

AUG 25 1993



August 23, 1993

Mr. Charles B. Schwer
Petroleum Sites Coordinator
Vermont Department of
Environmental Conservation
103 South Main Street
Waterbury, Vermont 05676

RE: Summary Report - Huggett's Mobil, East Thetford, VT
(VDEC Site #91-1172)

Dear Chuck:

As we previously indicated to you, Lincoln Applied Geology, Inc. (LAG) has completed our site investigation as delineated in the approved workplan. While evidence of vadose zone contamination was detected within the former UST area our continued site monitoring has shown that no adverse impacts to ground water can be quantified.

This low priority site was first evaluated during a routine Underground Storage Tank (UST) removal performed by the Northern Petroleum Company in late November 1991. Although no ground water was encountered to an excavation depth of 15 feet, photoionization (PID) assays of the excavated soils ranged from 0 to 300 parts per million (ppm). The soils were backfilled into the former tank area as replacement tanks and new delivery systems were installed at another location on the property. Based on the tank pull form submitted to your Department (VDEC), you issued a standard request on January 24, 1992 for additional site investigations.

LAG's February 5, 1992 workplan for the subsurface site investigation and risk assessment was approved by the VDEC on February 25, 1992. Copies of the pertinent correspondence are included in **Appendix A**.

The site is located on the easterly side of Route 5 in East Thetford, VT (**Figure 1**). The topography is basically flat and the soils consist of fine grained alluvial sands of the Connecticut River Valley. The soils were mapped by SCS as the Hadley series which was confirmed by the March 25, 1992 soil borings:

Mr. Charles Schwer

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August 23, 1993

The underlying bedrock is deep (i.e. greater than 100 feet based on available well logs from the valley bottom). The bedrock is mapped by the VT Geological Survey as the Orfordville formation (carbonaceous phyllite with minor quartzite). The topographic rise to the west is associated with the Ammonoosuc thrust fault and the overlying Gile Mountain formation (phyllite or schist).

Based on our general knowledge of the hydrogeology of the surficial aquifer associated with the alluvial sands, the ground water flow direction was predicted to be easterly or southeasterly towards the Connecticut River at a relatively flat gradient. One water supply well, at Huggett's Mobil Service Center, was suspected of being a potential receptor. This well is 170 feet deep and screened into a gravel layer with a static water level at 42 feet and an ability to produce 8 gallons per minute (gpm). No other private wells are being used within a 500 foot radius of the site. A community water system located in excess of 2000 feet upgradient of the site provides the water service to nearby residences and the mini-mart portion of the upgraded Huggett's Mobil.

Based on these findings, an array of ground water monitoring wells was defined in the locations shown on **Figure 2**, the Detailed Site Map. This map also depicts the locations of the Huggett's well and closest residences. A flat field in agricultural production extends easterly from the railroad tracks to the Connecticut river.

On March 25, 1992 the four monitor wells were installed in the hollow stem augered soil borings. The boring contractor was Green Mountain boring Co. (GMBC) of Barre, VT. The depths of borings were limited to twenty-five feet by the number of available augers. Split spoon samples were obtained from discrete portions of the profile confirming the alluvial stratified sands. Copies of the boring logs and monitor well construction details are included in **Appendix B**. These logs were jointly prepared by LAG and GMBC and included photoionization assay data (PID). Positive PID assays were measured in all soil samples obtained from MW-2, in the range of 2.0 to 20 ppm. The only other positive assay was 4.0 ppm from the 25 to 27 foot sample in MW-1. All other assays were background (BG).

Ground water was not encountered at the depth of the auger borings in either MW-1 or MW-2. The split spoon samples obtained from the 25 to 27 foot intervals did, however, demonstrate saturated conditions in the split spoon sample tip for MW-1 and three quarters of the sample for MW-2. These observations were used to calculate the ground water elevation below the



Lincoln Applied Geology, Inc.
Environmental Consultants

RD # 1 Box 710 • Bristol, Vermont 05443 • (802) 453-4384 • FAX (802) 453-5399

Mr. Charles Schwer
Page 3
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bottom of monitor wells 1 and 2 for March 25, 1992. The results are summarized in **Table 1** along with the results of succeeding monitoring rounds. A ground water contour map has been prepared using the March, 1992 data which shows that flow direction is easterly towards the Connecticut River (**Figure 3**). As predicted, the ground water gradient is relatively flat.

As seen on **Table 1**, the site's water level monitoring data through 1992, ground water levels never rose sufficiently high in MW's 1 or 2 for accurate water level readings or water quality sampling. Despite the lack of waters and somewhat elevated PID levels in MW's 1 and 2 (**Table 2**), the downgradient monitor well showed only traces of soluble gasoline constituents at concentrations well below ground water enforcement standards. In this regard, three rounds of water quality sampling have been performed through January, 1993. Copies of the formal analytical results are included in **Appendix C** and summarized in **Table 3**. The Huggett's Store sample was supplied by the community water system serving all nearby residences.

These combined results indicate that no significant impact to ground water or nearby receptors has occurred due to the former USTs. While some vadose zone contamination does appear to remain, LAG believes that no further remedial efforts are necessary and following one more sampling round showing comparable results the site should be considered for closure.

Please feel free to contact me with any questions or comments you may have regarding this site and/or our recommendation. We look forward to hearing from you.

Sincerely,



John F. Amadon, CPSS

JFA/tasp
Enclosures
cc: Robert Watson, Huggett's Mobil
Allen Avery



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Environmental Consultants

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APPENDIX A

Historical Correspondence



NORTHERN PETROLEUM COMPANY

DIVISION OF BRADFORD OIL CO., INC

P. O. BOX 540 • ST. JOHNSBURY, VERMONT 05819

TELEPHONE 748-8934

November 27, 1991

Huggett's Mobil
Box 8
E. Thetford, VT 05043

Att: Allen Avery

Dear Allen;

Enclosed is a copy of the site assessment for the removal of the gasoline tanks that we removed last week. As you are aware, there was contamination found there. The next move is up to the State of Vermont once they have received and reviewed this form.

Sincerely,

Maynard Farr
General Manager

MF:df

Enclosures - 3



NORTHERN PETROLEUM COMPANY

DIVISION OF BRADFORD OIL CO., INC

P. O. BOX 540 • ST. JOHNSBURY, VERMONT 05819

TELEPHONE 748-8934

November 21, 1991

Huggett Mobil Service
Thetford, VT.

Tank pull: 1 - 3,000 gallon; 2 - 4,000 gallon; 1 - 8,000 gallon

- A) 3,000 gallon tank:
Uncovered tank and lines, found contamination around fill pipe at 30 - 125 P.P.M.
Dug out sides and end, soil was clean on sides and end except a little near fill, approximately 20 - 50 P.P.M.
Purged tank - treated with BioSolve and removed.
P.P.M. reading under tank was 40 - 175 - spotty.
Dug as deep as we could reach - approximately 15 feet . Did not hit water table. Soil reading 50 - 250 - spotty.
Tank was rusty but did not leak.
- B) 4,000 gallon tank:
Readings on top and sides approximately same as the other. Purged and treated, removed and cleaned. Tank had numerous holes - small in bottom of tank. I believe our "problem child" was this tank.
P.P.M. reading on bottom was approximately 225+, spotty to 350 P.P.M.
- C) 8,000 gallon tank:
Uncovered top, 20 - 40 P.P.M. around fill pipe only. Sides and end of tank 0 P.P.M. Under tank near old 4,000 approximate reading 40 to 60 P.P.M. Under 8,000 approximately 15 feet deep. Reading 0 P.P.M. Tank was shaley but solid.
- D) 4,000 gallon tank:
0 P.P.M. Reading totally - under and sides as deep as we could dig. Tank was solid . Most of the bad soil was pretty much contained around the 3,000 and 4,000 gallon tank area. No readings at 20 feet away.
Soil was reburied on site with new gravel and sand on top.

RETURN TO:
 VERMONT DEPARTMENT OF ENVIRONMENTAL CONSERVATION
 UNDERGROUND STORAGE TANK PROGRAM
 103 SOUTH MAIN STREET
 WATERBURY, VERMONT 05676

===== DATE OF REMOVAL: 11-21/22-91 DATE OF SITE ASSESSMENT: 11-21-91 =====

PERSON/CO DOING SITE ASSESSMENT: Jim Cote
 TELEPHONE NUMBER: 802-748-8934

BUSINESS NAME WHERE TANK(S) LOCATED: Huggett's Service Center
 STREET ADDRESS OF BUSINESS: Thetford, Vt
 TOWN/CITY:

OWNER OF TANK(S): Allan Avery
 ADDRESS OF OWNER: Thetford, VT
 TOWN/CITY:

UST FACILITY ID#:

TANK #	PRODUCT	SIZE	CONDITION
1)	UL Gasoline	3,000	Poor
2)	UL Gasoline	4,000	Poor
3)	UL Gasoline	8,000	Fair
4)	S. Gasoline	4,000	Fair
5)			

DEC PERMITTED TANKS STILL ON SITE? Y or N HOW MANY? 3
 OUT OF SERVICE TANKS? Y or N HOW MANY?
 ON PREMISES HEATING OIL TANK? Y or N HOW MANY? 1 SIZE? 275

WHY IS TANK(S) BEING REMOVED? Old - changed location on property
 REPLACEMENTS: Y or N HOW MANY? 3 PERMIT OBTAINED? Yes

ANY WASTE PUMPAGE: Y or N EST. VOL. 5 to 7 gallons
 TRANSPORTED BY: Northern Petroleum Company

RECEPTORS: SOILS GROUNDWATER SURFACEWATER RESIDENTIAL

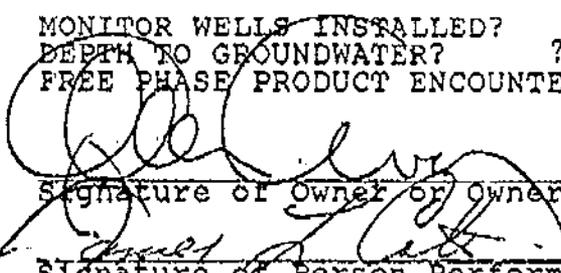
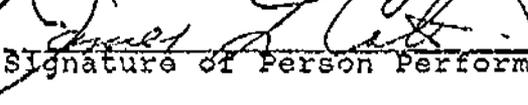
SOIL TYPE: Gravel and sand

CONTAMINATED SOILS: Y or N AMOUNT: ?

CONTAMINATED STOCKPILED SOILS: Y or N AMOUNT:

DEGREE OF CONTAMINATION: (PID READINGS) 20 - 300 PPM under & around 3,000 gal
 PID CALIBRATION SCHEDULE: Daily tank, bottom of hold-to 15 ft. No
 ground water encountered. See Report

MONITOR WELLS INSTALLED? Y or N HOW MANY?
 DEPTH TO GROUNDWATER? ?
 FREE PHASE PRODUCT ENCOUNTERED? Y or N AMOUNT?


 Signature of Owner or owner's Authorized Representative

 Signature of Person Performing Site Assessment
 Date 11-22-91

COMMENTS/RECOMMENDATIONS: (Please attach on a separate page)
 White - DEC File Copy Yellow - DEC File Copy Pink - Owner Copy

334 Huggitts Mobil # 24

11/21/91

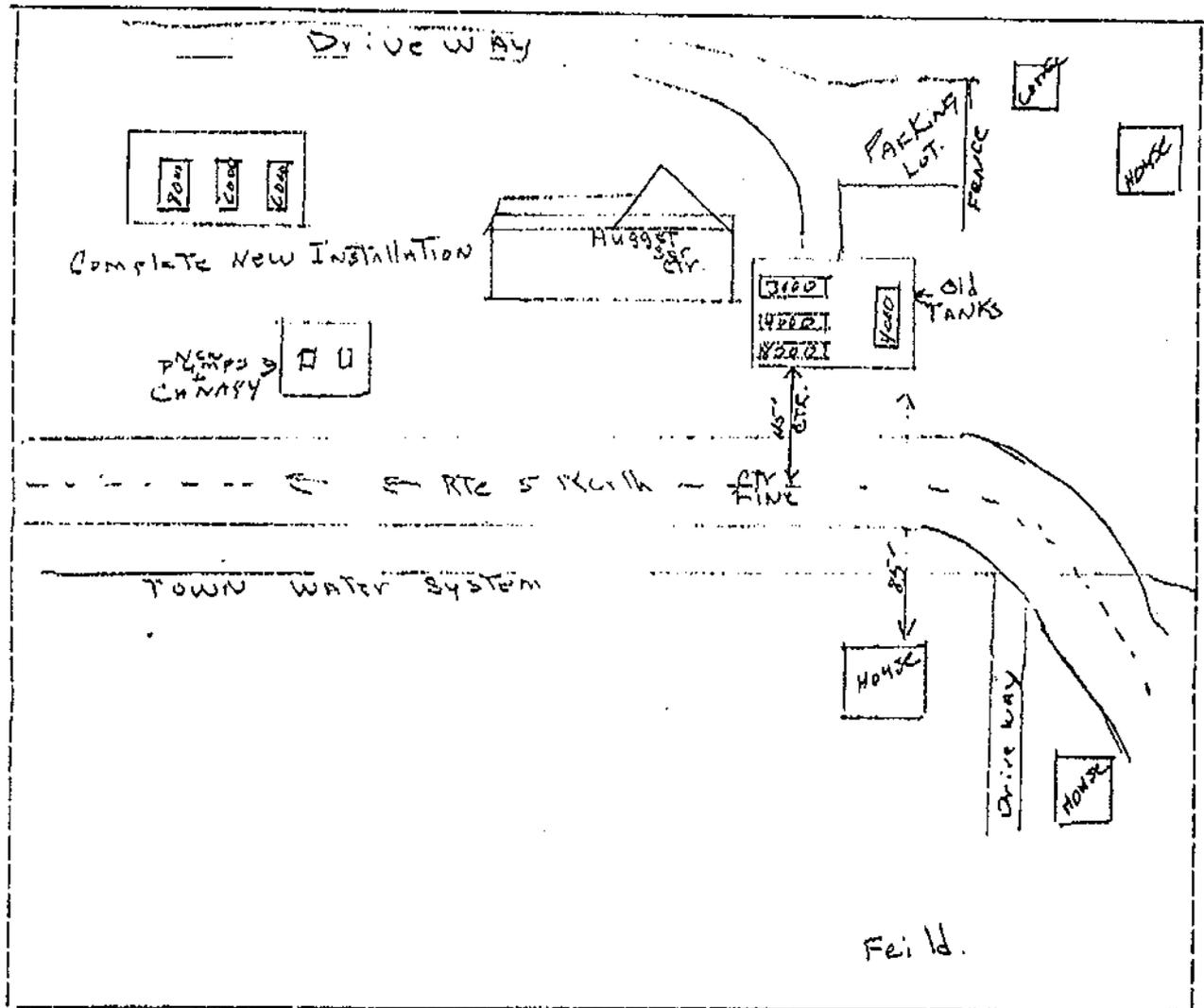
VERMONT DEPARTMENT OF ENVIRONMENTAL CONSERVATION
UNDERGROUND STORAGE TANK PROGRAM
SITE MAP

RECOMMENDED SCALE - 1" = 50 feet (but not smaller than 1" = 100 feet)

MAP DRAWN BY: JIM COTE - Northern Petroleum Co. - St. Johnsbury VT

BUSINESS NAME WHERE TANK(S) LOCATED: Huggitts Service Ctr.
Thetford VT.

Show location of all tanks and property boundary; distance to permanent structures; monitoring wells; water wells within 500 foot radius; storm; sewer and water lines; sample points; areas of contamination and other pertinent site information. Indicate North arrow and major street names or route number.





State of Vermont

Department of Fish and Wildlife
 Department of Forests, Parks and Recreation
 Department of Environmental Conservation
 State Geologist
 Natural Resources Conservation Council

AGENCY OF NATURAL RESOURCES
 Department of Environmental Conservation
 Hazardous Materials Management Division
 103 South Main Street / West Building
 Waterbury, Vermont 05671-0404
 802-244-8702

January 24, 1992

Robert Watson, Manager
 Huggett's Mobil
 P.O. Box 8
 East Thetford, Vermont 05043

Rec'd 1/29/92

RE: Petroleum Contamination at Huggett's Mobil - Site #91-1172

Dear Mr. Watson:

The Sites Management Section (SMS) has received the tank pull form and site report from James L. Cote of the Northern Petroleum Company concerning the underground storage tank (UST) removal at Huggett's Mobil on November 21 and 22, 1991. These documents indicate that four gasoline USTs were removed from this site. Two of these tanks were reported to be in poor condition. Petroleum contaminated soil was encountered in the tank excavation, but the extent of this contamination was not determined. Excavated petroleum contaminated soil was returned to the tank pit. Ground water was not encountered, and no evaluation of groundwater quality was made. Soils in the excavation were reported to be sands and gravels.

The SMS feels that additional investigation of this site is warranted based upon the information included in the tank pull form and removal report. Specifically, we feel that the extent of soil contamination should be determined, and that ground water in the area should be tested to insure that it has not been affected by site activities. You should contact a qualified environmental consultant to perform this work. Please have your consultant deliver a work plan describing their proposed investigation to the SMS. We should receive this work plan within 15 business days of your receipt of this letter.

The removed tanks are covered under the State's Petroleum Cleanup Fund. This means that after Huggett's Mobil spends \$10,000 for the site investigation, the State will reimburse Huggett's Mobil for all additional costs associated with the cleanup up to \$1,000,000. If Huggett's is unable to pay for the additional investigation at this time, contact the SMS immediately so that an alternative payment schedule can be arranged.

If you have any other questions concerning this site or the requested work, please call.

Sincerely,

 Charles B. Schwer, Supervisor
 Sites Management Section



February 5, 1992

Mr. Allen Avery
P.O. Box 8
E. Thetford, Vt. 05043

Re: Proposed Work Plan and Preliminary Cost Estimate for a Hydrogeologic Evaluation of Potential Subsurface Gasoline Contamination

Dear Mr. Avery:

Lincoln Applied Geology Inc. (LAG) is pleased to submit this work plan and preliminary cost estimate for a hydrogeologic evaluation of potential subsurface gasoline contamination at Huggetts Mobil on Route 5 in Thetford, Vermont (VDEC SMS Site #91-1172).

The correspondence you recently provided us to prepare this work plan indicates that on Nov. 21, 1991, four underground gasoline storage tanks (one 3,000 gallon, two 4,000 gallon and one 8,000 gallon) were excavated and removed from the site under the direction of Northern Petroleum (NP). Results summarizing the tank removal were sent to the Vermont Department of environmental Conservation (VDEC) Underground Storage Tank Program (USTP) by Northern Petroleum on November 27, 1991.

In response to discovery of gasoline contaminated soils during the tank removal, Chuck Schwer of the VDEC in a letter dated January 24, 1992 requested that you retain the services of a qualified environmental consultant to perform a site investigation. Huggetts Mobil (HM) then requested LAG to prepare a work plan and cost estimate. This work plan is outlined below and the cost estimate is included as **Attachment A**.

LAG proposes to install at least four 2" diameter ground water monitoring wells on-site. Three would be located downgradient of the former underground storage tank (UST) location. One well will be located upgradient of the former UST area. The exact locations of these wells will be determined on-site by the project geologist during the initial risk assessment.

All borings will be drilled using 4.25" diameter hollow stem augers, and steam cleaned between successive borings to eliminate the potential for cross-contamination. Soil samples will be collected at five foot intervals using a 2" diameter, two foot long, split-barrel sampler, and then screened with the HNU photoionization detector (PID) and olfactory senses for the presence of petroleum contamination. In borings where contamination is detected

continuous soil sampling will be conducted. Split-barrel samplers will be washed with soap and water between successive samples within a boring, and steam cleaned between each boring.

Borings will be drilled to a maximum depth of 20 feet, or a confining layer for the upper most aquifer, or refusal. Ground water monitoring wells will be constructed of 2" diameter PVC and screened such that the ground water surface is a minimum of one foot below the top of the well screen. A sandpack will be placed throughout the length of the screen in the annular space between the well and "native" soil materials. A bentonite seal will be placed above the sandpack. All wells will be covered with flush-mounted well boxes. The new wells will be appropriately developed using a peristaltic pump or dedicated bailers.

The location and elevation of the top of casing (TOC) of each new well will be surveyed, and then depth to ground water and HNU PID data collected. Following well development and equilibration for at least one week, ground water samples will be collected from the ground water monitoring wells. Appropriate purging and sampling techniques will be utilized. All water samples, including potentially impacted water supplies, and a trip blank will be submitted to the Endyne Laboratory in Williston, Vermont along with the proper chain of custody forms for BTEX and MTBE analysis (EPA Method 602 and MTBE).

A site specific Health and Safety Plan (HASP) will be followed for all on-site activities. Copies of the HASP will be available for VDEC review if requested. Prior to installation of the monitor wells, a risk assessment will be initiated to determine the receptors in the area that potentially could be impacted by gasoline contamination. This would include but not be limited to a site visit, research of local and State files for information regarding nearby wetlands, rivers, and public and private drinking water supplies.

A comprehensive report will be prepared detailing work conducted on-site, well logs, laboratory analyses, and the risk assessment. Additionally, our conclusions and recommendations will be presented. These may include the need for additional monitoring and/or site remediation.

If you have any questions or concerns with regard to this matter, please do not hesitate to call me at 802-453-4384.

Sincerely,



John F. Amadon, CPSS

JFA/smd
Enclosures



Lincoln Applied Geology, Inc.
Environmental Consultants

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ATTACHMENT A

I.	Risk Assessment and Health and Safety Plan (HASP)		
A.	Site Visit and Local and State File Research		
	Geologist - 14 hrs @ \$40.00		\$480.00
	Mileage - 220 miles @ \$0.30		66.00
	Copies at VDEC		<u>10.00</u>
	TOTAL A		\$556.00
II.	Soil Borings and Monitoring Well Installation		
A.	Drillers Charges (given average to good site conditions and wells not deeper than 25')		\$2,668.00
B.	Supervision of Drilling and Purging Monitoring Wells		
	Geologist - 10 hrs @ \$40.00		\$400.00
	Mileage - 220 @ \$0.30		66.00
	Pump and Generator		115.00
	HNU		<u>75.00</u>
	TOTAL B		\$656.00
	TOTAL A and B		\$3,324.00
III.	Ground Water Sampling		
A.	Technician - 8 hrs @ \$25.00		\$200.00
	Mileage - 245 @ \$0.30		73.50
	Pump and Generator		110.00
	Bailers		40.00
	Laboratory Analyses = 5 samples @ \$60.00		<u>300.00</u>
	TOTAL A		\$723.50
IV.	Summary Report		
A.	Manager - 2 hrs @ \$50.00		\$100.00
	Geologist - 16 hrs @ \$40.00		640.00
	Computer Technician - 5 hrs @ \$25.00		125.00
	Secretary - 6 hrs @ \$18.00		<u>108.00</u>
	TOTAL A		\$973.00
	TOTAL I, II, III, IV		<u>\$5,576.50</u>



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Environmental Consultants

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State of Vermont

Department of Fish and Wildlife
Department of Forests, Parks and Recreation
Department of Environmental Conservation
State Geologist
Natural Resources Conservation Council

AGENCY OF NATURAL RESOURCES
Department of Environmental Conservation

Hazardous Materials Management Division
103 South Main Street / West Building
Waterbury, VT 05671-0404
802-244-8702

February 25, 1992

John F. Amadon
Lincoln Applied Geology, Inc.
RD #1 Box 710
Bristol, Vermont 05443

RE: Work Plan for Huggett's Mobil, East Thetford - Site #91-1172

Dear Mr. Amadon:

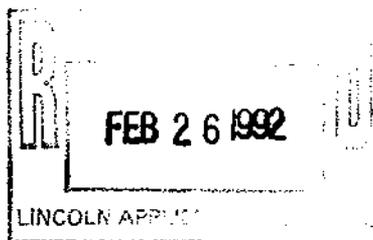
The Sites Management Section (SMS) has completed review of the work plan for the hydrogeologic evaluation of potential subsurface gasoline contamination at Huggett's Mobil, Route 5, East Thetford. The SMS finds this work plan to be acceptable. Please proceed with the site investigation and keep the SMS informed of your progress.

We are looking forward to receiving the results of this investigation. If there are any questions concerning the site, please call.

Sincerely,

Charles B. Schwer, Supervisor
Sites Management Section

CBS:BW/...sites/huggett.let





State of Vermont

Department of Fish and Wildlife
Department of Forests, Parks and Recreation
Department of Environmental Conservation
State Geologist
Natural Resources Conservation Council

AGENCY OF NATURAL RESOURCES
Department of Environmental Conservation

Hazardous Materials Management Division
103 South Main Street / West Building
Waterbury, VT 05671-0404
(802) 244-8702

November 23, 1992

John F. Amadon
Lincoln Applied Geology, Inc.
RD #1, Box 710
Bristol, VT 05443

RE: Petroleum contamination at Huggett's Mobil in East Thetford (Site #91-1172)

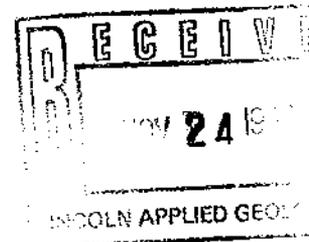
Dear Mr. Amadon:

On February 25, 1992, the Sites Management Section (SMS) approved of a work plan submitted by your firm for the above referenced site which detailed the manner in which the requests of the SMS were to be performed. To this date, we have not received information on what work, if any, has been completed. Please contact and update us on the status of this site so that we can continue to coordinate the investigative and possible remedial efforts which are necessary. Feel free to call with any questions.

Sincerely,

Charles B. Schwer, Supervisor
Sites Management Section

cc: Robert Watson, Huggett's Mobil
mg/1172





LINCOLN

December 3, 1992

APPLIED GEOLOGY, INC.
ENVIRONMENTAL CONSULTANTS

Mr. Charles B. Schwer
Petroleum Sites Coordinator
Vermont Department of
Environmental Conservation
103 South Main Street
Waterbury, Vermont 05676

RE: Huggett's Mobil, East Thetford, Vermont (Site #91-1172)

Dear Mr. Schwer:

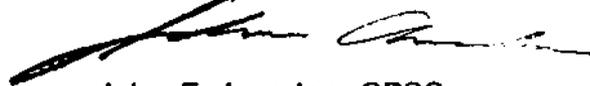
We are in receipt of your November 23, 1992 letter requesting information on the status of our investigatory activities at Huggett's Mobil. The work plan, as proposed and approved, has indeed been carried out and we are continuing with limited ground water quality monitoring. The site does not appear to represent an imminent threat to the environment and we do not believe that active remediation is necessary. Upon receipt of our December 1992 sampling results we will provide you with a complete summary report.

To briefly summarize our current results, evidence of vadose zone contamination was detected within the former tank area. No significant ground water contamination has been detected. Depth to ground water was greater than anticipated in the UST area and ground water has not been consistently present in two of the monitor wells installed. Analytical results from downgradient monitor wells have not demonstrated quantifiable levels of BTEX constituents, although MTBE has been quantified at a maximum of 18 ppb (ug/l).

A receptor assessment has been performed and the closest water supply, a deep well servicing Huggett's Mobil station, has been assayed and no quantifiable levels of BTEX or MTBE constituents have been detected. Municipal water service is available to the other nearby residences and businesses. As a result of our investigation, we have initiated a semi-annual water quality sampling program.

I do apologize for the delay in providing you with an update on this low priority site. As I previously indicated we will provide you with a summary report following receipt of our December sampling. In the interim, please feel free to contact me with any further questions or comments you may have.

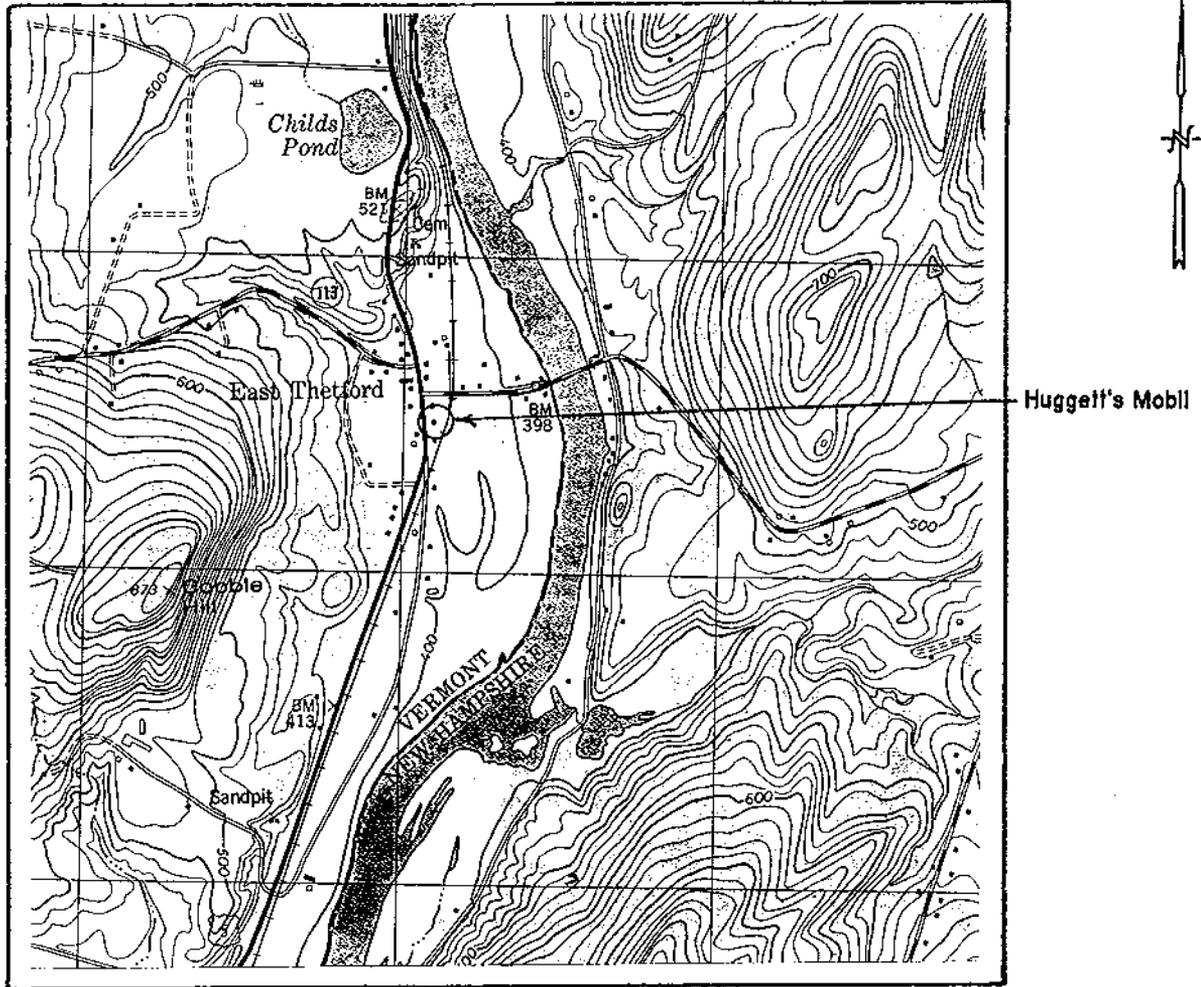
Sincerely,



John F. Amadon, CPSS

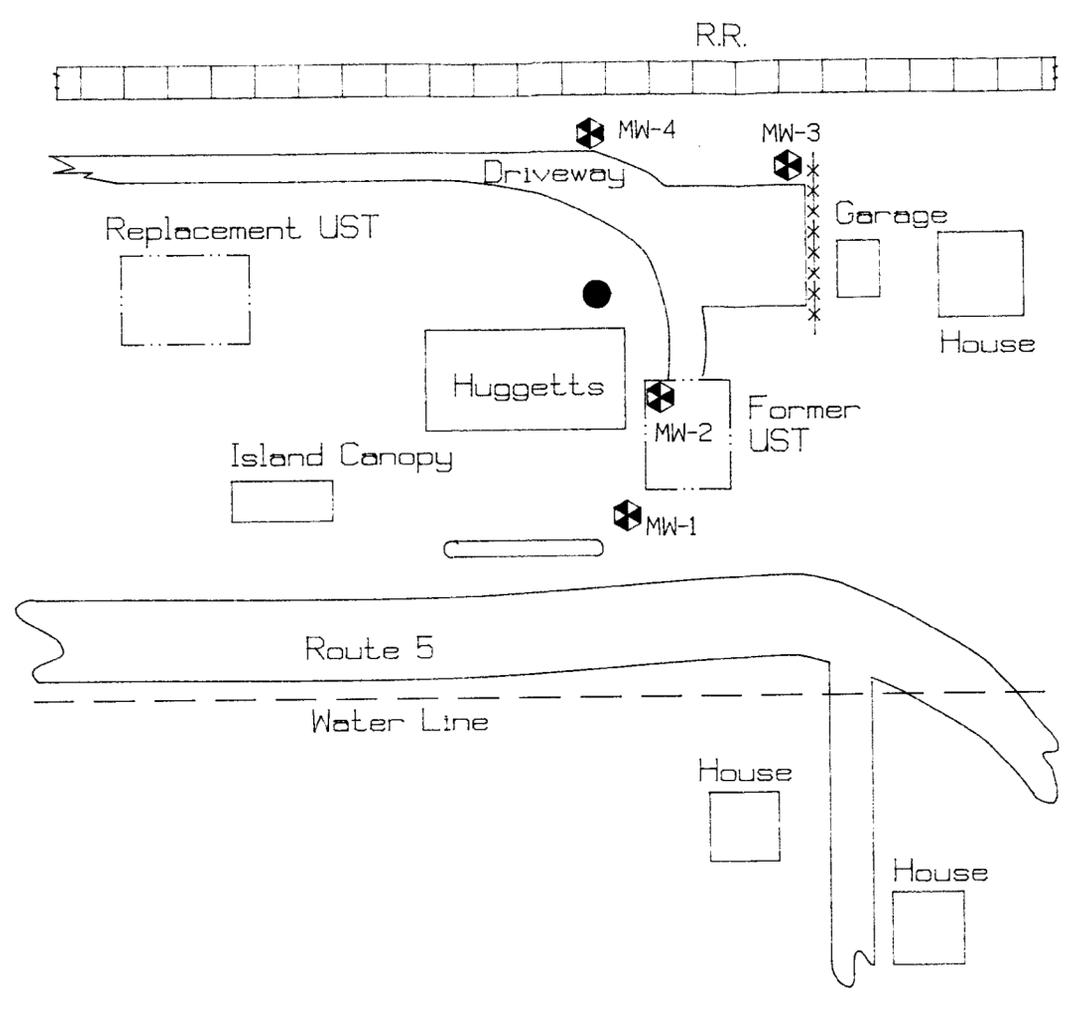
JFA/smd
cc: Robert Watson

Huggett's Mobil GENERAL LOCATION MAP



Source: U.S.G.S. 7.5 min.
Topo Series
Lyme NH -VT Quad

Scale: 1" = 2000'



LEGEND

- Huggetts Well
- Community Water Service Line
- ⊗ Monitoring Well

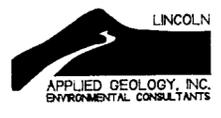


Figure 2

Huggetts Mobil	
<small>Location:</small> E. Thetford, VT	<small>Scale:</small> 1" = 25'
Detailed Site Map	
<small>Date:</small> Aug 93	<small>Job Type:</small> Site Assessment

APPENDIX B

Boring Logs & PID Assays

Green Mountain Boring Co., Inc.

R. D. 2 - BARRE, VERMONT 05641

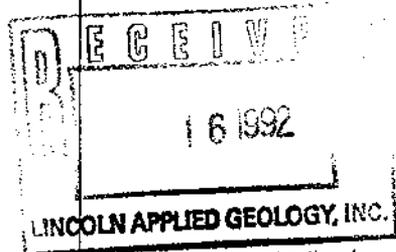
SHEET1..... OF 4
 DATE 3/25/92
 HOLE NO. MW-1
 LINE & STA.
 OFFSET None

TO Lincoln Applied Geology ADDRESS Lincoln, VT
 PROJECT NAME Huggett's Mobil LOCATION E. Thetford, VT
 REPORT SENT TO Lincoln Applied Geology PROJ. NO.
 SAMPLES SENT TO N/A OUR JOB NO. 92-39

GROUND WATER OBSERVATIONS At None at 0 Hours At at Hours	CASING Type AUGERS Size I. D. 4.25" Hammer Wt. Hammer Fall	SAMPLER CORE BAR. SPLIT SPOON 1 3/8" 140# 30"	SURFACE ELEV. DATE STARTED 3/25/92 DATE COMPL. 3/25/92 BORING FOREMAN Garneau INSPECTOR SOILS ENGR.
---	---	---	---

LOCATION OF BORING: As directed

DEPTH	Casing Blows per foot	Sample Depths From - To	Type of Sample	Blows per 6" on Sampler			Moisture Density or Consist.	Strain Change -Elev.	SOIL IDENTIFICATION Remarks include color, gradation, Type of soil etc. Rock-color, type, condition, hardness, Drilling time, seams and etc.	SAMPLE		
				From 0-6	To 6-12	To 12-18				No.	Pen	Rec.
		5'-7'	Dry	5	7	9	Dry	12" PID BG	Auger refusal at 2' Offset 3' East No sample - pushed rock	1	24"	2"
		10'-12'	Dry	7	11	14	Dry	BG	Coarse sand	2	24"	10"
		20'-22'	Dry	9	7	12	Dry	BG	Medium and coarse sand	3	24"	13"
		25'-27'	Dry	7	8	7	Damp	4.0	Fine sand	4	24"	18"
Installed well at 25' <u>Materials Used:</u> 10' .020 screen 15' 2" riser 1 top wing cap 1 bottom slip cap 3 bags #2 sand 25 lbs. bentonite 1 curb box Bag of Cement No bottles used for samples												



GROUND SURFACE TO 25'	USED 4.25" AUGERS:	THEN SPLIT spoon to 27' and inst	SUMMARY 1
Sample Type D=Dry C=Cored W=Washed UP=Undisturbed Piston TP=Test Pit A=Auger V=Vane Test UT=Undisturbed Thinwall	Proportions Used trace 0 to 10% little 10 to 20% some 20 to 35% and 35 to 50%	140 lb. Wr. x 30" fall an 2" O. D. Sampler Cohesionless Density 0-10 Loose 10-30 Med. Dense 30-50 Dense 50+ Very Dense	Cohesive Consistency 0-4 Soft 30+ Hard 4-8 M/Stiff 8-15 Stiff 15-30 V-Stiff
			Earth Boring 27' Rock Coring Samples 4 HOLE NO. MW-1

Green Mountain Boring Co., Inc.

R. D. 2 - BARRE, VERMONT 05641

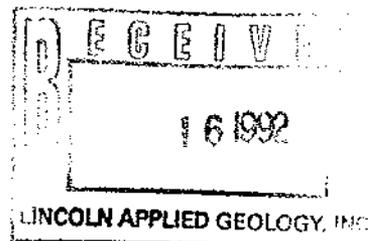
SHEET 2 OF 4
 DATE 3/25/92
 HOLE NO. MW-2
 LINE & STA. _____
 OFFSET None

TO Lincoln Applied Geology ADDRESS Lincoln, VT
 PROJECT NAME Huggett's Mobil LOCATION E. Thetford, VT
 REPORT SENT TO Lincoln Applied Geology PROJ. NO. _____
 SAMPLES SENT TO N/A OUR JOB NO. 92-39

GROUND WATER OBSERVATIONS		CASING	SAMPLER	CORE BAR.	SURFACE ELEV.
At <u>26.5'</u> at <u>0</u> Hours	Type	AUGERS	SPLIT SPOON		DATE STARTED <u>3/25/92</u>
At _____ at _____ Hours	Size I. D.	<u>4.25"</u>	<u>1 1/8"</u>		DATE COMPL. <u>3/25/92</u>
	Hammer Wt.		<u>140#</u>		BORING FOREMAN <u>Garneau</u>
	Hammer Fall		<u>30"</u>		INSPECTOR _____
					SOILS ENGR. _____

LOCATION OF BORING: As directed

DEPTH	Casing Blows per foot	Sample Depths From - To	Type of Sample	Blows per 6" on Sampler			Moisture Density or Consist.	Strata Change Elev.	SOIL IDENTIFICATION Remarks include color, gradation, Type of soil etc. Rock-color, type, condition, hardness, Drilling time, seams and etc.	SAMPLE		
				From 0-6	6-12	To 12-18				No.	Pen	Rec
		<u>5'-7'</u>	<u>Dry</u>	<u>5</u>	<u>7</u>	<u>7</u>	<u>Damp</u>	<u>11-PIG</u> <u>5.0</u>	<u>Very fine sand</u>	<u>1</u>	<u>24"</u>	<u>8"</u>
		<u>10'-12'</u>	<u>Dry</u>	<u>5</u>	<u>7</u>	<u>9</u>	<u>Damp</u>	<u>3.0</u>	<u>Coarse sand</u>	<u>2</u>	<u>24"</u>	<u>8"</u>
		<u>15'-17'</u>	<u>Dry</u>	<u>4</u>	<u>4</u>	<u>5</u>	<u>Dry</u>	<u>2.0</u>	<u>Coarse and medium sand</u>	<u>3</u>	<u>24"</u>	<u>14"</u>
		<u>20'-22'</u>	<u>Dry</u>	<u>6</u>	<u>8</u>	<u>7</u>	<u>Dry</u>	<u>20.0</u>	<u>Fine sand</u>	<u>4</u>	<u>24"</u>	<u>13"</u>
		<u>25'-27'</u>	<u>Dry</u>	<u>4</u>	<u>5</u>	<u>5</u>	<u>Wet</u>	<u>3.0</u>	<u>Fine sand</u>	<u>5</u>	<u>24"</u>	<u>8"</u>
									<u>Installed well at 25'</u>			
									<u>Materials Used:</u>			
									<u>10' .020 screen</u>			
									<u>15' 2" riser</u>			
									<u>1 top wing cap</u>			
									<u>1 bottom slip cap</u>			
									<u>3 bags of #2 sand</u>			
									<u>1 curb box</u>			
									<u>25 Lbs Bentonite</u>			
									<u>No bottles used for samples</u>			



GROUND SURFACE TO <u>25'</u>	USED <u>4.25"</u> AUGERS:	THEN <u>Split spoon to 27'</u> and <u>insta.</u>	SUMMARY
Sample Type	Proportions Used	140 lb. Wt. x 30" fall an 2" O. D. Sampler	Earth Boring 27'
D=Dry C=Cored W=Washed	trace 0 to 10%	Cohesionless Density	Rock Coring
UP=Undisturbed Piston	little 10 to 20%	0-10 Loose	Samples <u>5</u>
TP=Test Pit A=Auger V=Vane Test	some 20 to 35%	10-30 Med. Dense	
UT=Undisturbed Thinwall	and 35 to 50%	30-50 Dense	
		50+ Very Dense	
		Cohesive Consistency	
		0-4 Soft 30+ Hard	
		4-8 M/Stiff	
		8-15 Stiff	
		15-30 V-Stiff	

HOLE NO. MW-2

Green Mountain Boring Co., Inc.

R. D. 2 — BARRE, VERMONT 05641

SHEET 3 OF 4
 DATE 3/25/92
 HOLE NO. MW-3
 LINE & STA.
 OFFSET None

TO Lincoln Applied Geology ADDRESS Lincoln, VT
 PROJECT NAME Huggett's Mobil LOCATION E. Thetford, VT
 REPORT SENT TO Lincoln Applied Geology PROJ. NO.
 SAMPLES SENT TO N/A OUR JOB NO. 92-39

GROUND WATER OBSERVATIONS		CASING	SAMPLER	CORE BAR.	SURFACE ELEV.
At 21'	at 0 Hours	Type	AUGERS	SPLIT SPOON	DATE STARTED 3/25/92
At	at	Size I. D.	4.25"	1 3/8"	DATE COMPL. 3/25/92
		Hammer Wt.		140#	BORING FOREMAN Garneau
		Hammer Fall		30'	INSPECTOR
					SOILS ENGR.

LOCATION OF BORING: As directed

DEPTH	Casing Blows per foot	Sample Depths From - To	Type of Sample	Blows per 6" on Sampler			Moisture Density or Consist.	Strata Change Elev.	SOIL IDENTIFICATION Remarks include color, gradation, Type of soil etc. Rock-color, type, condition, hardness, Drilling time, seams and etc.	SAMPLE		
				From 0-6	To 6-12	To 12-18				No.	Pen	Rec
		10'-12'	Dry	8	7	10	Dry	ppm P10 BG	Medium sand	1	24"	10"
		15'-17'	Dry	4	4	5	Damp	BG	Coarse sand	2	24"	14"
		20'-22'	Dry	5	5	7	Wet	BG	Fine sand, medium sand	3	24"	14"
		25'-27'	Dry	5	9	13	Wet	BG	Fine and medium sand	4	24"	24"
Installed well at 25'												
Materials Used:												
10' .020 screen												
15' 2" riser												
1 top wing cap												
1 bottom slip cap												
3 bags of #2 sand												
15 lbs. bentonite												
1 curb box												
No bottles used for samples												

LINCOLN APPLIED GEOLOGY, INC.

GROUND SURFACE TO 25'		USED 4.25" AUGERS:		THEN Split spoon to 27' and instal.		SUMMAR Well	
Sample Type		Proportions Used		140 lb. Wt. x 30" fall an 2" O. D. Sampler		Earth Boring 27'	
D=Dry C=Cored W=Washed		trace 0 to 10%		Cohesionless Density	Cohesive Consistency	Rock Coring	Samples 4
UP=Undisturbed Piston		little 10 to 20%		0-10 Loose	0-4 Soft 30 + Hard		
TP=Test Pit A=Auger V=Vane Test		some 20 to 35%		10-30 Med. Dense	4-8 M/Stiff		
UT=Undisturbed Thinwall		and 35 to 50%		30-50 Dense	8-15 Stiff		
				50 + Very Dense	15-30 V-Stiff		

HOLE NO. MW-3

Green Mountain Boring Co., Inc.

R. D. 2 - BARRE, VERMONT 05641

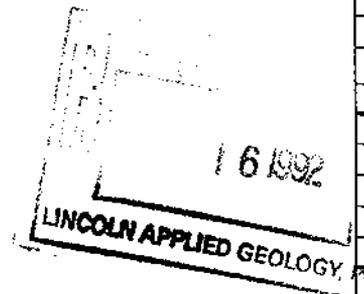
SHEET 4 OF 4
 DATE 3/25/92
 HOLE NO. MW-4
 LINE & STA.
 OFFSET None

TO Lincoln Applied Geology ADDRESS Lincoln, VT
 PROJECT NAME Huggett's Mobil LOCATION E. Thetford, VT
 REPORT SENT TO Lincoln Applied Geology PROJ. NO.
 SAMPLES SENT TO N/A OUR JOB NO. 92-39

GROUND WATER OBSERVATIONS		CASING	SAMPLER	CORE BAR.	SURFACE ELEV.
At 21' at 0 Hours	Type	AUGERS	SPLIT SPOON		DATE STARTED 3/25/92
At _____ at _____ Hours	Size I. D.	4.25"	1 3/8"		DATE COMPL. 3/25/92
	Hammer Wt.		140#		BORING FOREMAN Garneau
	Hammer Fall		30"		INSPECTOR
					SOILS ENGR.

LOCATION OF BORING: As directed

DEPTH	Casing Blows per foot	Sample Depths From - To	Type of Sample	Blows per 6" on Sampler			Moisture Density or Consist.	Strata Change Elev.	SOIL IDENTIFICATION Remarks include color, gradation, Type of soil etc. Rock-color, type, condition, hardness, Drilling time, seams and etc.	SAMPLE		
				From	To					No.	Pen	Rec.
				0-6	6-12	12-18						
								Augered to 25' and installed well				
								Materials Used:				
								10' .020 screen				
								15' 2" riser				
								1 top wing cap				
								1 bottom slip cap				
								3 bags of #2 sand				
								35 lbs. bentonite				
								1 curb box				
								<i>no positive PID assays from the bore hole or soils off the augers</i>				



GROUND SURFACE TO 25'	USED 4.25" AUGERS:	THEN Installed well	SUMMARY:
Sample Type	Proportions Used	140 lb. Wt. x 30" fall an 2" O. D. Sampler	Earth Boring 5
D=Dry C=Cored W=Washed	trace 0 to 10%	Cohesionless Density	Rock Coring
UP=Undisturbed Piston	little 10 to 20%	0-10 Loose	Samples 0
TP=Test Pit A=Auger V=Vane Test	some 20 to 35%	10-30 Med. Dense	
UT=Undisturbed Thinwall	and 35 to 50%	30-50 Dense	
		50+ Very Dense	
		Cohesive Consistency	
		0-4 Soft 30+ Hard	
		4-8 M/Stiff	
		8-15 Stiff	
		15-30 V.Stiff	

HOLE NO. MW-4

Project: Huggett's Mobil
Location: East Thetford, Vermont

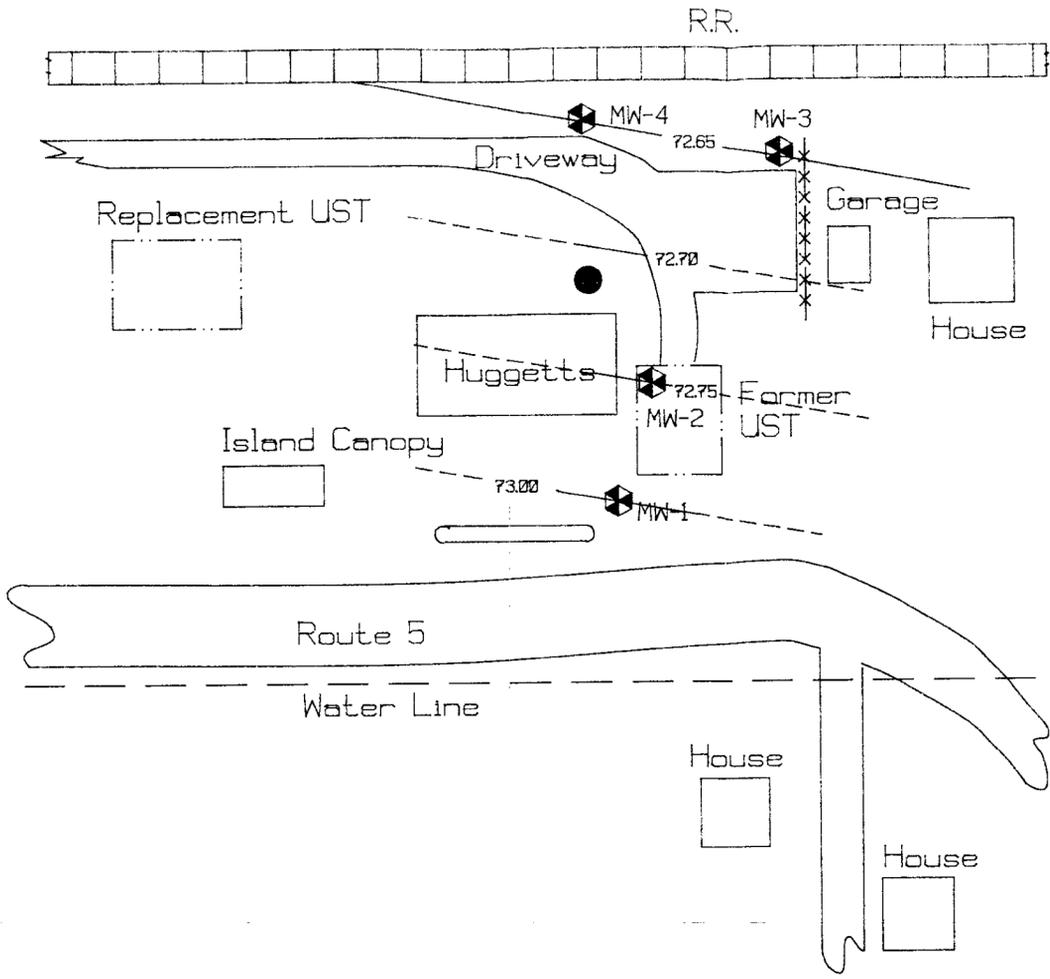
Table 1
Job Number: 9108
Sheet 1 of 1

Ground Water Elevation/Product Level (feet)

		3-25-92	4-2-92	4-27-92	7-31-92	1-7-93	
MW-1	100.00	73.00	<75.00	<75.00	<75.00	<75.00	
MW-2	98.50	72.75	<73.5	<73.5	<73.5	<73.5	
MW-3	93.06	72.64	72.61	73.26	72.76	73.01	
MW-4	92.96	72.65	72.61	73.35	72.81	72.96	

NOTES:

- 1 - Elevation datum assumed
- 2 - Reference elevation is elevation of top of PVC well casing
- * - Water entering at top of casing



LEGEND

- Huggetts Well
- Community Water Service Line
- ⊗ Monitoring Well

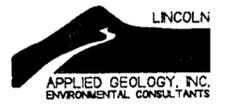
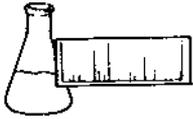


Figure 3

Huggetts Mobil	
Location: E. Thetford, VT	Scale: 1" = 25'
Ground Water Contour Map For March 25, 1992	
Date: Aug 93	Job Type: Site Assessment

APPENDIX C

Water Quality Results



ENDYNE, INC.

Laboratory Services

32 James Brown Drive
Williston, Vermont 05495
(802) 879-4333
FAX 879-7103

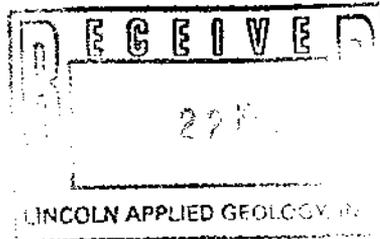
LABORATORY REPORT

GC METHOD--BTEX (BENZENE, TOLUENE, ETHYLBENZENE,XYLENES)

CLIENT: Lincoln Applied Geology
PROJECT NAME: Huggett's Service Station
REPORT DATE: April 17, 1992
DATE SAMPLED: April 2, 1992
DATE RECEIVED: April 2, 1992
ANALYSIS DATE: April 15, 1992

PROJECT CODE: LAHU7183
REF.#: 29,375
STATION: MW 3
TIME SAMPLED: 12:00
SAMPLER: Jim Holman

<u>Parameter</u>	<u>Detection Limit (ug/L)</u>	<u>Concentration (ug/L)</u>
Benzene	1	ND ¹
Toluene	1	1.0
Ethylbenzene	1	ND
Xylenes	1	ND
MTBE	1	ND



NUMBER OF UNIDENTIFIED PEAKS FOUND: 1

NOTES:

1 None detected

Reviewed by



ENDYNE, INC.

Laboratory Services

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Williston, Vermont 05495
(802) 879-4333
FAX 879-7103

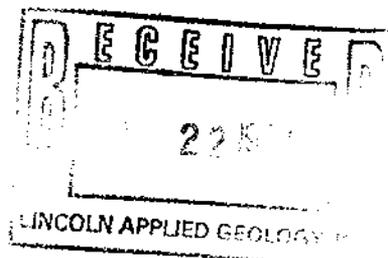
LABORATORY REPORT

GC METHOD--BTEX (BENZENE, TOLUENE, ETHYLBENZENE,XYLENES)

CLIENT: Lincoln Applied Geology
PROJECT NAME: Huggett's Service Station
REPORT DATE: April 17, 1992
DATE SAMPLED: April 2, 1992
DATE RECEIVED: April 2, 1992
ANALYSIS DATE: April 16, 1992

PROJECT CODE: LAHU7183
REF.#: 29,376
STATION: MW 4
TIME SAMPLED: 12:30
SAMPLER: Jim Holman

<u>Parameter</u>	<u>Detection Limit (ug/L)</u>	<u>Concentration (ug/L)</u>
Benzene	1	ND ¹
Toluene	1	TBQ ²
Ethylbenzene	1	ND
Xylenes	1	ND
MTBE	1	17.9

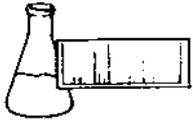


NUMBER OF UNIDENTIFIED PEAKS FOUND: 0

NOTES:

- 1 None detected
- 2 Trace below quantitation limit

Reviewed by 



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Laboratory Services

32 James Brown Drive
Williston, Vermont 05495
(802) 879-4333
FAX 879-7103

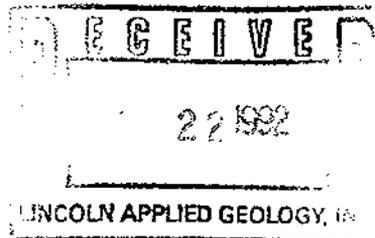
LABORATORY REPORT

GC METHOD--BTEX (BENZENE, TOLUENE, ETHYLBENZENE,XYLENES)

CLIENT: Lincoln Applied Geology
PROJECT NAME: Huggett's Service Station
REPORT DATE: April 17, 1992
DATE SAMPLED: April 2, 1992
DATE RECEIVED: April 2, 1992
ANALYSIS DATE: April 16, 1992

PROJECT CODE: LAHU7183
REF.#: 29,377
STATION: Huggett's Service Station
TIME SAMPLED: 12:40
SAMPLER: Jim Holman

<u>Parameter</u>	<u>Detection Limit (ug/L)</u>	<u>Concentration (ug/L)</u>
Benzene	1	ND ¹
Toluene	1	TBQ ²
Ethylbenzene	1	ND
Xylenes	1	ND
MTBE	1	ND

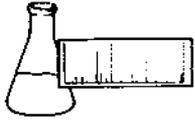


NUMBER OF UNIDENTIFIED PEAKS FOUND: 1

NOTES:

- 1 None detected
- 2 Trace below quantitation limit

Reviewed by 



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Laboratory Services

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FAX 879-7103

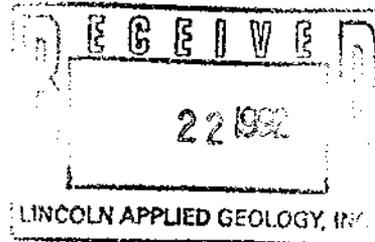
LABORATORY REPORT

GC METHOD--BTEX (BENZENE, TOLUENE, ETHYLBENZENE, XYLENES)

CLIENT: Lincoln Applied Geology
PROJECT NAME: Huggett's Service Station
REPORT DATE: April 17, 1992
DATE SAMPLED: April 2, 1992
DATE RECEIVED: April 2, 1992
ANALYSIS DATE: April 16, 1992

PROJECT CODE: LAHU7183
REF.#: 29,378
STATION: Huggett's Store
TIME SAMPLED: 12:45
SAMPLER: Jim Holman

<u>Parameter</u>	<u>Detection Limit (ug/L)</u>	<u>Concentration (ug/L)</u>
Benzene	1	ND ¹
Toluene	1	ND
Ethylbenzene	1	ND
Xylenes	1	ND
MTBE	1	ND



NUMBER OF UNIDENTIFIED PEAKS FOUND: 0

NOTES:

1 None detected

Reviewed by _____



Laboratory Services

32 James Brown Drive
Williston, Vermont 05495
(802) 879-4333
FAX 879-7103

LABORATORY REPORT

GC METHOD--BTEX (BENZENE, TOLUENE, ETHYLBENZENE,XYLENES)

CLIENT: Lincoln Applied Geology
PROJECT NAME: Huggetts Mobil
REPORT DATE: August 14, 1992
DATE SAMPLED: July 31, 1992
DATE RECEIVED: July 31, 1992
ANALYSIS DATE: August 13, 1992

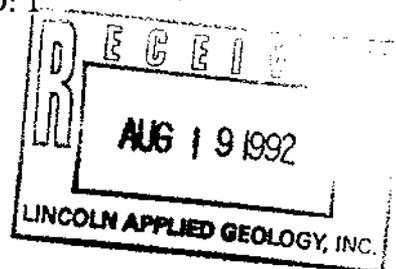
PROJECT CODE: LAHU1826
REF.#: 33,831
STATION: MW 3
TIME SAMPLED: 10:45
SAMPLER: Jim Holman

<u>Parameter</u>	<u>Detection Limit (ug/L)</u>	<u>Concentration (ug/L)</u>
Benzene	1	ND ¹
Toluene	1	ND
Ethylbenzene	1	ND
Xylenes	1	ND
MTBE	5	ND

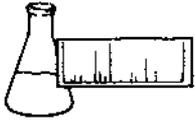
NUMBER OF UNIDENTIFIED PEAKS FOUND: 1

NOTES:

1 None detected



Reviewed by



ENDYNE, INC.

Laboratory Services

32 James Brown Drive
Williston, Vermont 05495
(802) 879-4333
FAX 879-7103

LABORATORY REPORT

GC METHOD--BTEX (BENZENE, TOLUENE, ETHYLBENZENE, XYLENES)

CLIENT: Lincoln Applied Geology
PROJECT NAME: Huggetts Mobil
REPORT DATE: August 14, 1992
DATE SAMPLED: July 31, 1992
DATE RECEIVED: July 31, 1992
ANALYSIS DATE: August 13, 1992

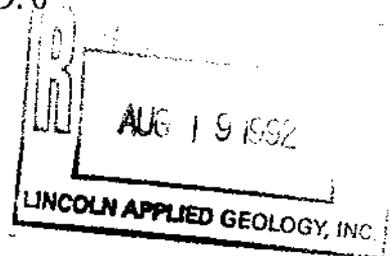
PROJECT CODE: LAHU1826
REF.#: 33,832
STATION: MW 4
TIME SAMPLED: 10:55
SAMPLER: Jim Holman

<u>Parameter</u>	<u>Detection Limit (ug/L)</u>	<u>Concentration (ug/L)</u>
Benzene	1	ND ¹
Toluene	1	ND
Ethylbenzene	1	ND
Xylenes	1	ND
MTBE	5	6.2

NUMBER OF UNIDENTIFIED PEAKS FOUND: 0

NOTES:

1 None detected



Reviewed by

Susan Dylak



ENDYNE, INC.

Laboratory Services

32 James Brown Drive
Williston, Vermont 05495
(802) 879-4333
FAX 879-7103

LABORATORY REPORT

GC METHOD--BTEX (BENZENE, TOLUENE, ETHYLBENZENE, XYLENES)

CLIENT: Lincoln Applied Geology
PROJECT NAME: Huggetts Mobil
REPORT DATE: August 14, 1992
DATE SAMPLED: July 31, 1992
DATE RECEIVED: July 31, 1992
ANALYSIS DATE: August 13, 1992

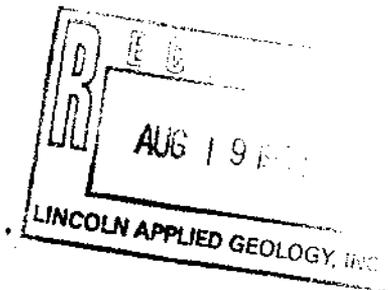
PROJECT CODE: LAHU1826
REF.#: 33,833
STATION: Huggetts Well
TIME SAMPLED: 11:05
SAMPLER: Jim Holman

<u>Parameter</u>	<u>Detection Limit (ug/L)</u>	<u>Concentration (ug/L)</u>
Benzene	1	ND ¹
Toluene	1	ND
Ethylbenzene	1	ND
Xylenes	1	ND
MTBE	5	ND

NUMBER OF UNIDENTIFIED PEAKS FOUND: 0

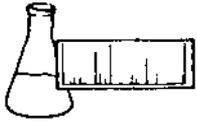
NOTES:

1 None detected



Reviewed by

Susan Gable



ENDYNE, INC.

Laboratory Services

32 James Brown Drive
Williston, Vermont 05495
(802) 879-4333
FAX 879-7103

LABORATORY REPORT

GC METHOD--BTEX (BENZENE, TOLUENE, ETHYLBENZENE,XYLENES)

CLIENT: Lincoln Applied Geology
PROJECT NAME: Huggetts Mobil
REPORT DATE: August 14, 1992
DATE SAMPLED: July 31, 1992
DATE RECEIVED: July 31, 1992
ANALYSIS DATE: August 13, 1992

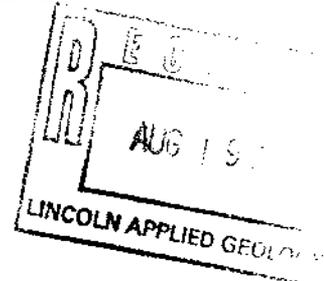
PROJECT CODE: LAHU1826
REF.#: 33,834
STATION: Huggetts Store
TIME SAMPLED: 11:15
SAMPLER: Jim Holman

<u>Parameter</u>	<u>Detection Limit (ug/L)</u>	<u>Concentration (ug/L)</u>
Benzene	1	ND ¹
Toluene	1	ND
Ethylbenzene	1	ND
Xylenes	1	ND
MTBE	5	ND

NUMBER OF UNIDENTIFIED PEAKS FOUND: 0

NOTES:

1 None detected



Reviewed by

Suzanne G. [Signature]



Laboratory Services

32 James Brown Drive
Williston, Vermont 05495
(802) 879-4333
FAX 879-7103

LABORATORY REPORT

GC METHOD--BTEX (BENZENE, TOLUENE, ETHYLBENZENE, XYLENES)

CLIENT: Lincoln Applied Geology
PROJECT NAME: Huggetts Mobil
REPORT DATE: August 14, 1992
DATE SAMPLED: July 31, 1992
DATE RECEIVED: July 31, 1992
ANALYSIS DATE: August 13, 1992

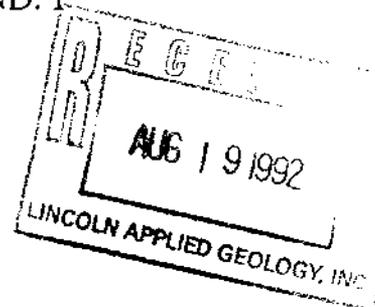
PROJECT CODE: LAHU1826
REF.#: 33,835
STATION: Trip
TIME SAMPLED: 5:50
SAMPLER: Jim Holman

<u>Parameter</u>	<u>Detection Limit (ug/L)</u>	<u>Concentration (ug/L)</u>
Benzene	1	ND ¹
Toluene	1	ND
Ethylbenzene	1	ND
Xylenes	1	ND
MTBE	5	ND

NUMBER OF UNIDENTIFIED PEAKS FOUND: 1

NOTES:

1 None detected



Reviewed by Susan Fudge



ENDYNE, INC.

Laboratory Services

32 James Brown Drive
Williston, Vermont 05495
(802) 879-4333
FAX 879-7103

REPORT OF LABORATORY ANALYSIS

CLIENT: Lincoln Applied Geology
PROJECT NAME: Hugetts Mobil
REPORT DATE: January 21, 1993
DATE SAMPLED: January 7, 1993

PROJECT CODE: LAHM1704
REF.#: 40,807 - 40,810

Enclosed please find the results of the analyses performed for the samples referenced on the attached chain of custody.

Chain of custody indicated samples were preserved with HCl.

All samples were prepared and analyzed by requirements outlined in the referenced method and within the specified holding times.

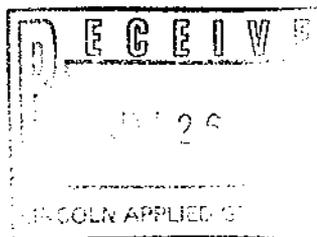
All instrumentation was calibrated with the appropriate frequency and verified by the requirements outlined in the referenced method.

Blank contamination was not observed at levels affecting the analytical results.

Analytical method precision and accuracy was monitored by laboratory control standards which included matrix spike, duplicate and quality control analyses. These standards were determined to be within established laboratory method acceptance limits.

Reviewed by,

Harry B. Locker, Ph.D.
Laboratory Director



enclosures



ENDYNE, INC.

Laboratory Services

32 James Brown Drive
Williston, Vermont 05495
(802) 879-4333
FAX 879-7103

LABORATORY REPORT

GC METHOD--BTEX (BENZENE, TOLUENE, ETHYLBENZENE,XYLENES)

CLIENT: Lincoln Applied Geology
PROJECT NAME: Hugetts Mobil
REPORT DATE: January 21, 1993
DATE SAMPLED: January 7, 1993
DATE RECEIVED: January 7, 1993
ANALYSIS DATE: January 21, 1993

PROJECT CODE: LAHM1704
REF.#: 40,807
STATION: Trip
TIME SAMPLED: 12:30
SAMPLER: Jim Holman

<u>Parameter</u>	<u>Detection Limit (ug/L)</u>	<u>Concentration (ug/L)</u>
Benzene	1	ND ¹
Toluene	1	ND
Ethylbenzene	1	ND
Xylenes	1	ND
MTBE	5	ND

Bromobenzene Surrogate Recovery: 113%

NUMBER OF UNIDENTIFIED PEAKS FOUND: 0

NOTES:

1 None detected



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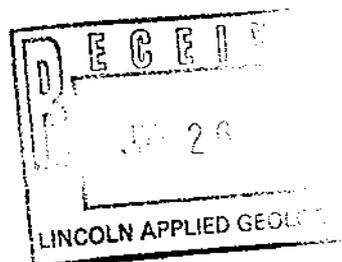
LABORATORY REPORT

GC METHOD--BTEX (BENZENE, TOLUENE, ETHYLBENZENE,XYLENES)

CLIENT: Lincoln Applied Geology
PROJECT NAME: Huggets Mobil
REPORT DATE: January 21, 1993
DATE SAMPLED: January 7, 1993
DATE RECEIVED: January 7, 1993
ANALYSIS DATE: January 21, 1993

PROJECT CODE: LAHM1704
REF.#: 40,808
STATION: Huggets
TIME SAMPLED: 12:41
SAMPLER: Jim Holman

<u>Parameter</u>	<u>Detection Limit (ug/L)</u>	<u>Concentration (ug/L)</u>
Benzene	1	ND ¹
Toluene	1	ND
Ethylbenzene	1	ND
Xylenes	1	ND
MTBE	5	ND

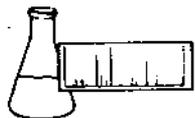


Bromobenzene Surrogate Recovery: 96%

NUMBER OF UNIDENTIFIED PEAKS FOUND: 0

NOTES:

1 None detected



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LABORATORY REPORT

GC METHOD--BTEX (BENZENE, TOLUENE, ETHYLBENZENE, XYLENES)

CLIENT: Lincoln Applied Geology
PROJECT NAME: Hugetts Mobil
REPORT DATE: January 21, 1993
DATE SAMPLED: January 7, 1993
DATE RECEIVED: January 7, 1993
ANALYSIS DATE: January 21, 1993

PROJECT CODE: LAHM1704
REF.#: 40,809
STATION: MW 3
TIME SAMPLED: 12:54
SAMPLER: Jim Holman

<u>Parameter</u>	<u>Detection Limit (ug/L)</u>	<u>Concentration (ug/L)</u>
Benzene	1	ND ¹
Toluene	1	ND
Ethylbenzene	1	ND
Xylenes	1	1.4
MTBE	5	ND

Bromobenzene Surrogate Recovery: 101%

NUMBER OF UNIDENTIFIED PEAKS FOUND: 0

NOTES:

1 None detected



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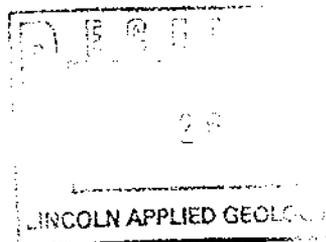
LABORATORY REPORT

GC METHOD--BTEX (BENZENE, TOLUENE, ETHYLBENZENE, XYLENES)

CLIENT: Lincoln Applied Geology
PROJECT NAME: Hugetts Mobil
REPORT DATE: January 21, 1993
DATE SAMPLED: January 7, 1993
DATE RECEIVED: January 7, 1993
ANALYSIS DATE: January 21, 1993

PROJECT CODE: LAHM1704
REF.#: 40,810
STATION: MW 4
TIME SAMPLED: 1:10
SAMPLER: Jim Holman

<u>Parameter</u>	<u>Detection Limit (ug/L)</u>	<u>Concentration (ug/L)</u>
Benzene	1	ND ¹
Toluene	1	ND
Ethylbenzene	1	ND
Xylenes	1	ND
MTBE	5	ND

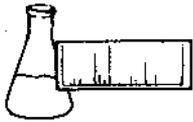


Bromobenzene Surrogate Recovery: 104%

NUMBER OF UNIDENTIFIED PEAKS FOUND: 0

NOTES:

1 None detected



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EPA METHOD 602 LABORATORY REPORT

MATRIX SPIKE AND DUPLICATE LABORATORY CONTROL DATA

CLIENT: Lincoln Applied Geology
PROJECT NAME: Hugetts Mobil
REPORT DATE: January 21, 1993
DATE SAMPLED: January 7, 1993
DATE RECEIVED: January 7, 1993
ANALYSIS DATE: January 21, 1993

PROJECT CODE: LAHM1704
REF.#: 40,808
STATION: Huggetts
TIME SAMPLED: 12:41
SAMPLER: Jim Holman

<u>Parameter</u>	<u>Sample(ug/L)</u>	<u>Spike(ug/L)</u>	<u>Dup1(ug/L)</u>	<u>Dup2(ug/L)</u>	<u>Avg % Rec</u>
Benzene	0	10	7.6	8.8	82%
Toluene	0	10	7.6	9.3	85%
Ethylbenzene	0	10	7.4	8.4	79%
Xylenes	0	30	21.6	24.9	78%

RECEIVED

Project: Huggett's Mobil
 Location: East Thetford, Vermont

Table 3
 Job Number: 9108
 Sheet 1 of 1

Ground Water Quality Results (ppb)

Data Point	4-2-92	7-31-92	1-7-93			
MW-1	---	---	---			
MW-2	---	---	---			
MW-3	<4	<4	<4.4			
MW-4	<4	17.9	6.2			
Huggett's Well	<4	<4	<4			
Huggett's Store	<4	<4	---			

NOTES:
 MTBE in upper right corner of cell
 BTEX in lower left corner of cell
 < - Contaminant not detected at specified detection limit