# **Waste Management Division** PO Box 95, 29 Hazen Drive Concord, NH 03302

Type of Submittal (Check One-Most Applicable)  $\Box$ Remedial Action ☐ Work Scope Remedial Action Plan ☐ Reimbursement Request Bid Plans and Specifications Remedial Action Implementation Report ☐ UST Facility Report Treatment System and POE O&M ☐ AST Facility Report Activity and Use Restriction Emergency/Initial Response Action П Temporary Surface Water Discharge Permit Groundwater Quality Assessment Initial Site Characterization Groundwater Management Permit Site Investigation Permit Application Site Investigation Report Renewal Application Supplemental Site Investigation Report Deed Recordation Documentation **GMZ** Delineation Abutter Notification Documentation Source Area Investigation Release of Recordation Data Submittal Data Submittal Annual Summary Report **Annual Summary Report** 

# PHASE I ENVIRONMENTAL SITE ASSESSMENT **REPORT**

Unsolicited Phase I Environmental Site Assessment

Closure Documentation

Former Guay's Garage Property 599-601 South Main Street Franklin, New Hampshire NHDES#199808031

Prepared For:

Lakes Region Planning Commission 103 Main Street, Suite #3 Meredith, NH 03253 Phone: (603) 279-8171 Contact: Mr. Eric Senecal

Prepared By:

#### CREDERE ASSOCIATES, LLC 776 Main Street

Westbrook, ME 04902 Phone: (207) 828-1272 ext. 35 Contact: Judd R. Newcomb

May 17, 2011

Recommended Risk Category (check one)				
Immediate Human Health Risk (Impacted water supply well, etc.)	4. Surface Water Impact	7. Alternate Water Available/Low Level Groundwater Contamination (<1,000 X		
☐ 2. Potential Human Health Risk	5. No Alternate Water Available/No Existing Wells in Area	AGQS)  8. No AGQS Violation/No Source Remaining		
(Water supply well within 1,000' or Site within SWPA)	6. Alternate Water Available/High Level Groundwater Contamination (>1,000 X	Closure Recommended		
3. Free Product or Source Hazard	AGQS)	No Risk Category can be recommended		

# Environment

# CREDERE ASSOCIATES, LLC

776 Main Street Westbrook, Maine 04092 Phone: 207-828-1272 Fax: 207-887-1051

May 17, 2011

Mr. Kimon Koulet, Executive Director Lakes Region Planning Commission 103 Main Street, Suite #3 Meredith, NH 03253

**Subject:** Phase I Environmental Site Assessment

Former Guay's Garage

601 South Main Street, Franklin, NH

NHDES Site No. 199808031

Dear Mr. Koulet:

Enclosed is a copy of the Phase I Environmental Site Assessment (ESA) Report completed for the Former Guay's Garage property located at 601 South Main Street in Franklin, New Hampshire (the subject property). This report was completed in accordance with the American Society of Testing Materials (ASTM) Standard Practice E 1527-05 for Phase I ESAs.

Four (4) recognized environmental conditions, one (1) de minimis environmental condition, and four (4) non-scope environmental considerations were identified for the subject property. These items are described in **Section 12** of the report.

Please do not hesitate to contact us at (207) 828-1272 if you have any questions or comments.

Sincerely,

CREDERE ASSOCIATES, LLC

udd R. Newcomb, PG

**Primary Author** 

Richard S. Vandenberg, PG Senior Project Manager

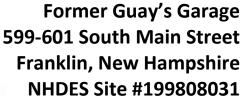
Enclosures – Phase I ESA

cc: Elizabeth Dragon, City of Franklin Richard Lewis, City of Franklin Ms. Jennifer Marts, NHDES Ms. Jerry Minor-Gordon, USEPA





# **Phase I Environmental Site Assessment Report**



*Prepared for:* 

Lakes Region Planning Commission 103 Main Street, Suite #3 Meredith, NH 03253



May 17, 2011

*In Reference to:* Project No. 10001087

Submitted by: Credere Associates, LLC 776 Main Street Westbrook, ME 04092

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# **EXECUTIVE SUMMARY**

Credere Associates, LLC (Credere) performed a Phase I Environmental Site Assessment (ESA) of the Former Guay's Garage property (the subject property) located at 599 - 601 South Main Street in Franklin, New Hampshire. It is worth noting that this property is also known as the Marion Guay Estate and M&K Motorsports, LLC. The City of Franklin nominated the property for participation in the Lakes Region Planning Commission (LRPC) Brownfields Assessment Program to prepare it for future sale and/or redevelopment.

All Phase I ESA work was completed in conformance with the American Society of Testing Materials (ASTM) Standard Practice E 1527-05 for Phase I ESAs, which meets the requirements of the U.S. Environmental Protection Agency (EPA) Standards and Practices for All Appropriate Inquiries (AAI); Final Rule (40 CFR Part 312).

Based on Credere's review of local, state, and federal records and files, property historical records, interviews, and observations during the site reconnaissance visit on December 7, 2010, the following highlights the pertinent findings of this Phase I ESA:

The subject property is composed of one 2.363-acre parcel of land that contains a residence, a garage building, and a barn connected to the garage. Since circa 1932, the subject property has been used as a residence, gasoline station, automotive service facility, and as a used car dealership.

The residence and the garage are heated with fuel oil fired systems and three (3) 275-gallon No. 2 fuel oil aboveground storage tanks (ASTs) are located on the subject property. No evidence of leaks or spills was observed around the tanks or heating systems. Records reviewed indicate that four (4) USTs were previously maintained at the subject property; three of these USTs were removed from the subject property, and one was abandoned-in-place beneath the garage floor. Contaminated soil was noted around one of these USTs; however, records indicate that these underground storage tanks (USTs) were properly closed and remediated to NHDES's satisfaction.

Floor drains located throughout the garage building formerly discharged to an on-site drywell. Contaminated soil and sludge was removed from the drywell and it was replaced with a holding tank in accordance with NDHES regulations. A sump appears to have been installed within the garage building that receives water from at least one floor drain and a small utility area. Soil staining was observed at the sump discharge location.

During this assessment, approximately 60 drums of waste vehicle fluids (presumed to be waste grease, oil, and coolant) were observed on the subject property that were presumably generated during previous operations conducted at the subject property. Stained soil and concrete was noted around some of the drums and numerous drums were visibly leaking, and/or were blossomed.



The area to the west of the private road is level with young tree growth and appears to have been recently clear cut. Dumped piles of gravelly fill material, partially burned trash with metal, scrap wood/building materials, tires, and household refuse were observed in this area. Several computer monitors were observed in the piles.

Results of this assessment have revealed the following evidence of *recognized environmental* conditions (REC) at the subject property:

- REC-1 The historical use of the subject property as a gasoline station, for automotive work, and dumping that may have impacted soil or groundwater at the subject property. In addition, there is the potential for undocumented USTs to be present on the subject property.
- REC-2 The storage of approximately 60 drums within and outside the garage building with stained soil and concrete indicates releases to the environment.
- REC-3 The presence of a sump that discharges to the ground to the west of the building may have received or been used for disposal of wastes and that would have been released to the environment.
- REC-4 The materials dumped to the west of the private road have the potential to contain petroleum and/or hazardous materials, which may have affected soil or groundwater in the area.

Credere identified one (1) *de minimis environmental condition* (DMEC) at the subject property during this Phase I ESA:

• DMEC-1 – Small stains that are typical of automotive service facilities were observed throughout the garage building and stained floors were observed around drums storage areas. Due to the age of the garage building and the fact that PCBs have commonly been found in automotive fluids and waste oil, PCBs may be present in these stained areas.

Four (4) ASTM Non-Scope considerations (NCs) were also noted during this Phase I ESA:

- NC-1 Based on the ages of the subject property buildings ACMs may be present on the interior and exterior of the buildings.
- NC-2 Based on the ages of the subject property buildings, lead-based paint may be present on the interior or exterior of the buildings.
- NC-3 Based on the ages of the subject property buildings, PCB-containing bulk products (caulking, paint, etc.) may be present on the interior and exterior of the buildings.
- NC-4 Based on the ages of the subject property buildings, fluorescent lighting fixtures observed throughout the buildings have the potential to contain PCBs.



To confirm or dismiss the RECs and DMEC and address the NCs described above, Credere makes the following recommendations for the subject property:

- Phase II ESA activities are recommended to confirm or dismiss the above RECs and DMEC.
- ACM, lead-based paint, and polychlorinated biphenyl (PCB)-containing hazardous building
  materials surveys should be completed to confirm or dismiss the NCs concerning the
  presence and/or extent of hazardous building materials on or within the buildings and the
  dumped building debris.
- A universal and hazardous waste survey should be completed to address the NC and inventory the wastes which remain or may be generated at the subject property during redevelopment.



# 1. INTRODUCTION

Credere Associates, LLC (Credere) performed a Phase I Environmental Site Assessment (ESA) of the former Guay's Garage property (the subject property) located at 599 and 601 South Main Street in Franklin, New Hampshire. It is worth noting that the subject property is also known as the Estate of Marion Guay, M&K Motorsports, LLC, and the Blodgett Property within state and local files. This work is being conducted because the City of Franklin recently seized the subject property for back taxes in 2010, evicted the building tenants, and would like to prepare the property for future sale and/or redevelopment. This report was completed on behalf of the Lakes Region Planning Commission (LRPC) of Meredith, New Hampshire, as part of their Brownfields Assessment Program.

The report was completed by Mr. Judd R. Newcomb, CG, Mr. Jedd Steinglass, and Mr. Richard S. Vandenberg, PG, of Credere. Resumes of Mr. Newcomb, Mr. Steinglass, and Mr. Vandenberg are included in **Appendix A**. The Phase I ESA was completed in conformance with the American Society of Testing Materials (ASTM) Standard Practice E 1527-05 for Phase I ESAs, which meets the requirements of the U.S. Environmental Protection Agency (EPA) Standards and Practices for All Appropriate Inquiries (AAI); Final Rule (40 CFR Part 312).

No Phase I ESA can wholly eliminate uncertainty regarding the potential for *recognized environmental conditions* (RECs)<sup>1</sup> in connection with a property. Performance of this practice is intended to reduce, but not eliminate, uncertainty regarding the potential for RECs in connection with the property, and this practice recognizes reasonable limits of time and cost. To the extent possible, this Phase I ESA presents a concise summary that qualitatively identifies potential environmental liability and provides Credere's professional opinions relative to the identified RECs so that informed business decisions may be made regarding the subject property. If the findings from this Phase I ESA indicate or reasonably imply that environmentally regulated materials are affecting the subject property, then the need for additional testing to evaluate the scope, location, source, and nature of any release or threat of release is included as a recommendation. In contrast, the Phase I ESA may also conclude that the likelihood of environmental problems is not significant and that there is no evidence of RECs in connection with the subject property. The benefit of the completed Phase I ESA is that any new owner would be eligible for the "bona fide prospective purchaser's" liability protection.

**Appendix B** contains a detailed description of Credere's Scope of Work for Phase I ESA's, which can be divided into the following broad categories: Records Review; Site Reconnaissance; Interviews; and Reporting. However, the following report is subdivided further so that it conforms to the recommended report format provided in ASTM E 1527-05. Photographs of the subject property taken during this assessment are included in **Appendix C**.

<sup>&</sup>lt;sup>1</sup> A *Recognized Environmental Condition* - the presence or likely presence of any hazardous substances or petroleum products on a property under conditions that indicate an existing release, past release, or material threat of a release of any hazardous substances or petroleum products into structures on the property or into the ground, groundwater, or surface water of the property. The term includes hazardous substances or petroleum products even under conditions in compliance with the law.



## 2. USER PROVIDED INFORMATION

In accordance with ASTM E 1527-05, the *user(s)* of this report were interviewed concerning their responsibilities under ASTM E 1527-05 Chapter 6. For this Phase I ESA the *user* is considered to be the City of Franklin. The City of Franklin Planning & Zoning Administrator, Mr. Richard Lewis, was identified as the City representative who is the most familiar with the subject property and as such, was interviewed concerning the City's responsibilities under this practice. The following sections summarize the information that the *user* of this report provided to meet their responsibilities under ASTM E 1527-05.

#### 2.1 REASON FOR PERFORMING PHASE I ESA

It was reported that the City of Franklin requested this Phase I ESA so that the subject property can be made ready for sale and/or future redevelopment.

## 2.2 SPECIALIZED KNOWLEDGE OR EXPERIENCE OF THE USER

Mr. Lewis reported no specialized knowledge of the subject property for the purpose of identifying RECs. Mr. Lewis does not have experience with real estate transactions involving environmental contamination, is not a commercial broker of real estate, or a real estate professional. Mr. Lewis reported that he does not have experience acting as a secured creditor on commercial real estate. Mr. Lewis does not have professional experience in detecting or remedying environmental contamination.

## 2.3 COMMONLY KNOWN OR REASONABLY ASCERTAINABLE INFORMATION

Mr. Lewis indicated that he is aware of the presence of 55-gallon drums on the subject property, but does not have knowledge of their contents or how the contents were generated. Mr. Lewis provided Credere with the City's property file for the subject property to review. Information included in the City file revealed that the subject property formerly operated as a gasoline station, a used car dealership, and automotive repair garage.

# 2.4 TITLE RECORDS

A comprehensive chain-of-title search was not completed as part of this Phase I ESA, nor were title records provided by the *users*. It is Credere's opinion that an adequate history of the subject property was able to be developed from other historic sources.

## 2.5 ENVIRONMENTAL LIENS OR ACTIVITY USE LIMITATIONS

A third party, such as a state or federal governmental agency, may place environmental liens on a property in order to recover clean-up costs that were incurred by the party. The existence of a recorded environmental clean-up lien on a property is an indication that environmental conditions either currently exist or previously existed on a property. Activity or land use



restrictions for a property may be placed on the property deed to prevent exposure to hazardous or contaminated materials. The existence of an environmental clean-up lien or activity/land use restrictions could be considered an indicator of potential environmental concerns, and could be a basis for additional environmental investigations on the subject property to determine the potential existence of ongoing or continued releases of hazardous substances or petroleum products.

Mr. Lewis reportedly has no knowledge of any environmental liens that may apply to the subject property under federal, tribal, state, or local law, or Activity and Land Use Limitations for the subject property such as institutional controls or engineering controls to limit exposure to hazardous substances or petroleum products. See **Sections 6.5** and **6.6** for records review of environmental liens and institutional or engineering controls associated with the subject property.

#### 2.6 REDUCTION OF VALUATION FOR ENVIRONMENTAL ISSUES

The subject property is currently not currently for sale; therefore, this could not be determined.



## 3. SUBJECT PROPERTY DESCRIPTION

## 3.1 SUBJECT PROPERTY OWNERSHIP AND LOCATION

Parcel Identification: Map 101, Lot 402 Site Owner(s): City of Franklin

Site Occupants: Vacant

Date of Ownership: May 12, 2010 to present

Site Location: 599-601 South Main Street, Franklin, New Hampshire

Zoning: Industrial (I1)
County: Merrimack

USGS Quadrangle: Franklin, New Hampshire 7.5 Minute Quadrangle

Latitude and Longitude: 43.424604 Lat., -71.654074 Long. NAICS Code: 811111-General Automotive Repair

# 3.2 SUBJECT PROPERTY DESCRIPTION AND OPERATIONS

The subject property is composed of a single 2.363-acre parcel of land with three buildings; a two-story residence (**Picture 1**), a single story concrete garage building (**Picture 2**), and a three-story post and beam barn (**Picture 2**) that is contiguous with the garage. A private road enters the property near the southern property boundary and trends northwest through the subject property. The topography of the property slopes east, such that the private road increases in elevation to the north and provides walk-out access to the third floor of the barn. Other portions of the subject property consist of small landscaped areas around the residence, paved and gravel parking and driveway areas around the commercial building and barn, and a brushy, partially wooded area to the west of the private road. **Figure 1** locates the subject property on the Franklin, New Hampshire, 7.5 minute quadrangle prepared by the United States Geological Survey (USGS). Pertinent features of the subject property are depicted on **Figure 2**.

The residence is divided into three apartments that were occupied by the former owner and two tenants. The garage building was most recently occupied by an automobile repair/customization business that included general automotive maintenance, accessory installation, and painting. The ground floor of the barn was used as part of the automotive repair/customization businesses. The first floor of the barn was reportedly used by the former owner for storage of building construction materials. The second floor of the barn was divided into several storage units that were leased to tenants.

#### 3.3 SUBJECT PROPERTY UTILITIES

Potable water is provided to the subject property by Franklin Water Works. Some area properties are also serviced by Franklin Water Works; however, some are serviced by private water supply wells.



According to the City's property file, wastewater from the residence is discharged to an on-site septic tank and leach field located west of the residence. It could not be determined where wastewater from the garage is discharged; however, a holding tank is located to the east of the garage building that reportedly receives water from the floor drain system within the building and may receive wastewater from the bathroom and sinks within the building.

Electricity is available to the subject property and surrounding area via overhead lines from Public Service of New Hampshire or the New Hampshire Electric Cooperative.

The residence and the garage are heated with fuel oil fired systems. Fuel oil is stored in several areas of the buildings and is discussed later in this report. The barn is unheated.

#### 3.4 SURFACE WATER

No surface water is located on the subject property. A small pond is located northwest of the subject property. The Merrimack River is located approximately 750 feet east of the subject property.

## 3.5 TOPOGRAPHY AND DRAINAGE

The subject property lies within the north-south trending Merrimack River Valley (**Figure 1**). The regions to the east and west of the valley are hilly, and slope/drain toward the Merrimack River. Based upon a subdivision plan included in the City's property file, the subject property buildings and parking areas are located approximately 320 feet above mean sea level (MSL), and the topography rises to the western portion of the subject property to approximately 345 feet MSL (see **Figure 2**).

## 3.6 GEOLOGICAL CHARACTERISTICS

# 3.6.1 Surficial Geology

According to the *Geohydrology and Water Quality of Stratified-Drift Aquifers in the Upper Merrimack River Basin, South-Central New Hampshire*, United States Geological Survey (USGS), Water-Resources Investigations Report 95-4123, by Peter J. Stekl and Sarah M. Flanagan (1997), the surficial geology at the subject property is mapped as fine grained stratified drift, which consists of sorted sediments ranging from clay to sand deposited by meltwater streams related to a glacial-lake setting. Soil boring data contained in the reports prepared by ARC Environmental Consultants, Inc. (ARC) and reviewed during this Phase I ESA confirm that materials beneath the subject property are fine grained stratified drift similar to those indicated above.

# 3.6.2 Bedrock Geology

According to the *Bedrock Geologic Map of New Hampshire* compiled by the USGS, the subject property is underlain by the upper part of the Rangeley Formation. The Rangeley Formation is



Lower Silurian in age and described as a pelitic schist, metasandstone, and locally coarse-grained metasandstone with rusty weathering. No bedrock outcrops were observed on the subject property during this Phase I ESA.

#### 3.6.3 Groundwater Characteristics

Previous investigation at the subject property completed by ARC (discussed in **Section 4**) determined that groundwater flows east to southeast at the subject property (**Figure 2**). ARC's data indicated that groundwater at the subject property has been observed at depths ranging from approximately 8.5 to 11 feet below ground surface (bgs). The *Geohydrology and Water Quality of Stratified-Drift Aquifers in the Upper Merrimack River Basin, South-Central New Hampshire* (1997) confirmed that groundwater flows east to southeast in the vicinity of the subject property.



# 4. SUMMARY OF PRIOR ENVIRONMENTAL DOCUMENTS

During interviews and the review of historical documentation, thirteen (13) pertinent previous environmental documents were identified that pertain to the subject property parcel and buildings. These documents are summarized below and are included in **Appendix D**.

# <u>Underground Storage Tank Closure Report – September 9, 1998</u>

On September 9, 1998, ARC completed an underground storage tank (UST) closure report for the subject property. It should be noted that at the time of the report, the subject property was part of a larger parcel of land that was later subdivided in 2001. The larger parcel included another additional residential structure. The report documented the removal of five (5) USTs; three located on the current subject property, and two on the adjoining residential property, which was formerly part of the subject property.

On July 30, 1998, ARC oversaw the removal of one (1) 1,000-gallon gasoline UST and one (1) 500-gallon gasoline UST from the subject property. The gasoline USTs were located southeast of the garage building in the vicinity of a former gasoline dispenser island (**Figure 2**). Upon removal of the gasoline USTs, the tanks appeared badly corroded and pinhole perforations were observed in the 1,000-gallon tank. Laboratory analytical results from soil samples collected beneath the tanks indicated that soil met New Hampshire Department of Environmental Services (NHDES) regulatory standards.

On July 30, 1998, ARC oversaw the removal of one (1) 500-gallon fuel oil UST that was located to the east of the garage building (**Figure 2**). Upon removal, the tank appeared badly corroded with perforations visible. Visual and olfactory evidence of a discharge of oil was observed in the excavation. On July 31, 1998, 39 tons of contaminated soil was excavated from beneath the tank to the depth of the water table and was disposed of off-site. Laboratory analytical results from a confirmation sample collected from the excavation bottom indicated that soil met NHDES regulatory standards. Laboratory analytical results from a groundwater sample collected from the base of the excavation indicated concentrations of polycyclic aromatic hydrocarbons (PAHs) and naphthalene were present at concentrations exceeding NHDES regulatory standards.

On July 31, 1998, ARC oversaw the removal of one 500-gallon and one 275-gallon No. 2 fuel oil USTs from the adjoining residential property (previously part of the subject property). Upon removal, the tanks appeared intact and no evidence of discharges was noted in the excavations. Laboratory analytical results from soil samples collected beneath the tanks indicated that soil met NHDES regulatory standards.

During UST removal activities, ARC collected a sludge sample from the base of a drywell located to the east of the garage building (**Figure 2**). The drywell reportedly received water from the floor drain system within the garage building. Laboratory analytical results of the sample indicated that total petroleum hydrocarbons (TPH), lead, and PAHs were present in the sludge at concentrations exceeding NHDES regulatory standards.



Based on their findings, ARC recommended that a Site Investigation be completed to investigate the discharges of oil identified from the 500-gallon fuel oil UST and the drywell located to the east of the garage. ARC also recommended that a remaining 500-gallon waste oil UST located beneath the garage bay floor be properly abandoned.

# UST Closure Report - November 23, 1998

On November 23, 1998, ARC completed a UST closure report for the oversight of the abandonment-in-place of one (1) 500-gallon waste oil UST located beneath the garage bay floor. On November 5, 1998, a hole was cut through the concrete floor of the garage bay to allow for cleaning and assessment of the tank. A total of 500-gallons of waste oil were pumped from the tank for disposal off-site. The tank appeared structurally sound with no evidence of perforations. One hole was cut into the bottom of the tank and one soil sample was collected from beneath the tank. The tank was subsequently filled-in-place with concrete. Laboratory analytical results of the soil sample indicated that soil beneath the tank met the NHDES regulatory standards and ARC concluded that a release had not occurred from the tank. The report did not indicate if the UST piping was also abandoned.

# NHDES Letter - January 7, 1999

On January 7, 1999, the NHDES issued a letter accepting ARCs November 1998 UST Closure Report and stated that the NHDES would not require additional investigation or remediation in relation to the 500-gallon waste oil UST.

# Site Investigation Report – April 14, 2000

On April 14, 2000, ARC completed a Site Investigation Report (SIR) for the subject property for the NHDES on behalf of a former owner of the subject property. The SIR documented soil and groundwater sampling results in support of the investigation of a former 500-gallon fuel oil UST and the closure of a drywell on the subject property. During the SIR, ARC installed four (4) soil borings as groundwater monitoring wells and collected soil and groundwater samples for laboratory analysis. Laboratory analytical results indicated that no contaminants were detected above NHDES regulatory standards in any of the samples.

On July 13, 1999, ARC oversaw the closure of the drywell located to the east of the garage building. During the removal, standing liquid was pumped from the drywell and six (6) cubic yards of contaminated soil were removed for proper disposal. ARC collected one (1) composite soil sample from the base of the excavation for laboratory analysis. Laboratory analytical results indicated that no contaminants were detected above NHDES regulatory standards.

Based on the investigation results and review of existing regulatory files for the subject property, ARC concluded that all known potential source areas of contamination had been investigated or removed from the subject property. ARC recommended that all of the floor drains within the building be permanently sealed and requested that the NHDES close the site and issue a Certificate of No Further Action.



# NHDES Letter – July 11, 2000

On July 11, 2000, the NHDES issued a letter in response to ARC's SIR requesting that one additional round of groundwater sampling be completed at the subject property, that the floor drains should be permanently sealed, and that documentation of the floor drain closure should be submitted to the NHDES. No documents have been identified to determine if the additional groundwater sampling work has been completed.

# NHDES Letter – August 4, 2000

On August 4, 2000, the NHDES issued a letter regarding the floor drains noted at the subject property. The letter noted that floor drain discharge is regulated under state law, and that it was required to close the drains, reroute the drains to a municipal sewer system, or reroute the floor drains to a NHDES certified holding tank. The NHDES required that verification of the floor drain closure or hookup be submitted within 30 days.

No further information was available regarding the modification of the floor drain system; however, a holding tank is depicted in the location of the former drywell on a plan prepared for the subdivision that included the subject property on June 27, 2001. In addition, the NHDES lists the Underground Injection Control (UIC) file for the subject property as closed on December 27, 2006 so it is likely that the NHDES requirements were satisfied.

# <u>Certificate of No Further Action and Site Closure – June 11, 2002</u>

On June 11, 2002, the NHDES issued a Certificate of No Further Action and Site Closure for the subject property stating that "All previous NHDES requirements with regard to the investigation and remediation of the No. 2 heating oil release have been satisfactorily addressed" and that no additional investigation, remedial measures, or groundwater monitoring would be required with respect to this release.

#### NHDES Waste Management Division Complaint File

The NHDES Waste Management Division maintained a complaint file for the subject property. The file contained the following correspondence and NHDES personnel site investigation reports:

- A NHDES record of telephone conversation dated October 28, 2009, documenting a citizen complaint regarding 20 to 30 55-gallon drums stored outside at the subject property.
- Site Investigation Summary Reports dated November 13, 2009, December 9, 2009, and February 10, 2010, summarizing NHDES personnel visits to the subject property and discussions with the property owners/tenants regarding storage and cleanup of drums stored outside. The reports indicated that the NDHES observed soil staining around drums and used car parts observed outside the building.
- A NHDES letter to the property owner dated February 16, 2010, documenting the complaint and subsequent inspections, and requesting that remedial actions take place at



the subject property. Requested actions included sampling of the drums to determine if they would be considered hazardous waste, formally notifying the NHDES of the intent to burn waste oil at the subject property, properly label and store all drums on the subject property, and properly excavated and dispose of contaminated soil around the drums and car parts stored outside.

- Follow-up Site Investigation Summary Reports dated April 14, 2010, and June 2, 2010, documenting that some drums had been moved into the building following the February letter.
- A Site Investigation Summary Report dated August 20, 2010, documenting that the City of Franklin had taken over the subject property and that the NHDES observed 51 55-gallon drums outside the garage building.
- Additional photographs of the August 20, 2010, Site Investigation that were not included within a summary report and documented the presence of drums outside the garage building.



## 5. SITE RECONNAISSANCE

On November 7, 2010, Credere representatives Mr. Judd Newcomb, CG and Mr. Richard S. Vandenberg, PG conducted site reconnaissance to determine the physical characteristics of the subject property and evaluate the subject property for evidence of RECs. Access to the subject property was provided by Mr. Richard Lewis of the City of Franklin. Mr. James Curran of the City of Franklin Fire Department was also present during the site reconnaissance. Pursuant to ASTM E 1527-05 Chapter 12.3, resumes for Mr. Newcomb and Mr. Vandenberg are attached as **Appendix A** to demonstrate their qualifications to perform this work. **Appendix C** contains photographs taken during the site reconnaissance. **Figure 2** is a site plan based on observations made during Credere's site reconnaissance and subject property records.

## 5.1 GENERAL SITE SETTING

# **5.1.1** Current Use of the Subject Property

The subject property is currently vacant.

# 5.1.2 Current Uses of Adjoining and Surrounding Area Properties

The subject property is located in a mixed residential, commercial, and industrial area of Franklin. Adjoining properties include the following:

North: The subject property is adjoined to the north by several residential properties (cross-gradient). A large industrial facility, the Webster Foundry Corporation, is located beyond the properties to the northwest.

East: The subject property is adjoined to the east by South Main Street, across which is a large residential property (downgradient) and the Merrimack River.

South: The subject property is adjoined to the south by a residential property, beyond which is Industrial Park Road, an access road to an industrial park (crossgradient). A large commercial building is located south of Industrial Park Road.

West: The subject property is adjoined to the west by vacant wooded land which is part of the industrial property owned by Webster Foundry Corporation (upgradient). Other properties to the west are commercial and industrial in nature.

References to upgradient, downgradient, and cross-gradient indicate the perceived location of these features relative to the direction of shallow groundwater flow at the subject property, which has been inferred to flow in an easterly to southeasterly direction.



# **5.2 EXTERIOR OBSERVATIONS**

The exterior of the subject property was observed by walking the perimeter of the subject property, by observing the subject property from South Main Street, from an adjacent private road, and by walking the perimeter of the buildings.

The exterior area around the residence consists of a small lawn (**Picture 1**) and some landscaping. A private road enters the subject property to the south of the residence from South Main Street and trends northwest across the property. A paved parking area and driveway divides the residence from the garage building (**Picture 1 & 2**). Fuel oil fill pipes were observed on the northeast corner of the residence that are connected to an aboveground storage tank (AST) within the building. No evidence of spills was observed around the fill pipes.

The area to the east of the garage building is paved parking; however, sand has accumulated over much of the area (**Picture 2**). A small area of the ground around the southeast corner of the garage building was oil stained and a metal pipe was observed protruding from the ground (**Picture 3**) in this area (**Figure 2**). This was one of the drum storage areas discussed in **Section 4**. The use of the pipe is unclear, but it may be related to the abandoned-in-place waste oil UST located beneath the garage, or associated with an undocumented UST. Fuel oil fill pipes were observed on the south and north walls of the building that supply a fuel oil ASTs within the garage areas. No evidence of spills was observed beneath the fill pipes. A damaged groundwater monitoring well was observed in the parking area to the east of the garage. This monitoring well likely remains from the previous investigations conducted at the subject property (see **Section 4**).

Sixteen full or partially full 30-gallon to 55-gallon unlabeled drums and piles of car parts including gas tanks were observed near a small wooden stockade fence located to the north of the garage (**Figure 2**). Several of the drums had obvious holes in them, were blossomed, and/or were weeping their contents to the ground. Small patches of oil stained soil were observed in the area (**Pictures 4** through **6**).

Twenty-three (23) full or partially full 55-gallon drums were observed in the area located adjacent to the northwest side of the garage building (**Picture 7** & **Figure 2**). Several of these drums were noted as tipped on their side, open to the atmosphere, or were blossomed and had leaked at least some of their contents to the ground. The ground throughout the area was stained with what appeared to be oil (**Picture 8**).

A hose was noted protruding from the building on the northwest side of the garage building. The hose was traced inside to a sump pump inside the building. The area beneath the sump discharge was covered in leaves, but appeared oil stained. Several sealed 5-gallon buckets with unknown contents were also stacked in this area and partially covered with soil and leaves (**Picture 9**).



The area to the west of the barn and garage and east of the private road has been leveled into a gravel parking area. An abandoned box truck was parked in this area and appeared to have been used for storage. Trash was observed to be strewn about the area.

The area to the west of the private road is level with young tree growth. This area appears to have been recently clear cut. Piles of gravelly fill material, partially burned trash with metal (**Picture 10**), scrap wood/building materials (**Picture 11**), tires, and household refuse were observed in this area (**Figure 2**). Several computer monitors were observed in the piles (**Picture 12**). One (1) unlabeled 30-gallon drum was observed in the brushy area (**Picture 13**). Due to the overgrown nature of the area, it could not be determined if there was staining around the drum.

Evidence of the following was <u>not</u> observed on the subject property during the exterior reconnaissance:

- Strong, pungent, or noxious odors.
- Pools of liquid.
- Evidence of drywells, pits, ponds, or lagoons.
- Stressed vegetation.

# 5.3 INTERIOR OBSERVATIONS

With the exception of one locked storage unit on the third floor of the barn, all interior spaces of the subject property buildings were accessed during the site reconnaissance. In general, painted surfaces throughout the subject property buildings vary in type, color, age, and repair. A minor amount of peeling or chipping paint was observed in some unoccupied areas of the buildings. Some of the interior areas of the residence and most of the interior areas of the garage and barn are lit with fluorescent lighting fixtures of various apparent ages. Several broken fluorescent bulbs were also observed within the buildings.

#### Residence

The residence is a two-story wooden building divided into two first floor and one second floor apartments. The apartments are currently vacant. Remnant discarded furniture and personal belongings from prior tenants were noted remaining in the building. Various types of linoleum or vinyl flooring were observed in the residence.

The building's basement has a dirt floor and stone foundation. A 275-gallon No. 2 fuel oil AST was observed in the northeast corner of the basement. The tank appeared to be connected to the building's heating system. No evidence of leaks or spills was observed around the tank, or the adjacent hot water boiler.

A discarded approximately 350-gallon AST was observed on the floor of the basement near this area (**Picture 14**). No evidence of leaks or spills was observed around the discarded AST.



Several one and five-gallon containers of paint and carpet adhesive were observed throughout the basement. No other evidence of bulk storage or a significant release of oil and/or hazardous materials was noted within interior portions of the residence.

#### Garage and Ground Floor of Barn

The garage building is a single-story concrete slab-on-grade building that is contiguous with a small ground-level basement of the barn. Two bay doors are located along the southeast side of the building to provide access to the building beneath the barn, four bay doors are located on the east side of the building (three that access former automotive repair bays and one that accesses a former paint shop area), and one bay door is located in the northern portion of the building that accesses the paint shop. Office areas with exterior doors are located in the eastern and northeastern portions of the building. Floors in the building are either bare concrete or linoleum tile. Staining that is typical of automotive shops was observed throughout the floors of the building. The concrete floors appeared intact with little evidence of cracks or breaks, indicating that this staining would not have affected soil beneath the building.

Four (4) floor drains and one (1) sump (**Picture 15**) were observed in the garage building that were discussed in **Section 4** and depicted on **Figure 2**. Some minor staining was observed on the floor around these drains. A sink was observed in a small utility area in the central portion of the building. The sink appeared to be plumbed into the floor drain system and was coated with oil, grease, and paint (**Picture 16**).

The southeast portion of the building contained two garage bays. The area is heated with a fuel oil fired hot air furnace. One (1) 275-gallon No. 2 fuel oil AST was observed in a small room to the west of the garage bays (**Figure 2**). No evidence of leaks or spills was observed around the AST. Floor tiles (9-inch by 9-inch) were observed covering the floor in a portion of the room (**Picture 17**).

The garage area beneath the barn contained seven (7) full 55-gallon drums. At least one of the drums was labeled "used oil". These may be the drums that were moved from outside (discussed in **Section 4**) (**Picture 18**). An out-of-service and empty parts washer, several partially full 5-gallon buckets of solvent and paint, and three (3) additional partially full 55-gallon drums were also observed in this area. No evidence of leaks or spills was observed around these containers. An area of oil staining (**Picture 19**) was observed on the concrete floor near the north wall of this room that was isolated from containers (**Figure 2**).

The northeast portion of the garage building is also heated by a fuel oil fired hot air furnace. One (1) 275-gallon No. 2 fuel oil AST was observed in this area. No evidence of leaks or spills was observed around the AST. The bay contains a large paint booth for vehicles. A large quantity of pint to 5-gallon size containers of paints, tints, and solvents was observed stored in this area (**Picture 20**). Four (4) full 55-gallon drums and one (1) partially full 25-gallon drum were observed in the northwest corner of the building. Oil staining was observed on the floor around the drums (**Picture 21**). One (1) additional 55-gallon drum was located near the center



of the bay adjacent to a floor drain. Various other spray can to one gallon size containers of cleaners and automotive fluids were observed throughout this bay.

No other evidence of bulk storage or a significant release of oil and/or hazardous materials was noted within interior portions of the garage.

# Barn (Second and Third Floors)

The barn is a post and beam structure built into the hill such that the third floor of the barn has walk out access to the parking area located to the west of the building. The second floor of the barn is in use for storage of building supplies (i.e. insulation, stove pipe, lumber, etc.) and tools. Several one to five-gallon containers of gasoline, oil, and building coatings were observed in this area (**Picture 22**).

The third floor of the barn has been partitioned into several self-storage units that were previously leased. The area was cluttered with abandoned personal belongings including furniture, clothing, computer equipment, and appliances.

No evidence of bulk storage or a significant release of oil and/or hazardous materials was noted within the second and third floors of the barn.

## 5.4 EVIDENCE OF UNDERGROUND AND ABOVEGROUND STORAGE TANKS

Three (3) 275-gallon No. 2 fuel oil ASTs (one in the residence and two in the garage) were observed on the subject property and are noted in **Section 5.3**, and are depicted on **Figure 2**. No evidence of leaks or spills was observed around the ASTs or fill pipes.

A pipe was observed protruding from the ground outside the southeast corner of the garage building that may be a UST fill pipe. It is unclear if this is associated with the abandoned-in-place waste oil UST located beneath the garage floor (see **Section 4**) or an undocumented UST.

# 5.5 PCB-CONTAINING ELECTRICAL AND HYDRAULIC EQUIPMENT

No evidence of the use of PCB-containing electrical or hydraulic equipment was identified during the subject property reconnaissance. ASTM Standards for Phase I ESAs specifically exclude fluorescent lighting fixtures that may contain PCBs from electrical equipment unless they are observed in waste form. However, no fluorescent lighting fixtures in waste form were observed during the reconnaissance. Fluorescent lighting fixtures that were in use that were observed within the subject property buildings are discussed as a non-scope consideration in **Section 9.4**.



## 5.6 RECONNASSIANCE LIMITATIONS

The ASTM Standards for Phase I ESAs require the identification of limitations that were encountered that may affect the ability to identify potential environmental conditions on the property, and to provide an opinion as to the significance of the limitation with regard to the ability to identify potential environmental conditions.

- 1. No electricity is currently provided to the subject property; therefore, interior spaces were unlit during the site reconnaissance. Credere utilized flashlights to examine interior spaces of the buildings, but it was difficult to view all spaces of the buildings by flashlight.
- 2. One approximately 8-foot by 10-foot storage unit could not be viewed because it was locked and the key was not available during the site reconnaissance.
- 3. Credere could not view a large portion of the second and third floors of the barn due to the large quantity of remnant items.



## 6. SUBJECT PROPERTY AND AREA RECORDS REVIEW

Files at the Franklin City Hall, the NHDES, and the United States Environmental Protection Agency (EPA) Region 1 were reviewed to obtain information concerning incidents involving releases of petroleum or hazardous materials and to identify potential RECs in connection with the subject property. In addition, an Environmental FirstSearch® database search was conducted on November 22, 2010, and is included as **Appendix E**. This research should not be considered inclusive of all regulatory records, but only those records that were publicly available, practically reviewable, and reasonably ascertained.

#### 6.1 HISTORICAL USE RECORDS

ASTM standards for Phase I ESAs require that standard historical records be searched for information on a property dating back to the property's earliest development or 1940, whichever is earliest, based on available documentation. The historical use of the subject property has been confirmed from standard historical records to have been used for automotive services since at least 1932. The timeline of uses of the subject property unclear, but the subject property is known to have been operated as a gasoline station and for automobile repair, modification, and painting.

Specific descriptions of the historical records that were reviewed for the subject property are presented below.

# **Historical USGS Maps**

Historical USGS maps dated 1927, 1956, and 1987 (**Figure 1**) were reviewed online at the University of New Hampshire Dimond Library online data center relative to the subject property and surrounding area. The land uses and any evidence of RECs in these maps are summarized below:

Historical USGS Map (Year)	Land Use	Evidence of RECs and/or Bulk Storage or Release of Petroleum Products or Hazardous Substances
1927	No specific land use was noted on the map. The vicinity of the subject property appears relatively	No evidence of RECs was obtained
1956	undeveloped with only sparse small structures (likely residences) and railroad tracks in the area.	from these maps.
1987 ( <b>Figure 1</b> )	No specific land use was noted for the subject property. Several large buildings that are likely industrial are depicted to the northwest of the subject property.	None; however, large buildings would indicate potential industrial use.



# **Aerial Photographs**

Historical aerial photographs dated 1942, 1951, 1981 1998, and 2009 were reviewed relative to the subject property and surrounding area. Copies of these historic aerial photographs are located within the FirstSearch® report included in **Appendix E.** 

Aerial Photo (Year)	Land Use	Evidence of RECs and/or Bulk Storage or Release of Petroleum Products or Hazardous Substances
1942	The subject property is developed with at least two buildings. The vicinity of the subject property is agricultural fields.	No evidence of RECs was obtained from this photograph.
1951	The subject property is developed with the two current buildings. Cars are visible parked throughout the area along South Main Street. The vicinity remains as agricultural fields.	The presence of multiple vehicles on the subject property implies the subject property may have been in use for automotive sales or service.
1981	The subject property is developed with the current buildings. Cars are visible parked throughout the area along South Main Street. The properties to the northwest of the subject property have been developed with large buildings, and several residences have been constructed to the north of the subject property.	Due to the presence of multiple vehicles on the subject property, the subject property was likely in use for automotive services. The presence of large buildings in the vicinity suggests industrial use.
1998	The subject property is developed with the current buildings. The properties to the northwest and west of the subject property have been further developed with large buildings.	The presence of large buildings in the vicinity suggests industrial use.
2009	The subject property is developed with the current buildings. Cars are visible parked throughout the area along South Main Street. The properties to the west of the subject property have been further developed with large buildings.	Due to the presence of multiple vehicles on the subject property, the subject property was likely in use for automotive services. The presence of large buildings in the vicinity suggests industrial use.

# **Ownership Records**

Ownership records were examined at the City of Franklin Tax Assessor's Office and online at the Merrimack County Registry of Deeds. Scanned copies of the deeds were not available to allow for review of deed references to land use; only ownership abstracts were available. Available ownership history of the subject property is summarized below:



Owner/Grantee	Date Acquired
City of Franklin	May 12, 2010 (tax deed)
Barbara Gutzszka	November 4, 2005
Russell J. Blodgett	April 26, 2002
Estate of Marion A. Guay (subdivided on July 25, 2001)	Parcel 1 – June 27, 1928 Parcel 2 – September 30, 1953
Parcel 1 – George E. Clark Parcel 2 – Edmond J. Guay	Parcel 1 – May 14, 2912 Parcel 2 - Prior records not available in online registry.
Parcel 1 – Jabez R. Smith & Wife	Parcel 1 – Prior records not available in online registry.

## **City Directories**

City directories dated 1932, 1937, 1942, 1947, 1951, 1955, 1961, 1966, 1992, 1995, 2000, 2004, and 2007 were available for the subject property and surrounding area. A table summarizing the City Directories and address listings is included within the FirstSearch® report included in **Appendix E**.

The directories from 1932 to 1951 noted that South Main Street was not numbered. Several filling stations and Guay's Garage Auto Repairing (the subject property) were listed in the area. The 1961 and 1966 directories also list Guay's Garage at the subject property; all other listings are residential in nature in these directories. No properties with obvious petroleum or hazardous materials use or storage are listed at addresses near the subject property in the 1992, 1995, 2000, or 2004 directories. The 2007 directory lists the subject property as D&G Auto and Thermal Fabrications (a former owner's energy efficiency business), and a nearby lower address as a foundry, which is the industrial property located in the industrial park to the northwest of the subject property.

# **Sanborn Fire Insurance Maps**

Sanborn Fire Insurance maps were not available for the subject property and surrounding area.

## **6.2 DATA FAILURE**

Data failure is defined as a failure to achieve the historical research objectives of ASTM E 1527-05 even after reviewing the standard historical sources that are reasonably ascertainable and likely to be useful dating back to the subject property's earliest development or 1940, whichever is earliest.



Data failure has occurred during this Phase I ESA because standard historical documents are not available that define the subject property's earliest development or historic uses in 5-year intervals.

#### 6.3 STATE ENVIRONMENTAL REVIEW

Credere performed an environmental FirstSearch® database search for the subject property and surrounding area. The NHDES also maintains an online 'OneStop' Environmental Site Information database, which includes information for USTs, ASTs, solid waste facilities, inactive asbestos disposal sites, hazardous waste generators, uncontrolled hazardous waste sites and remedial programs, Brownfields sites, and remediation and initial response spill sites. Credere cross-referenced database information to confirm the accuracy of the FirstSearch® report and used the FirstSearch<sup>®</sup> report as a basis for more in-depth research in the OneStop database. Credere also contacted Ms. Elizabeth Knowland at the NHDES file room to determine if any files were available at the NHDES that were not available through the OneStop database. Ms. Knowland indicated that all NHDES files were scanned for the subject property; however, the subject property had multiple NHDES Site Nos. and several files were not available for the public to view due to a technical issue. However, Ms. Knowland provided Credere with electronic copies of the files that did not appear in the database to review. The following sections provide the pertinent results of the FirstSearch® and OneStop database searches, and the electronic file reviews for the subject property.

## **Site Remediation and Initial Response Spill Sites**

The NHDES maintains a list of all petroleum and hazardous material remediation and initial response spill sites. The following information was obtained from our research:

The subject property is <u>not</u> listed as an initial response site; however, the subject property will likely be listed as an initial response site in the future because the NHDES was notified concerning the drums as part of the participation in the Brownfields program. In response, NHDES Brownfields staff coordinated with the EPA to arrange for the drums to be removed from the subject property. An EPA drum removal action began in December 2010. The EPA characterized the wastes within the drums on the subject property and removed the drums on January 31, 2010.

The Webster Valve Company at 583 South Main Street (NHDES Site No. 199003020) is located approximately 100-feet to the northwest of the subject property off of the industrial park road; however, this is not an adjoining property and is separated from the subject property by a small wooded parcel of land. This site had historically documented groundwater volatile organic compound (VOC) contamination (including chlorinated compounds) that was identified at the former property line prior to subdivision and creation of the subject property parcel in 2001. The NHDES oversaw monitoring of groundwater conditions in the area and closed the site for monitoring of VOCs in 1997. Several additional investigations and remedial actions have taken place at the site concerning the



presence of lead and zinc in soil, spills of high pH solvent and non-PCB transformer oil, surface water sampling, and floor drains and a boiler blow-down discharging to a drywell. The site currently has activity and use restrictions (AURs) and a soil management plan in place restricting the excavation of soil without approval from the NHDES.

No other upgradient site remediation or initial response spill sites were identified within 1.0 miles of the subject property.

# **Underground or Aboveground Storage Tanks Listing**

The NHDES data indicates that six (6) USTs were formerly registered for the subject property and that the subject property is listed as a leaking UST (LUST) site. As discussed in **Section 4**, two of these USTs were located at an adjacent residence that was formerly part of the property prior to subdivision in 2001. Each of these USTs was properly closed and remediated in 1998 in accordance with NHDES guidelines. Of the six closed tanks, one (1) 500-gallon UST was abandoned-in-place beneath the southeastern portion of the garage.

No adjoining properties are known to currently maintain USTs and no LUST sites were identified within a 0.5-mile search distance of the subject property.

# **State Brownfields Program**

Brownfields sites are defined under the federal Brownfields law, known as the Brownfields Revitalization Act of 2002, as "real property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant." The law further defines the term to include a site that is: "contaminated by a controlled substance; contaminated by petroleum or a petroleum product excluded from the definition of 'hazardous substance'; or mine-scarred land."

The NHDES has several Brownfields initiatives including the NH Brownfields Covenant Program, the NH Brownfields Assessment Program, and the NH Brownfields Cleanup Revolving Loan Fund.

Under these three programs, the NHDES maintains lists of active Brownfields sites, closed Brownfields sites, and sites participating in the Brownfields Covenant Program. According to information obtained from the NHDES Brownfields Program website, "active" Brownfields sites are listed in the contaminated sites inventory because they meet the definition of a Brownfields site under the federal Brownfields Revitalization Act of 2002. In addition, some sites included on the active list have entered the program by being assessed through participation in one of the many other EPA-funded Brownfields programs throughout New Hampshire. Sites denoted as "active" are not yet cleaned up to NHDES satisfaction. Closed Brownfields sites are sites listed in the contaminated sites inventory because they have been cleaned up and brought to resolution under the site cleanup program and have participated in one or more NHDES Brownfields initiatives, or generally meet the



definition of a Brownfields site. Sites participating in the Brownfields Covenant program are seeking covenants "not-to-sue" from the State of New Hampshire.

This Phase I ESA is currently being completed as part of the LRPC's Brownfields Program. The subject property is currently not listed on the NHDES lists as an active Brownfields site, but will likely be listed with the completion of the Phase I ESA. According to the NHDES lists of Brownfields sites and the FirstSearch® report, no other Brownfields sites or Brownfields Covenant sites are located within a 0.5 mile minimum search distance of the subject property.

# **Solid Waste Facilities**

According to the NHDES OneStop database, the subject property is <u>not</u> listed as a solid waste facility. No solid waste facilities are located within a 0.5-mile minimum search distance of the subject property.

## **6.4 FEDERAL ENVIRONMENTAL REVIEW**

The EPA maintains a number of databases that track properties and facilities that are regulated under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), the Resource Conservation and Recovery Act (RCRA), the Emergency Response Notification System (ERNS), and the Federal Institutional Control/Engineering Control (IC/EC) database.

# **CERCLA Sites**

CERCLA is a federally established program that created a fund to identify hazardous waste sites for remediation. The fund is known as Superfund. The Comprehensive Environmental Response, Compensation Information System (CERCLIS) list is a compilation of known and/or suspected uncontrolled or abandoned hazardous waste sites that are eligible for funding under Superfund. The Superfund program includes Federal Facility sites, short-and long-term clean-up sites, National Priority Listing (NPL) sites, delisted NPL sites, Sites Awaiting NPL Decisions (SAND), and No Further Remedial Action Plan (NFRAP) sites. These are defined below.

- Federal Facility sites are hazardous waste sites where the Department of Defense is the lead agency in the investigation or remediation of the site.
- Hazardous waste sites that do not require a long-term cleanup process are considered short-term cleanups, or "removal actions". Although the cleanup process for these sites may not be as lengthy as for long-term cleanups, these sites may still affect the health and environment of those who live near the site.
- Long-term clean-up sites are often caused by years of polluting and may take several years, even decades, to remediate. The most serious uncontrolled or abandoned



> hazardous waste sites identified as candidates for long-term clean up are listed on the NPL.

- The database of delisted NPL sites lists those sites where no further response is appropriate and the site may be deleted from the NPL.
- SAND sites have had site assessments performed, but a decision regarding NPL proposal has not been recorded. SAND sites include sites that have been assessed by the Superfund program, are now being addressed under state program authorities, or are in various stages of assessment and cleanup by federal or state agencies.
- The No Further Remedial Action Plan (NFRAP) list is a database of archive designated CERCLA sites that, to the best of the EPA's knowledge, assessment has been completed and the EPA has determined that no further steps will be taken to list that site on the NPL.

The subject property is <u>not</u> listed as an NPL, Federal Facility, SAND, CERCLA or NFRAP site.

According to EPA database information, no properties located within a 1.0-mile minimum search distance of the site are currently listed on the NPL.

The Franklin River Pond Landfill site is listed as a CERCLA NFRAP site and is approximately 0.31-miles northeast of the subject property. This site is located across the Merrimack River from the subject property, which would act as a hydraulic barrier for contaminant migration. In addition, this site is located down or cross-gradient and is not a concern for the subject property. No other CERCLA NFRAP sites are located within a 0.5-mile minimum search distance of the subject property.

#### **RCRA Sites**

Sites listed in the EPA RCRA database are sites that are hazardous waste treatment, storage, and disposal (RCRA TSD) facilities, or generate small or large quantities of hazardous wastes (RCRA GEN).

Accidents or other activities at RCRA facilities can result in the release of hazardous waste or hazardous constituents to the environment. The RCRA Corrective Action program (CORRACT) requires these facilities to conduct investigations and cleanup actions as necessary. Facilities under the CORRACTs program need to implement necessary corrective action as part of the process to obtain a permit to treat, store, or dispose of hazardous waste.

The subject property is <u>not</u> listed as a RCRA TSD facility, or a CORRACT facility. Mike's Automotive, a former business located at the subject property, is listed as a small quantity



RCRA generator for the disposal of petroleum distillates. Petroleum products are known to have been improperly stored on the subject property and soil contamination is likely present in the vicinity of the storage areas.

No adjoining properties are listed as RCRA generators. No RCRA TSD facilities are located within a 0.5-mile approximate minimum search distance of the subject property. No CORRACT facilities are located within a 1.0-mile approximate minimum search distance of the subject property.

# **ERNS Sites**

The Emergency Response Notification System (ERNS) was a database used to store information on notifications of oil discharges and hazardous substances releases. The ERNS program is a cooperative data sharing effort among the EPA Headquarters, the state Department of Transportation (DOT) Research and Special Programs Administration's John A. Volpe National Transportation Systems Center, other DOT program offices, the ten EPA Regions, and the National Response Center (NRC). The ERNS website was redesigned and the data now resides at the NRC. The primary function of the NRC is to serve as the sole national point of contact for reporting all oil, chemical, radiological, and biological discharges into the environment anywhere in the United States and its territories.

The subject property is <u>not</u> listed as an NRC/ERNS site.

## Federal IC/EC

The Federal Institutional Control/Engineering Control (Federal IC/EC) is a database of Superfund sites that have either an engineering or institutional control to limit exposure to contamination remaining on a site.

The subject property is <u>not</u> listed as a Federal IC/EC site.

# 6.5 ENVIRONMENTAL LIENS

A third party, such as a state or federal government agency, may place environmental liens on a property in order to recover clean-up costs that were incurred by that third party. The existence of a recorded environmental clean-up lien on a property is an indication that environmental conditions either currently exist or previously existed on a property. The existence of an environmental clean-up lien could be considered an indicator of potential environmental concerns, and could be a basis for additional environmental investigations on the property to determine the potential existence of ongoing or continued releases of hazardous substances.

The records review and *user* interviews conducted as part of this Phase I ESA identified <u>no</u> environmental liens for the subject property.



# 6.6 INSTITUTIONAL CONTROLS

Institutional controls or environmental-related covenants for a property are put in place to minimize the potential for human exposure to existing environmental conditions on that property by limiting land or resource use. Types of institutional controls may be referred to as land-use controls, or activity and use limitations, and these controls may be in the form of deed restrictions, zoning restrictions, building or excavation permits, well drilling prohibitions, easements, or covenants. A property owner wishing to maintain liability protections under state or federal law must comply with any existing land use restrictions and maintain any existing institutional control employed at the site in connection with a response action.

The local, state, and federal records reviews and *user* interviews conducted as part of this Phase I ESA identified <u>no</u> institutional controls/engineering controls for the subject property.



## 7. INTERVIEWS

In accordance with ASTM E 1527-05 Chapters 10 and 11, interviews with past and present owners, operators, and occupants of the facility were conducted, for the purpose of gathering information regarding the potential for RECs at the subject property. The following presents summary of the findings of these interviews.

# 7.1 PAST AND PRESENT USER(S), OWNER(S), AND OCCUPANT(S)

## **7.1.1** Users

Mr. Richard Lewis, Planning & Zoning Administrator of the City of Franklin and representative of the *user*, was interviewed in person to obtain information about the *user's* knowledge of the subject property in regard to identifying RECs in connection with the subject property. Mr. Lewis provided Credere with the City of Franklin property file, described the former uses of the subject property, and escorted Credere during the subject property reconnaissance. Mr. Lewis was aware that the subject property had historically been utilized as a gasoline station, for various automotive services, and as a used car dealership. With the exception of obvious issues associated with drum storage and poor housekeeping, Mr. Lewis was unaware of any additional evidence of RECs at the subject property.

# 7.1.2 Past Owners, Operators, and Occupants/Key Site Manager

Telephone contact information for the previous two owners of the subject property, Ms. Barbara Gutzszka and Mr. Russell Blodgett, could not be determined within the time and cost constraints of this assessment because Ms. Gutzszka is no longer an area resident, and Mr. Blodgett was recently evicted from the subject property. Due to the obvious evidence of RECs in connection with the subject property (i.e. large quantities of drums and obvious spills/staining) and the available documentation regarding USTs and remediation activities on the subject property, it is Credere's opinion that the lack of these interviews has not affected the outcome of this assessment.

#### 7.2 STATE AND/OR LOCAL GOVERNMENT OFFICIALS

City of Franklin Offices

As discussed in **Section 7.1.1**, Mr. Lewis was interviewed in person and provided Credere with the City's property file for the subject property.

City of Franklin Fire Department

Mr. James Curran of the City of Franklin Fire Department accompanied Credere during the subject property reconnaissance and was interviewed about his knowledge of the subject property in regard to identifying RECs in connection with the subject property. With the exception of fuel oil storage within the buildings, and the obvious issues associated with drum



storage and poor housekeeping, Mr. Curran was unaware of any additional evidence of RECs at the subject property.

# NHDES Brownfields Project Officer

Ms. Jennifer Marts at the NHDES was interviewed via telephone regarding her knowledge and correspondence with the EPA on ongoing drum sampling and removal actions at the subject property. Ms. Marts indicated that all of the drums on the subject property had been sampled by the EPA for hazardous waste characteristics and the EPA removed the drums on January 31, 2011.



#### 8. ADDITIONS, EXCEPTIONS, AND DEVIATIONS

According to Chapter 12.13 of ASTM E 1527-05, all additions and deviations from this practice shall be listed individually in detail. This includes any client-imposed constraints. In this regard, the following additions and deviations to this practice were identified:

#### **Additions**

The following ASTM *non-scope considerations* were added (**Section 9**) to Credere's scope of work as a part of this Phase I ESA:

- Radon
- Asbestos
- Lead-based Paint
- PCB-containing Equipment
- Wetlands

These were included as a part of this Phase I ESA because they are deemed to add value for assessments conducted under the LRPC Brownfields Program.

#### **Exceptions and Deviations**

No exceptions or deviations were made during this Phase I ESA.



#### 9. ASTM NON-SCOPE CONSIDERATIONS

The following is a discussion of findings made during this Phase I ESA as it relates to items not included within the scope of ASTM E 1527-05.

#### 9.1 ASBESTOS

Asbestos is a heat-resistant, naturally occurring mineral that breaks into fibers. Asbestos is the generic term for six different types of minerals. Some forms of asbestos are highly toxic by inhalation of dust particles. Past uses of asbestos include pipe and boiler insulation, fire and soundproofing, brakes, gaskets, floor tiles, roofing materials, window caulk, cement products, curtains, and water pipes.

A formal asbestos survey was <u>not</u> included in Credere's scope of services for this Phase I ESA. ACMs are not included within requirements of ASTM E 1527-05 for the Phase I ESA process, unless the ACM is found in its waste form. However, 9-inch by 9-inch floor tiles were observed in a small room within the garage building, which in Credere's experience, typically contain asbestos. Recognizing the age of the buildings on the subject property, which were constructed prior to 1978, the potential exists for other ACMs to be present in building materials at the subject property.

#### 9.2 LEAD-BASED PAINT

Lead is toxic by ingestion and inhalation of dust or fumes. Health effects are generally correlated with blood levels. Infants and young children absorb ingested lead more readily than older children and young adults. Primary exposure is from lead-based paint, lead solder and pipes in drinking water lines, and air quality in urban settings. Lead-based paint testing is typically warranted for residential properties constructed prior to 1978 and properties where children spend a significant amount of time, such as a daycare facility.

A formal lead-based paint survey was <u>not</u> within the scope of services of this Phase I ESA. However, due to the ages of the buildings, lead-based paint may be present within the buildings.

#### 9.3 RADON

Credere has included the general information pertaining to radon for informational purposes only. The EPA has prepared a map to assist National, State, and local organizations to target their resources and to implement radon-resistant building codes. The map divides the country into three Radon Zones. Zone 1 is those areas with the average predicted indoor radon concentration in residential dwellings exceeding the EPA Action limit of 4.0 Pico Curies per Liter (pCi/L), Zone 2 is where average predicted radon levels are between 2.0 and 4.0 pCi/L, and Zone 3 is where average predicted radon levels are less than 2.0 pCi/L.

It is important to note that the EPA has found homes with elevated levels of radon in all three zones, and the EPA recommends site specific testing in order to determine radon levels at a



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specific location. However, the map does give a valuable indication of the propensity of radon gas accumulation in structures.

Review of the EPA Map of Radon Zones places the subject property in Zone 2, where average predicted radon levels are between 2.0 and 4.0 pCi/L/. A basement is present under the residence, which is currently vacant; therefore, radon is not expected to be a concern at the subject property at this time. However, the presence of radon in the residence should be considered during subject property redevelopment. Recognizing that the subject property lies in Zone 2, but gets potable water from a public water supply which is tested for radon, the presence of radon in drinking water is not expected to be a concern at this time.

#### 9.4 NON-SCOPE PCB-CONTAINING EQUIPMENT AND MATERIALS

During the site reconnaissance, Credere noted the following non-scope equipment/materials on or adjacent to the subject property that either likely contain PCBs, or are known to possibly contain PCBs:

- Prior to 1978, fluorescent light ballasts were commonly manufactured with PCBs in the capacitor oil and in a tar-like substance that surrounds ballast components called "potting compound." Ballasts made after 1978 are usually marked "Non-PCB." Fluorescent light fixtures were observed to be installed throughout the buildings. Based on the apparent age of the structure, the potential exists for PCBs to be present in the lighting fixtures observed at the subject property.
- Caulk, paint, sealants, adhesives, and other materials containing PCBs were used in many buildings during building construction, renovation, or repair from the 1950s through the late 1970s. PCBs were not distributed in commerce after 1978. PCB-containing building materials may represent a risk to human health and the environment and may be regulated for disposal. Based on their ages, the potential exists for PCB-containing building materials to be present in the subject property buildings.

#### 9.5 WETLANDS

A formal wetland survey was <u>not</u> included in the scope of work for this Phase I ESA. Credere did not observe any wetlands on the subject property during our reconnaissance. A small wet area or pond was observed to the west of the subject property through a wooded area. According to the US Fish and Wildlife Service (FWS) National Wetlands Inventory, no wetlands are located on the subject property. The pond noted during the reconnaissance is listed as a freshwater pond. The Merrimack River is located approximately 0.1 miles east of the subject property.



#### 10. DATA GAPS

ASTM E 1527-05 Chapter 12.7 requires the identification of data gaps that may affect our ability to identify potential environmental conditions on the subject property, to further identify the sources of information consulted to attempt to fill these data gaps, and the significance of the data gap with regard to the ability to identify potential environmental conditions onsite.

- Data failure occurred during this assessment because standard historical sources were not
  available documenting the subject property's earliest development or historical uses in five
  year intervals. Although data failure occurred, it is Credere's opinion that this does not
  represent a data gap because anecdotal and other historical reports indicate the subject
  property has been used for automotive services since at least 1932, and all data sources have
  indicated a similar use of the subject property.
- The inability to interview past owners of the subject property represents a data gap because information regarding subject property operations including waste storage and disposal practices could not be confirmed. However, it is Credere's opinion that this has not affected our ability to identify RECs in connection with the subject property due to the obvious poor housekeeping at the subject property, and the fact that USTs and the drywell at the subject property have already been address to NHDES's satisfaction.



#### 11. FINDINGS AND OPINIONS

The following is a summary of relevant environmental findings concerning the subject property, and Credere's professional opinion concerning these findings:

- The subject property has historically been used as a residence, a gasoline station, for various automotive services, and for used car sales. In addition, dumping of various wastes including building debris, tires, vehicle gasoline tanks, computer monitors, scrap metal, and fill materials was observed in the western portion of the subject property. Based on the variety of petroleum and hazardous chemicals used at the subject property and the dumping of various wastes, it is possible that environmental media (i.e. soil and/or groundwater) at the subject property has been impacted by these historic uses.
- Four (4) USTs were previously maintained on the subject property. Three (3) of the USTs were removed, and one (1) was abandoned-in-place beneath the garage bay floor. Each of the USTs was properly closed and documented in accordance with NHDES guidelines. Soil contamination was identified around a 500-gallon fuel oil UST during removal and approximately 39 tons of soil was disposed of off-site. Subsequent investigation indicated that contamination had affected groundwater in the vicinity of the tank; however, concentrations were below NHDES standards. Contaminated soil associated with the release of fuel oil represents a historic REC; however, because the soil was remediated this is not considered a REC today; therefore, these USTs are no longer a concern for the subject property.
- A metal pipe was observed protruding from the ground adjacent to the southeast corner of the garage building. The use of the pipe was unclear, but it may be associated with the abandoned-in-place waste oil UST located beneath the garage floor, or due to the historical use of the subject property for petroleum storage and automotive service, there is the potential that this may be a fill pipe for an undocumented UST. Staining was observed on the ground in the vicinity of this pipe that may be associated with dumping of automotive fluids into the pipe, or the storage of drums in this area.
- Floor drains were observed throughout the subject property buildings. These drains historically discharged to a drywell located to the east of the building. This drywell was previously investigated by ARC and was determined to have impacted soil in the vicinity of the drywell. In 1999, ARC dismantled the drywell and removed 6 cubic yards of contaminated soil. A confirmatory sample indicated that all contamination had been removed from the vicinity of the drywell. A holding tank was installed in the former location of the drywell prior to 2001 and the NHDES UIC file lists the subject project as closed as of 2006. Because the drywell has been investigated and remediated and the floor drains discharge to a holding tank, floor drains are no longer a concern for the subject property.
- A sump was observed in the floor of the western portion of the garage building. A pipe/hose
  line had been embedded in the floor and trended towards the southwestern garage bay.
  Because there is a floor drain in this location, some of the floors drains within the building



may have been directed to this sump. In addition, due to the open nature of the sump, wastes could also have been disposed in the sump. The sump discharges to the ground surface outside the garage building and staining was observed on the ground in this location; therefore, soil and/or groundwater may have been impacted of oil and/or hazardous substances by discharges from the sump.

- Oil staining of various degrees was observed on the concrete floor throughout the garage building and specifically around drum areas. Because these oils were spilled directly to a concrete floor and the floor appeared intact, there is likely no migration pathway to the environment in these locations. However, it is commonly known that PCBs were present in some automotive fluids, and consequently is frequently found in waste oils at facilities of this type. Given this observation and the long history of operation of this facility for automotive repair during a time when PCBs were at their peak use (1950 to 1978), the potential presence PCBs in the oil stained floors cannot be ignored.
- Approximately 60 drums of waste vehicle fluids (presumed to be waste grease, oil, and coolant) were observed on the subject property that were presumably generated during previous operations conducted at the subject property. Stained soil and concrete was noted around some of the drums and numerous drums were visibly leaking, and/or were blossomed. The EPA began a drum removal action in cooperation with the NHDES on January 31, 2010; however, there are likely environmental impacts associated with drum storage throughout the subject property.
- The area to the west of the private road has been used to dump gravelly fill material, partially burned trash with metal, scrap wood/building materials, tires, and household refuse. Based on the unknown origin of these materials, and the potential for these materials to contain petroleum or hazardous materials, soil and/or groundwater may have been affected in this area. In addition, the dumped building materials have the potential to be coated in lead-based paint, have ACMs, or PCB bulk products.
- The Webster Valve Co. foundry site is located northwest of the subject property and some of the site is located upgradient of the subject property. Soil and groundwater contamination has historically been documented at the site and various cleanup efforts have occurred. Groundwater issues related to VOCs have been address to NHDES's satisfaction. Existing contaminated soil present on the site; however, an AUL is in place on the site and soil contamination has not been documented on adjacent properties.
- Based to the ages of the subject property buildings, there is the potential for ACMs and leadbased paint to be present on or within the subject property buildings.
- Based on the age of the garage building and Credere's previous experience with similar buildings, various building materials may be defined as a PCB bulk product waste and would therefore be regulated for disposal. Materials of initial concern for PCBs include painted surfaces, and caulking and sealing materials throughout the garage building.
- Fluorescent lighting fixtures were observed throughout the subject property buildings. Based on the ages of the buildings, some of these fixtures may contain PCBs.



#### 12. CONCLUSIONS

We have performed this Phase I ESA in conformance with the scope and limitations of the ASTM Practice E 1527-05. Any exceptions to, or deletions from, this process were described in **Section 8**. This assessment has revealed no evidence of RECs in connection with the subject property except for the following:

- REC-1 The historical use of the subject property as a gasoline station and for various automotive services represents a REC because releases to the environment from these types of facilities was commonplace and the obvious poor housekeeping at the subject property may have impacted soil or groundwater at the subject property. In addition, there is the potential for undocumented USTs to the present on the subject property from these uses.
- REC-2 The former storage of approximately 60 drums within and outside the building represents a REC because it is clear from the numerous soil and concrete stains evident during the site reconnaissance that this activity has impacted the environmental media at the subject property. Areas of concern (AOC) include:
  - 1. The area outside the southeast corner of the building where oil staining was noted and the NHDES had observed at least 4 drums with soil staining. Note that these drums were reportedly moved inside the building.
  - 2. The area outside the northwest corner of the building where a large quantity of drums were stored and soil staining was observed throughout the area.
  - 3. The area to the north of the building along a wooden stockade fence where various drums were observed that appeared to have been overfilled, leaked, or were blossomed.
- REC-3 The presence of a sump that discharges to the ground to the west of the building which may have received or been used for disposal of wastes represents a REC because staining observed beneath the discharge hose may indicate releases to the environment have occurred.
- REC-4 The use of the area to the west of the private road for dumping represents a REC because these materials have the potential to contain petroleum and/or hazardous materials, which may have affected soil or groundwater in the area.

Credere identified one (1) *de minimis environmental condition* (DMEC) at the subject property during this Phase I ESA:

• DMEC-1 – Small stains that are typical of automotive service facilities were observed throughout the garage building and stained floors were observed around drums storage areas. Because the concrete floors within the building appeared intact, it is unlikely that these stains represent released to the environment. However, due to the age of the garage building and



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the fact that PCBs have commonly been found in automotive fluids and waste oil, PCBs may be present in these stained areas.

The following ASTM non-Scope considerations (NCs) were also noted during this Phase I ESA:

- NC-1 Based on the ages of the subject property buildings ACMs may be present on the interior and exterior of the buildings or the dumped buildings materials.
- NC-2 Based on the ages of the subject property buildings, lead-based paint may be present on the interior or exterior of the buildings or the dumped building materials.
- NC-3 Based on the ages of the subject property buildings, PCB-containing bulk products (caulking, paint, etc.) may be present on the interior and exterior of the buildings or the dumped building materials.
- NC-4 Based on the ages of the subject property buildings, fluorescent lighting fixtures observed throughout the buildings have the potential to contain PCBs.



#### 13. RECOMMENDATIONS

The ASTM Standards require that the environmental professional determine the degree of obviousness of the presence or likely presence of contamination, releases, or other environmental conditions onsite, and the ability to detect that contamination. Based on the findings of this Phase I ESA, obvious conditions that are indicative of potential contamination or past releases are present at the subject property. In order to maintain *Bona Fide prospective purchaser* liability protection under CERCLA, the seller or purchaser must demonstrate appropriate care, which typically will entail the completion of the following recommendations:

- Phase II ESA activities are recommended to confirm or dismiss the identified RECs.
- Asbestos, lead-based paint, and PCB-containing hazardous building materials surveys should be completed to confirm or dismiss the NCs concerning the presence and/or extent of hazardous building materials on or within the buildings and the dumped building debris.
- A universal and hazardous waste survey should be completed to address the NC and inventory the wastes which are to remain or may be generated at the subject property during redevelopment.



#### 14. REFERENCES

#### LOCAL RESOURCES

- City of Franklin Official Website: http://www.franklinnh.gov
- City of Franklin Assessor's and Code Enforcement Files
- City of Franklin Fire Department

#### NHDES RESOURCES

- NHDES OneStop Environmental Site Information Online Database: http://www2.des.state.nh.us/onestop/
- **NHDES File Room, Concord, New Hampshire.** Contacted Ms. Elizabeth Knowland regarding the availability of non-digital files.

#### **EPA RESOURCES**

- **CERCLIS Hazardous Waste Sites:** Information obtained from USEPA website. http://cfpub.epa.gov/supercpad/cursites/srchsites.cfm
- **CERCLIS NFRAP:** Information obtained from USEPA website.

  http://cfpub.epa.gov/supercpad/cursites/srchrslt.cfm?start=1&CFID=481008&CFTOKEN
  =69470108&jsessionid=363045257c645c143453TR
- **RCRIS Database:** Information obtained from USEPA website. http://www.epa.gov/enviro/html/rcris/rcris\_query\_java.html
- **EPA Enforcement and Compliance History Online (ECHO):** http://www.epa-echo.gov/echo/index.html
- **Superfund Database:** NPL, SAND, and SHORT sites. Information obtained from USEPA website. *http://yosemite.epa.gov/R1/npl\_pad.nsf/*

#### **ADDITIONAL RESOURCES**

- US Fish and Wildlife Service National Wetlands Inventory Wetlands Mapper. http://wetlandsfws.er.usgs.gov/NWI/index.html
- Geological Information:
  - o Geohydrology and Water Quality of Stratified-Drift Aquifers in the Upper Merrimack River Basin, South-Central New Hampshire, (P.J. Stekl and S.M. Flanagan, 1997)
  - o http://tin.er.usgs.gov/geology/state/state.php?state=NH
- **Historical USGS Maps of New England.** University of New Hampshire Dimond Library data library. *http://docs.unh.edu/nhtopos/nhtopos.htm*



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#### 15. LIMITATIONS

This report has been prepared as part of an agreement between Credere Associates, LLC and LRPC. This agreement was established in order to provide LRPC with information upon which they can rely concerning the existence or likely existence of various environmental contaminants on or adjacent to the subject property.

The report does not provide sufficient information to unequivocally determine that no petroleum and/or hazardous substance contamination is present at the subject property. Additional work beyond that completed for this study would be necessary to provide such information. Further, this report is not an audit for regulatory compliance or a detailed condition survey for the presence of asbestos, lead paint, PCBs, radon or any other pollutant specific compound.

Our conclusions regarding the subject property are based on Credere's interpretation of subject property historical land use and on observations of existing subject property conditions during our field reconnaissance visits. The results of this study must be qualified in that no borings, soil or groundwater sampling or chemical testing was conducted as part of this study. Therefore, our conclusions regarding the condition of the subject property do not represent a warranty that the facility, parking areas, adjacent properties, etc., are of the same quality as may be inferred from observable property conditions and readily available property history files.

Credere Associates, LLC performed this Phase I ESA in conformance with the ASTM Standard Practice E 1527-05 and ASTM Standards. No exceptions or significant deviations were made to this practice during the completion of the Phase I ESA.



#### 16. SIGNATURES OF ENVIRONMENTAL PROFESSIONALS

The following individuals performed this Phase I ESA in conformance with ASTM Standard Practice E 1527-05 and AAI Standards. Any work completed on this Phase I ESA by an individual who is not considered an *environmental professional* was completed under the supervision or responsible charge of the *environmental professional* listed after the *Environmental Professionals Statement* provided below.

#### **Environmental Professionals Statement**

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

Judd R. Newcomb, CG

Geologist/Assistant Project Manager

udd R. Hawcoul

**Primary Author** 

Richard S. Vandenberg, CG, PG

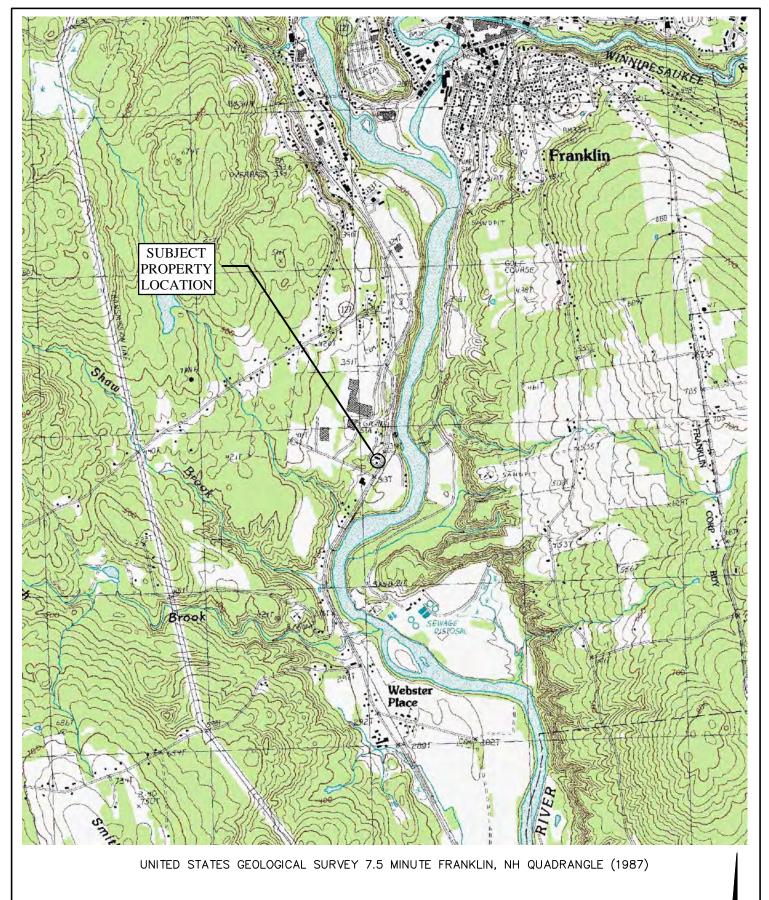
Senior Hydrogeologist

Jedd S. Steinglass

Senior Project Manager



## **FIGURES**



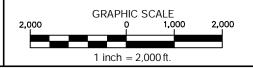
DRAWN BY:SWC/JRN DATE: 12/14/10 CHECKED BY:RSV/JSS PROJECT: 10001087

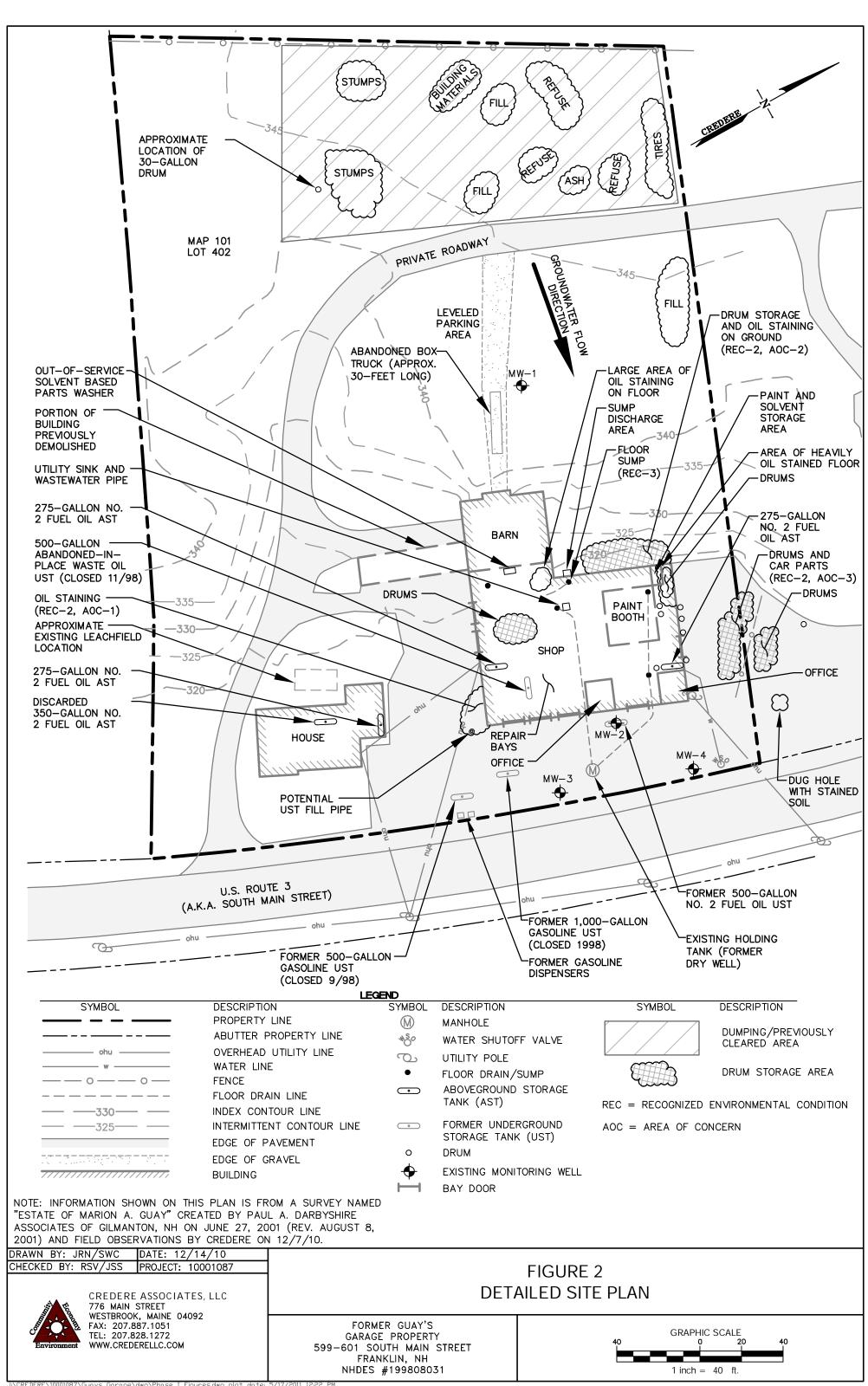


CREDERE ASSOCIATES, LLC 776 MAIN STREET WESTBROOK, MAINE 04092 TEL: 207.828.1272 FAX: 207.887.1051 WWW.CREDERELLC.COM

## FIGURE 1 - SITE LOCATION PLAN

FORMER GUAY'S GARAGE PROPERTY 599-601 SOUTH MAIN STREET FRANKLIN, NH NHDES #199808031





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# APPENDIX A RESUMES OF KEY PERSONNEL





## Richard S. Vandenberg CG,PG Senior Hydrogeologist/Senior Geologist

Credere Associates LLC

## PROFESSIONAL REGISTRATIONS

Professional Geologist:

ME #GE452

NH #52

AIPG#9627

#### **TRAINING**

- 40 hour, OSHA 29 CFR 1910.120 Hazardous Waste Health and Safety Course and Refresher Course
- 8 hour, OSHA 29 CFR 1910.120 Hazardous Waste Supervisor Health and Safety Course

# EDUCATION & PROFESSIONAL ACTIVITIES

- Bachelor of Arts in Geology/chemistry. University of Maine, Farmington, Maine, 1987.
- Graduate work toward Master's of Science in Geology. Fort Hays State University, Hays, Kansas 1987 to 1989.
- New Hampshire Geologist Society Member
- American Institute of Professional Geologist Member

#### **HIGHLIGHTS OF EXPERIENCE**

Mr. Vandenberg is a Senior Hydrogeologist with Credere Associates, LLC with over 18 years experience in assessment, investigation, remediation and disposal of petroleum and hazardous wastes, and water related projects. Mr. Vandenberg has managed numerous compliance, assessment, investigation, and remediation projects including Phase I and Phase II environmental site assessments (ESAs), remedial investigations, remedial action planning, 3-D groundwater flow and contaminant transport modeling, groundwater extraction and treatment system design, soil vapor extraction design, soil removals, and insitu chemical oxidation projects for clients across New England. In addition, Mr. Vandenberg has developed water supplies for communities and commercial/industrial water users in New Hampshire, Vermont, and Massachusetts.

#### **ENVIRONMENTAL PROJECTS:**

#### **Brownfields**

Mr. Vandenberg has conducted Phase I and Phase II assessment and investigation activities for the USEPA-funded Brownfields commercial redevelopment and revitalization program and review Quality Assurance Project Plan Addendums detailing all investigation, sampling, and analytical testing activities that were submitted to, and approved by the Maine DEP and USEPA. Additional activities at Brownfields sites included the development of conceptual site models, completion of redevelopment feasibility studies, and the characterization and remediation of contaminated media. Mr. Vandenberg has managed projects for Southern Maine Regional Planning Commission, Nashua Regional Planning Commission, Rockingham Planning Commission (New Hampshire), and City of Westbrook, Maine. Mr. Vandenberg has been involved with the following projects:

## Rockingham Regional Planning Commission Brownfields Assessment Program – So. New Hampshire

Project Manager for the Rockingham Planning Commission (RPC) Brownfields Assessment Program. Project included the inventory of over 400 potential Brownfield sites located within the region, prioritization and selection of sites for Environmental Assessment activities, and completion of Phase I and Phase II investigations, remediation planning, reuse planning, and implementation of remedial actions. Tasks have included development of scope of work, senior technical review of reports, project coordination, property owner education, facilitation of stakeholder meetings, regulatory agency interface, site reconnaissance visits, site master planning, and remedial alternative oversight. Properties assessed or currently being assessed as part of program include the following:

- Hampton Landfill, Hampton, New Hampshire
- Former Shoe Factory, Epping, New Hampshire
- Hammond Auto, Freemont, New Hampshire

## Nashua Regional Planning Commission Brownfields Assessment Program – So. New Hampshire

Project Manager for the Nashua Regional Planning Commission (NRPC) Petroleum Brownfields Assessment Program. Project included the inventory of over 300 potential Brownfield sites located within the region, prioritization and selection of sites for Environmental Assessment activities, and completion of Phase I and Phase II investigations, remediation planning, reuse planning, and implementation of remedial actions. Tasks have included development of scope of work, senior technical review of reports, project coordination, property owner education,

## Rick Vandenberg, CG, PG Senior Project Manager

Page 2

facilitation of stakeholder meetings, regulatory agency interface, site reconnaissance visits, site master planning, and remedial alternative oversight. Mr. Patten also assisted NRPC in obtaining one additional EPA Brownfields Assessment Grant (\$200k hazardous material) and an EPA Brownfields Cleanup Grant (\$200k for the Nashua Manufacturing Boiler House). Properties assessed or currently being assessed as part of the program include the following:

• Nashua Manufacturing Boiler House, Nashua

Majestic Motors Junkyard, Merrimack

## Southern Maine Regional Planning Commission Brownfields Assessment Program – York County, Maine

Senior Technical Reviewer for the Southern Maine Regional Planning Commission (SMRPC) Brownfields Assessment Program. Project included the inventory of over 200 potential Brownfield sites located within the region, prioritization and selection of sites for Environmental Assessment activities, and completion of Phase I and Phase II investigations, remediation planning, reuse planning, and implementation of remedial actions. Tasks have included development of scope of work, senior technical review of reports, project coordination, property owner education, regulatory agency interface, site reconnaissance visits, site master planning, and remedial alternative oversight. Properties assessed or currently being assessed as part of program includes the following:

• Lincoln Mill, Biddeford, Maine

• Stenton Trust Mill, Sanford, Maine

• North Dam Mill, Biddeford, Maine

• Riverdam Mill, Biddeford, Maine

#### Westbrook Brownfields Assessment Program – City of Westbrook, Maine

Project Manager for the Westbrook Brownfields Assessment Program. Project included the inventory of over 50 potential Brownfield sites located within the city, prioritization and selection of sites for Environmental Assessment activates, and completion of Phase I and Phase II investigations, remediation planning, reuse planning, and implementation of remedial actions. Properties assessed or currently being assessed as part of program includes the following:

• Larson's Junkyard site

#### Miscellaneous Brownfields Environmental Assessments and Remedial Investigations

Mr. Vandenberg has performed all phases of environmental site assessments and remedial investigations for the projects mentioned below. Tasks completed include development of scope of work, senior technical review of reports, project coordination, records review for federal, state, and local authorities, site reconnaissance visits, soil and groundwater sampling, and summary report preparation. Representative projects include:

- Global Timber, Hartland, Vermont
- Barre Coal Tar, Montpelier, Vermont





Credere Associates LLC

#### **TRAINING**

- 40-hour OSHA 29 CFR 1910.120 HAZWOPER Course
- 8-hour OSHA 29 CFR 1910.120 HAZWOPER Refresher (Nov. 2009)
- Utility Solid Waste
   Advisory Group
   Advanced PCB Training,
   2008

#### **EDUCATION**

B.A. Geology, 1999Colgate University

## Jedd Steinglass Senior Project Manager

#### HIGHLIGHTS OF EXPERIENCE

In a professional career spanning eleven years, Jedd has focused his efforts on the environment, completing environmental investigation, compliance, and remediation projects throughout New England.

#### **PROJECT EXPERIENCE INCLUDES:**

#### **Environmental Site Assessment and Remediation**

As an environmental consultant, Jedd has served as a lead member of an Emergency Response and Remediation Operations Team. He has opened and directed a branch office and served as a senior project manager for an average portfolio of 30 active projects and a staff of 20. He has performed facility assessments, subsurface investigations, and conducted technical report review. Jedd directed the management of remediation projects to ensure compliance at the local, state, and federal level, including an outstanding variety of initial and comprehensive response actions, risk characterization, regulatory closure, and usage restrictions. He provided oversight for the removal and/or replacement of underground storage tanks including agency notification, corrective actions, soil remediation, and closure activities. Additionally, Jedd has managed long-term groundwater monitoring projects and conducted the hydrogelogic investigations and modeling necessary for major and minor groundwater discharge permitting. He has also performed remote sensing studies incorporating the use of sub-surface acoustical profiling, GPS, and GIS technologies.

#### **Facility Assessment and Closure**

Jedd's range of abilities also includes the design and management of numerous pre-construction and pre-demolition characterization and remediation efforts, which addressed soil, concrete, and regulated building materials, health and safety plan development, waste materials management, and disposal coordination. Jedd's responsibilities have also included developing proposals, job scopes, and project plans, directing bid processes, and contract management.

#### **Utility Consulting**

Jedd completed many projects associated with electrical distribution, transmission, substation, and service centers. As a primary project manager for a multi-national electric and natural gas utility, Jedd also managed the proper installation of underground utilities through contaminated areas and directed the remediation of mercury releases, which often involved the containment and elimination of acute health hazards.

#### **PCB Characterization and Remediation**

Jedd has directed the characterization and cleanup of PCB remediation waste in accordance with EPA protocol and approval at more than 30 challenging cleanup sites. Cleanups were conducted under self-implementing, performance-based, risk-based, and alternative disposal methods. Completed projects involved the decontamination, off-site disposal, and/or on-site disposal of impacted equipment and structures, bulk materials such as concrete, wood, soil, and sediment, surface water, bulk products including paint and caulking, and electrical components such as transformers and regulators.

#### Representative Brownfields Projects Include:

- Brigton Memorial School, Brigton ME
- Aerofab Mill, Sanford, ME
- Adams School, Portland, ME
- Nashua Boiler House, Nashua, NH
- Lakes Region Facility, Laconia, NH
- Industrial Drive, Hudson, NH



## Judd R. Newcomb, CG Geologist/Assistant Project Manager

Credere Associates LLC

## PROFESSIONAL REGISTRATIONS

Certified Geologist: ME #GE493

#### **TRAINING**

- 40-hour OSHA 29 CFR
  1910.120 Hazardous Waste
  Health and Safety Course
  (June 2004)
- △8-hour OSAH 29 CFR 1910.120 Hazardous Waste Health and Safety Refresher Course (April 2009)
- 28-hour OSHA 29 CFR 1910.120 Hazardous Waste Supervisor Health and Safety Course (August 2004)
- 9-hour National Safety Council Basic First Aid Training
- △9-hour National Safety
  Council First Aid for Choking
  and CPR Course
- △Innov-X Systems Radiation Safety & Operator Training for portable XRF Spectrum Analyzers including Radiation Safety & XRF Theory
- △101-Portable Nuclear
  Density/Moisture Gauge
  Use and Safety Training

# PROFESSIONAL ACTIVITIES

- B.S., Geology, University of Maine, August 2000
- Geological Society of Maine
- National Groundwater Association
- National Brownfields Association
- The Geological Society of America
- Economic Development Council of Maine

#### HIGHLIGHTS OF EXPERIENCE

Mr. Newcomb is a Geologist and Assistant Project Manager for Credere Associates with experience in Brownfields, Phase I and Phase II Environmental Site Assessments, remedial system installation, operation, maintenance and reporting, remedial additive injection, UST closure, various drilling methods, and environmental sampling. Mr. Newcomb also has three years experience working with the Massachusetts Contingency Plan, 310 CMR 40.0000.

#### **PROJECT EXPERIENCE INCLUDES:**

#### Environmental Site Assessment/Sampling/Subsurface Investigation

Mr. Newcomb has performed environmental site assessments for numerous sites throughout New England varying from undeveloped land to industrial properties. After performing historical research, initial site investigations, assessing UST, AST, and hazardous materials compliance, interfacing with site personnel, federal, state, and local regulatory agencies as part of the regulatory records review, Mr. Newcomb prepared summary reports with recommended work plans for Phase II investigation. Phase II investigations concerned the release of chlorinated organic compounds, petroleum products, pollutant metals, PCBs, and pesticides to soil, groundwater, air, and concrete. As part of these investigations Mr. Newcomb performed test pitting, mud logging and environmental sampling utilizing a variety of drilling methods including: hollow stem auger, air rotary, mobile tripod, direct push Geoprobe®, and hand held tools. Associated activities included soil and discrete groundwater sample collection, bedrock coring and rock quality determination, monitoring well installation, and rising/falling head tests. Responsibilities included preparation of sampling plans, equipment management, health and safety coordination, accurate description of overburden and bedrock strata, installation of specified well construction, collecting representative samples, preparation of boring logs, data evaluation, interfacing with affected public and regulatory agencies, and project completion reports.

#### **Brownfields**

Mr. Newcomb has conducted extensive historical research, Phase I and Phase II environmental site assessment and investigation activities for the USEPA-funded Brownfields commercial redevelopment and revitalization program and prepared Quality Assurance Project Plans detailing all investigation, sampling, and analytical testing activities that were submitted to, and approved by the USEPA. Additional activities at Brownfields sites included the development of conceptual site models, completion of redevelopment feasibility studies, and the characterization and remediation of contaminated media. Mr. Newcomb has worked with the cities of Lewiston, Bath, Westbrook and Brewer, Maine, as well as with the Southern Maine Regional Planning Commission, and the City of Nashua, New Hampshire to develop Brownfields programs. A representative Brownfields project is summarized below:

#### Eastern Fine Paper, Brewer, Maine

Investigations conducted at the Eastern Fine Paper site included a geophysical electromagnetic survey, test pitting, a combination of direct-push, conventional auger, and drive-and-wash soil borings, installation of groundwater monitoring wells, pore water sampling, and the collection and field screening of soil, sediment, surface water, and groundwater samples. Field screening methods included PID headspace analysis, XRF soil and lead paint analyses, water chemistry field test kits, and direct-read instruments. Contaminants detected at the site primarily included PCBs, petroleum, SVOCs, and metals above Maine DEP Remedial Action Guidelines and EPA TSCA Guidelines. Asbestos-containing building materials and lead-based paint were also identified within the mill building. During redevelopment all asbestos-containing materials were removed and the building was demolished. Soils throughout the site were excavated and transported offsite for disposal, or were relocated and encapsulated on-site. Long-term stream quality and cap

## Judd R. Newcomb, CG

## **Geologist/Assistant Project Manager**

Page 2

maintenance plans have been developed for the site to ensure the protection of human health and the environment. The completed redevelopment of the site has brought approximately 500 new jobs to the City of Brewer.

#### **Southern Maine Regional Planning Commission**

Mr. Newcomb has assisted in the management of projects for the Southern Maine Regional Planning Commission (SMRPC) Brownfields Program. Past and ongoing responsibilities include communications with SMRPC, the Maine DEP, the U.S. EPA, property owners, and developers, project identification, contracting and contractor coordination, project research, scope of work, and report preparation, field work and technical oversight, and EPA reporting. SMRPC projects include:

- North Dam Mill, Biddeford, ME
- Riverdam Mill, Biddeford, ME
- Lincoln Mill, Biddeford, ME
- Robinson Mill, Parsonsfield, ME
- N. Berwick Woolen Mill, Berwick, ME
- Stenton Trust Mill, Sanford, Maine
- Biddeford Box Co., Biddeford, ME
- Dubois Property, Biddeford, ME
- Gagne Property, Biddeford, ME
- Kittery Town Pier, Kittery, ME
- Highland Towing, York, ME
- Municipal Lots, Kennebunk, ME

#### Other representative Brownfields projects include:

- Libbey Mill, Lewiston, ME
- Cowan Mill, Lewiston, ME
- Androscoggin Mill #8, Lewiston, ME
- Saccarappa Park, Westbrook, ME
- Texas Steamship Property, Bath, ME
- The Old Shipyard, Bath, ME
- The Prawer Block, Bath, ME
- Town Landing, Bath, ME
- Robbin's Junkyard, West Bath, ME
- Nashua Boiler House, Nashua, NH
- Majestic Motors, Merrimack, NH
- Sanford Mill, Sanford, ME

- Fmr Milford Police Dept., Milford, NH
- Grugnale Property, Milford, NH
- Granite Landing, Manchester, NH
- Greater ME Auto Auction, Gray, ME
- Gray Municipal Offices, Gray, ME
- Hammond Auto, Fremont, NH

#### **Remedial Systems/Technologies**

Mr. Newcomb has assisted in the installation and operation of several types of remedial systems for the extraction of contaminated media including air sparge, pump and treat, dual phase extraction, and bio-pile venting, and the application of several other remedial technologies including Fenton's Reagent, oxygen releasing compound, and hydrogen releasing compound. Responsibilities included pre-installation/application pilot testing, health and safety coordination the operation, maintenance, and sampling of installed systems, and the preparation of associated operational, sampling, and closure reports. Representative remedial systems projects include:

- New Franklin Laundry Soil Vapor Extraction (SVE) System Design, Bangor, ME
- Smith Street Groundwater Treatment System, Waltham, MA
- Former Rumford National Graphics Product Recovery and Treatment System, Belfast, ME
- Monhegan Island Product Recovery and Treatment System, Monhegan Island, ME

#### **UST Closure**

Mr. Newcomb has overseen numerous UST excavations and removals, inspections of the removed USTs, abandonment-in-place of USTs, and confirmatory soil and groundwater sampling to assess environmental impacts associated with USTs and in accordance with MEDEP Regulations, Chapter 691, and New Hampshire Code of Administrative Rules Env-Wm 1401. Responsibilities included accurate documentation of the closures and waste transportation, representative sampling, and preparation of UST closure reports for submittal to applicable regulatory agencies. Representative UST closures include:

- Former MBNA Belfast Campus diesel UST, Belfast, ME
- LaChance Brothers Filling Station gasoline USTs, Sanford, ME
- Chebeague Island Boat Yard UST piping removal, Chebeague Island, ME
- Maine Turnpike Mile 58 Service Center UST piping removal, Gray, ME
- Kittery Town Pier fuel dock UST, Kittery, ME
- Granite Landing unknown USTs, Manchester, NH

- Army Corps. of Engineers Formerly Used Defense Sites:
  - o Musquatch Mountain, Topsfield, ME
  - o Radar Site, Sedgewick, ME
  - o Former Barracks, Quoddy, ME
  - o Generator Bldng, Little Chebeauge Island, ME
  - o Fire Training Bldng, Little Chebeauge Island, ME
  - o Generator Bldng, Cow Island, ME



# APPENDIX B CREDERE'S PHASE I SCOPE OF WORK



#### Credere's LRPC Brownfields Scope of Work

The following is Credere's scope of work for completion of this Phase I Environmental Site Assessment (ESA) conducted in accordance with the ASTM Standard Practice for Environmental Site Assessments: Phase I Process (ASTM 1527-05). The ASTM Standard Practice for Environmental Site Assessments: Phase I Process (ASTM 1527-05) meets the requirements of the Environmental Protection Agency (EPA) Standards and Practices for All Appropriate Inquiries (AAI); Final Rule (40 CFR Part 312).

The objective of conducting a Phase I ESA is to provide a concise liability assessment in order that informed environmental business decisions may be made regarding the subject property. To accomplish this goal, our reports contain a summary that focuses on potential liabilities and presents conclusions and recommendations for confirming or dismissing the concerns and Recognized Environmental Conditions (RECs) identified during the Phase I ESA.

Our Phase I ESA process consists of the following four tasks: (1) records review, (2) site reconnaissance, (3) interviews, and (4) report. Each of these tasks is described in detail below.

#### **Records Review**

The purpose of the records review was to obtain and review reasonably ascertainable<sup>1</sup> records that help identify recognized environmental conditions in connection with the property. The following state and federal environmental record sources, with the minimum search distances used for each, are reviewed from USEPA websites, the Maine Department of Environmental Protection (MDEP) online databases, and an environmental records report for the property from FirstSearch Technology Corp:

Source	Minimum Search Distance (mi)
Federal NPL Site List	1.0
Federal CERCLIS List	0.5
Federal RCRA TSD	1.0
Facilities List	
Federal RCRA Generators	Property and Adjoining
List	Properties
Federal ERNS List	Property Only
State Leaking UST Sites	0.5
State Registered UST Sites	Property and Adjoining
	Properties

These records are reviewed for database listings associated with activities identified on the target property, or nearby sites that may have the potential to impact the target

Information that is 1) publicly available, 2) obtainable from its source within reasonable time and cost constraints, and 3) practically reviewable (ASTM E 1527-05).

property. Additional state and local records sources are reviewed to enhance or supplement the federal and state sources identified above. These include:

- Lists of Landfill/Solid Waste Disposal Sites
- Records of Emergency Release Reports
- USGS 7.5 Minute Topographic Map
- Department of Natural Resources Publications
- State Geologic Surveys and Reports
- Fire Department
- County Health Department

Historical records for the subject property and surrounding area are reviewed to determine the previous uses or occupancies of the property and surrounding area to identify those uses or occupancies that are likely to have led to recognized environmental conditions in connection with the property. The following historical records are reviewed:

- Ownership/Lease-Right History
- Aerial Photographs
- Historical USGS Topographic Maps
- Historical City Directories
- Historical Fire Insurance Maps
- Historical Property Tax Assessor, Code Enforcement, and Zoning/Land Use Records
- Previous Environmental Investigations

Historical information contained in any previous environmental site assessments is reviewed, incorporated, and referenced as appropriate.

#### **Site Reconnaissance**

The site reconnaissance is performed to obtain information indicating the likelihood of identifying recognized environmental conditions in connection with the target property. The site reconnaissance includes visual and physical observations noted while observing the periphery of the property, the periphery of all structures on the property, all interior spaces of the structure, including maintenance and repair areas, common areas, storage areas, and boiler rooms. Credere notes the presence or absence of the following:

- Storage tanks
- Odors
- Pools of liquid
- Drums
- Identified and/or unidentified substance containers
- Likely PCB-containing transformers or window caulk
- Heating/cooling sources

- Interior stains or corrosion
- Drains and sumps
- Pits, ponds, lagoons
- Stained soil or pavement
- Stressed vegetation
- Solid waste
- Wastewater
- Wells
- Septic systems

Any visual or physical indications of past uses of the property that are likely to involve the use, treatment, storage, disposal, or generation of hazardous substances or petroleum products are noted. Current and/or past uses of adjoining properties and/or the surrounding area to the extent visually or physically observed which are likely to indicate RECs in connection with the adjoining property or property are also noted.

#### **Interviews**

Interviews with current and former owners and occupants are conducted to obtain information indicating RECs in connection with the property. The content of questions to be asked shall attempt to obtain information about uses and conditions of items noted during the site reconnaissance and to obtain any environmentally pertinent documents or any threatened, pending, or past: litigation, administrative actions, or notices of violation relevant to hazardous substances or petroleum products in, on, or from the property. Reasonable attempts will be made to interview the property owner, occupant, and/or key site manager.

Interviews with local government officials are conducted to obtain information indicating RECs in connection with the subject property. Reasonable attempts are made to interview a staff member of the following types of local government agencies: fire department, tax assessor, code enforcement officer, health agencies, and/or local/regional office of state agency having jurisdiction over hazardous waste disposal or other environmental matters in the area in which the property is located.

#### Report

Our report for the Phase I ESA will generally follow the recommended report format presented in ASTM E 1527-05. The report will include documentation to support the analysis, opinions, and conclusions presented in the report, as well as the credentials of the environmental professional(s) responsible for the Phase I ESA. The report will include the environmental professional's opinion of the impact of recognized environmental conditions in connection with the property. If the assessment reveals no evidence of RECs, then a statement to this effect will be made in the report.

#### **Non-ASTM-Scope Considerations**

The following non-ASTM-scope considerations are added to the Credere's scope of work as a part of this Phase I:

- Radon
- Asbestos
- Lead Based Paint
- Polychlorinated Biphenyls (PCBs) Containing Equipment
- Wetlands

These are included as a part of this Phase I ESA because they are deemed to add value for assessments conducted under the LRPC Brownfields Program.

## APPENDIX C SITE PHOTOGRAPHS





View of the residence looking southwest from South Main Street.



## Picture 2

View of the garage building and barn looking northwest from South Main Street.

Phase I Environmental Site Assessment Former Guay's Garage Property 599-601 South Main Street, Franklin, NH NHDES #199808031





View of oil staining and a metal pipe protruding form the ground near southeast corner of the garage.



## Picture 4

View of drums and car parts on the northern side of the garage building looking northwest.

Phase I Environmental Site Assessment Former Guay's Garage Property 599-601 South Main Street, Franklin, NH NHDES #199808031





View of drums located to north of the garage looking southeast.

Note: according to the property information reviewed as part of this Phase I ESA, these drums are not located on the subject property.



## Picture 6

View of a weeping drum located to the north of the garage. Note the oil staining on the ground below the drum.

Phase I Environmental Site Assessment Former Guay's Garage Property 599-601 South Main Street, Franklin, NH NHDES #199808031





View of the drums stored in the alley to the west of the garage building looking northeast.



## Picture 8

View of stained soil around the drums in the alley.

Phase I Environmental Site Assessment Former Guay's Garage Property 599-601 South Main Street, Franklin, NH NHDES #199808031





View of partially buried 5-gallon buckets to the west of the garage.



## Picture 10

View of dumped partially burned trash with scrap metal located in a dumping area west of the building.

Phase I Environmental Site Assessment Former Guay's Garage Property 599-601 South Main Street, Franklin, NH NHDES #199808031





View of dumped building materials in a dumping area west of the building.



## Picture 12

View of dumped household refuse west of the building.

Phase I Environmental Site Assessment Former Guay's Garage Property 599-601 South Main Street, Franklin, NH NHDES #199808031





Picture 13
View of approximately 30-drum to west of the building.



Picture 14
View of discarded fuel oil AST in the residence basement.

Phase I Environmental Site Assessment Former Guay's Garage Property 599-601 South Main Street, Franklin, NH NHDES #199808031





Picture 15
View of the sump observed in the western portion of the garage building.



# Picture 16 View of oil, grease, and paint coated utility sink in garage building.

Phase I Environmental Site Assessment Former Guay's Garage Property 599-601 South Main Street, Franklin, NH NHDES #199808031





View of the 275gallon fuel oil AST and 9-inch by 9inch floor tiles in southeast portion of garage building.



## Picture 18

View of drums in south area of garage building.

Phase I Environmental Site Assessment Former Guay's Garage Property 599-601 South Main Street, Franklin, NH NHDES #199808031





## Picture 19

View of isolated floor oil staining in southwest portion of garage building.



## Picture 20

View of some of the various paints and solvents observed in northwest portion of garage building outside the paint booth.

Phase I Environmental Site Assessment Former Guay's Garage Property 599-601 South Main Street, Franklin, NH NHDES #199808031

Credere Associates, LLC 776 Main Street Westbrook, ME 04092





## Picture 21

View of drums and floor staining in the northwest corner of the garage building.



# Picture 22

View of typical various 5-gallon containers observed in several places on the second floor of barn.

Phase I Environmental Site Assessment Former Guay's Garage Property 599-601 South Main Street, Franklin, NH NHDES #199808031

Credere Associates, LLC 776 Main Street Westbrook, ME 04092



# APPENDIX D PRIOR ENVIRONMENTAL DOCUMENTS





Post Office Box 116 Gilmanton Iron Works New Hampshire 03837-0116

> Phone: (603) 364-2828 FAX: (603) 364-2829

# UNDERGROUND STORAGE TANK CLOSURE REPORT

Former Guay's Garage 601 South Main Street Franklin, New Hampshire

NHDES Site No. 199808031 NHDES Facility ID No. 0-115142

> September 9, 1998 ARC Job No. GU-98250

> > Prepared for:

Mr. Alexander Lachiatto, Esq.
Executor of the Estate of Marion A. Guay
P.O. Box 486
Franklin, New Hampshire 03235

Town Franklin Date of Closure 7/30 & 7/31/98	Mailed
omp New Hampshire Department of Environmental Services	(603) 271-3644 FAX (603) 271-2181
UST CLOSURE NOT	IFICATION
. Telephone Message	Initial
Name	Date:
Street	Telephone:
City	Fax #
. Facility Registration Number: 0-115142	:
Name_ Former Guay's Garage	City Franklin
Street 601 S. Main St.	Telephone
. Owner Name	
Name A. Lachiatto, Esq., Executery Franklin	024 2110
	ted; R=Removal; F=Filled in Place
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	L R F L R F  Tank # 4 Tank # 5
Size 1,000 Size 500 Size 500	Size 500   Size 275
Product Gas Product #2 Oil	Product #2 Oil Product #2 Oil
Will tank be replaced Will tank be replaced Will tank be replaced	Will tank be replaced Will tank be replaced
underground? XXX No underground? XXXX No underground? XXXX No	
Consultant / Contractor: ARC Environmental / CAB Se	rvices
Local Fire Dept. Notified Yes	
Inspector	Date
Field Screening Methods (tank and piping):	
OVA - Headspsce Vapor Methodology	
Sample Information	
	tank # 4 tank # 5
Soil 1 Water 0 Soil 1 Water 0 Soil 1 Water 1	Soil 1 Water 0 Soil 1 Water 0

7. Inspector			Date	
<ol><li>Field Screening Methor</li></ol>	ods (tank and piping	):		
OVA II.	andanaga Vanas	Mathadalagu		
	eadspsce Vapor	methodology		
9. Sample Information				
tank # 1	tank# 2	tank# 3	tank# 4	tank # 5
Soil 1 Water 0	Soil 1 Water 0	Soil 1 Water 1	Soil 1 Water 0	Soil 1 Water 0
Taken By: Gary Am	belas, ARC			
0. Tank Condition:				
tank # 1	tank# 2	tank# 3	tank # 4	tank #
Sound	Sound	Perf.	Sound	Sound

13. Estimated cubic yards of stock piled contaminated soil:

30 cubic yards

techniques to determine rea	he removed tank(s), including the entire excavation area. I am knowledga gulated substance contamination in soils and groundwater. There is no evidence also inspected the excavated tank(s) and found no evidence of leakage	ence of soil or groundwater
Name:	Signature:	Date:



Post Office Box 116 Gilmanton Iron Works New Hampshire 03837-0116

> Phone: [603] 364-2828 FAX: [603] 364-2829

# UNDERGROUND STORAGE TANK CLOSURE REPORT

Former Guay's Garage 601 South Main Street Franklin, New Hampshire

NHDES Site No. 199808031 NHDES Facility ID No. 0-115142

#### 1.0 INTRODUCTION

ARC Environmental Consultants, Inc. ("ARC"), in conjunction with C.A.B. Services, Inc. ("CAB"), closed five underground storage tanks ("UST's") at the above-referenced property as follows:

#### July 30, 1998:

#### Removed:

- (1) 1,000-gallon gasoline
- (1) 500-gallon gasoline
- (1) 500-gallon #2 oil

### July 31, 1998:

#### Removed:

- (1) 500-gallon #2 oil
- (1) 275-gallon #2 oil.

This Underground Storage Tank Closure Report was prepared in accordance with provisions of NH Code of Administrative Rules, Part Env-Wm 1401, "Underground Storage Facilities"; Part Env-Ws 412, "Reporting and Remediation of Oil Discharges"; the NHDES Contaminated Sites Risk Characterization and Management Policy; and the NHDES Underground Storage Tank Closure, Sampling, & Reporting Guidelines.

The subject facility is registered with the NHDES as Facility ID No. 0-115142.

The subject property is located on the west side of South Main Street (US Route 3), approximately 200 feet north of the intersection with Industrial Park Drive, in Franklin, Merrimack

County, New Hampshire. The property location is depicted in Figure 1, Site Location Map. Primary structures on the property include a masonry frame vehicle service garage with an attached wood frame warehouse-type building and an attached wood frame barn, a duplex-style residence, and a residential cottage. The property is serviced by the municipal water supply while sewage disposal is provided by individual septic systems.

The site has a 70+ year history of use as an automotive repair facility. Retail gasoline sales were conducted at the site from the mid-1920's through the mid-1960's. At the time of the UST closures, the service garage was leased by B&T Auto Repair, the barn was utilized by an insulation contractor, the cottage was occupied, while the warehouse and duplex were unoccupied. A site sketch of the property showing the locations of the primary structures and underground storage tanks is depicted in Figure 2.

Land use in the vicinity of the subject site is mixed, with residential and industrial properties within \( \frac{1}{4} \) mile. The subject property is abutted to the west by land belonging to Webster Valve Company, Inc. (DES \( \frac{#199003020}{} \)).

The 500-gallon #2 oil UST serving the cottage was replaced with a 275-gallon above-ground storage tank (on-premises heating use); none of the remaining UST's was replaced. One 500-gallon waste oil UST remains at the property (not in use). The tank is located beneath the slab of the service garage floor, and is scheduled to be closed (in place) in the near future.

#### 2.0 PERSONNEL

The following personnel were present during the tank closure activities:

Mr. Gary Ambelas, President ARC Environmental Consultants, Inc. Gilmanton Iron Works, NH

Mr. Martin Sullivan, Foreman, & Support Staff C.A.B. Services, Inc. Dover, NH

#### 3.0 TANK CLOSURES

The tank removals were performed in accordance with provisions of Env-Wm 1401.18, "Underground Storage Facilities, Permanent Closure".

#### 3.1 1,000-Gallon Gasoline UST

The 1,000-gallon gasoline UST was located approximately mid-way between the service garage and roadway, as shown on Figure 2.

The top of the UST was exposed on July 30, 1998. Residual product and tank bottom solids were removed by a vac-truck from Cyn Environmental Services Corp. of Hooksett, NH. A combined total of 539 gallons of waste gasoline/water mixture and solids was removed from the 1,000 and 500-gallon gasoline tanks on July 30, and transported to Environmental Compliance Corp. in South Portland, ME for disposal under a Uniform Hazardous Waste Manifest.

The UST was subsequently excavated and placed on the ground surface for visual inspection. The tank was corroded and badly pitted; some pitting may have given rise to pinhole perforations along the interior surface. After checking for explosive vapors with an LEL monitor, the tank was entered and cleaned by CAB personnel.

#### 3.2 500-Gallon Gasoline UST

The 500-gallon gasoline UST was located immediately to the west of the fuel pump island. The top of the UST was exposed on July 30, 1998, and the tank was observed to be full of a gasoline/water mixture. After removal of the residual product, the tank was excavated and placed on the ground surface for visual inspection.

The tank exhibited evidence of corrosion (rust) and was badly pitted. However, no holes or perforations were observed, and the tank appeared to be structurally sound. After checking for explosive vapors with an LEL monitor, the tank was entered and cleaned by CAB personnel.

#### 3.3 500-Gallon #2 Oil UST (Warehouse)

One 500-gallon #2 oil UST was located to the east of the warehouse portion of the commercial building. The tank stored #2 oil for on-premises heating use. The top of the UST was exposed on July 30, 1998, and the tank was observed to be empty. The tank was excavated and placed on the ground surface for visual inspection.

The tank was badly corroded and several perforations, up to one inch in diameter, were observed along the bottom surface. Visual and olfactory evidence of a discharge of oil to the underlying

soils was noted. After checking for explosive vapors with an LEL monitor, the tank was entered and cleaned by CAB personnel.

Approximately 39 tons of petroleum-contaminated soils were excavated from the tank grave on the morning of July 31, and encased in poly sheeting to await off-site disposal. Contaminated soils were excavated to the top of the water table, approximately 14 feet below ground surface. On August 21, 1998 NHDES staff approved an Authorization for Initial Response Action for excavation and disposal of the contaminated soils (see Section 6.0, below).

#### 3.4 500-Gallon #2 Oil (Cottage)

The other 500-gallon UST was located to the west of the rental cottage on the property, and stored #2 oil for on-premises heating. A combined total of 129 gallons of virgin #2 oil and tank bottom solids was pumped from the 500 and 275-gallon #2 oil tanks at the cottage by Cyn on July 30, and transported to Environmental Compliance Corp. in South Portland, ME for disposal under a Non-Hazardous Waste Manifest.

The tank was excavated on July 31 and placed on the ground surface for inspection. The tank exhibited some evidence of corrosion (rust), but otherwise appeared to be structurally sound. After checking for explosive vapors with an LEL monitor, the tank was entered and cleaned by CAB personnel.

#### 3.5 275-Gallon #2 Oil (Cottage)

The 275-gallon #2 oil UST was located at the southeast corner of the cottage. The tank was placed out of service when the replacement 500-gallon UST was installed at the cottage. The top of the UST was exposed on July 30, 1998, and residual product removed. The UST was excavated on July 31.

The tank exhibited evidence of corrosion (rust) and minor pitting. However, no holes or perforations were observed, and the tank appeared to be structurally sound. After checking for explosive vapors with an LEL monitor, the tank was cut and cleaned by CAB personnel.

All cleaned tanks were removed from the property by CAB on July 30 and 31 for off site disposal.

#### 3.6 Soils

Soils encountered during the UST excavations typically consisted of a veneer of fill material (up to one foot thick in the vicinity of the gasoline UST's) overlying coarse to fine-grained brown sands.

#### 3.7 Groundwater

Groundwater was encountered at a depth of approximately 14 feet below ground surface in the 500-gallon UST (warehouse) excavation following removal of impacted soils.

#### 4.0 FIELD SCREENING

Composite soil samples were collected from the base of each UST pit for field screening immediately following the removal of the tanks on July 30 and July 31, 1998. The samples were collected by boring into the base of the tank pit to a depth of 12 inches using a 36-inch Dutch-type soil auger (pre-cleaned before each use). The samples were analyzed on-site, using headspace vapor methodology, with a Thermo Environmental Model 580B photo-ionization type organic vapor analyzer ("OVA"). The 580B OVA has a sensitivity of 0.1 parts per million ("ppm"), and was calibrated to a benzene standard using a reference gas of isobutylene. Ambient background levels and instrument drift displayed by the OVA were in the range ±0.1 ppm.

The samples were placed in unused one-gallon zipper-lock plastic storage bags, which were then sealed and gently warmed to ambient temperature for several minutes. After the sample was gently agitated, the OVA probe was inserted through the seal into the headspace above the soil and the maximum vapor concentration recorded.

The composite soil samples from beneath each tank consisted of a mixture of soils collected from three discrete locations beneath the UST, except for the 1,000-gallon gasoline tank, where five discrete samples were composited, and the 500-gallon #2 oil UST at the warehouse, where the sample was collected from the excavator bucket following removal of contaminated soils. The results of the OVA screening are presented below in Table 1 (page 6). OVA concentrations are given in parts per million (ppm).

Significant levels of volatile organic vapors were detected in the sample collected at the top of the water table in the 500-gallon UST pit at the warehouse.

Table 1.
Soil OVA Headspace Screening Results.
601 South Main St.
Franklin, NH

Sample Location	Sample Depth (feet)	OVA Conc. (ppm)
1,000 Gasoline	7	3.3
500 Gasoline	6	1.0
500 #2 Oil (Warehouse)	14	43
500 #2 Oil (Cottage)	7	9.1
275 #2 Oil (Cottage)	6	3.3

#### 5.0 LABORATORY ANALYSIS

The laboratory analyses employed are those required by the NHDES Underground Storage Tank Closure, Sampling, & Reporting Guidelines, "Recommended Analytical Methods for Petroleum Contaminated Sites", (October 1997).

#### 5.1 Soils

A portion of the bottom composite sample from beneath each tank was placed in clean 4-ounce glass jars with teflon-lined lids, placed in an insulated cooler with ice packs for temporary storage and transport, and delivered the day of collection under Chain-of-Custody protocol to Aquarian Analytical, Inc. in Canterbury, NH. The jars were packed as full as possible to minimize headspace.

The samples from beneath the gasoline UST's were analyzed for volatile organic compounds ("VOC's") using EPA Method 8260B, and for total petroleum hydrocarbons ("TPH", gasoline standard) using EPA Method 8015. The samples from beneath the heating oil UST's were analyzed for VOC's using EPA Method 8260B, for TPH (fuel oil standard) using EPA Method 8100, and for polycyclic aromatic hydrocarbons ("PAH") using EPA Method 8270.

The laboratory analyses are summarized below in Table 2 (page 8). Concentrations of VOC's, TPH, and PAH are expressed in milligrams per kilogram (mg/kg), or parts per million (ppm). The NHDES Method 1 Soil Standards for Category NH S-2 soils are also listed for each compound where appropriate. Concentrations in excess of NH S-2 Soil Standards are shown in **bold** type.

(The selection of the S-2 soil classification is based upon the following factors: 1) soils are potentially accessible; 2) children may be present at the site; and 3) site usage is of high frequency but low intensity. [NHDES Contaminated Sites Risk Characterization and Management Policy {"RCMP"}, January 1998, Section 3.3 and Figure 2.])

All laboratory analytical data and Chain-of-Custody documents are appended to this report (Appendix B).

The laboratory analytical data indicate that in-situ soils beneath all five UST's meet current NHDES regulatory standards for Category NH S-2 (and NH S-1) soils.

#### 5.2 Groundwater

Groundwater samples were collected from the base of the 500-gallon UST excavation at the warehouse on July 31. Samples for VOC analyses were placed in clean 40 milliliter glass vials with teflon septum caps. Each sample was preserved with 2-3 drops of hydrochloric acid (1:1 HCl). Samples for PAH analysis were placed in one liter amber glass jars with teflon-lined lids. All samples were placed in an insulated cooler with ice packs immediately after collection for storage and transport. All groundwater samples were delivered the day of collection to Aquarian Analytical, Inc. All sample collection, transport, and delivery was performed following standard Chain of Custody protocol.

The groundwater laboratory analytical data from the 500-gallon UST are also attached in Appendix B.

The laboratory analytical data for the groundwater samples are summarized below in Table 3 (page 9). Concentrations of VOC's in Table 4 are expressed in micrograms per liter ( $\mu g/l$ ), or parts per billion (ppb). The NHDES Method 1 Groundwater Standards for Category NH GW-1 groundwater are also listed for each compound where appropriate. Concentrations in excess of NH GW-1 Groundwater Standards are shown in **bold** type.

The groundwater data indicate elevated levels of PAH, and the presence of naphthalene at concentrations in excess of NHDES Ambient Groundwater Quality Standards ("AGQS") for Category NH GW-1 groundwater.

# 601 South Main Street Franklin, New Hampshire

Table 2. Soil Analysis Summary - Gasoline & Heating Oil UST's
601 South Main Street
Franklin, NH
All Concentrations in mg/kg

Compound	1,000 Gas (Gar.)	500 Gas (Gar.)	500 #2 Oil (Whse.)	500 #2 Oil (Cot.)	275 #2 Oil (Cot.)	NH S-2 Stnd. (1)
VOC's: Benzene Toluene Ethylbenzene Xylenes (total) MTBE	BDL	BDL	BDL	BDL	BDL	0.3
	0.13	BDL	BDL	BDL	BDL	100
	BDL	BDL	BDL	BDL	BDL	140
	0.27	0.06	BDL	BDL	BDL	1,100
	BDL	BDL	BDL	BDL	BDL	2
Alkylbenzenes (2) Isopropylbenzene Naphthalene (as VOC)	0.29	0.15	BDL	BDL	BDL	59
	BDL	BDL	BDL	BDL	BDL	123
	0.13	BDL	BDL	0.78	BDL	5
PAH (All)	30 NT	32 NT	800 BDL	23 BDL	BDL_	10,000 Various

BDL = Below Detection Limits.

NT = Not Tested

- (1) NHDES Contaminated Sites Risk Characterization and Management Policy, Table 3, Section 7.5(2), Jan. 1998
- Alkylbenzenes include 1,2,4-trimethylbenzene, 1,3,5-trimethylbenzene, n-propylbenzene, p-isopropyltoluene, n-butylbenzene, sec-butylbenzene, and tert-butylbenzene.

Table 3. Groundwater Analysis Summary - 500-G. #2 Oil UST 601 South Main Street Franklin, NH All Concentrations in ug/l

Compound	500 #2 Oil (Whse.)	NH GW-1 Stnd. (1)
Benzene Toluene Ethylbenzene Xylenes (total) MTBE	BDL BDL BDL BDL	5 1,000 700 10,000 70
Alkylbenzenes <sup>(2)</sup> Isopropylbenzene Naphthalene (as VOC)	BDL BDL <b>25</b>	50 280 20
PAH: Acenaphthene Acenaphthylene Anthracene Fluorene Naphthalene (as PAH) Phenanthrene Pyrene	240 44 37 43 <b>23</b> 85 71	420 420 2,100 280 20 210 210
2-Methylnaphthalene 1-Methylnaphthalene	25 24	280 N/A

BDL = Below Detection Limits.

(1) NHDES Contaminated Sites Risk Characterization and Management Policy, Table 2, Section 7.4(5), Jan. 1998

(2) Alkylbenzenes include 1,2,4-trimethylbenzene, 1,3,5-trimethylbenzene, n-propylbenzene, p-isopropyltoluene, n-butylbenzene, sec-butylbenzene, and tert-butylbenzene.

#### 6.0 CONTAMINATED SOIL DISPOSAL

#### 6.1 Certification

On July 31, 1998, Mr. Alexander Lachiatto, Esq., Executor of the Estate of Marion Guay (facility owner) and Mr. Gary Ambelas of ARC signed the NHDES "Certification of Origin for Soils Contaminated with Virgin Petroleum Products". A copy of the Certification is attached in Appendix C.

Since the estimated weight of contaminated soils did not exceed 50 tons, no analytical testing (except flashpoint determination) of the soils was performed (Env-Ws 412.14(e)).

#### 6.2 Soil Disposal

On August 31 and September 1, 1998 CAB personnel transported 39.44 tons of virgin petroleum-contaminated soils from the subject site to MTS, Inc. in Epsom, NH under Straight Bills of Lading for disposal. Copies of the Bills of Lading and weight slips are attached in Appendix D.

#### 7.0 FLOOR DRAIN DISCHARGE

On July 31, 1998 ARC personnel collected soil and standing liquid samples from a subsurface dry well located between the warehouse and roadway, as shown on Figure 2. The dry well receives effluent from several active floor drains located in the warehouse; one floor drain receives effluent from a wash basin in the service garage. At the time of inspection, the dry well was filled to within two feet of the ground surface with a dark oily sludge and a dark oily water mixture. Although construction details of the well could not be visually verified, it is believed that liquids entering the well eventually leach into the surrounding soils, as a discharge pipe was not observed.

The sludge/soil sample was placed in two clean 4-ounce glass jars with teflon-lined lids, and placed in an insulated cooler with ice packs for temporary storage and transport. Liquid samples for VOC analysis were placed in clean 40 milliliter glass vials with teflon septum caps. Each sample was preserved with 2-3 drops of hydrochloric acid (1:1 HCl). Liquid samples for PAH analysis were placed in one liter amber glass jars with teflon-lined lids. All samples were placed in an insulated cooler with ice packs immediately after collection for storage and transport. All drain samples were delivered the day of collection to Aquarian Analytical, Inc. All sample collection, transport, and delivery was performed following standard Chain of Custody protocol.

The sludge/soil sample (identified as "DRAIN") was analyzed for VOC's (EPA Method 8260B), TPH (EPA Method 8100), PAH (EPA Method 8270), and for the eight RCRA priority pollutant metals (as total metals, EPA Method 6020). The drain water sample (identified as "DRAIN") was analyzed for VOC's and PAH. The laboratory analytical data for the drain samples are summarized below in Table 4 (soil, page 12) and Table 5 (liquid, page 13). Concentrations in excess of applicable NHDES regulatory standards are shown in **bold** type.

The laboratory data indicate that regulated contaminants have entered the dry well via the floor drains, resulting in contamination of solids and standing liquids at concentrations in excess of regulatory standards.

#### 8.0 CONCLUSIONS & RECOMMENDATIONS

#### 8.1 Conclusions

On July 30 and 31, 1998 ARC Environmental Consultants, Inc. supervised the removal of five underground storage tanks from the former Guay's Garage, 601 South Main Street, Franklin, NH. The site is serviced by the municipal water supply and on-site septic systems. One out of service 500-gallon waste oil UST remains at the site, beneath the concrete floor of the vehicle service garage.

A discharge of oil, as defined in Env-Ws 412.02 and 412.03, has occurred at two locations at the subject site: beneath a 500-gallon #2 oil UST, and at a dry well which receives discharges from floor drains in the commercial building.

Approximately 39 tons of virgin petroleum-contaminated soil were excavated from beneath the 500-gallon #2 oil UST at the warehouse and transported off-site for disposal. Laboratory analysis of soil samples collected from the base of each tank pit indicates that the soils beneath the UST's meet NHDES regulatory standards for VOC's, TPH, and PAH for Category NH S-2 (and NH S-1) soils. Laboratory analysis of a groundwater sample collected from the base of the 500-gallon #2 oil UST at the warehouse indicated the presence of naphthalene at concentrations in excess of AGQS.

Laboratory analysis of a soil/sludge sample collected from the dry well indicated the presence of TPH, lead, and the carcinogenic PAH compounds benzo(a)anthracene and benzo(a)pyrene at concentrations in excess of regulatory standards. Laboratory analysis of a standing liquid sample collected from the well indicated elevated levels of petroleum constituents and 1,4-dichlorobenzene (p-DCB), and concentrations of total alkylbenzenes slightly in excess of AGQS.

Table 4. Soil/Sludge Analysis Summary - Floor Drain Dry Well
601 South Main Street
Franklin, NH
All Concentrations in mg/kg

Compound	DRAIN	NH S-2 Stnd. (1)
Benzene Toluene Ethylbenzene Xylenes (total) MTBE	BDL 0.47 0.66 6.20 BDL	0.3 100 140 1,100 2
Alkylbenzenes <sup>(2)</sup> Isopropylbenzene Naphthalene (as VOC)	7.51 BDL 0.82	59 123 5
трн	19,000	10,000
RCRA Metals: Arsenic Barium Cadmium Chromium Lead Mercury Selenium Silver	8.3 150 7.9 56 <b>970</b> 0.3 2.5 0.9	12 2,500 230 460 <sup>(3)</sup> 400 7 2,500 200
PAH: Acenaphthene Acenaphthylene Anthracene Benzo(a)anthracene Benzo(b)fluoranthene Benzo(k)fluoranthene Benzo(a)pyrene Chrysene Fluoranthene Fluorene Naphthalene (as PAH) Benzo(g,h,i)perylene Phenanthrene Pyrene 2-Methylnaphthalene 1-Methylnaphthalene	BDL BDL 2.1 6.5 4.1 4.3 5.4 9.9 19 2.9 2.2 BDL 17 23 2.5 1.9	270 300 1,700 2 20 20 0.7 200 2,500 510 5 <combined Total 2,400&gt; 150 N/A</combined 

Notes: See Table 5, page 13.

Table 5. Liquid Analysis Summary - Floor Drain Dry Well
601 South Main Street
Franklin, NH
All Concentrations in ug/l

Compound	DRAIN	NH GW-1 Stnd. (4)
Benzene	BDL	5
Toluene	493	1,000
Ethylbenzene	26	700
Xylenes (total)	96	10,000
MTBE	BDL	70
Alkylbenzenes(2)	51	50
Isopropylbenzene	BDL	280
Naphthalene (as VOC)	12	20
1,4-Dichlorobenzene	60	75
PAH:		
Acenaphthene	BDL	420
Acenaphthylene	BDL	420
Anthracene	BDL	2,100
Fluorene	BDL	280
Naphthalene (as PAH)	7	20
Phenanthrene	BDL	210
Pyrene	BDL	210
2-Methylnaphthalene	BDL	280
1-Methylnaphthalene	BDL	N/A_

BDL = Below Detection Limits.

N/A = The NHDES has not adopted a regulatory limit for this compound.

- (1) NHDES Contaminated Sites Risk Characterization and Management Policy, Table 3, Section 7.5(2), Jan. 1998
- (2) Alkylbenzenes include 1,2,4-trimethylbenzene, 1,3,5-trimethylbenzene, n-propylbenzene, p-isopropyltoluene, n-butylbenzene, sec-butylbenzene, and tert-butylbenzene.

(3) Chromium (VI), Chromium (III) = 2,500

(4) NHDES Contaminated Sites Risk Characterization and Management Policy, Table 2, Section 7.4(5), Jan. 1998

#### 8.2 Recommendations

To address the issues noted during the UST closures, ARC Environmental Consultants, Inc. makes the following recommendations:

- ullet That a Site Investigation, pursuant to Env-Ws 412.10, be performed to assess the nature and extent of soil and groundwater contamination at the site.
- That contaminated solids and liquids be removed from the dry well for off-site disposal, that the well be dismantled, and that impacted soils, if any, in the immediate vicinity of the well be excavated and transported off-site for disposal.
- That all floor drains in the commercial building be permanently sealed to bring the facility into compliance with the NH Groundwater Protection Rules, Env-Ws 410.
- That the remaining 500-gallon waste oil UST beneath the service garage be permanently closed, per Env-Wm 1401.18.

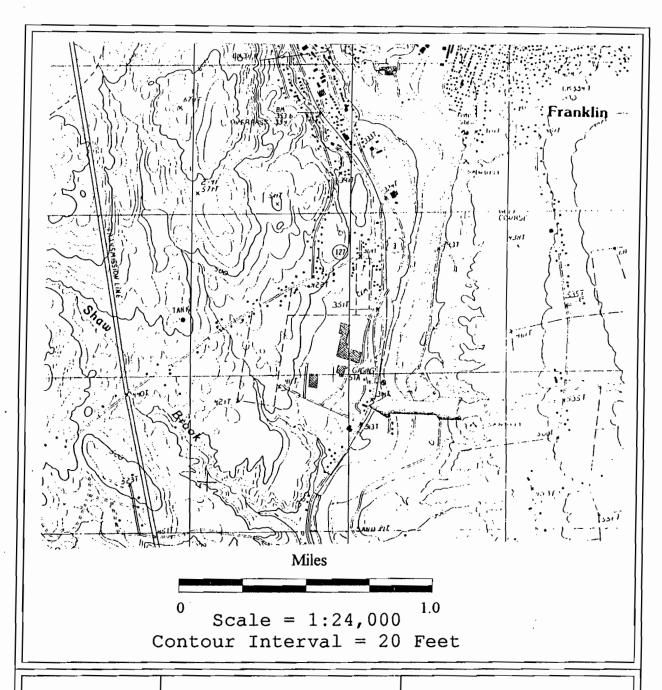
ARC ENVIRONMENTAL CONSULTANTS, INC.

Gary Ambelas, Project Manager

# FIGURES



USGS 7.5 Minute Topographic Map Franklin, NH Quadrangle Provisional Edition 1987

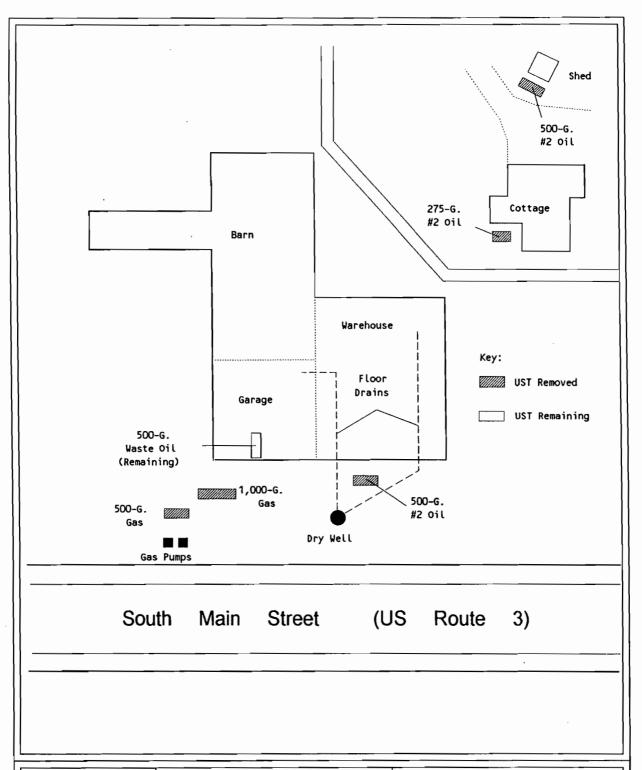




# ARC ENVIRONMENTAL CONSULTANTS, INC.

Gilmanton Iron Works New Hampshire Figure 1.
Site Location Map

Estate of M. Guay 601 S. Main St. Franklin, NH





# ARC ENVIRONMENTAL CONSULTANTS, INC.

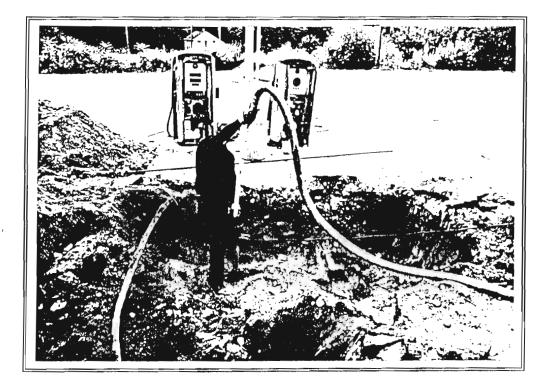
Gilmanton Iron Works, NH

Approximate Scale Feet 40

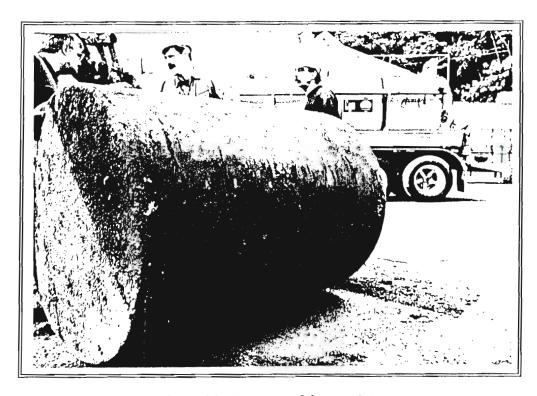
Figure 2.
Site Plan
Former Guay's Garage
601 S. Main St.
Franklin, NH

# PHOTOGRAPHS

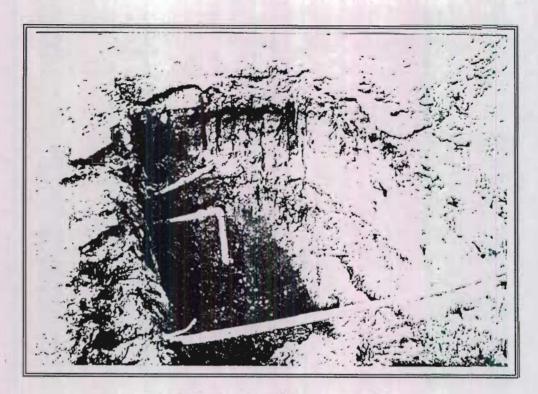




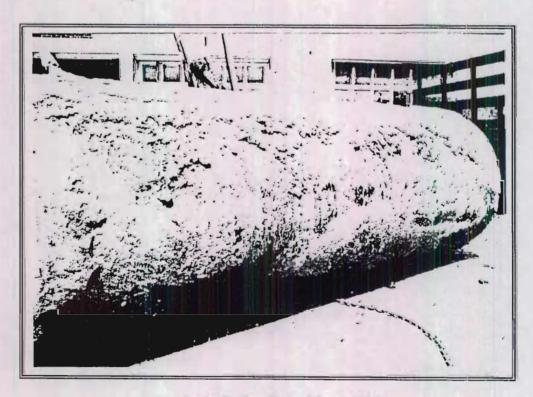
1. Product Removal, 500-G. Gasoline UST



2. 500-G. Gasoline UST



3. 500-G. Gasoline UST Pit



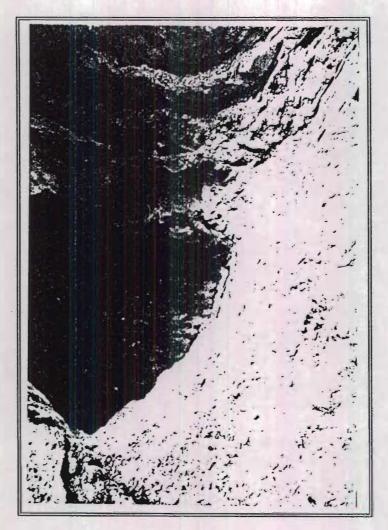
4. 1,000-G. Gasoline UST



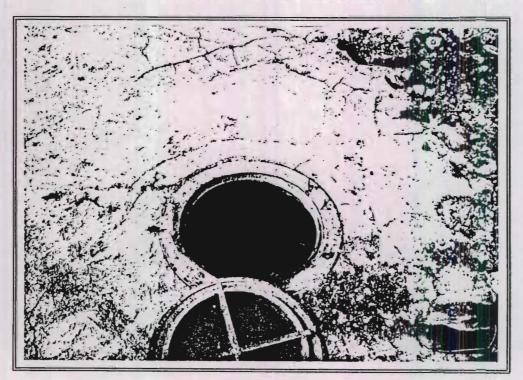
5. 1,000-G. Gasoline UST Pit



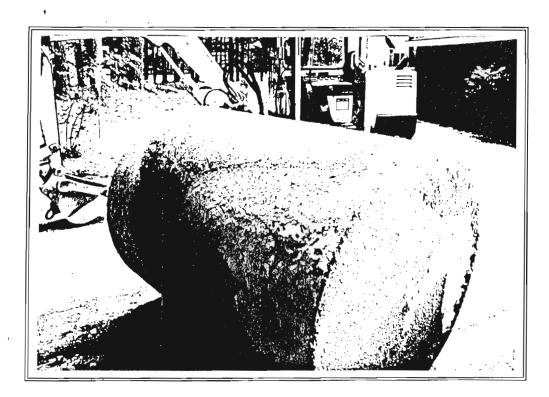
6. 500-G. #2 Oil UST at Warehouse Note Perforations



7. 500-G. #2 Oil UST Pit (Final)



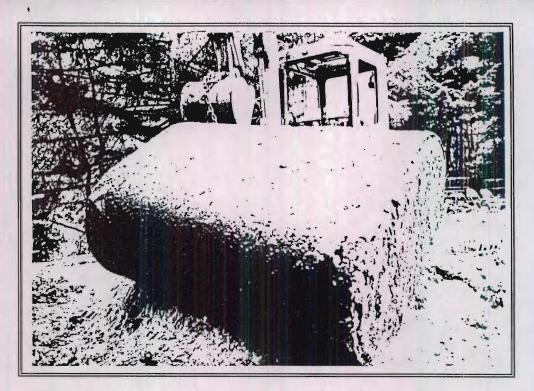
8. Dry Well



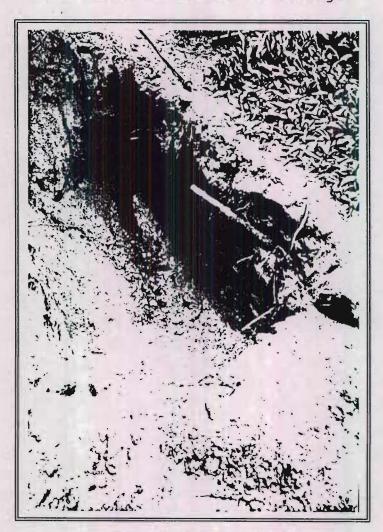
9. 500-G. #2 Oil UST at Cottage



10. 500-G. #2 Oil UST Pit



11. 275-G. #2 Oil UST at Cottage



12. 275-G. #2 Oil UST Pit

# APPENDICES



#### APPENDIX A

#### Limitations

- 1. The conclusions and recommendations presented in this report are based solely upon the described Scope of Work, and not on scientific tasks or procedures beyond the described Scope of Work or the time and budgetary constraints imposed by the Client. The stated conclusions and recommendations represent ARC's best professional judgement, and should not be construed as statements of scientific fact or certainty.
- 2. In preparing this report, ARC may have relied on information provided by state and local officials, and other parties herein referenced, and on information on record with various state and local agencies made available to ARC at the stated time of inspection. ARC did not attempt to independently verify the accuracy or completeness of all information received or reviewed as part of this investigation.
- 3. This report may contain the results of quantitative analyses performed by an outside laboratory. In such cases, ARC has relied upon the data provided to formulate its stated conclusions and recommendations, and has not attempted to independently evaluate the reliability of these data.
- 4. In the event that the conclusions stated in this report express ARC's professional opinion that a release of hazardous substances or petroleum products to the environment has occurred at the subject site, ARC recommends that the Client consult with its legal counsel regarding the duty to report the discharge to the appropriate federal, state, or local authorities. If ARC is not notified in a timely manner that such duty to report has been discharged by another party, ARC may, under certain legal interpretations, be deemed to be a "knowledgeable party", and may consult with its legal counsel regarding its duty to report or confirm the discharge to the appropriate authorities. Otherwise, ARC agrees to maintain in strictest confidence the information contained in this report.
- 5. This report was prepared for the exclusive use of the Estate of Marion Guay, Attorney Alexander Lachiatto, Executor, and except as described below, no other party may rely on the information herein contained. ARC hereby grants the Estate of Marion Guay, Attorney Alexander Lachiatto, Executor, permission to distribute this report, or copies thereof in whole, to its affiliates, assigned agents, or, in Client's discretion, to other parties having a direct financial interest in the subject property.

# **APPENDIX B**

Laboratory Analytical Data

#### Laboratory Services

P.O. Box 186 Canterbury, N.H. 03224 603-783-9097 08-05-98, 13:54

Mr. Gary Ambelas ARC Environmental Consultants P.O. Box 116 Gilmanton, NH 03837-0116

Dear Mr. Ambelas:

Please find enclosed the reports, and invoice for the samples that were logged in on, 07-30-98.

AAI Sample	Date Sampled	Project Description	Sample Location
39979		GUAY'S GARAGE - FRANKLIN	500 GAS
39980		GUAY'S GARAGE - FRANKLIN	1K GAS

To perform these analyses, the following methods were used:

QTY. EPA Methodologies/Applications

2 VOA + TPH Soil gasoline Mod. 8260/8015

Thank you for using Aquarian Analytical Inc. on this project. If I can be of any further help, please feel free to call.

Sincerely,

Laboratory Director

doc. L09017

### Laboratory Services

P.O. Box 186 Canterbury, N.H. 03224 603-783-9097

08-05-98,13:54

As part of Aquarian's ongoing quality assurance program, all analyses included the following quality assurance measures.

Samples were received in an acceptable condition.

Samples were prepared and analyzed within the appropriate hold time specified in the method referred to on the analyses sheet.

The instrument that was used for the analyses was calibrated and/or tuned at the required frequency.

A daily calibration check was performed.

A daily blank was run, and contamination was not observed at levels that would affect the analyses.

For all work, internal standards, and surrogates gave appropriate response levels.

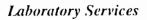
Matrix spikes were added where appropriate, and recoveries were within the acceptable range.

Duplicates were run at the frequency specified in the applicable state or federal regulations.

In addition to the above steps, all original-raw data is on file at Aquarian Analytical's offices for inspection when required.

Exceptions (if any)

Certification



P.O. Box 186 Canterbury, N.H. 03224 603-783-9097

#### Volatile Organic Report 08-05-98,13:53 Sample 39980

Project = GUAY'S GARAGE - FRANKLIN Matrix = Soil

Date Sampled = 07-30-98,11:00

Date Logged In = 07-30-98,15:22

Date of Analysis = 08-04-98

Sampler = G. AMBELAS

Location = 1K GAS Town = FRANKLIN

Organic Compound	Result mg/k	g Det. Lim. mg/kg
Benzene	BD	0.030
Bromobenzene	BD	0.030
Bromodichloromethane	BD	0.030
Bromoform	BD	0.030
Bromomethane	BD	0.030
n-Butylbenzene	BD	0.030
sec-Butylbenzene	BD	0.030
tert-Butylbenzene	BD	0.030
Carbon-Tetrachloride	BD	0.030
Chlorobenzene	BD	0.030
Chloroethane	BD	0.030
Chloroform	BD	0.030
Chloromethane	BD	0.030
2-Chlorotoluene	BD	0.030
4-Chlorotoluene	BD	0.030
Dibromochloromethane	BD	0.030
1,2 Dibromo-3-Chloropropane	BD	0.060
1,2 Dibromoethane	BD	0.060
Dibromomethane	BD	0.030
1,2 Dichlorobenzene	BD	0.030
1,3 Dichlorobenzene	BD	0.030
1,4 Dichlorobenzene	BD	0.030
Dichlorodifluoromethane	BD	0.060
1,1 Dichloroethane	BD	0.030
1,2 Dichloroethane	BD	0.030
1,1 Dichloroethene	BD	0.030
cis-1,2 Dichloroethene	BD	0.030
trans-1,2 Dichloroethene	BD	0.030
1,2 Dichloropropane	BD	0.060
1,3 Dichloropropane	BD	0.030
2,2 Dichloropropane	BD	0.030
1,1 Dichloropropene	BD	0.030
cis-1,3 Dichloropropene	BD	0.030
trans-1,3 Dichloropropene	BD	0.030

### Laboratory Services

P.O. Box 186

Canterbury, N.H. 03224

603-783-9097

Volatile Organic Report 08-05-98,13:53 Sample 39980

Project Location = GUAY'S GARAGE - FRANKLIN

= 1K GAS

Matrix = Soil

Organic Compound	Result mg/kg	g Det. Lim. mg/kg
Ethylbenzene	BD	0.030
Hexachlorobutadiene	BD	0.060
Isopropylbenzene	BD	0.030
p-Isopropyltoluene	BD	0.030
Methylene Chloride	BD	0.090
Naphthalene	0.130	0.060
n-Propylbenzene	BD	0.030
Styrene	BD	0.030
1,1,1,2 Tetrachloroethane	BD	0.030
1,1,2,2 Tetrachloroethane	BD	0.030
Tetrachloroethene	BD	0.030
Toluene	0.130	0.030
1,2,3 Trichlorobenzene	BD	0.060
1,2,4 Trichlorobenzene	BD	0.060
1,1,1 Trichloroethane	BD	.0.030
1,1,2 Trichloroethane	BD	0.030
Trichloroethene	BD	0.030
Trichlorofluoromethane	BD	0.060
1,2,3 Trichloropropane	BD	0.030
1,2,4 Trimethylbenzene	0.150	0.030
1,3,5 Trimethylbenzene	0.140	0.030
Vinyl Chloride	BD	0.030
o-Xylene	0.070	0.030
m&p-Xylene	0.200	0.030
Ethyl Ether	BD	0.450
Acetone	BD	1.500
Methylethylketone MEK	BD	0.750
Methylisobutylketone	BD	0.750
Tetrahydrofuran	BD	0.450
Methyl-t-butyl ether	BD	0.030
Total Pet. Hydrocarbons	30.0	3.0
Method = purge trap/GC/MS		Results for TPH are expressed in mg/kg (ppm)

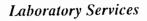
#### Comments:

TPH was performed with gasoline as the standard.

Method of VOA Analysis = EPA-8260B

BD = Below Detection Limit - Results are in parts per million (ppm) unless noted.

Page 2



P.O. Box 186 Canterbury, N.H. 03224 603-783-9097

Volatile Organic Report 08-05-98,13:53 Sample 39979

= GUAY'S GARAGE - FRANKLIN Matrix = Soil Project

Date Sampled = 07-30-98,09:30 Date Logged In = 07-30-98,15:20 Date of Analysis = 08-03-98 Sampler = G. AMBELASLocation = 500 GAS Town = FRANKLIN

Organic Compound	Result mg/kg	Det. Lim. mg/kg
Benzene	BD	0.040
Bromobenzene	BD	0.040
Bromodichloromethane	BD	0.040
Bromoform	BD	0.040
Bromomethane	BD	0.040
n-Butylbenzene	BD	0.040
sec-Butylbenzene	BD	0.040
tert-Butylbenzene	BD	0.040
Carbon-Tetrachloride	BD	0.040
Chlorobenzene	BD	0.040
Chloroethane	BD	0.040
Chloroform	BD	0.040
Chloromethane	BD	0.040
2-Chlorotoluene	BD	0.040
4-Chlorotoluene	BD	0.040
Dibromochloromethane	BD	0.040
1,2 Dibromo-3-Chloropropane	BD	0.080
1,2 Dibromoethane	BD	0.080
Dibromomethane	BD	0.040
1,2 Dichlorobenzene	BD	0.040
1,3 Dichlorobenzene	BD	0.040
1,4 Dichlorobenzene	BD	0.040
Dichlorodifluoromethane	BD	0.080
1,1 Dichloroethane	BD	0.040
1,2 Dichloroethane	BD	0.040
1,1 Dichloroethene	BD	0.040
cis-1,2 Dichloroethene	BD	0.040
trans-1,2 Dichloroethene	BD	0.040
1,2 Dichloropropane	BD	0.080
1,3 Dichloropropane	BD	0.040
2,2 Dichloropropane	BD	0.040
1,1 Dichloropropene	BD	0.040
cis-1,3 Dichloropropene	BD	0.040
trans-1,3 Dichloropropene	BD	0.040

# Laboratory Services

P.O. Box 186

Canterbury, N.H. 03224

603-783-9097

Volatile Organic Report 08-05-98,13:53 Sample 39979

Project

= GUAY'S GARAGE - FRANKLIN

Location = 500 GAS

Matrix = Soil

Organic Compound	Result mg/kg	Det. Lim. mg/kg
Ethylbenzene	BD	0.040
Hexachlorobutadiene	BD	0.080
Isopropylbenzene	BD	0.040
p-Isopropyltoluene	BD	0.040
Methylene Chloride	BD	0.120
Naphthalene	BD	0.080
n-Propylbenzene	BD	0.040
Styrene	BD	0.040
1,1,1,2 Tetrachloroethane	BD	0.040
1,1,2,2 Tetrachloroethane	BD	0.040
Tetrachloroethene	BD	0.040
Toluene	BD	0.040
1,2,3 Trichlorobenzene	BD	0.080
1,2,4 Trichlorobenzene	BD	0.080
1,1,1 Trichloroethane	BD	0.040
1,1,2 Trichloroethane	BD	0.040
Trichloroethene	BD	0.040
Trichlorofluoromethane	BD	0.080
1,2,3 Trichloropropane	BD	0.040
1,2,4 Trimethylbenzene	0.150	0.040
1,3,5 Trimethylbenzene	BD	0.040
Vinyl Chloride	BD	0.040
o-Xylene	BD	0.040
m&p-Xylene	0.057	0.040
Ethyl Ether	BD	0.600
Acetone	BD	2.000
Methylethylketone MEK	BD	1.000
Methylisobutylketone	BD	1.000
Tetrahydrofuran	BD	0.600
Methyl-t-butyl ether	BD	0.040
Total Pet. Hydrocarbons	32.0	4.0
Method = purge trap/GC/MS		Results for TPH are expressed in mg/kg (ppm)

#### Comments:

TPH was performed with gasoline as the standard.

Method of VOA Analysis = EPA-8260B

BD = Below Detection Limit - Results are in parts per million (ppm) unless noted.



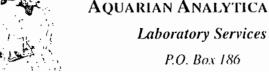
Laboratory Services

153 West Road Canterbury, NH 03324 Phone: (603)783-9097 FAX: (603)783-0360

LABORATORY INFORMATION	PROJEC	T INFORMATION
Turn-around-time: Same Day(100% upcharg	Project #:	Project Manager: Gary Ambelas
Turn-around-time: 24 Hrs(50% upcharge)	Project Name: GUAY'S GANAGE	Report to: ARC
Turn-around-time: 48 Hrs(25% upcharge)	Town/Site: Franklin, NH	Invoice to: ARC
Turn-around-time: Normal $XX$	Sampler: G.A.	Phone: 364-2828
Account #: 61070	Company: ARC	FAX: 364-2829

	SAMPLE INFORMAT	ION				VO	C's	-sv	OC's	5		Τ	PH		FA	ETA	LS				O.	ΓHΕ	R-(	Lis	1)		200000
AAI ID#	Sample ID	Date/Time 7/30/98	Sample Matrlx (S-soil / W-water / O-other)	Number of Containers	ă	EPA 8260 / EPA 8260B	EPA 8260B WITH IIC S EPA 8240 / EPA 624	18	Chlorinated Compounds Only	EPA 8270 (A-B/N)	EPA 8270 ( PAH)	EPA 8015M (Gasoline)	EPA 8100M (Fuel Oil)	ringerprint		<u>s</u>	8 RCRA Soll (TCLPTotal)	Miscellaneous-List	EPA 608/8080 PCBS	EPA 608/8080 Pesticides	EPA 8150 Herbicides	EPA SW846-7 Reactivity	EPA 1010 Ignitabilty/Flashpoint	EPA 150.1/9045 pH	EPA 120.1 Conductivity		
39979	500 GAS 1 K GAS	0930	2	/		X						X															
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Please refer to back side for sampling guidelines.



P.O. Box 186 Canterbury, N.H. 03224 603-783-9097 08-11-98,15:16

Mr. Gary Ambelas ARC Environmental Consultants P.O. Box 116 Gilmanton, NH 03837-0116

Dear Mr. Ambelas:

Please find enclosed the reports, and invoice for the samples that were logged in on, 07-31-98.

AAI Sample	Date Sampled	Project Description	Sample Location
40049 40050 40051 40052 40053 40054	07-31-98 07-31-98 07-31-98 07-31-98 07-31-98	GUAY'S GARAGE - FRANKLIN	275 COTTAGE 500 COTTAGE 500 #2 500 #2 DRAIN DRAIN

To perform these analyses, the following methods were used:

#### QTY. EPA Methodologies/Applications

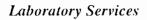
- 4 VOA + TPH Soil fuel oil Mod. 8260/8100
- ·2 EPA-8260 VOA Water
- 6 EPA-625/8270/525.1 PAH only
- 1 Soil/Solid Digestion
- 7 Metals analysis (excluding mercury)
- Mercury analysis

Thank you for using Aquarian Analytical Inc. on this project. If I can be of any further help, please feel free to call.

Sincerely,

Laboratory Director

doc. L09061



P.O. Box 186

Canterbury, N.H. 03224

603-783-9097

08-11-98,15:16

As part of Aquarian's ongoing quality assurance program, all analyses included the following quality assurance measures.

Samples were received in an acceptable condition.

Samples were prepared and analyzed within the appropriate hold time specified in the method referred to on the analyses sheet.

The instrument that was used for the analyses was calibrated and/or tuned at the required frequency.

A daily calibration check was performed.

A daily blank was run, and contamination was not observed at levels that would affect the analyses.

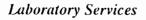
For all work, internal standards, and surrogates gave appropriate response levels.

Matrix spikes were added where appropriate, and recoveries were within the acceptable range.

Duplicates were run at the frequency specified in the applicable state or federal regulations.

In addition to the above steps, all original-raw data is on file at Aquarian Analytical's offices for inspection when required.

Exceptions (if any)	
	<i>iuX</i>
	Certification



P.O. Box 186 Canterbury, N.H. 03224 603-783-9097

Volatile Organic Report 08-11-98,15:08 Sample 40051

Project = GUAY'S GARAGE - FRANKLIN Matrix = Soil

Date Sampled = 07-31-98,09:30 Date Logged In = 07-31-98,13:23 Date of Analysis = 08-06-98

Sampler = G. AMBELAS Location = 500 #2

Town = FRANKLIN

Organic Compound	Result mg/kg	g Det. Lim. mg/kg
Benzene	BD	0.120
Bromobenzene	BD	0.120
Bromodichloromethane	BD	0.120
Bromoform	BD	0.120
Bromomethane	BD	0.120
n-Butylbenzene	BD	0.120
sec-Butylbenzene	BD	0.120
tert-Butylbenzene	BD	0.120
Carbon-Tetrachloride	BD	0.120
Chlorobenzene	BD	0.120
Chloroethane	BD	0.120
Chloroform	BD	0.120
Chloromethane	BD	0.120
2-Chlorotoluene	BD	
4-Chlorotoluene	BD	0.120 0.120
Dibromochloromethane	BD	0.120
1,2 Dibromo-3-Chloropropane	BD	0.120
1,2 Dibromoethane	BD	0.240
Dibromomethane	BD	0.240
1,2 Dichlorobenzene	BD	0.120
1,3 Dichlorobenzene	BD	0.120
1,4 Dichlorobenzene	BD	0.120
Dichlorodifluoromethane	BD	0.120
1,1 Dichloroethane	BD	0.120
1,2 Dichloroethane	BD	0.120
1,1 Dichloroethene	BD	0.120
cis-1,2 Dichloroethene	BD	0.120
trans-1,2 Dichloroethene	BD	0.120
1,2 Dichloropropane	BD	0.120
1,3 Dichloropropane	BD	0.120
2,2 Dichloropropane	BD	0.120
1,1 Dichloropropene	BD	0.120
cis-1,3 Dichloropropene	BD	0.120
trans-1,3 Dichloropropene	BD	0.120

## Laboratory Services

P.O. Box 186 Canterbury, N.H. 03224

603-783-9097

Volatile Organic Report 08-11-98,15:08 Sample 40051

Project = GUAY'S GARAGE - FRANKLIN

Location = 500 #2 Matrix = Soil

Organic Compound	Result mg/kg	g Det. Lim. mg/kg
Ethylbenzene	BD	0.120
Hexachlorobutadiene	BD	0.240
Isopropylbenzene	BD	0.120
p-Isopropyltoluene	BD	0.120
Methylene Chloride	BD	0.360
Naphthalene	BD	0.240
n-Propylbenzene	BD	0.120
Styrene	BD	0.120
1,1,1,2 Tetrachloroethane	BD	0.120
1,1,2,2 Tetrachloroethane	BD	0.120
Tetrachloroethene	BD	0.120
Toluene	BD	0.120
1,2,3 Trichlorobenzene	BD	0.240
1,2,4 Trichlorobenzene	BD	0.240
1,1,1 Trichloroethane	BD	0.120
1,1,2 Trichloroethane	BD	0.120
Trichloroethene	BD	0.120
Trichlorofluoromethane	BD	0.240
1,2,3 Trichloropropane	BD	0.120
1,2,4 Trimethylbenzene	BD	0.120
1,3,5 Trimethylbenzene	BD	0.120
Vinyl Chloride	BD	0.120
o-Xylene	BD	0.120
m&p-Xylene	BD	0.120
Ethyl Ether	BD	1.800
Acetone	BD	6.000
Methylethylketone MEK	BD	3.000
Methylisobutylketone	BD	3.000
Tetrahydrofuran	BD	1.800
Methyl-t-butyl ether	BD	0.120
Total Pet. Hydrocarbons	800.0	30.0
Method = EPA-8100 (mod.)		Results for TPH are expressed in mg/kg (ppm)

#### Comments:

TPH was performed with fuel oil as the standard.

Method of VOA Analysis = EPA-8260B
BD = Below Detection Limit - Results are in parts per million (ppm) unless noted.

## Laboratory Services

P.O. Box 186 Canterbury, N.H. 03224 603-783-9097

# Poly Aromatic Hydrocarbon Report 08-11-98,15:09 Sample 40051

Date Sampled = 07-31-98,09:30 Date Logged In = 07-31-98,13:23 Analysis Date = 08-05-98 Extraction Date = 08-05-98

Sampler = G. AMBELAS Location = 500 #2 Town = FRANKLIN

Matrix

= Soil

Organic Compound	Result mg/kg	Det. Lim. mg/kg
Acenaphthene	BD	0.20
Acenaphthylene	BD	0.20
Anthrecene	BD	0.20
Benzo (a) anthracene	BD	0.20
Benzo (b) fluoranthene	BD	0.20
Benzo (k) fluoranthene	BD	0.20
Benzo (ghi) perylene	BD	0.20
Benzo (a) pyrene	BD	0.20
Chrysene	BD	0.20
Dibenzo (a,h) anthracene	BD	0.20
Fluoranthene	BD	0.20
Fluorene	BD	0.20
Indeno (1,2,3-cd) pyrene	BD	0.20
Naphthalene	BD	0.20
Phenanthrene	BD	0.20
Pyrene	BD	0.20
2-Methylnaphthalene	BD	0.20
1-Methylnaphthalene	BD	0.20

#### Comments:

BD = Below Detection Limit Method of Analyses = EPA-8270 All Results are in parts per million (ppm), except as noted.

## Laboratory Services

P.O. Box 186 Canterbury, N.H. 03224 603-783-9097

Volatile Organic Report 08-11-98,15:13 Sample 40052

Project = GUAY'S GARAGE - FRANKLIN

Matrix = Water

Date Sampled = 07-31-98,10:20 Date Logged In = 07-31-98,13:24 Sampler = G. AMBELAS

Date of Analysis = 08-06-98

Location = 500 #2 Town = FRANKLIN

Organic Compound	Result ug/L	Det. Lim. ug/L
Benzene	BD	5
Bromobenzene	BD	5
Bromodichloromethane	BD	5
Bromoform	BD .	5 ·
Bromomethane	BD	5
Bromochloromethane	BD	5
n-Butylbenzene	BD	5
sec-Butylbenzene	BD	5
tert-Butylbenzene	BD	5 5
Carbon-Tetrachloride	BD	
Chlorobenzene	BD	5
Chloroethane	BD	5
Chloroform	BD	5
Chloromethane	BD	5
2-Chlorotoluene	BD	5
4-Chlorotoluene	BD	5
Dibromochloromethane	BD	5
1,2 Dibromo-3-Chloropropane	BD	10
1,2 Dibromoethane	BD	10
Dibromomethane	BD	5
1,2 Dichlorobenzene	BD	5
1,3 Dichlorobenzene	BD	5
1,4 Dichlorobenzene	BD	5
Dichlorodifluoromethane	BD	1.0
1,1 Dichloroethane	BD	5
1,2 Dichloroethane	BD	5
1,1 Dichloroethene	BD	5
cis-1,2 Dichloroethene	BD	5
trans-1,2 Dichloroethene	BD	5
1,2 Dichloropropane	BD	10
1,3 Dichloropropane	BD	5
2,2 Dichloropropane	BD	5
1,1 Dichloropropene	BD	5
cis-1,3 Dichloropropene	BD	5
trans-1,3 Dichloropropene	BD	5
Ethylbenzene	BD	5
Hexachlorobutadiene	BD	10

### Laboratory Services

P.O. Box 186 Canterbury, N.H. 03224

603-783-9097

Volatile Organic Report 08-11-98,15:13 Sample 40052

Project

= GUAY'S GARAGE - FRANKLIN

Matrix = Water

Date Sampled

Sampler = G. AMBELAS

Date Sampled = 07-31-98,10:20 Date Logged In = 07-31-98,13:24

Location = 500 #2

Date of Analysis = 08-06-98

Town = FRANKLIN

Organic Compound	Result ug	/L Det. Lim. ug/L
Isopropylbenzene	BD	5
p-Isopropyltoluene	BD	5
Methylene Chloride	BD	15
Naphthalene	25	10
n-Propylbenzene	BD	5
Styrene	BD	5
1,1,1,2 Tetrachloroethane	BD	5
1,1,2,2 Tetrachloroethane	BD	5
Tetrachloroethene	BD	5
Toluene	BD	5
1,2,3 Trichlorobenzene	BD	10
1,2,4 Trichlorobenzene	BD	10
1,1,1 Trichloroethane	BD	5
1,1,2 Trichloroethane	BD	5
Trichloroethene	BD	5
Trichlorofluoromethane	BD	10
1,2,3 Trichloropropane	BD	5
1,2,4 Trimethylbenzene	BD	5
1,3,5 Trimethylbenzene	BD	5
Vinyl Chloride	BD	5 5
o-Xylene	BD	
m&p-Xylene	BD	5
Ethyl Ether	BD	<b>7</b> 5
Acetone .	BD	<b>2</b> 5 <u>.</u> 0
Methylethylketone MEK	BD	125
Methylisobutylketone	BD	125
Tetrahydrofuran	BD	75
Methyl-t-butyl ether	BD	5
Carbon Disulfide	BD	10
2-Hexanone	BD	125

#### Comments:

Method of Analyses = EPA-8260B

BD = Below Detection Limit - Results are in parts per billion (ppb).



#### Laboratory Services

P.O. Box 186 Canterbury, N.H. 03224 603-783-9097

# Poly Aromatic Hydrocarbon Report 08-11-98,15:12 Sample 40052

Date Sampled = 07-31-98,10:20 Date Logged In = 07-31-98,13:24 Extraction Date = 08-04-98 Analysis Date = 08-05-98

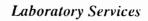
Sampler = G. AMBELAS Location = 500 #2 Town = FRANKLIN

Matrix = Water

Organic Compound	Result ug/L	Det. Lim. ug/L
Acenaphthene	240.0	20.0
Acenaphthylene	44.0	20.0
Anthrecene	37.0	20.0
Benzo (a) anthracene	BD	20.0
Benzo (b) fluoranthene	BD	20.0
Benzo (k) fluoranthene	BD	20.0
Benzo (ghi) perylene	BD	20.0
Benzo (a) pyrene	BD	20.0
Chrysene	BD	20.0
Dibenzo (a,h) anthracene	BD	20.0
Fluoranthene	BD	20.0
Fluorene	43.0	20.0
Indeno (1,2,3-cd) pyrene	BD	20.0
Naphthalene	23.0	20.0
Phenanthrene	85.0	20.0
Pyrene	71.0	20.0
2-Methylnaphthalene	25.0	20.0
1-Methylnaphthalene	24.0	20.0

#### Comments:

BD = Below Detection Limit Method of Analyses = EPA-8270 All Results are in parts per billion (ppb), except as noted.



P.O. Box 186 Canterbury, N.H. 03224 603-783-9097

Volatile Organic Report 08-11-98,15:08 Sample 40050

Project = GUAY'S GARAGE - FRANKLIN Matrix = Soil

Date Sampled = 07-31-98,09:10 Date Logged In = 07-31-98,13:23 Date of Analysis = 08-05-98

Sampler = G. AMBELAS Location = 500 COTTAGE

Town = FRANKLIN

Organic Compound	Result mg/kg	Det. Lim. mg/kg
Benzene	BD	0.040
Bromobenzene	BD	0.040
Bromodichloromethane	BD	0.040
Bromoform	BD	0.040
Bromomethane	BD	0.040
n-Butylbenzene	BD	0.040
sec-Butylbenzene	BD	0.040
tert-Butylbenzene	BD	0.040
Carbon-Tetrachloride	BD	0.040
Chlorobenzene	BD	0.040
Chloroethane	BD	0.040
Chloroform	BD	0.040
Chloromethane	BD	0.040
2-Chlorotoluene	BD	0.040
4-Chlorotoluene	BD	0.040
Dibromochloromethane	BD	0.040
1,2 Dibromo-3-Chloropropane	BD	0.080
1,2 Dibromoethane	BD	0.080
Dibromomethane	BD	0.040
1,2 Dichlorobenzene	BD	0.040
1,3 Dichlorobenzene	BD	0.040
1,4 Dichlorobenzene	BD	0.040
Dichlorodifluoromethane	BD	0.080
1,1 Dichloroethane	BD	0.040
1,2 Dichloroethane	BD	0.040
1,1 Dichloroethene	BD	0.040
cis-1,2 Dichloroethene	BD	0.040
trans-1,2 Dichloroethene	BD	0.040
1,2 Dichloropropane	BD	0.080
1,3 Dichloropropane	BD	0.040
2,2 Dichloropropane	BD	0.040
1,1 Dichloropropene	BD	0.040
cis-1,3 Dichloropropene	BD	0.040
trans-1,3 Dichloropropene	BD	0.040

#### Laboratory Services

P.O. Box 186

Canterbury, N.H. 03224

603-783-9097

Volatile Organic Report 08-11-98,15:08 Sample 40050

Project Location = GUAY'S GARAGE - FRANKLIN

= 500 COTTAGE

Matrix = Soil

Organic Compound	Result mg/kg	Det. Lim. mg/kg
Ethylbenzene	BD	0.040
Hexachlorobutadiene	BD	0.080
Isopropylbenzene	BD	0.040
p-Isopropyltoluene	BD	0.040
Methylene Chloride	BD	0.120
Naphthalene	0.776	0.080
n-Propylbenzene	BD	0.040
Styrene	BD	0.040
1,1,1,2 Tetrachloroethane	BD	0.040
1,1,2,2 Tetrachloroethane	BD	0.040
Tetrachloroethene	BD	0.040
l'oluene l'acceptant de la company de la com	BD	0.040
1,2,3 Trichlorobenzene	BD	0.080
1,2,4 Trichlorobenzene	BD	0.080
l,1,1 Trichloroethane	BD	0.040
1,1,2 Trichloroethane	BD	0.040
Trichloroethene	BD	0.040
Trichlorofluoromethane	BD	0.080
1,2,3 Trichloropropane	BD	0.040
1,2,4 Trimethylbenzene	BD	0.040
1,3,5 Trimethylbenzene	BD	0.040
Jinyl Chloride	BD	0.040
o-Xylene	BD	0.040
n&p-Xylene	BD	0.040
Ethyl Ether	BD	0.600
Acetone	BD	2.000
Methylethylketone MEK	BD	1.000
Methylisobutylketone	BD	1.000
letrahydrofuran	BD	0.600
Methyl-t-butyl ether	BD	0.040
Total Pet. Hydrocarbons	23.0	10.0
Method = EPA-8100 (mod.)	20.0	Results for TPH are
Direction of the contract of t		expressed in mg/kg (ppm)

#### Comments:

TPH was performed with #4 fuel oil as the standard.

Method of VOA Analysis = EPA-8260B

BD = Below Detection Limit - Results are in parts per million (ppm) unless noted.



### Laboratory Services

P.O. Box 186 Canterbury, N.H. 03224 603-783-9097

# Poly Aromatic Hydrocarbon Report 08-11-98,15:09 Sample 40050

Date Sampled = 07-31-98,09:10 Date Logged In = 07-31-98,13:23 Analysis Date = 08-05-98 Extraction Date = 08-05-98

Sampler = G. AMBELAS Location = 500 COTTAGE Town = FRANKLIN Matrix = Soil

Organic Compound	Result mg/kg	Det. Lim. mg/kg
Acenaphthene	BD	0.20
Acenaphthylene	BD	0.20
Anthrecene	BD	0.20
Benzo (a) anthracene	BD	0.20
Benzo (b) fluoranthene	BD	0.20
Benzo (k) fluoranthene	BD	0.20
Benzo (ghi) perylene	BD	0.20
Benzo (a) pyrene	BD	0.20
Chrysene	BD	0.20
Dibenzo (a,h) anthracene	BD	0.20
Fluoranthene	BD	0.20
Fluorene	BD	0.20
Indeno (1,2,3-cd) pyrene	BD	0.20
Naphthalene	BD	0.20
Phenanthrene	BD	0.20
Pyrene	BD	0.20
2-Methylnaphthalene	BD	0.20
1-Methylnaphthalene	BD	0.20

#### Comments:

BD = Below Detection Limit Method of Analyses = EPA-8270 All Results are in parts per million (ppm), except as noted.

## Laboratory Services

P.O. Box 186 Canterbury, N.H. 03224 603-783-9097

Volatile Organic Report 08-11-98,15:07 Sample 40049

Project = GUAY'S GARAGE - FRANKLIN Matrix = Soil

Date Sampled = 07-31-98,08:30 Date Logged In = 07-31-98,13:21 Date of Analysis = 08-06-98

Location = 275 COTTAGE = FRANKLIN Town

Sampler = G. AMBELAS

Organic Compound	Result mg/kg	g Det. Lim. mg/kg
Benzene	BD	0.030
Bromobenzene	BD	0.030
Bromodichloromethane	BD	0.030
Bromoform	BD	0.030
Bromomethane	BD	0.030
n-Butylbenzene	BD	0.030
sec-Butylbenzene	BD	0.030
tert-Butylbenzene	BD	0.030
Carbon-Tetrachloride	BD	0.030
Chlorobenzene	BD	0.030
Chloroethane	BD	0.030
Chloroform	BD	0.030
Chloromethane	BD	0.030
2-Chlorotoluene	BD	0.030
4-Chlorotoluene	BD	0.030
Dibromochloromethane	BD	0.030
1,2 Dibromo-3-Chloropropane	BD	0.060
1,2 Dibromoethane	BD	0.060
Dibromomethane	BD	0.030
1,2 Dichlorobenzene	BD	0.030
1,3 Dichlorobenzene	BD	0.030
1,4 Dichlorobenzene	BD	0.03.0
Dichlorodifluoromethane	BD	0.060
1,1 Dichloroethane	BD	0.030
1,2 Dichloroethane	BD	0.030
1,1 Dichloroethene	BD	0.030
cis-1,2 Dichloroethene	BD	0.030
trans-1,2 Dichloroethene	BD	0.030
1,2 Dichloropropane	BD	0.060
1,3 Dichloropropane	BD	0.030
2,2 Dichloropropane	BD	0.030
1,1 Dichloropropene	BD	0.030
cis-1,3 Dichloropropene	BD	0.030
trans-1,3 Dichloropropene	BD	0.030

### Laboratory Services

P.O. Box 186 Canterbury, N.H. 03224

603-783-9097

Volatile Organic Report 08-11-98,15:08 Sample 40049

Project

= GUAY'S GARAGE - FRANKLIN

Location = 275 COTTAGE

Matrix = Soil

Ethylbenzene	Organic Compound	Result mg/k	g Det. Lim. mg/kg
Isopropylbenzene	Ethylbenzene	BD	0.030
p-Isopropyltoluene         BD         0.030           Methylene Chloride         BD         0.090           Naphthalene         BD         0.060           n-Propylbenzene         BD         0.030           Styrene         BD         0.030           1,1,2,2 Tetrachloroethane         BD         0.030           1,1,2,2 Tetrachloroethane         BD         0.030           Tetrachloroethene         BD         0.030           Toluene         BD         0.030           1,2,3 Trichlorobenzene         BD         0.060           1,2,4 Trichloroethane         BD         0.030           1,1,2 Trichloroethane         BD         0.030           1,1,2 Trichloroethane         BD         0.030           Trichloroethene         BD         0.030           Trichloroethane         BD         0.030           Trichlorofluoromethane         BD         0.030           Trichloropropane         BD         0.030           1,2,3 Trichloropropane         BD         0.030           1,3,5 Trimethylbenzene         BD         0.030           Vinyl Chloride         BD         0.030           Stylene         BD         0.030	Hexachlorobutadiene	BD	0.060
Methylene Chloride         BD         0.090           Naphthalene         BD         0.060           n-Propylbenzene         BD         0.030           Styrene         BD         0.030           1,1,2,2 Tetrachloroethane         BD         0.030           1,1,2,2 Tetrachloroethane         BD         0.030           Tetrachloroethene         BD         0.030           Toluene         BD         0.030           1,2,3 Trichlorobenzene         BD         0.060           1,2,4 Trichloroethane         BD         0.030           1,1,1 Trichloroethane         BD         0.030           1,1,2 Trichloroethane         BD         0.030           1,1,2 Trichloroethane         BD         0.030           Trichlorofluoromethane         BD         0.030           Trichlorofluoromethane         BD         0.030           1,2,3 Trichloropropane         BD         0.030           1,2,4 Trimethylbenzene         BD         0.030           1,3,5 Trimethylbenzene         BD         0.030           1,3,5 Trimethylbenzene         BD         0.030           0-Xylene         BD         0.030           Ethyl Ether         BD         0.0	Isopropylbenzene	BD	0.030
Naphthalene         BD         0.060           n-Propylbenzene         BD         0.030           Styrene         BD         0.030           1,1,1,2 Tetrachloroethane         BD         0.030           1,1,2,2 Tetrachloroethane         BD         0.030           Tetrachloroethene         BD         0.030           Toluene         BD         0.030           1,2,3 Trichlorobenzene         BD         0.060           1,2,4 Trichloroethane         BD         0.030           1,1,1 Trichloroethane         BD         0.030           1,1,2 Trichloroethane         BD         0.030           Trichlorofluoromethane         BD         0.030           Trichlorofluoromethane         BD         0.030           1,2,4 Trimethylbenzene         BD         0.030           1,2,2 Trichloropropane         BD         0.030           1,3,5 Trimethylbenzene         BD         0.030           Vinyl Chloride         BD         0.030           waylene         BD         0.030           Ethyl Ether         BD         0.030           Acetone         BD         0.750           Methylethylketone         BD         0.750 <t< td=""><td>p-Isopropyltoluene</td><td>BD</td><td>0.030</td></t<>	p-Isopropyltoluene	BD	0.030
n-Propylbenzene         BD         0.030           Styrene         BD         0.030           1,1,1,2 Tetrachloroethane         BD         0.030           1,1,2,2 Tetrachloroethane         BD         0.030           Tetrachloroethene         BD         0.030           Toluene         BD         0.030           1,2,3 Trichlorobenzene         BD         0.060           1,2,4 Trichloroethane         BD         0.030           1,1,2 Trichloroethane         BD         0.030           1,1,2 Trichloroethane         BD         0.030           Trichlorofluoromethane         BD         0.030           Trichlorofluoromethane         BD         0.030           Trichloropropane         BD         0.030           1,2,3 Trichloropropane         BD         0.030           1,2,4 Trimethylbenzene         BD         0.030           1,3,5 Trimethylbenzene         BD         0.030           Waylene         BD         0.030           Mcp-Xylene         BD         0.030           Mcp-Xylene         BD         0.030           Methylethylketone         BD         0.750           Methylisobutylketone         BD         0.750	Methylene Chloride	BD	0.090
Styrene         BD         0.0330           1,1,1,2 Tetrachloroethane         BD         0.0330           1,1,2,2 Tetrachloroethane         BD         0.030           Tetrachloroethene         BD         0.030           Toluene         BD         0.030           1,2,3 Trichlorobenzene         BD         0.060           1,2,4 Trichloroethane         BD         0.030           1,1,1 Trichloroethane         BD         0.030           1,1,2 Trichloroethane         BD         0.030           Trichloroethene         BD         0.030           Trichloroethene         BD         0.030           Trichloropropane         BD         0.030           1,2,3 Trichloropropane         BD         0.030           1,2,4 Trimethylbenzene         BD         0.030           1,3,5 Trimethylbenzene         BD         0.030           Vinyl Chloride         BD         0.030           o-Xylene         BD         0.030           M&P-Xylene         BD         0.030           Ethyl Ether         BD         0.030           Acetone         BD         0.750           Methylisobutylketone         BD         0.750	Naphthalene	BD	0.060
1,1,1,2 Tetrachloroethane       BD       0.030         1,1,2,2 Tetrachloroethane       BD       0.030         Tetrachloroethene       BD       0.030         Toluene       BD       0.030         1,2,3 Trichlorobenzene       BD       0.060         1,2,4 Trichloroethane       BD       0.030         1,1,1 Trichloroethane       BD       0.030         1,1,2 Trichloroethane       BD       0.030         Trichloroethene       BD       0.030         Trichlorofluoromethane       BD       0.030         1,2,3 Trichloropropane       BD       0.030         1,2,4 Trimethylbenzene       BD       0.030         1,3,5 Trimethylbenzene       BD       0.030         Vinyl Chloride       BD       0.030         0-Xylene       BD       0.030         M&P-Xylene       BD       0.030         Ethyl Ether       BD       0.030         Acetone       BD       0.750         Methylethylketone MEK       BD       0.750         Methylisobutylketone       BD       0.030         Total Pet. Hydrocarbons       BD       0.030         Method = EPA-8100 (mod.)       Results for TPH are	n-Propylbenzene		0.030
1,1,2,2 Tetrachloroethane	Styrene	BD	0.030
Tetrachloroethene Toluene Toluene BD 0.030 1,2,3 Trichlorobenzene BD 0.060 1,2,4 Trichlorobenzene BD 0.060 1,1,1 Trichloroethane BD 0.030 1,1,2 Trichloroethane BD 0.030 Trichloroethene BD 0.030 Trichlorofluoromethane BD 0.030 Trichlorofluoromethane BD 0.030 Trichlorofluoromethane BD 0.030 Trichlorofluoromethane BD 0.030 1,2,3 Trichloropropane BD 0.030 1,2,4 Trimethylbenzene BD 0.030 Vinyl Chloride BD 0.030 Vinyl Chloride BD 0.030 0-Xylene BD 0.030 Ethyl Ether BD 0.030 Ethyl Ether BD 0.050 Methylethylketone MEK BD 0.750 Methylisobutylketone BD 0.750 Tetrahydrofuran BD 0.030 Methyl-t-butyl ether BD 0.030 Methylet. Hydrocarbons BD 10.0 Method = EPA-8100 (mod.) Results for TPH are	1,1,1,2 Tetrachloroethane	BD	0.030
Toluene	1,1,2,2 Tetrachloroethane	BD	0.030
1,2,3 Trichlorobenzene       BD       0.060         1,2,4 Trichloroethane       BD       0.060         1,1,1 Trichloroethane       BD       0.030         1,1,2 Trichloroethane       BD       0.030         Trichloroethene       BD       0.030         Trichlorofluoromethane       BD       0.060         1,2,3 Trichloropropane       BD       0.030         1,2,4 Trimethylbenzene       BD       0.030         1,3,5 Trimethylbenzene       BD       0.030         Vinyl Chloride       BD       0.030         o-Xylene       BD       0.030         M&P-Xylene       BD       0.030         Ethyl Ether       BD       0.450         Acetone       BD       0.450         Methylethylketone MEK       BD       0.750         Methylisobutylketone       BD       0.750         Tetrahydrofuran       BD       0.450         Methyl-t-butyl ether       BD       0.030         Total Pet. Hydrocarbons       BD       10.0         Method = EPA-8100 (mod.)       Results for TPH are	Tetrachloroethene	BD	0.030
1,2,4 Trichlorobenzene       BD       0.060         1,1,1 Trichloroethane       BD       0.030         1,1,2 Trichloroethane       BD       0.030         Trichloroethene       BD       0.030         Trichlorofluoromethane       BD       0.060         1,2,3 Trichloropropane       BD       0.030         1,2,4 Trimethylbenzene       BD       0.030         1,3,5 Trimethylbenzene       BD       0.030         Vinyl Chloride       BD       0.030         o-Xylene       BD       0.030         m&p-Xylene       BD       0.030         Ethyl Ether       BD       0.450         Acetone       BD       0.750         Methylethylketone MEK       BD       0.750         Methylisobutylketone       BD       0.750         Tetrahydrofuran       BD       0.450         Methyl-t-butyl ether       BD       0.030         Total Pet. Hydrocarbons       BD       10.0         Method = EPA-8100 (mod.)       Results for TPH are	Toluene	BD	0.030
1,1,1 Trichloroethane 1,1,2 Trichloroethane 1,1,2 Trichloroethane 1,2,3 Trichloropropane 1,2,4 Trimethylbenzene 1,3,5 Trimethylbenzene 1,3,5 Trimethylbenzene 20 BD 20 0.030 20 0.030 21 0.030 31 0.030 31 0.030 31 0.030 32 0.030 33 0.030 34 0.030 35 0.030 36 0.030 37 0.030 38 0.030 38 0.030 39 0.030 30 0.030 3	1,2,3 Trichlorobenzene	BD	0.060
1,1,2 Trichloroethane       BD       0.030         Trichloroethene       BD       0.030         Trichlorofluoromethane       BD       0.060         1,2,3 Trichloropropane       BD       0.030         1,2,4 Trimethylbenzene       BD       0.030         1,3,5 Trimethylbenzene       BD       0.030         Vinyl Chloride       BD       0.030         o-Xylene       BD       0.030         m&p-Xylene       BD       0.030         Ethyl Ether       BD       0.030         Acetone       BD       0.750         Methylethylketone MEK       BD       0.750         Methylisobutylketone       BD       0.750         Total Pet. Hydrocarbons       BD       0.030         Methyl-t-butyl ether       BD       0.030         Total Pet. Hydrocarbons       BD       10.0         Method = EPA-8100 (mod.)       Results for TPH are	1,2,4 Trichlorobenzene	BD	0.060
Trichloroethene  Trichlorofluoromethane  1,2,3 Trichloropropane  1,2,4 Trimethylbenzene  1,3,5 Trimethylbenzene  BD  D  D  D  D  D  D  D  D  D  D  D  D	1,1,1 Trichloroethane	BD	0.030
Trichlorofluoromethane  1,2,3 Trichloropropane  1,2,4 Trimethylbenzene  BD  0.030  1,3,5 Trimethylbenzene  BD  0.030  Vinyl Chloride  BD  0.030  o-Xylene  BD  0.030  m&p-Xylene  BD  0.030  Ethyl Ether  BD  0.030  Methylethylketone MEK  BD  0.750  Methylisobutylketone  BD  0.750  Tetrahydrofuran  Methyl-t-butyl ether  BD  0.030  BD  0.030  Total Pet. Hydrocarbons  Method = EPA-8100 (mod.)  BD  0.060  0.030			0.030
1,2,3 Trichloropropane       BD       0.030         1,2,4 Trimethylbenzene       BD       0.030         1,3,5 Trimethylbenzene       BD       0.030         Vinyl Chloride       BD       0.030         o-Xylene       BD       0.030         m&p-Xylene       BD       0.030         Ethyl Ether       BD       0.450         Acetone       BD       1.500         Methylethylketone MEK       BD       0.750         Methylisobutylketone       BD       0.750         Tetrahydrofuran       BD       0.450         Methyl-t-butyl ether       BD       0.030         Total Pet. Hydrocarbons       BD       10.0         Method = EPA-8100 (mod.)       Results for TPH are			0.030
1,2,4 Trimethylbenzene       BD       0.030         1,3,5 Trimethylbenzene       BD       0.030         Vinyl Chloride       BD       0.030         o-Xylene       BD       0.030         m&p-Xylene       BD       0.030         Ethyl Ether       BD       0.450         Acetone       BD       1.500         Methylethylketone MEK       BD       0.750         Methylisobutylketone       BD       0.750         Tetrahydrofuran       BD       0.450         Methyl-t-butyl ether       BD       0.030         Total Pet. Hydrocarbons       BD       10.0         Method = EPA-8100 (mod.)       Results for TPH are			
1,3,5 Trimethylbenzene  Vinyl Chloride  BD  0.030  o-Xylene  BD  0.030  m&p-Xylene  BD  0.030  Ethyl Ether  BD  0.030  Acetone  BD  0.030  Methylethylketone MEK  BD  0.750  Methylisobutylketone  BD  0.750  Tetrahydrofuran  BD  0.450  Methyl-t-butyl ether  BD  0.030  Total Pet. Hydrocarbons  Method = EPA-8100 (mod.)  BD  0.030  Results for TPH are		BD	0.030
Vinyl Chloride  O-Xylene  BD  O.030  m&p-Xylene  BD  O.030  Ethyl Ether  BD  O.030  Ethyl Ether  BD  O.450  Acetone  Methylethylketone MEK  BD  O.750  Methylisobutylketone  BD  O.750  Tetrahydrofuran  BD  O.450  Methyl-t-butyl ether  BD  O.030  BD  O.030  I.500  BD  O.750  O.030  Total Pet. Hydrocarbons  Methyl-t-butyl ether  BD  O.030  Results for TPH are			
o-Xylene  m&p-Xylene  Ethyl Ether  Acetone  Methylethylketone MEK  Methylisobutylketone  Total Pet. Hydrocarbons  Method = EPA-8100 (mod.)  BD  0.030			
m&p-XyleneBD0.030Ethyl EtherBD0.450AcetoneBD1.500Methylethylketone MEKBD0.750MethylisobutylketoneBD0.750TetrahydrofuranBD0.450Methyl-t-butyl etherBD0.030 Total Pet. Hydrocarbons Method = EPA-8100 (mod.) Results for TPH are		BD	0.030
Ethyl Ether  Acetone  BD  Methylethylketone MEK  Methylisobutylketone  Tetrahydrofuran  Methyl-t-butyl ether  BD  Methyl-t-butyl ether  BD  Method = EPA-8100 (mod.)  BD  0.450  0.030  10.0  Results for TPH are	-		0.030
Acetone  Methylethylketone MEK  Methylisobutylketone  Tetrahydrofuran  Methyl-t-butyl ether  BD  D  D  D  D  D  D  D  D  D  D  D  D			
Methylethylketone MEKBD0.750MethylisobutylketoneBD0.750TetrahydrofuranBD0.450Methyl-t-butyl etherBD0.030Total Pet. HydrocarbonsBD10.0Method = EPA-8100 (mod.)Results for TPH are	Ethyl Ether	BD	0.450
Methylisobutylketone BD 0.750 Tetrahydrofuran BD 0.450 Methyl-t-butyl ether BD 0.030  Total Pet. Hydrocarbons BD 10.0 Method = EPA-8100 (mod.) Results for TPH are		BD	1.500
Tetrahydrofuran BD 0.450 Methyl-t-butyl ether BD 0.030  Total Pet. Hydrocarbons BD 10.0 Method = EPA-8100 (mod.) Results for TPH are			
Methyl-t-butyl ether BD 0.030  Total Pet. Hydrocarbons BD 10.0 Method = EPA-8100 (mod.) Results for TPH are			
Total Pet. Hydrocarbons BD 10.0 Method = EPA-8100 (mod.) Results for TPH are			
Method = EPA-8100 (mod.) Results for TPH are	Methyl-t-butyl ether	BD	0.030
		BD	
	Method = EPA-8100 (mod.)		Results for TPH are expressed in mg/kg (ppm)

#### Comments:

TPH was performed with motor oil as the standard.

Method of VOA Analysis = EPA-8260B
BD = Below Detection Limit - Results are in parts per million (ppm) unless noted.

## Laboratory Services

P.O. Box 186 Canterbury, N.H. 03224 603-783-9097

# Poly Aromatic Hydrocarbon Report 08-11-98,15:09 Sample 40049

Date Sampled = 07-31-98,08:30 Date Logged In = 07-31-98,13:21 Analysis Date = 08-05-98 Extraction Date = 08-05-98

Sampler = G. AMBELAS Location = 275 COTTAGE Town = FRANKLIN Matrix = Soil

Organic Compound	Result mg/kg	Det. Lim. mg/kg
Acenaphthene	BD	0.20
Acenaphthylene	BD	0.20
Anthrecene	BD	0.20
Benzo (a) anthracene	BD	0.20
Benzo (b) fluoranthene	BD	0.20
Benzo (k) fluoranthene	BD	0.20
Benzo (ghi) perylene	BD	0.20
Benzo (a) pyrene	BD	0.20
Chrysene	BD	0.20
Dibenzo (a,h) anthracene	BD	0.20
Fluoranthene	BD	0.20
Fluorene	BD	0.20
Indeno (1,2,3-cd) pyrene	BD	0.20
Naphthalene	BD	0.20
Phenanthrene	BD	0.20
Pyrene	BD	0.20
2-Methylnaphthalene	BD	0.20
l-Methylnaphthalene	BD	0.20

#### Comments:

BD = Below Detection Limit Method of Analyses = EPA-8270 All Results are in parts per million (ppm), except as noted.

## Laboratory Services

P.O. Box 186 Canterbury, N.H. 03224 603-783-9097

Volatile Organic Report 08-11-98,15:08 Sample 40053

Project = GUAY'S GARAGE - FRANKLIN Matrix = Soil

Date Sampled = 07-31-98,10:40 Sampler = G. AMBELAS

Date Logged In = 07-31-98,13:25 Location = DRAIN
Date of Analysis = 08-06-98 Town = FRANKLIN

Organic Compound	Result mg/kg	g Det. Lim. mg/kg
Benzene	BD	0.130
Bromobenzene	BD	0.130
Bromodichloromethane	BD	0.130
Bromoform	BD	0.130
Bromomethane	BD	0.130
n-Butylbenzene	0.610	0.130
sec-Butylbenzene	BD	0.130
tert-Butylbenzene	BD	0.130
Carbon-Tetrachloride	BD	0.130
Chlorobenzene	BD	0.130
Chloroethane	BD	0.130
Chloroform	BD	0.130
Chloromethane	BD	0.130
2-Chlorotoluene	BD	0.130
4-Chlorotoluene	BD	0.130
Dibromochloromethane	BD	0.130
1,2 Dibromo-3-Chloropropane	BD	0.260
1,2 Dibromoethane	BD	0.260
Dibromomethane	BD	0.130
1,2 Dichlorobenzene	BD	0.130
1,3 Dichlorobenzene	BD	0.130
1,4 Dichlorobenzene	BD	0.130
Dichlorodifluoromethane	BD	0.260
1,1 Dichloroethane	BD	0.130
1,2 Dichloroethane	BD	0.130
1,1 Dichloroethene	BD	0.130
cis-1,2 Dichloroethene	BD	0.130
trans-1,2 Dichloroethene	BD	0.130
1,2 Dichloropropane	BD	0.260
1,3 Dichloropropane	BD	0.130
2,2 Dichloropropane	BD	0.130
1,1 Dichloropropene	BD	0.130
cis-1,3 Dichloropropene	BD	0.130
trans-1,3 Dichloropropene	BD	0.130

#### **Laboratory Services**

P.O. Box 186

Canterbury, N.H. 03224

603-783-9097

Volatile Organic Report 08-11-98,15:08 Sample 40053

Project = GUAY'S GARAGE - FRANKLIN

Location = DRAIN

Matrix = Soil

Organic Compound	Result mg/kg	Det. Lim. mg/kg
Ethylbenzene	0.660	0.130
Hexachlorobutadiene	BD	0.260
Isopropylbenzene	BD	0.130
p-Isopropyltoluene	0.480	0.130
Methylene Chloride	BD	0.390
Naphthalene	0.820	0.260
n-Propylbenzene	0.370	0.130
Styrene	BD	0.130
1,1,1,2 Tetrachloroethane	BD	0.130
1,1,2,2 Tetrachloroethane	BD	0.130
Tetrachloroethene	BD	0.130
Toluene	0.470	0.130
1,2,3 Trichlorobenzene	BD	0.260
1,2,4 Trichlorobenzene	BD	0.260
1,1,1 Trichloroethane	BD	0.130
1,1,2 Trichloroethane	BD	0.130
Trichloroethene	BD	0.130
Trichlorofluoromethane	BD	0.260
1,2,3 Trichloropropane	BD	0.130
1,2,4 Trimethylbenzene	2.930	0.130
1,3,5 Trimethylbenzene	3.120	0.130
Vinyl Chloride	BD	0.130
o-Xylene	2.130	0.130
n&p-Xylene	4.070	0.130
Ethyl Ether	BD	1.950
Acetone	BD	6.500
Methylethylketone MEK	BD	3.250
Methylisobutylketone	BD	3.250
Tetrahydrofuran	BD	1.950
Methyl-t-butyl ether	BD	0.130
Total Pet. Hydrocarbons	19000.0	50.0
Method = EPA-8100 (mod.)	1,000.0	Results for TPH are
		expressed in mg/kg (ppm)

#### Comments:

TPH was performed with #4 fuel oil as the standard.

Duplicate indicates heterogeneity, arsenic, lead. Spike indicates matr ~ ix

effect, mercury, selenium.

Method of VOA Analysis = EPA-8260B



#### Laboratory Services

P.O. Box 186 Canterbury, N.H. 03224 603-783-9097

# Poly Aromatic Hydrocarbon Report 08-11-98,15:09 Sample 40053

Date Sampled = 07-31-98,10:40
Date Logged In = 07-31-98,13:25
Analysis Date = 08-10-98
Extraction Date = 08-05-98

Sampler = G. AMBELAS Location = DRAIN Town = FRANKLIN Matrix = Soil

Organic Compound	Result mg/kg	Det. Lim. mg/kg
Acenaphthene	BD	2.00
Acenaphthylene	BD	2.00
Anthrecene	2.10	2.00
Benzo (a) anthracene	6.50	2.00
Benzo (b) fluoranthene	4.10	2.00
Benzo (k) fluoranthene	4.30	2.00
Benzo (ghi) perylene	BD	2.00
Benzo (a) pyrene	5.40	2.00
Chrysene	9.90	2.00
Dibenzo (a,h) anthracene	BD	2.00
Fluoranthene	19.00	2.00
Fluorene	2.90	2.00
Indeno (1,2,3-cd) pyrene	BD	2.00
Naphthalene	2.20	2.00
Phenanthrene	17.00	2.00
Pyrene	23.00	2.00
2-Methylnaphthalene	2.50	2.00
1-Methylnaphthalene	1.90	2.00

#### Comments:

BD = Below Detection Limit Method of Analyses = EPA-8270 All Results are in parts per million (ppm), except as noted.

## Laboratory Services

P.O. Box 186 Canterbury, N.H. 03224 603-783-9097

Metals Report 08-11-98,15:10 Sample 40053

Sample Matrix = Soil

Project = GUAY'S GARAGE - FRANKLIN

Date Sampled = 07-31-98,10:40 Sampler = G. AMBELAS

Date Logged In = 07-31-98,13:25 Location = DRAIN

Date of Analysis = 08-05-98

Town = FRANKLIN

Mercury Analysis = 08-05-98

Total Metal	EPA method	Result (ppm-mg/kg	g)Det. Lim. (ppm-mg/kg)
Arsenic	6020	8.3000	0.5000
Barium	6020	150.0000	1.0000
Cadmium	6020	7.9000	0.5000
Chromium	6020	56.0000	0.5000
Lead	6020	970.0000	0.5000
Mercury	6020	0.3000	0.1000
Selenium	6020	2.5000	0.5000
Silver	6020	0.9000	0.5000

#### Comments:

TPH was performed with #4 fuel oil as the standard.

Duplicate indicates heterogeneity, arsenic, lead. Spike indicates matr ~ ixeffect, mercury, selenium.

Results expressed in milligrams/kilogram, (ppm)



### Laboratory Services

P.O. Box 186 Canterbury, N.H. 03224 603-783-9097

#### Volatile Organic Report 08-11-98,15:13 Sample 40054

Project = GUAY'S GARAGE - FRANKLIN

Matrix = Water

= 07-31-98,10:40 Date Sampled Date Sampled = 07-31-98,10:40 Date Logged In = 07-31-98,13:26 Sampler = G. AMBELAS

Location = DRAIN

Date of Analysis = 08-07-98

Town = FRANKLIN

Organic Compound	Result ug/L	Det. Lim. ug/L
Benzene	BD	5
Bromobenzene	BD	5
Bromodichloromethane	BD	5
Bromoform	BD	5
Bromomethane	BD	5
Bromochloromethane	BD	5
n-Butylbenzene	BD	5
sec-Butylbenzene	BD	5
tert-Butylbenzene	BD	5
Carbon-Tetrachloride	BD	5
Chlorobenzene	BD	5
Chloroethane	BD	5
Chloroform	BD	5
Chloromethane	BD	5
2-Chlorotoluene	BD	5
4-Chlorotoluene	BD	5
Dibromochloromethane	BD	5
1,2 Dibromo-3-Chloropropane	BD	10
1,2 Dibromoethane	BD	10
Dibromomethane	BD	5
1,2 Dichlorobenzene	BD	5
1,3 Dichlorobenzene	BD	5
1,4 Dichlorobenzene	60	.5
Dichlorodifluoromethane	BD	10
1,1 Dichloroethane	BD	5
1,2 Dichloroethane	BD	5
1,1 Dichloroethene	BD	5
cis-1,2 Dichloroethene	BD	5
trans-1,2 Dichloroethene	BD	5
1,2 Dichloropropane	BD	10
1,3 Dichloropropane	BD	5
2,2 Dichloropropane	BD	5
1,1 Dichloropropene	BD	5
cis-1,3 Dichloropropene	BD	5
trans-1,3 Dichloropropene	BD	5
Ethylbenzene	26	5
Hexachlorobutadiene	BD	10

#### Laboratory Services

P.O. Box 186

Canterbury, N.H. 03224

603-783-9097

Volatile Organic Report 08-11-98,15:14 Sample 40054

Project

= GUAY'S GARAGE - FRANKLIN

Matrix = Water

Sampler = G. AMBELAS

Location = DRAIN

Date Sampled = 07-31-98,10:40 Date Logged In = 07-31-98,13:26 Date of Analysis = 08-07-98

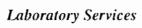
Town = FRANKLIN

Organic Compound	Result ug/	L Det. Lim. ug/L
Isopropylbenzene	BD	5
p-Isopropyltoluene	24	5
Methylene Chloride	BD	15
Naphthalene	12	10
n-Propylbenzene	BD	5
Styrene	BD	5
1,1,1,2 Tetrachloroethane	BD	5
1,1,2,2 Tetrachloroethane	BD	5
Tetrachloroethene	BD	5
Toluene	493	80
1,2,3 Trichlorobenzene	BD	10
1,2,4 Trichlorobenzene	BD	10
1,1,1 Trichloroethane	BD	5
1,1,2 Trichloroethane	BD	5
Trichloroethene	BD	5
Trichlorofluoromethane	BD	10
1,2,3 Trichloropropane	BD	5
1,2,4 Trimethylbenzene	14	5
1,3,5 Trimethylbenzene	13	5
Vinyl Chloride	BD	5
o-Xylene	BD	5 5
m&p-Xylene	96	
Ethyl Ether	BD	75
Acetone	BD	25.0
Methylethylketone MEK	BD	125
Methylisobutylketone	BD	125
Tetrahydrofuran	BD	75
Methyl-t-butyl ether	BD	5
Carbon Disulfide	BD	10
2-Hexanone	BD	125

Comments:

Method of Analyses = EPA-8260B

BD = Below Detection Limit - Results are in parts per billion (ppb).



P.O. Box 186 Canterbury, N.H. 03224 603-783-9097

#### Poly Aromatic Hydrocarbon Report 08-11-98,15:13 Sample 40054

Organic Compound	Result ug/L	Det. Lim. ug/L
Acenaphthene	BD	2.0
Acenaphthylene	BD	2.0
Anthrecene	BD	2.0
Benzo (a) anthracene	BD	2.0
Benzo (b) fluoranthene	BD	2.0
Benzo (k) fluoranthene	BD	2.0
Benzo (ghi) perylene	BD	2.0
Benzo (a) pyrene	BD	2.0
Chrysene '	BD	2.0
Dibenzo (a,h) anthracene	BD ·	2.0
Fluoranthene	BD	2.0
Fluorene	BD	2.0
Indeno (1,2,3-cd) pyrene	BD	2.0
Naphthalene	7.0	2.0
Phenanthrene	BD	2.0
Pyrene	BD	2.0
2-Methylnaphthalene	BD	2.0
1-Methylnaphthalene	BD	2.0

#### <u>Comments:</u>

BD = Below Detection Limit Method of Analyses = EPA-8270 All Results are in parts per billion (ppb), except as noted.



Laboratory Services

153 West Road Canterbury, NH 03324 Phone: (603)783-9097 FAX: (603)783-0360

	LABORATORY INFORMATION	PROJEC	T INFORMATION
Tu	rn-around-time: Same Day(100% upcharg	Project #:	Project Manager: Gary Ambelas
Tu	rn-around-time: 24 Hrs(50% upcharge)	Project Name: GAY'S GARAGE	Report to: ARC
		-	Invoice to: ARC
Tu	rn-around-time: Normal <u>XX</u>	Sampler: G.A.	Phone: 364-2828
A	count #: 61070	Company: ARC	FAX: 364-2829

	SAMPLE INFORMAT	ION				٧c	C's	s-S\	/oc	's		្រ័	PH			ME	TAI	LS				ОТ	ΗE	R-(	Lis	t)	
AAI ID#	Sample ID	Date/Time	Sample Matrlx (S-soil / W-water / O-other)	Number of Containers	اةا		B with	EPA 8240 / EPA 524	Chlorinated Compounds Only		EPA 8270 ( PAH)	EPA 8015M (Gasoline)	EPA 8100M (Fuci Oil)	Fingerprint	13 PP Water(Diss_Total_)	13 PP Soil (TCLPTotal)	ွ	8 RCRA Soll (TCLPTotal)	Miscellaneous-List	EPA 608/8080 PCBS	EPA 608/8080 Pesticides	EPA 8150 Herbicides	EPA SW846-7 Reactivity	EPA 1010 Ignitabilty/Flashpoint	EPA 150.1/9045 pH	EPA 120.1 Conductivity	
40049	275 COTTAGE	0830	S	1		X	$\downarrow$			$\perp$	X		X														$\perp$
40050	500 COTTAGE	09/0	5	1		X	_		$\perp$	$\perp$	X	_	X														
40051	5∞ #Z	6930	5	1		$\boxtimes$			┸		X	_	X		L												_ _
40052	500 # 2	/020	W	3		$\boxtimes$			$\perp$	$\perp$	X	$\perp$			L												
4/0013	DRAIN	1040	5	2	L	X			_ _	$\perp$	X	1	X					X									
40054	DRAIN	1040	W	3		X				$\perp$	X																
				<u> </u>					$\perp$			ŀ															
	$\sim 1/1$							1	1																		
Relinquished	By:	Date: 7/31/9 Time: / ?/ 🔿	8	Rec	eive	d By:		1/1	m		- L	lj P	9/	11		No	otes	::									
Relinquished	Ву:	Date: Time:		Received By:			1																				
Relinquished	Ву:	Date: Time:		Received By:					<u> </u>																		

Please refer to back side for sampling guidelines.

# **APPENDIX C**

Certification of Origin Document

# NEW HAMPSHIRE DEPARTMENT OF ENVIRONMENTAL SERVICES

CERTIFICATION OF ORIGIN FOR SOILS CONTAMINATED WITH VIRGIN PETROLEUM PRODUCTS

Site Information: DES Site Number:	Site Name:	Former Guay's Garage	
	Address:	601 S. Main St.	
	Town:	Franklin	
	10Wii.		
Transport Information: Estimated X/ชเมษาษ์/Weight:	45 (Cubic Yards /Ton	ns)	
Transporter Name: C.A	.B. Services, Inc.		
Receiving Facility: MTS	<u> </u>		
Owner Certification: Owner's Name/Contact Person:	Alexander Lachiatto	, Esq. Phone: 934-2110	
Contact Person's Title:	Executor of the will	l of Marion A. Guay	
Company Name:			
Address:	P.O. Box 486		
Town:	Franklin	State: <u>NH</u> Zip: 03235	_
the best of my knowledge, all so transport information listed abov	ils to be transported from this site e are contaminated only with virg	e and under a bill of lading and in accordance with gin petroleum products.  UWW 7/31/98 (date)	the
DES/Consultant's Certification		Phone: 364-2828	
DES SKAH/Consultant's Name:	Gary Ambelas		_
Firm's Name:	ARC Environmental C	Consultants, Inc.	_
Address:	P.O. Box 116		
Town:	Gilmanton I.W.	State: NII Zip: 03837	_
location from which the soils were certification and I have reviewed to be transported from this site in petroleum products.	e excavated. I have reviewed the all soil analyses required under E	sted soils to be shipped under a bill of lading and the site history summary on the reverse side of this Env-Ws 412.16(e). To the best of my knowledge, a aformation listed above are contaminated only with $\frac{2}{3} \frac{3}{3} \frac{3}{3}$ (date)	all scas
1/10/97 virgpet.wpd			

## NEW HAMPSHIRE DEPARTMENT OF ENVIRONMENTAL SERVICES CERTIFICATION OF ORIGIN FOR SOILS CONTAMINATED WITH VIRGIN PETROLEUM PRODUCTS **30 YEAR SITE HISTORY**

Site Information:		
DES Site Number:	 Site Name: _	Former Guay's Garage
	Address: _	601 S. Main St.
	Town:	Franklin

Dates From To	Owner Name	Business Name	Type of use (see below)	Source of information (do not leave blank)
1928 - Present	Marion Guay & Heir	s Guay's Garage	2	Warranty Deed
1970's	11	J.J. Nissen Baking	Distribution	Anecdotal

Type of Use: 1 - Fuel Dispensing Only 2 - Fuel & Auto Repair

3 - General Repair & Maintenance

4 - Electronics Manufacturing

5 - Metal Working

6 - Scrap Yard

7 - Residential

8 - School

9 - Other(Specify)

# APPENDIX D

Contaminated Soil Weight Slips & Bills of Lading

MTS ENVIRONMENTAL INC. Ticket No : 2,26 69 Dover Road Date : 8/31/9. PO Box 359 NH Ø3234 Epsom 4872 Order No : Customer: 254872: ALEXANDER LACHIATTO, ESQ. FRANKLIN, N EXEC. OF WILL MARION A. GUAY Loads : Miles: PO BOX 486 FRANKLIN NH Tons : 19.4: CAB 9 (ROLL OFF) 73,300 MAN WTIn CAB #9 Gross : 2:12:27PI NO. 2 NUMBER 2 FUEL OIL Tare : 34,460 STOREDOut 12:00:00AI 38,840 16 Net: 19.42 tn Weigh Master: HOLLY Drivers FRUM: CWH & MIS - - 5ep. US 1998 09:08AM P4 MUNE NO. MTS ENVIRONMENTAL INC. Ticket No : 2, 28: 69 Dover Road Date: 9/1/98 PD Box 359 Epsom NH 03234 Customer: 4872 Order No : 2548721 ALEXANDER LACHIATTO, ESQ. FRANKLIN, NE EXEC. OF MARION A. GUAY Loads : £ PO BOX 486 Miles: e FRANKLIN NH Tons : 39.44 CAB 9 CAB #9 (ROLL OFF) Gross : 74,500 1 In 9:35:57AM NUMBER 2 FUEL OIL Tare : 34,460 STOREDOut 12:00:00AM

NO.2

Net: 40,040 16

20.02 tn

Weigh Master:

Remarks: 17663

DILL OF LADING SOILS CONTAINING VIRGIN PETROLE	EUM OILS
BILL OF LADING # Nº 17662 PROJECT AUT	THORIZATION # 25:4872:1 DATE 9/1/98
AUTHORIZED SIGNATURE:	
FACILITY: MTS, INC. RT. 4, 9, & 202 CHICHESTER, NH (603) 798-4557 PLANT LOCATION: CHICHESTER, NH	TRANSPORTER NAME/ADDRESS:  CAB SERVICES P. D. BOX 8  DOVER, NH  TELEPHONE (603)-749-6355
GENERATOR NAME/ADDRESS:	SITE OF GENERATION:
ALEXANDER LACHIATTO, ESQ.  EXECUTOR OF THE WILL OF MARION A. GL P. O. BOX 486, FRANKLIN, NH  CONTACT PERSON: ALEXANDER LACHIATTO	FORMER GUAY'S GARAGE  AY 601 S. MAIN STREET  FRANKLIN, NH
TELEPHONE: (603)-934-2110	
SOIL DESCRIPTION:  GASOLINE KEROSENE  NO. 2 OIL XX NO. 4 OIL  NO. 6 OIL OTHER	TOTAL PROJECTED SHIPPED TO DATE THIS LOAD (EST.) REMAINING TO BE SHIPPED
CONSULTANT: (If Applicable)  NAME:A  TELEPHONE:A	
ANALYSIS ATTACHEDYESNO VOLATILES (AS BENZENE)PPM	·
of hygardous waste as defined in 40CFR260 and app	ain other constituents which fall within the definitions olicable State regulations.  DATE: F-31-9f-
TRUCKYTRASTOR REGISTRATION TRAILER REGIST	THE PARTY OF THE P
EMPTY 34460 1942 TICK	ET NO. 2269  ET NO. PC DATED 8/3/198
PROCESSED DATE PROCESSING FOREMAN SIGNATURE:	CERTIFICATE OF DESTRUCTION SENT ADDITIONAL COPIES SENT TO (1)(2)

SOILS CONTAINING VIRGIN PETROL	
BILL OF LADING # Nº 17663 PROJECT AU	THORIZATION # 25:4872:1 DATE 9/1/98
AUTHORIZED SIGNATURE:	
FACILITY:  MTS, INC.  RT. 4, 9, & 202  CHICHESTER, NH  (603) 798-4557  PLANT LOCATION: CHICHESTER, NH	TRANSPORTER NAME/ADDRESS:  CAB SERVICES  P. O. BOX 8  DOVER, NH  (603)-749-6355  TELEPHONE
GENERATOR NAME/ADDRESS:	SITE OF GENERATION:
ALEXANDER LACHIATTO, ESO.  EXECUTOR OF THE WILL OF MARION A. GU P. O. BOX 486, FRANKLIN, NH	FORMER GUAY'S GARAGE
CONTACT PERSON: <u>ALEXANDER LACHIATTO</u> TELEPHONE: (603)-934-2110	
SOIL DESCRIPTION:	QUANTITY: WT(TONS) VOLICUYDS.)
MO. 2 OIL XX NO. 4 OIL NO. 6 OIL OTHER	TOTAL PROJECTED 45 SHIPPED TO DATE THIS LOAD (EST.) REMAINING TO BE SHIPPED
CONSULTANT: (If Applicable)	-
NAME:A	DDRESS:
TELEPHONE:	
ANALYSIS ATTACHEDYE\$NO	
VOLATILES (AS BENZENE)PPM	TOTAL PETRO. HYDROCARBON(TPH)PPM
GENERATORS SIGNATURE: I hereby certify that the materials to be shipped and that the soils do not conta of hazardous waste as defined in 450FR260 and app X	in other constituents which fall within the definitions
STATE OUTHORIZATION SIGNATURE (IF APPLICABLE)	DATECASE #
TRUCK/TRACTOR REGISTRATION TRAILER REGISTRE  TRANSPORTERS SIGNATURE:	RATION LEFT SITE AT: 9, ~  9-1-980ATE: MPM
RECEIVING CLERK SIGNATURE:	DATE 2/128 INSPECTED SAT.?
ARRIVED 9:35 AMPM TRUCK WT:FULL 74500 TICKE EMPTY 34460 20-02 TICKE	TNO. 2285
PROCESSED DATE	CERTIFICATE OF DESTRUCTION SENT
PROCESSING FOREMAN SIGNATURE:	ADDITIONAL COPIES SENT TO (1)
	(2)

BILL OF FADING

# Closure Report Review

# A. SEP 11, 1998 : Date Closure Report Received

	Facility ID: 0115142  DES ID: 0  FORMER GUAYS GARAGE  FRANKLIN  Owner Information:  ALEXANDER LACHIATT  PO BOX 486  FRANKLIN NH	3235
	Tank Closure Information:	
	#2 HEATING OIL 500 gallon tank Date Closed: Jul 30, 1998	
	#2 HEATING OIL 275 gallon tank Date Closed: Jul 31, 1998	
	#2 HEATING OIL 500 gallon tank Date Closed: Jul 31, 1998	
	GASOLINE 1000 gallon tank Date Closed: Jul 30, 1998	
	GASOLINE 500 gallon tank Date Closed: Jul 30, 1998	
В.	9/4/8 Date Submitted For Initial Review	
	Closure Reviewer: Bule Date: 10/1/78	
	Field Screening:	
ı	Analytical Results:	
	Release Indicated:	
	Contaminated Soils Stockpiled: V N cu. yds.	
	NFA / SIR / SCR / Soil Reviewer	
C.	10/1/18 Date Submitted to UST Compliance	
I	Compliance Reviewer: 7113 Date: 195/98	
1	Compliance with Env-Wm 1401:	
1	Compliance with late with the control of the contro	
١	Non Compliance with Env-Wm 1401	
D	Date Fowarded to PM	
	Soil/SIR/SCR/NFA Reviewer:	

c.factshe



Post Office Box 116 Gilmanton Iron Works New Hampshire 03837-0116

> Phone: (603) 364-2828 FAX: (603) 364-2829

# 1980803

# UNDERGROUND STORAGE TANK CLOSURE REPORT (500-Gallon Waste Oil)

Former Guay's Garage 601 South Main Street Franklin, New Hampshire

NHDES Site No. 199808031 NHDES Facility ID No. 0-115142



### 1.0 INTRODUCTION

ARC Environmental Consultants, Inc. ("ARC"), in conjunction with C.A.B. Services, Inc. ("CAB"), closed-in-place one 500-gallon waste oil underground storage tank ("UST") on November 5, 1998.

This Underground Storage Tank Closure Report was prepared in accordance with provisions of NH Code of Administrative Rules, Part Env-Wm 1401, "Underground Storage Facilities"; Part Env-Ws 412, "Reporting and Remediation of Oil Discharges"; the NHDES Contaminated Sites Risk Characterization and Management Policy; and the NHDES Underground Storage Tank Closure, Sampling, & Reporting Guidelines.

The subject facility is registered with the NHDES as Facility ID No. 0-115142.

The subject property is located on the west side of South Main Street (US Route 3), approximately 200 feet north of the intersection with Industrial Park Drive, in Franklin, Merrimack County, New Hampshire. The property location is depicted in Figure 1, Site Location Map. The property is serviced by the municipal water supply while sewage disposal is provided by individual septic systems.

On July 30 and 31, 1998 ARC removed five UST's from the subject facility; see ARC's Underground Storage Tank Closure Report of September 9, 1998. Based on information contained in the report, the NHDES issued a request for a Level I Site Investigation on November 10, 1998.

#### 2.0 PERSONNEL

The following personnel were present during the tank closure activities:

Mr. Gary Ambelas, President ARC Environmental Consultants, Inc. Gilmanton Iron Works, NH

Mr. Fulton Mountain, Foreman, & Support Staff
C.A.B. Services, Inc.
Dover, NH

#### 3.0 TANK CLOSURE

The tank closure was performed in accordance with provisions of Env-Wm 1401.18, "Underground Storage Facilities, Permanent Closure".

The subject 500-gallon waste oil UST is located beneath the concrete floor of the automotive service garage. The tank location is shown on the accompanying Site Plan, Figure 2.

CAB personnel removed a portion of the concrete floor on the morning of November 5, 1998 using a pneumatic hammer, exposing the top surface of the UST. Approximately 500-gallons of waste oil were pumped from the tank into a vac-truck provided by Cyn Environmental Services of Hooksett, NH. The waste oil was then transferred to 55-gallon drums for temporary on-site storage when a preliminary laboratory analysis indicated that the waste oil was "off-spec". (ARC will notify the NHDES Waste Management Division when the oil is transported off-site for disposal, and forward a copy of the shipping manifest.)

After checking for explosive vapors with an LEL monitor, the tank was entered and cleaned by CAB personnel. One hole was cut in the bottom of the tank, and one discrete soil sample was collected using a pre-cleaned stainless sampling spoon. The soil consisted of medium-grained brown sand. The tank and floor pit were subsequently filled to original floor grade with approximately three cubic yards of concrete supplied by Persons Concrete, Inc. According to CAB personnel, the interior of the UST appeared to structurally sound, and no perforations or holes were observed.

(The decision to collect only one soil sample was based on the heavy gauge thickness of the UST wall and the apparently sound condition of the tank.)

Page 3 601 South Main Street Franklin, New Hampshire

#### 4.0 FIELD SCREENING

The discrete soil sample collected from beneath the waste oil UST was analyzed on-site, using headspace vapor methodology, with a Thermo Environmental Model 580B photo-ionization type organic vapor analyzer ("OVA"). The 580B OVA has a sensitivity of 0.1 parts per million ("ppm"), and was calibrated to a benzene standard using a reference gas of isobutylene. Ambient background levels and instrument drift displayed by the OVA were in the range ±0.1 ppm.

The sample was placed in an unused one-gallon zipper-lock plastic storage bag, which were then sealed and gently warmed to ambient temperature for several minutes. After the sample was gently agitated, the OVA probe was inserted through the seal into the headspace above the soil and the maximum vapor concentration recorded.

The results of the OVA screening are presented below in Table 1. OVA concentrations are given in parts per million (ppm).

# Table 1. Soil OVA Headspace Screening Results 500-Gallon Waste Oil UST 601 South Main St. Franklin, NH

Sample Location	Sample	Depth	(feet)	OVA Conc.	(ppm)
Bottom, mid-tank		7		3.8	

#### 5.0 LABORATORY ANALYSIS

The laboratory analyses employed are those required by the NHDES Underground Storage Tank Closure, Sampling, & Reporting Guidelines, "Recommended Analytical Methods for Petroleum Contaminated Sites", (October 1997).

#### 5.1 Soils

A portion of the bottom sample was placed in a clean 4-ounce glass jar with teflon-lined lid, placed in an insulated cooler with ice packs for temporary storage and transport, and delivered the day of collection under Chain-of-Custody protocol to Aquarian Analytical, Inc. in Canterbury, NH. The jar was packed as full as possible to minimize headspace.

The sample from beneath the waste oil UST was analyzed for volatile organic compounds ("VOC's") using EPA Method 8260B, total petroleum hydrocarbons ("TPH", fuel oil standard) using EPA Method 8100, polycyclic aromatic hydrocarbons ("PAH") using EPA Method 8270, and for the eight RCRA priority pollutant metals (as total metals) using EPA Method 6020.

The laboratory analyses are summarized below in Table 2 (page 5). Concentrations of VOC's, TPH, PAH, and metals are expressed in milligrams per kilogram (mg/kg), or parts per million (ppm). The NHDES Method 1 Soil Standards for Category NH S-3 soils are also listed for each compound where appropriate. Concentrations in excess of NH S-3 Soil Standards are shown in **bold** type. Published ambient background concentrations ("ABC's") of metals in NH are also listed in Table 2.

(The selection of the S-3 soil classification is based upon the fact that the isolated subsurface soils are located beneath the footprint of a building with a poured concrete floor. [NHDES Contaminated Sites Risk Characterization and Management Policy {"RCMP"}, January 1998, Section 3.3 and Figure 2.])

All laboratory analytical data and Chain-of-Custody documents are appended to this report (Appendix B).

The laboratory analytical data indicate that in-situ soils beneath the waste oil UST meet current NHDES regulatory standards for Category NH S-3 (and NH S-1) soils.

### 6.0 CONCLUSIONS & RECOMMENDATIONS

#### 6.1 Conclusions

On November 5, 1998 ARC Environmental Consultants, Inc. supervised the closure-in-place of one 500-gallon waste oil underground storage tank at the former Guay's Garage, 601 South Main Street, Franklin, NH. The site is serviced by the municipal water supply and on-site septic systems.

Laboratory analyses of a soil sample collected from beneath the UST indicated that in-situ soils beneath the tank meet current NHDES regulatory standards for VOC's, TPH, PAH, and the eight RCRA metals for category NH S-3 (and S-1) soils. No evidence of a release or discharge of waste oil to the environment was noted during the tank closure.

Page 5 601 South Main Street Franklin, New Hampshire

Table 2. Soil Analysis Summary - 500-G. Waste Oil UST
601 South Main Street
Franklin, NH
All Concentrations in mg/kg

500 Waste Oil	NH ABC <sup>(1)</sup>	NH S-3 Stnd. (2)
BDL BDL BDL BDL BDL	- - - -	0.3 100 140 1,100 2
BDL BDL	<u>-</u>	59 5
BDL	·	10,000
BDL	· +	Various
1.40 20 BDL 8.50 41 BDL BDL	12 N/A 1.9 33 54 0.33 2.2	12 3,400 230 540 <sup>(4)</sup> 400 7 4,200 200
	Waste Oil  BDL BDL BDL BDL BDL BDL BDL BDL BDL BD	### ABC (1)    BDL

BDL = Below Detection Limits.

N/A = Not Available.

(1) Ambient Background Concentrations of metals in soil, NHDES Contaminated Sites Risk Characterization and Management Policy, Table 1 (Jan. 1998).

(2) NHDES Contaminated Sites Risk Characterization and Management

Policy, Table 2, Section 7.4(5) (Jan. 1998).

(3) Alkylbenzenes include 1,2,4-trimethylbenzene, 1,3,5-trimethylbenzene, n-propylbenzene, p-isopropyltoluene, n-butylbenzene, sec-butylbenzene, and tert-butylbenzene.

(4) Chromium VI = 540 ppm, chromium III = 5,000 ppm.

Page 6 601 South Main Street Franklin, New Hampshire

### 6.2 Recommendations

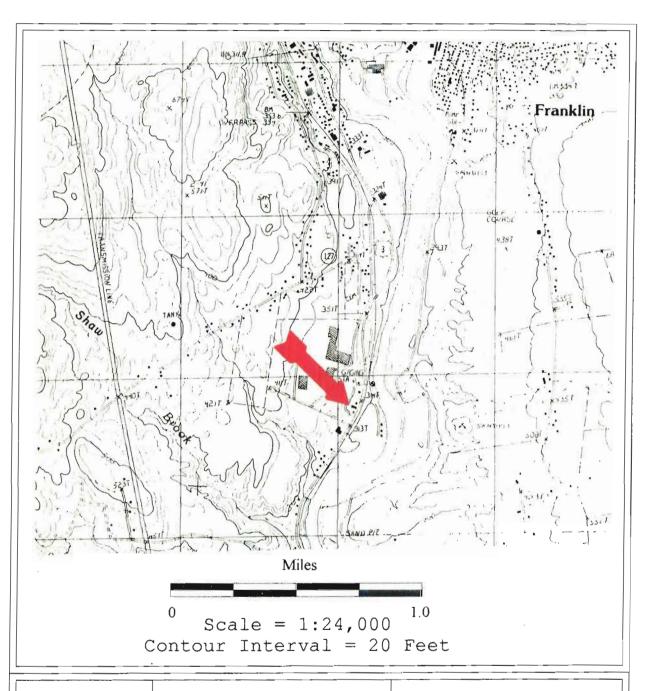
ARC is currently performing a Site Investigation per Env-Ws 412.10 at the subject site to determine the nature and extent of subsurface contamination encountered during the closure of a heating oil UST in July 1998.

No modifications to the standardized SIR workscope are warranted based on the analytical data from the closure-in-place of the subject 500-gallon waste oil UST.

ARC ENVIRONMENTAL CONSULTANTS, INC.

Gary Ambelas, Project Manager

USGS 7.5 Minute Topographic Map Franklin, NH Quadrangle Provisional Edition 1987





## ARC ENVIRONMENTAL CONSULTANTS, INC.

Gilmanton Iron Works New Hampshire Figure 1.
Site Location Map

Estate of M. Guay 601 S. Main St. Franklin, NH

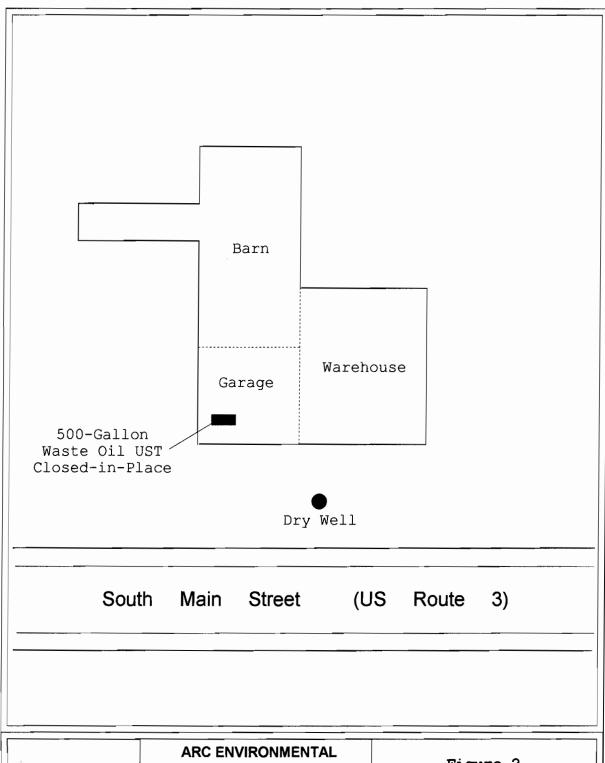
Mailed	
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10-Jun-96

New Hampshire Department of Environmental Services (603) 271-3644 FAX (603) 271-2181

### UST CLOSURE NOTIFICATION

			H W Married Arriva (Street		
1.	Telephone Message		RECE	Virteral D	
	Street		NOV 2 3	1998 ephone:	
	City		DEPARTM	ENTrar.	
2.	Facility Registration	Number: 0-115	ENVIRONMENTA 5142	L SERVICES	
	Name Former Guay	's Garage		CityFranklin	<u> </u>
	Street 601 S. Main	st.	- 0,486	Telephone	
3.	Owner Name  Estate of M Name A. Lachiatt	Marion Guay	J By 486		2100
4.	Tank Removal Informa			pected; R=Removal;	
	L R F	L R F			
	Tank #6	Tank #	Tank #	Tank #	Tank #
	Size500	Size	Size	Size	Size
	Product Waste Oi	Product	Product	Product	Product
	Will tank be replaced underground? XXX No	Will tank be replaced	Will tank be replaced underground? Yes	Will tank be replaced	· II
5.	Consultant / Contractor				underground . 163 140
	Local Fire Dept. Notifi	· · · · · · · · · · · · · · · · · · ·			
<u>.</u>					
7	Ingractor			Data	
	Inspector Field Screening Method	ds (tank and piping)	<del>.</del>	Date	
	•	adspsce Vapor			
۵	Sample Information	adapace vapor	nechodology		
7.	tank # 6	tank #	tank #	tank #	tank #
	Soil 1 Water 0	Soil Water	Soil Water	Soil Water	Soil Water
	Taken By: <u>Gary Aml</u>	belas, ARC			•
10.	Tank Condition:				
	tank# 6	tank #	tank #	tank #	tank #
	Sound	<u> </u>			
	Indicate tank and samp	_	_		
	Include photographs of Estimated cubic yard:		` ,	avaliable.	0 cubic yards
	Estimated cubic yard				
1	. Verification I have inspected the site of the techniques to determine regulation at the site. I have a site. I have a site in the site.	ulated substance contam	nination in soils and grou	indwater. There is no evi	dence of soil or groundwater
Van	ne: AMBELAS	Signature:	- Cu	-	Date: 11/5/98





## ARC ENVIRONMENTAL CONSULTANTS, INC.

Gilmanton Iron Works, NH

Approximate Scale Feet

40

Figure 2.
Site Plan
Former Guay's Garage
601 S. Main St.
Franklin, NH

#### APPENDIX A

### Limitations

- 1. The conclusions and recommendations presented in this report are based solely upon the described Scope of Work, and not on scientific tasks or procedures beyond the described Scope of Work or the time and budgetary constraints imposed by the Client. The stated conclusions and recommendations represent ARC's best professional judgement, and should not be construed as statements of scientific fact or certainty.
- 2. In preparing this report, ARC may have relied on information provided by state and local officials, and other parties herein referenced, and on information on record with various state and local agencies made available to ARC at the stated time of inspection. ARC did not attempt to independently verify the accuracy or completeness of all information received or reviewed as part of this investigation.
- 3. This report may contain the results of quantitative analyses performed by an outside laboratory. In such cases, ARC has relied upon the data provided to formulate its stated conclusions and recommendations, and has not attempted to independently evaluate the reliability of these data.
- 4. In the event that the conclusions stated in this report express ARC's professional opinion that a release of hazardous substances or petroleum products to the environment has occurred at the subject site, ARC recommends that the Client consult with its legal counsel regarding the duty to report the discharge to the appropriate federal, state, or local authorities. If ARC is not notified in a timely manner that such duty to report has been discharged by another party, ARC may, under certain legal interpretations, be deemed to be a "knowledgeable party", and may consult with its legal counsel regarding its duty to report or confirm the discharge to the appropriate authorities. Otherwise, ARC agrees to maintain in strictest confidence the information contained in this report.
- 5. This report was prepared for the exclusive use of the Estate of Marion Guay, Attorney Alexander Lachiatto, Executor, and except as described below, no other party may rely on the information herein contained. ARC hereby grants the Estate of Marion Guay, Attorney Alexander Lachiatto, Executor, permission to distribute this report, or copies thereof in whole, to its affiliates, assigned agents, or, in Client's discretion, to other parties having a direct financial interest in the subject property.



### Laboratory Services

P.O. Box 186 Canterbury, N.H. 03224 603-783-9097 11-11-98,14:34

Mr. Gary Ambelas ARC Environmental Consultants P.O. Box 116 Gilmanton, NH 03837-0116

Dear Mr. Ambelas:

Please find enclosed the reports, and invoice for the samples that were logged in on, 11-05-98.

AAI Date Sample Sampled Project Description Sample Location -----41975 11-05-98 GUAY'S GARAGE - FRANKLIN WASTE OIL

To perform these analyses, the following methods were used:

### QTY. EPA Methodologies/Applications

- 1 VOA + TPH Soil fuel oil Mod. 8260/8100
- 1 EPA-625/8270/525.1 PAH only
- 1 Soil/Solid Digestion
  7 Metals analysis (excluding mercury)
- 1 Mercury analysis

Thank you for using Aquarian Analytical Inc. on this project. If I can be of any further help, please feel free to call.

Sincerely,

William M. Rice

Laboratory Director

doc. L09571



### **Laboratory Services**

P.O. Box 186

Canterbury, N.H. 03224
603-783-9097

11-11-98,14:35

As part of Aquarian's ongoing quality assurance program, all analyses included the following quality assurance measures.

Samples were received in an acceptable condition.

Samples were prepared and analyzed within the appropriate hold time specified in the method referred to on the analyses sheet.

The instrument that was used for the analyses was calibrated and/or tuned at the required frequency.

A daily calibration check was performed.

A daily blank was run, and contamination was not observed at levels that would affect the analyses.

For all work, internal standards, and surrogates gave appropriate response levels.

Matrix spikes were added where appropriate, and recoveries were within the acceptable range.

Duplicates were run at the frequency specified in the applicable state or federal regulations.

In addition to the above steps, all original-raw data is on file at Aquarian Analytical's offices for inspection when required.

Exceptions (if any)

Certification

### Laboratory Services

P.O. Box 186 Canterbury, N.H. 03224 603-783-9097

Volatile Organic Report 11-11-98,14:33 Sample 41975

Project

GUAY'S GARAGE - FRANKLIN Matrix

Soil

Date Sampled
Date Logged In

11-05-98,14:40 11-05-98,16:09

Sampler Location G. AMBELAS WASTE OIL

Date of Analysis

11-06-98

Town

FRANKLIN

% Solids

Uncompleted%

Organic Compound	Result mg/	kg Det. Lim. mg/kg
Benzene	BD	0.030
Bromobenzene	BD	0.030
Bromodichloromethane	BD	0.030
Bromoform	BD	0.030
Bromomethane	BD	0.030
n-Butylbenzene	BD	0.030
sec-Butylbenzene	BD	0.030
tert-Butylbenzene	BD	0.030
Carbon-Tetrachloride	BD	0.030
Chlorobenzene	BD	0.030
Chloroethane	BD	0.030
Chloroform	BD	0.030
Chloromethane	BD	0.030
2-Chlorotoluene	BD	0.030
4-Chlorotoluene	BD	0.030
Dibromochloromethane	BD	0.030
1,2 Dibromo-3-Chloropropane	BD	0.060
1,2 Dibromoethane	BD	0.060
Dibromomethane	BD	0.030
1,2 Dichlorobenzene	BD	0.030
1,3 Dichlorobenzene	BD	0.030
1,4 Dichlorobenzene	BD	0.030
Dichlorodifluoromethane	BD	0.060
1,1 Dichloroethane	BD	0.030
1,2 Dichloroethane	BD	0.030
1,1 Dichloroethene	BD	0.030
cis-1,2 Dichloroethene	BD	0.030
trans-1,2 Dichloroethene	BD	0.030
1,2 Dichloropropane	BD	0.060
1,3 Dichloropropane	BD	0.030
2,2 Dichloropropane	BD	0.030
1,1 Dichloropropene	BD	0.030
cis-1,3 Dichloropropene	BD	0.030
trans-1,3 Dichloropropene	BD	0.030



### Laboratory Services

Page 2

P.O. Box 186 Canterbury, N.H. 03224 603-783-9097

Volatile Organic Report 11-11-98,14:33

Project

GUAY'S GARAGE - FRANKLIN

41975 Sample

Matrix

Soil

Location

WASTE OIL

Organic Compound	Result mg/	kg Det. Lim. mg/kg
	BD	0.030
Ethylbenzene	BD	0.400
Hexachlorobutadiene	BD	0.030
Isopropylbenzene	BD	0.030
p-Isopropyltoluene	BD	0.090
Methylene Chloride		0.060
Naphthalene	BD	0.030
n-Propylbenzene	BD	0.030
Styrene	BD	0.030
1,1,1,2 Tetrachloroethane	BD	0.030
1,1,2,2 Tetrachloroethane	BD	0.030
Tetrachloroethene	BD	
Toluene	BD	0.030
1,2,3 Trichlorobenzene	BD	0.060
1,2,4 Trichlorobenzene	BD	0.060
1,1,1 Trichloroethane	BD	0.030
1,1,2 Trichloroethane	BD	0.030
Trichloroethene	BD	0.030
Trichlorofluoromethane	BD	0.060
1,2,3 Trichloropropane	BD	0.030
1,2,4 Trimethylbenzene	BD	0.030
1,3,5 Trimethylbenzene	BD	0.030
Vinyl Chloride	BD	0.030
o-Xylene	BD	0.030
m&p-Xylene	BD	0.030
Ethyl Ether	BD	0.450
Acetone	BD	1.500
Methylethylketone MEK	BD	0.750
Methylisobutylketone	BD	0.750
Tetrahydrofuran	BD	0.450
Methyl-t-butyl ether	BD	0.030
riconfi c bacfi com-		
	<b>D</b> D	10.0
Total Pet. Hydrocarbons	BD	Results for TPH are
$Method = EPA-8100 \pmod{.}$		
		expressed in mg/kg (ppm)

### Comments:

TPH was performed with fuel oil as the standard.

Method of VOA Analysis = EPA-8260B

BD = Below Detection Limit - Results are in parts per million (ppm) unless noted.



### Laboratory Services

P.O. Box 186 Canterbury, N.H. 03224 603-783-9097

## Poly Aromatic Hydrocarbon Report 11-11-98,14:33 Sample 41975

Date Sampled 11-05-98,14:40
Date Logged In 11-05-98,16:09
Analysis Date 11-10-98
Extraction Date 11-10-98
% Solids Uncompleted%

Sampler Location Town Matrix

G. AMBELAS WASTE OIL FRANKLIN Soil/Solid

Organic Compound	Result mg/kg	Det. Lim. mg/kg
Acenaphthene	BD	0.20
Acenaphthylene	BD	0.20
Anthrecene	BD	0.20
Benzo (a) anthracene	BD	0.20
Benzo (b) fluoranthene	BD	0.20
Benzo (k) fluoranthene	BD	0.20
Benzo (ghi) perylene	BD	0.20
Benzo (a) pyrene	BD	0.20
Chrysene	BD	0.20
Dibenzo (a,h) anthracene	BD	0.20
Fluoranthene	BD	0.20
Fluorene	BD	0.20
Indeno (1,2,3-cd) pyrene	BD	0.20
Naphthalene	BD	0.20
Phenanthrene	BD	0.20
Pyrene	BD	0.20
2-Methylnaphthalene	BD	0.20
1-Methylnaphthalene	BD	0.20

### Comments:

TPH was performed with fuel oil as the standard.

BD = Below Detection Limit Method of Analyses = EPA-8270 All Results are in parts per million (ppm), except as noted.



### Laboratory Services

P.O. Box 186 Canterbury, N.H. 03224 603-783-9097

Total Metals Report 11-11-98,14:34 Sample 41975

Sample Matrix = Soil Project = GUAY'S GARAGE - FRANKLIN

Date Sampled = 11-05-98,14:40 Sampler = G. AMBELAS

Date Logged In = 11-05-98,16:09 Location = WASTE OIL

Date of Analysis = 11-06-98

Town = FRANKLIN

Mercury Analysis = 11-06-98

Total Metal	EPA method	Result (ppm-mg/kg	g)Det. Lim. (ppm-mg/kg)
Arsenic	6020	1.4000	0.5000
Barium	6020	20.0000	1.0000
Cadmium	6020	BD	0.5000
Chromium	6020	8.5000	0.5000
Lead	6020	41.0000	0.5000
Mercury ,	6020	BD	0.1000
Selenium	6020	BD	0.5000
Silver	6020	BD	0.5000

### Comments:

TPH was performed with fuel oil as the standard.

Results expressed in milligrams/kilogram, (ppm)



Laboratory Services

153 West Road Canterbury, NH 03224 Phone: (603)783-9097 FAX: (603)783-0360

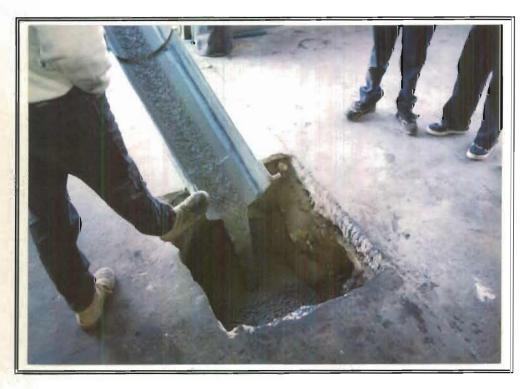
LABORATORY INFORMATION	PROJEC	T INFORMATION
Turn-around-time: Same Day(100% upcharg	Project #:	Project Manager: Gary Ambelas
Turn-around-time: 24 Hrs(50% upcharge)	Project Name: GAY'S GARACE	Report to: ARC
•		Invoice to: ARC
Turn-around-time: Normal $XX$	Sampler: Gary Ambelas	Phone: 364-2828
Account #: 61070	Company: ARC	FAX: 364-2829

	sample informat	FION				V	oc,	s-S	VO	C's			TP	Н		FAI	ETA	LS				0	THE	R-	(Lis	t)		
AAI ID#	Sample ID	Date/Time	Sample Matrix (S-soil / W-water / O-other)	Number of Containers	2	EPA 8260 / EPA 8260B /	× ×	EPA 8240 / EPA 624	BTEX / MTBE	Chlorinated Compounds Only	EPA 8270 (A-B/N)	EPA 8270 ( PAH)	EPA 8015M (Gasoune)	ErA o toom (i aci o)	13 PP Water(Diss Total )		8 RCRA Water (Diss_Total_	8 RCRA Soil (TCLP_Total)	Miscellaneous-List	EPA 608/8080 PCBS	EPA 608/8080 Pesticides	EPA 8150 Herbicides	EPA SW846-7 Reactivity	EPA 1010 Ignitabilty/Flashpoint	ЕРА 150.1/9045 рН	EPA 120.1 Conductivity		
41975	LASTE OIL	1440	2	7	П	X								1				X										
					П																							
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Please refer to back side for sampling guidelines.



1. Product Removal 500-Gallon Waste Oil UST



2. Closure-In-Place with Concrete

0-115142
UST Closure Report
23 Nov 1998



## State of New Hampshire DEPARTMENT OF ENVIRONMENTAL SERVICES

6 Hazen Drive, P.O. Box 95, Concord, NH 03302-0095 (603) 271-3644 FAX (603) 271-2181



January 7, 1999

Mr. Alex Lachiatto, Esq. PO Box 486 Franklin, New Hampshire 03235

Subject:

Franklin-Former Guay's Garage, 601 South Main Street: Tank Closure

Report, November 20, 1995 by ARC Environmental (UST# DES#

199808031, UST#0-115142)

Dear Attorney Lachiatto:

The New Hampshire Department of Environmental Services (DES) has reviewed the report for the November 5, 1998 tank closure by ARC Environmental for the 500 gallon waste oil underground storage tank closed in-place at the above referenced facility. Based upon the information contained in the report, DES has concluded that:

- 1. It does not appear that a discharge of petroleum that would ultimately impact surface water or groundwater of the State has occurred from this tank. Therefore, DES will not require additional investigation or remedial measures related to this tank closure. Previously requested investigations must still be conducted.
- 2. The owner(s) of this facility must meet the goals of the N.H. Admin. Rules Env-Ws 410 "Groundwater Protection Rules", that is, groundwater at the site must continue to meet drinking water quality standards. The owner shall not undertake any activities which might result in Ambient Groundwater Quality Standards being exceeded at the site.

DES reserves the right, under N.H. Administrative Rules Env-Ws 410, "Groundwater Protection Rules," and N.H. Administrative Rules Env-Ws 412, "Rules for Reporting and Remediation of Oil Discharges," to require additional hydrogeological investigations and/or remedial measures, if further information indicating the need for such work becomes known.

If you have any questions, please contact me at the *Waste Management Division* at 603-271-3644.

Sincerely,

Charles Berube

Oil Remediation and Compliance Bureau

Luly Bule

CB/gls:/f:\guay.fra
cc: Fred McGarry, P.E./ OR&CB
ARC Environmental
file



### RECEIVED

Post Office Box 116 Gilmanton Iron Works New Hampshire 03837-0116

> Phone: (603) 364-2828 FAX: (603) 364-2829

APR 1 7 2000

DEPARTMENT OF ENVIRONMENTAL SERVICES

Type of Submittal	Petroleum Reimbursement Fund Phase	
Technical Report	Site Investigation	

## SITE INVESTIGATION REPORT

199808031

Former Guay's Garage 601 South Main Street (US Route 3) Franklin, New Hampshire

NHDES Site No. 199808031 UST Facility ID No. 0-115142

> Prepared for: Estate of Marion A. Guay c/o Alexander Lachiatto, Esq. P.O. Box 486 Franklin, New Hampshire 03235

> > April 14, 2000

ARC Job No. GU-98310

### Recommended Risk Category

8. No AGQS Violation, No Source Remaining

## DATA SUMMARY FOR TECHNICAL REPORT SUBMITTALS



	Site Investig April 14, 200	<del>-</del>	
SITE INFORMATION			
NHDES#: 199808031	Re	commended RISK Level of this site (1-8	3):8
Site Name: Site Address: Site Town and Zip Code: Property Owner: Facility Owner: Facility Owner Contact Person and Responsible Party Mailing Address Specify Property or Facility Owner Property Deed Reference (County, Current Site Town Tax Map and Lo	:	Former Guay's Garage 601 S. Main St. Franklin, NH 03235 Estate of Marion A. Guay Estate of Marion A. Guay Alexander Lachiatto, Esc PO Box 486, Franklin, NH Both Merrimack 494/503 Map 101, Lot 402	7 603-934-2110
CONSULTANT INFORMATION	ADC Envi	ronmental Consultants 1	
Preparer/Consultant: Consultant's File #:	GU-98310		
Contact Person and Tel. #: Mailing Address:	Gary Amb	elas <u>603-364-2828</u> 16, Gilmanton I.W., NH (	3837
SITE LOCATION/DESCRIPTION	Yes/No	POTENTIAL RECEPTORS	Yes/No
Municipal water in the area? Municipal water provided to site? Municipal sewer in area? Urban area? Within Wellhead Protection area?	Yes Yes No No	Basements (within 250 ft.)? Water supply wells (within 1,000 ft.) Surface water bodies (within 100 ft.) Is site occupied?	
UST/AST INFORMATION UST/AST Registration Number: Date most recent compliance repoils site in compliance with operating Product(s) #USTs total stored active capacity Waste Oil 0 Gasoline 0 #2 Oil 0	and maintenance red #USTs #U	n	Ts #ASTs
PRIMARY SUSPECTED SO List (LUST, Dry Wells, Drun 500-gallon #2 oil Drywell (floor dr.	ns, Floor Drains, etc.) LUST		Yes/No Yes Yes
Estimated Product Lost: Estimated Product Recovered: Is all contaminated soil remediated	••	_ gallons or unknown lons or unknown s Yes	

## NEW HAMPSHIRE DEPARTMENT OF ENVIRONMENTAL SERVICES DATA SUMMARY FOR TECHNICAL REPORT SUBMITTALS

SITE GEOLOG	Y						ı	
	Stratigr	aphic Un	its				pth (feet - fee	et)
Sand						0 - 9	!	
	edded Sand	<u>/Silt</u>				9 - 12		_
Silt	edded Sand	/c: 1+				12 - ??	<u> </u>	
Estimated depth to	bedrock: ? (	(feet)	Is ther	e a vertical g	radient? (u		Y	
_	groundwater: 9.5			_		vater table? (yes/no)	Y	
					-	•		_
Notes: Perche	d water tal	ble v	ariable	, contr	olled	by stratig	raphy	
SOIL FIELD SO	REENING RESU	LTS	(remaining in	n-ground condi	itions)		: .	
<del></del> -	Sample Design	nation:	B-1	B-2	В-3	A B-3B	B-4	
	Date Sar	_	12/98				T -	
						<u> </u>	<u> </u>	
Parameters	Method (e.g., PID, H	lanby)		(	CONCENT	TRATIONS (ppm)		
Total VOCs	PID		0.0	1.7	2.5	2.1	0.4	
Total BTEX								
TPH								
SOIL QUALITY	ANALYTICAL			in-ground cond			.	
			Designation:	B-1	B-2	B-3B	B-4	
		Da	ate Sampled:	12/98				
Parameters	Test Metho	od S	oil Criteria		со	NCENTRATIONS	(ppm)	
Benzene	8260		0.3	BDL	BDL	BDL	BDL	
Total BTEX	8260			BDL	BDL	BDL	BDL	
Naphthalene	8260	+	5	BDL	BDL	BDL	BDL	
TPH	8100	10	0,000	BDL	BDL	BDL	BDL	
PAH	8270	<del>-   '</del>	,,,,,,	BDL	BDL	BDL	BDL	
					222		+	
					ļ <u>-</u>		. : -	
·					-		-	
							,	
GROUNDWAT	ER QUALITY AN			(most rece				
			Designation: ate Sampled:	MW-2	MW-	-4		
			ne Sampled:	08/99			<u> </u>	
Parameters	Test Method	AGQS	Are AGQSs violated?		со	NCENTRATIONS	(ppb)	
Benzene	8260	5	No	BDL	BDI			
Total BTEX	8260		No	BDL	BDI			
MTBE		XXXX E	No	6	1 (		i i	
Naphthalene	8260	20	No	BDL	BDI			
					<del> </del>		+	
	<del>-   -  </del>				<del> </del>		:	
					-		1	
							,	

Rev: 12/94



### RECEIVED

APR 1 7 2000

DEPARTMENT OF ENVIRONMENTAL SERVICES

Post Office Box 116 Gilmanton Iron Works New Hampshire 03837-0116

> Phone: (603) 364-2828 FAX: (603) 364-2829

## SITE INVESTIGATION REPORT

Former Guay's Garage 601 South Main Street (US Route 3) Franklin, New Hampshire

NHDES Site No. 199808031 UST Facility ID No. 0-115142

### SUMMARY

Petroleum-contaminated soils were encountered during the closure of one 500-gallon #2 fuel oil underground storage tank ("UST") at the site in July 1998. Laboratory analysis of a groundwater sample from beneath the tank indicated the presence of elevated levels of petroleum-related semi-volatile compounds ("PAH"), and the presence of the regulated VOC naphthalene at a concentration in excess of NHDES regulatory standards.

ARC installed four groundwater monitoring wells on the subject property during December 1998 as part of the current Site Investigation. Analysis of groundwater samples collected in April and August 1999 indicated the absence of petroleum-related VOC's in site groundwater at concentrations in excess of NH Ambient Groundwater Quality Standards ("AGQS") at locations within and presumed hydraulically down-gradient of the former fuel oil UST grave.

In July 1999 ARC removed a drywell located between the subject building and South Main Street. The drywell received effluent from two floor drain systems serving the building. Approximately six cubic yards of contaminated soil were excavated from the drywell pit and transported off-site for disposal at an authorized facility. Laboratory analysis of a composite in-situ soil sample collected from the base of the final drywell excavation indicated the absence of regulated VOC's, TPH, PAH, and the eight RCRA priority pollutant metals at concentrations in excess of NH regulatory standards.

No sensitive receptors, including surface water bodies, water supply wells, or residential dwellings, potentially at risk to the

Former Guay's Garage Franklin, New Hampshire

petroleum discharge originating at the subject site, were identified during the Site Investigation.

Since two consecutive rounds of groundwater samples have indicated compliance with AGQS, ARC further recommends site closure and the issuance of a letter of "no further action" relating to the prior discharge of petroleum products at the property.

// End Summary

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Former Guay's Garage 601 South Main Street Franklin, New Hampshire

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	F. Laboratory Analytical Data - Groundwater (	
	G. Laboratory Analytical Data - Groundwater (	
	H. Laboratory Analytical Data - Contaminated	Soils,
	Drywell (07/99)	
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	J. Properties & Owners Within 1,000 Feet	



Post Office Box 116 Gilmanton Iron Works New Hampshire 03837-0116

> Phone: (603) 364-2828 FAX: (603) 364-2829

## SITE INVESTIGATION REPORT

Former Guay's Garage 601 South Main Street Franklin, New Hampshire

NHDES Site No. 199808031 UST Facility ID No. 0-115142

### 1.0 INTRODUCTION

### 1.1 Objectives

ARC Environmental Consultants, Inc. ("ARC") has prepared this Site Investigation Report ("SIR") in order to define the nature, extent, and magnitude of subsurface contamination at the above-referenced property. This Site Investigation ("SI") was undertaken in response to a request from the NH Department of Environmental Services ("NHDES") to Mr. Alexander Lachiatto, Esq., executor of the estate of Marion A. Guay (facility owner), dated November 10, 1998, following the discovery that a discharge of oil, as defined in NH Code of Administrative Rules, Parts Env-Ws 412.02 and Env-Ws 412.03, had occurred at the subject site. The current Site Investigation was performed utilizing the NHDES standardized, preapproved Workscope and Budget. A copy of the Site Investigation request letter is attached as Appendix A.

This document is intended to fulfill the requirements of an SIR as outlined in NH Code of Administrative Rules, Part Env-Wm 1403.07, "Groundwater Management and Groundwater Release Detection Permits, Site Investigation". This report is subject to the limitations set forth in Appendix B.

### 1.2 Scope of Work

This investigation comprised the following tasks:

- A visual inspection of the subject property
- The advancement of five soil borings on the property, and the field screening and laboratory analysis of soil samples

Property Assessment • Storage Tank Management • Site Remediation

collected during the advancement of the borings

- ullet The completion of four of the soil borings as groundwater monitoring wells
- The collection and laboratory analysis of two rounds of groundwater samples from the monitoring wells
- Measurement of spot surface elevations and groundwater elevations, and construction of a groundwater contour map
- The closure of one dry well, which served as a discharge point for on-site floor drains
- Identification of potential receptors, and formulation of a conceptual model of the sources, transport, and fate of subsurface contamination
- A review of pertinent federal, state, and municipal records and databases
- Preparation of this SIR to comply with provisions of Env-Wm 1403.

### 2.0 SITE LOCATION AND DESCRIPTION

### 2.1 Site Description

Legal Description: Franklin Tax Map 101, Lot 402 Address: 601 South Main St., Franklin, NH 03235

Owner: Estate of Marion A. Guay, c/o Alex Lachiatto, Esq.,

Executor

Deed Reference: MCRD Book 494, Page 503

Size: 7.20 acres
Zoning: Industrial

**Utilities:** Water - municipal connection Sewer - on-site septic systems

Electricity, Telephone

Structures: 1-story masonry frame service garage, w/ attached

1-story wood frame warehouse and 3-story wood

frame barn;

2-story wood frame residence; 1-story wood frame cottage.

The subject property is located on the west side of South Main Street (US Route 3), approximately 200 feet north of the intersection with Industrial Park Drive, in Franklin, Merrimack County, New Hampshire. The property location is depicted in Figure

1, Site Location Map, and Figure 2, a portion of Franklin Tax Maps 101 and 102. (Figure 6 depicts properties within a 1,000-foot radius of the subject site). Land use in the subject neighborhood is mixed, with industrial properties dominating to the north and west (Webster Valve Company, Inc. and the Franklin Industrial Park), while residential properties predominate to the south and east.

The subject property is abutted to the north and south by residential properties; to the east by South Main Street, and beyond by an abandoned railroad right-of-way and residential property; and to the west by land belonging to Webster Valve Company, Inc. / Webster Foundry Corporation.

The subject property is in mixed commercial/residential use. The primary structure on the property is a one-story masonry frame service garage with an attached one-story wood frame warehouse and three-story wood frame barn. The garage (formerly known as Guay's Garage) is unheated at the present time, and is currently occupied by Dan's Auto Repair. The attached warehouse, which was unoccupied during 1998-1999, is currently occupied by Genuine Autobody. The barn is currently occupied by an insulation contractor, and is also unheated. This structure and its immediate environs are the primary focus of the current Site Investigation.

Secondary structures on the parcel include a two-story wood frame residence (duplex) to the south of the garage, and a one-story wood frame cottage to the north of the warehouse.

The subject property is serviced by the municipal water supply and individual on-site septic systems for the garage/warehouse and the two residences.

A boundary survey site plan of the subject property is enclosed in the map pocket at the rear of this report. The plan was prepared by Paul M. Darbyshire Associates of Gilmanton, NH, and is used by permission. The plan indicates the locations of the structures, surface elevations, and other pertinent features on the parcel. As shown on the plan, a private, paved access road (Mullavey Way) serves the cottage and other residential properties to the north of the subject site. Subject lands to the west of the access road consist of vacant clearings and woodlands. A small pond occupies the west central portion of the lot, as shown. A site plan showing detail in the vicinity of the commercial building and duplex, pertinent to the SI, is depicted in Figure 3.

### 2.2 Current Ownership

According to City of Franklin property assessment records, the current owner of record of the subject property and the registered

underground storage facility is:

Estate of Marion A. Guay c/o Alexander Lachiatto, Esq., Executor PO Box 486 Franklin, New Hampshire 03235 603-934-2110

### 2.3 Facility Registration Information

### A. Underground Storage Tanks.

The subject facility is registered with the NHDES Waste Management Division as Underground Storage Facility ID No. 0-115142. The status of all underground storage tanks ("UST's") on the subject property is summarized below in Table 1.

Table 1. UST Summary Estate of Marion Guay Franklin, New Hampshire Facility ID No. 0-115142

Tank No.	Capacity (gallons) & Product	Installation Date	Status (A/R/F)*	Closure Date
1	1,000 Gasoline	Unkn.	R	07/30/98
2	500 Gasoline	Unkn.	R	07/30/98
3	500 #2 Oil	Unkn.	R	07/30/98
4	500 #2 Oil	Unkn.	R	07/31/98
5	275 #2 Oil	Unkn.	· R	07/31/98
6	500 Waste Oil	Unkn.	F	11/05/98

<sup>\*</sup> Status Code: A = Active; R = Closed/Removed; F = Closed/Filled in Place.

The NHDES UST registration documents are attached in Appendix C. No active or out-of-service UST's are known to remain at the subject site.

### B. RCRA Hazardous Waste Generator Status.

The subject facility is not registered with the U.S. Environmental Protection Agency ("EPA") or the NHDES as a regulated or hazardous waste generator or handler.

### 3.0 SITE HISTORY & PROJECT BACKGROUND

#### 3.1 Current Use

The subject site is in mixed commercial/residential use. The service garage is occupied by Dan's Auto Repair, a general automotive repair and maintenance business. The adjoining warehouse is occupied by an autobody shop. The barn is currently occupied by an insulation contractor. Both the duplex along South Main Street and the cottage are occupied.

### 3.2 Prior Ownership and Use

The history of ownership of the subject property shown below in Table 2 (page 6) was compiled from information on file with the City of Franklin Assessors Office and from property deed information recorded with the Merrimack County Registry of Deeds ("MCRD") in Concord, NH, reviewed on May 18, 1998.

ARC personnel reviewed Franklin City Directories at the Franklin Public Library on May 13, 1998. Directories were reviewed from 1922 through 1961 at approximately five-year intervals. The subject site first appears in the 1926 Directory as "Guay Filling Station". From 1932 through 1961 the site is identified as "Guay's Garage" or "Guay's Garage, Inc." Retail gasoline sales were conducted at the property from c. 1926 through the mid 1960's. Through the years the subject address has included residential listings for Albert Guay and Edmond Guay.

The 1951 Directory includes a listing for "Franklin Airways" at the subject address. Other businesses known to have occupied the site through historical references or anecdotal information include the John J. Nissen Baking Company, which operated a distribution center and thrift shop in the warehouse during the 1970's, and various automotive repair facilities which have occupied the service garage during the past 30 years.

### Table 2. History of Ownership 601 S. Main St. Franklin, NH

Owner (Grantee)	Date of Acquisition	Book/Page (MCRD)
Marion A. Guay	06/27/28	494/503
George E. Clarke	05/14/12	401/431
Jabez R. Smith & Wife	Unkn.	
Residence (Duplex):		
Marion A. Guay	09/30/53	740/220
Edmond J. Guay	05/19/49	666/389
Linnie W. Wadleigh	06/20/29	148/423
City of Franklin	Unkn.	:

### 3.3 Prior Discharges of Regulated Contaminants

### 3.3.1 Underground Storage Tanks

On July 30 and 31, 1998 ARC, in conjunction with C.A.B. Services, Inc. of Dover, NH, removed UST's 1 through 5 in Table 1, above, from the subject property. The locations of the UST's are shown on Figure 3.

Laboratory analysis of composite soil samples from the floors of the tank graves indicated the presence of petroleum-related volatile organic compounds ("VOC's") at concentrations below Category NH S-2 soil standards. One groundwater sample was collected from the base of the 500-gallon #2 oil UST pit (UST #3), immediately east of the warehouse, on July 31, 1998. Laboratory analysis of this groundwater sample indicated the presence of elevated levels of polycyclic aromatic hydrocarbons ("PAH"), and concentrations of naphthalene in excess of NH Ambient Groundwater Quality Standards ("AGQS").

The groundwater analytical data from the tank closure is summarized below in Table 3 (page 7). Concentrations of VOC's and PAH in Table 3 are expressed in micrograms per liter ( $\mu$ g/l), or parts per

billion (ppb). The NHDES Method 1 Groundwater Standards for Category NH GW-1 groundwater (AGQS) are also listed for each compound where appropriate. Concentrations in excess of NH GW-1 Groundwater Standards are shown in **bold** type.

Table 3. Groundwater Analysis Summary
500-Gallon #2 Oil UST Closure - July 1998
601 South Main Street
Franklin, NH
All Concentrations in ug/l

Compound	500 #2 Oil (Whse.)	NH GW-1 Stnd. (1)
Benzene Toluene Ethylbenzene Xylenes (total) MTBE	BDL BDL BDL BDL BDL	5 1,000 700 10,000 70
Alkylbenzenes (2) Isopropylbenzene Naphthalene (as VOC)	BDL BDL 25	50 280 20
PAH: Acenaphthene Acenaphthylene Anthracene Fluorene Naphthalene (as PAH)	240 44 37 43 <b>23</b>	420 420 2,100 280 20
Phenanthrene Pyrene 2-Methylnaphthalene 1-Methylnaphthalene	85 71 25 24	210 210 280 N/A

BDL = Below Detection Limits.

N/A = The NHDES has not adopted a regulatory limit for this compound.

(1) NHDES Contaminated Sites Risk Characterization and Management Policy, Table 2, Section 7.4(5), Jan. 1998, as amended

(2) Alkylbenzenes include 1,2,4-trimethylbenzene, 1,3,5-trimethylbenzene, n-propylbenzene, p-isopropyltoluene, n-butylbenzene, sec-butylbenzene, and tert-butylbenzene.

For additional information on the closure of UST's 1 through 5 in Table 1, including complete laboratory data, refer to ARC's UST Closure Report, dated September 9, 1998 (on file with the NHDES Oil Remediation and Compliance Bureau). Based on the information contained in ARC's UST Closure Report, the NHDES issued a request for a Site Investigation on November 10, 1998 (see Appendix A).

On November 5, 1998 ARC, in conjunction with C.A.B. Services, Inc., closed-in-place the 500-gallon waste oil tank located beneath the floor of the service garage (UST 6 in Table 1, above.) Laboratory analyses of a soil sample collected from beneath the UST indicated that in-situ soils beneath the tank meet current NHDES regulatory standards for VOC's, TPH, PAH, and the eight RCRA priority pollutant metals for category NH S-3 (and S-1) soils. No evidence of a release or discharge of waste oil to the environment was noted during the tank closure. For additional information on the closure of the waste oil UST, including complete laboratory data, refer to ARC's UST Closure Report, dated November 20, 1998 (on file with the NHDES ORCB).

On January 7, 1999 the NHDES issued a letter of "no further action" in connection with the closure of the waste oil UST. Accordingly, the focus of the current Site Investigation remains the area proximate to the former 500-gallon #2 oil UST between the warehouse portion of the subject building and South Main Street.

### 3.3.2 Floor Drain Dry Well

On July 31, 1998 ARC personnel collected soil and standing liquid samples from a subsurface dry well located between the warehouse and roadway, as shown on Figure 3. The dry well receives effluent from several floor drains located in the warehouse; one floor drain receives effluent from a wash basin in the service garage.

The laboratory analytical data for the drain samples are summarized below in Table 4 (solids, page 9) and Table 5 (liquid, page 10). Concentrations in excess of applicable NHDES regulatory standards are shown in **bold** type.

The laboratory data indicate that regulated contaminants had entered the dry well via the floor drains, resulting in contamination of accumulated solids and standing liquids at concentrations in excess of regulatory standards.

On July 13, 1999 the dry well was dismantled, and contaminated solids and liquids were transported off-site for disposal. See Section 6 (page 24) for information on the closure of the dry well. For additional information on the sampling of the dry well, including complete laboratory data, refer to ARC's September 9, 1998 UST Closure Report.

Table 4. Soil/Sludge Analysis Summary - Floor Drain Dry Well
July 1998
601 South Main Street
Franklin, NH
All Concentrations in mg/kg

Benzene Toluene	BDL	
Ethylbenzene Xylenes (total) MTBE	0.47 0.66 6.20 BDL	0.3 100 140 1,100 2
Alkylbenzenes <sup>(2)</sup> Isopropylbenzene Naphthalene (as VOC)	7.51 BDL 0.82	59 123 5
TPH	19,000	10,000
RCRA Metals: Arsenic Barium Cadmium Chromium Lead Mercury Selenium Silver	8.3 150 7.9 56 <b>970</b> 0.3 2.5 0.9	12 2,500 230 460 <sup>(3)</sup> 400 7 2,500 200
PAH: Acenaphthene Acenaphthylene Anthracene Benzo(a)anthracene Benzo(b)fluoranthene Benzo(k)fluoranthene Benzo(a)pyrene Chrysene Fluoranthene Fluorene Naphthalene (as PAH) Benzo(g,h,i)perylene Phenanthrene Pyrene 2-Methylnaphthalene	BDL BDL 2.1 6.5 4.1 4.3 5.4 9.9 19 2.9 2.2 BDL 17 23 2.5	270 300 1,700 2 20 20 0.7 200 2,500 510 5 <combined Total 2,400&gt; 150</combined 

Notes: See Table 5, page 10.

Table 5. Liquid Analysis Summary - Floor Drain Dry Well
July 1998
601 South Main Street
Franklin, NH
All Concentrations in ug/l

Compound	DRYWELL LIQUID	NH GW-1 Stnd. (4)
Benzene	BDL	5
Toluene	493	1,000
Ethylbenzene	26	700
Xylenes (total)	96	10,000
MTBE	BDL	13
Alkylbenzenes (2)	51	50
Isopropylbenzene	BDL	280
Naphthalene (as VOC)	12	20
1,4-Dichlorobenzene	60.	75
PAH:		
Acenaphthene	BDL	420
Acenaphthylene	BDL	420
Anthracene	BDL	2,100
Fluorene	BDL	280
Naphthalene (as PAH)	7 .	20
Phenanthrene	BDL	210
Pyrene	BDL	210
2-Methylnaphthalene	BDL	280
1-Methylnaphthalene	BDL	N/A

BDL = Below Detection Limits.

N/A = The NHDES has not adopted a regulatory limit for this compound.

(1) NHDES Contaminated Sites Risk Characterization and Management Policy, Table 3, Section 7.5(2), Jan. 1998, as amended

(2) Alkylbenzenes include 1,2,4-trimethylbenzene, 1,3,5-trimethylbenzene, n-propylbenzene, p-isopropyltoluene, n-butylbenzene, sec-butylbenzene, and tert-butylbenzene.

(3) Chromium (VI) standard; Chromium (III) = 2,500 mg/kg

(4) NHDES Contaminated Sites Risk Characterization and Management Policy, Table 2, Section 7.4(5), Jan. 1998, as amended

### 3.4 Previous Investigations

In addition to the UST Closure Reports, ARC prepared a Phase I Environmental Site Assessment ("ESA") of the subject property, dated June 8, 1998. During the ESA investigation, ARC identified the following potential sources of environmental contamination at the site: on-site UST's; floor drains and the associated dry well; and subsurface contamination originating at the neighboring, and hydraulically up-gradient, Webster Valve Company / Watts Regulator Company site (see Section 3.5, below).

### 3.5 Regulatory File Review

No properties within one mile of the subject site appear on the EPA's CERCLIS database report of January 24, 2000. No properties within one mile of the subject site appear on the CERCLIS database of archived sites (NFRAP), updated January 24, 2000.

The subject property does not appear on the National Response Center's Emergency Response Notification System ("ERNS") database report of January 4, 2000. However, the ERNS database contains Standard Incident Reports for the following neighboring sites within approximately 1/2 mile of the subject property:

- 1. Watts Regulator Co., S. Main St., ERNS #221607, 02/14/94. Approximately 50 gallons of ethylene glycol (50%) were spilled as a result of a broken closed-loop cooling system pipe.
- 2. ALCAN Extrusions USA, Industrial Park Dr., ERNS #232310, 03/28/94. Approximately 45,000 gallons of contact cooling water were discharged to the environment as a result of an open cooling system drainage valve.
- 3. Watts Regulator Co., S. Main St., ERNS #318678, 01/01/96. Approximately 50 gallons of ethylene glycol were spilled as a result of a ruptured cooling system radiator.
- 4. Polyclad Laminates, Industrial Park Dr., ERNS #477969, 03/24/99. Approximately 300 gallons of resin were spilled during delivery due to a faulty coupling.

The subject property does not appear on the NHDES ALLSPILLS database report of April 3, 2000. Those sites within approximately mile of the subject property which appear on the ALLSPILLS database report of April 3, 2000 are listed below in Table 6 (page 12).

# Table 6. NHDES ALLSPILLS Inventory Within 4 Mile of 601 South Main Street Franklin, NH

NHDES Spill No.	Site Name & Address	Date	Contaminant
199802036	Aavid Precision Extrusion 43 Industrial Park Dr.	09/16/97	1 gallon transformer oil
199802005	Watts Regulator Co. S. Main St.	01/22/98	40 gallons hazardous waste

Those properties within ½ mile of the subject site which appear on the NHDES ALLSITES database report of April 3, 2000 are listed below in Table 7.

Table 7.

ALLSITES Site Remediation & Groundwater Hazard Inventory
Within 1/4 Mile of
601 South Main Street
Franklin, NH

NHDES Site No.	Site Name & Address	Project Type	File Status
199003020	Webster Valve Co. S. Main St.	HAZWASTE	Active
199607045	Former Alcan/Jarl Extrusion Industrial Park Dr.	SPILL/RLS	Closed
199808031	Former Guay's Garage 601 S. Main St.	LUST	Active

\* Project Type Key:
HAZWASTE = Hazardous Waste
SPILL/RLS = Spill/release
LUST = Leaking underground storage tank(s)

Discussion:

1. Webster Valve Co. / Watts Regulator Co., South Main St., DES #199003020

The Watts Regulator Company, Webster Valve Division site is located immediately north and west of the subject property on Franklin Tax Lots 101-002 and 101-003.

Following the closure of a 10,000-gallon fuel oil UST in 1989, the NHDES requested that groundwater monitoring wells be installed at the Webster Valve site. Analysis of groundwater samples collected during June and September 1990 indicated the presence of chlorinated solvent volatile organic compounds ("VOC's") at concentrations in excess of NHDES regulatory limits. The highest concentrations of VOC's were detected in wells located near the subject property boundary. The solvent contamination was believed to originate at an outdoor drum storage area.

Additional site investigations were undertaken in 1996 following the reported release of ethylene glycol solution (50%) in 1994 and reported releases of cutting oils to near-surface soils in 1993 and May 1996. Based on measured groundwater elevation data, groundwater was determined to flow in an easterly direction across the site.

Laboratory analysis of groundwater samples collected during April 1996 indicated the presence of the VOC 1,1-dichloroethene in two wells at concentrations in excess of NHDES ambient groundwater quality standards ("AGQS"). By July and November 1996 all VOC concentrations were reported below AGQS, although elevated levels of tetrachloroethene were reported in three wells. Since two consecutive rounds of groundwater sampling indicated concentrations below AGQS, the NHDES closed out the groundwater portion of the site in January 1997, indicating that additional groundwater monitoring would not be required.

In September 1997 approximately 750 cubic yards of lead-contaminated soils were discovered at the Webster Valve site. Bronze castings produced at an on-site foundry typically contain 7% lead, and the contamination is likely the result of impacted core sands and baghouse dust entering soils near the foundry. In October 1997 the NHDES approved the on-site treatment of the contaminated soil using a cement stabilization process.

On April 24, 1998 the NHDES requested that Webster Valve undertake additional investigations to characterize subsurface contamination at the site.

# 2. Former Alcan/Jarl Extrusion Facility, Industrial Park Dr., DES #199607045

The former Alcan/Jarl site, now Aavid Precision Extrusion, is located at the western terminus of Industrial Park Drive, approximately & mile west of the subject property.

In March 1994 approximately 45,000 gallons of contact cooling water were released to an on-site stormwater retention basin which discharges to an unnamed tributary of the Merrimack River. The contact cooling water contains a small amount of emulsified petroleum-based hydraulic oil which leaks into the cooling system. Based on previous measurements of the oil and grease concentration in the cooling water, an estimated 15 gallons of oil were released to the retention basin during the cooling water discharge. Remedial measures consisted of skimming free product from the water in the basin, cutting and containerizing impacted vegetation, and the placement of containment booms and absorbent pads in the basin and stream.

Analysis of cooling water and oil samples collected from the cooling system in 1996 did not indicate the presence of any NHDES target VOC's. Analysis of surficial soil samples collected from the area of the discharge in August 1996 indicated the absence of total petroleum hydrocarbons ("TPH"). Accordingly, the NHDES closed out the site file in October 1996, indicating that further remedial measures or monitoring are not warranted.

The ORCB Franklin town file contains the following reports of documented or alleged spills or releases of regulated substances in the vicinity of the subject property. (These incidents typically do not require regulatory action beyond the initial clean-up phase.)

# 3. Watts Regulator / Webster Valve, S. Main St.

On January 22, 1998 one 40-gallon container of sodium hydroxide (a caustic substance) ruptured inside a delivery truck at the site. The chemical was contained within the truck.

On May 31, 1996 approximately 10 gallons of water soluble machine cutting oil escaped the building beneath a wall. Impacted soils were cleaned by company personnel.

On February 22, 1996 approximately 50 gallons of water soluble cutting oil were released to a storm drain via the ground surface. Impacted soils were cleaned by company personnel.

On February 12, 1994 approximately 50 gallons of ethylene glycol solution (50%) were released to the ground surface when falling ice broke cooling system pipes. Most of the ethylene glycol was

recovered from snow and ice on the ground; no impact to local soils was reported (see above).

On November 1, 1993 approximately 25 gallons of cutting oil leaked onto asphalt pavement from a waste dumpster containing metal; chips and shavings.

# 4. Aavid Precision Extrusion, Industrial Park Dr.

On September 16, 1997 approximately one quart of non-PCB transformer oil was released; the transformer was replaced.

# 5. Polyclad Laminates, Inc., Industrial Park Dr.

On November 27, 1995 approximately 45 gallons of Therminol 66, a synthetic petroleum coolant containing terphenyls, were released. The spill was cleaned by company personnel.

# 4.0 SUBSURFACE INVESTIGATION

# 4.1 Subsurface Borings

On December 10 and 11, 1998 ARC Environmental Consultants, Inc., in conjunction with Con-Tec, Inc. of Concord, NH, advanced five soil borings on the subject property to assess the environmental quality of the subsurface soils in the vicinity of the former UST's at the garage/warehouse. All borings were advanced using a Dietrich' Model D-90 truck-mounted rotary drill rig equipped with  $4\frac{1}{4}$ " (inside diameter) hollow stem augers. Four of the five borings were completed as groundwater monitoring wells. Soil boring logs are attached in Appendix D. The locations of the borings / monitoring wells are shown on Figure 3.

Boring B-1 was advanced to a total depth of approximately 20 feet below ground surface ("bgs"), and was located to the rear (west) of the subject building to provide up-gradient elevation and ambient groundwater quality control. Boring B-2 was advanced to a total depth of approximately 25 feet bgs through the former 500-gallon #2 oil UST grave. Boring B-3A was advanced to a total depth of approximately 30 feet bgs in the vicinity of the former gasoline UST's and pumps; the boring was abandoned when it failed to encounter groundwater. Boring B-3B was advanced to a total depth of approximately 18 feet bgs at a location approximately 25 feet north of Boring B-3A. Boring B-4 was advanced to a total depth of approximately 18 feet bgs at a location off the northeast corner of the subject building.

Typical soil sequences encountered during boring consisted of unconsolidated interbedded deposits of sands and silts with frequent stringers of silty sands and sandy silts (see geologic cross section, Figure 5, and soil boring logs, Appendix D).

# 4.2 Soil Field Screening

During advancement of the soil borings, soil samples were collected at five-foot depth intervals using a 2" diameter split-spoon sampling tool (driven by a 140-pound weight falling a vertical distance of 30"). The samples were analyzed on-site, using headspace vapor methodology, with a Thermo Environmental Model 580B photo-ionization type organic vapor analyzer ("OVA"). The 580B OVA has a sensitivity of 0.1 parts per million ("ppm"), and was calibrated to a benzene standard using a reference gas of isobutylene. Ambient background levels and instrument drift displayed by the OVA were in the range ±0.1 ppm.

(Field screening was not performed at Boring B-2 until a sample depth of 15 feet bgs, since the first 14 feet of section consisted of clean sand used to backfill the 500-gallon #2 oil UST grave.)

The samples were placed in unused one-gallon zipper-lock plastic storage bags, which were then sealed and gently warmed for several minutes to ambient temperature. After the sample was gently agitated, the OVA probe was inserted through the seal into the headspace above the soil and the maximum vapor concentration recorded.

The results of the OVA screening are presented below in Table 8 (page 17). OVA concentrations are given in parts per million (ppm). Significant concentrations of organic vapors were not detected in any of the screened soil samples.

# 4.3 Soil Sample Collection and Delivery

A portion of the soil sample exhibiting the highest OVA reading from each of Borings B-1, B-2, B-3B, and B-4 was transferred to a clean four-ounce glass jar with teflon-lined screw-down lid. The jars were packed as full as possible to minimize headspace, then placed in an insulated cooler with ice packs for storage and transport. The samples were delivered the day of collection to Aquarian Analytical, Inc. in Canterbury, NH. All sample collection, transport, and delivery were performed following standard Chain of Custody protocol.

All soil laboratory analytical data and Chain of Custody documents are attached in Appendix E. (See Section 5.1, below.)

#### 4.4 Monitoring Well Installation

Soil borings B-1, B-2, B-3B, and B-4 were completed as groundwater monitoring wells MW-1 through MW-4. Wells were constructed with a ten-foot length of 2" Schedule 40 PVC well screen (0.010") and completed with 2" Schedule 40 PVC riser. The annular space surrounding the well screen and lower portion of the riser was filled with clean filter sand. A two-foot thick layer of bentonite

clay pellets was placed above the filter sand, and the remaining annular space filled with clean soil. All four wells were equipped with flush-mounted aluminum street boxes.

Well construction details are shown in Appendix D with the soil boring logs.

Table 8. Headspace OVA Screening Former Guay's Garage, Franklin, NH

Sample Number		Depth (feet)	OVA Conc. (ppm)		
Boring B-1	S1 S2 S3 * S4 S5	4 - 6 $9 - 11$ $14 - 16$ $19 - 21$ $24 - 26$	0.0 0.0 0.0 0.0		
Boring B-2	S1	14 - 16	1.6		
	S2 *	19 - 21	1.7		
	S3	24 - 26	1.0		
Boring B-3A	S1 S2 S3 S4 S5 S6	4 - 6 $9 - 11$ $14 - 16$ $19 - 21$ $24 - 26$ $29 - 31$	0.7 0.9 1.4 1.3 1.7 2.5		
Boring B-3B	S1	4 - 6	2.1		
	S2	9 - 11	1.5		
	S3 *	14 - 16	2.0		
Boring B-4	\$1	4 - 6	0.4		
	\$2 *	9 - 11	0.3		
	\$3	14 - 16	0.2		

<sup>\*</sup> Indicates sample selected for laboratory analysis.

# 4.5 Groundwater Sampling

The first and second rounds of groundwater samples were collected on April 30 and August 10, 1999, respectively. While intervals of wet soils were encountered during the advancement of Borings B-1, B-2, B-3B, and B-4, monitoring wells MW-1 and MW-3 were dry when sampled during both rounds. The water table at the subject site appears to be perched, and strongly controlled by the local stratigraphy, or more particularly, by the location of the interface between sand and silt layers in the vadose zone, and the thickness of the silt aquatard. As evidence of the variability in

the stratigraphy, note that while well MW-3 was dry, well MW-2, located approximately 43 feet away, contained a 14-foot column of water during both sampling rounds. (See geologic cross-section, Figure 5.)

Prior to groundwater sample collection, monitoring wells MW-2 and MW-4 were developed by purging a minimum of three standing bore volumes of water using a dedicated, pre-cleaned, disposable polyethylene bailer. After a brief recharge period, groundwater samples were carefully collected from the well using the bailer.

During both sampling rounds, groundwater samples from wells MW-2 and MW-4 were analyzed for VOC's using EPA Method 8260B. The samples were also analyzed for PAH during the initial round using EPA Method 8270.

Samples for VOC analysis were placed in clean 40 milliliter glass vials with teflon septum caps. Each sample was preserved with 2-3 drops of hydrochloric acid (1:1 HCl). Samples collected for analysis of PAH were placed in amber glass one liter jars preserved with approximately 30 drops of HCl.

All samples were placed in an insulated cooler with ice packs immediately after collection for storage and transport. All groundwater samples were delivered the day of collection to Aquarian Analytical, Inc. All sample collection, transport, and delivery were performed following standard Chain of Custody protocol.

All water laboratory analytical data and Chain of Custody documents are attached in Appendix F (03/99) and Appendix G (08/99). (See Section 5.2, below.)

## 4.6 Groundwater Elevation and Flow Direction

The elevations of monitoring wells MW-1 through MW-4 and spot surface elevations were measured on April 30, 1999 using a meridian level and survey leveling rod. Elevations were recorded at the top of the PVC casing in each well, and referenced to an arbitrary datum on the property. A small nail driven near the base of a utility pole at the northeast corner of the service garage was selected as the reference datum of 100.00'. (A USGS benchmark referenced to the NGVD is not located within 1,000 feet of the subject property.)

Depth to groundwater was measured in wells MW-2 and MW-4, prior to well development, on April 30 and August 10, 1999 using an electronic water level indicator manufactured by Slope Indicator Company, Model 51453. Depth to groundwater was referenced to the top of the PVC well casing in each well. Wells MW-1 and MW-3 were dry when sampled on both dates, although wet soils were encountered during advancement of the borings.

Monitoring well elevations, depth to groundwater, and computed groundwater elevations are presented in Table 9, below. All elevations are given in feet. Depths to "groundwater" in dry wells MW-1 and MW-3 are estimates based on the depth at which wet soils were encountered during advancement of the well bores on December 10, 1998.

A groundwater contour map, showing the inferred groundwater flow direction, is depicted in Figure 4; the map is based on the August 1999 groundwater elevation data. The map was constructed using the estimated groundwater elevations at wells MW-1 and MW-3.

The mapped groundwater flow across the subject site is generally eastward, from the rear to the front of the subject building, and is consistent with the regional topography. At road grade, however, the perched water table appears to dip westward, toward the front of the building. This reversal of groundwater flow in the shallow overburden, coupled with the extreme variability in the location of the perched overburden groundwater, suggests just how tightly the water table is controlled by the local stratigraphy.

The hydraulic gradient is defined as the instantaneous (mathematical) slope of the top of the groundwater surface, and is typically expressed in feet (vertical) per foot (horizontal) or centimeters per meter. From Figure 4, the computed hydraulic gradient from west to east across the building site is approximately 0.18'/ft. (or 18 cm/m).

Table 9. Groundwater Elevations
Former Guay's Garage, Franklin, NH
All Elevations in Feet
"A" = 04/30/99; "B" = 08/10/99

			<u>-</u>		
Well	Well Elevation (Top PVC)		Depth to Groundwater		Groundwater Elevation
MW-1	122.71		~11.0 (estimated)		~112 (estimated)
MW-2	98.71	A B	11.18 11.65	A	87.53 87.06
MW-3	98.32		~9.0 (estimated)		~89 (estimated)
MW-4	98.44	A B	8.45 9.53	A B	89.99 88.91

# 5.0 LABORATORY ANALYSES

### 5.1 Soils

The analytical methods employed are those recommended in the NHDES sampling guidance document "Recommended Analytical Methods for Petroleum Contaminated Sites".

The soil samples from borings B-1 through B-4 were analyzed for volatile organic compounds ("VOC's") using EPA Method 8260B, for total petroleum hydrocarbons ("TPH") using EPA Method 8100 (fuel oil standard), and for polycyclic aromatic hydrocarbons ("PAH") using EPA Method 8270.

The soil laboratory analyses are summarized below in Table 10. Concentrations of VOC's, TPH, and PAH are expressed in milligrams per kilogram (mg/kg), or parts per million (ppm). The NHDES Method 1 Soil Standards for Category NH S-2 soils are also listed for each compound where appropriate. Concentrations in excess of NH S-2 Soil Standards are shown in **bold** type.

Table 10. SIR Soil Analysis Summary.
Former Guay's Garage
Franklin, NH
All Concentrations in mg/kg

Compound	B-1	B-2	B-3B	B-4	NH S-2 Stnd. (1)
VOC's: Benzene Toluene Ethylbenzene Xylenes (total) MTBE	BDL	BDL	BDL	BDL	0.3
	BDL	BDL	BDL	BDL	100
	BDL	BDL	BDL	BDL	140
	BDL	BDL	BDL	BDL	1,000
	BDL	BDL	BDL	BDL	2
Alkylbenzenes (2) Isopropylbenzene Naphthalene	BDL	BDL	BDL	BDL	59
	BDL	BDL	BDL	BDL	123
	BDL	BDL	BDL	BDL	5
PAH (All)	BDL	BDL BDL	BDL	BDL BDL	10,000 Various

BDL = Below Detection Limits.

- (1) NHDES Contaminated Sites Risk Characterization and Management Policy, Table 3, Section 7.5(2), Jan. 1998, as amended
- (2) Alkylbenzenes include 1,2,4-trimethylbenzene, 1,3,5-trimethylbenzene, n-propylbenzene, p-isopropyltoluene, n-butylbenzene, sec-butylbenzene, and tert-butylbenzene.

(The selection of the S-2 soil classification is based upon the following factors: 1) impacted soils are potentially accessible, 2) children may be present at the site, and 3) site use by adults is of high frequency but low intensity. [NHDES Contaminated Sites Risk Characterization and Management Policy {"RCMP"}, January 1998, Section 3.3 and Figure 2.])

#### 5.2 Groundwater

# 5.2.1 Volatile Organics

The analytical methods employed are those recommended in the NHDES sampling guidance document "Recommended Analytical Methods for Petroleum Contaminated Sites".

All groundwater samples collected from monitoring wells MW-2 and MW-4 on April 30 and August 10, 1999 were analyzed for volatile organic compounds ("VOC's") using EPA Method 8260B. The samples were also analyzed for polycyclic aromatic hydrocarbons ("PAH") during the initial round using EPA Method 8270.

The laboratory analyses are summarized below in Table 11 (pages 22 and 23). Concentrations of VOC's and PAH in Table 11 are expressed in micrograms per liter ( $\mu$ g/l), or parts per billion (ppb). The NHDES Method 1 Groundwater Standards for Category NH GW-1 groundwater (AGQS) are also listed for each compound where appropriate. Concentrations at or in excess of NH GW-1 Groundwater Standards are shown in **bold** type.

#### 5.2.2 Inorganics

Since no target analytes were detected during the April 1999 groundwater sampling round at concentrations in excess of AGQS, no sampling or field measurement was performed for the inorganic or natural attenuation parameters during the Site Investigation.

## 5.3 Discussion of Analytical Data

#### 5.3.1 Soils

The laboratory analytical data indicate that in-situ soils proximate to the former site UST's meet NHDES regulatory standards for VOC's, TPH, and PAH for Category NH S-2 (and S-1) soils.

#### 5.3.2 Groundwater - VOC's

The laboratory analytical data indicate that site groundwater in the vicinity of the former leaking 500-gallon fuel oil UST meets AGQS. Two consecutive rounds of sampling have indicated compliance with NHDES regulatory standards for VOC's.

# Former Guay's Garage Franklin, New Hampshire

Table 11. SIR Groundwater Analysis Summary - VOC's, April & August 1999 Former Guay's Garage Franklin, NH All Concentrations in  $\mu g/l$ 

Compound	<b>MV</b> 04/99	<b>7-1</b> 08/99	<b>MW</b> 04/99	NH GW-1 Stnd. (1)	
VOC's: Benzene Toluene Ethylbenzene Xylenes (total) MTBE	DRY	DRY	BDL BDL BDL BDL BDL	BDL BDL BDL BDL 6	5 1,000 700 10,000 13 <sup>(3)</sup>
Alkylbenzenes (total) (2) Isopropylbenzene Naphthalene PAH (All)			BDL BDL BDL	BDL BDL BDL	50 280 20 Various

BDL = Below Detection Limits.

NT = Not Tested.

- (1) NHDES Contaminated Sites Risk Characterization and Management Policy, Table 3, Section 7.5(2), Jan. 1998, as amended
- (2) Alkylbenzenes include 1,2,4-trimethylbenzene, 1,3,5-trimethylbenzene, n-propylbenzene, p-isopropyltoluene, n-butylbenzene, sec-butylbenzene, and tert-butylbenzene.
- (3) The AGQS for MTBE at the time of sampling was 70  $\mu$ g/l.

# Former Guay's Garage Franklin, New Hampshire

Table 11 (cont'd). SIR Groundwater Analysis Summary - VOC's, April & August 1999 Former Guay's Garage Franklin, NH All Concentrations in  $\mu q/l$ 

Compound	<b>MW-3</b> 04/99 08/99		<b>MW-4</b> 04/99 08/99		NH GW-1 Stnd. (1)
VOC's: Benzene Toluene Ethylbenzene Xylenes (total) MTBE	DRY	DRY	BDL BDL BDL BDL 7	BDL BDL BDL BDL 10	5 1,000 700 10,000 13 <sup>(3)</sup>
Alkylbenzenes (total) (2) Isopropylbenzene Naphthalene PAH (All)			BDL BDL BDL	BDL BDL BDL NT	50 280 20 Various

BDL = Below Detection Limits.

NT = Not Tested.

- (1) NHDES Contaminated Sites Risk Characterization and Management Policy, Table 3, Section 7.5(2), Jan. 1998, as amended
- (2) Alkylbenzenes include 1,2,4-trimethylbenzene, 1,3,5-trimethylbenzene, n-propylbenzene, p-isopropyltoluene, n-butylbenzene, sec-butylbenzene, and tert-butylbenzene.
- (3) The AGQS for MTBE at the time of sampling was 70  $\mu$ g/l.

# 6.0 DRYWELL CLOSURE

# 6.1 Drywell Excavation

On July 13, 1999 ARC, in conjunction with personnel from Lakes Region Environmental Contractors, Inc. ("LREC") of Gilmanton, NH, removed the drywell located between the subject building and South Main Street. The drywell received effluent from two floor drain systems serving the subject building.

Approximately 10 gallons of standing liquid were pumped from the drywell into a DOT-approved banded-closure 55-gallon drum for disposal prior to excavation. During excavation, the drywell was observed to consist of an open vertical length of concrete culvert. Based on the results of field screening using a Thermo Environmental Model 580B photo-ionization type organic vapor analyzer ("OVA"), approximately six cubic yards of contaminated soil were excavated from the dry well pit and stockpiled on site encased in protective polyethylene sheeting. One composite soil sample was collected from the base of the excavation for laboratory analysis. The excavation was then backfilled with approximately six cubic yards of 1½-inch stone.

Based on the discovery of a drainage pipe during excavation of the drywell, it is believed that the effluent from the well discharged to a stormwater catch basin located along the roadway. The basin, in turn, appears to discharge via a culvert beneath South Main Street, which daylights along an abandoned railroad grade on the east side of the roadway. No discoloration or evidence of chemically stressed vegetation was observed in the vicinity of the drainage outfall.

## 6.2 Laboratory Analyses

The composite sample, identified as "BOT COMP", was placed in a clean 4-ounce glass jar with teflon-lined lid, placed in an insulated cooler with ice packs, and delivered the day of collection under Chain-of-Custody protocol to Aquarian Analytical, Inc. in Canterbury, NH. The jar was packed as full as possible to minimize headspace.

The composite soil sample from the dry well was analyzed for VOC's using EPA Method 8260B, for TPH using EPA Method 8100, for PAH using EPA Method 8270, and for the eight RCRA priority pollutant metals (as total metals) using EPA Method 6020.

The laboratory analyses are summarized below in Table 12 (page 25). Concentrations of VOC's, TPH, PAH, and metals are expressed in milligrams per kilogram (mg/kg), or parts per million (ppm). The

NHDES Method 1 Soil Standards for Category NH S-2 soils are also listed for each compound where appropriate. Concentrations in excess of NH S-2 Soil Standards are shown in bold type.

All laboratory analytical data and Chain of Custody documents from the drywell closure are attached in Appendix H.

Table 12. Soil Analysis Summary - Drywell Former Guay's Garage Franklin, NH All Concentrations in mg/kg

Compound	BOT COMP	NH S-2 Stnd. (1)
VOC's: Benzene Toluene Ethylbenzene Xylenes (total) MTBE	BDL BDL BDL BDL BDL	0.3 100 140 1,000 2
Alkylbenzenes <sup>(2)</sup> Naphthalene	BDL BDL	59 5
ТРН	12	10,000
PAH (All)	BDL	Various
RCRA Metals: Arsenic Barium Cadmium Chromium Lead Mercury Selenium Silver	1.2 9.0 BDL 4.7 4.1 BDL BDL BDL	12 2,500 230 460 400 7 2,500 200

BDL = Below Detection Limits.

<sup>(1)</sup> NHDES Contaminated Sites Risk Characterization and Management Policy, Table 3, Section 7.5(2), Jan. 1998, as amended

<sup>(2)</sup> Alkylbenzenes include 1,2,4-trimethylbenzene, 1,3,5-trimethylbenzene, n-propylbenzene, p-isopropyltoluene, n-butylbenzene, sec-butylbenzene, and tert-butylbenzene.

# 6.3 Contaminated Soil Disposal

One composite soil sample, consisting of eight discrete core samples, was collected from the pile of contaminated soil excavated from the drywell pit. The composite sample, identified as "PILE", was placed in two clean 4-ounce glass jars with teflon-lined lids, placed in an insulated cooler with ice packs, and delivered the day of collection under Chain-of-Custody protocol to Aquarian Analytical, Inc. in Canterbury, NH. The jars were packed as full as possible to minimize headspace. The composite sample was analyzed for the parameters in Env-Ws 412.14, Table 412-3 (non-virgin petroleum-contaminated soil). The laboratory analytical data are attached in Appendix H.

On August 13, 1999 personnel from LREC transported 11.06 tons of contaminated soil to Environmental Soil Management, Inc. ("ESMI") in Loudon, NH for disposal. Copies of the Bill of Lading and certified weight slip are attached in Appendix I.

# 7.0 CONCEPTUAL MODEL

## 7.1 Sources of Contamination

With the removal of the 500-gallon fuel oil UST and the five other UST's from the site, and the closure of the former floor drain dry well, all known on-site sources of subsurface contamination have been eliminated.

No impacts to the subject property associated with known subsurface contamination originating at the neighboring Webster Valve Company facility (DES #199003020) have been documented.

The service garage in the subject building is occupied by Dan's Auto Repair, a general automotive maintenance and repair facility. The neighboring warehouse portion of the structure is occupied by an autobody shop. Given the presence of unsealed floor drains in the building and the absence of a municipal sewer line at the site, improper storage or handling of regulated substances and wastes at the automotive repair and autobody facilities could represent a potential threat to the environmental quality of the site.

NH Code of Administrative Rules, Part Env-Ws 1503 prohibits discharges to the ground or subsurface from floor drains located in any area where regulated contaminants are used or stored. Such discharges must be routed to an alarmed holding tank or a municipal sewer line, or the floor drains must be permanently sealed.

# 7.2 Site Geology

Soils on the subject property have been mapped as Windsor Loamy Sand (WdB, 3-8% slopes, and WdE, 15-60% slopes), Merrimac Sandy Loam (WmA, 0-3% slopes), and Au Gres Fine Sandy Loam (0-3% slopes). These soils are typically deep and moderately to excessively well drained.

Typical soil sequences encountered during boring consisted of unconsolidated interbedded deposits of sands and silts with frequent stringers of silty sands and sandy silts (see soil boring logs, Appendix D).

A geologic cross-section of the overburden soils along the line through monitoring wells MW-3, MW-2, and MW-4 is shown in Figure 5.

Bedrock in the subject area has been mapped as the upper part of the Rangely Formation, Lower Silurian in age, belonging to the metasedimentary and metavolcanic rocks of the Central Main Trough. The local bedrock is characterized as rusty-weathering, pelitic schist, metasandstone, and local coarse-grained metasandstone lentils, with common calc-silicate pods and minor coticule.

Bedrock was not encountered during advancement of the test borings, and the average depth to bedrock at the site was not ascertained.

## 7.3 Contaminant Transport and Fate

The primary method of contaminant transport at the site appears to be vertical migration from the soils beneath the former 500-gallon #2 oil UST into the underlying groundwater. Transport of dissolved-phase contaminants in the groundwater appears to be controlled by the regional and local hydraulic gradient. The interbedded pods of lower permeability silts in the saturated zone beneath the site may have acted as an aquatard to impede the vertical and horizontal transport of dissolved contaminants.

The groundwater analytical data from monitoring wells MW-2 and MW-4 suggest that remediation by natural attenuation has successfully mitigated the subsurface contamination associated with the former 500-gallon fuel oil UST and drywell.

Absent any remaining active sources of contamination, overall contaminant levels at the site are expected to remain below regulatory standards in the future.

## 7.4 Contaminant Distribution

Subsurface contamination associated with the former leaking 500-gallon fuel oil UST appears to have been confined to the soils and

groundwater in the immediate vicinity of the tank. Approximately 40 tons of virgin petroleum-contaminated soils were excavated during the UST closure in July 1998. Contaminated groundwater proximate to the former UST appears to have been successfully remediated through natural attenuation processes.

Likewise, subsurface contamination associated with the former drywell appears to have been confined to the soils in the immediate vicinity of the well. No residual impacts to site groundwater were noted.

# 8.0 POTENTIAL RECEPTORS

A potential receptors map, from portions of Franklin Tax Maps 101 and 102, is attached as Figure 6. The map identifies surface water bodies, known water supply wells, and residential properties with basements within 1,000 feet of the subject site. A list of all properties and owners within a 1,000-foot radius of the subject site is attached as Appendix J.

#### 8.1 Surface Water

A small pond is located in the woodlands on the western portion of the subject parcel, topographically above the former UST's and drywell. The inlet to the pond consists of an 18-inch culvert near its southwest corner. The culvert may be the discharge point for one or more stormwater catch basins or runoff detention basins located on the adjacent Webster Foundry Corporation property. The outlet stream from the pond enters a buried culvert which discharges northward to a stormwater catch basin located on Lot 101-004 (Mullavey property).

The nearest major surface water body is the Merrimack River, located approximately 500 feet east of South Main Street. Surface water flow across the site is expected to be eastward toward the roadway. A stormwater catch basin located along the roadway in front of the service garage discharges to the ground surface along the railroad right-of-way to the east of South Main Street.

The subject property is not located in a FEMA-designated flood hazard zone.

# 8.2 Water Supply Wells

The subject and some neighboring residential and industrial properties are serviced by the municipal water supply, while some residential properties within ½ mile of the site rely on private, on-site wells for potable water. The subject property is not

located within the Phase II & V Rules Protective Area for a registered public water supply.

Known water supply wells within approximately 1,000 feet of the subject property are shown on Figure 6; location and ownership are summarized below in Table 13. Additionally, one or more springs or dug wells near the pond inlet appear to have served as a potable water supply for the subject site prior to the connection to the municipal water line.

Of the known water supply wells within 1,000 feet of the subject site, only two wells are located topographically (and presumed hydraulically) down-gradient of the former UST's and drywell. A dug well on the Weglarz property, Lot 102-401, located approximately 100 feet east of South Main Street, is used for landscaping purposes only. The Weglarz's potable water supply well is located near their residence, at least 300 feet from the roadway.

Since subsurface contamination does not appear to have migrated off the subject property, no public or private water supplies appear to be at risk from the subject discharge.

# 8.3 Residential Properties with Basements

Of the residences with a basement located within 1,000 feet of the subject site, none appears to be at risk for the migration of volatile contaminants from groundwater to indoor air. The locations of the residences are shown on Figure 6.

Table 13. Water Supply Wells Within 1,000 Feet of the Former Guay's Garage 601 S. Main St., Franklin, NH

Well Location	Owner
Map 101, Lot 004	Michael Mullavey
Mullavey Residence	P.O. Box 6099
31 Mullavey Way	Franklin, NH 03235
Map 102, Lot 401 (2 wells)	Stanley Weglarz
Weglarz Residence	602 S. Main St.
602 S. Main St.	Franklin, NH 03235

# 9.0 CONCLUSIONS & RECOMMENDATIONS

#### 9.1 Conclusions

Based on the subsurface analytical data, visual inspection, research, and other information gathered as part of this Site Investigation, ARC Environmental Consultants, Inc., in its professional opinion, concludes the following:

- The subject property is located on the west side of South Main Street (US Route 3), approximately 200 feet north of the intersection with Industrial Park Drive, in Franklin, New Hampshire. The property is serviced by the municipal water supply and on-site septic systems.
- Retail gasoline sales were conducted at the property from c. 1926 through the mid 1960's. Numerous automotive maintenance and repair facilities have occupied the site from the mid 1920's through the present time. In July 1998 ARC removed two gasoline and three #2 fuel oil underground storage tanks ("UST's") from the subject site. A waste oil UST was filled-in-place beneath the floor of the service garage in November 1998.
- Petroleum-contaminated soils and groundwater were encountered during the closure of one 500-gallon #2 oil UST in July 1998. Laboratory analysis of soil and groundwater samples from beneath the tank indicated the presence of petroleum-related contamination at concentrations in excess of NHDES regulatory standards.
- ARC installed four groundwater monitoring wells on the subject property during December 1998 as part of the current Site Investigation. Two of the wells penetrated the perched water table at the site, and failed to accumulate significant quantities of groundwater. Analysis of groundwater samples collected from the two remaining wells in April and August 1999 indicated the absence of petroleum-related VOC's in site groundwater at concentrations in excess of NH Ambient Groundwater Quality Standards (AGQS) at locations within and proximate to the former 500-gallon UST grave.
- The mapped groundwater flow across the subject site is generally eastward, from the rear to the front of the subject building, and is consistent with the regional topography. At road grade, however, the perched water table appears to dip westward, toward the front of the building. This reversal of groundwater flow in the shallow overburden, coupled with the extreme variability in the location of the perched overburden

groundwater, suggests that the water table is tightly controlled by the local stratigraphy.

- In July 1999 ARC removed a drywell located between the subject building and South Main Street. The drywell received effluent from two floor drain systems serving the building. Approximately six cubic yards of contaminated soil were excavated from the drywell pit and transported off-site for disposal at an authorized facility. Laboratory analysis of a composite in-situ soil sample collected from the base of the final drywell excavation indicated the absence of regulated VOC's, TPH, PAH, and the eight RCRA priority pollutant metals at concentrations in excess of NH regulatory standards.
- Two floor drain systems located in the service garage and adjoining warehouse discharged collectively into the former dry well. The floor drains have not been permanently sealed, and the areas of the building where the drains are located are currently occupied by an automotive repair facility and an autobody shop. NH Code of Administrative Rules, Part Env-Ws 1503 prohibits discharges to the ground or subsurface from floor drains located in any area where regulated contaminants are used or stored.
- No sensitive receptors, including surface water bodies, water supply wells, or residential dwellings, potentially at risk to the petroleum discharge originating at the subject site, were identified during the Site Investigation.

#### 9.2 Recommendations

To address the issue of the active floor drains noted above, ARC makes the following recommendation:

• That all floor drains in the service garage be permanently sealed to bring the facility into compliance with Env-Ws 1503.

Since two consecutive rounds of groundwater samples have indicated compliance with AGQS, ARC further recommends site closure and the issuance of a letter of "no further action" relating to the prior discharge of petroleum products at the property.

ARC ENVIRONMENTAL CONSULTANTS, INC.

Gary Ambelas, Project Manager

# 10.0 REFERENCES

### Part A. Sources

## Federal:

- U.S. Environmental Protection Agency:
  - A. CERCLIS Database, NH Site/Event Listing (01/24/00)
  - B. CERCLIS Archive Database (NFRAP) (01/24/00)
  - C. RCRIS Database, NH Generators Listing (01/19/00)

# National Response Center:

- A. ERNS Database (01/04/00)
- U.S. Department of the Interior:
  - A. Bedrock Geologic Map of New Hampshire, Lyons et. al., USGS, 1997
- U.S. Dept. of Agriculture:
  - A. Natural Resource Conservation Service: Soils Maps, Merrimack County, NH

#### State:

- NH Department of Environmental Services:
  - A. Groundwater Management Rules (Env-Wm 1403)
  - B. Underground Storage Facilities Rules (Env-Wm 1401)
  - C. Contaminated Sites Risk Characterization & Management Policy (01/98)
  - D. Groundwater Discharge Permit & Registration Rules (Env-Ws 1500)
- NH Department of Environmental Services:
- Oil Remediation & Compliance Bureau
  - A. ALLSITES Database (04/03/00)
  - B. ALLSPILLS Database (04/03/00)
  - C. Underground Storage Tank Database (04/03/00)
  - D. Files:
    - #199003020 Webster Valve/Watts Regulator #199607045 Former Alcan/Jarl Extrusion
    - Franklin Town File
    - Franklin Hazardous Waste File

Page 33 Former Guay's Garage Franklin, New Hampshire

# Local:

Franklin Municipal Offices:

- A. Assessors Office
- B. Planning Department
- C. Building/Code Enforcement Department
- D. Municipal Services Department

## Other References:

"Environmental Site Assessment, Estate of Marion A. Guay, 601 South Main Street (US Route 3), Franklin, New Hampshire", ARC Environmental Consultants, Inc., June 8, 1998

"Underground Storage Tank Closure Report, Former Guay's Garage, 601 South Main Street, Franklin, New Hampshire", ARC Environmental Consultants, Inc., September 9, 1998

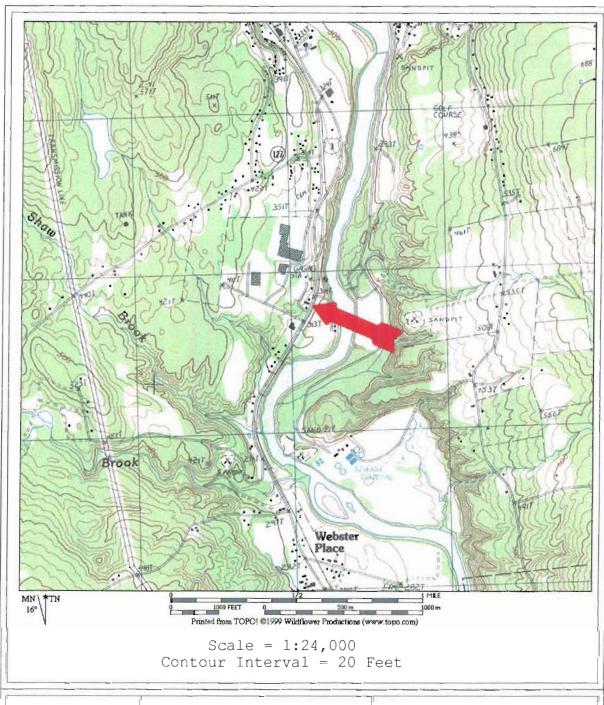
"Underground Storage Tank Closure Report (500-Gallon Waste Oil), Former Guay's Garage, 601 South Main Street, Franklin, New Hampshire", ARC Environmental Consultants, Inc., November 20, 1998

Boundary Survey & Subdivision Plan for Estate of Marion A. Guay, Paul M. Darbyshire Associates, Gilmanton, NH 04/24/97, rev. 01/28/98

# FIGURES



USGS 7.5 Minute Topographic Map Franklin, NH Quadrangle Provisional Edition 1987



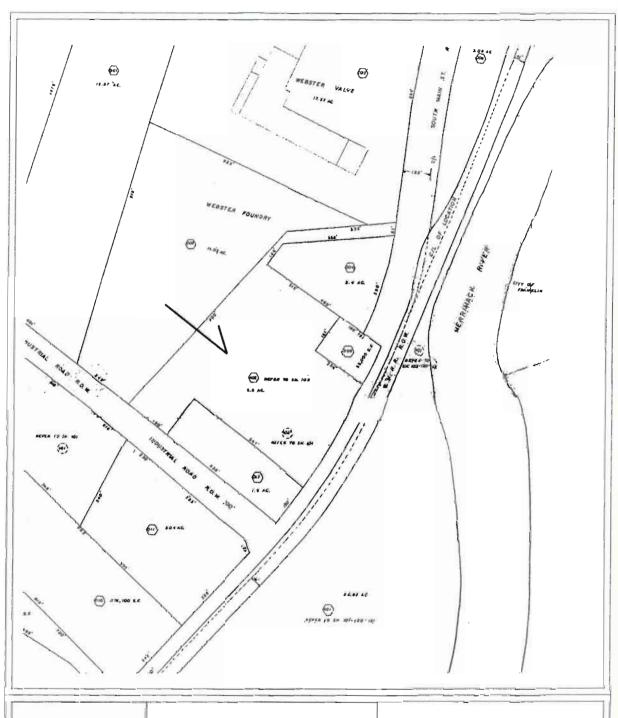


# ARC ENVIRONMENTAL CONSULTANTS, INC.

Gilmanton Iron Works, NH

Figure 1. Site Location Map

Former Guay's Garage 601 S. Main Street Franklin, NH





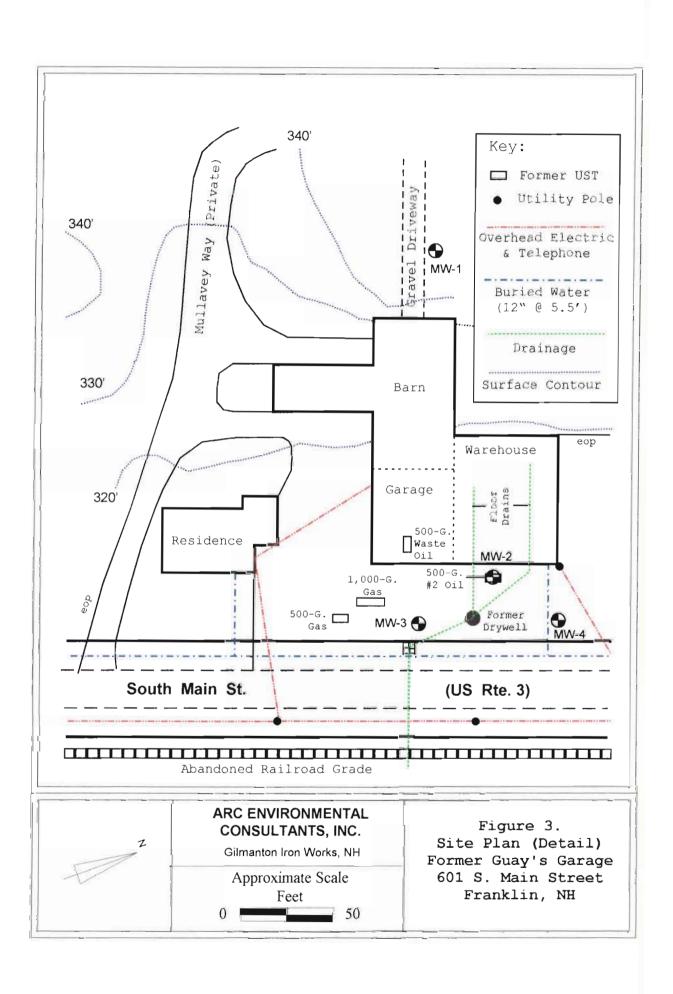
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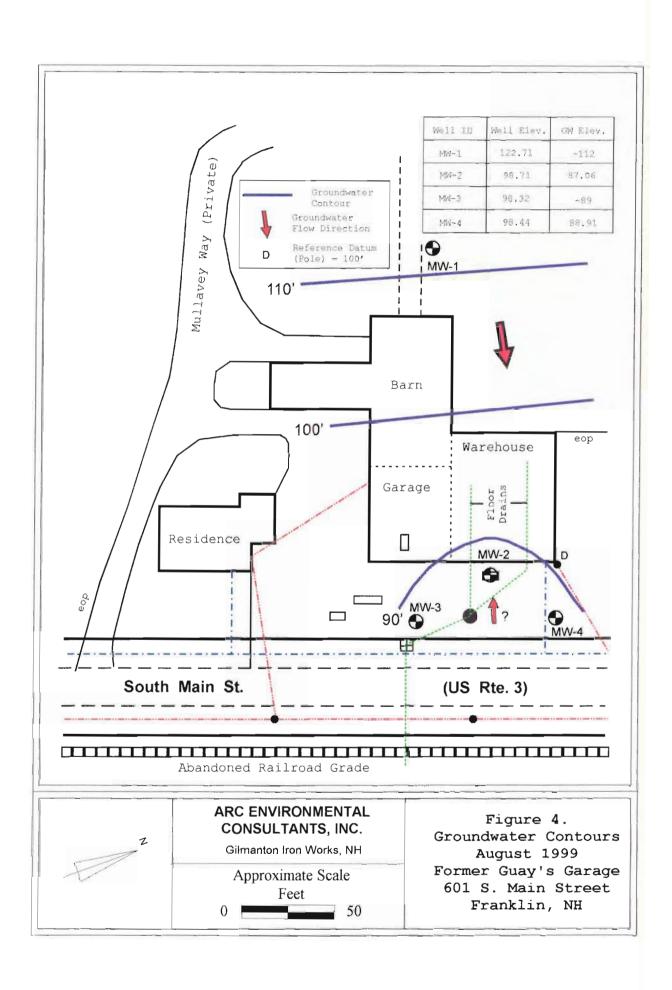
Gilmanton Iron Works, NH

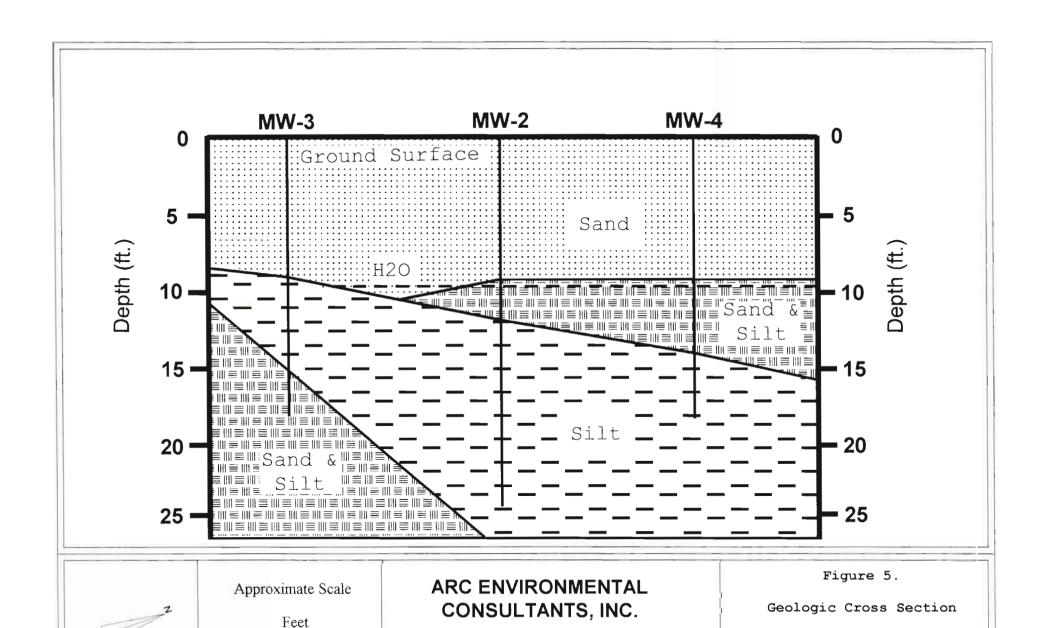
Figure 2.

Portion of Franklin

Tax Maps 101 & 102







Gilmanton Iron Works, NH

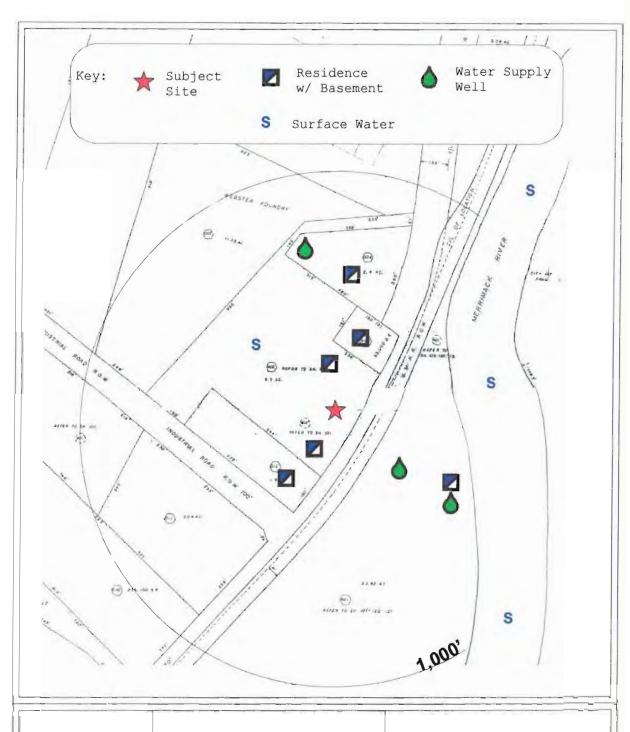
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Former Guay's Garage

601 S. Main Street

Franklin, NH





# ARC ENVIRONMENTAL CONSULTANTS, INC.

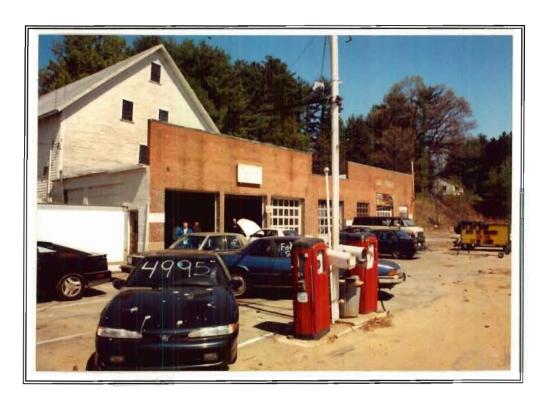
Gilmanton Iron Works, NH

Figure 6.

Potential Receptors Map Former Guay's Garage 601 S. Main Street Franklin, NH

# PHOTOGRAPHS

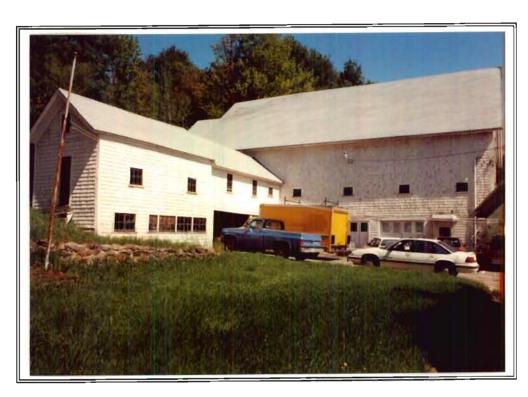




1. Subject Building & Former Fuel Pumps L to R: Barn, Service Garage, Warehouse



2. Subject Building, North Face Residence at Left



3. Barn to West of Garage Looking North from Duplex

# APPENDICES



# APPENDIX A

NHDES Site Investigation Request



# State of New Hampshire DEPARTMENT OF ENVIRONMENTAL SERVICES

6 Hazen Drive, P.O. Box 95, Concord, NH 03302-0095 (603) 271-3644 FAX (603) 271-2181



November 10, 1998

Mr. Alexander Lachiatto, Esq. P.O. Box 486 Franklin, NH 03235

SUBJECT: FRANKLIN - Former Guay's Garage, 601 South Main Street: UST Tank

Closure Report by ARC Environmental (DES#199808031-LUST-WLP3)

Dear Mr. Lachiatto:

The New Hampshire Department of Environmental Services (DES) has received the subject report regarding your client's facility located at 601 South Main Street, Franklin. Based on a review of this report, and information in DES files, DES has determined that a discharge of oil, as defined in New Hampshire Code of Admin. Rules, Part Env-Ws 412.02 and Env-Ws 412.03, has occurred at the subject site and impacted the groundwater. Oil contamination of the groundwater was evidenced by the presence of petroleum contaminants in a groundwater sample from the tank excavation. DES has also determined that the Former Guay's Garage may be a responsible party with respect to this site. Therefore, DES requires that you conduct a Site Investigation for this site as required by Part Env-Ws 412.10 of the New Hampshire Code of Admin. Rules. The site investigation report must include the information required in Env-Ws 410.22, "Groundwater Protection Rules." A copy of DES rules for "Reporting and Remediation of Oil Discharges" (Env-Ws 412), "Groundwater Protection Rules" (Env-Ws 410) is available on request or may be downloaded from the DES website at http://www.state.nh/us/orcb/gpbrules.htm.

The New Hampshire Petroleum Reimbursement Funds (Funds) provide financial assistance to owners of petroleum storage facilities who incur costs for investigation and cleanup of contamination from the release (spill or leak) of petroleum products. To qualify for the state fund coverage, the facility must be in compliance with all applicable state and federal rules for the facility operation and maintenance. Enclosed is a packet of information on the different reimbursement Funds that will guide you through the reimbursement process.

In order to assist in the prompt completion of the above-required Site Investigation, a Standardized Pre-Approved Work Scope and Budget has been enclosed for your use. DES believes that the conditions reported at the site warrant that you perform a Level I Site Investigation. Please note that the Pre-Approved Work Scope and Budget for a Level I Site Investigation provides for engineering costs NOT-TO-EXCEED \$7,000.

The Site Investigation Report is due in this office no later than 90 days from the date of this letter. If special conditions associated with this site require work beyond the Standardized Work Scope enclosed, a detailed alternative scope-of-work and budget estimate must be submitted to this office for approval within 30 days. The completed report shall be due 90 days after approval of said work scope. If you do not intend to use the Funds, the final report shall be submitted to this office no later than 90 days from the date of this letter.

TDD Access: Relay NH 1-800-735-2964

Mr. Alexander Lachiatto, Esq. Des #199808031 Page 2

A list of consultants that perform site investigations is enclosed with this letter. DES does not prequalify consultants on this list, therefore DES strongly recommends that you check the firm's qualifications and experience to conduct the type of work which may be necessary.

In order to be eligible for reimbursement from the Fund, the facility must be maintained and operated in compliance with Env-Wm 1401, "Control of Underground Storage Facilities." We have reviewed our files and our records indicate that eligibility at this facility (UST Facility # 0-115142) cannot be determined at this time. Therefore, the facility does <u>not</u> qualify at this time for Fund coverage. If you have not already received an eligibility review, a letter detailing the specific items needed by DES to determine eligibility for the Fund will follow. All submittals related to eligibility requirements should be directed to Ms. Johnna Furber of the DES staff (phone 271-2889) at the letter address.

If you have questions, please contact me at the Waste Management Division at (603) 271-3644.

Sincerely,

Charles Berube

Oil Remediation & Compliance Bureau

F:\GWUSERS\WMCPB\9808031.118

Enclosures:

Site Investigation & Remediation Consultants

ODDCF Information Package

Pre-Approved Site Investigation Work Scope/Budget

cc:

Fred McGarry, P.E./OR&CB Johnna Furber, OR&CB

Charles Bodien Jr., Franklin Health Officer Gary Ambelas, ARC Environmental Consultants

file

Route:

Walter Carlson/ OR&CB

#### APPENDIX B

# Limitations

- 1. The conclusions and recommendations presented in this report are based solely upon the described Scope of Work, and not on scientific tasks or procedures beyond the described Scope of Work or the time and budgetary constraints imposed by the Client. The stated conclusions and recommendations represent ARC's best professional judgement, and should not be construed as statements of scientific fact or certainty.
- 2. In preparing this report, ARC may have relied on information provided by federal, state, and local officials, and other parties herein referenced, and on information on record with various federal, state, and local agencies made available to ARC at the stated time of inspection or inquiry. ARC did not attempt to independently verify the accuracy or completeness of all information received or reviewed as part of this investigation.
- 3. This report may contain the results of quantitative analyses performed by an outside laboratory. In such cases, ARC has relied upon the data provided to formulate its stated conclusions and recommendations, and has not attempted to independently evaluate the reliability of these data.
- 4. In the event that the conclusions stated in this report express ARC's professional opinion that a release of hazardous substances or petroleum products to the environment has occurred at the subject site, ARC recommends that the Client consult with its legal counsel regarding the duty to report the discharge to the appropriate federal, state, or local authorities. If ARC is not notified in a timely manner that such duty to report has been discharged by another party, ARC may, under certain legal interpretations, be deemed to be a "knowledgeable party", and may consult with its legal counsel regarding its duty to report or confirm the discharge to the appropriate authorities. Otherwise, ARC agrees to maintain in strictest confidence the information contained in this report.
- 5. This report was prepared for the exclusive use of the Estate of Marion A. Guay and the NH Department of Environmental Services, and except as described below, no other party may rely on the information herein contained. ARC hereby grants the Estate of Marion A. Guay permission to distribute this report, or copies thereof in whole, to its affiliates, assigned agents, or, in Client's discretion, to other parties having a direct financial interest in the subject property.

# APPENDIX C

NHDES UST Registration Documents

(603) 271-3644



Registration for Underground	Storage Tank Systems
Type of Notification	State Use Only
	ID NUMBER 0-115142
A. New Facility B. Amended XXX C. Cl	
	A. Date entered to Computer
INSTRUCTIONS	B. Data Entry Clerk Initials
Please type or print in ink all items except "signature" in Sec	
must be completed for each location containing underground If more than four (4) are owned at this location, photocopy the	
sheets, and staple additional sheets to this form.	ACTIVE
Also, provide a site plan and facility layout. (may be an ac	
hand sketch).	INACTIVE
I. WNERSHIP OF TANK(S)	II. LOCATION OF TANK(S)
Owner Name	Facility Name
Estate of Marion A. Guay	•
c/o Alexander Lachiatto, Esq.	Former Guay's Garage
Mailing Address	Street Address (DO NOT USE POST OFFICE BOX)
P.O. Box 486	601 S. Main St.
City State Zip Code	City State Zip Code
- 11/ 2002	
Franklin, NH 03235	Franklin, NH 03235
Phone Number (include area code) $603-934-2110$	County Merrimack
003-334-2110	Mellimack
III. TYPE OF OWNER	IV. MAPPING INFORMATION
III. THE OF CANCEL	If known please provide:
Federal Gov't. Commercial	The Geographic Location of the tanks by degree, minutes and
	seconds: (Example Lat 42. 36. 12 N Long. 95. 24. 17 W)
State Gov't. XX Private	Latitude: Longitude:
Local Govt.	Tax Map #:101 Lot #:_402
Local dov.	Tux Map #
V. TYPE O	FFACILITY
Con Station	Government Contractor
	Government Contractor   Government Trucking / Transportation
	al- Non-Military Utilities
	al- Military Farm or Residential
Auto Dealership Comm	
RailroadIndustr	ial
VI. CONTACT PERSON IN	CHARCE OF TANKS
Name Job Title Address	Phone Number (Include Area Code)
Traille Sob Title Addiess	Thoma Number (include Area Code)
Alexander Lachiatto, Esq., Executor, E	P.O. Box 486, Franklin, NH 03235
	603-934-2110
VII. CERTIF	
	ned and am familiar with the information submitted in this and all
attached documents, and that based on my inquiry of those indi	
believe that the submitted information is true, accurate and com	plete.
Name and title of owner Gianature	Data Signad'
Name and title of owner Signature	Date Signed
Alexander Lachiatto, Esq.	
Executor of the will of	
Marion A. Guay	
200 1 014	

VIII. DESCRIPTION OF U	MUCHGROOMD OF SHAGE 121			<del></del>	,
ank Identification Number	r	Tank No1	Tank No2	Tank No3	Tu 140. 4
1. Status of Tank (Mark Only One)	Currently in Use				
(IVIAIR OTHY OTHE)	Temporarily Closed				
	Permanently Closed		VV	777	xx
	Newly Installed	XX	XX	LXX	
	Amendment of Information				
	Amenument of information	Unkn.	Unkn.	Unkn.	Unkn.
2. Date of Installation		Ulikii.	Olikii.	OIIKII.	Olikii.
3. Compartment Tank (List each Tank Co	ompartment in a Separate Column)				
4. Estimate Total Capacity	(gallons)	1,000	500	500	500
<ul> <li>Material of Construction (Mark All That Apply)</li> </ul>	Asphalt Coated or Bare Steel	XX	XX	xx	kx
(Marit, 111, 11, 11, 11, 11, 11, 11, 11, 11,	Cathodically Protected Steel				
	Lined Interior				
	Epoxy Coated Steel				
C	omposite (steel with Fiberglass)				
	Fiberglass Reinforced Plastic				
	Double Walled				
	Polyethylene Tank Jacket		<u>:#</u>	!	
	Concrete				
	Excavation Liner				
	Unknown				
	Other, Please Specify				
	Has Tank been Repaired?				
6. Piping Material (Mark all that Apply)	Bare Steel	XX	XX		
(ויומוג מוו נוומנ אףףוץ)	Galvanized Steel			!	
	Fiberglass Reinforced Plastic				
	Cathodically Protected Steel				
	Double Walled				
	Copper			XX	XX
	Secondary Containment				
	Unknown				
	Other, Please Specify				
	Other, I lease openly				
7. Piping Type					
(Mark all that Apply)	Suction: No Valve at Tank	XX	XX	XX	LXX
	Suction: Valve at Tank				
	Pressure				
	Gravity Fed				
	Has piping been repaired?				

Tank Identification Numb	0,1021.101.10	Tank No. 5	Tank No6	Tank No	Ta 140
Tank Identification Numb 1. Status of Tank	er	TANK NO	_ Tank No0	Tank 110.	
(Mark Only One)	Currently in Use				
	` Temporarily Closed		XX		
Ī	Permanently Closed	XX			
l	Newly Installed				
	Amendment of Information				
2. Date of Installation		Unkn.	Unkn.		
	Compartment in a Separate Column)			:	
<ol> <li>Estimate Total Capacit</li> <li>Material of Construction</li> </ol>	ty (gallons)	275	500		
(Mark All That Apply)	Asphalt Coated or Bare Steel	XX	xx		
(4,,2,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	Cathodically Protected Steel				
	Lined Interior				
	Epoxy Coated Steel				
(	Composite (steel with Fiberglass)				
	Fiberglass Reinforced Plastic				
	Double Walled				
	Polyethylene Tank Jacket				
	Concrete				
	Excavation Liner				
	Unknown				
	Other, Please Specify				
	Has Tank been Repaired?				
6. Piping Material	Bare Steel		XX		
(Mark all that Apply)	Galvanized Steel				
	Fiberglass Reinforced Plastic		\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \		
	Cathodically Protected Steel				
	Double Walled				
	Copper	XX			
	Secondary Containment				
	Unknown				
	Other, Please Specify				
7. Piping Type					
(Mark all that Apply)	Suction: No Valve at Tank	XX	XX		
, , , , , , , , , , , , , , , , , , , ,	Suction: Valve at Tank				
	Pressure				
	Gravity Fed				
	Has piping been repaired?				
	3			1	

Tank identification Number	I ank No	_ I dlik inu 4_	rankino.	
8. Substance Currently or Last Stored in Greatest Quantity by Volume  Gasoline  Diese  Gasoho  Kerosene  (OPU) Heating Oil  Used Oil  Other, Please Specify		XX	xx	
Hazardous Substance CERCLA name and / or CAS number				
Mixture of Substances Please Specify				
Tank Currently Empty				
IX. PERMANENT / TEMPORARY CL	OSURE OR C	HANGE IN S	ERVICE	
ank Identification Number	Tank No. 1	Tank No2	Tank No. 3	Tank No. 4
Closing of Tank     A. Estimate date product and sludge removed from tank	07/30/98		07/30/98	07/31/98
B. Estimate date tank closed	07/30/98	07/30/98	07/30/98	07/31/98
C. Tank was removed from ground D. Tank was closed in ground E. Tank filled with inert material F. Change in service	xx	XX	xx	xx —
2. Tank Closure Assessment Completed  Estimate date of action  (month / day / year)	XX	XX	XX	XX
Evidence of a leak detected			XX	
Page 3 of 4	·			

ank Identification Number	Tank INU	_ rain no		
8 Substance Currently or Last Stored in Greatest Quantity by Volume  Gasoline  Diese  Gasoho  Kerosene  Heating Oi  Used Oil				
Hazardous Substance CERCLA name and / or CAS number	<u>-</u>			
Mixture of Substances Please Specify				
Tank Currently Empty				
IX. PERMANENT / TEMPORARY CL	OSURE OR C	CHANGE IN S	ERVICE	
ank Identification Number	Tank No. 5	Tank No6_	Tank No	Tank No
(month / day / year)	07/31/98 07/31/98			
C. Tank was removed from ground D. Tank was closed in ground E. Tank filled with inert material F. Change in service	XX			
2. Tank Closure Assessment Completed  Estimate date of action  (month / day / year)	XX	Aug. 98		
Evidence of a leak detected				

# **APPENDIX D**

Soil Boring Logs December 1998 December 16, 1998



Mr. Gary Ambelas ARC Environmental, Inc. PO Box 116 Gilmanton Iron Works, NH 03837-0116

RE: Con-Tec, Inc. Job #98134 Guay's Garage 601 S. Main Street Franklin, NH

Dear Gary,

Enclosed are the typed driller's field logs of 5 test borings and 4 monitor well installations made for you for this project.

Soil samples from these borings were retained by you.

The borings were located by you and were drilled in accordance with your instructions.

Thank you for this opportunity to work with you.

Very truly yours,

Helen D. McGlashan

Encls:

PROJEC				ARAGE I, NEW I					KING LO		JOB NO. HOLE NO. SHEET	98134 MW - 1 of 1	1	
		C	ASING	SAMP).E	CORE	GROUN	OWATER		DEPTH TO		START DATE	12/10/9	8	
	TYPE		HSA	SS		DATE	TIME	WATER	BOTTOM OF CASING	BOTTOM OF	FINISH DATE	12/10/9	8	
	SIZE ID		1/4"	1 3/8*				11.0'	CASING	- AOUE	DRILLER	R. S. McG	ashan	
	ANNER WT.			140							HEUPER	 W. Hoecke	le ::::	
	MMER FALL			30"							INSPECTOR	∷∷ ∵∷G. Ambela	s (1996)	
. DEPTH IN	CASING BLOWS PER	SAMP	SAMPLE	SAMPLE BLOWS	PSCOV.									
PET.	FOOT	₩O:	DETHI	PERGINOHES				SO	L DESCRIF	TION		WE	LL DET/	VILS
												•		
ď								_						0'
													A B	
						1								1
ļ		]									•			
		1										3	CUTTINGS	
5.0°		1	4' - 6'	4 - 5		Brown, dr	y, medium	dense m/c S	AND			DRILL	ج ا تو	
				9 - 10			•						88	6.0'
		1	1			1						OCAMO BEATOO	SEAL NO	
	<b></b>	i										608	8 COC	8.0
		1												
10.0'		2	9' - 11'	5 - 9		Brown dr	v. medium	dense silty f	SAND			10.0		10.0
10.0		<u> </u>	<del>  •</del>	7-9			et sandy SI							
		1		1-9		Diown, w	et sandy of	<b>L</b> 1						
l		ļ												
1				<u> </u>		Į.							66	
													X KE	
15.0		3	14' - 16'	4 - 6		Brown, w	et, medium	dense SILT	with sand in th	in layers			8	
1				8 - 10									SCH 40 PVC SCREEN .010	
		]											8	
			)			1								
20.0		4	19' - 21'	9 - 9		Brown, w	et, silty SAM	ND & sandy	SILT in layers					20.0
				10 - 10					,					
									,					
25.0		5	24' - 26'	7 - 10		Light brov	vn, dry, me	dium dense (	n/c SAND					
				11 - 12										
						воттом	OF BORIN	IG						26.0'
						Note:	1. Perched	d water level	at 11.0'.					
							2. Typed I	Oriller's Field	Log.					
30.0'										•				
		]												
		1												

					N-TEC, INC. TEST BORING LOG		
PROJECT:		UAY'S G				JOB ND.	98134
LOCATION:	F	RANKLIN	I, NEW I	HAMP	SHIRE	HOLE NO.	MW - 2
Economic Contract	<u> Namero</u>		4.0000	<b>.</b>		SHEET	1 of 1
		CASING	SAMPLE	CORE	GROUNDWATER DEPOT TO	START DATE	12/10/98
	YPE	HSA	SS		DATE TIME WATER BOTTOM OF BOTTOM OF CASING HOLE	FINISH DATE	12/10/98
\$12	生版	4 1/4"	1 3/8"		9.5'		R. S. McGlashan
HAMMER	WT.		140				W. Hoeckele
HAMMER			30"			MISPECTOR	G. Ambelas
DEPTH IN CAS	SPER: 110		PER 6 NOHES	RECOV	SOIL DESCRIPTION		WELL DETAILS
¢o							
							<b></b> -
O'	$\overline{}$		<del></del>			<u> </u>	<b>ASI — BSI</b> 0
i	$\dashv$			1	Drilled without sampling to 14'		
<del> </del>	$\dashv$		<u> </u>	-	(SAND FILL)		
	_			ł			DRILL ER JTTINGS
	$\dashv$			-			E 2 2 2 3 3
5.0'	-						OCULAR HIS COLORS
				-			00000000000000000000000000000000000000
				1			රිංහ් දී රිංහ් 7.5'
<u> </u>	$\dashv$			-			
	$\dashv$			-			9.5
10.0	+		-				
<b>│</b>	_						
	_						
			-	1	0		14.0'
15.0	1	14' - 16'			Gray, wet, medium dense SILT		8
	_		6 - 9	1			H. H.
	$\dashv$			1	·		PVC SCREEN
<del>  -</del>	$\dashv$			1			
	┥.		-		Community and floor damage CILT		<i>™</i>
20.0	2	19' - 21'			Gray, wet, medium dense SILT		
	_		7 - 8		4		
25.0'	<b>-</b>   ₃	24' - 26"	4-7		Gray, wet, medium dense SILT		24.5'
25.0	<del>  '</del>	24 - 20	8 - 11		Gray, wet, modium unite GILT		24.5
			3-11		BOTTOM OF BORING		26.0'
					Note: 1. Typed Driller's Field Log.		20.0
					1. 17ped office of role bog.		
30.0'	_						
30.0				М			
	$\dashv$						

PROJEC				ARAGE , NEW H				201 00	·		JOB NO. NOLE NO. SHEET	98134 MW - 3 1 of 1	
	TYPE		ASING	SAMPLE SS	CORE	GROUN	DWATER	WATER	DEPTH TO BOTTOM OF CASING		START DATE	12/10/98 12/10/98	
	SIZE (D		1/4"	1 3/8"				Est. 9.0'			DRILLER	R. S. McGlashan	
н	ANNER WT.			140							HEUPER	W. Hoeckele	
DEPTH IN	CASING	SAMP	SAMPLE	30"	RECOV						INSPECTOR:	G. Ambelas	
FEET	BLDWSPER FOOT	(10	DEPTR	PERENCHES				SOI	L DESCRI	PTION		WELL DETAIL	.S
0'			i —									<b>AI</b>	ď
5.0		1	4' - 6'	40 - 24		Dense, m	/c/f SAND	& m/c/f GRA	VEL, occasion	nal cobbles		C   C   C   C   C   C   C   C   C   C	4.0
				26 - 22								*****	6.0
10.0		2	9' - 11'	3 - 5		Medium d	ense sand	y SILT					8.5
				8 - 8									
												1010	
		-										Z SCH 40 PVC SCREEN 910	
15.0'		3	14' - 16'	6 - 6		Medium d	ense sand	y SILT & silty	SAND in laye	ers		D Ad	
				10 - 12								7 SGT	
	-												
20.0'						воттом	OF BORIN	lG					18.5'
						Note:	1. Typed	Driller's Field	Log.				
	<u> </u>												
			l										
			<u> </u>										

#### CON-TEC, INC. TEST BORING LOG

**GUAY'S GARAGE** JOB NO. PROJECT: 98134 HOLE NO. FRANKLIN, NEW HAMPSHIRE B - 3A LOCATION: SHEET 1 of 1 CORE CASING SAMPLE GROUNDWATER DEPTH TO START DATE 12/10/98 BOTTOMOF. BOTTOM: OF: TYPE DATE TIME WATER FINISH DATE 12/10/98 HSA SS 4 1/4" 1 3/8\* DRILLER R. S. McGlashan SIZE ID None HELPER. W. Hoeckele HANNER WT. 140 INSPECTOR G. Ambelas HAMMER FALL 30° SAMPLE BLOW SLOWS PER SOIL DESCRIPTION FOOT 5.0 4' 0 5' 23 - 30 Brown, dry, very dense m/c SAND & f/m/c GRAVEL, occasional cobble 10.01 2 9 - 11' 7 - 10 Brown, dry, medium dense m/f SAND 10 - 12 15.0 3 14' - 16' 8 - 10 Light brown, dry, medium dense m/f SAND, some sitty sand in layers 10 - 12 19' - 21' 20.0 4 6 - 12 Brown, dry, medium dense m/c SAND, some f/m/c gravel 16 - 16 25.0' 5 24' - 26 8 - 14 Brown, dry, dense m/c SAND, some f/m/c gravel 18 - 18 30.0 29' - 31' 30 - 22 6 Brown, dry, very dense m/c SAND, some f/m/c gravel 30 - 35 34.0 BOTTOM OF BORING 34.0' 35.0 Note: 1. Typed Driller's Field Log.

PROJE				ARAGE I, NEW H							JOB: NO: HOLE: NO; SHEET	98134 MW - 4 1 of 1	
		C	ASING	SAMPLE	CORE	GROU	NOWATER		DEPTH TO		START DATE	12/11/98	
	TYPE		HSA	SS		DATE	TIME	WATER	BOTTOM OF	BOTTOM OF	FINISH DATE	12/11/98	
	SIZE ID	4	1/4"	1 3/8*				9.5'			DRILLER	R. S. McGlasha	n
Н	ANNER WT.			140							HEUPER	W. Hoeckele	
	MANER FALL			30"							HISPECTOR	G. Ambelas	
DEPTH IN	CASING BLOWSPER FOOT	SAMP NO:	SAMPLE DB7H	SAMPLE BLOWS PER 6 INCHES	RECOV.			SOI	L DESCRII	PTION		MEIT [	DETAILS
O'												<u> </u>	ď
0	1			Γ		<u> </u>						<b>81</b> O	188
												Detr	8
													83 4.0°
5.0°		1	4' - 6'	4 - 5		Brown, d	ry, medium	dense m/c S	AND			On MAD Sendo Sch 40 PVC RISER	ල්දු දිඹු ? දිනු ? දිනු ? දිනු ?
				7 - 7								င္ဂ်ေဝ န္	දිං <sub>දු</sub> 6.0
			ļ		.							8	
					-			dense f/SAN				9.0	8.5
10.0'		2	9' - 11'	9 - 8		Brown, w	et, medium	dense silty S	SAND & sandy	SILT in layers			
				8-7									
		i										8	
												SCREEN 010	
15.0'		3	14' - 16'	5 - 6		Brown W	iat madium	dense sandy	, CII T				
15.0	-	3	14 - 10	5-8		Diowii, w	GL, IIIGUIUIII	uonise sanoj	OILI			SCH 40 PVC	
				3-0								ž	
					1								
20.0						BOTTOM	OF BORIN	IG			_		18.5'
						Note:	1. Typed I	Driller's Field	Log.				
									`				

# **APPENDIX E**

Laboratory Analytical Data Soils- December 1998



### Laboratory Services

P.O. Box 186

Canterbury, N.H. 03224

603-783-9097

12-15-98, 17:22

Mr. Gary Ambelas ARC Environmental Consultants P.O. Box 116 Gilmanton, NH 03837-0116

Dear Mr. Ambelas:

Please find enclosed the reports, and invoice for the samples that were logged in on, 12-10-98.

AAI Sample	Date Sampled	Project Description	Sample Location
42905	12-10-98	GUAY'S GARAGE	B-1
42906	12-10-98	GUAY'S GARAGE	B-3
42907	12-10-98	GUAY'S GARAGE	B-4
42935	12-11-98	GUAY'S GARAGE	B-2

To perform these analyses, the following methods were used:

QTY. EPA Methodologies/Applications

- 4 VOA + TPH Soil fuel oil Mod. 8260/8100
- 4 EPA-625/8270/525.1 PAH only

Thank you for using Aquarian Analytical Inc. on this project. If I can be of any further help, please feel free to call.

Sincerely,

William M. Rice

Laboratory Director

doc. L09829



#### Laboratory Services

P.O. Box 186 Canterbury, N.H. 03224 603-783-9097

12-15-98,17:22

As part of Aquarian's ongoing quality assurance program, all analyses included the following quality assurance measures.

Samples were received in an acceptable condition.

Samples were prepared and analyzed within the appropriate hold time specified in the method referred to on the analyses sheet.

The instrument that was used for the analyses was calibrated and/or tuned at the required frequency.

A daily calibration check was performed.

A daily blank was run, and contamination was not observed at levels that would affect the analyses.

For all work, internal standards, and surrogates gave appropriate response levels.

Matrix spikes were added where appropriate, and recoveries were within the acceptable range.

Duplicates were run at the frequency specified in the applicable state or federal regulations.

In addition to the above steps, all original-raw data is on file at Aquarian Analytical's offices for inspection when required.

Exceptions (if any)

Certification

## Laboratory Services

P.O. Box 186 Canterbury, N.H. 03224 603-783-9097

Volatile Organic Report 12-15-98,17:19 42905 Sample

Project GUAY'S GARAGE Matrix

Soil

Date Sampled Date Logged In Date of Analysis

% Solids

12-10-98,08:50 12-10-98,15:40 Sampler Location G. AMBELAS B-1

12-11-98 75.15%

Town

FRANKLIN

Organic Compound	Result mg/k	g Det. Lim. mg/kg
Benzene	BD	0.030
Bromobenzene	BD	0.030
Bromodichloromethane	BD	0.030
Bromoform	BD	0.030
Bromomethane	BD	0.030
n-Butylbenzene	BD	0.030
sec-Butylbenzene	BD	0.030
tert-Butylbenzene	BD	0.030
Carbon-Tetrachloride	BD	0.030
Chlorobenzene	BD	0.030
Chloroethane	BD	0.030
Chloroform	BD	0.030
Chloromethane	BD	0.030
2-Chlorotoluene	BD	0.030
4-Chlorotoluene	BD	0.030
Dibromochloromethane	BD	0.030
1,2 Dibromo-3-Chloropropane	BD	0.060
1,2 Dibromoethane	BD	0.060
Dibromomethane	BD	0.030
1,2 Dichlorobenzene	BD	0.030
1,3 Dichlorobenzene	BD	0.030
1,4 Dichlorobenzene	BD	0.030
Dichlorodifluoromethane	BD	0.060
1,1 Dichloroethane	BD	0.030
1,2 Dichloroethane	BD	0.030
1,1 Dichloroethene	BD	0.030
cis-1,2 Dichloroethene	BD	0.030
trans-1,2 Dichloroethene	BD	0.030
1,2 Dichloropropane	BD	0.060
1,3 Dichloropropane	BD	0.030
2,2 Dichloropropane	BD	0.030
1,1 Dichloropropene	BD	0.030
cis-1,3 Dichloropropene	BD	0.030
trans-1,3 Dichloropropene	BD	0.030



#### Laboratory Services

P.O. Box 186

Canterbury, N.H. 03224

603-783-9097

Page 2

Volatile Organic Report 12-15-98,17:19 Sample 42905

Project Location GUAY'S GARAGE

B-1

Matrix

Soil

Organic Compound	Result mg/kg	Det. Lim. mg/kg
Ethylbenzene	BD	0.030
Hexachlorobutadiene	BD	0.060
Isopropylbenzene	BD	0.030
p-Isopropyltoluene	BD	0.030
Methylene Chloride	BD	0.090
Naphthalene	BD	0.060
n-Propylbenzene	BD	0.030
Styrene	BD	0.030
1,1,1,2 Tetrachloroethane	BD	0.030
1,1,2,2 Tetrachloroethane	BD	0.030
Tetrachloroethene	BD	0.030
Toluene	BD	0.030
1,2,3 Trichlorobenzene	BD	0.060
1,2,4 Trichlorobenzene	BD	0.060
1,1,1 Trichloroethane	BD	0.030
1,1,2 Trichloroethane	BD	0.030
Trichloroethene	BD	0.030
Trichlorofluoromethane	BD	0.060
1,2,3 Trichloropropane	BD	0.030
1,2,4 Trimethylbenzene	BD	0.030
1,3,5 Trimethylbenzene	BD	0.030
Vinyl Chloride	BD	0.030
o-Xylene	BD	0.030
m&p-Xylene	BD	0.030
Ethyl Ether	BD	0.450
Acetone	BD	1.500
Methylethylketone MEK	BD	0.750
Methylisobutylketone	BD	0.750
Tetrahydrofuran	BD	0.450
Methyl-t-butyl ether	BD	0.030
Total Pet. Hydrocarbons	BD	10.0
Method = EPA-8100 (mod.)		Results for TPH are expressed in mg/kg (ppm)

#### Comments:

TPH was performed with fuel oil as the standard.

Method of VOA Analysis = EPA-8260B

BD = Below Detection Limit - Results are in parts per million (ppm) unless noted.

#### Laboratory Services

P.O. Box 186 Canterbury, N.H. 03224 603-783-9097

Volatile Organic Report 12-15-98,17:20 Sample 42935

Project

GUAY'S GARAGE

Matrix

Soil

Date Sampled

12-11-98,09:15

Sampler

G. AMBELAS

Date Logged In

12-11-98,12:08

Location

B-2

Date of Analysis 12-14-98

Town

FRANKLIN

% Solids

Uncompleted%

Organic Compound	Result mg/k	ng Det. Lim. mg/kg
Benzene	BD	0.030
Bromobenzene	. BD	0.030
Bromodichloromethane	BD	0.030
Bromoform	BD	0.030
Bromomethane	BD	0.030
n-Butylbenzene	BD	0.030
sec-Butylbenzene	BD	0.030
tert-Butylbenzene	BD	0.030
Carbon-Tetrachloride	BD	0.030
Chlorobenzene	BD	0.030
Chloroethane	BD	0.030
Chloroform	BD	0.030
Chloromethane	BD	0.030
2-Chlorotoluene	BD	0.030
4-Chlorotoluene	BD	0.030
Dibromochloromethane	BD	0.030
1,2 Dibromo-3-Chloropropane	BD	0.060
1,2 Dibromoethane	BD	0.060
Dibromomethane	BD	0.030
1,2 Dichlorobenzene	BD	0.030
1,3 Dichlorobenzene	BD	0.030
1,4 Dichlorobenzene	BD	0.030
Dichlorodifluoromethane	BD	0.060
1,1 Dichloroethane	BD	0.030
1,2 Dichloroethane	BD	0.030
1,1 Dichloroethene	BD	0.030
cis-1,2 Dichloroethene	BD	0.030
trans-1,2 Dichloroethene	BD	0.030
1,2 Dichloropropane	BD	0.060
1,3 Dichloropropane	BD	0.030
2,2 Dichloropropane	BD	0.030
1,1 Dichloropropene	BD	0.030
cis-1,3 Dichloropropene	BD	0.030
trans-1,3 Dichloropropene	BD	0.030



#### Laboratory Services

P.O. Box 186 Canterbury, N.H. 03224 603-783-9097

Volatile Organic Report 12-15-98,17:20 Sample 42935

Project Location GUAY'S GARAGE

B-2

Matrix Soil

Organic Compound	Result mg/k	g Det. Lim. mg/kg
Ethylbenzene	BD	0.030
Hexachlorobutadiene	BD	0.060
Isopropylbenzene	BD	0.030
p-Isopropyltoluene	BD	0.030
Methylene Chloride	BD	0.090
Naphthalene	BD	0.060
n-Propylbenzene	BD BD	0.030 0.030
Styrene	BD	0.030
1,1,1,2 Tetrachloroethane	BD	0.030
1,1,2,2 Tetrachloroethane	BD	0.030
Tetrachloroethene	BD	0.030
Toluene	BD	0.030
1,2,3 Trichlorobenzene	BD	0.060
1,2,4 Trichlorobenzene 1,1,1 Trichloroethane	BD	0.030
1,1,1 Trichloroethane 1,1,2 Trichloroethane	BD	0.030
Trichloroethene	BD	0.030
Trichlorofluoromethane	BD	0.060
1,2,3 Trichloropropane	BD	0.030
1,2,4 Trimethylbenzene	BD	0.030
1,3,5 Trimethylbenzene	BD	0.030
Vinyl Chloride	BD	0.030
o-Xylene	BD	0.030
m&p-Xylene	BD	0.030
Ethyl Ether	BD	0.450
Acetone	BD	1.500
Methylethylketone MEK	BD	0.750
Methylisobutylketone	BD	0.750
Tetrahydrofuran	BD	0.450
Methyl-t-butyl ether	BD	0.030
Total Pet. Hydrocarbons Method = EPA-8100 (mod.)	BD	10.0 Results for TPH are
		expressed in mg/kg (ppm)

#### Comments:

TPH was performed with fuel oil as the standard.

Method of VOA Analysis = EPA-8260B

BD = Below Detection Limit - Results are in parts per million (ppm) unless noted.

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## Laboratory Services

P.O. Box 186 Canterbury, N.H. 03224 603-783-9097

Volatile Organic Report 12-15-98,17:19 Sample 42906

Project GUAY'S GARAGE Matrix

Soil

Date Sampled

12-10-98,14:20 12-10-98,15:41 Sampler Location G. AMBELAS

Date Logged In Date of Analysis

12-11-98

Town

B-3 FRANKLIN

% Solids

77.85%

Organic Compound	Result mg/k	kg Det. Lim. mg/kg
Benzene	BD	0.040
Bromobenzene	BD	0.040
Bromodichloromethane	BD	0.040
Bromoform	BD	0.040
Bromomethane	BD	0.040
n-Butylbenzene	BD	0.040
sec-Butylbenzene	BD	0.040
tert-Butylbenzene	BD	0.040
Carbon-Tetrachloride	BD	0.040
Chlorobenzene	BD .	0.040
Chloroethane	BD	0.040
Chloroform	BD	0.040
Chloromethane	BD	0.040
2-Chlorotoluene	BD	0.040
4-Chlorotoluene	BD	0.040
Dibromochloromethane	BD	0.040
1,2 Dibromo-3-Chloropropane	BD	0.080
1,2 Dibromoethane	BD	0.080
Dibromomethane	BD	0.040
1,2 Dichlorobenzene	BD	0.040
1,3 Dichlorobenzene	BD	0.040
1,4 Dichlorobenzene	BD	0.040
Dichlorodifluoromethane	BD	0.080
1,1 Dichloroethane	BD	0.040
1,2 Dichloroethane	BD	0.040
1,1 Dichloroethene	BD	0.040
cis-1,2 Dichloroethene	BD	0.040
trans-1,2 Dichloroethene	BD	0.040
1,2 Dichloropropane	BD	0.080
1,3 Dichloropropane	BD	0.040
2,2 Dichloropropane	BD	0.040
1,1 Dichloropropene	BD	0.040
cis-1,3 Dichloropropene	BD	0.040
trans-1,3 Dichloropropene	BD	0.040



#### Laboratory Services

P.O. Box 186 Canterbury, N.H. 03224 603-783-9097

Volatile Organic Report 12-15-98,17:19 Sample 42906

Project Location GUAY'S GARAGE

B-3

Matrix

Soil

Organic Compound	Result mg/kg	Det. Lim. mg/kg
Ethylbenzene	BD	0.040
Hexachlorobutadiene	BD	0.080
Isopropylbenzene	BD	0.040
p-Isopropyltoluene	BD	0.040
Methylene Chloride	BD	0.120
Naphthalene	BD	0.080
n-Propylbenzene	BD	0.040
Styrene	BD	0.040
1,1,1,2 Tetrachloroethane	BD	0.040
1,1,2,2 Tetrachloroethane	BD	0.040
Tetrachloroethene	BD	0.040
Toluene	BD	0.040
1,2,3 Trichlorobenzene	BD	0.080
1,2,4 Trichlorobenzene	BD	0.080
1,1,1 Trichloroethane	BD	0.040
1,1,2 Trichloroethane	BD	0.040
Trichloroethene	BD	0.040
Trichlorofluoromethane	BD	0.080
1,2,3 Trichloropropane	BD	0.040
1,2,4 Trimethylbenzene	BD	0.040
1,3,5 Trimethylbenzene	BD	0.040
Vinyl Chloride	. BD	0.040
o-Xylene	BD	0.040
m&p-Xylene	BD	0.040
Ethyl Ether	BD	0.600
Acetone	BD	2.000
Methylethylketone MEK	BD	1.000
Methylisobutylketone	BD	1.000
Tetrahydrofuran	BD	0.600
Methyl-t-butyl ether	BD	0.040
Total Pet. Hydrocarbons	BD	10.0
Method = EPA-8100 (mod.)		Results for TPH are
MECHOU = EFA-0100 (mou.)		expressed in mg/kg (ppm)

#### Comments:

TPH was performed with fuel oil as the standard.

Method of VOA Analysis = EPA-8260B

BD = Below Detection Limit - Results are in parts per million (ppm) unless noted.

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## Laboratory Services

P.O. Box 186 Canterbury, N.H. 03224 603-783-9097

Volatile Organic Report 12-15-98,17:19 Sample 42907

Project GUAY'S GARAGE Matrix

Soil

Date Sampled Date Logged In 12-10-98,10:40

Sampler

G. AMBELAS

Date of Analysis

12-10-98,15:42 12-11-98

Location

B-4

% Solids

78.78%

Town

FRANKLIN

Organic Compound	Result mg/kg	Det. Lim. mg/kg
Benzene	BD	0.024
Bromobenzene	BD	0.024
Bromodichloromethane	BD	0.024
Bromoform	BD	0.024
Bromomethane	BD	0.024
n-Butylbenzene	BD	0.024
sec-Butylbenzene	BD	0.024
tert-Butylbenzene	BD	0.024
Carbon-Tetrachloride	BD	0.024
Chlorobenzene	BD	0.024
Chloroethane	BD	0.024
Chloroform	BD	0.024
Chloromethane	BD	0.024
2-Chlorotoluene	BD	0.024
4-Chlorotoluene	BD	0.024
Dibromochloromethane	BD	0.024
1,2 Dibromo-3-Chloropropane	BD	0.048
1,2 Dibromoethane	BD	0.048
Dibromomethane	BD	0.024
1,2 Dichlorobenzene	BD	0.024
1,3 Dichlorobenzene	BD	0.024
1,4 Dichlorobenzene	BD	0.024
Dichlorodifluoromethane	BD	0.048
1,1 Dichloroethane	BD	0.024
1,2 Dichloroethane	BD	0.024
1,1 Dichloroethene	BD	0.024
cis-1,2 Dichloroethene	BD	0.024
trans-1,2 Dichloroethene	BD	0.024
1,2 Dichloropropane	BD	0.048
1,3 Dichloropropane	BD	0.024
2,2 Dichloropropane	BD	0.024
1,1 Dichloropropene	BD	0.024
cis-1,3 Dichloropropene	BD	0.024
trans-1,3 Dichloropropene	BD	0.024



#### Laboratory Services

P.O. Box 186
Canterbury, N.H. 03224
603-783-9097

Volatile Organic Report 12-15-98,17:19 Sample 42907

Project Location GUAY'S GARAGE

B-4

Matrix Soil

Organic Compound	Result mg/kg	Det. Lim. mg/kg
Ethylbenzene	BD	0.024
Hexachlorobutadiene	BD	0.048
Isopropylbenzene	BD	0.024
-Isopropyltoluene	BD	0.024
Methylene Chloride	BD	0.072
Japhthalene	BD	0.048
-Propylbenzene	BD	0.024
tyrene	BD	0.024
,1,1,2 Tetrachloroethane	BD	0.024
.,1,2,2 Tetrachloroethane	·BD	0.024
etrachloroethene	BD	0.024
Coluene	BD	0.024
.,2,3 Trichlorobenzene	BD	0.048
.,2,4 Trichlorobenzene	BD	0.048
,1,1 Trichloroethane	BD	0.024
,1,2 Trichloroethane	BD	0.024
richloroethene	BD	0.024
richlorofluoromethane	BD	0.048
,2,3 Trichloropropane	BD	0.024
.,2,4 Trimethylbenzene	BD	0.024
,3,5 Trimethylbenzene	BD	0.024
inyl Chloride	BD	0.024
-Xylene	BD	0.024
&p-Xylene	BD	0.024 0.360
Ethyl Ether	BD BD	1.200
Acetone	BD	0.600
Methylethylketone MEK	BD	0.600
Methylisobutylketone	BD	0.360
etrahydrofuran	BD	0.024
Methyl-t-butyl ether		
otal Pet. Hydrocarbons	BD	10.0
Method = EPA-8100 (mod.)		Results for TPH are
iccirca = Erif croc (car)		expressed in mg/kg (ppm)

#### Comments:

TPH was performed with fuel oil as the standard.

<u>Method of VOA Analysis = EPA-8260B</u>

BD = Below Detection Limit - Results are in parts per million (ppm) unless noted.

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#### Laboratory Services

P.O. Box 186 Canterbury, N.H. 03224 603-783-9097

# Poly Aromatic Hydrocarbon Report 12-15-98,17:20 Sample 42905

Date Sampled Date Logged In Analysis Date Extraction Date % Solids

12-10-98,08:50 12-10-98,15:40 12-14-98 12-11-98 75.15%

Sampler Location Town Matrix

G. AMBELAS B-1

FRANKLIN Soil/Solid

Organic Compound	Result mg/kg	Det. Lim. mg/kg
Acenaphthene	BD	0.20
Acenaphthylene	BD	0.20
Anthrecene	BD	0.20
Benzo (a) anthracene	BD	0.20
Benzo (b) fluoranthene	BD	0.20
Benzo (k) fluoranthene	BD	0.20
Benzo (ghi) perylene	BD	0.20
Benzo (a) pyrene	BD	0.20
Chrysene	BD	0.20
Dibenzo (a,h) anthracene	BD	0.20
Fluoranthene	BD	0.20
Fluorene	BD	0.20
Indeno (1,2,3-cd) pyrene	BD	0.20
Naphthalene	BD	0.20
Phenanthrene	BD	0.20
Pyrene	BD	0.20
2-Methylnaphthalene	BD	0.20
1-Methylnaphthalene	BD	0.20

#### Comments:

TPH was performed with fuel oil as the standard.



#### Laboratory Services

P.O. Box 186 Canterbury, N.H. 03224 603-783-9097

# Poly Aromatic Hydrocarbon Report 12-15-98,17:21 Sample 42935

Date Sampled
Date Logged In
Analysis Date
Extraction Date
% Solids Unc Date 12-11-98 Uncompleted%

12-11-98,09:15 12-11-98,12:08 12-14-98

Sampler Location Town Matrix

G. AMBELAS B-2 FRANKLIN Soil/Solid

Organic Compound	Result mg/kg	Det. Lim. mg/kg
Acenaphthene	BD	0.20
Acenaphthylene	BD	0.20
Anthrecene	BD	0.20
Benzo (a) anthracene	BD	0.20
Benzo (b) fluoranthene	BD	0.20
Benzo (k) fluoranthene	BD	0.20
Benzo (ghi) perylene	BD	0.20
Benzo (a) pyrene	BD	0.20
Chrysene	BD	0.20
Dibenzo (a,h) anthracene	BD	0.20
Fluoranthene	BD	0.20
Fluorene	BD	0.20
Indeno (1,2,3-cd) pyrene	BD	0.20
Naphthalene	BD	0.20
Phenanthrene	BD	0.20
Pyrene	BD	0.20
2-Methylnaphthalene	BD	0.20
1-Methylnaphthalene	BD	0.20

#### Comments:

TPH was performed with fuel oil as the standard.



#### Laboratory Services

P.O. Box 186

Canterbury, N.H. 03224

603-783-9097

#### Poly Aromatic Hydrocarbon Report 12-15-98,17:20 Sample 42906

Date Sampled Date Logged In Analysis Date Extraction Date % Solids 12-10-98,14:20 12-10-98,15:41 12-14-98 12-11-98 77.85%

Sampler Location Town Matrix G. AMBELAS B-3 FRANKLIN Soil/Solid

Organic Compound	Result mg/kg	Det. Lim. mg/kg
Acenaphthene	BD	0.20
Acenaphthylene	BD	0.20
Anthrecene	BD	0.20
Benzo (a) anthracene	BD	0.20
Benzo (b) fluoranthene	BD	0.20
Benzo (k) fluoranthene	BD	0.20
Benzo (ghi) perylene	BD	0.20
Benzo (a) pyrene	BD	0.20
Chrysene	BD	0.20
Dibenzo (a,h) anthracene	BD	0.20
Fluoranthene	BD	0.20
Fluorene	BD	0.20
Indeno (1,2,3-cd) pyrene	BD	0.20
Naphthalene	BD	0.20
Phenanthrene	BD	0.20
Pyrene	BD	0.20
2-Methylnaphthalene	BD	0.20
1-Methylnaphthalene	BD	0.20

#### <u>Comments:</u>

TPH was performed with fuel oil as the standard.



Laboratory Services

P.O. Box 186 Canterbury, N.H. 03224 603-783-9097

#### Poly Aromatic Hydrocarbon Report 12-15-98,17:20 Sample 42907

Date Sampled Date Logged In Analysis Date Extraction Date % Solids 12-10-98,10:40 12-10-98,15:42 12-14-98 12-11-98 78.78%

Sampler Location Town Matrix G. AMBELAS B-4 FRANKLIN Soil/Solid

Organic Compound	Result mg/kg	Det. Lim. mg/kg
Acenaphthene	BD	0.20
Acenaphthylene	BD	0.20
Anthrecene	BD	0.20
Benzo (a) anthracene	BD	0.20
Benzo (b) fluoranthene	BD	0.20
Benzo (k) fluoranthene	BD	0.20
Benzo (ghi) perylene	BD	0.20
Benzo (a) pyrene	BD	0.20
Chrysene	BD	0.20
Dibenzo (a,h) anthracene	BD	0.20
Fluoranthene	BD	0.20
Fluorene	BD	0.20
Indeno (1,2,3-cd) pyrene	BD	0.20
Naphthalene	BD	0.20
Phenanthrene	BD	0.20
Pyrene	BD	0.20
2-Methylnaphthalene	BD	0.20
1-Methylnaphthalene	BD	0.20

#### <u>Comments:</u>

TPH was performed with fuel oil as the standard.



# Laboratory Services

153 West Road Canterbury, NH 03224 Phone: (603)783-9097 FAX: (603)783-0360

LABORATORY INFORMATION	PROJEC	T INFORMATION
Turn-around-time: Same Day(100% upcharg	Project #:	Project Manager: Gary Ambelas
Turn-around-time: 24 Hrs(50% upcharge)	Project Name: GVAY'S GARAGE	Report to: ARC
	1	Invoice to: ARC
Turn-around-time: Normal $XX$	Sampler: Gary Ambelas	Phone: 364-2828
Account #: 61070	Company: ARC	FAX: 364-2829

		SAMPLE INFORMAT	'ION				V	oc'	's-8	vo	C's	,		T	PH			ME	ΤA	LS				O	THE	R-	(Lis	t)		
	AAI ID#	Sample ID	Date/Time	Sample Matrix (S-soil / W-water / O-other)	Number of Containers	EPA 524.2 Drinking Water		B with	EPA 8240 / EPA 624		Chlorinated Compounds Only	EPA 8270 (A-B/N)	EPA 8270 ( PAH)	EPA 8015M (Gasoline)	EPA 8100M (Fuel Oil)	- 1	- !!	13 PP Soil (TCLP_Total_)	8 RCRA Water (Diss_Total	8 RCRA Soil (TCLPTotal)	Miscellaneous-List	EPA 608/8080 PCBS	EPA 608/8080 Pesticides	EPA 8150 Herbicides	EPA SW846-7 Reactivity	EPA 1010 Ignitabilty/Flashpoint	EPA 150.1/9045 pH	EPA 120.1 Conductivity		
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	42906	13-3	1420	S	1		X						X		X							Γ								
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Please refer to back side for sampling guidelines.



# Laboratory Services

153 West Road Canterbury, NH 03224 Phone: (603)783-9097 FAX: (603)783-0360

LABORATORY INFORMATION	PROJEC	T INFORMATION
Turn-around-time: Same Day(100% upcharg		Project Manager: Gary Ambelas
Turn-around-time: 24 Hrs(50% upcharge)	Project Name: Gay's GARAGE	Report to: ARC
Turn-around-time: 48 Hrs(25% upcharge)		Invoice to: ARC
Turn-around-time: Normal $XX$	Sampler: Gary Ambelas	Phone: 364-2828
Account #: 61070	Company: ARC	FAX: 364-2829

	SAMPLE INFORMAT	ION			1	V	oc's	-SV	oc'	5		T	PH			ME	TAL	S				O)	FHE	R-	Lis	t)	
AAI ID#	Sample ID	Date/Time	Sample Matrix (S-soil / W-water / O-other)	Number of Containers	ă	EPA 8260 / EPA 8260B	EPA 8260B with TIC's	BTEX / MTBE	Chlorinated Compounds Only	EPA 8270 (A-B/N)	EPA 8270 ( PAH)	EPA 8015M (Gasoline)	EPA 8100M (Fuel Oil)			입	ွှူ	8 RCRA Soil (TCLPTotal)	Miscellaneous-List	EPA 608/8080 PCBS	EPA 608/8080 Pesticides	EPA 8150 Herbicides	EPA SW846-7 Reactivity	EPA 1010 Ignitabilty/Flashpoint	EPA 150.1/9045 pH	EPA 120.1 Conductivity	
42935	B-2	0915	2	1		X					X		X														
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Please refer to back side for sampling guidelines.

# **APPENDIX F**

Laboratory Analytical Data Groundwater - April 1999



## Laboratory Services

P.O. Box 186
Canterbury, N.H. 03224
603-783-9097
05-10-99,11:53

Mr. Gary Ambelas ARC Environmental Consultants P.O. Box 116 Gilmanton I.W., N.H. 03837-0116

Dear Mr. Ambelas:

Please find enclosed the reports, and invoice for the samples that were logged in on, 04-30-99.

AAI Sample	Date Sampled	Project Description	Sample Location
45829	0 - 0 - 0 - 0	GUAY'S GARAGE	MW-2
45830		GUAY'S GARAGE	MW-4

To perform these analyses, the following methods were used:

QTY. EPA Methodologies/Applications

\_\_\_\_\_

2 EPA-8260 VOA Water

2 EPA-625/8270/525.1 PAH only

Thank you for using Aquarian Analytical Inc. on this project. If I can be of any further help, please feel free to call.

Sincerely,

William M. Rice Laboratory Director

doc. L10604





Laboratory Services

P.O. Box 186 Canterbury, N.H. 03224 603-783-9097

05-10-99,11:53

As part of Aquarian's ongoing quality assurance program, all analyses included the following quality assurance measures.

Samples were received in an acceptable condition.

Samples were prepared and analyzed within the appropriate hold time specified in the method referred to on the analyses sheet.

The instrument that was used for the analyses was calibrated and/or tuned at the required frequency.

A daily calibration check was performed.

A daily blank was run, and contamination was not observed at levels that would affect the analyses.

For all work, internal standards, and surrogates gave appropriate response levels.

Matrix spikes were added where appropriate, and recoveries were within the acceptable range.

Duplicates were run at the frequency specified in the applicable state or federal regulations.

In addition to the above steps, all original-raw data is on file at Aquarian Analytical's offices for inspection when required.

Exceptions (if any)

Certification

## Laboratory Services

P.O. Box 186 Canterbury, N.H. 03224 603-783-9097

Volatile Organic Report 05-10-99,11:52 Sample 45829

Project

= GUAY'S GARAGE

Matrix = Water

Date Sampled

= 04-30-99, 12:30

Sampler = G. AMBELAS

Date Logged In = 04-30-99,14:17

Location = MW-2

Date of Analysis = 05-04-99

Town = FRANKLIN

Organic Compound	Result ug/L	Det. Lim. ug/L
Benzene	BD	2
Bromobenzene	BD	2
Bromodichloromethane	BD	2
Bromoform	BD	2
Bromomethane	BD	2
Bromochloromethane	BD	2
n-Butylbenzene	BD	2
sec-Butylbenzene	BD	2
tert-Butylbenzene	BD	2
Carbon-Tetrachloride	BD	2
Chlorobenzene	BD	2
Chloroethane	BD.	2
Chloroform	BD	2
Chloromethane	BD	6
2-Chlorotoluene	BD	2
4-Chlorotoluene	BD	2
Dibromochloromethane	BD	2
1,2 Dibromo-3-Chloropropane	BD	4
1,2 Dibromoethane	BD	4
Dibromomethane	BD	2
1,2 Dichlorobenzene	BD	2
1,3 Dichlorobenzene	BD	2
1,4 Dichlorobenzene	BD	2
Dichlorodifluoromethane	BD	4
1,1 Dichloroethane	BD	2
1,2 Dichloroethane	BD	2
1,1 Dichloroethene	BD	2
cis-1,2 Dichloroethene	BD	2
trans-1,2 Dichloroethene	BD	2
1,2 Dichloropropane	BD	4
1,3 Dichloropropane	BD	. 2
2,2 Dichloropropane	BD	2
1,1 Dichloropropene	BD	2
cis-1,3 Dichloropropene	BD	2
trans-1,3 Dichloropropene	BD	2
Ethylbenzene	BD	2
Hexachlorobutadiene	BD	4



#### Laboratory Services

P.O. Box 186 Canterbury, N.H. 03224 603-783-9097

Volatile Organic Report 05-10-99,11:53 Sample 45829

Project

= GUAY'S GARAGE

Matrix = Water

Date Sampled = 04-30-99,12:30

Sampler = G. AMBELAS

Date Logged In = 04-30-99,14:17

Location = MW-2

Date of Analysis = 05-04-99

Town = FRANKLIN

Organic Compound	Result ug/L	Det. Lim. ug/L
Isopropylbenzene	BD	2
p-Isopropyltoluene	BD	2
Methylene Chloride	BD	6
Naphthalene	BD	4
n-Propylbenzene	BD ·	2
Styrene	BD	2 2
1,1,1,2 Tetrachloroethane	BD	2
1,1,2,2 Tetrachloroethane	BD	2 2
Tetrachloroethene	BD	2
Toluene	BD	2
1,2,3 Trichlorobenzene	BD	4
1,2,4 Trichlorobenzene	BD	4
1,1,1 Trichloroethane	BD	2
1,1,2 Trichloroethane	BD	2
Trichloroethene	BD	2
Trichlorofluoromethane	BD	4
1,2,3 Trichloropropane	BD	2
1,2,4 Trimethylbenzene	BD	2
1,3,5 Trimethylbenzene	BD	2
Vinyl Chloride	BD	2
o-Xylene	BD	2 2 2 2
m&p-Xylene	BD	
Ethyl Ether	BD	30
Acetone	BD	100
Methylethylketone MEK	BD	50
Methylisobutylketone	BD	50
Tetrahydrofuran	BD	30
Methyl-t-butyl ether	BD	2
Carbon Disulfide	BD	4
2-Hexanone	BD	50

Comments:

Method of Analyses = EPA-8260B

BD = Below Detection Limit - Results are in parts per billion (ppb).

Page 2

### Laboratory Services

P.O. Box 186 Canterbury, N.H. 03224 603-783-9097

Volatile Organic Report 05-10-99,11:53 Sample 45830

Project

= GUAY'S GARAGE

Matrix = Water

Sampler = G. AMBELAS

Date Sampled = 04-30-99,12:40 Date Logged In = 04-30-99,14:19

Location = MW-4

Date of Analysis = 05-04-99

Town = FRANKLIN

Organic Compound	Result ug/L	Det. Lim. ug/L
Benzene	BD	2
Bromobenzene	BD	2
Bromodichloromethane	BD	2
Bromoform	BD	2
Bromomethane	BD	2
Bromochloromethane	BD	2
n-Butylbenzene	BD	2
sec-Butylbenzene	BD	2
tert-Butylbenzene	BD	2
Carbon-Tetrachloride	BD	2
Chlorobenzene	BD	2
Chloroethane	BD	2
Chloroform	BD	2
Chloromethane	BD	6
2-Chlorotoluene	BD	2
4-Chlorotoluene	BD	2
Dibromochloromethane	BD	2
1,2 Dibromo-3-Chloropropane	BD	4
1,2 Dibromoethane	BD	4
Dibromomethane	BD	2
1,2 Dichlorobenzene	BD	2
1,3 Dichlorobenzene	BD	2
1,4 Dichlorobenzene	BD	2
Dichlorodifluoromethane	BD	4
1,1 Dichloroethane	BD	2
1,2 Dichloroethane	BD .	2
1,1 Dichloroethene	BD	2
cis-1,2 Dichloroethene	BD	2
trans-1,2 Dichloroethene	BD	2
1,2 Dichloropropane	BD	4
1,3 Dichloropropane	BD	2
2,2 Dichloropropane	BD	2
1,1 Dichloropropene	BD	2
cis-1,3 Dichloropropene	BD	2
trans-1,3 Dichloropropene	BD	2
Ethylbenzene	BD	2
Hexachlorobutadiene	BD	4



#### Laboratory Services

P.O. Box 186 Canterbury, N.H. 03224 603-783-9097

Volatile Organic Report 05-10-99,11:53 Sample 45830

Project

= GUAY'S GARAGE

Matrix = Water

Date Sampled

= 04-30-99, 12:40

Sampler = G. AMBELAS

Date Logged In = 04-30-99,14:19

Location = MW-4

Date of Analysis = 05-04-99

Town = FRANKLIN

Organic Compound	Result ug/L	Det. Lim. ug/L
Isopropylbenzene	BD	2
p-Isopropyltoluene	BD	2
Methylene Chloride	BD	6
Naphthalene	BD	4
n-Propylbenzene	BD	2
Styrene	BD	2
1,1,1,2 Tetrachloroethane	BD	2
1,1,2,2 Tetrachloroethane	BD	2
Tetrachloroethene	BD	2
Toluene	BD	2
1,2,3 Trichlorobenzene	BD	4
1,2,4 Trichlorobenzene	BD	4
1,1,1 Trichloroethane	BD	2
1,1,2 Trichloroethane	BD	2
Trichloroethene	BD	2
Trichlorofluoromethane	BD	4
1,2,3 Trichloropropane	BD	2
1,2,4 Trimethylbenzene	BD	2
1,3,5 Trimethylbenzene	BD	2
Vinyl Chloride	BD	2
o-Xylene	BD	2 2 2
m&p-Xylene	BD	
Ethyl Ether	BD	30
Acetone	BD	100
Methylethylketone MEK	BD	50
Methylisobutylketone	BD	50
Tetrahydrofuran	BD	30
Methyl-t-butyl ether	7	2
Carbon Disulfide	BD	4
2-Hexanone	BD	50

Comments:

<u>Method of Analyses = EPA-8260B</u>

BD = Below Detection Limit - Results are in parts per billion (ppb).

Page 2



#### Laboratory Services

P.O. Box 186 Canterbury, N.H. 03224 603-783-9097

## Poly Aromatic Hydrocarbon Report 05-10-99,11:52 Sample 45829

Date Sampled = 04-30-99,12:30 Date Logged In = 04-30-99,14:17 Extraction Date = 05-07-99 Analysis Date = 05-07-99

Sampler = G. AMBELAS Location = MW-2 Town = FRANKLIN

Matrix = Water

Organic Compound	Result ug/L	Det. Lim. ug/L
Acenaphthene	BD	2.0
Acenaphthylene	BD	2.0
Anthrecene	BD	2.0
Benzo (a) anthracene	BD	2.0
Benzo (b) fluoranthene	BD	2.0
Benzo (k) fluoranthene	BD	2.0
Benzo (ghi) perylene	BD	2.0
Benzo (a) pyrene	BD	2.0
Chrysene	BD	2.0
Dibenzo (a,h) anthracene	BD	2.0
Fluoranthene	BD	2.0
Fluorene	BD	2.0
Indeno (1,2,3-cd) pyrene	BD	2.0
Naphthalene	BD	2.0
Phenanthrene	BD	2.0
Pyrene	BD	2.0
2-Methylnaphthalene	BD	2.0
1-Methylnaphthalene	BD	2.0

#### Comments:

BD = Below Detection Limit Method of Analyses = EPA-8270 All Results are in parts per billion (ppb), except as noted.



#### Laboratory Services

P.O. Box 186 Canterbury, N.H. 03224 603-783-9097

## Poly Aromatic Hydrocarbon Report 05-10-99,11:52 Sample 45830

Date Sampled = 04-30-99,12:40 Date Logged In = 04-30-99,14:19 Extraction Date = 05-07-99 Analysis Date = 05-07-99

Sampler = G. AMBELAS Location = MW-4 Town = FRANKLIN Matrix = Water

= Water

Organic Compound	Result ug/L	Det. Lim. ug/L
Acenaphthene	BD	2.0
Acenaphthylene	BD	2.0
Anthrecene	BD	2.0
Benzo (a) anthracene	BD	2.0
Benzo (b) fluoranthene	BD	2.0
Benzo (k) fluoranthene	BD	2.0
Benzo (ghi) perylene	BD	2.0
Benzo (a) pyrene	BD	2.0
Chrysene	BD	2.0
Dibenzo (a,h) anthracene	BD	2.0
Fluoranthene	BD	2.0
Fluorene	BD	2.0
Indeno (1,2,3-cd) pyrene	BD	2.0
Naphthalene	BD	2.0
Phenanthrene	BD	2.0
Pyrene	BD	2.0
2-Methylnaphthalene	BD	2.0
1-Methylnaphthalene	BD	2.0

#### Comments:

BD = Below Detection Limit Method of Analyses = EPA-8270 All Results are in parts per billion (ppb), except as noted.



## Laboratory Services

153 West Road Canterbury, NH 03224 Phone: (603)783-9097 FAX: (603)783-0360

LABORATORY INFORMATION	PROJEC	T INFORMATION
Turn-around-time: Same Day(100% upcharg	Project #:	Project Manager: Gary Ambelas
Turn-around-time: 24 Hrs(50% upcharge)	Project Name: Gay's Garage	Report to: ARC
Turn-around-time: 48 Hrs(25% upcharge)	Town/Site: FRANKLIN, NH	Invoice to: ARC
Turn-around-time: Normal <u>XX</u>	Sampler: Gary Ambelas	Phone: 364-2828
Account #: 61070	Company: ARC	FAX: 364-2829

	SAMPLE INFORMAT	ION				VC	)C's	-sv	OC's			TPI	1		ME	ŦΑ	LS				0	THE	R-	(Lis	t)		
AAI ID#	Sample ID	Date/Time	Sample Matrix (S-soil / W-water / O-other)	Number of Containers	ā	EPA 8260_/ EPA 8260B	EPA 8260B With 11C S EPA 8240 / EPA 624		Chlorinated Compounds Only	EPA 8270 (A-B/N)	EPA 8270 ( PAH)	EPA 8100M (Fuel Oil)	Fingerprint	13 PP Water(DissTotal)	13 PP Soll (TCLPTotal)	,	8 RCRA Soil (TCLPTotal)	Miscellaneous-List	EPA 608/8080 PCBS	EPA 608/8080 Pesticides	EPA 8150 Herbicides	EPA SW846-7 Reactivity	EPA 1010 Ignitabilty/Flashpoint	EPA 150.1/9045 pH	EPA 120.1 Conductivity	·	
45829	M4-2	1230	W	3	П	X	T		П		d	T	Ė														┨
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Please refer to back side for sampling guidelines.

## **APPENDIX G**

Laboratory Analytical Data Groundwater - August 1999

#### Laboratory Services

P.O. Box 186 Canterbury, N.H. 03224 Ph. 603-783-9097 • Fax 603-783-0360

08-13-99,09:54

Mr. Gary Ambelas ARC Environmental Consultants P.O. Box 116 Gilmanton I.W., N.H. 03837-0116

Dear Mr. Ambelas:

Please find enclosed the reports, and invoice for the samples that were logged in on, 08-10-99.

AAI Sample	Date Sampled	Project Description	Sample Location
48124	00 20 22	GUAY'S GARAGE	MW-2
48125		GUAY'S GARAGE	MW-4

To perform these analyses, the following methods were used:

QTY. EPA Methodologies/Applications

O TDA COCO MON Makes

2 EPA-8260 VOA Water

Thank you for using Aquarian Analytical Inc. on this project. If I can be of any further help, please feel free to call.

Sincerely,

William M. Rice

Laboratory Director

doc. L11199

#### Laboratory Services

P.O. Box 186

Canterbury, N.H. 03224

Ph. 603-783-9097 • Fax 603-783-0360

08-13-99,09:54

As part of Aquarian's ongoing quality assurance program, all analyses included the following quality assurance measures.

Samples were received in an acceptable condition.

Samples were prepared and analyzed within the appropriate hold time specified in the method referred to on the analyses sheet.

The instrument that was used for the analyses was calibrated and/or tuned at the required frequency.

A daily calibration check was performed.

A daily blank was run, and contamination was not observed at levels that would affect the analyses.

For all work, internal standards, and surrogates gave appropriate response levels.

Matrix spikes were added where appropriate, and recoveries were within the acceptable range.

Duplicates were run at the frequency specified in the applicable state or federal regulations.

In addition to the above steps, all original-raw data is on file at Aquarian Analytical's offices for inspection when required.

Exceptions (if any)

UMR

#### Laboratory Services

P.O. Box 186

Canterbury, N.H. 03224

Ph. 603-783-9097 • Fax 603-783-0360

Volatile Organic Report 08-13-99,09:53 Sample 48124

Project

= GUAY'S GARAGE

Matrix = Water

Date Sampled

= 08-10-99, 10:20

Sampler = K.A.

Date Logged In = 08-10-99,11:38

Location = MW-2

Date of Analysis = 08-10-99

Town = FRANKLIN

Organic Compound	Result ug/L	Det. Lim. ug/L
Benzene	BD	2
Bromobenzene	BD	2
Bromodichloromethane	BD	2
Bromoform	BD	2
Bromomethane	BD	2
Bromochloromethane	BD	2
n-Butylbenzene	BD	2
sec-Butylbenzene	BD	2
tert-Butylbenzene	BD	2
Carbon-Tetrachloride	BD	2
Chlorobenzene	BD	2
Chloroethane	BD	2
Chloroform	BD	2
Chloromethane	BD	3
2-Chlorotoluene	BD	2
4-Chlorotoluene	BD	2
Dibromochloromethane	BD	2
1,2 Dibromo-3-Chloropropane	BD	8
1,2 Dibromoethane	BD	8
Dibromomethane	BD	2
1,2 Dichlorobenzene	BD	2
1,3 Dichlorobenzene	BD	2
1,4 Dichlorobenzene	BD	2
Dichlorodifluoromethane	BD	4
1,1 Dichloroethane	BD	2
1,2 Dichloroethane	BD	2
1,1 Dichloroethene	BD	2
cis-1,2 Dichloroethene	BD	2
trans-1,2 Dichloroethene	BD	2
1,2 Dichloropropane	BD	4
1,3 Dichloropropane	BD	2
2,2 Dichloropropane	BD	2
1,1 Dichloropropene	BD	2
cis-1,3 Dichloropropene	BD	2
trans-1,3 Dichloropropene	BD	2
Ethylbenzene	BD	2
Hexachlorobutadiene	, BD	4

#### Laboratory Services

P.O. Box 186

Canterbury, N.H. 03224

Ph. 603-783-9097 • Fax 603-783-0360

Volatile Organic Report 08-13-99,09:53 Sample 48124

Project

= GUAY'S GARAGE

Matrix = Water

Date Sampled

= 08-10-99, 10:20

Sampler = K.A.

Date Logged In = 08-10-99,10:20

Location = MW-2

Date of Analysis = 08-10-99

Town = FRANKLIN

Organic Compound	Result ug/L	Det. Lim. ug/L	
Isopropylbenzene	BD	2	
p-Isopropyltoluene	BD	2	
Methylene Chloride	BD	6	
Naphthalene '	BD	4	
n-Propylbenzene	BD	2	
Styrene	BD	2	
1,1,1,2 Tetrachloroethane	BD	2	
1,1,2,2 Tetrachloroethane	BD	2	
Tetrachloroethene	BD	2	
Toluene	BD	2	
1,2,3 Trichlorobenzene	BD	4	
1,2,4 Trichlorobenzene	BD	4	
1,1,1 Trichloroethane	BD	2	
1,1,2 Trichloroethane	BD	2	
Trichloroethene	BD	2	
Trichlorofluoromethane	BD	4	
1,2,3 Trichloropropane	BD	2	
1,2,4 Trimethylbenzene	BD	2	
1,3,5 Trimethylbenzene	BD	2	
Vinyl Chloride	BD	2 2	
o-Xylene	BD	2	
m&p-Xylene	BD	2	
Ethyl Ether	BD	30	
Acetone	BD	100	
Methylethylketone MEK	BD	50	
Methylisobutylketone	BD	50	
Tetrahydrofuran	BD	30	
Methyl-t-butyl ether	6	2	
Carbon Disulfide	BD	4	
2-Hexanone	BD	50	

Method of Analyses = EPA-8260B

BD = Below Detection Limit - Results are in parts per billion (ppb).

Page 2

#### Laboratory Services

P.O. Box 186 Canterbury, N.H. 03224 Ph. 603-783-9097 • Fax 603-783-0360

> Volatile Organic Report 08-13-99,09:53 Sample 48125

Project = GUAY'S GARAGE

Matrix = Water

Date Sampled = 08-10-99,10:20Date Logged In = 08-10-99,11:39 Sampler = K.A. Location = MW-4

Date of Analysis = 08-10-99

Town = FRANKLIN

Organic Compound	Result ug/L	Det. Lim. ug/L
Benzene	BD	2
Bromobenzene	BD	. 2
Bromodichloromethane	BD	2
Bromoform	BD	2
Bromomethane	BD	2
Bromochloromethane	BD	2
n-Butylbenzene	BD	2
sec-Butylbenzene	BD	2
tert-Butylbenzene	BD	2
Carbon-Tetrachloride	BD	2
Chlorobenzene	BD	2
Chloroethane	BD	2
Chloroform	BD	2
Chloromethane	BD	3
2-Chlorotoluene	BD	2
4-Chlorotoluene	BD	2
Dibromochloromethane	BD	2
1,2 Dibromo-3-Chloropropane	BD	8
1,2 Dibromoethane	BD	8
Dibromomethane	BD	2
1,2 Dichlorobenzene	BD	2
1,3 Dichlorobenzene	BD	2
1,4 Dichlorobenzene	BD	2
Dichlorodifluoromethane	BD	. 4
1,1 Dichloroethane	BD	2
1,2 Dichloroethane	BD	2
1,1 Dichloroethene	BD	2
cis-1,2 Dichloroethene	BD	2
trans-1,2 Dichloroethene	BD	2
1,2 Dichloropropane	BD	4
1,3 Dichloropropane	BD	2
2,2 Dichloropropane	BD	2
1,1 Dichloropropene	BD	2
cis-1,3 Dichloropropene	BD	2
trans-1,3 Dichloropropene	BD	2
Ethylbenzene	BD	2
Hexachlorobutadiene	BD	4

#### Laboratory Services

P.O. Box 186

Canterbury, N.H. 03224

Ph. 603-783-9097 • Fax 603-783-0360

Volatile Organic Report 08-13-99,09:53 Sample 48125

Project

= GUAY'S GARAGE

Matrix = Water

Date Sampled

= 08-10-99, 10:20

Sampler = K.A.

Date Logged In = 08-10-99,11:39

Location = MW-4

Date of Analysis = 08-10-99

Town = FRANKLIN

Organic Compound	Result ug/L	Det. Lim. ug/L
Isopropylbenzene	BD	2
p-Isopropyltoluene	BD	2
Methylene Chloride	BD	6
Naphthalene	BD	4
n-Propylbenzene	BD	2
Styrene	BD	2
1,1,1,2 Tetrachloroethane	BD	
1,1,2,2 Tetrachloroethane	BD	2
Tetrachloroethene	BD	2 2 2
Toluene	BD	2
1,2,3 Trichlorobenzene	BD	4
1,2,4 Trichlorobenzene	BD	4
1,1,1 Trichloroethane	BD	2
1,1,2 Trichloroethane	BD	2
Trichloroethene	BD	2
Trichlorofluoromethane	BD	4
1,2,3 Trichloropropane	BD	2
1,2,4 Trimethylbenzene	BD	2
1,3,5 Trimethylbenzene	`BD	2
Vinyl Chloride	BD	2
o-Xylene	BD	2
m&p-Xylene	BD	2
Ethyl Ether	BD	30
Acetone	BD	100
Methylethylketone MEK	BD	50
Methylisobutylketone	BD	50
Tetrahydrofuran	BD	30
Methyl-t-butyl ether	10	2
Carbon Disulfide	BD	4
2-Hexanone	BD	50

Comments:

Method of Analyses = EPA-8260B

BD = Below Detection Limit - Results are in parts per billion (ppb).

Page 2



LABORATORY INFORMATION

Turn-around-time: Normal XX
Account #: 61070

## AQUARTAN ANALYTICAL, INC.

**Laboratory Services** 

Canterbury, NH 03224 Phone: (603)783-9097 FAX: (603)783-0360

PROJECT INFORMATION

Project Manager: Gary Ambelas

Report to: Gary Ambelas

Turn-around-time: Same Day\_\_\_(100% upcharg)

Turn-around-time: 24 Hrs\_\_\_(50% upcharge)

Turn-around-time: 48 Hrs\_\_\_(25% upcharge)

Turn-around-time: Normal XX

Sampler: GA

KA

Company: ARC Environmental

Phone: 364-2828 FAX: 364-2829

Invoice to: ARC

VOC's-SVOC's TPH METALS SAMPLE INFORMATION OTHER-(List) EPA 8260 / EPA 8260B V/
EPA 8260B with TIC's
EPA 8240 / EPA 624
BTEX / MTBE
Chlorinated Compounds Only EPA 1010 Ignitabilty/Flashpoint EPA SW846-7 Reactivity EPA 8270 ( PAH)
EPA 8015M (Gasoline)
EPA 8100M (Fuel Oil) EPA 120.1 Conductivity EPA 608/8081 PCBS or EPA 8150 Herbicides 13 Priority Poultant EPA 300.0 Chloride EPA 150.1/9045 pH EPA 8270 (A-B/N) EPA 300.0 Nitrate Sample ID AAI ID# Date/Time Field Filtered Lab Filtered Fingerprint Alkalinity 8 RCRA Methane Misc. Total 8/10/99 48124 10:20 48125 10:20 Date: 8/10/97 Received By: Relinquished By: Notes: Time: //:30 Relinquished By: Date: Received By: Time: Relinquished By: Date: Received By: Time: Please refer to back side for sampling guidelines.

## APPENDIX H

Laboratory Analytical Data Contaminated Soils - Drywell July 1999

#### Laboratory Services

P.O. Box 186

Canterbury, N.H. 03224

Ph. 603-783-9097 • Fax 603-783-0360

07-22-99,15:11

Mr. Gary Ambelas ARC Environmental Consultants P.O. Box 116 Gilmanton I.W., N.H. 03837-0116

Dear Mr. Ambelas:

Please find enclosed the reports, and invoice for the samples that were logged in on, 07-13-99.

AAI Sample	Date Sampled	Project Description	Sample Location
47217		GUAY'S GARAGE - FRANKLIN	BOT COMP
47218		GUAY'S GARAGE - FRANKLIN	PILE

To perform these analyses, the following methods were used:

#### QTY. EPA Methodologies/Applications

- 1 New Hampshire DES, Table IV Analysis
- 1 VOA + TPH Soil fuel oil Mod. 8260/8100
- 1 EPA-625/8270/525.1 PAH only
- 1 Soil/Solid Digestion
- 7 Metals analysis (excluding mercury)
- 1 Mercury analysis

Thank you for using Aquarian Analytical Inc. on this project. If I can be of any further help, please feel free to call.

Sincerely

William M. Rice

Laboratory Director

doc. L11047

#### Laboratory Services

P.O. Box 186

Canterbury, N.H. 03224

Ph. 603-783-9097 • Fax 603-783-0360

07-22-99,15:12

As part of Aquarian's ongoing quality assurance program, all analyses included the following quality assurance measures.

Samples were received in an acceptable condition.

Samples were prepared and analyzed within the appropriate hold time specified in the method referred to on the analyses sheet.

The instrument that was used for the analyses was calibrated and/or tuned at the required frequency.

A daily calibration check was performed.

A daily blank was run, and contamination was not observed at levels that would affect the analyses.

For all work, internal standards, and surrogates gave appropriate response levels.

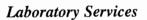
Matrix spikes were added where appropriate, and recoveries were within the acceptable range.

Duplicates were run at the frequency specified in the applicable state or federal regulations.

In addition to the above steps, all original-raw data is on file at Aquarian Analytical's offices for inspection when required.

Exceptions (if any)

Certification



P.O. Box 186 Canterbury, N.H. 03224

Ph. 603-783-9097 • Fax 603-783-0360

Volatile Organic Report 07-22-99,15:10 Sample 47217

Project

GUAY'S GARAGE - FRANKLIN Matrix

Soil

Date Sampled
Date Logged In
Date of Analysis

07-13-99,09:40 07-13-99,12:08 Sampler Location G. AMBELAS BOT COMP

Date of Analysis % solids

07-14-99 97.40% Town FRANKLIN

Organic Compound	Result mg/k	g Det. Lim. mg/kg
Benzene	BD	0.031
Bromobenzene	BD	0.031
Bromodichloromethane	BD	0.031
Bromoform	BD	0.031
Bromomethane	BD	0.031
n-Butylbenzene	BD	0.031
sec-Butylbenzene	BD	0.031
tert-Butylbenzene	BD	0.031
Carbon-Tetrachloride	BD	0.031
Chlorobenzene	BD	0.031
Chloroethane	BD	0.031
Chloroform	BD	0.031
Chloromethane	BD	0.047
2-Chlorotoluene	BD	0.031
4-Chlorotoluene	BD	0.031
Dibromochloromethane	BD	0.031
1,2 Dibromo-3-Chloropropane	BD	0.062
1,2 Dibromoethane	BD	0.062
Dibromomethane	BD	0.031
1,2 Dichlorobenzene	BD	0.031
1,3 Dichlorobenzene	BD	0.031
1,4 Dichlorobenzene	BD	0.031
Dichlorodifluoromethane	BD	0.062
1,1 Dichloroethane	BD	0.031
1,2 Dichloroethane	BD	0.031
1,1 Dichloroethene	BD	0.031
cis-1,2 Dichloroethene	BD	0.031
trans-1,2 Dichloroethene	BD	0.031
1,2 Dichloropropane	BD	0.062
1,3 Dichloropropane	BD	0.031
2,2 Dichloropropane	BD	0.031
1,1 Dichloropropene	BD	0.031
cis-1,3 Dichloropropene	BD	0.031
trans-1,3 Dichloropropene	BD	0.031

#### Laboratory Services

P.O. Box 186

Canterbury, N.H. 03224

Ph. 603-783-9097 • Fax 603-783-0360

Volatile Organic Report 07-22-99,15:10 Sample 47217

Project Location GUAY'S GARAGE - FRANKLIN

BOT COMP

Matrix Soil

#### Comments:

TPH was performed with #2 fuel oil as the standard.

Method of VOA Analysis = EPA-8260B

BD = Below Detection Limit - Results are in parts per million (ppm) unless noted.

Page 2

#### Laboratory Services

P.O. Box 186 Canterbury, N.H. 03224 Ph. 603-783-9097 • Fax 603-783-0360

Poly Aromatic Hydrocarbon Report 07-22-99,15:10 Sample 47217

Date Sampled Date Logged In Analysis Date Extraction Date % Solids

07-13-99,09:40 07-13-99,12:08 07-15-99 07-15-99 97.40%

Sampler Location Town Matrix

G. AMBELAS BOT COMP FRANKLIN Soil/Solid

Organic Compound	Result mg/kg	Det. Lim. mg/kg
Acenaphthene	BD	0.20
Acenaphthylene	BD	0.20
Anthrecene	BD	0.20
Benzo (a) anthracene	BD	0.20
Benzo (b) fluoranthene	BD	0.20
Benzo (k) fluoranthene	BD	0.20
Benzo (ghi) perylene	BD	0.20
Benzo (a) pyrene	BD	0.20
Chrysene	BD	0.20
Dibenzo (a,h) anthracene	BD	0.20
Fluoranthene	BD	0.20
Fluorene	BD	0.20
Indeno (1,2,3-cd) pyrene	BD	0.20
Naphthalene	BD	0.20
Phenanthrene	BD	0.20
Pyrene	BD	0.20
2-Methylnaphthalene	BD	0.20
1-Methylnaphthalene	BD	0.20

#### Comments:

TPH was performed with #2 fuel oil as the standard.

BD = Below Detection Limit Method of Analyses = EPA-8270 All Results are in parts per million (ppm), except as noted.

#### Laboratory Services

P.O. Box 186

Canterbury, N.H. 03224

Ph. 603-783-9097 • Fax 603-783-0360

Total Metals Report 07-22-99,15:10 Sample 47217

Sample Matrix = Soil/Solid Project = GUAY'S GARAGE - FRANKLIN

Date Sampled = 07-13-99,09:40 Sampler = G. AMBELAS

Date Logged In = 07-13-99,12:08 Location = BOT COMP

Date of Analysis = 07-21-99

Town = FRANKLIN

Mercury Analysis = 07-21-99

Total Metal	EPA method	Result (ppm-mg/kg	g)Det. Lim. (ppm-mg/kg)
Arsenic	6020	1.2000	0.5000
Barium	6020	9.0000	1.0000
Cadmium	6020	BD	0.5000
Chromium	6020	4.7000	0.5000
Lead	6020	4.1000	0.5000
Mercury	6020	BD	0.1000
Selenium	6020	BD	0.5000
Silver	6020	BD	0.5000

#### Comments:

TPH was performed with #2 fuel oil as the standard.

Results expressed in milligrams/kilogram, (ppm)

#### Laboratory Services

P.O. Box 186

Canterbury, N.H. 03224

Ph. 603-783-9097 • Fax 603-783-0360

Volatile Organic Report 07-22-99,15:09 Sample 47218

Sample Matrix

= Soil/Solid

Project

GUAY'S GARAGE - FRANKLIN

= 07-13-99,10:00 Sampler = 07-13-99,12:16 Location = 07-13-99 Town

G. AMBELAS PILE

Date Sampled Date Logged In Date of Analysis

FRANKLIN

Organic Compound	Result mg/kg	g Det. Lim. mg/kg
Bromodichloromethane Chlorodibromomethane Bromoform Chloroform Carbon Tetrachloride Dichloromethane 1,1-dichloroethane 1,2-dichloroethane 1,1,2-trichloroethane 1,1,2-trichloroethylene Trichloroethylene Trichloroethylene 1,2-Dichloroethylene 1,2-Dichloroethylene 1,2-Dichloroethylene 1,2-Dichloroethylene Chloromethane Vinylchloride Bromomethane Trichlorofluoromethane Benzene Toluene Ethylbenzene m&p-Xylene 0-Xylene Chlorobenzene 1,2-dichlorobenzene 1,3-dichlorobenzene 1,4-dichlorobenzene 1,2,4-trichlorobenzene 1,2,1,2,2-trichlorobenzene 1,2-trichlorobenzene 1,2,4-trichlorobenzene 1,2,4-trichlorobenzene 1,2,4-trichlorobenzene 1,2,4-trichlorobenzene 1,2,4-trichlorobenzene 1,2,4-trichlorobenzene 1,2,4-trichlorobenzene 1,2,4-trichlorobenzene 1,2,4-trichlorobenzene 1,2,1-trichlorobenzene 1,2,1-trichlorobenzene 1,2,1-trichlorobenzene 1,2,1-trichlorobenzene 1,2-trichlorobenzene 1,2-trichlorobenzene		0.150 0.150 0.150 0.1550 0.1550 0.1550 0.11550
Total Pet. Hydrocarbons Modified EPA-8100 (Extraction,	GC/FID)	10.0 Results for TPH are expressed in mg/kg (ppm)

<u>Comments:</u>
TPH was performed with #2 fuel oil as the standard.

Method of VOA Analyses = EPA-8240, BD = Below Detection Limit

doc. m8240t

#### Laboratory Services

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Ph. 603-783-9097 • Fax 603-783-0360

Base Neutral Report 07-22-99,15:09 Sample 47218

= Soil/Solid = 07-13-99,12:16 = 07-15-99 Sample Matrix

Date Sampled = 07-13-99,10:00 Sampler = G. AMBELAS Location = PILE

Date Logged In Date Extracted

Location = FRANKLIN Town

= 07 - 15 - 99Analysis Date

Result mg/kg Det. Lim. mg/kg Organic Compound Naphthalene, 2-chloro
Ether, bis (2-chloroethyl)
Ether, bis (2-chloroisopropyl)
Ether, 2-chloroethyl vinyl
Ether, 4-bromophenyl phenyl
Ether, 4-chlorophenyl phenyl
Methane, bis (2-chloroethoxy)
Benzene, nitro
Toluene, 2,4-dinitro
Toluene, 2,6-dinitro
Phthalate, dimethyl
Phthalate, diethyl
Phthalate, di-n-octyl BD0.40 0.40 BD0.40 BDBD0.40 0.40BDBD 0.40 0.40 BD0.40 BD0.40 BD 0.40 BDBD 0.40 1.60 BDPhthalate, di-n-octyl Phthalate, bis (2-ethylhexyl) Phthalate, butyl benzyl BD4.00  $B\overline{D}$ 4.00 0.40BD0.40 0.40 Acenaphthene BD 0.40 Acenaphthylene 1.10 2.80 1.60 0.40Anthrecene Benzo (a) anthracene
Benzo (b) fluoranthene
Benzo (k) fluoranthene
Benzo (ghi) perylene
Benzo (a) pyrene 0.40 0.40 1.80 1.30 2.60 3.20 0.40 0.40 0.40 0.40 Chrysene 0.40 0.40 Dibenzo (a,h) anthracene 0.40 Fluoranthene 5.30 0.40 0.40 Hexachlorobenzene Indeno (1,2,3-cd) pyrene Naphthalene Fluorene 0.40 BD1.20 BD 0.40 0.40 0.405.00 Phenanthrene BD 0.40 Nitrosamine, dimethyl - (DMN) Nitrosamine, diphenyl-Nitrosamine, di-n-propyl-Butadiene, Hexachloro Ethane, hexachloro Benzoic Acid Pyrene 0.40 BD 0.40 BDBD 0.40 BD0.40 0.40BDBD1.60 0.40 BDPyridine 2.40 0.40 Phthlate, di-n-butyl 1-Methylnaphthalene 2-Methylnaphthalene BD 0.40 BD 1.60 4-Chloroaniline

#### Comments:

BD = Below Detection Limit Method of Analyses = EPA-8270. All Results are in parts per million (ppm), except if noted.

### Laboratory Services

P.O. Box 186

Canterbury, N.H. 03224

Ph. 603-783-9097 • Fax 603-783-0360

Acid Fraction Report 07-22-99,15:09 Sample 47218

Sample Matrix = Soil/Solid

Date Sampled = 07-13-99,10:00

Date Logged In = 07-13-99,12:16

Sampler = G. AMBELAS

Date Extracted = 07-15-99

Location = PILE

Date of Analysis = 07-15-99

Town = FRANKLIN

Organic Compound	Result mg/kg	Det. Lim. mg/kg
Phenol, 4-chloro-3-methyl Cresol, (meta & para) Cresol, ortho Phenol Phenol, 2-chloro-Phenol, 2,4 dichloro-Phenol, 2,4,5 trichloro-Phenol, 2,4,6 trichloro-Phenol, pentachloro-Phenol, 2 nitro-Phenol, 4 nitro-Phenol, 2,4 dinitro-Phenol, 2,4 dimethyl-Cresol, 4,6 dinitro-o-	BD BD BDD BDD BDD BBD BBD BBD BBBBBBBBB	4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0

#### Comments:

BD = Below Detection Limit Method of Analyses = EPA-8270 All Results are in parts per million (ppm), except as noted.

#### Laboratory Services

P.O. Box 186

Canterbury, N.H. 03224

Ph. 603-783-9097 • Fax 603-783-0360

TCLP Report 07-22-99,15:09 Sample 47218

Sample Matrix = Soil-Solid/TCLP Project = GUAY'S GARAGE - FRANKLIN

Date Sampled = 07-13-99,10:00 Sampler = G. AMBELAS

Date Logged In = 07-13-99,12:16 Location = PILE

Date of Analysis = 07-15-99 Town = FRANKLIN

Mercury Analysis = 07-15-99

TCLP Metal	EPA method	Result (ppm-mg/L)	Det. Lim. (ppm-mg/L)
Arsenic	6020	BD	0.0100
Barium	6020	0.1700	0.0200
Cadmium	6020	0.0100	0.0100
Chromium	6020	0.0300	0.0100
Lead	6020	0.2400	0.0100
Mercury	6020	BD	0.0020
Selenium	6020	BD	0.0100
Silver	6020	BD	0.0100

#### Comments:

Results expressed in milligrams/liter, (ppm) TCLP Extraction Method = EPA-1311

#### Laboratory Services

P.O. Box 186

Canterbury, N.H. 03224

Ph. 603-783-9097 • Fax 603-783-0360

PCB Report 07-22-99,15:09 Sample 47218

Sample Matrix = Soil/Solid

Project = GUAY'S GARAGE - FRANKLIN

Date Sampled

= 07-13-99,10:00

Sampler = G. AMBELAS

Login Date

= 07-13-99,12:16

Location = PILE

Date of Analysis = 07-16-99

Town = FRANKLIN

Organic Compound	Result (ppm)	Det. Lim. (ppm)
PCB 1016	BD	1.000
PCB 1221	BD	1.000
PCB 1232	BD	1.000
PCB 1242	BD	1.000
PCB 1248	BD	1.000
PCB 1254	BD	1.000
PCB 1260	BD	1.000

#### Comments:

BD = Below Detection Limit Method of Analyses = EPA-8080

doc. pcb

#### Laboratory Services

P.O. Box 186 Canterbury, N.H. 03224 Ph. 603-783-9097 • Fax 603-783-0360

TCLP Pesticide - Herbicide Report 07-22-99,15:09 Sample 47218

Date Sampled = 07-13-99,10:00 Date Logged In = 07-13-99,12:16 Pest. Completion = 07-16-99 Herb. Completion = 07-20-99

Sampler = G. AMBELAS Location = PILE

Town = FRANKLIN = Soil/Solid Matrix

Organic Compound	Result (ppm)	Det. Lim. (ppm)
Chlordane Aldrin a-BHC (Alpha) b-BHC (Beta) g-BHC (Lindane, Gamma) d-BHC (Delta) DDD DDE DDT Dieldrin a-Endosulfan b-Endosulfan Endosulfan Sulfate Endrin Heptachlor Heptachlor epoxide Methoxychlor Toxaphene	BDD BDD BDD BDD BBD BBD BBD BBD BBD BBD	0.50 0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.01
2,4-D Silvex	BD BD	0.030

BD = Below Detection Limit Methods = Pesticides = EPA-1311/8080, Herbicides = EPA-1311/8150 doc. pest h

#### Laboratory Services

P.O. Box 186

Canterbury, N.H. 03224

Ph. 603-783-9097 • Fax 603-783-0360

Miscellaenous Tests 07-22-99,15:09 Sample 47218

Sample Matrix = Soil/Solid

Date Sampled = 07-13-99,10:00 Sampler = G. AMBELAS

Date Logged In = 07-13-99,12:16 Location = PILE

Date Sulfide = 25-00-01 Town = FRANKLIN

Date Cyanide = 07-16-99 Date Flash Point = 07-14-99 Date pH = 07-16-99

Type of Test	EPA Method	Result	Det. Lim./units
Reactive Sulfide SW-846	7.3.4.1	158.40	125.00 mg/kg
Reactive Cyanide SW-846	7.3.3.2	BD	80.00 mg/kg
Flash Point (degrees F.	) 1010 >	160.0	degrees F.
рН	9045	20.40	units

#### Comments:

BD = Below Detection



Laboratory Services

53 W ad Canterbury, NH 03224 Phone: (603)783-9097 FAX: (603)783-0360

LABORATORY INFORMATION		PROJECT INFORMATION
Turn-around-time: Same Day(100% upchare		Project Manager: Gary Ambelas
Turn-around-time: 24 Hrs(50% upcharge)	Project Name: Way's GANAGE	Report to: Gary Ambelas
Turn-around-time: 48 Hrs(25% upcharge)	Town/Site: FRANKCIN, NH	Invoice to: ARC
Turn-around-time: Normal XX	Sampler: GA KA	Phone: 364-2828
Account #: 61070	Company: ARC Environmental	FAX: 364-2829

	SAMPLE INFORMATION					VC	C's	svi	oc,	\$		Т	PH			ME	ΓAL	S	OTHER-(List)														
AAI ID#	Sample ID	Date/Time  7//3/99	Sample Matrix (S-soil / W-water / O-other)	Number of Containers	ă	EPA 8260 / EPA 8260B	EPA 8240 / EPA 624	BE	Chlorinated Compounds Only	EPA 8270 (A-B/N)	EPA 8270 ( PAH)	EPA 8015M (Gasoline)	EPA 8100M (Fuel Oil)	42 Delocity Doublest	8 RCRA TOTAL		Field Filtered	Lab Filtered	Total	EPA 608/8081 PCBS or Pesticid	EPA 8150 Herbicides	EPA SW846-7 Reactivity	EPA 1010 Ignitabilty/Flashpoint	EPA 150.1/9045 pH	EPA 120.1 Conductivity	Alkalinity	Methane	EPA 300.0 Nitrate	EPA 300.0 Sulfate	EPA 300.0 Chloride	1ABLE IV "		
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## **APPENDIX I**

Bill of Lading & Weight Slip Contaminated Soil Disposal

	Not Nego		Straight Bill o	T Lading-	Snort	Form		Shipp	er's No.
Lake	es Reg	ion Environ						Carri	ier's No
ECEIVED	subject to th	a classifications and lawf	(Name of Carrier) ully filed tariffs in effect on the da	ata of the issue of the Dill	of Ladina			Call	et 5 140
601	S.Mai	n St. Frank	Lin 8/13 <sub>19</sub> 99	From Guay's	-	α <b>o</b>			
property des ntract as med tually agreed terms and c tor carrier sh Ship	scribed below, in a uning any person of , as to each carrie onditions of the Uni ipment. per hereby certifi	pparent good order, except as note or corporation in possession of the r of all or any of said property over a niform Domestic Straight Bilt of Ladi es that he is familiar with all the to	d (contents and condition of contents of paci property under the contract) agrees to carry all or any portion of said route to destination, my set forth (1) in Uniform Freight Classificati time and conditions of the said bill of ladir	kages unknown), marked, consigner to its usual place of delivery at sair and as to each party at any time into on in effect on the date hereof, if the	d and destined as d destination, if o terested in all or a his is a rail or a re	s indicated below, we note route, otherwise any of said property, aif-water shipment, o	e to deliver to a that every server (2) in the app	another o ice to be olicable n	carrier on the route to said destination. I performed hereunder shall be subject to notor cerrier classification or tariff if this is
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estinatio	on_ <b>67 IN</b> T	ERNATIONAL DR.	LOUDON State NH Zi	pCounty	*To be fill	Address	*		gnee—For purposes of notification onlaring tariffs provide for delivery there
oute elivering	g Carrier∐a	akes Region	EnvironmentalC	ar or Vehicle Initials	Roll	9933	AP		No. 98
NO. ACKAGES	HAZARDOUS MATERIALS		ON OF ARTICLES, SPECIAL MARKS			*WEIGHT ECT TO CORR.)	CLASS OR RATE	1	Subject to Section 7 of conditions applicable bill of lading, if the shipment is to be delivered to the shipment is the shipment is to be delivered to the shipment is to be delivered to the shipment is the shipment is to be delivered to the shipment is the shi
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			0.0						(Signature of Consignor)  If charges are to be prepaid, write
		ESMI/	C. Congran	4656					stamp here, "To be Pre-paid."
				<u>a4440</u>					
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									Per (The signature here acknowledges only the amounts prepaid.)
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ESMI 67 INTERNATIONAL DR. LOUDON NH @33@7 (603) 783-0228

ransaction No. 124028 Time In 09:10 Time Out 09:27

Date Ø8-13-99

ustomer Name:ARC

PO BOX 116

GILMTN IRON WRKS, NH

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Tame : 0244401b

2212015 Net:

Net Tons : 11.06

Truck No.

:LAKES98

Dwner

:18465

Job No. Site

:GUAY'S GARAGE

:60 SOUTH MAIN STREET

Address City

:FRANKLIN

State / Zip :NH, 03235

Running Tonnage : 11.06

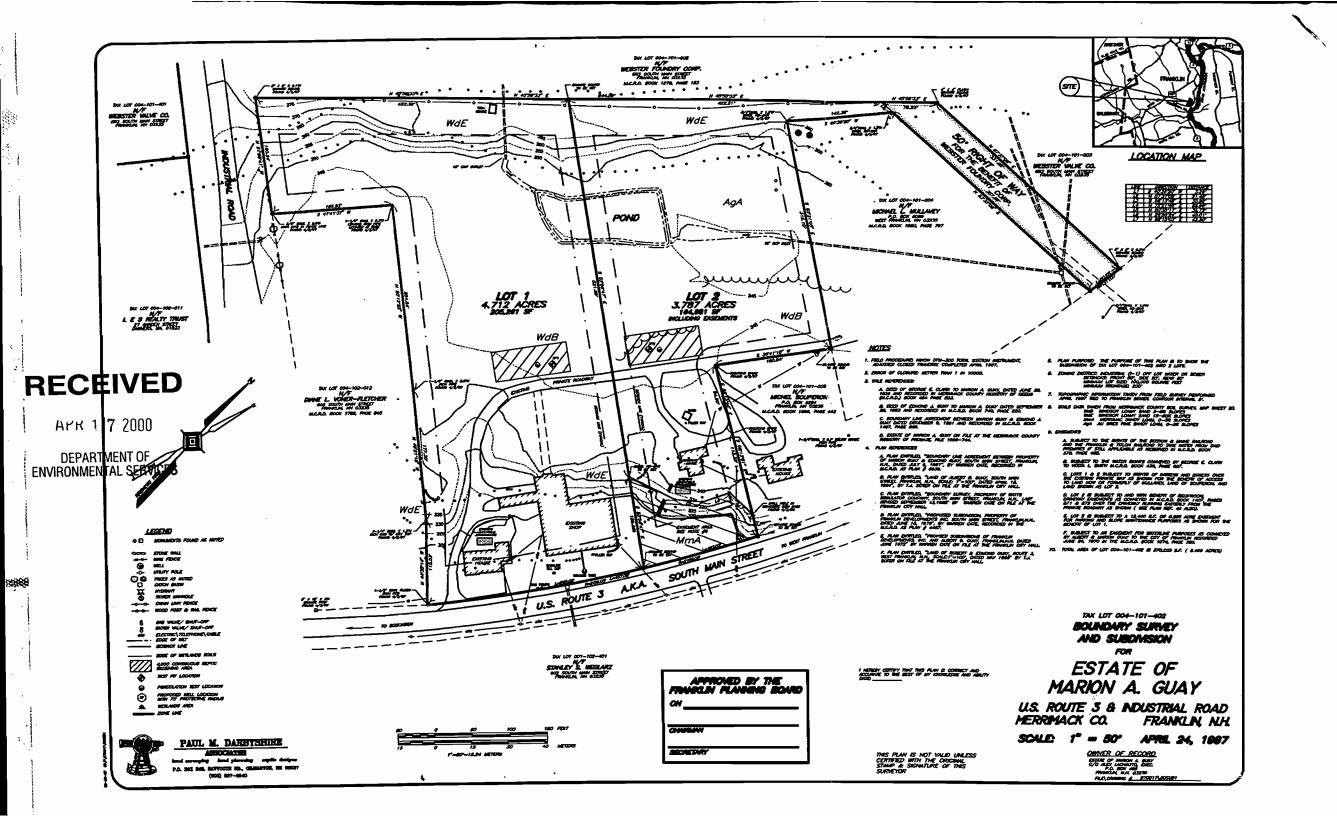
Est. Total Job Ton : 9

Max. Acceptable Soil: 200

#### **APPENDIX J**

# Properties & Owners Within 1,000 Feet of 601 South Main Street Franklin, NH

Location & Use	Owner
Map 101, Lot 402	c/o Alexander Lachiatto, Esq.
601 S. Main St.	PO Box 486
Use: Commercial & Res.	Franklin, NH 03235
Map 101, Lot 001	Wyman Gordon Titanium Castings
35 Industrial Park Dr.	PO Box 188
Use: Industrial	Tilton, NH 03276
Map 101, Lot 002	Webster Foundry Corp.
585 S. Main St.	583 S. Main St.
Use: Industrial	Franklin, NH 03235
Map 101, Lot 003	Webster Foundry Corp.
583 S. Main St.	583 S. Main St.
Use: Industrial	Franklin, NH 03235
Map 101, Lot 004	Michael Mullavey
31 Mullavey Way	PO Box 6099
Use: Residential	Franklin, NH 03235
Map 101, Lot 005	Michel Souperon
23 Mullavey Way	PO Box 6294
Use: Residential	Franklin, NH 03235
Map 101, Lot 006	State of New Hampshire
S. Main St.	PO Box 483
Use: Right-of-Way	Concord, NH 03302
Map 101, Lot 401	Webster Valve Co.
Industrial Park Dr.	583 S. Main St.
Use: Industrial	Franklin, NH 03235
Map 102, Lot 011	LES Realty Trust
635 S. Main St.	27 Garden St.
Use: Commercial	Danvers, MA 01923
Map 102, Lot 012	Diana Voner-Fletcher
605 S. Main St.	605 S. Main St.
Use: Residential	Franklin, NH 03235
Map 102, Lot 401	Stanley Weglarz
602 S. Main St.	602 S. Main St.
Use: Residential	Franklin, NH 03235





## State of New Hampshire DEPARTMENT OF ENVIRONMENTAL SERVICES

6 Hazen Drive, P.O. Box 95, Concord, NH 03302-0095 (603) 271-2900 FAX (603) 271-2456



July 11, 2000

Estate of Marion A. Guay c/o Alexander Lachiatto, Esq. PO Box 486 Franklin, NH 03235

Subject:

Franklin – Former Guay's Garage, 601 South Main St.: Site Investigation Report, dated

April 14, 2000, prepared by ARC Environmental, (DES#199808031-LUST-WLP3)

Dear Mr. Lachiatto:

The New Hampshire Department of Environmental Services (DES) has completed its review of the subject report and other information submitted to this office to date concerning the release of petroleum hydrocarbons at the referenced property. DES finds the report meets the requirements of a <u>Site Investigation Report</u> as outlined in the N.H. Administrative Rules Env-Wm-1403 "Groundwater Management and Groundwater Release Detection Permits".

DES has the following comments concerning the findings in the report:

- 1. The suggested groundwater flow pattern illustrated in Figure 4 must be confirmed by actual groundwater level data. DES requests that another round of groundwater monitoring be performed later in the year when groundwater levels are higher. Samples shall be collected from MW-1 and MW-3 for VOC analysis according to EPA Method 8260B. Groundwater elevation shall be determined for all site monitoring wells. Results shall be submitted to DES within forty-five days of sampling. If analytical data indicate that DES Ambient Groundwater Quality Standards (AGQS) have been met, then DES anticipates that the DES Fuel Oil Project file for this site may be closed.
- 2. The floor drains in the garage must be permanently sealed in order to comply with DES Groundwater Protection Rules and to close the DES Underground Injection Control (UIC) file for this site. Please provide documentation of this work to Mr. Mitchell Locker of the DES Water Supply Engineering Bureau at the letterhead address.

If you have any questions, please write or call me at the Waste Management Division at 603-271-3540.

Sincerely,

Maureen Estabrook

Oil Remediation & Compliance Bureau

Mainer Stabook

ME:jal

H:\MEstabrook\mar2000\99808031.siI.DOC

cc Gary Lynn, P.E./OR&CB

Mitchell Locker, WSEB

Gary Ambelas, ARC Environmental

File

Route: Walter Carlson/OR&CB



## State of New Hampshire DEPARTMENT OF ENVIRONMENTAL SERVICES

6 Hazen Drive, P.O. Box 95, Concord, NH 03302-0095 (603) 271-3503 FAX (603) 271-5171



August 4, 2000

Estate of Marion Guay C/o Alexander Lachiatto, Esq. P.O. Box 486 Franklin, New Hampshire 03235

Subject: Franklin - Former Guay's Garage, South Main Street, Floor Drains Discharging to the

**Environment (DES #199808031)** 

Dear Mr. Lachiatto:

The Department of Environmental Services (DES) has issued a letter dated July 11, 2000 concerning the report for the subject site. A copy of the letter was forwarded to me for further action highlighting the issue pertaining to the Underground Injection Program. It is my understanding that you are the appropriate contact to follow up on the current status of this site.

The letter noted that floor drains at your facility. The New Hampshire Code of Administrative Rules Env-Ws 1500, <u>Groundwater Discharge Permit and Registration Rules</u> regulates floor drain discharges. The continued use of the floor drain(s) is prohibited. DES requires the completion of one of the following options:

1. Permanently close the floor drains with concrete.

2. Reroute the floor drains to a municipal sanitary sewer system (may require approval by local sewer authority).

3. Reroute to a DES registered holding tank (DES requires holding tanks to be equipped with a high water alarm (see attached form)).

We have enclosed a <u>Registration & Notification Form For Floor Drains and Discharges to Groundwater</u> and a <u>Holding Tank Registration Form</u> and Fact Sheet for your use. Please submit one of the completed forms verification of closure, or verification of municipal sewer hook-up to my attention within 30 days.

If there are any questions please contact me at the Water Division at (603) 271-2858.

Sincerely

Mitchell D. Locker

Water Supply Engineering Bureau

MDL/ml/h:\swp\uic/2000mdl/nov/199808031nov

Enclosure

e: Sarah Pillsbury, WSEB

Charles Bodien, Franklin Health Officer, 316 Central St., Franklin NH 03235

File



## State of New Hampshire DEPARTMENT OF ENVIRONMENTAL SINVICES

6 Hazen Drive, P.O. Box 95, Concord, NH 03302-0095 (603) 271-3644 FAX (603) 271-2181



June 11, 2002

Estate of Marion A. Guay c/o Alexander Lachiatto, Esq. P.O. Box 486 Franklin, New Hampshire 03235

SUBJECT: FRANKLIN - Former Guay's Garage, 601 Main Street: Certificate of No Further Action

and Site Closure (DES #199808031-OPUF-WLP3)

Dear Mr. Lachiatto:

Please be advised that the New Hampshire Department of Environmental Services (DES) has reviewed all information received to date concerning the release of No. 2 heating oil at the above referenced property and has concluded that:

- 1. All previous DES requirements with regard to the investigation and remediation of the No. 2 heating oil release have been satisfactorily addressed.
- Based on information now in DES files, all known sources of groundwater contamination at the subject site have been eliminated, and ambient groundwater quality standards are met at all sampled on-site monitoring wells.
- 3. Health hazards associated with direct exposure by way of inhalation, ingestion, and dermal contact with contaminants have been eliminated.
- 4. During the site investigation/remediation process, state and federal monies were expended. DES has determined cost recovery will not be pursued.

Therefore, in accordance with Env-Wm 1403.19, no additional investigation, remedial measures, or groundwater monitoring shall be required at this site and the DES regulatory file for this project (#199808031-OPUF-WLP3) is now closed.

Please note, however, that DES reserves the right, under N.H. Administrative Rules Env-Wm 1403, Groundwater Management and Groundwater Release Detection Permits and N.H. Administrative Rules Env-Ws 412, Rules for Reporting and Remediation of Oil Discharges, to require additional investigations, remedial measures, or groundwater monitoring if further information indicating the need for such work becomes known.

If you have any questions, please contact me at the *Waste Management Division* at 271-3624, or e-mail me at gkirby@des.state.nh.us.

Sincerely,

Gregory A. Kirby, P.G

Oil Remediation & Compliance Bureau

GK:mal

H:\GKirby\Closure2002\199808031\puf.cls.doc

cc: Health Officer, City of Franklin

Gary Ambelas, ARC Environmental

File

Route: George Lombardo, P.E., OR&CB Administrator

TDD Access: Relay NH 1-800-735-2964



#### Inter-Department Communication

DATE: June 11, 2002

FROM:

Gregory A. Kirby, P.G.

AT (OFFICE) NHDES/WMD

Oil Remediation and Compliance Bureau

SUBJECT: FRANKLIN - Former Guay's Garage, 601 Main Street: (DES Project

#199808031)

TO:

File

PROJECT TYPE: OPUF

#### FILE CLOSE-OUT

I have reviewed the file for subject site, and have determined that no further regulatory action is required. The file is therefore closed out as noted below.

#### X Site Characterization Report Complete, No Further Action Warranted

The Tank Closure Report and/or Site Investigation were completed. The conclusion of the project manager is that no source of groundwater contamination exists and there was no indication of groundwater impact.

#### Site Remediation Complete

No source of groundwater contamination at the subject site was discovered during emergency response measures. Based on information in the Bureau files as of the date of this memo, additional investigation, remedial measures or groundwater monitoring is not required.

### Site Remediation or Groundwater Monitoring NOT Required

Groundwater contamination at the subject site is a result of a discharge or release from an off-site source. Based on information in the Bureau files as of the date of this memo, additional investigation, remedial measures or groundwater monitoring by the site owner is not required.

. \* \* \* \* \* \* \* \* \* \* \*

Franklin, Former Guay's Gara DES # 199808031 June 11, 2002 File Close-Out

#### LUST TRUST COST RECOVERY CLOSE-OUT

I have reviewed the file for the subject site and have determined that the following cost recovery actions were taken (check appropriate option):

## No LUST TRUST Monies Expended Contamination at the subject site was not related to an on-site leaking underground storage tank. No LUST TRUST monies were expended. Total LUST TRUST Cost Recovery There has been a discharge related to an underground storage tank at the subject site. During the site investigation/remediation process, LUST TRUST monies were expended. All costs incurred by the State have been recovered from responsible parties. Amount recovered ... Partial LUST TRUST Cost Recovery There has been a discharge related to an underground storage tank at the subject site. During the site investigation/remediation process, LUST TRUST monies were expended. A settlement was reached by the State and responsible parties and \$\_\_\_\_ out of a total cost of \$ incurred by the State was recovered. No LUST TRUST Cost Recovery X There has been a discharge related to an underground storage tank at the subject site. During the site investigation/remediation process, LUST TRUST monies were expended. Cost recovery was not pursued for the following reason(s) outlined below check appropriate reason(s) and attach supporting data if not already in file): Owner/operator demonstrated lack of financial resources to pay the claim. Project manager determined that the likelihood of success on litigating the claim as small because of the absence of proof of liability or unavailability of required witnesses. X Cost of judicial collection is disproportionately high. Cost of pursuing the case further will approach or exceed the potential recovery. Owner/operator bankruptcy. Statute of Limitations (3 years) has run out.

GAK:mal
H:\GKirby\Closure2002\199808031cls.mem.doc

Other reasons (explain)

Site 2009/1004
Project 7/36
WASTE MANAGEMENT DIVISION

# **Record of Telephone Conversation**

Date of Conversation:			Time:	1:42	)	a.m/p.m
Bureau Staff:	CFWoodbury	-	Title:	Sup VII	191	
Other Party's Name:	"Steve"	*	Telephone #		÷	
Affiliation/Company:	Concornal	citizen.				
	Matorsports, C		Franklin			~
Site:			1			
		SUMMARY OF CON	IVERSATION			
	1-1		, (			-
this tael	lity has 20-	-30, 55 gallor	drums it	pred outs	ide behind	
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observed	but outside a	2 drums are	otly. Faci	My Soon	to change	
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		*******				

Date November 13, 2009

Town: Franklin Site # 200911004

#### SITE INVESTIGATION SUMMARY REPORT

Site Name: M&K Motorsports, LLC.

Location: 601 South Main Street

NHDES Investigator(s): Degler

#### Personnel Present / Affiliations:

1. Russell Blodgett, Property Owner

2. Mike Defelice, Owner of M&K Motorsports, LLC.

On November 3, 2009, I arrived on-site and met with the new mechanic for M&K Motorsports, LLC. I explained the reason for the site visit and he knew exactly where the drums were so we walked to the side of the garage. Last month Russell Blodgett, Property Owner evicted the business owner who was renting the last two bays in the garage. Outside the garage I observed 3 – 55-gallon unlabeled drum, 1 – 55-gallon labeled "Used Oil", 3 engine blocks and 1 transmission. All four 55-gallon drums were sealed and stored on the side of the garage. I observed stained soil/broken asphalt around the 4 drums. I then spoke with Mike Defelices, M&K Motorsports, LLC. and he stated that he didn't own the property but he would contact Mr. Blodgett and give him my contact information. He was also going to email me photographs of the facility prior to him moving in two years ago along with the property owner information.

To date I have not received any email or other information from Mr. Defelice.



3 of the 55-gallon drums outside of the garage



3 oily engines and 1 transmission

Date December 9, 2009	Town: Franklin
	Site # 200911004 SITE INVESTIGATION
	SUMMARY REPORT
C'a Nama May Matagements Inc	
Site Name: M&K Motorsports, Inc.	
Location: 601 South Main Street	
NHDES Investigator(s); Degler	
Personnel Present / Affiliations:	
<ol> <li>Mike, Shop owner</li> </ol>	
2. 3.	
work. Mike informed me that he will be he the entire building. The drums out side are will dig up the contaminated soil and prop	moving the used oil burner to the center of the building and plans on heating re all used oil and he plans on burning the used oil in the used oil burner. He berly dispose of at ESMI.

Date February 10, 2010

Town: Franklin Site # 200911004

#### SITE INVESTIGATION SUMMARY REPORT

Site Name: M&K Motorsports LLC

Location: 601 South Main Street

NHDES Investigator(s): Degler

#### Personnel Present / Affiliations:

1. Employee, M&K Motorsports LLC

2.

3.

On February 9, 2010, I arrived on-site and spoke with an employee. Mike, business owner is away from the business at this time so I left my business card and asked if he could contact me. The employee stated that the used oil burner has not been hooked up and I noticed they installed a regular furnace that burns number #2 fuel oil in the work bays. Outside of the garage I observed 3 55-gallon poly drums and 5 engines/transmissions lying on the ground. Stained soil was evident around the drums and automobile parts.



5 Engines and transmission lying on stained soil



3 drums stored on top of stained soil

On Thursday February 11, 2010, Mike contacted me concerning my site visit earlier in the week. He has decided to keep the used oil burner where it is located and install a #2 fuel oil fired furnace in the mechanic shop. A company has been contacted to pick up the antifreeze. The engines and transmissions are from his previous tenant and he was waiting for him to come pick them up. Mike will put the engines and transmissions into vehicles before he scraps the vehicle. I asked him who the property owner was; Russell Blodgett manages the property since his mother, Barbara Gutzszka lives in Illinois.



# The State of New Hampshire DEPARTMENT OF ENVIRONMENTAL SERVICES

# ordinator 1.

#### Thomas S. Burack, Commissioner

February 16, 2010

CERTIFIED MAIL # 7007 2560 0001 3867 1984

LETTER OF DEFICIENCY No. WMD # 10-002

Barbara Gutzszka 8 S 620 Boundry Hill Road Napaville, IL 60565

Subject Site: Franklin - Advanced Motorsports LLC., 601 South Main Street, Franklin NH,

DES#200911004, Project Type: Complaint

Dear Ms. Gutzszka:

On October 28, 2009, the Department of Environmental Services, Spill Response and Complaint Investigation Section ("DES") received a complaint concerning unlabeled 55 gallon drums being stored outside on stained soil with no secondary containment. On November 3, 2009 DES conducted an inspection of your property located at 601 South Main Street, Franklin, NH ("Site"). The purpose of the inspection was to determine your compliance status with RSA 147-A and rules adopted relative to the proper management of hazardous waste.

During the November, 3, 2009, December 7, 2009 and February 9, 2010, inspections, DES personnel observed or learned the following:

- Three 55-gallon unlabeled plastic containers of used oil are being stored outside on the ground,
- 2. Five engines and/or transmissions are being stored outside on the ground, and
- 3. A used oil burner was going to be installed to burn the used oil.

This letter serves to inform you that conditions at the above referenced site constitute violations of the following:

Env-Hw 502.01 Hazardous Waste Determination. Failure to determine if the containerized material is a hazardous waste.

Env-Hw 504.01 Notification. Failure to notify DES of hazardous waste activities.

Env-Hw 507.03 Packaging, Labeling and Pre-Transport. Failure to properly label and store hazardous waste.

DES believes that the cited deficiencies can be corrected by completing the following requested remedial actions within the time indicated:

 By March 16, 2010, sample and analyze the containerized material for toxicity using the Toxic Characteristic Leaching Procedure (TCLP), EPA test method 1311 and EPA test method 1020B for ignitability to determine if the material is a hazardous waste.

P.O. Box 95, 29 Hazen Drive, Concord, New Hampshire 03302-0095
Telephone: (603) 271-3644 Fax: (603) 271-2181 TDD Access: Relay NH 1-800-735-2964

Advanced Motorsports LLC. February 16, 2010 Des # 200911004 Page 2 of 2

- By March 31, 2010, notify DES that you generate haz ardous waste and/or burn used oil.
  Contact Maria Michel, Reporting & Information Management Section at 271-3203 and
  Contact the local Fire Chief concerning the burning of used oil. Attached you will find a
  notification form to fill out to notify DES as a used oil burner.
- By March 31, 2010, properly label and store the drum. Hazardous waste must be properly labeled and stored in secondary contaminant that has a capacity of 110% of the containers volume along with a cover to protect the secondary contaminant from collecting rain or snow.
- 4. By March 31, 2010, excavate and properly dispose of the contaminated soil around the drums and greasy oily parts.

And

5. By March 31, 2010, cease storing petroleum containing or greasy parts on the ground.

Please address all correspondence and reports regarding this matter to:

David Degler
Department of Environmental Services
Waste Management Division
PO Box 95
Concord, New Hampshire 03302-0095
Fax: (603) 271-0653

In the event compliance is not achieved within the time period indicated above, DES may initiate formal enforcement action against you, including issuing an order requiring the deficiencies to be corrected and/or referring the matter to the New Hampshire Department of Justice for imposition of civil and/or criminal penalties. DES reserves the right to pursue administrative fines for the violation(s) noted above.

Your prompt attention to this matter is appreciated. Please contact David Degler at (603) 271-2873 if you have any questions or require further assistance.

Sincerely,

George Lombardo, P.E., Administrator Oil Remediation and Compliance Bureau

Tel: (603) 271-3645

Email: George.Lombardo@des.nh.gov

cc: Gretchen Hamel, Legal Unit Building Inspector, Franklin

George Lombordo

Attachments: RCRA C Identification Form

Date April 14, 2010

Town: Franklin Site # 200911004

#### SITE INVESTIGATION SUMMARY REPORT

Site Name: M & K Motor Sports LLC.

Location: 601 South Main Street

NHDES Investigator(s): Degler

#### Personnel Present / Affiliations:

1.

2.

3.

On March 18, 2010, I arrived on-site and observed 3 poly drums one of the drums contained a oil filter that was actively draining. Two of the three drums are unlabeled. I walked into the garage and spoke with an employee from the auto body shop and he stated that Mike was not around and he didn't know when he would return.



3 Poly drums and stained soil



View after removing the oil filter

Date June 2, 2010

Town: Franklin Site # 200911004

#### SITE INVESTIGATION SUMMARY REPORT

Site Name: M&K Motorsports LLC

Location: 601 South Main Street

NHDES Investigator(s): Degler

#### Personnel Present / Affiliations:

1. Mike, Owner of M&K Motorsports LLC

2. Elizabeth Corrow, Franklin City Manager

3.

On May 21, 2010 I arrived on-site and met with Mike concerning the outside storage of 55-gallons drums of used oil. He has moved all of the used oil 55-gallon drums into the back of the building for the property owner to use or dispose of. M&K Motorsports LLC will be closing at the end of this month. Russell, property owner's son will have to dig up the contaminated soil and dispose of the used oil.



Stained soil where the drums were stored outside



Drum storage inside the building

June 4, 2010, I spoke with Elizabeth Corrow, Franklin City Manager and the city took the property which includes an apartment for back taxes sometime in April 2010. Next week the tenants will receive their eviction notices and then city employees will conduct a site visit to look at all of the issues and coordinate clean-up efforts. I explained to her that there was a minimum four drums of waste oil inside the building which must be tested for hazardous waste, labeled and properly disposed of at a permitted facility. Outside of the building is a 6' X 10' area of contaminated soil.

Date August 20, 2010 Town Franklin Site # 200911004

#### SITE INVESTIGATION SUMMARY REPORT

Site Name: Advanced Motorsports LLC/M&K Motorsports LLC.

Location: 601 South Main Street

NHDES Investigator(s): Degler

#### Personnel Present / Affiliations:

1. Elizabeth Corrow, City Manager, 934-3900

2. Paul Fitzgerald, Attorney for the City of Franklin, 524-2166

3.

On August 18, 2010 I arrived on-site to confirm the city of Franklin's take over of the above mentioned property and the subsequent remediation of the six drums of used oil. Both garages/businesses at this location were closed but I observed a large number of drums outside on the north and west side of the property. Upon farther inspection I observed 51 55-gallon drums; 37 contained contents, 14 were empty (9 out front & 4 behind the building), 8 full drums out back were missing bungs, 2 30-gallon drums with contents and approximately 40 tires were observed in the north west corner of the building/property. Two of the drums were labeled and none of the drums are stored according to DES rules. While I was walking around the facility I observed a sign on a back door that the city of Franklin has taken the property and to contact Elizabeth Corrow, City Manager at 934-3900. I didn't walk through the building or all the way around the building due to the unleashed dog in the area.

Later in the day I contacted Ms. Corrow concerning my finding of the above mentioned site. She explained that the city is trying to evict the residence of the apartment house located on the same property. She then suggested I contact Paul Fitzgerald, attorney for the City of Franklin.

On August 19, 2010, I spoke with Mr. Fitzgerald and informed him of my site visit findings.





One open top 55-gal drum ½ full w/oil & gas can is full

25 55-gal drums behind the garage





















# APPENDIX E FirstSearch® REPORT



# FirstSearch Technology Corporation

# **Environmental FirstSearch**<sup>TM</sup> **Report**

Target Property: S MAIN STREET GARAGE

**599 S MAIN ST** 

FRANKLIN NH 03235

Job Number: 10001086

#### PREPARED FOR:

Credere Associates, LLC
776 Main Street
Westbrook, ME 04092

11-22-10



Tel: (781) 551-0470 Fax: (781) 551-0471

# Environmental FirstSearch Search Summary Report

**Target Site:** 599 S MAIN ST

FRANKLIN NH 03235

#### FirstSearch Summary

Database	Sel	Updated	Radius	Site	1/8	1/4	1/2	1/2>	ZIP	TOTALS	
)		10.21.10	1.00	0	0	0	0	0	0	0	
NPL	Y	10-21-10	1.00	0	0	0	0	0	0	0	
NPL Delisted	Y	10-21-10	0.50	0	0	0	0	-	0	0	
CERCLIS	Y	08-31-10	0.50	0	0	0	0	-	0	0	
NFRAP	Y	08-31-10	0.50	0	0	0	1	-	0	1	
RCRA COR ACT	Y	09-14-10	1.00	0	0	0	0	0	0	0	
RCRA TSD	Y	09-14-10	0.50	0	0	0	0	-	0	0	
RCRA GEN	Y	09-14-10	0.25	1	2	0	-	-	0	3	
Federal Brownfield	Y	10-01-10	0.50	0	0	0	0	-	0	0	
ERNS	Y	10-21-10	0.12	0	4	-	-	-	2	6	
Tribal Lands	Y	12-01-05	1.00	0	0	0	0	0	1	1	
State/Tribal Sites	Y	09-27-10	1.00	0	1	0	2	3	5	11	
State Spills 90	Y	09-27-10	0.12	0	8	-	-	-	0	8	
State/Tribal SWL	Y	06-01-07	0.50	0	0	0	0	-	2	2	
State/Tribal LUST	Y	09-27-10	0.50	0	0	0	1	_	0	1	
State/Tribal UST/AST	Y	09-27-10	0.25	0	2	1	_	_	2	5	
State/Tribal EC	Y	NA	0.50	0	0	0	0	_	0	0	
State/Tribal IC	Y	11-01-10	0.25	0	0	0	_	_	0	0	
State/Tribal VCP	Y	NA	0.50	0	0	0	0	_	0	0	
State/Tribal Brownfields	Y	11-01-10	0.50	0	0	0	0	_	0	0	
FI Map Coverage	Y	08-25-10	0.12	0	0	_	_	_	0	0	
Federal IC/EC	Y	11-04-10	0.50	0	0	0	0	-	0	0	
- TOTALS -				1	17	1	4	3	12	38	

#### **Notice of Disclaimer**

Due to the limitations, constraints, inaccuracies and incompleteness of government information and computer mapping data currently available to FirstSearch Technology Corp., certain conventions have been utilized in preparing the locations of all federal, state and local agency sites residing in FirstSearch Technology Corp.'s databases. All EPA NPL and state landfill sites are depicted by a rectangle approximating their location and size. The boundaries of the rectangles represent the eastern and western most longitudes; the northern and southern most latitudes. As such, the mapped areas may exceed the actual areas and do not represent the actual boundaries of these properties. All other sites are depicted by a point representing their approximate address location and make no attempt to represent the actual areas of the associated property. Actual boundaries and locations of individual properties can be found in the files residing at the agency responsible for such information.

#### Waiver of Liability

Although FirstSearch Technology Corp. uses its best efforts to research the actual location of each site, FirstSearch Technology Corp. does not and can not warrant the accuracy of these sites with regard to exact location and size. All authorized users of FirstSearch Technology Corp.'s services proceeding are signifying an understanding of FirstSearch Technology Corp.'s searching and mapping conventions, and agree to waive any and all liability claims associated with search and map results showing incomplete and or inaccurate site locations.

# Environmental FirstSearch Site Information Report

**Request Date:** 

11-22-10

**Requestor Name:** Standard:

Judd R. newcomb AAI PACKAGE

**Search Type:** Job Number: **COORD** 10001086

**Filtered Report** 

**Target Site:** 599 S MAIN ST

FRANKLIN NH 03235

# **Demographics**

**Sites:** 

38

Non-Geocoded:

12

**Population:** 

NA

Radon: NA

#### Site Location

	<b>Degrees (Decimal)</b>	Degrees (Min/Sec)	
Longitude:	-71.654074	-71:39:15	<b>Easting:</b>

**Latitude:** 

**Elevation:** 

43.424604

342

-71:39:15

43:25:29

285155.901

**UTMs** 

**Northing:** 

4811174.376

Zone:

19

#### Comment

**Comment:** 

ZIP

Code City Name

#### Additional Requests/Services

**Services:** 

# **Adjacent ZIP Codes:** 0 Mile(s)

COTE	D: 4/D:	G 1	
ST	Dist/Dir	Sel	

	Requested?	Date
	•	
Fire Insurance Maps	No	
Aerial Photographs	Yes	11-22-10
Historical Topos	No	
City Directories	Yes	11-22-10
Title Search/Env Liens	No	
Municipal Reports	No	
Online Topos	Yes	11-22-10

# Environmental FirstSearch Sites Summary Report

599 S MAIN ST FRANKLIN NH 03235 **JOB:** 10001086 **Target Property:** 

NON GEOCODED: 12 SELECTED: 0 **TOTAL:** 38 **GEOCODED:** 26

Map ID	DB Type	Site Name/ID/Status	Address	Dist/Dir	ElevDiff	Page No.
1	RCRAGN	MIKES AUTOMOTIVE NHD510131055/VGN	599 S MAIN ST FRANKLIN NH 03235	0.04 NE	0	1
2	SPILLS	WATTS REGULATOR 94-46	SOUTH MAIN ST FRANKLIN NH 03235	0.08 SW	+ 23	1
2	RCRAGN	LABRANCHE RUDOLPH INC NHD500018999/TRANSPORTER	583 S MAIN ST FRANKLIN NH 03235	0.08 SW	+ 23	3
2	RCRAGN	WEBSTER VALVE INC NHD058537960/LGN	SOUTH MAIN ST FRANKLIN NH 03235	0.08 SW	+ 23	5
2	ERNS	WATTS INDUSTRIES INC 487774/FIXED FACILITY	SOUTH MAIN (WEBSTER VALVE F FRANKLIN NH 03235	0.08 SW	+ 23	7
2	ERNS	WATTS REGULATOR CO 481417/FIXED FACILITY	SOUTH MAIN ST FRANKLIN NH 03235	0.08 SW	+ 23	8
2	ERNS	WATTS REGULATOR CO 359694/FIXED FACILITY	SOUTH MAIN ST FRANKLIN NH 03235	0.08 SW	+ 23	9
2	ERNS	H40584/FIX FAC	SOUTH MAIN ST FRANKLIN NH 03235	0.08 SW	+ 23	10
2	STATE	WEBSTER VALVE CO 199003020/GW HAZ INV	SOUTH MAIN ST FRANKLIN NH 03235	0.08 SW	+ 23	10
2	SPILLS	WATTS REG./WEB. VALVE 96-179	SO. MAIN ST FRANKLIN NH 03235	0.08 SW	+ 23	11
2	SPILLS	WATTS REG./WEB. VALVE 96-1	SO. MAIN ST FRANKLIN NH 03235	0.08 SW	+ 23	11
2	SPILLS	WATTS REG./WEB. VALVE 96-66	FRANKLIN NH 03235	0.08 SW	+ 23	12
2	SPILLS	WATTS REGULATOR 94-47	SOUTH MAIN ST FRANKLIN NH 03235	0.08 SW	+ 23	12
2	SPILLS	WATTS REGULATOR-WEBVAL 95-355	SOUTH MAIN ST FRANKLIN NH 03235	0.08 SW	+ 23	13
2	SPILLS	WATTS REGULATOR-WEBVAL 95-356	SOUTH MAIN ST FRANKLIN NH 03235	0.08 SW	+ 23	13
2	UST	WEBSTER VALVE CO 0112752/UST	SOUTH MAIN ST FRANKLIN NH 03235	0.08 SW	+ 23	15
2	UST	WEBSTER VALVE CO 0000715/AST	583 S MAIN ST FRANKLIN NH 03235	0.08 SW	+ 23	17
2	SPILLS	WATTS REGULATOR 93-449	FRANKLIN NH 03235	0.08 SW	+ 23	19
3	UST	PUBLIC WORKS SUPPLY CO INC 0220116/UST	635 S MAIN ST FRANKLIN NH 03235	0.20 SE	- 31	20
4	NFRAP	FRANKLIN RIVER ROAD LANDFILL NHD980913446/NFRAP-N	FRANKLIN RIVER RD FRANKLIN NH 03235	0.31 NE	- 52	21
5	STATE	OLD FRANKLIN LANDFILL 198401090/DELETED	RIVER ST FRANKLIN NH 03235	0.39 NE	+ 3	21

# Environmental FirstSearch Sites Summary Report

599 S MAIN ST FRANKLIN NH 03235 **JOB:** 10001086 **Target Property:** 

**TOTAL:** 38 **GEOCODED:** 26 NON GEOCODED: 12 **SELECTED:** 0

Map ID	DB Type	Site Name/ID/Status	Address	Dist/Dir	<b>ElevDiff</b>	Page No.
6	STATE	FORMER GUAYS GARAGE 199808031/GW HAZ INV - CLOSED	601 S MAIN ST FRANKLIN NH 03235	0.48 SW	- 57	24
6	LUST	GUAYS GARAGE 199808031/UNASSIGNED	601 S MAIN ST FRANKLIN NH 03235	0.48 SW	- 57	24
7	STATE	FRANKLIN S MAIN ST IRVING 199408010/GW HAZ INV	221 S MAIN ST FRANKLIN NH 03235	0.82 NW	- 9	24
8	STATE	TWIN RIVERS CORP 199702024/GW HAZ INV - CLOSED	16 ANDERSON AVE FRANKLIN NH 03235	0.95 NW	- 9	24
9	STATE	GORDON MARSHALL 199712046/GW HAZ INV - CLOSED	340 PROSPECT ST FRANKLIN NH 03235	0.97 NE	+ 193	24

# Environmental FirstSearch Sites Summary Report

599 S MAIN ST FRANKLIN NH 03235 **JOB:** 10001086 **Target Property:** 

NON GEOCODED: 12 SELECTED: 0 **TOTAL:** 38 **GEOCODED:** 26

Map ID	DB Type	Site Name/ID/Status	Address	Dist/Dir	ElevDiff	Page No.
	STATE	NH DOT BRIDGE MAINTENANCE 200409198/GW HAZ INV - CLOSED	ROUTE 127 FRANKLIN NH	NON GC	N/A	N/A
	STATE	CUMBERLAND FARMS 2806 199003013/GW HAZ INV	239 CENTRAL ST FRANKLIN NH	NON GC	N/A	N/A
	ERNS	NRC-526389/FIXED	DANNY WEBSTER FARM UNITED S FRANKLIN NH 03235	NON GC	N/A	N/A
	ERNS	PUBLIC SERVICE OF NH 503753/FIXED FACILITY	NORTH EASTMAN FALLS MAIN ST FRANKLIN NH 03235	NON GC	N/A	N/A
	TRIBALLAND	BUREAU OF INDIAN AFFAIRS CONTA BIA-03235	UNKNOWN NH 03235	NON GC	N/A	N/A
	STATE	PETRIGNI PROPERTY 200911019/GW HAZ INV - CLOSED	75 ORCHARD ST FRANKLIN NH	NON GC	N/A	N/A
	STATE	ROWELL S MHP 200903083/GW HAZ INV - CLOSED	16 COUNTRY LN FRANKLIN NH 03235	NON GC	N/A	N/A
	STATE	SCOTT MARCHANT 200511029/GW HAZ INV - CLOSED	23 GLORY DR FRANKLIN NH 03235	NON GC	N/A	N/A
	SWL	FRANKLIN LANDFILL NHSW-01-1/LANDFILL	73 PUNCH BROOK ROAD FRANKLIN NH	NON GC	N/A	N/A
	SWL	NHSW-TRAN-83/TRANSFER STATIONS	PUNCH BROOK ROAD FRANKLIN NH 03235	NON GC	N/A	N/A
	UST	FORMER RADIO SHACK 0114777/UST	SOUTH MAIN ST FRANKLIN NH 03235	NON GC	N/A	N/A
	UST	PSNH EASTMAN FALLS SUBSTATION 9812137/AST	NORTH MAIN ST FRANKLIN NH	NON GC	N/A	N/A

Target Property: 599 S MAIN ST JOB: 10001086

FRANKLIN NH 03235

**RCRAGN** 

**SEARCH ID:** 3 **DIST/DIR:** 0.04 NE **ELEVATION:** 342 **MAP ID:** 1

NAME: MIKES AUTOMOTIVE REV: 7/14/10

**ADDRESS:** 599 S MAIN ST **ID1:** NHD510131055

FRANKLIN NH 03235 ID2:

MERRIMACK STATUS: VGN

CONTACT: PHONE: SOURCE: EPA

CT MANIFEST INFORMATION

MANIFEST ID SHIPPED TSD ID TRANS ID OTY MATERIAL

CTF1025856 02/12/2002 CTD021816889 CTD021816889 0015 G PETROLEUM DISTILLATES NOS

SPILLS

SEARCH ID: 20 DIST/DIR: 0.08 SW ELEVATION: 365 MAP ID: 2

 NAME:
 WATTS REGULATOR
 REV:
 01/01/98

 ADDRESS:
 SOUTH MAIN ST
 ID1:
 94-46

DDRESS: SOUTH MAIN ST ID1: 94-46
FRANKLIN NH 03235 ID2:

CONTACT: SOURCE: STATUS: PHONE:

**DATE OF SPILL:** 1/28/94 **TIME OF SPILL:** 1700

CHEMICAL SPILLED:Cutt OilHAZARD:Flam LiqAMOUNT SPILLED:Unk UnkTYPE OF SITE:Fixed

**Target Property:** 599 S MAIN ST JOB: 10001086

FRANKLIN NH 03235

**RCRAGN** 

**SEARCH ID:** 2 **DIST/DIR:** 0.08 SW **ELEVATION:** 365 MAP ID: 2

NAME: LABRANCHE RUDOLPH INC

REV: 2/16/10 **ADDRESS:** 583 S MAIN ST NHD500018999 ID1:

FRANKLIN NH 03235 ID2:

STATUS: TRANSPORTER

CONTACT: PHONE: SOURCE: EPA

SITE INFORMATION

**SITE INFORMATION** 

SITE INFORMATION

**SITE INFORMATION** 

CONTACT INFORMATION: CHRISTINE A SHEEDY

PO BOX 6431

FRANKLIN NH 032356431

PHONE: 6039341322

CONTACT INFORMATION: CHRISTINE A SHEEDY

PO BOX 6431

FRANKLIN NH 032356431

PHONE: 6039341322

CONTACT INFORMATION: CHRISTINE SHEEDY

PO BOX 6431

FRANKLIN NH 032356431

PHONE: 6039341322

CONTACT INFORMATION: CHRISTINE SHEEDY

PO BOX 6431

FRANKLIN NH 032356431

PHONE: 6039341322

**UNIVERSE INFORMATION:** 

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**Target Property:** 599 S MAIN ST **JOB:** 10001086

			RC	RAGN			
SEARCH	<b>ID:</b> 2	DIST/DIR:	0.08 SW	ELEVATION:	365	MAP ID:	2
NAME: ADDRESS:	LABRANCHE RUDO 583 S MAIN ST FRANKLIN NH 0323			REV: ID1: ID2: STATUS:	2/16/10 NHD500018999 TRANSPORTER		
CONTACT: SOURCE:	EPA			PHONE:	TRANSFORTER		
NAIC INFO	RMATION						
NAIC INFO	<u>RMATION</u>						
NAIC INFO	<u>RMATION</u>						
NAIC INFO	RMATION						
			HINERY INSTALLATION				
ENFORCEM	MENT INFORMATIO	<u>N:</u>					
ENFORCEM	MENT INFORMATIO	<u>N:</u>					
ENFORCEM	MENT INFORMATIO	<u>)N:</u>					
ENFORCEM	MENT INFORMATIO	<u>N:</u>					
VIOLATION	N INFORMATION:						
VIOLATION	N INFORMATION:						
VIOLATION	N INFORMATION:						
VIOLATION	N INFORMATION:						
HAZARDOU	US WASTE INFORMA	ATION:					
HAZARDOU	US WASTE INFORMA	ATION:					
Lead Lead Lead Lead							

**Target Property:** 599 S MAIN ST **JOB:** 10001086

FRANKLIN NH 03235

**RCRAGN** 

SEARCH ID: 4 DIST/DIR: 0.08 SW ELEVATION: 365 MAP ID: 2

NAME: WEBSTER VALVE INC REV: 9/14/10

ADDRESS: SOUTH MAIN ST ID1: NHD058537960

FRANKLIN NH 03235 ID2: STATUS: LGN

CONTACT: PHONE:
SOURCE: EPA

#### CT MANIFEST INFORMATION

MANIFEST ID	SHIPPED	TSD ID	TRANS ID	<u>QTY</u>	MATERIAL .
NHC0009646	02/12/1990	CTD072138969	NHD980521843	3000 G	HAZ WASTE LIQ NOS WATER/OIL MIX
NHC0009647	05/09/1990	CTD072138969	NHD980521843	2400 G	HAZARDOUS WASTE LIQUID, NOS
NHC0019018	08/06/1990	CTD072138969	NHD980521843	3000 G	HAZARDOUS WASTE LIQUID, NOS
NHC0019003	09/07/1990	CTD072138969	NHD980521843	4000 G	HAZ WASTE LIQ NOS WATER/OIL MIX
NHC0019004	10/11/1990	CTD072138969	NHD980521843	4000 G	HAZARDOUS WASTE LIQUID NOS
NHC0019005	01/23/1991	CTD072138969	NHD980521843	18020 P	HAZ WASTE LIQ NOS WATER/OIL MIX
NHC0019006	03/25/1991	CTD072138969	NHD980521843	2000 G	HAZARDOUS WASTE LIQUID, NOS
NHC0019009	05/15/1991	CTD072138969	NHD980521843	15380 P	HAZ WASTE LIQ NOS W/LEAD/OIL MIX
NHC0019008	06/27/1991	CTD072138969	NHD980521843	34160 P	HAZ WASTE LIQ NOS W/LEAD/OIL MIX
NHC0019010	08/09/1991	CTD072138969	NHD980521843	6050 G	HAZARDOUS WASTE LIQUID, NOS
NHC0019011	08/27/1991	CTD072138969	NHD980521843	32400 P	HAZ WASTE LIQ NOS W/LEAD/OIL MIX
NHC0019012	09/27/1991	CTD072138969	NHD980521843	4000 G	HAZARDOUS WASTE LIQUID, NOS
NHC0019014	10/31/1991	CTD072138969	NHD980521843	4000 G	HAZ WASTE LIQ NOS WASTE OIL MIX W/LEAD
NHC0019007	01/16/1992	CTD072138969	NHD980521843	40740 P	HAZ WASTE LIQ NOS W/LEAD/OIL MIX
NHC0019016	02/18/1992	CTD072138969	NHD980521843	4000 G	HAZARDOUS WASTE LIQUID, NOS
NHC0019017	03/03/1992	CTD072138969	NHD980521843	4800 G	HAZARDOUS WASTE LIQUID, NOS
NHF0007652	06/09/1992	CTD072138969	NHD980521843	30640 P	HAZARDOUS WASTE LIQUID
NHF0007653	07/23/1992	CTD072138969	NHD980521843	3000 G	HAZARDOUS WASTE LIQUID NOS, CONTAIN LEAD
NHF0007655	08/26/1992	CTD072138969	NHD980521843	2800 G	HAZARDOUS WASTE LIQUID, NOS
CTF0111079	09/21/1992	CTD021816889	CTD982191942	3750 G	HAZARDOUS WASTE LIQUID, NOS
CTF0111029	10/26/1992	CTD021816889	CTD982191942	3000 G	HAZARDOUS WASTE LIQUID, NOS
CTF0107149	12/14/1992	CTD021816889	CTD982191942	3648 G	HZRDS WASTE LIQUID NOS, CONTAINS LEAD
CTF0223976	02/01/1993	CTD021816889	MAD981892557	2400 G	HAZARDOUS WASTE LIQUID, NOS
					- Continued on next page -

**Target Property:** 599 S MAIN ST **JOB:** 10001086

				RCRAG	N		
SEARCH	<b>ID:</b> 4	DIST/DIR	: 0.08 SW	ELE	EVATION:	365 <b>MAP ID:</b> 2	
NAME: ADDRESS: CONTACT:	WEBSTER VAI SOUTH MAIN FRANKLIN NH	ST			REV: ID1: ID2: STATUS: PHONE:	9/14/10 NHD058537960 LGN	
SOURCE:	EPA						
CTF0223954	04/15/1993	CTD021816889	MAD981892557	3900 G	HW LIQUID N	OS LEAD, TRICHLOROETHANE, 111	
CTF0058241	07/16/1993	CTD021816889	MAD981892557	3800 G	HAZARDOUS	WASTE LIQUID, NOS	
CTF0253705	08/26/1993	CTD021816889	MAD039322250	4015 G	HAZARDOUS	WASTE LIQUID, NOS	
CTF0313412	10/07/1993	CTD021816889	MAD039322250	2875 G	HAZARDOUS	WASTE LIQUID, NOS	
CTF0313418	11/18/1993	CTD021816889	MAD039322250	3025 P	HAZARDOUS	WASTE LIQUID	
CTF0313415	01/06/1994	CTD021816889	MAD039322250	2600 G	HAZARDOUS	WASTE LIQUID, NOS	
CTF0313423	01/25/1994	CTD021816889	MAD039322250	2783 G	HAZARDOUS	WASTE LIQUID NOS, LEAD	
CTF0313427	02/18/1994	CTD021816889	MAD039322250	2910 G	HAZARDOUS	WASTE LIQUID, NOS	
CTF0313428	03/29/1994	CTD021816889	MAD039322250	3050 G	HAZARDOUS	WASTE LIQUID	
CTF0313429	04/27/1994	CTD021816889	MAD039322250	3000 G	HAZARDOUS	WASTE LIQUID	
NAH375684	06/20/1994	CTD021816889	MAD039322250	2900 G	HAZARDOUS	WASTE LIQUID, NOS	
CTF0313431	08/08/1994	CTD021816889	MAD039322250	2970 G	HAZARDOUS	WASTE LIQUID	
MAH380319	09/21/1994	CTD021816889	MAD039322250	2060 G	HAZARDOUS	WASTE LIQUID	
MAH709913	11/01/1994	CTD021816889	MAD039322250	3100 G	HAZARDOUS	WASTE LIQUID	
MAH710687	12/20/1994	CTD021816889	MAD039322250	3000 G	HAZARDOUS	WASTE LIQUID	
MAH710874	02/07/1995	CTD021816889	MAD039322250	2952 G	HAZARDOUS	WASTE LIQUID	
MAH718086	03/23/1995	CTD021816889	MAD039322250	2889 G	HAZARDOUS	WASTE LIQUID	
MAH718288	05/05/1995	CTD021816889	MAD039322250	2745 G	HAZARDOUS	WASTE LIQUID NOS	
MAH718448	06/08/1995	CTD021816889	MAD039322250	2800 G	HAZARDOUS	WASTE LIQUID NOS	
MAJ021053	07/28/1995	CTD021816889	MAD039322250	2136 G	HAZARDOUS	WASTE LIQUID NOS	
MAJ003981	12/07/1995	CTD021816889	MAD039322250	2493 G	HAZARDOUS	WASTE LIQUID NOS	
MAJ311748	02/07/1996	CTD021816889	MAD039322250	2800 G	ENV. HAZARI	OOUS SUBSTANCE LIQUID NOS	
MAJ010400	06/05/1996	CTD021816889	MAD039322250	2802 G	ENV. HAZARI	OOUS SUBSTANCE LIQUID NOS	
MAJ560426	09/18/1996	CTD000604488	MAD039322250	3600 G	ENV. HAZARI	OOUS SUBSTANCE LIQUID NOS	
CTF0482004	11/18/1996	CTD021816889	MAD039322250	2750 G	ENV. HAZAR	DOUS SUBSTANCE LIQUID NOS	
MAJ010490	01/16/1997	CTD021816889	MAD039322250	2800 G	ENV. HAZARI	OOUS SUBSTANCE LIQUID NOS	
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					- (	Continued on next page -	

Target Property: 599 S MAIN ST JOB: 10001086

	RCRAGN								
SEARCH	ID: 4	DIST/DIR	<b>R:</b> 0.08 SW	ELEVATION: 365			MAP ID: 2	2	
NAME: ADDRESS: CONTACT:	WEBSTER VALVE INC SOUTH MAIN ST FRANKLIN NH 03235					4/10 HD058537960 GN	960		
SOURCE:	EPA								
MAJ010333	04/02/1997	CTD021816889	MAD039322250	2850 G	ENV. HAZARDOUS	SUBSTANCE I	LIQUID NOS		
CTF0313110	06/02/1997	CTD021816889	MAD039322250	3000 G	ENV. HAZARDOUS	SUBSTANCE	LIQUID NOS		
CTF0553573	09/02/1997	CTD021816889	MAD985294693	3908 G	ENV. HAZARDOUS	SUBSTANCE	LIQUID NOS		
NHF0007656	12/02/1997	CTD021816889	MAD985294693	4550 G	ENV. HAZARDOUS	SUBSTANCE	LIQUID NOS		
CTF0553607	02/20/1998	CTD021816889	MAD985294693	4314 G	ENV. HAZARDOUS	SUBSTANCE	LIQUID NOS		
CTF0444048	04/24/1998	CTD021816889	MAD985294693	4170 G	ENV. HAZARDOUS	SUBSTANCE	LIQUID NOS		
NHF0007660	07/23/1998	CTD021816889	MAD985294693	4180 G	ENV. HAZARDOUS	SUBSTANCE	LIQUID NOS		
CTF0742338	10/29/1998	CTD021816889	CTD021816889	4065 G	ENV. HAZARDOUS	SUBSTANCE I	LIQUID NOS		
CTF0758146	01/18/1999	CTD021816889	CTD021816889	3000 G	ENV. HAZARDOUS	SUBSTANCE I	LIQUID NOS		
CTF0864128	04/16/1999	CTD021816889	CTD021816889	3000 G	ENV. HAZARDOUS	SUBSTANCE I	LIQUID NOS		
CTF0862204	07/09/1999	CTD021816889	CTD021816889	3290 G	ENV. HAZARDOUS	SUBSTANCE I	LIQUID NOS		
CTF0878538	10/01/1999	CTD021816889	CTD021816889	2700 G	ENV. HAZARDOUS	SUBSTANCE I	LIQUID NOS		
CTF0895988	01/04/2000	CTD021816889	CTD021816889	1700 G	ENV. HAZARDOUS	SUBSTANCE I	LIQUID NOS		
CTF0923542	03/30/2000	CTD021816889	CTD021816889	2200 G	ENV. HAZARDOUS	SUBSTANCE I	LIQUID NOS		
CTF0922361	06/30/2000	CTD021816889	NHD980521843	2050 G	ENV. HAZARDOUS	SUBSTANCE	LIQUID NOS		
CTF0959512	10/02/2000	CTD021816889	CTD021816889	2500 G	ENV. HAZARDOUS	SUBSTANCE I	LIQUID NOS		
CTF0958900	12/13/2000	CTD021816889	CTD021816889	1950 G	ENV. HAZARDOUS	SUBSTANCE I	LIQUID NOS		
CTF0997744	03/21/2001	CTD021816889	CTD021816889	2609 G	ENV. HAZARDOUS	SUBSTANCE I	LIQUID NOS		
CTF0996154	05/29/2001	CTD021816889	NHD980521843	2570 G	ENV. HAZARDOUS	SUBSTANCE	LIQUID NOS		
CTF1009414	08/22/2001	CTD021816889	CTD021816889	2015 G	ENV. HAZARDOUS	SUBSTANCE I	LIQUID NOS		
CTF1023254	11/06/2001	CTD021816889	CTD021816889	1925 G	ENV. HAZARDOUS	SUBSTANCE I	LIQUID NOS		
CTF1025910	01/29/2002	CTD021816889	CTD021816889	2175 G	ENV. HAZARDOUS				
	04/23/2002	CTD021816889	CTD021816889	2067 G	ENV. HAZARDOUS				
CTF1074695				2300 G	ENV. HAZARDOUS				

Target Property: 599 S MAIN ST JOB: 10001086

FRANKLIN NH 03235

**ERNS** 

**SEARCH ID:** 5 **DIST/DIR:** 0.08 SW **ELEVATION:** 365 **MAP ID:** 2

NAME: WATTS INDUSTRIES INC REV: 2/22/1996

ADDRESS: SOUTH MAIN (WEBSTER VALVE FACILITY) ST ID1: 487774 FRANKLIN NH 03235 ID2:

STATUS: FIXED FACILITY

CONTACT: PHONE:

**SOURCE:** EPA

SPILL INFORMATION

**DATE OF SPILL:** 2/22/1996 **TIME OF SPILL:** 1115

**PRODUCT RELEASED (1):** 7% SOLUTION OF WATER SOLUBLE OIL

**QUANTITY (1):** 5

CAUSE OF RELEASE

DUMPING:NOEQUIPMENT FAILURE:NONATURAL PHENOMENON:NOOPERATOR ERROR:NO

OTHER CAUSE: YES TRANS

Target Property: 599 S MAIN ST JOB: 10001086

FRANKLIN NH 03235

**ERNS** 

FIXED FACILITY

SEARCH ID: 6 DIST/DIR: 0.08 SW ELEVATION: 365 MAP ID: 2

 NAME:
 WATTS REGULATOR CO
 REV:
 1/1/96

 ADDRESS:
 SOUTH MAIN ST
 ID1:
 481417

FRANKLIN NH 03235 ID2: 481

STATUS:

CONTACT: PHONE: SOURCE: EPA

SPILL INFORMATION

**DATE OF SPILL:** 1/1/96 **TIME OF SPILL:** 1400

**PRODUCT RELEASED (1):** ETHYLENE GLYCOL

**QUANTITY (1):** 120 **UNITS (1):** GAL

PRODUCT RELEASED (2):

QUANTITY (2): UNITS (2):

PRODUCT RELEASED (3):

QUANTITY (3): UNITS (3):

MEDIUM/MEDIA AFFECTED

AIR: NO GROUNDWATER: NO LAND: NO FIXED FACILITY: NO WATER: NO OTHER: NO

WATERBODY AFFECTED BY RELEASE:

CAUSE OF RELEASE

DUMPING:NOEQUIPMENT FAILURE:NONATURAL PHENOMENON:NOOPERATOR ERROR:NOOTHER CAUSE:NOTRANSP. ACCIDENT:NOUNKNOWN:NO

ACTIONS TAKEN: SECURED RELEASE/MATERIAL IS CONTAINED/WILL DEPLOY VAC TRUCK

**RELEASE DETECTION:** FURNACE COOLING SYSTEM FURNACE COOLING SYSTEM/PIECE OF ICE PERFERATED THE RADIATOR **MISC. NOTES:** MATERIAL WAS MIXED WITH 1000 GALS OF WATER/ALL MATERIAL WAS CONTAINED ON THE F ACILITY

DISCHARGER INFORMATION

DISCHARGER ID: 481417 DUN and BRADSTREET:

**TYPE OF DISCHARGER:** PRIVATE ENTERPRISE NAME OF DISCHARGER: WATTS REGULATOR CO

ADDRESS: S MAIN ST

Target Property: 599 S MAIN ST JOB: 10001086

FRANKLIN NH 03235

**ERNS** 

SEARCH ID: 7 DIST/DIR: 0.08 SW ELEVATION: 365 MAP ID: 2

NAME: WATTS REGULATOR CO
ADDRESS: SOUTH MAIN ST

REV: 2/14/94
ID1: 359694

FRANKLIN NH 03235 ID2:

MERRIMACK STATUS: FIXED FACILITY

CONTACT: PHONE:

SOURCE: EPA

SPILL INFORMATION

**DATE OF SPILL:** 2/14/94 **TIME OF SPILL:** 0700

**PRODUCT RELEASED (1):** ETHYLENE GLYCOL (50%)

**QUANTITY (1):** 50 **UNITS (1):** GAL

PRODUCT RELEASED (2):

QUANTITY (2): UNITS (2):

PRODUCT RELEASED (3):

QUANTITY (3): UNITS (3):

MEDIUM/MEDIA AFFECTED

AIR: NO GROUNDWATER: NO LAND: YES FIXED FACILITY: NO WATER: NO OTHER: NO WATERBODY AFFECTED BY RELEASE: ICE/CONCRETE/SOIL

CAUSE OF RELEASE

DUMPING:NOEQUIPMENT FAILURE:NONATURAL PHENOMENON:NOOPERATOR ERROR:NOOTHER CAUSE:NOTRANSP. ACCIDENT:NOUNKNOWN:NO

ACTIONS TAKEN: RECOVERD THE MATERIAL AND PUT IT INTO DRUMS

RELEASE DETECTION: CLOSED LOOP COOLING SYSTEM PIPE/PIPE WAS BROKEN FROM 100 LBS OF ICE FALLING ON THE PIPE

MISC. NOTES: WILL NOTIFY NH EMA AND LEPC

DISCHARGER INFORMATION

DISCHARGER ID: 359694 DUN and BRADSTREET:

TYPE OF DISCHARGER: PRIVATE ENTERPRISE
NAME OF DISCHARGER: WATTS REGULATOR CO
ADDRESS: SOUTH MAIN ST

Target Property: 599 S MAIN ST JOB: 10001086

FRANKLIN NH 03235

**ERNS** 

**SEARCH ID:** 8 **DIST/DIR:** 0.08 SW **ELEVATION:** 365 **MAP ID:** 2

 NAME:
 REV:
 01-20-98

 ADDRESS:
 SOUTH MAIN ST
 ID1:
 H40584

FRANKLIN NH 03235 ID2:

CONTACT: TWOMBLY JOHN STATUS: FIX FAC PHONE: 603-934-1334

**SOURCE:** EPA

CERCLIS (Y/N):

MAT: ETHYLENE GLYCOL QUANT: 50.00 GALLONS

**LOCATION:** SOUTH MAIN ST.

**CITY:** FRANKLIN NH 03235 **REPORTED:** 19940214

SOURCE: FIX FAC MEDIUM: LAND

CLOSED LOOP COOLING SYSTEM PIPE

CAUSE: EQUIP FAILURE

PIPE BROKEN FROM 100 LBS OF ICE FALLING ON THE PIPE.

ACT: RECOVERED THE MATERIAL AND PUT IT INTO DRUMS.

BY: NH DES

STATE

**SEARCH ID:** 14 **DIST/DIR:** 0.08 SW **ELEVATION:** 365 **MAP ID:** 2

 NAME:
 WEBSTER VALVE CO
 REV:
 9/27/10

 ADDRESS:
 SOUTH MAIN ST
 ID1:
 199003020

FRANKLIN NH ID2:

MERRIMACK STATUS: GW HAZ INV

CONTACT: PHONE: SOURCE: NH DES

PERMITS:

**PROJECT TYPE:** HAZARDOUS **PROJECT MANAGER:** UNASSIGNED

**Target Property:** 599 S MAIN ST **JOB:** 10001086

FRANKLIN NH 03235

**SPILLS** SEARCH ID: 15 **DIST/DIR:** 0.08 SW **ELEVATION:** 365 MAP ID: 2 NAME: WATTS REG./WEB. VALVE **REV:** 01/01/98 96-179 ADDRESS: SO. MAIN ST ID1: FRANKLIN NH 03235 ID2: STATUS: **CONTACT:** PHONE: SOURCE: DATE OF SPILL: 5/31/96 TIME OF SPILL: 0935 CHEMICAL SPILLED: Cutting Oil HAZARD: Flammable AMOUNT SPILLED: 10 Gallons TYPE OF SITE: Fixed

			SPILLS			
SEARCH ID: 16	DIST/DIR:	0.08 SW	ELEVATION:	365	MAP ID:	2
NAME: WATTS REC ADDRESS: SO. MAIN S FRANKLIN I CONTACT: SOURCE:			REV: ID1: ID2: STATUS: PHONE:	01/01/98 96-1		
DATE OF SPILL:	1/1/96		TIME OF SPILL:	1400		
CHEMICAL SPILLED: AMOUNT SPILLED:	Ethylene Glycol 110 Gallons		HAZARD: TYPE OF SITE:	Flammable Fixed		

Target Property: 599 S MAIN ST JOB: 10001086

FRANKLIN NH 03235

**SPILLS** SEARCH ID: 17 **DIST/DIR:** 0.08 SW **ELEVATION:** 2 365 MAP ID: NAME: WATTS REG./WEB. VALVE **REV:** 01/01/98 ADDRESS: 96-66 ID1: FRANKLIN NH 03235 ID2: STATUS: **CONTACT:** PHONE: SOURCE: DATE OF SPILL: 2/22/96 TIME OF SPILL: 1100 CHEMICAL SPILLED: Oil Mixture HAZARD: Flammable AMOUNT SPILLED: 50 Gallons TYPE OF SITE: Fixed DATE OF SPILL: TIME OF SPILL: 2/22/96 CHEMICAL SPILLED: Fuel Oil **HAZARD:** Flammable AMOUNT SPILLED: 50 Gallons TYPE OF SITE:

			SPILLS			
SEARCH ID: 19	DIST/DIR:	0.08 SW	ELEVATION:	365	MAP ID:	2
NAME: WATTS RECADDRESS: SOUTH MA FRANKLIN ISOURCE:	IN ST		REV: ID1: ID2: STATUS: PHONE:	01/01/98 94-47		
DATE OF SPILL:	2/12/94		TIME OF SPILL:			
CHEMICAL SPILLED: AMOUNT SPILLED:	Ethy.Glyc. 605 Gals.		HAZARD: TYPE OF SITE:	Flamm. Fixed		

**Target Property:** 599 S MAIN ST **JOB:** 10001086

FRANKLIN NH 03235

**SPILLS** SEARCH ID: 21 **DIST/DIR:** 0.08 SW **ELEVATION:** 365 MAP ID: 2 NAME: WATTS REGULATOR-WEBVAL **REV:** 01/01/98 95-355 **ADDRESS:** SOUTH MAIN ST ID1: FRANKLIN NH 03235 ID2: STATUS: **CONTACT:** PHONE: SOURCE: DATE OF SPILL: 12/5/95 TIME OF SPILL: CHEMICAL SPILLED: Sulfuric Acid HAZARD: Corrosive AMOUNT SPILLED: 15 Gals TYPE OF SITE: Fixed

			SPILLS			
SEARCH ID: 22	DIST/DIR:	0.08 SW	ELEVATION:	365	MAP ID:	2
NAME: WATTS REC ADDRESS: SOUTH MA FRANKLIN I CONTACT: SOURCE:			REV: ID1: ID2: STATUS: PHONE:	01/01/98 95-356		
DATE OF SPILL:	12/5/95		TIME OF SPILL:			
CHEMICAL SPILLED: AMOUNT SPILLED:	Rust Pel 51 25 Gals		HAZARD: TYPE OF SITE:	Flammable Fixed		

Target Property: 599 S MAIN ST JOB: 10001086

FRANKLIN NH 03235

UST

SEARCH ID: 24 DIST/DIR: 0.08 SW ELEVATION: 365 MAP ID: 2

 NAME:
 WEBSTER VALVE CO
 REV:
 9/27/10

 ADDRESS:
 SOUTH MAIN ST
 ID1:
 0112752

SOUTH MAIN ST ID1: 0112/52 FRANKLIN NH ID2:

STATUS: UST

CONTACT: PHONE: SOURCE: NH DES

TOTAL NUMBER OF TANKS: 5

OWNER INFORMATION

OWNER NAME: WATTS REGULATOR OWNER ADDRESS: PO BOX 6431

FRANKLIN NH 03235

SITE TRACKING NUMBER: 199003020

TANK INFORMATION

TANK NUMBER:

STORAGE CAPACITY: 10000 GALLONS SUBSTANCE STORED: 4 HEATING OIL

TANK TYPE: PIPE TYPE: STEEL

DOUBLE WALL TANK: N
DATE INSTALLED:

EMERG SPILL ENCLOSURE INSTALLED: EMERG OVERFILL ENCLOSURE INSTALLED:

LAST TIGHTNESS TEST DATE:

LINE LEAK DETECTION TEST DATE: 08/01/1987

DATE PERMANENTLY CLOSED: R
PERM CLOSURE ANALYSIS PERFORMED:

DATE TEMPORARILY CLOSED: CLOSURE TYPE: REMOVED

TANK NUMBER: 2

STORAGE CAPACITY: 1000 GALLONS SUBSTANCE STORED: 2 HEATING OIL

TANK TYPE: PIPE TYPE: STEEL

DOUBLE WALL TANK: N
DATE INSTALLED: 06/03/1988

DATE INSTALLED: 06/03/1988
EMERG SPILL ENCLOSURE INSTALLED:

LAST TIGHTNESS TEST DATE:

LINE LEAK DETECTION TEST DATE: 07/11/1990

EMERG OVERFILL ENCLOSURE INSTALLED:

**DATE PERMANENTLY CLOSED:** R

PERM CLOSURE ANALYSIS PERFORMED: 10/10/1990

**DATE TEMPORARILY CLOSED:** 10/10/1990 **CLOSURE TYPE:** REMOVED

TANK NUMBER: 3

STORAGE CAPACITY: 500 GALLONS SUBSTANCE STORED: 2 HEATING OIL

TANK TYPE: PIPE TYPE: STEEL

**DOUBLE WALL TANK:** N

DATE INSTALLED:

EMERG SPILL ENCLOSURE INSTALLED: EMERG OVERFILL ENCLOSURE INSTALLED:

LAST TIGHTNESS TEST DATE:

LINE LEAK DETECTION TEST DATE: 07/15/1987

DATE PERMANENTLY CLOSED: R
PERM CLOSURE ANALYSIS PERFORMED:

DATE TEMPORARILY CLOSED: CLOSURE TYPE: REMOVED

Target Property: 599 S MAIN ST JOB: 10001086

FRANKLIN NH 03235

UST

**SEARCH ID:** 24 **DIST/DIR:** 0.08 SW **ELEVATION:** 365 **MAP ID:** 2

 NAME:
 WEBSTER VALVE CO
 REV:
 9/27/10

 ADDRESS:
 SOUTH MAIN ST
 ID1:
 0112752

SOUTH MAIN ST ID1: 0112752 FRANKLIN NH ID2:

STATUS: UST

CONTACT: PHONE:

**SOURCE:** NH DES

TANK NUMBER: 4

STORAGE CAPACITY: 10000 GALLONS SUBSTANCE STORED: 2 HEATING OIL

TANK TYPE: PIPE TYPE: STEEL

**DOUBLE WALL TANK:** N **DATE INSTALLED:** 

EMERG SPILL ENCLOSURE INSTALLED: EMERG OVERFILL ENCLOSURE INSTALLED:

LAST TIGHTNESS TEST DATE:

LINE LEAK DETECTION TEST DATE: 07/25/1989

**DATE PERMANENTLY CLOSED:** R

PERM CLOSURE ANALYSIS PERFORMED: 01/03/1990

**DATE TEMPORARILY CLOSED:** 01/03/1990 **CLOSURE TYPE:** REMOVED

TANK NUMBER: 5

STORAGE CAPACITY: 10000 GALLONS SUBSTANCE STORED: 4 HEATING OIL

TANK TYPE: PIPE TYPE: STEEL, CORROSION PROTECTED

DOUBLE WALL TANK: Y
DATE INSTALLED: 08/01/1987

EMERG SPILL ENCLOSURE INSTALLED:
EMERG OVERFILL ENCLOSURE INSTALLED:
LAST TIGHTNESS TEST DATE: 08/01/1987

LINE LEAK DETECTION TEST DATE: DATE PERMANENTLY CLOSED:

PERM CLOSURE ANALYSIS PERFORMED:

DATE TEMPORARILY CLOSED: CLOSURE TYPE:

Target Property: 599 S MAIN ST JOB: 10001086

FRANKLIN NH 03235

UST

SEARCH ID: 25 DIST/DIR: 0.08 SW ELEVATION: 365 MAP ID: 2

 NAME:
 WEBSTER VALVE CO
 REV:
 9/27/10

 ADDRESS:
 583 S MAIN ST
 ID1:
 0000715

FRANKLIN NH ID2:

MERRIMACK STATUS: AST

CONTACT: BRYAN ANDERSON PHONE: 603-934-5110

**SOURCE:** NH DES

OWNER INFORMATION

OWNER NAME: WEBSTER VALVE CO

OWNER ADDRESS:

SITE TRACKING NUMBER: 199003020

TANK INFORMATION

TANK NUMBER: 01-77

STORAGE CAPACITY: 475 GALLONS SUBSTANCE STORED: HYDRAULIC OIL

TANK TYPE: PIPE TYPE:

DOUBLE WALL TANK: DATE INSTALLED:

EMERG SPILL ENCLOSURE INSTALLED:

EMERG OVERFILL ENCLOSURE INSTALLED:

LAST TIGHTNESS TEST DATE:

LINE LEAK DETECTION TEST DATE:

DATE PERMANENTLY CLOSED: PERM CLOSURE ANALYSIS PERFORMED:

DATE TEMPORARILY CLOSED: CLOSURE TYPE:

TANK NUMBER: 02-77

STORAGE CAPACITY: 475 GALLONS SUBSTANCE STORED: HYDRAULIC OIL

TANK TYPE: PIPE TYPE:

DOUBLE WALL TANK: DATE INSTALLED:

EMERG SPILL ENCLOSURE INSTALLED: EMERG OVERFILL ENCLOSURE INSTALLED:

EMERG OVERFILL ENCLOSURE INSTALI LAST TIGHTNESS TEST DATE:

LINE LEAK DETECTION TEST DATE: DATE PERMANENTLY CLOSED:

PERM CLOSURE ANALYSIS PERFORMED:

DATE TEMPORARILY CLOSED: CLOSURE TYPE:

TANK NUMBER: 03-77

STORAGE CAPACITY: 275 GALLONS SUBSTANCE STORED: LUBRICATION OIL

TANK TYPE: PIPE TYPE:

DOUBLE WALL TANK: DATE INSTALLED:

EMERG SPILL ENCLOSURE INSTALLED: EMERG OVERFILL ENCLOSURE INSTALLED:

LAST TIGHTNESS TEST DATE: LINE LEAK DETECTION TEST DATE: DATE PERMANENTLY CLOSED:

PERM CLOSURE ANALYSIS PERFORMED:

DATE TEMPORARILY CLOSED: CLOSURE TYPE:

TANK NUMBER: 04-77

Target Property: 599 S MAIN ST JOB: 10001086

FRANKLIN NH 03235

UST

SEARCH ID: 25 DIST/DIR: 0.08 SW ELEVATION: 365 MAP ID: 2

 NAME:
 WEBSTER VALVE CO
 REV:
 9/27/10

 ADDRESS:
 583 S MAIN ST
 ID1:
 0000715

FRANKLIN NH ID2:

MERRIMACK STATUS: AST

CONTACT: BRYAN ANDERSON PHONE: 603-934-5110

**SOURCE:** NH DES

STORAGE CAPACITY: 275 GALLONS SUBSTANCE STORED: LUBRICATION OIL

TANK TYPE: PIPE TYPE:

DOUBLE WALL TANK: DATE INSTALLED:

EMERG SPILL ENCLOSURE INSTALLED: EMERG OVERFILL ENCLOSURE INSTALLED:

LAST TIGHTNESS TEST DATE: LINE LEAK DETECTION TEST DATE: DATE PERMANENTLY CLOSED:

PERM CLOSURE ANALYSIS PERFORMED:

DATE TEMPORARILY CLOSED: CLOSURE TYPE:

TANK NUMBER: 05-77

STORAGE CAPACITY: 275 GALLONS SUBSTANCE STORED: USED OIL

TANK TYPE: PIPE TYPE:

DOUBLE WALL TANK: DATE INSTALLED:

EMERG SPILL ENCLOSURE INSTALLED: EMERG OVERFILL ENCLOSURE INSTALLED:

LAST TIGHTNESS TEST DATE: LINE LEAK DETECTION TEST DATE:

DATE PERMANENTLY CLOSED: PERM CLOSURE ANALYSIS PERFORMED:

DATE TEMPORARILY CLOSED: CLOSURE TYPE:

TANK NUMBER: 06-WEFCO

STORAGE CAPACITY: 275 GALLONS SUBSTANCE STORED: DIESEL

TANK TYPE: PIPE TYPE:

DOUBLE WALL TANK: DATE INSTALLED:

EMERG SPILL ENCLOSURE INSTALLED: EMERG OVERFILL ENCLOSURE INSTALLED:

LAST TIGHTNESS TEST DATE: LINE LEAK DETECTION TEST DATE: DATE PERMANENTLY CLOSED:

PERM CLOSURE ANALYSIS PERFORMED:

DATE TEMPORARILY CLOSED: CLOSURE TYPE:

TANK NUMBER: 07- MAINT

STORAGE CAPACITY: 275 GALLONS SUBSTANCE STORED: USED OIL

PIPE TYPE:

DOUBLE WALL TANK:

TANK TYPE:

DATE INSTALLED:

EMERG SPILL ENCLOSURE INSTALLED:

EMERG OVERFILL ENCLOSURE INSTALLED:

LAST TIGHTNESS TEST DATE: LINE LEAK DETECTION TEST DATE: DATE PERMANENTLY CLOSED:

PERM CLOSURE ANALYSIS PERFORMED:

DATE TEMPORARILY CLOSED: CLOSURE TYPE:

Target Property: 599 S MAIN ST JOB: 10001086

FRANKLIN NH 03235

UST

PIPE TYPE:

SEARCH ID: 25 DIST/DIR: 0.08 SW ELEVATION: 365 MAP ID: 2

 NAME:
 WEBSTER VALVE CO
 REV:
 9/27/10

 ADDRESS:
 583 S MAIN ST
 ID1:
 0000715

FRANKLIN NH ID2:

MERRIMACK STATUS: AST

CONTACT: BRYAN ANDERSON PHONE: 603-934-5110

**SOURCE:** NH DES

TANK NUMBER: 55- GAL

STORAGE CAPACITY: 3410 GALLONS SUBSTANCE STORED: USED OIL

TANK TYPE: PIPE TYPE:

DOUBLE WALL TANK: DATE INSTALLED:

EMERG SPILL ENCLOSURE INSTALLED:

EMERG OVERFILL ENCLOSURE INSTALLED:

LAST TIGHTNESS TEST DATE: LINE LEAK DETECTION TEST DATE: DATE PERMANENTLY CLOSED:

PERM CLOSURE ANALYSIS PERFORMED:

DATE TEMPORARILY CLOSED: CLOSURE TYPE:

TANK NUMBER: 300

STORAGE CAPACITY: 2400 GALLONS SUBSTANCE STORED: USED OIL

TANK TYPE: DOUBLE WALL TANK:

DATE INSTALLED:

EMERG SPILL ENCLOSURE INSTALLED:

 ${\bf EMERG\ OVERFILL\ ENCLOSURE\ INSTALLED:}$ 

LAST TIGHTNESS TEST DATE: LINE LEAK DETECTION TEST DATE: DATE PERMANENTLY CLOSED:

PERM CLOSURE ANALYSIS PERFORMED:

DATE TEMPORARILY CLOSED: CLOSURE TYPE:

TANK NUMBER: - GE

STORAGE CAPACITY: 1500 GALLONS SUBSTANCE STORED: DIESEL

TANK TYPE: PIPE TYPE:

DOUBLE WALL TANK: DATE INSTALLED:

EMERG SPILL ENCLOSURE INSTALLED: EMERG OVERFILL ENCLOSURE INSTALLED:

EMERG OVERFILL ENCLOSURE INSTALL LAST TIGHTNESS TEST DATE:

LINE LEAK DETECTION TEST DATE: DATE PERMANENTLY CLOSED:

PERM CLOSURE ANALYSIS PERFORMED:

DATE TEMPORARILY CLOSED: CLOSURE TYPE:

**Target Property:** 599 S MAIN ST 10001086 **JOB:** 

FRANKLIN NH 03235

**SPILLS** 

SEARCH ID: 18 **DIST/DIR:** 0.08 SW **ELEVATION:** 365 MAP ID: 2

NAME: WATTS REGULATOR **REV:** 01/01/98 ADDRESS:

93-449 ID1: FRANKLIN NH 03235 ID2:

STATUS: **CONTACT:** PHONE:

SOURCE:

DATE OF SPILL: 11/1/93 TIME OF SPILL:

CHEMICAL SPILLED: Oil, lubricat HAZARD: Flam.Liquid AMOUNT SPILLED: 25 Gallons TYPE OF SITE: Fixed

Target Property: 599 S MAIN ST JOB: 10001086

FRANKLIN NH 03235

UST

**SEARCH ID:** 23 **DIST/DIR:** 0.20 SE **ELEVATION:** 311 **MAP ID:** 3

 NAME:
 PUBLIC WORKS SUPPLY CO INC
 REV:
 9/27/10

 ADDRESS:
 635 S MAIN ST
 ID1:
 0220116

635 S MAIN ST ID1: 0220116 FRANKLIN NH ID2:

STATUS: UST

CONTACT: PHONE: SOURCE: NH DES

TOTAL NUMBER OF TANKS: 2

OWNER INFORMATION

**OWNER NAME:** LES REALTY TRUST **OWNER ADDRESS:** 27 GARDEN ST

DANVERS MA 01923

SITE TRACKING NUMBER: 198605627

TANK INFORMATION

TANK NUMBER:

STORAGE CAPACITY: 1000 GALLONS SUBSTANCE STORED: GASOLINE TANK TYPE.

TANK TYPE: PIPE TYPE: STEEL

DOUBLE WALL TANK: N
DATE INSTALLED:

EMERG SPILL ENCLOSURE INSTALLED:

EMERG OVERFILL ENCLOSURE INSTALLED: LAST TIGHTNESS TEST DATE:

LINE LEAK DETECTION TEST DATE: 07/31/1987

DATE PERMANENTLY CLOSED: R

PERM CLOSURE ANALYSIS PERFORMED:

DATE TEMPORARILY CLOSED: CLOSURE TYPE: REMOVED

TANK NUMBER: 2

STORAGE CAPACITY: 500 GALLONS SUBSTANCE STORED: USE TANK TYPE: STEEL

DOUBLE WALL TANK: N
DATE INSTALLED:
EMERG SPILL ENCLOSURE INSTALLED:

EMERG SPILL ENCLOSURE INSTALLED: EMERG OVERFILL ENCLOSURE INSTALLED:

LAST TIGHTNESS TEST DATE:

LINE LEAK DETECTION TEST DATE: 07/31/1987

DATE PERMANENTLY CLOSED: R
PERM CLOSURE ANALYSIS PERFORMED:

DATE TEMPORARILY CLOSED: CLOSURE TYPE: REMOVED

**Target Property:** 599 S MAIN ST **JOB:** 10001086

FRANKLIN NH 03235

**NFRAP** 

REV:

8/31/10

**SEARCH ID:** 1 **DIST/DIR:** 0.31 NE **ELEVATION:** 290 **MAP ID:** 4

NAME: FRANKLIN RIVER ROAD LANDFILL

 ADDRESS:
 FRANKLIN RIVER RD
 ID1:
 NHD980913446

 FRANKLIN NH 03235
 ID2:
 0101154

FRANKLIN NH 03235 ID2: 0101154 MERRIMACK STATUS: NFRAP-N

CONTACT: PHONE: SOURCE: EPA

DESCRIPTION:

ACTION/QUALITY AGENCY/RPS START/RAA END

ARCHIVE SITE EPA In-House 4/2/1998

DISCOVERY EPA Fund-Financed 6/1/1984

PRELIMINARY ASSESSMENT State, Fund Financed /1-82-7/13 9/27/1985

LOW PRIORITY FOR FURTHER ASSESSMENT

SITE INSPECTION State, Fund Financed 3/13/1991

NFRAP: NO FURTHER REMEDIAL ACTION PLANNED

STATE

**SEARCH ID:** 12 **DIST/DIR:** 0.39 NE **ELEVATION:** 345 **MAP ID:** 5

NAME: OLD FRANKLIN LANDFILL REV: 07/03/00

ADDRESS: RIVER ST ID1: 198401090

FRANKLIN NH 03235
MERRIMACK

ID2:
STATUS: DELETED

MERRIMACK STATUS: DELETED PHONE: SOURCE:

PERMITS:

PROJECT TYPE: DELETED

PROJECT MANAGER: PERMITS-MGMT

**Target Property:** 599 S MAIN ST JOB: 10001086

FRANKLIN NH 03235

**STATE** 

**SEARCH ID:** 9 **DIST/DIR:** 0.48 SW **ELEVATION:** 285 MAP ID: 6

NAME: FORMER GUAYS GARAGE REV: 9/27/10 ADDRESS: 601 S MAIN ST

199808031 ID1: FRANKLIN NH ID2:

MERRIMACK STATUS: GW HAZ INV - CLOSED

CONTACT: PHONE: **SOURCE:** NH DES

**PERMITS:** 

PROJECT TYPE: ON PREM US PROJECT MANAGER: CLOSED

**LUST** 

**SEARCH ID: DIST/DIR:** 0.48 SW **ELEVATION:** 285 MAP ID: 6

**REV:** NAME: **GUAYS GARAGE** 10/6/00 ADDRESS: 601 S MAIN ST ID1: 199808031

FRANKLIN NH

ID2: MERRIMACK STATUS: UNASSIGNED

**CONTACT:** PHONE:

SOURCE:

RISK: RISK LEVEL 7: LOW CONCENTRATION, ALTERNATIVE WATER IS AVAILABLE

PRIORITY: WLP: 3

**COMPLETE:** REFERRED:

**COMMENT:** UNASSIGNED

**STATE** 

SEARCH ID: 10 **DIST/DIR:** 0.82 NW 7 **ELEVATION:** 333 MAP ID:

FRANKLIN S MAIN ST IRVING **REV:** 1/13/04 NAME: ADDRESS: 221 S MAIN ST ID1: 199408010

FRANKLIN NH ID2: STATUS: GW HAZ INV MERRIMACK

**CONTACT:** PHONE: SOURCE:

**Target Property:** 599 S MAIN ST JOB: 10001086

FRANKLIN NH 03235

**STATE** 

**SEARCH ID: ELEVATION:** 7 10 **DIST/DIR:** 0.82 NW 333 **MAP ID:** 

NAME: FRANKLIN S MAIN ST IRVING REV: 1/13/04 **ADDRESS:** 221 S MAIN ST

199408010 ID1: FRANKLIN NH ID2:

MERRIMACK STATUS: GW HAZ INV

**CONTACT:** PHONE: SOURCE:

**PERMITS:** 

PROJECT TYPE: ON PREM US PROJECT MANAGER: **LEATHERS** 

**STATE** 

**SEARCH ID: DIST/DIR:** 0.95 NW **ELEVATION:** 333 MAP ID: 8

TWIN RIVERS CORP **REV:** NAME: 9/27/10 ADDRESS: 16 ANDERSON AVE ID1: 199702024

FRANKLIN NH ID2:

MERRIMACK STATUS: GW HAZ INV - CLOSED

CONTACT: PHONE: SOURCE: NH DES

**PERMITS:** 0

PROJECT TYPE: ON PREM US PROJECT MANAGER: CLOSED

**STATE** 

SEARCH ID: 11 **DIST/DIR:** 0.97 NE **ELEVATION:** 535 MAP ID: 9

NAME: GORDON MARSHALL **REV:** 9/27/10 ADDRESS: 340 PROSPECT ST ID1: 199712046

FRANKLIN NH ID2:

MERRIMACK STATUS: GW HAZ INV - CLOSED

**CONTACT:** PHONE: SOURCE: NH DES

**Target Property:** 599 S MAIN ST **JOB:** 10001086

FRANKLIN NH 03235

**STATE** 

**SEARCH ID:** 11 **DIST/DIR:** 0.97 NE **ELEVATION:** 535 **MAP ID:** 9

 NAME:
 GORDON MARSHALL
 REV:
 9/27/10

 ADDRESS:
 340 PROSPECT ST
 ID1:
 199712046

FRANKLIN NH ID2:

MERRIMACK STATUS: GW HAZ INV - CLOSED

CONTACT: PHONE: SOURCE: NH DES

PERMITS: 0

**PROJECT TYPE:** ON PREM US **PROJECT MANAGER:** CLOSED

# Environmental FirstSearch Street Name Report for Streets within .25 Mile(s) of Target Property

599 S MAIN ST FRANKLIN NH 03235 **JOB:** 10001086 **Target Property:** 

Street Name	Dist/Dir	Street Name	Dist/Dir
M. 11 XV	0.10 NIE		
Mullavey Way	0.10 NE		
Old So Main	0.15 NE		
Old South Main St	0.17 NE		
River St	0.24 SE		
S Main St	0.04 SE		
United States Highwa	0.04 SE		



# NO MAPS AVAILABLE

#### 11-22-10 10001086 599 S MAIN ST FRANKLIN NH 03235

A search of FirstSearch Technology Corporation's proprietary database of historical fire insurance map availability confirmed that there are <u>NO MAPS AVAILABLE</u> for the Subject Location as shown above.

FirstSearch Technology Corporation's proprietary database of historical fire insurance map availability represents abstracted information from the Sanborn® Map Company obtained through online access to the U.S. Library of Congress via local libraries.

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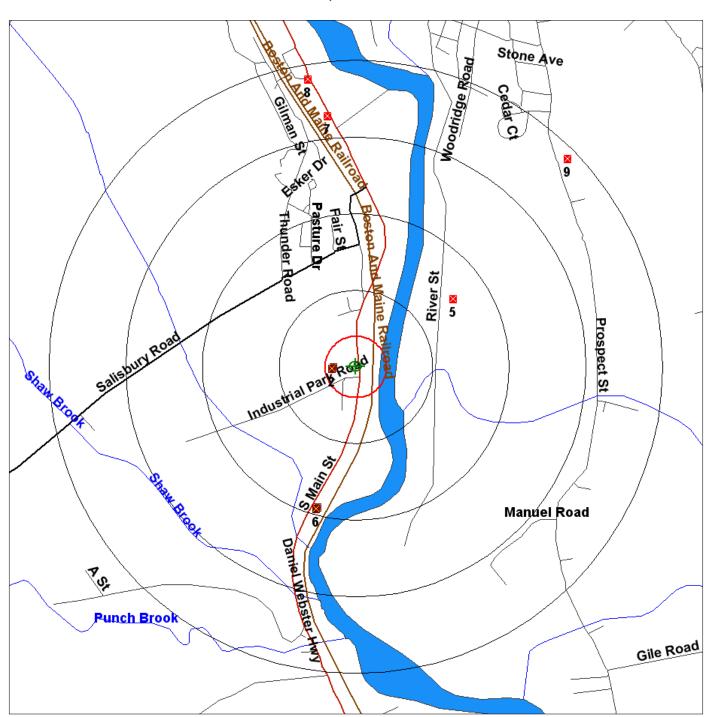
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1 Mile Radius ASTM Map: NPL, RCRACOR, STATE Sites



#### 599 S MAIN ST, FRANKLIN NH 03235



#### Source: 2005 U.S. Census TIGER Files





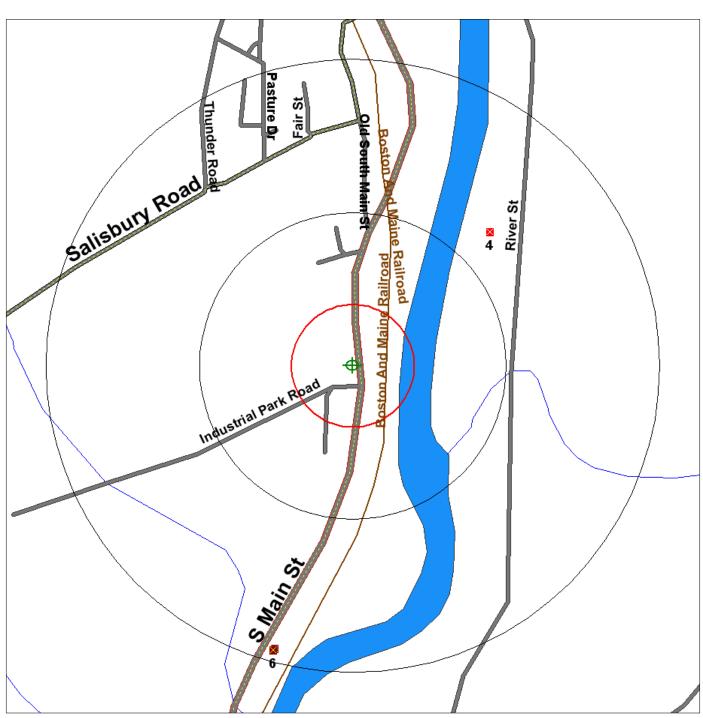




.5 Mile Radius ASTM Map: CERCLIS, RCRATSD, LUST, SWL



#### 599 S MAIN ST, FRANKLIN NH 03235



#### Source: 2005 U.S. Census TIGER Files





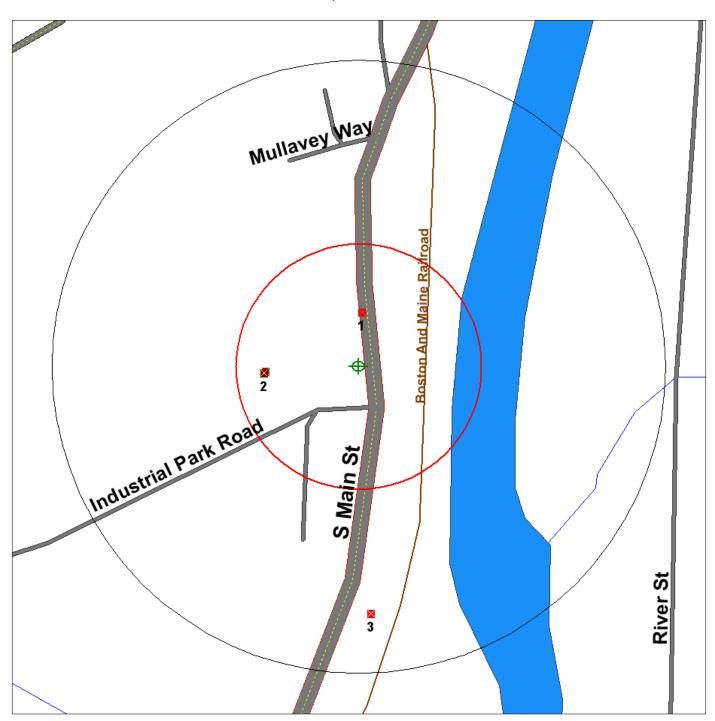




.25 Mile Radius ASTM Map: RCRAGEN, ERNS, UST, FED IC/EC, METH LABS



#### 599 S MAIN ST, FRANKLIN NH 03235



#### Source: 2005 U.S. Census TIGER Files







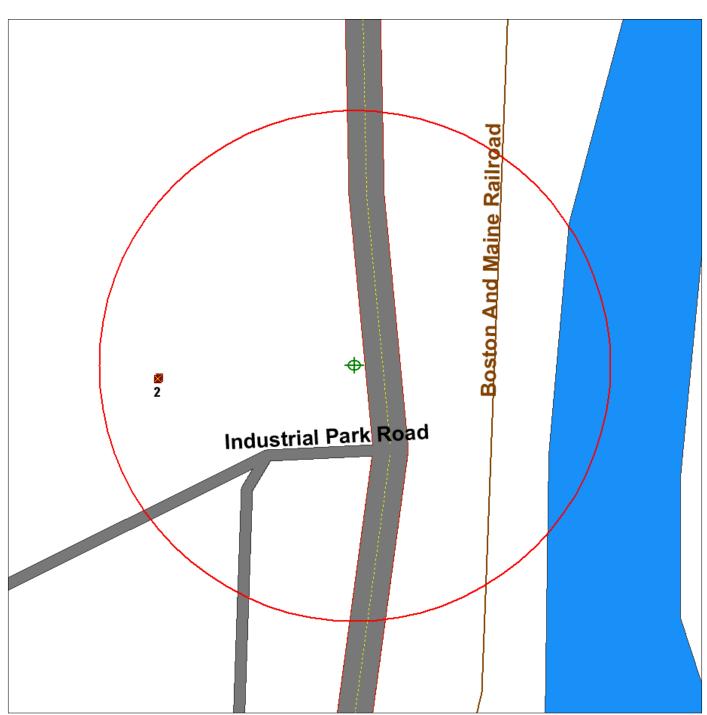




.12 Mile Radius Non-ASTM Map: Spills 90



#### 599 S MAIN ST, FRANKLIN NH 03235



#### Source: 2005 U.S. Census TIGER Files

Target Site (Latitude: 43.424604 Longitude: -71.654074) ..... Identified Site, Multiple Sites, Receptor ..... NPL, DELNPL, Brownfield, Solid Waste Landfill (SWL), Hazardous Waste National Historic Sites and Landmark Sites .....







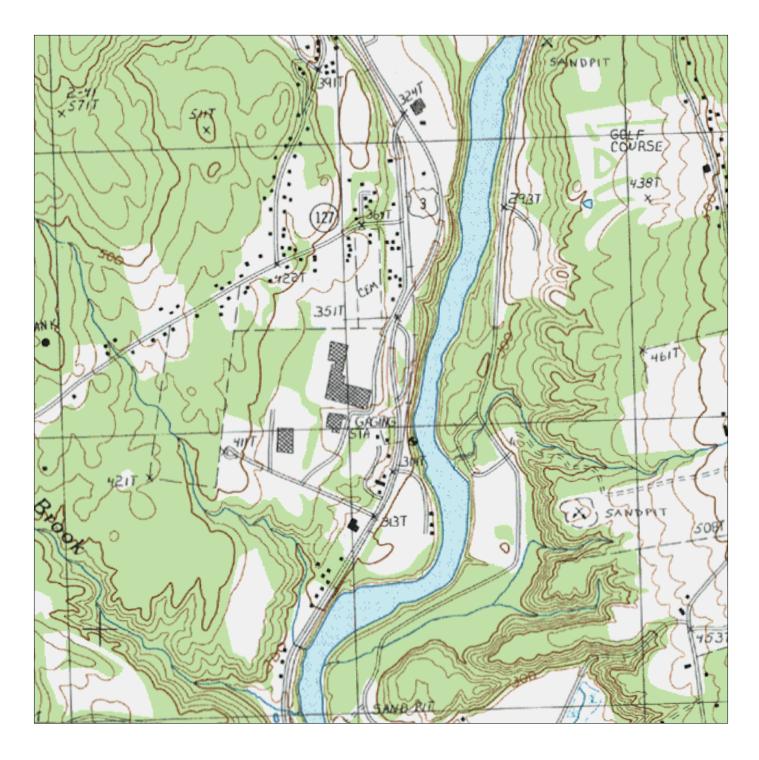




# **Site Location Map**

Topo: 0.75 Mile Radius

#### 599 S MAIN ST, FRANKLIN NH 03235



SOURCE: SCANNED USGS TOPOGRAPHIC QUADRANGLES SCANNED BY MAPTECH AND USGS DISTRIBUTED AUGUST, 2005.

Black Rings Represent 1/4 Mile Radii; Red Ring Represents 500 ft. Radius

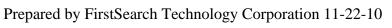
495 1,980 2,970 3,960





Map Name: FRANKLIN

Map Reference Code: 43071-D6-TF-024



Contour Interval: 20 feet

Date Created: 2000 Date Revised: None

FIGURE NO. Elevation: 342 1

JOB NO.

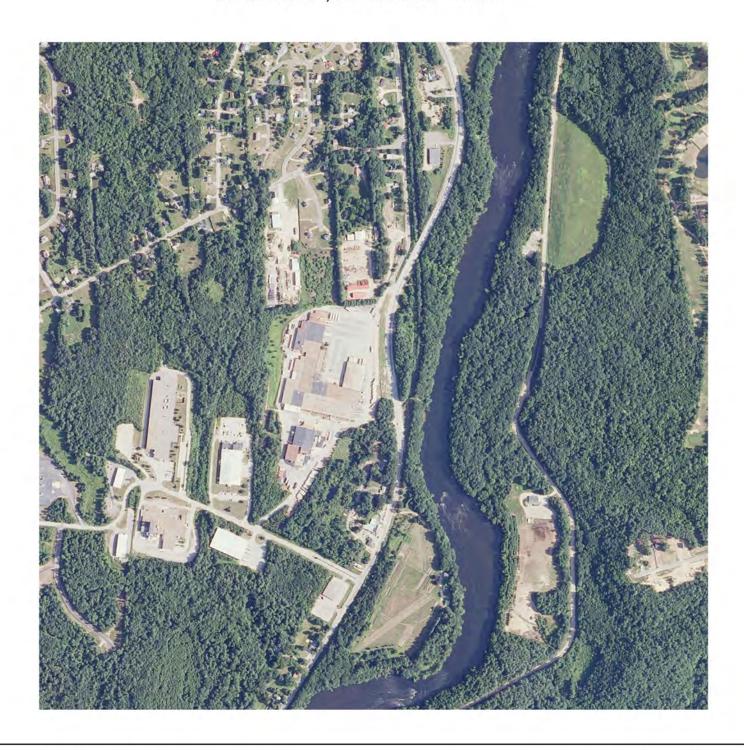
10001086



Historical Aerial Photo 2009



# 599 S MAIN ST, FRANKLIN NH 03235



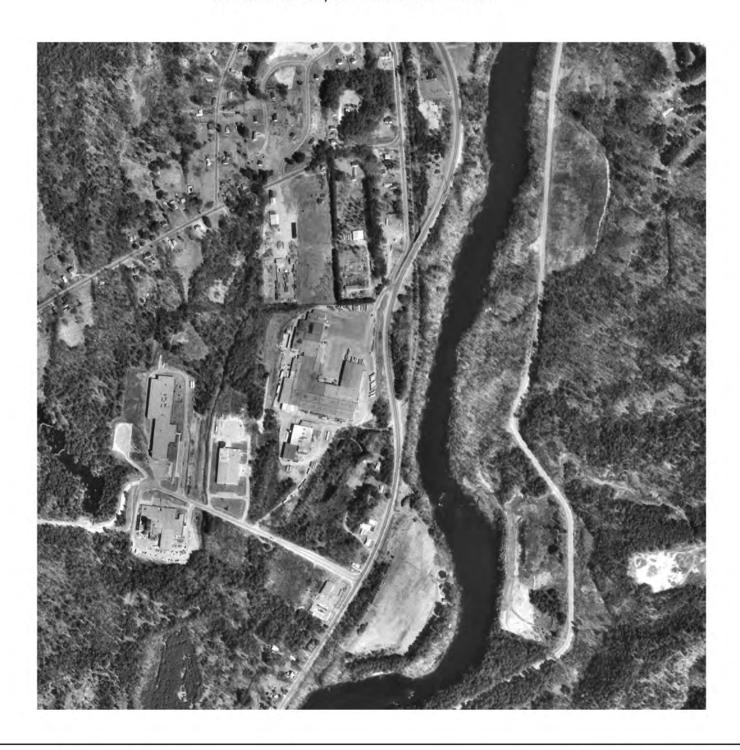
Job Number: 10001086 Target Site: (Latitude: 43.424604, Longitude: -71.654074)



Historical Aerial Photo 1998



# 599 S MAIN ST, FRANKLIN NH 03235



Job Number: 10001086 Target Site: (Latitude: 43.424604, Longitude: -71.654074)



Historical Aerial Photo 1981



# 599 S MAIN ST, FRANKLIN NH 03235



Job Number: 10001086 Target Site: (Latitude: 43.424604, Longitude: -71.654074)



Historical Aerial Photo 1951



# 599 S MAIN ST, FRANKLIN NH 03235



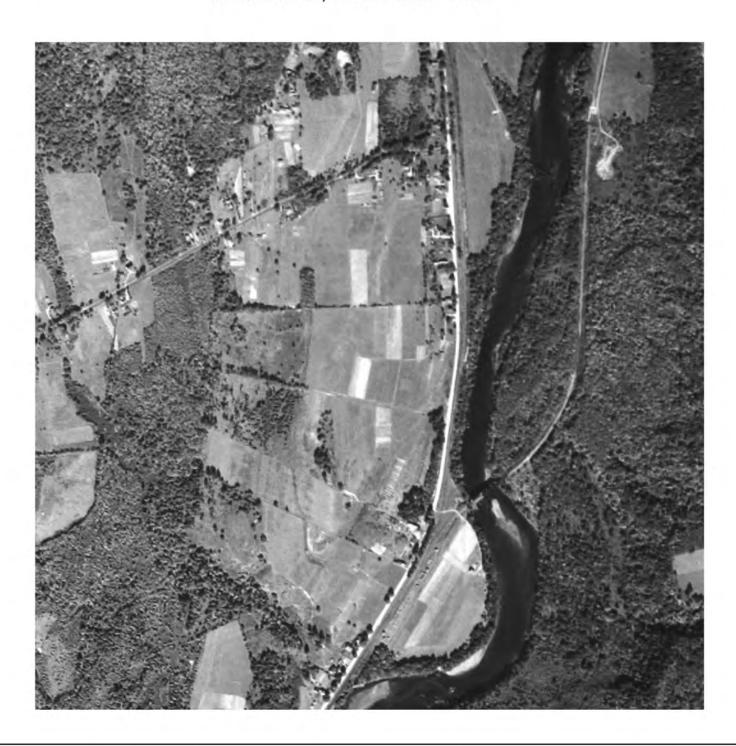
Job Number: 10001086 Target Site: (Latitude: 43.424604, Longitude: -71.654074)



Historical Aerial Photo 1942



# 599 S MAIN ST, FRANKLIN NH 03235



Job Number: 10001086 Target Site: (Latitude: 43.424604, Longitude: -71.654074)



# **CITY DIRECTORY REVIEW**

Report Date: November 29, 2010

Client Job Number: 10001086 FirstSearch Index Number: 247676

Site Address(es): 599 South Main Street

Franklin, NH 03235

A search was conducted for the subject area noted above to identify any Historical City Directory coverage/tenant information maintained at national repositories, local city/town libraries and/or various public sources.

The following information is the result of the search:

YEAR /	CLOSEST LOWER	SUBJECT ADDRESS (ES)	CLOSEST UPPER
SOURCE	ADDRESS LISTINGS	SUBJECT ADDRESS (ES)	ADDRESS LISTINGS
2007/Cole	380 South Main Street	Not Listed	601 South Main Street
Directory	Residential Listing		D&G Auto LLC
	400 South Main Street		Thermal Fabrications
	Blue Rock Building Supply		602 South Main Street
	583 South Main Street		Frank J Weglarz Education
	Watts Regulator Co Foundry		Weglarz Stanley
	Division		605 South Main Street
	Webster Valve Co		Residential Listing
	Worldwide Dedicated Inc		635 South Main Street
	590 South Main Street		Public Works Supply Co Inc
	Residential Listing		
2004/Cole	380 South Main Street	Carroll Dan	602 South Main Street
Directory	Residential Listing		Weglarz Stanley
	392 South Main Street		605 South Main Street
	Beauchine Auto Service		Residential Listing
	400 South Main Street		635 South Main Street
	Blue Rock Building Supply Inc		Public Works Supply Co
	Occupant Unknown		Occupant Unknown
	583 South Main Street		665 South Main Street
	United Parcel Service Inc		Residential Listing
	Webster Valve Co		
2000/Cole	403 South Main Street	Not Listed	605 South Main Street
Directory	Occupant Unknown		Residential Listing
	405 South Main Street		635 South Main Street
	Occupant Unknown		Public Works Supply Company
	433 South Main Street		Incorporated
	Residential Listing		665 South Main Street
	553 South Main Street		Residential Listing
	Trailer Rental Wilderness RV		675 South Main Street
			Occupant Unknown

1995/Cole   221 South Main Street   Not Listed   635 South Main Street   Public Works Supply Co Ir   675 South Main Street   Public Works Supply Co Ir   675 South Main Street   Multiple Residential Listing   709 South Main Street   Residential Listing   735 South Main Street
Ferns Propane Prescott Oil Co Prescott Tire Center  232 South Main Street Prescott Bradbury M 270 South Main Street Franklin Storage Co 403 South Main Street Multiple Residential Listing Frankling Residential Listing Frankling Storage Co 403 South Main Street Multiple Residential Listing  1992/Cole Directory Residential Listing 256 South Main Street Residential Listing 270 South Main Street
Ferns Propane Prescott Oil Co Prescott Tire Center  232 South Main Street Prescott Bradbury M 270 South Main Street Franklin Storage Co 403 South Main Street Multiple Residential Listing Frankling Residential Listing Frankling Storage Co 403 South Main Street Multiple Residential Listing  1992/Cole Directory Residential Listing 256 South Main Street Residential Listing 270 South Main Street
Prescott Oil Co Prescott Tire Center  232 South Main Street Prescott Bradbury M 270 South Main Street Franklin Storage Co 403 South Main Street Multiple Residential Listing  1992/Cole Directory Residential Listing Prescott Bradbury M 270 South Main Street Multiple Residential Listing  Not Listed Franklin Storage Co 403 South Main Street Multiple Residential Listing  1992/Cole Directory Residential Listing 256 South Main Street Residential Listing 270 South Main Street  Residential Listing 270 South Main Street Top South Main Street Multiple Residential Listing Multiple Residential Listing 709 South Main Street
Prescott Tire Center  232 South Main Street Prescott Bradbury M Prescott Bradbury M 270 South Main Street Pranklin Storage Co 403 South Main Street Multiple Residential Listing  1992/Cole Directory Residential Listing Proscott Bradbury M And Street Residential Listing Prescott Bradbury M And Street Residential Listing Proscott Bradbury M And Street Residential Listing Prescott Bradbury M And Street Residential Listing Prescott Bradbury M And Street Residential Listing Prescott Bradbury M And Street Residential Listing Proscott Bradbury M And Street Residential Listing And Street Multiple Residential Listing And Street Residential Listing Proscott Bradbury M And Street Residential Listing
232 South Main Street Prescott Bradbury M 270 South Main Street Franklin Storage Co 403 South Main Street Multiple Residential Listing  1992/Cole Directory Residential Listing Problem Color Main Street Not Listed Residential Listing Public Work Supply Co In 675 South Main Street Residential Listing 270 South Main Street To South Main Street Residential Listing 270 South Main Street To South Main Street
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270 South Main Street 709 South Main Street
403 South Main Street 735 South Main Street
Multiple Residential Listings Residential Listing
1966/Manning (No Address Numbers) Not Listed 601rear South Main Stree
<b>Directory</b> South Main Street Guay's Garage Inc auto
Multiple Residential Listings repairing
Residential Listing Residential Listing
Sundial Inn and Cabins 601 South Main Street
Residential Listing Residential Listing
Webster Valve Co 602 South Main Street
585off South Main Street Residential Listing
Residential Listing 605 South Main Street
587off South Main Street Residential Listing
Residential Listing  Residential Listing  Dutchess Antique Shop
589off South Main Street Sum res
Residential Listing (No Address Number)
Residential Listing
1961/Manning (No Address Numbers) Not Listed 601 South Main Street
<b>Directory</b> South Main Street Guay's Garage Inc auto
Wyman's Tourist Home & repairing
Multiple Residential Listings 605 South Main Street
Residential Listing Residential Listing
Sundial Inn and Cabins Dutchess Antique Shop
Webster Valve Co Multiple Residential Listing
585 South Main Street The Yankee Trader antiques
Residential Listing and oil
587 South Main Street  Punch Brook Road Begin
Residential Listing (No Address Numbers)
589 South Main Street Punch Brook Lunch Room
Residential Listing Multiple Residential Listing

CONTINUED			1
1955/Manning Directory	Salisbury Road Begins (No Address Numbers) Wyman's Tourist Home & Cabins Multiple Residential Listings Sundial Inn and Cabins 585 South Main Street Residential Listing 587 South Main Street Residential Listing 589 South Main Street Residential Listing	Not Listed	601 South Main Street Guay's Garage Inc auto repairing Multiple Residential Listings 605 South Main Street Residential Listing Dexter C Rowell antiques and auctioneer (No Address Numbers) Multiple Residential Listings Kitchen Garden Cabins Residential Listing Uncle Sam Cabins Multiple Residential Listings The Yankee Trader antiques Punch Brook Road Begins
105155	77.1	TT 1	Punch Brook Lunch Room
1951/Manning Directory	Unknown (Street Not Numbered) Salisbury Road Begins William H Wyman, cabins Residential Listing Residential Listing Sundial Inn and Cabins Residential Listing	Unknown (Street Not Numbered)	Unknown (Street Not Numbered)
Continued on newt	Smith Hill Road Begins		

CONTINUED	TT.1.	TT 1	77.1
1947/Manning	Unknown	Unknown	Unknown
Directory	(Street Not Numbered)	(Street Not Numbered)	(Street Not Numbered)
	Salisbury Road Begins		
	Residential Listing		
	Claude V Samuelson gas & oils		
	Residential Listing		
	Sun Dial Inn		
	Eugene E Harbour trucking		
	Residential Listing		
	Residential Listing		
	Guay's Garage auto repairing		
	Residential Listing		
	Residential Listing		
	Residential Listing		
	Punch Brook Lunch Room &		
	Filling Sta		
	Residential Listing		
	Residential Listing		
	Vacant		
	Residential Listing		
	Residential Listing		
	Smith Hill Ends		
1942/Manning	Unknown	Unknown	Unknown
Directory	(Street Not Numbered)	(Street Not Numbered)	(Street Not Numbered)
•	Salisbury Road Begins	(,	(11111111111111111111111111111111111111
	Residential Listing		
	Vacant		
	Champion Motors		
	Residential Listing		
	Claude V Samuelson gas & oils		
	Residential Listing		
	Vacant		
	Residential Listing		
	Residential Listing		
	Guay's Garage auto repairing		
	Residential Listing		
	George H P Perkins gas & oils		
	Residential Listing		
	Vacant		
	Punch Brook Lunch Room &		
	Filling Sta		
Continued on next			

CONTINUED			
1942/Manning	(Continued)		
Directory	Residential Listing		
(Continued)	Residential Listing		
	Vacant		
	Residential Listing		
	Residential Listing		
	Smith Hill Ends		
1937/Manning	Unknown	Unknown	Unknown
Directory	(Street Not Numbered)	(Street Not Numbered)	(Street Not Numbered)
	Salisbury Road Begins		
	Residential Listing		
	Residential Listing		
	Willmill Service Station		
	Residential Listing		
	Mrs Edna E Arnett gas & oils		
	Residential Listing		
	Guays Garage auto repairing		
	Residential Listing		
	George H P Perkins gas & oils		
	Residential Listing		
	Sunnybrook Inn		
	Residential Listing		
	Punch Brook Filling Sta		
	Residential Listing		
	Residential Listing		
	Vacant		
	Residential Listing		
	Smith Hill Ends		
1932/Manning	Unknown	Unknown	Unknown
Directory	(Street Not Numbered)	(Street Not Numbered)	(Street Not Numbered)
•	Salisbury Road Begins	· ·	
	Residential Listing		
	Residential Listing		
	Higgins Garage		
	Residential Listing		
	John S Heath filling sta		
	Residential Listing		
	Guays Garage auto repairing		
	Residential Listing		
	George H P Perkins gas & oils		
	Residential Listing		
	residential Library		l

1932/Manning	(Continued)	
Directory	Residential Listing	
(Continued)	Sunnybrook Inn	
	Residential Listing	
	Punch Brook Filling Sta	
	Residential Listing	
	Vacant	
	Residential Listing	
	Smith Hill Ends	

**Notes:** No further coverage available

#### **GLOSSARY OF TERMS**

- "No Listing/Not Listed" address not listed in the directory
- "Vacant" or "No Current Listing" status of address in directory
- "Residential Listing" one residential listing located at address
- "Multiple Residential Listings" more than one residential listing located at address
- "Multiple Retail Listings" more than one retail facility located at address
- "Multiple Business Listings" more than one business listing at address
- "Multiple Government Offices" more than one federal listing at an address
- "Multiple Municipal Listings" more than one municipal listing at an address
- "Multiple Military Listings" more than one military listing at an address
- "Street Not Listed" street not listed in directory

When multiple tenants/facilities are observed for one address, the information may be summarized as shown in the following examples:

- An apartment building will be represented by "Multiple Residential Listings"
- A retail shopping center will be represented by "Multiple Retail Listings" followed by a separate listing of sites, if present, which may contain the use of regulated/chemical/hazardous materials such as dry cleaners, photo finishers, hair salons, auto repair shops, etc.
- An office building consisting of attorneys, insurance, firms, or other facilities which do not indicate the use of regulated/chemical/hazardous materials will be represented by "Multiple Business Listings"

Residential addresses, including individual houses and apartment buildings, are listed as residential. Names of tenants can be provided if needed.

Unless otherwise noted, the subject address(es) plus four adjacent addresses up from the subject property and four addresses down from the subject property are included in the report, if available.

Although great care has been taken by FirstSearch Technology Corporation in compiling and verifying the information contained in this report to insure that it is accurate, FirstSearch Technology Corporation disclaims any and all liability for any errors, omissions, or inaccuracies in such information and data.

Community Revitalization, Economic Development, Environmental Remediation & Engineering

#### **Contact us:**

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