



June 2, 2000

Mr. Chuck Schwer
Vermont ANR/DEC
Waste Management Division
103 South Main St./ West Bldg.
Waterbury, VT 05671-0404

RE: Initial Site Investigation for Teago Store, South Pomfret, Vermont
(VTDEC Site #99-2670)

Dear Mr. Schwer,

Enclosed please find a copy of the Site Investigation Report for the above referenced site.

Please contact me if you have any questions.

Sincerely,

Beth Stopford FOR

Beth Stopford
Environmental Engineer

Enclosure

cc: GI Job #119941641

**INITIAL INVESTIGATION OF
SUSPECTED SUBSURFACE
PETROLEUM CONTAMINATION
AT TEAGO STORE**

June 2, 2000

Site Location:

**Teago Store
2035 Stage Road
South Pomfret, VT**

**VTDEC SITE #99-2670
GI Project #119941641**

Prepared For:

**Stage Road Enterprises, Inc.
P.O. Box 127
South Pomfret, VT 05067**

Prepared By:



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



TABLE OF CONTENTS

I. INTRODUCTION.....	1
II. SITE BACKGROUND	1
A. SITE HISTORY.....	1
B. SITE DESCRIPTION	2
C. SITE GEOLOGIC SETTING	2
III. INVESTIGATIVE PROCEDURES	2
A. MONITORING WELL INSTALLATION.....	2
B. DETERMINATION OF GROUNDWATER FLOW DIRECTION AND GRADIENT	4
C. GROUNDWATER SAMPLE COLLECTION AND ANALYSIS	5
D. SOIL STOCKPILE MONITORING.....	5
E. SENSITIVE RECEPTOR RISK ASSESSMENT	6
IV. CONCLUSIONS	7
V. RECOMMENDATIONS.....	8
VI. REFERENCES.....	9

APPENDICES

- A. MAPS
 - 1) Site Location Map
 - 2) Area Map
 - 3) Site Map
 - 4) Groundwater Contour Map
 - 5) Contaminant Concentration Map
- B. BORING LOGS AND MONITORING WELL CONSTRUCTION DIAGRAMS
- C. LIQUID LEVEL MONITORING DATA
- D. GROUNDWATER QUALITY SUMMARY DATA
- E. LABORATORY ANALYSIS REPORTS



I. INTRODUCTION

This report summarizes the initial investigation of suspected subsurface petroleum contamination at the Teago Store, located at 2035 Stage Road in South Pomfret, VT (see the Site Location Map in Appendix A). This investigation was conducted by Griffin International, Inc. (Griffin) for Stage Road Enterprises, Inc. (SRE) to address petroleum contamination detected during an underground storage tank closure inspection in August 1999. The Vermont Department of Environmental Conservation (VTDEC) requested that this work be completed in a letter to Charles and Alice Gunderson of SRE from Mr. Chuck Schwer of the VTDEC, dated October 13, 1999. The site (VTDEC Site #99-2670) is owned by SRE.

Work conducted at the site included the advancement of six soil borings and installation of five groundwater monitoring wells, the determination of groundwater flow direction and gradient, and the collection and laboratory analysis of groundwater samples from four of the five monitoring wells (the fifth well was submerged under water). In addition, a sensitive receptor risk assessment was conducted to assess the risk that subsurface petroleum contamination at the site may pose to potentially sensitive receptors identified in the site vicinity, and water samples were collected from two supply wells for laboratory analysis. Work has been conducted in accordance with Griffin's *Work Plan and Cost Estimate for Subsurface Investigation at Teago Store* dated October 25, 1999 [1]. The Work Plan was approved by Mr. Charles Gunderson of Stage Road Enterprises, Inc. on November 16, 1999, and by Mr. Chuck Schwer of the VTDEC in a letter dated December 30, 1999.

II. SITE BACKGROUND

A. Site History

During a UST closure inspection in August 1999 subsurface petroleum contamination was detected in soil at the Teago Store. Field measurements were made using an HNu™ Model HW-101 photoionization detector (PID) equipped with a 10.2 eV bulb. Soil contamination was associated with the piping run between the dispenser island and two 6,000-gallon gasoline USTs, and in the excavation for one new 4,000-gallon gasoline UST, located in the vicinity of the dispenser island. UST removal and replacement activities were conducted between August 30 and September 1, 1999. Details of the closure inspection are outlined in the Underground Storage Tank Permanent Closure Form [2]. Adsorbed petroleum contamination exceeding Soil Guideline Thresholds set by the Waste Management Division of the VTDEC [3] were detected along the piping run near the leachfield south of Stage Road, and in the vicinity of the former dispenser island north of Stage Road. Measured VOC concentrations ranged from 0 parts per million (ppm) to 320 ppm. During the UST removal inspection, the piping between the former gasoline USTs on the south side of Stage Road and the dispenser island on the north side of Stage Road was observed to be in poor condition at the connections, and the joints were only hand tight [2].



In compliance with a request from the VTDEC that additional work be conducted at this site in order to determine the degree and extent of petroleum contamination, SRE retained the services of Griffin to conduct this initial site investigation.

B. Site Description

The Teago Store site is located on the north and south side of Stage Road in South Pomfret, VT (see Site Location Map in Appendix A). The site is serviced by a septic system and a supply well. The area surrounding the site is primarily residential and light commercial. Residences and businesses in the area are serviced by individual water supplies and septic systems. Pomfret Brook flows along the western side of the property, and drains into Barnard Brook, located approximately 500 feet to the southwest at its closest point to the site.

The on-site building, housing a convenience store and the South Pomfret Post Office, is constructed on a foundation. The majority of the site on the north side of Stage Road is paved; the parking area on the south side of Stage Road is unpaved.

C. Site Geologic Setting

According to the Surficial Geologic Map of Vermont [4], the site is underlain by kame gravel and glaciofluvial gravel. Soils encountered during drilling activities consisted of well-graded sand with some silt and gravel. Bedrock at the site is mapped as gray quartzose and micaceous crystalline limestone of the Waits River formation [5]. Bedrock was not encountered during excavation activities at the site in August of 1999. Auger refusal was met during soil boring and monitoring well installation in March 2000. It is not known if bedrock was encountered, or if refusal was due to the presence of cobbles or boulders in the subsurface.

Based on visual observation and review of the USGS topographic map [6], groundwater in the vicinity of the Teago Store would be expected to flow to the southwest toward Pomfret Brook, which borders the site to the west, and Barnard Brook, located to the southwest, following topographic contours.

III. INVESTIGATIVE PROCEDURES

A. Monitoring Well Installation

On March 8, 2000, six soil borings were advanced by T&K Drilling of East Swanzey, NH using a hollow stem auger drilling rig. Five soil borings were completed as groundwater monitoring wells. Drilling and well construction were directly supervised by a Griffin engineer. Soil

samples were collected at five-foot intervals from each boring. Soil samples were not screened for volatile organic compounds (VOCs) due to a PID malfunction in the field. Soil characteristics were recorded in detailed boring logs by the supervising Griffin engineer (see the Boring Logs and Well Construction Diagrams in Appendix B).

The soil borings/monitoring wells (SB1 to SB6) were installed to help better define groundwater flow direction and gradient, and the degree and extent of suspected petroleum contamination at the site. SB1 and SB6/MW1 were installed north of the presumed source area (e.g. the former piping for the UST system) in an inferred up to crossgradient direction. MW2 was installed in the vicinity of two former abandoned USTs, located to the southeast of the Teago Store. MW3 was installed near the former piping run which ran between the dispenser island north of Stage Road and the former gasoline USTs which were located on the south side of Stage Road. MW4 was installed in the vicinity of the two former 6,000-gallon gasoline USTs, and near the current soil stockpile. MW5 was installed southwest of the former dispenser island in a presumed down to crossgradient direction.

The monitoring wells were constructed of 2-inch diameter Schedule 40 PVC riser and 0.010-inch factory slotted, well screen. The length of the riser and the screened section of pipe varied depending on the depth of the well. The annulus between the well screen and the borehole was filled with a sand pack to just above the well screen. A bentonite seal was placed above the sand pack. The remainder of the boring was filled with native backfill. 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. Specific well construction details are displayed in the detailed Boring Logs and Well Construction Diagrams included in Appendix B.

SB1

The boring for SB1 was advanced to 7 feet below grade, at which point auger refusal was met. Soils from the boring consisted of moist well-graded sand from 0 to 2 and 5 to 7 feet below grade. Groundwater was not encountered at a depth of approximately 7 feet below grade, and the boring was not completed as a monitoring well.

SB2/MW2

The boring for SB2/MW2 was advanced to 13.4 feet below grade. Soils from the boring for SB2/MW2 consisted of well-graded sand from 0 to 2, 5 to 7, and 10 to 12 feet below grade. Groundwater was encountered at approximately 10 feet below grade. Auger refusal was met at 13.4 feet below grade, and the screened section of the well was installed from 13.4 to 3.4 feet below grade.



SB3/MW3

The boring for SB3/MW3 was advanced to 15 feet below grade. Soils from the boring consisted of sandy silt from 0 and 2 feet below grade. Silt with sand was observed from 5 to 7 feet below grade. Soils from 10 to 12 feet below grade consisted of silty sand. A petroleum odor was observed in the soil samples collected from 5 to 7 and from 10 to 12 feet below grade, approximately coincident with the water table. Groundwater was encountered at approximately 10 feet below grade. The boring was completed as MW3, and the screened section of the well was installed from 15 to 5 feet below grade.

SB4/MW4

The boring for SB4/MW4 was advanced to 15 feet below grade. Soils from the boring consisted of silty sand from 0 and 2 feet below grade. Well-graded sand with silt was observed from 5 to 7 feet below grade. Soils from 10 to 12 feet below grade consisted of well-graded sand. Groundwater was encountered at approximately 10 feet below grade. The boring was completed as MW4, and the screened section of the well was installed from 15 to 5 feet below grade.

SB5/MW5

The boring for SB5/MW5 was advanced to 15 feet below grade. Soils from the boring consisted of well-graded sand from 0 and 2, 5 to 7, and 10 to 12 feet below grade. Groundwater was encountered at approximately 10 feet below grade. The boring was completed as MW5, and the screened section of the well was installed from 15 to 5 feet below grade.

SB6/MW1

The boring for SB6/MW1 was advanced to 15 feet below grade. Soils from the boring consisted of well-graded sand from 0 and 2, 5 to 7, and 10 to 12 feet below grade. Groundwater was encountered at approximately 10 feet below grade. The boring was completed as MW1, and the screened section of the well was installed from 15 to 5 feet below grade.

B. Determination of Groundwater Flow Direction and Gradient

Water table elevation measurements were collected from four of the five newly installed monitoring wells on March 15, 2000 using a Keck interface probe. MW5 was submerged beneath water and could not be sampled. These measurements were subtracted from the top of casing elevations, which were determined relative to an arbitrary datum of 100 feet at the top of the casing for MW3, to determine the water table elevation at each of the wells. Groundwater level data are recorded in Appendix C. No free phase petroleum product was observed in any of the monitoring wells gauged on March 15, 2000.

As displayed in the groundwater contour map included in Appendix A, groundwater flow on March 15, 2000 is directed to the west-southwest toward Pomfret Brook, at a hydraulic gradient of approximately 7.8%. Under the groundwater flow regime estimated for March 15, 2000, MW1 is located upgradient of the dispenser island, the former gasoline UST system, and the two abandoned USTs. MW5 is located downgradient of the dispenser island. MW2 is located in the vicinity of the two abandoned USTs on the north side of Stage Road. MW3 is located in the vicinity of the former piping run connecting the former gasoline USTs to the dispenser island. MW4 is located in the vicinity of the former gasoline USTs and the existing soil stockpile.

C. Groundwater Sample Collection and Analysis

Groundwater samples were collected from four of the five monitoring wells immediately following well gauging on March 15, 2000. MW5 could not be sampled because it was submerged under water. Samples were analyzed for the presence of VOCs per EPA Method 8021B, and for total petroleum hydrocarbons (TPH) by EPA Method 8015 for diesel range organics (DRO). Results of the laboratory analyses are summarized in Appendix D. Laboratory report forms are presented in Appendix E.

None of the targeted petroleum constituents were detected in the sample collected from MW1, the upgradient monitoring well, on March 15, 2000.

Low concentrations of targeted petroleum constituents were detected in the samples collected from MW2 and MW4, located in the vicinity of the two abandoned USTs and the former gasoline USTs, respectively. Concentrations of 1,3,5 trimethyl benzene (TMB) and 1,2,4 TMB exceeded their respective VGESs in MW2. The VGES for 1,2,4 TMB was exceeded in MW4. Low concentrations of TPH were also detected in these monitoring wells.

Elevated concentrations of petroleum constituents were detected in the groundwater sample collected from MW3, located in the vicinity of the former product piping on the south side of Stage Road. VGESs were exceeded for all of the targeted compounds except benzene and MTBE, which were not detected above method detection limits. However, the method detection limits for these two compounds exceeded their applicable VGESs.

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

D. Soil Stockpile Monitoring

Approximately 80 yards of petroleum contaminated soils were polyencapsulated and stockpiled on-site during UST removal and replacement activities in August 1999. The soil was stockpiled



in the former gasoline UST pit, and extends from approximately 3 feet below ground level to slightly above ground level.

The soil stockpile was not screened during the March 2000 sampling visit because the pile was frozen.

E. Sensitive Receptor Risk Assessment

A receptor risk assessment was conducted to identify known and potential receptors of contamination at the Teago Store facility. A visual survey was conducted during the piping replacement inspection in August 1999 and during monitoring well installation. Based on these observations, a determination of the potential risk to identified receptors was made based on proximity to the expected source areas (specifically: the former piping run south of Stage Road which ran between the former gasoline USTs and the pump island, and soils in the vicinity of the pump island), groundwater flow direction, and contaminant concentration levels in soil and groundwater.

Water Supplies

The Teago Store and the surrounding residences are served by water supplied from private supply wells. The majority of these wells are reportedly point-driven. The supply well for the store is located in the basement, and is approximately 120 feet deep [2].

Water samples were collected from the Teago Store supply well, as well as from a residence located approximately 200 feet south of the store (see Area Map in Appendix A), on March 15, 2000. The samples were submitted for analysis of VOCs via EPA Method 524.2. None of the compounds targeted by this analysis were detected in the supply well samples collected on March 15, 2000.

Well construction details were not on record with the VTDEC Water Supply Division for the supply well servicing the residence south of Teago Store, or for the Teago Store supply well [7].

Buildings in the Vicinity

The on-site building houses a convenience store and a post office. Environmental risk to the on-site building is considered minimal, given that the building is located upgradient to crossgradient of the identified contamination at the site.

The interior and basement of the Teago Store were not screened with a PID on the day of drilling (March 8, 2000) due to a PID malfunction in the field.



Other buildings in the area are considered at minimal risk from the on-site petroleum contamination given that they are located upgradient or crossgradient of the contaminant sources at the Teago Store property.

Surface Water

The nearest surface water is Pomfret Brook which runs along the western border of the site. Barnard Brook is located approximately 500 feet southwest of Teago Store, at its closest point. Barnard Brook is crossgradient of the source areas (the former piping run and the dispenser island), based upon the water table elevations measured on March 15, 2000, and is considered at minimal risk of petroleum impact from Teago Store given its distance from the subject site.

Pomfret Brook was visually inspected during the UST closure inspection in August-September 1999, and on the day of drilling (March 8, 2000). No petroleum sheens or odors were observed on the water surface or from seeps along the stream banks. Based on its proximity to the former piping run where elevated VOC concentrations were measured in soil and groundwater, and its downgradient location from this source area, Pomfret Brook is potentially at risk of petroleum impact.

Utility Corridors

The area surrounding Teago Store is serviced by private supply wells and septic systems. There are no utilities in the vicinity which would allow the potential migration of contaminants from the site via utility corridors.

IV. CONCLUSIONS

Based on this initial site investigation of petroleum contamination at the Teago Store site, the following conclusions are offered:

1. There has been an apparent release(s) of gasoline in the subsurface at the subject site. The nature and duration of the release(s) is not known. During the tank removal inspection, the piping was observed to be in poor condition at the connections, and the joints were only hand tight.
2. VOC readings of soils collected during a UST system removal and upgrade in August 1999 indicate that adsorbed petroleum compounds exist in the soils in the vicinity of the former dispenser island on the north side of Stage Road and along the former piping run near the leachfield located on the south side of Stage Road. Measured VOC concentrations in soils ranged from 0 to 320 ppm.



3. The extent of soil contamination at the Teago Store site has not been defined.
4. Five groundwater monitoring wells were installed at the Teago Store site on March 8, 2000 to evaluate the degree and extent of subsurface petroleum contamination detected during the UST closure inspection in August and September 1999.
5. Water table elevation data collected on March 15, 2000 indicate that groundwater in the overburden aquifer beneath the site is flowing generally to the west southwest toward Pomfret Brook at a hydraulic gradient of approximately 7.8%.
6. No free product was present in the monitoring wells sampled on March 15, 2000.
7. None of the targeted petroleum constituents were detected in the sample collected from MW1, located upgradient of the pump island.
8. Low concentrations of the targeted petroleum constituents were detected in the groundwater samples collected from MW2 and MW4, located in the vicinity of two abandoned USTs and the former gasoline USTs, respectively.
9. Groundwater samples collected from MW3, adjacent to the former piping run, had concentrations of petroleum constituents exceeding their respective VGESs for all of the compounds detected. Benzene and MTBE were not detected in the sample collected from this well, however the method detection limit exceeded the VGES for these compounds.
10. Pomfret Brook is the only receptor (other than soils and groundwater) believed to be at risk from subsurface petroleum contamination, based on currently available data. No petroleum sheens or odors were observed on the water surface or from seeps along the stream banks in during the UST closure inspection in August and September 1999 or during drilling activities in March 2000.
11. The downgradient extent of groundwater contamination has not been defined with the current well array.
12. The soil stockpile was not screened during the March 15, 2000 sampling event because it was frozen.

V. RECOMMENDATIONS

Based upon the above conclusions, Griffin recommends that a confirmatory round of groundwater sampling be conducted at the site. The confirmatory sampling event should be scheduled for the Summer of 2000 in order to confirm contaminant concentrations measured during the March, 2000 sampling event, and to confirm groundwater flow direction. Additionally, three to four borings should be advanced with a hand auger along the stream bank,



Hand install MW if positive PID kits

Initial Investigation of Suspected Subsurface Petroleum Contamination
Teago Store, South Pomfret, Vermont

and soil samples should be collected from the soil-water interface for screening with a PID to determine if contaminants are migrating toward Pomfret Brook. Following the confirmatory round of groundwater sampling and riverbank assessment, recommendations for future monitoring or investigation at the site should be made.

The stockpiled soils currently polyencapsulated on-site should be screened with a PID during the next round of groundwater sampling.

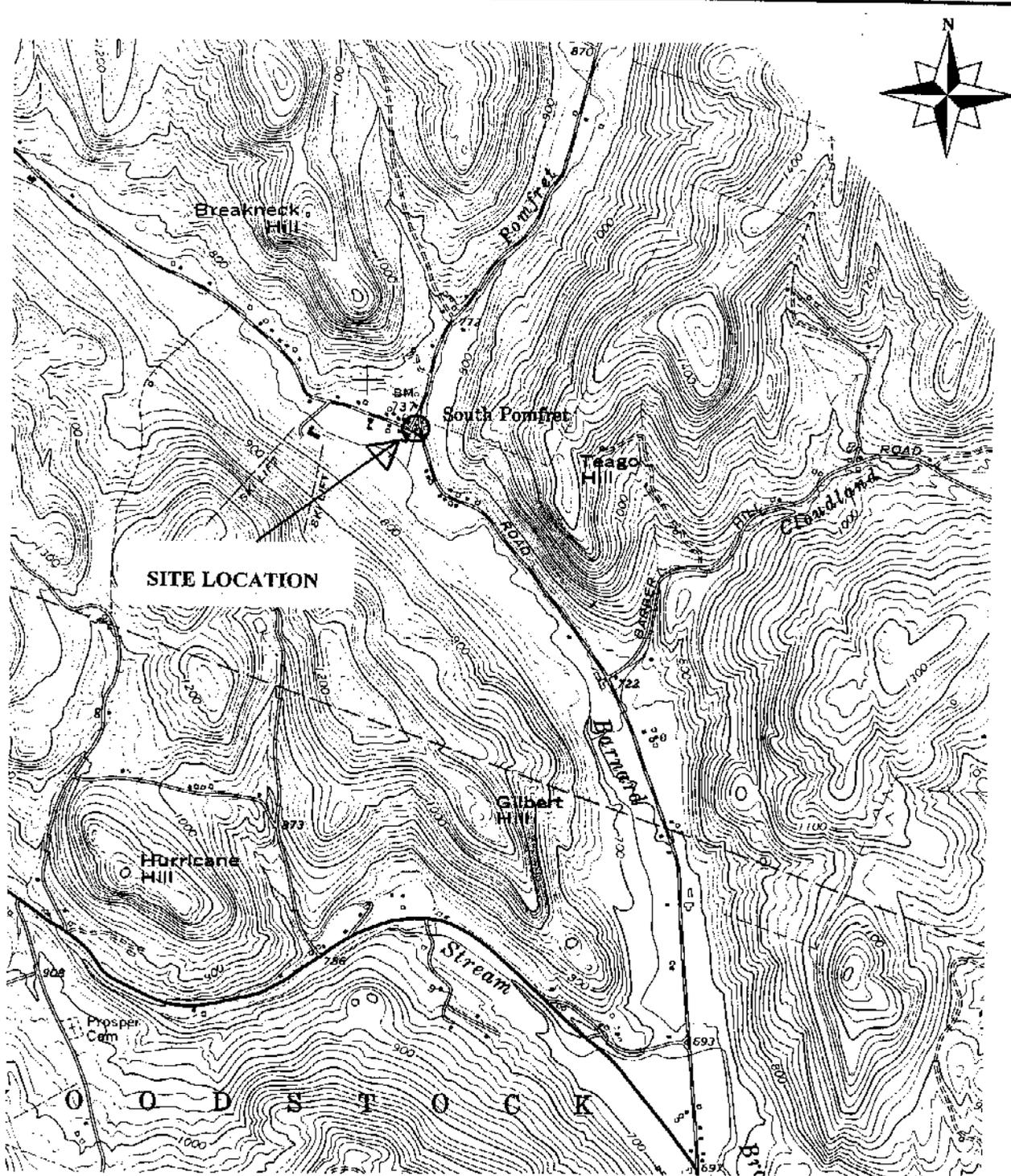
VI. REFERENCES

1. Griffin International, Inc. October 25, 1999. *Work Plan and Cost Estimate for Subsurface Investigation of Suspected Petroleum Contamination at Teago Store.*
2. Griffin International Inc., September 10, 1999. UST Closure Letter Report from Don Tourangeau to Susan Thayer (VTDEC) re: UST Closure Inspection, Teago Store, UST Facility 4571626.
3. Vermont Department of Environmental Conservation. August 1996. *Agency Guidelines for Contaminated Soils and Debris.*
4. Doll, Charles G., ed., 1970, *Surficial Geologic Map of Vermont*, State of Vermont.
5. Doll, Charles G., ed., 1961, *Centennial Geologic Map of Vermont*, State of Vermont.
6. USGS 7.5 Minute Topographic Quadrangle Map. 1966, photo-inspected 1976. Woodstock North, Vermont – Windsor County.
7. Hood, Melissa. VTDEC Water Supply Division. May 30, 2000. Telephone conversation with Elizabeth Stopford, Griffin International, Inc.



APPENDIX A

Maps



Job #: 119941641



Teago Store

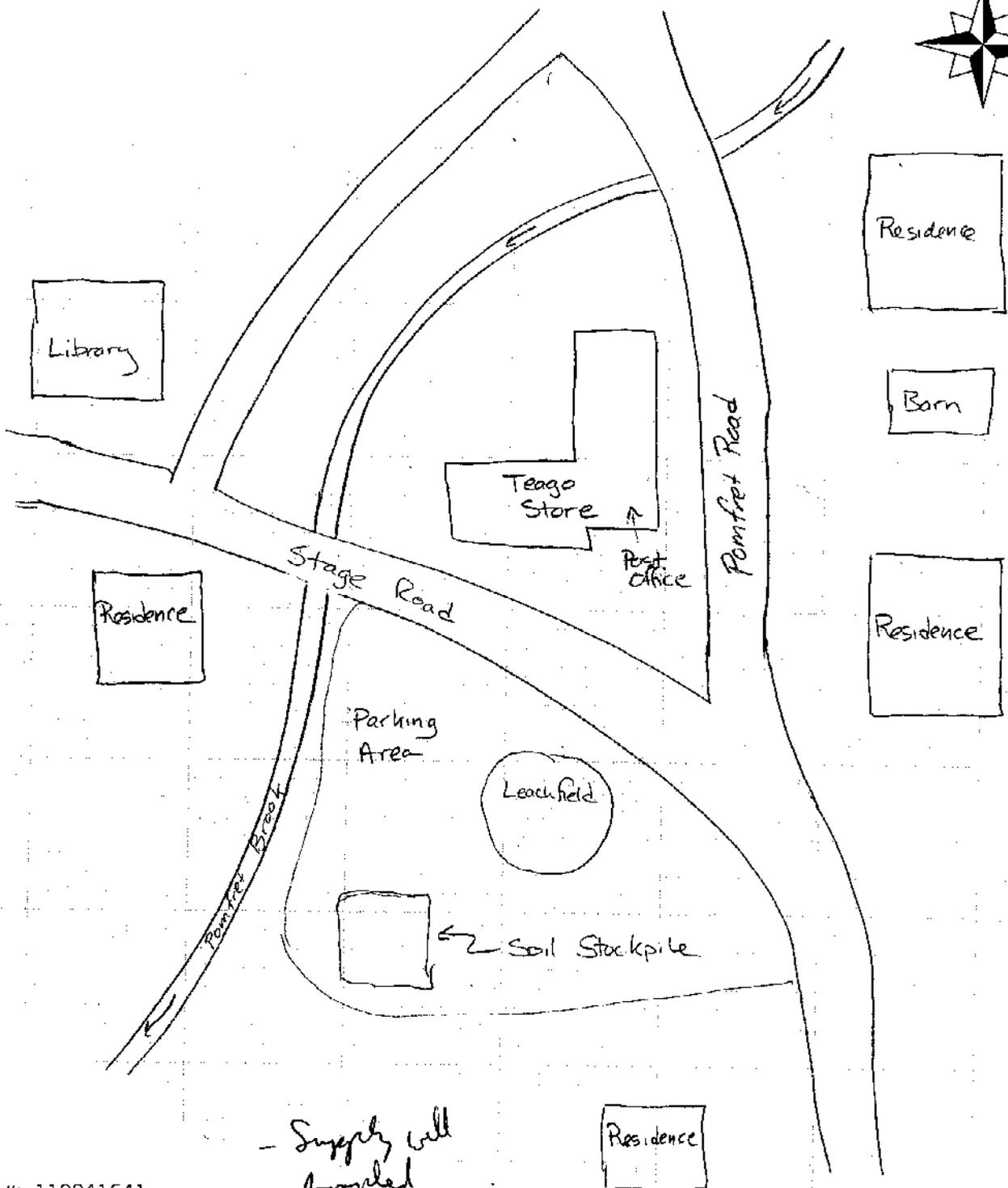
2035 Stage Road, South Pomfret, VT

Site Location Map

06/01/2000

Source: USGS 7.5 Minute Topographic Quad. Map. Woodstock North, VT. 1966, photoinspected 1976

Scale: 1" = 2000'



- Supply well
Analyzed

Job #: 119941641



Teago Store

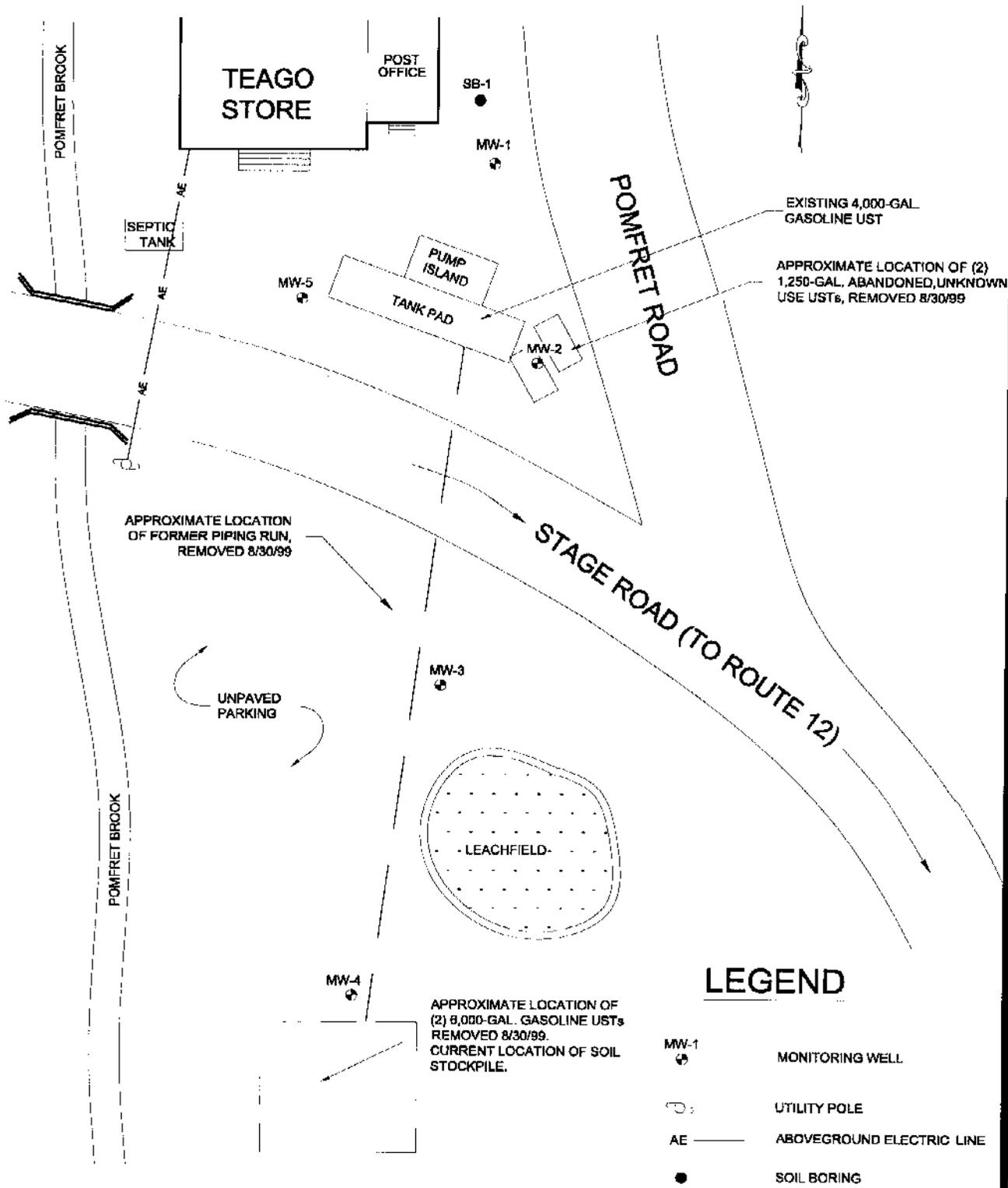
2035 Stage Road, South Pomfret, VT

Area Map

06/01/2000

Source: BS Field Sketch, March 8, 2000.

Scale: nts



LEGEND

- MW-1  MONITORING WELL
-  UTILITY POLE
- AE  ABOVEGROUND ELECTRIC LINE
-  SOIL BORING

SOURCE: GRIFFIN SITE SURVEY, 3/15/00



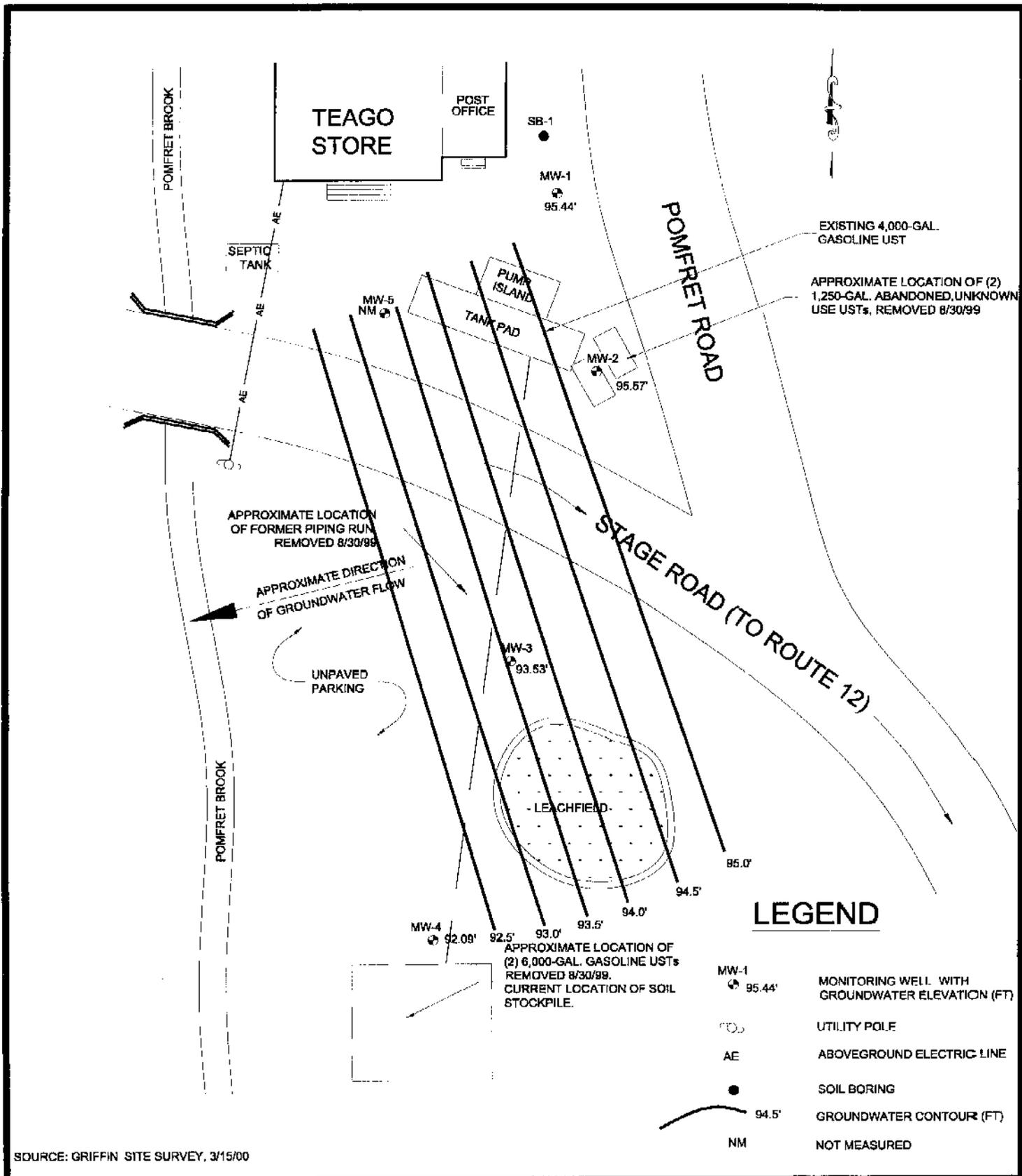
VTDEC SITE #: 99-2670
JOB #: 118941641

TEAGO STORE

2035 STAGE ROAD, S. POMFRET, VT

SITE MAP

DATE: 5/24/00	DWG #: 2	SCALE: 1"= 20'	DRN.: MP	APP.: BS
---------------	----------	----------------	----------	----------



SOURCE: GRIFFIN SITE SURVEY, 3/15/00



VTDEC SITE #: 99-2670
JOB #: 118941641

TEAGO STORE

2035 STAGE ROAD, S. POMFRET, VT

GROUNDWATER ELEVATION MAP

MEASURED: 3/15/00

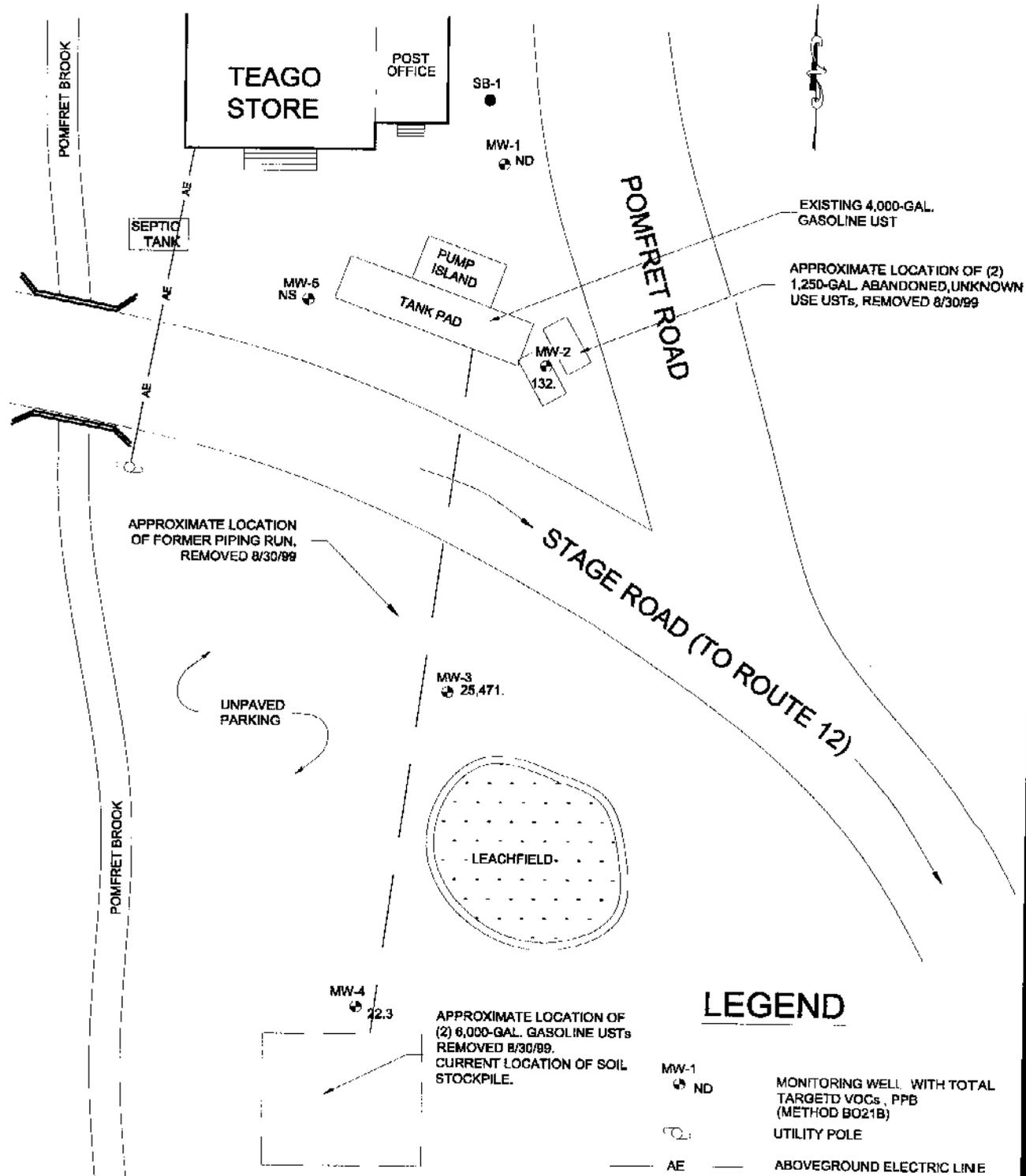
DATE: 5/24/00

DWG.#: 3

SCALE: 1" = 20'

DRN.: MP

APP.: BS



LEGEND

- MW-1 ND MONITORING WELL WITH TOTAL TARGETD VOCs, PPB (METHOD B021B)
- ⊕ UTILITY POLE
- AE — ABOVEGROUND ELECTRIC LINE
- SOIL BORING
- ND NOT DETECTED
- NS NOT SAMPLED

SOURCE: GRIFFIN SITE SURVEY, 3/15/00



VTDEC SITE #: 99-2670
JOB #: 119941641

TEAGO STORE

2035 STAGE ROAD, S. POMPFBRET, VT

CONTAMINANT CONCENTRATION MAP

TOTAL TARGETED VOCs (METHOD 8021B)

SAMPLED: 3/15/00

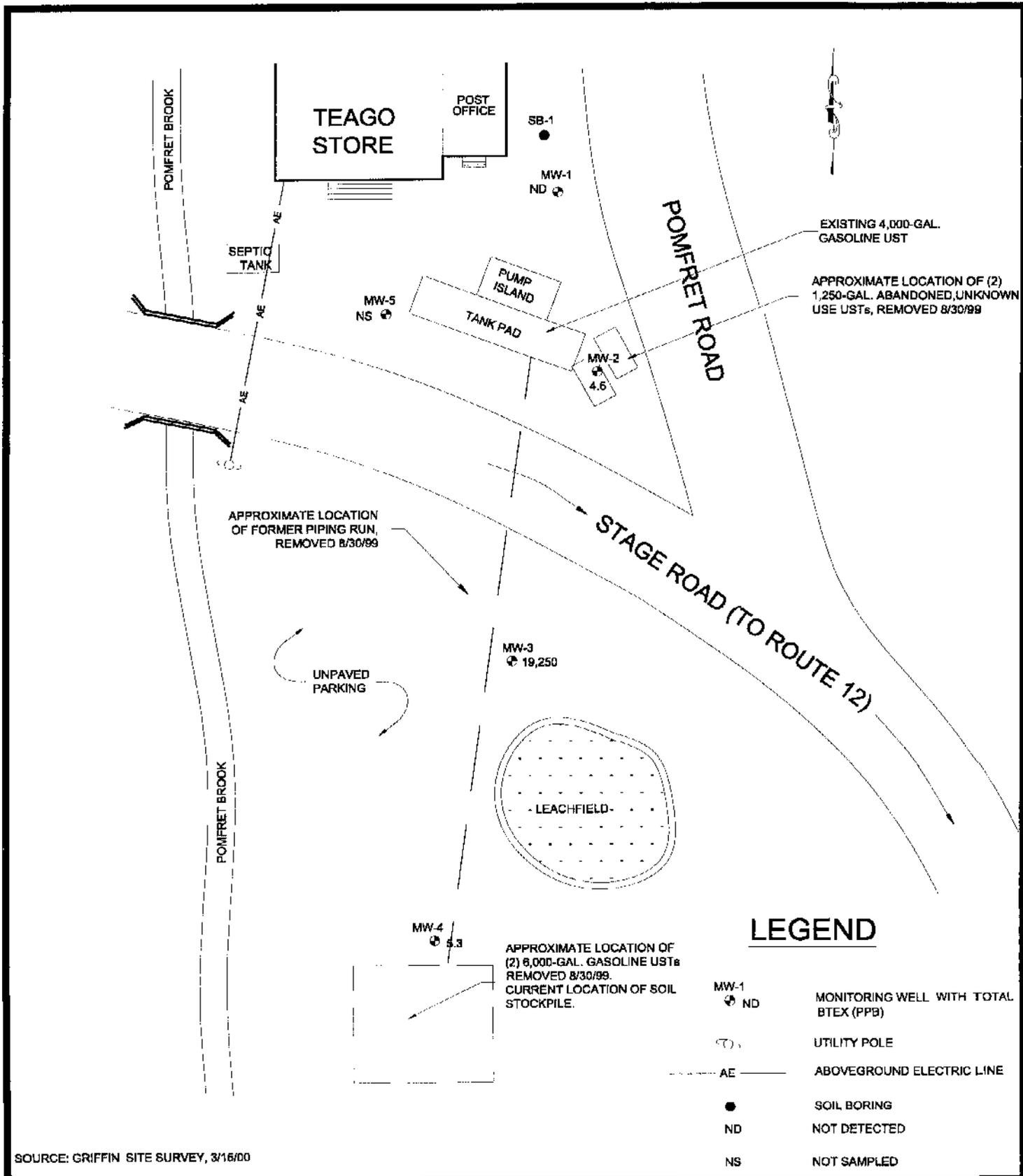
DATE: 5/24/00

DWG.#: 5

SCALE: 1" = 20'

DRN.: MP

APP.: BS



SOURCE: GRIFFIN SITE SURVEY, 3/16/00



VTDEC SITE #: 99-2670
JOB #: 119941641

TEAGO STORE

2035 STAGE ROAD, S. POMFRET, VT

CONTAMINANT CONCENTRATION MAP

TOTAL BTEX

SAMPLED: 3/15/00

DATE: 5/24/00

DWG.#: 4

SCALE: 1"= 20'

DRN.: MP

APP.: BS



APPENDIX B

Boring Logs and Monitoring Well Construction Diagrams

BORING LOG

Boring No: SB1



Teago Store
South Pomfret, VT

Griffin Project #: 119941641	Date Installed: 03/08/2000	
Drilled by: Griffin International	Drilling Method: Hollow-stem auger	
Driller: T&K Drilling	Boring Diameter: 4.25"	
Supervised by: EES	Development Method: not developed	
Logged by: EES	Screened Length: not completed as a monitoring well	

Grade = 0	Well Construction	Pen/Rec (*)	Interval (*)	Soil Characteristics	Letter Symbol	Graphic Symbol
		Blow Count	PID (ppm)			
0.5				Asphalt Surface		
1.0		na	0 - 2			
1.5	Ft<Grade	na	nm	Moist, brown, well-graded sand. 95% fine sand, 5% silt.	SW	
2.0						
2.5						
3.0						
3.5						
4.0						
4.5						
5.0						
5.5		24/7	5 - 7	Moist, brown, well-graded sand. 90% fine to medium sand, 5% fine gravel, 5% silt.	SW	
6.0		20 71 21 32	nm			
6.5						
7.0						
7.5						
8.0						
8.5						
9.0						
9.5						
10.0						
10.5						
11.0						
12.0						
13.0						
14.0						
15.0						
16.0						
17.0						
18.0						
19.0						
20.0						
21.0						
22.0						
23.0						
24.0						
25.0						
26.0						
27.0						
28.0			7	Base of Exploration. Auger refusal.		

Legend

<ul style="list-style-type: none"> Road Box with Bolt Down Cover, Set in Cement. Existing Surface. Bentonite Seal Placed in Annulus. Grade #1 Silica Sand Pack Placed in Annulus. Drill Cuttings Placed in Annulus. <p>na - Not available nm - Not measured due to PID malfunction</p>	<ul style="list-style-type: none"> Locking Plug. 1.5" ID, Schedule 40 PVC Riser. 1.5" ID, Schedule 40 PVC, 0.010" Slotted Well Screen Plug Point Approximate Water Level During Drilling Static Water Level
--	---

BORING LOG AND WELL CONSTRUCTION DIAGRAM

Well No: SB2/MW2



Teago Store
South Pomfret, VT

Griffin Project #: 119941641	Date Installed: 03/08/2000	
Drilled by: Griffin International	Drilling Method: Hollow-stem auger	
Driller: T&K Drilling	Boring Diameter.: 4.25"	
Supervised by: EES	Development Method: Bailer	
Logged by: EES	Screened Length: 10 Ft.	

	Well Construction	Pen/Rec (*)	Interval (')	Soil Characteristics	Letter Symbol	Graphic Symbol
Grade = 0		Blow Count	PID (ppm)	Asphalt Surface		
0.5		na	0 - 2	Moist, brown, well-graded sand. 75% fine sand, 20% medium sand, 5% silt.	SW	
1.0		na	nm			
1.5						
2.0						
2.5						
3.0						
3.5						
4.0						
4.5						
5.0						
5.5		24/13	5 - 7	Moist, brown and black, well-graded sand. 95% fine to medium sand, 5% silt. Aged petroleum odor.	SW	
6.0		7 11 19 28	nm			
6.5						
7.0						
7.5						
8.0						
8.5						
9.0						
9.5						
10.0						
10.5		18/9	10 - 12	Wet, brown, well-graded sand. 90% fine to medium sand, 10% fine to coarse gravel.	SW	
11.0		55 41 120	nm			
11.5						
12.0						
12.5						
13.0						
13.5						
14.0						
14.5						
15.0						
15.5						
16.0						
16.5						
17.0						
17.5						
18.0						
18.5						
19.0						
19.5			13.4	Base of Exploration.		

Legend

<ul style="list-style-type: none"> Road Box with Bolt Down Cover, Set in Cement. Existing Surface. Bentonite Seal Placed in Annulus. Grade #1 Silica Sand Pack Placed in Annulus. Drill Cuttings Placed in Annulus. 	<ul style="list-style-type: none"> Locking Plug. 1.5" ID, Schedule 40 PVC Riser. 1.5" ID, Schedule 40 PVC, 0.010"-Slotted Well Screen Plug Point Approximate Water Level During Drilling Static Water Level
---	---

na - Not available
nm - Not measured due to PID malfunction

BORING LOG AND WELL CONSTRUCTION DIAGRAM

Well No: **SB3/MW3**



Teago Store
South Pomfret, VT

Griffin Project #: 119941641	Date Installed: 03/08/2000
Drilled by: Griffin International	Drilling Method: Hollow-stem auger
Driller: T&K Drilling	Boring Diameter.: 4.25"
Supervised by: EES	Development Method: Bailer
Logged by: EES	Screened Length: 10 Ft.

Grade = 0	Well Construction	Pen/Rec ("	Interval (')	Soil Characteristics	Letter Symbol	Graphic Symbol
		Blow Count	PID (ppm)	Asphalt Surface		
0.5						
1.0						
1.5		na	0 - 2	Moist, brown, sandy silt. 30% fine sand, 70% silt.	ML	
2.0		na	nm			
2.5						
3.0						
3.5						
4.0						
4.5						
5.0						
5.5		24/16	5 - 7	Moist, olive gray, silt with sand. 15% fine sand, 85% silt.	ML	
6.0		2 2 3 11	nm	Petroleum odor.		
6.5						
7.0						
7.5						
8.0						
8.5						
9.0						
9.5						
10.0						
10.5		24/15	10 - 12	Wet, olive gray and brown, silty sand. 80% medium sand, 5%	SM	
11.0		8 10 15 17	nm	fine sand, 15% silt. Petroleum odor.		
11.5						
12.0						
12.5						
13.0						
13.5						
14.0						
14.5						
15.0						
15.5						
16.0						
16.5						
17.0						
17.5						
18.0						
18.5						
19.0						
19.5			15	Base of Exploration.		

Legend

- Road Box with Bolt Down Cover, Set in Cement.
- Existing Surface.
- Bentonite Seal Placed in Annulus.
- Grade #1 Silica Sand Pack Placed in Annulus.
- Drill Cuttings Placed in Annulus.

- Locking Plug.
- 1.5" ID, Schedule 40 PVC Riser.
- 1.5" ID, Schedule 40 PVC, 0.010" Slotted Well Screen
- Plug Point

na - Not available

nm - Not measured due to PID malfunction

- Approximate Water Level During Drilling
- Static Water Level

BORING LOG AND WELL CONSTRUCTION DIAGRAM

Well No: SB4/MW4



Teago Store
South Pomfret, VT

Griffin Project #: 119941641	Date Installed: 03/08/2000
Drilled by: Griffin International	Drilling Method: Hollow-stem auger
Driller: T&K Drilling	Boring Diameter.: 4.25"
Supervised by: EES	Development Method: Bailer
Logged by: EES	Screened Length: 10 Ft.

	Well Construction	Per/Rec (")	Interval (')	Soil Characteristics	Letter Symbol	Graphic Symbol
Grade = 0		Blow Count	PID (ppm)	Asphalt Surface		
0.5		na	0 - 2	Moist, brown, silty sand. 85% fine to medium sand, 15% silt.	SM	
1.0		na	nm			
1.5						
2.0						
2.5						
3.0						
3.5						
4.0						
4.5						
5.0						
5.5		24/17	5 - 7	Moist, brown, well-graded sand with silt. 85% fine to medium sand, 5% fine gravel, 10% silt.	SW-SM	
6.0		3 5 6 6	nm			
6.5						
7.0						
7.5						
8.0						
8.5						
9.0						
9.5						
10.0						
10.5		24/14	10 - 12	Wet, light brown, well-graded sand. 90% fine to medium sand, 5% fine gravel, 5% silt.	SW	
11.0		6 5 4 6	nm			
11.5						
12.0						
12.5						
13.0						
13.5						
14.0						
14.5						
15.0						
15.5						
16.0						
16.5						
17.0						
17.5						
18.0						
18.5						
19.0						
19.5			15	Base of Exploration.		

Legend

<ul style="list-style-type: none"> Road Box with Bolt Down Cover, Set in Cement. Existing Surface. Bentonite Seal Placed in Annulus. Drill Cuttings Placed in Annulus. Grade #1 Silica Sand Pack Placed in Annulus. 	<ul style="list-style-type: none"> Locking Plug. 1.5" ID, Schedule 40 PVC Riser. 1.5" ID, Schedule 40 PVC, 0.010"-Slotted Wall Screen Plug Point Approximate Water Level During Drilling Static Water Level
---	---

na - Not available
nm - Not measured due to PID malfunction

BORING LOG AND WELL CONSTRUCTION DIAGRAM

Well No: SB5/MW5



Teago Store
South Pomfret, VT

Griffin Project #: 119941641	Date Installed: 03/08/2000
Drilled by: Griffin International	Drilling Method: Hollow-stem auger
Driller: T&K Drilling	Boring Diameter.: 4.25"
Supervised by: EES	Development Method: Bailer
Logged by: EES	Screened Length: 10 Ft.

Grade = 0	Well Construction	Per/Rec (")	Interval (')	Soil Characteristics	Letter Symbol	Graphic Symbol
		Blow Count	PID (ppm)			
0.5				Asphalt Surface		
1.0		na	0 - 2	Dry to moist, brown, well-graded sand. 95% fine sand, 5% silt.	SW	
1.5	Ft < Grade	na	nm			
2.0						
2.5						
3.0						
3.5						
4.0						
4.5						
5.0						
5.5		24/17	5 - 7	Dry to moist, brown, olive gray, and red, well-graded sand. 85% fine to medium sand, 10% fine gravel, 5% silt.	SW	
6.0		8 11 9 11	nm			
6.5						
7.0						
7.5						
8.0						
8.5						
9.0						
9.5						
10.0						
10.5		24/16	10 - 12	Wet, brown and olive gray, well-graded sand. 85% fine to medium sand, 10% fine to coarse gravel, 5% silt.	SW	
11.0		19 16 11 9	nm			
11.5						
12.0						
12.5						
13.0						
13.5						
14.0						
14.5						
15.0						
15.5						
16.0						
16.5						
17.0						
17.5						
18.0						
18.5						
19.0						
19.5			15	Base of Exploration.		

Legend

<ul style="list-style-type: none"> Road Box with Bolt Down Cover, Set in Cement. Existing Surface. Bentonite Seal Placed in Annulus. Grade #1 Silica Sand Pack Placed in Annulus. Drill Cuttings Placed in Annulus. 	<ul style="list-style-type: none"> Locking Plug. 1.5" ID, Schedule 40 PVC Riser. 1.5" ID, Schedule 40 PVC, 0.010" Slotted Well Screen Plug Point Approximate Water Level During Drilling Static Water Level
---	---

na - Not available
nm - Not measured due to PID malfunction

BORING LOG AND WELL CONSTRUCTION DIAGRAM

Well No: SB6/MW1



Teago Store
South Pomfret, VT

Griffin Project #: 119941641	Date Installed: 03/08/2000
Drilled by: Griffin International	Drilling Method: Hollow-stem auger
Driller: T&K Drilling	Boring Diameter.: 4.25"
Supervised by: EES	Development Method: Bailer
Logged by: EES	Screened Length: 10 Ft.

Grade = 0	Well Construction	Pen/Rec (")	Interval (')	Soil Characteristics	Letter Symbol	Graphic Symbol
		Blow Count	PID (ppm)			
0.5				Asphalt Surface		
1.0		na	0 - 2	Dry to moist, light brown and brown, well-graded sand. 75% fine to medium sand, 20% fine gravel, 5% silt.	SW	
1.5		na	nm			
2.0						
2.5						
3.0						
3.5						
4.0						
4.5						
5.0						
5.5		24/14	5 - 7	Moist, red brown, well-graded sand. 90% medium to fine sand, 5% fine gravel, 5% silt.	SW	
6.0		4 2 2 2	nm			
6.5						
7.0						
7.5						
8.0						
8.5						
9.0						
9.5						
10.0						
10.5		24 / 16	10 - 12	Wet, light brown, well-graded sand. 85% fine to medium sand, 10% fine gravel, 5% silt.	SW	
11.0		9 13 25 15	nm			
11.5						
12.0						
12.5						
13.0						
13.5						
14.0						
14.5						
15.0						
15.5						
16.0						
16.5						
17.0						
17.5						
18.0						
18.5						
19.0						
19.5			15	Base of Exploration.		

Legend

<ul style="list-style-type: none"> Road Box with Bolt Down Cover, Set in Cement. Existing Surface. Bentonite Seal Placed in Annulus. Grade #1 Silica Sand Pack Placed in Annulus. Drill Cuttings Placed in Annulus. <p>na - Not available nm - Not measured due to PID malfunction</p>	<ul style="list-style-type: none"> Locking Plug. 1.5" ID, Schedule 40 PVC Riser. 1.5" ID, Schedule 40 PVC, 0.010"-Slotted Well Screen Plug Point Approximate Water Level During Drilling Static Water Level
--	---



APPENDIX C

Liquid Level Monitoring Data

Summary of Liquid Level Data

Measurement Date: March 15, 2000

Well I.D.	Well Depth btoc	Top of Casing Elevation	Depth To Product btoc	Depth To Water btoc	Product Thickness	Specific Gravity Of Product	Water Equivalent	Corrected Depth To Water	Corrected Water Table Elevation
MW1	14.3	101.93	-	6.49	-	-	-	-	95.44
MW2	12.8	101.91	-	6.34	-	-	-	-	95.57
MW3	14.5	100.00	-	6.47	-	-	-	-	93.53
MW4	14.4	99.92	-	7.83	-	-	-	-	92.09
MW5	nm	97.75	-	nm	-	-	-	-	nm

All Values Reported in Feet

btoc - Below Top of Casing

nm - not measured, monitoring well submerged

Monitoring wells surveyed by Griffin International March 15, 2000

Elevations determined relative to top of casing of MW3, which was arbitrarily set at 100'



APPENDIX D

Groundwater Quality Summary Data

Groundwater Quality Summary

Sample Date: March 15, 2000

PARAMETER	MW1	MW2	MW3	MW4	MW5	VGES
Benzene	ND(1)	ND(1)	ND(100)	ND(1)		5
Toluene	ND(1)	1.4	6,410.	1.0	not	1,000
Ethylbenzene	ND(1)	1.3	1,640.	2.3	sampled	700
Xylenes	ND(1)	1.9	11,200.	2.0		10,000
Total BTEX	ND	4.6	19,250.	5.3		-
1,3,5 Trimethyl Benzene	ND(1)	40.5	1,590.	TBQ(1)	road	4
1,2,4 Trimethyl Benzene	ND(1)	84.1	4,190.	5.3	box	5
Naphthalene	ND(1)	2.8	441.	1.6	submerged	20
MTBE	ND(10)	ND(10)	ND(1000)	10.1		40
Total Targeted VOCs	ND	132.	25,471.	22.3		-
TPH (mg/L)	ND(G 40)	2.22	28.1	1.11	NT	-

TBQ(): Trace below quantitation limit (quantitation limit)

ND(): Not detected (detection limit)

NT: Not tested

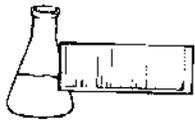
All values in ug/L (ppb) unless noted

Analysis by EPA Method 8021B, except for TPH by EPA Method 8015 DRO

VGES = Vermont Groundwater Enforcement Standards (Vermont Groundwater Protection Rule and Strategy, 1/20/2000)



APPENDIX E
Laboratory Analysis Reports



ENDYNE, INC.

Laboratory Services

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

REPORT OF LABORATORY ANALYSIS

CLIENT: Griffin International
PROJECT NAME: Teago Store
REPORT DATE: March 23, 2000
DATE SAMPLED: March 15, 2000

ORDER ID: 6409
REF.#: 151,776 - 151,781

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

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

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

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

Reviewed by

Harry B. Locker, Ph.D.
Laboratory Director

enclosures



EPA METHOD 8021B--PURGEABLE AROMATICS

CLIENT: Griffin International
 PROJECT NAME: Teago Store
 CLIENT PROJ. #: 119941641

DATE RECEIVED: March 16, 2000
 REPORT DATE: March 23, 2000
 ORDER ID: 6409

Ref. #:	151,776	151,777	151,778	151,779	151,780
Site:	Trip Blank	MW 1	MW 2	Duplicate	MW 4
Date Sampled:	3/15/00	3/15/00	3/15/00	3/15/00	3/15/00
Time Sampled:	7:45	13:40	13:45	13:45	14:18
Sampler:	JR	JR	JR	JR	JR
Date Analyzed:	3/22/00	3/23/00	3/23/00	3/23/00	3/23/00
UIP Count:	0	0	>10	>10	>10
Dil. Factor (%):	100	100	100	100	100
Surr % Rec. (%):	85	108	83	114	107
Parameter	Conc. (ug/L)				
MTBE	<10	<10	<10	<10	10.1
Benzene	<1	<1	<1	<1	<1
Toluene	<1	<1	1.4	1.2	1.0
Ethylbenzene	<1	<1	1.3	1.9	2.3
Xylenes	<1	<1	1.9	2.1	2.0
1,3,5 Trimethyl Benzene	<1	<1	40.5	39.1	TBQ <1
1,2,4 Trimethyl Benzene	<1	<1	84.1	79.7	5.3
Naphthalene	<1	<1	2.8	2.9	1.6

Ref. #:	151,781				
Site:	MW 3				
Date Sampled:	3/15/00				
Time Sampled:	14:45				
Sampler:	JR				
Date Analyzed:	3/23/00				
UIP Count:	>10				
Dil. Factor (%):	1				
Surr % Rec. (%):	119				
Parameter	Conc. (ug/L)				
MTBE	<1000				
Benzene	<100				
Toluene	6,410.				
Ethylbenzene	1,640.				
Xylenes	11,200.				
1,3,5 Trimethyl Benzene	1,590.				
1,2,4 Trimethyl Benzene	4,190.				
Naphthalene	441.				

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

JOB # 119941641

Project Name: TEAGO STORE SOUTH POCKET VT.		Reporting Address: GRIFFIN		Billing Address: GRIFFIN	
Endyne Order ID: (Lab Use Only) 6409	3 -0 -I -S	Company: Contact Name/Phone #: GRIFFIN BS		Sampler Name: Phone #: J. ROULIN	

Ref # (Lab Use Only)	Sample Identification	Matrix	GRAB	COMP	Date/Time	Sample Containers		Field Results/Remarks	Analysis Required	Sample Preservation	Rush
						No.	Type/Size				
151776	TRIP BLANK	H ₂ O	✓		3/15/00 0745	2	40ml		8021B	HCl	
151777	MW-1				1340				8021B/8015 DRO		
151778	MW-2				1345				↓		
151779	DUPLICATE MW-2				1345				8021B		
151780	MW-4				1418				8021B/8015 DRO		
151781	MW-3				1445				↓		
151782	TEAGO STORE SW				1500				524.2		
151783	RESIDENCE SW				1521				524.2		

Relinquished by: <i>[Signature]</i>	Date/Time: 3/15/00	Received by: <i>[Signature]</i>	Date/Time: 10:32 AM	Received by: <i>[Signature]</i>	Date/Time: 3/16/00
-------------------------------------	---------------------------	---------------------------------	----------------------------	---------------------------------	---------------------------

New York State Project: Yes No Requested Analyses

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



ENDYNE, INC.

Laboratory Services

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

LABORATORY REPORT

Griffin International
PO Box 943
Williston, VT 05495
Attn:

PROJECT: Tcago Store/#119941641
ORDER ID: 6409
RECEIVE DATE: March 16, 2000
REPORT DATE: March 27, 2000

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

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

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

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

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

Reviewed by,

Harry B. Locker, Ph.D.
Laboratory Director



LABORATORY REPORT

CLIENT: Griffin International
PROJECT: Teago Store/#119941641
REPORT DATE: March 27, 2000

ORDER ID: 6409
DATE RECEIVED: March 16, 2000
SAMPLER: JR
ANALYST: 128

Ref. Number: 151777

Site: MW-1

Date Sampled: March 15, 2000

Time: 1:40 PM

<u>Parameter</u>	<u>Result</u>	<u>Unit</u>	<u>Method</u>	<u>Analysis Date</u>
TPH 8015 DRO	< 0.40	mg/L	SW 8015B	3/24/00

Ref. Number: 151778

Site: MW-2

Date Sampled: March 15, 2000

Time: 1:45 PM

<u>Parameter</u>	<u>Result</u>	<u>Unit</u>	<u>Method</u>	<u>Analysis Date</u>
TPH 8015 DRO	2.22	mg/L	SW 8015B	3/24/00

Ref. Number: 151780

Site: MW-4

Date Sampled: March 15, 2000

Time: 2:18 PM

<u>Parameter</u>	<u>Result</u>	<u>Unit</u>	<u>Method</u>	<u>Analysis Date</u>
TPH 8015 DRO	1.11	mg/L	SW 8015B	3/24/00

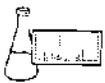
Ref. Number: 151781

Site: MW-3

Date Sampled: March 15, 2000

Time: 2:45 PM

<u>Parameter</u>	<u>Result</u>	<u>Unit</u>	<u>Method</u>	<u>Analysis Date</u>
TPH 8015 DRO	28.1	mg/L	SW 8015B	3/24/00



ENDYNE, INC.

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

CHAIN-OF-CUSTODY-RECORD

34752

JOB # 119941641

Project Name: TEAGO STORE SOUTH POINSETT VT.		Reporting Address: GRIFFIN		Billing Address: GRIFFIN	
Endyne Order ID: 6409		Company: GRIFFIN BS		Sampler Name: J. ROCKLIN	
(Lab Use Only)		Contact Name/Phone #:		Phone #:	
3 - 0					
- I					
- S					

Ref # (Lab Use Only)	Sample Identification	Matrix	GRAB	COMPO	Date/Time	Sample Containers		Field Results/Remarks	Analysis Required	Sample Preservation	Rush
						No.	Type/Size				
151776	TRIP BLANK	H ₂ O	✓		3/15/00 0745	2	40ml		8021B	HCl	
151777	MW-1				1340				8021B/8015 DRO		
151778	MW-2				1345				↓		
151779	DUPLICATE MW-2				1345				8021B		
151780	MW-4				1418				8021B/8015 DRO		
151781	MW-3				1445				↓		
151782	TEAGO STORE SW				1500				524.2		
151783	RESIDENCE SW				1521				524.2		

Relinquished by: <i>for Ball</i>	Date/Time: 3/15/00	Received by: <i>Stacey Benjamin</i>	Date/Time: 10:32 AM 3-16-00	Received by: <i>Alison Florence</i>	Date/Time: 3/16/00
----------------------------------	--------------------	-------------------------------------	--------------------------------	-------------------------------------	--------------------

New York State Project: Yes No Requested Analyses

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



LABORATORY REPORT

Griffin International
PO Box 943
Williston, VT 05495
Attn:

PROJECT: Teago Store/#119941641
ORDER ID: 6409
RECEIVE DATE: March 16, 2000
REPORT DATE: March 28, 2000

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

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

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

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

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

Reviewed by,

Harry B. Locker, Ph.D.
Laboratory Director

enclosures



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

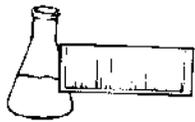
LABORATORY REPORT

EPA 524.2

CLIENT: Griffin International
PROJECT: Teago Store/#119941641
SITE: Teago Store SW
DATE RECEIVED: March 16, 2000
REPORT DATE: March 28, 2000
ANALYSIS DATE: March 27, 2000

ORDER ID: 6409
REFERENCE NUMBER: 151782
DATE SAMPLED: March 15, 2000
TIME SAMPLED: 3:00 PM
SAMPLER: JR
ANALYST: 725

Parameter	Result ug/L	Parameter	Result ug/L
Benzene	< 0.5	Hexachlorobutadiene	< 0.5
Bromobenzene	< 0.5	Isopropylbenzene	< 0.5
Bromochloromethane	< 0.5	4-Isopropyltoluene	< 0.5
Bromomethane	< 0.5	MTBE	< 1.0
n-Butylbenzene	< 0.5	Naphthalene	< 1.0
sec-Butylbenzene	< 0.5	n-Propylbenzene	< 0.5
tert-Butylbenzene	< 0.5	Styrene	< 0.5
Carbon tetrachloride	< 0.5	1,1,1,2-Tetrachloroethane	< 0.5
Chlorobenzene	< 0.5	1,1,2,2-Tetrachloroethane	< 1.0
Chloroethane	< 0.5	Tetrachloroethene	< 0.5
Chloromethane	< 0.5	Toluene	< 0.5
4-Chlorotoluene	< 1.0	1,2,3-Trichlorobenzene	< 0.5
2-Chlorotoluene	< 1.0	1,2,4-Trichlorobenzene	< 0.5
Dibromomethane	< 1.0	1,1,1-Trichloroethane	< 0.5
1,2-Dichlorobenzene	< 0.5	1,1,2-Trichloroethane	< 0.5
1,3-Dichlorobenzene	< 0.5	Trichloroethene	< 0.5
1,4-Dichlorobenzene	< 0.5	Trichlorofluoromethane	< 1.0
Dichlorodifluoromethane	< 0.5	1,2,3-Trichloropropane	< 0.5
1,1-Dichloroethane	< 0.5	1,2,4-Trimethylbenzene	< 0.5
1,2-Dichloroethane	< 0.5	1,3,5-Trimethylbenzene	< 0.5
1,1-Dichloroethene	< 0.5	Vinyl Chloride	< 0.5
cis-1,2-Dichloroethene	< 0.5	Xylenes, Total	< 1.0
trans-1,2-Dichloroethene	< 0.5	Bromodichloromethane	< 0.5
Dichloromethane	< 1.0	Bromoform	< 0.5
1,2-Dichloropropane	< 0.5	Chloroform	< 0.5
1,3-Dichloropropane	< 0.5	Dibromochloromethane	< 0.5
2,2-Dichloropropane	< 0.5	Total Trihalomethanes	< 0.5
1,1-Dichloropropene	< 0.5	Surrogate 1	96.0%
cis-1,3-Dichloropropene	< 0.5	Surrogate 2	95.0%
trans-1,3-Dichloropropene	< 0.5	UIP's	0.0%
Ethylbenzene	< 0.5		



LABORATORY REPORT

EPA 524.2

CLIENT: Griffin International
PROJECT: Teago Store/#119941641
SITE: Residence SW
DATE RECEIVED: March 16, 2000
REPORT DATE: March 28, 2000
ANALYSIS DATE: March 27, 2000

ORDER ID: 6409
REFERENCE NUMBER: 151783
DATE SAMPLED: March 15, 2000
TIME SAMPLED: 3:21 PM
SAMPLER: JR
ANALYST: 725

<u>Parameter</u>	<u>Result</u> <u>ug/L</u>	<u>Parameter</u>	<u>Result</u> <u>ug/L</u>
Benzene	< 0.5	Hexachlorobutadiene	< 0.5
Bromobenzene	< 0.5	Isopropylbenzene	< 0.5
Bromochloromethane	< 0.5	4-Isopropyltoluene	< 0.5
Bromomethane	< 0.5	MTBE	< 1.0
n-Butylbenzene	< 0.5	Naphthalene	< 1.0
sec-Butylbenzene	< 0.5	n-Propylbenzene	< 0.5
tert-Butylbenzene	< 0.5	Styrene	< 0.5
Carbon tetrachloride	< 0.5	1,1,1,2-Tetrachloroethane	< 0.5
Chlorobenzene	< 0.5	1,1,2,2-Tetrachloroethane	< 1.0
Chloroethane	< 0.5	Tetrachloroethene	< 0.5
Chloromethane	< 0.5	Toluene	< 0.5
2-Chlorotoluene	< 1.0	1,2,3-Trichlorobenzene	< 0.5
4-Chlorotoluene	< 1.0	1,2,4-Trichlorobenzene	< 0.5
Dibromomethane	< 1.0	1,1,1-Trichloroethane	< 0.5
1,2-Dichlorobenzene	< 0.5	1,1,2-Trichloroethane	< 0.5
1,3-Dichlorobenzene	< 0.5	Trichloroethene	< 0.5
1,4-Dichlorobenzene	< 0.5	Trichlorofluoromethane	< 1.0
Dichlorodifluoromethane	< 0.5	1,2,3-Trichloropropane	< 0.5
1,1-Dichloroethane	< 0.5	1,2,4-Trimethylbenzene	< 0.5
1,2-Dichloroethane	< 0.5	1,3,5-Trimethylbenzene	< 0.5
1,1-Dichloroethene	< 0.5	Vinyl Chloride	< 0.5
cis-1,2-Dichloroethene	< 0.5	Xylenes, Total	< 1.0
trans-1,2-Dichloroethene	< 0.5	Bromodichloromethane	< 0.5
Dichloromethane	< 1.0	Bromoform	< 0.5
1,2-Dichloropropane	< 0.5	Chloroform	< 0.5
1,3-Dichloropropane	< 0.5	Dibromochloromethane	< 0.5
2,2-Dichloropropane	< 0.5	Total Trihalomethanes	< 0.5
1,1-Dichloropropene	< 0.5	Surrogate 1	103.%
cis-1,3-Dichloropropene	< 0.5	Surrogate 2	106.%
trans-1,3-Dichloropropene	< 0.5	UIP's	0.
Ethylbenzene	< 0.5		

JOB # 119941641

Project Name: TEAGO STORE SOUTH POFFRET VT.	Reporting Address: GRIFFIN	Billing Address: GRIFFIN
Endyne Order ID: 6409	Company: GRIFFIN	Sampler Name: J. ROULIN
(Lab Use Only) 3 -0 -1 -S	Contact Name/Phone #: BS	Phone #:

Ref # (Lab Use Only)	Sample Identification	Matrix	GRAB	COMP	Date/Time	Sample Containers		Field Results/Remarks	Analysis Required	Sample Preservation	Rush
						No.	Type/Size				
151776	TRIP BLANK	H ₂ O	✓		3/15/00 0745	2	40ml		8021B	HCL	
151777	MW-1				1340				8021B/8015 DRO		
151778	MW-2				1345				↓		
151779	DUPLICATE MW-2				1345				8021B		
151780	MW-4				1448				8021B/8015 DRO		
151781	MW-3				1445				↓		
151782	TEAGO STORE SW				1500				524.2		
151783	RESIDENCE SW				1521				524.2		

Relinquished by: <i>[Signature]</i>	Date/Time: 3/15/00	Received by: <i>[Signature]</i>	Date/Time: 10:32 AM 3-16-00	Received by: <i>[Signature]</i>	Date/Time: 11:00
-------------------------------------	--------------------	---------------------------------	--------------------------------	---------------------------------	------------------

New York State Project: Yes No Requested Analyses

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