



December 3, 1996

Messrs. William and Albert Mitroff
22 Autumn Street
Springfield, Vermont 05156

Re: UST Investigation
DH 4160071 962051

DEC 11 11 00 AM '96

Gentlemen:

On November 20, 1996, we were at your residence to perform the site work as outlined in the November 4, 1996 letter from David Deane, and as verbally approved by Andrew Shively of the Vermont Sites Management Section on November 19, 1996.

The top of the tank was uncovered and the connections were better viewed. This also allowed verification that the tank is spherical. We determined that a large stone laying on the vent pipe was the most likely reason that the pipe had broken. The vent line did have a whistle in it, but because of the break, the whistle is inoperable. A piece of tubing that can be seen extending into the tank is a part of the whistle. Springfield Plumbing and Heating Co., (SPH) arrived and verified that a portion of the nipple from the vent pipe had broken and was still in the tank fitting. SPH believed that this connection can be repaired. The fill pipe connection appears to be intact, as does the copper distribution line connection.

A series of eight (8) hand auger borings were installed to obtain soil samples in the vicinity of the tank. The number and locations were limited somewhat by stones. No groundwater was encountered. Refer to the attached plan and section sketches for the locations, depths and orientations of these sampling locations. The results of the PID screening are summarized in the attached table.

The PID screening results indicate that petroleum contamination in the soil is limited to the area immediately adjacent to the tank. The only PID readings of significance were observed in TP-1 and TP-6S. It appears that oil leaking out of the broken vent line has flowed down the sides of the of the tank, contaminating soil as deep as eight feet in the area of TP-1. The highest reading was observed in TP-6S which was drilled at an angle beneath the tank. The 188 ppm reading was observed just beneath the widest section of the tank. Deeper samples from TP-6S, did not indicate that the soil beneath the tank is significantly contaminated. These results also serve as a limited verification of the integrity of the tank.

Potential receptors in the vicinity could be private water supplies or basements of adjacent structures. We have verified through the Springfield Department of Public works that all residences in the vicinity except 26 Autumn Street are on the

Corporate Headquarters:
North Springfield, Vermont

Area Offices:
Greenfield, Massachusetts
Westford, Massachusetts
Portland, Maine

Manchester, New Hampshire
Montpelier, Vermont
Port Charlotte, Florida
Naples, Florida

Albert and William Mitroff

December 3, 1996

Page 2

municipal water supply. A copy of a map of the vicinity showing water mains is attached. 26 Autumn is several hundred feet to the south, and about seventy feet higher. The location, type and depth of the assumed well at that residence has not been verified. The closest basement space is the immediately adjacent Mitroff residence. The house has a poured concrete foundation, and the garage, which is less than five feet from the tank, has a concrete block wall. No evidence of petroleum vapors has been reported in the house, and there has been no evidence of oil seeping through the concrete block wall near the tank, although parts of this wall can not be easily observed. The closest downgradient residence is several hundred feet away, and based on the sampling results, is very unlikely to be affected.

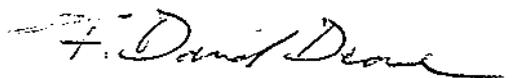
We conclude that the volume of soil affected by the vent line leak is limited to up to five (5) cubic yards in the area immediately adjacent to the tank. The contamination does not appear to extend beneath the tank, but is as deep as eight feet beside the tank. Removal of all of the contaminated soil would be difficult without removal of the tank. There is no evidence to suggest that the tank itself is leaking. There is also no evidence of a significant risk to potential receptors, due to the limited extent of the contamination, and the presence of the public water supply.

The most prudent immediate course of action would seem to be to repair the vent line, including installation of an appropriate vent whistle. This would allow continued use of the tank over the upcoming winter, and time to decide about tank removal. As we, and no doubt others, have discussed with you, the soil contamination, and the presence of an underground tank would likely be viewed as an undesirable feature of the property, regardless of whether the Sites Management Section requires further action.

We are submitting a copy of this report, on your behalf, to Mr. Shively at the Sites Management Section and look forward to his comments.

Very truly yours,

DUFRESNE-HENRY, INC.


Oscar D. Garcia *for*
Environmental Services Division

ODG/FDD/dim

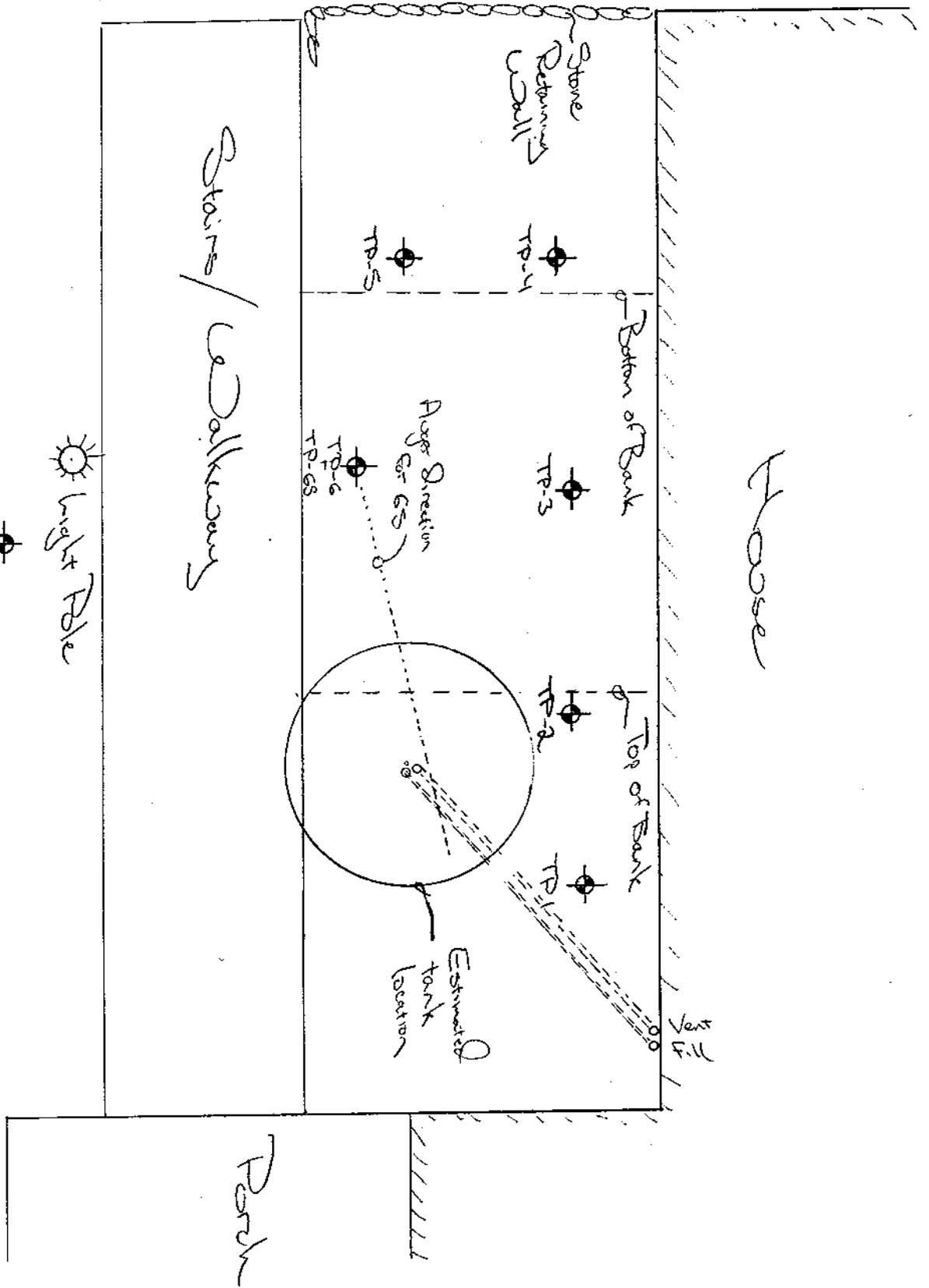
Enclosures

cc Andrew Shively - Sites Management Section

MITT1203.WP

DUFRESNE-HENRY, INC.

PREPARED BY ODG DATE 11-20-96 PROJECT NO. _____
CALCULATIONS CHECKED BY _____ DATE _____ SHEET NO. _____ OF _____
ASSUMPTIONS / METHODS CHECKED BY _____ DATE _____
SUBJECT Wastoff



Plan
Scale 1" = 3'

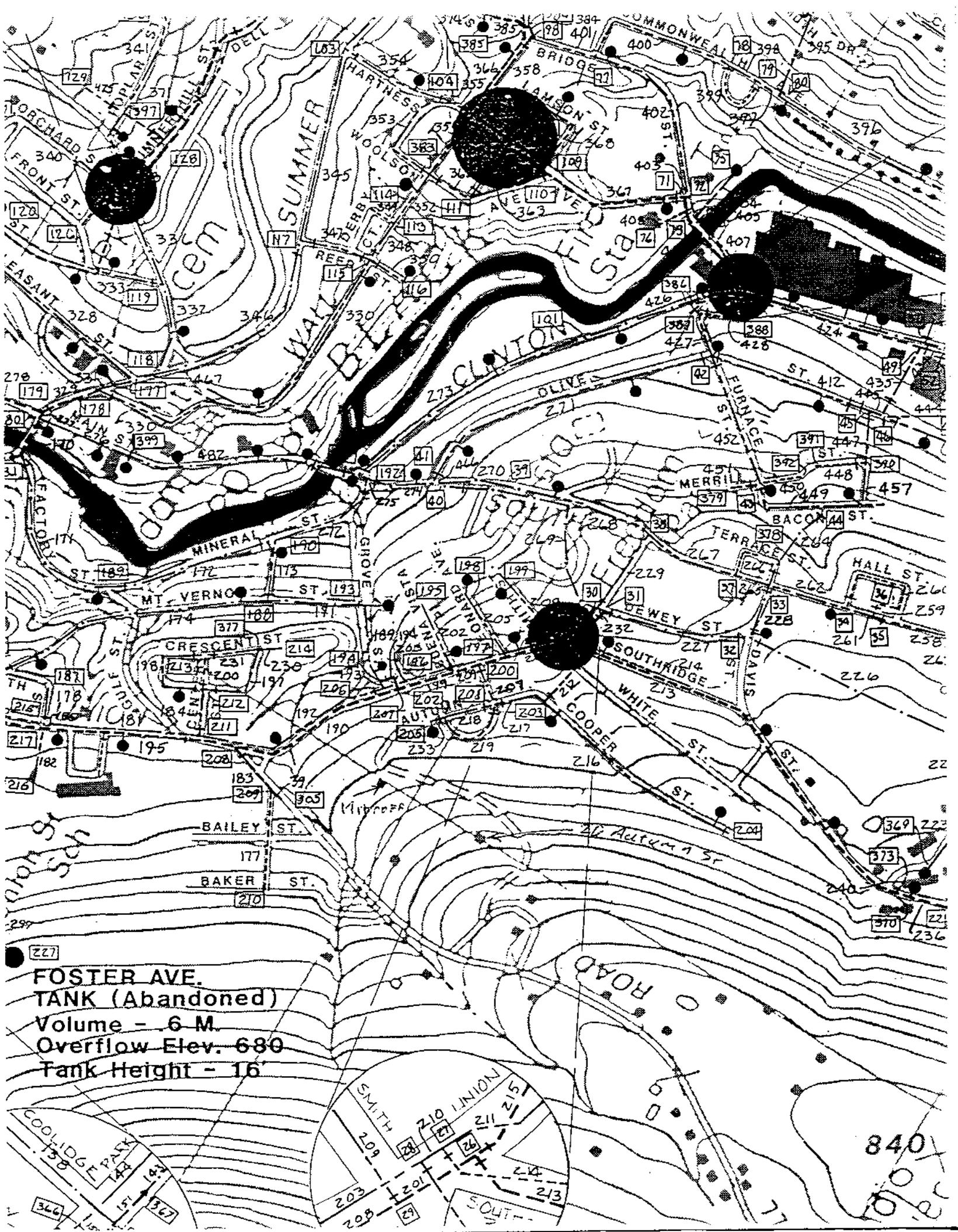
Light Pole
TP-7

SUMMARY OF SOIL PID READINGS
MITROFF RESIDENCE
22 AUTUMN STREET – SPRINGFIELD, VERMONT
PETROLUUM CONTAMINATION ASSESSMENT

Location	Depth (ft)	PID Reading (ppm)
TP-1	2.5	12.8
	4	3.9
	6	25.2
	8	21.6
	10	6.7
TP-2	2.5	2.2
TP-3	2.8	3
	4.5	2.3
	6	2.3
TP-4	3.5	2.6
	4.5	8.9
TP-5	2	2.1
	4	2.8
TP-6	3.5	2.2
	4.5	2.2
	6.5	2.6
	7	2.6
TP-6S	4.5	188
	6.5	8.1
	7.5	7
TP-7	2.5	2.9
	4.5	3
	8	3.9

Samples obtained with a stainless steel bucket auger.

PID screening was by polybag headspace method with a Photovac HL-2000 calibrated with 100 ppm isobutylene.



227
FOSTER AVE.
TANK (Abandoned)
Volume - 6 M.
Overflow Elev. 680
Tank Height - 16'

840