



May 17, 1999

Chuck Schwer
Waste Management Division
Sites Management Section
103 S Main St./West Building
Waterbury, VT 05676-0404

MAY 19 12 45 PM '99

Re: Wyeth Nutritionals and Vermont Whey
SMS Site # 98-2575 and 98-2541
DH 6584009.03 and 6584009.02

Dear Mr. Schwer:

Enclosed are copies of our Site Investigations for the subject properties. No petroleum contamination of significance were found at either site. We recommend that both of these sites be considered for SMAC designation.

Please feel free to write, call or e-mail your comments.

Very truly yours,

DUFRESNE-HENRY, INC.

F. David Deane, P.E.
Environmental Services

FDD/dim

Enclosures

cc G. William Edder
Harry J. Yekel, P.E.
Alec Tuscany w/o Enclosures

WNI/VWISITran051799

Phase (check one)	Type (check one)
<input checked="" type="checkbox"/> Initial Site Investigation <input type="checkbox"/> Corrective Action Feasibility Investigation <input type="checkbox"/> Corrective Action Plan <input type="checkbox"/> Corrective Action Summary Report <input type="checkbox"/> Operations & Monitoring Report	<input type="checkbox"/> Work Scope <input checked="" type="checkbox"/> Technical Report <input type="checkbox"/> PCF Reimbursement Request <input type="checkbox"/> General Correspondence

SITE INVESTIGATION

**Wyeth Nutritionals, Inc.
Georgia, VT 05468**

SMS Site #98-2575

**A Facility Owned By:
Wyeth Nutritionals, Inc.
P.O. Box 2109
Georgia, VT 05468
(802) 527 - 7737
Contact: G. William Edder**

**Prepared By:
Dufresne-Henry, Inc.
Precision Park
North Springfield, VT 05150
(802) 886-2261
Contact: F. David Deane, P.E.**

May 13, 1999

WASTE INVESTIGATION
MAY 19 12 45 PM '99

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EXECUTIVE SUMMARY

A Site Investigation has been completed at Wyeth Nutritionals, Inc. in Georgia, Vermont. The investigation was in response to the discovery of petroleum contamination during a UST upgrade. PID readings up to 700 ppm were observed. The contamination is attributed to a spill in 1995 and/or leaks in the old product piping.

Four shallow groundwater monitoring wells were installed on the site in March 1999. The wells were installed in and around the area of the spill and the observed contamination. Both soil and water samples from each of the borings were analyzed by EPA Methods 8021B and 8100(mod). No compounds above detection limits were found in either medium.

Soils on the site are silty sand and sandy silt. The permeability of the soil is likely to be relatively low. Bedrock was not encountered in any of the borings to a depth of 30 feet. Based on a single round of sounding, the direction of groundwater flow is to the southeast.

All of the tenants in the industrial park are on the municipal water supply system. There are a limited number of private residences within a half mile of the site. The nearest are separated from the site by a stream. The nearest surface water is Deer Brook located several hundred feet to the south. No odors have been reported in the Wyeth Nutritionals Maintenance and Utilities Building. Vapor impacts to off site structures is very unlikely.

Based on these findings, the site does not meet the SMS criteria for corrective actions. It is our opinion that additional investigation is not necessary to further characterize conditions at this site relative to petroleum contamination associated with the USTs. The stockpiled soils

from the adjacent Vermont Whey, Inc site should remain polyencapsulated at their present location and be monitored annually until evidence of petroleum contamination no longer is present. At that time the site can be considered for Site Management Activity Completed (SMAC) designation.

**SITE INVESTIGATION
WYETH NUTRITIONALS, INC.
GEORGIA, VERMONT**

Introduction

Wyeth Nutritionals, Inc. is located in the Georgia Dairy Industrial Park off of No. 31 Industrial Park Road in Georgia, Vermont. A site location map is included as Appendix A.

Dufresne-Henry, Inc. provided site monitoring and inspection services for upgrading two (2) 40,000 gallon, fiberglass, #2 heating oil tanks. The work involved installation of new double-wall flexible fuel piping, containment sumps, spill containment, release detection, and relocation of the existing pumps. The oil is used as a backup energy source for the facility boilers. Evidence of soil contamination above the reporting threshold was found under the old piping.

The Sites Management Section (SMS) requested in a letter dated February 23, 1999, that a Site Investigation be conducted. Wyeth Nutritionals, Inc. retained Dufresne-Henry to do the work in February 1999.

Work and Health and Safety Plans

A work plan to complete the investigation was forwarded to the SMS in March 1999. The work plan was approved via e-mail on March 22, 1999, with the stipulation that four (4) monitoring wells be installed, rather than the two (2) originally proposed. Dufresne-Henry prepared a Health and Safety Plan for the proposed activities at the site. Copies of these

documents will be found in Appendix B. The remainder of this report describes the on-site activities and subsequent findings of the investigation.

Site Description

Wyeth Nutritionals is located in the Georgia Dairy Industrial Park in Georgia, Vermont. The facility consists of several large buildings, various storage tanks, treatment lagoons, paved roads and parking, and undeveloped land. The property is served by the municipal water supply system, and an on-site wastewater disposal system. The site is quite flat, with a slight slope to the south and west. The site is bordered by Town Highway #31 to the north; Vermont Whey Company and undeveloped land to the east; and the industrial park access road and developed and undeveloped land to the south and west. A site plan is included as Appendix C.

The two 40,000 gallon #2 heating oil tanks are located just south of the maintenance and utilities building at the south end of the complex. The tanks are oriented east-west. The distribution piping goes north from the tanks, and under a paved road before entering the building. The tanks and original piping were installed in 1982. There are no other known UST's on the site.

Site History

The history of the site is incompletely known. The plant has occupied the site since at least the early 1980's. The two 40,000 gallon UST's were installed in 1982. It is our understanding that a reportable release of #2 oil occurred in 1998. It is our further understanding that approximately ^{80,000} ~~three feet~~ of soil was excavated from the area of the spill as a corrective action.

No documentation of this activity was reviewed. ^{excavated on 6/2/97}

6/2/97 - SEM report



The Fourth Quarter 1998 Update (January 19, 1999) Vermont Hazardous Waste Sites List maintained by the Hazardous Materials Management Division (HMMD) contains four other sites in Georgia. One of the sites is within a one-half mile radius of the subject property. The Vermont Whey Company site (SMS #98-2541) directly abuts the subject property to the east, but is judged unlikely to have an impact on it.

Previous Investigations

No record of previous investigations was disclosed, other than the September 1998 upgrade work. During that work headspace soil samples from the excavations produced PID readings up to 700 ppm to depths of six feet. All contaminated soil was backfilled. Site monitoring documentation from the work is included as Appendix D.

Monitoring Well Installation

Four shallow groundwater monitoring wells were installed on March 25 - 26, 1999 by Green Mountain Boring of East Barre, Vermont. All borings and well installations were under the field observation of Dufresne-Henry personnel. The wells are designated MW-1 through MW-4. Well MW-1 is located northwest of the west tank, MW-2 is located northeast of the east tank, MW-3 is located near the southwest corner of the maintenance building, and MW-4 is located south of the tanks. The locations of all the wells were significantly influenced by underground utilities including the tanks and appurtenances, gas mains and service lines, the main electric service to the building, a water main, and overhead power lines. The boring locations are noted on the site plan in Appendix C. Logs of the borings and daily inspection reports are included as Appendix E.

CURRENT LOCATION
OF MW-4?

During boring advancement split spoon soil samples were taken at various intervals as determined by the Dufresne-Henry inspector. In MW-1 continuous sampling was performed starting at four feet. In MW-2 continuous sampling was done between four feet and ten feet, with sampling at five foot intervals below ten feet. In MW-3 and MW-4 sampling was at five foot intervals starting at five feet. All soil samples were screened for the presence of Volatile Organic Compounds (VOC's) with a Photovac HL-2,000 photoionization detector (10.6 eV lamp, calibrated on-site with 99.1 ppm Isobutylene). The screening was done at ambient temperatures in the headspace of the sample jars.

No evidence of soil contamination by visual or olfactory sense was observed at any boring. Peak PID readings ranged from 0.0 ppm to 2.8 ppm in MW-1; from 1.3 ppm to 3.6 ppm in MW-2; from 0.9 ppm to 2.8 ppm in MW-3; and from 0.0 ppm to 1.7 ppm in MW-4. Total boring depth was 25 feet in MW-2, and 30 feet at the other locations. Refusal was not encountered at any location. The water table at all borings was encountered between 19 feet and 20 feet.

Two-inch diameter PVC monitoring wells were installed in each of the borings. Each well was constructed from .010 inch machine slotted screen. The screened interval is ten feet in each well. The bottom of the wells is at 25 feet in MW-1, and at 30 feet in the other borings. Each well was backfilled with clean silica sand to a point above the screen and a bentonite seal installed between three feet and four feet. Wells MW-1, MW-2, and MW-3 were protected at the ground surface by grouting in watertight cast iron monitoring well boxes. A well box was unavailable for MW-4 at the time of the work. The wells were developed by repeated bailing.

Soil Sampling

Analytical soil samples were collected from each of the borings. The sample from MW-1 was from the 18 -20 foot split spoon, the sample from MW-2 was from the 8-10 foot spoon, the sample from MW-3 was from the 10-12 foot spoon, and the sample from MW-4 was from the 15-17 foot spoon. The samples were kept refrigerated prior to being shipped via overnight carrier to Eastern Analytical, Inc. of Concord, New Hampshire on March 29, 1999. All samples were analyzed for VOC's by EPA Method 8021B and for Total Petroleum Hydrocarbons (TPH) by EPA Method 8100(mod). The analyses found no compounds above detection limits at any location. A copy of the analytical report is included as Appendix F.

Monitoring Well Sampling

The four Dufresne-Henry monitoring wells were sampled on April 8, 1999. The sampling was performed by Dufresne-Henry personnel. Three well volumes were purged from each well prior to drawing a sample. No sheens were observed in any of the monitoring wells. The refrigerated samples were shipped to Eastern Analytical, Inc. on April 8, 1999 via overnight carrier. The samples were analyzed for VOC's by EPA Method 8021B and for TPH by EPA Method 8100(mod). No compounds above detection limits were found at any location. A copy of the contract laboratory analytical report is included as Appendix G.

Site Geology

Published surficial geology indicates the site is near the contact of an area of pebbly marine sand, and lake bottom sediments consisting of silt, silty clay, and/or clay containing ice rafted boulders. The deposits are associated with Lake Vermont, formed at the close of the Pleistocene

3 UPCA/ADIA,
1 [unclear]

glaciation. The SCS soil survey for Franklin County maps the soil as Windsor loamy fine sand. The test borings generally corroborate the soils as lake bottom sediments. The soils are very fine grained, alternating between silty very fine sand, and sandy silt. Stone content is virtually nonexistent, with only several apparently ice rafted pebbles observed. No evidence of filling was observed.

Published mapping indicates bedrock on the site is likely to be Dunham Dolomite. Dunham Dolomite is generally described as pink and cream to buff siliceous dolomite. The contact with the Cheshire Quartzite is a short distance to the east. The contact is a fault line. The age of both rocks is Lower Cambrian. Some fracturing of the rock is likely. No bedrock outcrops were observed in the immediate vicinity.

Site Hydrogeology

At the time the monitoring wells were sampled on April 8, 1999, the depth to the water table at the Dufresne-Henry monitoring wells ranged from 21.3 feet to 23.2 feet. Based on this single sounding, the direction of groundwater flow is to the southeast. The gradient is relatively shallow at approximately 1.06%. A site plan showing the groundwater contours as of April 8, 1999 is included as Appendix H.

Potential Receptors

The most recent USGS quadrangle (1997) shows less than a dozen structures within a half mile radius of the site. While the industrial park tenants are on the municipal water supply, it is not known whether these private residences are. The nearest houses are separated from the site by Deer Brook, which is the nearest surface water body and is located several hundred feet

south of the site. Deer Brook enters Arrowhead Mountain Lake approximately 3,000 feet downstream. No vapors have been reported in the Wyeth Maintenance Building which has a slab on grade foundation. Given the extent of contamination, and the distances to them, vapor impacts to off site buildings are quite unlikely. The trench excavation has been backfilled and paved with bituminous concrete, which is sufficient to prevent dermal contact with near surface soil.

Summary and Recommendations

Wyeth Nutritionals has occupied the site since at least the early 1980's. In addition to Wyeth Nutritionals, the industrial park is occupied by Vermont Whey and one other business. ^{WATO?} One lot is currently being cleared for an additional tenant on the opposite side of the access road directly west of the site.

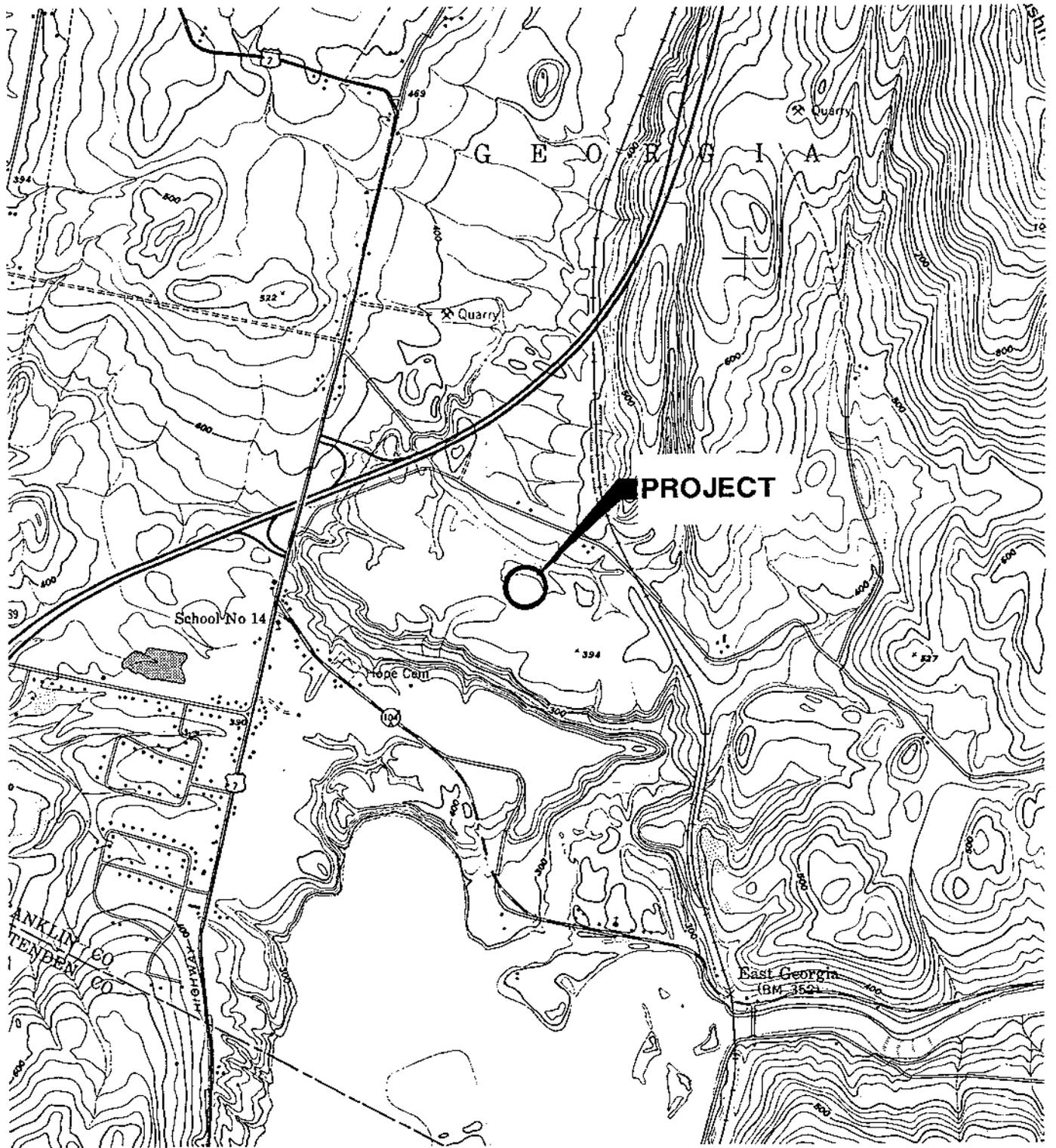
Four shallow groundwater monitoring wells were installed in March 1999. No evidence of contamination was observed at any location. One soil sample was collected from each of the borings. The monitoring wells were sampled once. Both sets of samples were analyzed for VOC's by EPA Method 8021B and for TPH by EPA Method 8100(mod). Neither the soil nor the groundwater analyses found compounds above method detection limits. Based on one round of sounding, the direction of groundwater flow is to the southeast.

All of the properties in the industrial park vicinity are connected to the municipal water supply system. The nearest surface water is Deer Brook located several hundred feet to the south. No vapors have been reported in the Wyeth Nutritionals Maintenance Building.

NO₂ RELEAK
UBIS?
How many scotch filters?
WELL DRILLER FEELINGS?

Migration of vapors to off site buildings is very unlikely given the extent of the contamination and the distance to those structures. There are no other UST's known to exist on the site.

Based on these findings, the site does not meet the SMS criteria for corrective actions. It is our opinion that additional investigation is not necessary to further characterize conditions at this site relative to petroleum contamination associated with the USTs. The stockpiled soils from the adjacent Vermont Whey, Inc. site should remain polyencapsulated at their present location and be monitored annually until evidence of petroleum contamination no longer is present. At that time the site can be considered for Site Management Activity Completed (SMAC) designation.



SCALE
1:25,000

TAKEN FROM A QUADRANGLE MAP FOR MILTON, VT
PHOTOREVISED 1972



GEORGIA,

SITE LOCATION PLAN
WYETH NUTRITIONAL

VERMONT

Project No.	6584009.03
Proj. Mgr.	F.D.D.
Scale	1:25,000
Date	APR. 1999
	A

APPENDIX B

**SITE INVESTIGATION REQUEST, WORK
PLAN,
HEALTH AND SAFETY PLAN**

Waste Management Division
103 South Main Street/West Office
Waterbury, Vermont 05671-0404
(802) 241-3888
FAX (802) 241-3296

February 23, 1999

Mr. William Edder
Wyeth Nutritionals
P.O. Box 2109
Georgia, Vermont 05468-2109

RE: Petroleum Contamination at Wyeth Nutritionals
Georgia, Vermont
SMS Site # 98-2575

Dear Mr. Edder:

The Sites Management Section (SMS) has received the Underground Storage Tank (UST) closure report which outlines the subsurface conditions for the above referenced site. The fieldwork was conducted by Dufresne-Henry, Inc. on November 16, 1998. The report is dated January 12, 1999 and summarizes the degree and extent of contamination encountered. The USTs removed include:

- UST #1 - 2,000 gallon No.2 fuel oil UST

During the site activities, screened soils had concentrations up to 700 parts per million (ppm) as measured by a photoionization detector (PID). The peak PID readings were measured at depths of 6 feet below ground surface (fbgs) in the excavation. The limits of soil contamination were not defined. All soil was used for backfill at the conclusion of the UST removal program.

Site soils consisted of sand and silt. Groundwater was not encountered at a (maximum) depth of approximately 6 fbgs.

The Wyeth Nutritionals was not reported to have been inspected for sensitive receptors. The possible receptors potentially affected include groundwater, basements of adjacent buildings, nearby surface water, and public or private drinking water wells.

Based on the report information, the SMS has determined additional work is necessary to determine the severity of contamination. Due to possible contamination to nearby receptors, the SMS requests that Wyeth Nutritionals retain the services of a qualified environmental consultant to perform the following:

- Further define the degree and extent of contamination to the soil.
- If appropriate, determine if the airspace beneath the site and site adjacent building(s) (e.g. basements) has been impacted by the release using a PID. Wall and floor construction and susceptibility to vapor migration should be noted. PID measurements should be made in cracks and/or joints likely impacted. If the airspace has been impacted, SMS requests confirmatory sampling and laboratory analyses be performed using EPA Method TO-2.
- Determine the degree and extent of contamination, if any, to groundwater. A sufficient number of monitoring sites should be installed to adequately define the severity of site contamination. Analyze groundwater samples for BTEX and TPH. At sites proximal to water supply sources, determine the hydrologic relationship of the contaminated area to the water supply source. Pumping influences should be

considered in the evaluation.

- Assess the potential for contaminant impact on sensitive receptors. Base this update on all available information and include basements of adjacent buildings, nearby surface water, any proximal drinking water sources, wetlands, sensitive ecologic areas, outdoor or indoor air, sewers, or utility corridors. Sample and analyze any at-risk water supplies for BTEX and TPH compounds.
- Determine the need for long-term treatment and/or monitoring that addresses groundwater contamination.
- Submit a summary report that outlines the work performed, as well as provides conclusions and recommendations. As appropriate include analytical data; a site map showing the location of any potential sensitive receptors, stockpiled soils and monitoring or sample locations; an area map; detailed well logs; and a groundwater contour map.
- With the Workplan or Expressway form, please submit a site location map at an approximate scale of 1:24000 showing the location of the site. Please include a scale, a north arrow, the SMS site number, and a citation of the source map. The purpose of this map is to enable the SMS to enter the site location into a Geographical Information Systems database.

Please have your consultant submit a preliminary work plan and cost estimate or a site investigation expressway notification form within fifteen days of your receipt of this letter, so it may be approved prior to the initiation of onsite work. Enclosed please find a list of consultants who perform this type of work as well as the brochure "*Selecting Your UST Cleanup Contractor*," which will help you in choosing an environmental consultant.

Based on current information, the underground storage tanks at Wyeth Nutritionals are eligible for participation in the Petroleum Cleanup Fund (PCF). You must provide written proof to the SMS that you hold no other applicable insurance in order to receive reimbursement from the PCF. The owner or permittee must pay for the removal and/or repair of the failed tank(s), and for the initial \$10,000.00 of the cleanup. The fund will reimburse the tank owner or permittee for additional eligible cleanup costs of up to \$1 million. All expenditures must be pre-approved by the Agency or performed in accordance with the "*Site Investigation Guidance*" expressway program. Please refer to the enclosed guidance document titled, "*Procedures for Reimbursement from the Petroleum Cleanup Fund*" for additional information concerning the PCF.

The Secretary of the Agency of Natural Resources reserves the right to seek cost recovery of fund monies spent at the Wyeth Nutritionals site if the Secretary concludes that Wyeth Nutritionals is in significant violation of the Vermont Underground Storage Tank Regulations or the Underground Storage Tank statute (10 V.S.A., Chapter 59).

We realize this may be a lot to absorb and respond to. We are here to help make this process as effective and uncomplicated as possible. Please review the enclosed documents and call me with any questions you may have. I can be reached at (802) 241-3876.

Sincerely,

Chuck Schwer, Supervisor
Sites Management Section

Enclosures (3)

cc: Georgia Selectboard w/o enclosure
Georgia Health Officer w/o enclosure
DEC Regional Office w/o enclosure (transmitted electronically) ✓
Dave Deane, Dufresne-Henry, Inc. w/o enclosure (transmitted electronically) ✓

CS:rgb
A:\WyethLtrfrom SMS.wpd

Proposed Work Plan
Site Investigation

WYETH NUTRITIONALS, INC.
GEORGIA, VERMONT

This work plan outlines the tasks to be completed for a Site Investigation at the Wyeth Nutritionals plant in Georgia, Vermont. Evidence of soil contamination was discovered during the replacement of product piping between two 40,000 gallon oil UST's and the factory. PID readings up to 700 ppm were observed in the headspace of soil samples from depths to 6 feet. Neither bedrock nor the water table was encountered to that depth. The SMS requested that a Site Investigation be conducted in a letter dated February 23, 1999. The letter noted that a 2,000 gallon #2 oil UST was removed. This was not the case. The SMS is currently aware of the discrepancy.

The purpose of the investigation is to determine the existence and extent of subsurface petroleum contamination at the site. The proposed monitoring wells will be used to help ascertain the vertical extent of a contamination plume and provide basic hydrogeologic data. At this time it is proposed that four (4) test borings be completed. Each of the borings will be completed as monitoring wells. Two (2) of the borings will be arrayed on either side of the UST's, covering the area of the petroleum spill. One of the borings will be installed in the vicinity of the building on the north side of the tanks. The final boring location will be a decision of the Dufresne-Henry inspector, in conjunction with Wyeth management, and be based on property lines, utilities, and other site considerations. An attempt will be made to locate the boring south of the tanks. All field personnel are OSHA certified for hazardous site operations under 29 CFR part 1910.120.

BORINGS

It is anticipated that the borings will be completed using 4 1/4" hollow stem augers. If possible, the monitoring well boring will be taken a minimum of five (5) feet into the prevailing water table. It is anticipated that well depth will not exceed 40 feet. Petroleum based pipe dope for use on drill rods, tools, or casing will not be allowed. No type of drilling mud, including polymers, will be used. Should flowing sands be encountered, clean water obtained locally will be used to increase hydraulic head. If flowing sands are particularly problematic, casing will be used. All borings and monitoring well installation will be performed by Green Mountain Boring of Barre, Vermont under the field observation of Dufresne-Henry personnel.

SOIL SAMPLING

It is anticipated that continuous split spoon soil samples will be taken in the borings near the UST's. The sampling frequency at the other locations will be a field decision of the Dufresne-Henry inspector. The split spoon sampler allows retrieval of relatively undisturbed soil samples from a known depth for classification and Volatile Organic Compound (VOC) screening.

All soil samples and material from the auger flights will be screened for VOC's by headspace analysis with a Photovac HL-2000 photoionization detector (10.6 eV lamp, calibrated with Isobutylene). The act of driving the sampler (Standard Penetration Test) also gives an indication of the density or degree of compaction of the soil. Representative samples from each spoon will be placed in glass jars and retained by Dufresne-Henry. These are for project records only and are not intended for chemical analysis. Detailed logs of geology, drilling data, PID readings, and monitoring well installation will be prepared for each boring. At this time it is anticipated that one analytical soil sample will be collected from each boring below the apparent zone of contamination. Each sample will be analyzed for VOC's by EPA Method 8021B (including Trimethylbenzenes) and for TPH by EPA Method 8100(mod). The analyses will be done by Eastern Analytical, Inc. of Concord, New Hampshire.

MONITORING WELL

The monitoring wells will be constructed from 2", 0.010" machine slotted, threaded, flush joint, Schedule 40 PVC. Assuming no refusal, the wells will consist of 10' to 15' of screen with sufficient riser to reach approximately 2" below the surface grade. The bottom of the well will be set such that approximately 5 feet of screen extends below the water table observed at the time of installation. The bottom of the well will be provided with a PVC cap or point, or a plug with an expanding gasket. The annular space between the auger and the screen will be carefully backfilled with clean silica sand to create a filter pack around the well. The filter pack will extend from the bottom of the well to approximately 2 feet above the screen. A bentonite seal will be installed above the filter pack, and the remainder of the hole will be backfilled with native soil. A protective monitoring well box will be grouted in flush at the surface or a stick-up steel casing installed depending on the location. The well will have a removable top cap for sampling and sounding. The well will be developed by surging, and by pumping or bailing. Evacuated water will be drummed on site.

DECONTAMINATION

The borings may, or may not, be completed within the zone of contamination. However, to prevent cross contamination between the borings, strict decontamination procedures will be followed. All in-ground tools and equipment will be decontaminated by steam cleaning prior to the start of work and between borings. All decontamination will be done on-site at a designated location. Routine cleaning of equipment, such as split spoons, will use water obtained at the site and a product such as ALCONOX. Spent cleaning solution will be drummed on the site. Excess contaminated soil will be also drummed on site.

WATER SAMPLING

Water quality samples will be obtained from the monitoring wells following a period of stabilization. The sample will be taken by Dufresne-Henry personnel. The samples will be

obtained with a disposable bailer which will be left in each well to facilitate future sampling. Samples may not be obtained if free product is present. The samples will be analyzed for VOC's by EPA Method 8021B (including Trimethylbenzenes) and for TPH by EPA Method 8100(mod). The analyses will be done by Eastern Analytical, Inc. of Concord, New Hampshire.

SITE SURVEY

The relative locations and elevations of the test boring and monitoring well will be determined. Sufficient additional surveying will be performed to update any existing site plan or prepare a new site plan.

RECEPTOR ASSESSMENT

A receptor assessment will be conducted to identify potential receptors including nearby water supply wells and surface water. The basements of nearby buildings, if any, will be screened with the PID as deemed necessary.

REPORTING

A report will be prepared summarizing the findings and recommendations of the investigation including the monitoring well installation, groundwater quality and overall characterization of shallow subsurface conditions, and the likely impacts on potential receptors. Conclusions and recommendations regarding the need for long term treatment and/or monitoring will be included. The report will be submitted within 30 days of the monitoring well installation.

A summary breakdown of estimated costs to complete the work will be found attached.

From: "Chuck Schwer" <CHUCKS@dec.anr.state.vt.us>
To: DDeane@d-hinc.com
Date sent: Mon, 22 Mar 1999 09:31:11 -0500
Subject: Re: 98-2575 / Wyeth Nutritionals - Georgia
Copies to: Chuck Schwer <chucks@dec>
Priority: normal

Dave - I can not approve of the Wyeth workplan at this time. Due to the size of the tanks (2 - 40,000 gallon USTs) and the degree of contamination measured during the piping replacement assessment, the SMS feels two monitoring wells is inadequate to fully characterize the degree and extent of the contamination. The remaining details of the workplan are acceptable. The SMS can approve of this workplan if it is modified to include four monitoring wells instead of two. Please let me know if you need any additional information.

Sincerely,

Chuck Schwer.

*Chuck Schwer
Sites Management Section
Waste Management Division
802-241-3876
email address: chucks@dec.anr.state.vt.us*

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PROJECT: VERMONT WHEY / WYETH NUTRITIONALS SITE INVESTIGATION
JOB NO.: 6584009.02 (VT WHEY) 6584009.03 (WYETH NUT.)

HEALTH AND SAFETY PLAN
FOR

SITE INVESTIGATION

VERMONT WHEY / WYETH NUTRITIONALS

GEORGIA, VERMONT

This Health and Safety Plan applies only to Dufresne-Henry, Inc. employees.

PROPOSED ON-SITE ACTIVITIES:

Vermont Whey - Completion of two (2) test borings, the installation of one (1) monitoring well, soil sampling, well development, decontamination, and groundwater sampling.

Wyeth Nutritionals - Completion of four (4) test borings, the installation of four (4) monitoring wells, soil sampling, well development, decontamination, and groundwater sampling.

PROPOSED DATE(S) OF WORK: Wells: March 24 - 26, 1999
Sampling: Week of March 29, 1999

ANTICIPATED WEATHER CONDITIONS: temperatures in the teens - 40's, possible snow or rain.

PROPOSED SITE INVESTIGATION TEAM:

<u>Personnel</u>	<u>Responsibilities</u>
F. David Deane	Project Manager
Bruce Cox	Site Safety Officer
Bruce Cox/Oscar Garcia	Field Team Leader (Monitoring Wells/Sampling)
William Edder	Site Representative
Chuck Schwer	ANR Representative

All Dufresne-Henry, Inc. personnel arriving or departing the Site should check in and out with the Site Safety Officer. All Dufresne-Henry activities on-Site must be cleared through the Field Team Leader or Project Manager.

Background Information

Site Status: Active Inactive Unknown

Site Description (Topography, on-site structures, vegetation, surrounding population, contaminated areas (if known))

Vermont Whey and Wyeth Nutritionals are both parts of the same company. The two plants are located across the street from each other.

Vermont Whey is located on Industrial Park Road. On-site utilities include underground water and sewer lines, underground and overhead power lines, underground gas lines, and underground stormwater piping. The depth to the water table is greater than 15'.

Wyeth Nutritionals is located on Industrial Park Road. On-site utilities include underground water and sewer lines, underground and overhead power lines, underground gas lines, and underground stormwater piping. The depth to the water table is greater than 15'.

Dig Safe was contacted on March 22, 1999. The sites are clear after 7:45 am on March 24, 1999. The Dig Safe number is 19991300303. Each company is responsible for the location of on-site utilities not covered by the Dig Safe service.

Site History:

The history of neither site is known at this time. Both have been on their respective sites for several years. One (1) fuel oil UST was removed at Vermont Whey in September 1998.

Monitoring or Sampling Data From Previous Site work:

A UST Closure Assessment was conducted at Vermont Whey between September 18 and 24, 1998. One (1) 30,000 gallon fuel oil UST was removed. Soil sample headspace readings up to 53 ppm were observed, as well as approximately 1/16" of free product.

Contaminated soil was encountered during the replacement of product piping between two 40,000 gallon oil UST's and the factory. PID readings up to 700 ppm were observed.

No other site investigations are known.

HAZARD REFERENCE

Waste Types:

Liquid Solid (soil) ___ Sludge Vapor ___ Unknown

Waste Characteristics:

___ Corrosive Ignitable ___ Radioactive
 Volatile ___ Toxic ___ Reactive
___ Unknown ___ Other ___ Persistent

Specific Substances of Greatest Concern (if known): fuel oil

Hazard Evaluation:

Task: Mon. Well Install. Low ___ Medium ___ High

Identification of Hazards: fuel oil

Task: Decontamination Low ___ Medium ___ High

Identification of Hazards: fuel oil

Task: Sampling Low ___ Medium ___ High

Identification of Hazards: fuel oil

Task: ___ Low ___ Medium ___ High

Identification of Hazards:

Other Physical Hazards: (weather, heavy equipment, site structures...)
Drill rig, traffic, weather.

PROJECT: VERMONT WHEY / WYETH NUTRITIONALS SITE INVESTIGATION
JOB NO.: 6584009.02 (VT WHEY) 6584009.03 (WYETH NUT.)

Hazard Assessment:

OVERALL HAZARD: ___ Serious ___ Moderate X Low ___ Unknown

On-Site Control

Site control is necessary to minimize potential exposure of workers to hazardous waste/materials, protect the public from the Site's chemical and physical hazards, and to facilitate work activity. The procedures to be followed involve the establishment of Site work zones, Site security, and safe work practices.

The on-Site staging area and support zone has been established at:

Vermont Whey - the paved parking area near the tank.

Wyeth Nutritionals -- the paved parking area near the tanks.

The personal contamination reduction zone (decon area) has been established at:

Vermont Whey - the paved parking area near the tank

Wyeth Nutrtrionals - the paved parking area near the tanks

During the intrusive work, the exclusion area will be defined as follows:

A 15 foot radius around the drill rig.

The decontamination of sampling and/or heavy equipment will be conducted:

Vermont Whey - To be coordinated with company management. Steam cleaning will be done in a drum or other container.

Wyeth Nutritionals - To be coordinated with company management. Steam cleaning will be done in a drum or other container.

These sub-regions of on-Site control have been established in order to reduce the potential cross contamination and proliferation of contamination by potentially contaminated equipment and personal protective equipment.

SITE ACTIVITIES

Required Personal Protective Equipment (PPE)

<u>Task</u>	<u>Entry Level of Protection</u>	<u>Monitoring Equipment</u>	<u>Upgrade/Downgrade Contingency</u>
Well Install.	Mod D	Photovac HL-2000 Explosimeter O ₂ meter H ₂ S meter	Upgrade to Level C with PID readings over 10 ppm for 5 minutes in breathing space.
Decon.	Mod D	"	"
Sampling	Mod D	"	"

Note: Breathing space PID readings of 50 ppm, explosimeter readings over 25% of the LEL, O₂ deficiency or enrichment, or H₂S readings will result in shutting down the job and consulting with State officials and the client.

Specific protective equipment for each level of protection is as follows:

Level C: Full Face Respirator w/appropriate cartridge (Willson T45)
Chemically Resistant Suit (Tyvek®)
Outer Rubber Slush Boots
Outer Chemically Resistant Gloves
Surgical Gloves
Hard Hat
Steel Toe/Shank Work Boots

Modified Level D: Chemically Resistant Suit (Tyvek®)
Outer Rubber Slush Boots
Outer Chemically Resistant Gloves
Surgical Gloves
Hard Hat
Steel Toe/Shank Work Boots
Safety Glasses or Face Shield

Level D: Work Clothes
Steel Toe/Shank Work Boots
Surgical Gloves
Hard Hat

Rationale for change in level of protection:

Upgrade to Level C with PID readings of 10 ppm or more for 5 minutes in the breathing space. PID readings over 50 ppm in the breathing space, explosimeter readings of over 25% of the LEL, O₂ deficiency or enrichment, or H₂S readings will result in shutting down the job and consulting with State officials and the client.

NO CHANGES TO THE SPECIFIED LEVELS OF PROTECTION SHALL BE MADE WITHOUT THE APPROVAL OF THE SITE SAFETY OFFICER OR PROJECT MANAGER.

Monitoring Procedures

Site Monitoring Equipment:

- Photovac MicroTIP (Model HL-2000, 10.6 eV lamp)
- Explosimeter
- Draeger Tube & Pump
- O₂ Meter
- Other: H₂S meter

Methods and Frequency of Monitoring:

Air space and soil samples: Photovac MicroTIP HL-2000.

Air space: explosimeter/O₂ meter/H₂S meter.

Frequency: Soil samples; as obtained.
Air; not to exceed every 15 minutes.

Decontamination and Disposal

Personnel Decontamination Procedure:

- Level C: Slush boot and glove wash, slush boot and glove rinse, tape removal, outer glove removal, (cartridge change), slush boot removal, suit removal, inner glove removal.
- Modified Level D: Slush boot and glove wash, slush boot and glove rinse, slush boot removal, suit removal, glove removal.

Equipment Decontamination:

The drill rig and tools will be decontaminated by steam cleaning prior to the start of work and between borings. The use of clean augers (not previously used on the job) will be permitted with washing of the bit in ALCONOX. All decontamination will be done on-site. Routine washing of split spoon samplers, etc will use water obtained at the site. Spent cleaning liquid will be drummed on site.

Disposal Procedure for Investigation-Derived Materials:
(decon waste, disposables)

All decon waste and disposables will remain on site. Contaminated soil will be placed on the existing polyencapsulated stockpile or drummed on site.

SITE OPERATING PROCEDURES/SAFETY GUIDELINES

- ** Always observe the buddy system. Never enter or exit site alone, and never work alone in an isolated area. Never wander off by yourself.
- ** Always maintain a line-of-sight.
- ** Practice contamination avoidance. Never sit down or kneel, never lay equipment on the ground, avoid obvious sources of contamination such as puddles, and avoid unnecessary contact with on-site objects
- ** No eating, drinking, or smoking outside the designated "clean" zone.
- ** In the event PPE is ripped or torn, work shall stop and PPE shall be removed and replaced as soon as possible.
- ** Be alert to any unusual changes in your own condition; never ignore warning signs. Notify Health and Safety Coordinator as to suspected exposures or accidents.
- ** A vehicle will be readily available exclusively for emergency use. All personnel going on-site shall be familiar with the most direct route to the nearest hospital.
- ** In the event of direct skin contact, the affected area shall be washed immediately with soap and water.
- ** Copies of the Health and Safety Plan shall be readily accessible at the command post.
- ** Note wind direction. Personnel shall remain upwind whenever possible during on-site activities.
- ** Never climb over or under refuse or obstacles. Use safety harness/safety lines when sampling lagoons, stream beds, and ravines with steep banks.
- ** Hands and face must be thoroughly washed before eating, drinking, etc.
- ** Any modifications to this safety plan MUST be approved by the Site Safety Officer.

Special Procedures:
Confined Space Entry

- No attempt will be made to enter abandoned buildings, manholes, tanks, or any other confined areas.
- Other:

Personnel Monitoring: (If applicable: Heat stress, frostbite, air sampling of individual breathing zone)

Monitoring of individual breathing space will be monitored by a Photovac MicroTIP HL-2000, explosimeter, and O₂ meter as outlined in monitoring procedures. Monitoring of weather related hazards will be dictated by existing conditions.

EMERGENCY SITUATIONS

The following standard emergency procedures will be used by Dufresne-Henry on-site personnel. The Site Safety Officer (SSO) shall be notified of any on-site emergencies and be responsible for ensuring that the appropriate procedures are followed.

Personnel Injury to Dufresne-Henry Employees in the Exclusion Zone

Upon notification of an injury to a Dufresne-Henry employee in the exclusion zone, a rescue team will enter the zone (if required) to remove the injured person to the hotline. The SSO and Project Manager should evaluate the nature of the injury, and the affected person should be decontaminated to the extent possible prior to movement to the support zone. The SSO shall arrange for appropriate first aid, and contact should be made for an ambulance and with the designated medical facility (if required). No Dufresne-Henry personnel shall re-enter the exclusion zone until the cause of the injury or symptoms are determined.

Personnel Injury to Dufresne-Henry Employees in the Support Zone

Upon notification of an injury to a Dufresne-Henry employee in the support zone, the Project Manager and SSO will assess the nature of the injury. If the cause of the injury or loss of the injured person does not affect the performance of site personnel, operations may continue, with the on-site Field Team Leader initiating the appropriate first aid and necessary follow-up as stated above. If the injury increases the risk to others, all Dufresne-Henry personnel shall move to the decon line for further instructions. Dufresne-Henry activities on-site will cease until the added risk is removed or minimized.

Fire/Explosion

Upon notification of a fire or explosion on-site, all Dufresne-Henry personnel will assemble at the decon line. The fire department shall be alerted and all Dufresne-Henry personnel moved to a safe distance from the involved area.

Personal Protective Equipment Failure

If any Dufresne-Henry site personnel experience a failure or alteration of protective equipment that effects the protection factor, that person and his/her buddy shall immediately leave the exclusion zone. Re-entry shall not be permitted until the equipment has been repaired or replaced.

Other Equipment Failure

If any other equipment on-site fails to operate properly, the Project Manager and SSO shall be notified and then determine the effect of this failure on continuing operations on-site. If the failure affects the safety of on-site Dufresne-Henry personnel or prevents the completion of the tasks, all Dufresne-Henry personnel shall leave the exclusion zone until the situation is evaluated and appropriate actions taken.

In all situations, when an on-site emergency results in evacuation of the exclusion zone, Dufresne-Henry personnel shall not re-enter until:

1. The conditions resulting in the emergency have been corrected.
2. The hazards have been reassessed.
3. The Site Safety Plan has been reviewed.
4. Dufresne-Henry personnel have been briefed on any changes in the Site Safety Plan.

PROJECT: VERMONT WHEY / WYETH NUTRITIONALS SITE INVESTIGATION
JOB NO.: 6584009.02 (VT WHEY) 6584009.03 (WYETH NUT.)

EMERGENCY INFORMATION

AMBULANCE: Georgia Phone: 9-1-1

HOSPITAL: Northwestern Medical Center Phone: (800) 696 - 0321
Fairfield Street
St. Albans, VT
(see attached map)

POLICE: State Police (St. Albans) Phone: (802) 524 - 5993

FIRE DEPARTMENT: Georgia Phone: 9-1-1

POISON CENTER: Phone: (802) 658 - 3456

ANR INCIDENT RESPONSE: Office Phone: (802) 241 - 3888
Chuck Schwer (802) 241 - 3876

CORPORATE:

Dufresne-Henry N. Springfield, VT Phone: (802) 886 - 2261

Project Manager: F. David Deane Ext 431

SITE REPRESENTATIVE William Edder Phone: (802) 773 - 1813

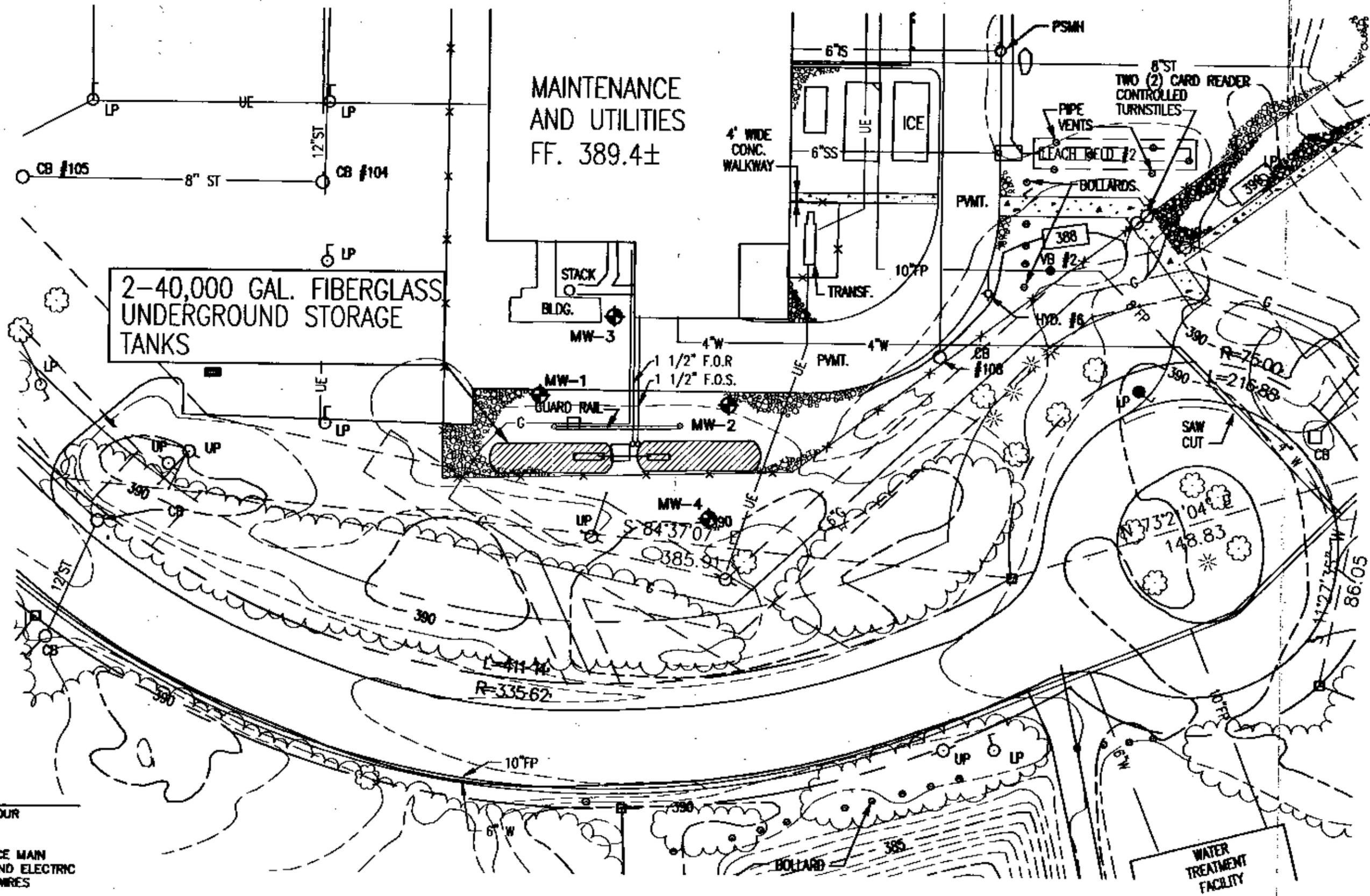
NEAREST PHONE: On site

LOCATION OF ON-SITE FIRST AID KIT: On site

EMERGENCY VEHICLE:

APPENDIX C

SITE PLAN



WYETH NUTRITIONALS
SITE INVESTIGATION
SITE PLAN

GEORGIA, VERMONT

Project No.	0504009.03
Proj. Mgr.	F.D.D.
Scale	1"=40'
Date	4/28/00

B SK2

APPENDIX D

**SITE MONITORING DURING UST
UPGRADE**

January 12, 1999

Ms. Susan Thayer
Vermont Agency of Natural Resources
Department of Environmental Conservation \ Waste Management Division
103 South Main Street / West Office
Waterbury, Vermont 05671-0404

Re: Wyeth Nutritionals, Inc. - Georgia, VT
Facility Id. # 527-0521
DH 6584009

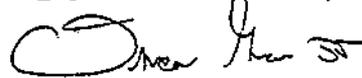
Dear Ms. Thayer:

Enclosed please find the following information:

1. Expressway Notification Form.
2. U.S.T. Permanent Closure Form.
3. Dufresne-Henry, Inc. File Memo Documenting Site Observations.
4. Site Photographs.

Eight soil samples were obtained from the excavation area where the piping entered the ground near the tanks, and at the building face. These samples produced headspace readings ranging from 4 to 700 ppm. There was strong olfactory evidence of contamination present in the excavation area near the tanks. There was no visual evidence of the contamination. Soil samples for laboratory analysis were not collected. The limits of contamination are not known. The soil was silty sand throughout our excavation depth of 6'. Groundwater was not encountered. Based on these findings, it is the opinion of Dufresne-Henry Inc. that further action be taken at this site.

Sincerely,
DUFRESNE-HENRY, INC.



Oscar D. Garcia, Jr.
Environmental Services Division

ODG/dim
Enclosures

cc: G. William Edder - Wyeth Nutritionals, Inc.
Dennis Bolio - Engelberth Construction Inc.
piping ltr.wpd

UNDERGROUND STORAGE TANK PERMANENT CLOSURE FORM
 Vermont Agency of Natural Resources, Department of Environmental Conservation, Waste Management Division
 103 South Main Street, West Building, Waterbury, Vermont 05671-0404, Telephone: (802) 241-3888

Agency Use Only
 Date of scheduled Activity 11/16/98 Facility ID # 527-0521 Closing: tanks, piping, system
 DEC initials: _____ SMS # _____ DEC evaluator: _____

Section A. Facility Information:

Name of facility: W. J. Nutritional Inc Number of employees: 306
 Street address: Industrial Rd Town/city: Georgia
 Owner of UST(s) to be closed: W. J. Nutritional Inc Contact (if different than owner): G. William Elder
 Mailing address of owner: P.O. Box 2109 Georgia, VT 05168-2109
 Telephone number of owner: 802 527-0521 Contact telephone #: 2501

Section B. UST Closure Information: (please check one) Tank upgrade/Piping Replacement
 Reason for initiating UST closure: Suspected Leak Liability Replacement Abandoned

UST's (piping is considered a part of UST system) undergoing permanent closure. Include condition of USTs

UST #	Product	Size (gallons)	Tank age	Tank Condition	Piping age	Piping condition
1+2	#2 F.O.	240K	16	Unknown	16	Unknown
	both tanks are fiberglass					

Which tanks, if any, will be closed in-place: USTs# 1+2 Authorized by: _____ Date: 11/16/98
 Disposal/destruction of removed UST(s): Location _____ Method _____ Date: _____
 Amount (gal.) and type of waste generated from USTs: 0 gal
 (tank contents are hazardous wastes unless recovered as usable product)
 Tank cleaning company (must be trained in confined space entry) N/A
 Certified hazardous waste hauler: N/A Generator ID number: N/A

Section C. Initial site characterization:

Work in this section must be completed by a professional environmental consultant or hydrogeologist with experience in environmental sampling for the presence of hazardous materials. A full report from the consultant must accompany this form.

Excavation information: (some tank pulls require more than one excavation)

Tank(s) # and Excavation (A,B,C,etc)	Depth (ft)	Excavation size(ft ²)	Peak PID reading	Depth of Peak (ft)	Avg PID reading	Bedrock Depth (ft)	Groundwater encountered? (y/n) and at depth (ft)	Soil type
1+2	6'	50	6300	6'	230	-	No	Silty Sand-thyphoid

Dig Safe Number: 984604666
 PID information:
 Make: HAN Model: PI-101 Calibration information (date, time, gas): 11/6/98 10:00 TCO

Locate all readings and samples on site diagram

Number of soil samples collected for laboratory analysis? 0 results due date 11/16/98
 Have any soils been polyencapsulated on site? Yes (#yds' PID range above zero) No
 Have any soils been transported off site? Yes list amount (yds): No
 Location transported to: _____ DEC official who approved: _____
 Amount of soils backfilled(yds³): All PID range above zero 1-700
 Have limits of contamination been defined? Yes No
 Is there any other known contamination on-site? Yes No Comments: _____

Free Phase product encountered? Yes thickness sheen No
 Groundwater encountered? Yes depth(ft) No
 Are there existing monitoring wells on-site? Yes how many: (locate on site diagram) No
 Have new monitoring wells been installed? Yes how many: (locate on site diagram) No
 Samples obtained from monitoring wells for lab analysis? Yes results due date No

Is there a water supply well on site? Yes (check type: shallow rock spring) No
 Number of public water supply wells are located within a 0.5 mile radius? 0 min. distance (ft.): _____
 Number of private water supply wells located within a 0.5 mile radius? 1 min distance (ft.): 28600'

Receptors impacted? soil indoor air ambient air groundwater surface water water supply

Facility ID# 523-0521

Section D: Tanks/Piping Remaining/installed

Regardless of size, include USTs at site as to *status, e.g. "abandoned", "in use", or "to be installed". (Most installations require permits and advance notice to this office.)

UST#	Product	Size(gallons)	Tank age	*Tank status	Piping age	*Piping Status

There are no other tanks at this site.

Section E. Statements of UST closure compliance:

(must have both signatures or site assessment not complete)

As the party responsible for compliance with the Vermont UST Regulations and related statutes at this facility, I hereby certify that the all of the information provided on this form is true and correct to the best of my knowledge.

A. William Eldred
Signature of UST owner or owner's authorized representative

1/5/99
Date of signature

As the environmental consultant on site, I hereby certify that the site assessment requirements were performed in accordance with DEC policy and regulations, and that information which I have provided on this form is true and correct to the best of my knowledge.

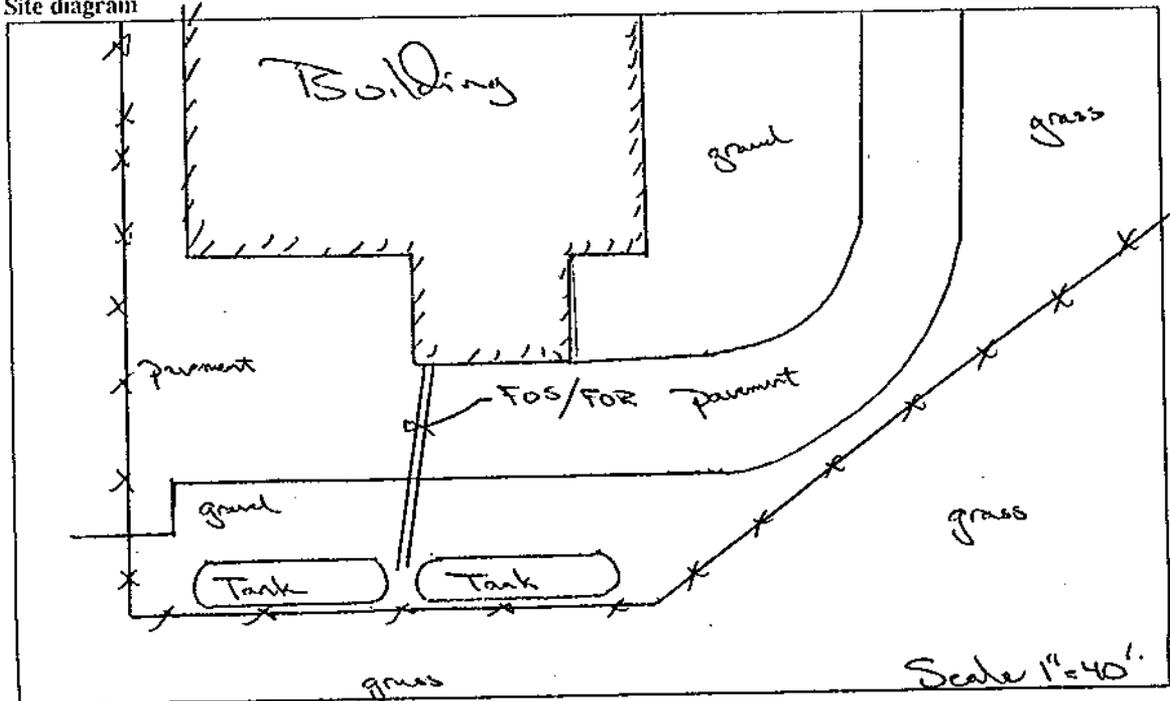
John Henry Inc.
Signature of Environmental Consultant
Company: John Henry Inc.
Telephone #: 888-2261

1/5/99
Date of signature

Date of Closure: 1/5/99 Date of Assessment 1/5/99

Return form along with complete narrative report and photographs to the Department of Environmental Conservation(DEC), Underground Storage Tank Program within 72 hours of closure.

Site diagram



This Closure Form may only be issued for the facility and the date indicated at top of page 1. Changes in the scheduled closure date should be phoned in at least 48 hours in advance. Both the yellow and white copies of this form must be returned to the address on the top of page 1 of this form; the pink copy should be retained by the UST owner. A written report from an environmental consultant covering all aspects of closure and site assessment, complete with photographs and any other relevant data, must accompany this form. All procedures must be conducted by qualified personnel, to include training required by 29 CFR 1910.120. Documentation of all methods and materials used must be adequate. All work must be performed in compliance with DEC policy "UST Closure and Site Assessment Requirements" as well as all applicable statutes, regulations, and additional policies. The DEC may reject inadequate closure forms and reports.

DUFRESNE-HENRY, INC.

MEMO TO: File
FROM: Oscar D. Garcia Jr.
DATE: January 6, 1999
SUBJECT: Wyeth Nutritionals, Inc.

This report of field activities has been prepared by Dufresne-Henry, Inc. (DH). DH has been contracted by Wyeth Nutritionals, Inc. to provide the engineering services required for underground storage tank piping closure.

On Monday, November 16, 1998, and Tuesday, January 5, 1999, I was at the above referenced location to perform the closure assessment for the supply and return piping for the two 40,000-gallon, fiberglass, #2 fuel oil tanks. The photoionization detector used on the 16th was a HnU PI-101 which uses a 10.2 eV lamp. The HnU was calibrated on-site prior to use with Isobutylene at 100 ppm. The weather on the 16th was sunny, breezy, and 35 degrees.

Upon arrival a portion of the piping near the tank (just after the pumps) had been exposed and the area at the building where the lines entered/exited had also been exposed. There was a strong fuel oil odor from the excavation area near the pumps. The piping run of 50' between the building and the pumps was not investigated.

PID readings were obtained at various depths throughout the excavation. The table below reflects the readings obtained. All of the soil samples were warmed prior to screening.

Location	PID headspace (ppm)	Odor
2' deep at vert. piping	4	None
3' deep at vert. piping	55	None
40" deep at vert. piping	180	Strong old fuel oil
60" deep at vert. piping	500	Strong old fuel oil
72" deep at vert. piping	700	Strong old fuel oil
5.5' deep, 3" below pipe at bldg.	28	None
4' into pave from tank, 5' deep	140	Light fuel oil
4' into pave from tank, 5.5' deep	210	Moderate fuel oil

There was no groundwater, free product, or bedrock observed to the excavation depth of 6 feet. The soil was silty sand throughout.

I was informed by Wyeth personnel that a spill had occurred during a delivery some time ago in this area. It is our understanding that this spill was reported and that a quantity of

contaminated soil was removed. With this information, combined with the site soil conditions we called Ted Unkles at the Waste Management Division to discuss our options. Our conversation resulted in backfilling the excavated soil and completion and submittal of this report when the piping was abandon in place.

On January 5, 1999 the piping was disconnected and purged. I was informed by Dennis Bolio, of Engelberth Const. Inc. that the pipes were to be filled with grout. New lines had been installed for one of the two tanks, and they were in the process of final interior connections to bring that tank back on-line. Wyeth boilers are dual fuel type operating on oil or natural gas.

APPENDIX E

BORING LOGS AND DAILY REPORTS

BORING LOCATION MW-1		INCLINATION V		BEARING		DATE START/FINISH 3/25/99 / 3/25/99				
CASING ID		CORE SIZE		TOTAL DEPTH 25 FT		DRILLED BY: GREEN MOUNTAIN BORING (R.G.)				
GROUND EL (AD) 388.56		DEPTH TO WATER/DATE 19±		FT/ IMMED.		LOGGED BY: B. COX				
ELEV	SAMPLE			SAMP OD (IN)	LENGTH		REMARKS ON ADVANCE OF BORING	SIZE/TYPE BIT USED TO ADVANCE BORING	SOIL AND ROCK DESCRIPTION	
AD (FT)	DEPTH (FT)	TYPE AND NO.	B		REC (IN)	PENE-TRATION (IN)				
384.56	4.0						4 1/4" HSA	6"/CCH	0" - 3" CRUSHED STONE. 3" - 4' Medium gray brown, silty SAND.	
382.56	6.0	SS-1	7 9 12 12	2	22	24			Medium gray brown, medium dense, silty SAND. Very fine grained, well sorted sand. 40%± non plastic fines. Trace of mica. Dry. No odor or staining. 0.0 ppm.	
380.56	8.0	SS-2	12 12 14 17	2	20	24			Medium gray brown, medium dense, silty SAND and sandy SILT similar to above. Very fine grained, well sorted sand. 50%± non plastic fines. Faint horizontal layering. Dry. No odor or staining. 0.0 ppm.	
378.56	10.0	SS-3	7 9 12 16	2	16	24			Medium brown, medium dense, silty SAND similar to above, but browner and sandier. 40%± non plastic fines. Dry. No odor or staining. 0.0 ppm.	
376.56	12.0	SS-4	5 11 13 14	2	14	24			Light - medium gray brown, medium dense, SILT and SAND. 50%± non plastic, inorganic fines. Occasional thin oxidized layers. Dry. No odor or staining. 0.0 ppm.	
374.56	14.0	SS-5	12 14 19 18	2	20	24			12' - 13' Light - medium gray brown, medium dense, sandy SILT similar to above. 1/2" oxidized layer at bottom. Dry. No odor or staining. 13' - 13'4" Dark brown SILT. 13'4" - 14' Light - medium gray brown, sandy SILT as above. Dry. No odor or staining. 0.0 ppm.	
372.56	16.0	SS-6	7 8 14 19	2	16	24			Light - medium gray brown, medium dense - dense, sandy SILT as above. Dry. No odor or staining. 0.2 ppm.	
370.56	18.0	SS-7	20 17 22 20	2	18	24			Light - medium brown, dense, sandy SILT similar to above, but slightly darker. Dry - very slightly moist at bottom. No odor or staining. 0.2 ppm.	
368.56	20.0	SS-8	6 7 10 10	2	16	24			18' - 19± Light - medium brown, medium dense, sandy SILT as above. 19' - 20' Medium - dark brown, medium dense, silty SAND. Very fine grained, well sorted sand. 40%± non plastic fines. Trace of mica and mafic minerals. Saturated. No odor or staining. 2.8 ppm.	
		SS-9	10 11 15	2	11	24			Medium brown, medium dense - dense, silty SAND as above. Saturated. No odor or staining. 0.0 ppm.	
B - Penetration resistance, Blows/6" of a 140 lb hammer falling 30 in to drive a split spoon sampler. REC - Length of sample recovered. SS - Split spoon sample. U - Undisturbed samples S - Shelby tube D - Denison F - Fixed piston P - Pitcher O - Osterberg SAMP OD - Outside diameter of sampling spoon							NOTES HSA = Hollow Stem Auger CCH = Conical Cutter Head ppm Refers to PID reading (10.6 eV lamp) Top of PVC elev = 388.13		WYETH NUTRITIONALS, INC. WYETH NUTRITIONALS SITE INVESTIGATION GEORGIA, VERMONT DATE: 3/25/99 PROJECT: 6584009.03 PAGE 1 OF 2 LOG OF BORING: MW-1	

BORING LOCATION MW-1 INCLINATION V BEARING DATE START/FINISH 3/25/99 / 3/25/99
 CASING ID CORE SIZE TOTAL DEPTH 25 FT DRILLED BY: GREEN MOUNTAIN BORING (R.G.)
 GROUND EL (AD) 388.58 DEPTH TO WATER/DATE 19± FT/ IMMED. LOGGED BY: B. COX

ELEV		SAMPLE			SAMP OD (IN)	LENGTH		REMARKS ON ADVANCE OF BORING	SIZE/TYPE BIT USED TO ADVANCE BORING	SOIL AND ROCK DESCRIPTION
AD (FT)	DEPTH (FT)	TYPE AND NO.	B	REC (IN)		PENE-TRATION (IN)				
366.56	22.0									
364.56	24.0	SS-10	10 13 14 18	2	13	24				Medium - dark gray brown, medium dense - dense, sandy SILT. Very fine grained, well sorted sand. 60%+ non plastic, inorganic fines. Saturated. No odor or staining. 0.0 ppm.
363.56	25.0						4 1/4" HSA	6"/CCH		Probable sandy SILT similar to above.
										No refusal to depth. Installed 10' of 2" dia, .010" slot, threaded, flush joint, Schd 40 PVC at 25'. Sand backfill to 13'. Bentonite seal 3' - 4'. Grouted in flush 8" cast iron monitoring well box.

B - Penetration resistance, Blows/6" of a 140 lb hammer falling 30 in to drive a split spoon sampler.
 REC - Length of sample recovered.
 SS - Split spoon sample.
 U - Undisturbed samples
 S - Shelby tube D - Denison
 F - Fixed piston P - Pitcher
 O - Osterberg
 SAMP OD - Outside diameter of sampling spoon

NOTES
 HSA = Hollow Stem Auger
 CCH = Conical Cutter Head
 ppm Refers to PID reading (10.6 eV lamp)
 Top of PVC elev = 388.13

WYETH NUTRITIONALS, INC.
 WYETH NUTRITIONALS
 SITE INVESTIGATION
 GEORGIA, VERMONT
 DATE: 3/25/99 PROJECT: 6584009.03



BORING LOCATION MW-2		INCLINATION V		BEARING		DATE START/FINISH 3/26/99 / 3/26/99				
CASING ID		CORE SIZE		TOTAL DEPTH 30 FT		DRILLED BY: GREEN MOUNTAIN BORING (R.G.)				
GROUND EL (AD) 388.33		DEPTH TO WATER/DATE 20±		FT/ IMMED.		LOGGED BY: B. COX				
ELEV	SAMPLE			LENGTH		REMARKS ON ADVANCE OF BORING	SIZE/TYPE BIT USED TO ADVANCE BORING	SOIL AND ROCK DESCRIPTION		
AD (FT)	DEPTH (FT)	TYPE AND NO.	B	SAMP OD (IN)	REC (IN)	PENE-TRATION (IN)				
384.33	4.0						4 1/4" HSA	6"/CCH	0" - 3"± CRUSHED STONE. 3" - 4" Medium gray brown, silty SAND.	
382.33	6.0	SS-1	6 9 8 8	2	21	24			Light - medium gray brown, medium dense, silty SAND. Very fine grained, well sorted sand. 40%± non plastic fines. Trace of mica and mafic minerals. Dry. No odor or staining. 1.5 ppm.	
380.33	8.0	SS-2	8 9 10 13	2	19	24			Medium gray brown, medium dense, silty SAND and sandy SILT similar to above, but grayer and finer grained overall. 50%± non plastic fines. Dry. No odor or staining. 1.3 ppm.	
378.33	10.0	SS-3	6 10 10 13	2	20	24			Medium gray brown, medium dense, sandy SILT. Very fine grained, well sorted sand. 50%+ non plastic, inorganic fines. Dry. No odor or staining. 2.5 ppm.	
373.33	15.0						4 1/4" HSA	6"/CCH	Probable silty SAND and sandy SILT similar to above.	
371.33	17.0	SS-4	6 10 12 13	2	24	24			Light - medium gray brown, medium dense, sandy SILT similar to above. 4" thick silt layer at 16'±. Dry. No odor or staining. 3.5 ppm.	
368.33	20.0						4 1/4" HSA	6"/CCH	Probable sandy SILT similar to above. Likely to be wet or saturated near 20'.	
366.33	22.0	SS-5	18 23 25 28	2	15	24			Medium brown gray, dense - very dense, sandy SILT similar to above. Trace of mica. Saturated. No odor or staining. 3.6 ppm.	
363.33	25.0						4 1/4" HSA	6"/CCH	Probable sandy SILT similar to above.	
361.33	27.0	SS-6	13 19 27 33	2	19	24			Medium gray brown, dense - very dense, sandy SILT similar to above, but browner and slightly sandier. Saturated. No odor or staining. 2.9 ppm.	
358.33	30.0						4 1/4" HSA	6"/CCH	Probable sandy SILT similar to above.	
									No refusal to depth. Installed 10' of 2" dia, .010" slot, threaded, flush joint, Schd 40 PVC at 30'. Sand backfill to 18'±. Bentonite seal 3'± - 4'±. Grouted in flush 8" cast iron monitoring well box.	
B - Penetration resistance, Blows/6" of a 140 lb hammer falling 30 in to drive a split spoon sampler. REC - Length of sample recovered. SS - Split spoon sample. U - Undisturbed samples S - Shelby tube D - Denison F - Fixed piston P - Pitcher O - Osterberg SAMP OD - Outside diameter of sampling spoon							NOTES HSA = Hollow Stem Auger CCH = Conical Cutter Head ppm Refers to PID reading (10.6 eV lamp) Top of PVC elev = 387.92		WYETH NUTRITIONALS, INC. WYETH NUTRITIONALS SITE INVESTIGATION GEORGIA, VERMONT DATE: 3/26/99 PROJECT: 6584009.03	
							PAGE 1	OF 1	LOG OF BORING: MW-2	

BORING LOCATION MW-3 INCLINATION V BEARING DATE START/FINISH 3/26/99 / 3/26/99
 CASING ID CORE SIZE TOTAL DEPTH 30 FT DRILLED BY: GREEN MOUNTAIN BORING (R.G.)
 GROUND EL (AD) 389.07 DEPTH TO WATER/DATE 20± FT/ IMMED. LOGGED BY: B. COX

ELEV	SAMPLE				LENGTH		REMARKS ON ADVANCE OF BORING	SIZE/TYPE BIT USED TO ADVANCE BORING	SOIL AND ROCK DESCRIPTION
	AD (FT)	DEPTH (FT)	TYPE AND NO.	B	SAMP OD (IN)	REC (IN)			
384.07	5.0						4 1/4" HSA	6"/CCH	0" - 3"± BITUMINOUS CONCRETE pavement. 3" - 1'+ Medium brown, sandy GRAVEL. 1' - 5' Medium brown, silty SAND.
382.07	7.0	SS-1	7 9 9 9	2	15	24			Medium gold brown, medium dense, sandy SILT. Very fine grained, well sorted sand. 70%± non plastic, inorganic fines. Trace of mica and mafic minerals. Dry. No odor or staining. 2.8 ppm.
379.07	10.0						4 1/4" HSA	6"/CCH	Probable sandy SILT and silty SAND similar to above.
377.07	12.0	SS-2	7 8 13 13	2	16	24			Medium gold brown, medium dense, silty SAND similar to above, but sandier. 40%± non plastic fines. 1" - 1 1/2" thick dark brown silt layer at 11'±. Dry. No odor or staining. 2.3 ppm.
374.07	15.0						4 1/4" HSA	6"/CCH	Probable silty SAND and sandy SILT similar to above.
372.07	17.0	SS-3	9 12 12 14	2	20	24			Light - medium gray brown, medium dense, sandy SILT similar to above. 70%+ non plastic, inorganic fines. Faint horizontal layering. Dry. No odor or staining. 0.9 ppm.
369.07	20.0						4 1/4" HSA	6"/CCH	Probable sandy SILT or silty SAND similar to above. Likely to be wet or saturated near 20'.
367.07	22.0	SS-4	5 8 12 18	2	18	24			Medium - dark gray brown, medium dense - dense, sandy SILT similar to above. Saturated. No odor or staining. 2.5 ppm.
364.07	25.0						4 1/4" HSA	6"/CCH	Probable sandy SILT similar to above.
362.07	27.0	SS-5	3 8 17 15	2	24	24			Medium - dark brown gray, medium dense - dense, sandy SILT similar to above, but grayer. Occasional lighter brown sandier layers, and occasional darker gray clayey layers. Saturated. No odor or staining. 1.3 ppm.
359.07	30.0						4 1/4" HSA	6"/CCH	Probable sandy SILT similar to above.
									No refusal to depth. Installed 10' of 2" dia, .010" slot, threaded, flush joint, Schd 40 PVC at 30'. Sand backfill to 18'±. Bentonite seal 3'± - 4'±. Grouted in flush 8" cast iron monitoring well box.

B - Penetration resistance, Blows/6" of a 140 lb hammer falling 30 in to drive a split spoon sampler.
 REC - Length of sample recovered.
 SS - Split spoon sample.
 U - Undisturbed samples
 S - Shelby tube D - Denison
 F - Fixed piston P - Pitcher
 O - Osterberg
 SAMP OD - Outside diameter of sampling spoon

NOTES
 HSA = Hollow Stem Auger
 CCH = Conical Cutter Head
 ppm Refers to PID reading (10.6 eV lamp)
 Top of PVC elev = 388.53

WYETH NUTRITIONALS, INC.
 WYETH NUTRITIONALS
 SITE INVESTIGATION
 GEORGIA, VERMONT
 DATE: 3/26/99 PROJECT: 6584009.03



GREEN MOUNTAIN BORING
 PO Box 218 ° East Barre, Vermont 05649 ° 802 476-5073

TO: Dufresne-Henry ATTN: Bruce Cox Precision Park North Springfield, VT 05150	PROJECT NAME: Vermont Whey and Wyeth Nutritionals Monitoring Wells	SHEET: 3
	LOCATION: Georgia, Vermont	DATE: 3/25/99
	GMB JOB #: 99024	HOLE #: MW-1
		LINE & STA. OFFSET: None

Ground Water Observations 18' at 0 hours	Augers-Size I.D. 4.25"	Surface Elev.:
	Split Spoon 1 3/8"	Date Started: 3/25/99
	Hammer Wt. 140#	Date Completed: 3/25/99
	Hammer Fall 30"	Boring Foreman: Ronald Garneau
		Inspector:
		Soils Eng.: Bruce Cox

LOCATION OF BORING: As Directed

Depth	Casing Blows Per Foot	Sample Depths From/To	Type of Sample	Blows per 6" on Sampler	Moisture Density or Consist.	Strata Change Elev.	Soil Identification	Sample		
								No.	Pen.	Rec.
							Drilled to 4'			
		4'-6'	D	7/9/12/12	Dry		Very fine silty sand	1	24"	18"
		6'-8'	D	12/12/14/17	Dry		Very fine silty sand	2	24"	18"
		8'-10'	D	7/9/13/10	Dry		Very fine silty sand	3	24"	16"
		10'-12'	D	4/7/9/12	Dry		Very fine silty sand	4	24"	12"
		12'-14'	D	12/14/19/18	Dry		Very fine silty sand with a 4" silt layer	5	24"	20"
		14'-16'	D	7/8/14/19	Dry		Very fine silty sand	6	24"	20"
		16'-18'	D	20/17/22/20	Dry		Very fine silty sand	7	24"	18"
		18'-20'	D	7/7/10/10	Wet		Very fine silty sand	8	24"	16"
		20'-22'	D	7/11/13/15	Wet		Very fine silty sand	9	24"	17"
		22'-24'	D	10/11/14/15	Wet		Very fine silty sand			
							Installed Well at 25'			
							<u>Materials Used</u> 10' .010 Screen 15' Riser 2 1/2 Bags of Sand 1 Set of Caps 1/2 Bag of Bentonite 1 Curb Box 1 Bag of Cement			

Ground Surface to 25'

Used 4.25" Augers, then Installed Well at 25'

SUMMARY: Earth Boring: 25' Rock Coring: Samples: 9 **HOLE # MW-1**

GREEN MOUNTAIN BORING
PO Box 218 ° East Barre, Vermont 05649 ° 802 476-5073

TO: Dufresne-Henry ATTN: Bruce Cox Precision Park North Springfield, VT 05150	PROJECT NAME: Vermont Whey and Wyeth Nutritionals Monitoring Wells	SHEET: 4
	LOCATION: Georgia, Vermont	DATE: 3/26/99
	GMB JOB #: 99024	HOLE #: MW-2 LINE & STA. OFFSET: None

Ground Water Observations 20' at 0 hours	Augers-Size I.D. 4.25"	Surface Elev.:
	Split Spoon 1 3/8"	Date Started: 3/26/99
	Hammer Wt. 140#	Date Completed: 3/26/99
	Hammer Fall 30"	Boring Foreman: Ronald Garneau
		Inspector:
		Soils Eng.: Bruce Cox

LOCATION OF BORING: As Directed

Depth	Casing Blows Per Foot	Sample Depths From/To	Type of Sample	Blows per 6" on Sampler	Moisture Density or Consist.	Strata Change Elev.	Soil Identification	Sample		
								No.	Pen.	Rec.
							Drilled to 4'			
		4'-6'	D	6/9/8/8	Dry		Fine sand	1	24"	16"
		6'-8'	D	8/9/10/13	Dry		Fine sand	2	24"	16"
		8'-10'	D	6/10/11/13	Dry		Fine sand	3	24"	20"
		15'-17'	D	6/10/12/13	Dry		Fine sand	4	24"	24"
		20'-22'	D	21/23/26/26	Wet	20'	Very fine sand	5	24"	14"
		25'-27'	D	13/19/27/33	Wet		Very fine sand	6	24"	16"
							Drilled to 30' and Installed Well			
							<u>Materials Used</u> 10' .010 Screen 20' Riser 2 Bags of Sand 1 Set of Caps ½ Bag of Bentonite 1 Curb Box ½ Bag of Cement			

Ground Surface to 30'

Used 4.25" Augers, then Installed Well at 30'

SUMMARY: Earth Boring: 30'

Rock Coring:

Samples: 6

HOLE # MW-2

GREEN MOUNTAIN BORING
 PO Box 218 ° East Barre, Vermont 05649 ° 802 476-5073

TO: Dufresne-Henry ATTN: Bruce Cox Precision Park North Springfield, VT 05150	PROJECT NAME: Vermont Whey and Wyeth Nutritionals Monitoring Wells	SHEET: 5
	LOCATION: Georgia, Vermont	DATE: 3/26/99
	GMB JOB #: 99024	HOLE #: MW-3
		LINE & STA. OFFSET: None

Ground Water Observations 20' at 0 hours	Augers-Size I.D. 4.25"	Surface Elev.: Date Started: 3/26/99 Date Completed: 3/26/99 Boring Foreman: Ronald Garneau Inspector: Soils Eng.: Bruce Cox
	Split Spoon 1 3/8" Hammer Wt. 140# Hammer Fall 30"	

LOCATION OF BORING: As Directed

Depth	Casing Blows Per Foot	Sample Depths From/To	Type of Sample	Blows per 6" on Sampler	Moisture Density or Consist.	Strata Change Elev.	Soil Identification	Sample		
								No.	Pen.	Rec.
		5'-7'	D	8/8/9/13	Dry		Very fine sand	1	24"	16"
		10'-12'	D	7/8/12/13	Dry		Very fine sand with a silt lens at 11'	2	24"	16"
		15'-17'	D	9/12/12/14	Dry		Very fine sand	3	24"	18"
		20'-22'	D	5/8/13/17	Wet	20'	Very fine sand	4	24"	16"
		25'-27'	D	3/8/17/14	Wet		Very fine sand	5	24"	24"
							Drilled to 30' and Installed Well <u>Materials Used</u> 10' .010 Screen 20' Riser 3 Bags of Sand 1 Set of Caps ½ Bag of Bentonite 1 Curb Box ½ Bag of Cement			

Ground Surface to 30'

Used 4.25" Augers, then Installed Well at 30'

SUMMARY: Earth Boring: 30' Rock Coring: Samples: 5 HOLE # MW-3

GREEN MOUNTAIN BORING
 PO Box 218 ° East Barre, Vermont 05649 ° 802 476-5073

TO: Dufresne-Henry ATTN: Bruce Cox Precision Park North Springfield, VT 05150	PROJECT NAME: Vermont Whey and Wyeth Nutritionals Monitoring Wells LOCATION: Georgia, Vermont GMB JOB #: 99024	SHEET: 6 DATE: 3/26/99 HOLE #: MW-4 LINE & STA. OFFSET: None
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Ground Water Observations 21'8" at 0 hours	Augers-Size I.D. 4.25" Split Spoon 1 3/8" Hammer Wt. 140# Hammer Fall 30"	Surface Elev.: Date Started: 3/26/99 Date Completed: 3/26/99 Boring Foreman: Ronald Garneau Inspector: Soils Eng.: Bruce Cox
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LOCATION OF BORING: As Directed

Depth	Casing Blows Per Foot	Sample Depths From/To	Type of Sample	Blows per 6" on Sampler	Moisture Density or Consist.	Strata Change Elev.	Soil Identification	Sample		
								No.	Pen.	Rec.
		5'-7'	D	5/8/10/12	Dry		Very fine sand	1	24"	16"
		10'-12'	D	7/8/9/9	Dry		Very fine sand	2	24"	16"
		15'-17'	D	8/10/11/13	Dry		Very fine sand and little medium sand	3	24"	18"
		20'-22'	D	9/10/9/10	Dry/Wet	21'8"	Very fine sand	4	24"	16"
		25'-27'	D	5/11/9/8	Wet		Very fine sand	5	24"	14"
							Drilled to 30' and Installed Well <u>Materials Used</u> 10' .010 Screen 20' Riser 3 Bags of Sand 1 Set of Caps ½ Bag of Bentonite			

Ground Surface to 30'

Used 4.25" Augers, then Installed Well at 30'

SUMMARY: Earth Boring: 30' Rock Coring: Samples: 5 **HOLE # MW-4**

WYETH NUTRITIONALS
SITE INVESTIGATION
GEORGIA, VERMONT

March 25, 1999

Dufresne-Henry, Inc. - Bruce Cox on site at 12:10 pm (from Vermont Whey).

Green Mountain Boring - Ronald Garneau and ? on site at 12:10 pm (from Vermont Whey).

Dig Safe #19991300303.

Steam cleaned from 12:15 pm - 12:50 pm.

MW-1

MW-1 is located in the crushed stone on the north side of the west end of the UST's. The boring was started at 1:00 pm. All water used for cleaning split spoons and other tools was obtained at the site. Drilled with 4 1/4" hollow stem augers taking continuous split spoon samples starting at 4 feet. All samples were screened for VOC's with a Photovac HL-2000 (10.6 eV lamp, calibrated with 99.1 ppm Isobutylene). Representative soil samples from each split spoon were stored in clear glass jars and retained by Dufresne-Henry. The total depth of the boring was 25', with no refusal to depth. The general geologic column is crushed stone to 3"±, and silty sand and sandy silt to the limit of the boring. The water table was encountered at approximately 19'. No evidence of contamination by visual or olfactory senses was observed in the samples or on the tools. Peak PID readings ranged from 0.0 ppm to 2.8 ppm. Installed a 10' long, 2" diameter, 0.010" machine slotted, threaded, flush joint, Schedule 40 PVC well at 25'. All pipe came from factory sealed plastic bags. The annular space was backfilled with clean silica sand to 13'. A bentonite seal was installed from 3' - 4'. An 8" diameter cast iron, watertight, monitoring well box was grouted in at the surface.

Materials: 10' of 2", 0.010" slot, threaded, flush joint, Schd 40 PVC.
14'9" of 2", solid wall, threaded, flush joint, Schd 40 PVC.
250 lb of silica sand.
25 lb± of bentonite chips.
80 lb of concrete mix.
1 2" push-on PVC cap.
1 2" expanding gasket cap.
1 8" monitoring well box.

Soil samples from the 18' - 20' split spoon for analysis of VOC's and TPH were collected at 2:15 pm.

Visitors: Bill Edder (VT Whey/Wyeth), Harry Yekel (W-AL).

Weather: Mostly cloudy - overcast, frequent light - moderate flurries am, 20s - 30's, windy.

Off site: 4:25 pm.

March 26, 1999

Dufresne-Henry, Inc. - Bruce Cox on site at 7:45 am.

Green Mountain Boring - Ronald Garneau and Michael McGinley on site at 8:05 am.

MW-2

MW-2 is located in the crushed stone on the north side of the east end of the UST's. The boring was started at 8:20 am. All water used for cleaning split spoons and other tools was obtained at the site. Drilled with 4 1/4" hollow stem augers taking semi-continuous split spoon samples starting at 4 feet. All samples were screened for VOC's with a Photovac HL-2000 (10.6 eV lamp, calibrated with 99.1 ppm Isobutylene). Representative soil samples from each split spoon were stored in clear glass jars and retained by Dufresne-Henry. The total depth of the boring was 30', with no refusal to depth. The general geologic column is crushed stone to 3"±, and silty sand and sandy silt to the limit of the boring. The water table was encountered at approximately 20'. No evidence of contamination by visual or olfactory senses was observed in the samples or on the tools. Peak PID readings ranged from 1.3 ppm to 3.6 ppm. Installed a 10' long, 2" diameter, 0.010" machine slotted, threaded, flush joint, Schedule 40 PVC well at 30'. All pipe came from factory sealed plastic bags. The annular space was backfilled with clean silica sand to 18'±. A bentonite seal was installed from 3' - 4'. An 8" diameter cast iron, watertight, monitoring well box was grouted in at the surface.

Materials: 10' of 2", 0.010" slot, threaded, flush joint, Schd 40 PVC.
19'9" of 2", solid wall, threaded, flush joint, Schd 40 PVC.
200 lb of silica sand.
25 lb± of bentonite chips.
40 lb of concrete mix.
1 2" push-on PVC cap.
1 2" expanding gasket cap.
1 8" monitoring well box.

Soil samples from the 8' - 10' split spoon for analysis of VOC's and TPH were collected at 8:50 am.

MW-3

MW-3 is located north of the UST's at the alleyway to the boiler room. The boring was started at 10:30 am. All water used for cleaning split spoons and other tools was obtained at the site. Drilled with 4 1/4" hollow stem augers taking split spoon samples starting at 5 foot intervals starting at 5 feet. All samples were screened for VOC's with a Photovac HL-2000 (10.6 eV lamp, calibrated with 99.1 ppm Isobutylene). Representative soil samples from each split spoon were stored in clear glass jars and retained by Dufresne-Henry. The total depth of the boring was 30', with no refusal to depth.

The general geologic column is bituminous concrete pavement to approximately 3", sandy gravel to approximately 1', and silty sand and sandy silt to the limit of the boring. The water table was encountered at approximately 20'. No evidence of contamination by visual or olfactory senses was observed in the samples or on the tools. Peak PID readings ranged from 0.9 ppm to 2.8 ppm. Installed a 10' long, 2" diameter, 0.010" machine slotted, threaded, flush joint, Schedule 40 PVC well at 30'. All pipe came from factory sealed plastic bags. The annular space was backfilled with clean silica sand to 18'. A bentonite seal was installed from 3' - 4'. An 8" diameter cast iron, watertight, monitoring well box was grouted in at the surface.

Materials: 10' of 2", 0.010" slot, threaded, flush joint, Schd 40 PVC.
19'9" of 2", solid wall, threaded, flush joint, Schd 40 PVC.
300 lb of silica sand.
25 lb± of bentonite chips.
40 lb of concrete mix.
1 2" push-on PVC cap.
1 2" expanding gasket cap.
1 8" monitoring well box.

Soil samples from the 10' - 12' split spoon for analysis of VOC's and TPH were collected at 10:55 am.

MW-4

MW-4 is located south of the UST's on the opposite of the chain link fence. The boring was started at 1:10 pm. All water used for cleaning split spoons and other tools was obtained at the site. Drilled with 4 1/4" hollow stem augers taking split spoon samples at 5 foot intervals starting at 5 feet. All samples were screened for VOC's with a Photovac HL-2000 (10.6 eV lamp, calibrated with 99.1 ppm Isobutylene). Representative soil samples from each split spoon were stored in clear glass jars and retained by Dufresne-Henry. The total depth of the boring was 30', with no refusal to depth. The general geologic column is organic soil to 4"±, and silty sand and sandy silt to the limit of the boring. The water table was encountered at approximately 21.5'. No evidence of contamination by visual or olfactory senses was observed in the samples or on the tools. Peak PID readings ranged from 0.0 ppm to 1.7 ppm. Installed a 10' long, 2" diameter, 0.010" machine slotted, threaded, flush joint, Schedule 40 PVC well at 30'. All pipe came from factory sealed plastic bags. The annular space was backfilled with clean silica sand to 18'. A bentonite seal was installed from 3' - 4'. No monitoring well box was installed.

Materials: 10' of 2", .010" slot, threaded, flush joint, Schd 40 PVC.
19'9" of 2", solid wall, threaded, flush joint, Schd 40 PVC.
300 lb of silica sand.
25 lb± of bentonite chips.
1 2" push-on PVC cap.
1 2" expanding gasket cap.

Soil samples from the 15' - 17' split spoon for analysis of VOC's and TPH were collected at 1:45 pm.

Visitors: Bill Edder

Weather: Mostly overcast am, 30's, mostly clear - clear pm, 40's, light wind.

Off site: 3:45 pm.

APPENDIX F

**LABORATORY ANALYTICAL REPORT -
SOIL**



eastern analytical

professional laboratory services

David Deane
Dufresne-Henry
Precision Park
N. Springfield, VT 05150

RECEIVED
APR 19 1999
DUFRESNE-HENRY, INC.

Subject: Laboratory Report

Eastern Analytical, Inc. ID: 16161 DUFVT
Client Identification: Wyeth Nutritionals 6584009.03
Date Received: 3/30/99

Dear Mr. Deane :

Enclosed please find the laboratory report for the above identified project. All analyses were subjected to rigorous quality control measures to assure data accuracy. Unless otherwise stated, all holding times, preservation techniques, container types, and sample conditions adhered to EPA Protocol.

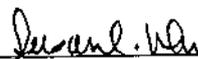
The following standard abbreviations and conventions apply throughout all Eastern Analytical, Inc. reports:

< = "less than" followed by the detection limit
TNR = Testing Not Requested
ND = None Detected, no established detection limit
RL = Reporting Limits

If you have any questions regarding the results contained within, please feel free to directly contact me, the department supervisor, or the analytical chemist who performed the testing in question. Unless otherwise requested, we will dispose of the sample(s) 30 days from the sample receipt date.

We appreciate this opportunity to be of service and look forward to your continued patronage.

Sincerely,


Susan C. Uhler, Lab Director

4/15/99
Date



LABORATORY REPORT

Eastern Analytical, Inc. ID#: 16161

Client: Dufresne-Henry

Client Designation: Wyeth Nutritionals 6584009.03

Sample ID:	MW-1 18-20'	MW-2 8-10'	MW-3 10-12'	MW-4 15-17'
Analytical Type:	Sample	Sample	Sample	Sample
Matrix:	soil	soil	soil	soil
Date Sampled:	3/25/99	3/26/99	3/26/99	3/26/99
Date Received:	3/30/99	3/30/99	3/30/99	3/30/99
Units:	µg/kg	µg/kg	µg/kg	µg/kg
Date of Analysis:	4/1/99	4/1/99	4/1/99	4/1/99
Analyst:	JDS	JDS	JDS	JDS
Method:	8021Bmod	8021Bmod	8021Bmod	8021Bmod
Dilution Factor:	1	1	1	1

Chloromethane	< 500	< 500	< 500	< 500
Vinyl chloride	< 100	< 100	< 100	< 100
Bromomethane	< 500	< 500	< 500	< 500
Chloroethane	< 500	< 500	< 500	< 500
1,1-Dichloroethene	< 50	< 50	< 50	< 50
Methylene chloride	< 50	< 50	< 50	< 50
trans-1,2-Dichloroethene	< 50	< 50	< 50	< 50
1,1-Dichloroethane	< 50	< 50	< 50	< 50
cis-1,2-Dichloroethene	< 50	< 50	< 50	< 50
Chloroform	< 50	< 50	< 50	< 50
1,1,1-Trichloroethane	< 50	< 50	< 50	< 50
Carbon tetrachloride	< 50	< 50	< 50	< 50
1,2-Dichloroethane	< 50	< 50	< 50	< 50
Trichloroethene	< 50	< 50	< 50	< 50
1,2-Dichloropropane	< 50	< 50	< 50	< 50
Bromodichloromethane	< 50	< 50	< 50	< 50
cis-1,3-Dichloropropene	< 50	< 50	< 50	< 50
trans-1,3-Dichloropropene	< 50	< 50	< 50	< 50
1,1,2-Trichloroethane	< 50	< 50	< 50	< 50
Tetrachloroethene	< 50	< 50	< 50	< 50
Dibromochloromethane	< 50	< 50	< 50	< 50
Chlorobenzene	< 50	< 50	< 50	< 50
Bromoform	< 50	< 50	< 50	< 50
1,1,2,2-Tetrachloroethane	< 50	< 50	< 50	< 50
Methyl-t-butyl ether(MTBE)	< 300	< 300	< 300	< 300
Benzene	< 50	< 50	< 50	< 50
Toluene	< 50	< 50	< 50	< 50
Ethylbenzene	< 50	< 50	< 50	< 50
mp-Xylene	< 50	< 50	< 50	< 50
o-Xylene	< 50	< 50	< 50	< 50
1,3,5-Trimethylbenzene	< 50	< 50	< 50	< 50
1,2,4-Trimethylbenzene	< 50	< 50	< 50	< 50
Naphthalene	< 50	< 50	< 50	< 50

8021Bmod: Samples were analyzed by GCMS using method 8260B.



LABORATORY REPORT

Eastern Analytical, Inc. ID#: 16161

Client: Dufresne-Henry

Client Designation: Wyeth Nutritionals 6584009.03

Sample ID:	MW-1 18-20'	MW-2 8-10'	MW-3 10-12'	MW-4 15-17'
Analytical Type:	Sample	Sample	Sample	Sample
Matrix:	soil	soil	soil	soil
Date Sampled:	3/25/99	3/26/99	3/26/99	3/26/99
Date Received:	3/30/99	3/30/99	3/30/99	3/30/99
Units:	mg/kg	mg/kg	mg/kg	mg/kg
Date of Extraction/Prep:	4/8/99	4/8/99	4/8/99	4/8/99
Date of Analysis:	4/9/99	4/9/99	4/9/99	4/9/99
Analyst:	KH	KH	KH	KH
Method:	8100 Mod	8100 Mod	8100 Mod	8100 Mod
Dilution Factor:	6	5	5	6
TPH (C9-C40)	< 50	< 50	< 50	< 50

APPENDIX G

**LABORATORY ANALYTICAL REPORT -
GROUNDWATER**



eastern analytical

professional laboratory services

Oscar Garcia
Dufresne-Henry
Precision Park
N. Springfield , VT 05150

Subject: Laboratory Report

Eastern Analytical, Inc. ID: 16319 DUFVT
Client Identification: Wyeth Nutritionals
Date Received: 4/9/99

Dear Mr. Garcia :

Enclosed please find the laboratory report for the above identified project. All analyses were subjected to rigorous quality control measures to assure data accuracy. Unless otherwise stated, all holding times, preservation techniques, container types, and sample conditions adhered to EPA Protocol.

The following standard abbreviations and conventions apply throughout all Eastern Analytical, Inc. reports:

< = "less than" followed by the detection limit
TNR = Testing Not Requested
ND = None Detected, no established detection limit
RL = Reporting Limits

If you have any questions regarding the results contained within, please feel free to directly contact me, the department supervisor, or the analytical chemist who performed the testing in question. Unless otherwise requested, we will dispose of the sample(s) 30 days from the sample receipt date.

We appreciate this opportunity to be of service and look forward to your continued patronage.

Sincerely,



Susan C. Uhler, Lab Director

4/19/99
Date



LABORATORY REPORT

Eastern Analytical, Inc. ID#: 16319

Client: Dufresne-Henry

Client Designation: Wyeth Nutritionals

Sample ID:	MW-1	MW-2	MW-3	MW-4
Analytical Type:	Sample	Sample	Sample	Sample
Matrix:	aqueous	aqueous	aqueous	aqueous
Date Sampled:	4/8/99	4/8/99	4/8/99	4/8/99
Date Received:	4/9/99	4/9/99	4/9/99	4/9/99
Units:	µg/l	µg/l	µg/l	µg/l
Date of Analysis:	4/13/99	4/13/99	4/13/99	4/13/99
Analyst:	VG	VG	VG	VG
Method:	8021Bmod	8021Bmod	8021Bmod	8021Bmod
Dilution Factor:	1	1	1	1

Chloromethane	< 10	< 10	< 10	< 10
Vinyl chloride	< 2	< 2	< 2	< 2
Bromomethane	< 10	< 10	< 10	< 10
Chloroethane	< 10	< 10	< 10	< 10
1,1-Dichloroethene	< 1	< 1	< 1	< 1
Methylene chloride	< 2	< 2	< 2	< 2
trans-1,2-Dichloroethene	< 2	< 2	< 2	< 2
1,1-Dichloroethane	< 2	< 2	< 2	< 2
cis-1,2-Dichloroethene	< 2	< 2	< 2	< 2
Chloroform	< 2	< 2	< 2	< 2
1,1,1-Trichloroethane	< 2	< 2	< 2	< 2
Carbon tetrachloride	< 2	< 2	< 2	< 2
1,2-Dichloroethane	< 2	< 2	< 2	< 2
Trichloroethene	< 2	< 2	< 2	< 2
1,2-Dichloropropane	< 2	< 2	< 2	< 2
Bromodichloromethane	< 2	< 2	< 2	< 2
cis-1,3-Dichloropropene	< 2	< 2	< 2	< 2
trans-1,3-Dichloropropene	< 2	< 2	< 2	< 2
1,1,2-Trichloroethane	< 2	< 2	< 2	< 2
Tetrachloroethene	< 2	< 2	< 2	< 2
Dibromochloromethane	< 2	< 2	< 2	< 2
Chlorobenzene	< 2	< 2	< 2	< 2
Bromoform	< 2	< 2	< 2	< 2
1,1,2,2-Tetrachloroethane	< 2	< 2	< 2	< 2
Methyl-t-butyl ether(MTBE)	< 10	< 10	< 10	< 10
Benzene	< 1	< 1	< 1	< 1
Toluene	< 1	< 1	< 1	< 1
Ethylbenzene	< 1	< 1	< 1	< 1
mp-Xylene	< 1	< 1	< 1	< 1
o-Xylene	< 1	< 1	< 1	< 1
1,3,5-Trimethylbenzene	< 1	< 1	< 1	< 1
1,2,4-Trimethylbenzene	< 1	< 1	< 1	< 1
Naphthalene	< 5	< 5	< 5	< 5

8021Bmod: The samples were analyzed by GCMS using method 8260B.



LABORATORY REPORT

Eastern Analytical, Inc. ID#: 16319

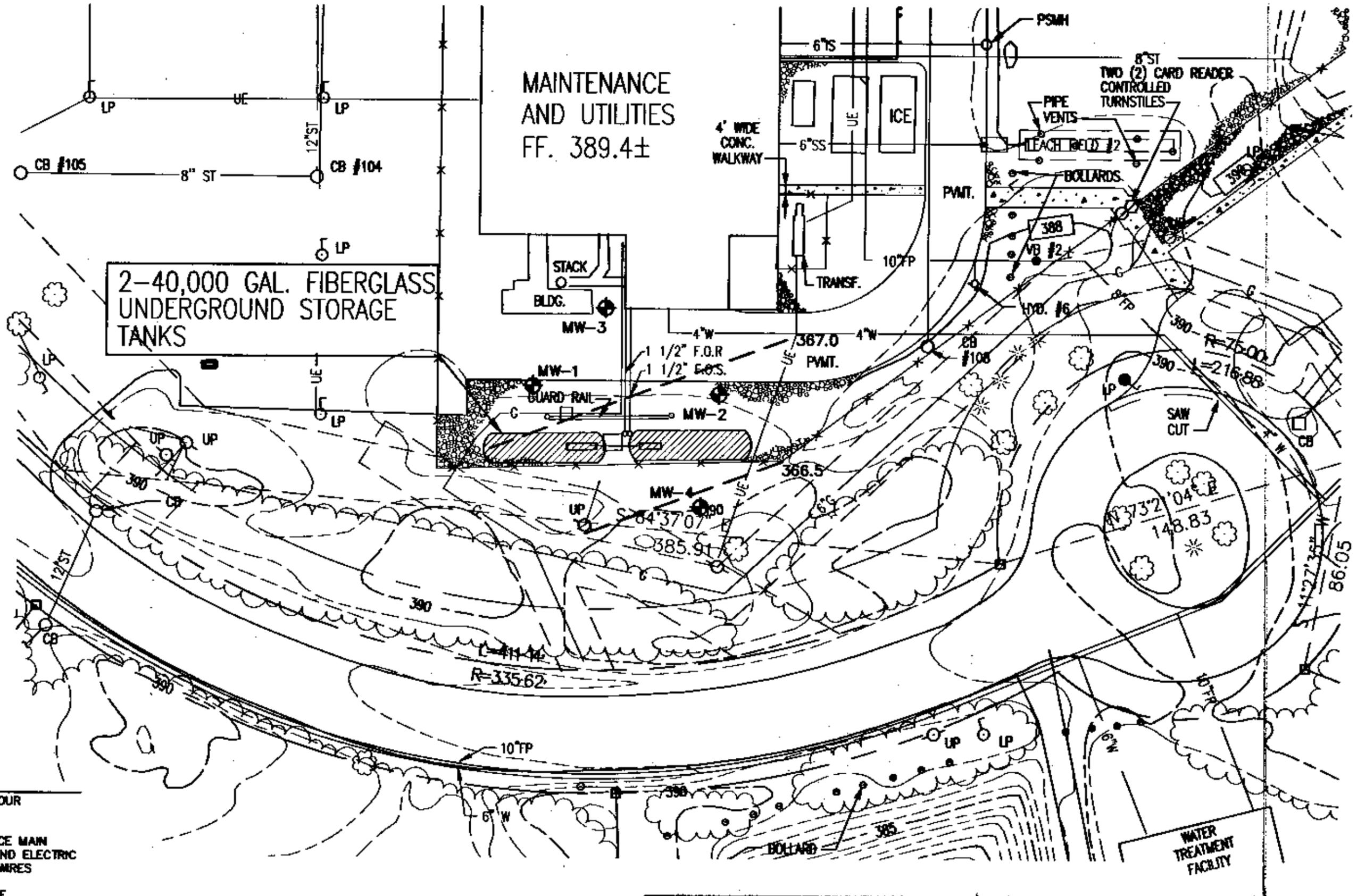
Client: Dufresne-Henry

Client Designation: Wyeth Nutritionals

Sample ID:	MW-1	MW-2	MW-3	MW-4
Analytical Type:	Sample	Sample	Sample	Sample
Matrix:	aqueous	aqueous	aqueous	aqueous
Date Sampled:	4/8/99	4/8/99	4/8/99	4/8/99
Date Received:	4/9/99	4/9/99	4/9/99	4/9/99
Units:	mg/l	mg/l	mg/l	mg/l
Date of Extraction/Prep:	4/13/99	4/13/99	4/13/99	4/13/99
Date of Analysis:	4/15/99	4/15/99	4/15/99	4/15/99
Analyst:	KH	KH	KH	KH
Method:	8100 Mod	8100 Mod	8100 Mod	8100 Mod
Dilution Factor:	1	1	1	1
TPH (C9-C40)	< 0.6	< 0.5	< 0.6	< 0.5

APPENDIX H

GROUNDWATER CONTOUR MAP



LEGEND:

- 1 FT. CONTOUR
- W WATER LINE
- S SEWER LINE
- FM SEWER FORCE MAIN
- UGE UNDERGROUND ELECTRIC
- OHW OVERHEAD WIRES
- G GAS LINE
- UTILITY POLE
- ☆ LIGHT POLE
- ⊙ HYDRANT
- ⊙ VALVES
- ⊙ DECIDUOUS TREE
- ⊙ CONIFEROUS TREE
- CHAIN LINK FENCE



WYETH NUTRITIONALS SITE INVESTIGATION GROUNDWATER ELEVATIONS ON 4/8/99	Project No. 8884008.03
	Proj. Mgr. F.D.D.
	Scale 1"=40'
	Date 4/29/99
GEORGIA, VERMONT	8 SK2