



APR 25 2003

65 MILLET STREET SUITE 301  
RICHMOND, VT 05477  
802-434-4500  
FAX 802-434-6076  
WWW.ECSMARIN.COM

25 April 2003  
File No. VTA3-0026

Ms. Susan Thayer  
Waste Management Division  
103 South Main Street/West Building  
Waterbury, Vermont 05671

RE: UST Closure  
Walker Motors, Inc, Montpelier, Vermont

Dear Ms. Thayer:

On 23 April 2003, I observed the removal of one, 4,000 gallon #2 fuel oil underground storage UST (UST) at Walker Motors, Inc., located at 265 River Street in Montpelier, Vermont (Figure 1). The UST was located adjacent to the auto body shop behind the main dealership showroom (Figure 2) and was used to fuel a boiler inside the auto body shop. The UST was removed due to a suspected leak discovered when water was detected in the boiler and UST.

Prior to its removal, the UST was positioned under asphalt approximately 10 feet from the auto body shop building. The UST was installed in 1963 and was registered with the State of Vermont UST Program. Calkins Oil & Excavating from Danville, Vermont, provided the excavation services and Ostrout Petroleum provided UST-cleaning services. The UST was transported offsite to All Cycle Metals located off Route 15 in Hardwick, Vermont, to be used as scrap metal. The UST permanent closure forms and photographic documentation of the UST closure are attached to this report.

#### FINDINGS

The findings of this assessment are summarized as follows:

- The heating oil UST was found to be in poor condition upon removal, with some rusting and pitting and several holes observed at both ends of the UST. The till, suction, return and vent lines for the UST were in fair condition with some minor rusting, but no pitting or holes.
- Water and an estimated 10 to 15 ounces of #2 fuel oil entered the excavation from the holes in the bottom of the UST upon extraction from the subsurface. The majority of the oil was absorbed using spill absorbent materials and placed into a drum for subsequent offsite disposal.
- Olfactory and visual signs of petroleum impact were observed in soils in the UST excavation beginning approximately two feet below ground surface (bgs).

- Soils in the immediate vicinity of the former UST consisted of brown, damp to saturated, coarse to medium-grained sands and gravel. Native soils probably glacial till were encountered at approximately 4.5 feet bgs that included greenish-gray, line sand and clay.
- Photoionization detector (PID) headspace readings taken of soils in the excavation ranged from five parts per million (ppm) collected from a soil sample approximately five feet bgs in the greenish-gray fine sand and clay layer, to a high of 123 ppm collected from same general area, approximately three feet bgs in the brownish coarser sands and gravel. The average PID reading throughout the excavation was 83 ppm. Soil headspace PID screening results are presented on Figure 2.
- All stockpiled soils originating from the excavation were backfilled into the excavation following the soil screening activities. Clean sand was imported to bring the excavated site up to grade.
- Prior to excavation activities, approximately 1,000-gallons of #2 fuel oil and water mixture was purged from the UST by North Country Environmental and transported offsite for proper disposal. Approximately 50 gallons of additional water, UST bottoms, and waste product were removed from the UST during UST cleaning after it was removed from the subsurface. This waste was drummed onsite and will subsequently be transported offsite by North Country Environmental.
- Perched groundwater entered the excavation from various seeps in the sidewalls of the excavation; however, no accumulation of groundwater was observed during the three hours that the excavation was open. Oil sheening and olfactory evidence of petroleum impact was observed on the perched groundwater. No bedrock was encountered in the excavation; however, bedrock outcrops were noted on the northwestern portion of the site.
- The site and surrounding properties are serviced by municipal water and sewer system. The Winooski River is located approximately 750 feet north-northeast east of the site. No public supply wells are known to be within the site vicinity. Two private wells are within a ½-mile of the site. The adjacent service building does not have a basement or crawlspace.

#### RECOMMENDATIONS

Based on the results of the UST closure assessment, ECSMarin recommends that a site investigation be performed to define the extent and degree of soil impact and to determine if the water table has been impacted. Walker Motors, Inc., has elected to pursue the site investigation process via the Expressway program. The completed Expressway Notification Form is attached.

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## **SITE INFORMATION**

The site currently houses an automobile dealership. The main showroom and repair shop is located near Route 2. The auto body shop is located at a higher elevation (approximately 30 feet) behind the showroom. The majority of the new cars and trucks for sales are parked northwest of the main showroom and additional vehicle parking is east of the building. A second 4,000-gallon #2 fuel oil UST is registered with the VT DEC and is located east of the showroom/repair shop. This second UST was installed in 1976. Two monitoring wells were installed in the lower parking area east of the showroom/repair shop in response to a former UST closure.

The surrounding areas are primary commercial located off Routes 2 and 302. The ground surface at the property slopes to the north, toward the Winooski River.

According to the Vermont Agency of Natural Resources Internet Mapping Site of Private Wells, at least two private water supply wells are located with a 1/2-mile of the site. Both wells are approximately 2000 feet away from the former UST location and are 348 and 445 feet in depth.

## **UST AND PIPING SYSTEM OBSERVATIONS**

The heating oil UST was found to be in poor condition upon removal, with some rusting and pitting and several holes observed at both ends of the UST. The fill, suction, return and vent lines for the UST was in fair condition with some minor rusting, but no pitting or holes. Water and an estimated 10 to 15 ounces of #2 fuel oil entered the excavation from the holes in the bottom of the UST upon extraction of the UST from the subsurface. The majority of the oil was absorbed using spill absorbent materials and placed into a drum for subsequent offsite disposal.

Calkins Oil & Excavating from Danville, Vermont, provided the excavation services and Ostrout Petroleum provided UST-cleaning services. The UST was transported offsite to All Cycle Metals located off Route 15 in Hardwick, Vermont, to be used as scrap metal.

Approximately 1,000-gallons of #2 fuel oil and water mixture was purged from the UST by North Country Environmental and transported offsite prior to excavation activities. An additional 50 gallons of water, UST bottoms, and waste product were removed from the UST during UST cleaning after it was removed from the subsurface. This waste was drummed onsite for subsequent offsite transport by North Country Environmental.

## **ENVIRONMENTAL OBSERVATIONS**

Soils in the immediate vicinity of the former UST consisted of damp to moist, brown coarse to medium-grained sands and gravel. Glacial till soils were encountered at approximately 4.5 feet that included greenish-gray fine sand and clay.

PID headspace readings taken of soils in the excavation ranged from five ppm collected from a soil sample approximately five feet bgs in the greenish-gray fine sand and clay layer, to a high of 123 ppm collected from same general area, approximately three bgs in the brownish coarser sands and gravel. The average PID reading throughout the excavation was 83 ppm. An elevated PID reading of 113 ppm was

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also recorded on soils under the suction and return lines. Soil headspace PID screening results are presented on Figure 2. Soils were screened for the possible presence of volatile organic compounds (VOCs) with a Thermo Environmental Instrument, model PID 580b. The PID was field-calibrated on the day of the assessment with an isobutylene gas to a benzene reference. Soil samples were placed in resealable bags, sealed, and agitated. Bag headspace was then screened for the possible presence of VOCs with the PID.

Perched groundwater entered the excavation from various seeps in the sidewalls of the excavation; however, no accumulation of groundwater was observed during the three hours that the excavation was open. Oil sheening and olfactory evidence of petroleum impact was observed on the perched groundwater. No bedrock was encountered.

The completed excavation measured approximately 14 feet wide x 27 feet long x 6 feet deep. All stockpiled soils originating from the excavation were backfilled into the excavation following the soil screening activities. Clean sand was imported to bring the excavated site up to grade. Less than one cubic yard of extra clean imported backfill material that did not tit into the gravesite was thin spread onsite north of the auto body shop.

## RECEPTOR EVALUATION

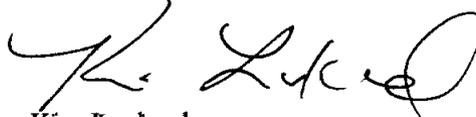
Potential receptors identified in the vicinity of the parcel included the following:

- z Soils and groundwater beneath the UST excavation;
- z Winooski River located %-east of the site;
- z Approximately two water supply wells located with %-mile radius of the site.

Based on the information obtained during the UST closure, it appears that a site investigation is warranted with respect to the former #2 fuel oil UST located at Walker Motors, Inc. auto body shop.

Should you have any questions or concerns regarding this assessment, please do not hesitate to contact me at 1-800-520-6065.

Sincerely,  
ENVIRONMENTAL COMPLIANCE SERVICES, INC.



Kim Lockard  
Compliance Specialist

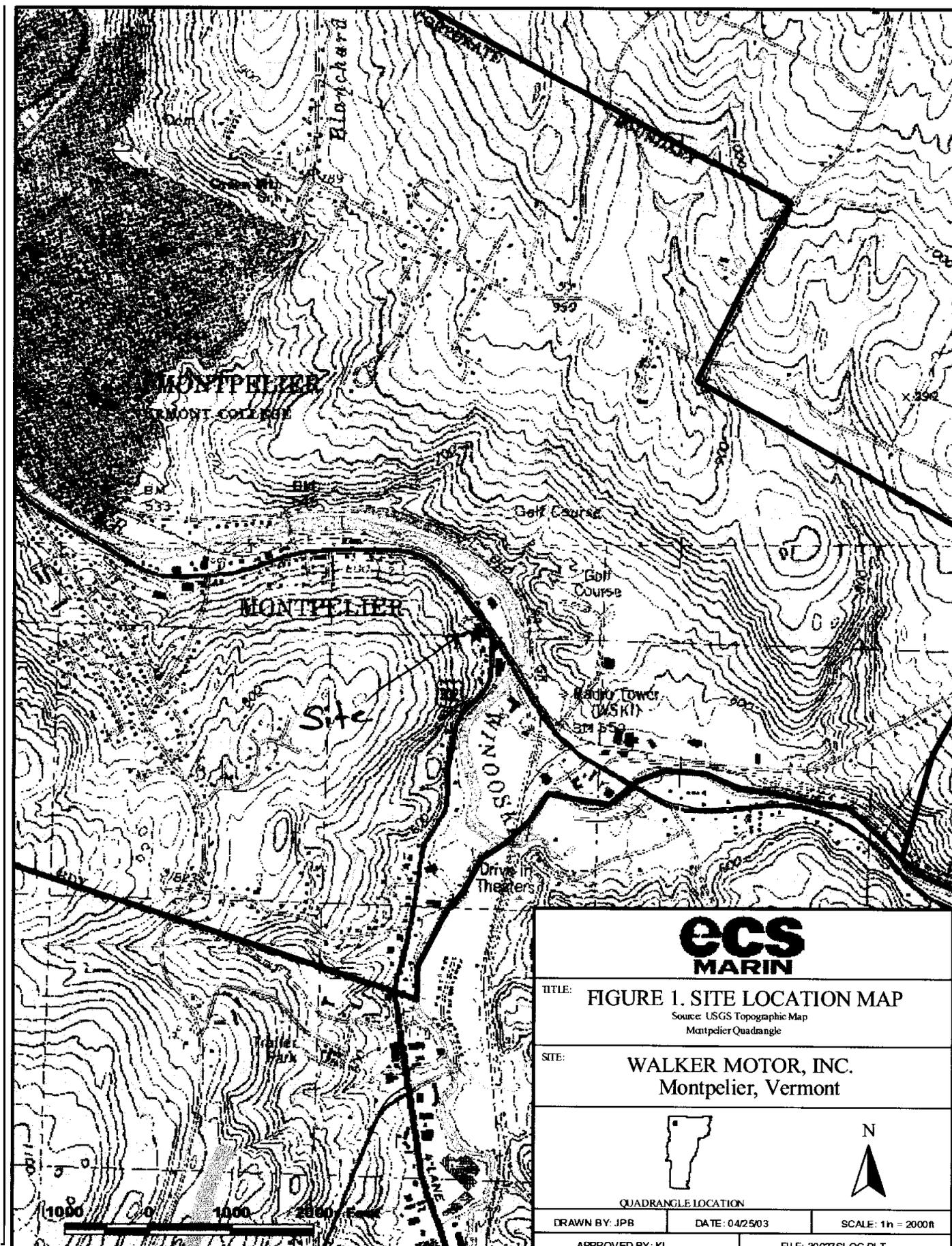
kl/A30026UST.doc

Attachments

cc: Mr. Wade Walker, Walker Motors, Inc.

## ATTACHMENTS

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**ecs**  
**MARIN**

TITLE: **FIGURE 1. SITE LOCATION MAP**  
Source: USGS Topographic Map  
Montpelier Quadrangle

SITE: **WALKER MOTOR, INC.**  
Montpelier, Vermont



QUADRANGLE LOCATION

DRAWN BY: JPB	DATE: 04/25/03	SCALE: 1in = 2000ft
APPROVED BY: KL	FILE: 30027SL0C.PLT	

SUBJECT:

Walker Motors, Inc.

DATE

4/24/03

PREPARED

BY  
KL

CHECKED

BY

DATE

PROJECT

NO.  
VTA-3-0027

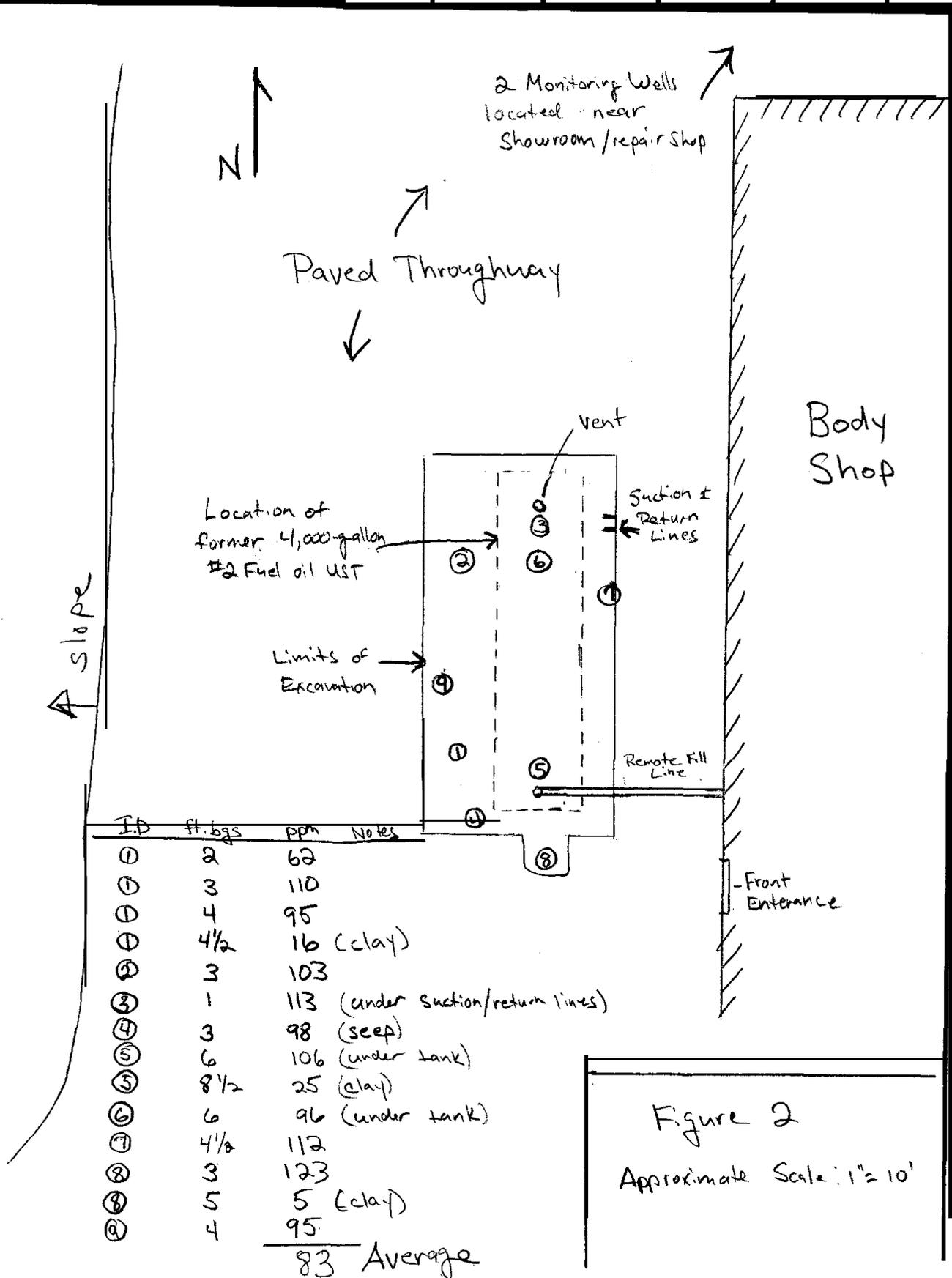


Figure 2  
Approximate Scale: 1" = 10'

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VT-WMD-SMS  
August 1996

Figure 2: Notification figure

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

SITE INVESTIGATION EXPRESSWAY NOTIFICATION FORM

Site Owner: Wade Walker

Site Name, Town: Walker Motors

Yes, this site will participate in the Site Investigation Expressway Process.

No, this site will not participate in the Site Investigation Expressway Process.

If yes, please complete the checklist below:

Contamination present in soils above action levels  Yes  No

If yes, summarize levels:

PID soil headspace levels ranged from 5 to 123 ppm  
average soil headspace PID 83 ppm

Free product observed  Yes  No

Groundwater contamination observed  Yes  No small amount of perched water entering excavation from gravel

Surface water contamination observed  Yes  No backfill around UST

Suspected release of hazardous substances  Yes  No

If yes, please explain:

No. 2 Fuel Oil from underground storage tank  
UST size: 4,000 gallon. Holes observed in UST

Affected receptors  Yes  No None identified at this time.

If yes, please identify receptors including names and addresses of third party receptors:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Please provide an estimated date of when you expect to submit Site Investigation Report: June 27, 2003

Owner's Signature/Date: Wade Walker Consultant's Signature/Date: Jessie Lynn / 4-24-03  
ECSM Mar 11

The SMS has reviewed this expressway notification form (and approves / disapproves) of this action.

SMS Signature/Date: Adrienne Sluby 5/8/03

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# UNDERGROUND STORAGE TANK PERMANENT CLOSURE FORM

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

Agency Use Only  
Date of scheduled Activity 4/23/03 Facility ID # 2119 Closing: tanks, piping, system  
DEC initials: ST SMS # \_\_\_\_\_ DEC evaluator: [Signature]

### Section A. Facility Information:

Name of facility: WALKER MOTORS INC Number of employees: 75  
Street address: 265 River St Town/city: Montpelier, VT  
Owner of UST(s) to be closed: Sierra Holdings LLC Contact (if different than owner): Nade Walker  
Mailing address of owner: 265 River St Montpelier, VT 05602  
Telephone number of owner: 802-223-5201 Contact telephone #: 802-223-5201

### Section B. UST Closure Information: (please check one)

Reason for initiating UST closure:  Suspected Leak  Liability  Replacement  Abandoned

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

UST #	Product	Size (gallons)	Tank age	Tank Condition	Piping age	Piping condition
1	#2 Fuel Oil	4,000	40 yrs	Poor	40 yrs	Fair

Which tanks, if any, will be closed in-place: USTs# NA Authorized by: \_\_\_\_\_ Date:   /  /    
Disposal/destruction of removed UST(s): Location Baldwins Method Strip Date: 4/23/03  
Amount (gal.) and type of waste generated from USTs: 1,050 gallons water, bottom, product  
(tank contents are hazardous wastes unless recovered as usable product),  
Tank cleaning company (must be trained in confined space entry) Ostrout Petroleum  
Certified hazardous waste hauler: North Country Generator ID number: VTD040251035

### Section C. Initial site characterization:

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

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

Tank(s) # and Excavation (A,B,C,etc)	Depth (ft)	Excavation size(ft <sup>2</sup> )	Peak PID reading	Depth of Peak (ft)	Avg PID reading	Bedrock Depth (ft)	Groundwater encountered? (y/n) and at depth (ft)	Soil type
A	4'-6'	378	123	3	83	NA	Perched C-M Sands, Gravels & fl	

Dig Safe Number: 20031608616

### PID information:

Make: Therma Model: 580b Calibration information (date, time, gas): 4/23/03 9:00 100 ppm 150 butylene

### Locate all readings and samples on site diagram

Number of soil samples collected for laboratory analysis? None results due date   /  /    
Have any soils been polyencapsulated on site? Yes    (#yds' PID range above zero <sup>low</sup>    - <sup>peak</sup>   ) No   
Have any soils been transported off site? Yes    list amount (yds<sup>3</sup>):    No   
Location transported to: NA DEC official who approved \_\_\_\_\_  
Amount of soils backfilled(yds<sup>3</sup>):    PID range above zero <sup>low</sup> 5 - <sup>peak</sup> 123  
Have limits of contamination been defined? Yes    No   
Is there any other known contamination on-site? Yes    No    Comments: Potential cont. associated w/ previous UST pull.

Free Phase product encountered? Yes   ; thickness    sheen  No     
Groundwater encountered? Yes    depth(ft)    No  perched  
Are there existing monitoring wells on-site? Yes  how many: 2 (locate on site diagram) No     
Have new monitoring wells been installed? Yes    how many:    (locate on site diagram) No   
Samples obtained from monitoring wells for lab analysis? Yes- results due date   /  /   No

Is there a water supply well on site? Yes-(check type: shallow    rock    spring   ) No   
Number of public water supply wells are located within a 0.5 mile radius? 0 min. distance (ft.):     
Number of private water supply wells located within a 0.5 mile radius? 2 min distance (ft.): 2,000

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

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Facility ID# 2116

Section D: Tanks/Piping Remaining/installed

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

UST#	Product	Size(gallons)	Tank age	*Tank status	Piping age	*Piping Status
2	#2 Fuel oil	4,000	27 yrs	In Use	27 yrs	In Use

There are no other tanks at this site.

Section E. Statements of UST closure compliance:

(must have both signatures or site assessment not complete)

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

Nadine W. Pres  
Signature of UST owner or owner's authorized representative

4/23/03  
Date of signature

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

Y. L. Lukard  
Signature of Environmental Consultant

4/24/03  
Date of signature

Company: ECS Marin  
Telephone #: 434-4500

Date of Closure: 4/23/03 Date of Assessment 4/23/03

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

ite diagram

See Attached Site Sketch  
  
Figure 2 in ECS Marin report dated 25 April 2003

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

Location of Remote Fill Line



Pre-Excavation UST Location

Greenish Gray Clay Layer



Impacted Sand/Gravel Layer

UST In Ground  
(fill and remote fill lines on left)

Vent  
Line



Suction and  
Return Lines

Fill and  
Remote  
Fill Lines

UST in Excavation



Remote  
Fill Line

UST Excavation  
(product on water immediately after tank was removed)

Imported  
Clean Fill



Clean Soils  
from  
Excavation

Impacted  
Soils from  
Excavation

UST Excavation

UST  
Excavation  
Location



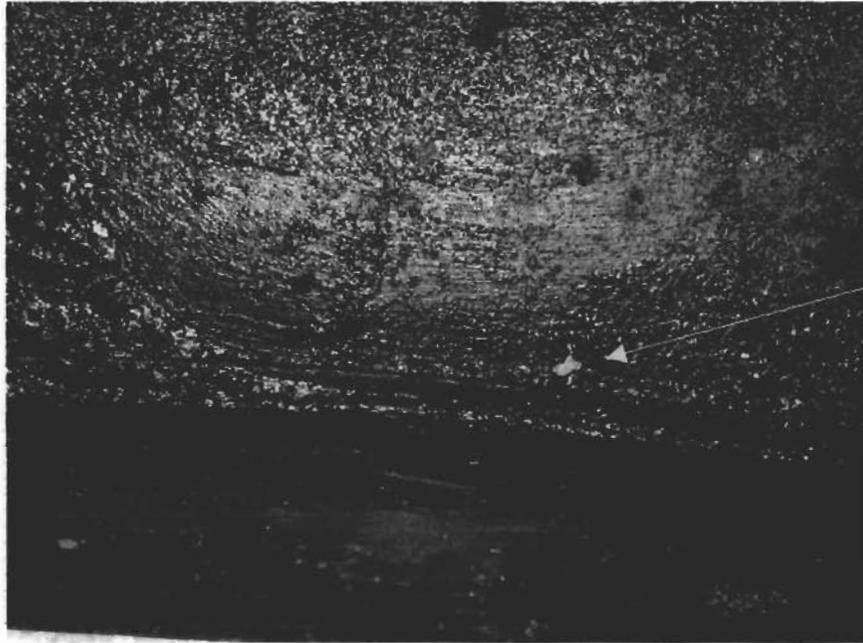
Backfilled Excavation



Fill End of Tank  
(holes on bottom rim)



Pitting on Bottom of Tank



Hole

Fill End of Tank



Holes

Vent End of Tank