination at the Haynes & Kane Property at 215 Benmont Avenue, Bennington, VT (VTDEC Site #95-1775)

Dear Mr. Spiese:

Please find enclosed a copy of Griffin's report on the investigation of subsurface petroleum contamination at the Haynes & Kane warehouse at 215 Benmont Avenue in Bennington. This investigation was conducted in response to your letter to Kathleen Haynes dated May 5, 1995. A Site Investigation Expressway Notification was submitted to the VTDEC on May 15.

If you have any questions regarding this report, please do not hesitate to call.

Sincerely,

Kevin McGraw  
Hydrogeologist

Enclosures

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

at

**HAYNES & KANE, INC.  
215 BENMONT AVENUE  
BENNINGTON, VERMONT  
(VTDEC SITE #95-1775)**

**JUNE 1995**



Prepared by:

***GRIFFIN INTERNATIONAL, INC.***

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Griffin Project #: 1955110

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## **I. INTRODUCTION**

This report summarizes the investigation of subsurface petroleum contamination at Haynes & Kane, Inc., located at 215 Benmont Avenue in Bennington, Vermont (see Site Location Map and Area Map, Appendix A). The building on this property serves as a warehouse for Haynes & Kane, a furniture store.

The following investigation has been conducted to define more clearly the degree and extent of petroleum contamination which was detected in the soils and groundwater at this site during the recent removal of three underground storage tanks (USTs). Included in the report are the findings from the hollow-stem auger drilling along with the results of subsequent groundwater sampling conducted on the property. This work has been completed for Haynes & Kane by Griffin International, Inc. (Griffin).

## **II. HISTORICAL BACKGROUND**

In March of 1995, Griffin supervised the removal of three USTs at the Haynes & Kane property. Two of these tanks were 1,000-gallon No.2 fuel oil tanks and the third tank was a 1,000-gallon gasoline tank. The USTs were located on the south side of the warehouse building and cement wall (see Site Map, Appendix A).

Upon removal, the gasoline tank was found to be in good condition but the two fuel oil tanks were in poor condition with ten holes identified in each of these tanks. A thin layer of free product (No. 2 fuel oil) was observed on the water table in Tank Pit #2. Based on Griffin's observations during the tank removals, it was determined that all of the contamination detected was likely related to releases from the fuel oil UST systems and not from the gasoline tank system. Griffin submitted a tank closure report, dated March 27, 1995, to the Vermont Department of Environmental Conservation (VTDEC).

In response to the soil and groundwater contamination detected during the removal of the on-site USTs, the VTDEC requested additional work in order to determine the severity of the contamination. A Site Investigation Expressway Notification Form was subsequently submitted to the Sites Management Section (SMS) of the VTDEC.

## **III. SITE DESCRIPTION**

The site is located between the Walloomsac River to the west and the Vermont Railway property to the east. Local terrain is relatively level and groundwater flow beneath the site is likely to the northwest toward the river. The lot size is approximately 0.67 acres (see Area Map derived from Bennington Property Tax Map). The on-site two-story building, located on the eastern half of the property, is constructed as a warehouse-style building on a cement slab foundation. The majority of the property surrounding the building is lawn.

The area surrounding the site consists of a mix of commercial, industrial and residential uses. The area, including the Haynes & Kane warehouse, is served by the municipal water and sewer systems. According to state records, five private water supply wells are located within one-half mile of the site. The nearest private well may be approximately 1,000 feet southeast of the site.

After removal of the tanks mentioned in Section II above, no additional USTs are reported to exist at the site. Two (2) indoor, 275-gallon tanks now supply No. 2 fuel oil to the furnaces which heat the on-site warehouse building.

The Surficial Geologic Map of Vermont maps the surrounding area as glacial outwash, horizontally bedded glaciofluvial gravel. Actual subsurface materials consist primarily of fine to coarse-grained sand and fine to coarse-grained gravel with some cobbles.

#### **IV. SUBSURFACE INVESTIGATION**

On May 17, 1995, four monitoring wells were installed using a hollow-stem auger drill rig. The monitoring wells, designated MW-1 through MW-4, were installed to help define the degree and extent of petroleum contamination in the vicinity of the former on-site USTs. MW-1 was installed in the tank pit of one of the former fuel oil tanks. The boring for MW-2 was drilled between the former fuel oil tank pits and the former gasoline tank pit. MW-3 was installed in the likely downgradient direction from the former tank pit areas, and MW-4 was installed in the yard between the two cement walls. The locations of the wells are shown on the Site Map in Appendix A.

Soil samples were obtained in each boring at five-foot intervals using a split-spoon sampler. These soil samples were screened for volatile organic compounds (VOCs) using an HNU (Model PI-101) photoionization device (PID).

In the boring for MW-1, light brown fine to coarse-grained sand and fine to coarse gravel with some cobbles were predominant from the ground surface to 12 feet below grade. Groundwater was encountered at approximately 4 feet below grade. Moderate petroleum odors were observed in the soils from this boring. A maximum PID reading of 55 parts per million (ppm) was recorded for the 3'-5' sample.

Soils retrieved from the boring for MW-2 were slightly plastic, fine-grained sand with silt from grade to 5 feet below grade. From 5 to 12 feet below grade, fine to coarse-grained sand and fine to coarse gravel with some cobbles were predominant. Groundwater was again encountered at a depth of approximately 4 feet. Moderate petroleum odors were noted in the soils from this boring. A maximum PID reading of 74 ppm was recorded for the 5'-7' sample.

In the boring for MW-3, sand and gravel was observed again and groundwater was estimated to be 4 feet below grade. Petroleum contamination was not detected in any of the soils from this boring.

In the boring for MW-4, sand and gravel was predominant. A thin layer of plastic clay/silt was observed at approximately 3 feet below grade. The water table was encountered again at 4 feet below grade. Petroleum odors were not detected in the split-spoon samples obtained from this boring, however, slight odors were observed in soils taken from the flights of the auger at approximately 7 feet below grade. Split-spoon recovery was minimal due to the presence of significant cobbles in this location. The boring could not be advanced below 7.25 feet due to these cobbles.

The monitoring wells were constructed with two-inch diameter, Schedule 40 PVC riser and 0.010" slotted screen. The screened portion of monitoring wells MW-1 through MW-3 is from 2 to 12 feet below grade. MW-4 is screened from approximately 0.75 to 7.25 feet below grade. A silica sand pack was placed around the screened portion of each well and a bentonite seal was placed in the annulus immediately above the sand pack. To complete the construction of each well, a road box was set in concrete at grade level. In addition, locking well caps were placed on the monitoring wells. The boring logs and well construction details for these wells are included in Appendix B.

## **V. WATER LEVELS AND WATER QUALITY**

### **A. Water Table Elevations**

Water table elevation measurements were collected from MW-1 through MW-4 prior to sampling on May 23, 1995. In addition, the monitoring wells were surveyed in azimuth and elevation relative to the top-of-casing of MW-1 which has been assigned an arbitrary elevation of 100.00 feet. Liquid level monitoring data are presented in Appendix C.

Water table elevations have been plotted and contoured to illustrate the estimated gradient and direction of groundwater flow beneath the site (see Groundwater Contour Map, Appendix A). According to these data, it appears that groundwater is flowing to the west-northwest at a hydraulic gradient of 0.04.

### **B. Water Quality**

Griffin collected groundwater samples at the site from MW-2, MW-3 and MW-4. MW-1 was not sampled since it contained 0.06 feet of free product (fuel oil). The samples were analyzed for petroleum compounds by EPA Method 602, and for Total Petroleum Hydrocarbons (TPH) by Modified EPA Method 8100. In addition, a petroleum fingerprint analysis was performed for the MW-2, MW-4 and duplicate samples, to try to determine if the contamination was correlated with No. 2 fuel oil or gasoline. The

analytical results have been plotted to show the distribution of dissolved contamination across the site (see Contaminant Concentration Map, Appendix A).

Relatively low levels of benzene, toluene, ethylbenzene and xylenes (BTEX) were detected in the samples from MW-2 and MW-4. The Vermont drinking water standard of 5 parts per billion (ppb) for benzene was exceeded in these two samples. The standards for toluene, ethylbenzene and xylenes were not exceeded in these groundwater samples. Dissolved petroleum compounds were not detected in the sample from MW-3 by EPA Method 602.

Using modified EPA Method 8100, relatively low levels of total petroleum hydrocarbons were measured in the samples collected at this site. The maximum TPH measurement was 600 mg/Liter in the sample from MW-2. The petroleum fingerprint analysis performed on MW-2, MW-4 and the duplicate sample from MW-2, indicated that the chromatographic fingerprint of all of these samples showed a significant correlation to that of No. 2 fuel oil (see Endyne laboratory report in Appendix D). A groundwater quality summary for this sampling event is presented in tabular form in Appendix D.

The trip blank, equipment blank and duplicate sample results indicate that proper quality assurance and quality control were maintained during the sampling and analysis.

## **VI. RECEPTOR RISK ASSESSMENT**

As stated previously, the area in the vicinity of the Haynes & Kane property is served by the municipal water system. According to state records, the nearest private water supply well may be approximately 1,000 feet southeast of the site. Based on the direction of groundwater flow determined for this investigation, this well appears to be upgradient from the property and is not at risk.

The on-site building does not have a basement for accumulation of petroleum vapors and other buildings in the area are not likely at risk from the fuel oil contamination. There are no buildings situated directly downgradient from the Haynes & Kane property on the east side of the Walloomsac River.

The Walloomsac River is the nearest surface water to the site, located approximately 500 feet away. The banks of the river were surveyed for signs of petroleum contamination. No sheens, odors or seeps were observed along the eastern edge of the river. In addition, only a trace of petroleum contamination was detected in the sample from downgradient monitoring well MW-3 which is more than several hundred feet from the river. This suggests that the risk to the river at this time is minimal.

## VII. CONCLUSIONS

Based on the investigation at this site, Griffin has reached the following conclusions:

1. Adsorbed, dissolved and free-phase petroleum contamination exists in the vicinity of the former underground storage tanks at the Haynes & Kane property. Furthermore, this contamination appears to be a result of releases of No. 2 fuel oil only, and not due to any release of gasoline. This was suspected to be the case prior to this investigation since no signs of gasoline contamination were detected during the removal of the former USTs. Methyl tert butyl ether (MTBE), a compound present in gasoline but not fuel oil, was not detected in any of the samples analyzed by EPA Method 602. In addition, the analysis performed by Endyne revealed that the chromatographic fingerprint of the samples closely matched that of No. 2 fuel oil.
2. Based on the water table elevation data collected in May, groundwater beneath the site appears to be flowing west-northwest at a hydraulic gradient of 0.04.
3. Only a trace of contamination was detected in monitoring well MW-3, located furthest downgradient from the source. This suggests that significant off-site migration of dissolved petroleum hydrocarbons is not likely occurring, and that the downgradient extent of contamination has been sufficiently determined.
4. The extent of contamination in the upgradient direction from the former fuel oil USTs was determined at the time the tanks were removed. A test pit was dug approximately 50 feet to the east of Tank Pit #3 (the easternmost fuel oil tank pit). The test pit was extended to the water table and several soil samples were collected. No contamination was detected using the PID and no staining or petroleum odors were observed in any of the soils from this test pit (see Griffin's Tank Closure Report dated March 27, 1995).
5. The risk assessment for this site has determined that there is little threat to any of the identified receptors in the area. The Walloomsac River is likely the receptor at greatest risk, however, at this time, the risk to the river is deemed to be minimal. The natural processes of dilution, dispersion and biodegradation will likely reduce contaminant concentrations in the groundwater to non-detect levels before reaching the river.

## VIII. RECOMMENDATIONS

Based on the above conclusions, Griffin does not recommend active remediation at this time. However, Griffin does recommend the following:

1. Passive remediation of the small amount of free product detected in MW-1 should be accomplished using a SoakEase™ sorbent pad installed in the well. At this time, routine manual bailing of the product in MW-1 does not appear to be necessary. Monitoring wells MW-1 and MW-2 should be monitored for free product on a monthly basis. The sorbent pad should be replaced during these site visits, as necessary.
  2. A quarterly groundwater monitoring program should be established to document the fluctuation in dissolved groundwater concentrations at the site. Groundwater samples should be collected from all monitoring wells not containing free product. All samples should be analyzed for petroleum compounds by EPA Method 602 only.
- Quarterly monitoring reports should be submitted to the VTDEC. These reports should include a revised groundwater contour map, a contaminant concentration map, a groundwater quality summary, an historical summary of liquid level measurements in MW-1 and MW-2, conclusions and recommendations.

## **APPENDIX A**

### **Maps**

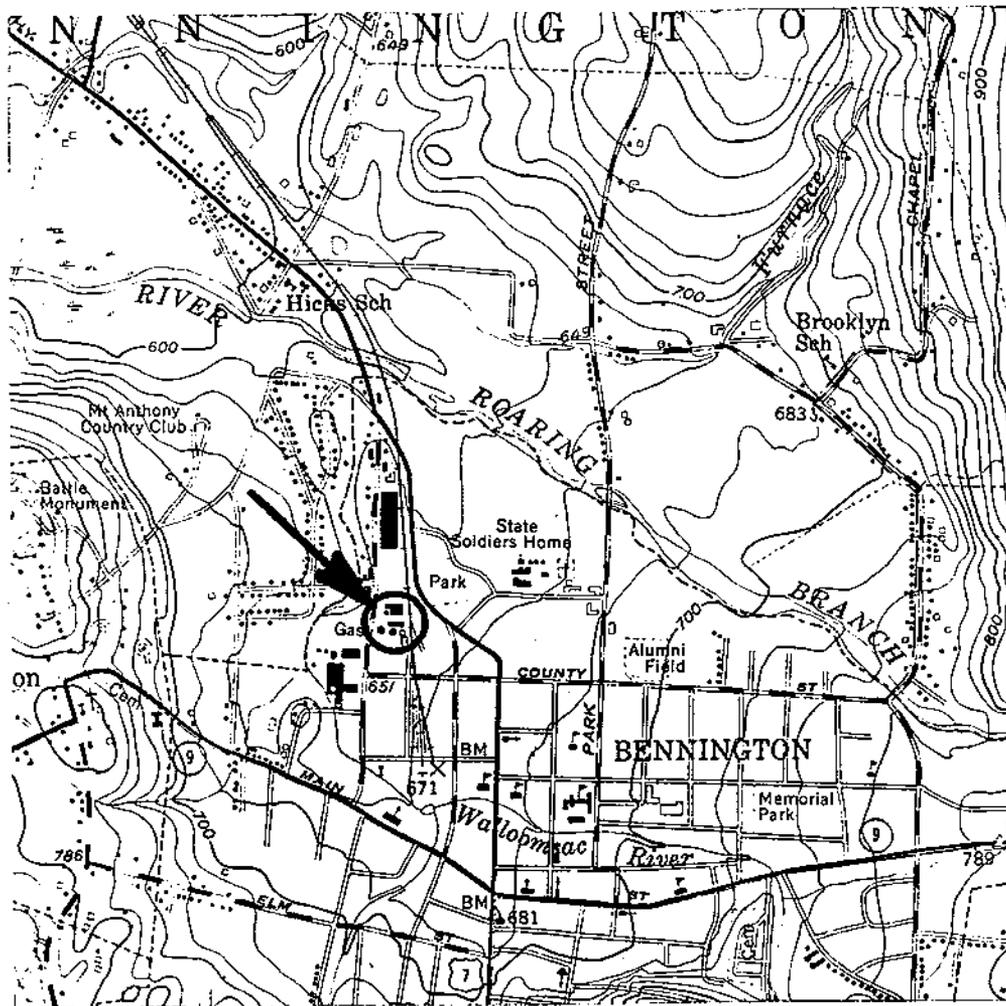
Site Location Map

Area Map

Site Map

Groundwater Contour Map

Contaminant Concentration Map



JOB #: 1955110  
 SOURCE: USGS- BENNINGTON, VERMONT QUADRANGLE



**HAYNES AND KANE**  
**BENNINGTON, VERMONT**  
**SITE LOCATION MAP**

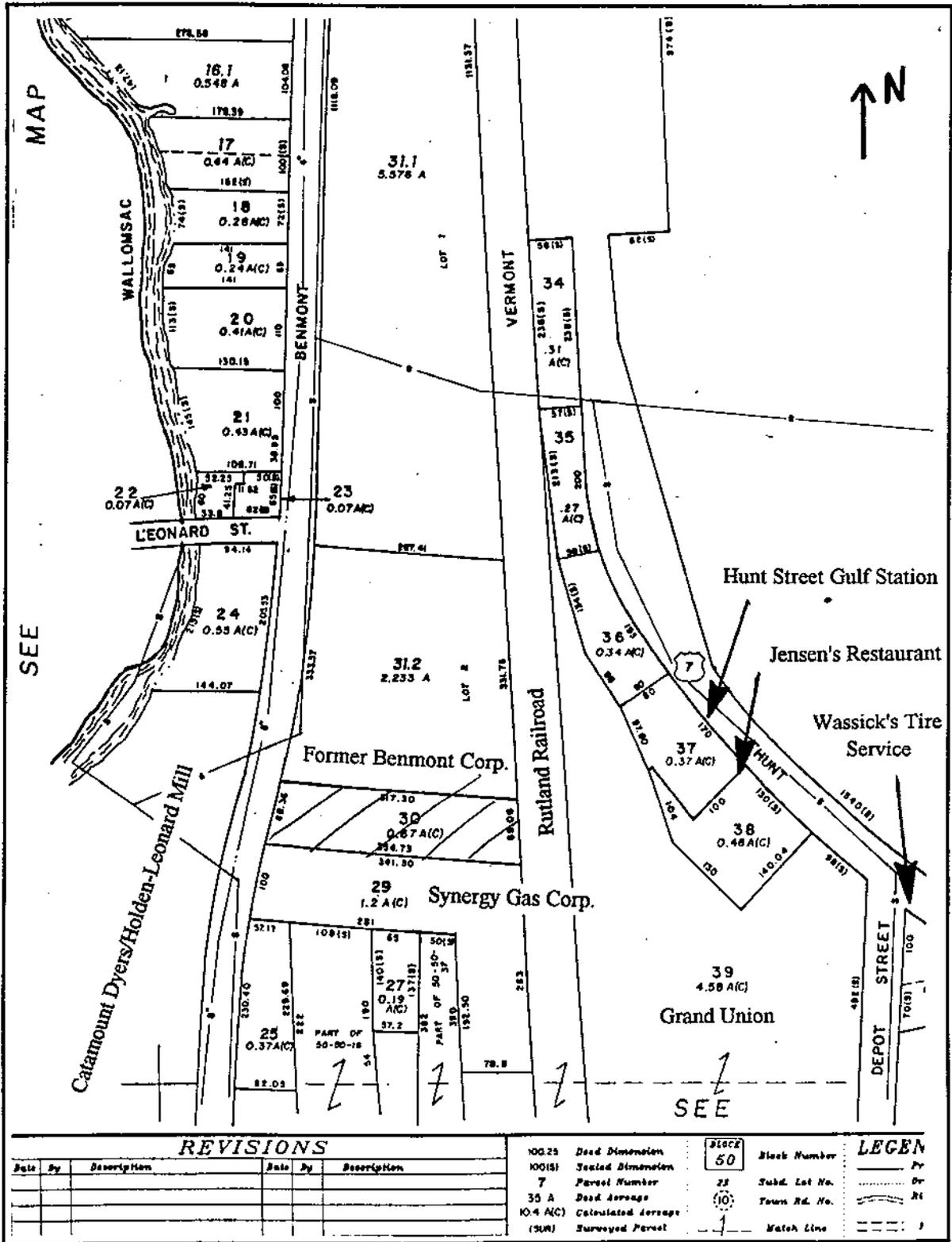
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DWG. #: 1

SCALE: 1:24000

DRN.: SB

APP.: KM

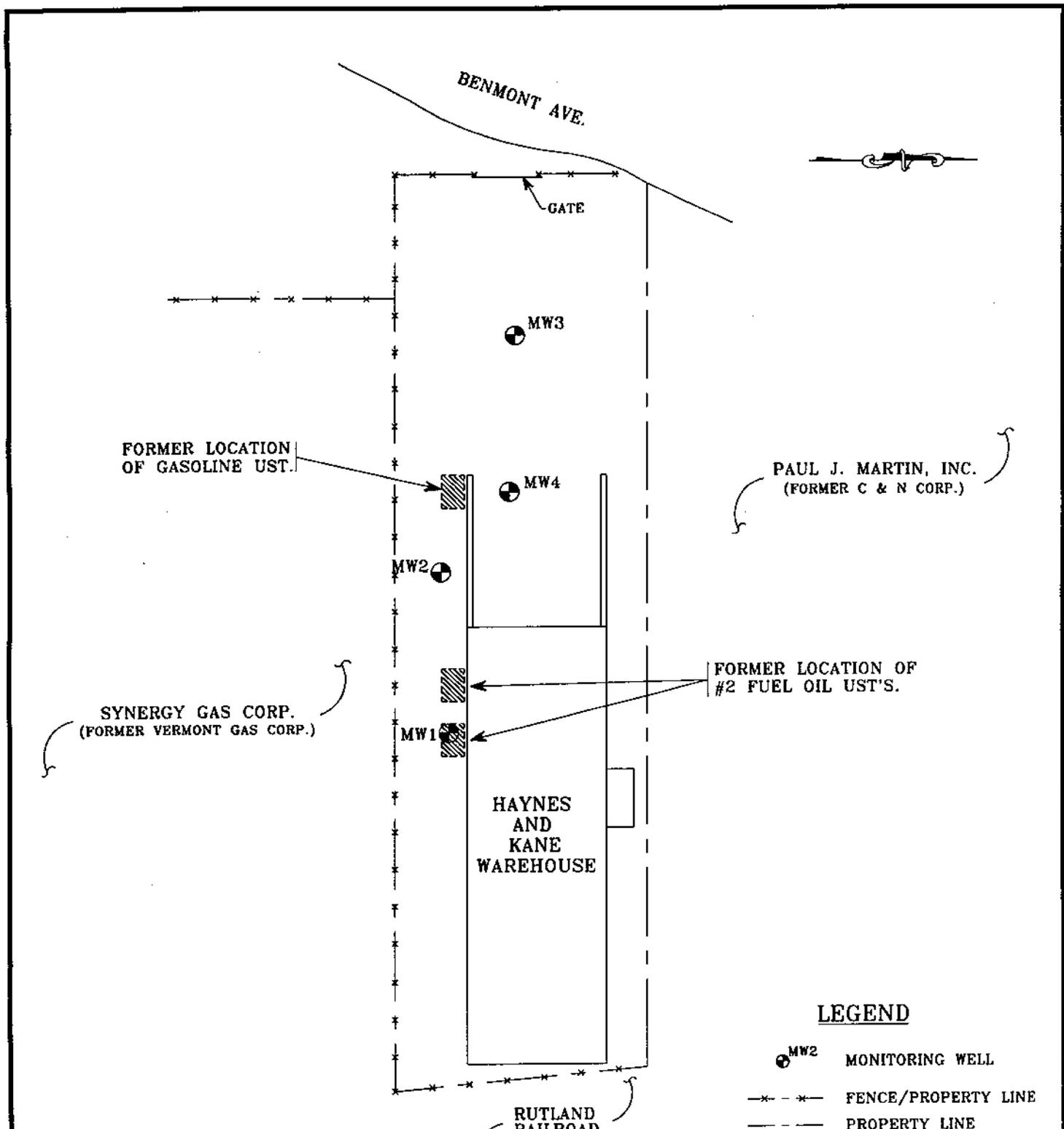


### AREA MAP

Haynes & Kane, 215 Benmont Avenue, Bennington, Vermont

Property #30

Source: Town of Bennington

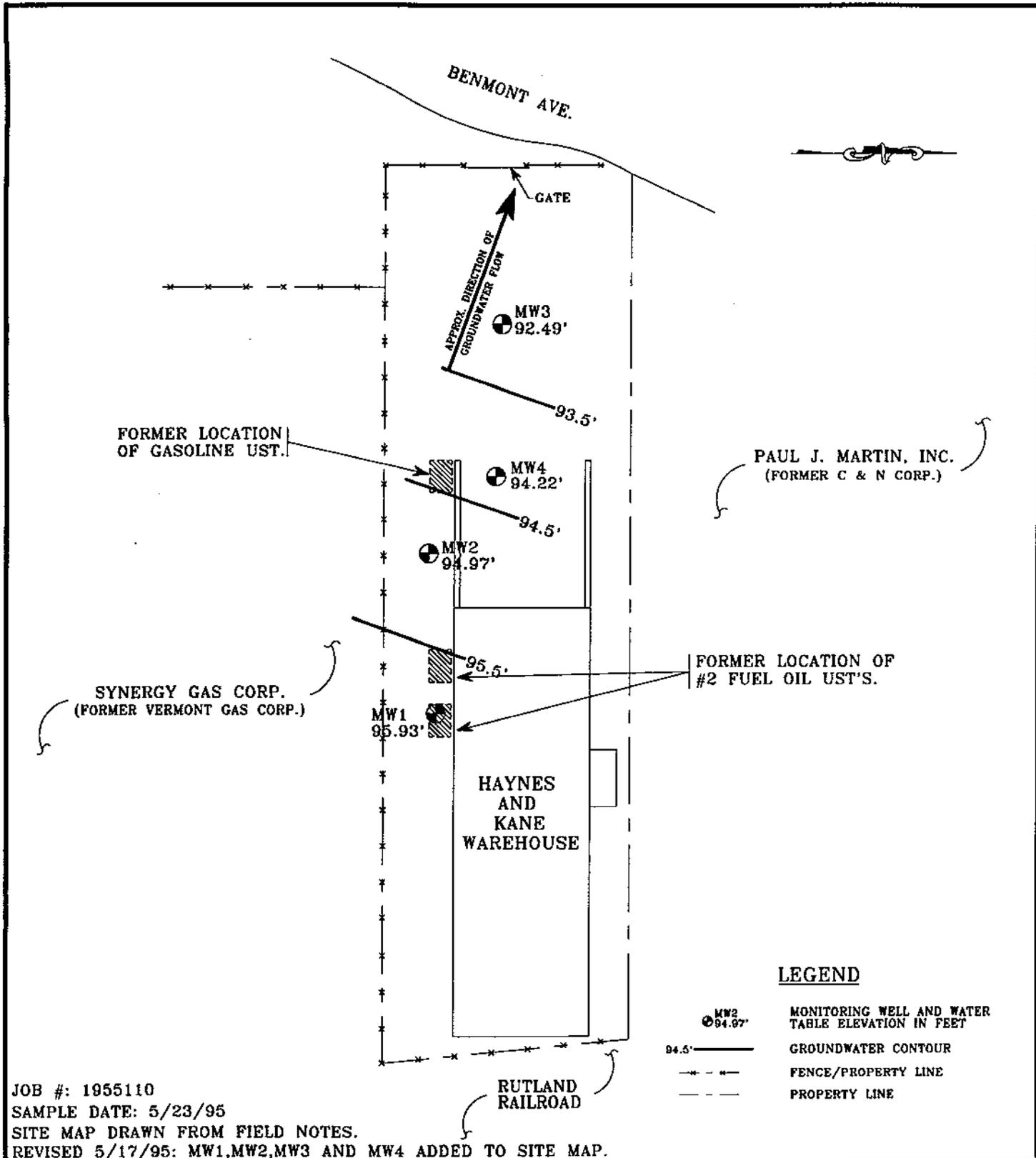


JOB #: 1955110  
 SITE MAP DRAWN FROM FIELD NOTES.  
 REVISED 5/17/95: MW1, MW2, MW3 AND MW4 ADDED TO SITE MAP.

- LEGEND**
- MW2 MONITORING WELL
  - FENCE/PROPERTY LINE
  - PROPERTY LINE



|                            |          |                 |          |          |
|----------------------------|----------|-----------------|----------|----------|
| <b>HAYNES AND KANE</b>     |          |                 |          |          |
| <b>BENNINGTON, VERMONT</b> |          |                 |          |          |
| <b>SITE MAP</b>            |          |                 |          |          |
| DATE: 5/19/95              | DWG.#: 3 | SCALE: 1" = 50' | DRN.: SB | APP.: KM |



# HAYNES AND KANE

BENNINGTON, VERMONT

## GROUNDWATER CONTOUR MAP

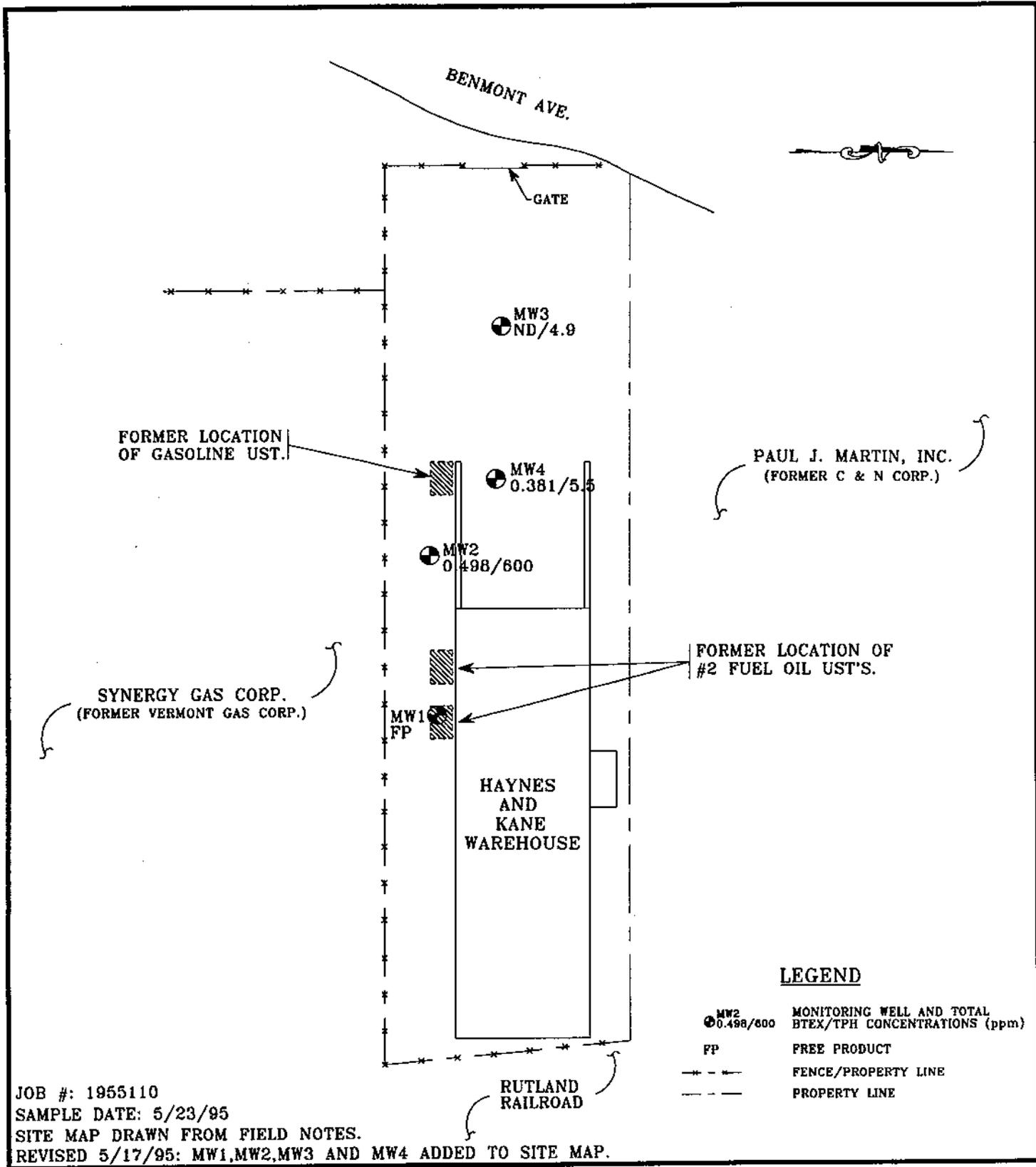
DATE: 6/19/95

DWG.#: 4

SCALE: 1"=50'

DRN.:SB

APP.:KM



JOB #: 1955110  
 SAMPLE DATE: 5/23/95  
 SITE MAP DRAWN FROM FIELD NOTES.  
 REVISED 5/17/95: MW1, MW2, MW3 AND MW4 ADDED TO SITE MAP.

**LEGEND**

- MW2 0.498/600 MONITORING WELL AND TOTAL BTEX/TPH CONCENTRATIONS (ppm)
- FP FREE PRODUCT
- - - - - FENCE/PROPERTY LINE
- - - - - PROPERTY LINE



**HAYNES AND KANE**  
 BENNINGTON, VERMONT

**CONTAMINANT CONCENTRATION MAP**

|               |          |               |         |         |
|---------------|----------|---------------|---------|---------|
| DATE: 6/19/95 | DWG.#: 5 | SCALE: 1"=50' | DRN.:SB | APP.:KM |
|---------------|----------|---------------|---------|---------|

**APPENDIX B**

**Well Logs**

PROJECT HAYNES AND KANE

LOCATION BENNINGTON, VERMONT

DATE DRILLED 5/17/95 TOTAL DEPTH OF HOLE 12.25'

DIAMETER 4.25"

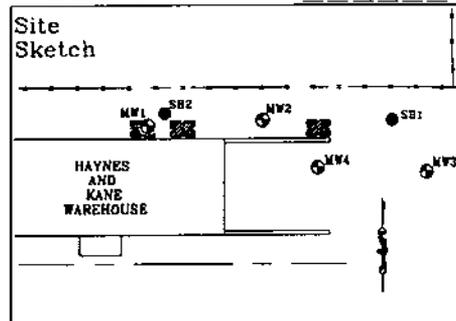
SCREEN DIA. 2" LENGTH 10' SLOT SIZE 0.010"

CASING DIA. 2" LENGTH 1.5' TYPE sch 40 pvc

DRILLING CO. TDS DRILLING METHOD HSA

DRILLER STEVE/MARK LOG BY K. UNDERWOOD

WELL NUMBER MW1



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          | LOCKING WELL CAP                    |                                      |   | 0             |
| 1             | CONCRETE          | BENTONITE                           |                                      | Light brown, non-plastic, coarse to fine-grained SAND and coarse to fine GRAVEL, some cobbles, dry, slight odor.                              | 1             |
| 2             | WELL RISER        |                                     |                                      |   | 2             |
| 3             |                   |                                     |                                      |   | 3             |
| 4             |                   |                                     | 3'-5'-9/11/14/18<br>55 ppm           | 4.0' WATER TABLE  | 4             |
| 5             |                   |                                     |                                      |   | 5             |
| 6             | WELL SCREEN       |                                     | 5'-7'-21/29/30/32<br>34 ppm          |   | 6             |
| 7             |                   |                                     |                                      | Light brown, non-plastic, coarse to fine-grained SAND and coarse to fine GRAVEL, some cobbles, wet, moderate petroleum odor, petroleum sheen. | 7             |
| 8             |                   |                                     |                                      |   | 8             |
| 9             |                   |                                     |                                      |   | 9             |
| 10            | SAND PACK         |                                     |                                      |   | 10            |
| 11            | BOTTOM CAP        |                                     | 10'-12'-12/20/9/19<br>20 ppm         |   | 11            |
| 12            |                   | UNDISTURBED UNCONSOLIDATED DEPOSITS |                                      |   | 12            |
| 13            |                   |                                     |                                      | BASE OF WELL AT 12'<br>END OF EXPLORATION AT 12.25'   | 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 HAYNES AND KANE

LOCATION BENNINGTON, VERMONT

DATE DRILLED 5/17/95 TOTAL DEPTH OF HOLE 12.25'

DIAMETER 4.25"

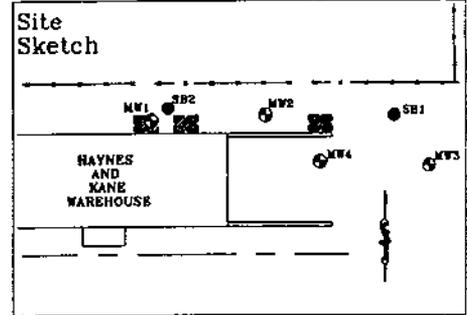
SCREEN DIA. 2" LENGTH 10' SLOT SIZE 0.010"

CASING DIA. 2" LENGTH 1.5' TYPE sch 40 pvc

DRILLING CO. TDS DRILLING METHOD HSA

DRILLER STEVE/MARK LOG BY K. UNDERWOOD

WELL NUMBER MW2



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<br>LOCKING WELL CAP        |       |                                      |  | 0             |
| 1             | CONCRETE<br>BENTONITE               |       |                                      | Medium brown, slightly plastic, fine-grained SAND with SILT, trace of gravel.  | 1             |
| 2             | WELL RISER                          |       |                                      |  | 2             |
| 3             |                                     |       |                                      |  | 3             |
| 4             |                                     |       | 3'-5'-11 120/4"<br>52 ppm            | 4.0' WATER TABLE   | 4             |
| 5             | WELL SCREEN                         |       |                                      | Medium to dark brown, slightly plastic, fine-grained SAND with SILT, trace of fine gravel, moist, slight petroleum odor. Horizon of dark petroleum staining at very bottom 1/2" of recovered spoon material, wet, moderate odor, slight petroleum sheen. | 5             |
| 6             |                                     |       | 5'-7'- 35/46/21/14<br>74 ppm         |  | 6             |
| 7             |                                     |       |                                      |  | 7             |
| 8             |                                     |       |                                      |  | 8             |
| 9             | SAND PACK                           |       |                                      | Medium brown to dark brown, coarse to fine-grained SAND, and coarse to fine GRAVEL, some cobbles, trace silt/clay, wet, moderate petroleum odor, sheen. Boulder fragments in bottom of spoon.  | 9             |
| 10            |                                     |       |                                      |  | 10            |
| 11            | BOTTOM CAP                          |       | 10'-12'-12/16/25/27<br>44 ppm        | Brown coarse to fine-grained SAND and coarse to fine GRAVEL, trace fines, trace cobbles, strong petroleum sheen, wet, strong odor.   | 11            |
| 12            | UNDISTURBED UNCONSOLIDATED DEPOSITS |       |                                      |  | 12            |
| 13            |                                     |       |                                      | BASE OF WELL AT 12'<br>END OF EXPLORATION AT 12.25'  | 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 HAYNES AND KANE

LOCATION BENNINGTON, VERMONT

DATE DRILLED 5/17/95 TOTAL DEPTH OF HOLE 12.25'

DIAMETER 4.25"

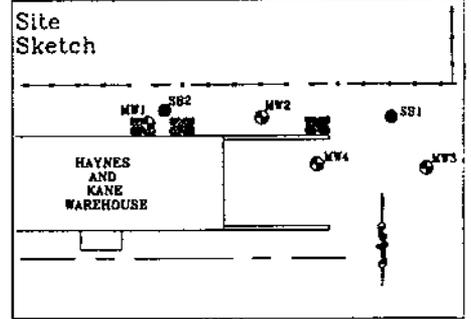
SCREEN DIA. 2" LENGTH 10' SLOT SIZE 0.010"

CASING DIA. 2" LENGTH 1.5' TYPE sch 40 pvc

DRILLING CO. TDS DRILLING METHOD HSA

DRILLER STEVE/MARK LOG BY K. UNDERWOOD

WELL NUMBER MW3



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<br>LOCKING WELL CAP<br>CONCRETE<br>BENTONITE |       |                                      |   | 0             |
| 1             |   |       |                                      | Medium brown to dark brown, coarse to fine SAND and coarse to fine GRAVEL, dry, stiff.                  | 1             |
| 2             | WELL RISER  |       |                                      |   | 2             |
| 3             |   |       |                                      |   | 3             |
| 4             |   |       |                                      | 4.0' WATER TABLE  | 4             |
| 5             |   |       |                                      |   | 5             |
| 6             | WELL SCREEN   |       | 5'-7'- 42/50/15/17<br>0.2 ppm        | Medium brown to yellowish brown, coarse to fine SAND and coarse to fine GRAVEL, wet, no petroleum odor. | 6             |
| 7             |   |       |                                      |   | 7             |
| 8             |   |       |                                      |   | 8             |
| 9             |   |       |                                      |   | 9             |
| 10            | SAND PACK   |       |                                      |   | 10            |
| 11            | BOTTOM CAP  |       | 10'-12'-35/17/16/12<br>0.2 ppm       | Yellowish brown, coarse to fine SAND and fine GRAVEL, wet, no petroleum odor.                           | 11            |
| 12            | UNDISTURBED UNCONSOLIDATED DEPOSITS                   |       |                                      |   | 12            |
| 13            |   |       |                                      | BASE OF WELL AT 12'<br>END OF EXPLORATION AT 12.25'   | 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 HAYNES AND KANE

LOCATION BENNINGTON, VERMONT

DATE DRILLED 5/17/95 TOTAL DEPTH OF HOLE 7.25'

DIAMETER 4.25"

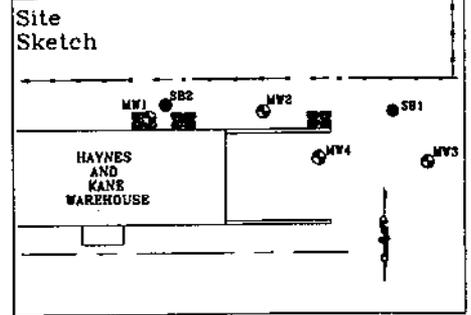
SCREEN DIA. 2" LENGTH 6.5' SLOT SIZE 0.010"

CASING DIA. 2" LENGTH 0.5' TYPE sch 40 pvc

DRILLING CO. TDS DRILLING METHOD HSA

DRILLER STEVE/MARK LOG BY K. UNDERWOOD

WELL NUMBER MW4



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<br>LOCKING WELL CAP<br>CONCRETE |       |                                      |   | 0             |
| 1             | BENTONITE<br>WELL RISER                  |       |                                      | Medium brown, coarse to fine SAND with coarse to fine GRAVEL, some silt/clay, dry, no odor.                   | 1             |
| 2             |  |       |                                      |   | 2             |
| 3             | WELL SCREEN                              |       |                                      |   | 3             |
| 4             |  |       | 3'-5'-16 120/5"                      | 4.0' WATER TABLE  | 4             |
| 5             | SAND PACK                                |       |                                      | Yellowish brown, plastic, CLAY/SILT, trace fine gravel, cobble frags, moist.                                  | 5             |
| 6             | BOTTOM CAP                               |       | 5'-7'- 64/72/ 120/3"                 | Yellowish brown, coarse to fine-grained SAND, and coarse to fine GRAVEL, cobble frags (schist), wet, no odor. | 6             |
| 7             | UNDISTURBED LARGE COBBLE                 |       |                                      |   | 7             |
| 8             |  |       |                                      | BASE OF WELL AT 7.25'<br>REFUSAL AT 7.25'   | 8             |
| 9             |  |       |                                      |   | 9             |
| 10            |  |       |                                      |   | 10            |
| 11            |  |       |                                      |   | 11            |
| 12            |  |       |                                      |   | 12            |
| 13            |  |       |                                      |   | 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            |

**APPENDIX C**

**Liquid Level Monitoring Data**

**Liquid Level Monitoring Data  
Haynes & Kane, Bennington, VT**

5/23/95

| Well I.D. | Well Depth | Top of Casing Elevation | Depth To Product | Depth To Water | Product Thickness | Specific Gravity Of Product | Water Equivalent | Corrected Depth To Water | Corrected Water Table Elevation |
|-----------|------------|-------------------------|------------------|----------------|-------------------|-----------------------------|------------------|--------------------------|---------------------------------|
| MW-1      | 12         | 100.00                  | 4.06             | 4.12           | 0.06              | 0.76                        | 0.05             | 4.07                     | 95.93                           |
| MW-2      | 12         | 99.24                   |                  | 4.27           |                   |                             |                  |                          | 94.97                           |
| MW-3      | 12         | 96.77                   |                  | 4.28           |                   |                             |                  |                          | 92.49                           |
| MW-4      | 7.25       | 99.15                   |                  | 4.93           |                   |                             |                  |                          | 94.22                           |

All Values Reported in Feet

Top-of-Casing Elevations Measured in Feet Relative to MW-1 set at 100.00'

**APPENDIX D**

**Groundwater Quality Summary**

**Laboratory Report**

**Groundwater Quality Summary**  
**Haynes & Kane, Inc.**  
**Bennington, Vermont**

Sampling Date: 5/23/95

| PARAMETER     | Sample Location |            |      |            |                   |            |                 | Vermont Drinking Water Standards |
|---------------|-----------------|------------|------|------------|-------------------|------------|-----------------|----------------------------------|
|               | MW-1            | MW-2       | MW-3 | MW-4       | Duplicate of MW-2 | Trip Blank | Equipment Blank |                                  |
| [REDACTED]    | FP              | [REDACTED] | ND   | [REDACTED] | 73.0              | ND         | ND              | 5.0*                             |
| Chlorobenzene | 0.06'           | ND         | ND   | ND         | ND                | ND         | ND              | 100*                             |
| 1,2-DCB       |                 | ND         | ND   | ND         | ND                | ND         | ND              | 600*                             |
| 1,3-DCB       |                 | ND         | ND   | ND         | ND                | ND         | ND              | 600**                            |
| 1,4-DCB       |                 | ND         | ND   | ND         | ND                | ND         | ND              | 75*                              |
| [REDACTED]    |                 | [REDACTED] | ND   | [REDACTED] | 136.              | ND         | ND              | 700*                             |
| [REDACTED]    |                 | [REDACTED] | ND   | [REDACTED] | 15.0              | ND         | ND              | 1,000*                           |
| [REDACTED]    |                 | [REDACTED] | ND   | [REDACTED] | 237.              | ND         | ND              | 10,000*                          |
| Total BTEX    |                 | 498.1      | ND   | 381.4      | 461.0             | ND         | ND              | -                                |
| MTBE          |                 | ND         | ND   | ND         | ND                | ND         | ND              | 40**                             |
| BTEX+MTBE     |                 | 498.1      | ND   | 381.4      | 461.0             | ND         | ND              | -                                |
| TPH           | -               | 600.       | 4.9  | 5.5        | 204.              | ND         | ND              |                                  |

All Values Reported in ug/L (ppb), except TPH in mg/L (ppm)

\* - Maximum Contaminant Level (MCL)

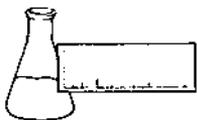
\*\* - Vermont Health Advisory Level

TBQ - Trace Below Quantitation Limit

FP - Free Product

TPH - Total Petroleum Hydrocarbons

ND - None Detected



**ENDYNE, INC.**

Laboratory Services

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(802) 879-4333  
FAX 879-7103

REPORT OF LABORATORY ANALYSIS

CLIENT: Griffin International  
PROJECT NAME: Haynes & Kane  
REPORT DATE: May 31, 1995  
DATE SAMPLED: May 23, 1995

PROJECT CODE: GIHK1183  
REF.#: 74,814 - 74,819

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

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

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

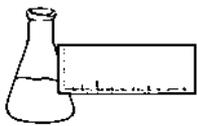
Individual sample performance was monitored by the addition of surrogate analytes to each sample. All surrogate recovery data was determined to be within laboratory QA/QC guidelines unless otherwise noted.

Reviewed by,

Harry B. Locker, Ph.D.  
Laboratory Director

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LABORATORY REPORT

EPA METHOD 602--PURGEABLE AROMATICS

CLIENT: Griffin International  
PROJECT NAME: Haynes & Kane  
REPORT DATE: May 31, 1995  
DATE SAMPLED: May 23, 1995  
DATE RECEIVED: May 23, 1995  
DATE ANALYZED: May 31, 1995

PROJECT CODE: GIHK1183  
REF.#: 74,814  
STATION: MW-2  
TIME SAMPLED: 11:40  
SAMPLER: J. Bernhard

| <u>Parameter</u>    | <u>Detection Limit (ug/L)<sup>1</sup></u> | <u>Concentration (ug/L)</u> |
|---------------------|---|-----------------------------|
| Benzene             | 5   | 77.8                        |
| Chlorobenzene       | 5   | ND <sup>2</sup>             |
| 1,2-Dichlorobenzene | 5   | ND                          |
| 1,3-Dichlorobenzene | 5   | ND                          |
| 1,4-Dichlorobenzene | 5   | ND                          |
| Ethylbenzene        | 5   | 147.                        |
| Toluene             | 5   | 16.3                        |
| Xylenes             | 5   | 257.                        |
| MTBE                | 50  | ND                          |

Bromobenzene Surrogate Recovery: 110%

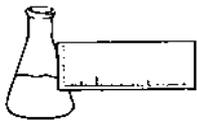
NUMBER OF UNIDENTIFIED PEAKS FOUND: >10

NOTES:

1 Detection limit raised due to high levels of contaminants. Sample run at 20% dilution.

2 None detected

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LABORATORY REPORT

EPA METHOD 602--PURGEABLE AROMATICS

CLIENT: Griffin International  
PROJECT NAME: Haynes & Kane  
REPORT DATE: May 31, 1995  
DATE SAMPLED: May 23, 1995  
DATE RECEIVED: May 23, 1995  
DATE ANALYZED: May 31, 1995

PROJECT CODE: GIHK1183  
REF.#: 74,815  
STATION: MW-3  
TIME SAMPLED: 10:45  
SAMPLER: J. Bernhard

| <u>Parameter</u>    | <u>Detection Limit (ug/L)</u> | <u>Concentration (ug/L)</u> |
|---------------------|-------------------------------|-----------------------------|
| Benzene             | 1                             | ND <sup>1</sup>             |
| Chlorobenzene       | 1                             | ND                          |
| 1,2-Dichlorobenzene | 1                             | ND                          |
| 1,3-Dichlorobenzene | 1                             | ND                          |
| 1,4-Dichlorobenzene | 1                             | ND                          |
| Ethylbenzene        | 1                             | ND                          |
| Toluene             | 1                             | ND                          |
| Xylenes             | 1                             | ND                          |
| MTBE                | 10                            | ND                          |

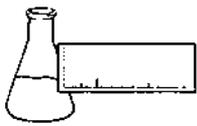
Bromobenzene Surrogate Recovery: 102%

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: Haynes & Kane  
REPORT DATE: May 31, 1995  
DATE SAMPLED: May 23, 1995  
DATE RECEIVED: May 23, 1995  
DATE ANALYZED: May 31, 1995

PROJECT CODE: GIHK1183  
REF.#: 74,816  
STATION: MW-4  
TIME SAMPLED: 11:10  
SAMPLER: J. Bernhard

| <u>Parameter</u>    | <u>Detection Limit (ug/L)<sup>1</sup></u> | <u>Concentration (ug/L)</u> |
|---------------------|---|-----------------------------|
| Benzene             | 5   | 50.6                        |
| Chlorobenzene       | 5   | ND <sup>2</sup>             |
| 1,2-Dichlorobenzene | 5   | ND                          |
| 1,3-Dichlorobenzene | 5   | ND                          |
| 1,4-Dichlorobenzene | 5   | ND                          |
| Ethylbenzene        | 5   | 124.                        |
| Toluene             | 5   | 14.8                        |
| Xylenes             | 5   | 192.                        |
| MTBE                | 50  | ND                          |

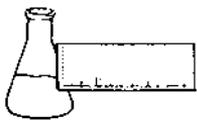
Bromobenzene Surrogate Recovery: 112%

NUMBER OF UNIDENTIFIED PEAKS FOUND: >10

NOTES:

- 1 Detection limit raised due to high levels of contaminants. Sample run at 20% dilution.
- 2 None detected

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LABORATORY REPORT

EPA METHOD 602--PURGEABLE AROMATICS

CLIENT: Griffin International  
PROJECT NAME: Haynes & Kane  
REPORT DATE: May 31, 1995  
DATE SAMPLED: May 23, 1995  
DATE RECEIVED: May 23, 1995  
DATE ANALYZED: May 30, 1995

PROJECT CODE: GIHK1183  
REF.#: 74,817  
STATION: Trip Blank  
TIME SAMPLED: 6:55  
SAMPLER: J. Bernhard

| <u>Parameter</u>    | <u>Detection Limit (ug/L)</u> | <u>Concentration (ug/L)</u> |
|---------------------|-------------------------------|-----------------------------|
| Benzene             | 1                             | ND <sup>1</sup>             |
| Chlorobenzene       | 1                             | ND                          |
| 1,2-Dichlorobenzene | 1                             | ND                          |
| 1,3-Dichlorobenzene | 1                             | ND                          |
| 1,4-Dichlorobenzene | 1                             | ND                          |
| Ethylbenzene        | 1                             | ND                          |
| Toluene             | 1                             | ND                          |
| Xylenes             | 1                             | ND                          |
| MTBE                | 10                            | ND                          |

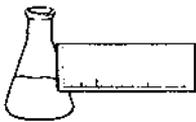
Bromobenzene Surrogate Recovery: 98%

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: Haynes & Kane  
REPORT DATE: May 31, 1995  
DATE SAMPLED: May 23, 1995  
DATE RECEIVED: May 23, 1995  
DATE ANALYZED: May 30, 1995

PROJECT CODE: GIHK1183  
REF.#: 74,818  
STATION: Equipment Blank  
TIME SAMPLED: 12:00  
SAMPLER: J. Bernhard

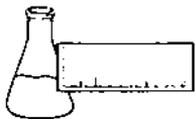
| <u>Parameter</u>    | <u>Detection Limit (ug/L)</u> | <u>Concentration (ug/L)</u> |
|---------------------|-------------------------------|-----------------------------|
| Benzene             | 1                             | ND <sup>1</sup>             |
| Chlorobenzene       | 1                             | ND                          |
| 1,2-Dichlorobenzene | 1                             | ND                          |
| 1,3-Dichlorobenzene | 1                             | ND                          |
| 1,4-Dichlorobenzene | 1                             | ND                          |
| Ethylbenzene        | 1                             | ND                          |
| Toluene             | 1                             | ND                          |
| Xylenes             | 1                             | ND                          |
| MTBE                | 10                            | ND                          |

Bromobenzene Surrogate Recovery: 103%

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: Haynes & Kane  
REPORT DATE: May 31, 1995  
DATE SAMPLED: May 23, 1995  
DATE RECEIVED: May 23, 1995  
DATE ANALYZED: May 31, 1995

PROJECT CODE: GIHK1183  
REF.#: 74,819  
STATION: Duplicate (MW-2)  
TIME SAMPLED: 11:40  
SAMPLER: J. Bernhard

| <u>Parameter</u>    | <u>Detection Limit (ug/L)<sup>1</sup></u> | <u>Concentration (ug/L)</u> |
|---------------------|---|-----------------------------|
| Benzene             | 5   | 73.0                        |
| Chlorobenzene       | 5   | ND <sup>2</sup>             |
| 1,2-Dichlorobenzene | 5   | ND                          |
| 1,3-Dichlorobenzene | 5   | ND                          |
| 1,4-Dichlorobenzene | 5   | ND                          |
| Ethylbenzene        | 5   | 136.                        |
| Toluene             | 5   | 15.0                        |
| Xylenes             | 5   | 237.                        |
| MTBE                | 50  | ND                          |

Bromobenzene Surrogate Recovery: 105%

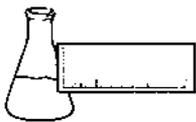
NUMBER OF UNIDENTIFIED PEAKS FOUND: > 10

NOTES:

1 Detection limit raised due to high levels of contaminants. Sample run at 20% dilution.

2 None detected

10/10/95 11:40 AM - J. Bernhard



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REPORT OF LABORATORY ANALYSIS

CLIENT: Griffin International  
PROJECT NAME: Haynes & Kane  
DATE REPORTED: June 5, 1995  
DATE SAMPLED: May 23, 1995

PROJECT CODE: GIHK1184  
REF. #: 74,820 - 74,825

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

Chain of custody indicated sample preservation with HCL.

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

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

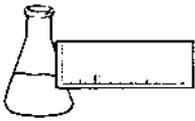
Blank contamination was not observed at levels affecting the analytical results.

Reviewed by,

Harry B. Locker, Ph.D.  
Laboratory Director

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LABORATORY REPORT

TOTAL PETROLEUM HYDROCARBONS (TPH) BY MODIFIED EPA METHOD 8100

DATE: June 5, 1995  
CLIENT: Griffin International  
PROJECT: Haynes & Kane  
PROJECT CODE: GIHK1184  
COLLECTED BY: J. Bernhard  
DATE SAMPLED: May 23, 1995  
DATE RECEIVED: May 23, 1995

| <u>Reference #</u> | <u>Sample ID</u>       | <u>Concentration (mg/L)<sup>1</sup></u> |
|--------------------|------------------------|---|
| 74,820             | MW-2; 11:40            | 600.                                    |
| 74,821             | MW-3; 10:45            | [REDACTED]                              |
| 74,822             | MW-4; 11:10            | 5.5                                     |
| 74,823             | Trip Blank; 6:55       | ND <sup>3</sup>                         |
| 74,824             | Equipment Blank; 12:00 | ND                                      |
| 74,825             | Dup (MW-2); 11:40      | 204.                                    |

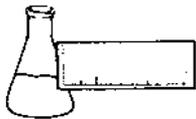
Notes:

1 Method detection limit is 1.0 mg/L

2 [REDACTED]

3 None detected

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LABORATORY REPORT

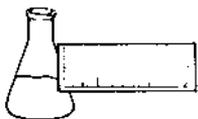
PETROLEUM FINGERPRINT

CLIENT: Griffin International  
PROJECT NAME: Haynes & Kane  
REPORT DATE: June 6, 1995  
SAMPLER: J. Bernhard  
DATE SAMPLED: May 23, 1995  
DATE RECEIVED: May 23, 1995

PROJECT CODE: GIHK1184  
ANALYSIS DATE: June 1, 1995  
STATION: MW-2  
REF.#: 74,820  
TIME SAMPLED: 11:40

Petroleum identification is determined by comparison of the chromatographic fingerprint of the sample with a laboratory generated library of chromatographic fingerprints of assorted petroleum standards. The chromatographic fingerprint of this sample, as analyzed by EPA 602 and modified 8100, shows a significant correlation with the chromatographic fingerprint of #2 Fuel Oil. The total petroleum hydrocarbon value for this sample determined by modified EPA Method 8100 is 600 mg/L.

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LABORATORY REPORT

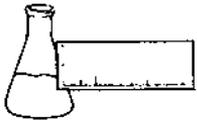
PETROLEUM FINGERPRINT

CLIENT: Griffin International  
PROJECT NAME: Haynes & Kane  
REPORT DATE: June 6, 1995  
SAMPLER: J. Bernhard  
DATE SAMPLED: May 23, 1995  
DATE RECEIVED: May 23, 1995

PROJECT CODE: GIHK1184  
ANALYSIS DATE: June 1, 1995  
STATION: MW-4  
REF.#: 74,822  
TIME SAMPLED: 11:10

Petroleum identification is determined by comparison of the chromatographic fingerprint of the sample with a laboratory generated library of chromatographic fingerprints of assorted petroleum standards. The chromatographic fingerprint of this sample, as analyzed by EPA 602 and modified 8100, shows a significant correlation with the chromatographic fingerprint of #2 Fuel Oil. The total petroleum hydrocarbon value for this sample determined by modified EPA Method 8100 is 5.5 mg/L.

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LABORATORY REPORT

PETROLEUM FINGERPRINT

CLIENT: Griffin International  
PROJECT NAME: Haynes & Kane  
REPORT DATE: June 6, 1995  
SAMPLER: J. Bernhard  
DATE SAMPLED: May 23, 1995  
DATE RECEIVED: May 23, 1995

PROJECT CODE: GIHK1184  
ANALYSIS DATE: June 2, 1995  
STATION: Duplicate (MW-2)  
REF.#: 74,825  
TIME SAMPLED: 11:40

Petroleum identification is determined by comparison of the chromatographic fingerprint of the sample with a laboratory generated library of chromatographic fingerprints of assorted petroleum standards. The chromatographic fingerprint of this sample, as analyzed by EPA 602 and modified 8100, shows a significant correlation with the chromatographic fingerprint of #2 Fuel Oil. The total petroleum hydrocarbon value for this sample determined by modified EPA Method 8100 is 204 mg/L.

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74,814 — 74,825

CHAIN-OF-CUSTODY RECORD

14559

|   |                                       |                                    |
|---|---------------------------------------|------------------------------------|
| Project Name: <i>Haynes &amp; Kane</i>  | Reporting Address: <i>Griffin</i>     | Billing Address: <i>Griffin</i>    |
| Site Location: <i>Bennington, VT</i>    | # <i>1955110</i>                      |                                    |
| Endyne Project Number: <i>GJHK 1183</i> | Company: <i>Griffin</i>               | Sampler Name: <i>J. Beardsford</i> |
|   | Contact Name/Phone #: <i>865-4788</i> | Phone #: <i>same</i>               |

| Lab #  | Sample Location  | Matrix           | G<br>R<br>A<br>B | C<br>O<br>M<br>P | Date/Time        | Sample Containers |           | Field Results/Remarks | Analysis Required | Sample Preservation | Rush |
|--------|------------------|------------------|------------------|------------------|------------------|-------------------|-----------|-----------------------|-------------------|---------------------|------|
|        |                  |                  |                  |                  |                  | No.               | Type/Size |                       |                   |                     |      |
| 74,814 | MW-2             | H <sub>2</sub> O | X                |                  | 5-23-95<br>11:40 | 2                 | 40ml      |                       | 602               | HCl                 |      |
| 74,815 | MW-3             |                  |                  |                  | 10:45            |                   |           |                       |                   |                     |      |
| 74,816 | MW-4             |                  |                  |                  | 11:10            |                   |           |                       |                   |                     |      |
| 74,817 | Trip Blank       |                  |                  |                  | 06:55            |                   |           |                       |                   |                     |      |
| 74,818 | Equipment Blank  |                  |                  |                  | 12:00            |                   |           |                       |                   |                     |      |
| 74,819 | Duplicate (MW-2) |                  |                  |                  | 11:40            |                   |           |                       |                   |                     |      |
|        | MW-2             |                  |                  |                  | 11:40            |                   | 1 liter   |                       |                   |                     |      |
|        | MW-3             |                  |                  |                  | 10:45            |                   |           |                       |                   |                     |      |
|        | MW-4             |                  |                  |                  | 11:10            |                   |           |                       |                   |                     |      |
|        | Trip Blank       |                  |                  |                  | 06:55            |                   |           |                       |                   |                     |      |
|        | Equipment Blank  |                  |                  |                  | 12:00            |                   |           |                       |                   |                     |      |
|        | Duplicate (MW-2) |                  |                  |                  | 11:40            |                   |           |                       |                   |                     |      |

modified 8100  
TPH only  
See 30 below

|   |   |                                |
|---|---|--------------------------------|
| Relinquished by: Signature <i>John B. [unclear]</i> | Received by: Signature <i>Kevin McShane</i>       | Date/Time <i>5/23/95 16:30</i> |
| Relinquished by: Signature <i>Kevin McShane</i>     | Received by: Signature <i>Louise M. [unclear]</i> | Date/Time <i>5-23-95 4:40</i>  |

New York State Project: Yes      No      Requested Analyses

|   |           |    |                  |    |              |    |                    |    |                  |    |                      |
|---|-----------|----|------------------|----|--------------|----|--------------------|----|------------------|----|----------------------|
| 1 | pH        | 6  | TKN              | 11 | Total Solids | 16 | Metals (Specify)   | 21 | EPA 624          | 26 | EPA 8270 B/N or Acid |
| 2 | Chloride  | 7  | Total P          | 12 | TSS          | 17 | Coliform (Specify) | 22 | EPA 625 B/N or A | 27 | EPA 8010/8020        |
| 3 | Ammonia N | 8  | Total Diss. P    | 13 | TDS          | 18 | COD                | 23 | EPA 418.1        | 28 | EPA 8080 Pest/PCB    |
| 4 | Nitrite N | 9  | BOD <sub>5</sub> | 14 | Turbidity    | 19 | BTEX               | 24 | EPA 608 Pest/PCB |    |                      |
| 5 | Nitrate N | 10 | Alkalinity       | 15 | Conductivity | 20 | EPA 601/602        | 25 | EPA 8240         |    |                      |

29 TCLP (Specify: volatiles, semi-volatiles, metals, pesticides, herbicides)

(30) Other (Specify): *For both analyses (602 and 8100 Modified), please do characterization of peaks to differentiate between gasoline and fuel oil.*