



PHASE I ENVIRONMENTAL SITE ASSESSMENT

Northstar Variety
204 New Sweden Road
New Sweden, Maine

Prepared for:
Maine Department of Environmental Protection
17 State House Station
Augusta, Maine 04333

Prepared by:
County Environmental Engineering, Inc.
924 Grimes Road
Caribou, Maine 04736
Tel: (207) 472-0858

June 25, 2026

EXECUTIVE SUMMARY

County Environmental Engineering, Inc. has completed a Phase I Environmental Site Assessment (ESA) of Northstar Variety located at 204 New Sweden Road in New Sweden, Maine, as described herein. The subject property (1.13 acres) is developed with a commercial building consisting of a convenience store, garage and residence and two aboveground storage tanks with underground piping and dispensers for retail gasoline. This Phase I ESA was completed for the Maine Department of Environmental Protection in accordance with ASTM International Standard E1527-21 and the scope of work outlined in Section 1. The purpose of this Phase I ESA was to identify recognized environmental conditions (RECs), as defined by ASTM International Standard E1527-21, in connection with the subject property through site reconnaissance, records review and interviews.

RECs are defined by ASTM International Standard E1527-21 as: (1) the presence of hazardous substances or petroleum products in, on, or at the subject property due to a release to the environment; (2) the likely presence of hazardous substances or petroleum products in, on, or at the subject property due to a release or likely release to the environment; or (3) the presence of hazardous substances or petroleum products in, on, or at the subject property under conditions that pose a material threat of a future release to the environment. Based upon the work completed within the scope of this Phase I ESA, we can report this summary of findings, opinion, and conclusions in connection with the subject property.

Documented Petroleum Contamination

Significant petroleum contamination was encountered at the subject property in 1989 due to a leaking fitting at the pump island (Spill Report #I-178-1989). A recovery system was installed and operated for a few weeks. Contaminated soil was later excavated in 2000 and 2003, but petroleum contamination exceeding cleanup goals was left in place beneath the building, near a utility pole, and along the roadway (New Sweden Road/Route 161). A subsequent subsurface investigation in 2012 identified petroleum contamination in soil, groundwater and soil gas at the subject property above regulatory guidelines. The documented petroleum contamination at the subject property is a REC.

Former Underground Storage Tank Facility

Four registered underground storage tanks (USTs) were installed at the subject property in 1976, 1983 and 1984 for gasoline, diesel and kerosene (Tanks #1 – 4). One UST was registered with an unknown installation date and unknown tank contents (Tank #5). State records document saturated soil and three USTs at the southeast corner of the building in 1983 (Spill Report #B-152-1983) and failing statistical inventory analysis in 1988 (Spill Report #I-222-1988). Two buried 1.5-inch steel pipes were noted near the southwest corner of the building during site reconnaissance, indicative of a remote fill and vent pipes for a kerosene UST in the west yard. There is no documentation regarding subsurface conditions during removal of the UST facility in 1989. The former UST facility is a REC.

Unregistered Gas Tanks

The subject property was first developed as a gas station in 1953 with a pump island and unregistered gas tanks. The potential exists for releases associated with unregistered gas tanks, associated underground piping, pumps and dispensers. Unregistered gas tanks are a REC.

Site Use as a Service Garage

The subject property was historically operated as a service garage from the mid-1950s to late 1990s. The potential exists for petroleum and hazardous substance contamination at the subject property due to site use as a service garage. Site use as a service garage is a REC.

Floor Drains

The service garage was previously equipped with floor drains consisting of floor sumps discharging to a 4-inch drain pipe extending to the south yard. The discharge location of the drain pipe is unknown. State records document a release of gasoline to floor drains at the subject property in 1983 (Spill Report #B-152-1983). The drain pipe had been damaged during earthwork and significant gasoline vapors were emitted from the broken pipe. The former property owner admitted dumping gasoline into a floor drain. The potential exists for releases associated with floor drains at the subject property and serves as a REC.

In-Ground Hydraulic Lift(s)

The garage bay at the subject property is equipped with an in-ground hydraulic lift. The potential exists for releases associated with in-ground hydraulic lift(s) at the subject property and serves as a REC.

Off-Site Sources

State records identified potential off-site sources of contamination, including the adjoining New Sweden School property to the west, adjoining New Sweden Service property to the north, and nearby New Sweden town garage and New England Telephone Company properties approximately 1,000 feet east. A hydrogeological investigation in 2001 identified the New Sweden School property as potential leaking UST site with an unregistered gas tank in the 1950s. A registered gasoline UST was installed at the New Sweden School in 1975 and removed in 1989. A registered fuel oil UST was installed at the New Sweden Service property in 1971 and removed in 1991. Petroleum releases from a leaking pump at the New Sweden town garage property impacted area groundwater in 1991 and 2003. A leaking fuel oil UST at the New England Telephone Company property impacted a private water supply well in 1978. Potential off-site sources of contamination are a REC.

Agricultural Land

The earliest record of the subject property is agricultural land on a historical aerial photograph from 1947. The historical application of herbicides and pesticides to surface soils at the subject property serves as a REC. This REC would require additional investigation to determine the current impact (if any) on the subject property. Our experience with sampling historical agricultural land in Aroostook County indicates background herbicide and pesticide contaminant concentrations in surface soils are generally below the most stringent regulatory guidelines except arsenic. Maine soil often contains naturally occurring arsenic above risk-based regulatory guidelines for residential and commercial exposure scenarios.

Surface Spills

State records document several surface spills of gasoline at subject property from 2002 to 2020 due to human error at the dispensers and spills from vehicles. The estimated quantities of surface spills at the subject property were minimal, generally one gallon or less, with a 3-gallon spill in 2011, 9-gallon spill in 2007, 10-gallon spill in 2002 and 30-gallon spill in 2020. According to spill reports, the reported releases were promptly cleaned up. The surface spills are historical recognized environmental conditions (HRECs). An HREC is a previous release of hazardous substances or petroleum products affecting the subject property that has been addressed to the satisfaction of the applicable regulatory authority or authorities and meeting unrestricted use criteria established by the applicable regulatory authority or authorities without subjecting the subject property to any controls. An HREC is not a REC.

Additional investigation is warranted at the subject property, including but not limited to, vapor intrusion and drinking water assessments for petroleum products and hazardous substances. We recommend participation in the Maine Voluntary Response Action Program (VRAP).

TABLE OF CONTENTS

1.	INTRODUCTION	1
1.1	Scope of Work	1
2.	USER-PROVIDED INFORMATION	1
3.	PHYSICAL SETTING	2
4.	SITE RECONNAISSANCE	2
4.1	Methodology	2
4.2	Site Visit	2
5.	RECORDS REVIEW	4
5.1	Historical Records Review	4
5.2	Regulatory Records Review	5
6.	INTERVIEWS	9
6.1	Past and Present Owners, Operators and Occupants	9
6.2	State and/or Local Government Officials	9
7.	NON-SCOPE SERVICES	10
8.	FINDINGS AND OPINION	10
8.1	Documented Petroleum Contamination	10
8.2	Former Underground Storage Tank Facility	10
8.3	Unregistered Gas Tanks	11
8.4	Site Use as a Service Garage	11
8.5	Floor Drains	11
8.6	In-Ground Hydraulic Lift(s)	11
8.7	Off-Site Sources	11
8.8	Agricultural Land	11
8.9	Surface Spills	12
9.	CONCLUSIONS	12
10.	LIMITATIONS	12

APPENDIX

Figure 1 Location Map
Figure 2 Area Map
Figure 3 Site Map
Aerial Photographs
Historical Land Survey
Historic Site Sketch
Boundary Survey
Property Assessment Records
Site Photographs
Facility Registration Certificates
Geoprobe Investigation Report (2012)
Jacques Whitford Reports (2001, 2004)
Spill Reports

1. INTRODUCTION

This Phase I Environmental Site Assessment (ESA) was completed for Northstar Variety located at 204 New Sweden Road in New Sweden, Maine. The purpose of this Phase I ESA was to identify recognized environmental conditions (RECs) in connection with the subject property through site reconnaissance, records review and interviews. RECs are defined in ASTM International Standard E1527-21 as:

- (1) the presence of hazardous substances or petroleum products in, on, or at the subject property due to a release to the environment;
- (2) the likely presence of hazardous substances or petroleum products in, on, or at the subject property due to a release or likely release to the environment; or
- (3) the presence of hazardous substances or petroleum products in, on, or at the subject property under conditions that pose a material threat of a future release to the environment.

1.1 Scope of Work

The scope of work for this Phase I ESA consisted of site reconnaissance, records review and interviews conducted in accordance with ASTM International Standard E1527-21, as described below.

1.1.1 Site Reconnaissance

The purpose of site reconnaissance was to collect information and make observations to help identify RECs in connection with the subject property. During the site visit, the environmental professional (or person under the supervision or responsible charge of the environmental professional) looked for and identified the specified features, activities, uses, and conditions for this Phase I ESA.

1.1.2 Records Review

The purpose of records review was to obtain and review records that will help identify RECs in connection with the subject property. Physical setting resources, standard governmental environmental record sources, and standard historical resources were reviewed for this Phase I ESA.

1.1.3 Interviews

The purpose of interviews was to obtain information indicating RECs in connection with the subject property. Past and present owners, operators and occupants of the subject property and state and/or local government officials were interviewed for this Phase I ESA.

2. USER-PROVIDED INFORMATION

This Phase I ESA was completed for the Maine Department of Environmental Protection. The user was provided the ASTM International Standard E1527-21 User Questionnaire. Land title records were not received for this Phase I ESA and the user did not identify activity use limitations or environmental liens. Pertinent information provided by the user is included in this report.

3. PHYSICAL SETTING

As shown on the attached Location Map (Figure 1, Appendix), the subject property (1.13 acres) is located on the west side of New Sweden Road (Route 161) at the intersection with Station Road and Westmanland Road in New Sweden, Maine. The subject property is owned by David and Sara Anderson and identified as Lot 134F on Tax Map 11. The subject property is developed with a 2,112-square foot commercial building with a 441-square foot deck, 240-square foot shed, and two aboveground storage tanks (ASTs) with underground piping and dispensers for retail gasoline.

The surrounding area consists of residential, recreational, and commercial properties. The subject property and surrounding area are served by private water supply wells and septic systems. Private water supply wells within 2,500 feet of the subject property are illustrated on the attached Area Map (Figure 2, Appendix). According to the Maine Public Water Resources Information System, there are no public water supply wells within 2,500 feet of the subject property. The subject property is not located on a mapped sand and gravel aquifer.

General surface topography of the area is flat, gently sloping northwest. The nearest surface water body is an unnamed stream approximately 1,300 feet northwest. The FEMA Flood Map indicates the subject property is in Zone C for areas of minimal flooding. The primary surficial geologic unit in the area is till, a heterogeneous mixture of sand, silt, clay and stones. Bedrock in the area is mapped as calcareous pelite of the New Sweden Formation (Sns).

4. SITE RECONNAISSANCE

4.1 Methodology

The periphery of the subject property as well as the periphery of all structures on the subject property, if any, were visually and/or physically observed by walking and/or driving around the property. If roads or paths with no apparent outlet were observed on the subject property, the use of the road or path was identified to determine whether it was likely to have been used as an avenue for releases or disposal of hazardous substances or petroleum products.

The subject property was viewed from all adjacent public thoroughfares. Adjoining properties and the surrounding area were observed during observation of the periphery of the subject property, from public thoroughfares adjacent to or traveled on the way to the subject property, and from buildings and structures otherwise accessed during the site visit.

The interior of structures at the subject property, if any, were visually and/or physically observed, including accessible common areas (such as lobbies, hallways, utility rooms, recreation areas, etc.); areas where hazardous substances or petroleum products are or may have been stored, used, treated, discharged, or disposed; maintenance and repair areas; boiler rooms; and a representative sample of occupant spaces.

4.2 Site Visit

A site visit was conducted on May 28, 2026 by Nathan Hersey of County Environmental Engineering, Inc. Identified specified features, activities, uses, and conditions are described below.

ASTM International Standard E1527-21 Site Reconnaissance		
Specified Features, Activities, Uses, and Conditions	Identified	Not Present
Current use(s) of the subject property	X	
Past use(s) of the subject property		X
Current uses of adjoining properties	X	
Past uses of adjoining properties		X
Current or past use(s) of the surrounding area	X	
Geologic, hydrogeologic, hydrologic and topographic conditions	X	
Structures and other improvements at the subject property	X	
Roads	X	
Potable water supply/source for the subject property	X	
Sewage disposal system for the subject property	X	
Petroleum and hazardous substance containers in connection with use	X	
Storage tanks	X	
Strong, pungent or noxious odors and their sources		X
Petroleum or hazardous substances in pools or sumps		X
Drums, totes, and intermediate bulk containers		X
Petroleum and hazardous substance containers not in connection with use		X
Unidentified substance containers		X
PCB-containing items (including transformers, hydraulic lifts)	X	
Heating/cooling	X	
Stains or corrosion on floors, walls, or ceilings (excluding water)		X
Drains and sumps		X
Pits, ponds, or lagoons		X
Stress vegetation, stained soil or pavement		X
Solid waste	X	
Water/wastewater (including stormwater)	X	
Wells (including dry wells, monitoring wells, abandoned wells)	X	
Septic systems or cesspools	X	

4.2.1 Exterior Observations

The subject property (1.13 acres) is developed with a 2,112-square foot commercial building consisting of a 1,472-square foot two-story structure with a 640-square foot single-story addition on the north side and 441-square foot deck on the south side. The west side of the addition is equipped with several PVC vent pipes for subfloor ventilation. Two buried 1.5-inch steel pipes were noted near the southwest corner of the building, indicative of a remote fill and vent pipes for a kerosene UST in the west yard. Fill and vent pipes for a fuel oil tank were observed at the southwest corner of the building. Trash bins were noted on the south side of the building. A 240-square foot shed is located south of the building. A 5,000-gallon AST and 2,000-gallon AST are located inside a concrete dike in the south yard with a transition sump and underground piping to two dispensers east of the building.

General surface topography of the area is flat, gently sloping northwest. The subject property is served by a private water supply well and septic system. The on-site well is located north of the building, the holding tank is west of the building and the leach field is in the south yard. The subject property is served by overhead electric. Pole-mounted transformers were noted on the east side of New Sweden Road. The north yard is paved with a gravel yard to the south and grassed areas to the west. A gravel access road, drainage swale and culvert are located at the southwest corner of the property. The gravel access road is the right of way for the adjoining property to the south.

4.2.2 Interior Observations

The commercial building consists of a convenience store with a single-bay garage at the south end and residence on the second floor. The garage bay is equipped with an in-ground hydraulic lift. The building is heated with an oil-fired furnace supplied by a 275-gallon fuel oil tank in the southwest corner of the garage. Fill and vent pipes extend to the building exterior. Several gas cans were noted in the storage shed with no leaks or releases noted.

4.2.3 Adjoining Properties and the Surrounding Area

The surrounding area consists of residential, recreational, and commercial properties.

Current Uses of Adjoining Properties			
Location	Map-Lot	Property Owner	Apparent Use
South	11-134G	David Spooner	Agricultural field, undeveloped woodlands
East	11-134G	David Spooner	Residence
North	11-116A	Michael Hewitt	Maintenance garage (Stubborn Swede, New Sweden Service)
Northwest	11-115A	Evelyn Naegeli	Residence
West	11-134J	Stanley Anderson	Warehouse, recreational field (ballfield)

5. RECORDS REVIEW

5.1 Historical Records Review

The objective of compiling and analyzing historical property information and developing a history of the previous uses of the subject property, adjoining properties and surrounding area is to help identify the likelihood of past uses having led to RECs in connection with the subject property.

ASTM International Standard E1527-21 Standard Historical Resources	
Historical Resource	Historical Information Source(s)
Aerial Photographs	Aerial photographs were obtained from Google Earth and the Maine Geologic Survey Digital Maine Repository.
Fire Insurance Maps	The Sanborn Library collection at the University of Maine Fogler Library was searched and fire insurance maps covering the subject property were not found.
Local Street Directories	Street directories were not reviewed. This resource was unlikely to be useful due to information obtained from other resources.
Topographic Maps	Historical topographic maps were not reviewed. This resource was unlikely to be useful due to information obtained from other resources.
Building Department Records	Building records were not reviewed. Additional review of this resource was not warranted to meet the objective of historical research.
Interviews	Interviews with knowledgeable individual(s) about the past uses of the subject property, adjoining properties, or surrounding area were conducted.
Property Tax Files	Property assessment records and tax information sheets were obtained from the Town of New Sweden.
Zoning/Land Use Records	Zoning or land use records were not reviewed. Additional review of this resource was not warranted to meet the objective of historical research.
Other Historical Records	Deed records were obtained from the Southern Aroostook Registry of Deeds. Project files were reviewed at County Environmental Engineering, Inc.

5.1.1 Uses of the Subject Property

The earliest record of the subject property is agricultural land on a historical aerial photograph from 1947. The subject property was acquired by Henry Anderson in 1953 and developed as a gas station and service garage (Texaco). A historical land survey from 1954 illustrates a pump island, flood light and sign at the subject property. The existing 1,472-square foot two-story structure is evident on historical aerial photographs from 1957 and 1970.

The subject property was owned and operated by Arthur and Marie Cullins (A&M Texaco Service) in 1979, Gary and Mary Raymond (Gary's Texaco) in 1982, and George and Vera Plourde (Georgie Porgies Exxon) in 1986. The subject property was acquired by David and Sara Anderson (Northstar Variety) in 1998 and operated as a convenience store, sporting goods store, and gas station. The garage bay was previously used as a bait shop. The subject property remains largely unchanged since the 2000s.

5.1.2 Uses of Adjoining Properties and Surrounding Area

The earliest record of the surrounding area is agricultural land and homestead farms on a historical aerial photograph from 1947. The former New Sweden School on the adjoining property to the west was constructed in the early 1950s. The existing maintenance garage on the adjoining property to the north (Stubborn Swede, New Sweden Service) was constructed in the 1960s. The school building was demolished in the late 1990s.

5.2 Regulatory Records Review

Some records reviewed pertain not just to the subject property but also pertain to properties within an additional approximate minimum search distance to help assess the likelihood of an impact to the subject property from migrating hazardous substances or petroleum products.

ASTM International Standard E1527-21 Government Records Reviewed and Minimum Search Distances	
Standard Environmental Record Resources	Distance (Miles)
Lists of Federal NPL (Superfund) sites	1.0
Lists of Federal Delisted NPL sites	0.5
Lists of Federal sites subject to CERCLA removals and CERCLA orders	0.5
Lists of Federal CERCLA sites with NFRAP	0.5
Lists of Federal RCRA facilities undergoing Corrective Action	1.0
Lists of Federal RCRA TSD facilities	0.5
Lists of Federal RCRA generators	property/adjoining
Federal institutional control/engineering control registries	property only
Federal ERNS list	property only
Lists of state- and tribal "Superfund" equivalent sites	1.0
Lists of state- and tribal hazardous waste facilities	0.5
Lists of state and tribal landfills and solid waste disposal facilities	0.5
Lists of state and tribal leaking storage tanks	0.5
Lists of state and tribal registered storage tanks	property/adjoining
State and tribal institutional control/ engineering control registries	property only
Lists of state and tribal voluntary cleanup and brownfield sites	0.5

5.2.1 EPA Superfund: National Priorities List (NPL)

www.epa.gov/superfund/superfund-national-priorities-list-npl, as of May 12, 2026.

The National Priorities List (NPL) is the list of sites of national priority among the known releases or threatened releases of hazardous substances, pollutants, or contaminants throughout the United States and its territories. The NPL is intended primarily to guide the Environmental Protection Agency (EPA) in determining which sites warrant further investigation. There were no current, proposed or deleted sites listed on the NPL within one mile of the subject property.

5.2.2 EPA Superfund Enterprise Management System (SEMS)

<https://enviro.epa.gov/envirofacts/sems/search>, data last refreshed June 2, 2026.

The Superfund Enterprise Management System (SEMS) is the official repository for site and non-site specific Superfund data in support of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). There were no SEMS sites listed within one-half mile of the subject property.

5.2.3 EPA Resource Conservation and Recovery Act (RCRA) Information Database

<https://enviro.epa.gov/facts/rcrainfo/search.html>, data last refreshed June 2, 2026.

The Resource Conservation and Recovery Act Information (RCRAInfo) is used by the EPA to track entities regulated under RCRAInfo subtitle C (hazardous waste handlers). RCRAInfo includes data on general handler information, permit or closure status, compliance with federal and state regulations, and cleanup activities. Records were researched for both active and inactive sites. There were no treatment, storage, and disposal (TSD) facilities within one mile of the subject property. The subject property and adjoining properties were not listed on the RCRAInfo database.

5.2.4 EPA RCRAInfo Hazardous Waste Information Platform (HWIP)

<https://rcrapublic.epa.gov/rcra-hwip/>, as of June 2, 2026.

The RCRAInfo Hazardous Waste Information Platform (HWIP) is EPA's Office of Land and Emergency Management's (OLEM) data repository for nationwide hazardous waste generation, management, and transportation. The subject property and adjoining properties were not listed on the HWIP database.

5.2.5 EPA Facility Registry System (FRS)

www.epa.gov/frs/frs-query, last updated May 28, 2026.

The EPA Facility Registry System (FRS) is a centrally managed database that identifies facilities, sites or places subject to environmental regulations or of environmental interest. The subject property and adjoining properties were not listed on the EPA FRS.

5.2.6 US Coast Guard National Response Center (NRC)

<https://nrc.uscg.mil/>, reports through 2025.

Maintained by the United States Coast Guard, the National Response Center (NRC) serves as an emergency call center that fields initial reports for pollution and railroad incidents and forwards that information to appropriate federal/state agencies for response. The spreadsheets posted to the NRC website are organized by year. This standard government environmental record source is not practically reviewable by geographic location.

5.2.7 MEDEP BRWM Remediation Sites Database

www.maine.gov/dep/gis/datamaps, data refreshed June 6, 2026.

This most recent public record of all past and current sites in the Maine Department of Environmental Protection (MEDEP) Bureau of Remediation and Waste Management (BRWM) Superfund, Federal Facilities, Landfill Closure, Uncontrolled Sites, Brownfields and/or Voluntary Response Action Program (VRAP) was reviewed, including sites which are being actively worked on, sites which may pose a threat to public health and require further investigation, sites which have been investigated and found to have no evidence of hazardous substances, or sites which require no further action. The subject property (REM03770) is listed on the MEDEP BRWM Remediation Sites Database for recent Brownfields assessment. There were no other remediation sites within one-half mile of the subject property.

5.2.8 MEDEP BRWM Registered Petroleum Tanks Database

www.maine.gov/dep/gis/datamaps, data refreshed June 8, 2026.

The MEDEP BRWM Registered Petroleum Tanks Database was reviewed for registered USTs and ASTs at the subject property and adjoining properties. As summarized on the table below, five single-wall steel USTs (Tanks #1 – 5) were registered for the subject property (Facility Registration Certificate #2989).

Registered Underground Storage Tanks at the Subject Property (Georgie Porgies Exxon)						
Tank	Size (gal)	Product	Tank Type	Installed	Status	Status Date
1	5,000	Reg Gasoline	SW Steel	1983	Removed	1989
2	4,000	UL Gasoline	SW Steel	1976	Removed	1989
3	2,000	Diesel	SW Steel	1984	Removed	1989
4	500	Kerosene	SW Steel	1983	Removed	1989
5	1,000	Unknown	SW Steel	Unknown	Removed	1989

The existing 5,000-gallon AST for unleaded gasoline and 2,000-gallon AST for premium gasoline were also registered for the subject property (Facility Registration Certificate #21179). The ASTs were installed in 1991 and the associated underground piping was replaced in 2004.

A 1,000-gallon single-wall steel UST for regular gasoline was registered for the former New Sweden School on the adjoining property to the west (Facility Registration Certificate #2089). The UST was installed in 1975 and removed in 1989. A 500-gallon single-wall steel UST for fuel oil was registered for the garage owned by Michael Hewitt on the adjoining property to the north (Facility Registration Certificate #16297). The UST was installed in 1971 and removed in 1991.

5.2.9 MEDEP BRWM Hazardous Oil Spill System

www.maine.gov/dep/gis/datamaps, data refreshed June 6, 2026.

The MEDEP BRWM Hazardous Oil Spill System includes all responses to spills or releases of hazardous substances or petroleum products, including leaking USTs. Spill reports for the subject property, adjoining or nearby properties with the potential to impact the subject property are summarized below.

Spill Report #B-997-1978. The private water supply well at a nearby residence approximately 1,000 feet east was impacted by petroleum contamination in 1978. The source was determined to be a leaking fuel oil UST at the former New England Telephone Company building. The leaking UST was replaced.

Spill Report #B-152-1983. Petroleum contamination was encountered during the installation of a used 5,000-gallon UST at the subject property in 1983 (Gary's Texaco). Saturated soil was observed near an existing gasoline UST and significant gasoline vapors were noted at a broken 4-inch drain pipe in the excavation. According to the spill narrative, the drain pipe was connected to floor drains in the service garage and the owner had recently dumped gasoline into one of the floor drains. A site sketch in the spill file illustrates the drain pipe and three USTs at the southeast corner of the building.

Spill Report #I-222-1988. A gasoline UST at the subject property failed statistical inventory analysis (SIA) in 1988 (Georgie Porgies Exxon).

Spill Report #I-178-1989. Significant petroleum contamination was encountered at the subject property in 1989 (Georgie Porgies Exxon). The source was determined to be a leaking fitting at the pump island. A recovery system was installed and operated for a few weeks. Contaminated soil was later excavated in 2000 and 2003, but petroleum contamination exceeding cleanup goals was left in place beneath the building, near a utility pole, and along the roadway (New Sweden Road/Route 161). A subsequent subsurface investigation in 2012 identified petroleum contamination in soil, groundwater and soil gas at the subject property above regulatory guidelines.

Spill Report #I-63-1991. Petroleum contamination was discovered at the New Sweden town garage approximately 1,000 feet east due to a leak at the pump island in 1991. According to the spill narrative, saturated soil extended to bedrock and a nearby resident reported gas in their cellar sump.

Spill Report #I-35-1993. The private water supply well at the former New Sweden School on the adjoining property to the west was impacted by petroleum contamination in 1993. Petroleum contamination was also detected in the private water supply well at a nearby residence to the west (Boody residence). Carbon filters were installed and the wells were later replaced in 2000 and 2001. A hydrogeological investigation in 2001 identified the New Sweden School property as potential leaking UST site with an unregistered gas tank in the 1950s.

Spill Report #I-23-2002. Approximately 10 gallons of gasoline was released at the subject property due to a vehicle overfill in 2002. According to the spill narrative, contaminated snow was recovered for disposal.

Spill Report #I-223-2002. A gasoline pump at the subject property was damaged by a vehicle accident in 2002. The piping was repaired and a limited amount of contaminated soil was removed.

Spill Report #I-156-2003. Approximately one quart of gasoline was released from a vehicle at the subject property in 2003. The spill was cleaned up with sorbents.

Spill Report #I-178-2003. Approximately one gallon of gasoline was released from a delivery truck at the subject property in 2003.

Spill Report #I-182-2003. Petroleum contamination was encountered at the New Sweden town garage approximately 1,000 feet east due to a leak at the pump island in 2003. According to the spill narrative, contaminated soil extended to bedrock. Subsequent sampling identified petroleum contamination in the private water supply well for town garage.

Spill Report #I-144-2007. Approximately 9 gallons of gasoline was released from a vehicle at the subject property in 2007. The spill was cleaned up with sorbents.

Spill Report #I-183-2009. Approximately one gallon of gasoline was released from a dispenser nozzle at the subject property in 2009. The spill was cleaned up with sorbents.

Spill Report #I-140-2010. Approximately one gallon of gasoline was released at the subject property due to a vehicle overfill in 2010. The spill was cleaned up with sorbents.

Spill Report #I-119-2011. Approximately three gallons of gasoline was released from a vehicle at the subject property in 2011. The spill was cleaned up with sorbents.

Spill Report #I-77-2020. Approximately 30 gallons of gasoline was released from a vehicle at the subject property in 2020. The spill was cleaned up with sorbents.

5.2.10 Maine Environmental and Geographic Analysis Database

<https://www.maine.gov/dep/maps-data/egad/>, results through June 8, 2026.

The Maine Environmental and Geographic Analysis Database (EGAD) includes sites with environmental monitoring and threats to groundwater. The subject property, adjoining and nearby properties were listed on EGAD for investigation and remediation work in the area.

5.2.11 MEDEP BRWM Solid Waste – Closed Municipal Landfills

www.maine.gov/dep/gis/datamaps, as of May 27, 2025.

State lists were reviewed for landfill and/or solid waste disposal sites. There were no closed municipal landfills within one-half mile of the subject property.

6. INTERVIEWS

The following individuals were interviewed for this Phase I ESA. Pertinent information provided by the individuals has been included in previous sections of this report.

6.1 Past and Present Owners, Operators and Occupants

Sara Anderson (present owner, operator and key site manager) and Ted Wolfertz of MEDEP (Phase I ESA user) were present for the site visit and provided information regarding the subject property. Sara Anderson completed the Phase I ESA user, property owner and key site manager questionnaires.

6.2 State and/or Local Government Officials

Sean Bernard of the MEDEP Northern Maine Regional Office (NMRO), Nathan Durant of the MEDEP Underground Injection Control Program, and Mason Moro of MEDEP Response Services were contacted for this assessment and reported no record of floor drains or recent spills at the subject property.

7. NON-SCOPE SERVICES

This Phase I ESA did not include services outside the scope of ASTM International Standard E1527-21. Following are several non-scope considerations that persons may want to assess in connection with commercial real estate. No implication is intended as to the relative importance of inquiry into such non-scope considerations, and this list of non-scope considerations is not intended to be all-inclusive:

ASTM International Standard E1527-21 Non-Scope Considerations
Asbestos-containing building materials unrelated to releases into the environment
Biological agents, mold or microbial growth conditions, naturally-occurring radon
Cultural and historic resources, ecological resources, endangered species, wetlands
Health and safety, industrial hygiene, regulatory compliance
Indoor air quality unrelated to releases of hazardous substances or petroleum products into the environment
Lead-based paint unrelated to releases into the environment, lead in drinking water
PCB-containing building materials (e.g., interior fluorescent light ballasts, paint, and caulk)
Substances not defined as hazardous substances (including some substances sometimes generally referred to as emerging contaminants) unless or until such substances are classified as a CERCLA hazardous substance

8. FINDINGS AND OPINION

Site history prior to 1947 is a data gap. It is our opinion this data gap is not a significant data gap due to apparent agricultural use.

8.1 Documented Petroleum Contamination

Significant petroleum contamination was encountered at the subject property in 1989 due to a leaking fitting at the pump island (Spill Report #I-178-1989). A recovery system was installed and operated for a few weeks. Contaminated soil was later excavated in 2000 and 2003, but petroleum contamination exceeding cleanup goals was left in place beneath the building, near a utility pole, and along the roadway (New Sweden Road/Route 161). A subsequent subsurface investigation in 2012 identified petroleum contamination in soil, groundwater and soil gas at the subject property above regulatory guidelines. The documented petroleum contamination at the subject property is a REC.

8.2 Former Underground Storage Tank Facility

Four registered underground storage tanks (USTs) were installed at the subject property in 1976, 1983 and 1984 for gasoline, diesel and kerosene (Tanks #1 – 4). One UST was registered with an unknown installation date and unknown tank contents (Tank #5). State records document saturated soil and three USTs at the southeast corner of the building in 1983 (Spill Report #B-152-1983) and failing statistical inventory analysis in 1988 (Spill Report #I-222-1988). Two buried 1.5-inch steel pipes were noted near the southwest corner of the building during site reconnaissance, indicative of a remote fill and vent pipes for a kerosene UST in the west yard. There is no documentation regarding subsurface conditions during removal of the UST facility in 1989. The former UST facility is a REC.

8.3 Unregistered Gas Tanks

The subject property was first developed as a gas station in 1953 with a pump island and unregistered gas tanks. The potential exists for releases associated with unregistered gas tanks, associated underground piping, pumps and dispensers. Unregistered gas tanks are a REC.

8.4 Site Use as a Service Garage

The subject property was historically operated as a service garage from the mid-1950s to late 1990s. The potential exists for petroleum and hazardous substance contamination at the subject property due to site use as a service garage. Site use as a service garage is a REC.

8.5 Floor Drains

The service garage was previously equipped with floor drains consisting of floor sumps discharging to a 4-inch drain pipe extending to the south yard. The discharge location of the drain pipe is unknown. State records document a release of gasoline to floor drains at the subject property in 1983 (Spill Report #B-152-1983). The drain pipe had been damaged during earthwork and significant gasoline vapors were emitted from the broken pipe. The former property owner admitted dumping gasoline into a floor drain. The potential exists for releases associated with floor drains at the subject property and serves as a REC.

8.6 In-Ground Hydraulic Lift(s)

The garage bay at the subject property is equipped with an in-ground hydraulic lift. The potential exists for releases associated with in-ground hydraulic lift(s) at the subject property and serves as a REC.

8.7 Off-Site Sources

State records identified potential off-site sources of contamination, including the adjoining New Sweden School property to the west, adjoining New Sweden Service property to the north, and nearby New Sweden town garage and New England Telephone Company properties approximately 1,000 feet east. A hydrogeological investigation in 2001 identified the New Sweden School property as potential leaking UST site with an unregistered gas tank in the 1950s. A registered gasoline UST was installed at the New Sweden School in 1975 and removed in 1989. A registered fuel oil UST was installed at the New Sweden Service property in 1971 and removed in 1991. Petroleum releases from a leaking pump at the New Sweden town garage property impacted area groundwater in 1991 and 2003. A leaking fuel oil UST at the New England Telephone Company property impacted a private water supply well in 1978. Potential off-site sources of contamination are a REC.

8.8 Agricultural Land

The earliest record of the subject property is agricultural land on a historical aerial photograph from 1947. The historical application of herbicides and pesticides to surface soils at the subject property serves as a REC. This REC would require additional investigation to determine the current impact (if any) on the subject property. Our experience with sampling historical agricultural land in Aroostook County indicates background herbicide and pesticide contaminant concentrations in surface soils are generally below the most stringent regulatory guidelines except arsenic. Maine soil often contains naturally occurring arsenic above risk-based regulatory guidelines for residential and commercial exposure scenarios.

8.9 Surface Spills

State records document several surface spills of gasoline at subject property from 2002 to 2020 due to human error at the dispensers and spills from vehicles. The estimated quantities of surface spills at the subject property were minimal, generally one gallon or less, with a 3-gallon spill in 2011, 9-gallon spill in 2007, 10-gallon spill in 2002 and 30-gallon spill in 2020. According to spill reports, the reported releases were promptly cleaned up. The surface spills are historical recognized environmental conditions (HRECs). An HREC is a previous release of hazardous substances or petroleum products affecting the subject property that has been addressed to the satisfaction of the applicable regulatory authority or authorities and meeting unrestricted use criteria established by the applicable regulatory authority or authorities without subjecting the subject property to any controls. An HREC is not a REC.

9. CONCLUSIONS

The purpose of this Phase I ESA was to identify RECs in connection with the subject property through site reconnaissance, records review, and interviews. RECs are defined by ASTM International Standard E1527-21 as “(1) the presence of hazardous substances or petroleum products in, on, or at the subject property due to a release to the environment; (2) the likely presence of hazardous substances or petroleum products in, on, or at the subject property due to a release or likely release to the environment; or (3) the presence of hazardous substances or petroleum products in, on, or at the subject property under conditions that pose a material threat of a future release to the environment.”

We have performed a Phase I ESA in conformance with the scope and limitations of ASTM Practice E1527-21 of Northstar Variety, the subject property. Any exceptions to, or deletions from, this practice are described in the Limitations Section of this report. This assessment has revealed the following RECs, controlled RECs, and/or significant data gaps in connection with the subject property: documented petroleum contamination, former underground storage tank facility, unregistered gas tanks, site use as a service garage, floor drains, in-ground hydraulic lift(s), off-site sources, and agricultural land. Additional investigation is warranted at the subject property, including but not limited to, vapor intrusion and drinking water assessments for petroleum products and hazardous substances. We recommend participation in the Maine Voluntary Response Action Program (VRAP).

10. LIMITATIONS

This Phase I ESA has been completed in accordance with ASTM International Standard E1527-21 for specific application to Northstar Variety located at 204 New Sweden Road in New Sweden, Maine, as described herein. No warranty, expressed or implied, is made. County Environmental Engineering, Inc. (CEE) cannot be responsible for the actions of others taken in reliance on this report, nor for any consequential or incidental damages arising or resulting from this report.

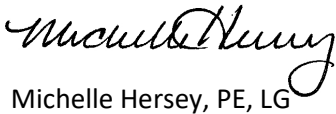
This report is based on site reconnaissance, records review, and interviews completed by CEE as outlined in the scope of work and our professional judgment. As such it does not represent scientific certainties. CEE does not represent that the subject property contains no hazardous material or other potential condition beyond that detected during this environmental site assessment. Should any additional information subsequently become available, CEE requests the opportunity to review the new data and modify, if appropriate, the assessments, findings, conclusions and opinions given in this report.

This report is based in part on information provided by others who are knowledgeable about the subject property and/or other pertinent matters, and in part on public records. CEE cannot guarantee that the information provided to us is accurate. Whenever standard sources were not reasonably ascertainable, alternatives similar or better in reliability and detail were reviewed, including personal knowledge of persons interviewed. Current (within 90 days) sources of standard information were reviewed, whenever reasonably ascertainable.

CEE has made no attempt to verify the compliance of past or present owners or occupants of the property with local, state or federal laws and regulations. This site assessment was not an environmental audit of the operations of owners or occupants, but rather an assessment of RECs in connection with the property from site reconnaissance, records review, and interviews.

Environmental Professional Statement. I declare that, to the best of my professional knowledge and belief, I meet the definition of Environmental professional as defined in §312.10 of 40 CFR 312 and I have the specific qualifications based on education, training, and experience to assess a property of the nature, history, and setting of the subject property. I have developed and performed the all appropriate inquiries in conformance with the standards and practices set forth in 40 CFR Part 312.

Respectfully Submitted,
COUNTY ENVIRONMENTAL ENGINEERING, INC.


Michelle Hersey, PE, LG

APPENDIX

Figure 1 Location Map
Figure 2 Area Map
Figure 3 Site Map
Aerial Photographs
Historical Land Survey
Historic Site Sketch
Boundary Survey
Property Assessment Records
Site Photographs
Facility Registration Certificates
Geoprobe Investigation Report (2012)
Jacques Whitford Reports (2001, 2004)
Spill Reports

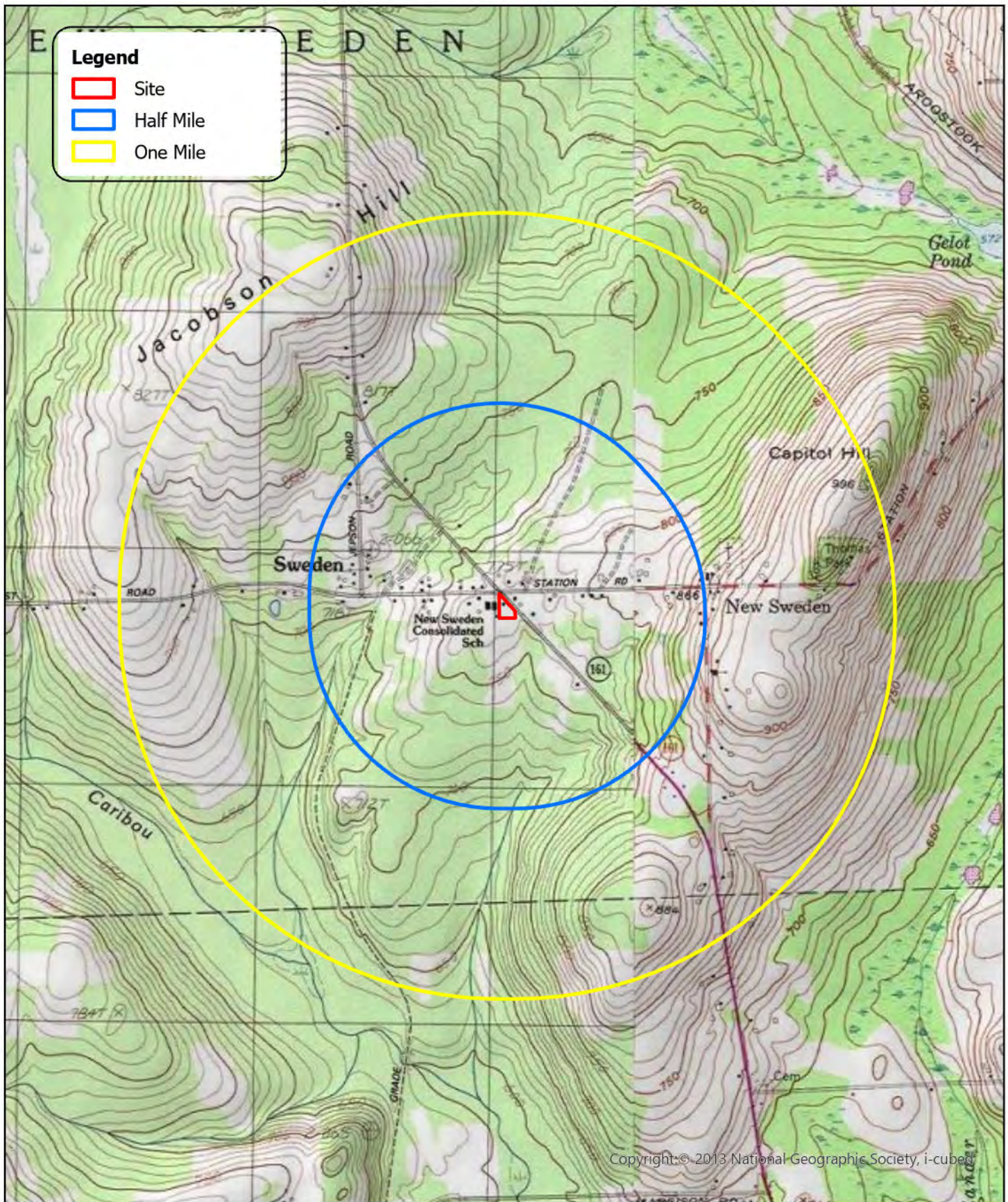


Figure 1

Location Map

Phase I Environmental Site Assessment
 Northstar Variety
 204 New Sweden Road, New Sweden
 Aroostook County, Maine

0 1,000 2,000 3,000 4,000 Ft

Project 261-05

Drawn by: MDH
 Date: 05/28/2026



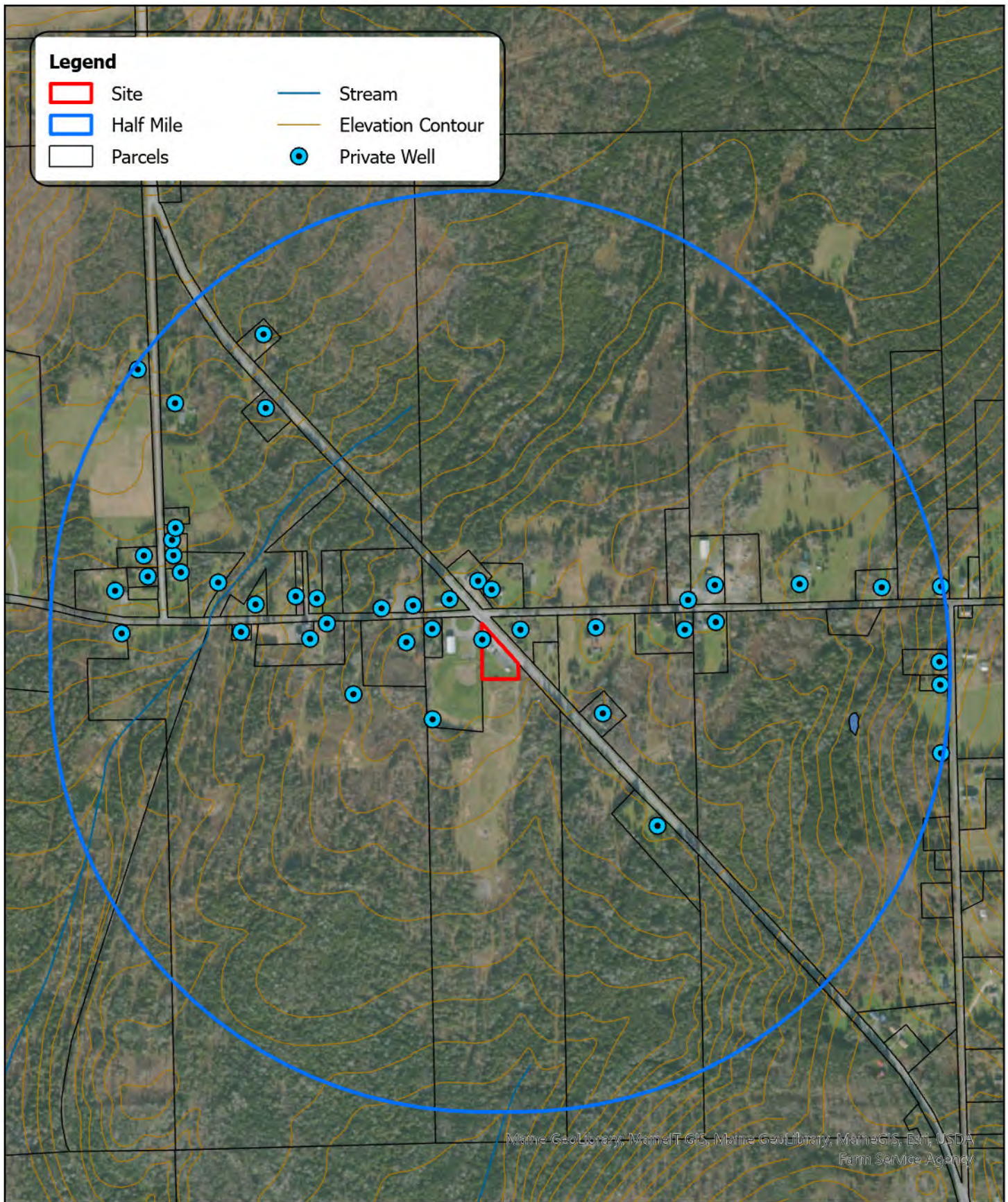


	Figure 2	Area Map	04008001,2001,600 Ft		
	Phase I Environmental Site Assessment Northstar Variety 204 New Sweden Road, New Sweden Aroostook County, Maine		Project 261-05		
			Drawn by: MDH Date: 05/28/2026		

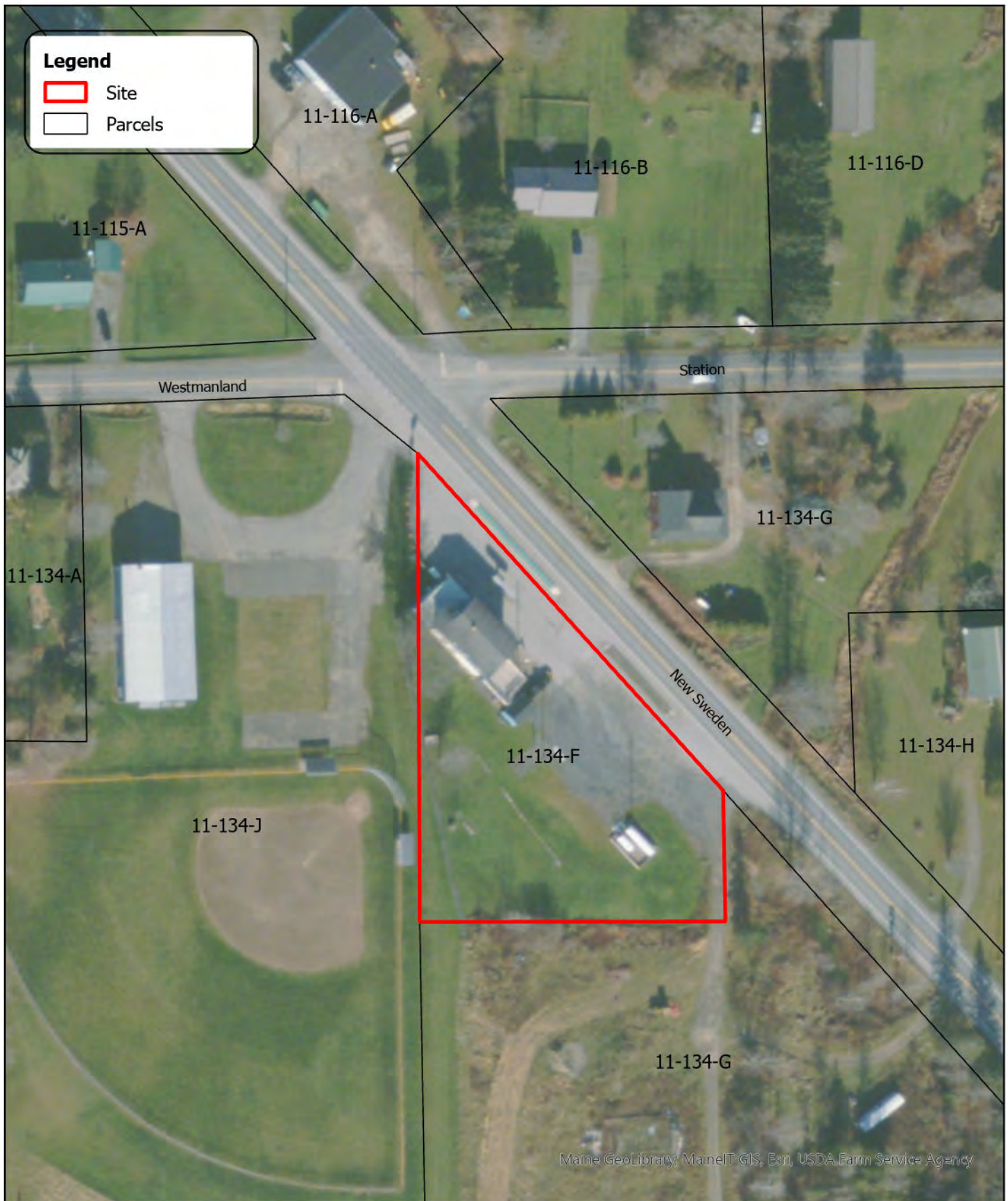
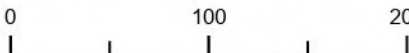


	Figure 3	Site Map			
	Phase I Environmental Site Assessment Northstar Variety 204 New Sweden Road, New Sweden Aroostook County, Maine		Project 261-05	Drawn by: MDH Date: 05/28/2026	

2025



Google Earth

Image © 2025 Airbus



2013



Google Earth

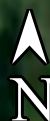


2007



Google Earth

Image USDA/FPAC/GEO



1996



Google Earth

Image U.S. Geological Survey



1980



1970

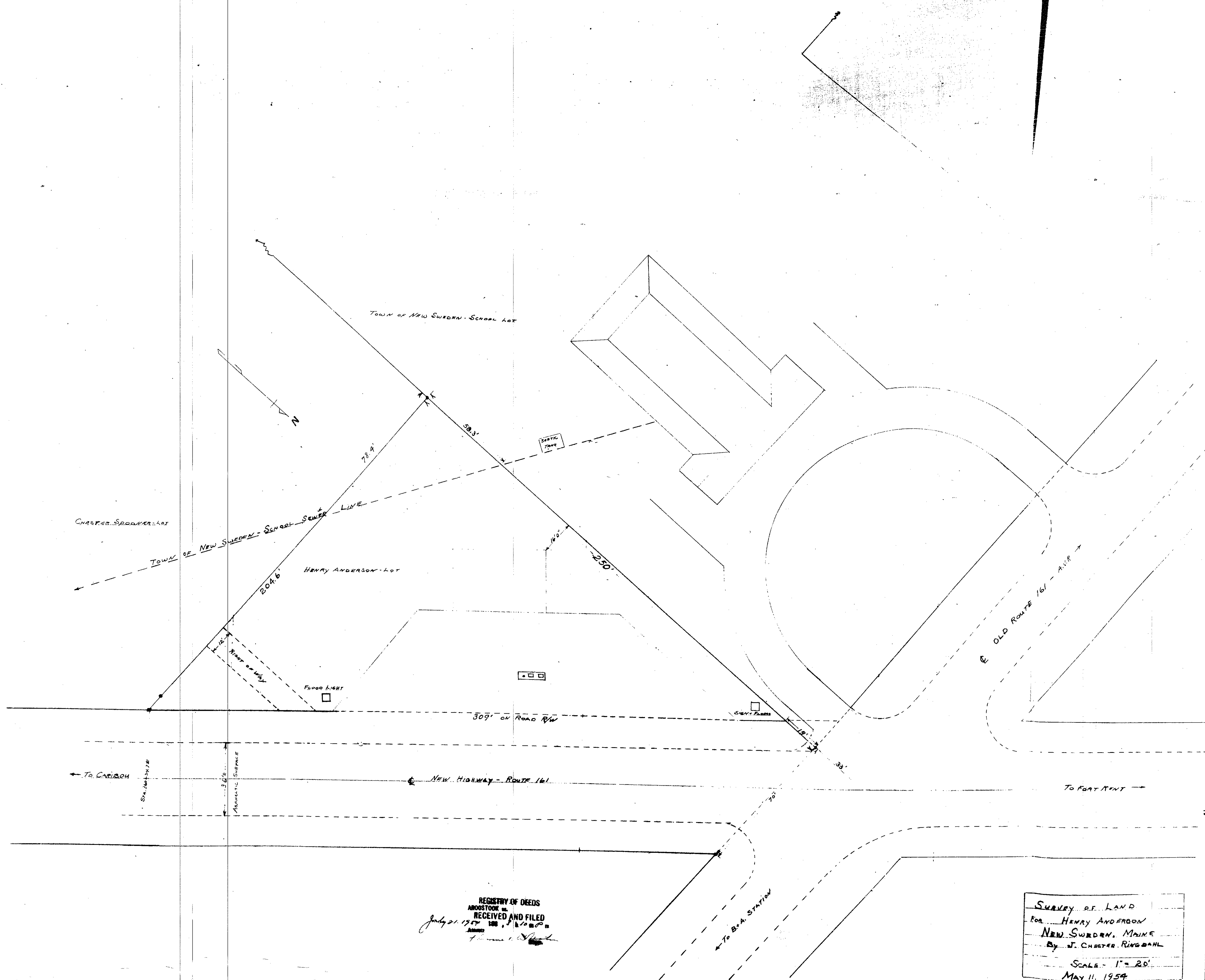


1957



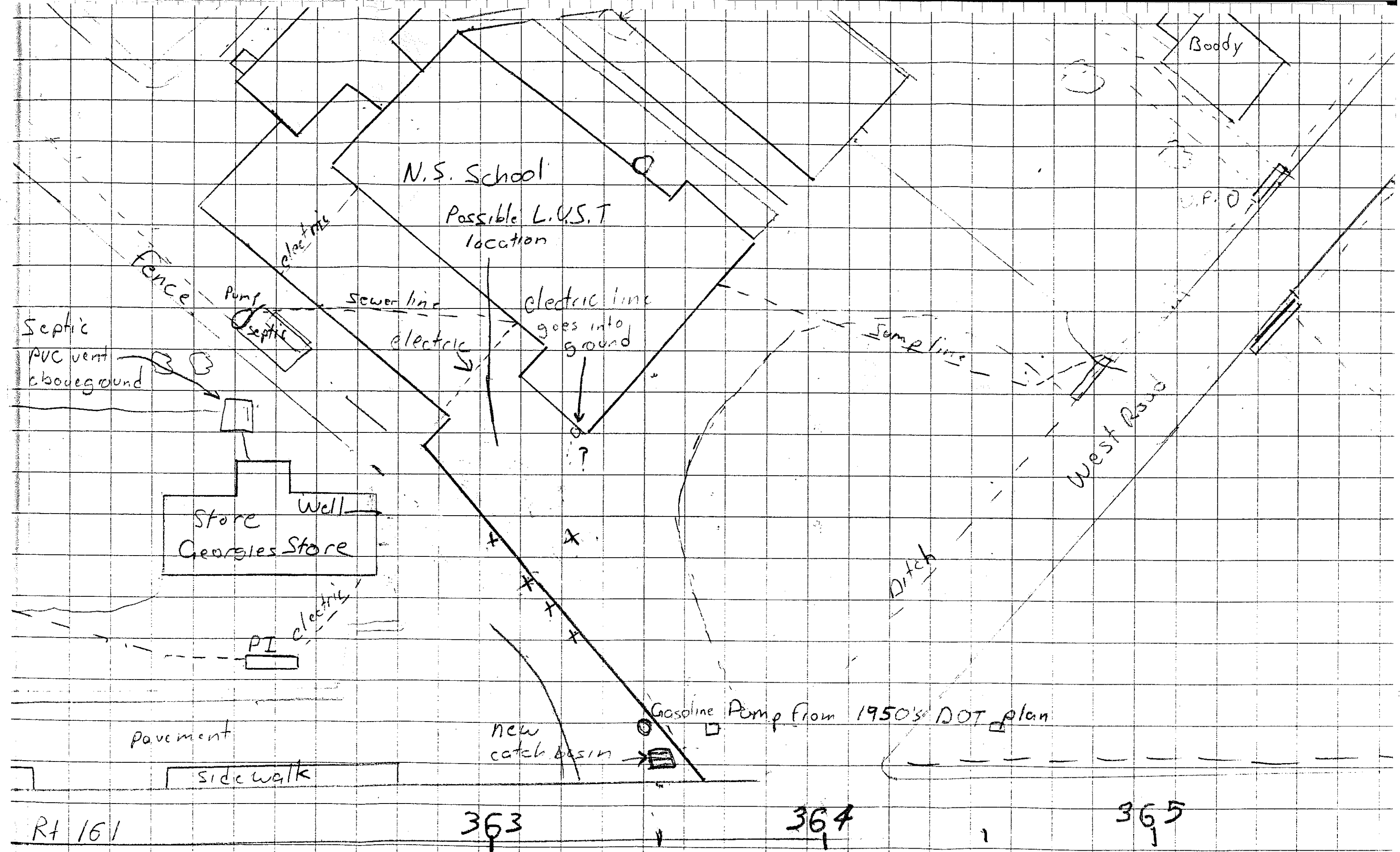
1947





REGISTRY OF DEEDS
ANDSTOCK
RECEIVED AND FILED
July 21, 1959
1959
J. Chester Ringbahl

SURVEY OF LAND
FOR HENRY ANDERSON
NEW SWEDEN, MAINE
By J. CHESTER RINGBAHL
SCALE - 1" = 20'
May 11, 1959



20

PROPERTY ASSESSMENT RECORD

TOWN OF New Sweden

CARD OF CARDS

MAP	LOT	ROAD	204 New Sweden Rd.				SINGLE FAMILY	RESIDENTIAL	SUMMARY						
						TWO FAMILY	SEASONAL								
						APARTMENT	OTHER								
11	134-F	OWNER						NEIGHBORHOOD	12	LAND	12700				
									20	BLDGS.	94300				
									20	TOTAL	107000				
RECORD OF OWNERSHIP			DATE	BK	PG	RET ST	7-16-12 Reviewed with			25	LAND	18,000			
Anderson, David A. & Sara L. Robinson Anderson							10-07	4519	224	Sara was shown			25	BLDGS.	122,300
addl. land							3-10	4809	77	Damaged Area in Cooler Area			20	TOTAL	140,300
mtg NorState Federal CR							1-22-15	5393	181	only - Never showed 2nd floor.			20	LAND	
										Applied Extra 5% Degr.			20	BLDGS.	
										Gunnell. When 20x52 Area			20	TOTAL	
										is repaired Re Actual Degr.			20	LAND	
													20	BLDGS.	
													20	TOTAL	
													20	LAND	
													20	BLDGS.	
													20	TOTAL	
													20	LAND	
													20	BLDGS.	
													20	TOTAL	
													20	LAND	
													20	BLDGS.	
													20	TOTAL	
													20	LAND	
													20	BLDGS.	
													20	TOTAL	
													20	LAND	
													20	BLDGS.	
													20	TOTAL	
													20	LAND	
													20	BLDGS.	
													20	TOTAL	
													20	LAND	
													20	BLDGS.	
													20	TOTAL	
													20	LAND	
													20	BLDGS.	
													20	TOTAL	
													20	LAND	
													20	BLDGS.	
													20	TOTAL	
													20	LAND	
													20	BLDGS.	
													20	TOTAL	
													20	LAND	
													20	BLDGS.	
													20	TOTAL	
													20	LAND	
													20	BLDGS.	
													20	TOTAL	
													20	LAND	
													20	BLDGS.	
													20	TOTAL	
													20	LAND	
													20	BLDGS.	
													20	TOTAL	
													20	LAND	
													20	BLDGS.	
													20	TOTAL	
													20	LAND	
													20	BLDGS.	
													20	TOTAL	
													20	LAND	
													20	BLDGS.	
													20	TOTAL	
													20	LAND	
													20	BLDGS.	
													20	TOTAL	
													20	LAND	
													20	BLDGS.	
													20	TOTAL	
													20	LAND	
													20	BLDGS.	
													20	TOTAL	
													20	LAND	
													20	BLDGS.	
													20	TOTAL	
													20	LAND	
													20	BLDGS.	
													20	TOTAL	
													20	LAND	
													20	BLDGS.	
													20	TOTAL	
													20	LAND	
													20	BLDGS.	
													20	TOTAL	
													20	LAND	
													20	BLDGS.	
													20	TOTAL	
													20	LAND	
													20	BLDGS.	
													20	TOTAL	
													20	LAND	
													20	BLDGS.	
													20	TOTAL	
													20	LAND	
													20	BLDGS.	
													20	TOTAL	
													20	LAND	
													20	BLDGS.	
													20	TOTAL	
													20	LAND	
													20	BLDGS.	
													20	TOTAL	
													20	LAND	
													20	BLDGS.	
													20	TOTAL	
													20	LAND	
													20	BLDGS.	
													20	TOTAL	
													20	LAND	
													20	BLDGS.	
													20	TOTAL	
													20	LAND	
													20	BLDGS.	
													20	TOTAL	
													20	LAND	
													20	BLDGS.	
													20	TOTAL	
													20	LAND	
													20	BLDGS.	
													20	TOTAL	
													20	LAND	
													20	BLDGS.	
													20	TOTAL	
													20	LAND	
													20	BLDGS.	
													20	TOTAL	
													20	LAND	
													20	BLDGS.	
													20	TOTAL	
													20	LAND	
													20	BLDGS.	
													20	TOTAL	
													20	LAND	
													20	BLDGS.	
													20	TOTAL	
													20	LAND	
													20	BLDGS.	
													20	TOTAL	
													20	LAND	
													20	BLDGS.	
													20	TOTAL	
													20	LAND	
													20	BLDGS.	
													20	TOTAL	
													20	LAND	
													20	BLDGS.	
													20	TOTAL	
													20	LAND	
													20	BLDGS.	
													20	TOTAL	
													20	LAND	
													20	BLDGS.	
													20	TOTAL	
													20	LAND	
													20	BLDGS.	
													20	TOTAL	
													20	LAND	
													20	BLDGS.	
													20	TOTAL	
													20	LAND	
													20	BLDGS.	
													20	TOTAL	
													20	LAND	
													20	BLDGS.	
													20	TOTAL	
													20	LAND	
													20	BLDGS.	
													20	TOTAL	
													20	LAND	
													20	BLDGS.	
													20	TOTAL	
													20	LAND	
													20	BLDGS.	
													20	TOTAL	
													20	LAND	
													20	BLDGS.	
													20	TOTAL	
													20	LAND	
													20	BLDGS.	
													20	TOTAL	
													20	LAND	
													20	BLDGS.	
													20	TOTAL	
													20	LAND	
													20	BLDGS.	
													20	TOTAL	
													20	LAND	
													20	BLDGS.	
													20	TOTAL	
													20	LAND	
													20	BLDGS.	
													20	TOTAL	
													20	LAND	
													20	BLDGS.	
													20	TOTAL	
													20	LAND	
													20	BLDGS.	
													20	TOTAL	
													20	LAND	
													20	BLDGS.	
													20	TOTAL	
													20	LAND	
													20	BLDGS.	
													20	TOTAL	
													20	LAND	
													20	BLDGS.	
													20	TOTAL	
													20	LAND	
													20	BLDGS.	
													20	TOTAL	
													20	LAND	
													20	BLDGS.	
													20	TOTAL	
													20	LAND	
													20	BLDGS.	
													20	TOTAL	
													20	LAND	
													20	BLDGS.	
													20	TOTAL	
													20	LAND	
													20	BLDGS.	
													20	TOTAL	
													20	LAND	
													20	BLDGS.	
													20	TOTAL	
													20	LAND	
													20	BLDGS.	
													20	TOTAL	
													20	LAND	
													20	BLDGS.	
													20	TOTAL	
													20	LAND	
													20	BLDGS.	
													20	TOTAL	
													20	LAND	
													20	BLDGS.	
													20	TOTAL	
													20	LAND	
													20	BLDGS.	
													20	TOTAL	
													20	LAND	
													20	BLDGS.	
													20	TOTAL	
													20	LAND	
													20	BLDGS.	
													20	TOTAL	
													20	LAND	
													20	BLDGS.	
													20	TOTAL	
													20	LAND	
													20		

CONSTRUCTION

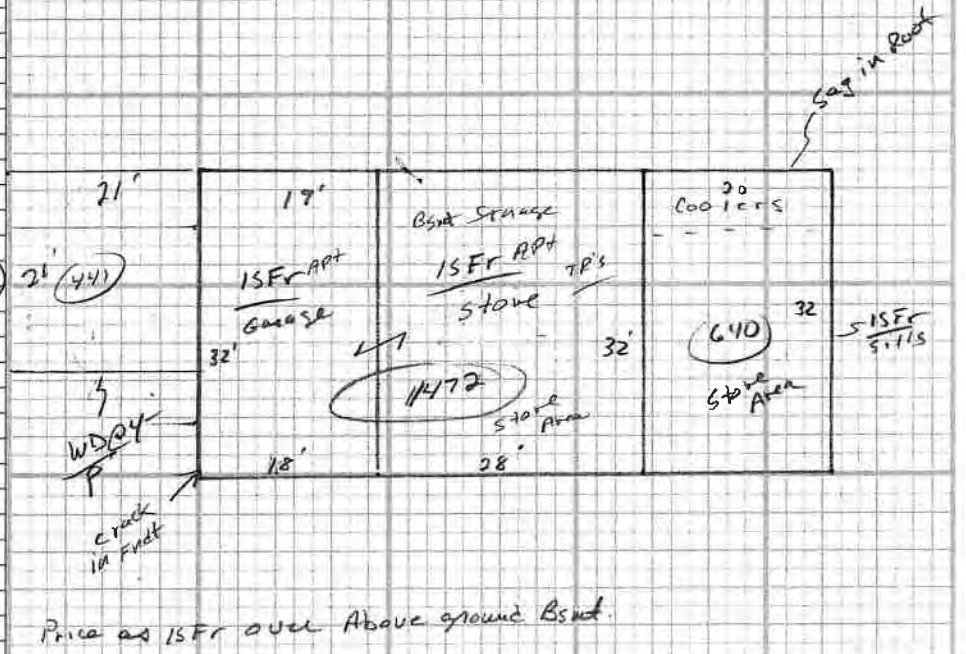
REMODELING DATA

SKETCH

1 FOUNDATION		G	F	P	6 FLOORS	
CONCRETE					B	1 2 3 G F P
CONC BLOCK 14"					CONCRETE	
CONC SLAB					EARTH	
BRICK OR STONE					PINE	
PIERS					HARDWOOD	
2 BASEMENT ABOVE GROUND					INLAID LIN	
FULL HR 8'					W/W CARPET	
1/4 1/2 3/4					CERAMIC	
FIN BSMT AREA					SINGLE	
BSMT GAR						
FRAMING					ATTIC FLR & STAIRS	
FLR JOISTS						
X O/C					7 INTERIOR FINISH	
BEAMS & COL					B	1 2 3 G F P
STUDS					PLASTER	
3 WALLS					DRYWALL	
DOUBLE SIDING MATCH					PANEL	
SINGLE SIDING					KNOTTY PINE	
SHINGLES Cedar					WALLBOARD	
CONC BLOCK					UNFIN	
FACE BRK ON					FINISH ATTIC AREA	
SOLID COM BRK						
INSULATION					8 HEATING	M O
ATTIC ONLY					HOT AIR	
ROOFING					HOT WATER/VAPOR	
ASPH SHINGLES					STEAM	
WOOD SHINGLES					AIR COND	
METAL					PIPELESS FURN	
ROLL ROOFING					FLOOR FURN	
ROOF TYPE					AUTO OIL BURNER	
GABLE					GAS	
HIP					ELECTRIC	
GAMBREL					NO HEATING	
4 LIGHTING					UNIT HTRS	
NO ELEC						
OUTLETS					9 PLUMBING	M O
WIRING					BATHROOM	
5 FIREPLACES					TOILET ROOM in Store Area	
# OF STACKS					WATER CLOSET	
FIREPLACE STACK					LAVATORY	
FIREPLACE					STALL SHOWER	
HEARTH					KITCHEN SINK	
NO OF ROOMS					AUTO WATER HEATER	
BSMT	1ST				NO PLUMBING	
2ND	3RD					
INT LAYOUT						

YEAR		COST	
STRUCTURAL			
KITCHEN			
ELECTRICAL			
PLUMBING			
HEATING			
COMPUTATIONS			
UNIT	AMOUNT		
1472 SF	88506		
BSMT AREA			
BSMT GAR 1000	+ 1500		
WALLS			
INSULATION			
ROOFING			
LIGHTING			
FIREPLACES			
FLOORS			
ATTIC			
INT FINISH			
HEATING	+ 1000		
PLUMBING			
TOTAL	91206		
ADDITIONS & PCHS			
1 640038-10 SF	+ 24384		
2 44104- SF	+ 1764		
3	SF		
4	SF		
5	SF		
6	SF		
7	SF		
8	SF		
9	SF		
TOTAL	117354		
FACTOR			
FIN BSMT Store Area	+ 6500		
+ TR'S APDIX			
6500 010-			
REPL VALUE	123854 x 1.3		
OCCUPANCY	CONSTRUCTION	SIZE	AREA
1/2 Store	ISFR/08 Bldg	32x46	1472
OUT BLDGS.			
1 Shed	ISFR	12x20	240
2			
3			
4			
5			
6			
7			
8			

DATE		TYPE		SALE		SOURCE		DATE LISTED	
MO.	YR.	1. LAND	2. BLDG	PRICE	1. BUYER	3. DECL.	4. AGENT	LISTED	
		1 2 3			1 2 3 4			MEAS	
		1 2 3			1 2 3 4			PRICED	
INTERIOR CONDITION COMPARED TO EXTERIOR				+	=	-	REV'D.		
OBSOLESCENCE FACTORS									
SURPLUS CAPACITY		ENCROACHMENTS		PLUMB & HEAT		UNFINISHED			
STYLE		COMM. LOCATION		ECONOMIC					
REMOD	COND	REPL VAL	PHYS DEP	PHYS VAL	OBSOL.	SOUND VALUE			
1950's		161,010	25	120,758		120,758			
		2160	5	2,052	25	1539			
TOTAL VALUE BUILDINGS									
122,298									



Northstar Variety, 204 New Sweden Road, New Sweden, Maine
May 28, 2026



Commercial building and dispensers looking southwest



View of subject property looking southeast



Shed, deck, trash bins, fill and vent piping south of commercial building



East side of commercial building looking northwest, garage

Northstar Variety, 204 New Sweden Road, New Sweden, Maine
May 28, 2026



On-site private water supply well north of commercial building



PVC vent pipes, west side of commercial building looking southeast



Vent pipe, holding tank west of commercial building



Two buried 1.5-inch steel pipes, possible UST?

Northstar Variety, 204 New Sweden Road, New Sweden, Maine
May 28, 2026



South yard looking southeast, leach field, gasoline ASTs



View of subject property looking northwest, Route 161



Gasoline ASTs, transition sump south in south yard



Gasoline ASTs, concrete dike in south yard

Northstar Variety, 204 New Sweden Road, New Sweden, Maine
May 28, 2026



Garage interior



In-ground hydraulic lift, garage bay



275-gallon fuel oil tank in southwest corner of garage



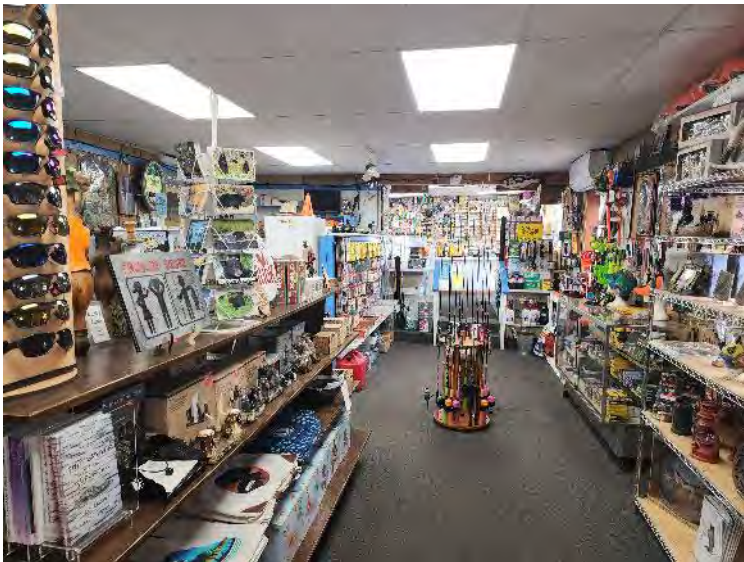
Expansion tank, water supply point of entry



Furnace



Transition sump leak detection monitoring console



Convenience store interior



Storage shed interior



STATE OF MAINE
DEPARTMENT OF ENVIRONMENTAL PROTECTION

Date of Certificate:
June 1, 2026

FACILITY REGISTRATION CERTIFICATE FOR
Aboveground and Underground Storage Tank

Please display this certificate in a visible location at the registered facility.

Facility:

NORTHSTAR VARIETY LLC
204 NEW SWEDEN RD
NEW SWEDEN

Facility Registration Number: 21179

Date of Registration: September 12, 2006

Facility Phone: 207-896-3239

Operator:

ANDERSON, SARA R
ANDERSON, DAVID A
204 NEW SWEDEN RD
NEW SWEDEN , ME 04762-
207-896-3239

Sensitive Area Status:

Facility Use: RETAIL OIL

Owner:

ANDERSON, SARA R
ANDERSON, DAVID A
204 NEW SWEDEN RD
NEW SWEDEN , ME 04762-
207-896-3239

Aboveground and Underground Storage Tanks

Number of Active Aboveground Tanks: 2

Number of Active Underground Tanks: 0

If the information on this form is accurate and complete, please retain for you records.

The Maine Department of Environmental Protection must be notified of any errors or changes in the information on this form. To accomplish this, please draw a line through the incorrect or outdated information, insert the correct information, and return this form to:

**Department of Environmental Protection Bureau of Remediation and Waste Management
State House Station #17 Augusta, ME 04333**

Attn: Underground Tanks Program

If you have any questions concerning this process, please call (207)287-7688 and ask for the administrator of the Underground Storage Tanks Program

INDIVIDUAL TANK DATA FOR SITE NUMBER: 21179

Tank	Tank Under/ Above ground	Tank Type	Tank Size	Tank Monitoring	Date Tank Installed	Tank Status	Tank Substatus	Tank Status Date
1	Above Ground	Steel - Bare Or Asphalt Coated.	5000	None	10/01/1991	Active	IN SERVICE	09/11/2006

Chamber	Chamber Size	Product Stored	Pipe Under/ Above ground	Date Piping Installed	Pipe Monitoring	Piping Type	Overfill Protection
1	5000	Unleaded Gasoline	Below Ground	09/01/2004	Secondary Containment / Cont Elec Mon	Flexible Double- Walled Piping	None

INDIVIDUAL TANK DATA FOR SITE NUMBER: 21179

Tank	Tank Under/ Above ground	Tank Type	Tank Size	Tank Monitoring	Date Tank Installed	Tank Status	Tank Substatus	Tank Status Date
2	Above Ground	Steel - Bare Or Asphalt Coated.	2000	None	10/01/1991	Active	IN SERVICE	09/11/2006

Chamber	Chamber Size	Product Stored	Pipe Under/ Above ground	Date Piping Installed	Pipe Monitoring	Piping Type	Overfill Protection
1	2000	Premium Unleaded	Below Ground	09/01/2004	Secondary Containment / Cont Elec Mon	Flexible Double- Walled Piping	None



STATE OF MAINE
DEPARTMENT OF ENVIRONMENTAL PROTECTION

Date of Certificate:
June 1, 2026

FACILITY REGISTRATION CERTIFICATE FOR
Aboveground and Underground Storage Tank

Please display this certificate in a visible location at the registered facility.

Facility:

GEORGIE PORGIES EXXON MART
RT 161
NEW SWEDEN

Facility Registration Number: 2989

Date of Registration: July 24, 1986

Facility Phone: 207-896-5779

Operator:

PLOURDE, GEORGE
RT 1 BOX 31 E
NEW SWEDEN, ME 04762-
207-896-5779

Sensitive Area Status:

NEAR PUBLIC WATER

Facility Use: RETAIL OIL

Owner:

PLOURDE, GEORGE
RT 1 BOX 31 E
NEW SWEDEN, ME 04762-
207-896-5779

Aboveground and Underground Storage Tanks

Number of Active Aboveground Tanks: 0

Number of Active Underground Tanks: 0

If the information on this form is accurate and complete, please retain for you records.

The Maine Department of Environmental Protection must be notified of any errors or changes in the information on this form. To accomplish this, please draw a line through the incorrect or outdated information, insert the correct information, and return this form to:

**Department of Environmental Protection Bureau of Remediation and Waste Management
State House Station #17 Augusta, ME 04333**

Attn: Underground Tanks Program

If you have any questions concerning this process, please call (207)287-7688 and ask for the administrator of the Underground Storage Tanks Program

INDIVIDUAL TANK DATA FOR SITE NUMBER: 2989

Tank	Tank Under/ Above ground	Tank Type	Tank Size	Tank Monitoring	Date Tank Installed	Tank Status	Tank Substatus	Tank Status Date
1	Below Ground	Steel - Bare Or Asphalt Coated.	5000	Unknown	06/01/1983	Removed		07/01/1989

Chamber	Chamber Size	Product Stored	Pipe Under/ Above ground	Date Piping Installed	Pipe Monitoring	Piping Type	Overfill Protection
1	5000	Regular Gasoline	Below Ground		Unknown	Steel With Cathodic Protection.	Unknown

INDIVIDUAL TANK DATA FOR SITE NUMBER: 2989

Tank	Tank Under/ Above ground	Tank Type	Tank Size	Tank Monitoring	Date Tank Installed	Tank Status	Tank Substatus	Tank Status Date
2	Below Ground	Steel - Bare Or Asphalt Coated.	4000	Unknown	01/01/1976	Removed		07/01/1989

Chamber	Chamber Size	Product Stored	Pipe Under/ Above ground	Date Piping Installed	Pipe Monitoring	Piping Type	Overfill Protection
1	4000	Unleaded Gasoline	Below Ground		Unknown	Steel With Cathodic Protection.	Unknown

INDIVIDUAL TANK DATA FOR SITE NUMBER: 2989

Tank	Tank Under/ Above ground	Tank Type	Tank Size	Tank Monitoring	Date Tank Installed	Tank Status	Tank Substatus	Tank Status Date
3	Below Ground	Steel - Bare Or Asphalt Coated.	2000	Unknown	05/01/1984	Removed		07/01/1989

Chamber	Chamber Size	Product Stored	Pipe Under/ Above ground	Date Piping Installed	Pipe Monitoring	Piping Type	Overfill Protection
1	2000	Diesel	Below Ground		Unknown	Steel With Cathodic Protection.	Unknown

INDIVIDUAL TANK DATA FOR SITE NUMBER: 2989

Tank	Tank Under/ Above ground	Tank Type	Tank Size	Tank Monitoring	Date Tank Installed	Tank Status	Tank Substatus	Tank Status Date
4	Below Ground	Steel - Bare Or Asphalt Coated.	500	Unknown	06/01/1983	Removed		07/01/1989

Chamber	Chamber Size	Product Stored	Pipe Under/ Above ground	Date Piping Installed	Pipe Monitoring	Piping Type	Overfill Protection
1	500	#1 Fuel Oil - Kerosene	Below Ground		Unknown	Steel With Cathodic Protection.	Unknown

INDIVIDUAL TANK DATA FOR SITE NUMBER: 2989

Tank	Tank Under/ Above ground	Tank Type	Tank Size	Tank Monitoring	Date Tank Installed	Tank Status	Tank Substatus	Tank Status Date
5	Below Ground	Steel - Bare Or Asphalt Coated.	1000	Unknown	10/01/1969	Removed		07/01/1989

Chamber	Chamber Size	Product Stored	Pipe Under/ Above ground	Date Piping Installed	Pipe Monitoring	Piping Type	Overfill Protection
1	1000	Unknown Substance	Below Ground		Unknown	Other	Unknown



County Environmental Engineering, Inc.

November 28, 2012

Paul Blood
Maine Department of Environmental Protection
106 Hogan Road
Bangor, Maine 04402

Re: Geoprobe Investigation Report – Spill #I-178-1989
Northstar Variety, formerly Georgie’s Store, 204 New Sweden Road, New Sweden, Maine

Dear Paul:

The following letter report and attachments document investigation activities completed by County Environmental Engineering, Inc. (CEE) at Northstar Variety (Site), formerly known as Georgie’s Store, located at 204 New Sweden Road (Route 161) in New Sweden, Maine, as shown on the attached Location Map (Figure 1, Appendix). The investigation was conducted on September 12, 2012 and completed in substantial accordance with the August 21, 2012 work plan prepared by CEE and approved by the Maine Department of Environmental Protection (MEDEP). The investigation involved the completion of three Geoprobe borings and collection of three soil samples, one groundwater sample from a temporary monitoring well, one drinking water sample from the on-site water supply well, and two soil gas samples for laboratory analysis. Seventeen soil samples were also collected for laboratory analysis on October 8, 2012 from an off-site land spread area.

1. SITE HISTORY AND PURPOSE

1.1 Site Characterization

The Site is located on the west side of Route 161 in New Sweden at the intersection with the Westmanland Road and Station Road, as shown on the attached Site Map (Figure 2, Appendix). The property is currently developed with a two-story building, attached garage, and residential apartment on the second floor. The Site (Facility Reg. #21179) is operated as a retail gasoline station and convenience store with two aboveground storage tanks (ASTs) connected to a dispenser island with underground product supply piping. The property was previously known as Georgie’s Store and historically operated as a retail gasoline station.

According to the MEDEP facility registration certificate for Georgie Porgies Exxon Mart (Facility Reg. #2989), five underground storage tanks (USTs) were removed from the property in July 1989.

The surrounding area consists primarily of residential properties. There are no public water or sewer services in New Sweden. Water and sewer service is provided by privately-owned bedrock and overburden wells and septic systems. According to the Maine Office of GIS public drinking water wells (WELLS) data layer and Maine Department of Health and Human Services (DHHS) Public Water Resources Information System, there are no public water supply wells located within 2,500 feet of the Site. The surface topography at the Site is generally level to gently sloping west. The closest surface water body is an unnamed tributary to Caribou Stream, located approximately 4,170 feet west of the facility. According to the Maine Office of GIS aquifer polygons data layer, the property is not located on a mapped sand and gravel aquifer. The 1985 Department of Conservation (DOC) Maine Geological Survey Bedrock Geologic Map of Maine maps the bedrock in the area as calcareous pelite of the New Sweden formation. The 1985 DOC Maine Geological Survey Surficial Geologic Map of Maine shows the primary geologic unit in the area as till, a heterogenous mixture of sand, silt, clay and stones.

1.2 Environmental Release

In October 1989, MEDEP was contacted regarding a strong odor of gasoline in the vicinity of the Site. According to the spill report (#I-178-1989), a leak was discovered under the dispenser island due to a poorly constructed fiberglass joint. The release reportedly occurred adjacent to an underground spring with drainage tile pipe to swamp area approximately 300 feet south of the Site. The spill report indicates a shallow recovery system was installed and operated at the Site until November 1989. Several investigative and remedial actions have occurred at the Site and surrounding area, as summarized in the site closure narrative prepared by CEE and dated July 20, 2012. These actions include the following:

- Investigation of water intrusion into the basement of Gaylon Beaulieu (Spill #I-231-1991) with a reported odor of gasoline;
- Investigation of drinking water well contamination at the New Sweden Elementary School (Spill #I-35-1993) and subsequent replacement of the water supply well;
- Investigation of drinking water well contamination at the Boody Residence (May 1995) and subsequent replacement of the water supply well;
- Initial hydrogeologic investigation and groundwater monitoring (June 1997 – October 2000);
- Removal of petroleum contaminated soil for off-site disposal (May 2000);
- Hydrogeological assessment (August 2001);
- Removal of petroleum contaminated soil for off-site land spreading (September 2003); and
- Post-removal groundwater monitoring (2003 – 2004).

Petroleum contaminated soil removed from the Site in September 2003 was transported a land spread area approximately three miles east on the north side of Station Road, as shown on the attached Land Spread Location Map (Figure 4, Appendix). According to the *Soil Removal Report, Northstar Variety, New*

Sweden, Maine dated February 3, 2004 and prepared by Jacques Whitford Company (JWC), 1,156 cubic yards of contaminated soil was land spread at this location.

According to the MEDEP Environmental and Geographic Analysis Database (EGAD) file for the Site, no further groundwater monitoring or remedial actions have been completed since 2004. The purpose of this investigation was to gather sufficient data in order to determine if contaminated soil, groundwater and/or soil gas above the applicable remediation guidelines exists at the Site or if the spill file can be closed.

2. SCOPE OF WORK AND FINDINGS

2.1 Soil Sampling

A Dig Safe permit was obtained prior to initiating investigation activities. Craig Brescia and Nathan Hersey of CEE were on site September 12, 2012 to complete three Geoprobe borings (SB-01 through SB-03) with a truck-mounted Geoprobe rig. The placement of each boring was in accordance with the August 21, 2012 work plan approved by MEDEP. Boring locations are illustrated on the attached Site Diagram (Figure 3, Appendix).

Soil samples were collected and field screened with a photoionization detector (PID) in accordance with the MEDEP *Compendium of Field Testing of Soil Samples for Gasoline and Fuel Oil*, April 20, 2011. A MiniRAE 3000 PID was calibrated to 100 parts per million (ppm) with 100 ppm isobutylene span gas prior to use and throughout the day as needed. Soil samples were collected at two to four foot intervals, unless otherwise noted, and field screened in accordance with the leaching to groundwater cleanup scenario outlined in Section 7.0 of the Compendium. As documented on the attached MEDEP TS004 bag headspace field EDD sheet and boring logs (Appendix), field screening results for soil samples collected from SB-01 and SB-02 exceed the Approved PID Field Cleanup and Notification Guidelines (Table 1) outlined in the Compendium. Exceedances for the PID bag headspace test with a MiniRAE 3000 under the leaching to groundwater cleanup scenario (40 ppm) include SB-01 at 5 feet below ground surface (' bgs, 332.5 ppm) and SB-02 at 4' bgs (1,580 ppm) and 6' bgs (1,466 ppm).

Soil samples were collected from SB-01 at 5' bgs, SB-02 at 6' bgs and SB-03 at 5' bgs and submitted to Katahdin Analytical Services in Scarborough, Maine for volatile petroleum hydrocarbon (VPH) and extractable petroleum hydrocarbon (EPH) analysis. As summarized on Table I VPH & EPH Detections in Soil Samples (Appendix), laboratory results for soil samples collected from SB-01 and SB-02 exceed the Tier 1 Soil Remediation Guidelines Based on Petroleum Leaching to Ground Water (Table 3) outlined in the MEDEP *Remediation Guidelines for Petroleum Contaminated Sites in Maine*, December 1, 2009. The VPH exceedance at SB-01 includes C9-C10 aromatics (130 milligrams per kilogram, mg/kg). VPH and EPH exceedances at SB-02 include C5-C8 aliphatics (2,000 mg/kg), C9-C10 aromatics (1,600 mg/kg), ethylbenzene (65 mg/kg), naphthalene (20 mg/kg), 2-methylnaphthalene (8.2 mg/kg), toluene (34 mg/kg) and xylenes (358 mg/kg). VPH and EPH analytes were not detected at SB-03. A copy of the laboratory report is included in the Appendix.

2.2 Groundwater Sampling

One groundwater sample (MW-01) was collected from a temporary monitoring well installed at SB-02. The well was constructed to a depth of approximately 9' bgs and consisted of five feet of 1-inch PVC screen with 1-inch solid riser pipe to the ground surface. A peristaltic pump and high-density polyethylene (HDPE) tubing was used to purge and sample the well. The groundwater sample was submitted to Katahdin for VPH and EPH analysis. As summarized on Table II VPH & EPH Detections in Groundwater Sample (Appendix), laboratory results for the groundwater sample collected from MW-01 exceed the Tier 1 Statewide Groundwater and Drinking Water Remediation Guidelines for Petroleum Related Compounds (Table 1) in the Remediation Guidelines. VPH and EPH exceedances at MW-01 include C5-C8 aliphatics (2,800 µg/L, 2,900 mg/kg unadjusted), C9-C12 aliphatics (1,000 µg/L, 4,500 µg/L unadjusted), C9-C10 aromatics (2,600 µg/L), C11-C22 aromatics (440 µg/L, 490 µg/L unadjusted), benzene (23 µg/L), ethylbenzene (240 µg/L) and naphthalene (48 µg/L). A copy of the laboratory report is included in the Appendix.

2.3 Soil Gas Sampling

One soil gas sample (SG-01) was collected approximately three feet northwest of boring location SB-02 and one soil gas sample (SG-02) was collected near the southern corner of the on-site building. The soil gas samples were collected in accordance with the MEDEP Standard Operating Procedure (SOP) RWM-DR-026, *Protocol for Collecting Soil Gas Samples*, February 2, 2009. The soil gas samples were shipped to Alpha Analytical in Mansfield, Massachusetts for air-phase petroleum hydrocarbon (APH) analysis. As summarized on Table III APH Detections in Soil Gas Samples (Appendix), laboratory results for the soil gas samples collected at SG-01 and SG-02 exceed the soil gas targets (SGTs) for the chronic residential scenario at multi-contaminant sites (Table B2) in the MEDEP *Vapor Intrusion Evaluation Guidance*, January 13, 2010. APH exceedances at SG-01 include C5-C8 aliphatics (18,000,000 µg/m³), C9-C10 aromatics (570,000 µg/m³), C9-C12 aliphatics (600,000 µg/m³), benzene (8,800 µg/m³), ethylbenzene (17,000 µg/m³), naphthalene (1,200 µg/m³) and xylenes (501,000 µg/m³). The APH exceedance at SG-02 includes 1,3-butadiene (6.9 µg/m³). A copy of the laboratory report and MEDEP soil gas sampling field sheets are included in the Appendix.

2.4 Drinking Water Sampling

A drinking water sample was collected from the on-site water supply well ("Anderson Well") and submitted to Katahdin for VPH and EPH analysis. VPH and EPH analytes were not detected in the drinking water sample collected from the on-site water supply well. A copy of the laboratory report is included in the Appendix.

2.5 Land Spread Soil Sampling

In accordance with our September 18, 2012 email correspondence, a total of seventeen soil samples were collected from the off-site land spread area on October 8, 2012 and submitted to Katahdin for VPH analysis.

Soil sample locations are shown on the attached Land Spread Site Diagram (Figure 5, Appendix). Ten of the soil samples were collected from three inches below ground surface (" bgs) and seven of the soil samples were collected from 15" bgs. VPH analytes were not detected in any of the soil samples collected from the land spread site. A copy of the laboratory report is included in the Appendix.

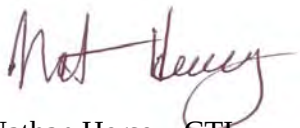
3. CONCLUSIONS

Petroleum contaminated groundwater, soil and soil gas exceeding the applicable MEDEP guidelines exists at the Site. Although the potential exists for contaminated groundwater to impact nearby private water supply wells, laboratory results for the drinking water sample collected from the on-site well was non-detect for VPH and EPH. Inaccessible contaminated soil likely exists beneath the on-site building and may contribute to the groundwater and soil gas contamination at the Site. Based on the laboratory results for SG-01, CEE recommends sampling the indoor air of the on-site building.

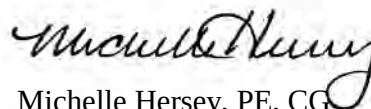
Thank you for the opportunity to be of service on this project. Please do not hesitate to contact us if we may be of further assistance.

Respectfully Submitted,

County Environmental Engineering, Inc.



Nathan Hersey, CTI
Senior Environmental Technician



Michelle Hersey, PE, CG
President



	Site Diagram		
	Geoprobe Investigation Northstar Variety (I-178-1989) 204 New Sweden Road, New Sweden Aroostook County, Maine	Figure 3 Scale: 1:350	Project: 127-111
			Drawn By: MDH Date: 11/27/12



County Environmental Engineering, Inc.
 177 Cyr Road, Cross Lake, Maine 04779
 Tel: (207) 834-2378 Fax: (207) 834-2378
 www.countyee.com

Site: Northstar Variety (I-178-1989)
 204 New Sweden Road, New Sweden, Maine

Table I - VPH & EPH Detections Soil Samples (mg/kg) ¹				
Sample ID	SB-01, 5'	SB-02, 6'	SB-03, 5'	Remediation Guideline ²
Depth (' bgs)	5	6	5	
PID Result (ppm)	332.5	1,466	2.4	
Percent Solids (%)	89	84	83	
VPH Results				
Unadjusted C5-C8 Aliphatics	130	2,000	ND	1,600
Unadjusted C9-C12 Aliphatics	240	2,600	ND	NA
C5-C8 Aliphatics	130	2,000	ND	1,600
C9-C12 Aliphatics	110	ND	ND	NA
C9-C10 Aromatics	130	1,600	ND	75
Ethylbenzene	ND	65	ND	0.81
Naphthalene	ND	20	ND	1.7
Toluene	ND	34	ND	8.1
Total Xylenes	ND	358	ND	26
EPH Results				
Unadjusted C11-C22 Aromatics	ND	510	ND	460
C11-C22 Aromatics	ND	480	ND	460
C9-C18 Aliphatics	64	580	ND	NA
C19-C36 Aliphatics	ND	1,700	ND	NA
Naphthalene	0.30	12	ND	1.7
2-Methylnaphthalene	ND	8.2	ND	3.6
Phenanthrene	ND	1.9	ND	97
Acenaphthene	ND	0.3	ND	170
Anthracene	ND	0.42	ND	2,400
Benzo(a)anthracene	ND	0.54	ND	NA
Benzo(b)fluoranthene	ND	0.43	ND	NA
Benzo(k)fluoranthene	ND	0.60	ND	NA
Chrysene	ND	0.47	ND	NA
Fluoranthene	ND	1.2	ND	NA
Fluorene	ND	0.35	ND	120
Pyrene	ND	1.4	ND	NA

Table Notes:

' bgs = feet below ground surface

mg/kg = milligrams per kilogram

PID = photoionization detector

ppm = parts per million

ND = not detected above laboratory's Practical Quantitation Limit (PQL)

NA = not applicable

Results in **Bold** meet or exceed respective regulatory guideline.

¹Parameters not detected at the laboratory's PQL in samples are omitted from this table.

²Remediation Guidelines for Petroleum Contaminated Sites in Maine, MEDEP, December 1, 2009, Tier 1 Soil Remediation Guidelines Based on Petroleum Leaching to Groundwater.



County Environmental Engineering, Inc.

177 Cyr Road, Cross Lake, Maine 04779

Tel: (207) 834-2378 Fax: (207) 834-2378

www.countyee.com

Site: Northstar Variety (I-178-1989)

204 New Sweden Road, New Sweden, Maine

Table II - VPH & EPH Detections in Groundwater Sample (µg/L) ¹		
Sample ID	MW-01	Remediation Guideline ²
Boring	SB-02	
Depth (' bgs)	9	
VPH Results		
Unadjusted C5-C8 Aliphatics	2,900	300
Unadjusted C9-C12 Aliphatics	4,500	700
C5-C8 Aliphatics	2,800	300
C9-C12 Aliphatics	1,000	700
C9-C10 Aromatics	2,600	200
Benzene	23	4.0
Ethylbenzene	240	30
Naphthalene	48	10
Toluene	76	600
Total Xylenes	920	1,000
EPH Results		
Unadjusted C11-C22 Aromatics	490	200
C9-C18 Aliphatics	240	700
C19-C36 Aliphatics	730	10,000
C11-C22 Aromatics	440	200
Naphthalene	34	10
2-Methylnaphthalene	14	30

Table Notes:

' bgs = feet below ground surface

µg/L = micrograms per liter or parts per billion (ppb)

Results in **Bold** meet or exceed respective regulatory guideline.

¹Parameters not detected at the laboratory's PQL in samples are omitted from this table.

²Remediation Guidelines for Petroleum Contaminated Sites in Maine,

MEDEP, December 1, 2009, Table 1, Tier 1 Statewide Groundwater &

Drinking Water Remediation Guidelines for Petroleum Related Compounds.



County Environmental Engineering, Inc.

177 Cyr Road, Cross Lake, Maine 04779

Tel: (207) 834-2378 Fax: (207) 834-2378

www.countyee.com

Site: Northstar Variety (I-178-1989)
204 New Sweden Road, New Sweden, Maine

Table III - APH Detections in Soil Gas Samples ($\mu\text{g}/\text{m}^3$) ¹			
Sample ID	SG-01	SG-02	Soil Gas Target ²
Depth (' bgs)	5	5	
1,3-Butadiene	ND	6.9	4.05
Benzene	8,800	2.1	15.5
Toluene	8,300	2.4	50,000
C5-C8 Aliphatics, Adjusted	18,000,000	150	2,100
Ethylbenzene	17,000	ND	48.5
Total Xylenes	501,000	ND	1,050
Naphthalene	1,200	ND	3.6
C9-C12 Aliphatics, Adjusted	600,000	83	2,100
C9-C10 Aromatics Total	570,000	12	500

Table Notes:

' bgs = feet below ground surface

$\mu\text{g}/\text{m}^3$ = micrograms per cubic meter

ND = not detected above laboratory Reporting Limit (RL).

Results in **Bold** meet or exceed respective Soil Gas Target

¹Parameters not detected at the laboratory's RL are omitted from this table.

²*Vapor Intrusion Evaluation Guidance*, MEDEP, January 13, 2010, Soil Gas Targets determined by dividing Indoor Air Targets by an attenuation factor of 0.02 (Section 3.2) for the Chronic Residential Scenario at Multi-Contaminant Sites (Table B2).

SOIL EXCAVATION REPORT
NORTHSTAR VARIETY
NEW SWEDEN, MAINE

X

Prepared for

Maine Department of Environmental Protection
Bangor, Maine

Prepared by

Jacques Whitford Company, Inc.
Portland, Maine

January 8, 2001



SOIL EXCAVATION REPORT NORTHSTAR VARIETY NEW SWEDEN, MAINE

1.0 INTRODUCTION

This report describes the remediation of petroleum-contaminated soil at Northstar Variety (Northstar) located at the intersection of Route 161 and the West Road in New Sweden, Maine (see Figure 1). Field activities consisted of soil excavation and test pitting. The Soderberg Company, Inc. (Soderberg) removed soil on May 22 and 23, 2000. Jacques Whitford Company, Inc. (JWC) evaluated soil in three test pits dug by Soderberg on May 24, 2000. Kirk St. Peter provided services as a Licensed Maine Tank Installer. Regulatory oversight was provided by Paul Blood and Carl Allen of the Maine Department of Environmental Protection (MEDEP).

The footprint of the excavation (see Figure 2) was between the Northstar Variety building and the gasoline dispenser island and between subsurface electrical lines adjacent to the entrance of the store and approximately 15 feet beyond the south end of the building. The excavation extended 4 to 7 feet below ground surface (bgs).

David and Sara Anderson intend to replace the existing subsurface product lines from the current above-ground gasoline tanks located to the south of the store to the dispensers located to the east of the store building. The Andersons plan to install a subsurface drainage system which will discharge to the ground surface south of the tanks. They will then pave the surface of the parking area. The drainage system is necessary to prevent cracking and buckling of the pavement.

The purpose of the excavation was to remove petroleum-contaminated soil in preparation for the upgrade of the fuel distribution system. The MEDEP's goal was to remove enough of the subsurface petroleum so that overly-contaminated groundwater would not be discharged through the subsurface drainage system.

JWC provided services according to our contract with the MEDEP dated January 21, 1999. JWC's services consisted of the following tasks:

- ❖ Met with Paul Blood and Carl Soderberg on May 18, 2000 at the site.
- ❖ Prepared a site-specific health and safety plan.
- ❖ Observed soil excavation during the week of May 22, 2000. JWC monitored the soil removal with a photoionization device (PID). JWC performed ziplock bag headspace testing and monitored soil for evidence of contamination as it was removed from the excavation. JWC also characterized the geology of the excavation sidewall and of three test pits.

- ❖ Collect soil samples for Gasoline Range Organics (GRO) using laboratory supplied methanol-preserved containers and MEDEP-approved sampling tools. We kept the containers cooled before and after they were filled.
- ❖ Submitted soil samples and QA/QC blanks to Katahdin Analytical Services (Katahdin) in Westbrook, Maine for analysis for GRO.
- ❖ Prepared this report describing field procedures and results.

2.0 WORK PERFORMED

On the morning of May 22, 2000, Soderberg set up Jersey barriers topped with orange fencing to segregate the work area from store operations. Soderberg isolated the north end of this work area by placing barriers approximately over the underground electrical wires from the pump island to the east wall of the store (see photographs).

Soderberg removed pavement prior to excavating the soil. A Caterpillar 315BL track-mounted excavator with a 1-cubic yard bucket was used. Bob Masse supervised the Soderberg operation. Soderberg separately loaded the pavement and soil directly into 14-wheel dumptrucks and transported it to the Tri-Community Landfill in Fort Fairfield, Maine for disposal.

Soderberg transported a total of 20 truckloads of contaminated soil and 4 truckloads of pavement offsite. Other equipment used by Soderberg included a Caterpillar 936E front end loader, a medium-size tire-mounted vibratory roller, and a Caterpillar D3C bulldozer. Soderberg also supplied granular backfill for the excavation.

Soderberg encountered abandoned conduit and product lines in the excavation. Soderberg cut off three, one-inch diameter electrical conduits which exited from under the south end of the building. Soderberg also removed abandoned product lines leading to the pump island.

Soderberg worked from north to south between the building and pump island. Soderberg encountered bedrock at approximately 5 feet bgs at the north end of the excavation (see photographs). Soderberg excavated 5 and 7 feet bgs.

During excavation, JWC screened the excavated soil with a MSA Photo photoionization detector (PID). The soil samples were placed in one-quart Ziplock bags for screening. The PID was calibrated to a setpoint of 225 with 100 ppm isobutylene span gas. JWC tested each sample then allowed it to equilibrate for at least 15 minutes and tested it again. Results from the 10 PID samples are discussed in Section 3.0. Sample locations are depicted on Figure 2.

JWC collected samples for laboratory analysis from four locations. At each sample location, JWC used a MEDEP-approved syringe to extract approximately 5 grams of soil and added the soil to a laboratory-supplied, methanol-preserved container. JWC kept the containers iced in a cooler before and after filling. JWC carried laboratory-supplied trip and field blanks in the cooler according to the MEDEP sampling methodology. JWC opened the field blank onsite.

After consultation with the MEDEP, JWC submitted samples from the north and west excavation sidewalls for chemical analysis. JWC delivered the samples under Chain of Custody to Katahdin for testing. Katahdin tested the two samples and two QA/QC blanks for Gasoline Range Organics (GRO) according to Maine Method 4.1.17. Results are discussed in Section 3.0.

Soderberg backfilled the excavation with bank run material which consisted of a gravelly sand matrix and included rounded cobbles generally between three and six inches in diameter (see photograph). This coarse-grained mixture was used to facilitate compaction below the groundwater table. Soderberg brought the level of the fill up to approximately 18 inches bgs then added a sandy granular fill to the ground surface. Soderberg compacted the fill with a vibratory compactor (see photograph).

Excavation was halted on May 23 2000 when Mr. St. Peter, the licensed tank installer determined that the existing product lines were constructed of fiberglass. Although the location of the lines had previously been delineated (apparently with a metal detector), because the lines were fiberglass rather than metal, doubt was cast upon their location. We also ascertained that petroleum-contaminated soil extended to the east under the product lines. Furthermore, Kirk St. Peter and Carl Allen expressed concern about using the gasoline dispensing system while excavating nearby; a break in a line caused by the excavator would spread contamination and present an explosion hazard. For these reasons, with the approval of the MEDEP, we decided to suspend operations until we could drain and remove the product lines and remove the pump island.

In order to better define the extent of contamination outside the excavation area, on May 24, 2000, Soderberg dug three test pits at the locations depicted on Figure 2. Test pit logs are included in Attachment 2

3.0 RESULTS

The generalized geological profile was granular fill over glacial till over bedrock. The till consisted of a dense clay loam with no fraction larger than coarse sand. The bedrock appeared to be a gray incompetent metasediment with near vertical foliation and was easily excavated. The thickness and nature of the fill varied. For example, at TP-3, the sidewall soil profile consisted of 2.5 feet of gray brown sandy fill over 1 foot of black organic soil over 1 foot of olive gray till over bedrock. At TP-2, course cobbly fill extended from approximately 2 feet up to the ground surface. Soil descriptions are included on test pit logs in Attachment 3.

Groundwater was encountered at the site between 2 and 3 feet bgs. Because the till was dense, water did not seep into the excavation immediately, but filled the pit gradually overnight. This facilitated truck loading and transport because the newly excavated till from below the water table was not "dripping" with water; MEDEP rules forbid discharge of gasoline-contaminated leachate from trucks during over-the-road transport.

In the fill, the water level rose quickly to its static level. No evidence of a free product layer or sheen was observed in the excavation on May 22 or 23, 2000. However, JWC observed a sheen on the water surface in TP-3 on May 24, 2000.

The following table describes PID readings collected on May 22 and 23, 2000.

Summary of PID Readings					
Designation	Depth (feet bgs)	Location	Insitu PID Reading (PPM)	Bag Sample Reading (PPM)	Comments
HS-1	3	Bottom north end	8050	7835	Strong Odor
HS-2	4	Bottom north end	8750	4850	Strong Odor
HS-3	4	North sidewall	NR	1350	Correlates with the north sidewall sample
HS-4	5.5	Bottom north end	NR	6450	
HS-5	4	West sidewall near phone booth	5025	>9999	
HS-6	4	West sidewall	5320	9250	Correlates with the west sidewall Sample
HS-7	4	East sidewall	9250	9330	
HS-8	3	West Sidewall	121	2150	
HS-9	3.5	East sidewall	334	>9999	
HS-10	2	South sidewall	532	>9999	

Analytical results indicate that the sample from the north sidewall contained 130 mg/Kg GRO while the sample from the west sidewall contained 13,000 mg/Kg GRO. No GRO was reported in the field blank above the detection limit of 2.5 mg/Kg.

4.0 DISCUSSION

According to the Chapter 691 Rules for Underground Oil Facilities, the site appears to fall under the "stringent" category because based on the "Flowchart for DEP Decision Tree", the release was to bedrock and glacial till and the area is not supplied by public water. The rules include the requirement to remove free product, saturated soil, and soil with a gasoline concentration of over 5 mg/Kg. This standard is significantly lower than the GRO concentration of 130 and 13,000 mg/Kg taken from the side walls of the excavation.

Based on PID and laboratory analytical results, high concentrations of gasoline appear to remain in situ to the west, south, and east of the excavation area. Gasoline concentrations appear to diminish to the north of the excavation. To the west, the PID level at HS-5 near the telephone booth was >9999 ppm. To the south, the PID concentration was >9999 ppm at HS-10. To the east the PID concentration was 9330 ppm at HS-7 while to the north, the PID concentration was 1350 ppm.

Laboratory analytical results confirmed the PID results. The GRO concentration was significantly higher in the west sidewall than in the north sidewall in both laboratory analytical results and PID screening results.

Visual observations corroborated the laboratory data. No sheen was observed on groundwater in test pits to the north and northeast of the pump island but a sheen was observed on the groundwater in a test pit to the east, between the pump island and the road.

In order to achieve the stringent standards, the building and a portion of the roadway might have to be removed. Therefore limits exist on the amount of soil that can be practically removed. Soil removal to the west is constrained by the presence of the Northstar building. Soil removal to the east is limited by the presence of the State Route 161. Further excavation under the pump island and fuel island is on hold until the Anderson's secure funding to complete renovations of the parking lot and pump island.

In addition, use of the stringent guidelines may not be warranted because groundwater monitoring from 1990 to 2000 in the area of the store has shown a relatively limited impact from the spill on neighboring properties. Current contamination in the Northstar area is limited to MTBE in levels of 5 µg/L in MW-1A (see Figure 3 for location) and 8 µg/L at the Northstar water supply well.

The concentration of GRO increased at the Northstar water supply well from 6.4 µg/L in April 2000 to 8 µg/L in October 2000. We may see a rise in GRO in this well in future monitoring rounds because of changes in groundwater flow patterns caused by the excavation.

Presently, the shallow groundwater, appears to be flowing away from the Northstar well. The ground surface is sloped gently to the south in the Northstar building and parking lot area. Surface water flows south to a swale south of the parking lot. Shallow groundwater appears to flow in the same direction.

Deeper groundwater flow appears to flow to the west, however, as evidenced by the MTBE historically present in homeowner supply wells to the west of the store (such as the Jepsons, Andersons, and Baptist Church).

Stripping off the till layer over the bedrock in the excavation area may provide remaining contamination under the store footprint and road and provide a pathway through bedrock groundwater flow towards the west.

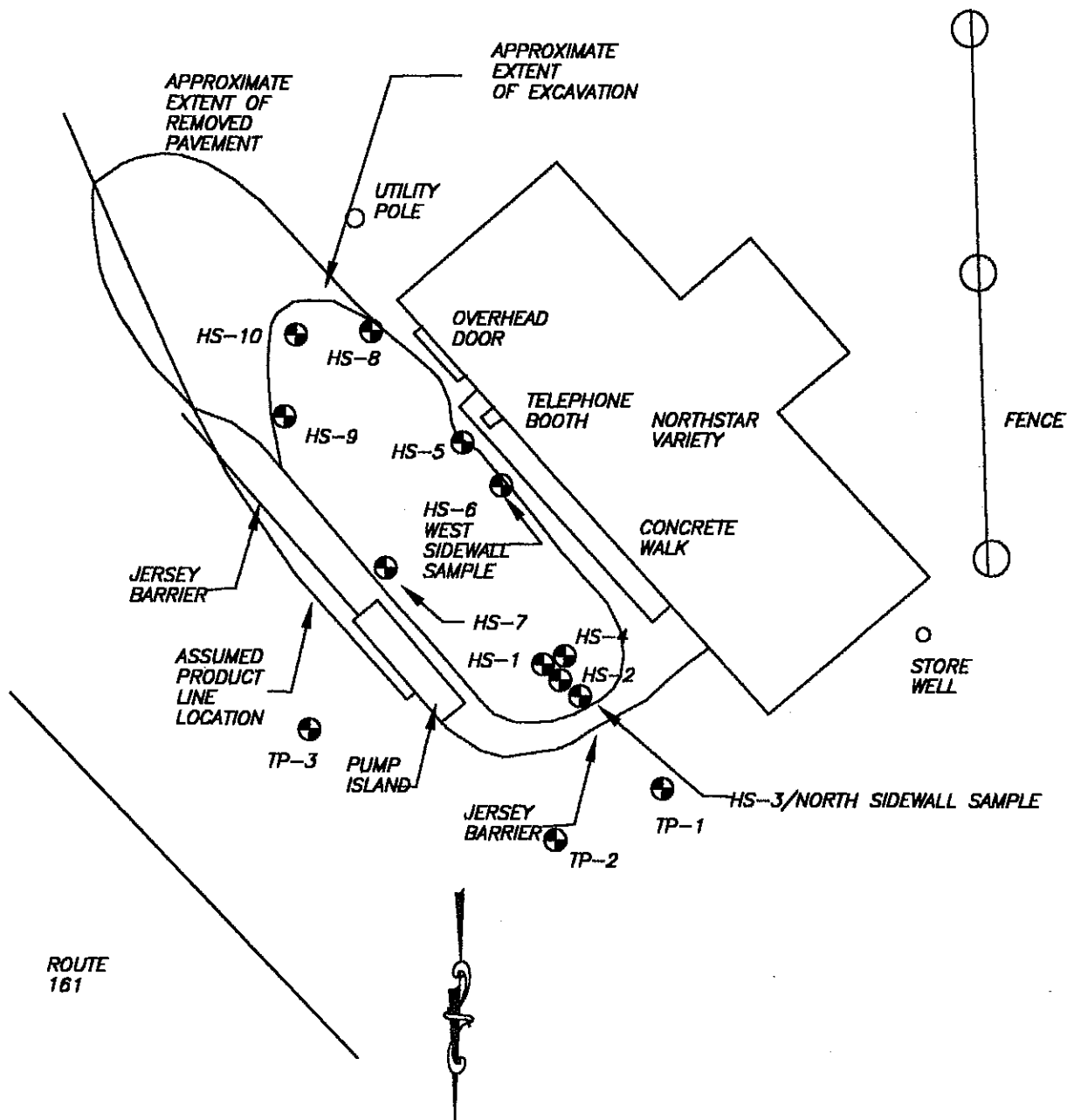
5.0 CONCLUSIONS AND RECOMMENDATIONS

Based on fieldwork performed at the site, JWC concludes that significant residual gasoline soil contamination remains to the west, south, and east of the excavation area. Removal of all gasoline-

contaminated soil down to the stringent cleanup standards of 5 mg/Kg appears to be impractical beneath the gasoline station building and Route 161. A more practical alternative would be to excavate gasoline-contaminated soil to the north, south and toward the road to a level of 5 mg/Kg GRO. This level of effort, though it would not satisfy the state's stringent cleanup standards, would help to limit the discharge of gasoline-contaminated water from the proposed underdrain system under the parking area. Once the Anderson's funding is secured, we will be able to coordinate the removal with their renovation efforts at the store.

In addition, because significant soil contamination will be left under the store footprint and likely under Route 161, we recommend continuation of the well monitoring program at the site and a reassessment of the hydrogeology of the store area including the possible installation of additional monitoring wells.

Because additional excavation will likely include fill below the water table and because over-the-road transport of saturated soil to a landfill is not allowed, provisions will likely be necessary to dewater soil before it is transported offsite.



Jacques Whitford Company, Inc.



JACQUES WHITFORD LOCATION:
PORTLAND, MAINE

DATE PREPARED: 7-26-00	DESIGNED BY: DVC	DRAWN BY: DVC	CHECKED BY: DTC	REVIEWED BY: DTC
REVISION DATE:	REVISION NO.:	DRAWN BY:	CHECKED BY:	REVIEWED BY:

PROJECT NAME/FILE NAME:
MEDEP-NSS

PROJECT NUMBER/PHASE:
MEF04242

SCALE:
1"=20'

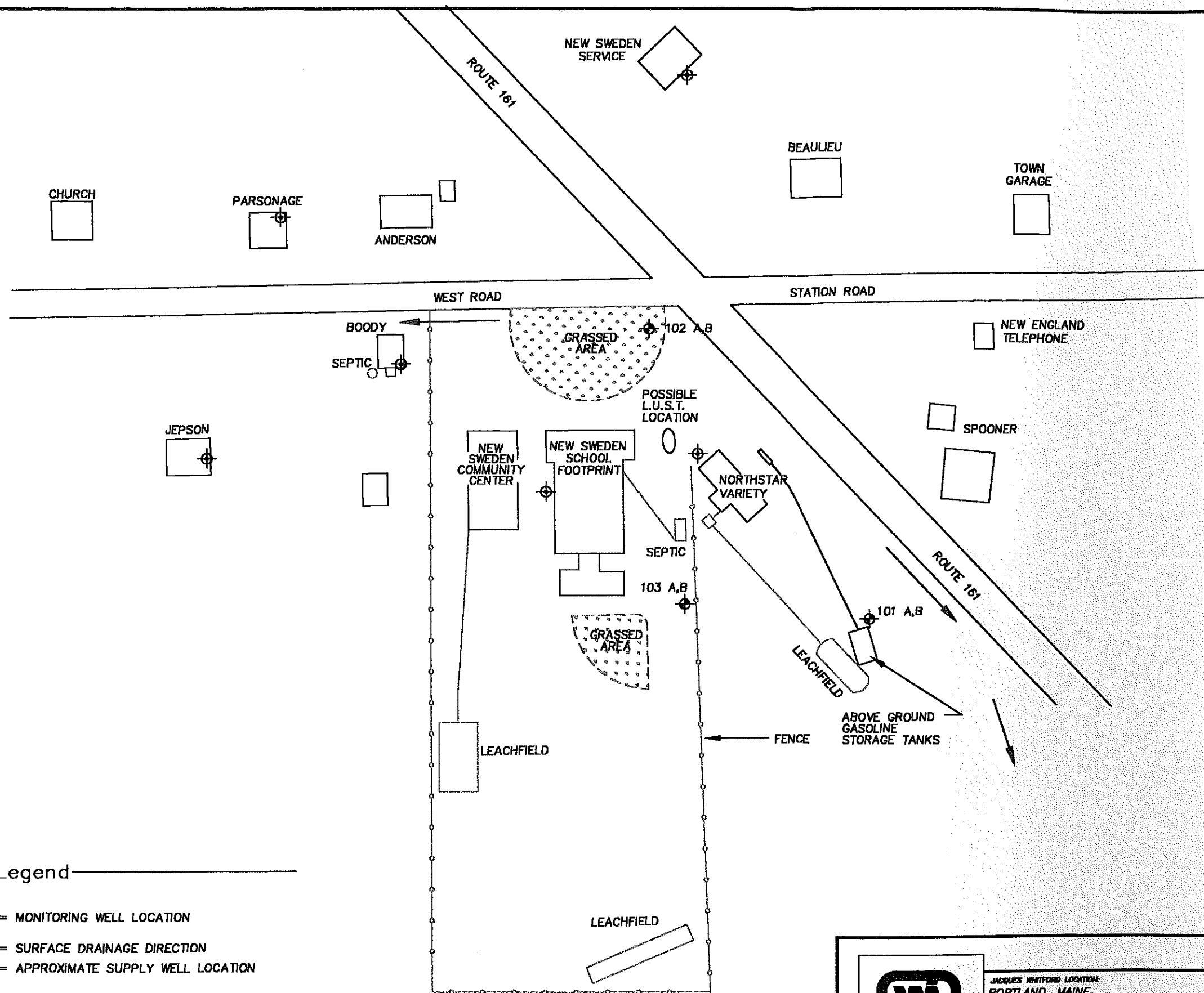
PREPARED FOR:
MEDEP

DRAWING TITLE:

SITE PLAN
NORTHSTAR VARIETY
NEW SWEDEN, MAINE

FIGURE NO.

2



100 0 100
SCALE IN FEET

Legend

-  = MONITORING WELL LOCATION
-  = SURFACE DRAINAGE DIRECTION
-  = APPROXIMATE SUPPLY WELL LOCATION

NOTES:

- 1) Locations and dimensions of structures are approximate.
- 2) Northstar Variety formerly known as "Cora's". Cora's formerly known as "Georgie Porgies".



Jacques Whitford Company, Inc.

JACQUES WHITFORD LOCATION:
PORTLAND, MAINE

DATE PREPARED: 2-5-99	DESIGNED BY: DVC	DRAWN BY: BSB	CHECKED BY: DVC	REVIEWED BY: CRG
--------------------------	---------------------	------------------	--------------------	---------------------

REVISION DATE:	REVISION NO.:	DRAWN BY:	CHECKED BY:	REVIEWED BY:
----------------	---------------	-----------	-------------	--------------

PROJECT NAME/FILE NAME: NEWSWEDEN/SITE2	PROJECT NUMBER/PHASE: MEF80348	SCALE: 1=100'
--	-----------------------------------	------------------

DRAWING TITLE:

AREA MAP
NEW SWEDEN HYDROGEOLOGICAL INVESTIGATION

PREPARED FOR:
MAINE D.E.P.

FIGURE NO.

3

X

**BOODY WATER SUPPLY
INSTALLATION REPORT
WESTMANLAND ROAD
NEW SWEDEN, MAINE**

Prepared for

Maine Department of Environmental Protection
Bangor, Maine

Prepared by

Jacques Whitford Company, Inc.
Portland, Maine

January 8, 2001





**Jacques Whitford
Company, Inc.**

Consulting Engineers
Environmental Scientists
Risk Consultants

75 Pearl Street, Suite 201, Portland, Maine, U.S.A. 04101
Tel 207 761 7790 Fax 207 772 0385

World Wide Web: www.jacqueswhitford.com
E-mail: info@jacqueswhitford.com

Maine • New Hampshire • Vermont • Trinidad • Russia • Argentina
Nova Scotia • New Brunswick • Prince Edward Island • Newfoundland & Labrador • Quebec • Ontario • Saskatchewan • Alberta • British Columbia

January 8, 2001

Mr. Paul Blood, C.G.
Maine Department of Environmental Protection
106 Hogan Road
Bangor, ME 04401

RE: Boody Water Supply Installation, Westmanland Road, New Sweden, Maine
JWC Reference: MEDEP – NSS/MEP00131

Dear Mr. Blood:

Jacques Whitford Company, Inc. (JWC) has completed the installation of the water supply line at the Boody residence in New Sweden, Maine. We performed this work for the Maine Department of Environmental Protection (MEDEP) in accordance with our contract dated January 21, 1999. This letter describes the water line installation.

INTRODUCTION

As shown on Figure 1, the Boody residence is located on the south side of Westmanland Road (or West Road) approximately 200 feet from the intersection of Westmanland Road and Route 161 (or New Sweden Road) in New Sweden, Maine. The Boody residence is also located approximately 200 feet west of Northstar Variety (formerly known as Georgie Porgie's Store) where gasoline was released 1989.

Monitoring of the Boody water supply from 1993 to April 2000 indicated that the water contained up to 98 µg/l Gasoline Range Organics (GRO), 130 µg/L MTBE, and 2 µg/L toluene. The Maine Maximum Exposure Guidelines (MEGs) for these three contaminants are 50, 35, and 1400 µg/L respectively. Due to the gasoline contamination, the Boody well was retrofitted with carbon filters.

In order to supply the Boody residence with a permanent source of clean well water, the MEDEP contracted JWC to connect the residence to a new well. JWC's scope of work included the following:

- observe the installation of a replacement well for the Boody residence,
- observe the installation of a water line in a trench from the well to the residence,
- coordinate the installation of a pump in the well and chlorinate the water supply, and
- prepare this summary report.

(Boody Report.doc - 01/08/01)

Geotechnical Engineering • Materials Engineering & Research • Mining Engineering • Air Quality • Environmental Sciences
Environmental Engineering • Hydrogeology • Environmental Management Systems



**BALLFIELD WATER SUPPLY
INSTALLATION REPORT
WESTMANLAND ROAD
NEW SWEDEN, MAINE**

Prepared for

Maine Department of Environmental Protection
Bangor, Maine

Prepared by

Jacques Whitford Company, Inc.
Portland, Maine

November 16, 2001

(ballfield water supply.doc)





**Jacques Whitford
Company, Inc.**

Consulting Engineers
Environmental Scientists
Risk Consultants

75 Pearl Street, Suite 201, Portland, Maine, U.S.A. 04101
Tel 207 761 7790 Fax 207 772 0385

**World Wide Web: www.jacqueswhitford.com
E-mail: info@jacqueswhitford.com**

Maine • New Hampshire • Vermont • New York • Trinidad • Russia • Argentina
Nova Scotia • New Brunswick • Prince Edward Island • Newfoundland & Labrador • Quebec • Ontario • Saskatchewan • Alberta • British Columbia • Northwest Territories

November 16, 2001

Mr. Paul Blood, C.G.
Maine Department of Environmental Protection
106 Hogan Road
Bangor, ME 04401

RE: Ballfield Water Supply Installation, Westmanland Road, New Sweden, Maine
JWC Reference: MEDEP NSS-2001/MEP01120

Dear Mr. Blood:

Jacques Whitford Company, Inc. (JWC) has completed the installation of the water supply line at the former New Sweden School ballfield site in New Sweden, Maine. We performed this work for the Maine Department of Environmental Protection (MEDEP) in accordance with our contract dated July 9, 2001. This letter describes the water line installation.

INTRODUCTION

As shown on Figure 1, the former New Sweden School ballfield site is located at the southwest corner of the intersection of the Westmanland Road and Route 161 (or New Sweden Road) in New Sweden, Maine. The site is also located adjacent to Northstar Variety (formerly known as Georgie Porgie's Store) where gasoline was released in 1989.

As shown on Figure 2, an elementary school building was located at the site. The school building was located on a slab and partial basement. The building was raised in the late 1990s. The partial basement was backfilled and the slab was left in place. A well which supplied the school building was filled in at that time.

Adjacent to this raised building is a warehouse building approximately 50 by 100 feet in size. The warehouse was formerly used as a fitness studio and previous to that as the school gymnasium.

The MEDEP contracted Henry Michaud & Sons (Michaud) of St. Agatha, Maine to drill a replacement well for the warehouse building in the late 1990s. The supply well is 6 inches in diameter and has a steel casing which extends into bedrock. As shown on Figure 2, the well is located at the southwest corner of the site, approximately 450 southwest of the warehouse.

Because the replacement well was found to have a very low yield, a second well was drilled adjacent to the first. The two wells were hydrofractured in an unsuccessful attempt to increase the flow of water into them and increase communication between them.



X

**HYDROGEOLOGICAL ASSESSMENT
NEW SWEDEN SCHOOL SITE
NEW SWEDEN, MAINE**

Prepared for

Maine Department of Environmental Protection
Bangor, Maine

Prepared by

Jacques Whitford Company, Inc.
Portland, Maine

November 16, 2001

(NSShydroreport.doc)





**Jacques Whitford
Company, Inc.**

Consulting Engineers
Environmental Scientists
Risk Consultants

75 Pearl Street, Suite 201, Portland, Maine, U.S.A. 04101
Tel 207 761 7790 Fax 207 772 0385

**World Wide Web: www.jacqueswhitford.com
E-mail: info@jacqueswhitford.com**

Maine • New Hampshire • Vermont • New York • Trinidad • Russia • Argentina
Nova Scotia • New Brunswick • Prince Edward Island • Newfoundland & Labrador • Quebec • Ontario • Saskatchewan • Alberta • British Columbia • Northwest Territories

November 16, 2001

Mr. Paul Blood, C.G.
Maine Department of Environmental Protection
106 Hogan Road
Bangor, Maine 04401

RE: Hydrogeological Assessment, Former New Sweden School Area, New Sweden, Maine
JWC Project Reference: MEDEP-NSS/MEP01120

Dear Mr. Blood:

INTRODUCTION

Jacques Whitford Company Inc. (JWC) has performed a hydrogeological assessment of the former New Sweden School area in New Sweden, Maine. We performed this work for the Maine Department of Environmental Protection (MEDEP) in accordance with our contract dated July 9, 2001. This report describes our methods and results.

Site Description

As shown on Figure 1, the New Sweden School area (the Site) is at the intersection of Route 161, Station Road, and Westmanland Road in New Sweden. The land surface at the site is relatively flat. The land surface slopes upwards to the east and downwards to the north, west, and south. From Figure 1, groundwater flow from the site area appears to be towards discharge areas to the north, west, and south.

The site is underlain by a thin layer of glacial till (up to approximately 6 feet deep). Under the till is calcareous pelite metamorphosed to marble and slate/phyllite of the New Sweden Formation. The bedrock strikes northeast and dips nearly vertically.

The site is characterized by single family residences, commercial buildings, an athletic field, municipal buildings, and a church (see Figure 2). Northstar Variety (Northstar), a gasoline station and convenience store, is located at the southwest corner of the intersection. To the west of Northstar are the foundation of the former New Sweden School, a ballfield, and a warehouse operated by County Electric. Surrounding these buildings are residences, New Sweden Service (an equipment dealer), and a Baptist Church. A Verizon telephone switching building and the New Sweden Town Office and Town Garage are located uphill to the east of Northstar. Area buildings are serviced by individual drilled wells and septic systems.



Site Background

MTBE contaminates residential wells along Westmanland Road. Three potential contamination sources have been identified in the site area. In 1989, gasoline spilled from piping at Northstar (known at that time as Georgie Porgie's). In 1991, a fuel spill occurred at the New Sweden Town Garage located to the east of the site. In addition, an underground storage tank was located at the school property. This UST was reportedly connected to a dispenser used to fuel school buses in the 1950s. Two locations for this UST have been reported. The tank was depicted at the corner of Route 161 and Westmanland Road on a Maine Department of Transportation (MDOT) map. An alternate location, approximately 50 feet to the south, was reported by a local resident.

Soil and groundwater contamination has been documented in the area of the gasoline pumps at Northstar. The MEDEP removed contaminated soil in 1989 to remediate the gasoline release. Subsequently more contaminated soil has been removed in the source area at the store.

To further investigate the extent of the gasoline release, three well pairs (MW-101A/B, MW-102A/B, and MW103A/B) were installed at the store in 1997. Logs for these wells are included in Attachment 1. MW-102A/B were installed near the UST location marked on the MDOT map. These wells along with surrounding residential water supplies have been monitored for gasoline and gasoline components including MTBE. The MEDEP also equipped impacted homeowner water supplies with carbon filters to remove the residual MTBE from the water. In addition, two residential water supplies (Boody and County Electric) were replaced with new wells.

Monitoring results indicate that the concentration of MTBE in residential wells to the west of the store are decreasing. MTBE concentrations in these wells have fallen to below 10 µg/L which is below the 35 µg/L Maine Maximum Exposure Guideline. Although positive Diesel Range Organic (DRO) levels have been recorded periodically at the site, these levels were determined to be not representative of site conditions and DRO testing was discontinued in 1999.

Gaps existed in our understanding of the site. Although a significant level of gasoline contamination was found during soil excavation at Northstar in fall 2000, the an on-site water supply well located within 50 feet of the source area has historically contained no significant concentrations of gasoline or MTBE. This well is between the source area at Northstar and the MTBE-contaminated wells to the west.

In addition, because of the limited number of groundwater wells at the site, the groundwater flow direction could not be determined. Though wells to the west of the store are contaminated with MTBE, surface water runoff in the area of the gasoline pumps flows to the south.

Further soil removal at Northstar is pending. In order to provide a rationale for a natural attenuation alternative for the site after this soil removal, the MEDEP requested that JWC determine the groundwater flow direction at the site and test additional water supplies.

(NSShydroreport.doc)



To accomplish this task, JWC's approach was to collect groundwater samples for gasoline and gasoline constituent analysis and to measure water levels in an expanded area around the store. Specific tasks included:

- Sampling the existing network of monitoring wells and homeowner water supplies plus two additional locations uphill from Northstar;
- Measuring water levels with recording water level devices in 5 wells and at other locations manually with an electronic water level meter;
- Coordinating a survey to establish the elevations of water level monitoring points; and
- Preparing this summary report.

METHODOLOGY

In August 2001, JWC collected samples from site monitoring wells and water supplies, interviewed three people, and measured water levels in a networks of wells.

Interviews

On August 13, 2001 and November 15, 2001, JWC interviewed Wendell Spooner, an area resident since the 1950s. Mr. Spooner provided historical information about the store and nearby buried utility lines. On November 15, 2001, JWC interviewed Brian Pelletier, maintenance man at the New Sweden School. On November 15, 2001 JWC contacted Mr. Gilbert of the Maine Oil Dealer's Association regarding when MTBE was used in gasoline in Maine.

Groundwater Sampling

David Chapman of JWC performed sampling of monitoring wells MW-101A, MW-101B, MW-102A, MW-102B, MW-103A, MW-103B, and groundwater supply wells at the Baptist Church/Parsonage, Bither (formerly Bealeau), Boody (replacement well), Jepson, New Sweden Service, and Northstar Variety, Spooner, and the New Sweden Town Office on August 8-9, 2001.

JWC prepared an equipment blank during the sampling event to assure no cross contamination had occurred. JWC purged and sampled the monitoring wells with a Geotech Geopump Series II peristaltic pump connected to dedicated polyethylene tubing. To avoid cross contamination, JWC replaced the Tygon peristaltic pump tubing between sample points. JWC connected the pump discharge to a flow cell to measure field parameters. JWC decontaminated the flow cell between sample points with a Tide™ detergent wash and distilled water rinse. JWC recorded the water level in the monitoring wells, the purge rate, dissolved oxygen content, temperature, conductivity, pH, Eh, and turbidity during purging. JWC continued to purge groundwater until field parameters stabilized. Purge and sample data sheets are included as Attachment 2.

JWC sampled the Jepson residence from taps before a carbon system and the New Sweden Service, Boody, Baptist Church, Bither, and Northstar Variety, Spooner, and New Sweden Town Office wells from inside or outside taps. We removed the aerator from the faucet where one was present. JWC purged water from each of these eight wells for approximately 15 minutes to assure that the sample was collected from the well rather than the pressure tank and piping. JWC kept the samples on ice in coolers and delivered them to Katahdin Analytical Services (Katahdin) on August 10, 2001.

Water Level Measurement

JWC used automated water level devices at five locations (Northstar, Boody's new well, Bither, Spooner, and Jepson). These devices were necessary because the wells were regularly pumped. Only during intervals when the wells were not used, typically between midnight and 5:00 AM, did the water levels rise to static levels. By comparing these static levels to other levels collected by hand at the site, JWC was able to determine groundwater flow directions.

JWC used InSitu MiniTrolls, which consist of a transducer connected to a wire. The transducer is lowered down a well. By sensing the pressure of the overlying water column, the transducer is able to determine the elevation of water over it. The transducers collected water level measurements at 10-minute intervals. Transducers are equipped with a battery and a memory chip. With a laptop computer, JWC periodically downloaded data from the transducers to establish the record of water levels in the wells.

The MiniTroll network was installed on August 13, 2001, checked the next morning then checked again and broken down the following morning. JWC collected two nights of water level data.

At 12 other locations, monitoring wells or locations where the well was not used in the evening, JWC measured the depth to groundwater periodically with a Heron electronic water level meter. For example, at New Sweden Service, the water supply was not used from 5:00 PM when the dealership closed until 7:00 AM when it reopened. The level of the well rose to static overnight. JWC measured the static level at 7:00 AM before any water was used. JWC monitored the following locations manually: six monitoring wells, New Sweden Town Office, Verizon, Boody's old well, and the Ballfield well.

JWC questioned homeowners about well construction details. The available information is summarized in Table 2. JWC decided not to try to sound the wells because of the likelihood of catching the water level meter tape on the pump or water line in the well.

JWC determined from Stanley (Bub) Anderson, owner of the former New Sweden School property, that he had abandoned the school well shortly after buying the property. We contacted Jim Paulsen, the minister of the Baptist Church. We inspected the church and parsonage grounds and determined that the wellhead is apparently buried. Mr. Paulson inquired among his

parishioners regarding the location of the well. Neither Mr. Paulson nor his parishioners could locate the well.

JWC downloaded the MiniTroll data to a computer and produced graphs of the water levels. JWC determined the static water level from these graphs, which are included in Attachment 3. We combined the static levels with manual readings collected with the Heron electronic water level meter and survey data to produce groundwater elevation points that were used to assess the groundwater flow directions at the site.

RESULTS

Water Testing

No exceedences of the Maine Maximum Exposure Guidelines (MEGs) or Federal Maximum Concentration Limits (MCLs) were found in any of the wells sampled. A summary of historical water sampling results is presented in Table 1. A copy of the laboratory analytical report is included in Attachment 4. The results of the August 2001 groundwater sampling are summarized below:

- In the monitoring wells, 3.5 µg/L MTBE was detected in the sample from MW-101A and 10 µg/L GRO was detected in the sample from MW-103B.
- A concentration of 15 µg/L GRO was detected in the sample from the Baptist Church.
- The Jepson sample contained 0.76 µg/L MTBE.
- The Northstar sample contained 1.1 µg/L MTBE.
- None of the other samples including the ones from the Spooner and New Sweden Town Office wells contained detectable levels of GRO or MTBE.

Interviews

Wendell Spooner indicated that two drainage channels had been dug at the site. He said the first was from the former school septic tank to a swale south near the Northstar aboveground fuel oil tanks. The school originally had a septic tank but no leach field. Overflow from the tank discharged through a buried effluent line which drained to the swale. High-permeability backfill around the effluent line may influence the shallow groundwater direction in the area of the trench.

Mr. Spooner said a former store owner dug a ditch from the gasoline pump area to the swale. The ditch was intended to drain water from under the store parking lot to the swale. The ditch

was apparently filled with high-permeability fill and served as a conduit for gasoline to discharge into the swale after the release in 1989.

Mr. Spooner helped his father install the UST in question at the school. He remembered it to be approximately 50 feet south of the intersection of Westmanland Road and Route 161. He said the tank was installed in 1951 or 1952 and was still in service until at least 1956. Mr. Spooner's father was a custodian and bus driver for the school. Mr. Spooner remembered the UST to be cylindrical and have a capacity of approximately 500 gallons. He helped his father and another local man blast ledge to facilitate installation of the UST. Mr. Spooner did not know when the UST was taken out of service and if it had been removed.

Brian Pelletier's knowledge of New Sweden School extends back to 1983. He knew nothing of a UST or associated dispenser. He said the building was used as a school from 1947 until 1994.

Mr. Gilbert of the Maine Oil Dealer's Association indicated that MTBE was first used in the 1970s as a substitute for lead in gasoline. The concentration of MTBE was increased in 1995 with the introduction of reformulated gasoline.

Water Level Measurement

A summary of water table elevations and well information is presented in Table 2. JWC plotted groundwater elevation points on a map and drew equipotential lines (lines of equal elevation). From these lines, drew groundwater flow direction arrows perpendicular to the equipotential lines and in a downgradient direction.

Groundwater flow directions are depicted on Figure 2. The figure indicates that groundwater flow directions generally mirror ground surface topography as indicated on Figure 1. The plot indicates there is a groundwater flow divide in the vicinity of the Northstar property and that groundwater from the source area apparently flows in a somewhat radial direction from this area.

CONCLUSIONS

Based on the results of the evaluation, JWC concludes the following:

- Groundwater monitoring has documented that MTBE contamination is decreasing in the impacted wells. The level of MTBE has fallen to less than 10 µg/L in the Anderson well and less than 1 µg/L in the Jepson well. Although a level of 15 µg/L GRO was recorded in the Baptist Church well in August 2001, no gasoline components were detected and no GRO has been detected in that well before. The reading is not likely indicative of a trend.
- The Spooner well across Route 161 from Northstar is in an apparent upgradient direction from the release at Northstar. No detectable concentration of gasoline was found in the Spooner well sample.

- No gasoline components were detected in the water supply at the New Sweden Municipal Office. Because the well is adjacent to the town garage, likely the documented release at the town garage was not the source of the MTBE contamination in the residential wells along Westmanland Road.
- The area of the UST and/or dispenser used to fuel school buses as depicted on an MDOT map is not likely the source of the MTBE in residential wells along Westmanland Road because no significant contamination has been documented historically in MW-102A or B. The area of the school bus UST as reported by Wendell Spooner remains a potential source. The UST may have been used until the 1970s when MTBE was introduced into Maine gasoline.
- The source of the MTBE in the wells along Westmanland Road may be the release at Northstar. The groundwater flow direction in the source area appears to be to the south, north, and west towards the impacted wells. The store well, however, shows only minimal impact and is located between the source area and the affected wells. If the store well is cased below the zone of contamination, the store release would not impact the onsite water supply well.

The source of the petroleum-impacted groundwater wells cannot be definitely determined. Because the contaminant levels have decreased to below the MEGs, we recommend a natural attenuation alternative for this site. We also recommend continued sampling on a semiannual basis of the Baptist Church well, the Jepson well, the ballfield well, and the Northstar well with samples collected on a twice-a-year basis. We believe this is necessary because of the possible impact on the hydrogeologic flow regime caused by additional excavation of contaminated soil in the source area at the store.

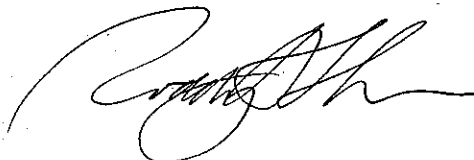
CLOSURE

JWC appreciates the opportunity to perform this service for you. Should you have any questions, please contact us at 761-7790.

Sincerely
JACQUES WHITFORD COMPANY, INC.



David Chapman
Project Manager



Roddy A. Sherer, P.E.
Senior Engineer

RAS/DVC:dvc

FIGURES

- Figure 1: Site Locus
- Figure 2: Site Plan

TABLES

- Table 1: Laboratory Test Results
- Table 2: Groundwater Elevations

ATTACHMENTS

- Attachment 1: Monitoring Well Logs
- Attachment 2: Purge & Sample Data Sheets
- Attachment 3: Water Level Graphs
- Attachment 4: Laboratory Analytical Report

TABLE 1. LABORATORY TEST RESULTS
New Sweden School Hydrogeologic Monitoring - August 2001

Location	Date	GRO	DRO	MTBE	Benzene	Toluene	Ethyl-Benzene	Total Xylenes
Regulatory Limit		50	50	35	12	1400	70	14000
Type of Limit		MEG	MEG	MEG	MEG	MCL	MEG	MEG
Location	Date	GRO	DRO	MTBE	Benzene	Toluene	Ethyl-Benzene	Total Xylenes
Regulatory Limit		50	50	35	12	1400	70	14000
Type of Limit		MEG	MEG	MEG	MEG	MCL	MEG	MEG
MW-101A	06/16/97	<10	NA*	47	<5	<5	<5	<5
MW-101A	05/27/98	<10	<50	2.1	<0.50	<1.0	<1.0	<1.0
MW-101A	10/21/98	<10	<55	3.7	<0.50	<1.0	<1.0	<1.0
MW-101A	04/21/99	<10	<50	2.6	<0.50	<1.0	<1.0	<1.0
MW-101A	10/22/99	<10	100B	2.6	<0.50	<1.0	<1.0	<1.0
MW-101A	04/18/2000	<10	NA	3.9	<0.5	<1.0	<1.0	<1.0
MW-101A	10/17/2000	<10	NA	5	<2	<2	<2	<5
MW-101A	08/09/2001	<10	NA	3.5	<0.5	<1.0	<1.0	<1.0
MW-101B	06/16/97	530	NA*	431	84	380	75	392
MW-101B	05/27/98	<10	59	<0.50	<0.50	<1.0	<1.0	<1.0
MW-101B	10/20/98	<10	<50	<0.50	<0.50	<1.0	<1.0	<1.0
MW-101B	04/21/99	<10	<50	0.72	<0.50	<1.0	<1.0	<1.0
MW-101B	10/22/99	<10	55B	<0.50	<0.50	<1.0	<1.0	<1.0
MW-101B	04/18/2000	32	NA	3.3	3	3.8	<1.0	5.7
MW-101B	10/17/2000	<10	NA	<2	<2	<2	<2	<5
MW-101B	08/09/2001	<10	NA	<0.5	<0.5	<1.0	<1.0	<1.0
MW-102A	06/16/97	<10	NA*	<5	<5	<5	<5	<5
MW-102A	05/28/98	<10	68	<0.50	<0.50	<1.0	<1.0	<1.0
MW-102A	10/20/98	<10	<55	<0.50	<0.50	1.2	<1.0	<1.0
MW-102A	04/21/99	<10	<50	<0.50	<0.50	2.2	<1.0	<1.0
MW-102A	10/21/99	<10	89B	<0.50	<0.50	<1.0	<1.0	<1.0
MW-102A	04/18/2000	<10	NA	<0.50	<0.50	<1.0	<1.0	<1.0
MW-102A	10/17/2000	<10	NA	<2	<2	<2	<2	<5
MW-102A	08/09/2001	<10	NA	<0.5	<0.5	<1.0	<1.0	<1.0
MW-102B	06/16/97	<10	NA*	<5	<5	<5	<5	<5
MW-102B	05/28/98	11	190	2.2	<0.50	<1.0	<1.0	<1.0
MW-102B	10/20/98	20	180	2.3	<0.50	10	<1.0	<1.0
MW-102B	04/21/99	<10	<50	<0.50	<0.50	<1.0	<1.0	<1.0
MW-102B	10/21/99	<10	130B	<0.50	<0.50	1.1	<1.0	<1.0
MW-102B	04/18/2000	<10	NA	<0.50	<0.50	<1.0	<1.0	<1.0
MW-102B	10/17/2000	<10	NA	<2	<2	<2	<2	<5
MW-102B	08/08/2001	<10	NA	<0.5	<0.5	<1.0	<1.0	<1.0
MW-103A	06/16/97	<10	62	<5	<5	<5	<5	<5
MW-103A	05/27/97	<10	88	0.73	<0.50	<1.0	<1.0	<1.0
MW-103A	10/20/98	<10	<55	1.7	<0.50	1	<1.0	<1.0
MW-103A	04/21/99	<10	<50	<0.50	<0.50	<1.0	<1.0	<1.0
MW-103A	10/22/99	<10	86B	<0.50	<0.50	<1.0	<1.0	<1.0
MW-103A	04/18/2000	<10	NA	<0.50	<0.50	<1.0	<1.0	<1.0

TABLE 1. LABORATORY TEST RESULTS
New Sweden School Hydrogeologic Monitoring - August 2001

Location	Date	GRO	DRO	MTBE	Benzene	Toluene	Ethyl-Benzene	Total Xylenes
Regulatory Limit Type of Limit		50 MEG	50 MEG	35 MEG	12 MEG	1400 MCL	70 MEG	14000 MEG
MW-103A	10/17/2000	<10	NA	J1	<2	<2	<2	<5
MW-103A	08/08/2001	<10	NA	1.5	<0.5	<1.0	<1.0	<1.0
MW-103B	06/16/97	<10	<25	<5	<5	<5	<5	<5
MW-103B	05/27/98	<10	86	<0.50	<0.50	<1.0	<1.0	<1.0
MW-103B	10/20/98	<10	<55	<0.50	<0.50	1.1	<1.0	<1.0
MW-103B	04/21/99	<10	<50	<0.50	<0.50	<1.0	<1.0	<1.0
MW-103B	10/22/99	<10	<50	<0.50	<0.50	<1.0	<1.0	<1.0
MW-103B	04/18/2000	<10	NA	<0.50	<0.50	<1.0	<1.0	<1.0
MW-103B	10/17/2000	<10	NA	<2	<2	<2	<2	<5
MW-103B	08/08/2001	10	NA	<0.5	<0.5	<1.0	<1.0	<1.0
Anderson	06/16/97	<10	<25	53	<5	<5	<5	<5
Anderson	05/28/98	49	<55	50	<2.5	<5	<5	<5
Anderson	04/29/99	20	<50	21	<0.50	<1.0	<1.0	<1.0
Anderson	10/21/99	<10	92B	<0.50	<0.50	<1.0	<1.0	<1.0
Anderson	04/18/2000	<10	NA	5.7	<0.50	<1.0	<1.0	<1.0
Baptist Church	05/05/93	BDL	BDL	BDL	NS	NS	NS	NS
Baptist Church	06/16/97	<25	<10	<5	<5	<5	<5	<5
Baptist Church	05/28/98	<10	<55	0.99	<0.50	<1.0	<1.0	<1.0
Baptist Church	10/20/98	<10	<55	0.51	<0.50	<1.0	<1.0	<1.0
Baptist Church	04/21/99	<10	<50	2.1	<0.50	<1.0	<1.0	<1.0
Baptist Church	10/26/99	<10	<50	<0.50	<0.50	<1.0	<1.0	<1.0
Baptist Church	04/18/2000	<10	NA	<0.50	<0.50	<1.0	<1.0	<1.0
Baptist Church	10/17/2000	<10	NA	<2	<2	<2	<2	<5
Baptist Church	08/08/2001	15	NA	<0.5	<0.5	<1.0	<1.0	<1.0
Beaulieu	05/05/93	BDL	BDL	BDL	NS	NS	NS	NS
Beaulieu	06/16/97	<10	<25	<5	<5	<5	<5	<5
Beaulieu	05/28/98	<10	<50	<0.50	<0.50	<1.0	<1.0	<1.0
Beaulieu	04/21/99	<10	210	<0.50	<0.50	<1.0	<1.0	<1.0
Beaulieu	10/21/99	<10	290B	<0.50	<0.50	<1.0	<1.0	<1.0
Beaulieu	04/20/2000	<10	NA	<0.50	<0.50	<1.0	<1.0	<1.0
Bither (Beaulieu)	10/17/2000	<10	NA	<2	<2	<2	<2	<5
Bither (Beaulieu)	08/08/2001	<10	NA	<0.5	<0.5	<1.0	<1.0	<1.0
Boody	05/05/93	BDL	BDL	<1/NC	NS	NS	NS	NS
Boody	06/17/93	NS	NS	9	<5	<5	<5	<5
Boody	05/28/98	98	52	130	<5	<10	<10	<10
Boody	10/20/98	44	<55	56	<2.5	<5	<5	<5
Boody	04/21/99	27	<50	29	<1.0	<2	<2	<2
Boody	10/26/99	11	<50	7.9	<0.50	<1	<1	<1
Boody	04/17/2000	<10	NA	1.1	<0.50	<1.0	<1.0	<1.0
Boody	10/17/2000	<10	NA	<2	<2	2	<2	<5
Boody	08/08/2001	<10	NA	<0.5	<0.5	<1.0	<1.0	<1.0

TABLE 1. LABORATORY TEST RESULTS
New Sweden School Hydrogeologic Monitoring - August 2001

Location	Date	GRO	DRO	MTBE	Benzene	Toluene	Ethyl-Benzene	Total Xylenes
Regulatory Limit		50	50	35	12	1400	70	14000
Type of Limit		MEG	MEG	MEG	MEG	MCL	MEG	MEG
Davis	05/05/93	BDL	BDL	BDL	NS	NS	NS	NS
Jepson	06/17/93	BDL	BDL	BDL	NS	NS	NS	NS
Jepson	06/16/97	<10	<25	118	<5	<5	<5	<5
Jepson	05/28/98	56	<50	64	<2.5	<5	<5	<5
Jepson	10/20/98	31	<55	40	<2.5	<5	<5	<5
Jepson	04/21/99	12	<50	8.2	<0.50	<1.0	<1.0	<1.0
Jepson	10/27/99	<10	<51	<0.50	<0.50	<1.0	<1.0	<1.0
Jepson	04/18/2000	<10	NA	1.2	<0.50	<1.0	<1.0	<1.0
Jepson	10/17/2000	<10	NA	<2	<2	<2	<2	<5
Jepson	08/08/2001	<10	NA	0.76	<0.5	<1.0	<1.0	<1.0
Plourde	05/05/93	BDL	BDL	BDL	NS	NS	NS	NS
Plourde	06/17/97	<10	<25	<5	<5	<5	<5	<5
Cora's (Plourde)	05/29/98	<10	51	1.2	<0.50	<1.0	<1.0	<1.0
Northstar (Plourde)	10/20/98	<10	<50	<0.50	<0.50	<1.0	<1.0	<1.0
Northstar (Plourde)	04/21/99	<10	<50	<0.50	<0.50	<1.0	<1.0	<1.0
Northstar (Plourde)	10/21/99	<10	91B	3.3	<0.50	<1.0	<1.0	<1.0
Northstar (Plourde)	04/20/2000	<10	NA	6.4	<0.50	<1.0	<1.0	<1.0
Northstar (Plourde)	10/17/2000	<10	NA	8	<2	<2	<2	<5
Northstar (Plourde)	08/09/2001	<10	NA	1.1	<0.5	<1.0	<1.0	<1.0
New Sweden Service	05/05/93	BDL	BDL	BDL	NS	NS	NS	NS
New Sweden Service	06/16/97	<10	<25	<5	<5	<5	<5	<5
New Sweden Service	05/29/98	<10	<50	<0.50	<0.50	<1.0	<1.0	<1.0
New Sweden Service	10/20/98	<10	<50	<0.50	<0.50	<1.0	<1.0	<1.0
New Sweden Service	04/21/99	<10	<50	<0.50	<0.50	<1.0	<1.0	<1.0
New Sweden Service	10/21/99	<10	<53	<0.50	<0.50	<1.0	<1.0	<1.0
New Sweden Service	04/20/2000	<10	NA	<0.50	<0.50	<1.0	<1.0	<1.0
New Sweden Service	10/17/2000	<10	NA	<2	<2	<2	<2	<5
New Sweden Service	08/09/2001	<10	NA	<0.5	<0.5	<1.0	<1.0	<1.0
New Sweden School	05/09/90	BDL	BDL	BDL	NS	NS	NS	NS
New Sweden School	08/15/90	BDL	BDL	BDL	NS	NS	NS	NS
New Sweden School	06/19/92	BDL	BDL	BDL	NS	NS	NS	NS
New Sweden School	11/24/92	<10	<50	<1.0	<1.0	<1.0	<1.0	<1.0
New Sweden School	01/06/93	<10	<50	BDL	<1.0	<1.0	<1.0	<1.0
New Sweden School	02/24/93	<10	<50	<1.0	<1.0	<1.0	<1.0	<1.0
New Sweden School	01/27/93	NS	NS	1K	BDL	BDL	BDL	BDL
New Sweden School	04/29/93	<10	<50	102	<1.0	<1.0	<1.0	<1.0
New Sweden School	05/20/93	NS	NS	BDL	BDL	BDL	BDL	BDL
New Sweden School	06/16/97	<10	<25	<5	<5	<5	<5	<5
New Sweden School	05/29/98	<10	<50	<0.50	<0.50	<1.0	<1.0	<1.0
New Sweden School	10/28/98	10	<55	<0.50	<0.50	<1.0	<1.0	<1.0

TABLE 1. LABORATORY TEST RESULTS
New Sweden School Hydorgeologic Monitoring - August 2001

Location	Date	GRO	DRO	MTBE	Benzene	Toluene	Ethyl-Benzene	Total Xylenes
Regulatory Limit		50	50	35	12	1400	70	14000
Type of Limit		MEG	MEG	MEG	MEG	MCL	MEG	MEG
NS Town Office	08/08/2001	<10	NA	<0.5	<0.5	<1.0	<1.0	<1.0
Spooner	08/08/2001	<10	NA	<0.5	<0.5	<1.0	<1.0	<1.0
Trip Blank	06/16/97	<10	NA	<5	<5	<5	<5	<5
Trip Blank	05/28/97	<10	NA	<0.50	<0.50	<1.0	<1.0	<1.0
Trip Blank	10/21/98	NA	NA	<0.50	<0.50	<1.0	<1.0	<1.0
Trip Blank	04/21/99	<10	NA	NA	NA	NA	NA	NA
Trip Blank	10/22/99	<10	NA	NA	NA	NA	NA	NA
Trip Blank	04/20/2000	<10	NA	NA	NA	NA	NA	NA
Trip Blank	08/08/2001	<10	NA	NA	NA	NA	NA	NA
Equipment Blank	06/16/97	<10	NA	<5	<5	<5	<5	<5
Equipment Blank	05/28/97	<10	NA	<0.50	<0.50	<1.0	<1.0	<1.0
Equipment Blank	10/21/98	<10	NA	<0.50	<0.50	1.2	<1.0	<1.0
Equipment Blank	04/22/99	<10	NA	NA	NA	NA	NA	NA
Equipment Blank	04/18/2000	<10	NA	NA	NA	NA	NA	NA
Equipment Blank	10/17/2000	<10	NA	NA	NA	NA	NA	NA
Equipment Blank	08/09/2001	<10	NA	NA	NA	NA	NA	NA

Notes:

All results reported in ug/L. Exceedences of regulatory limits are reported in bold.

NA - Not Analyzed

NC - Not Confirmed

ND - Not Detected

< - Less than Reporting Limit

* - Sample lost in laboratory Accident

MEG - State of Maine Maximum Exposure Guideline.

MCL - Maximum Contaminant Level.

DRO - Diesel Range Organics measured with State of Maine Method 4.1.25.

GRO-Gasoline Range Organics measured with State of Maine Method 4.2.17.

B denotes that the analyte was also found in the laboratory method blank. DRO was found in the 10/99 method blank at a concentration of 92 ug/l.

**SOIL REMOVAL REPORT
NORTHSTAR VARIETY
NEW SWEDEN, MAINE**

X

Prepared for

Maine Department of Environmental Protection
Augusta, Maine

Prepared by

Jacques Whitford Company, Inc.
Portland, Maine

February 3, 2004





**Jacques Whitford
Company, Inc.**

Consulting Engineers
Environmental Scientists
Risk Consultants

75 Pearl Street, Suite 410, Portland, Maine, U.S.A. 04101
Tel 207 761 7790 Fax 207 761 7631

**World Wide Web: www.jacqueswhitford.com
E-mail: info@jacqueswhitford.com**

Maine • New Hampshire • Massachusetts • Connecticut • Florida • Rhode Island • Pennsylvania • New York • Trinidad • Russia • Argentina • Brunei
Nova Scotia • New Brunswick • Prince Edward Island • Newfoundland & Labrador • Quebec • Ontario • Saskatchewan • Alberta • British Columbia • Northwest Territories

February 3, 2004

Mr. Chris Swain
Maine Department of Environmental Protection
State House Station 17
Augusta, Maine 04330

RE: Soil Excavation Report, Northstar Variety, New Sweden, Maine
JWC Project Reference: MDEP-Northstar/MEP03175

Dear Chris,

Jacques Whitford Company, Inc. (Jacques Whitford) is pleased to submit this report describing the removal of gasoline-contaminated soil at Northstar Variety (Northstar), a general store and gasoline station, in New Sweden, Maine. The site is at the intersection of Route 161 and West Road at the location depicted on Figures 1 and 2. Jacques Whitford performed the contaminated soil removal for the Maine Department of Environmental Protection (MDEP) in accordance with our contract dated July 1, 2003.

Field activities consisted of soil excavation, land spreading of the excavated soil, replacement of gasoline product lines, and paving. The Soderberg Company, Inc. (Soderberg) of Caribou, Maine excavated approximately 1,200 cubic yards of gasoline-contaminated soil from September 2-9, 2003. Soderberg transported the soil to the Clifton Anderson farm in New Sweden for land spreading. Soderberg assisted David Beaumont of Beaumont Generator, Inc., a licensed tank installer and Master Electrician from Medway, Maine, in replacing the gasoline dispensing system at the store. After backfilling and grading by Soderberg, The Lane Corporation (Lane) of Presque Isle, Maine paved the excavation area.

BACKGROUND

In 2000, to remediate a release of gasoline at Northstar, contaminated soil was removed. The excavation area was approximately 60 feet long by 20 feet wide and extended from the Northstar building to a pump island located between the building and Route 161. The excavation was continued downward into weathered bedrock between 4 and 7 feet below ground surface. Jacques Whitford documented in *Soil Excavation Report, Northstar Variety, New Sweden, Maine*. Figure 2 of that report depicts the area of excavated soil.



During the excavation discussed above, gasoline contamination was found to extend under the Northstar building and underneath the pump island. Excavation was halted because of safety concerns associated with the proximity of the pump island and active gasoline supply lines. Significant residual soil contamination remained to the west, south, and east of the excavation area.

In 2003, the MDEP determined that additional soil should be removed from the site. Removal of the pump island, replacement of the gasoline supply lines, and paving was included in the scope of work. Removal of the pump island and product lines permitted excavation of contaminated soil between the area of excavation completed in 2000 and the edge of Route 161.

The purpose of the excavation was to remove overtly contaminated soil to competent bedrock. The 2003 excavation area was bounded by the edge of the 2000 excavation area to the west, a utility pole to the southwest, and the edge of Route 161 to the east as depicted on Figure 3.

To accomplish this goal, Jacques Whitford performed the following services:

- Met with David and Sara Anderson, Northstar owners, and contractor representatives at the site on July 2, 2003;
- Solicited and reviewed contractor bids;
- Met with Chris Swain of the MDEP, Brent Bubar of the Maine Department of Transportation, David Anderson, and contractor representatives on August 12, 2003;
- Observed fieldwork from September 2-9, 2003. Monitored soil removal with a photoionization device and characterized soil and groundwater conditions;
- Prepared this letter report describing field procedures and results.

METHODOLOGY

On July 2, 2003, Jacques Whitford met with the Northstar owners, David and Sara Anderson along with Carl Soderberg; Kirk St. Peter of County Environmental Engineering, Inc. (CEE), a licensed tank installer; and Stan Brown of Lane to review the Anderson's concerns and help refine the scope of work of the project.

Jacques Whitford next solicited contractor bids. For excavation services, Jacques Whitford obtained bids from Soderberg, and Ross McQuade of A.E. McQuade & Sons, Inc. of Mars Hill, Maine. Soderberg was selected based on cost and previous on-site experience.

For gasoline line installation, Jacques Whitford contacted Kirk St. Peter, Ira Dodge of Guerin Associates, LLC of Presque Isle, Maine, and David Beaumont. Beaumont, as low bidder, was chosen.

Jacques Whitford contacted Tri-Community Landfill for a quote for soil disposal. Land spreading, however, was determined to be a more cost-effective option for disposal of the contamination soil. Soderberg contracted with a local landowner, Clifton Anderson, to spread the soil on two of his fields. The spreading area on the north of Station Road approximately 3 miles east of Northstar Variety in New Sweden at N46.95720°, W-68.086737. Photographs of the spreading area are included in Attachment 1.

On September 2, 2003, Jacques Whitford, Soderberg, and Frank Wezner of the MDEP's Presque Isle office inspected the spreading site. Mr. Wezner approved the site, which appeared to be greater than 300 feet from any stream, residence, or water supply well. Mr. Wezner judged the depth to bedrock to be greater than 3 feet and the soil to be suitable for land spreading. Wezner presented a spreading agreement to Karl Espling, which required that no food crops be grown on the land for three years after the spreading.

Two separate fields were used for land spreading. Soil was spread on both to an estimated depth of 3 inches. The eastern field is the larger of the two with good sun exposure to the east, south, and west. The second field, to the west of the first, receives less sun. It is shaded to the east and west (refer to photographs in Attachment 1).

After completion of soil emplacement, Soderberg removed cobbles from the ground surface in the spreading areas then filled and graded the access road to restore it to its former condition.

Chris Swain obtained a Road Opening Permit from the Maine Department of Transportation (MDOT) and coordinated with Brent Bubar, the local MDOT representative, regarding state requirements relative to working adjacent to Route 161.

On August 20, 2003, Jacques Whitford contacted Dig Safe and obtained clearance #20032306910 for the site work.

On September 2, 2003 Soderberg began excavating existing product lines at Northstar. Soderberg used a Volvo EC290 track-mounted excavator, a Caterpillar 950F front-end loader, and a Caterpillar Turbo 416B rubber-tired backhoe. Karl Espling supervised the operation for Soderberg.

Soderberg delivered and placed Jersey barriers to segregate the work area. Beaumont drained product lines from the pump island to the two above-ground storage tanks at the south end of the site (see Photograph 3). Beaumont drained the two single wall fiberglass pipes at the pumps, adjacent the tank containment, at a low spot

approximately 5 feet north of containment, then at various low spots in the product lines between the ASTs and the pump island. He drained an estimated 40 gallons of product from the system. Beaumont removed the fiberglass lines as Soderberg dug them up. Some of the joints in the fiberglass pipe appeared to Beaumont to be poorly constructed (see Photograph 6). Beaumont and Soderberg also removed the gasoline dispensers, canopy, and pump island.

Jacques Whitford observed granular sandy fill with gravel and cobbles in the trench. Most of the soil was moist. The soil below approximately 2 feet below ground surface (bgs) within approximately 10 feet of the ASTs, however, was saturated with water.

Jacques Whitford screened soil as it was removed from the trench with a Thermo 580B photoionization device (PID) with a 10.6 eV lens. Prior to use each day, Jacques Whitford calibrated the PID with 100-ppm isobutylene gas. Jacques Whitford set the span of the PID at 255, the MDEP-recommended setpoint for gasoline sites.

Jacques Whitford measured levels of up to 496 ppm in the excavated soil. The trench measured about 4 feet wide and extended approximately 30 inches bgs. Soderberg backfilled the trench to facilitate site work. The trench was later reopened to install new product lines as described below.

On September 3, 2003, Soderberg began excavating contaminated soil in the pump island area. Gasoline contamination appeared to be concentrated in the dark brown till soil under the fill and over the olive gray till. Soderberg excavated to bedrock refusal, loaded the soil into dump trucks, and transported the soil to the Clifton Anderson farm.

The soil profile consisted of brown well-graded gravelly fine to coarse sand trace cobbles up to 6 inches in diameter moist firm to 27-36 inches bgs. Under this was 9-12 inches of dark brown silty fine sand some medium sand to cobbles moist firm topsoil. Under this was olive brown fine sandy silt trace medium sand to coarse gravel moist firm till. Bedrock varied from approximately 5 feet bgs at the north end of the excavation to approximately 7.5 feet bgs at the south end. The water table was at approximately 5.5 feet bgs. The excavation was extended from 5.5 to 7.5 feet bgs. Soderberg was able to excavate below the water table because of the dense nature of the till soil. Appreciable standing water collected in the excavation only after it had been left open for a period of hours.

On September 3, 2003, Chris Swain visited the site and met with Brent Bubar of the MDOT. In the southern end of the excavation, Soderberg found pieces of concrete, apparently part of the former pump island, pieces of metal, pieces of wood, and sections of steel pipe, apparently product lines associated with the former USTs.

Jacques Whitford screened soil with the PID both in situ and in Ziplock bags. Bag headspace locations are marked on the on Figure 3. Bag headspace readings are summarized in Table 1.

Soderberg dug a trench to a depth of 3-3.5 feet an estimated 120 feet north of the gasoline tanks along the former piping run. Soderberg tapered the trench from 8 feet wide for the first 40 feet from the ASTs down to a width of 4 feet for the remainder of the trench. The soil profile in the trench sidewall consisted of fill over till over weathered bedrock. Bedrock depth varied from 2.5-3 feet. The water table varied from approximately 2 feet bgs adjacent to the ASTs to greater than 3.5 feet bgs at the north end of the trench. PID readings from bag headspace testing of trench soil are recorded in Table 3.

Headspace locations are depicted on Figure 4. Soderberg used the Caterpillar vibratory roller to compact fill in the pipe trench.

On September 8, 2003, David Beaumont began reinstalling the petroleum dispensing system. Beaumont installed a sump adjacent to the AST containment area and sumps under the gasoline dispensers.

Beaumont also installed the wiring conduits from the northeast corner of the store building to the pump island. Beaumont installed the wiring conduits and product lines along the west side of the island. Beaumont installed a sensor in the AST containment sump and an alarm in the store building. Beaumont installed product lines in flexible blue secondary containment, which extended between the AST sump and dispenser sumps.

After Soderberg completed filling and grading at the site, Lane emplaced a 3-inch thick layer of asphalt pavement over the excavation area and Beaumont reinstalled the gasoline dispensers and pump island canopy.

DISCUSSION

According to the Chapter 691 Rules for Underground Oil Facilities, the site appears to fall under the "stringent" category because based on the "*Flowchart for DEP Decision Tree*", the release was to bedrock and glacial till and the area is not supplied by public water. The rules include the requirement to remove free product, saturated soil, and soil with a gasoline concentration of over 5 mg/Kg.

The closest water supply is the Northstar well located near the north wall of the building. In 2000, PID readings of up to >9,999 ppm were recorded in soil in the west sidewall of the excavation adjacent to the Northstar building.

To achieve a stringent standard would have required removal of the Northstar building, which was determined by the MDEP to be impractical. Though the Northstar well is within 50 feet of the excavation area, periodic monitoring has shown no impact greater than MDEP water quality standards on that water supply.

In addition, no other water supplies in the impacted area contain levels of gasoline contamination greater than MDEP water quality standards and no gasoline vapor issues have been identified in the store building. Paving the excavation area should help limit the infiltration of water into the excavation area and the spread of residual contamination.

RECOMMENDATIONS

We recommend bi-annual analysis of the store well and monitoring wells (MW-101A/B, and MW-102A/B, and MW103A/B) to assess the potential impact of residual contamination under the store building on the Northstar drinking water well and on site groundwater.

CLOSURE

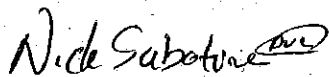
In summary, remediation was accomplished to the extent practical at the site. Removal of the store building to excavate contaminated soil was not determined feasible by the MDEP. A total of 1,156 cubic yards of soil was removed. Visual, olfactory, and PID evidence indicated that the bulk of the contamination was centered under the pump island and in the former UST area near the south end of the store building in the area excavated.

It has been a pleasure working for the MDEP on this project. If you have questions, please contact us at 761-7790.

Sincerely
JACQUES WHITFORD COMPANY, INC.



David V. Chapman, C.G.
Geologist



Nick Sabatine, P.G.
Senior Geologist

NOS/DVC:dvc

(Northstar Report.doc)

Table 1. PID Readings in Soil in the Excavation Between Northstar Variety and Route 161.

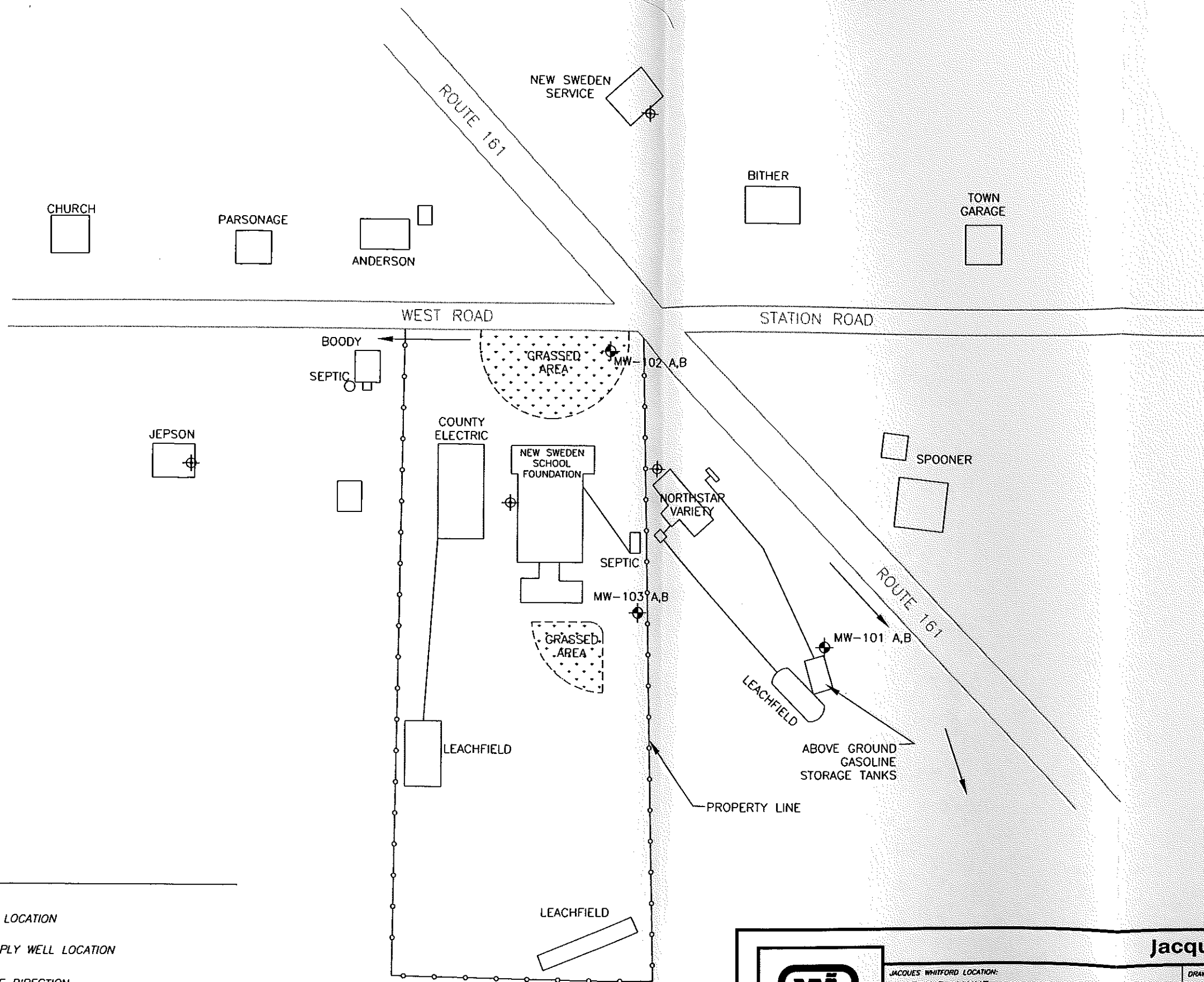
Sample Number	Depth (feet below ground surface)	Position in Trench	PID Reading (ppm)
HS-1B	5.5	Bottom	1,054
HS-1C	4	Sidewall	87
HS-2A	4	Sidewall	782
HS-2B	5.5	Bottom	381
HS-2C	4.5	Sidewall	1,272
HS-3A	5	Sidewall	336
HS-3B	6	Bottom	1,654
HS-3C	4	Sidewall	165
HS-4A	4	Sidewall	336
HS-4B	6	Bottom	1,424
HS-4C	5	Sidewall	20
HS-5A	4	Sidewall	24
HS-5B	5	Bottom	34
HS-5C	4	Sidewall	21
HS-6A	4.2	Sidewall	1,835
HS-6B	4.5	Bottom	4.5
HS-6C	4.5	Sidewall	19
HS-7	3.1	Sidewall	3.1
HS-8	2.6	Sidewall	2.6
HS-9	5	Sidewall	585
HS-10	3.5	Sidewall	38
HS-11	4	Sidewall	67
HS-12	4.5	Sidewall	8.2

Table 2. Volume of Soil Removed from the Northstar Variety Site.

Date	Volume of Soil Removed (cubic yards)
September 3, 2003	726
September 4, 2003	160
September 5, 2003	132
September 6, 2003	138
Total	1,156

Table 3. PID Seadings in Soil in the Trench from the ASTs to the Main Excavation Area.

Sample Number	Distance from ASTs (feet)	Depth (feet below ground surface)	Position in Trench	PID Reading (ppm)
HS-13	0	5.8	Sidewall	539
HS-14	15	2	Sidewall	316
HS-15	30	3	Sidewall	49
HS-16	60	3	Sidewall	212
HS-17	66	3	Sidewall	342
HS-18	70	3.5	Bottom	391
HS-19	78	3	Sidewall	435
HS-20	83	3	Sidewall	324
HS-21	91	3.5	Sidewall	796
HS-22	107	3	Sidewall	281



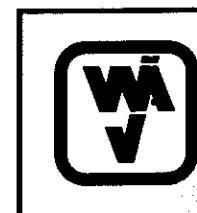
Legend

-  - MONITORING WELL LOCATION
-  - APPROXIMATE SUPPLY WELL LOCATION
-  - SURFACE DRAINAGE DIRECTION

NOTES:

1. LOCATIONS AND DIMENSIONS OF STRUCTURES ARE APPROXIMATE.
2. NORTHSTAR VARIETY FORMERLY KNOWN AS "CORA'S". CORA'S FORMERLY KNOWN AS "GEORGIE PORGIES".

100 0 100
SCALE IN FEET



JACQUES WHITFORD LOCATION:
PORTLAND, MAINE

DATE PREPARED:
01-22-04

DESIGNED BY:
DVC

REVISION DATE:

PROJECT NAME/FILE NAME:
MDEP NORTHSTAR/SITE

DRAWN BY:
TS

CHECKED BY:
BSB

REVIEWED BY:
DVC

PROJECT NUMBER/PHASE:
MEP03175/*

SCALE:
1"=100'

Jacques Whitford Company, Inc.

DRAWING TITLE:

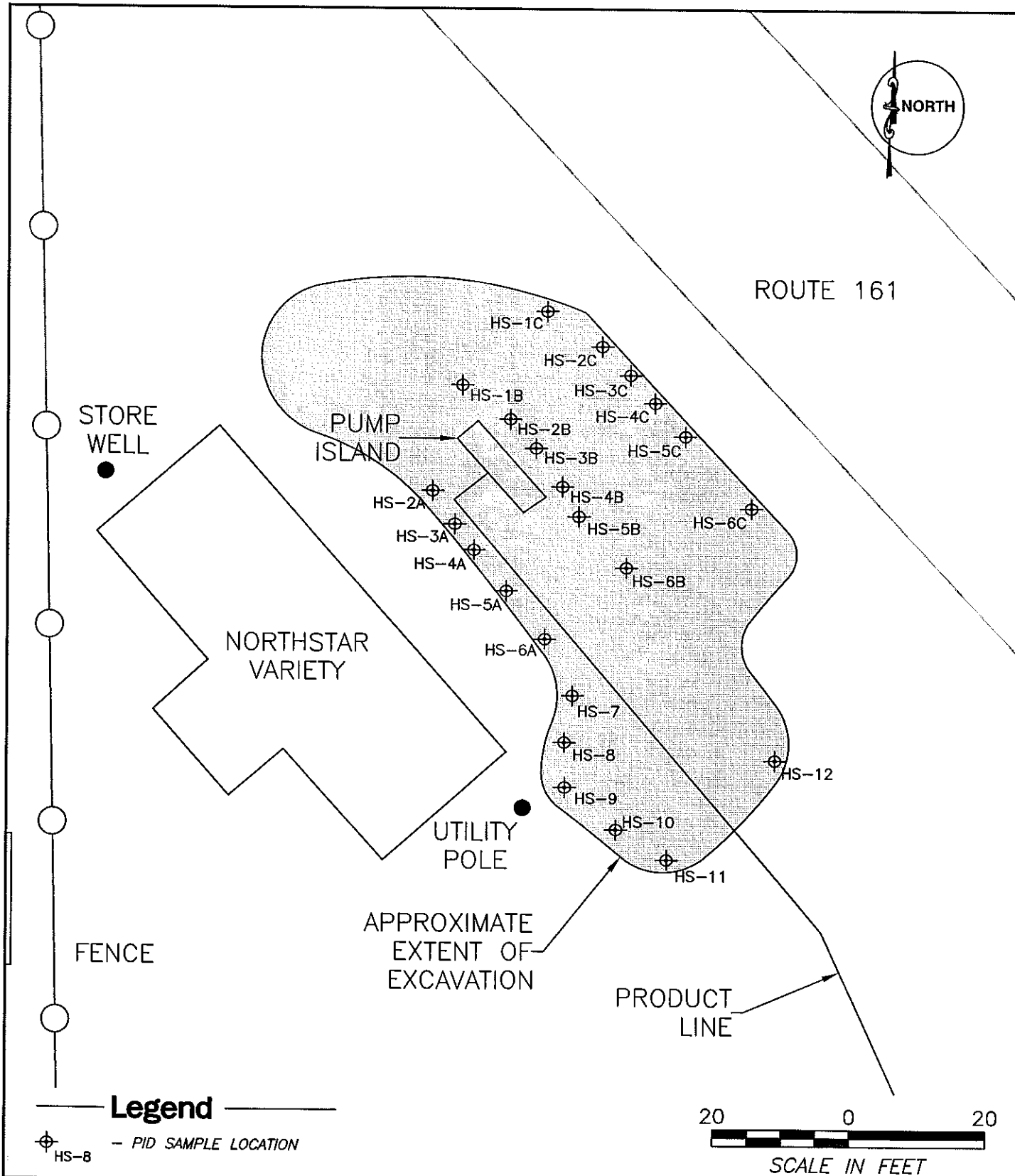
SITE PLAN

NORTHSTAR VARIETY
ROUTE 161
NEW SWEDEN, MAINE

PREPARED FOR:
MAINE DEP

FIGURE NO.

2



Jacques Whitford Company, Inc.



JACQUES WHITFORD LOCATION:
PORTLAND, MAINE

DATE PREPARED: 01-22-04	DESIGNED BY: DVC	DRAWN BY: TS	CHECKED BY: BSB	REVIEWED BY: DVC
REVISION DATE:	REVISION NO:	DRAWN BY:	CHECKED BY:	REVIEWED BY:

PROJECT NAME/FILE NAME:
MDEP NORTHSTAR/SITE

PROJECT NUMBER/PHASE:
MEP03175/*

SCALE:
1"=20'

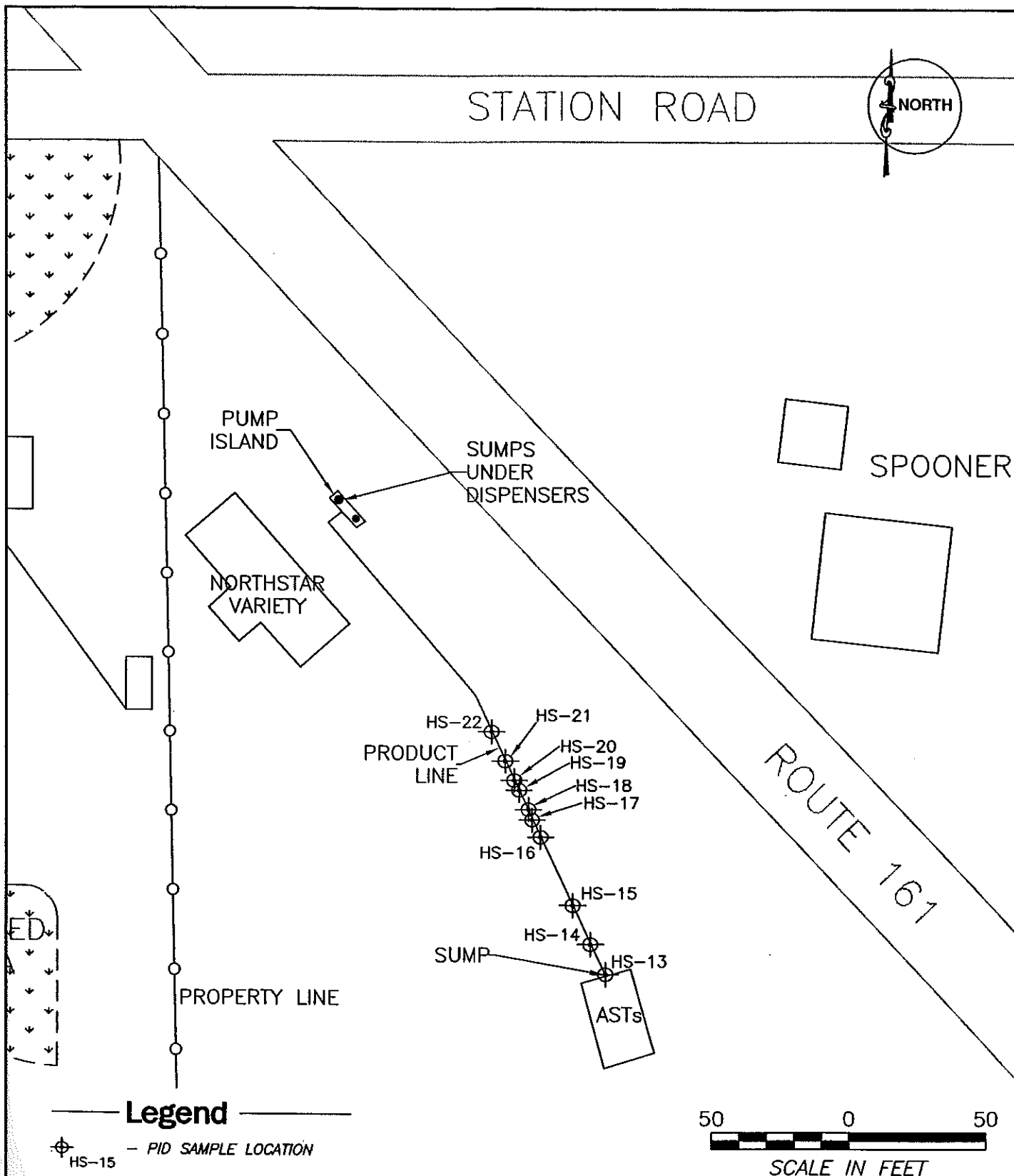
DRAWING TITLE:

EXCAVATION FOOTPRINT
NORTHSTAR VARIETY
ROUTE 161
NEW SWEDEN, MAINE

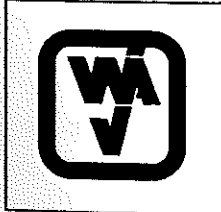
PREPARED FOR:
MAINE DEP

FIGURE NO.

3



Jacques Whitford Company, Inc.



JACQUES WHITFORD LOCATION: PORTLAND, MAINE				
DATE PREPARED: 01-22-04	DESIGNED BY: DVC	DRAWN BY: TS	CHECKED BY: BSB	REVIEWED BY: DVC
REVISION DATE:	REVISION NO:	DRAWN BY:	CHECKED BY:	REVIEWED BY:
PROJECT NAME/FILE NAME: MDEP NORTHSTAR/SITE		PROJECT NUMBER/PHASE: MEPO3175/*		SCALE: 1"=50'

DRAWING TITLE: SUPPLY LINE PID SAMPLE LOCATIONS	
NORTHSTAR VARIETY ROUTE 161 NEW SWEDEN, MAINE	
PREPARED FOR: MAINE DEP	FIGURE NO. 4

B-997-78
RECORD OF INVESTIGATION

INVESTIGATION NUMBER _____

COMPLAINT RECEIVED BY: J. Duncan

DATE: 10/23/78

TIME: _____

COMPLAINANT: Mrs. Elmer Landean

ADDRESS: New Sweden

TELE. NUMBER 896-5557

WATERWAY or A.Q.R. INVOLVED _____

NATURE OF COMPLAINT: Oil contamination of well water

DIRECTIONS TO AREA: Going north, turn right from Route 161 at A & M Texaco Station intersection; third house on right, gold in color.

(FORWARD TO DIRECTOR OF TECHNICAL SERVICES DIVISION)

INSPECTOR ASSIGNED J. Duncan; D. Boulter DATE: _____

DATE INSPECTED: 10/23/78

INSPECTOR COMMENTS: We detected a faint odor of possible a petroleum product in their tap water. Inspection of well water showed no visible sheen, however.

An inspection at nearby residences and town garage revealed no evidence of a spill.

It was felt that if there was a leaky fuel tank, it was possible from a tank servicing a nearby New England Tel. Co. building. This tank was approx. 60' from the well. I contacted Mr. Harold Saucier, NEM employee in charge of building maintenance, to ask if there had been any problems with the tank at that location--there had not.

FURTHER ACTION: NO ACTION NEEDED - FILE _____

REINSPECT: _____

FORWARD TO ENFORCEMENT DIVISION _____

OTHER Follow-up on 11/13/78

ALL PERTINENT MATERIAL MUST BE PLACED IN CENTRAL FILE

ENTERED

ENTERED

**SEE BACK PAGE FOR MORE DETAILS

9

DETAILS:
CONT'D

He said, however, he would inspect the area on 10/24/78 and contact me if he found anything unusual.

On October 25, 1978 I contacted Mrs. Landean and asked that she send to Augusta for hydrocarbon analysis. She was to pick up form and bottles at Human Services office of Caribou and call me about results in 2-3 weeks.

1/12/79: Mrs. Landean called to tell us she received results from water test and that Human Services indicated hydrocarbons in their well-water. Also, nitrites were not able to be determined because of high hydrocarbon concentration in sample.

I called Jake Waru of Bangor to discuss the situation with him and he indicated that we should obtain copies of the report of analysis and go from there.

1/15/79: I visited the Landean home and obtained report of which I made copies (attached) and also inspected the well. There was a layer of oil on the water which appeared to be a few inches thick.

1/16/79: I called John Bourgoin of Ft. Fairfield and Gene Michaud of MPG to inquire about methods of testing for leaks in underground tanks and neither were familiar with the hydrostatic testing procedure but were familiar and available to perform pressure testing.

I called Harold Saucier of New England Telephone (NET) and discussed the situation with him. He said he would call Dead River Company and let me know by the end of the week when testing would take place. I explained that even though the pressure test may indicate no leakage, it has been our experience that it is not always accurate and depending upon other factors, we may decide to drill in the area of the tank anyway.

ENTERED
ENTERED

1/22/79: Contacted Daigle Oil at Presque Isle, Aroostook Petroleum Products of Caribou, and Lead River Oil Co. of Caribou to inquire about any known oil spills in the area of Landeans which might contribute to groundwater contamination. None had any reports of spills.

I also contacted Landean's closest neighbor Floyd Dickinson to ask about any unusual amounts of oil usage. He said he had no problems with his oil tank and also informed me that his tank is in his cellar on a cement foundation with lines exposed and there has been no indication of leakage.

1/23/79: Made arrangements to dig tank up. Malachi Anderson would have his backhoe available, Dick Brescia would have jackhammer available and John Bourgoin would be available to do pressure testing if necessary.

It was agreed by myself, Harold Saucier, and Malachi Anderson to begin operations at 9:00 a.m. on January 30, 1979.

1/30/79: Began digging at 9:00 a.m. and almost immediately found fuel oil in the groundwater and also contamination around the tank. Harold Saucier located a replacement tank which would be delivered on January 31. The present tank was left partially uncovered and hooked up to provide service to heating system until Jan. 31 when the switch would be made.

Also took sample of oil from the hole the tank was in and also from Landean's well for fingerprinting if necessary. These were transported to Bangor office on Feb. 1, 1979 where they will be kept under locked conditions until the situation has been resolved.

1/31/79: New tank placed in ground at about 1:30 p.m. Harold Saucier said we could contact Arthur Schlosser at Bangor MMT office for answers to questions of MMT's liability in this case and also could have any bills accrued sent to him.

1/1/79: Jake Ward met with Arthur Schlosser to discuss situation. Jake is handling correspondence and will write up report. No further action required by this office.

ENTERED
ENTERED

OIL SPILL REPORT FORMSpill Case # B-152 for 83Spillor and Location Gary's Texaco, Rt. 161, New SwedenPerson Reporting Spill Bob McMannAmount and Type of Product less 20 gals gasolineDate and Time of Spill approx. 8/10/83 Reported 8/22/83 140Cause of Spill Dumped gas down a storm drain P or A PTotal Amount of Oil Recovered zero Methods Oils - Recycleable Liquids - Non-Recycleable Solids - Combustible Solids - Non-Combustible Weather Conditions SunnyWater Course Affected Ground waterInvestigator(s) Carl Allen CWA Incident Code C/SS/GREMARKS - RECOMMENDATIONS

After receiving a call concerning gas fumes in an excavation from Bob McMann, the local fire marshall, I went to New Sweden.

Gary's Texaco was installing a used 4,000 gal tank that he purchased from M.P.G. There was an extremely strong smell of gasoline in the excavation. The side of his regular tank was exposed and some saturated soil was found around the fill end of the tank. Some of the fumes were probably coming from that saturated soil. The majority of the smell seemed to be coming out of a 4" line that was broken when the hole for the new tank was excavated.

I questioned the owner and found the broken line came from the floor drains in the garage bays. About 2 weeks before the owner had dumped 6 to 20 gals of gasoline into one of the floor drains from a couple of gasoline tanks that he was going to weld.

Since the inventory of the other tanks showed no losses other than a couple of gals. over the last year, I don't suspect the tanks of leaking.

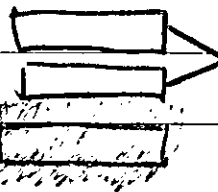
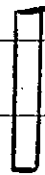
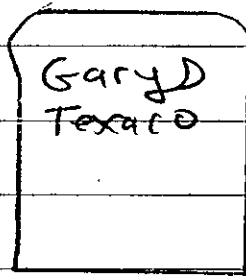
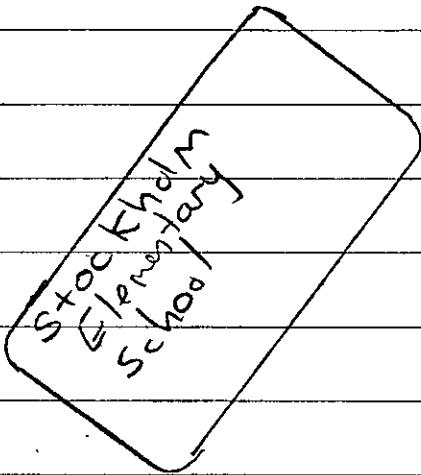
I think the fumes came mostly from that broken 4" pipe. The owner will be plugging the lines exiting the floor sumps in the garage bays. I will be stopping in periodically and check the inventory.

Spill #152 for 83

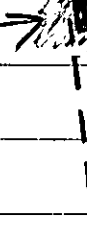


RT/61

Stockholm Road



Excavation area



Existing
Tanks
New! Used
Tank

I-222-88

Georgie Porgie's Exxon (Reg. #2989) failed a SIA on its unleaded tanks. Due to the problems of tank tilt and possibly the wrong tank chart, this station can't get a good SIA on this tank.

Operator would like to keep tank in operation. I suggested that, if he wanted to operate this tank, he should explain in writing to Augusta. The tanks will all be removed in the spring and placed above ground.

I-178-89

On 17 Oct 1989, a gasoline odor was reported to me by Tom Whitworth of DOC. Tom noticed a very strong odor of gas while traveling on Route #161 in the vicinity of George's Store in New Sweden.

George's Store operates an aboveground system with underground piping. System was installed in early June with a permit issued by the Fire Marshall's Office on 17 July 89.

A surface outbreak was identified by Maynard Saucier of Eagle Fuel on 10/19. When I investigated, I found approximately 300 ft. of swamp affected and to keep the spill from contaminating more area, I installed an underflow weir below the surface outbreak using Consolidated Environmental Services (CES) equipment which was passing by. CES also assisted in recovering product which had accumulated in the swamp below the outbreak. CES total time on site was 1 hour 40 minutes on 10/19.

On 10/21, I called in Soderberg Construction to begin investigation of the source.

A drainage tile pipe was located which was draining a spring hole (next to the spill area) and this pipe discharged to the outbreak area.

Leak was discovered in the no lead regular line in a poorly constructed fiberglass joint under the pump island on 10/24 by Saucier. Joint is in possession of George Plourde, store owner.

Using Langille Construction auger truck on 10/23, I identified the extent of the spill area (see map). Spill appears to be contained around the pump

area and water appears to be discharging from bedrock in the area. Presently no water wells are affected.

On 10/24, we began installing a shallow recovery system. Bedrock is within 5 ft. of grade. Soils are so tight in spill area that the drainage pipe is carrying majority of oil and water in area away from spill site.

Recovery system was operational on 11/1/89.

The installer, Maynard Saucier, stated he's not financially capable of dealing with the initial bills. He is accepting responsibility and will make payment arrangements when he receives a request from DEP for reimbursement.

Recovery system secured on 24 Nov. due to cold weather.

Insurance Adjuster
Fol/Talk
Linsey & Newson
PO Box 991
RI

I-63-91

On April 4, 1991 I was passing by the New Sweden town garage when I noticed a large stain of fuel around their pump island. When I investigated I found the pump leaking. System was being fed from an above ground tank and was siphoning.

The town didn't have any money budgeted for this clean up, so I called Soderberg Construction to begin cleanup.

They removed approximately 24 yds of heavily contaminated soil, which was land spread on town property. Saturated soil went to bedrock and had flowed into the rock. Rock was a soft brown shale. Strike & dip matched other area outcrops.

On 29 April Galen Beaulieu called and stated he had gas in his sump pit in his cellar.

Beaulieu is directly in line with leak if the strike & dip remain constant from the town garage. Samples taken in the sump came back negative, but I'm pretty sure the two are related. Beaulieu never reported any other odors.

I-035-93

On 3/5/93 Sandi Jones called and reported 60 ppb gasoline in the well water at the New Sweden Elementary School. Sandi runs the quarterly monitoring program for DEP. The school is being monitored as a result of a past spill at a nextdoor gas station.

A filter was installed on Sunday, 3/7/93, by Norlen's Water Treatment Service. The filter was arranged by Paul Blood, DEP Bangor geologist. It was quite an accomplishment to get the filter installed on Sunday prior to school on Monday.

I took water samples before and after the filter on 3/8/93. Both were negative.

For the time being, the filter will be left on, and the quarterly sampling will be continued.

CA/ks

MAINE DEPARTMENT OF ENVIRONMENT PROTECTION
OIL & HAZARDOUS MATERIALS REPORT

Spill Number: I-23-2002

Report Status: Final Report

MCD Town: NEW SWEDEN

Local Name: NEW SWEDEN

Primary Responder: CARL ALLEN

Primary Product: Unleaded Gasoline {23} - 10 gals. ESTIMATE

Subject/Owner: UNKNOWN - -

I. EVENT

Spill Info

Type Oil Incident {O}
Source Storage Unit - Aboveground Storage Tank {TA}
Cause Accident - Human Error {17}

Spill Date/Time

02/05/2002 (Time Unknown)

Reporter Type/Detection Method

Type Anonymous {5}
Method Visual Product {L}

Reported Date/Time

02/06/2002 08:29

Subject/Owner

Contact --UNKNOWN

ME

Comment

Reporter (Potential Responsible Party)

Contact ANONYMOUS --

ME USA
207

Comment

Primary Responder and Other Employees

CARL ALLEN (Primary Responder)

No Further Response Action Expected

II. SITE

Location

Location Type Terminal - Service Station {SS}
Name NORTHSTAR VARIETY
Street Address 204 NEW SWEDEN RD
MCD Town NEW SWEDEN
Local Name NEW SWEDEN
State/Province ME

Spill Point

UTM North 5,198,971.000
UTM East 566,063.000

Wells and Media Affected

Wells Affected 0 Wells Impacted / 0 Wells At Risk
Media Affected Land{L}

Tanks Involved

Above Ground Tank(s) Involved-Tank Outside

III. CLEANUP**Product Reported**

Unleaded Gasoline {23}

Cleanup DTREE

Stringent

Products Found/Amount Spilled

Unleaded Gasoline {23}/ - 10 gals. ESTIMATE (Primary Product)

Material Recovered

Mixed Media {MM} - 0.25 cu. yds. ESTIMATE

Recovery/Treatment Method

Excavation {G}

Disposal Information

Local Landfill

IV. NARRATIVE

This spill was caused by a person filling their vehicle. The station doesn't have the automatic nozzles so the person filling the vehicle used his gas cap to allow the nozzle to pump while he sat in his vehicle.

About a 1/4 of yd of contaminated snow was recovered and will be disposed of this spring.

I advised the station that they needed to report all spills.

Case closed.

V. ATTACHMENTS**Attachment Type**

Electronic Form

Description

Cleanup DTREE

File Name

MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION
OIL & HAZARDOUS MATERIALS REPORT

Spill Number: I-223-2002

Report Status: Final Report

MCD Town: NEW SWEDEN

Local Name: NEW SWEDEN

Primary Responder: CARL ALLEN

Primary Product: Unleaded Gasoline {23} - 0.5 gals. ESTIMATE

Subject/Owner: NORTH STAR VARIETY -DAVID ANDERSEN-

I. EVENT

Spill Info

Type Oil Incident {O}
Source Storage Unit - Aboveground Storage Tank {TA}
Cause Accident - Transportation {11}

Spill Date/Time

12/28/2002 11:35

Reporter Type/Detection Method

Type Subject/Spiller {2}
Method Odor/Vapor/Mist {H}

Reported Date/Time

12/28/2002 13:30

Subject/Spiller (Potential Responsible Party)

Contact DAVID ANDERSEN--NORTH STAR VARIETY
204 NEW SWEDEN ROAD
NEW SWEDEN ME 04762 USA
207 896-3239

Comment

Reporter

Contact SARAH ANDERSEN--NORTH STAR VARIETY
204 NEW SWEDEN ROAD
NEW SWEDEN ME 04762 USA
207 896-3239

Comment

Other Contact (Potential Responsible Party)

Contact CHRISTY L. CURRY--
26 ALLEN STREET PRESQUE ISLE
46 STATE STREET
PRESQUE ISLE ME 04769 USA
207-764-7172

Comment Operator of vehicle that drove over the pump
Top address is probably correct bottom address was on drivers license

Other Contact

Contact IRA DODGE-UST TANK INSTALLER-GUERIN ASSOCIATES

ME USA
207-760-9300

Comment

Primary Responder and Other Employees

FRANCIS J GRAMLICH JR
CARL ALLEN (Primary Responder)

II. SITE

Location

Location Type Business - Commercial {CM}
Name NORTH STAR VARIETY
Street Address 204 NEW SEWDEN ROAD
MCD Town NEW SWEDEN

Spill Point

UTM North
UTM East

Local Name NEW SWEDEN
State/Province ME

Wells and Media Affected

Wells Affected 0 Wells Impacted / 4 Wells At Risk
Media Affected Land{L}
Groundwater{G}

Tanks Involved

Above Ground Tank(s) Involved-Tank Outside

III. CLEANUP**Product Reported**

Unleaded Gasoline {23}

Cleanup DTREE

Stringent

Products Found/Amount Spilled

Unleaded Gasoline {23}/ - 0.5 gals. ESTIMATE (Primary Product)

Material Recovered

Other Material {OM} - 0.1 cu. yds. ESTIMATE

Contaminated Soil {CS} - 0.25 cu. yds. ESTIMATE

Recovery/Treatment Method:

Other {J}
Excavation {G}

Disposal Information**IV. NARRATIVE**

Vehicle accident sheared off gasoline pump.
0.5 gallon of gasoline reported spilled.

Maine Potato Growers (MPG) was called to remove the damaged pump and the product that was in the pump. Some product ran into the ground under the pump prior to MPG's arrival on 12/30/02.

I meet Paul Blood on this site on 1/14/03, it is a historical spill site (I-178-1989) that we were planning on doing more work at the site the next summer.

I informed the owner that a precision test would have to be conducted on the piping prior to putting the system back into service.

The contamination from this spill is impossible to locate due the the extremely cold temperature on site and the frozen ground.

The owner had hired Guerin Associates to begin the repair; they started to remove the frozen soil with a backhoe. After the backhoe beat on the frozen ground about 45 minutes, he reached the piping. The operator then managed to remove an 18 inch section of the buried fiberglass piping.

1/15/03, I assisted the owner in completing the Fire Marshall's application for the Groundwater Oil Clean up Insurance Fund.

The tank installer on site, Ira Dodge, stopped the operation until he could get something to thaw the ground around the piping and pump island where he had to work.

The piping was repaired, some contamination removed with the rest to be addressed during the clean up associated with I-178-1989.

MAINE DEPARTMENT OF ENVIRONMENT PROTECTION
OIL & HAZARDOUS MATERIALS REPORT

Spill Number: I-156-2003

Report Status: Final Report

MCD Town: NEW SWEDEN
Local Name: NEW SWEDEN
Primary Responder: FRANKLIN S WEZNER JR
Primary Product: Unleaded Gasoline {23} - 1 gals. ESTIMATE
Subject/Owner: NORSTAR VARIETY - -

I. EVENT

Spill Info

Type Oil Incident {O}
Source Land Transportation - Passenger Vehicle {PV}
Cause Corrosion - Other {04}.

Spill Date/Time

06/04/2003 (Time Unknown)

Reporter Type/Detection Method

Type Subject/Spiller {2}
Method Visual Product {L}

Reported Date/Time

06/04/2003 00:00

Subject/Owner (Potential Responsible Party)

Contact --NORSTAR VARIETY
204 NEW SWEDEN RD
NEW SWEDEN ME 04762 USA
207

Comment

Reporter

Contact SARAH ANDERSON--NORSTAR VARIETY
204 NEW SWEDEN RD
NEW SWEDEN ME 04762 USA
207

Comment

Primary Responder and Other Employees

FRANKLIN S WEZNER JR (Primary Responder)

No Further Response Action Expected

II. SITE

Location

Location Type Business - Commercial {CM}
Name NORSTAR VARIETY
Street Address 204 NEW SWEDEN RD
MCD Town NEW SWEDEN
Local Name NEW SWEDEN
State/Province ME

Spill Point

UTM North
UTM East

Wells and Media Affected

Wells Affected 0 Wells Impacted / 0 Wells At Risk
Media Affected Land{L}

Tanks Involved

None

III. CLEANUP**Product Reported****Cleanup DTREE**

Gasoline Unspecified {20}

Products Found/Amount Spilled

Unleaded Gasoline {23}/ - 1 gals. ESTIMATE (Primary Product)

Material Recovered

Other Material {OM} - 1 gals. ESTIMATE

Recovery/Treatment Method**Disposal Information**

Sorbents {C}

IV. NARRATIVE

At Norstar Variety, a car leaked about a cup to quart of gasoline. Sorbents were used for cleanup.

V. ATTACHMENTS**Attachment Type****Description****File Name**

MAINE DEPARTMENT OF ENVIRONMENT PROTECTION
OIL & HAZARDOUS MATERIALS REPORT

Spill Number: I-178-2003

Report Status: Final Report

MCD Town: NEW SWEDEN

Local Name: NEW SWEDEN

Primary Responder: CARL ALLEN

Primary Product: #2 Fuel Oil {02} - 1 gals. ESTIMATE

Subject/Owner: WASHBURN PETROLEUM -ART GRIFFIN-

I. EVENT

Spill Info

Type Oil Incident {O}
Source Land Transportation - Tank Truck {TT}
Cause Mechanical Failure - Loose Fitting {08}

Spill Date/Time

03/13/2003 13:30

Reporter Type/Detection Method

Type Other Involved Party {7}
Method Visual Product {L}

Reported Date/Time

03/13/2003 14:00

Subject/Owner (Potential Responsible Party)

Contact ART GRIFFIN--WASHBURN PETROLEUM

ME USA
207

Comment

Reporter

Contact SARAH ANDERSON--NORTH STAR VARIETY
204 NEW SWEDEN RD
NEW SWEDEN ME 04762 USA
207-896-3239

Comment

Primary Responder and Other Employees

CARL ALLEN (Primary Responder)

No Further Response Action Expected

II. SITE

Location

Location Type Business - Commercial {CM}
Name NORTH STAR VARIETY
Street Address 204 NEW SWEDEN RD
MCD Town NEW SWEDEN
Local Name NEW SWEDEN
State/Province ME

Spill Point

UTM North
UTM East

Wells and Media Affected

Wells Affected None Specified
Media Affected Land{L}

Tanks Involved

None

III. CLEANUP**Product Reported**

#2 Fuel Oil {02}

Cleanup DTREE**Products Found/Amount Spilled**

#2 Fuel Oil {02}/ - 1 gals. ESTIMATE (Primary Product)

Material Recovered

None {NO} - 0 gals. ESTIMATE

Recovery/Treatment Method

None {K}

Disposal Information**IV. NARRATIVE**

When a fuel truck left the store, some how about a gallon of fuel was splashed on the store driveway by the fuel pumps.

The owner of Washburn Petroleum, Art Griffin, called me after he found the truck. A small amount of fuel had drained from the delivery hose into the delivery meter compartment. Some of this product splashed onto the driveway of the store. Delivery valve was tightened.

Response case closed.

V. ATTACHMENTS**Attachment Type****Description****File Name**

While preparing to move the fuel pump location for the above ground tanks, the New Sweden Road crew identified and reported that the pump had been leaking.

Between town office building and public works building (N 46 56' 31.5" E 68 07' 35.9").

On 8/3/03 the contaminated soil was excavated and land spread about 1000 feet from the town office on Town property.

The bedrock was within 3 feet of the ground at the spill site so only 30 yds or so were removed. The contamination has definitely entered the bedrock. The volume of the spill is most likely small as the results of sampling with a PID showed reading in the range of 45 to 188 ppm.

Response case closed.

Case passed to technical service group.

MEMO

TO: File - New Sweden Oil Remediation # I-182-03

FROM: Chris Swain

DATE: 8/13/03

On August 12, 2003, while at a nearby site in New Sweden, I went to the New Sweden Town Office/Public Works buildings.

Earlier this month, the Town had relocated the pumps for their consumptive use above ground diesel storage tanks, and in the process discovered evidence of discharge. DEP was notified and Carl Allen (NMRO Response Services) oversaw the removal of contaminated soil for treatment. According to Mr. Allen's report it was apparent that some product had migrated into the fractured bedrock, and as such posed a threat to groundwater and nearby drinking water supplies. The spill report identified 4 wells in the vicinity of the spill to be sampled.

The site was referred to EMRO geologist Paul Blood who asked me to attempt to collect samples, which brings us to this point.

At the Town Office/Public Works Garage (2 separate buildings) I met one of the road crew - I did not catch his name and he didn't throw it, so we're going to refer him as "Road Crew Guy".

Road Crew Guy showed me where the spill had occurred and directed me to an unnamed Town Clerk for a water sample from the Town Office. While purging the Town Office drilled well (Babe Michuad drilled - early to mid 1980's). Town Clerk mentioned that she thought the Public Works building had its own well. I collected a sample from the Town Office (03E-DOR-03104) and went in search of Road Crew Guy, who confirmed that a second well existed which served the Public Works Building. The water serves a toilet, sink, and tap for garden hose. Road Crew Guy said it was used for flushing and cleaning, that no one drank the water.

Going by appearances, I'm guessing that its not used a lot for cleaning either. Sampled the Public Work's well (03E-DOR-03095) and asked Road Crew Guy the names of the neighbors listed to be sampled on the spill report.

Started out across the street (Station Road) from the Town properties at the Gary Dickinson residence. Mr. Dickinson showed me the location of his buried drilled well. He believes that the well was installed in the 1960's and has no further information. Collected sample (03E-DOR-03101) after purging for 10 minutes or so. During

this time Mr. Dickinson mentioned that, while his water was OK, it is rumor that when the Public Works removed several USTs back in late 80's, the house below (the corner of Station Road and Rt. 161) got their well "ruined" by gasoline and had filters installed - I'll look into this next trip.

Below the Dickinson residence, headed to Rt. 161 (GPS map to follow) is a Verizon switching station, which has a well. As luck would have it, a Verizon technician pulled up and gave me access to sample. As a company policy, any Verizon building served by private water supplies have signs warning not to drink the water. Ran the water a bit and sampled (03E-DOR-03096), slightly amusing the technician.

Next was the Grant residence - Granny was babysitting a six (or so) year old girl, knew nothing about the well, and had me sample from outside tap (03E-DOR-03098).

Next, is the Blanchette residence. No one was home and this is one of the 2 homes at the intersection of Station Road and Rt. 161 - one of which may have filters. Because of this I did not sample from outside tap.

We have a job nearby set to go on the 25th - I'll revisit the site then and try to learn more about wells. I have names, addresses, and numbers in the file.

V. ATTACHMENTS

<u>Attachment Type</u>	<u>Description</u>	<u>File Name</u>
Electronic Form	Cleanup DTREE	
Electronic Form	Referral to PAUL BLOOD	
Electronic Form	Expense Tracking	
Paper Attach	Land Spreading Agreement Form	
Paper Attach	Site Map	

Allen, Carl W

From: Swain, Chris
Sent: Friday, August 22, 2003 8:23 AM
To: Allen, Carl W
Cc: Blood, Paul S
Subject: New Sweden Town Garage

Water sample results: Town Garage(03E-DOR-03095)- 65 ppb DRO, Town Office(03E-DOR-03104)- BDL, Verizon(03E-DOR-03096)-BDL, Grant(03E-DOR-03098)- BDL, Dickinson(03E-DOR-03101)- BDL. I will have Janet set up a spreadsheet for this site and I'll mail out homeowner copies. Carl - the water at the Garage is not used for drinking, so is there a need to filter?

T-182-03

MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION
OIL & HAZARDOUS MATERIALS REPORT

Spill Number: I-144-2007

Report Status: Final Report

MCD Town: NEW SWEDEN

Local Name: NEW SWEDEN

Primary Responder: LEE A THOMAS

Primary Product: Unleaded Gasoline {23} - 9 gals. ESTIMATE

Subject/Owner: PRIVATE CITIZEN -RUDY LOTTER-

I. EVENT

Spill Info

Type Oil Incident {O}
Source Land Transportation - Passenger Vehicle {PV}
Cause Accident - Poor Workmanship {16}

Spill Date/Time

09/20/2007 (Time Unknown)

Reporter Type/Detection Method

Type Subject/Spiller {2}
Method Visual Product {L}

Reported Date/Time

09/20/2007 00:00

Subject/Spiller (Potential Responsible Party)

Contact RUDY LOTTER--PRIVATE CITIZEN
EAST ROAD
NEW SWEDEN ME 04762 USA
207 896-5234

Comment Rudy was the man who was filling his car with gas when the spill occurred

Reporter

Contact SARAH & DAVE ANDERSON-OWNER/OPERATOR-NORTHSTAR VARIETY STORE
204 NEW SWEDEN ROAD
NEW SWEDEN ME 04762 USA
207 896-3239

Comment Sarah called the state police 1-800 spill reporting number

Primary Responder and Other Employees

LEE A THOMAS (Primary Responder)

No Further Response Action Expected

II. SITE

Location

Location Type Terminal - Service Station {SS}
Name NORTHSTAR VARIETY STORE
Street Address 204 NEW SWEDEN ROAD
MCD Town NEW SWEDEN
Local Name NEW SWEDEN
State/Province ME

Spill Point

UTM North 5,198,952.870000
UTM East 566,112.170000

Wells and Media Affected

Wells Affected 0 Wells Impacted / 1 Well At Risk
Media Affected Land {L}

Tanks Involved

Above Ground Tank(s) Involved-Tank Outside

III. CLEANUP**Product Reported**

Unleaded Gasoline {23}

Cleanup DTREE**Products Found/Amount Spilled**

Unleaded Gasoline {23}/ - 9 gals. ESTIMATE (Primary Product)

Material Recovered

Mixed Liquid Media {MM} - 600 lbs. ESTIMATE

Recovery/Treatment Method

Sorbents {C}

Disposal Information

Tri Community Landfill

IV. NARRATIVE

07/25/07 Received a call from Sarah Anderson around 11:00 to report the spillage of about 9 gallons of unleaded gas which occurred during the filling of a passenger vehicle at about 10:50. Sarah's husband, Dave responded right away by shutting down the fuel dispenser pump and applying several bags of speedy dry from the facility's spill clean-up kit. The spill flowed across the asphalt pavement in a southerly direction for about 15 to 20 feet. Dave Anderson had applied speedy dry and was sweeping it into the product when I arrived on-scene. I talked with Dave to determine the cause of the gas spill. Dave said that the car's owner, a Mr. Rudy Lotter had just come from a auto repair garage and the garage had not properly reconnected the car's fill pipe with the gas tank. While Mr. Lotter was filling the car it was pouring out under the car onto the asphalt parking lot. Dave was able to sweep the speedy dry into the product and soak up all the product. I gave him a couple of heavy mil poly bags to place the contaminated speedy dry into and provided him with an oil spill debris form to haul the oily wastes into Tri-Community Landfill. There is a private well about 50 to 60 feet from the pump islands where the spill occurred, however given the fact that the spill area was on asphalt with no cracks and the product was quickly soaked up with absorbent material it was determined that the well was not at risk. No further action is warranted by Response Services staff at this time.

Facility info Northstar Variety has two active ASTs a 5,000 gallon steel asphalt coated tank for reg UL, and a 2000 gallon steel asphalt coated tank for super UL gas. Both ASTs have secondary containment with continuous electronic monitoring. The dispensers are supplied via a suction system with flexible double walled underground piping.

V. ATTACHMENTS**Attachment Type**

Paper Attach

Description

Oil Debris Form

File Name

MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION
OIL & HAZARDOUS MATERIALS REPORT

Spill Number: I-183-2009

Report Status: Final Report

MCD Town: NEW SWEDEN

Local Name: NEW SWEDEN

Primary Responder: FRANKLIN S WEZNER JR

Primary Product: Diesel {29} - 1 gals. ESTIMATE

Subject/Owner: NORTH STAR VARIETY - -

I. EVENT

Spill Info

Type Oil Incident {O}
Source Land Transportation - Truck {TR}
Cause Overfill {09}

Spill Date/Time

09/11/2009 01:30

Reporter Type/Detection Method

Type Subject/Spiller {2}
Method Visual Product {L}

Reported Date/Time

09/11/2009 01:40

Subject/Spiller (Potential Responsible Party)

Contact --NORTH STAR VARIETY
204 NEW SWEDEN ROAD
NEW SWEDEN ME 04762 USA
207-896-3239

Comment

Reporter

Contact SARA ANDERSON--NORTH STAR VARIETY
204 NEW SWEDEN ROAD
NEW SWEDEN ME 04762 USA
207-896-3239

Comment

Primary Responder and Other Employees

FRANKLIN S WEZNER JR (Primary Responder)

II. SITE

Location

Location Type Terminal - Service Station {SS}
Name NORTH STAR VARIETY
Street Address 204 NEW SWEDEN ROAD
MCD Town NEW SWEDEN
Local Name NEW SWEDEN
State/Province ME

Spill Point

UTM North
UTM East

Wells and Media Affected

Wells Affected 0 Wells Impacted / 1 Well At Risk
Media Affected Land{L}

Tanks Involved

Underground Tank(s) Involved-

III. CLEANUP**Product Reported**

Diesel {29}

Cleanup DTREE**Products Found/Amount Spilled**

Diesel {29}/ - 1 gals. ESTIMATE (Primary Product)

Material Recovered

Other Material {OM} - 3 lbs. ESTIMATE

Recovery/Treatment Method:

Sorbents {C}

Disposal Information**IV. NARRATIVE**

Approximately 1 gallon of diesel spilled when the nozzle fell out during fill up at North Star Variety in New Sweden. The spill was cleaned up using absorbent pads. No further action by Response Services expected.

V. ATTACHMENTS**Attachment Type****Description****File Name**

MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION
OIL & HAZARDOUS MATERIALS REPORT

Spill Number: I-40-2010

Report Status: Final Report

MCD Town: NEW SWEDEN

Local Name: NEW SWEDEN

Primary Responder: FRANKLIN S WEZNER JR

Primary Product: Unleaded Gasoline {23} - 1 gals. ESTIMATE

Subject/Owner: -CUSTOMER -

I. EVENT

Spill Info

Type Oil Incident {O}
Source Land Transportation - Passenger Vehicle {PV}
Cause Overfill {09}

Spill Date/Time

Date and Time Unknown

Reporter Type/Detection Method

Type Other Involved Party {7}
Method Visual Product {L}

Reported Date/Time

03/18/2010 00:00

Subject/Spiller (Potential Responsible Party)

Contact CUSTOMER --
NORTH STAR VARIETY
NEW SWEDEN ROAD
NEW SWEDEN ME 04762 USA

Comment

Reporter

Contact SARAH ANDERSON--NORTH STAR VARIETY
NEW SWEDEN ROAD
NEW SWEDEN ME 04762 USA
207-896-3239

Comment

Primary Responder and Other Employees

FRANKLIN S WEZNER JR (Primary Responder)

II. SITE

Location

Location Type Terminal - Service Station {SS}
Name NORTH STAR VARIETY
Street Address NEW SWEDEN ROAD
MCD Town NEW SWEDEN
Local Name NEW SWEDEN
State/Province ME

Spill Point

UTM North
UTM East

Wells and Media Affected

Wells Affected 0 Wells Impacted / 1 Well At Risk
Media Affected Land{L}

Tanks Involved

None

III. CLEANUP**Product Reported**

Unleaded Gasoline {23}

Cleanup DTREE**Products Found/Amount Spilled**

Unleaded Gasoline {23}/ - 1 gals. ESTIMATE (Primary Product)

Material Recovered

Other Material {OM} - 4 lbs. ESTIMATE

Recovery/Treatment Method:

Sorbents {C}

Disposal Information**IV. NARRATIVE**

On 3-18-10, Sarah Anderson, owner of North Star Variety in New Sweden, reported that a customer had overfilled their car while filling up with gas and spilled approximately 1 gallon in the yard. Speedy dry was used to clean it up. No further action by Response Services expected.

V. ATTACHMENTS**Attachment Type**

Paper Attach

Description

North Star report

File Name

MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION
OIL & HAZARDOUS MATERIALS REPORT

Spill Number: I-119-2011

Report Status: Final Report

MCD Town: NEW SWEDEN

Local Name: NEW SWEDEN

Primary Responder: FRANKLIN S WEZNER JR

Primary Product: Unleaded Gasoline {23} - 3 gals. ESTIMATE

Subject/Owner: NORTHSTAR VARIETY - -

I. EVENT

Spill Info

Type Oil Incident {O}
Source Land Transportation - Passenger Vehicle {PV}
Cause Mechanical Failure - Piping/Hose {06}

Spill Date/Time

06/20/2011 (Time Unknown)

Reporter Type/Detection Method

Type Subject/Spiller {2}
Method Visual Product {L}

Reported Date/Time

06/23/2011 00:00

Subject/Spiller (Potential Responsible Party)

Contact --NORTHSTAR VARIETY
204 NEW SWEDEN ROAD
NEW SWEDEN ME 04762 USA

Comment

Reporter (Potential Responsible Party)

Contact --NORTHSTAR VARIETY
204 NEW SWEDEN ROAD
NEW SWEDEN ME 04762 USA

Comment

Primary Responder and Other Employees

FRANKLIN S WEZNER JR (Primary Responder)

II. SITE

Location

Location Type Terminal - Service Station {SS}
Name NORTHSTAR VARIETY
Street Address 204 NEW SWEDEN RD
MCD Town NEW SWEDEN
Local Name NEW SWEDEN
State/Province ME

Spill Point

UTM North
UTM East

Wells and Media Affected

Wells Affected 0 Wells Impacted / 0 Wells At Risk
Media Affected Land{L}

Tanks Involved

Underground Tank(s) Involved-21179

III. CLEANUP**Product Reported**

Unleaded Gasoline {23}

Cleanup DTREE**Products Found/Amount Spilled**

Unleaded Gasoline {23}/ - 3 gals. ESTIMATE (Primary Product)

Material Recovered

Other Material {OM} - 0.35 tons ACTUAL

Recovery/Treatment Method:

Sorbents {C}

Disposal Information

Tri-Community Recycling

IV. NARRATIVE

On 6-23-11, North Star Variety reported that 3 gallons of unleaded gasoline spilled from a fuel line on a passenger vehicle at the Northstar Variety in New Sweden. The spill was cleaned up with sorbents and debris transported to the Tri-Community Landfill. No further action required.

V. ATTACHMENTS**Attachment Type**

Electronic Form

Description

Spill Debris

File Name

MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION
OIL & HAZARDOUS MATERIALS REPORT

Spill Number: I-77-2020

Report Status: Final Report

MCD Town: NEW SWEDEN

Local Name: NEW SWEDEN

Primary Responder: KELLY L LANGLEY

Primary Product: REGULAR GASOLINE {21} - 25 gals. ESTIMATE

Subject/Owner: -UNKNOWN -

I. EVENT

Spill Info

Type Oil Incident {O}
Source Land Transportation - Truck {TR}
Cause Discharge - Deliberate/Other {20}

Spill Date/Time

Date and Time Unknown

Reporter Type/Detection Method

Type Other Involved Party {7}
Method Visual Product {L}

Reported Date/Time

04/30/2020 09:08

Subject/Spiller (Potential Responsible Party)

Contact UNKNOWN --

USA

Comment

Reporter

Contact SARAH ANDERSON--NORTHSTAR VARIETY
204 NEW SWEDEN ROAD
NEW SWEDEN ME 04762 USA
207-896-3239

Comment

Primary Responder and Other Employees

KELLY L LANGLEY (Primary Responder)

No Further Response Action Expected

II. SITE

Location

Location Type Business - Commercial {CM}
Name NORTHSTAR VARIETY
Street Address 204 NEW SWEDEN ROAD
MCD Town NEW SWEDEN
Local Name NEW SWEDEN
State/Province ME

Spill Point

UTM North
UTM East

Wells and Media Affected

Wells Affected 0 Wells Impacted / 0 Wells At Risk
Media Affected Land {L}

Tanks Involved

Underground Tank(s) Involved-0

III. CLEANUP**Product Reported**

REGULAR GASOLINE {21}

Cleanup DTREE**Products Found/Amount Spilled**

REGULAR GASOLINE {21}/ - 25 gals. ESTIMATE (Primary Product)

Material Recovered

Other Material {OM} - 50 lbs. ESTIMATE

Recovery/Treatment Methods

Sorbents {C}

Disposal InformationNorthStar Variety waste
stream**IV. NARRATIVE**

The Division of Response was notified of a release of unleaded gasoline to pavement at a filling station due to a corrosion hole in a customer's automobile gas tank. Sorbents were used to clean the release and all materials were disposed of in the NorthStar Variety waste stream.

No further Division of Response Services is needed at this time.

V. ATTACHMENTS**Attachment Type****Description****File Name**