

DEC 22 1999



December 20, 1999

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

RE: Ray's Sunoco, Route 100 North, Wilmington, VT
Facility ID #99

Dear Mr. Shively:

Enclosed please find a summary report for the Limited Site Investigation conducted at the above-referenced site in accordance with the request for corrective action contained in the December 8, 1999 Notice of Alleged Violation (NOAV) issued to J.W. Sandri of VT, Inc.

Please call with any questions or comments. A work plan/ cost estimate for Site Investigation will be forwarded in the next few days, as well as analytical results for the on-Site supply well.

Sincerely,

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

Kristen Underwood
Senior Hydrogeologist

Enc.

cc: Ms. Sharon Abbott, J.W. Sandri of VT, Inc.
GI #129941647

**LIMITED
SITE INVESTIGATION**

**Ray's Sunoco
Route 100 North
Wilmington, VT**

December 20, 1999

Prepared for

J.W. Sandri of VT, Inc.
PO Box 1578
Greenfield, MA 01302-1578

Prepared by



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

Griffin Project #129941647

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1.0 INTRODUCTION

This report provides a summary of the tasks completed for a Limited Site Investigation at Ray's Sunoco on Route 100 North in Wilmington, Vermont (see Site Location Map, and Area Map, Appendix A). This investigation was carried out at the request of the Vermont Department of Environmental Conservation (VTDEC) to initiate corrective action in accordance with Section 8-604(2) of the Vermont Underground Storage Tank (UST) regulations, following identification by Mr. Andrew Shively of the VTDEC of evidence which suggested a release of petroleum from the dispenser system for the gasoline USTs. The request for corrective action was contained in a December 8, 1999 Notice of Alleged Violation (NOAV) issued to J.W. Sandri of VT, Inc., responsible party for the gasoline UST systems on the property. This work was conducted by Griffin International, Inc. (Griffin), under contract to J.W. Sandri of VT, Inc. (Sandri), in accordance with the December 13, 1999 work plan and cost estimate, which was approved by Sandri and by Mr. Andrew Shively of the VTDEC.

The objectives of this limited site investigation were to: 1) confirm whether or not a release of petroleum had occurred to the subsurface associated with the gasoline dispensers; and 2) assess the potential for impact to area sensitive receptors, including an on-site supply well, adjacent school supply well, and adjacent North Branch of the Deerfield River.

2.0 SITE BACKGROUND

2.1 The Site and Vicinity

Ray's Sunoco (the Site) is located on the northwest side of Route 100 within the valley occupied by the North Branch of the Deerfield River, approximately 1.5 miles north-northwest of the Village of Wilmington, Vermont (see Site Sketch, Appendix A; see photograph, Appendix B). The property is developed with a single-story gasoline service station, which is serviced by an on-site supply well, on-site septic system, overhead power, and telephone. The following USTs were present at the property as of December 14, 1999, according to the VTDEC registered UST database, as confirmed by Sandri records:

| UST | Capacity (gallons) | Contents | Date Installed |
|--------|--------------------|----------|----------------|
| UST #2 | 4000 | Gasoline | 1970 |
| UST #3 | 4000 | Gasoline | 1970 |
| UST #4 | 4000 | Gasoline | 1970 |
| UST #1 | 4000 | Gasoline | 1979 |

UST #1 was subsequently removed and a closure inspection conducted separately by Sandri on December 14, 1999 [2].

The Site is located in a mixed residential, commercial and agricultural setting with the Deerfield Elementary School located approximately 170 feet to the west of the Sunoco station building.

Directly northwest of the Sunoco station are two large storage buildings accessed by gravel drives which comprise the Deerfield Valley Mini-Storage property. The land northwest of this facility is largely forested with exposed bedrock. To the east, southeast, and southwest of the Site across Route 100 is agricultural field followed by the North Branch of the Deerfield River.

2.2 Site Drainage and Available Local Geology

A northwest-southeast trending bedrock ridge appears to control topography to the immediate north and northwest of the Sunoco station building. Exposed bedrock was noted in several locations to the north and northwest of the station building (see Area Map and Site Sketch Map, Appendix A). Topography slopes downward to the east and southeast toward the North Branch of the Deerfield River. Stormwater appears to drain naturally off the property along the topographic slope. An apparent stormwater drainage channel trends from the northeastern corner of the Site, under Route 100 via a culvert, and eastward to join the River. Based on visual observations, this channel likely accepts stormwater drainage from the northeastern portion of the Sunoco station and from the Deerfield Valley Mini-Storage property located up-topographic slope. This drainage channel was dry when inspected on December 14, 1999. A stormwater catchbasin was observed along the northwestern edge of Route 100 directly southeast of the Site. This basin appears to accept drainage from Route 100 and from the grassy slope which forms a median between Route 100 and the Sunoco station property. The ultimate discharge location of this catchbasin is not known. This catchbasin was observed to be dry on December 14, 1999.

Based upon review of the West Dover USGS 7.5-minute topographic quadrangle (1986), and the patterns of exposed bedrock at the site and site vicinity, the regional direction of overburden groundwater flow is presumed to be directed to the east or southeast toward the North Branch of the Deerfield River [1]. Shallow groundwater was encountered in an excavation for UST #1 on December 14, 1999 (see UST Closure Report, submitted under separate cover by Sandri [2]) at an approximate depth of nine feet below grade.

The site is underlain by post-glacial fluvial gravels which overlie glacial till according to the Surficial Geologic Map of Vermont [3]. Bedrock underlying the Site is mapped as the Hoosac Formation consisting generally of schists [4]. Exposed bedrock noted at the Site and Site vicinity was consistent with the mapped descriptions.

3.0 SUBSURFACE EXPLORATION AND SOIL SCREENING

Two (2) test pits were excavated along the southeast (and inferred downgradient) edge of the UST dispenser island at the Site on December 14, 1999. The test pits were excavated by Sandri personnel under direction of a Griffin hydrogeologist.

3.1 Test Pit Excavations and Soil Screening

Test Pit #1 (TP-1) was excavated at the southwest end of the pump island (see Site Sketch Map, Appendix A). TP-2 was excavated at the northeast end of the pump island (see Site Sketch Map,

Test Pit #2 Detail, Appendix A; see photographs, Appendix B). Soil samples were collected for field screening of volatile organic compounds (VOCs) using an HNU™ Model PI-101 portable photoionization device (PID) in accordance with Griffin's *Jar/ Polyethylene Bag Headspace Screening Protocol*, which conforms with state and industry standards. Soils exhibited total VOC concentrations ranging from 15 to 220 parts per million (ppm). Concentrations in four of the five soil samples exceeded the VTDEC guideline (of 20 ppm) for soils impacted by gasoline.

Table 1.
Soil Screening Results, Test Pits
December 14, 1999
Ray's Sunoco, Rt. 100, Wilmington, VT

| TP-1 | | | TP-2 | | |
|------------|--------------------------------|-------------------|------------|--------------------------------|-------------------|
| Sample No. | Depth Interval (ft bel. grade) | PID Reading (ppm) | Sample No. | Depth Interval (ft bel. grade) | PID Reading (ppm) |
| 1 | 0.3 | 84 | 3 | 0.3 | 15 |
| 2 | 2-2.5 | 140 | 4 | 2 | 210 |
| | | | 5 | 2.5 | 220 |

3.2 On-Site Supply Well Sampling and Analysis

The Ray's Sunoco station building, including two restrooms on the southwest side of the building, is serviced by an on-site supply well. The exact location of the supply well could not be confirmed on December 14, 1999. According to historic records on file at Sandri, the supply well is located approximately 28 feet northeast of the station building. If the well is located in this vicinity of the property, it is likely buried below grade, as a stick-up well casing was not observed during visual reconnaissance of this area on December 14, 1999. Sandri records did not indicate the depth or construction of this well. On December 16, 1999, a Griffin hydrogeologist reviewed the well construction records on file in the VTDEC Water Supply Division (WSD). Maps of supply well locations, for which WSD maintains well construction records, did not indicate a well at the known location of the Ray's Sunoco station. It is possible that a construction record for the subject well is on file at the WSD, but the location of the well was incorrectly marked on the Wilmington area map. Further research into past owners of the subject property, may assist in locating the well construction record, if it exists.

The sink in the women's restroom of the Ray's Sunoco station was allowed to run for approximately 5 minutes prior to sampling. The well had been in regular operation throughout the morning due to use of the restrooms by the Site occupants. A sample was collected for analysis of VOCs by drinking water EPA Method 524.2, and transported on ice under chain of custody to Endyne, Inc. laboratory of Williston, Vermont. The results of this analysis will be forwarded upon receipt (expected week of December 20, 1999). No VOC or petroleum odors or discoloration were noted in the water sampled.

4.0 RECEPTOR ASSESSMENT

The vicinity of the Site was inspected on December 14, 1999 for potential receptors of subsurface petroleum contamination at the Site. Potentially sensitive receptors include subsurface soils and groundwater, onsite and area supply wells, the nearby North Branch of the Deerfield River, the on-site building, and utility corridors.

Soils and Groundwater

On-site soils are impacted by petroleum to at least 2.5 feet below grade in the direct vicinity of the dispenser island. Groundwater was not encountered in these test pits. However, shallow groundwater was encountered at a depth of approximately nine feet below grade (apparently perched above bedrock) on the same day during excavations for permanent closure of the 4000-gallon gasoline UST (UST #1) approximately 40 feet northeast of the dispenser island [2]. Given the depth to bedrock/ groundwater and the inferred shallow groundwater flow direction (to the southeast under Route 100) from the dispenser island, further test pit excavations to confirm depth to bedrock and to determine degree and extent of contaminant impact were not conducted. Instead, it was determined that these objectives would be more feasibly and cost effectively addressed through installation of a series of soil borings/ monitoring wells in a follow-on Site Investigation. Planning for a follow-on Site Investigation will allow for the necessary coordination of off-site landowner approvals, possible Right-of-Way permits, and appropriate traffic control measures.

Supply Wells

Given the current uncertainty surrounding its exact location and construction, the on-site supply well is deemed at potential risk of impact by subsurface petroleum contamination encountered in the vicinity of the dispenser island. Analytical results of the sample submitted from this supply well on December 14, 1999 will be forwarded upon receipt.

The construction specifications for the nearby Deerfield Valley Elementary School supply well (Well #103, Wilmington township) were obtained on December 16, 1999 at the Water Supply Division in Waterbury, VT. This well is reportedly completed in bedrock to a depth of 590 feet below grade with 8 feet of casing set 6 feet below grade to the overburden/ bedrock contact. The exact location of this well is not confirmed at this time. February 3, 1999 analytical results for VOC analysis of water from the Deerfield Valley Elementary School supply well were obtained from the WSD, and are included in Appendix C. The results indicate no detectable VOCs for the sample date. Detection limits were below EPA Maximum Contaminant Levels for petroleum-related VOCs.

If petroleum from the Ray's Sunoco Site has impacted the underlying bedrock aquifer, this nearby School supply well, as well as other nearby bedrock supply wells, may be potentially impacted by petroleum-related contaminants. Further evaluation of this potential impact to area

bedrock supply wells is warranted following further investigation to determine the degree, nature and extent of petroleum impact from the dispenser source area at the Site.

Buildings

The on-Site service station building is the only structure in close proximity to the dispenser island. This building is constructed on a concrete slab foundation. While the full extent of contaminant impact to the subsurface from the dispenser vicinity is yet to be defined, it is likely that the potential for vapor impact to the building interior due to subsurface contaminant impact is less in degree than that which would be contributed through regular commercial activities which are ongoing at the site, including gasoline dispensing to automobiles and automobile servicing and repair. There are no residential structures in the immediate vicinity of the dispenser island or in an inferred downgradient direction from this source area.

Utility Corridors

Electrical conduits, UST pipelines, on-Site water service connections, and on-Site septic system piping may all serve as preferential conduits for the migration of contaminant vapors, or contaminants associated with groundwater at the Site. Given the data currently available, a full assessment of the potential risk for migration of contaminants along utility corridors cannot be made.

Surface Water

The nearest substantial surface water body to the Site is the North Branch of the Deerfield River. The river bank approximately 300 feet southeast of (and in an inferred downgradient direction from) the Site was inspected by a Griffin hydrogeologist on December 14, 1999. Water was flowing quickly in the River at the time of inspection. No petroleum sheens were observed on the river water. No areas of groundwater seeps were observed along the river bank.

The surface water drainage channel leading from the northeast corner of the Site to the Deerfield River was observed to be dry on December 14, 1999. No seeps or areas of sediment staining associated with this channel were observed.

5.0 CONCLUSIONS

The following conclusions are offered following completion of a limited Site Investigation at the Ray's Sunoco on Route 100 North in Wilmington, Vermont.

1. An apparent release of gasoline has occurred at the Site in association with the gasoline UST dispenser island.

2. The exact duration and nature of the release(s) has not been defined. Contributing factors may include leakage from the dispenser apparatus, and small spills and overfills over time. Pavement in the vicinity of the pump islands was observed to be cracked.
3. The headspace of soil samples collected from a maximum of 2.5 feet below each dispenser contained VOCs measuring up to 220 ppm with the PID.
4. Groundwater was not encountered at the total depth of test pit excavations (2.5 feet below grade); however, based upon site data collected during the removal of a UST from the Site on the same date, groundwater is expected to be perched upon bedrock at an approximate depth of nine feet or greater below grade in the immediate site vicinity.
5. The degree and extent of petroleum impact to site soils and groundwater has not been defined.
6. Based on currently available data, none of the identified area sensitive receptors appears to be at adverse environmental risk from petroleum impact at the Site. On-Site supply well sample results are pending.

6.0 RECOMMENDATIONS

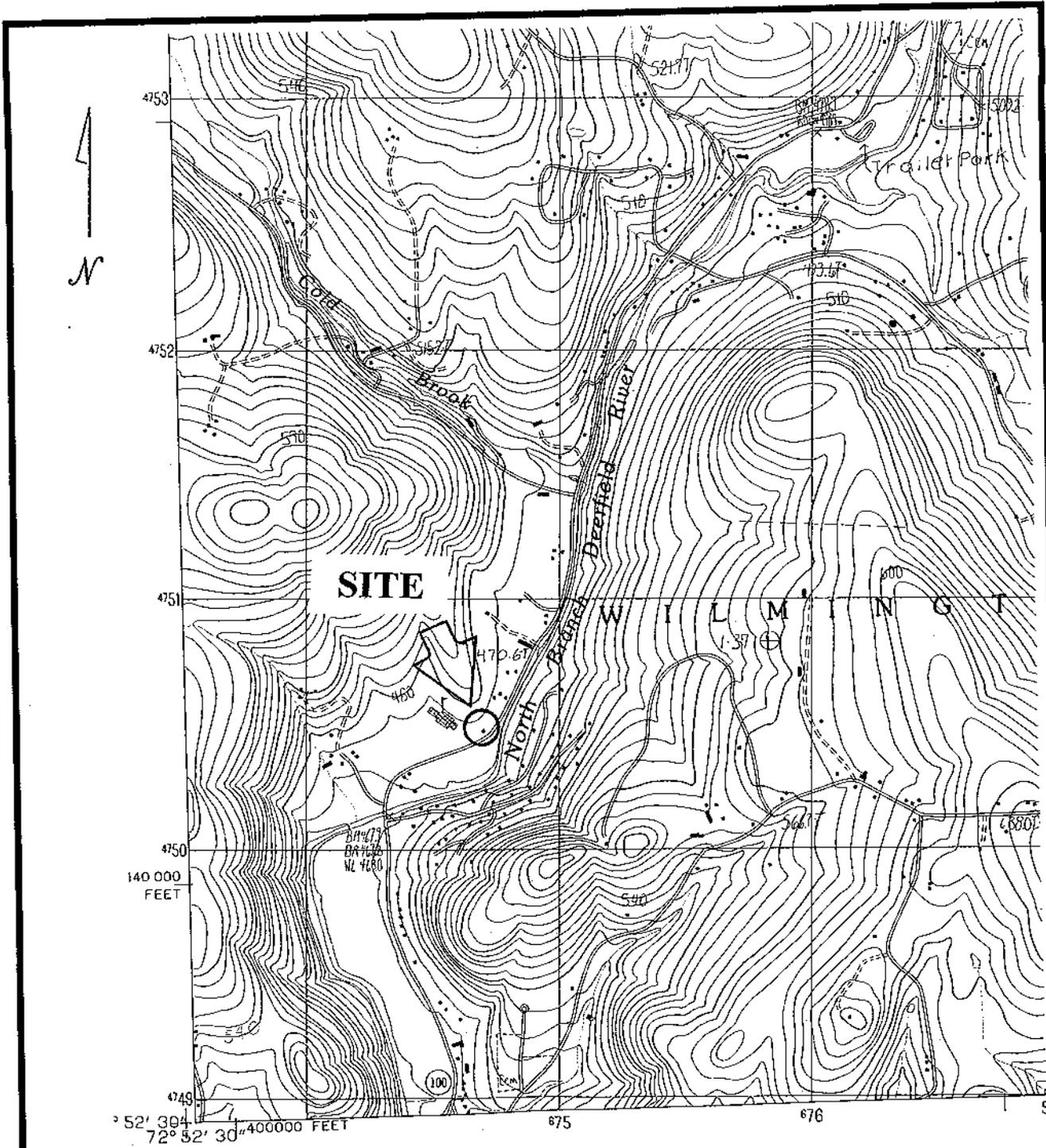
A Site Investigation should be conducted to further define the degree and extent of petroleum impact to soils and groundwater at the site, and to enable a clearer determination of the potential environmental risk to area receptors including supply wells, utility corridors, and the nearby North Branch of the Deerfield River.

7.0 REFERENCES

1. USGS 7.5-minute Topographic Map, West Dover, Vermont, 1986, provisional edition.
2. A.R. Sandri, Inc., December 20, 1999, *UST Closure Report, Ray's Sunoco, Wilmington, VT.*
3. Doll, Charles G., ed., 1970, *Surficial Geologic Map of Vermont*, State of Vermont.
4. Doll, Charles G., ed., 1961, *Centennial Geologic Map of Vermont*, State of Vermont.

Appendix A

Site Maps



Griffin Job Number:

129941647

Source:

USGS Topographic Map, West Dover, VT Quadrangle, 1986



Ray's Sunoco
Route 100 North, Wilmington, VT

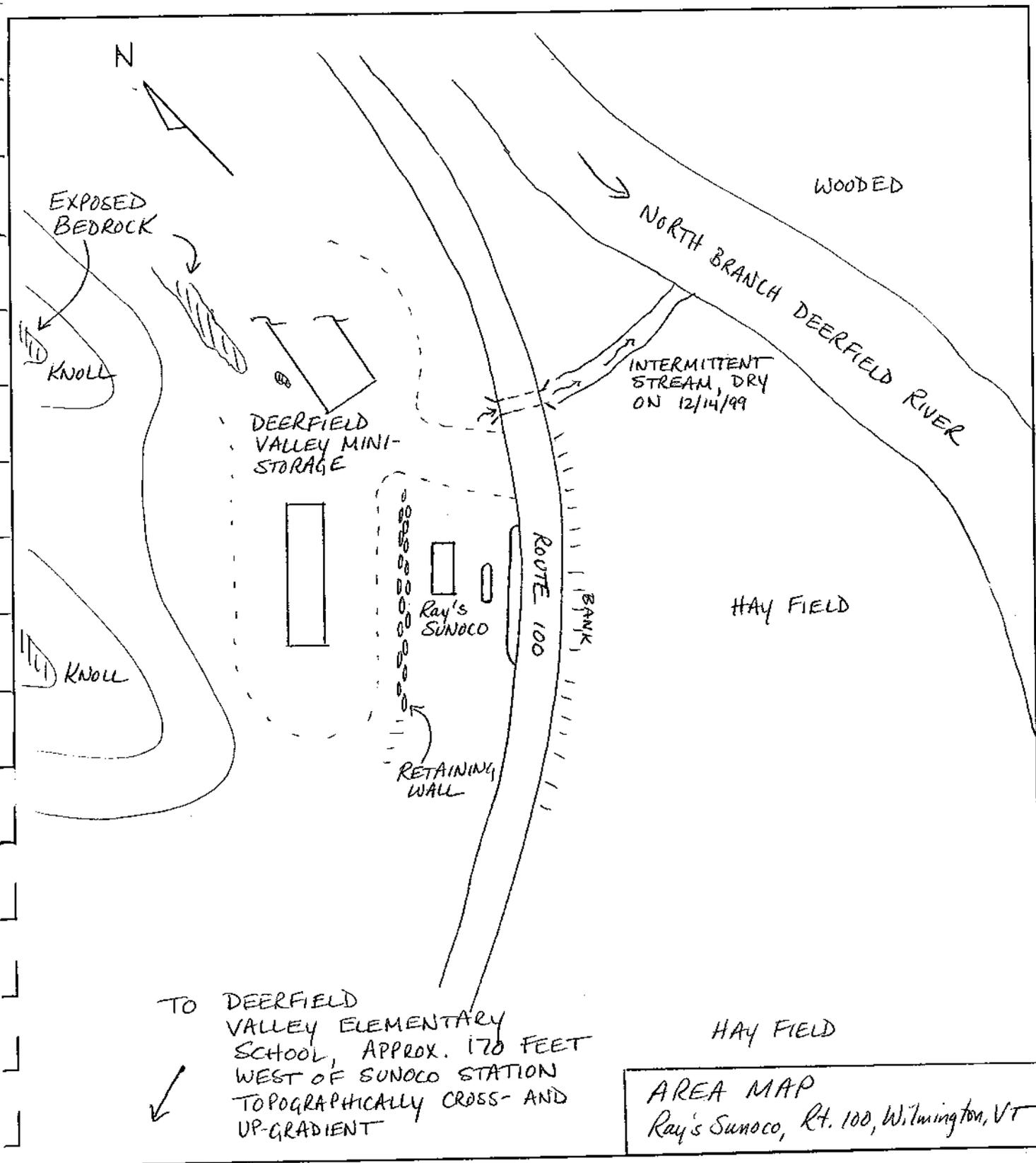
Site Location Map
UST Facility ID #99

Date: 12/17/99 Drawing No. 1/1 Scale: 1:24,000 By: KLU



19 Commerce Street
P.O. Box 943
Williston, VT 05495
Ph/Fax (802) 865-4288
E-mail: griffint@together.net

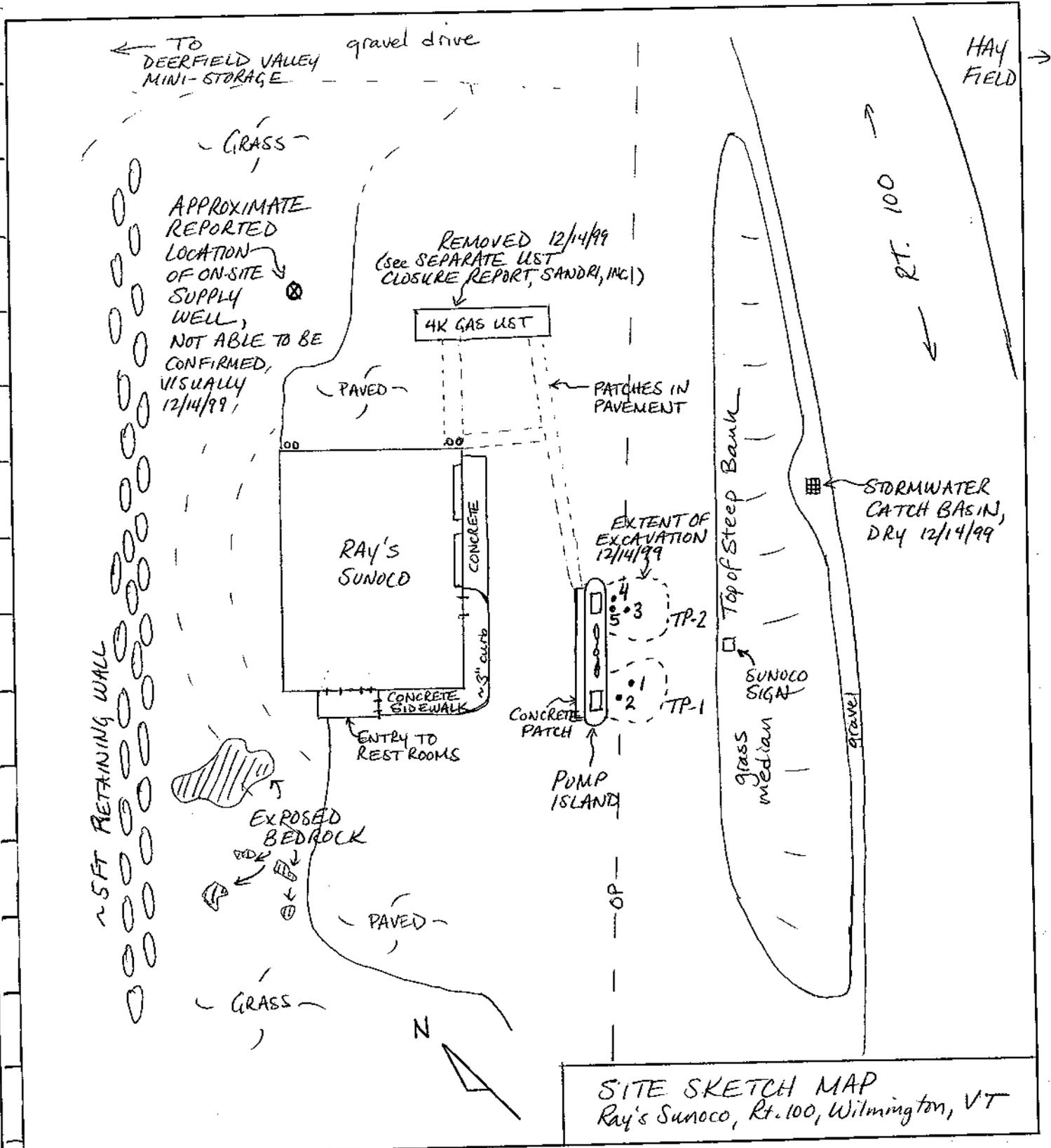
JOB 1299 41647
SHEET NO. 1 OF 1
CALCULATED BY KLU DATE 12/17/99
CHECKED BY _____ DATE _____
SCALE NOT TO SCALE





19 Commerce Street
P.O. Box 943
Williston, VT 05495
Ph/Fax (802) 865-4288
E-mail: griffint@together.net

JOB 1299 41647
SHEET NO. 1 OF 1
CALCULATED BY KLU DATE 12/12/99
CHECKED BY _____ DATE _____
SCALE 1" = ~25'

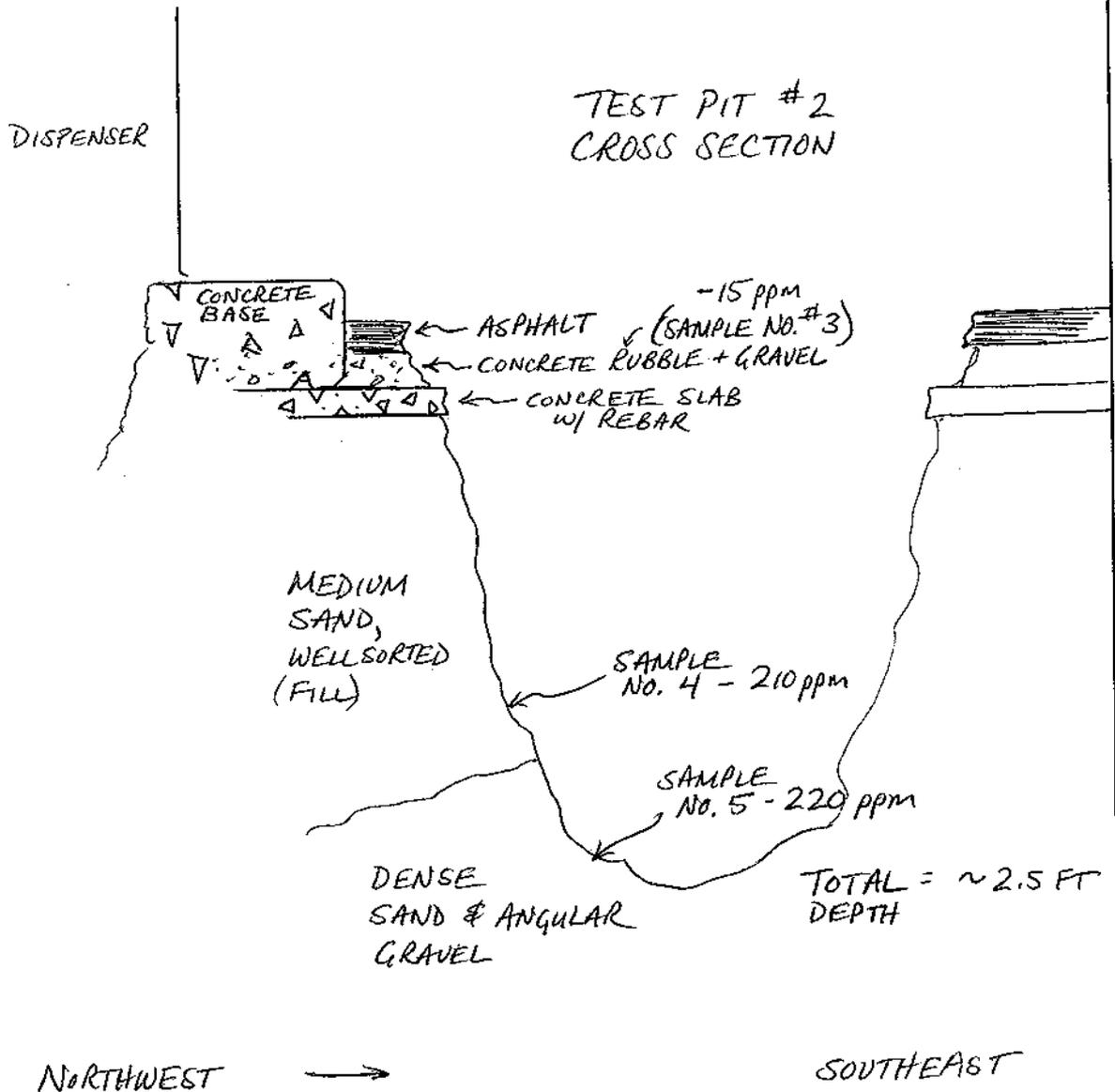


SITE SKETCH MAP
Ray's Sunoco, Rt. 100, Willington, VT



19 Commerce Street
P.O. Box 943
Williston, VT 05495
Ph/Fax (802) 865-4288
E-mail: griffint@together.net

JOB 1299 41647
SHEET NO. 1 OF 1
CALCULATED BY KLU DATE 12/17/99
CHECKED BY _____ DATE _____
SCALE NOT TO SCALE



TEST PIT #2 DETAIL
Ray's Sunoco, Rt. 100, Wilmington, VT

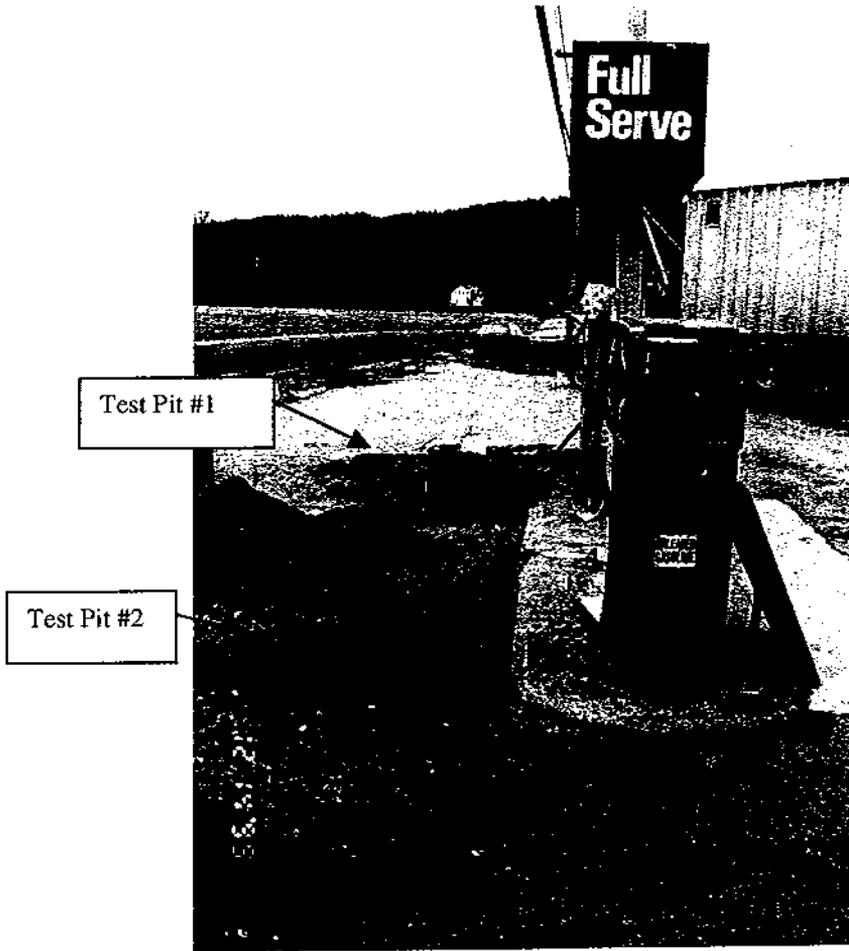
Appendix B
Site Photographs

**RAY'S SUNOCO, Rt. 100 NORTH, WILMINGTON, VERMONT
8-604(2) LIMITED SITE INVESTIGATION, FACILITY ID#99
12/14/99**



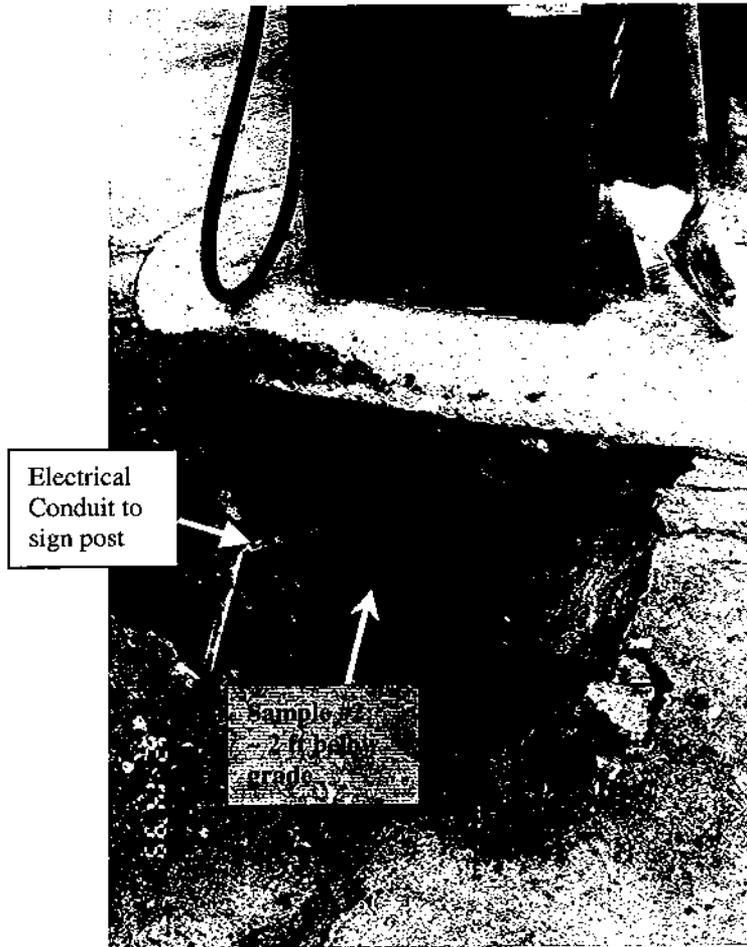
General view of site (facing southwest), prior to excavation activities.

**RAY'S SUNOCO, Rt. 100 NORTH, WILMINGTON, VERMONT
8-604(2) LIMITED SITE INVESTIGATION, FACILITY ID#99
12/14/99**



View of Test Pit Excavations– looking southwest.

**RAY'S SUNOCO, Rt. 100 NORTH, WILMINGTON, VERMONT
8-604(2) LIMITED SITE INVESTIGATION, FACILITY ID#99
12/14/99**



Test Pit #1 – Southwest end of pump island.

**RAY'S SUNOCO, Rt. 100 NORTH, WILMINGTON, VERMONT
8-604(2) LIMITED SITE INVESTIGATION, FACILITY ID#99
12/14/99**



**Test Pit #2 –
Northeast end of pump
island.**

Appendix C

**Deerfield Valley Elementary School
Supply Well Results**

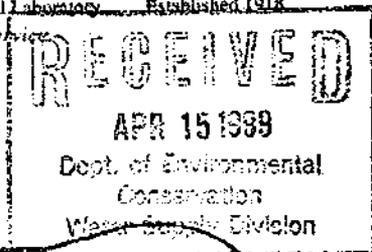
6568

AXIOM LABORATORIES, INC.

Henry Souther Metallurgical Laboratory Established 1898
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 Celebrating 100 Years of Service

24 Tobey Road
 Bloomfield, Connecticut 06002-3586
 Tel. (860) 242-6291; Fax (860) 286-0634

CT Lab Registration #PH-0428



Date Received: 05-Feb-99
 Date Due: 19-Feb-99
 Report Date: 2/16/99
 Purchase Order:
 Water System ID:

Butch Pike
 Deerfield Valley Elementary School
 P.O. Box 638

Wilmington VT 05363-

The following is a report of the results of analyses for samples submitted to this laboratory.

Sample Ref# 557

Request Number: 26156

Customer Notes:

Sample Number: 001
 Kitchen Sink

Sample Date: 2/3/99 Sample Time: 2:00:00 PM
 Matrix: Water

| Category | Analyte | Result | Detection Limit | Analysis Date | Method # | Analyst |
|----------------------|--------------------------------|-----------|-----------------|---------------|----------|---------|
| Volatile Organics | 1,1,1,2-Tetrachloroethane | <0.5 ug/L | 0.5 | 2/11/99 | EPA502.2 | PL |
| | 1,1,1-Trichloroethane | <0.5 ug/L | 0.5 | 2/11/99 | EPA502.2 | PL |
| | 1,1,2,2-Tetrachloroethane | <0.5 ug/L | 0.5 | 2/11/99 | EPA502.2 | PL |
| | 1,1,2-Trichloroethane | <0.5 ug/L | 0.5 | 2/11/99 | EPA502.2 | PL |
| | 1,1-Dichloroethane | <0.5 ug/L | 0.5 | 2/11/99 | EPA502.2 | PL |
| | 1,1-Dichloroethene | <0.5 ug/L | 0.5 | 2/11/99 | EPA502.2 | PL |
| | 1,1-Dichloropropene | <0.5 ug/L | 0.5 | 2/11/99 | EPA502.2 | PL |
| | 1,2,3-Trichlorobenzene | <0.5 ug/L | 0.5 | 2/11/99 | EPA502.2 | PL |
| | 1,2,3-Trichloropropane | <0.5 ug/L | 0.5 | 2/11/99 | EPA502.2 | PL |
| | 1,2,4-Trichlorobenzene | <0.5 ug/L | 0.5 | 2/11/99 | EPA502.2 | PL |
| | 1,2,4-Trimethylbenzene | <0.5 ug/L | 0.5 | 2/11/99 | EPA502.2 | PL |
| | 1,2-Dibromo-3-chloropropane(D) | <0.5 ug/L | 0.5 | 2/11/99 | EPA502.2 | PL |
| | 1,2-Dibromoethane (EDB) | <0.5 ug/L | 0.5 | 2/11/99 | EPA502.2 | PL |
| | 1,2-Dichloroethane | <0.5 ug/L | 0.5 | 2/11/99 | EPA502.2 | PL |
| | 1,2-Dichloropropane | <0.5 ug/L | 0.5 | 2/11/99 | EPA502.2 | PL |
| | 1,3,5-Trimethylbenzene | <0.5 ug/L | 0.5 | 2/11/99 | EPA502.2 | PL |
| | 1,3-Dichlorobenzene | <0.5 ug/L | 0.5 | 2/11/99 | EPA502.2 | PL |
| | 1,3-Dichloropropane | <0.5 ug/L | 0.5 | 2/11/99 | EPA502.2 | PL |
| | 1,4-Dichlorobenzene | <0.5 ug/L | 0.5 | 2/11/99 | EPA502.2 | PL |
| | 1,2-Dichlorobenzene | <0.5 ug/L | 0.5 | 2/11/99 | EPA502.2 | PL |
| | 2,2-Dichloropropane | <0.5 ug/L | 0.5 | 2/11/99 | EPA502.2 | PL |
| | 2-Chloroethylvinyl ether | <0.5 ug/L | 0.5 | 2/11/99 | EPA502.2 | PL |
| | 2-Chlorotoluene | <0.5 ug/L | 0.5 | 2/11/99 | EPA502.2 | PL |
| | 4-Chlorotoluene | <0.5 ug/L | 0.5 | 2/11/99 | EPA502.2 | PL |
| 4-Isopropyltoluene | <0.5 ug/L | 0.5 | 2/11/99 | EPA502.2 | PL | |
| Benzene | <0.5 ug/L | 0.5 | 2/11/99 | EPA502.2 | PL | |
| Bromobenzene | <0.5 ug/L | 0.5 | 2/11/99 | EPA502.2 | PL | |
| Bromochloromethane | <0.5 ug/L | 0.5 | 2/11/99 | EPA502.2 | PL | |
| Bromodichloromethane | <0.5 ug/L | 0.5 | 2/11/99 | EPA502.2 | PL | |
| Bromoform | <0.5 ug/L | 0.5 | 2/11/99 | EPA502.2 | PL | |
| Bromomethane | <0.5 ug/L | 0.5 | 2/11/99 | EPA502.2 | PL | |

AXIOM LABORATORIES, INC.

Henry Souther Metallurgical Laborator Established 1898
 James Newlands Environmental Laboratory Established 1918
 Celebrating 100 Years of Service

CT Lab Registration #PH-0428

SampleNumber: 001 SampleDate: 2/ 3/99 SampleTime: 2:00:00 PM
 Kitchen Sink Matrix: Water

| Category | Analyte | Result | Detection Limit | Analysis Date | Method # | Analyst |
|----------|--------------------------------|-----------|-----------------|---------------|----------|---------|
| | Carbon tetrachloride | <0.5 ug/L | 0.5 | 2/11/99 | EPA502.2 | PL |
| | Chlorobenzene | <0.5 ug/L | 0.5 | 2/11/99 | EPA502.2 | PL |
| | Chloroethane | <0.5 ug/L | 0.5 | 2/11/99 | EPA502.2 | PL |
| | Chloroform | <0.5 ug/L | 0.5 | 2/11/99 | EPA502.2 | PL |
| | Chloromethane | <0.5 ug/L | 0.5 | 2/11/99 | EPA502.2 | PL |
| | cis 1,2-Dichloroethene | <0.5 ug/L | 0.5 | 2/11/99 | EPA502.2 | PL |
| | cis 1,3-Dichloropropene | <0.5 ug/L | 0.5 | 2/11/99 | EPA502.2 | PL |
| | Dibromochloromethane | <0.5 ug/L | 0.5 | 2/11/99 | EPA502.2 | PL |
| | Dibromomethane | <0.5 ug/L | 0.5 | 2/11/99 | EPA502.2 | PL |
| | Dichlorodifluoromethane | <0.5 ug/L | 0.5 | 2/11/99 | EPA502.2 | PL |
| | Ethylbenzene | <0.5 ug/L | 0.5 | 2/11/99 | EPA502.2 | PL |
| | Hexachlorobutadiene | <0.5 ug/L | 0.5 | 2/11/99 | EPA502.2 | PL |
| | Isopropylbenzene | <0.5 ug/L | 0.5 | 2/11/99 | EPA502.2 | PL |
| | m-Xylene | <0.5 ug/L | 0.5 | 2/11/99 | EPA502.2 | PL |
| | Methyl-tert-butyl ether (MTBE) | <0.5 ug/L | 0.5 | 2/11/99 | EPA502.2 | PL |
| | Methylene chloride | <0.5 ug/L | 0.5 | 2/11/99 | EPA502.2 | PL |
| | n-Butylbenzene | <0.5 ug/L | 0.5 | 2/11/99 | EPA502.2 | PL |
| | n-Propylbenzene | <0.5 ug/L | 0.5 | 2/11/99 | EPA502.2 | PL |
| | n-Xylene | <0.5 ug/L | 0.5 | 2/11/99 | EPA502.2 | PL |
| | p-Xylene | <0.5 ug/L | 0.5 | 2/11/99 | EPA502.2 | PL |
| | sec-Butylbenzene | <0.5 ug/L | 0.5 | 2/11/99 | EPA502.2 | PL |
| | Styrene | <0.5 ug/L | 0.5 | 2/11/99 | EPA502.2 | PL |
| | tert-Butylbenzene | <0.5 ug/L | 0.5 | 2/11/99 | EPA502.2 | PL |
| | Tetrachloroethene | <0.5 ug/L | 0.5 | 2/11/99 | EPA502.2 | PL |
| | Toluene | <0.5 ug/L | 0.5 | 2/11/99 | EPA502.2 | PL |
| | trans 1,2-Dichloroethene | <0.5 ug/L | 0.5 | 2/11/99 | EPA502.2 | PL |
| | trans 1,3-Dichloropropene | <0.5 ug/L | 0.5 | 2/11/99 | EPA502.2 | PL |
| | Trichloroethene | <0.5 ug/L | 0.5 | 2/11/99 | EPA502.2 | PL |
| | Trichlorofluoromethane | <0.5 ug/L | 0.5 | 2/11/99 | EPA502.2 | PL |
| | Vinyl chloride | <0.5 ug/L | 0.5 | 2/11/99 | EPA502.2 | PL |

SampleNumber: 002 SampleDate: 2/ 3/99 SampleTime: 2:00:00 PM
 Kitchen Sink Matrix: Water

| Category | Analyte | Result | Detection Limit | Analysis Date | Method # | Analyst |
|-----------|--------------------|-----------|-----------------|---------------|----------|---------|
| Nutrients | Nitrate (NO3 as N) | 0.09 mg/L | 0.01 | 2/ 7/99 | EPA300.0 | JOC |

AXIOM LABORATORIES, INC.

Hartford Metallurgical Laboratory
James Newlands Environmental Laboratory
Celebrating 100 Years of Service

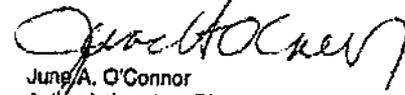
Established 1898
Established 1918

24 Tobey Road
Bloomfield, Connecticut 06002-3586
Tel. (860) 242-0291; Fax (860) 286-0634

CT Lab Registration #PH-0428

Sincerely,

AXIOM LABORATORIES, INC.



Jung A. O'Connor
Acting Laboratory Director
James A. Newlands Environmental Laboratory

004

WATER SUPPLY DIVISION

12/15/99 WED 15:35 FAX 802 241 3284

AXIOM LABORATORIES, INC.

Henry Souther Metallurgical Laboratory Established 1898
 James Newlands Environmental Laboratory Established 1918
 24 Tobey Road • Bloomfield, Connecticut 06002-3586
 Tel. (860) 242-6291 • Fax (860) 286-0634

Chain of Custody Record

Im-557

Date Rec'd _____

Standard lab turnaround is 10 working days. Accelerated turnarounds are always available. Check with office on prevailing surcharge. ACCELERATED TURNAROUND TIME REQUESTED: 1 2 3 4 5 working days.

P.04

93%

802 241 3284

DEC-15-1999 15:16

Customer: Deerfield valley Elem School Project: _____ Project P.O.: _____
 Address: po Box 634 Report To: Butch Pike Phone: (802) 464 5177 ^{Ext} 119
willington VT 05763 Invoice To: _____ Fax #: (802) 464 1246

Remarks: VOC and Nitrate test to be done thank you Butch Pike

Analysis Required

| Sampling Information | | | | | Analysis Required | | | | | | | | | | Lab Sample Number | | | | | | | |
|---|--------|---------|-----------------|---------|-------------------|---------|--|--|--|--|--|--|--|--|-------------------|--|--|--|--|-------|---|---|
| Sample Ident./Location | Date | Time | # of containers | Matrix | VOC (502-2) | Nitrate | | | | | | | | | | | | | | | | |
| Kitchen sink | 9/2/99 | 7:30 | 3 | VOC | X | | | | | | | | | | | | | | | 26156 | 1 | |
| K. room sink | 9/2/99 | 7:30 | 1 | Nitrate | | X | | | | | | | | | | | | | | | | 2 |
| | 2/3/99 | 2:00 pm | | | | | | | | | | | | | | | | | | | | |
| "Please send me some more" Chain of Custody Record sheets | | | | | | | | | | | | | | | | | | | | | | |

Container Code: P = Plastic E = EPA Vial C = Cube G = Glass A = Amber Glass B = Bacteria Bottle
 Preservative Code: I = Iced F = Filtered N = Nitric Acid (HNO₃) H = Hydrochloric Acid (HCL) R = Sodium Hydroxide (NaOH) T = Sodium Thiosulfate S = Sulfuric Acid (H₂SO₄)
 O = Other: Specify _____

Container Type / Sample Preservative: _____
 Have holding times been met? Yes (Y) or No (N) _____

Relinquished by: _____ Date: _____ Time: _____
 Received by: Butch Pike Date: _____ Time: _____
 Relinquished by: _____ Date: _____ Time: _____
 Received by: _____ Date: _____ Time: _____

white - original copy yellow - customer report copy pink - lab record copy gold/tened - customer copy