

AMERADA HESS CORPORATION

TELETYPE: 710-998-0873
CABLE ADDRESS: HESSOIL

1 HESS PLAZA
WOODBIDGE, N. J. 07095-0961
(908) 750-6000

November 24, 1992

Ms. Lynda Wedderspoon
Department of Environmental Conservation
Hazardous Materials Management Division
103 South Main Street - West Building
Waterbury, Vermont 05671-0404

Re: Initial Site Investigation Report
Former Hess Station #45201
Main Street and Depot Road
Bennington, Vermont
DEC Site #92-1212

Dear Ms. Wedderspoon:

Enclosed please find the Initial Site Investigation Report for the above referenced station.

Please advise if you require additional information or have any questions. I may be contacted directly at (908) 750-6828.

Very truly yours,

AMERADA HESS CORPORATION



Robert Spedding
Hydrogeologist

RS:aw
Enclosure

CC: Mr. R. T. Ehrlich - AHC (w/o enclosure)
Mr. F. C. Jones - AHC (w/o enclosure)

NOV 30 1992

**Initial Site Investigation
Paul's Fish Fry
Depot Road
Bennington, Vermont**

Prepared for
Amerada Hess Corporation
1 Hess Plaza
Woodbridge, NJ 07095-0961

October 27, 1992

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Executive Summary

Four under ground storage tanks (UST's) were removed from the Paul's Fish Fry site on June 23, 1992. Using a Photo Ionization Device (PID) for organic volatiles detection, soils in the excavated pit were screened and found to be contaminated. These contaminated soils were excavated and removed from the site for proper disposal. The extent of soil contamination was determined by screening with a PID during excavation. Four monitor wells were drilled, developed, and sampled to determine extent of groundwater contamination. Site evaluation and sampling results are presented in this report along with conclusions and recommendations.

I. Site Overview

Initial Site Investigation

Paul's Fish Fry
Bennington, Vermont

I. Site Overview

A. Setting and Layout

Paul's Fish Fry is located at the intersection of Depot Road and Main Street, in Bennington, Vermont (Site Location Map, Appendix A). The property is bordered by Main Street to the south, Fay's Drugstore and State Liquor Store to the north, Depot Road to the east, and Alcaro Car Dealership parking lot to the west (Site Sketch Map, Appendix B).

The main building on site is a remodeled service station that is now used as a fast food kitchen. There is an extension off the main building that is set up as a dining room area. There are also tables set up in front of the building for outdoor dining. A small shed is located on the north side of the restaurant.

The four underground storage tanks (UST's) removed from the site were located to the east of the indoor dining area (Tank Pull Map, Appendix C).

B. Site History

The site was previously owned and operated by Amerada Hess Corporation as a gasoline station from October 1963 to February 1964. The gas station was originally built in December 1961. Prior to this the site was vacant.

C. Initial Sampling and Screening

The four, 4,000 gallon UST's were excavated and removed on June 23, 1992 by Brown's Country Services. At the time of removal the tanks were inspected by Paul Miller of TRI-S Environmental Consulting (TEC) and found to be in good condition with light surface rust and shallow pitting. On the same day soils in the tank excavation pit were screened by TEC, using a PID, and found to be contaminated. The contaminated soils were then excavated by Brown's Country Services and transported to a disposal site by Clean Berkshires, Inc, an approved Hess Contractor. The excavation pit was then filled with clean fill.

On September 8, 1992 four monitor wells were installed at the site by TEC and T&K Drilling (Monitor Well Installation Logs, Appendix D). These wells were developed and surveyed by TEC personnel on September 15, 1992. Groundwater elevations of each well were measured before both surveying and sampling episodes. Groundwater elevations were then calculated and are presented in data summary chart on next page as groundwater potentiometric readings. A groundwater potentiometric map was developed from these readings to determine the direction of groundwater flow and is included as Appendix E. Groundwater at the site flows in a northwesterly direction towards the Walloomsac River.

Wells	PFF-1	PFF-2	PFF-3	PFF-4
Top of PVC	98.61	98.47	99.16	99.63
9/15/92	93.23	92.99	92.66	92.25
9/28/92	93.26	93.01	91.65	92.23

All readings measured in feet from an arbitrary datum point

The monitor wells were purged and sampled by TEC on September 28, 1992. Water and sediment samples were also taken upstream and down stream of the site in Dewey Brook. Locations of the sampling points are shown on map in Appendix B. Samples were collected and preserved in accordance with State of Vermont sampling protocol. Samples were analyzed by EPA Method 8020 for purgeable aromatics. Analysis of the samples was performed by Toxikon Laboratories located in Woburn, Massachusetts at the request of Amerada Hess Corporation. Results are summarized in the chart below. Full laboratory reports are included as Appendix F.

Compound	PFF-1	PFF-2	PFF-3	PFF-4	PFF-5	PFF-6	TB	Dup-2	FB	DB-1	DB-2
Benzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Toluene	ND	ND	ND	4	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Xylenes	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

All results reported in parts per billion
 DB-1 = Down stream water sample DB-2 = Up stream water sample
 PFF-5 & 6 = down stream and upstream sediment samples from Dewey Brook Dup-2 = Duplicate of PFF-2

Initial Site Investigation

Paul's Fish Fry
Bennington, Vermont

D. Initial Risk Evaluation

Based on the laboratory analysis of sediment and water samples collected from the Pauls Fish Fry site, contamination levels in the groundwater and in Dewey Brook were found to be well below State of Vermont Drinking water Standards (5 ppb benzene and 50 ppb BTEX) as shown above in data summary table. All buildings within a half mile radius of the site are serviced by the town water system. The other potential receptors in the immediate area are Dewey Brook and the Walloomsac River. It does not appear that sensitive receptors are being impacted by the contaminants found at the site.

E. Conclusions

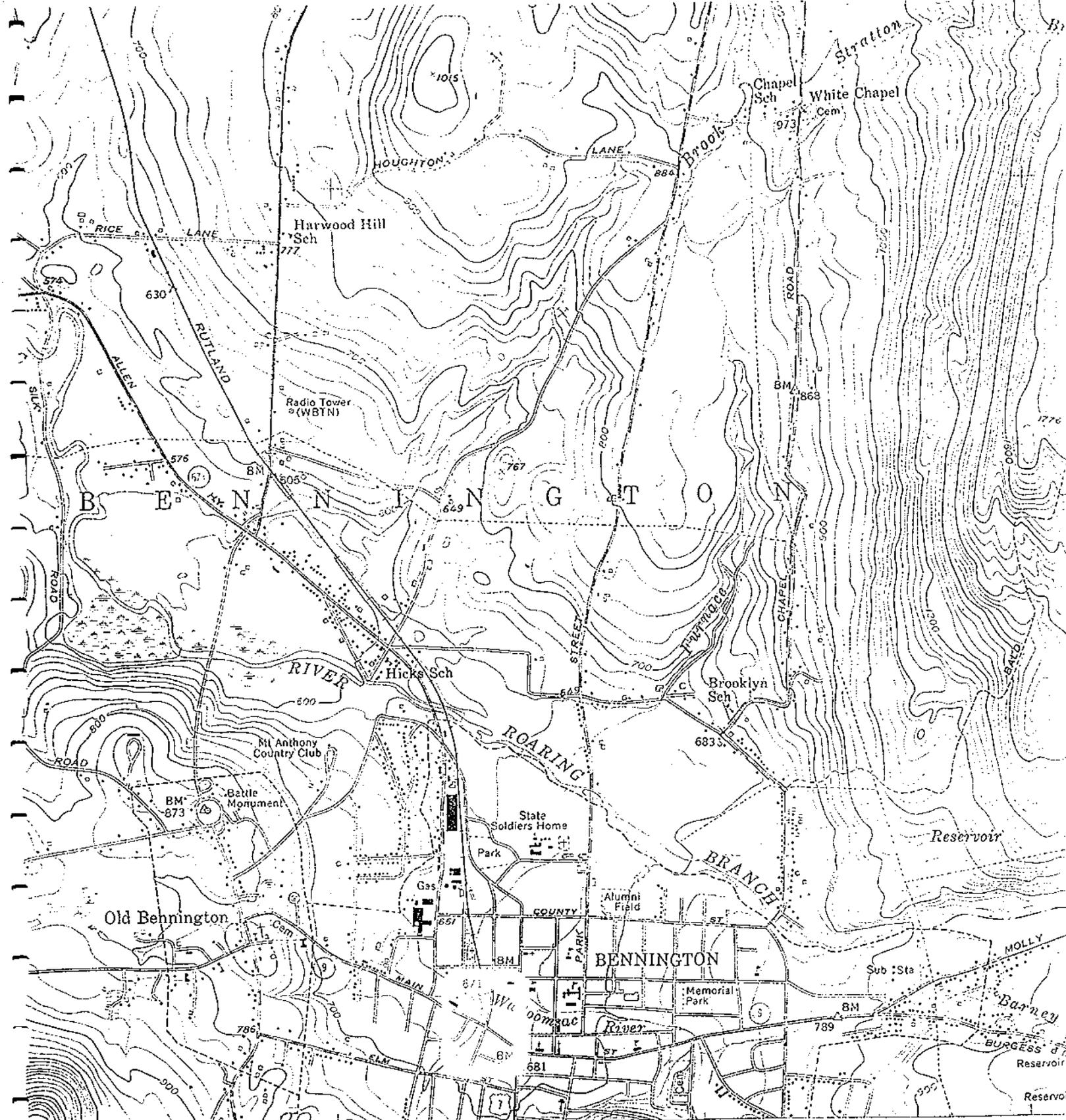
TEC makes the following conclusions

- Soil Screening during UST excavation and removal showed detectable levels of organic vapors.
- Soil Screening during monitor well installation showed non-detectable levels of organic vapors.
- Upon sampling and analysis, BTEX contamination was not found in monitor wells PFF-1, PFF-2, PFF-3 or Dewey Brook.
- Monitor well PFF-4 was found to contain 4 ppb toluene.

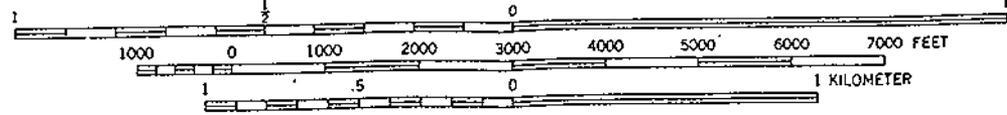
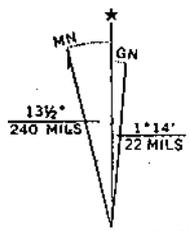
F. Recommendations

TEC recommends additional sampling of the site in the spring to further confirm the absence of contamination. Sampling will take place in the spring when the water table is higher and may saturate the former UST area. The site should be deemed closed when two consecutive sets of samples confirm that all contaminant levels remain below the State of Vermont Drinking Water Standards.

A. Site Location Map



Survey



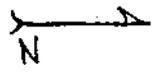
SCALE 1:24000
 CONTOUR INTERVAL 20 FEET
 DATUM IS MEAN SEA LEVEL

UTM GRID AND 1953 MAGNETIC NORTH DECLINATION AT CENTER OF SHEET

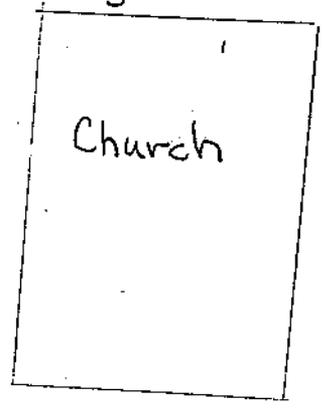
THIS MAP COMPLIES WITH NATIONAL MAP ACCURACY STANDARDS FOR 250,000 SCALE GEOLOGICAL SURVEY WASHINGTON D.C. 20242

B. Site Sketch Map

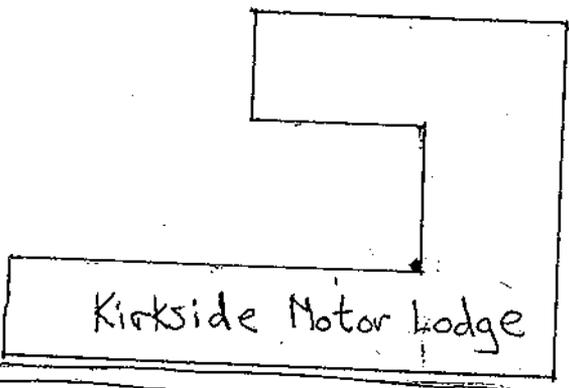
TRI-S Env. Con.
Sketch Map
Paul's Fish Fry
Bennington Vt.



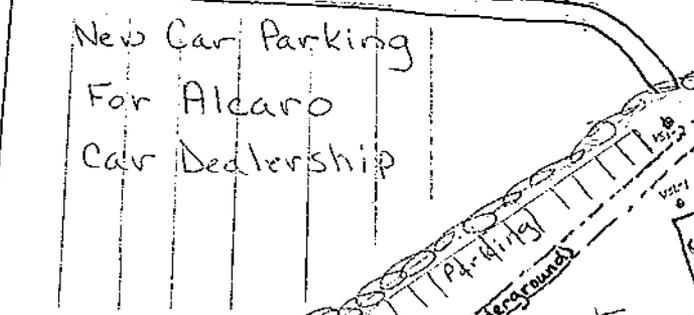
*Not to Scale
*Drawn by KHJ



Church



Kirkside Motor Lodge



New Car Parking
For Alcaro
Car Dealership

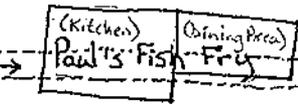


Alcaro
Car
Dealership

Bagel
Deli

Treet
Dry
Cleaner

Main Street

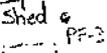


(Kitchen)
Paul's Fish Fry

(Dining Area)



Dumpster

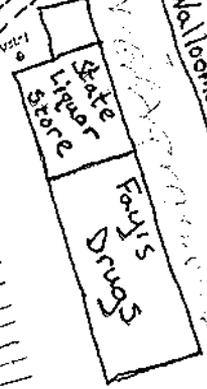


Shed



Tree Line

Plaza
(Loading Grounds)

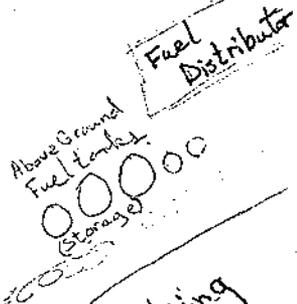


Liquor
Store

Fay's
Drugs

Dewey
Brook

Wallomac River



Fuel
Distributor

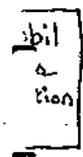
Above Ground
Fuel Tanks
(Storage)

Parking

Depot Road

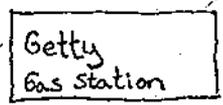
Bridge

River

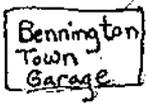


Mobil
&
Lion

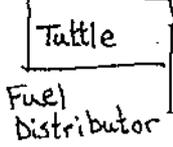
Main Street



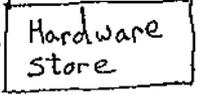
Getty
Gas Station



Bennington
Town
Garage



Tuttle
Fuel
Distributor

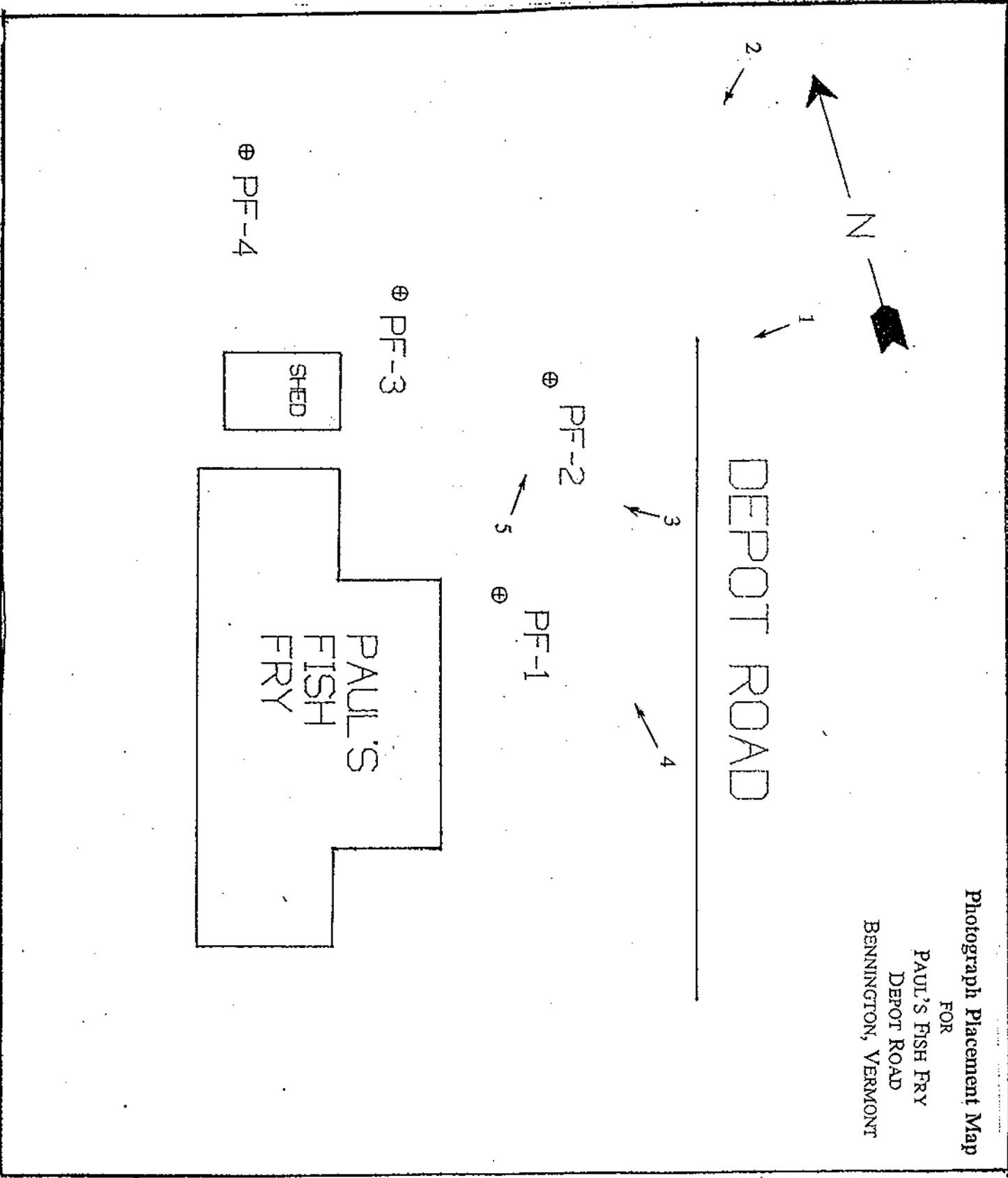


Hardware
Store

C. Site Photographs

Photograph Placement Map

FOR
PAUL'S FISH FRY
DEPOT ROAD
BENNINGTON, VERMONT





1. A view of Paul's Fish Fry toward the west



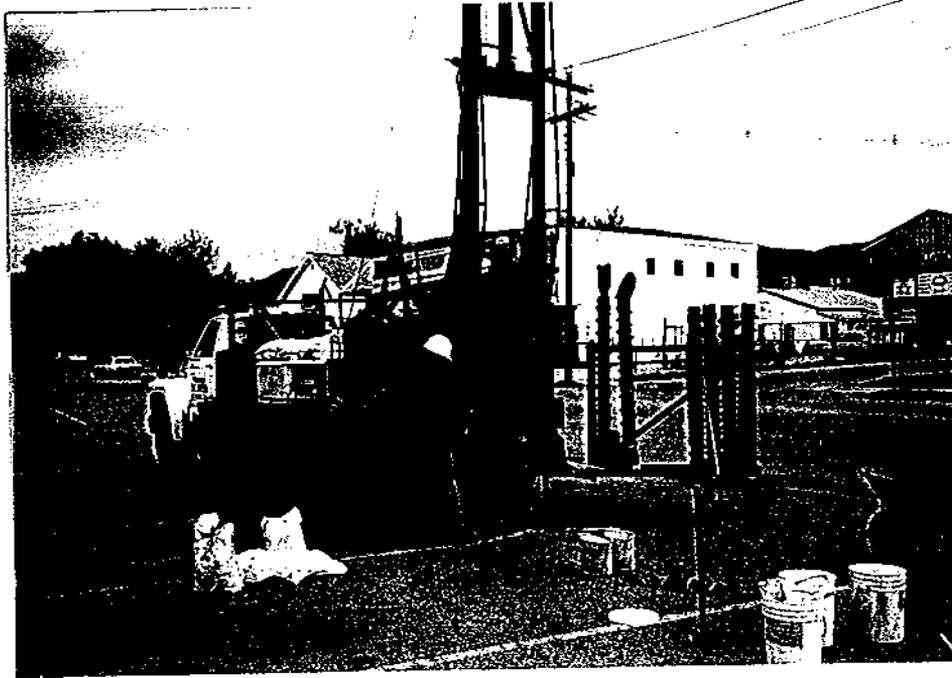
2. View of Paul's Fish Fry illustrating the proximity of nearby gasoline stations



3. Packing silica sand around PF-2



4. Drilling monitoring well PF-1



5. Drilling monitoring well PF-2

D. Tank Pull Map

VERMONT DEPARTMENT OF ENVIRONMENTAL CONSERVATION
UNDERGROUND STORAGE TANK PROGRAM
SITE MAP

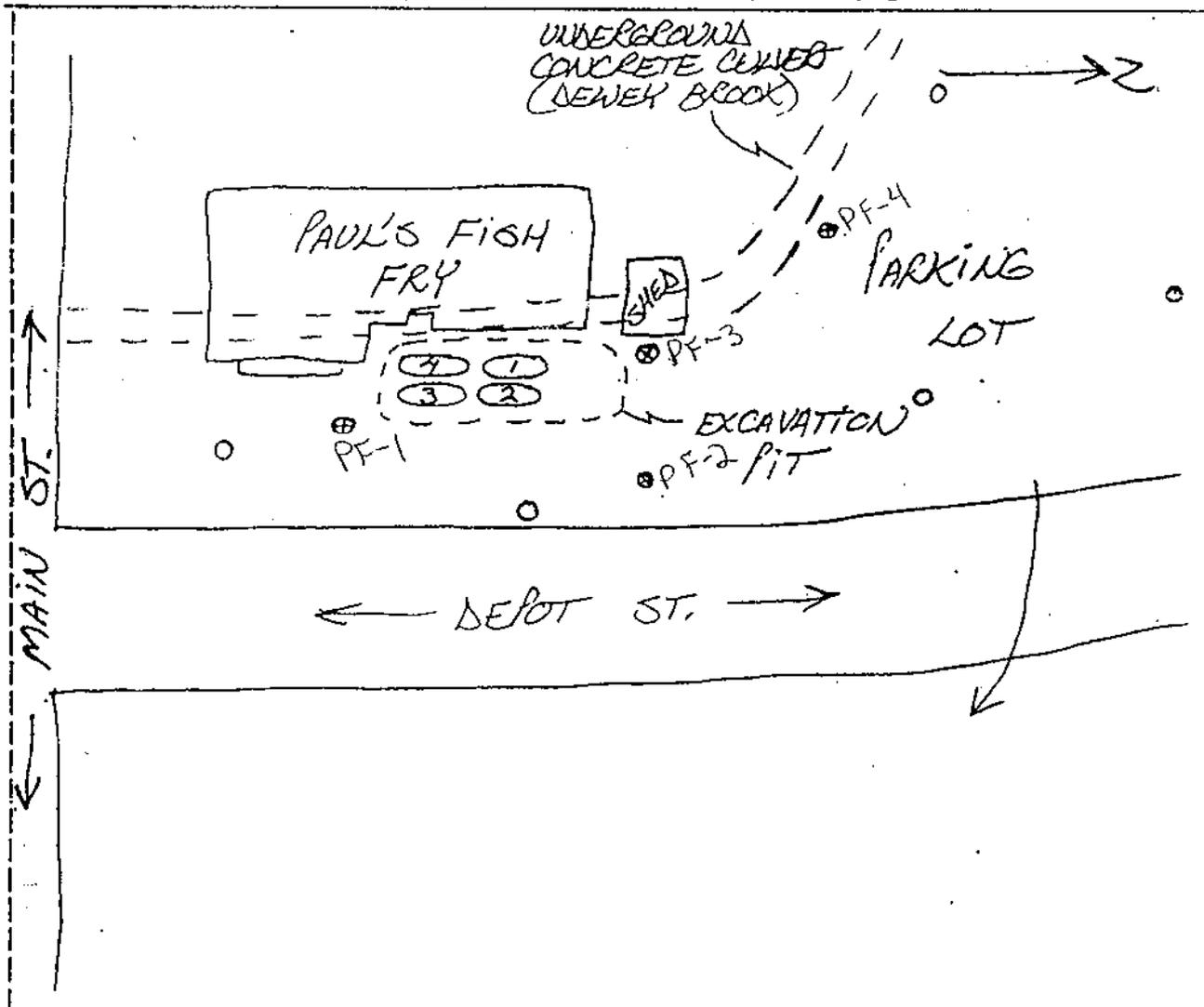
RECOMMENDED SCALE - 1" = 50 feet (but not smaller than 1" = 100 feet)

MAP DRAWN BY: PAUL D. G. MILLER

BUSINESS NAME WHERE TANK(S) LOCATED: PAUL'S FISH FRY

Show location of all tanks and property boundary; distance to permanent structures; monitoring wells; water wells within 500 foot radius; storm; sewer and water lines; sample points; areas of contamination and other pertinent site information. Indicate North arrow and major street names or route number.

SCALE: 1 INCH = 50'



- ⊗ = PROPOSED WELL LOCATIONS
- = ADDITIONAL PROPOSED WELL LOCATIONS, DEPENDING ON SITE CONDITIONS
- X = OVM READING LOCATION

E. Monitoring Well Installation Logs

TRI-S ENVIRONMENTAL CONSULTING
SOIL BORING / MONITORING WELL LOG

WELL NUMBER PFF-1

SHEET No. 1 of 4

CLIENT <u>Amerada Hess</u>	DATE DRILLED <u>9/8/92</u>	DRILLING METHOD <u>HSA</u>
PROJECT NAME <u>Paul's Fish Fry</u>	WELL TOP ELEV. <u>99.09</u>	TOTAL DEPTH OF WELL <u>12'</u>
PROJECT # <u>244</u>	PVC ELEV. <u>98.61</u>	SCREEN DIA. <u>2"</u> LENGTH <u>9'</u>
WELL LOCATION <u>see enclosed Map</u>	GROUND ELEV. _____	RISER DIA. <u>2"</u> LENGTH <u>3'</u>
DRILLING CO. <u>T+K Drilling</u>	DRILLER _____	SLOT SIZE <u>10</u>
LOG BY <u>Paul Miller</u>		

DEPTH	SAMPLE				FIELD CLASSIFICATION AND REMARKS	FIELD TESTING	EQUIPMENT INSTALLED	
	No.	PEN/REC.	DEPTH (FT)	BLOWS/5'			Riser	Screen
					Concrete Pad	Non-detect		Cement to Grade Bentonite
					Brown, Fine to Coarse Sand and Fine to Coarse Gravel	ND		
5				7,4 3,3	Black, Silt and Fine Gravel, some Fine to Coarse Sand	ND		Grade 1 Silica Sand Pack
10				19,22 10,20	Black, Fine to Coarse sand and silt, some clay, Trace Gravel	ND		
					Refusal at 12'	End of Boring		
15								
20								
25								
30								
35								
40								

NOTES:

1. FIELD TESTING PERFORMED USING A THERMO ENVIRONMENTAL INSTRUMENTS INC. ORGANIC VAPOR METER (OVM), MODEL 5808. METER RESPONSE IN PPM.
2. ND INDICATES NON-DETECTABLE CONTAMINANT CONCENTRATIONS ON OVM.
3. SAMPLES COLLECTED USING A SPLIT SPOON SAMPLER UNLESS OTHERWISE INDICATED.
4. SPLIT SPOON SAMPLER HAS A 2" DIAMETER AND IS DRIVEN USING A 140 LB HAMMER FALLING 30 INCHES
5. HSA = HOLLOW STEM AUGER
AR = AIR ROTARY

TRI-S ENVIRONMENTAL CONSULTING
SOIL BORING / MONITORING WELL LOG

WELL NUMBER PFF-2

SHEET No. 2 of 4

CLIENT <u>Amerada Hess</u>	DATE DRILLED <u>9/8/92</u>	DRILLING METHOD <u>HSA</u>
PROJECT NAME <u>Paul's Fish Fry</u>	WELL TOP ELEV. <u>99.02</u>	TOTAL DEPTH OF WELL <u>8'</u>
PROJECT # <u>244</u>	PVC ELEV. <u>98.47</u>	SCREEN DIA. <u>2"</u> LENGTH <u>5'</u>
WELL LOCATION <u>see enclosed Map</u>	GROUND ELEV. _____	RISER DIA. <u>2"</u> LENGTH <u>3'</u>
DRILLING CO. <u>J+K Drilling</u>	DRILLER _____	SLOT SIZE <u>10</u>
LOG BY <u>Paul Miller</u>		

HOLE	SAMPLE				FIELD CLASSIFICATION AND REMARKS	FIELD TESTING	EQUIPMENT INSTALLED	
	No.	PEN/REC	DEPTH (FT)	BLONS/6"			Riser	Screen
					Brown/Tan, fine to coarse sand and fine to coarse gravel	ND	Cement to Grade Bentonite	
5			30		Brown, silt, some fine gravel, little fine to coarse sand	ND	Grade 1 silica sand pack	
10					Cobbles and boulders Refusal at 8'	ND		End of Boring
15								
20								
25								
30								
35								
40								

- NOTES:
1. FIELD TESTING PERFORMED USING A THERMO ENVIRONMENTAL INSTRUMENTS INC. ORGANIC VAPOR METER (OVM) MODEL 5803. METER RESPONSE IN PPM.
 2. ND INDICATES NON-DETECTABLE CONTAMINANT CONCENTRATIONS ON OVM.
 3. SAMPLES COLLECTED USING A SPLIT SPOON SAMPLER UNLESS OTHERWISE INDICATED.
 4. SPLIT SPOON SAMPLER HAS A 2" DIAMETER AND IS DRIVEN USING A 140 LBL HAMMER FALLING 30 INCHES.
 5. HSA = HOLLOW STEM AUGER
AR = AIR ROTARY

TRI-S ENVIRONMENTAL CONSULTING
SOIL BORING / MONITORING WELL LOG

WELL NUMBER PFE-3

SHEET No. 3 of 4

CLIENT <u>Amerada Hess</u>	DATE DRILLED <u>9/8/92</u>	DRILLING METHOD <u>HSA</u>
PROJECT NAME <u>Paul's Fish Fry</u>	WELL TOP ELEV. <u>99.41</u>	TOTAL DEPTH OF WELL <u>13'</u>
PROJECT # <u>244</u>	PVC ELEV. <u>99.16</u>	SCREEN DIA. <u>2"</u> LENGTH <u>10'</u>
WELL LOCATION <u>see enclosed Map</u>	GROUND ELEV. _____	RISER DIA. <u>2"</u> LENGTH <u>3'</u>
DRILLING CO. <u>J+K Drilling</u>	DRILLER _____	SLOT SIZE <u>10</u>
LOG BY <u>Paul Miller</u>		

DEPTH	SAMPLE			FIELD CLASSIFICATION AND REMARKS	FIELD TESTING	EQUIPMENT INSTALLED	
	No.	PEN/REC	DEPTH (FT)			BLOWS/5"	Riser
				Brown/Tan, Fine to Coarse Sand and Fine to Coarse Gravel	ND		Cement to Grade Bentonite
				Brown, Silt, Some Fine Gravel, Little Fine to Coarse Sand	ND		Grade 1 Silica Sand Pack
5			2,2 3,1	Black, Medium to Coarse Sand, some Fine Gravel and Silt	ND		
10			1,4 30	Black, Fine to Coarse sand and Silt	ND		
15				End of Boring			
20							
25							
30							
35							
40							

- NOTES:
1. FIELD TESTING PERFORMED USING A THERMO ENVIRONMENTAL INSTRUMENTS INC. ORGANIC VAPOR METER (OVUM), MODEL 5808. METER RESPONSE IN PPM.
 2. ND INDICATES NON-DETECTABLE CONTAMINANT CONCENTRATIONS ON OVM.
 3. SAMPLES COLLECTED USING A SPLIT SPOON SAMPLER UNLESS OTHERWISE INDICATED.
 4. SPLIT SPOON SAMPLER HAS A 2" DIAMETER AND IS DRIVEN USING A 140 LB. HAMMER FALLING 30 INCHES.
 5. HSA = HOLLOW STEM AUGER
AR = AIR ROTARY

TRI-S ENVIRONMENTAL CONSULTING
SOIL BORING / MONITORING WELL LOG

WELL NUMBER PFF-4

SHEET No 4 of 4

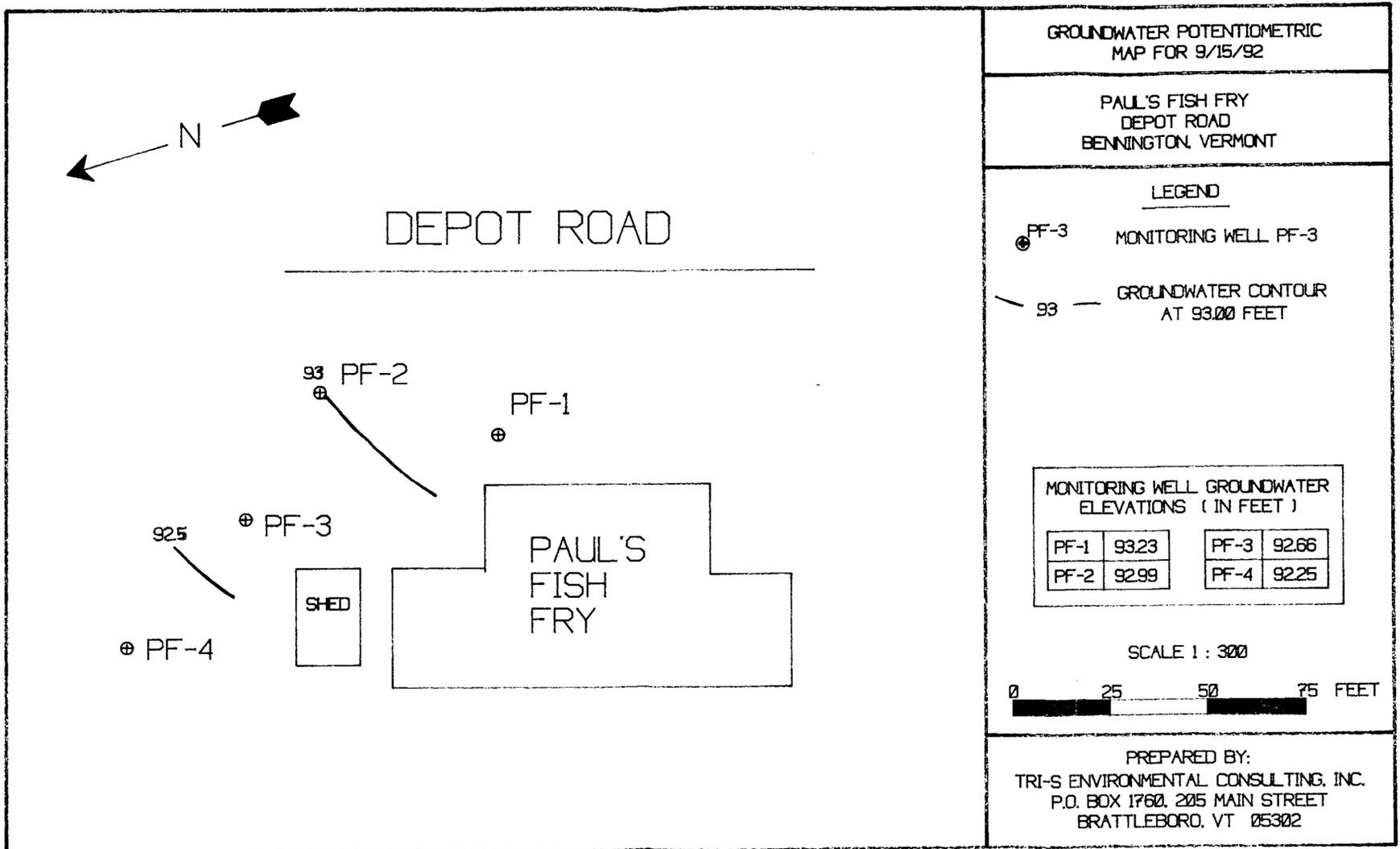
CLIENT <u>Amerada Hess</u>	DATE DRILLED <u>9/8/92</u>	DRILLING METHOD <u>HSA</u>
PROJECT NAME <u>Paul's Fish Fry</u>	WELL TOP ELEV. <u>100.08</u>	TOTAL DEPTH OF WELL <u>13'</u>
PROJECT # <u>244</u>	PVC ELEV. <u>99.63</u>	SCREEN DIA. <u>2"</u> LENGTH <u>10'</u>
WELL LOCATION <u>see enclosed Map</u>	GROUND ELEV. _____	RISER DIA. <u>3"</u> LENGTH <u>3'</u>
DRILLING CO. <u>T+K Drilling</u>	DRILLER _____	SLOT SIZE <u>10</u>
LOG BY <u>Paul Miller</u>		

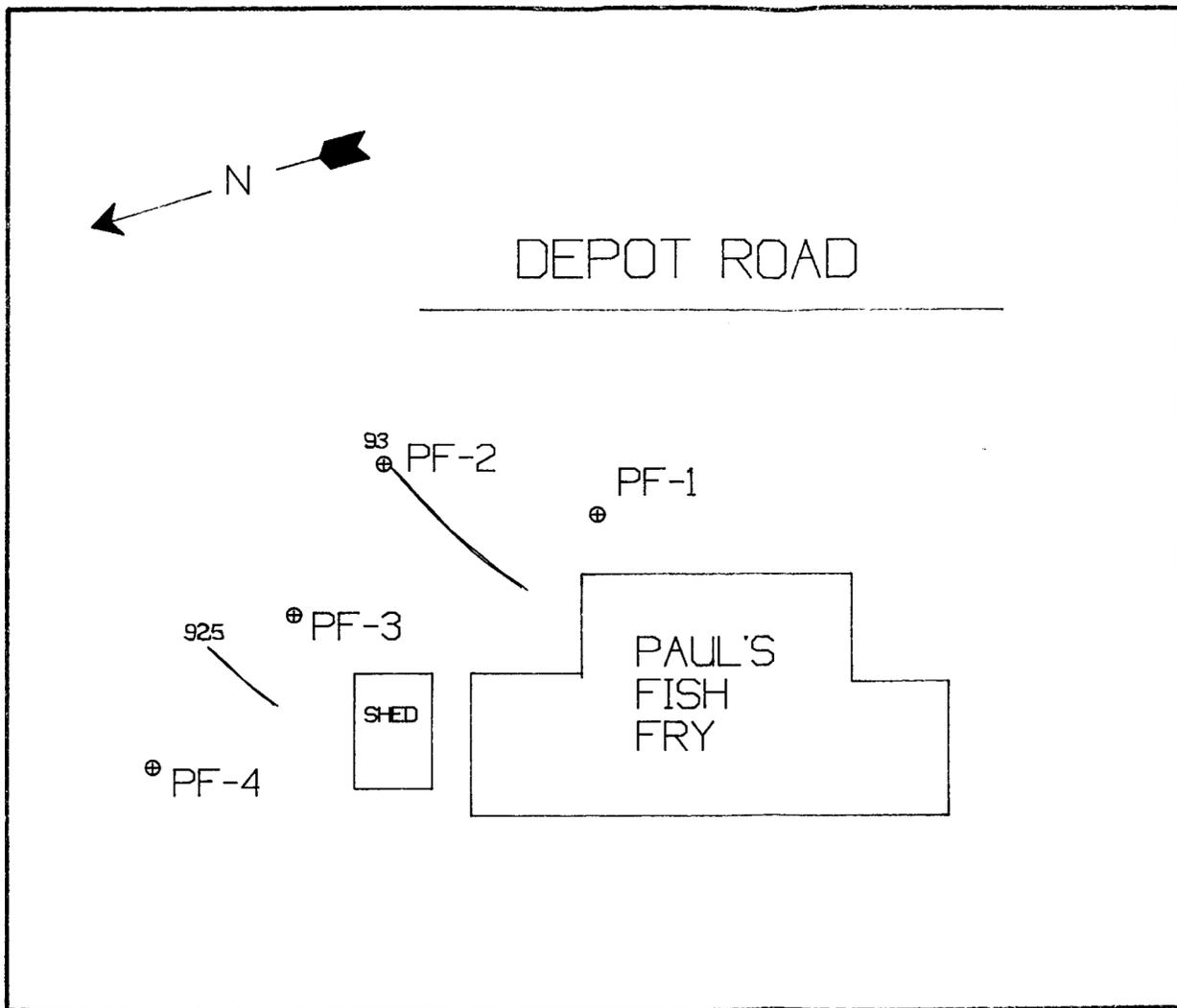
DEPTH FEET	SAMPLE			FIELD CLASSIFICATION AND REMARKS	FIELD TESTING	EQUIPMENT INSTALLED
	No.	PEN/ REC.	DEPTH FT/J			
				Brown/Tan, Fine to Coarse Sand and Fine to Coarse Gravel	ND	Cement to Grade Bentonite
5			7, 14 10, 8	Brown, Fine Sand and Silt, Little Fine Gravel	ND	Grade 1 Silica Sand Pack
10			9, 6 30	Black, Silt and Fine Gravel, Some Fine to Coarse Sand	ND	
				Black, Organic Sand Medium Gravel and Silt	ND	Screen
15				End of Boring		
20						
25						
30						
35						
40						

NOTES:

1. FIELD TESTING PERFORMED USING A THERMO ENVIRONMENTAL INSTRUMENTS INC. ORGANIC VAPOR METER (OVMI) MODEL 580B. METER RESPONSE IN PPM.
2. ND INDICATES NON-DETECTABLE CONTAMINANT CONCENTRATIONS ON OVM.
3. SAMPLES COLLECTED USING A SPLIT SPOON SAMPLER UNLESS OTHERWISE INDICATED.
4. SPLIT SPOON SAMPLER HAS A 2" DIAMETER AND IS DRIVEN USING A 140 LB. HAMMER FALLING 30 INCHES.
5. HSA = HOLLOW STEM AUGER
AR = AIR ROTARY

F. Groundwater Potentiometric





GROUNDWATER POTENTIOMETRIC
MAP FOR 9/28/92

PAUL'S FISH FRY
DEPOT ROAD
BENNINGTON, VERMONT

LEGEND

- ⊕ PF-3 MONITORING WELL PF-3
- 93 — GROUNDWATER CONTOUR AT 93.00 FEET

MONITORING WELL GROUNDWATER
ELEVATIONS (IN FEET)

PF-1	93.26	PF-3	92.65
PF-2	93.01	PF-4	92.23

SCALE 1 : 300

0 25 50 75 FEET

PREPARED BY:
TRI-S ENVIRONMENTAL CONSULTING, INC.
P.O. BOX 1760, 205 MAIN STREET
BRATTLEBORO, VT 05302

G. Laboratory Analysis Reports

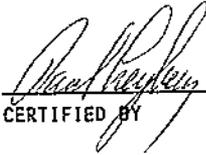
244

Received: 09/29/92

10/06/92 11:13:07

REPORT TRI-S ENVIRONMENTAL CONS.
TO PO BOX 1760 205 MAIN STREET
BRATTLEBORO, VT
(802)254-3677 FAX:7630
ATTEN KRISTEN JEPPESEN

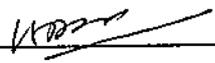
PREPARED TOXIKON CORPORATION
BY 225 WILDWOOD AVE.
WOBURN, MA 01801
ATTEN PAUL LEZBERG
PHONE (617) 933-6903


CERTIFIED BY
CONTACT JIM

CLIENT TRI S ENVIRO SAMPLES 11
COMPANY TRI-S ENVIRONMENTAL CONS.
FACILITY PO BOX 1760 205 MAIN STREET
BRATTLEBORO, VT

MA CERT # MA064: TRACE METALS, SULFATE, CYANIDE, TURB., RES. FREE
CHLORINE, Ca, TOTAL ALK., TDS, pH, THMS, VOC, PEST., NUTRIENTS,
DEMAND, O&G, PHENOLICS, PCBs (OIL), CY DHS #PH-0563, NY #10778
FL HRS E87143, NJ DEP 59538, NC DNR286, SC 88002, NH 204091.C.

WORK ID AHC 244
TAKEN 09/28/92
TRANS _____
TYPE SOIL & WATER
P.O. # 1234
INVOICE under separate cover

Verified By: 
MA CERT# MA064:

SAMPLE IDENTIFICATION

TEST CODES and NAMES used on this workorder

- 01 PFF-1-92892-244
- 02 PFF-2-92892-244
- 03 PFF-3-92892-244
- 04 PFF-4-92892-244
- 05 PFF-5-92892-244
- 06 PFF-6-92892-244
- 07 PFF-7-92892-244
- 08 PFF-8-92892-244
- 09 PFF-9-92892-244
- 10 PFF-DB-1-244
- 11 PFF-DB-2-244

8020 PURGEABLE AROMATICS

RECEIVED OCT 13 1992

Received: 09/29/92

Results by Sample

SAMPLE ID PFF-1-92892-244FRACTION 01ATEST CODE 8020NAME PURGEABLE AROMATICSDate & Time Collected 09/28/92 04:23:00Category WATEREPA 8020

	RESULT	LIMIT
BENZENE	<u>ND</u>	<u>2.0</u>
TOLUENE	<u>ND</u>	<u>2.0</u>
ETHYLBENZENE	<u>ND</u>	<u>2.0</u>
XYLENES (TOTAL)	<u>ND</u>	<u>2.0</u>

Notes and Definitions for this Report:

DATE RUN: 10/04/92ANALYST: APINSTRUMENT: 9000DIL. FACTOR: 1UNITS: ug/L

ND = not detected at detection limit

Received: 09/29/92

Results by Sample

SAMPLE ID PFF-2-92892-244FRACTION 02ATEST CODE 8020NAME PURGEABLE AROMATICSDate & Time Collected 09/28/92 04:14:00Category WATEREPA 8020

	RESULT	LIMIT
BENZENE	<u>ND</u>	<u>2.0</u>
TOLUENE	<u>ND</u>	<u>2.0</u>
ETHYLBENZENE	<u>ND</u>	<u>2.0</u>
XYLENES (TOTAL)	<u>ND</u>	<u>2.0</u>

Notes and Definitions for this Report:

DATE RUN: 10/02/92ANALYST: APINSTRUMENT: 9000DIL. FACTOR: 1UNITS: ug/L

ND = not detected at detection limit

SAMPLE ID PFF-3-92892-244 FRACTION 03A TEST CODE 8020 NAME PURGEABLE AROMATICS
Date & Time Collected 09/28/92 04:05:00 Category WATER

EPA 8020

	RESULT	LIMIT
BENZENE	<u>ND</u>	<u>2.0</u>
TOLUENE	<u>ND</u>	<u>2.0</u>
ETHYLBENZENE	<u>ND</u>	<u>2.0</u>
XYLENES (TOTAL)	<u>ND</u>	<u>2.0</u>

Notes and Definitions for this Report:

DATE RUN: 10/04/92

ANALYST: AP

INSTRUMENT: 9000

DIL. FACTOR: 1

UNITS: ug/L

ND = not detected at detection limit

Received: 09/29/92

Results by Sample

SAMPLE ID PFF-4-92892-244

FRACTION 04A

TEST CODE 8020

NAME PURGEABLE AROMATICS

Date & Time Collected 09/28/92 03:52:00

Category WATER

EPA 8020

	RESULT	LIMIT
BENZENE	<u>ND</u>	<u>2.0</u>
TOLUENE	<u>4</u>	<u>2.0</u>
ETHYLBENZENE	<u>ND</u>	<u>2.0</u>
XYLENES (TOTAL)	<u>ND</u>	<u>2.0</u>

Notes and Definitions for this Report:

DATE RUN: 10/05/92

ANALYST: AP

INSTRUMENT: 9000

DIL. FACTOR: 1

UNITS: ug/L

ND = not detected at detection limit

Received: 09/29/92

Results by Sample

SAMPLE ID PFF-5-92892-244

FRACTION 05A

TEST CODE 8020

NAME PURGEABLE AROMATICS

Date & Time Collected 09/28/92 03:50:00

Category SOIL

EPA 8020

	RESULT	LIMIT
BENZENE	<u>ND</u>	<u>2.0</u>
TOLUENE	<u>ND</u>	<u>2.0</u>
ETHYLBENZENE	<u>ND</u>	<u>2.0</u>
XYLENES (TOTAL)	<u>ND</u>	<u>2.0</u>

Notes and Definitions for this Report:

DATE RUN: 10/02/92

ANALYST: AP

INSTRUMENT: 9000

DIL. FACTOR: 1

UNITS: ug/kg

ND = not detected at detection limit

Received: 09/29/92

Results by Sample

SAMPLE ID PFF-6-92892-244 FRACTION 06A TEST CODE 8020 NAME PURGEABLE AROMATICS
Date & Time Collected 09/28/92 04:06:00 Category SOIL

EPA 8020

	RESULT	LIMIT
BENZENE	<u>ND</u>	<u>2.0</u>
TOLUENE	<u>ND</u>	<u>2.0</u>
ETHYLBENZENE	<u>ND</u>	<u>2.0</u>
XYLENES (TOTAL)	<u>ND</u>	<u>2.0</u>

Notes and Definitions for this Report:

DATE RUN: 10/02/92
ANALYST: AP
INSTRUMENT: 9000
DIL. FACTOR: 1
UNITS: ug/kg

ND = not detected at detection limit

Received: 09/29/92

Results by Sample

SAMPLE ID PFF-7-92892-244FRACTION 07ATEST CODE 8020NAME PURGEABLE AROMATICSDate & Time Collected 09/28/92 04:15:00Category WATEREPA 8020

	RESULT	LIMIT
BENZENE	<u>ND</u>	<u>2.0</u>
TOLUENE	<u>ND</u>	<u>2.0</u>
ETHYLBENZENE	<u>ND</u>	<u>2.0</u>
XYLENES (TOTAL)	<u>ND</u>	<u>2.0</u>

Notes and Definitions for this Report:

DATE RUN: 10/02/92ANALYST: APINSTRUMENT: 9000DIL. FACTOR: 1UNITS: ug/L

ND = not detected at detection limit

Received: 09/29/92

Results by Sample

SAMPLE ID PFF-8-92892-244 FRACTION 08A TEST CODE 8020 NAME PURGEABLE AROMATICS
Date & Time Collected 09/28/92 04:15:00 Category WATER

EPA 8020

	RESULT	LIMIT
BENZENE	ND	2.0
TOLUENE	ND	2.0
ETHYLBENZENE	ND	2.0
XYLENES (TOTAL)	ND	2.0

Notes and Definitions for this Report:

DATE RUN: 10/04/92
 ANALYST: AP
 INSTRUMENT: 9000
 DIL. FACTOR: 1
 UNITS: ug/L
 ND = not detected at detection limit

Received: 09/29/92

Results by Sample

SAMPLE ID PFF-9-92892-244 FRACTION 09A TEST CODE 8020 NAME PURGEABLE AROMATICS
Date & Time Collected 09/28/92 04:28:00 Category WATER

EPA 8020

	RESULT	LIMIT
BENZENE	<u>ND</u>	<u>2.0</u>
TOLUENE	<u>ND</u>	<u>2.0</u>
ETHYLBENZENE	<u>ND</u>	<u>2.0</u>
XYLENES (TOTAL)	<u>ND</u>	<u>2.0</u>

Notes and Definitions for this Report:

DATE RUN: 10/02/92
ANALYST: AP
INSTRUMENT: 9000
DIL. FACTOR: 1
UNITS: ug/L
ND = not detected at detection limit

Received: 09/29/92

Results by Sample

SAMPLE ID PFF-DB-1-244 FRACTION 10A TEST CODE 8020 NAME PURGEABLE AROMATICS
Date & Time Collected 09/28/92 03:52:00 Category WATER

EPA 8020

	RESULT	LIMIT
BENZENE	<u>ND</u>	<u>2.0</u>
TOLUENE	<u>ND</u>	<u>2.0</u>
ETHYLBENZENE	<u>ND</u>	<u>2.0</u>
XYLENES (TOTAL)	<u>ND</u>	<u>2.0</u>

Notes and Definitions for this Report:

DATE RUN: 10/02/92
ANALYST: AP
INSTRUMENT: 9000
DIL. FACTOR: 1
UNITS: ug/L
ND = not detected at detection limit

Received: 09/29/92

Results by Sample

SAMPLE ID PFF-DB-2-244 FRACTION 11A TEST CODE 8020 NAME PURGEABLE AROMATICS
Date & Time Collected 09/28/92 04:02:00 Category WATER

EPA 8020

	RESULT	LIMIT
BENZENE	<u>ND</u>	<u>2.0</u>
TOLUENE	<u>ND</u>	<u>2.0</u>
ETHYLBENZENE	<u>ND</u>	<u>2.0</u>
XYLENES (TOTAL)	<u>ND</u>	<u>2.0</u>

Notes and Definitions for this Report:

DATE RUN: 10/02/92
 ANALYST: AP
 INSTRUMENT: 9000
 DIL. FACTOR: 1
 UNITS: ug/L
 ND = not detected at detection limit

Received: 09/29/92

Test Methodology

TEST CODE 8020 NAME PURGEABLE AROMATICS

EPA Method: 8020. Volatile Aromatic Compounds incl. MTBE.

Reference: Test Methods for Evaluating Solid Waste: Physical/Chemical
Methods. EPA SW-846 (Third Edition) 1986.
Office of Solid Waste, USEPA.

H. Site Health and Safety Plan

SITE SPECIFIC HEALTH AND SAFETY PLAN

FOR

Pauls Fish Fry, Bennington, Vermont

To be used in conjunction with all applicable sections of the Tri-S Programs and Procedures.

A. Site Description

Location: Pauls Fish Fry, Depot Road, Bennington, VT (see map in file)

Special Hazards: Concrete culvert below surface covering Dewey Brook

See Section F, Major Contaminants, and Section G, Health and Safety Risks.

B. Objectives

General Summary: Four underground storage tanks are scheduled to be pulled at this site. Tanks will be purged of any substance then excavated and disposed of in Connecticut as per Vermont and Connecticut's established criteria. All soil will be screened for contamination and segregated corresponding to their degree of contamination. Any contaminated soil will be transported off site for disposal. If contamination is severe and it is deemed necessary the following additional tasks will be proposed:

1. The installation of a number of sufficient monitor wells to determine the direction of groundwater flow and define the extent of dissolved hydrocarbons in the groundwater.
2. Sampling of monitor wells as well as surface water and sediment from Dewey Brook sampling as per EPA Method 8020.
3. Evaluation of site assessment study to determine the potential of contamination impacting sensitive receptors in the area of the site.
4. Interpretation of results from the site assessment for conclusions and recommendations pertaining to remedial action possibilities or monitoring continuation.

C. On-Site Organization

Project Team Leader/Tri-S Supervisor: David Gagnon

Site Health & Safety Officer: Paul Miller

Site Representative of Owner: Mr. Calvin Jones, Senior Hydrogeologist
(908) 750-6592 Mr. Robert Spedding, Hydrogeologist

State DEC Officer: Ms. Lynda Wedderspoon (802) 244-8702

Health and Safety Plan

Other State Representatives: n/a

US EPA Representative: n/a

Other Federal Agency Representatives: n/a

Local Agency Representatives: n/a

D. Emergency Telephone Numbers

Local Police: (802) 442-5464

Local Fire: (802) 442-5555

Local Ambulance: (802) 442-5464

Tri-S Response: (203) 875-2110

State DEC Spills Division: (802) 244-8702

State DEC Hazardous Waste Division: (802) 244-8702

US EPA Region 1: (617) 860-4300

US EPA Hotline (24 hours): (617) 223-7265

National Response Center: 1 (800) 424-8802

Chemtrec: 1 (800) 424-9300

Local Poison Information Center: (802) 658-3456

State Police: (802) 442-5421

Mayor's Office: Town Manager (802) 442-1037

Local Hospitals: Southwestern Vermont Medical Center (802) 442-6361
Hospital Drive, Bennington, VT

Other Hospitals in Region: n/a

Health and Safety Plan

Directions to Hospital: Head west on Rt 9 (Main St). Left on Dewey St. Right on Hospital Drive. Follow street to hospital.

E. Pertinent Site History

Site contains 4 - 4,000 gallon gasoline storage tanks (UST) which are suspected to be leaking. This site was previously a Hess gas station.

F. Major Contaminants Gasoline

G. Health & Safety Risks

The only known or suspected contaminant at this site is gasoline in both the soils and groundwater. Gasoline, primarily used as a fuel for automobiles, is highly flammable and moderately explosive when exposed to heat or flame, and can react vigorously with oxidizing materials. Only foam, CO₂, or dry chemical should be used to fight a gasoline fire.

Symptoms following exposure include the following: prolonged or repeated dermal exposure causes dermatitis and can cause blistering of the skin; oral routes, including inhalation, causes central nervous system depression; severe pneumonitis will result from pulmonary aspiration of gasoline; brief inhalation of high concentrations can cause hyperemia of the conjunctiva and other disorders of the eyes. Should levels of gasoline vapors reach sufficient levels, the vapors will act as an asphyxiant. According to some sources, addiction to gasoline vapors has been noted.

Action Levels: Ambient levels of total organic vapors will be monitored by the Tri-S Health and Safety Officer with a Thermo Environmental Model 508 Organic Vapor Meter capable of detecting organic vapors to 0.1 ppm and measured at the breathing zone. Any detectable levels above 10 ppm will require that Level C protection be utilized.

H. Tri-S Employee Training Assignments

Refer to Tri-S Employee Training Program

Health and Safety Plan

I. Equipment Assignment and Levels of Protection

All personnel will be assigned Level C protection including a half-face respirator with a North 7500-2 yellow organic cartridge should it be required on site. Level D protection will be utilized throughout all drilling operations or when there is potential for exposure to gasoline on site. All Tri-S field personnel have been trained to use Level C protection and will be provided the appropriate equipment. The level of personal protection will be determined by the on-site Tri-S Health and Safety Officer in accordance with Section G, Health and Safety Risks, above.

J. Medical Surveillance

Refer to Medical Surveillance segment of the Tri-S Health and Safety Plan

K. Air Monitoring

Ambient air will be monitored at breathing level with an organic vapor meter (Thermo Environmental Model 508) capable of reading total organic vapors as low as 0.5 ppm.

See Section G for specific air monitoring procedures.

L. Site Control and Security

Only personnel as designated by the Tri-S Health and Safety Officer will be allowed in the work zone. The work Zone will be identified by barricade tape and appropriate signage. An access walkway will be provided through the barricade tape.

M. Decontamination Procedures

Drill rig and augers will be steam-cleaned before and after each soil boring. All wells will be completed and cemented in place at completion of each boring. Any disposable personal protection equipment will be packaged for proper disposal.

N. Site Standard Operating Procedures

All personnel will utilize appropriate and prudent actions during all phases of work.

Health and Safety Plan

O. Contingency Plan

See Tri-S Contingency Plan