

THE JOHNSON COMPANY, INC.

Environmental Sciences and Engineering

January 23, 1997

Mr. Matthew Moran, Site Manager
Sites Management Section, Vermont Waste Management Division
Department of Environmental Conservation
103 South Main Street, West Office
Waterbury, Vermont 05671-0404

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JAN
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30
AM
1997

Re: Request for SMAC Designation for the Blackmer/Ladd Property in Fairlee, Vermont
SMS Site # 96-1997
JCO # 1-1371-1 (042)

Dear Mr. Moran:

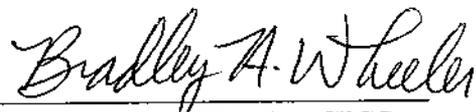
As you requested on January 23, 1997, attached is a copy of the Site Investigation/Corrective Action report for the above referenced property.

Based on the findings that are detailed in the report, we believe that a Site Management Activity Completed (SMAC) designation is appropriate for this site. We request that you conduct a review of the report and consider providing the site with a SMAC designation. If you have any questions about the report or the site conditions, please feel free to call at any time.

Dr. David McKay and the other owners of the property are actively negotiating a sale of this property with the Wells River Savings Bank. Your response to this request is vital to this transaction. We would appreciate your prompt response to this matter.

If you have any questions, please do not hesitate to call.

Sincerely,
THE JOHNSON COMPANY, INC.

By: 
Bradley A. Wheeler, CPSS
Senior Scientist

cc: Dr. David McKay

Reviewed By: BRH
I:\PROJECTS\1-1371-1\SMAC.197 January 23, 1997 BAW

THE JOHNSON COMPANY, INC.

Environmental Sciences and Engineering

August 28, 1996

Dr. David McKay
P.O. Box 1198
Montpelier, Vermont 05601

Re: Report for the Site Investigation/Corrective Action at the
Blackmer/Ladd Property, Main Street, Fairlee, Vermont
SMS Site # 96-1997
JCO # 1-1371-1 (042)

Dear Dr. McKay:

The Johnson Company has completed the Site Investigation/Corrective Action (SI/CA) for the above referenced property. (See Figure 1, Site Location Map) The objective of this SI/CA was to meet the requirements of the June 4, 1996 letter to you from Matthew Moran of the Vermont Sites Management Section (SMS). Mr Moran's letter was in response to a May 1996 Phase I Environmental Site Assessment report prepared by The Johnson Company. In this report, we described two areas on the property that have been impacted by the disposal of paint brush cleaning wastes, reportedly primarily kerosene. It was believed that similar waste may have been disposed into the soil that makes up a portion of the basement floor of the house on the property. The scope of work was based on a June 10, 1996 work plan developed by The Johnson Company. Copies of the SMS June 4, 1996 letter and The Johnson Company work plan are attached as Appendix A.

The Johnson Company's work plan included the following tasks:

1. determine the degree and extent of the soil contamination outside and in the basement of the house,
2. remove soils that are contaminated with volatile organic compounds,
3. sample roofing materials located on the ground near the garage and analyze them for asbestos,
4. determine if any sensitive receptors may be at risk due to the site contamination,
5. determine the need for an on-going treatment and/or monitoring plan.

On July 11, 1996, Bradley A. Wheeler, Senior Scientist for The Johnson Company and Don Kramer, backhoe operator for Great Northern Environmental Services, completed the soil excavation work on the site. As the areas of concern (see Figure 2, Site Sketch) were excavated with the backhoe, the soils were screened using a photoionization detector (PID) and all soils that were found to produce positive readings for volatile organic compounds using a plastic bag headspace screening method were removed. The PID used was a Thermo Environmental Organic Vapor Meter Model 580B, and was calibrated using zero air and 100 parts per million (ppm) isobutylene calibration gas on the morning of the field work.

The first area excavated was in the wooded portion of the property west of the garage. The maximum PID headspace reading for the excavated soils was approximately 245 ppm. The completed excavation was a hole approximately 150 square feet in area and 12 feet deep. No evidence of a seasonal high water table was seen in the excavation.

PID screening of the soils remaining in place provided results of 2 ppm or less on the sides and bottom of the hole. A composite soil sample (SS-1) was collected from the soils remaining in this area for analysis for volatile organic hydrocarbons using EPA Method 8260.

The reported results of this analysis are as follows:

ethylbenzene	44 parts per billion (ppb)
o-xylene	51 ppb
m+p-xylene	190 ppb

The laboratory report for this analysis is included in Appendix B.

The second area excavated was on the lawn immediately southwest of the house. In this area, we removed approximately 3 to 4 cubic yards of soil contaminated at levels ranging to as high as 61 ppm based on PID headspace screening. Following the excavation, which resulted in an excavated area approximately 300 square feet in area and an average of four inches deep (some spots were as much as 12 inches deep), PID screening indicated that soils remaining in place produced readings of less than 1.8 ppm.

A composite soil sample (SS-2) was collected from the soils remaining in this area for analysis for volatile organic hydrocarbons using EPA Method 8260. The reported results of this analysis are as follows:

ethylbenzene	51 ppb
o-xylene	65 ppb
m+p-xylene	220 ppb

The laboratory report for this analysis is included in Appendix B.

After the excavation of the contaminated soils from these two areas was completed, the areas were backfilled with clean sand to the original grade.

The excavated soils were temporarily stockpiled on site (as shown on Figure 2) in an encapsulation of 6 mil polyethylene sheeting. A composite sample of the stockpiled soils was collected and analyzed at ChemServe Laboratory in Milford, New Hampshire in order to determine their suitability for disposal at the MTS asphalt batch disposal facility in Epsom, New Hampshire. This suite of analyses included, among other analyses, testing for volatile organic compounds using EPA Method 8260, and for total petroleum hydrocarbons using EPA Method 8100. It was reported by the laboratory that the composite sample contained 4-isopropyltoluene at a concentration of 10 ppb and 1,2,4-trimethylbenzene at a concentration of 130 ppb. Total petroleum hydrocarbons were reported in the sample at 360 ppm. A copy of the laboratory report for the analysis of this composite sample is included as Appendix C.

Based on the reported results of the laboratory analysis, the soils were determined to be suitable for disposal at the MTS facility. On August 1 and 2, 1996, Great Northern Environmental Services loaded the stockpiled soils and trucked them to the MTS facility. The total weight of soil received at the MTS facility was 43.27 tons. This weight corresponds to approximately 65 cubic yards of soil, based on an assumed weight of 1.5 tons per cubic yard of soil.

Three samples of roofing material that was suspected of containing asbestos were collected on July 11, 1996. This material was on the ground around the garage, presumably discarded during a past replacement of the garage roof. The locations of the samples are shown on Figure 2. Sample 1 was a felt paper, and samples 2 and 3 were black asphalt roofing material. The samples were analyzed for asbestos at East Coast Analytical Laboratory, Inc. in South Burlington, Vermont using polarized light microscopy. All samples were reported to not contain asbestos. The laboratory report is attached as Appendix D.

To address the concern of contamination in the soils in the basement, we collected ten surficial (from a depth of 0 to 10 inches) soil samples from throughout the sand floor area. These samples were screened using the PID for volatile organic compounds using the same plastic bag headspace screening method used for the soils excavated outside. Readings of 0.0 ppm were recorded for each sample. No evidence of soil contamination was detected in the basement of the house.

During the course of the field work on July 11, 1996, a small area of oily leaves and soil was identified immediately behind the garage. This 3 to 4 cubic feet of material, along with an additional 5 to 6 cubic feet of visually clean appearing soil from around and under the oily material, was placed in a drum by Great Northern Environmental Services and removed from the site for disposal at Northland Environmental, Inc. in Providence, Rhode Island.

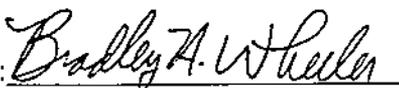
Based on the limited extent of the soil contamination on the site, the fact that the area is served by a municipal water supply system, and the lack of nearby surface water, we have determined that there are no sensitive receptors at risk from the contaminated soils that were formerly located on the property. The depth to groundwater at a nearby site under management by the SMS is approximately 50 feet.

Based on the conditions encountered during the site investigation, and the results of the soil excavation activities, we have determined that an on-going treatment plan and/or monitoring plan is not needed for this site. The residual soil contamination has been removed from the site, and the groundwater on the site has not been impacted.

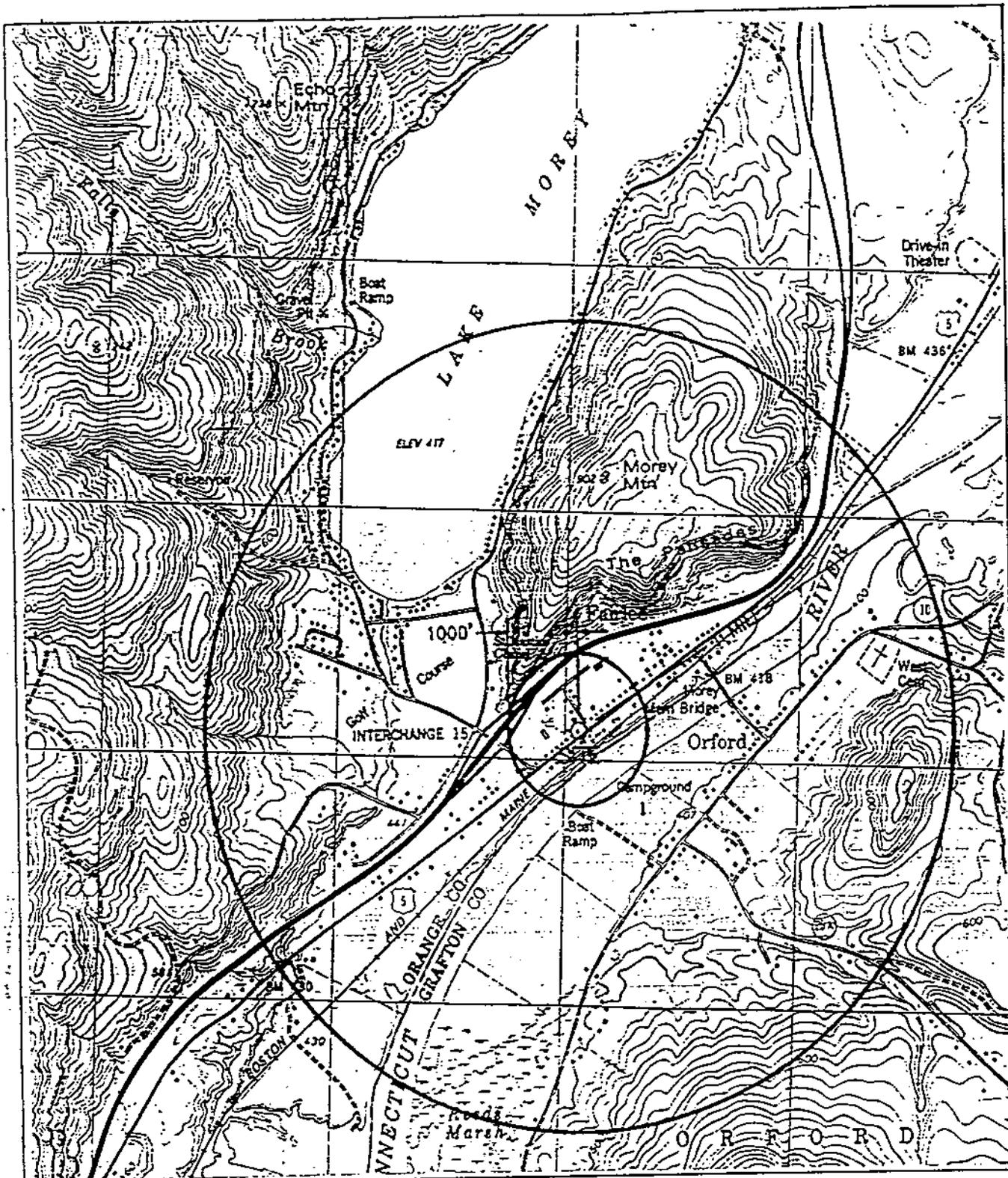
Now that the site has been fully investigated and the soil contamination has been removed, we believe that the site meets the requirements established for designation as Site Management Activities Completed (SMAC) by the SMS. We recommend that this report, along with an appropriate cover letter, be used to make a formal request to the SMS for SMAC designation of the site.

We appreciate the opportunity to conduct this SI/CA for you. If you have any questions, please do not hesitate to call.

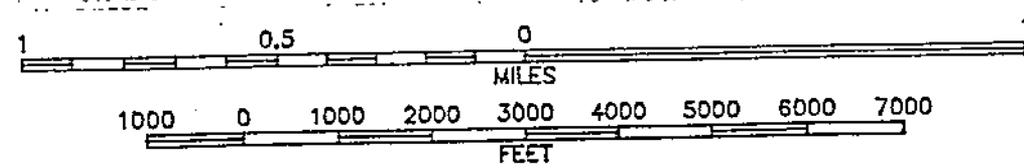
Sincerely,
THE JOHNSON COMPANY, INC.

By: 
Bradley A. Wheeler, CPSS
Senior Scientist

FIGURES



NORTH ↑



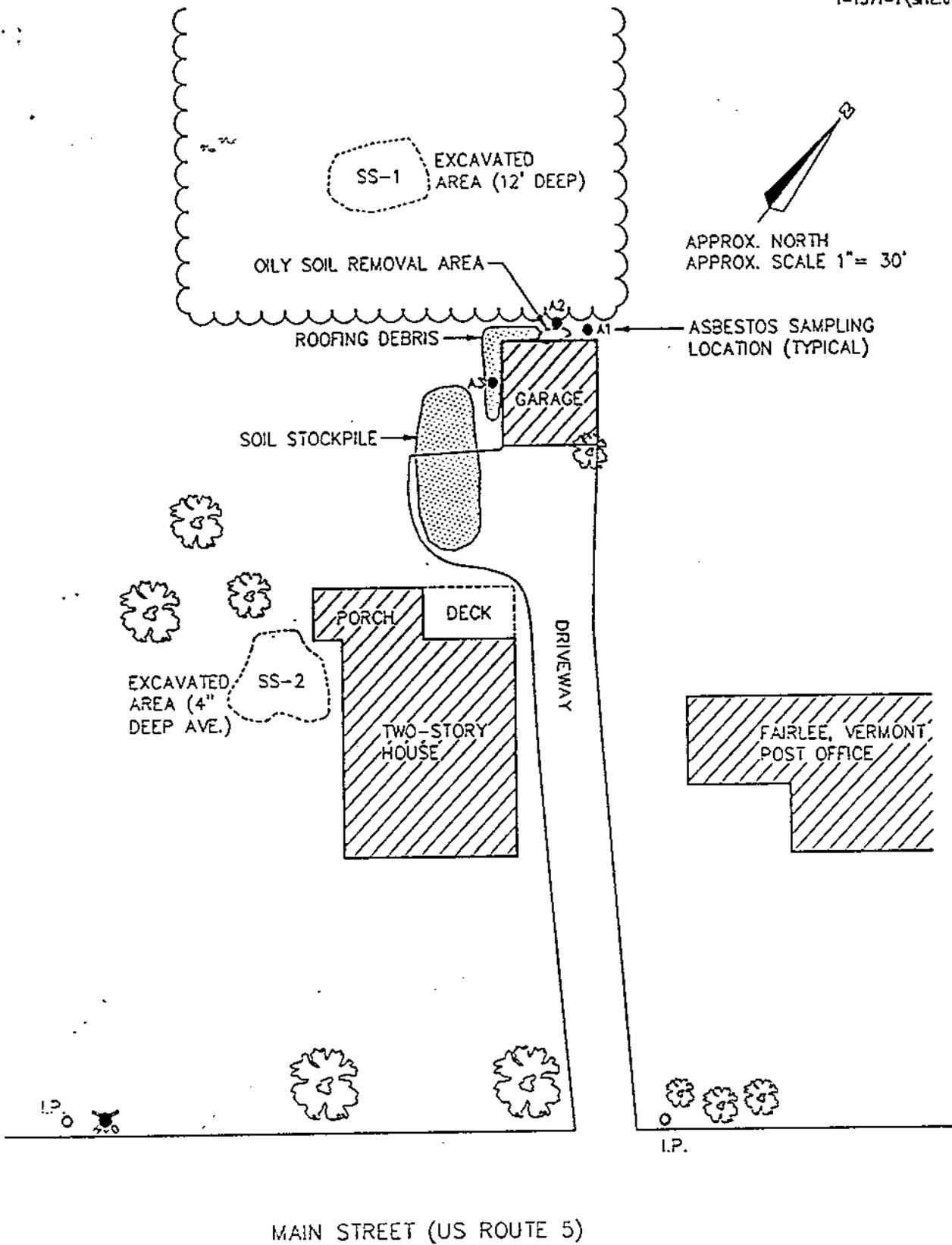
CONTOUR INTERVAL 20 FEET



BASE MAP : USGS 7.5 Minute Topographic Quadrangles: Fairlee VT-NH revised 1981.

FIGURE 1: Site Location Map
 Blackmer / Ladd Property
 Fairlee, Vermont

THE JOHNSON COMPANY, INC.
 Environmental Sciences and Engineering
 100 STATE STREET MONTPELIER, VT 05602



FAIRLEE GENERAL STORE

WATERS' SALES AND SERVICE

YOUR PLACE RESTAURANT

FIGURE 2 - SITE SKETCH
BLACKMER/LADD PROPERTY
FAIRLEE, VERMONT

THE JOHNSON COMPANY, INC.
Environmental Sciences and Engineering
100 STATE STREET MONTPELIER, VT 05602

APPENDIX A



State of Vermont

1-2330-4
Btu

Department of Fish and Wildlife
Department of Forests, Parks and Recreation
Department of Environmental Conservation
State Geologist
RELAY SERVICE FOR THE HEARING IMPAIRED
1-800-253-0191 TDD>Voice
1-800-253-0195 Voice>TDD

AGENCY OF NATURAL RESOURCES
Department of Environmental Conservation
Waste Management Division
103 South Main Street/West Office
Waterbury, Vermont 05671-0404
(802) 241-3888
FAX (802) 241-3296

RECEIVED
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1996
JOHNSON CO. INC.
MONTPELIER, VT

DAVID MCKAY
PO BOX 1198
MONTPELIER VT 05601

RE: Phase I Environmental Site Assessment for the Blackma/Ladd Property, Fairlee, VT
(Site #96-1997)

Dear Mr. McKay:

The Sites Management Section (SMS) has received The Johnson Company, Inc. Phase I Environmental Site Assessment report outlining evidence of subsurface cleaning solvent contamination in two areas of the above referenced site. The report summarizes the degree and extent of contamination encountered during the assessment.

During the assessment, two areas were investigated where paints and solvents for cleaning painting equipment were dumped. The first area investigated was located in the woods where kerosene (a solvent) was reportedly dumped. In this area, soils screened from a depth of approximately one (1) foot below ground surface (bgs) contained peak volatile organic compound (VOC) concentrations of 279 parts per million (ppm), as measured by a photoionization detector (PID). As the boring was advanced, soil sample concentrations decreased with depth. Soil samples collected from approximately four (4) feet bgs, the maximum depth of the boring, contained PID readings of 91 ppm. The second area investigated was located at the southwest side of the house where water used to clean painting equipment was dumped on the lawn. A peak PID reading of 45 ppm was encountered at approximately one (1) foot bgs, but PID readings dropped below 2 ppm at a depth of approximately two (2) feet bgs. The lateral extent of contamination in both of these areas is unclear. The Johnson Company, Inc. did not report whether there was any visual or olfactory evidence of contamination associated with either of the above cited areas. During the winter, painting equipment was also cleaned in the basement of the on-site building; half of the basement has a dirt floor. Although a substantial number of paints and thinners were stored in the basement and an open five gallon container of kerosene was present on the dirt floor, no odor or soil staining was noted. Other areas of potential concern identified during the assessment included: asphalt roofing material that may contain asbestos piled on the ground near the garage; wood and other materials piled near the garage which may be considered solid waste. Drinking water is supplied by the municipal system. The Connecticut River is located approximately 425 feet from the site. No other potential sensitive receptors were identified in the report.

Based on the above information, the SMS has determined that additional work is necessary at the site in order to determine the severity of contamination present. Due to the possibility of contaminant impact to nearby receptors, the SMS is requesting that on behalf of the current property owners, David McKay retain the services of a qualified environmental consultant to perform the following:

- Further define the degree and extent of contamination to the soil in the two outdoor areas of concern. This may be accomplished by obtaining soil borings, digging test pits, or performing a soil-gas survey. Based on information already obtained, it appears that the extent of soil contamination may be limited to an area that may be reasonably excavated. However, excavation of contaminated soils is considered a corrective action measure and should be pre-approved in writing by the SMS. Soils should

be collected and sampled using EPA Method 8260 as well as an EPA Method for distinguishing total petroleum hydrocarbons (TPH). In addition, soil samples should be collected from the basement floor and screened with a PID. If elevated PID readings are encountered, then further investigation will be necessary.

- If soil contamination is extensive, then determine the degree and extent of contamination, if any, to groundwater. If soil is found to contain evidence of contamination at the water table, then a sufficient number of monitoring wells should be installed in locations which will adequately define the severity of contamination at the site. All groundwater samples taken should be analyzed using EPA Method 8260.
- Perform an assessment of the site to determine the potential for sensitive receptors to be impacted by the contamination. This should include basements of adjacent buildings, nearby surface water, and any public or private drinking water wells which are located within the vicinity of the site. If any water supplies appear at risk from this contamination, they should be sampled and analyzed using EPA 8260.
- Determine the need for a long term treatment and/or monitoring plan which addresses the contamination present at the site. The need for such a plan should be based on the results of the above investigations.
- Submit to the SMS a summary report which outlines the work performed as well as providing conclusions and recommendations. Included should be analytical data, a site map, an area map, and if monitoring wells are installed, detailed well logs and a groundwater contour map.
- The Vermont Department of Health, Environmental Health Division should be contacted for further assistance regarding potential asbestos containing materials at 1-800-439-8550. If the wood and other materials are discarded as waste, then they should be properly disposed.

Please have your consultant submit a preliminary work plan and cost estimate or a site investigation expressway notification form within fifteen days of your receipt of this letter so that it may be approved prior to the initiation of onsite work. Enclosed please find a list of consultants who perform this type of work in the area as well as the brochure "Selecting Your UST Cleanup Contractor", which will help you in choosing an environmental consultant. If you have any questions, please feel free to call me at 802-241-3243.

Sincerely,



Matthew Moran, Site Project Manager
Sites Management Section

Enclosures - (2)

cc: Fairlee Selectboard
Fairlee Health Officer
DEC Regional Office
Michael Clafin, Wells River Savings Bank
Bradley Wheeler, The Johnson Company, Inc.

THE JOHNSON COMPANY, INC.
Environmental Sciences and Engineering

June 10, 1996

Dr. David McKay
P.O. Box 1198
Montpelier, Vermont 05601

Re: Workplan for Site Investigation / Corrective Action,
Blackmer/Ladd Property, Main Street, Fairlee, Vermont
SMS Site # 96-1997
JCO # 1-1371-1 (042)

Dear Dr. McKay:

The Johnson Company is pleased to present this proposed scope of services work plan for the above referenced property. The objective of this work plan is to meet the requirements of the June 4, 1996 letter to you from Marthew Moran of the Vermont Sites Management Section (SMS).

The SMS letter was in response to their review of a Phase I Environmental Site Assessment report prepared by The Johnson Company. In this report, we described two areas on the property that have been impacted by the disposal of paint brush cleaning wastes, reportedly primarily kerosene. It is believed that similar waste may have been disposed into the soil that makes up a portion of the basement floor of the house on the property. Hand-auger soil sampling in the two outside areas suggest that the contamination is deeper than four feet thick in one area and likely less than four feet thick in the other area. Based on the depth of groundwater in monitoring wells on nearby properties, the SMS has suggested that the groundwater table in this area is more than 20 feet deep.

Mr. Moran's letter requests the completion of the following tasks:

- Define the degree and extent of the soil contamination on the property, including the two areas identified outdoors and in the basement.
- Define the degree and extent of the contamination to groundwater if it is found that the soil contamination extends to a depth that coincides with the upper limits of the seasonal high groundwater table under the property.
- Determine the potential for sensitive receptors to be adversely affected by the site contamination.
- Determine the need for a long term treatment and/or monitoring plan for the site.
- Prepare a report that outlines the work performed and provides conclusions and recommendations for the site.

The Johnson Company's work plan to fully respond to this request is as follows:

We propose to conduct the investigation of the degree and extent of the soil contamination by using a backhoe to excavate the two outside areas of soil contamination. Based on the expected site conditions, we believe that it will be possible to remove the contaminated soils effectively with a conventional backhoe. We will screen the soils using a photoionization detector (PID) and will attempt to remove all soils that are found to produce positive readings for volatile organic compounds using a plastic bag headspace screening method. The soils will be temporarily stockpiled on site in an encapsulation of 6 mil polyethylene sheeting.

A composite sample of the stockpiled soils will be collected and analyzed in order to determine if they are suitable for disposal at an asphalt batch disposal facility in New Hampshire. This suite of analyses will include testing for volatile organic compounds using EPA Method 8260, and for total petroleum hydrocarbons using EPA Method 8100. A composite sample of the soil left in each location after the soil removal is complete will be collected and analyzed for volatile organic compounds using EPA Method 8260, and for total petroleum hydrocarbons using EPA Method 8100. These samples will provide documentation of the condition of the soils that will remain on site in these areas.

During the excavation, the soil morphology will be closely examined to determine if the soil contamination extends vertically to a depth that coincides with the seasonal high water table for this area. This will allow us to determine if it will be necessary to install groundwater monitoring wells on the site to determine the degree and extent of the contamination to groundwater.

For the basement, we will collect at least ten soil samples from the sand floor area that will be screened using the PID for volatile organic compounds using the same plastic bag headspace screening method as will be used for the outdoor soils. If soil contamination is detected in the basement soils, we will attempt to determine the degree and extent of this contamination using a hand auger and PID. We will also collect a sample of this soil for laboratory analysis for volatile organic compounds using EPA Method 8260, and for total petroleum hydrocarbons using EPA Method 8100. Once the volume of contaminated soil in the basement can be better estimated, and the nature of the contamination is better understood, we will provide a recommendation regarding the preferred method of handling the soils in the basement.

We will determine the potential for sensitive receptors to be impacted by the site contamination by evaluating the degree and extent of the site contamination, the proximity of adjacent buildings with basements, water supply wells, and surface water to the site contamination. Basements of buildings that appear to be at risk will be screened with the PID, if access is possible. Water supply wells and surface waters that appear to be at risk will be sampled and analyzed for volatile organic compounds using EPA Method 8260.

Based on the conditions encountered during the site investigation, and the results of the soil excavation activities, we will determine if an on-going treatment plan and/or monitoring plan is needed for the site. Elements of this could include periodic sampling and analysis of groundwater monitoring wells or water supply wells, or monitoring of the air quality in any potentially impacted buildings.

We will also collect at least three samples of the suspect asbestos containing material (roofing) that has been discarded onto the ground on the property. These samples will be analyzed at East Coast Analytical Laboratory for the presence of asbestos using Polarized Light Microscopy.

Since this site has been listed by the SMS as an Active Hazardous Waste Site (#96-1997), the development of a Site Health and Safety Plan is required prior to initiating any investigative or corrective action activities. The Johnson Company will prepare the required Site Health and Safety Plan that will be utilized by all persons working on the site. The Site Health and Safety Plan will conform to the requirements of 29 CFR 1910.120, the Occupational Safety and Health Administration Hazardous Waste Operations and Emergency Response worker regulations.

June 10, 1996

Page 3

Dr. David McKay
P.O. Box 1198, Montpelier, VT

After these tasks are completed, The Johnson Company will prepare a report summarizing the activities and presenting the results obtained. This report will include a detailed description of all work that was performed on the site; CADD generated site drawings to clearly present the limits of the work activities and other pertinent site features; tables that present the analytical data in a clear, logical manner; and recommendations and conclusions regarding the status of the site and additional work that may be warranted.

The total estimated probable cost for this investigation and corrective action is \$6,450. This includes \$1,700 for soil and asbestos sample laboratory analysis (no costs for water supply or surface water sample laboratory analysis are included, as the likelihood of this sampling being necessary is remote), \$1,150 for soil excavation conducted by a certified OSHA-trained contractor (this cost assumes that the excavator/operator will be needed for 10 hours), and \$3,600 for The Johnson Company to complete the work plan, the health and safety plan, the soil investigation/excavation supervision, the soil sampling, the sampling of suspect asbestos containing materials (roofing materials), the sensitive receptor survey and screening, the treatment and/or monitoring plan, and the final report for the project. The estimated cost for The Johnson Company assumes that one 12-hour field day will be sufficient time to complete all on-site tasks.

Loading, trucking and disposal of contaminated soil at an approved asphalt batch disposal facility is estimated to cost \$52 per ton, and backfilling the excavated areas with clean fill is estimated to cost \$10 per cubic yard of fill required.

We appreciate the opportunity to submit this work plan proposal to you. If you have any questions, please do not hesitate to call.

Sincerely,

THE JOHNSON COMPANY, INC.

By: Bradley A. Wheeler
Bradley A. Wheeler, CPSS
Senior Scientist

APPENDIX B

GREEN MOUNTAIN LABORATORIES, INC.

RR 3, BOX 5210
Montpelier, Vermont 05602

Phone (802) 223 - 1468

Fax (802) 223 - 8688

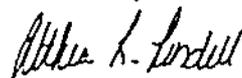
LABORATORY RESULTS

CLIENT NAME:	The Johnson Company	REFERENCE NO.:	1021
ADDRESS:	100 State Street Montpelier, VT 05602	PROJECT NO.:	1-1371-1
SAMPLE LOCATION:	Blackmer Property	DATE OF SAMPLE:	07/11/96
SAMPLER:	Bradley A. Wheeler	DATE OF RECEIPT:	07/12/96
ATTENTION:	Bradley A. Wheeler	DATE OF ANALYSIS:	07/17/96
		DATE OF REPORT:	07/18/96

Pertaining to the analyses of specimens submitted under the accompanying chain of custody form, please note the following:

- Specimens were processed and examined according to the procedures outlined in the specified method.
- Holding times were honored.
- Instruments were appropriately tuned and calibrations were checked with the frequencies required in the specified method.
- Blank contamination was not observed at levels interfering with the analytical results.
- Continuing Calibration standards were monitored at intervals indicated in the specified method. The resulting analytical precision and accuracy were determined to be within method QA/QC acceptance limits.
- The efficiency of analyte recovery for individual samples was monitored by the addition of surrogate analyte to all samples, standards, and blanks. Surrogate recoveries were found to be within laboratory QA/QC acceptance limits, unless noted otherwise.

Reviewed by:



Althea L. Lindell

Director, Chemical Services

Green Mountain Laboratories, Inc.

RR 3, Box 5210
Montpelier, Vermont 05602

Phone (802) 223-1468

Fax (802) 223-8688

GML REF. #: 1021
STATION: SS-1
ANALYSIS DATE: 07/17/96
DATE SAMPLED: 07/11/96
SAMPLE TYPE: SOIL (99.78% DRY WT.)

PARAMETERS	PQL	µg/kg	PARAMETERS	PQL	µg/kg
Benzene	18	ND	trans-1,3-Dichloropropene	18	ND
Bromobenzene	18	ND	Ethylbenzene	18	44
Bromochloromethane	54	ND	Hexachlorobutadiene	180	ND
Bromodichloromethane	18	ND	Isopropylbenzene	18	ND
Bromoform	18	ND	p-Isopropyltoluene	36	ND
Bromomethane	90	ND	Methylene Chloride	90	ND
n-Butylbenzene	36	ND	Methyl-t-butyl-ether (MTBE)	36	ND
sec-Butylbenzene	18	ND	Naphthalene	90	ND
tert-Butylbenzene	36	ND	n-Propylbenzene	18	ND
Carbon Tetrachloride	18	ND	Styrene	36	ND
Chlorobenzene	18	ND	1,1,1,2-Tetrachloroethane	18	ND
Chloroethane	36	ND	1,1,2,2-Tetrachloroethane	36	ND
Chloroform	18	ND	Tetrachloroethylene	18	ND
Chloromethane	36	ND	Toluene	18	ND
o-Chlorotoluene	18	ND	1,2,3-Trichlorobenzene	36	ND
p-Chlorotoluene	36	ND	1,2,4-Trichlorobenzene	36	ND
1,2-Dibromo-3-chloropropan	54	ND	1,1,1-Trichloroethane	18	ND
Dibromochloromethane	36	ND	1,1,2-Trichloroethane	18	ND
1,2-Dibromomethane (EDB)	18	ND	Trichloroethylene (TCE)	18	ND
Dibromomethane	18	ND	Trichlorofluoromethane	36	ND
o-Dichlorobenzene	18	ND	1,2,3-Trichloropropane	36	ND
m-Dichlorobenzene	18	ND	1,2,4-Trimethylbenzene	18	ND
p-Dichlorobenzene	18	ND	1,3,5-Trimethylbenzene	18	ND
Dichlorodifluoromethane	36	ND	Vinyl Chloride	36	ND
1,1-Dichloroethane	36	ND	o-Xylene	18	51
1,2-Dichloroethane	18	ND	m + p-Xylene	36	190
1,1-Dichloroethylene	18	ND			
cis-1,2-Dichloroethylene	36	ND	Surrogates:		
trans-1,2-Dichloroethylene	36	ND	Dibromofluoromethane	100 %	
1,2-Dichloropropane	18	ND	Toluene-D8	98.2 %	
1,3-Dichloropropane	18	ND	4-Bromofluorobenzene	95.4 %	
2,2-Dichloropropane	36	ND			
1,1-Dichloropropene	18	ND	ND - Not Detected		
cis-1,3-Dichloropropene	18	ND	Concentration units = µg/kg		

Green Mountain Laboratories, Inc.

RR 3, Box 5210

Montpelier, Vermont 05602

Phone (802) 223-1468

Fax (802) 223-8688

GML REF. #: 1021
 STATION: SS-2
 ANALYSIS DATE: 07/17/96
 DATE SAMPLED: 07/11/96
 SAMPLE TYPE: SOIL (87.85% DRY WT.)

PARAMETERS	PQL	µg/kg	PARAMETERS	PQL	µg/kg
Benzene	22	ND	trans-1,3-Dichloropropene	22	ND
Bromobenzene	22	ND	Ethylbenzene	22	51
Bromochloromethane	66	ND	Hexachlorobutadiene	220	ND
Bromodichloromethane	22	ND	Isopropylbenzene	22	ND
Bromoform	22	ND	p-Isopropyltoluene	44	ND
Bromomethane	110	ND	Methylene Chloride	110	ND
n-Butylbenzene	44	ND	Methyl-t-butyl-ether (MTBE)	44	ND
sec-Butylbenzene	22	ND	Naphthalene	110	ND
tert-Butylbenzene	44	ND	n-Propylbenzene	22	ND
Carbon Tetrachloride	22	ND	Styrene	44	ND
Chlorobenzene	22	ND	1,1,1,2-Tetrachloroethane	22	ND
Chloroethane	44	ND	1,1,2,2-Tetrachloroethane	44	ND
Chloroform	22	ND	Tetrachloroethylene	22	ND
Chloromethane	44	ND	Toluene	22	ND
o-Chlorotoluene	22	ND	1,2,3-Trichlorobenzene	44	ND
p-Chlorotoluene	44	ND	1,2,4-Trichlorobenzene	44	ND
1,2-Dibromo-3-chloropropan	66	ND	1,1,1-Trichloroethane	22	ND
Dibromochloromethane	44	ND	1,1,2-Trichloroethane	22	ND
1,2-Dibromomethane (EDB)	22	ND	Trichloroethylene (TCE)	22	ND
Dibromomethane	22	ND	Trichlorofluoromethane	44	ND
o-Dichlorobenzene	22	ND	1,2,3-Trichloropropane	44	ND
m-Dichlorobenzene	22	ND	1,2,4-Trimethylbenzene	22	ND
p-Dichlorobenzene	22	ND	1,3,5-Trimethylbenzene	22	ND
Dichlorodifluoromethane	44	ND	Vinyl Chloride	44	ND
1,1-Dichloroethane	44	ND	o-Xylene	22	65
1,2-Dichloroethane	22	ND	m + p-Xylene	44	220
1,1-Dichloroethylene	22	ND			
cis-1,2-Dichloroethylene	44	ND	Surrogates:		
trans-1,2-Dichloroethylene	44	ND	Dibromofluoromethane	101 %	
1,2-Dichloropropane	22	ND	Toluene-D8	98.0 %	
1,3-Dichloropropane	22	ND	4-Bromofluorobenzene	93.8 %	
2,2-Dichloropropane	44	ND			
1,1-Dichloropropene	22	ND	ND - Not Detected		
cis-1,3-Dichloropropene	22	ND	Concentration units = µg/kg		

1-1371-1
BAW

Green Mountain Laboratories, Inc.

RR#3 Box 5210
Montpelier, Vermont 05602

Phone (802) 223-1468

Fax (802) 223-8688

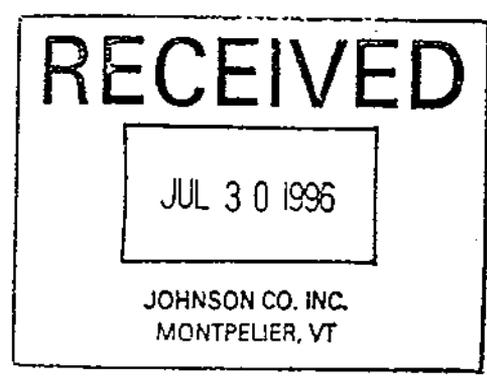
LABORATORY RESULTS

CLIENT NAME:	The Johnson Company	REF #:	1021
ADDRESS:	100 State Street Montpelier, Vermont 05602	PROJECT NO.:	1-1371-1
SAMPLE LOCATION:	Blackmer Property	DATE OF SAMPLE:	07/11/96
SAMPLER:	Bradley A. Wheeler	DATE OF RECEIPT:	07/12/96
		DATE OF ANALYSIS:	07/17/96
ATTENTION:	Bradley A. Wheeler	DATE OF REPORT:	07/30/96

Total Petroleum Hydrocarbons (TPH) Results by EPA Modified 8100

Sample	Result (mg/kg-ppm)*
SS-1	<50
SS-2	<50

* Carbon Range C9-C40 - Fuel (Diesel) and Lubricating Oil Range Organics.



Reviewed by:

A handwritten signature in cursive script, appearing to read "Albert L. Ladd".

Director, Chemical Services

CHAIN OF CUSTODY RECORD

No. 3085

Client/Project Name <i>Blackmer property</i>		Project Location <i>Fairlee</i>		ANALYSES 8260 8100 (Aroclor/petroleum distillates)		1021 -- REMARKS	
Project No. <i>1-1371-1</i>		Field Logbook No.					
Sampler: (Signature) <i>Bradley A. Wheeler</i>		Chain of Custody Tape No.					

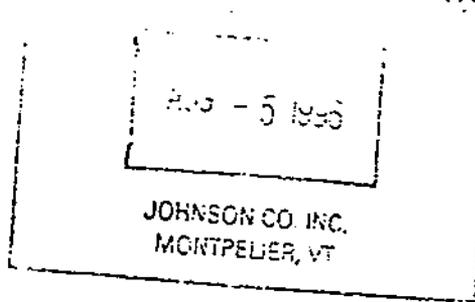
Sample No./ Identification	Date	Time	Lab Sample Number	Type of Sample										
<i>SS-1</i>	<i>7/11/96</i>	<i>1:00</i>		<i>Soil</i>	<i>X</i>	<i>X</i>								<i>(2) 40 ml vials and</i>
<i>SS-2</i>	<i>7/11/96</i>	<i>2:15</i>		<i>soil</i>	<i>X</i>	<i>X</i>								<i>(2) amber jars for</i>
														<i>each sample</i>

Relinquished by: (Signature) <i>Bradley A. Wheeler</i>		Date <i>7/17/96</i>	Time <i>2:42</i>	Received by: (Signature) <i>[Signature]</i>		Date <i>7/17/96</i>	Time <i>14:42</i>
Relinquished by: (Signature)		Date	Time	Received by: (Signature)		Date	Time
Relinquished by: (Signature)		Date	Time	Received for Laboratory: (Signature)		Date	Time
Sample Disposal Method:				Disposed of by: (Signature)		Date	Time

SAMPLE COLLECTOR 5 State Street Montpelier, VT 05602 (802) 229-4600 Fax: (802) 229-5876		THE JOHNSON COMPANY, INC. Environmental Sciences and Engineering		ANALYTICAL LABORATORY <i>Green Mtn. Lab</i> <i>Middlesex, VT</i>	
---	--	--	--	--	--

APPENDIX C

July 30, 1996



Mr. Bradley A. Wheeler
The Johnson Company, Inc.
5 State Street
Montpelier VT 05602

Job Name	: Blackmor Property	Laboratory #	: G15-96-01
Job #	: 1-1371-1	Purchase Order #	: 1-1371-1
Location	: Fairlee	Control #	: 3084

Dear Mr. Wheeler,

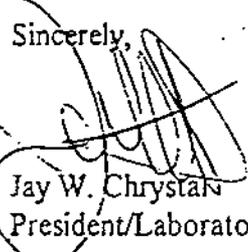
Enclosed please find the laboratory results for the above referenced samples which were received by the Chemserve sample custodian, under chain of custody control number 3084 on July 15, 1996. Samples were collected by Bradley A. Wheeler on July 11, 1996. Any abnormalities to the samples would be noted on the enclosed chain of custody document or laboratory report form. This report is not valid without a completed Chemserve chain of custody with the corresponding control number, attached.

Chemserve follows protocols for analysis corresponding to the methods referenced unless a modification is noted. Unless otherwise stated, all holding times, preservation techniques and container types are analogous with those outlined by the U.S. EPA.

A formal quality assurance/quality control QA/QC program is maintained and updated by Chemserve on a routine basis. This QA/QC manual is available upon request.

If you have questions or concerns regarding this analysis, please feel free to contact me.

Sincerely,


Jay W. Chrystal
President/Laboratory Director

Enclosures



VOLATILE ORGANIC ANALYSIS
EPA METHOD 8260



CUSTOMER: THE JOHNSON COMPANY, INC.

LAB#: G15-96-01

SAMPLE LOCATION: BLACKMOR PROPERTY

JOB#: 1-1371-1

SAMPLE IDENTITY: SS-3

CONTROL#: 3084

DATE SAMPLED: 07/11/96

DATE REC'D: 07/15/96

DATE ANALYZED: 07/16/96

COMPOUND	MATRIX: SOLID CONCENTRATION (UG/KG)	PERCENT MOISTURE: 5.00% DETECTION LIMIT MULTIPLIER: (UG/KG) X 10
BENZENE	BDL	1
BROMOBENZENE	BDL	1
BROMOCHLOROMETHANE	BDL	1
BROMODICHLOROMETHANE	BDL	1
BROMOFORM	BDL	1
BROMOMETHANE	BDL	1
CARBON TETRACHLORIDE	BDL	1
CHLOROBENZENE	BDL	1
CHLOROETHANE	BDL	1
CHLOROFORM	BDL	1
CHLOROMETHANE	BDL	1
2-CHLOROTOLUENE	BDL	1
4-CHLOROTOLUENE	BDL	1
DIBROMOCHLOROMETHANE	BDL	1
1,2-DIBROMO-3-CHLOROPROPANE	BDL	1
1,2-DIBROMOETHANE	BDL	1
DIBROMOMETHANE	BDL	1
1,2-DICHLOROBENZENE	BDL	1
1,3-DICHLOROBENZENE	BDL	1
1,4-DICHLOROBENZENE	BDL	1
DICHLORODIFLUOROMETHANE	BDL	1
1,1-DICHLOROETHANE	BDL	1
1,2-DICHLOROETHANE	BDL	1
1,1-DICHLOROETHENE	BDL	1
CIS-1,2-DICHLOROETHENE	BDL	1
TRANS-1,2-DICHLOROETHENE	BDL	1
1,2-DICHLOROPROPANE	BDL	1
1,3-DICHLOROPROPANE	BDL	1
2,2-DICHLOROPROPANE	BDL	1
1,1-DICHLOROPROPENE	BDL	1
CIS-1,3-DICHLOROPROPENE	BDL	1
TRANS-1,3-DICHLOROPROPENE	BDL	1
ETHYLBENZENE	BDL	1
METHYLENE CHLORIDE	BDL	1
STYRENE	BDL	1
1,1,1,2-TETRACHLOROETHANE	BDL	1
1,1,2,2-TETRACHLOROETHANE	BDL	1
TETRACHLOROETHENE	BDL	1
TOLUENE	BDL	1
1,1,1-TRICHLOROETHANE	BDL	1



VOLATILE ORGANIC ANALYSIS
EPA METHOD 8260

CUSTOMER: THE JOHNSON COMPANY, INC.

LAB#: G15-96-01

SAMPLE LOCATION: BLACKMOB PROPERTY

JOB#: 1-1371-1

SAMPLE IDENTITY: SS-3

CONTROL#: 3084

DATE SAMPLED: 07/11/96

DATE RECD: 07/15/96 *

DATE ANALYZED: 07/16/96

COMPOUND	MATRIX: SOLID CONCENTRATION (UG/KG)	PERCENT MOISTURE: 5.00% DETECTION LIMIT MULTIPLIER: (UG/KG) X 10
1,1,2-TRICHLOROETHANE	BDL	1
TRICHLOROETHENE	BDL	1
TRICHLOROFLUOROMETHANE	BDL	1
1,2,3-TRICHLOROPROPANE	BDL	1
VINYL CHLORIDE	BDL	1
TOTAL XYLENES	BDL	1
METHYL-TERTIARY-BUTYL ETHER	BDL	1
CARBON DISULFIDE	BDL	1
n-BUTYLBENZENE	BDL	1
sec-BUTYLBENZENE	BDL	1
tert-BUTYLBENZENE	BDL	1
ISOPROPYLBENZENE	BDL	1
4-ISOPROPYLTOLUENE	10	1
n-PROPYLBENZENE	BDL	1
1,2,3-TRICHLOROBENZENE	BDL	1
1,2,4-TRICHLOROBENZENE	BDL	1
1,2,4-TRIMETHYLBENZENE	130	1
1,3,5-TRIMETHYLBENZENE	BDL	1
NAPHTHALENE	BDL	1
HEXACHLOROBUTADIENE	BDL	1
2-HEXANONE	BDL	10
4-METHYL-2-PENTANONE	BDL	10
2-BUTANONE	BDL	10
ACETONE	BDL	15
ACROLEIN	BDL	50
ACRYLONITRILE	BDL	50
2-CHLOROETHYL VINYL ETHER	BDL	50

SURROGATE	PERCENT RECOVERY	ACCEPTANCE LIMITS
DIBROMOFLUOROMETHANE	90%	76-110%
TOLUENE-D8	95%	74-111%
4-BROMOFLUOROBENZENE	106%	77-109%

NOTE: NON-TARGET COMPOUNDS PRESENT

BDL = BELOW DETECTION LIMIT
ANALYZED BY: DM

CUSTOMER: THE JOHNSON COMPANY, INC.

LAB#: G15-96-01

SAMPLE LOCATION: BLACKMOR PROPERTY

JOB#: 1-1371-1

SAMPLE IDENTITY: SS-3

CONTROL#: 3084

DATE SAMPLED: 07/11/96

DATE RECD: 07/15/96

DATE ANALYZED: 07/22/96

DATE EXTRACTED: 07/19/96

MATRIX: SOLID

PERCENT MOISTURE: 5.00%

COMPOUND	CONCENTRATION (UG/KG)	DETECTION LIMIT MULTIPLIER: (UG/KG) X 1
2-Chlorophenol	BDL	330
2-Chloronaphthalene	BDL	330
4-Chlorophenyl-phenyl-ether	BDL	330
1,4-Dichlorobenzene	BDL	330
1,3-Dichlorobenzene	BDL	330
1,2-Dichlorobenzene	BDL	330
bis(2-chloroethoxy)methane	BDL	330
bis(2-chloroisopropyl)ether	BDL	330
bis(2-chloroethyl)ether	BDL	330
n-Nitroso-di-n-propylamine	BDL	330
2-Methylnaphthalene	BDL	330
2,4-Dichlorophenol	BDL	330
2,4-Dimethylphenol	BDL	330
2,4-Dinitrophenol	BDL	330
4-Chloroaniline	BDL	330
4-Chloro-3-methylphenol	BDL	330
Hexachlorobutadiene	BDL	330
Hexachlorocyclopentadiene	BDL	330
2,4,5-Trichlorophenol	BDL	330
2,4,6-Trichlorophenol	BDL	330
2-Nitroaniline	BDL	330
3-Nitroaniline	BDL	330
4-Nitroaniline	BDL	330
2,4-Dinitrotoluene	BDL	330
2,6-Dinitrotoluene	BDL	330
4,6-Dinitro-2-methylphenol	BDL	330
n-Nitrosodimethylamine	BDL	330
n-Nitrosodiphenylamine	BDL	330
1,2-Diphenyl hydrazine	BDL	330
4-Bromophenyl-phenylether	BDL	330
Hexachlorobenzene	BDL	330
Hexachloroethane	BDL	330
Pentachlorophenol	BDL	330
Acenaphthylene	BDL	330
Acenaphthene	BDL	330
Phenanthrene	BDL	330
Anthracene	BDL	330
Fluoranthene	BDL	330
Pyrene	BDL	330
Chrysene	BDL	330


 SEMIVOLATILE ORGANIC ANALYSIS
 EPA METHOD 8270

CUSTOMER: THE JOHNSON COMPANY, INC.

LAB#: G15-96-01

SAMPLE LOCATION: BLACKMOR PROPERTY

JOB#: 1-1371-1

SAMPLE IDENTITY: SS-3

CONTROL#: 3084

DATE SAMPLED: 07/11/96

DATE REC'D: 07/15/96

DATE ANALYZED: 07/22/96

DATE EXTRACTED: 07/19/96

MATRIX: SOLID

PERCENT MOISTURE: 5.00%

COMPOUND

CONCENTRATION
(UG/KG)DETECTION LIMIT MULTIPLIER:
(UG/KG) X 1

Benzo[a]anthracene	BDL	330
3,3'-Dichlorobenzidine	BDL	330
Butylbenzylphthalate	BDL	330
bis(2-Ethylhexyl)phthalate	BDL	330
Di-n-butylphthalate	BDL	330
Di-n-octylphthalate	BDL	330
Dimethylphthalate	BDL	330
Diethylphthalate	BDL	330
Fluorene	BDL	330
2-Methylphenol	BDL	330
4-Methylphenol	BDL	330
2-Nitrophenol	BDL	330
4-Nitrophenol	BDL	330
Phenol	BDL	330
Isophorone	BDL	330
Benzidine	BDL	330
Azobenzene	BDL	330
Nitrobenzene	BDL	330
1,2,4-Trichlorobenzene	BDL	330
Dibenzofuran	BDL	330
Benzo[b]fluoranthene	BDL	330
Benzo[k]fluoranthene	BDL	330
Benzo[a]pyrene	BDL	330
Indeno[1,2,3-cd]pyrene	BDL	330
Dibenzo[a,h]anthracene	BDL	330
Benzo[g,h,i]perylene	BDL	330
Benzoic acid	BDL	1,650
Benzyl Alcohol	BDL	1,650

SURROGATE	PERCENT RECOVERY	ACCEPTANCE LIMITS
2-FLUOROPHENOL	50%	33-117%
PHENOL-D5	52%	29-113%
NITROBENZENE-D5	45%	36-120%
2-FLUOROBIPHENYL	61%	38-115%
2,4,6-TRIBROMOPHENOL	43%	19-109%
TERPHENYL-D14	107%	45-131%

NOTE: NON-TARGET COMPOUNDS PRESENT

 BDL = BELOW DETECTION LIMIT
 ANALYZED BY: CR



PESTICIDES
EPA METHOD 8080

CUSTOMER: THE JOHNSON COMPANY, INC.

LAB#: G15-96-01

SAMPLE LOCATION: BLACKMOR PROPERTY

JOB#: 1-1371-1

SAMPLE IDENTITY: SS-3

CONTROL#: 3084

DATE SAMPLED: 07/11/96

DATE RECD: 07/15/96

DATE ANALYZED: 07/17/96

DATE EXTRACTED: 07/17/96

MATRIX: SOLID

PERCENT MOISTURE: 5.00%

COMPOUND	CONCENTRATION (UG/KG)	DETECTION LIMIT MULTIPLIER: (UG/KG) X 1
ALPHA-BHC	BDL	3
BETA-BHC	BDL	3
DELTA-BHC	BDL	3
HEPTACHLOR	BDL	3
ALDRIN	BDL	3
HEPTACHLOR EPOXIDE	BDL	3
ENDOSULFAN 1	BDL	3
ENDOSULFAN 2	BDL	3
DIELDRIN	BDL	3
ENDRIN	BDL	3
4,4'-DDE	BDL	3
4,4'-DDD	BDL	3
4,4'-DDT	BDL	3
LINDANE	BDL	3
ENDOSULFAN SULFATE	BDL	3
ENDRIN ALDEHYDE	BDL	3
ENDRIN KETONE	BDL	3
METHOXYCHLOR	BDL	30
TOXAPHENE	BDL	30
TOTAL CHLORDANE	BDL	30

SURROGATE	PERCENT RECOVERY	ACCEPTANCE LIMITS
2,4,5,6-TETRACHLORO-M-XYLENE	62%	50-117%
DIBUTYL CHLORENDATE	71%	65-113%

NOTE: NON-TARGET COMPOUNDS PRESENT

BDL = BELOW DETECTION LIMIT

ANALYZED BY: WN



PCB SCAN
EPA METHOD 8080

CUSTOMER: THE JOHNSON COMPANY, INC.

LAB#: G15-96-01

SAMPLE LOCATION: BLACKMOR PROPERTY

JOB#: 1-1371-1

SAMPLE IDENTITY: SS-3

CONTROL#: 3084

DATE SAMPLED: 07/11/96

DATE RECD: 07/15/96

DATE ANALYZED: 07/17/96

DATE EXTRACTED: 07/17/96

MATRIX: SOLID

PERCENT MOISTURE: 5.00%

COMPOUND

CONCENTRATION
(UG/KG)

DETECTION LIMIT MULTIPLIER:
(UG/KG) X 1

TOTAL AROCLORS

BDL

3

BDL=BELOW DETECTION LIMIT

ANALYZED BY: WN



TOXIC CHARACTERIZATION LEACHATE PROCEDURE (TCLP)

HERBICIDES

EPA METHOD 1311/8150

CUSTOMER: THE JOHNSON COMPANY, INC.

LAB#: G15-96-01

SAMPLE LOCATION: BLACKMOR PROPERTY

JOB#: 1-1371-1

SAMPLE IDENTITY: SS-3

CONTROL#: 3084

DATE SAMPLED: 07/11/96

DATE REC'D: 07/15/96

DATE ANALYZED: 07/19/96

DATE EXTRACTED: 07/15/96

MATRIX: LIQUID

COMPOUND	CONCENTRATION (UG/L)	DETECTION LIMIT MULTIPLIER: (UG/L) X 5
2,4-D	BDL	1
SILVEX	BDL	1

BDL=BELOW DETECTION LIMIT

ANALYZED BY: WN



TOTAL PETROLEUM HYDROCARBONS
EPA MODIFIED METHOD 8100

CUSTOMER: THE JOHNSON COMPANY, INC.

LAB#: G15-96-01

SAMPLE LOCATION: BLACKMOR PROPERTY

JOB#: 1-1371-1

SAMPLE IDENTITY: SS-3

CONTROL#: 3084

DATE SAMPLED: 07/11/96

DATE RECD: 07/15/96

DATE ANALYZED: 07/18/96

DATE EXTRACTED: 07/17/96

MATRIX: SOLID

PERCENT MOISTURE: 5.00%

COMPOUND

CONCENTRATION
(MG/KG)

DETECTION LIMIT MULTIPLIER:
(MG/KG) X 1

TOTAL PETROLEUM
HYDROCARBONS AS
FUEL OIL CONSTITUENTS
CARBON RANGE: C10-C27

360

10

BDL= BELOW DETECTION LIMIT

ANALYZED BY: DM



THE JOHNSON COMPANY, INC.

LABORATORY # : G15-96-01

CONTROL # : 3084

JOB NAME : BLACKMOR PROPERTY

DATE SAMPLED : 07/11/96

JOB # : 1-1371-1

LOCATION : FAIRLEE

QUALITY CONTROL STATEMENT

All samples analyzed by Chemserve are subject to quality standards. These standards are either as stringent or more stringent than those established under 40 CFR Part 136, state certification programs, and corresponding methodologies. Chemserve has a written QA/QC Procedures Manual which outlines these standards, and is available, upon request, for your reference. Written reports and validation summaries comply with established quality guidelines with the exception of any deviations already noted within the report.

Certification:

I certify that I have reviewed the above referenced analytical data and written report, and I have found this report within compliance with the procedures outlined in the Chemserve QA/QC Procedures Manual.

Certified by:


Linda Carleton-Henderson - QA/QC Administrator

THE JOHNSON COMPANY, INC.

LABORATORY # : G15-96-01

JOB NAME : BLACKMOR PROPERTY

CONTROL # : 3084

JOB # : 1-1371-1

DATE SAMPLED : 07/11/96

LOCATION : FAIRLEE

STANDARD TCLP DATA PACKAGE

MATRIX SPIKE RECOVERY FORM

SPIKE SAMPLE ID: 03084

MERCURY SPIKE ID: 17955-2

<u>PARAMETER</u>	<u>SPIKE CONCENTRATION</u>	<u>SAMPLE CONCENTRATION</u>	<u>SPIKE + SAMPLE CONCENTRATION</u>	<u>% RECOVERY</u>
ARSENIC	0.500	<0.100	0.557	111
BARIUM	1.00	<0.500	1.29	94
CADMIUM	0.500	<0.010	0.481	96
CHROMIUM	0.500	<0.010	0.485	97
LEAD	0.500	<0.050	0.513	103
MERCURY	0.0020	<0.0005	0.0017	85
SELENIUM	0.500	<0.100	0.436	87
SILVER	0.400	<0.010	0.370	93

DUPLICATE SAMPLE ID: 03084

MERCURY DUPLICATE SAMPLE ID: 17955-2

METHOD BLANK RESULTS

DUPLICATE SAMPLE RESULTS

<u>PARAMETER</u>	<u>RESULTS</u>	<u>ORIGINAL</u>	<u>RESULTS DUPLICATE</u>	<u>RPD</u>
ARSENIC	<0.100	<0.100	<0.100	0
BARIUM	<0.500	<0.500	<0.500	0
CADMIUM	<0.010	<0.010	<0.010	0
CHROMIUM	<0.010	<0.010	<0.010	0
LEAD	<0.050	<0.050	<0.050	0
MERCURY	<0.0005	<0.0005	<0.0005	0
SELENIUM	<0.100	<0.100	<0.100	0
SILVER	<0.010	<0.010	<0.010	0

VOA SPIKE RECOVERY FORM
EPA METHOD 8260

CUSTOMER: THE JOHNSON COMPANY, INC.

LAB#: G15-96-01

SAMPLE LOCATION: BLACKMOR PROPERTY

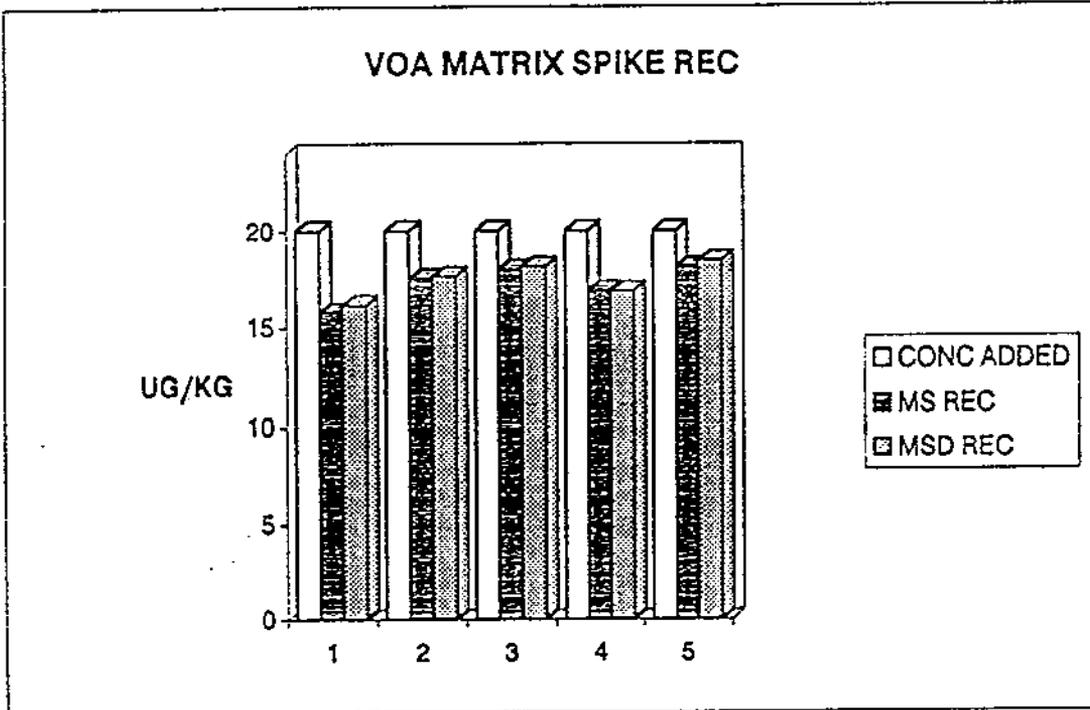
JOB#: 1-1371-1

SAMPLE IDENTITY: QC SPIKES / 3084

CONTROL#: 3084

DATE ANALYZED: 07/16/96

COMPOUND	CONC ADDED (UG/KG)	AMT REC (UG/KG)	DUP AMT REC (UG/KG)	%REC	DUP % REC	%DIFF
1,1-DICHLOROETHENE	20	15.76	16.12	79%	81%	2%
BENZENE	20	17.49	17.59	87%	88%	1%
TRICHLOROETHENE	20	17.96	18.10	90%	91%	1%
TOLUENE	20	16.85	16.81	84%	84%	0%
CHLOROBENZENE	20	18.08	18.42	90%	92%	2%



SPIKE RECOVERY LIMITS
 1,1-DICHLOROETHENE 74-113%
 BENZENE 76-115%
 TRICHLOROETHENE 72-111%
 TOLUENE 75-117%
 CHLOROBENZENE 75-112%

**SEMIVOLATILE ORGANIC ANALYSIS
EPA METHOD 8270**

CUSTOMER: THE JOHNSON COMPANY, INC.

LAB#: G15-96-01

SAMPLE LOCATION: BLACKMOR PROPERTY

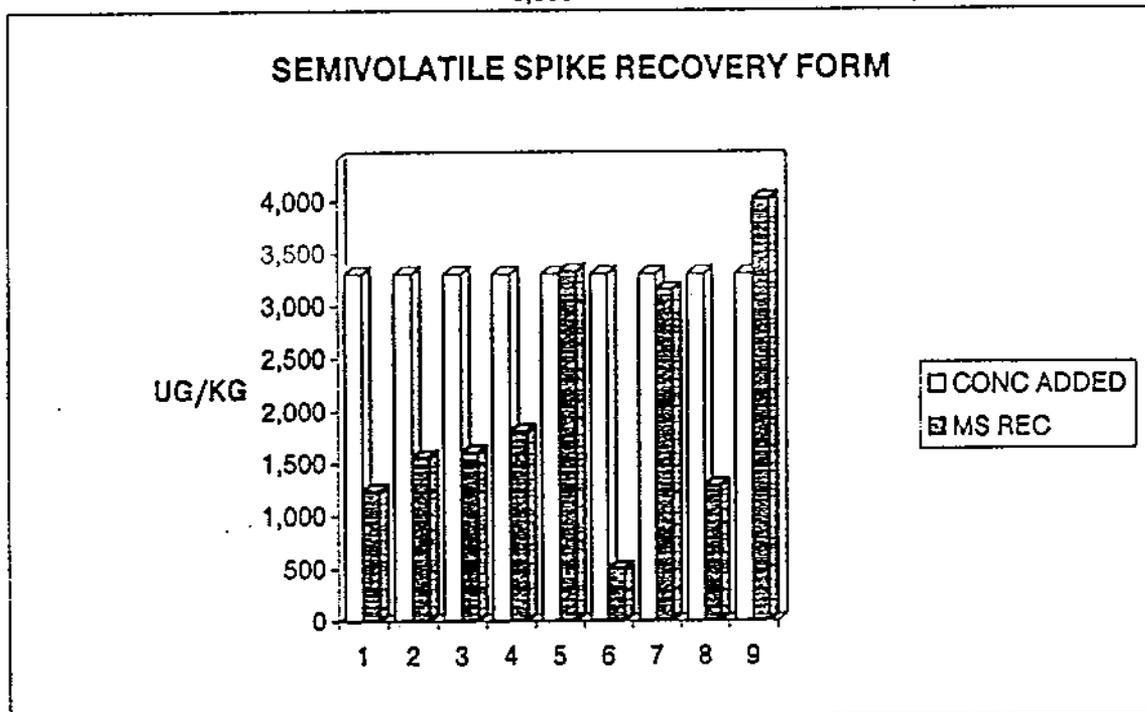
JOB#: 1-1371-1

SAMPLE IDENTITY: QC SPIKE / 14646

CONTROL#: 3084

DATE ANALYZED: 07/22/96

COMPOUND	CONC ADDED (UG/KG)	AMT REC (UG/KG)	%RECOVERY
PHENOL	3,300	1,232	37%
2-CHLOROPHENOL	3,300	1,550	47%
1,4-DICHLOROBENZENE	3,300	1,600	48%
4-CHLORO-3-METHYLPHENOL	3,300	1,800	55%
ACENAPHTHENE	3,300	3,325	101%
4-NITROPHENOL	3,300	496	15%
2,4-DINITROTOLUENE	3,300	3,148	95%
PENTACHLOROPHENOL	3,300	1,277	39%
PYRENE	3,300	4,019	122%



SPIKE RECOVERY LIMITS

- PHENOL 26-100%
- 2-CHLOROPHENOL 25-102%
- 1,4-DICHLOROBENZENE 28-104%
- 4-CHLORO-3-METHYLPHENOL 26-103%
- ACENAPHTHENE 31-137%
- 4-NITROPHENOL 11-114%
- 2,4-DINITROTOLUENE 28-104%
- PENTACHLOROPHENOL 17-109%
- PYRENE 35-142%

PESTICIDES
SPIKE RECOVERY FORM
EPA METHOD 8080

CUSTOMER: THE JOHNSON COMPANY, INC.

LAB#: G15-96-01

SAMPLE LOCATION: BLACKMOR PROPERTY

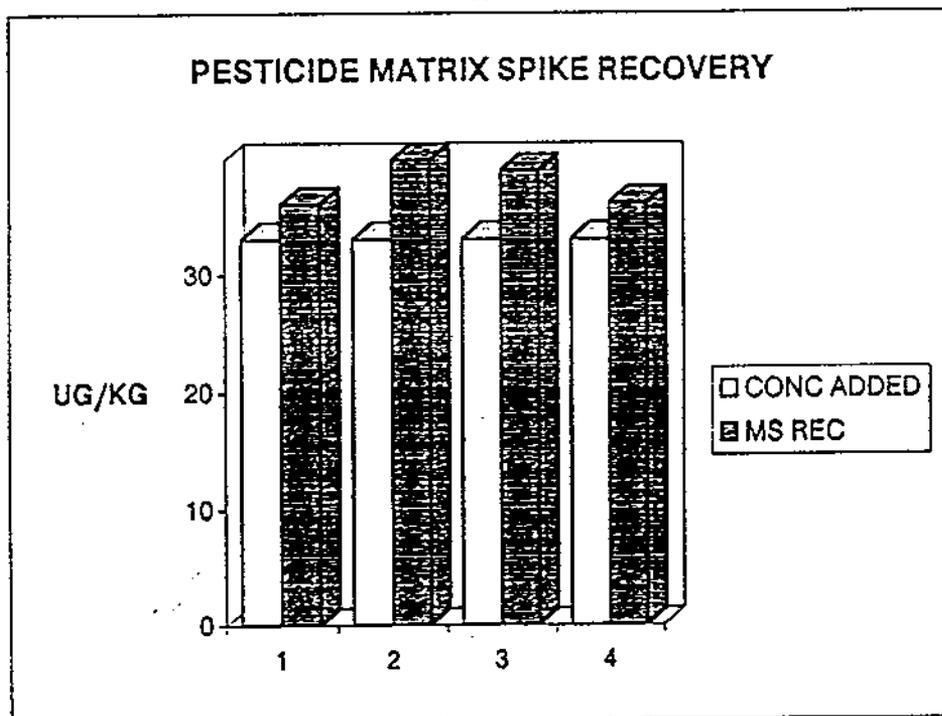
JOB#: 1-1371-1

SAMPLE IDENTITY: QC SPIKE / 3084

CONTROL#: 3084

DATE ANALYZED: 07/17/96

COMPOUND	CONC ADDED (UG/KG)	AMT REC (UG/KG)	%RECOVERY
LINDANE	33	36.03	109%
HEPTACHLOR	33	39.80	121%
HEPTACHLOR EPOXIDE	33	38.87	118%
ENDRIN	33	36.06	109%



SPIKE RECOVERY LIMITS
LINDANE 46-127%
HEPTACHLOR 35-130%
HEPTACHLOR EPOXIDE 45-120%
ENDRIN 42-139%

TCLP HERBICIDE SPIKE RECOVERY FORM
 EPA METHOD 1311/8150

CUSTOMER: THE JOHNSON COMPANY, INC.

LAB#: G15-96-01

SAMPLE LOCATION: BLACKMOR PROPERTY

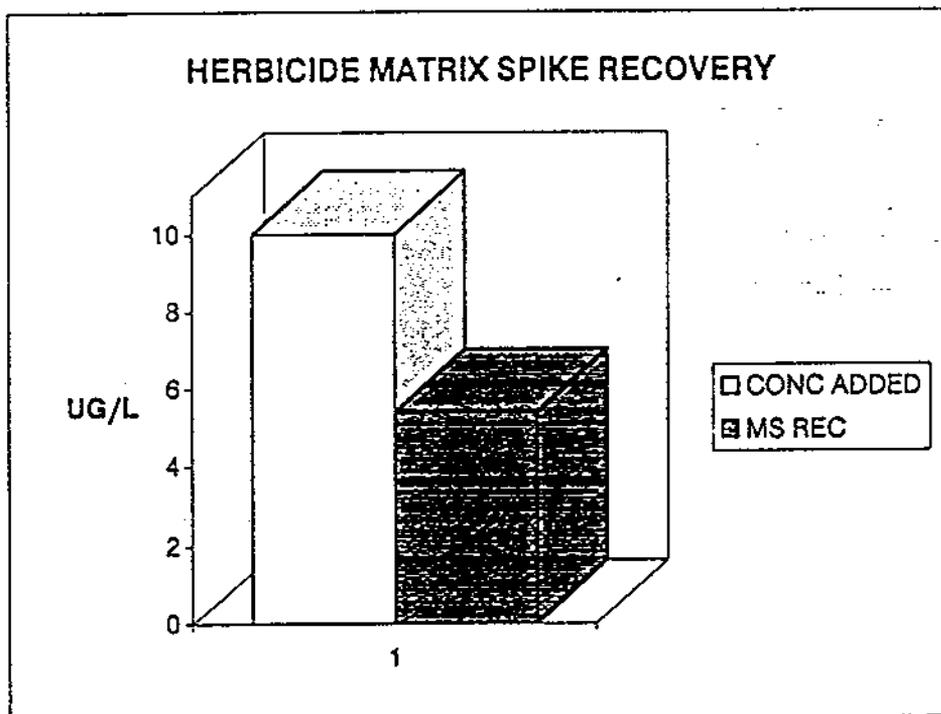
JOB#: 1-1371-1

SAMPLE IDENTITY: QC SPIKE / 3084

CONTROL#: 3084

DATE ANALYZED: 07/19/96

COMPOUND	CONC ADDED (UG/L)	AMT REC (UG/L)	%RECOVERY
SILVEX	10	5.39	54%



CONTROL LIMITS +/- 50%

G15-96-01

7/25/96
7/29/96

CHAIN OF CUSTODY RECORD

No 3084

Client/Project Name Blackmer property		Project Location Fairlee		ANALYSES
Project No. 1-1371-1		Field Logbook No.		
Sampler: (Signature) Bradley A. Wheeler		Chain of Custody Tape No. 1543		

NH Asphalt Batch
(petroleum distillates)
Kerosene

Sample No./ Identification	Date	Time	Lab Sample Number	Type of Sample	REMARKS
SS-3	7/11/96	2:45		Soil	X (1) 500 ml amber jar (2) 40 ml vials

Relinquished by: (Signature) Bradley A. Wheeler	Date 7/12/96	Time 12:00	Received by: (Signature)	Date	Time
Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
Relinquished by: (Signature)	Date	Time	Received for Laboratory: (Signature) M. G. R.	Date 7-15-96	Time 1330
Sample Disposal Method:	Disposed of by: (Signature)			Date	Time

SAMPLE COLLECTOR

5 State Street
Montpelier, VT 05602
(802) 229-4600
Fax: (802) 229-5876

THE JOHNSON COMPANY, INC.
Environmental Sciences and Engineering

ANALYTICAL LABORATORY

Chem Serve
317 Elm St.
Milford, NH 03055

The State of New Hampshire
Department of Environmental Services
CERTIFICATE OF APPROVAL
Wastewater Analysis

Issued to
Chemsolve, Inc.

Located at
Elm Street, Milford, NH

Under the provisions of the Regulations in Env-C300
for the following analyses:

FULL CERTIFICATION: Total Coliform by Membrane Filtration, Fecal Coliform by Membrane Filtration, ICP Metals, Metals by Graphite Furnace, Mercury, pH, TDS, Total Hardness, Calcium, Magnesium, Sodium, Potassium, Total Alkalinity, Fluoride, Sulfate, Ammonia, Nitrate-N, Orthophosphate, TKN, Total Phosphorus, COD, BOD, Non-Filterable Residue, Oil & Grease, Total Phenolics, PCBs in Water, PCBs in Oil, Pesticides, and Volatile Organics.

PROVISIONAL CERTIFICATION: None

REPLACES CERTIFICATE #100895-B

CERTIFICATE NUMBER: 100895-D

DATE OF ISSUE: May 23, 1998

EXPIRATION DATE: December 2, 1998

Charles W. Lyons
Certifying Officer

The State of New Hampshire
Department of Environmental Services
CERTIFICATE OF APPROVAL
Drinking Water Analysis

Issued to
Chemsolve, Inc.

Located at
Elm Street, Milford, NH

Under the provisions of the Regulations in Env-C300
for the following analyses:

FULL CERTIFICATION: Total Coliform by Membrane Filtration, Fecal Coliform by Membrane Filtration, Coliform-MPN, Metals by Graphite Furnace, Metals by ICP, Mercury, Nitrate-N, Fluoride, Nitrite-N, Turbidity, Total Filterable Residue, Calcium, pH, Alkalinity, Corrosivity, Sodium, Sulfate, Trihalomethanes, Volatile Organics, Vinyl Chloride, and EDB.

PROVISIONAL CERTIFICATION: Total Cyanide

REPLACES CERTIFICATE #100895-A

CERTIFICATE NUMBER: 100895-C

DATE OF ISSUE: December 19, 1996

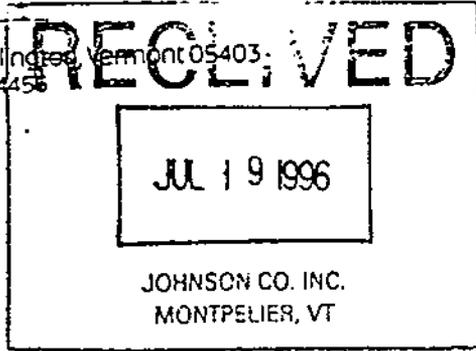
EXPIRATION DATE: December 2, 1998

Charles W. Lyons
Certifying Officer

APPENDIX D

East Coast
Analytical Laboratory, Inc.

6 Oak Creek Drive • South Burlington, Vermont 05403
(802) 863-4456



July 18, 1996

Brad Wheeler
The Johnson Company, Inc.
100 State Street
Montpelier, VT 05602

Re: Asbestos Analysis PLM
Project no.: 1-1371-1
ECALI file no.: 5314

Dear Brad:

Please find enclosed the data sheet for the 3 samples which were submitted on July 16, 1996.

The samples were analyzed by Polarized Light Microscopy (PLM) using the EPA 600/M4-82-020 method. No asbestos was detected.

Refer to the data sheet for additional information. The samples will be discarded after 30 days. Should you have any questions, please feel free to contact me.

Sincerely,



Lucie M. Jean
President

LMJ/byme

enc.

cc

PLM ANALYSIS-EPA-600/N4-82-020 METHOD

Client Name: The Johnson Co-Brad ECALI Project no. E-5314
 Location: Blackmer Property ECALI sample no. E-1
 Client Project no. 1-1371-1 (7-15-96) E-3

ECALI Sample no.	Client Sample no.	Sample Description/Color	Asbestos Results Percentage			Non-Asbestos Percentage			
			Chry.	Ainos	Other	Fbgl.	Min. Wool	Cell	Other
1	1	Roofing (Tan)						60%	40%
2	2					60%		5%	35%
3	3	↓						60%	40%

COMMENTS

CHAIN OF CUSTODY

Received by Lucie Jean Date 7-16-96 (7-15 PM?)

Prepared by _____ Date 7-17-96

Analyzed by _____ Date _____

Reported by _____ Date _____

(802) 229-4600
 FAX (802) 229-5876

TO: East Coast Analytical Laboratory
6 Oak Creek Drive
So. Burlington, VT 05403

DATE	7/15/96	JOB NO.	H-1371-1
ATTENTION	Lucy Jean		
RE:	Bulk Samples from Blackmer property - Fairlee		

WE ARE SENDING YOU Attached Under separate cover via _____ the following items:

- Shop drawings Prints Plans Samples Specifications
 Copy of letter Change order 3 Bulk Samples

COPIES	DATE	NO.	DESCRIPTION
		1	} Bulk samples of black roofing materials
		2	
		3	

THESE ARE TRANSMITTED as checked below:

- For approval Approved as submitted Submit _____ copies for approval
 For your use Approved as noted Submit _____ copies for dis
 As requested Returned for corrections Return _____ corrected prints
 For review and comment _____
 FOR BIDS DUE _____ 19 _____ PRINTS RETURNED AFTER LOAN TO US

REMARKS

Lucy,
 Please analyze these samples for asbestos
 using PLM.
 Thanks.
 Brad

COPY TO _____

SIGNED

Bradley A. Wheeler