



March 31, 1998

Ms. Lynda Provencher
Assistant Hazardous Material Specialist
Site Management Section
Department of Environmental Conservation
Waste Management Division
103 South Main Street/West Bldg
Waterbury, Vermont 05671-0404

**RE: Subsurface Investigation Summary Report
Lily Transportation Corporation
Truck Terminal
36 San Remo Drive
South Burlington, Vermont 05403
Facility ID#958
DEC Site #97-2232**

Dear Ms. Provencher:

On behalf of Lily Transportation Corporation, Handex of New England, Inc. presents a Subsurface Investigation Summary Report to the Department of Environmental Conservation (DEC) regarding environmental conditions at the above location. In a letter dated November 4, 1997, the DEC approved a cost proposal to complete a surface investigation and summary report for the above location.

Should you have any questions or require additional information, please do not hesitate to contact our office or Mr. Mike Berube of Lily Transportation at 781-449-8811

Sincerely,
Handex of New England, Inc.


Patrick Korths
Hydrogeologist


George E. Campbell, LSP, PG
Senior Project Manager

cc: Michael M. Berube, Lily Transportation Corporation, Needham, MA
Cecil Royea, Jr., Lily Transportation Corporation, South Burlington, VT
Albert Audette, Superintendent, City of South Burlington Street Department, South Burlington, VT

**SUBSURFACE INVESTIGATION
SUMMARY REPORT**

*Lily Transportation Corporation
36 San Remo Drive
South Burlington, Vermont*

March 31, 1998

Prepared For:

*Lily Transportation Corporation
145 Rosemary Street
Needham, Massachusetts*

Prepared By:

*Handex of New England
398 Cedar Hill Street
Marlborough, MA 01752*



TABLE OF CONTENTS

1 INTRODUCTION	1
2 SITE DESCRIPTION	1
3 SENSITIVE RECEPTORS	1
4 LOCAL AND STATE FILE REVIEWS	2
4.1 PIZZAGALLI CONSTRUCTION WAREHOUSE, 76 SAN REMO DRIVE, CLOSED SITE	2
4.2 FORMER LAKE BUICK, 222 DORSET STREET, DEC #94-1637	2
4.3 CHAMPLAIN OIL COMPANY, 354 DORSET STREET, DEC #89-0432, CLOSED SITE.....	2
4.4 MUNSON EARTH MOVING CORPORATION, 366 DORRSET STREET, DEC #93-1417	3
4.5 FORMER NISSAN BAKERY, 370 DOREST STREET, DEC #96-2115	3
4.6 SOUTH BURLINGTON POLICE DEPARTMENT, 575 DORSET STREET, DEC #93-1384	3
5 SOIL EXCAVATION ACTIVITIES	3
6 SOIL DISPOSAL	4
7 MONITORING WELL INSTALLATION ASSESSMENT ACTIVITIES	4
8 GROUNDWATER MONITORING AND SAMPLING	4
9 SUMMARY	5
10 RECOMMENDATIONS	5

FIGURES

Figure 1	Locus Map
Figure 2	Site Information Map
Figure 3	Area Map
Figure 4	Soil & Groundwater Quality Map

APPENDICES

Appendix A.....	Initial Site Characterization Report
Appendix B	Boring Logs
Appendix C.....	Laboratory Report – Soil
Appendix D.....	Observation Well Gauge Report
Appendix E	Laboratory Report – Groundwater

**Subsurface Investigation Summary Report
Lily Transportation Corporation
Truck Terminal
36 San Remo Drive
South Burlington, Vermont 05403
DEC Site #97-2232**

1 Introduction

Handex of New England, Inc. (Handex) presents the results of a subsurface investigation conducted at the above location. Soil excavation activities related to diesel underground storage tank (UST) piping and dispenser island removal and replacement were conducted at the Lily Transportation Corporation (Lily) truck terminal in June 1997. Petroleum impacted soils were identified. The Department of Environmental Conservation (DEC) was notified of the release on June 16, 1997. The DEC granted approval to Lily to excavate petroleum-impacted soils and collect post-excavation samples. A summary report of these soil excavation activities, titled Initial Site Characterization Report, was completed by Handex and submitted to the DEC in August 1997. In response to this report, the DEC required that Lily perform a subsurface investigation to characterize the on-site soil and groundwater quality. In addition, the subsurface investigation was conducted to obtain information to evaluate the risk to health, safety, public welfare and the environment posed by the release at the site.

2 Site Description

The site is a truck terminal located at 36 San Remo Drive in South Burlington, Vermont, in a mixed commercial and residential area. One steel-framed building exists in the center of the site. The building has truck service, storage and office areas. A steel 10,000-gallon diesel UST is located southeast of the service building. DEC records indicate that the diesel UST has been in service since 1986. The site is partially paved. Figure 1, a Locus Map, shows the location of the site, the surrounding topography and local surface drainage. Figure 2, a Site Information Plan, illustrates the location of the service building, diesel dispenser, UST and other pertinent site features.

The property is registered with the South Burlington Assessor's Office, Book 373, Page 66-68, Parcel ID #1490-00036-C. The property is 70,567 square feet in area. Lily Transportation Corporation purchased the property from Lily Truck Corporation in December 1994. Vermont Trucking Lease Company owned the property from August 1972 to August 1980. Property ownership information prior to 1972 was not available at the Assessor's Office.

The site is serviced by underground electric, water, sanitary sewer, natural gas and overhead telephone entering the property from San Remo Drive. Subsurface drainage catch basins are located in San Remo Drive. Surface runoff discharges to an outfall located nearby Brookwood Drive. The utility locations are indicated on Figures 2 and 3.

3 Sensitive Receptors

Residences abut the site to the east. Commercial properties are located to the north, south and west across San Remo Drive. Figure 3, an Area Map, indicates the commercial and residential properties located in the vicinity the truck terminal site.

The Central School and Frederick H. Tuttle Middle School are located approximately 2,000 feet northeast and south from the site, respectively. Figure 1 indicates the location of the schools.

There are no surface water bodies on the property. The nearest surface water, Potash Brook, is approximately 2,000 feet southeast of the site. A National Wetlands Inventory (NWI) classified wetland is located approximately 1,000 feet northwest of the site.

According to the South Burlington Street Department and the Champlain Water Department, the site and the surrounding area are supplied by surface water pumped from Lake Champlain. The South Burlington Street and the Champlain Water Departments had no record of any private or public drinking water wells within one-half mile of truck terminal.

4 Local and State File Reviews

File reviews were conducted at South Burlington Town Offices and Hazardous Waste Management Office of the DEC at Waterbury, Vermont. Information was obtained concerning environmental conditions of sites located within 2,000 feet of the Lily truck terminal. Refer to Figure 3 for the location of the sites and their relative distance from the Lily truck terminal.

4.1 Pizzagalli Construction Warehouse, 76 San Remo Drive, Closed Site

One 10,000-gallon diesel and two 5,000-gallon gasoline USTs were removed from the Pizzagalli property on January 11, 1990. Photoionization detector (PID) readings were reportedly detected up to 320 parts per million (ppm) from collected soil sample. Free product was not observed in the excavations. Additional assessment has not occurred at this site.

4.2 Former Lake Buick, 222 Dorset Street, DEC #94-1637

A 4,000-gallon UST was removed at the former Lake Buick site on June 7, 1994. PID readings were detected up to 675 ppm from samples collected from the UST excavation. A sheen was observed on the water table in the UST excavation at approximately eight feet below the ground surface. Three monitoring wells were installed in September 1994 to determine the extent of subsurface petroleum contamination. A recent groundwater gauge and sample event was conducted at the former Lake Buick site on July 8, 1997. Groundwater was reported to flow to the south. Benzene, toluene, ethylbenzene and xylenes (BTEX) and methyl tertiary butyl ether (MTBE) were reportedly detected in monitoring wells up to 2,188 parts per billion (ppb) and 1,640 ppb, respectively. The DEC has required the responsible party to conduct semi-annual groundwater sampling at the location until levels are below Groundwater Enforcement Standards for benzene, which is 5 ppb, and Vermont Health Advisory for MTBE, which is 40 ppb.

4.3 Champlain Oil Company, 354 Dorset Street, DEC #89-0432, Closed Site

One 10,000-gallon diesel UST was removed at the Champlain Oil Company (COC) on September 13, 1989. Free product was reported to be visible on the water table in the excavation. Two USTs were installed in 1989 and removed in 1990 reportedly due to leakage. The DEC reportedly listed the site as closed in 1990 because free product was not detected in site monitoring wells.

4.4 Munson Earth Moving Corporation, 366 Dorset Street, DEC #93-1417

Several USTs have been in service on-site to fuel earth moving equipment and support vehicles. Six USTs, three former gasoline USTs and three existing diesel USTs have contributed to on-site soil and groundwater contamination. Releases have been identified: near the gasoline USTs, near the diesel USTs, and near a broken gasoline UST vent line. A groundwater gauge and sample event was conducted at the Munson site on August 29, 1997. Approximately 2.16 inches of free product were detected in a site monitoring well. Groundwater was reported to flow to the northwest. Benzene and MTBE were reportedly detected in monitoring wells up to 3,350 ppb and 633 ppb, respectively. Groundwater sampling events are conducted trice-annually at the site.

A gasoline-contaminated groundwater plume exists within an area between the former gasoline USTs and the Dorset Street stormwater drain. BTEX, MTBE and total petroleum hydrocarbons (TPH) associated with the releases at Munson have been detected in a wetland outfall area located approximately 1,200 feet northwest of the site. Dissolved hydrocarbon concentrations have been monitored periodically at the outfall.

4.5 Former Nissan Bakery, 370 Dorset Street, DEC #96-2115

One 1,000-gallon #2 fuel oil and one 1,000-gallon gasoline UST were removed at the former Nissan Bakery site on October 24, 1996. Free product was observed on the water table in the #2 fuel oil UST excavation at approximately 4.5 feet below the ground surface. PID readings were detected up to 220 ppm from samples collected from the gasoline UST excavation. The DEC requested the potentially responsible party, via correspondence dated February 7, 1997, to conduct a subsurface investigation to determine the extent of petroleum contamination. No other information was obtained.

4.6 South Burlington Police Department, 575 Dorset Street, DEC #93-1384

A 3,000-gallon gasoline UST was removed from South Burlington Fire Department parking lot area on April 29, 1993. The 3,000-gallon UST was used by the South Burlington Police Department. PID readings were detected up to 300 ppm from samples collected from the UST excavation. Several monitoring wells were subsequently installed to evaluate soil and groundwater quality at the site. A recent groundwater gauge and sample event was conducted on May 28, 1997. Groundwater was reported to flow to the east. BTEX was reportedly detected up to 17,184 ppb. MTBE was not detected. The DEC has required the responsible party to conduct annual groundwater sampling at the site.

5 Soil Excavation Activities

Soil excavation activities related to UST piping and dispenser island removal and replacement were conducted at the Lily truck terminal in June 1997. Soil samples were collected from the trench excavation bottom and nearby an existing 10,000-gallon diesel UST. The samples were screened for volatile organic vapors with an HNu Model PI-101 photoionization detector (PID) using the jar headspace procedure. PID readings ranged from 1 to 145 parts per million (ppm). Petroleum impacted-soils were observed in the location of the former diesel dispenser island and nearby the diesel UST. Water was encountered at 4 to 5 feet below grade. Free product was not observed in the excavations. Handex notified the DEC of PID levels. A summary report of these soil excavation activities, titled Initial Site Characterization Report, was completed by Handex and submitted to the DEC in August 1997. A copy of this report is attached as Appendix A.

Approximately 45 cubic yards of soil was excavated from the location of the former diesel dispenser. Excavated material included soil impacted by diesel fuel. Post-excavation soil samples were collected from the excavation sidewalks and base, and nearby the diesel UST. The samples were screened for volatile organic vapors using a PID. Hydrocarbons were detected up to 50 ppm. The excavation was backfilled with soil and peastone. Seven post-excavation samples were collected and analyzed for diesel range organics (DRO). DRO was not detected in PE-2, PE-3, PE-4, PE-5 and PE-6. DRO concentrations were detected at 160 mg/kg in PE-1 and 43 mg/kg in PE-7.

6 Soil Disposal

One composite sample was collected from the soil stockpile for pre-classification acceptance to a recycling facility on June 17, 1997. The sample was analyzed for Volatile Organic Compounds (VOCs) by EPA Method 8240 and diesel range organics via DRO, PCBs by EPA Method 8080, RCRA Metals via EPA 6010/7000. Diesel range organics were detected at 810 mg/kg. VOCs, PCBs, mercury, cadmium and silver were not detected in soil stockpile sample. Flashpoint was greater than 160 degrees Fahrenheit. Laboratory analytical certificates were submitted to the DEC as part of the Initial Site Characterization Report.

In October 1997, the DEC approved a proposal completed by Handex for soil disposal costs. Soil disposal is scheduled for the 2nd quarter of 1998.

7 Monitoring Well Installation Assessment Activities

On November 25, 1997, monitoring wells MW-1, MW-2, MW-3 and MW-4 were installed via a drilling rig using hollow-stem augers. Figure 2 illustrates the location of monitoring wells. During drilling activities, soil samples were screened for volatile organic vapors with a PID using the jar headspace procedure. Volatile organic vapor were not detected in MW-1, MW-2 and MW-3. Volatile organic vapor concentrations ranged from 1 to 5 ppm in MW-4.

Soil types were logged during well installation. Fine to coarse sand, some gravel and little silt was encountered from the ground surface to approximately 5 to 7 feet below grade. A clayey silt with very fine sand was present from 7 to 17 feet below the ground surface. Bedrock was not encountered during drilling activities. Boring logs are attached within Appendix B.

Soil samples were collected from the depth of the water table and transported via Chain of Custody protocol to Accutest Laboratories in Marlborough, Massachusetts. The samples were analyzed for TPH-DRO via EPA Method 8100 Modified. DRO was not detected in MW-1, MW-2 and MW-3. DRO was detected at 218 ppm in MW-4. Table 1 is a summary of site soil quality. Laboratory analytical certificates are attached as Appendix C.

8 Groundwater Monitoring and Sampling

Groundwater depths in monitoring wells were gauged on November 27 and December 1, 1997, using an electronic interface probe. Free product was not detected in any of the wells during the groundwater monitoring events. The wells were not surveyed on December 1, 1997, due to inclement weather conditions. Regional groundwater direction is west based on the location of Lake Champlain. Observation Well Gauge Reports are attached as Appendix D.

On December 1, 1997, groundwater sampling was conducted at the location. Prior to sampling, each well was purged of standing water by manually bailing three to five well volumes. The wells were allowed to recharge and

groundwater samples were collected using clean bailers. The samples were preserved at 4°C and transported via Chain of Custody protocol to Accutest Laboratories in Marlborough, Massachusetts and analyzed for TPH-DRO via EPA Method 8100 Modified. DRO was not detected in samples collected from MW-1, MW-2 and MW-3. DRO was detected at 0.834 ppm in MW-4. Laboratory analytical certificates are attached as Appendix E. Table 1 is a summary of site groundwater analytical data.

9 Summary

A subsurface investigation consisting of well installation and groundwater sampling was conducted at the Lily truck terminal in South Burlington, Vermont. In addition, information concerning the site and surrounding area was identified during file reviews performed at local and state agencies. The findings and information obtained are summarized below:

- Soil impacted by diesel fuel was detected during excavation activities in June 1997. DRO was not detected in 5 of 7 post-excavation samples. DRO was detected at 43 and 160 ppm in two post-excavation samples.
- Approximately 45 cubic yards of impacted soils was removed from the excavation.
- Residential buildings are approximately 75 feet to the east of the site property boundary.
- There are no surface water bodies on the property. The nearest surface water, Potash Brook, is approximately 2,000 feet southeast of the site. A NWI classified wetland located approximately 1,000 feet northwest of the site.
- There are no private or public drinking water wells within one-half mile of truck terminal.
- DRO was not detected in soil and groundwater samples collected from monitoring wells MW-1, MW-2 and MW-3. DRO was detected in MW-4 at 218 and 0.834 ppm, respectively, in soil and groundwater.

10 Recommendations

Due to the lack of sensitive receptors and low petroleum concentrations identified in subsurface soils and groundwater at the Lily truck terminal, there is no significant risk to the public or the environment at the site. Handex, on the behalf of Lily Transportation Corporation, recommends the following actions at the truck terminal in 1998:

- Approximately 45 cubic yards of soil will be removed from the site and recycled at a New Hampshire facility in the second quarter of 1998. This work has been approved by the DEC.
- Request no further action at Lily truck terminal due to low DRO concentrations in soil and groundwater.

Table 1
Diesel Range Organics - Soil and Groundwater Quality Data
Lily Transportation Corporation
Truck Terminal
36 San Remo Drive
South Burlington, Vermont

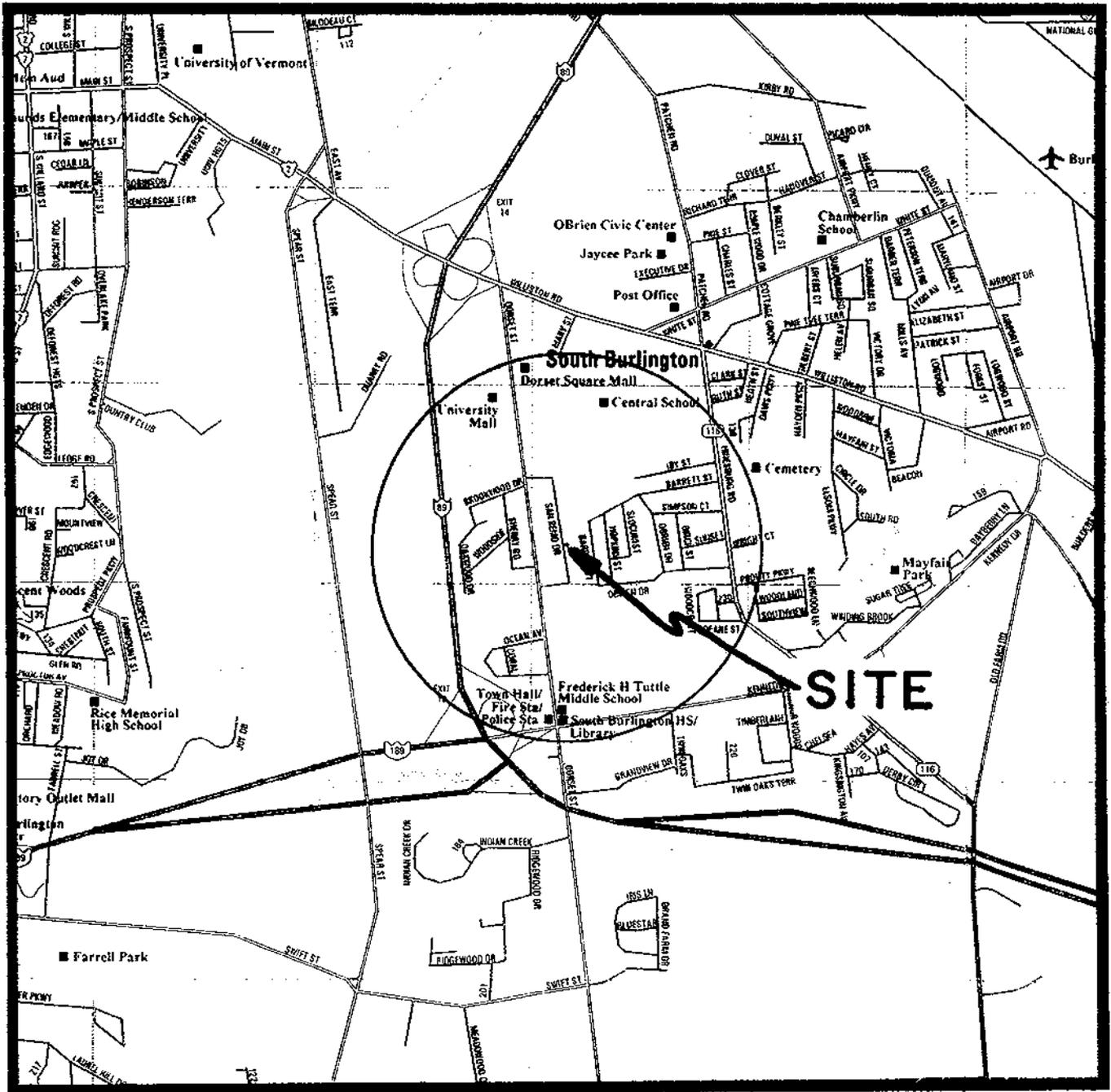
Sample Date	November 25, 1997	December 1, 1997
Sample Location	Soil	Groundwater
MW-1	ND	ND
MW-2	ND	ND
MW-3	ND	ND
MW-4	218	0.834

Notes:

Diesel range organic concentrations determined by EPA Method 8100 Modified.

Diesel range organic for soil are reported in mg/kg (parts per million)

Diesel range organic for groundwater are reported in mg/l (parts per million)

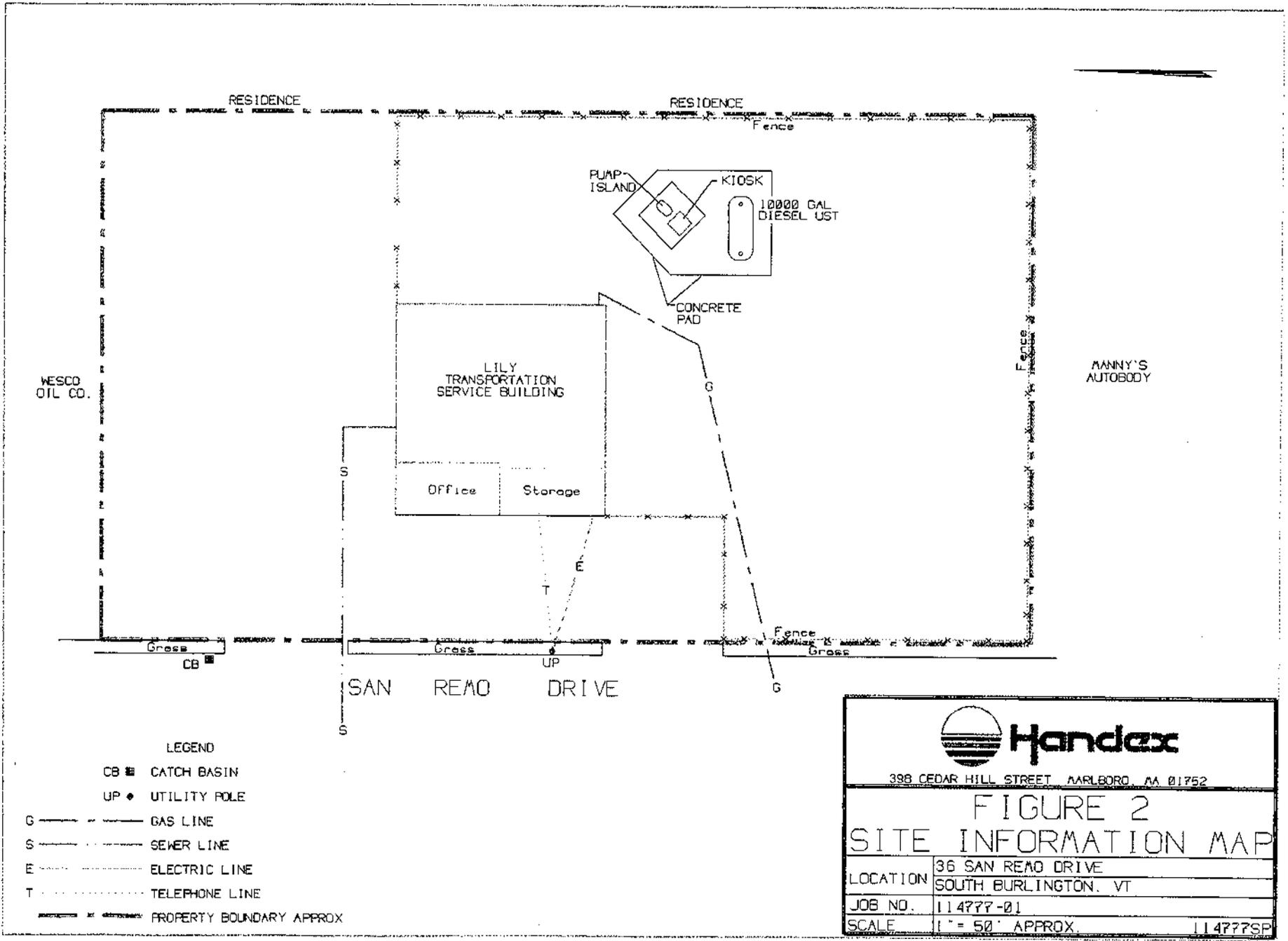




Handlex

398 CEDAR HILL STREET MARLBORO, MA 01752

<h2 style="margin: 0;">FIGURE 1</h2> <h2 style="margin: 0;">LOCUS MAP</h2>	
LOCATION	36 SAN REMO DRIVE SOUTH BURLINGTON, VT
JOB NO.	114777-01
SCALE	1" = 2000' APPROX.



- LEGEND
- CB ■ CATCH BASIN
 - UP ◆ UTILITY POLE
 - G ——— GAS LINE
 - S ——— SEWER LINE
 - E ——— ELECTRIC LINE
 - T ——— TELEPHONE LINE
 - — — — — PROPERTY BOUNDARY APPROX



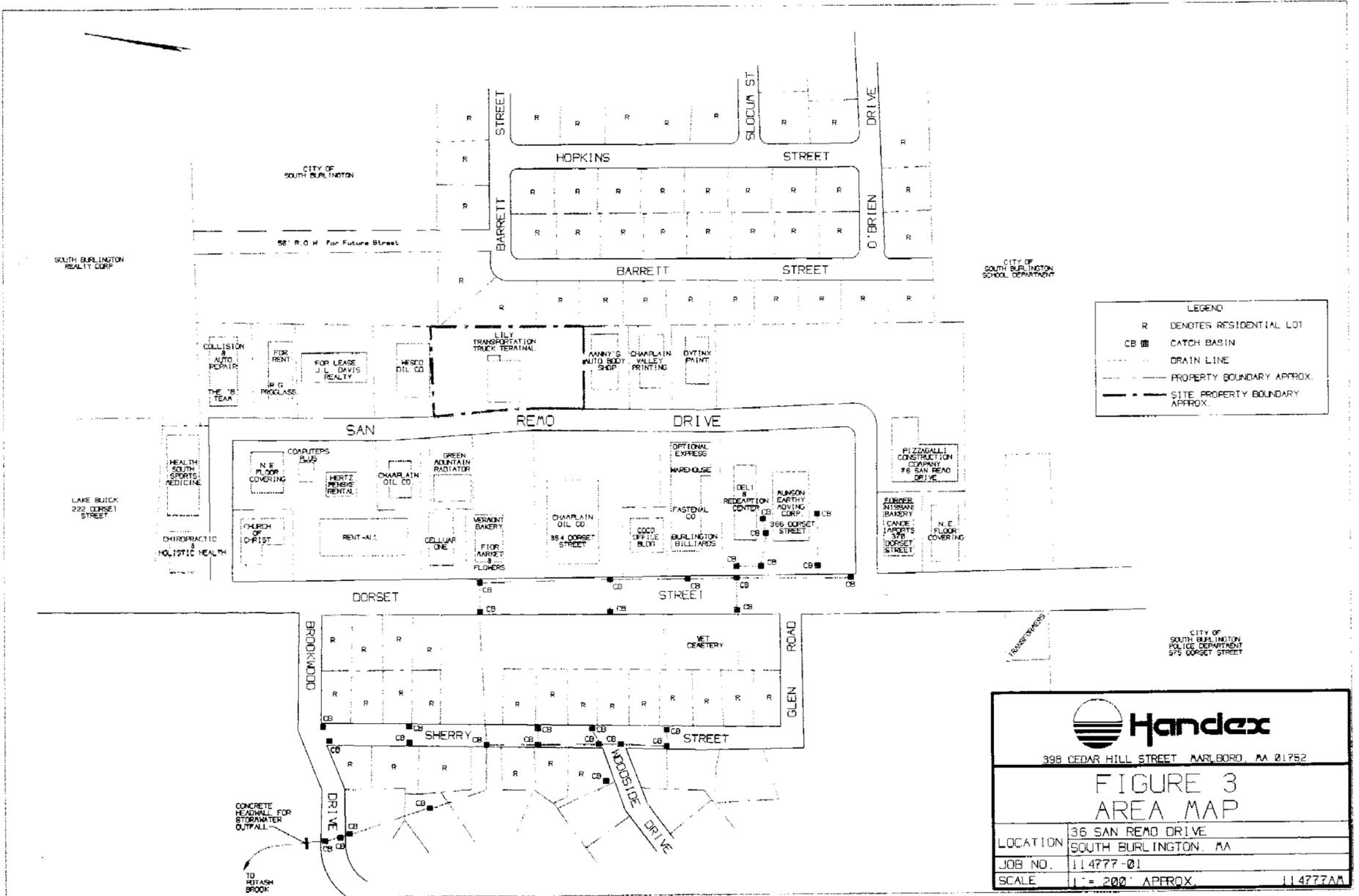
Handex

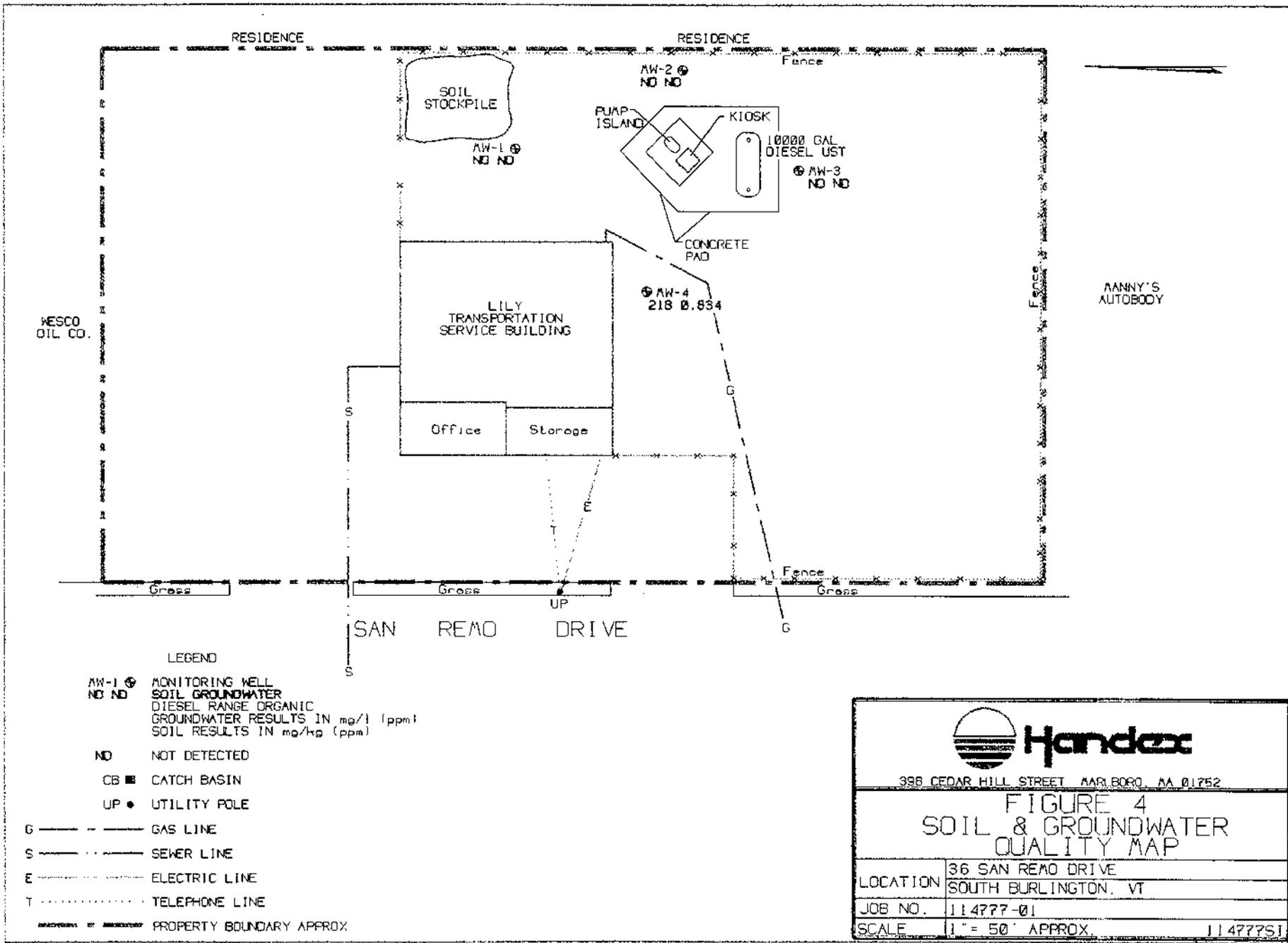
398 CEDAR HILL STREET MARLBORO MA 01752

FIGURE 2

SITE INFORMATION MAP

LOCATION	36 SAN REMO DRIVE	
	SOUTH BURLINGTON, VT	
JOB NO.	114777-01	
SCALE	1" = 50' APPROX.	114777SP





APPENDIX A

Initial Site Characterization Report



August 8, 1997

Mr. Chuck Schwer, Acting Chief
Site Management Section
Department of Environmental Conservation
103 South Main Street/West Office
Hazardous Materials Management Division
Waterbury, Vermont 05671-0404

**RE: Initial Site Characterization Report
Lily Transportation Corporation
36 San Remo Drive
South Burlington, Vermont 05403
Facility ID#958**

Dear Mr. Schwer:

On behalf of Lily Transportation Corporation (Lily), Handex of New England, Inc. (Handex) presents an Initial Site Characterization Report regarding environmental conditions related to underground storage tank (UST) piping and dispenser island replacement activities conducted by Northland at the above location.

Site Description

The site is located at 36 San Remo Drive in South Burlington, Vermont, in a mixed commercial and residential area. The location is operated as a truck leasing and service facility. One building exists in the center of the site. A dispenser island and 10,000-gallon diesel UST are located southeast of the service building. Figure 1, a Locus Map, shows the location of the site, the surrounding topography and local surface drainage. Figure 2, a Site Information Plan, illustrates the location of the service building, diesel dispenser, UST and other pertinent site features.

Sensitive Receptors

Residences abut the site to the east. Commercial properties are located to the north, south and west across San Remo Drive.

The Central School and Frederick H. Tuttle Middle School are located approximately 2,000 feet northeast and south; respectively, from the site.

There are no surface water bodies located on-site. The nearest surface water, Potash Brook, is approximately 2,000 feet southeast of the site.

According to the Champlain Water Department, the site and the surrounding area are supplied by surface water pumped from Lake Champlain. The South Burlington Department of Public Works has no record of any private or public drinking water wells within the vicinity of San Remo Drive.

Soil Excavation Activities

On June 10, 1997, Northland initiated soil excavation activities to remove and replace UST piping.

On June 16, 1997, soil samples were collected from the trench excavation bottom and nearby an existing 10,000-gallon diesel UST. The samples were screened for volatile organic vapors with an HNu Model PI-101 photoionization detector (PID) using the jar headspace procedure. PID readings ranged from 1 to 145 parts per million (ppm). Table 1 is a summary of PID screening results. Figure 3 indicates the soil sample locations. Stained soils were observed in the location of the former diesel dispenser island and nearby the diesel UST. Water was encountered between 4-5 feet below grade. Free product was not observed in the excavations.

On June 17, 1997, Northland excavated approximately 45 cubic yards of soil from the location of the former diesel dispenser. Excavated material included soil impacted by diesel fuel. Post-excavation soil samples were collected from the excavation sidewalls and base, and nearby the diesel UST. Free product was not observed in the excavations following soil removal. Figure 3 illustrates the post-excavation sample locations. The samples were screened for volatile organic vapors with a PID using the jar headspace procedure. PID readings ranged from non detectable to 50 ppm. Northland backfilled the excavation with stockpiled soil and peastone.

Post-excavation samples were transported via Chain of Custody protocol to NEI/GTEL Environmental Laboratories. The samples were analyzed for diesel range organics using Method API DRO. Diesel range organics were not detected in PE-2, PE-3, PE-4, PE-5 and PE-6. Diesel range organic concentrations were detected at 160 mg/kg in PE-1 and 43 mg/kg in PE-7. Table 2 is a summary of post-excavation soil quality data. Laboratory analytical certificates are attached as Appendix A.

Soil Classification and Disposal

On June 17, 1997, one composite sample was collected from the soil stockpile for pre-classification acceptance to a recycling facility. The samples were analyzed for Volatile Organic Compounds (VOCs) by EPA Method 8240 and diesel range organics via API DRO, PCBs by EPA Method 8080, RCRA Metals via EPA 6010/7000. Diesel range organics were detected at 810 mg/kg. VOCs, PCBs, mercury, cadmium and silver were not detected in soil stockpile sample. Flashpoint was greater than 160 degrees Fahrenheit. Laboratory analytical certificates are attached as Appendix A.

Photos

Photos of trenching, soil excavation and backfilling were taken on June 16 and 17, 1997. The Photos 1 through 6 are attached within Appendix B.

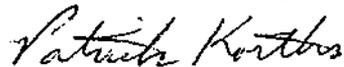
Summary

The Initial Site Characterization Report results indicate the following:

- Soil impacted by diesel fuel was detected during excavation. Approximately 45 cubic yards of impacted soils was removed from the excavation and will be recycled at a New Hampshire facility upon approval from the Vermont Department of Environmental Conservation.
- Diesel range organics were not detected in 5 of 7 post-excitation samples. Diesel range organics were detected up to 160 mg/kg in two post-excitation samples.
- Residential buildings are approximately 75 feet to the east of the site.

Should you have any questions or require additional information, please do not hesitate to contact our office or Mr. Mike Berube of Lily Transportation at (617) 449-8811.

Sincerely,
Handex of New England, Inc.



Patrick Korths
Hydrogeologist



George E. Campbell, LSP, PG
Senior Project Manager

cc: Michael M. Berube, Lily Transportation Corp., Needham, MA
Cecil Royea, Jr., Lily Transportation Corp., South Burlington, VT

**Table 1
 PID Soil Screening Summary
 Lily Trucking Facility
 36 San Remo Drive
 South Burlington, Vermont
 June 16, 1997**

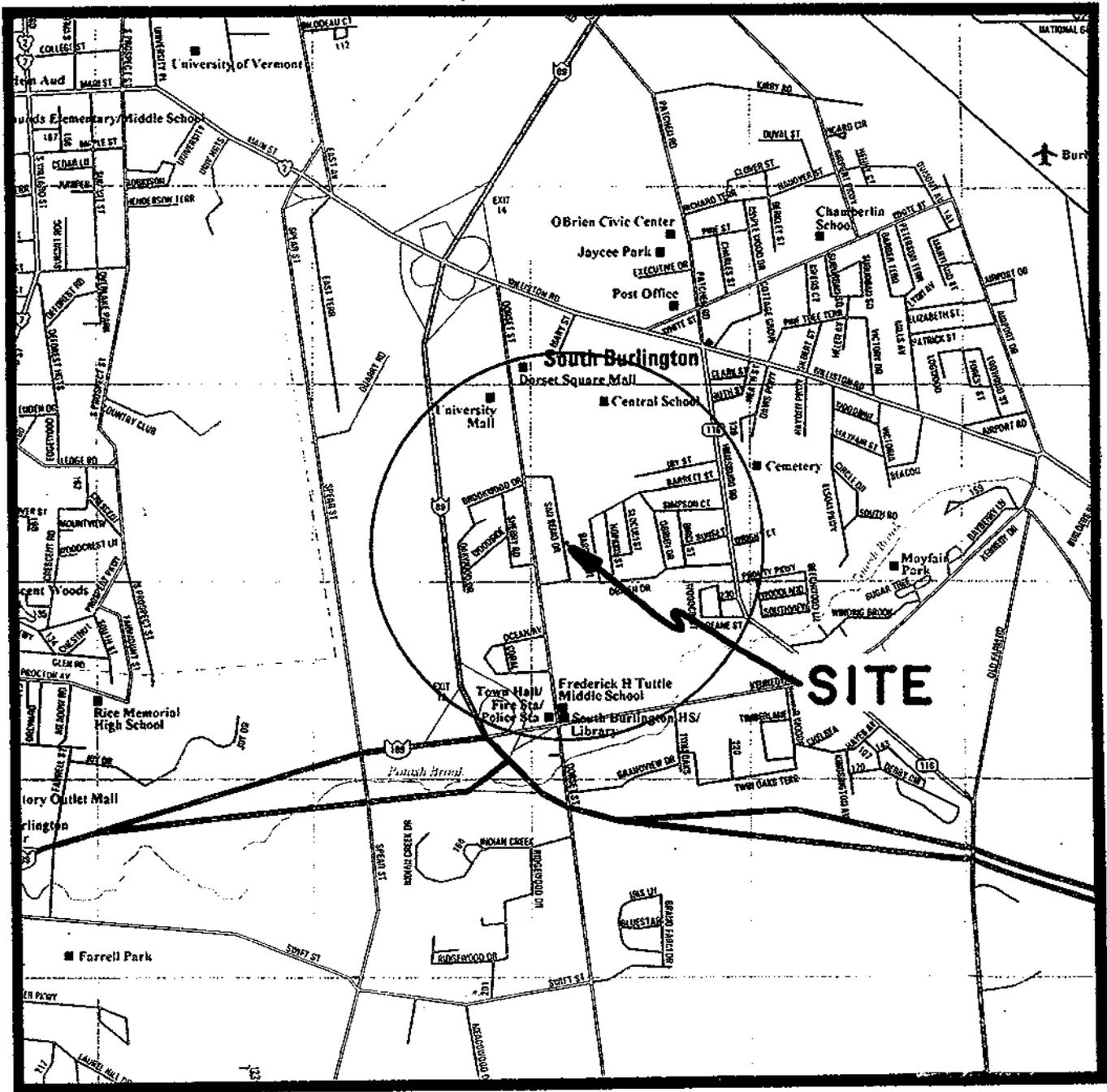
Sample	Sample Depth (feet)	PID Heading Reading (ppm)
SS-1	3 - 4	125
SS-2	3 - 4	28
SS-3	3 - 4	7
SS-4	3 - 4	80
SS-5	3 - 4	2
SS-6	3 - 4	1
SS-7	3 - 4	2.5
SS-8	3 - 4	7
SS-9	3 - 4	110
SS-10	3 - 4	110
SS-11	3 - 4	68
SS-12	3 - 4	65
SS-13	3 - 4	2
SS-14	3 - 4	45
SS-15	3 - 4	Not Detected
SS-16	3 - 4	110
SS-16	4 - 5	145

Notes: PID readings determined with an HNu Model PI-101 photoionization detector using the jar headspace procedure

Table 2
Post-Excavation Soil Quality Data
Lily Trucking Facility
36 San Remo Drive
South Burlington, Vermont
June 17, 1997

Sample	Sample Depth (feet)	PID Headspace Reading (ppm)	Diesel Range Organics (mg/kg)
PE-1	5 - 7	50	160
PE-2	5 - 7	ND	ND
PE-3	4 - 6	7	ND
PE-4	5 - 7	ND	ND
PE-5	7 - 8	20	ND
PE-6	7 - 8	25	ND
PE-7	5 - 6	40	43

Notes: PID readings determined with an HNu Model PI-101 photoionization detector using the jar
 headspace procedure
 Diesel range organics are reported in mg/kg (parts per million)

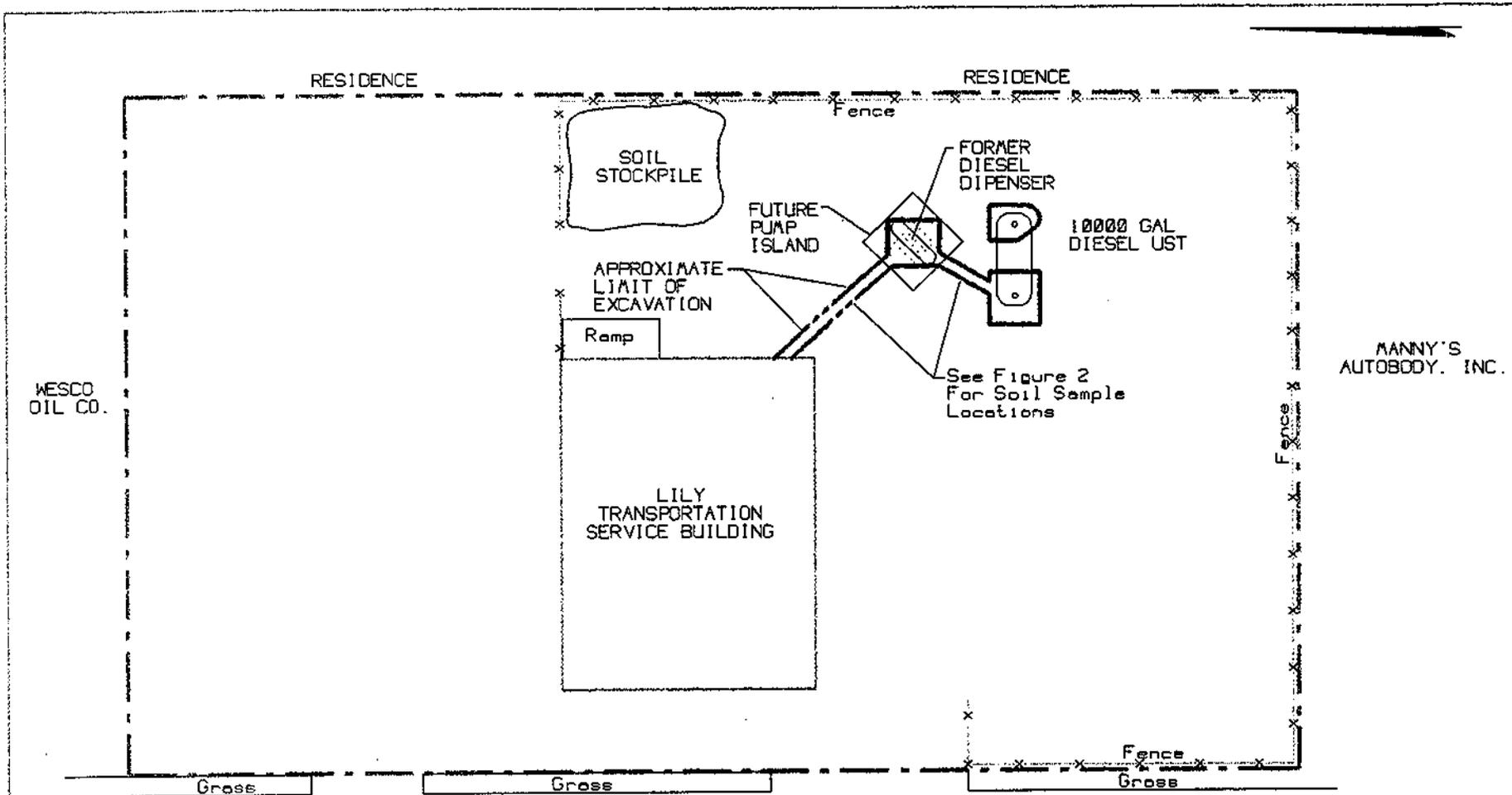




Handlex

398 CEDAR HILL STREET MARLBORO, MA 01752

<h2>FIGURE 1</h2> <h2>LOCUS MAP</h2>	
LOCATION	36 SAN REMO DRIVE SOUTH BURLINGTON, VT
JOB NO.	114777-01
SCALE	1" = 2000' APPROX.



SAN REMO DRIVE

LEGEND

- APPROXIMATE LIMIT OF EXCAVATION
- - - - - PROPERTY BOUNDARY APPROX.



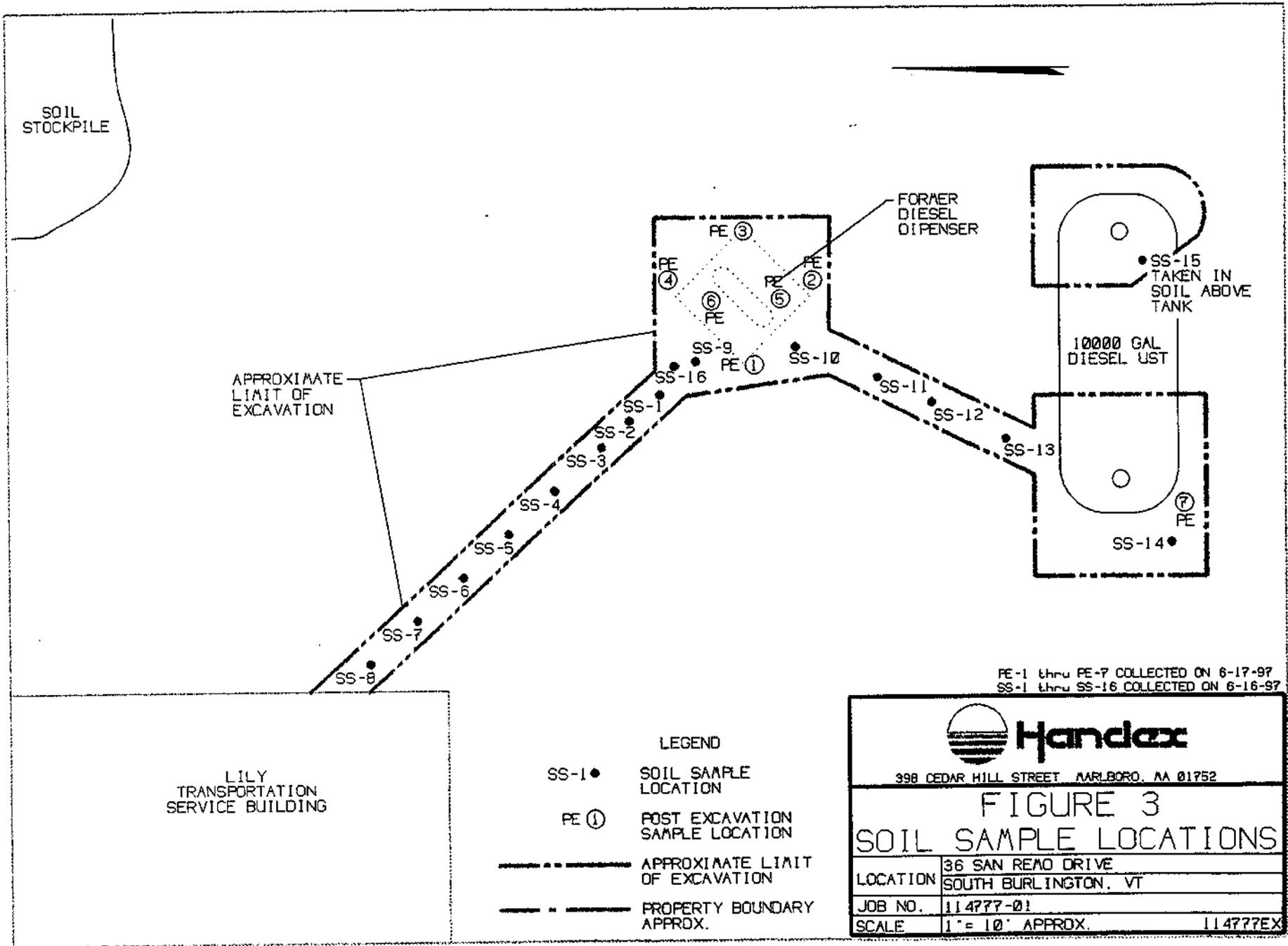
Handlex

398 CEDAR HILL STREET MARLBORO, MA 01752

FIGURE 2

SITE PLAN

LOCATION	36 SAN REMO DRIVE	
	SOUTH BURLINGTON, VT	
JOB NO.	114777-01	
SCALE	1" = 40' APPROX.	114777SP



APPENDIX B

Boring Logs



Handex of New England

WELL LOG: MW-1

Permit #: <i>N/A</i>	Drill Date: <i>11/25/97</i>	Use: <i>Monitoring</i>
Location: <i>36 San Remo Drive, South Burlington, VT</i>		Owner Loc #: <i>N/A</i>
Owner: <i>Lily Transportation Corporation</i>		Handex Loc #: <i>114777</i>
Owner Address: <i>Needham, MA</i>	BORING - Depth: <i>17 ft.</i>	Diameter: <i>8 in.</i>
Drilling Method: <i>Hollow Stem Auger</i>	CASING - Length: <i>2.5 ft.</i>	Diameter: <i>2 in.</i>
Sampling Method: <i>Split Spoon</i>	SCREEN - Length: <i>12 ft.</i>	Diameter: <i>2 in.</i>
Static Water Level:	WELL - Depth: <i>15.5 ft.</i>	

Depth (ft.)	Sample ID	Sample Depth	Blows/6 in.	HNu (ppm)	Graphic Log	Geologic Description	Well Diagram
						Brown fine to coarse SAND, some fine to coarse Gravel.	
5	SS-1		11,7,7,5			Brown fine to coarse SAND and Clayey SILT, little (-) fine to coarse Gravel, occasional Wood Fragments/Organics.	
	SS-2		4,6,9,11	ND		Brown fine to coarse SAND, little Silt.	
10	SS-3		9,9,6,6	ND		Grey Clayey SILT and ORGANICS.	
15	SS-4		6,4,7,7	ND			
20							

NOTES: = Sample interval/recovery

Geologist: Patrick Korths Driller: Green Mountain Boring



Handex of New England

WELL LOG: MW-2

Permit #: <i>N/A</i>	Drill Date: <i>11/25/97</i>	Use: <i>Monitoring</i>
Location: <i>36 San Remo Drive, South Burlington, VT</i>		Owner Loc #: <i>N/A</i>
Owner: <i>Lily Transportation Corporation</i>		Handex Loc #: <i>114777</i>
Owner Address: <i>Needham, MA</i>	BORING - Depth: <i>17 ft.</i>	Diameter: <i>8 in.</i>
Drilling Method: <i>Hollow Stem Auger</i>	CASING - Length: <i>2.5 ft.</i>	Diameter: <i>2 in.</i>
Sampling Method: <i>Split Spoon</i>	SCREEN - Length: <i>12 ft.</i>	Diameter: <i>2 in.</i>
Static Water Level:	WELL - Depth: <i>15.5 ft.</i>	

Depth (ft.)	Sample ID	Sample Depth	Blows/6 in.	HNu (ppm)	Graphic Log	Geologic Description	Well Diagram
	Grab			ND		Light Brown fine to coarse SAND, little fine to coarse Gravel.	
5	SS-1		7,6,5,6	ND		Dark Brown fine to coarse SAND, little fine to coarse Gravel, little (-) Silt.	
				ND		Light Brown fine to coarse SAND, little Silt.	
10	SS-2		9,4,5,5	ND		Grey fine to coarse SAND, some Silt.	
15	SS-3		7,10,10,10	ND		Grey CLAY and SILT, little (-) Sand.	
20							

NOTES: = Sample interval/recovery

Geologist: Patrick Korths Driller: Green Mountain Boring



Handex of New England

WELL LOG: MW-3

Permit #: <i>N/A</i>	Drill Date: <i>11/26/97</i>	Use: <i>Monitoring</i>
Location: <i>38 San Remo Drive, South Burlington, VT</i>		Owner Loc #: <i>N/A</i>
Owner: <i>Lily Transportation Corporation</i>		Handex Loc #: <i>114777</i>
Owner Address: <i>Needham, MA</i>	BORING - Depth: <i>17 ft.</i>	Diameter: <i>8 in.</i>
Drilling Method: <i>Hollow Stem Auger</i>	CASING - Length: <i>2.5 ft.</i>	Diameter: <i>2 in.</i>
Sampling Method: <i>Split Spoon</i>	SCREEN - Length: <i>12 ft.</i>	Diameter: <i>2 in.</i>
Static Water Level:	WELL - Depth: <i>15.5 ft.</i>	

Depth (ft.)	Sample ID	Sample Depth	Blows/6 in.	HNu (ppm)	Graphic Log	Geologic Description	Well Diagram
0							
5	SS-1		8,9,7,9	ND		Brown fine to coarse SAND, some fine to coarse Gravel.	
						Orange/Brown fine to coarse SAND, little Silt.	
						Brown fine to coarse SAND, trace fine to coarse Gravel.	
						Brown Clayey SILT, little fine to medium Sand.	
10	SS-2		7,10,7,5	ND		Grey very fine to coarse SAND, little Clayey Silt.	
15	SS-3		3,4,6,10	ND		Grey Clayey SILT, little very fine Sand.	
20							

NOTES: = Sample interval/recovery

Geologist: Patrick Korthis

Driller: Green Mountain Boring



Handex of New England

WELL LOG: MW-4

Permit #: <i>N/A</i>	Drill Date: <i>11/25/97</i>	Use: <i>Monitoring</i>
Location: <i>38 San Remo Drive, South Burlington, VT</i>		Owner Loc #: <i>N/A</i>
Owner: <i>Lily Transportation Corporation</i>		Handex Loc #: <i>114777</i>
Owner Address: <i>Needham, MA</i>	BORING - Depth: <i>17 ft.</i>	Diameter: <i>8 in.</i>
Drilling Method: <i>Hollow Stem Auger</i>	CASING - Length: <i>2.5 ft.</i>	Diameter: <i>2 in.</i>
Sampling Method: <i>Split Spoon</i>	SCREEN - Length: <i>12 ft.</i>	Diameter: <i>2 in.</i>
Static Water Level:	WELL - Depth: <i>15.5 ft.</i>	

Depth (ft.)	Sample ID	Sample Depth	Blows/6 in.	HNu (ppm)	Graphic Log	Geologic Description	Well Diagram
	Grab			1		Brown fine to coarse SAND, little fine to coarse Gravel, little (-) Silt.	<p>Top of casing set 5 feet below grade</p> <p>2" Sched. 40 PVC</p> <p>2" Sched. 40 PVC (0.020 slot)</p> <p>#1 Morrie Well Gravel</p> <p>Bentonite Seal Portland Cement</p>
5	SS-1		16,19,11,10	5		Light Grey/Black fine to coarse SAND, trace SILT and CLAY.	
10	SS-2		10,12,17,20	1		Light Brown Clayey SILT, some (+) fine to coarse Sand.	
15	SS-3		4,3,4,5	NO		Grey Clayey SILT and little (-) fine SAND.	
20							

NOTES: = Sample interval/recovery

Geologist: Patrick Korths

Driller: Green Mountain Boring

APPENDIX C

Laboratory Report - Soil

Technical Report for**Handex of New England Inc.**

Lily Transportation, 36 San Remo Dr., S. Burlington, VT

114777-01

Accutest Job Number: M3026

Report to:**Handex of New England Inc.
398 Cedar Hill Street
Marlborough, MA 01752****ATTN: Paul Thibodeau****Total number of pages in report: 7**
**Reza Tand
Lab Director**

Certifications: MA (MA136) CT (PH-0109) NH (250293) NJ (59928) RI (A-71) ME (MA136)

Results relate only to the items tested.

This report shall not be reproduced, except in its entirety, without the written approval of Accutest Laboratories.



Sample Summary

Handex of New England Inc.

Date: 12/10/97
Job No: M3026

Lily Transportation, 36 San Remo Dr., S. Burlington, VT
Project No: 114777-01

Sample Number	Collected Date	Time By	Received	Matrix Code	Type	Client Sample ID
M3026-1	11/25/97	09:30 PK	11/26/97	SO	Soil	MW-1
M3026-2	11/25/97	10:45 PK	11/26/97	SO	Soil	MW-2
M3026-3	11/25/97	11:45 PK	11/26/97	SO	Soil	MW-3
M3026-4	11/25/97	13:30 PK	11/26/97	SO	Soil	MW-4



Report of Analysis

Client Sample ID: MW-1	
Lab Sample ID: M3026-1	Date Sampled: 11/25/97
Matrix: SO - Soil	Date Received: 11/26/97
Method: SW846-8100M	Percent Solids: 84.4
Project: Lily Transportation, 36 San Remo Dr., S. Burlington, VT	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	GCF4879.D	1	12/09/97	CZ	12/08/97	OP340	GCF167
Run #2							

CAS No.	Compound	Result	RDL	Units	Q
	TPH-DRO (Semi-VOA)	ND	4.8	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
438-22-2	5a-Androstane	65%		40-150%

ND = Not detected
RDL = Reported Detection Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates that analyte is found in associated method blank
N = Indicates presumptive evidence of a compound



Report of Analysis

Client Sample ID: MW-2	Date Sampled: 11/25/97
Lab Sample ID: M3026-2	Date Received: 11/26/97
Matrix: SO - Soil	Percent Solids: 86.1
Method: SW846-8100M	
Project: Lily Transportation, 36 San Remo Dr., S. Burlington, VT	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	GCF4880.D	1	12/09/97	CZ	12/08/97	OP340	GCF167
Run #2							

CAS No.	Compound	Result	RDL	Units	Q
	TPH-DRO (Semi-VOA)	ND	4.5	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
438-22-2	5a-Androstane	68%		40-150%

ND = Not detected RDL = Reported Detection Limit E = Indicates value exceeds calibration range	J = Indicates an estimated value B = Indicates that analyte is found in associated method blank N = Indicates presumptive evidence of a compound
--	--



ACCUTEST

Report of Analysis

Client Sample ID: MW-3	Date Sampled: 11/25/97
Lab Sample ID: M3026-3	Date Received: 11/26/97
Matrix: SO - Soil	Percent Solids: 80.2
Method: SW846-8100M	
Project: Lily Transportation, 36 San Remo Dr., S. Burlington, VT	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	GCF4881.D	1	12/09/97	CZ	12/08/97	OP340	GCF167
Run #2							

CAS No.	Compound	Result	RDL	Units	Q
	TPH-DRO (Semi-VOA)	ND	4.8	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
438-22-2	5a-Androstane	66%		40-150%

ND = Not detected
RDL = Reported Detection Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates that analyte is found in associated method blank
N = Indicates presumptive evidence of a compound



Report of Analysis

Client Sample ID: MW-4	Date Sampled: 11/25/97
Lab Sample ID: M3026-4	Date Received: 11/26/97
Matrix: SO - Soil	Percent Solids: 91.4
Method: SW846-8100M	
Project: Lily Transportation, 36 San Remo Dr., S. Burlington, VT	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	GCF4882.D	1	12/09/97	CZ	12/08/97	OP340	GCF167
Run #2							

CAS No.	Compound	Result	RDL	Units	Q
	TPH-DRO (Semi-VOA)	218	4.3	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
438-22-2	5a-Androstane	110%		40-150%

ND = Not detected
 RDL = Reported Detection Limit
 E = Indicates value exceeds calibration range
 J = Indicates an estimated value
 B = Indicates that analyte is found in associated method blank
 N = Indicates presumptive evidence of a compound

Job No. M3026
 Project No. 114777-01

CHAIN OF CUSTODY RECORD



398 CEDAR HILL STREET
 MARLBORO, MA 01752
 (508) 481-5750
 FAX (508) 481-5159

Client Lily Transportation Corporation
145 Rosemary Street
 Address
Needham, MA 02194
 - City State/Zip
 Attention Mike Berube Telephone # 781-449-8811

REQUESTED TURN AROUND:

1 WEEK 2 WEEKS 3 WEEKS NORMAL

APPROVED: _____
 OTHER: _____

SAMPLE ID	DATE SAMPLED	TIME SAMPLED	SAMPLED BY	MATRIX	NO CONT	PRES	FIELD ID	POINT OF COLLECTION	ANALYSIS REQUEST
M3026-1	11/25/97	9:30 am	P.K.	Soil	3	4°C	Lily Transportation Corp. 36 San Remo Drive South Burlington, VT	MW-1	8100 DRO
-2		10:45 am			3	4°C		MW-2	
-3		11:45 am			3	4°C		MW-3	
-4		1:30 pm			4	4°C		MW-4	
						4°C			
						4°C			
						4°C			
						4°C			
1. RELINQUISHED BY: <u>Patrick Keith</u>		DATE/TIME: <u>11-25-97 2:40 pm</u>		RECEIVED BY: <u>FEDEX</u>		DATE/TIME: _____		3. RELINQUISHED BY: _____	
2. RELINQUISHED BY: <u>FEDEX</u>		DATE/TIME: <u>11/26/97 10:15</u>		RECEIVED BY: <u>[Signature]</u>		DATE/TIME: <u>11/26/97 10:15</u>		4. RELINQUISHED BY: _____	

LOC 2A1

APPENDIX D

Observation Well Gauge Report

OBSERVATION WELL GAUGE REPORTS

CLIENT: LILY
 LOCATION: S.BURLINGTON-36 SAN REMO DR.
 STATE: VT

CLIENT CODE:
 HANDEX CODE: 114777

Print date: 4/02/98 Page 1

MONITORING DATE	WELL TYPE-#	C	PRODUCT DEPTH (feet)	WATER DEPTH (feet)	PRODUCT THICK. (feet)	PRODUCT ELEV. (feet)	GW ELEV. (feet)	CORR GW ELEV. (feet)
28-Nov-97	MW-1			4.32				
28-Nov-97	MW-2			3.95				
28-Nov-97	MW-3			3.59				
28-Nov-97	MW-4			4.19				
1-Dec-97	MW-1			4.30				
1-Dec-97	MW-2			3.78				
1-Dec-97	MW-3			3.37				
1-Dec-97	MW-4			4.13				

"C"omments: [P = Pumping; N = Non-Pumping; B/A = Before/After Adjustment]
 [I = Well Inaccessible; # = nth Monitoring Event of Day]
 [D = Dry Well; F = Film or Trace of Product] 114777



APPENDIX E

Laboratory Report – Groundwater

Technical Report for

Handex of New England Inc.

Lily Transportation, 36 San Remo Dr., S. Burlington, VT

114777-01

Accutest Job Number: M3049

Report to:

Handex of New England Inc.
398 Cedar Hill Street
Marlborough, MA 01752

ATTN: Paul Thibodeau

Total number of pages in report: 7



Reza Tand
Lab Director

Certifications: MA (MA136) CT (PH-0109) NH (250293) NJ (50928) RI (A-71) ME (MA136)

Results relate only to the items tested.

This report shall not be reproduced, except in its entirety, without the written approval of Accutest Laboratories.



Sample Summary

Handex of New England Inc.

Date: 12/11/97
Job No: M3049

Lily Transportation, 36 San Remo Dr., S. Burlington, VT
Project No: 114777-01

Sample Number	Collected Date	Time By	Received	Matrix Code	Type	Client Sample ID
M3049-1	12/01/97	11:45 PK	12/02/97	AQ	Water	MW-1
M3049-2	12/01/97	11:50 PK	12/02/97	AQ	Water	MW-2
M3049-3	12/01/97	11:55 PK	12/02/97	AQ	Water	MW-3
M3049-4	12/01/97	12:05 PK	12/02/97	AQ	Water	MW-4

**Report of Analysis**

Client Sample ID: MW-1	Date Sampled: 12/01/97
Lab Sample ID: M3049-1	Date Received: 12/02/97
Matrix: AQ - Water	Percent Solids: n/a
Method: SW846-8100M	
Project: Lily Transportation, 36 San Remo Dr., S. Burlington, VT	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	GCF4885.D	1	12/09/97	CZ	12/06/97	OP348	GCF167
Run #2							

CAS No.	Compound	Result	RDL	Units	Q
	TPH-DRO (Semi-VOA)	ND	0.50	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
438-22-2	5a-Androstane	94%		40-150%

ND = Not Detected

RDL = Reported Detection Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates that analyte is found in associated method blank

N = Indicates presumptive evidence of a compound



Report of Analysis

Client Sample ID: MW-2	Date Sampled: 12/01/97
Lab Sample ID: M3049-2	Date Received: 12/02/97
Matrix: AQ - Water	Percent Solids: n/a
Method: SW846-8100M	
Project: Lily Transportation, 36 San Remo Dr., S. Burlington, VT	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	GCF4886.D	1	12/09/97	CZ	12/06/97	OP348	GCF167
Run #2							

CAS No.	Compound	Result	RDL	Units	Q
	TPH-DRO (Semi-VOA)	ND	0.50	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
438-22-2	5a-Androstane	92%		40-150%

ND = Not detected
RDL = Reported Detection Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates that analyte is found in associated method blank
N = Indicates presumptive evidence of a compound



Report of Analysis

Client Sample ID: MW-3							
Lab Sample ID: M3049-3				Date Sampled: 12/01/97			
Matrix: AQ - Water				Date Received: 12/02/97			
Method: SW846-8100M				Percent Solids: n/a			
Project: Lily Transportation, 36 San Remo Dr., S. Burlington, VT							

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	GCF4887.D	1	12/09/97	CZ	12/06/97	OP348	GCF167
Run #2							

CAS No.	Compound	Result	RDL	Units	Q
	TPH-DRO (Semi-VOA)	ND	0.50	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
438-22-2	5a-Androstane	106%		40-150%

ND = Not detected
RDL = Reported Detection Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates that analyte is found in associated method blank
N = Indicates presumptive evidence of a compound



Report of Analysis

Client Sample ID: MW-4	Date Sampled: 12/01/97
Lab Sample ID: M3049-4	Date Received: 12/02/97
Matrix: AQ - Water	Percent Solids: n/a
Method: SW846-8100M	
Project: Lily Transportation, 36 San Remo Dr., S. Burlington, VT	

Run #1	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	GCF4888.D	1	12/09/97	CZ	12/06/97	OP348	GCF167
Run #2							

CAS No.	Compound	Result	RDL	Units	Q
	TPH-DRO (Semi-VOA)	0.834	0.50	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
438-22-2	5a-Androstane	61%		40-150%

ND = Not detected
 RDL = Reported Detection Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates that analyte is found in associated method blank
 N = Indicates presumptive evidence of a compound

Job No.
M3049

Project No.
114777-01

CHAIN OF CUSTODY RECORD

ACCUTEST



398 CEDAR HILL STREET
MARLBORO, MA 01752
(508) 481-5750
ATTN: GEORGE CAMPBELL

Lily Transportation Corporation

Client
145 Rosemary Street

Address
Needham MA 02194

City State/Zip
Mike Berube 781 449-8811

Attention Telephone #

REQUESTED TURN AROUND:

1 WEEK 2 WEEKS 3 WEEKS NORMAL

APPROVED: _____
 OTHER: _____

SAMPLE ID	DATE SAMPLED	TIME SAMPLED	SAMPLED BY	MATRIX	NO CONT	PRES	FIELD ID	POINT OF COLLECTION	ANALYSIS REQUEST
M3049-1	12-1-97	11:45 am	PK	W	2	4°C	Lily Transportation Corporation 36 San Remo Drive South Burlington, Vermont	MW-1	8100 (GRO) DRO
-2	12-1-97	11:50 am	PK	W	2			MW-2	
-3	12-1-97	11:55 am	PK	W	2			MW-3	
-4	12-1-97	12:05 pm	PK	W	2			MW-4	

1. RELINQUISHED BY: <i>Patricia Kottler</i>	DATE/TIME 12-02-97 8:30 AM	RECEIVED BY: <i>[Signature]</i>	DATE/TIME 12/2/97 8:30	3. RELINQUISHED BY:	DATE/TIME	RECEIVED BY:	DATE/TIME
2. RELINQUISHED BY:	DATE/TIME	RECEIVED BY:	DATE/TIME	4. RELINQUISHED BY:	DATE/TIME	RECEIVED BY:	DATE/TIME

REMARKS: * *AP. PATRICK K. 12/2/97*

30