SDMS DocID 469208

REMOVAL PROGRAM PRELIMINARY ASSESSMENT/ SITE INVESTIGATION FOR JARD CO., INC. SITE BENNINGTON, VERMONT

Prepared For:

U.S. Environmental Protection Agency
Region I
60 Westview Street
Lexington, MA 02173

CONTRACT NO. 68-W0-0036

TAT-01-N-00790

TDD NO. 01-9103-07

Prepared By:

ROY F. WESTON, INC.
Technical Assistance Team
Region I

April 1991

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EPA REGION I
REMOVAL PRELIMINARY ASSESSMENT

SITE NAME AND LOCATION

SITE NAME: JARD CO., INC.

STREET, ROUTE NO. OR LOCATION IDENTIFIER: BOWEN ROAD | TOWN: BENNINGTON

COUNTY: BENNINGTON | STATE: VERMONT

[X] ATTACHED USGS MAP OF LOCATION

SITE STATUS: [ ] NPL [ ] NON-NPL [X] RCRA [ ] TSCA [ ] ACTIVE [X] ABANDON
[ ] OTHER

SITE ID #: VTD048141741

REFERRAL

[ ] CITIZEN [ ] CITY/TOWN [X] STATE [ ] PREREMEDIAL [ ] RCRA
[ ] OTHER VERMONT DEPARTMENT OF ENVIRONMENTAL CONSERVATION

NAME OF REFERRING PARTY: STAN CORNEILLE

ADDRESS: | PHONE #: (802) 244-8702

CONTACTS IDENTIFIED:

A. STAN CORNEILLE VT DEC PHONE #: (802) 244-8702

B. BOB FINUCAN VT DEC PHONE #: (802) 244-8702

C. PHONE #: ( )

D. PHONE #: ( )

SOURCE OF INFORMATION

[X] VERBAL STAN CORNEILLE VT DEC HAZARDOUS SITE SECTION

[X] REPORT SECTION 5.0 OF DRAFT ENVIRONMENTAL SITE ASSESSMENT OF THE JARD CO. PROPERTY IN BENNINGTON, VT. PREPARED BY WEHRAN ENGINEERING, NOV 89

[ ] ~~OTHER~~ ML

POTENTIAL RESPONSIBLE PARTIES

ML ~~OWNER:~~ TRUSTEE: LAURENCE H. LEVY, INC | ADDRESS: 530 EAST MAIN ST SUITE 725
PHONE #: (804) 644-2000 | RICHMOND, VIRGINIA 23219

OPERATOR: | ADDRESS:

PHONE #: ( )

SOURCE:

EPA REGION I

REMOVAL PRELIMINARY ASSESSMENT

SITE ACCESS

☒ OBTAINED ☒ VERBAL
☐ NOT OBTAINED ☐ WRITTEN

DATE: 3/13/91
AUTHORIZING PERSON: LAURENCE LEVY INC.
PHONE #: (804) 644-2000

PHYSICAL SITE CHARACTERIZATION

BACKGROUND INFORMATION (INCLUDE SITE DESCRIPTION, TOPOGRAPHY, AND PRIOR USES): THE JARD, CO IS A FORMER RCRA FACILITY (PRESENTLY IN BANKRUPTCY), THAT MANUFACTURED CAPACITORS COATED WITH ZINC. SOLVENTS AND PAINTS WERE USED IN THE PROCESS. THE SITE IS ON 33 ACRES OF LAND INCLUDING THE BUILDING AND PARKING LOT WHICH TAKE UP ONE ACRE. THE FACILITY ALSO MANUFACTURED SMALL NON-FLUID TRANSFORMERS AND SMALL MOTORS. THE PLANT CEASED OPERATIONS IN EARLY 1989. PRIOR TO THE JARD CO. BUILT IN 1969 THE LOT WAS VACANT AND WOODED, FLAT TOPO.

DESCRIPTION OF SUBSTANCES POSSIBLY PRESENT, KNOWN OR ALLEGED: A PHASE I SITE ASSESSMENT CONDUCTED AT THE SITE BY WEHRAN ENGINEERING IN NOV, 1989 INDICATED THE PRESENCE OF POLY CHLORINATED BIPHENYLS (PCBs), BIS (2-ETHYLHEXYL) PHTHALATE (DOP), AND ZINC IN THE SURFACE SOILS AT THE SITE. A FENCED IN DRUM STORAGE AREA, CONTAINING 15-20 55-GALLON DRUMS OF TRICHLOROETHYLENE (TCE), VARNISH, DOP, PAINTS AND SOLVENTS IS LOCATED IN THE SOUTHEAST CORNER OF THE PARKING LOT. THE WEHRAN REPORT INDICATED THE AREA IMMEDIATELY ADJACENT TO BUILDING WAS SAMPLED ONLY.

EXISTING ANALYTICAL DATA

IDENTIFY SOURCE, DATE AND METHODOLOGY.

☒ REAL-TIME MONITORING DATA ACCORDING TO INFORMATION IN THE PHASE I REPORT BY WEHRAN, HNU READINGS RECORDED DURING SOIL SAMPLING RANGED FROM BACKGROUND (LESS THAN 1 PPM) TO 10 PPM.

☒ SAMPLING DATA SOIL SAMPLES FROM THE PHASE I ASSESSMENT HAVE INDICATED UP TO 77 mg/Kg OF PCBs (AROCLOR 1242), 3000 Mg/Kg OF DOP, AND 2600 Mg/Kg OF ZINC IS PRESENT IN THE SOIL.

POTENTIAL THREAT

DESCRIPTION OF POTENTIAL HAZARDS TO ENVIRONMENT AND/OR POPULATION – IDENTIFY ANY OF THE CRITERIA FOR A REMOVAL ACTION (FROM NCP) THAT MAY BE MET BY THE SITE: SECTION 300.415 REMOVAL ACTION 2 (i) ACTUAL OR POTENTIAL EXPOSURE TO NEARBY HUMAN POPULATIONS... (ii) ACTUAL OR POTENTIAL CONTAMINATION OF... SENSITIVE ECOSYSTEMS (iii) HAZARDOUS SUBSTANCES IN DRUMS... TANKS OR OTHER BULK STORAGE CONTAINERS THAT MAY POSE A THREAT OF RELEASE (iv) HIGH LEVELS OF HAZARDOUS SUBSTANCES... AT OR NEAR SURFACE...

EPA REGION I
REMOVAL PRELIMINARY ASSESSMENT

PRIOR RESPONSE ACTIVITIES

☒ PRP ☐ STATE ☐ FEDERAL ☐ OTHER

BRIEF DESCRIPTION: A PHASE I SITE ASSESSMENT WAS CONDUCTED BY WEHRAN ENGINEERING FOR MR. LAURENCE H. LEVY, TRUSTEE FOR THE JARO CO IN NOVEMBER 1989. ACCORDING TO THIS REPORT THIS ASSESSMENT WAS TO BE PART OF AN INITIAL ENVIRONMENTAL AUDIT EVALUATING THE PROPERTY PRIOR TO A POSSIBLE SALE OF THE PROPERTY. REFER TO THE PHYSICAL SITE CHARACTERIZATION AND EXISTING ANALYTICAL DATA ON PAGE 2 OF THIS REMOVAL PRELIMINARY ASSESSMENT FORM.

PRIORITY FOR SITE INVESTIGATION

☒ HIGH ☐ MEDIUM ☐ LOW ☐ NONE

COMMENTS: HIGH LEVELS OF PCBs, DDP AND ZINC HAVE BEEN REPORTED AT THIS SITE. THE SITE IS BORDERED BY ABROOK AND LITTLE LEAGUE BASEBALL DIAMOND AND IS OTHERWISE LOCATED IN AN INDUSTRIAL AREA.

REPORT GENERATION

INITIATOR OF REPORT: MICHAEL W. LOMBARDI

DATE OF PREPARATION: 3/28/91

AFFILIATION: ROY F. WESTON, INC TECHNICAL ASSISTANCE TEAM

PHONE #: (617)229-6430

EPA REGION I
REMOVAL SITE INVESTIGATION

INSPECTION INFORMATION

SITE NAME: JARO CO., INC.	ADDRESS: BOWEN ROAD
COUNTY: BENNINGTON	TOWN: BENNINGTON / STATE: VERMONT
DATE OF INSPECTION: MARCH 19, 1991	TIME OF INSPECTION: 1130-1730
WEATHER CONDITIONS: CLEAR TO PARTLY CLOUDY, 38°F	
SITE STATUS AT TIME OF INSPECTION: ☐ ACTIVE ☒ INACTIVE	COMMENTS: ABANDONED FACILITY, HOWEVER, NO ACCESS TO THE INTERIOR OF THE BUILDING WAS ALLOWED

AGENCIES PERFORMING INSPECTION:

	NAMES:	PROGRAM:
☒ EPA	MARY ELLEN STANTON	U.S. EPA EMERGENCY ~~REMOVAL~~ PLANNING AND RESPONSE BRANCH ML
☒ EPA CONTRACTOR SUPPORT	MICHAEL LOMBARDI TIMOTHY JONES	FIRM: ROY F. WESTON, INC TECHNICAL ASSISTANCE TEAM
☒ STATE	STAN CORNEILLE BOB FINUCAN	PROGRAM: DEPARTMENT OF ENVIRONMENTAL CONSERVATION; HAZARDOUS SITE SECTION
☐ OTHER	NAMES:	ORGANIZATION:

CURRENT ~~OWNER~~ OL BASED ON DEED STATUS:	BOOK # ~~4~~ ML
TRUSTEE: LAURENCE LEVY / COMPANY IS PRESENTLY	PAGE # ~~31, 32~~ ML
CURRENT OWNER BASED ON FIELD INTERVIEW: UNDER CH. 7 BANKRUPTCY LAWS	VERBAL CHECK AT DESK:

PHYSICAL SITE CHARACTERISTICS

PROVIDE SITE SCHEMATIC – SEE ATTACHMENT 1

	QUANTITIES/EXTENT		QUANTITIES/EXTENT
☐ CYLINDERS	NA	☐ PILES	NA
☒ DRUMS	APP 85 55 GAL DRUMS STACKED 4 HIGH ON THEIR SIDES OUTSIDE OF LOCKED DRUM STORAGE AREA. VT DEC REPORTS THEY ARE EMPTY.	☒ STAINED SOIL	MUCH OF THE AREA ADJACENT TO BUILDING APP. 80%
☐ ~~LAGOONS~~ ML		☐ SHEENS	
		☒ STRESSED VEGETATION	STAINED AREAS SHOW STRESSED VEGETATION
☒ TANKS – ☒ ABOVE	55 55 GAL DRUMS INSIDE STORAGE AREA. 1 RAISED TANK MARKED DRM-E	☐ LANDFILL	
☒ TANKS – ☒ BELOW	2 VENT PIPES PROTRUDING	☒ POPULATION WITHIN VICINITY OF SITE	BALLFIELD BORDERS SITE
☐ ASBESTOS	NA	☒ WELLS 2	DRY WELL ALLEGED STORM DRAINAGE RUN OFF COLLECTION
☒ OTHER	25 PLASTIC AND METAL 5 GAL CANS, 10 VARIOUS SIZE (UOR 2 GALLON)	☒ OTHER 2 CABINETS	WITH VARIOUS PAINTS SOLVENTS AND UNKNOWNS.

EPA REGION I
REMOVAL SITE INVESTIGATION

PHYSICAL SITE OBSERVATIONS

COMMENTS: ONE SIDE OF STORAGE AREA (DRUM STORAGE AREA) WAS LOCKED AND COULD NOT BE ACCESSED, 25 55 GALL DRUMS WERE STAGED INSIDE AND LABELS WERE DIFFICULT TO DISCERN. AREA WITH ABOVE GROUND TANK HAD WHAT APPEARED TO BE GREY PAINT COVERING THE GROUND SURROUNDING IT.

CONTAINMENT OF MATERIALS: DRUMS STAGED IN ACCESSIBLE PORTION OF STORAGE AREA HAVE VARIOUS CONTENTS AND MOST APPEAR TO HAVE SOME PRODUCT REMAINING.

RECEPTORS

- [x] GROUND WATER/DRINKING WATER SOURCE — [ ] PRIVATE — [x] MUNICIPAL
- [x] UNRESTRICTED ACCESS TO SITE — AREA IS FENCED IN BUT FENCE IS APP 4' HIGH WIDE SQUARE SHAPED MESH/CAN BE CLIMBED EASILY
- [ ] ~~POPULATION IN PROXIMITY TO SITE~~ NL
- [x] SENSITIVE ECOSYSTEM — ROARING BRANCH BORDERS SITE AND FEEDS INTO THE WALOOMSAC RIVER/BRANCH REPORTEDLY SEVERAL HUNDRED FEET FROM BUILDING.
- [ ] ~~OTHER~~

FIELD SAMPLING AND ANALYSIS

		FIELD INSTRUMENTATION	ANALYTICAL PARAMETER
[x] SOIL		RADMETER, CGI/O_2 METER, ~~HNU 10.7~~ OVA NL .01 m/REMS, 0% LEL, 21% O_2, .02 ppm	SOIL SAMPLES COLLECTED FOR VOCs, BNAs, PCBs, METALS
[ ] GROUNDWATER		NA	
[ ] SURFACE WATER		NA	
[x] AIR SAMPLING		RADMETER/CGI/O_2 METER/~~HNU 10.7~~ OVA NL .01 m/REMS/0% LEL, 21% O_2, .02 PPM	
[x] STRUCTURES	[x] TANKS	(DRY WELL)	
	[x] DRUMS	RADMETER, CGI/O_2 METER, ~~HNU 10.7~~ OVA NL TOLUENE DRUM; .01 m/REM, 30% LEL, OVER 1000 PPM (PEGGED NEEDLE) EXONATE 600 DRUM;	DRUM SAMPLES COLLECTED FOR VOCs, BNAs
	[ ] ~~VATS~~		
	[ ] LAGOONS	.01 m/REMS, 0% LEL, 10 ppm	
	[ ] OTHER		
[x] SPILLAGE		RADMETER, CGI/O_2 METER, ~~HNU 10.7~~ OVA NL .01 m/REMS, 0% LEL, 21% O_2, .02 ppm	
[ ] RUNOFF		NA	
[ ] PILES		NA	
[ ] SEDIMENTS		NA	

EPA REGION I
REMOVAL SITE INVESTIGATION

ANALYTICAL RESULTS

SEE ATTACHED REPORT(S) DRAFT ENVIRONMENT SITE ASSESSMENT OF THE JARD COMPANY PROPERTY IN BENNINGTON VERMONT, WEHRAN ENGINEERING, NOV 89

FIELD QUALITY CONTROL PROCEDURES

☒ SOP FOLLOWED ☐ DEVIATION FROM SOP:

COMMENTS: ALL AIR MONITORING, SOIL SAMPLING, AND DRUM SAMPLING WAS CONDUCTED ACCORDING THE HEALTH AND SAFETY PLAN AND THE SAMPLING PLAN.

FURTHER ANALYSIS

ANALYTICAL PARAMETER	MEDIA	LABORATORY
☒ VOA	☐ AIR	☒ NERL
☒ PCB	☐ WATER	☐ CLP LAB ☐ SAS ☐ SOW
☐ PESTICIDE	☒ SOIL	☐ NON-CLP LAB
☒ METALS	☐ SOURCE	
☐ CYANIDE	☐ SEDIMENT	
☒ SEMI VOA		
☐ TOXICITY		
☐ DIOXIN		
☐ ASBESTOS		
☐ OTHER		

ADDITIONAL PROCEDURES FOR SITE DETERMINATION

☐ BIOLOGICAL EVALUATION

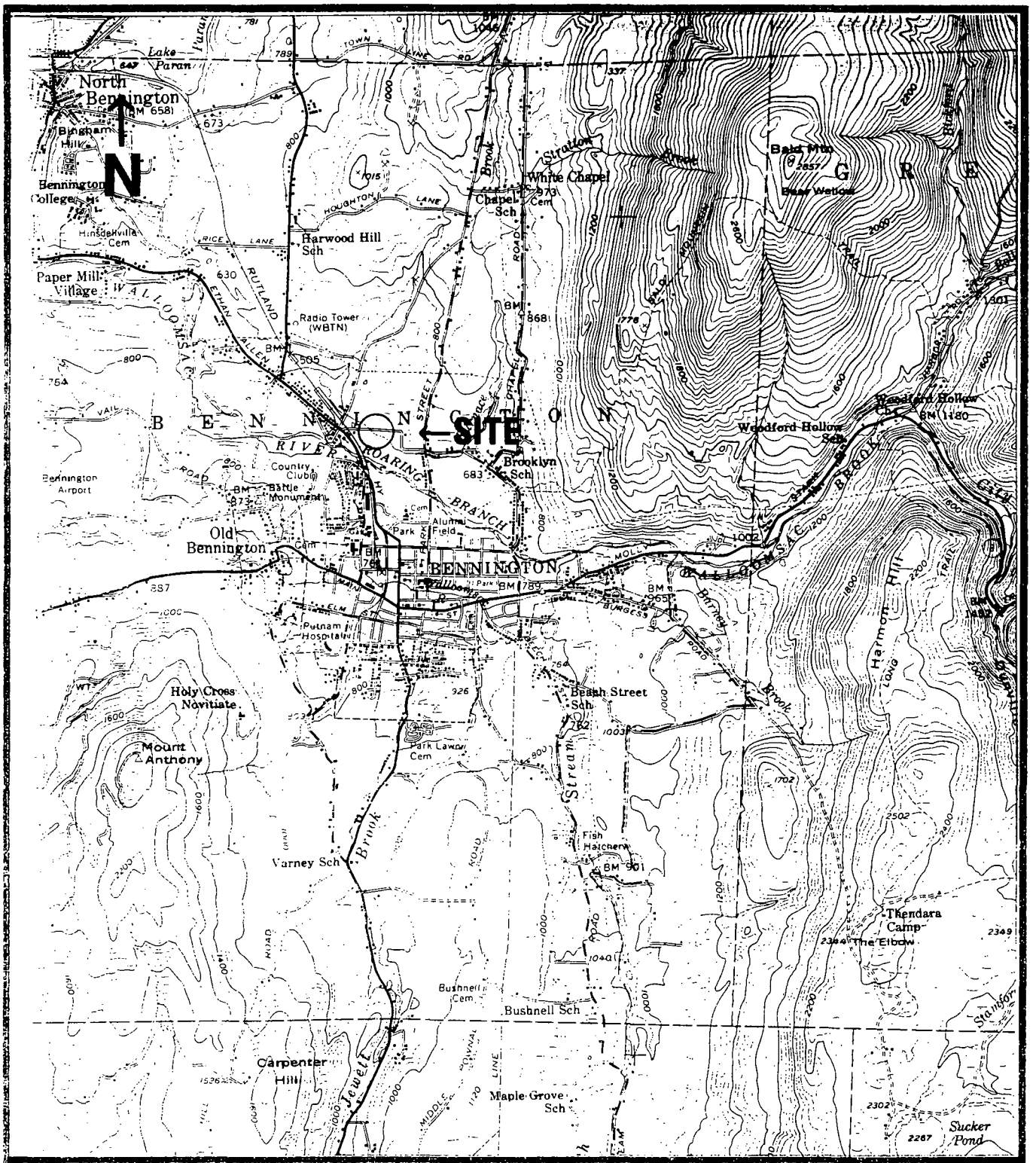
☐ ATSDR

SITE DETERMINATION

LIST – USE NCP CRITERIA, CLOSURE MEMO SECTION 300.415 REMOVAL ACTION 2(i) ACTUAL OR POTENTIAL EXPOSURE TO NEARBY HUMAN POPULATIONS, ANIMALS, OR THE FOOD CHAIN FROM HAZARDOUS SUBSTANCES OR POLLUTANTS OR CONTAMINANTS; (ii) ACTUAL OR POTENTIAL CONTAMINATION OF DRINKING WATER SUPPLIES OR SENSITIVE ECOSYSTEMS; (iii) HAZARDOUS SUBSTANCES OR POLLUTANTS OR CONTAMINANTS IN DRUMS, BARRELS, TANKS, OR OTHER BULK STORAGE CONTAINERS THAT MAY POSE A THREAT OF RELEASE; (iv) HIGH LEVELS OF HAZARDOUS SUBSTANCES OR POLLUTANTS OR CONTAMINANTS IN SOILS LARGELY AT OR NEAR THE SURFACE, THAT MAY MIGRATE; (vii) THE AVAILABILITY OF OTHER APPROPRIATE FEDERAL OR STATE RESPONSE MECHANISMS TO RESPOND TO THE RELEASE.

APPENDIX A

SITE LOCATION MAP



NOT TO SCALE

FIGURE 1

SITE LOCATION MAP

JARD CO. ,INC.

BENNINGTON, VERMONT

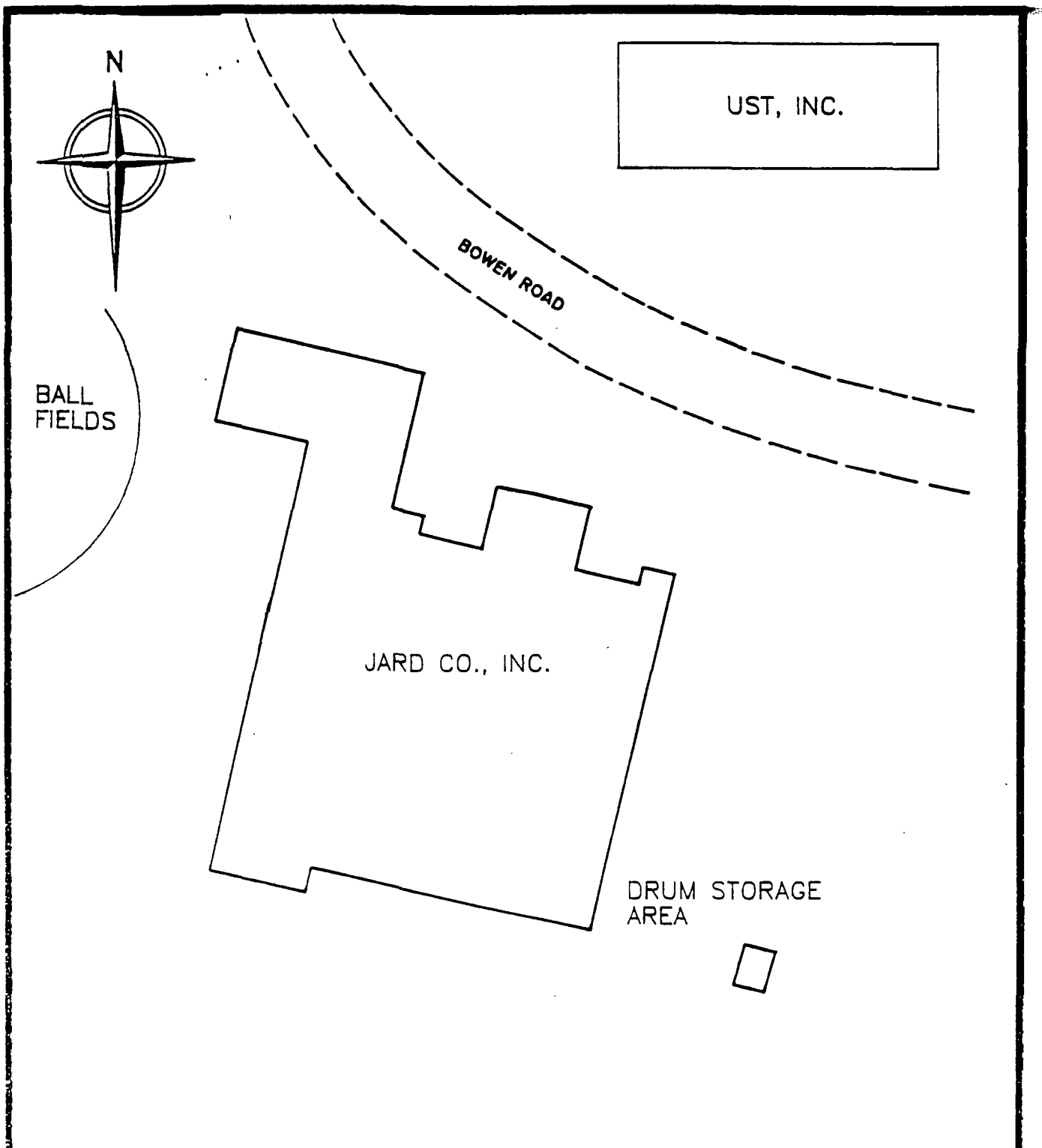
WESTON

MANAGERS DESIGNERS/CONSULTANTS

DRAWN	DATE	PCS #
MWL	3/91	1211
APPROVED	DATE	TOD #
RW	3/91	01-9103-07

APPENDIX B

SITE DIAGRAM



NOT TO SCALE

FIGURE 2

SITE DIAGRAM
JARD CO. ,INC.
BENNINGTON, VERMONT
ADAPTED FROM WEHRAN ENGINEERING

WESTON
MANAGERS DESIGNERS/CONSULTANTS

DRAWN MWL	DATE 3/91	PCS # 1211
APPROVED	DATE 3/91	TDD # 01-9103-07

APPENDIX C

SITE SAMPLING QA/QC PLAN

SAMPLING QUALITY ASSURANCE/ QUALITY CONTROL PLAN JARD CO., INC. SITE BENNINGTON, VERMONT

Prepared For:

U.S. Environmental Protection Agency
Region I
60 Westview Street
Lexington, MA 02173

CONTRACT NO. 68-W0-0036

TAT-01-N-00775

TDD NO. 01-9103-07

Prepared By:

ROY F. WESTON, INC.
Technical Assistance Team
Region I

March 1991

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1.0 BACKGROUND

The Jard Co., Inc. site is located in Bennington, Bennington County, Vermont on a 33 acre parcel of land (Figure 1). The Jard Co., Inc. manufactured capacitors coated with zinc from 1969 to 1989 and is presently abandoned (Figure 2). A Phase I Site Assessment was conducted on the RCRA facility by Wehran Engineering in November, 1989, to determine the possible extent of contamination resulting from historical manufacturing and/or disposal practices.

The Phase I Site Assessment indicated the presence of polychlorinated biphenyls (PCBs), bis (2-ethylhexyl) phthalate, and zinc in the surface soil of the site (Figure 3). A fenced drum storage area, containing 15-20 55-gallon drums of trichloroethylene (TCE), varnish, "DOP" (marked "not sampled"), paints and solvents, is located on the site.

A Phase 2 Site Assessment was conducted by Wehran Engineering in 1990, and included test pits and groundwater monitoring wells. A Phase 2 Site Assessment Report has not been released by Wehran Engineering. The Vermont Occupational Safety and Health Administration (OSHA) informed the Vermont Department of Environmental Protection (DEP) of the impending bankruptcy of Jard Co., Inc. in the Fall of 1989. Although the company was not involved in manufacturing in 1990, company personnel remained on the site. The site is presently abandoned and the Vermont DEP holds the key to the fenced drum storage area. The Vermont DEP referred the site to the U.S. EPA Emergency Planning and Response Branch (EPRB) for further investigation.

2.0 OBJECTIVES

The objective of the sampling survey is to obtain sufficient analytical data from a representative number of samples which can be used to determine whether further actions at the site by the U.S. EPA Emergency Planning and Response Branch are necessary.

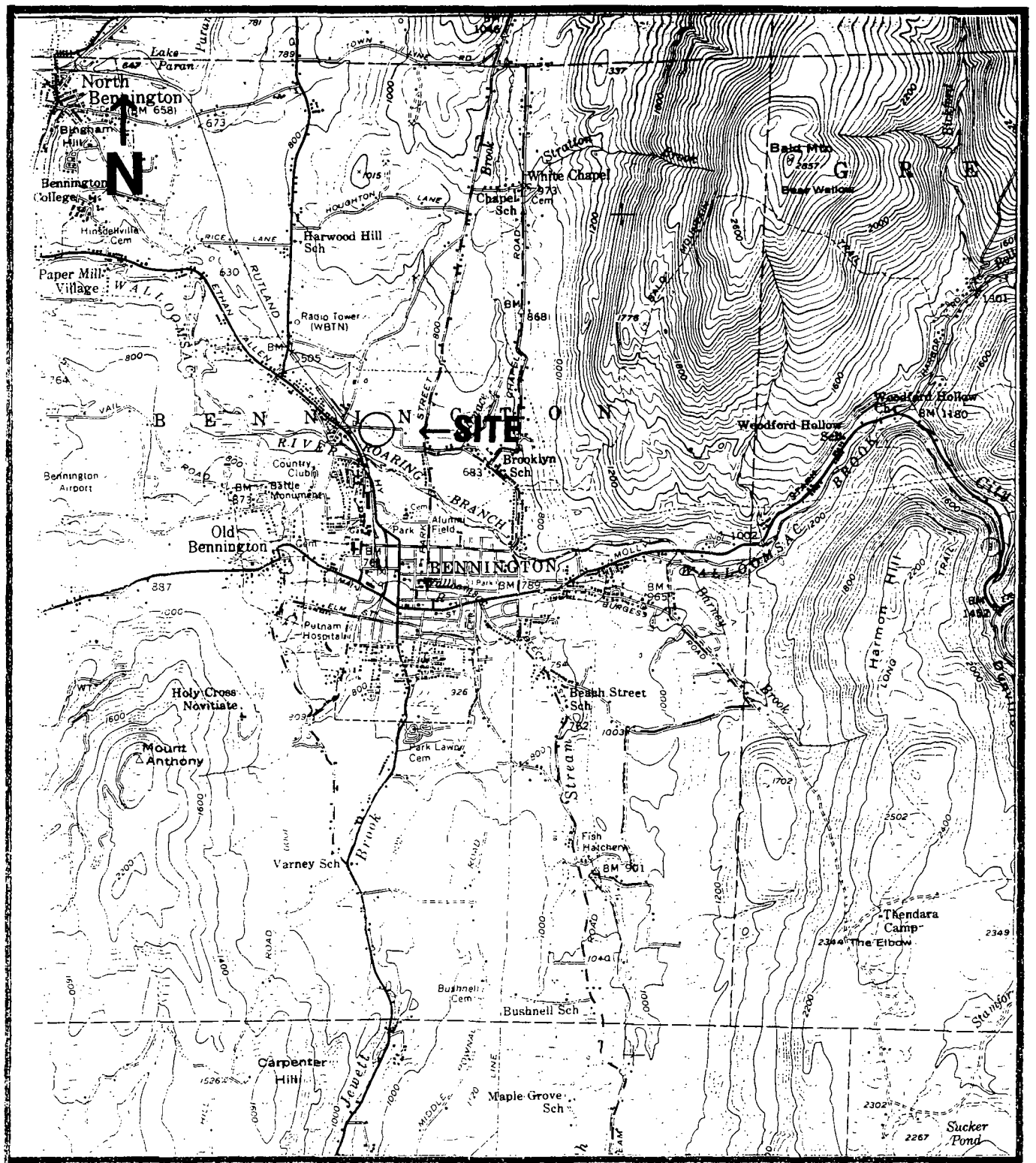
3.0 QUALITY ASSURANCE LEVELS

The quality assurance (QA) levels for the on-site screening activities will be QA1. These activities include the use of the following instrumentation/test equipment:

MSA Combustible Gas Indicator and Oxygen Meter
Victoreen Radiation Survey Meter
HNu Photoionization Detector

The QA level for the samples analyzed at the laboratory will be a modified QA2.

See Section 6.0 for details.



NOT TO SCALE

FIGURE 1

SITE LOCATION MAP

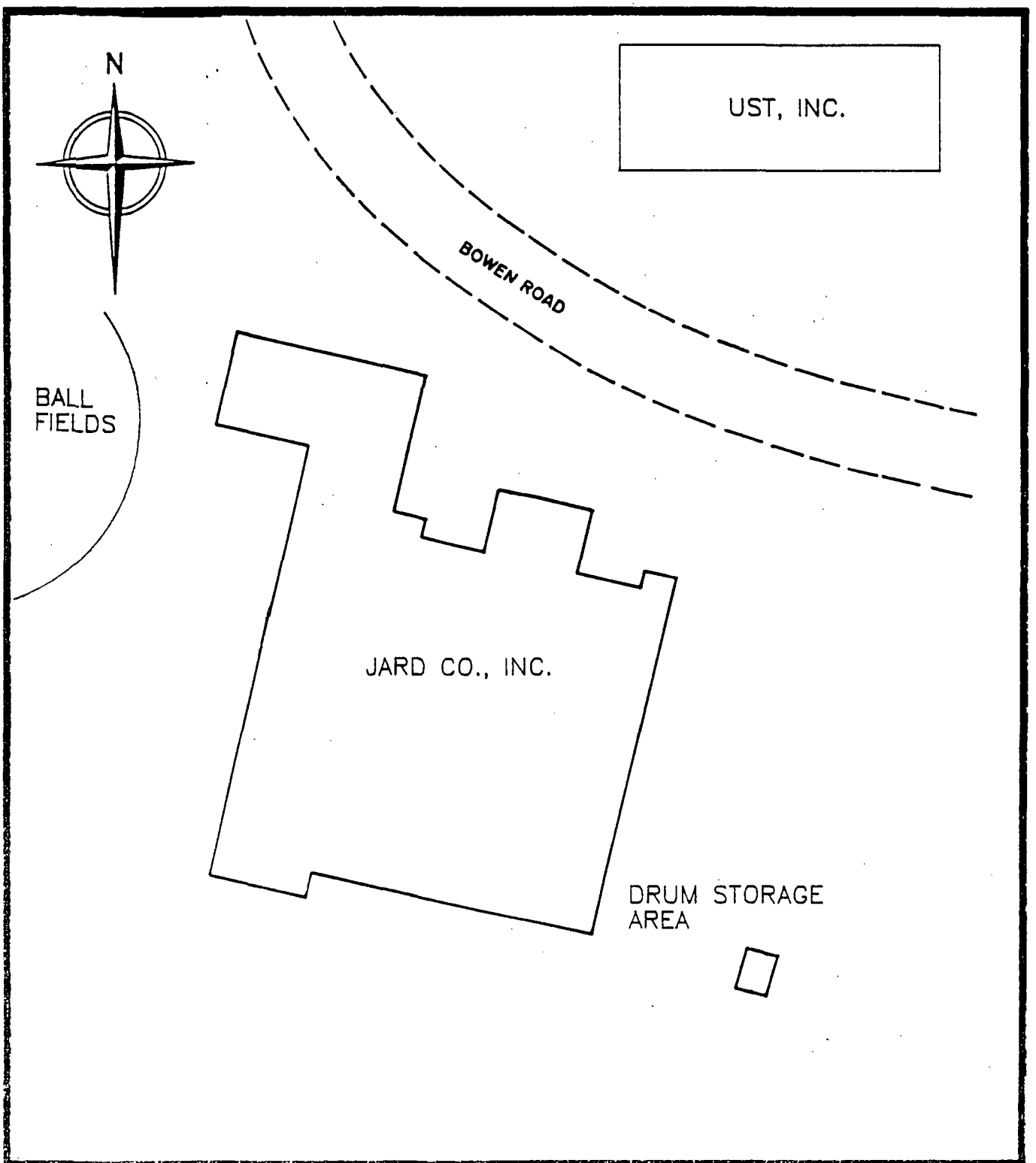
JARD CO. ,INC.

BENNINGTON, VERMONT

WESTON

MANAGERS DESIGNERS/CONSULTANTS

DRAWN	DATE	PCS #
MWL	3/91	1211
APPROVED	DATE	TOD #
	3/91	01-9103-07



NOT TO SCALE

FIGURE 2

SITE DIAGRAM
JARD CO. ,INC.
BENNINGTON, VERMONT
ADAPTED FROM WEHRAN ENGINEERING

WESTON
MANAGERS DESIGNERS/CONSULTANTS

DRAWN	DATE	PCS #
MWL	3/91	1211
APPROVED	DATE	TOD #
	3/91	01-9103-07

4.0 APPROACH AND SAMPLING METHODOLOGIES

The sampling survey will be conducted on March 19, 1990. Samples will be collected for, but are not limited to volatile organic compounds (VOCs), base/neutral and acid-extractable compounds (BNAs), metals analysis and polychlorinated biphenyls (PCBs) analysis.

Sample stations will be screened in the field prior to sample collection, if practical, to determine the location and quantity of samples. The samples will be containerized, preserved, and analyzed in accordance with Table 1. U.S. EPA chain of custody procedures will be utilized for all sampling activities. Samples will be disposed of by the laboratory performing the analyses. All contaminated sampling materials will be disposed of by the U.S. EPA New England Regional Laboratory.

4.1 Drums

There are reportedly 15-20 drums located in a fenced area on the site. If the drums are accessible, Site Investigator (SI) Mary Ellen Stanton will select those which will be sampled. The samples will be analyzed for VOCs, BNAs, total metals, and PCBs.

4.1.1 Sample Collection Procedures

All drum samples will be grab samples collected with dedicated drum thieves.

4.2 Soil

Sampling locations will be selected by EPA Site Investigator (SI) Mary Ellen Stanton. Up to five soil samples will be collected and submitted for VOCs, BNAs, total metals and PCBs analyses.

4.2.1 Sample Collection Procedures

A grab sample will be taken at each sample station. Metals samples will be collected with disposable plastic scoops. BNAs, VOCs, and PCB samples will be collected using a metal trowel. The metal trowel will be decontaminated by removing loose dirt with a brush followed by rinsing with distilled water, a hexane, rinse, then distilled water and allowing it to air dry between each sample location.

5.0 PROJECT ORGANIZATION AND RESPONSIBILITIES

U.S. EPA Emergency Planning and Response Branch:

Mary Ellen Stanton	Site Investigator

Roy F. Weston Technical Assistance Team Members:

Michael Lombardi	Sampler, Safety Monitor
Timothy Jones	Sampler

6.0 QUALITY ASSURANCE REQUIREMENTS

The on-site screening activities will employ the following QA level 1 requirements: sample documentation; instrument calibration/performance check; and the determination of a detection limit, if appropriate.

The analyses of samples at the laboratory will employ the following modified QA level 2 requirements: sample documentation; chain of custody; sample holding times; method blanks, trip blanks, preparation blanks; initial and continuing calibration data; definitive identification: confirm the identification of analytes via a second GC column or mass spectra on the samples submitted (for organics only); and provide gas chromatograms and/or mass spectra.

7.0 DELIVERABLES

A report documenting all project activities will be generated by the Roy F. Weston Technical Assistance Team.

8.0 DATA VALIDATION

A data quality review of the sample analyses will be conducted by the Roy F. Weston Technical Assistance Team and/or EPA New England Regional Laboratory personnel.

QA level 1 data will be evaluated for calibration and detection limits.

The modified QA level 2 data will be evaluated by the following: results of 10% of the samples in the analytical data packages will be evaluated for all of the elements listed in Section 6, "QA Requirements"; and holding times, blank contamination, and detection capability will be reviewed for all samples.

9.0 REFERENCES

Wehran Engineering, November 1989, Phase I Site Assessment Report, Jard Co., Inc.

TABLE 1

SAMPLING SUMMARY, ANALYTICAL METHODS, AND QA/QC SAMPLES

MATRIX	#SAMPLES	ANALYTICAL PARAMETER	VOLUME	CONTAINER	PRESERVATIVE	METHOD	TRIP BLANKS
Drum	5	VOCs	40 ml	1-40 ml VOA Vial	Ice	8240	None
Drum	5	BNAs	40 ml	1-40 ml VOA Vial	Ice	8270	None
Drum	5	Total Metals	8 oz	8 oz jar Glass	Ice	6010	None
Drum	5	PCBs	40 ml	1-40 ml VOA vial	Ice	8080	None
Soil	5	VOCs	40 ml	1-40 ml VOA Vial	Ice	8240	3-40 ml VOA Vials Organic Free H20
Soil	5	BNAs	4 oz	Glass	Ice	8270	None
Soil	5	Total Metals	4 oz	Glass No Metal Lid	Ice	6010	None
Soil	5	PCBs	8 oz	Glass	Ice	8080	None

APPENDIX D

HEALTH AND SAFETY PLAN

WESTON MAJOR PROGRAMS DIVISION
HEALTH AND SAFETY PLAN
EMERGENCY RESPONSE / SITE INVESTIGATION

TDD No. 01-9103-07 **Site Name:** JARD CO.

Site Address: Street No. BOWEN ROAD

City BENNINGTON

County/State BENNINGTON / VERMONT

Site Contact / Phone No.: LAWRENCE LEVY INC (804) 644-2000

Directions to Site:(Att.Map) 128 SOUTH TO ROUTE 2 WEST. FOLLOW ROUTE 2 WEST UNTIL INTERSTATE 91, AND TAKE ROUTE 91 NORTH. GET OFF THE INTERSTATE AT THE ROUTE 9 EXIT AND HEAD WEST TO BENNINGTON VERMONT. HEAD NORTH AT THE ROUTE 7 INTERSECTION ~~AND~~ ML IN THE CENTER OF BENNINGTON UNTIL COUNTY ST. RIGHT ONTO COUNTY AND THEN TAKE A LEFT ONTO PARK ST. PAST BLINKING LIGHT BOWEN WILL BE ON THE RIGHT.

Historical/Current Site Information: THE JARD CO, INC IS AN ABANDONED RCRA FACILITY WHICH FORMERLY MANUFACTURED CAPACITORS COATED WITH ZINC FROM 1969 TO 1989. A PHASE I SITE ASSESSMENT BY WEHRAN ENGINEERING INDICATED THE PRESENCE OF PCBs, ZINC, AND DI-N-PTHALATE IN THE SURFACE SOIL. A FENCED IN DRUM STAGING AREA ON THE SITE CONTAINS 15-20 55 GALLON DRUMS OF TCE, VARNISH, PAINT, SOLVENT AND DI-N-PTHALATE.

Incident Type:
- ~~( ) Air Release~~ -
- ( ) Spill -
- ( ) Fire -
- (X) HW Site -

Location Class : (X) Industrial ( ) Commercial ( ) Urban/Residential ( ) Rural

USEPA Contact: MARY ELLEN STANTON **Date of Initial Site Activities:** 3/19/91

Original HASP: Yes X **Modification Number:** _____

Lead TAT: M. LOMBARDI **Site Health & Safety Coordinator:** M. LOMBARDI

Response Activities/Duration (fill in as applicable)

Emergency Response:	( ) Perimeter Recon.	
	( ) Site Entry	
	( ) Visual Documentation:	
	( ) Multi-media Sampling:	
	( ) Decontamination:	
Assessment:	(X) Perimeter Recon.	1 HR
	(X) Site Entry	1/2 HR
	(X) Visual Documentation:	1/2 HR
	(X) Multi-media Sampling:	2 HRS
	(X) Decontamination:	1 HRS

Physical Safety Hazards to Personnel

( ) Heat (X) Cold (X) Precipitation ( ) Confined Space (X) Terrain
(X) Walking/Working Surfaces ( ) Fire & Explosion ( ) Oxygen Deficiency
( ) Underground Utilities ( ) Overhead Utilities ( ) Heavy Equipment
(X) Unknowns in Drums, Tanks, Containers ( ) Ponds, Lagoons, Impoundments
( ) Rivers, Streams ( ) Pressurized Containers, Systems ( ) Noise
( ) Illumination ( ) Nonionizing Radiation ( ) Ionizing Radiation

Biological Hazards to Personnel N4

( ) Infectious/Medical/Hospital Waste ( ) Non-domesticated Animals ( ) Insects
( ) Poisonous Plants/Vegetation ( ) Raw Sewage

Training Requirements

(X) 40 Hour General Site Worker Course with three days supervised experience.
( ) 24 Hour Course for limited, specific tasks with one day supervised experience.
( ) 24 Hour Course for Level D Site with one day supervised experience.
(X) 8 Hour Annual Refresher Health and Safety Training.
(X) 8 Hour Management/Supervisor Training in addition to basic training course.
( ) Site Specific Health and Safety Training.
( ) Pre-entry training for emergency response skilled support personnel.

Medical Surveillance Requirements

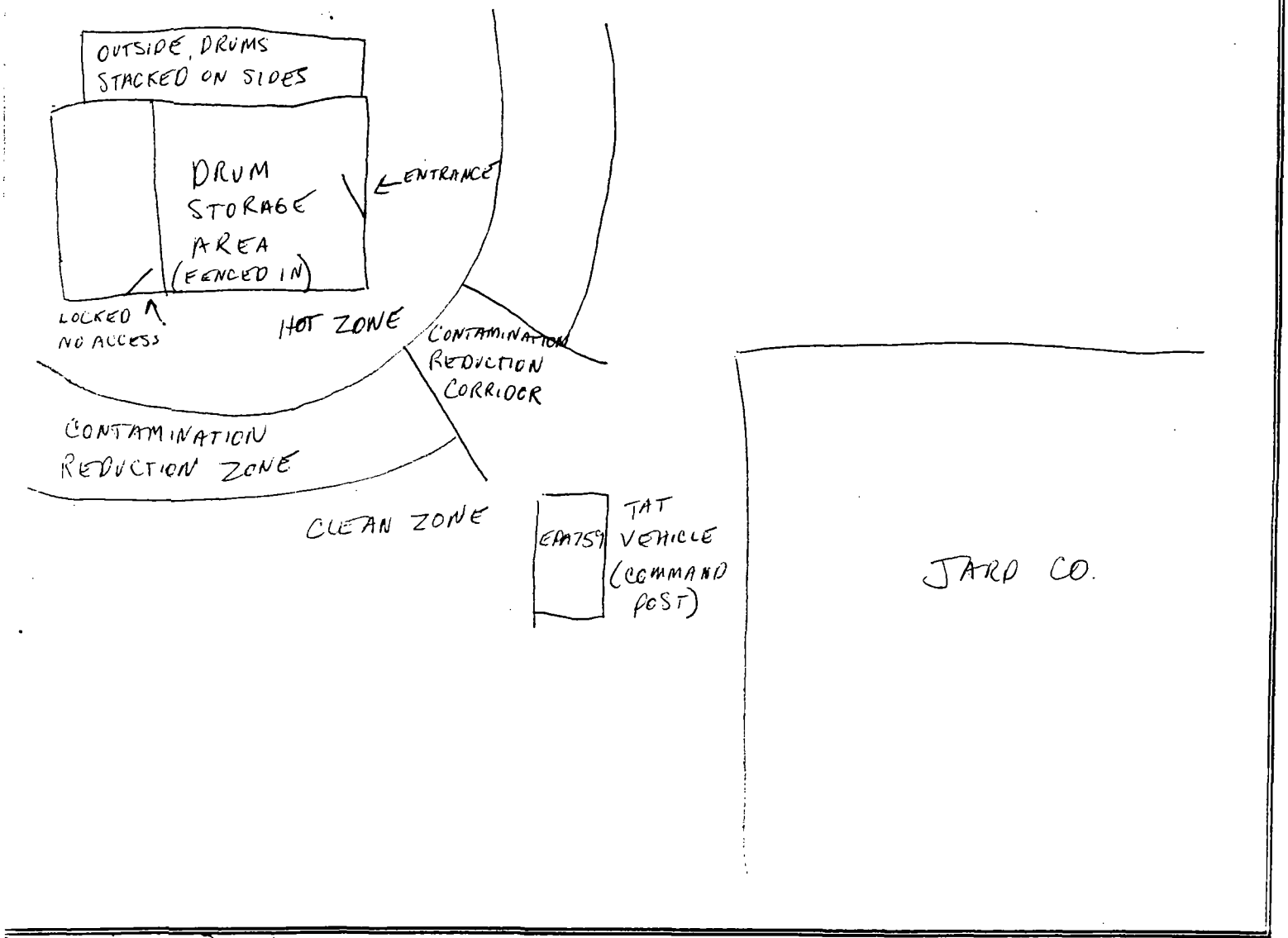
(X) Baseline initial physical examination with physician certification.
(X) Annual medical examination with physician certification.
( ) Site Specific medical monitoring protocol (Radiation, Pesticide, PCB, Metals).
( ) Asbestos Worker medical protocol.
( ) Exempt from medical surveillance:_____.
(X) Examination required in event of chemical exposure or trauma.

Chemical Hazards to Personnel

Physical Parameters	Chemical Contaminant	Chemical Contaminant	Chemical Contaminant	Chemical Contaminant
	POLYCHLORINATED BIPHENYLS (PCBS)	TRICHLOROETHYLENE (TCE)	DI-SEC-OCTYL PHTHLATE (DOP)	ZINC
Exposure Limits IDLH Level	___ ppm 0.5 mg/m³ PEL ___ ppm 0.5 mg/m³ TLV CA ppm ___ mg/m³ IDLH CARCINOGEN	50 ppm ___ mg/m³ PEL 50 ppm ___ mg/m³ TLV CA ppm ___ mg/m³ IDLH CARCINOGEN	___ ppm 5 mg/m³ PEL ___ ppm ___ mg/m³ TLV CA ppm ___ mg/m³ IDLH CARCINOGEN	NA ppm ___ mg/m³ PEL NA ppm ___ mg/m³ TLV NK ppm ___ mg/m³ IDLH
Physical Form Sol.Liq.Gas Color	X Solid X Liquid ___ Gas ___ Color SOIL CONTAMINATION	___ Solid X Liquid ___ Gas ___ Color COLORLESS	___ Solid X Liquid ___ Gas ___ Color COLORLESS	X Solid ___ Liquid ___ Gas ___ Color BLUISH-WHITE, LUSTROUS METAL
Odor	MILD HYDROCARBON ODOR	MILD HYDROCARBON ODOR	ODOR LESS	
Flash Point Flammable Limits	432 Degrees F or C NA % UEL NA % LEL	NA Degrees F or C 41 % UEL 11 % LEL	425 Degrees F or C NA % UEL NA % LEL	___ Degrees F or C ___ % UEL ___ % LEL
Vapor Press. Vapor Dens.	.00006 mm/Hg ___ Air = 1	58 mm/Hg ___ Air = 1	< 0.01 mm/Hg ___ Air = 1	___ mm/Hg ___ Air = 1
Specific Gravity	1.4 - 1.5 Water = 1	1.456-1.462 Water = 1	___ Water = 1	7.14 Water = 1
Solubility	INSOLUBLE	0.1 %	0.005 %	
Incompatible Materials	STRONG OXIDIZER	STRONG OXIDIZERS	NITRATES, STRONG OXIDIZERS, ACIDS, ALKALIDES	REACTS SLOWLY TO STRONG ACIDS, ALKALI HYDROXIDES
Route of Exposure	X Inh X Abs X Con X Ing	X Inh ___ Abs X Con X Ing	X Inh ___ Abs X Con X Ing	X Inh ___ Abs ___ Con ___ Ing
Symptoms of Acute Exposure	IRRITATED EYES, CHLORACNE	HEADACHE TREMORS NAUSEA IRRITATED EYES	IRRITATED EYES, MUCOUS MEMBRANES NAUSEA DIARRHEA	SWEET TASTE, DRY THROAT, COUGH, WEAKNESS, NAUSEA, VOMITING
First Aid Treatment	IRRIGATE EYES SOAP WASH SKIN ARTIFICIAL RESP. MEDICAL ATTN.	IRRIGATE EYES SOAP WASH SKIN ARTIFICIAL RESP. MEDICAL ATTN.	IRRIGATE IMMEDIATELY SOAP WASH SKIN ARTIFICIAL RESP. MEDICAL ATTN.	
Ion Potential	NA eV	9.47 eV	___ eV	___ eV
Instruments For Detection	___ PID W/ ___ Probe ___ FID ___ CGI ___ RAD ___ Det Tube ___ Ph Other ELECTRON CAPTURE w/GC	X PID W/ 10.2 Probe ___ FID ___ CGI ___ RAD ___ Det Tube ___ Ph Other ___	___ PID W/ ___ Probe ___ FID ___ CGI ___ RAD ___ Det Tube ___ Ph Other ___	___ PID W/ ___ Probe ___ FID ___ CGI ___ RAD ___ Det Tube ___ Ph Other ___

Site Control Measures

Site Map with work zones:



Decontamination Procedures

( ) Wet Decontamination - using:_____

(x) Dry Decontamination

Description of Site Specific Decontamination Plan: DRY DECON; SOAP AND WATER WASH IF NECESSARY, PROPER DISPOSAL OF PROTECTIVE CLOTHING

Adequacy of decontamination determined by: VISUAL OBSERVATION

rsonal Protective Equipment

TASK TO BE PERFORMED/AIR MONITORING REQUIRED	ANTICIPATED LEVEL OF PROTECTION	TYPE OF CHEMICAL PROTECTIVE COVERALL	INNER GLOVE OUTER GLOVE BOOT COVER	TYPE OF APR CARTRIDGE OR CANISTER
SITE ENTRY GBI, RADMETER, HNU	B	SARANEX	LATEX INNER NITRILE OUTER VINYL BOOTIE	SCBA
DRUM SAMPLING	B	SARANEX	LATEX INNER SILVER SHIELD INNER NITRILE OUTER VINYL BOOTIE	SCBA
SOIL SAMPLING	C	SARANEX	LATEX INNER SILVER SHIELD VINYL BOOTIE	6MC-H

Frequency and Types of Air Monitoring: (X) Continuous ( ) Routine -_____ ( ) Periodic - _____

DIRECT READING INSTRUMENTS	COMBUSTIBLE GAS/OXYGEN METER (1)	RADIATION SURVEY METER/PROBE (2)	PHOTOIONIZATION DETECTOR/PROBE (3)	FLAME IONIZATION DETECTOR (4)	CHEM. DETECTOR TUBE (5)
ID NUMBER	TAT #3	TAT #3		TRANSFER FROM REGION 4 #2	
CAL. DATE	3/19/91	3/19/91		3/19/91	
TAT MEMBER	M. LOMBARDI	T. JONES		T. JONES	
ACTION LEVEL	≥ 20%LEL ≤19.5%, ≥23% O_2 - LEAVE	3X BACKGRND - CAUTION; 1 MR/HR-LEAVE	UNKNOWNS 0-5 UNITS:"C" 5-500:"B"	UNKNOWNS 0-5 UNITS:"C" 5-500:"B"	PEL/TLV COMPARE W/PF

Emergency Phone Numbers

Emergency Contact	Location	Phone Number	Notified
Hospital	SOUTHWESTERN VT MEDICAL CENTER (Formerly Putnam) 100 HOSPITAL DRIVE	442-6361	YES -
Ambulance	120 McKINLEY ST	911	YES
Police	120 McKINLEY ST	911	YES
Fire Dept.	WILLOW ROAD	911	YES

Chemical Trauma Capability? (X) Yes ( ) No If no, closest backup: _____ Phone: _____

Directions to Hospital (attach map) - Route verified by: M. LOMBARDI Date: 3/19/91

TAKE A LEFT FROM THE SITE ONTO PARK STREET. AT THE STOP LIGHT TAKE A RIGHT ONTO COUNTY STREET AND TAKE A LEFT ONTO ROUTE 7. APPROXIMATELY 1 1/2 MILES SOUTH ON ROUTE 7 TAKE A RIGHT ONTO WEEKS STREET. FOLLOW WEEKS STREET TO THE END AND IT BECOMES HOSPITAL DRIVE. HOSPITAL IS ON HOSPITAL DRIVE.

Additional Emergency Phone Contacts

Contact	Phone Number
WESTON 24 hr. Hotline	215-524-1925 215-524-1926
WESTON Medical Emergency Service	513-421-3063
Chemtrec	800-424-9300
ATSDR	404-639-0615
ATF (explosives information)	800-424-9555
National Response Center	800-424-8802
National Poison Control Center	800-942-5969

HASP prepared by: MICHAEL W. LOMBARDI Date: 3/18/91

Pre-Response/Entry Approval by: [signature] Date: 3/18/91

Verbal Approval/Modification to Original HASP by: _____ Date: __/__/__

ysical Description of Site and Response Activities

e of Site: 35 Terrain PAVED Weather CLEAR, 38°F
stance to Nearest: Residence 1m School 1/2m Hospital 3m
Public Building 2m Other _____
acuation: ( ) Yes (X) No By Whom: _____
arest Waterway: WALOOMSA RIVER Distance from Site: BORDERS SITE TO THE SOUTH

Condition	Observed	Potential	None	Comments/Observations
urface Water Contamination		X		
Ground Water Contamination		X		
Drinking Water Contamination		X		
ir Release		X		
oil Contamination	X			VISIBLE SOIL STAINING, HEAVY
Stressed Vegetation	X			GREY (PAINTLIKE) COVERING ON SOUTH SIDE OF BUILDING
Dead Animal Species		X		

Actions Taken On-Site:
Perimeter Monitoring: (X) Yes ( ) No
Site Entry by TAT: (X) Yes ( ) No

Tasks Conducted	Level of Protection/Specific PPE Used
DRUM SAMPLING (INSIDE MAIN CALCAREA, ONE SIDE WAS LOCKED)	LEVEL B SARANEX NITRILE INNER, SILVER SHIELD ~~OUTER~~ INNER, NITRILE OUTER, ML ~~TAT~~ VINYL BOOTIES
SOIL SAMPLING	LEVEL C / GMC-H / SAME PP CLOTHING USED ABOVE
SITE WALKOVER W/ VT DEP IN LEVEL D	LEVEL D
PHOTO DOCUMENTATION	SAMPLING - LEVEL C AS ABOVE BUILDING, DRUM AREA - LEVEL D FROM OUTSIDE THE FENCED IN AREA.

Air Monitoring Summary Log

Date: 3/12/91

Data Collected by: M Lombardi, T. Jones

Data to be summarized by a "Range of readings,i.e.,- Low to High" and/or "Average" by location.

Station/Location	CGI/O_2 Meter	Radiation Meter	PID/Probe	FID/OVA	Detector Tube
DRUM STORAGE AREA / CENTER OF CAGE	21% O_2, 0% LEL	.01 m/~~RADS~~ ML REMS		.02 ppm	
TOLUENE DRUM / JUST INSIDE BUNG	ML ~~15%~~ LEL 30%	.01 m/~~RADS~~ ML REMS		OVER 1000 ppm (PEGGED DIAL)	
EXXONATE 600 DRUM / JUST INSIDE BUNG	0% LEL	.01 m/REMS		ML ~~600 ppm~~ 10 PPM	
PERIMETER OF SITE	21% O_2, 0% LEL	.01 m/REMS		.02 ppm	
EMPTY DRUMS OUTSIDE OF CAGE AREA	21% O_2, 0% LEL	.01 m/REMS		.02 ppm	

Summary/Comments: Site beyond parking lot was fenced in per request of VT DEP to Jard Co. No access beyond parking (paved area) into woods area up to river border. VT DEP claimed there was little concern for contamination outside of fence. All readings were background with the exception of the 2 drums.

izardous Waste Site and Environmental Sampling Activities

Off Site: ( ) Yes (X) No
On Site: (X) Yes ( ) No

escribe types of samples and methods used to obtain
mples: Soil samples were collected with a plastic sampling device a metal trowel according to the sampling plan. Drums were sampled with sample thieves and thieves were removed from drum and disposed of in a 5gallon pail and sealed.

as Laboratory notified of Potential Hazard Level Of Samples? (X) Yes ( ) No

Note: The nature of the work assignment may require the use of the following procedures/programs which will be ciuded as Attachments to this HASP as applicable: Emergency Response Plan, Confined Space Entry Procedures. Spill Containment Program.

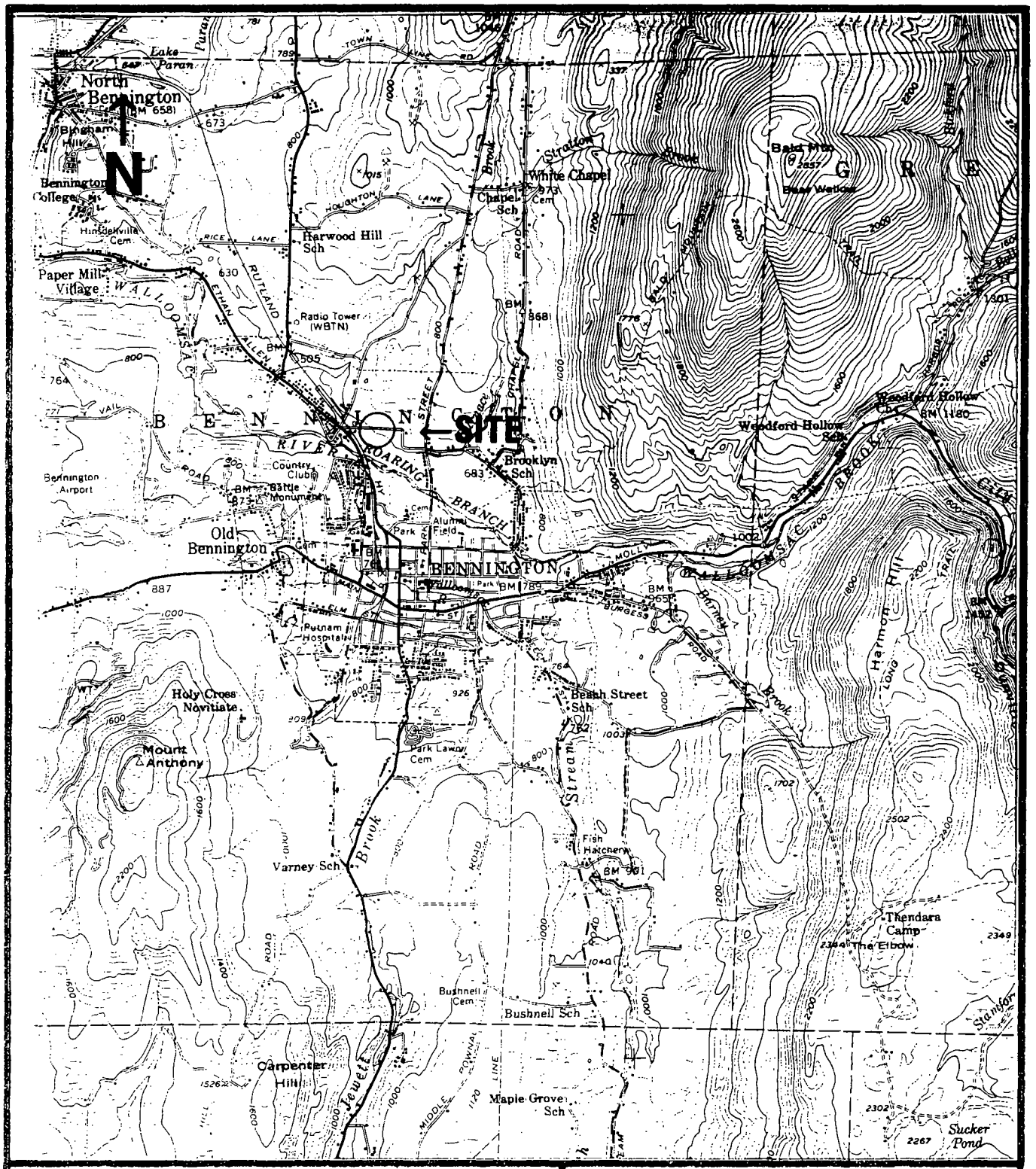
sciaimer: This Health and Safety Plan (HASP) was prepared for work to be conducted under the Technical Assistance Team (TAT) Contract 68-WO-0036 for Zone I. Use of this HASP by WESTON and its subcontractors intended to fulfill the OSHA requirements found in 29 CFR 1910.120. Items not specifically covered in this ASP are included by reference to 29 CFR 1910 and 1926.

e signatures below indicate that the individuals have read and understood this Health and Safety Plan.

PRINTED NAME	SIGNATURE	AFFILIATION	DATE
TIMOTHY C JONES	[signature]	Weston TAT	3/19/91
MICHAEL W. LOMBARDI	[signature]	WESTON TAT	3/19/91

		Date
Final Submission of HASP by:	M. Lombardi 3/20/91	
ost Response Review by:	[signature]	4/11/91
ost Response Approval by:		
TAT HSO Review by:		

COMMENTS/FOLLOWUP



NOT TO SCALE

FIGURE 1

SITE LOCATION MAP

JARD CO. ,INC.

BENNINGTON, VERMONT

WESTON

MANAGERS DESIGNERS/CONSULTANTS

DRAWN	DATE	PCS #
MWL	3/91	1211
APPROVED	DATE	TOD #
RW	3/91	01-9103-07

APPENDIX E

PHOTO-DOCUMENTATION LOG

PHOTOGRAPHY LOG SHEET

SCENE: SOUTHEAST SIDE, MONITORING WELL AND CONCRETE VAULT.
SITE NAME: JARD CO., INC. LOCATION: BENNINGTON, VERMONT
FRAME NUMBER: 1 DATE: 03/19/91 TIME: 1141 SKY CONDITION: CLEAR
PHOTO BY: M. LOMBARDI WITNESSES: T. JONES ,
CAMERA: OLYMPUS SETTING: AUTOMATIC FILM TYPE: 35 MM FILM ROLL: 197749

SCENE: CONCRETE VAULT NEAR MONITORING WELL ON THE SOUTHEAST SIDE.
SITE NAME: JARD CO., INC. LOCATION: BENNINGTON, VERMONT
FRAME NUMBER: 2 DATE: 03/19/91 TIME: 1141 SKY CONDITION: SLEAR
PHOTO BY: M. LOMBARDI WITNESSES: T. JONES ,
CAMERA: OLYMPUS SETTING: AUTOMATIC FILM TYPE: 35 MM FILM ROLL: 197749

PHOTOGRAPHY LOG SHEET

SCENE: MONITORING WELL SOUTH SIDE OF BUILDING.
SITE NAME: JARD CO., INC. LOCATION: BENNINGTON, VERMONT
FRAME NUMBER: 5 DATE: 03/19/91 TIME: 1143 SKY CONDITION: CLEAR
PHOTO BY: M. LOMBARDI WITNESSES: T. JONES ,
CAMERA: OLYMPUS SETTING: AUTOMATIC FILM TYPE: 35 MM FILM ROLL: 197749

SCENE: ABOVEGROUND STORAGE TANK SOUTH SIDE OF BUILDING.
SITE NAME: JARD CO., INC. LOCATION: BENNINGTON, VERMONT
FRAME NUMBER: 6 DATE: 03/19/91 TIME: 1146 SKY CONDITION: CLEAR
PHOTO BY: M. LOMBARDI WITNESSES: T. JONES ,
CAMERA: OLYMPUS SETTING: AUTOMATIC FILM TYPE: 35 MM FILM ROLL: 197749

PHOTOGRAPHY LOG SHEET

SCENE: ABOVEGROUND STORAGE TANK AND BAGHOUSE FILTER SOUTH SIDE OF BLDG.
SITE NAME: JARD CO., INC. LOCATION: BENNINGTON, VERMONT
FRAME NUMBER: 7 DATE: 03/19/91 TIME: 1146 SKY CONDITION: CLEAR
PHOTO BY: M. LOMBARDI WITNESSES: T. JONES ,
CAMERA: OLYMPUS SETTING: AUTOMATIC FILM TYPE: 35 MM FILM ROLL: 197749

SCENE: CONCRETE DRYWELL SOUTH SIDE NEAR UNDERGROUND STORAGE TANKS.
SITE NAME: JARD CO., INC. LOCATION: BENNINGTON, VERMONT
FRAME NUMBER: 8 DATE: 03/19/91 TIME: 1151 SKY CONDITION: CLEAR
PHOTO BY: M. LOMBARDI WITNESSES: T. JONES ,
CAMERA: OLYMPUS SETTING: AUTOMATIC FILM TYPE: 35 MM FILM ROLL: 197749

PHOTOGRAPHY LOG SHEET

SCENE: DRUM STORAGE AREA, SOUTHEAST CORNER OF PARKING LOT.
SITE NAME: JARD CO., INC. LOCATION: BENNINGTON, VERMONT
FRAME NUMBER: 3 DATE: 03/19/91 TIME: 1141 SKY CONDITION: CLEAR
PHOTO BY: M. LOMBARDI WITNESSES: T. JONES ,
CAMERA: OLYMPUS SETTING: AUTOMATIC FILM TYPE: 35 MM FILM ROLL: 197749

SCENE: EMPTY DRUMS STORED BESIDE DRUM STORAGE AREA.
SITE NAME: JARD CO., INC. LOCATION: BENNINGTON, VERMONT
FRAME NUMBER: 4 DATE: 03/19/91 TIME: 1142 SKY CONDITION: CLEAR
PHOTO BY: M. LOMBARDI WITNESSES: T. JONES ,
CAMERA: OLYMPUS SETTING: AUTOMATIC FILM TYPE: 35 MM FILM ROLL: 197749

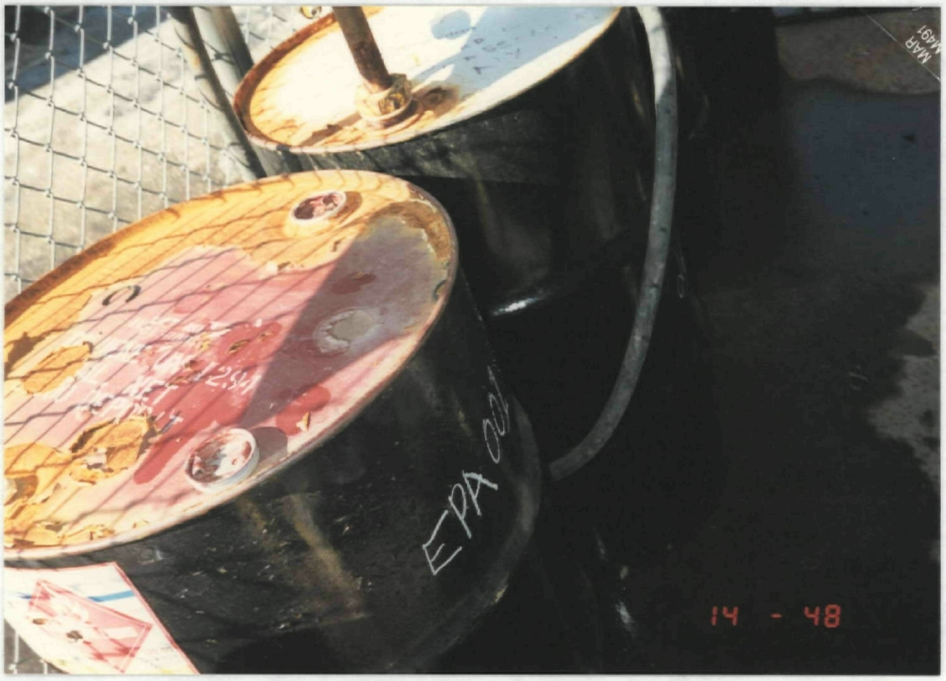
PHOTOGRAPHY LOG SHEET

SCENE: DRUMS STORED ON WEST SIDE OF BUILDING.
SITE NAME: JARD CO., INC. LOCATION: BENNINGTON, VERMONT
FRAME NUMBER: 9 DATE: 03/19/91 TIME: 1157 SKY CONDITION: CLEAR
PHOTO BY: M. LOMBARDI WITNESSES: T. JONES ,
CAMERA: OLYMPUS SETTING: AUTOMATIC FILM TYPE: 35 MM FILM ROLL: 197749

SCENE: MONITORING WELL WEST SIDE OF BUILDING BEHIND BALL FIELD.
SITE NAME: JARD CO., INC. LOCATION: BENNINGTON, VERMONT
FRAME NUMBER: 10 DATE: 03/19/91 TIME: 1202 SKY CONDITION: CLEAR
PHOTO BY: M. LOMBARDI WITNESSES: T. JONES ,
CAMERA: OLYMPUS SETTING: AUTOMATIC FILM TYPE: 35 MM FILM ROLL: 197749

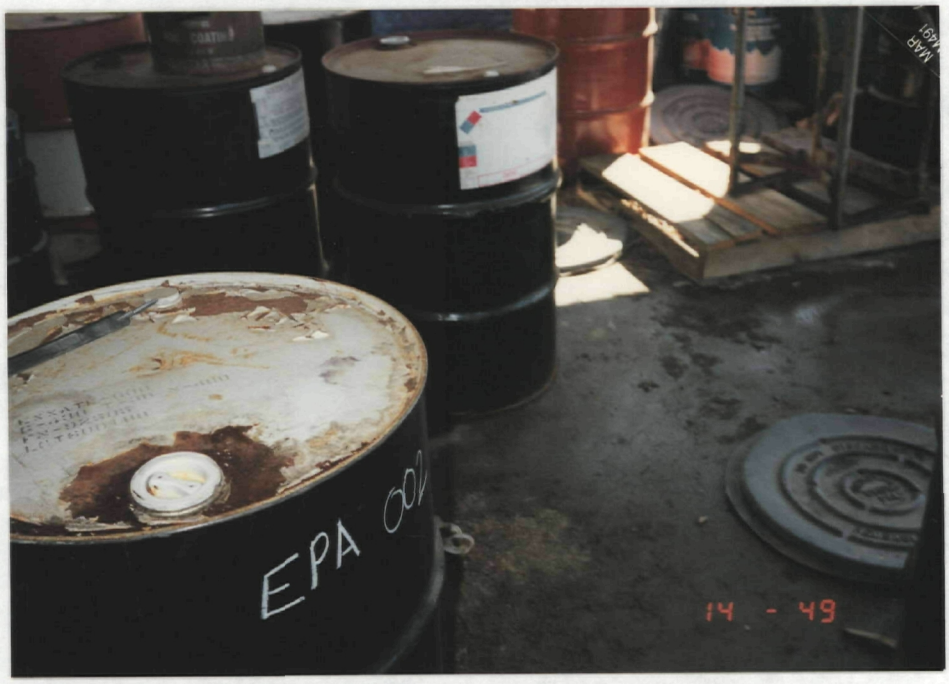
PHOTOGRAPHY LOG SHEET

SCENE: DRUMS INSIDE STORAGE AREA ALONG NORTHWEST SIDE OF FENCE.
SITE NAME: JARD CO., INC. LOCATION: BENNINGTON, VERMONT
FRAME NUMBER: 11 DATE: 03/19/91 TIME: 1448 SKY CONDITION: CLEAR
PHOTO BY: M. LOMBARDI WITNESSES: T. JONES ,
CAMERA: OLYMPUS SETTING: AUTOMATIC FILM TYPE: 35 MM FILM ROLL: 197749



SCENE: DRUM LABELED 001 SAMPLED INSIDE STORAGE AREA.
SITE NAME: JARD CO., INC. LOCATION: BENNINGTON, VERMONT
FRAME NUMBER: 12 DATE: 03/19/91 TIME: 1448 SKY CONDITION: CLEAR
PHOTO BY: M. LOMBARDI WITNESSES: T. JONES ,
CAMERA: OLYMPUS SETTING: AUTOMATIC FILM TYPE: 35 MM FILM ROLL: 197749

PHOTOGRAPHY LOG SHEET



SCENE: DRUM LABELED 002 SAMPLED INSIDE STORAGE AREA.
SITE NAME: JARD CO., INC. LOCATION: BENNINGTON, VERMONT
FRAME NUMBER: 13 DATE: 03/19/91 TIME: 1449 SKY CONDITION: CLEAR
PHOTO BY: M. LOMBARDI WITNESSES: T. JONES ,
CAMERA: OLYMPUS SETTING: AUTOMATIC FILM TYPE: 35 MM FILM ROLL: 197749

SCENE: INSIDE DRUM STORAGE SHOWING DRUMS AND 5 GALLON PAILS.
SITE NAME: JARD CO., INC. LOCATION: BENNINGTON, VERMONT
FRAME NUMBER: 14 DATE: 03/19/91 TIME: 1450 SKY CONDITION: CLEAR
PHOTO BY: M. LOMBARDI WITNESSES: T. JONES ,
CAMERA: OLYMPUS SETTING: AUTOMATIC FILM TYPE: 35 MM FILM ROLL: 197749

PHOTOGRAPHY LOG SHEET

SCENE: ATTACHED DRUM STORAGE INACCESSIBLE TO THE TEAM.
SITE NAME: JARD CO., INC. LOCATION: BENNINGTON, VERMONT
FRAME NUMBER: 15 DATE: 03/19/91 TIME: 1451 SKY CONDITION: CLEAR
PHOTO BY: M. LOMBARDI WITNESSES: T. JONES ,
CAMERA: OLYMPUS SETTING: AUTOMATIC FILM TYPE: 35 MM FILM ROLL: 197749

SCENE: INACCESSIBLE DRUM STORAGE AREA SHOWING LOCK AND CHAIN.
SITE NAME: JARD CO., INC. LOCATION: BENNINGTON, VERMONT
FRAME NUMBER: 16 DATE: 03/19/91 TIME: 1522 SKY CONDITION: CLEAR
PHOTO BY: M. LOMBARDI WITNESSES: T. JONES ,
CAMERA: OLYMPUS SETTING: AUTOMATIC FILM TYPE: 35 MM FILM ROLL: 197749

PHOTOGRAPHY LOG SHEET

SCENE: SOIL SAMPLE LOCATION S003, SOUTHEAST SIDE NEAR MONITORING WELL.
SITE NAME: JARD CO., INC. LOCATION: BENNINGTON, VERMONT
FRAME NUMBER: 18 DATE: 03/19/91 TIME: 1522 SKY CONDITION: CLEAR
PHOTO BY: M. LOMBARDI WITNESSES: T. JONES ,
CAMERA: OLYMPUS SETTING: AUTOMATIC FILM TYPE: 35 MM FILM ROLL: 197749

SCENE: SOIL SAMPLE LOCATION S004 NEAR ABOVEGROUND STORAGE TANK.
SITE NAME: JARD CO., INC. LOCATION: BENNINGTON, VERMONT
FRAME NUMBER: 19 DATE: 03/19/91 TIME: 1529 SKY CONDITION: CLEAR
PHOTO BY: M. LOMBARDI WITNESSES: T. JONES ,
CAMERA: OLYMPUS SETTING: AUTOMATIC FILM TYPE: 35 MM FILM ROLL: 197749

PHOTOGRAPHY LOG SHEET

SCENE: SOIL SAMPLE S005 SOUTH SIDE NEAR UNDERGROUND STORAGE TANK.
SITE NAME: JARD CO., INC. LOCATION: BENNINGTON, VERMONT
FRAME NUMBER: 20 DATE: 03/19/91 TIME: 1536 SKY CONDITION: CLEAR
PHOTO BY: M. LOMBARDI WITNESSES: T. JONES ,
CAMERA: OLYMPUS SETTING: AUTOMATIC FILM TYPE: 35 MM FILM ROLL: 197749

SCENE: SOIL SAMPLE S006 SOUTH SIDE NEAR UST (CLOSER TO BUILDING).
SITE NAME: JARD CO., INC. LOCATION: BENNINGTON, VERMONT
FRAME NUMBER: 21 DATE: 03/19/91 TIME: 1544 SKY CONDITION: CLEAR
PHOTO BY: M. LOMBARDI WITNESSES: T. JONES ,
CAMERA: OLYMPUS SETTING: AUTOMATIC FILM TYPE: 35 MM FILM ROLL: 197749

PHOTOGRAPHY LOG SHEET

SCENE: SOIL SAMPLE S007 BETWEEN UST VENT PIPE AND ROAD.
SITE NAME: JARD CO., INC. LOCATION: BENNINGTON, VERMONT
FRAME NUMBER: 22 DATE: 03/19/91 TIME: 1551 SKY CONDITION: CLEAR
PHOTO BY: M. LOMBARDI WITNESSES: T. JONES ,
CAMERA: OLYMPUS SETTING: AUTOMATIC FILM TYPE: 35 MM FILM ROLL: 197749

SCENE: SOIL SAMPLE S008 WEST SIDE NEAR SMALL DRAIN.
SITE NAME: JARD CO., INC. LOCATION: BENNINGTON, VERMONT
FRAME NUMBER: 23 DATE: 03/19/91 TIME: 1557 SKY CONDITION: CLEAR
PHOTO BY: M. LOMBARDI WITNESSES: T. JONES ,
CAMERA: OLYMPUS SETTING: AUTOMATIC FILM TYPE: 35 MM FILM ROLL: 197749

PHOTOGRAPHY LOG SHEET

SCENE: JARD BUILDING SHOWING RECEIVING BAYS (LOOKING NORTH TO SOUTH).
SITE NAME: JARD CO., INC. LOCATION: BENNINGTON, VERMONT
FRAME NUMBER: 24 DATE: 03/19/91 TIME: 1720 SKY CONDITION: CLEAR
PHOTO BY: M. LOMBARDI WITNESSES: T. JONES ,
CAMERA: OLYMPUS SETTING: AUTOMATIC FILM TYPE: 35 MM FILM ROLL: 197749

SCENE: NEGATIVES
SITE NAME: JARD CO., INC. LOCATION: BENNINGTON, VERMONT
FRAME NUMBER: 0 DATE: 03/19/91 TIME: SKY CONDITION: CLEAR
PHOTO BY: WESTON TAT WITNESSES: M. LOMBARDI ,T. JONES
CAMERA: OLYMPUS SETTING: AUTOMATIC FILM TYPE: 35 MM FILM ROLL: 197749

APPENDIX F

CHAIN-OF-CUSTODY RECORD

ENVIRONMENTAL PROTECTION AGENCY
Office of Enforcement

RE[redacted] 1

JFK Federal Building, Rm. 2203
Boston, Massachusetts 02203

CHAIN OF CUSTODY RECORD

PROJ. NO.: 1[illegible]

PROJECT NAME: JARD CO, INC.

SAMPLERS: (Signature) [illegible]

all samples Rec'd cold with seals intact.

STA. NO.	DATE	TIME	COMP.	GRAB	STATION LOCATION	NO. OF CONTAINERS	VOC 8240	BNA 8270	METALS XRF SCREEN	PCB 8080			REMARKS
S000	3/19/91	0710		X	US EPA NERL	3	X						#63763 3-40ML VOA TRIP BLANKS
S001		1310		X	DRUM STORAGE AREA	2	X	X					#63764 2-40ML VOA
S002		1320		X	DRUM STORAGE AREA	2	X	X					#63765 2-40ML VOA
S003		1521		X	E SIDE OF BLDG/NEAR MW4	4	X	X	X	X			#63766 1-40ML, 2-4OZ, 1-8OZ
S004		1529		X	S SIDE OF BLDG/BESIDE DRM-E TANK	4	X	X	X	X			#63767 1-40ML, 2-4OZ, 1-8OZ
S005		1536		X	S SIDE OF BLDG/NEAR UST	4	X	X	X	X			#63768 1-40ML, 2-4OZ, 1-8OZ
S006		1544		X	S SIDE OF BLDG/NEAR UST (CLOSER TO BLDG)	4	X	X	X	X			#63769 1-40ML, 2-4OZ, 1-8OZ
S007		1550		X	S SIDE OF BLDG/BETWEEN FILL PIPE AND ROAD	4	X	X	X	X			#63770 1-40ML, 2-4OZ, 1-8OZ
S008		1556		X	W SIDE OF BLDG/NEAR SMALL DRAIN	4	X	X	X	X			#63771 1-40ML, 2-4OZ, 1-8OZ
S009	↓	1544		X	S SIDE OF BLDG/UST	2	X						#63772 2-40ML

Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
[illegible]	3/20/91 1010				
Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)

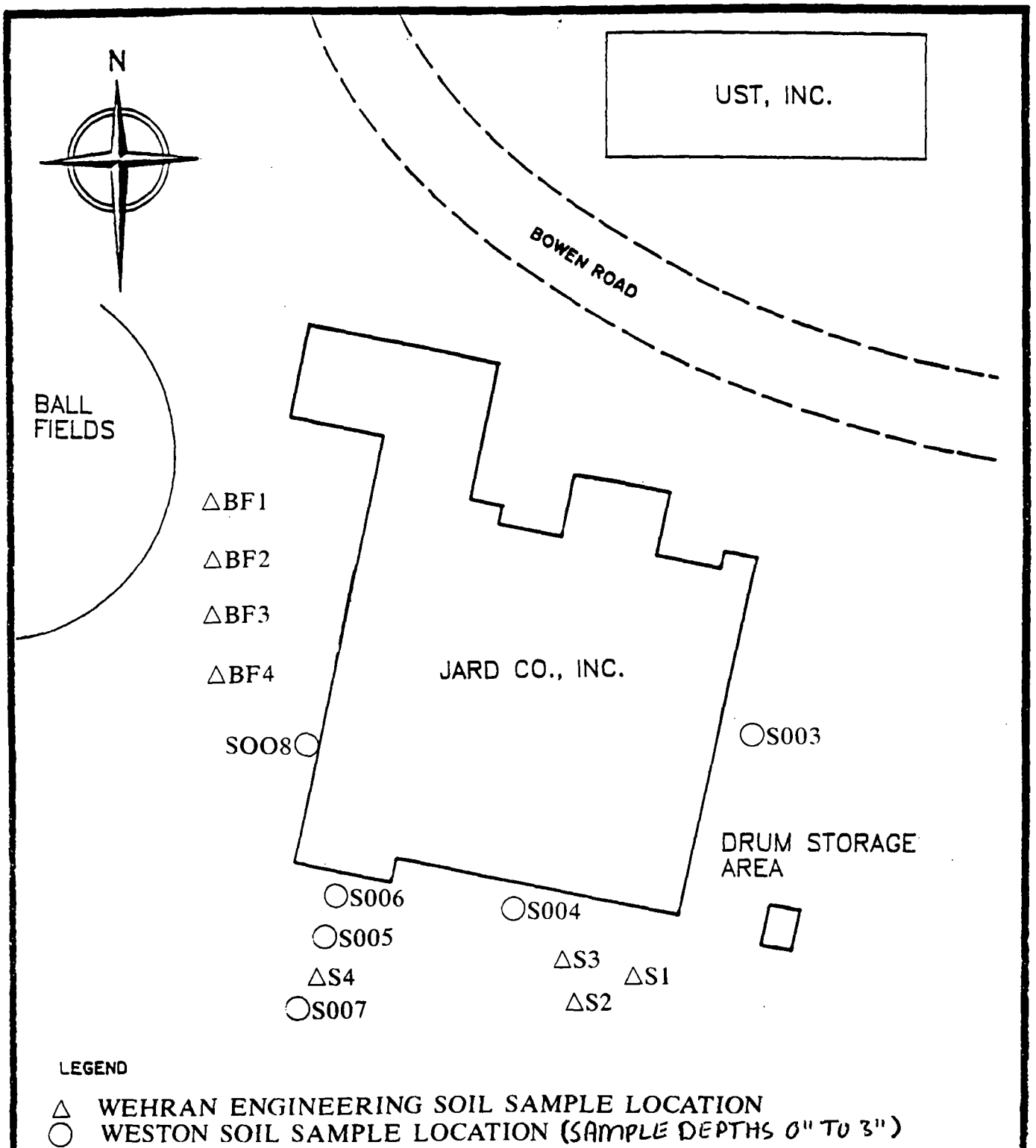
Relinquished by: (Signature)	Date / Time	Received for Laboratory by: (Signature)	Date / Time	Remarks
		[illegible]	3/21/91 1010	

Distribution: Original Accompanies Shipment; Copy to Coordinator Field Files

1— 3888

APPENDIX G

SOIL SAMPLE LOCATION MAP



NOT TO SCALE

FIGURE 3

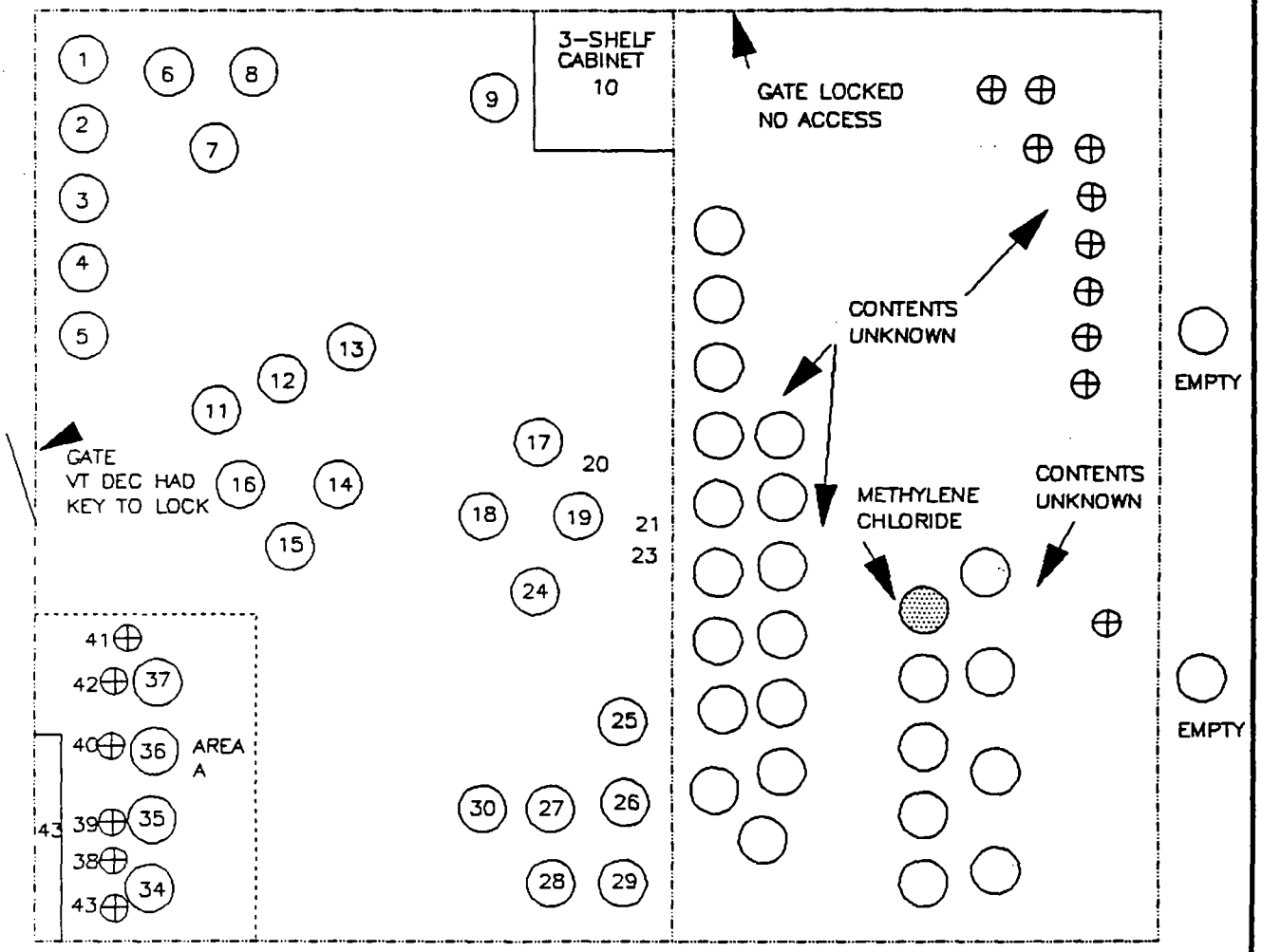
SOIL SAMPLE LOCATIONS
JARD CO. ,INC.
BENNINGTON, VERMONT

WESTON
MANAGERS DESIGNERS/CONSULTANTS

DRAWN MWL	DATE 3/91	PCS # 1211
APPROVED	DATE 3/91	TOD # 01-9103-07

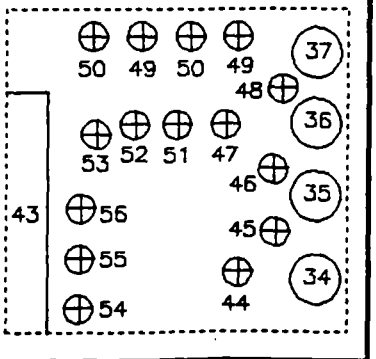
APPENDIX H

DRUM LOG



APPROXIMATELY 85 55 GALL DRUMS LOCATED IN THIS AREA
VERMONT DEPARTMENT OF ENVIRONMENTAL CONSERVATION
HAS DETERMINED DRUMS TO BE EMPTY

AREA A ENLARGED



KEY

55 GALL DRUM

5 GALL PAIL

FENCE

REFER TO KEY TO FIGURE 4 ON FOLLOWING PAGE

NOT TO SCALE

FIGURE4

DIAGRAM OF DRUM STORAGE AREA
JARD CO. ,INC.
BENNINGTON, VERMONT

WESTON
REGION I TECHNICAL ASSISTANCE TEAM

DRAWN	DATE	PCS #
MWL	3/91	1211
APPROVED	DATE	TDD #
	3/91	01-9103-07

KEY TO FIGURE 4

1. methyl isoamyl ketone
2. trichlorethane
3. exxate 600
4. toluene - DRUM EPA 001
5. MeOH
6. MeOH
7. toluene
8. methyl isoamyl ketone
9. hydraulic oil
10. cabinet - paints (12-32 oz. or less) and varnishes [TOP]
    4 small aerosol paint cans [TOP]
    12 1-gal containers paint [middle]
    1-gal refrigeration oil; 1-gal cutting oil [BOTTOM]
    2 5-gal "Northern Plastics" [BOTTOM]
11. Mobil therm 603 heat transfer oil
12. MeOH
13. MeOH
14. paraplex G-60 (CP Hall Co.) (epoxidized soybean oil)
15. trichlorethylene
16. mas vinyl 27-3000-001 "paint enamel flammable"
17. exxate 600 - DRUM EPA 002
18. MeOH
19. MeOH
20. roof coating
21. paint can
22. paint waste
23. roof seal
24. grey enamel
25. _____ oil
26. mas unmarked
27. grey enamel
28. unmarked
29. "oakite 202"
30. Mobiltherm 603

31-33. "ice foe" w/isotrol 100 lb ea.

34. PD George?
35. PD George #1500
36. synthetic resin
37. unmarked
38. 2 5-gal ethylene glycol
39. 1 5-gal MeOH
40. asphalt roof coating
41. 1 5-gal MeOH
    1 5-gal "Sea-lac"
42. 2 ½-gal "dirty chemicals - please dispose"
43. shelving - [TOP] "sea-lac" 5-gal, polybutene polymer 5-gal, "oakite 31" 1-gal, unmarked 5-gal
    [MIDDLE] unmarked 5-gal, MeOH 5-gal, "Paraplex G-62 expoxidized soybean oil" 5-gal
    [BOTTOM] "NIAX POLYOL 16-46" 5-gal, "Paraplex G-62" 5-gal, "Bestine solvent and thinner 1-gal
44. Paraplex G-62
45. unmarked; Essex, United Technologies
46. MeOH
47. Hydrochloric acid 164 lbs
48. 1-gal vinyl phenolic adhesive
49. paint enamel
50. unmarked
51. 2 5-gal "Paint related material"
52. 2 boxes 4-gal each vinyl phenolic adhesive
53. 1 5-gal corroded can - "Penwalt" stored on tope of
    1 5-gal can "Centimark Plastic Remover"
54. MeOH
55. unmarked
56. unmarked

Soil Sampling Results/VOCs

M. E. Stanton

US ENVIRONMENTAL PROTECTION AGENCY
60 Westview Street
Lexington, MA. 02173

DATE: April 9, 1991

SUBJECT: Jard Co., Inc. - Bennington, VT - Purgeable Organic Analysis
Samples Received: 63766, 63767, 63768, 63769, 63770
63771, 63772, 63763 - Trip Blank
Samples Analyzed by GC/MS:Same

FROM: Steven Heller, ESAT Chemist, Joe Montanaro, EPA Chemist

TO: Mary Ellen Stanton, EER

THRU: Dr. William Andrade
Chief, Chemistry Section WJA 4/9/91

PROJECT NUMBER: 910104

DATE(S) SAMPLES RECEIVED BY THE LABORATORY: 3/20/91

ANALYTICAL PROCEDURE: SW-846, 8240 Modified

Soil: Approximately 4 grams (wet weight) of sample is tared in a 40ml VOA vial. Nine mls of pesticide grade methanol and one ml of fluorobenzene surrogate spiking solution is added to the vial. The sample is then shaken for approximately 2 minutes. A portion of the methanol extract is diluted in organic-free water and then analyzed as per SW-846 3rd revision, Method 8240 Modified. Concentration is based on dry weight analyzed.

QUALITY CONTROL:

1. A method blank was analyzed prior to sample analysis.

2. Each sample was spiked with three surrogate compounds at approximately 30 ppb concentration. The results for the surrogate recoveries are reported for each sample.

3. Sample 63768 was analyzed in duplicate to determine laboratory precision and accuracy.

DATA FILE: D:\LABRPTS\910104SO.VOA

cc: Suresh Srivastava

ANALYTICAL PARAMETERS
PURGEABLE ORGANIC ANALYSIS

INSTRUMENTS: Tekmar ALS 2016
Tekmar LSC-2000
Finnigan INCOS-50

PURGE CONDITIONS:

Gas:	Helium
Purge Time and Flow:	11 min.,40 ml/min
Trap:	25 cm stainles steel (1/8 in.OD) packed with 15 cm 60/80 mesh Tenax-GC plus 8 cm 35/80 mesh Davison type 15 Silica Gel
Desorption Time,Flow, Temperature:	4 min, 20ml/min.,180C
Bake out cycle:	12 min.

CHROMATOGRAPHIC CONDITIONS:

Column:	30 meter long x 0.5 mm ID DB 624 mega-bore column
Program:	Initial 5 C ramped at 2 C/min to 10 C. Hold at 10 C for 5 minutes, then programmed at 6 C/min to 160 C and held for 1 minute.
Injector, Separator,and Transfer Temperatures:	220 C,220 C,220 C
Carrier Gas and Flow:	Helium, 30 ml/min

MASS SPECTROMETER CONDITIONS:

Electron Energy:	70 V
Mass Range:	35,300
Scan Rate:	1.5 seconds

MATRIX SPIKE DUPLICATE ANALYSIS

Survey: Jard Co.
Sample Number: 63768
Date: 3/27/91

ACCURACY

COMPOUND	AVERAGE % RECOVERY	ACCEPTABLE RANGE *
1,1 Dichloroethylene	116	D-234
Benzene	87	37-151
Trichloroethylene	91	71-157
Toluene	90	47-150
Chlorobenzene	90	37-160

PRECISION

Compound	#1 RECOVERY	#2 RECOVERY	RPD
1,1 Dichloroethylene	110	122	10
Benzene	86	88	2
Trichloroethylene	88	91	6
Toluene	87	90	5
Chlorobenzene	89	90	1

* Acceptance limit from Federal Register Table 5, Method 624

FACILITY SAMPLED: Jard Co.

US ENVIRONMENTAL PROTECTION AGENCY
REGION I LABORATORY
GC/MS PURGEABLE ORGANIC ANALYSIS - SOIL

SAMPLE NO.: 63766
SAMPLE LOCATION:
PERCENT DRY WEIGHT: 78%
INSTRUMENT: INCOS-50

DATE OF ANALYSIS: 3/27/91
REFERENCE BOOK: 100
PRESERVATIVE: Cool to 4 C

SAMPLE RESULTS:

CAS NO.	STORET NO.	Compound	ppm Conc. (ug/gm)	Det. Limit (ug/gm)	Comments
		TARGET COMPOUNDS			
74-87-3	34418	Chloromethane	ND	0.20	
74-83-9	34413	Bromomethane	ND	0.10	
75-01-4	39175	Vinyl Chloride	ND	0.10	
75-00-3	34311	Chloroethane	ND	0.10	
75-09-2	34423	Methylene Chloride	ND	0.20	
75-69-4	34488	Trichlorofluoromethane	2.3	0.10	
75-35-4	34501	1,1-Dichloroethylene	ND	0.10	
75-34-3	34496	1,1-Dichloroethane	ND	0.10	
156-60-5	34546	1,2-Dichloroethylene isomers	ND	0.10	
67-66-3	32106	Chloroform	ND	0.10	
107-06-2	34531	1,2-Dichloroethane	ND	0.10	
71-55-6	34506	1,1,1-Trichloroethane	ND	0.10	
56-23-5	32102	Carbon Tetrachloride	ND	0.10	
75-27-4	32101	Bromodichloromethane	ND	0.10	
78-87-5	34541	1,2-Dichloropropane	ND	0.10	
10061-02-6	34699	t-1,3-Dichloropropene	ND	0.10	
79-01-6	39180	Trichloroethylene	ND	0.10	
124-48-1	32105	Dibromochloromethane	ND	0.10	
10061-01-5	34704	c-1,3-Dichloropropene and/or 1,1-Dichloropropene	ND	0.10	
79-00-5	34511	1,1,2-Trichloroethane	ND	0.10	
71-43-2	34030	Benzene	ND	0.10	
110-75-8	34576	2-Chloroethylvinyl ether	ND	0.40	
75-25-2	32104	Bromoform	ND	0.10	
127-18-4	34475	Tetrachloroethylene	ND	0.10	
79-34-5	34516	1,1,2,2-Tetrachloroethane	ND	0.10	
108-88-3	34010	Toluene	ND	0.10	
108-90-7	34301	Chlorobenzene	ND	0.10	
100-41-4	34371	Ethylbenzene	ND	0.10	
107-02-8	34210	Acrolein	ND	3.00	
107-13-1	34215	Acrylonitrile	ND	3.00	
		Dichlorobenzene isomers	ND	0.20	
		1,1,2-Trichloro-1,2,2-trifluoroethane	ND	0.10	
67-64-1	81552	Acetone	ND	4.00	
75-15-0	77041	Carbon Disulfide	ND	0.30	

(con't)

US ENVIRONMENTAL PROTECTION AGENCY
REGION I LABORATORY
GC/MS PURGEABLE ORGANIC ANALYSIS -SOIL

AMPLE NO.: 63766
Sample Results Continued:

CAS NO.	STORET NO.	Compound	Conc. (ug/gm)	Det. Limit (ug/gm)	Comments
8-93-3	81595	2-Butanone (MEK)	ND	10.00	
08-05-4	77057	Vinyl Acetate	ND	1.00	
91-10-6	77103	2-Hexanone	ND	0.10	
108-10-1	81596	4-Methyl-2-Pentanone(MIBK)	0.66	0.30	
00-42-5	81708	Styrene	ND	0.10	
33-02-7	81551	Xylenes (total)	0.28	0.20	
		1,2-Dibromoethane	ND	0.10	
		Tetrahydrofuran	ND	1.00	
		Ethyl ether	ND	0.30	

Other Compounds
Tentatively Identified

Unidentified hydrocarbons were found totaling approximately 40 ug/g.

Other Compounds Quantitated

Sample Recoveries for Surrogate Compounds:	Observed Recoveries	95%Confidence Limits
1,2-Dichloroethane,d4	101	70-133
Toluene,d8	82	88-98
1,4-Bromofluorobenzene	102	80-107
Fluorobenzene	60	67-130

Notes:
ND=none detected
~=approximate
<=less than
>=greater than

FACILITY SAMPLED: Jard Co.

US ENVIRONMENTAL PROTECTION AGENCY
REGION I LABORATORY
GC/MS PURGEABLE ORGANIC ANALYSIS - SOIL

SAMPLE NO.: 63767
SAMPLE LOCATION:
PERCENT DRY WEIGHT: 88%
INSTRUMENT: INCOS-50

DATE OF ANALYSIS: 3/20/91
REFERENCE BOOK: 100
PRESERVATIVE: Cool to 4 C

SAMPLE RESULTS:

CAS NO.	STORET NO.	Compound	ppm Conc. (ug/gm)	Det. Limit (ug/gm)	Comments
		TARGET COMPOUNDS			
74-87-3	34418	Chloromethane	ND	0.18	
74-83-9	34413	Bromomethane	ND	0.09	
75-01-4	39175	Vinyl Chloride	ND	0.09	
75-00-3	34311	Chloroethane	ND	0.09	
75-09-2	34423	Methylene Chloride	ND	0.09	
75-69-4	34488	Trichlorofluoromethane	ND	0.09	
75-35-4	34501	1,1-Dichloroethylene	ND	0.09	
75-34-3	34496	1,1-Dichloroethane	ND	0.09	
156-60-5	34546	1,2-Dichloroethylene isomers	ND	0.09	
67-66-3	32106	Chloroform	ND	0.09	
107-06-2	34531	1,2-Dichloroethane	ND	0.09	
71-55-6	34506	1,1,1-Trichloroethane	ND	0.09	
56-23-5	32102	Carbon Tetrachloride	ND	0.09	
75-27-4	32101	Bromodichloromethane	ND	0.09	
78-87-5	34541	1,2-Dichloropropane	ND	0.09	
10061-02-6	34699	t-1,3-Dichloropropene	ND	0.09	
79-01-6	39180	Trichloroethylene	ND	0.09	
124-48-1	32105	Dibromochloromethane	ND	0.09	
10061-01-5	34704	c-1,3-Dichloropropene and/or 1,1-Dichloropropene	ND	0.09	
79-00-5	34511	1,1,2-Trichloroethane	ND	0.09	
71-43-2	34030	Benzene	ND	0.09	
110-75-8	34576	2-Chloroethylvinyl ether	ND	0.36	
75-25-2	32104	Bromoform	ND	0.09	
127-18-4	34475	Tetrachloroethylene	ND	0.09	
79-34-5	34516	1,1,2,2-Tetrachloroethane	ND	0.09	
108-88-3	34010	Toluene	ND	0.09	
108-90-7	34301	Chlorobenzene	ND	0.09	
100-41-4	34371	Ethylbenzene	ND	0.09	
107-02-8	34210	Acrolein	ND	2.70	
107-13-1	34215	Acrylonitrile	ND	2.70	
		Dichlorobenzene isomers	ND	0.18	
		1,1,2-Trichloro-1,2,2-trifluoroethane	ND	0.09	
67-64-1	81552	Acetone	ND	3.60	
75-15-0	77041	Carbon Disulfide	ND	0.27	

(con't)

US ENVIRONMENTAL PROTECTION AGENCY
REGION I LABORATORY
GC/MS PURGEABLE ORGANIC ANALYSIS -SOIL

SAMPLE NO.: 63767
Sample Results Continued:

CAS NO.	STORET NO.	Compound	Conc. (ug/gm)	Det. Limit (ug/gm)	Comments
78-93-3	81595	2-Butanone (MEK)	ND	9.00	
108-05-4	77057	Vinyl Acetate	ND	0.90	
591-10-6	77103	2-Hexanone	ND	0.09	
108-10-1	81596	4-Methyl-2-Pentanone(MIBK)	ND	0.27	
100-42-5	81708	Styrene	ND	0.09	
133-02-7	81551	Xylenes (total)	ND	0.18	
		1,2-Dibromoethane	ND	0.09	
		Tetrahydrofuran	ND	0.90	
		Ethyl ether	ND	0.27	

Other Compounds
Tentatively Identified

Other Compounds Quantitated

Sample Recoveries for Surrogate Compounds:	Observed Recoveries	95%Confidence Limits
1,2-Dichloroethane,d4	102	70-133
Toluene,d8	91	88-98
1,4-Bromofluorobenzene	101	80-107
Fluorobenzene	89	67-130

Notes:
ND=none detected
~=approximate
<=less than
>=greater than

FACILITY SAMPLED: Jard Co.

US ENVIRONMENTAL PROTECTION AGENCY
REGION I LABORATORY
GC/MS PURGEABLE ORGANIC ANALYSIS - SOIL

SAMPLE NO.: 63768
SAMPLE LOCATION:
PERCENT DRY WEIGHT: 88%
INSTRUMENT: INCOS-50

DATE OF ANALYSIS: 3/20/91
REFERENCE BOOK: 100
PRESERVATIVE: Cool to 4 C

SAMPLE RESULTS:

CAS NO.	STORET NO.	Compound	ppm Conc. (ug/gm)	Det. Limit (ug/gm)	Comments
		TARGET COMPOUNDS			
74-87-3	34418	Chloromethane	ND	0.18	
74-83-9	34413	Bromomethane	ND	0.09	
75-01-4	39175	Vinyl Chloride	ND	0.09	
75-00-3	34311	Chloroethane	ND	0.09	
75-09-2	34423	Methylene Chloride	ND	0.09	
75-69-4	34488	Trichlorofluoromethane	ND	0.09	
75-35-4	34501	1,1-Dichloroethylene	ND	0.09	
75-34-3	34496	1,1-Dichloroethane	ND	0.09	
156-60-5	34546	1,2-Dichloroethylene isomers	ND	0.09	
67-66-3	32106	Chloroform	ND	0.09	
107-06-2	34531	1,2-Dichloroethane	ND	0.09	
71-55-6	34506	1,1,1-Trichloroethane	ND	0.09	
56-23-5	32102	Carbon Tetrachloride	ND	0.09	
75-27-4	32101	Bromodichloromethane	ND	0.09	
78-87-5	34541	1,2-Dichloropropane	ND	0.09	
10061-02-6	34699	t-1,3-Dichloropropene	ND	0.09	
79-01-6	39180	Trichloroethylene	ND	0.09	
124-48-1	32105	Dibromochloromethane	ND	0.09	
10061-01-5	34704	c-1,3-Dichloropropene and/or 1,1-Dichloropropene	ND	0.09	
79-00-5	34511	1,1,2-Trichloroethane	ND	0.09	
71-43-2	34030	Benzene	ND	0.09	
110-75-8	34576	2-Chloroethylvinyl ether	ND	0.36	
75-25-2	32104	Bromoform	ND	0.09	
127-18-4	34475	Tetrachloroethylene	ND	0.09	
79-34-5	34516	1,1,2,2-Tetrachloroethane	ND	0.09	
108-88-3	34010	Toluene	ND	0.09	
108-90-7	34301	Chlorobenzene	ND	0.09	
100-41-4	34371	Ethylbenzene	ND	0.09	
107-02-8	34210	Acrolein	ND	2.70	
107-13-1	34215	Acrylonitrile	ND	2.70	
		Dichlorobenzene isomers	ND	0.18	
		1,1,2-Trichloro-1,2,2-trifluoroethane	ND	0.09	
67-64-1	81552	Acetone	ND	3.60	
75-15-0	77041	Carbon Disulfide	ND	0.27	

(con't)

US ENVIRONMENTAL PROTECTION AGENCY
REGION I LABORATORY
GC/MS PURGEABLE ORGANIC ANALYSIS -SOIL

AMPLE NO.: 63768
Sample Results Continued:

CAS NO.	STORET NO.	Compound	Conc. (ug/gm)	Det. Limit (ug/gm)	Comments
78-93-3	81595	2-Butanone (MEK)	ND	9.00	
108-05-4	77057	Vinyl Acetate	ND	0.90	
591-10-6	77103	2-Hexanone	ND	0.09	
108-10-1	81596	4-Methyl-2-Pentanone(MIBK)	ND	0.27	
100-42-5	81708	Styrene	ND	0.09	
133-02-7	81551	Xylenes (total)	ND	0.18	
		1,2-Dibromoethane	ND	0.09	
		Tetrahydrofuran	ND	0.90	
		Ethyl ether	ND	0.27	

Other Compounds
Tentatively Identified

Other Compounds Quantitated

Sample Recoveries for Surrogate Compounds:	Observed Recoveries	95%Confidence Limits
1,2-Dichloroethane,d4	96	70-133
Toluene,d8	99	88-98
1,4-Bromofluorobenzene	96	80-107
Fluorobenzene	82	67-130

Notes:
ND=none detected
~=approximate
<=less than
>=greater than

FACILITY SAMPLED: Jard Co.

US ENVIRONMENTAL PROTECTION AGENCY
REGION I LABORATORY
GC/MS PURGEABLE ORGANIC ANALYSIS - SOIL

SAMPLE NO.: 63769
SAMPLE LOCATION:
PERCENT DRY WEIGHT: 88%
INSTRUMENT: INCOS-50

DATE OF ANALYSIS: 3/20/91
REFERENCE BOOK: 100
PRESERVATIVE: Cool to 4 C

SAMPLE RESULTS:

CAS NO.	STORET NO.	Compound	ppm Conc. (ug/gm)	Det. Limit (ug/gm)	Comments
		TARGET COMPOUNDS			
74-87-3	34418	Chloromethane	ND	0.22	
74-83-9	34413	Bromomethane	ND	0.11	
75-01-4	39175	Vinyl Chloride	ND	0.11	
75-00-3	34311	Chloroethane	ND	0.11	
75-09-2	34423	Methylene Chloride	ND	0.11	
75-69-4	34488	Trichlorofluoromethane	ND	0.11	
75-35-4	34501	1,1-Dichloroethylene	ND	0.11	
75-34-3	34496	1,1-Dichloroethane	ND	0.11	
156-60-5	34546	1,2-Dichloroethylene isomers	ND	0.11	
67-66-3	32106	Chloroform	ND	0.11	
107-06-2	34531	1,2-Dichloroethane	ND	0.11	
71-55-6	34506	1,1,1-Trichloroethane	ND	0.11	
56-23-5	32102	Carbon Tetrachloride	ND	0.11	
75-27-4	32101	Bromodichloromethane	ND	0.11	
78-87-5	34541	1,2-Dichloropropane	ND	0.11	
10061-02-6	34699	t-1,3-Dichloropropene	ND	0.11	
79-01-6	39180	Trichloroethylene	ND	0.11	
124-48-1	32105	Dibromochloromethane	ND	0.11	
10061-01-5	34704	c-1,3-Dichloropropene and/or 1,1-Dichloropropene	ND	0.11	
79-00-5	34511	1,1,2-Trichloroethane	ND	0.11	
71-43-2	34030	Benzene	ND	0.11	
110-75-8	34576	2-Chloroethylvinyl ether	ND	0.44	
75-25-2	32104	Bromoform	ND	0.11	
127-18-4	34475	Tetrachloroethylene	ND	0.11	
79-34-5	34516	1,1,2,2-Tetrachloroethane	ND	0.11	
108-88-3	34010	Toluene	ND	0.11	
108-90-7	34301	Chlorobenzene	ND	0.11	
100-41-4	34371	Ethylbenzene	ND	0.11	
107-02-8	34210	Acrolein	ND	3.30	
107-13-1	34215	Acrylonitrile	ND	3.30	
		Dichlorobenzene isomers	ND	0.22	
		1,1,2-Trichloro-1,2,2-trifluoroethane	ND	0.11	
67-64-1	81552	Acetone	ND	4.40	
75-15-0	77041	Carbon Disulfide	ND	0.33	

(con't)

US ENVIRONMENTAL PROTECTION AGENCY
REGION I LABORATORY
GC/MS PURGEABLE ORGANIC ANALYSIS -SOIL

AMPLE NO.: 63769
Sample Results Continued:

CAS NO.	STORET NO.	Compound	Conc. (ug/gm)	Det. Limit (ug/gm)	Comments
78-93-3	81595	2-Butanone (MEK)	ND	11.00	
108-05-4	77057	Vinyl Acetate	ND	1.10	
591-10-6	77103	2-Hexanone	ND	0.11	
108-10-1	81596	4-Methyl-2-Pentanone(MIBK)	ND	0.33	
100-42-5	81708	Styrene	ND	0.11	
133-02-7	81551	Xylenes (total)	ND	0.22	
		1,2-Dibromoethane	ND	0.11	
		Tetrahydrofuran	ND	1.10	
		Ethyl ether	ND	0.33	

Other Compounds
Tentatively Identified

Other Compounds Quantitated

Sample Recoveries for Surrogate Compounds:	Observed Recoveries	95%Confidence Limits
1,2-Dichloroethane,d4	110	70-133
Toluene,d8	100	88-98
1,4-Bromofluorobenzene	102	80-107
Fluorobenzene	94	67-130

Notes:
ND=none detected
~=approximate
<=less than
>=greater than

FACILITY SAMPLED: Jard Co.

US ENVIRONMENTAL PROTECTION AGENCY
REGION I LABORATORY
GC/MS PURGEABLE ORGANIC ANALYSIS - SOIL

SAMPLE NO.: 63770
SAMPLE LOCATION:
PERCENT DRY WEIGHT: 89%
INSTRUMENT: INCOS-50

DATE OF ANALYSIS: 3/20/91
REFERENCE BOOK: 100
PRESERVATIVE: Cool to 4 C

SAMPLE RESULTS:

CAS NO.	STORET NO.	Compound	ppm Conc. (ug/gm)	Det. Limit (ug/gm)	Comments
		TARGET COMPOUNDS			
74-87-3	34418	Chloromethane	ND	0.22	
74-83-9	34413	Bromomethane	ND	0.11	
75-01-4	39175	Vinyl Chloride	ND	0.11	
75-00-3	34311	Chloroethane	ND	0.11	
75-09-2	34423	Methylene Chloride	ND	0.11	
75-69-4	34488	Trichlorofluoromethane	ND	0.11	
75-35-4	34501	1,1-Dichloroethylene	ND	0.11	
75-34-3	34496	1,1-Dichloroethane	ND	0.11	
156-60-5	34546	1,2-Dichloroethylene isomers	ND	0.11	
67-66-3	32106	Chloroform	ND	0.11	
107-06-2	34531	1,2-Dichloroethane	ND	0.11	
71-55-6	34506	1,1,1-Trichloroethane	ND	0.11	
56-23-5	32102	Carbon Tetrachloride	ND	0.11	
75-27-4	32101	Bromodichloromethane	ND	0.11	
78-87-5	34541	1,2-Dichloropropane	ND	0.11	
10061-02-6	34699	t-1,3-Dichloropropene	ND	0.11	
79-01-6	39180	Trichloroethylene	ND	0.11	
124-48-1	32105	Dibromochloromethane	ND	0.11	
10061-01-5	34704	c-1,3-Dichloropropene and/or 1,1-Dichloropropene	ND	0.11	
79-00-5	34511	1,1,2-Trichloroethane	ND	0.11	
71-43-2	34030	Benzene	ND	0.11	
110-75-8	34576	2-Chloroethylvinyl ether	ND	0.44	
75-25-2	32104	Bromoform	ND	0.11	
127-18-4	34475	Tetrachloroethylene	ND	0.11	
79-34-5	34516	1,1,2,2-Tetrachloroethane	ND	0.11	
108-88-3	34010	Toluene	ND	0.11	
108-90-7	34301	Chlorobenzene	ND	0.11	
100-41-4	34371	Ethylbenzene	ND	0.11	
107-02-8	34210	Acrolein	ND	3.30	
107-13-1	34215	Acrylonitrile	ND	3.30	
		Dichlorobenzene isomers	ND	0.22	
		1,1,2-Trichloro-1,2,2-trifluoroethane	ND	0.11	
67-64-1	81552	Acetone	ND	4.40	
75-15-0	77041	Carbon Disulfide	ND	0.33	

(con't)

US ENVIRONMENTAL PROTECTION AGENCY
REGION I LABORATORY
GC/MS PURGEABLE ORGANIC ANALYSIS -SOIL

SAMPLE NO.: 63770
Sample Results Continued:

CAS NO.	STORET NO.	Compound	Conc. (ug/gm)	Det. Limit (ug/gm)	Comments
78-93-3	81595	2-Butanone (MEK)	ND	11.00	
108-05-4	77057	Vinyl Acetate	ND	1.10	
591-10-6	77103	2-Hexanone	ND	0.11	
108-10-1	81596	4-Methyl-2-Pentanone(MIBK)	ND	0.33	
100-42-5	81708	Styrene	ND	0.11	
133-02-7	81551	Xylenes (total)	ND	0.22	
		1,2-Dibromoethane	ND	0.11	
		Tetrahydrofuran	ND	1.10	
		Ethyl ether	ND	0.33	

Other Compounds
Tentatively Identified

Other Compounds Quantitated

Sample Recoveries for Surrogate Compounds:	Observed Recoveries	95%Confidence Limits
1,2-Dichloroethane,d4	97	70-133
Toluene,d8	76	88-98
1,4-Bromofluorobenzene	101	80-107
Fluorobenzene	79	67-130

Notes:
ND=none detected
~=approximate
<=less than
>=greater than

FACILITY SAMPLED: Jard Co.

US ENVIRONMENTAL PROTECTION AGENCY
REGION I LABORATORY
GC/MS PURGEABLE ORGANIC ANALYSIS - WATER

SAMPLE NO.: 63771
SAMPLE LOCATION:
PERCENT DRY WEIGHT: 87%
INSTRUMENT: INCOS-50

DATE OF ANALYSIS: 3/20/91
REFERENCE BOOK: 100
PRESERVATIVE: Cool to 4 C

SAMPLE RESULTS:

CAS NO.	STORET NO.	Compound	ppm Conc. (ug/L)	Det. Limit (ug/L)	Comments
		TARGET COMPOUNDS			
74-87-3	34418	Chloromethane	ND	0.22	
74-83-9	34413	Bromomethane	ND	0.11	
75-01-4	39175	Vinyl Chloride	ND	0.11	
75-00-3	34311	Chloroethane	ND	0.11	
75-09-2	34423	Methylene Chloride	ND	0.11	
75-69-4	34488	Trichlorofluoromethane	ND	0.11	
75-35-4	34501	1,1-Dichloroethylene	ND	0.11	
75-34-3	34496	1,1-Dichloroethane	ND	0.11	
156-60-5	34546	1,2-Dichloroethylene isomers	ND	0.11	
67-66-3	32106	Chloroform	ND	0.11	
107-06-2	34531	1,2-Dichloroethane	ND	0.11	
71-55-6	34506	1,1,1-Trichloroethane	ND	0.11	
56-23-5	32102	Carbon Tetrachloride	ND	0.11	
75-27-4	32101	Bromodichloromethane	ND	0.11	
78-87-5	34541	1,2-Dichloropropane	ND	0.11	
10061-02-6	34699	t-1,3-Dichloropropene	ND	0.11	
79-01-6	39180	Trichloroethylene	ND	0.11	
124-48-1	32105	Dibromochloromethane	ND	0.11	
10061-01-5	34704	c-1,3-Dichloropropene and/or 1,1-Dichloropropene	ND	0.11	
79-00-5	34511	1,1,2-Trichloroethane	ND	0.11	
71-43-2	34030	Benzene	ND	0.11	
110-75-8	34576	2-Chloroethylvinyl ether	ND	0.44	
75-25-2	32104	Bromoform	ND	0.11	
127-18-4	34475	Tetrachloroethylene	ND	0.11	
79-34-5	34516	1,1,2,2-Tetrachloroethane	ND	0.11	
108-88-3	34010	Toluene	ND	0.11	
108-90-7	34301	Chlorobenzene	ND	0.11	
100-41-4	34371	Ethylbenzene	ND	0.11	
107-02-8	34210	Acrolein	ND	3.30	
107-13-1	34215	Acrylonitrile	ND	3.30	
		Dichlorobenzene isomers	ND	0.22	
		1,1,2-Trichloro-1,2,2-trifluoroethane	ND	0.11	
67-64-1	81552	Acetone	ND	4.40	
75-15-0	77041	Carbon Disulfide	ND	0.33	

(con't)

US ENVIRONMENTAL PROTECTION AGENCY
REGION I LABORATORY
GC/MS PURGEABLE ORGANIC ANALYSIS -SOIL

SAMPLE NO.: 63771
Sample Results Continued:

CAS NO.	STORET NO.	Compound	Conc. (ug/gm)	Det. Limit (ug/gm)	Comments
78-93-3	81595	2-Butanone (MEK)	ND	11.00	
108-05-4	77057	Vinyl Acetate	ND	1.10	
591-10-6	77103	2-Hexanone	ND	0.11	
108-10-1	81596	4-Methyl-2-Pentanone(MIBK)	ND	0.33	
100-42-5	81708	Styrene	ND	0.11	
133-02-7	81551	Xylenes (total)	ND	0.22	
		1,2-Dibromoethane	ND	0.11	
		Tetrahydrofuran	ND	1.10	
		Ethyl ether	ND	0.33	

Other Compounds
Tentatively Identified

Other Compounds Quantitated

Sample Recoveries for Surrogate Compounds:	Observed Recoveries	95%Confidence Limits
1,2-Dichloroethane,d4	93	70-133
Toluene,d8	81	88-98
1,4-Bromofluorobenzene	98	80-107
Fluorobenzene	78	67-130

Notes:
ND=none detected
~=approximate
<=less than
>=greater than

FACILITY SAMPLED: Jard Co.

US ENVIRONMENTAL PROTECTION AGENCY
REGION I LABORATORY
GC/MS PURGEABLE ORGANIC ANALYSIS - WATER

SAMPLE NO.: 63763
SAMPLE LOCATION:

DATE OF ANALYSIS: 3/20/91
REFERENCE BOOK: 100
PRESERVATIVE: Cool to 4 C

INSTRUMENT: INCOS-50

SAMPLE RESULTS:

CAS NO.	STORET NO.	Compound	ppm Conc. (ug/L)	Det. Limit (ug/L)	Comments
		TARGET COMPOUNDS			
74-87-3	34418	Chloromethane	ND	2.00	
74-83-9	34413	Bromomethane	ND	1.00	
75-01-4	39175	Vinyl Chloride	ND	1.00	
75-00-3	34311	Chloroethane	ND	1.00	
75-09-2	34423	Methylene Chloride	ND	1.00	
75-69-4	34488	Trichlorofluoromethane	ND	1.00	
75-35-4	34501	1,1-Dichloroethylene	ND	1.00	
75-34-3	34496	1,1-Dichloroethane	ND	1.00	
156-60-5	34546	1,2-Dichloroethylene isomers	ND	1.00	
67-66-3	32106	Chloroform	ND	1.00	
107-06-2	34531	1,2-Dichloroethane	ND	1.00	
71-55-6	34506	1,1,1-Trichloroethane	ND	1.00	
56-23-5	32102	Carbon Tetrachloride	ND	1.00	
75-27-4	32101	Bromodichloromethane	ND	1.00	
78-87-5	34541	1,2-Dichloropropane	ND	1.00	
10061-02-6	34699	t-1,3-Dichloropropene	ND	1.00	
79-01-6	39180	Trichloroethylene	ND	1.00	
124-48-1	32105	Dibromochloromethane	ND	1.00	
10061-01-5	34704	c-1,3-Dichloropropene and/or 1,1-Dichloropropene	ND	1.00	
79-00-5	34511	1,1,2-Trichloroethane	ND	1.00	
71-43-2	34030	Benzene	ND	1.00	
110-75-8	34576	2-Chloroethylvinyl ether	ND	4.00	
75-25-2	32104	Bromoform	ND	1.00	
127-18-4	34475	Tetrachloroethylene	ND	1.00	
79-34-5	34516	1,1,2,2-Tetrachloroethane	ND	1.00	
108-88-3	34010	Toluene	ND	1.00	
108-90-7	34301	Chlorobenzene	ND	1.00	
100-41-4	34371	Ethylbenzene	ND	1.00	
107-02-8	34210	Acrolein	ND	30.00	
107-13-1	34215	Acrylonitrile	ND	30.00	
		Dichlorobenzene isomers	ND	2.00	
		1,1,2-Trichloro-1,2,2-trifluoroethane	ND	1.00	
67-64-1	81552	Acetone	ND	40.00	
75-15-0	77041	Carbon Disulfide	ND	3.00	

(con't)

US ENVIRONMENTAL PROTECTION AGENCY
REGION I LABORATORY
GC/MS PURGEABLE ORGANIC ANALYSIS -WATER

SAMPLE NO.: 63763
Sample Results Continued:

CAS NO.	STORET NO.	Compound	Conc. (ug/gm)	Det. Limit (ug/gm)	Comments
78-93-3	81595	2-Butanone (MEK)	ND	100.00	
108-05-4	77057	Vinyl Acetate	ND	10.00	
591-10-6	77103	2-Hexanone	ND	1.00	
108-10-1	81596	4-Methyl-2-Pentanone(MIBK)	ND	3.00	
100-42-5	81708	Styrene	ND	1.00	
133-02-7	81551	Xylenes (total)	ND	2.00	
		1,2-Dibromoethane	ND	1.00	
		Tetrahydrofuran	ND	10.00	
		Ethyl ether	ND	3.00	

Other Compounds
Tentatively Identified

Other Compounds Quantitated

Sample Recoveries for Surrogate Compounds:	Observed Recoveries	95%Confidence Limits
1,2-Dichloroethane,d4	96	70-133
Toluene,d8	104	88-98
1,4-Bromofluorobenzene	92	80-107

Notes:
ND=none detected
~=approximate
<=less than
>=greater than

Soil Sampling Results/BNAs

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION I
60 WESTVIEW STREET, LEXINGTON, MASSACHUSETTS 02173

Mary Ellen Stanton

DATE: April 8, 1991

SUBJ: Gas Chromatography-Mass Spectrometry Analysis of Extractable Organics in Soils and Sediments - **Jard Co.**

FROM: Elayne Lee, Delon Maas, ESAT, and Dick Siscanaw, Chemistry Section

THRU: Dr. William J. Andrade, Chief, Chemistry Section

TO: Mary Ellen Stanton

PROJECT NUMBER: 910104

ANALYTICAL PROCEDURE:

EPA Consensus Protocol, Organic Analysis, Multi-Media, Multi-Concentration, Medium Level Preparation for Screening and Analysis of Semivolatiles (BNA), 1/87 (IFB WA 84-A266). All samples were screened on a gas chromatograph prior to the gas chromatograph-mass spectrometer analysis. All values are reported out on a dry weight basis.

Date(s) Samples Received by the Laboratory: 3/20/91

Date Samples Analyzed: 3/20/91 - 4/5/91

File: K:\CHEMSTRY\REPORTS\FINAL\910104SO.BNA

US ENVIRONMENTAL PROTECTION AGENCY
60 Westview Street
Lexington, MA 02173

QUALITY CONTROL:

1. A laboratory blank was analyzed before the sample analysis.

2. Each sample was spiked with several surrogate compounds at approximately 75 mg/kg concentration. The results for the surrogate recoveries are reported out for each sample.

3. One sample, 63770 was spiked twice as a matrix spike duplicate with the following compounds at approximately 75 mg/kg concentration.

Compound	Rec. (%)	Rec. (%)	QC Range (%)	Comments
Acenaphthene	86	82	31-137	
4-Chloro-3-methylphenol	91	89	26-103	
2-Chlorophenol	93	89	25-102	
1,4-Dichlorobenzene	79	74	28-104	
2,4-Dinitrotoluene	81	81	28-89	
4-Nitrophenol	91	89	11-114	
N-Nitrosodipropylamine	82	78	41-126	
Pentachlorophenol	54	55	17-109	
Phenol	88	85	26-90	
Pyrene	92	93	35-142	
1,2,4-Trichlorobenzene	88	84	38-107	

(Cont.)

US ENVIRONMENTAL PROTECTION AGENCY
60 Westview Street
Lexington, MA 02173

COMPOUNDS NOT IN THE SPIKING SOLUTION:

Target Compounds	Conc. (mg/kg)	Conc. (mg/kg)
Bis(2-ethylhexyl)phthalate	34	28

Tentatively Identified Compounds	Conc. (mg/kg)	Conc. (mg/kg)
None		

SAMPLE(S) ANALYZED: 63766 63767 63768 63769 63770 63771

US ENVIRONMENTAL PROTECTION AGENCY
60 Westview Street
Lexington, MA 02173

ANALYTICAL PARAMETERS

INSTRUMENTS:

Hewlett Packard 5880 Gas Chromatograph
Hewlett Packard 5987 or 5988 Gas Chromatograph-Mass Spectrometer

GC/FID Screening Conditions:

Gas:	Hydrogen
Capillary Column:	DB-1, 30m, 0.32mm ID, 0.10 micron film thickness
Injection Mode:	Splitless
Temperature Program:	Isothermal for 3 min at 40°C, programmed at 20°C/min to 350°C

GC-MS Conditions:

Gas:	Helium
Capillary Column:	DB-5, 60m, 0.25mm ID, 0.25 micron film thickness
Injection Mode:	Splitless
Temperature Program:	Isothermal for 4 min at 40°C, programmed at 7°C/min to 300°C
Injector, Transfer Temperatures:	300°C, 290°C
Electron Energy:	70 V
Mass Range:	35-550
Scan Rate:	0.9 seconds

FACILITY SAMPLED: JARD CO

US ENVIRONMENTAL PROTECTION AGENCY
REGION I LABORATORY
GC/MS EXTRACTABLE ORGANIC ANALYSIS

SAMPLE NO.: 63766
SAMPLE LOCATION:
DATE OF COLLECTION:
TIME OF COLLECTION:
SAMPLE RESULTS:

Dilution Factor: 0.336
Percent Moisture: 21
Sample pH: 5.9

CAS NO.	STORET NO.	Compound	Conc. (mg/kg)	Det. Limit (mg/kg)	Comments
		Priority Pollutants			
83-32-9	34205	Acenaphthene	ND	3.36	
208-96-8	34200	Acenaphthylene	ND	3.36	
120-12-7	34220	Anthracene	ND	3.36	
309-00-2	39330	Aldrin	ND	3.36	
56-55-3	34526	Benzo(a)anthracene	ND	3.36	
205-99-2	34230	Benzo(b)fluoranthene	ND	3.36	
207-08-9	34242	Benzo(k)fluoranthene	ND	3.36	
50-32-8	34247	Benzo(a)pyrene	ND	3.36	
191-24-2	34521	Benzo(ghi)perylene	ND	3.36	
85-68-7	34292	Benzyl butyl phthalate	ND	3.36	
319-85-7	39338	beta-BHC	ND	3.36	
319-86-8	34259	delta-BHC	ND	3.36	
111-44-4	34273	Bis(2-chloroethyl)ether	ND	3.36	
111-91-1	34278	Bis(2-chloroethoxy)methane	ND	3.36	
117-81-7	**39100**	**Bis(2-ethylhexyl)phthalate**	**45**	**3.36**	
108-60-1	34283	Bis(2-chloroisopropyl)ether	ND	3.36	
101-55-3	34636	4-Bromophenylphenyl ether	ND	3.36	
59-50-7	34452	4-Chloro-3-methylphenol	ND	3.36	
91-58-7	34581	2-Chloronaphthalene	ND	3.36	
95-57-8	34586	2-Chlorophenol	ND	3.36	
7005-72-3	34641	4-Chlorophenylphenyl ether	ND	3.36	
218-01-9	34320	Chrysene	ND	3.36	
72-54-8	39310	4,4'-DDD	ND	3.36	
72-55-9	39320	4,4'-DDE	ND	3.36	
50-29-3	39300	4,4'-DDT	ND	3.36	
53-70-3	34556	Dibenzo(a,h)anthracene	ND	3.36	
84-74-2	39110	Di-n-butylphtalate	ND	3.36	
541-73-1	34566	1,3-Dichlorobenzene	ND	3.36	

(con't)

US ENVIRONMENTAL PROTECTION AGENCY
REGION I LABORATORY
GC/MS EXTRACTABLE ORGANIC ANALYSIS

SAMPLE NO.: 63766
Sample Results Continued:

CAS NO.	STORET NO.	Compound	Conc. (mg/kg)	Det. Limit (mg/kg)	Comments
95-50-1	34536	1,2-Dichlorobenzene	ND	3.36	
106-46-7	34571	1,4-Dichlorobenzene	ND	3.36	
91-94-1	34631	3,3'-Dichlorobenzidine	ND	6.72	
120-83-2	34601	2,4-Dichlorophenol	ND	3.36	
60-57-1	39380	Dieldrin	ND	3.36	
84-66-2	34336	Diethylphtalate	ND	3.36	
105-67-9	34606	2-4-Dimethylphenol	ND	3.36	
131-11-3	**34341**	**Dimethylphthalate**	**~1**	**3.36**	
51-28-5	34616	2,4-Dinitrophenol	ND	16.8	
121-14-2	34611	2,4-Dinitrotoluene	ND	3.36	
606-20-2	34626	2,6-Dinitrotoluene	ND	3.36	
117-84-0	34596	Di-n-octylphthalate	ND	3.36	
206-44-0	34376	Fluoranthene	ND	3.36	
86-73-7	34381	Fluorene	ND	3.36	
76-44-8	39410	Heptachlor	ND	3.36	
1024-57-3	39420	Heptachlor epoxide	ND	3.36	
118-74-1	39700	Hexachlorobenzene	ND	3.36	
87-68-3	34391	Hexachlorobutadiene	ND	3.36	
77-47-4	34386	Hexachlorocyclopentadiene	ND	3.36	
67-72-1	34396	Hexachloroethane	ND	3.36	
193-39-5	34403	Indeno(1,2,3-cd)pyrene	ND	3.36	
78-59-1	**34408**	**Isophorone**	**~1**	**3.36**	
534-52-1	34657	2-methyl-4,6-dinitrophenol	ND	16.8	
91-20-3	34696	Naphthalene	ND	3.36	
98-95-3	34447	Nitrobenzene	ND	3.36	
88-75-5	34591	2-Nitrophenol	ND	3.36	
100-02-7	34646	4-Nitrophenol	ND	16.8	
86-30-3	34433	N-nitrosodiphenylamine	ND	3.36	
621-64-7	34428	N-Nitrosodi-n-propylamine	ND	3.36	
87-86-5	39032	Pentachlorophenol	ND	16.8	
85-01-8	34461	Phenanthrene	ND	3.36	
108-95-2	34694	Phenol	ND	3.36	
129-00-0	34469	Pyrene	ND	3.36	

(con't)

US ENVIRONMENTAL PROTECTION AGENCY
REGION I LABORATORY
GC/MS EXTRACTABLE ORGANIC ANALYSIS

SAMPLE NO.: 63766
Sample Results Continued:

CAS NO.	STORET NO.	Compound	Conc. (mg/kg)	Det. Limit (mg/kg)	Comments
120-82-1	34551	1,2,4--Trichlorobenzene	ND	3.36	
88-06-2	34621	2,4,6-Trichlorophenol	ND	3.36	
		Hazardous Substances			
65-53-3	77089	Aniline	ND	3.36	
65-85-0	77247	Benzoic Acid	ND	16.8	
100-51-6	77147	Benzyl Alcohol	ND	3.36	
106-47-8		4-Chloroaniline	ND	3.36	
132-64-9	81302	Dibenzofuran	ND	3.36	
534-52-1		4,6-Dinitro-2-methylphenol	ND	16.8	
91-57-6		2-Methylnaphthalene	ND	3.36	
95-48-7		2-Methylphenol	ND	3.36	
106-44-5		4-Methylphenol	ND	3.36	
88-74-4		2-Nitroaniline	ND	16.8	
99-09-2		3-Nitroaniline	ND	16.8	
100-01-6		4-Nitroaniline	ND	16.8	
95-95-4	34621	2,4,5-Trichlorophenol	ND	16.8	
		Other Compounds Quantitated			
		None			

Tentatively Identified Compounds	Est. Conc. (mg/kg)	Det. Limit (mg/kg)
Unknown	30	3

US ENVIRONMENTAL PROTECTION AGENCY
REGION I LABORATORY
GC/MS EXTRACTABLE ORGANIC ANALYSIS

SAMPLE NO.: 63766
Sample Results Continued:

Sample Recoveries For Surrogate Compounds:	Recoveries (%)	QC Range (%)
2-Fluorophenol	93	30-115
Phenol,d5	84	24-113
Nitrobenzene,d5	70	23-120
Fluorobiphenyl	80	30-115
2,4,6-Tribromophenol	80	19-122
p-Terphenyl,d14	79	18-137

Notes:

ND = none detected
~ = approximate
< = less than
> = greater than
NA = not available, due to sample dilution or interference

FACILITY SAMPLED: JARD CO

US ENVIRONMENTAL PROTECTION AGENCY
REGION I LABORATORY
GC/MS EXTRACTABLE ORGANIC ANALYSIS

SAMPLE NO.: 63767
SAMPLE LOCATION:
DATE OF COLLECTION:
TIME OF COLLECTION:
SAMPLE RESULTS:

Dilution Factor: 0.298
Percent Moisture: 11
Sample pH: 6.2

CAS NO.	STORET NO.	Compound	Conc. (mg/kg)	Det. Limit (mg/kg)	Comments
		Priority Pollutants			
83-32-9	34205	Acenaphthene	ND	2.98	
208-96-8	34200	Acenaphthylene	ND	2.98	
120-12-7	34220	Anthracene	ND	2.98	
309-00-2	39330	Aldrin	ND	2.98	
56-55-3	34526	Benzo(a)anthracene	ND	2.98	
205-99-2	34230	Benzo(b)fluoranthene	ND	2.98	
207-08-9	34242	Benzo(k)fluoranthene	ND	2.98	
50-32-8	34247	Benzo(a)pyrene	ND	2.98	
191-24-2	34521	Benzo(ghi)perylene	ND	2.98	
85-68-7	34292	Benzyl butyl phthalate	ND	2.98	
319-85-7	39338	beta-BHC	ND	2.98	
319-86-8	34259	delta-BHC	ND	2.98	
111-44-4	34273	Bis(2-chloroethyl)ether	ND	2.98	
111-91-1	34278	Bis(2-chloroethoxy)methane	ND	2.98	
117-81-7	**39100**	**Bis(2-ethylhexyl)phthalate**	**~2**	**2.98**	
108-60-1	34283	Bis(2-chloroisopropyl)ether	ND	2.98	
101-55-3	34636	4-Bromophenylphenyl ether	ND	2.98	
59-50-7	34452	4-Chloro-3-methylphenol	ND	2.98	
91-58-7	34581	2-Chloronaphthalene	ND	2.98	
95-57-8	34586	2-Chlorophenol	ND	2.98	
7005-72-3	34641	4-Chlorophenylphenyl ether	ND	2.98	
218-01-9	34320	Chrysene	ND	2.98	
72-54-8	39310	4,4'-DDD	ND	2.98	
72-55-9	39320	4,4'-DDE	ND	2.98	
50-29-3	39300	4,4'-DDT	ND	2.98	
53-70-3	34556	Dibenzo(a,h)anthracene	ND	2.98	
84-74-2	39110	Di-n-butylphtalate	ND	2.98	
541-73-1	34566	1,3-Dichlorobenzene	ND	2.98	

(con't)

US ENVIRONMENTAL PROTECTION AGENCY
REGION I LABORATORY
GC/MS EXTRACTABLE ORGANIC ANALYSIS

SAMPLE NO.: 63767
Sample Results Continued:

CAS NO.	STORET NO.	Compound	Conc. (mg/kg)	Det. Limit (mg/kg)	Comments
95-50-1	34536	1,2-Dichlorobenzene	ND	2.98	
106-46-7	34571	1,4-Dichlorobenzene	ND	2.98	
91-94-1	34631	3,3'-Dichlorobenzidine	ND	5.96	
120-83-2	34601	2,4-Dichlorophenol	ND	2.98	
60-57-1	39380	Dieldrin	ND	2.98	
84-66-2	34336	Diethylphtalate	ND	2.98	
105-67-9	34606	2-4-Dimethylphenol	ND	2.98	
131-11-3	34341	Dimethylphthalate	ND	2.98	
51-28-5	34616	2,4-Dinitrophenol	ND	14.9	
121-14-2	34611	2,4-Dinitrotoluene	ND	2.98	
606-20-2	34626	2,6-Dinitrotoluene	ND	2.98	
117-84-0	34596	Di-n-octylphthalate	ND	2.98	
206-44-0	34376	Fluoranthene	ND	2.98	
86-73-7	34381	Fluorene	ND	2.98	
76-44-8	39410	Heptachlor	ND	2.98	
1024-57-3	39420	Heptachlor epoxide	ND	2.98	
118-74-1	39700	Hexachlorobenzene	ND	2.98	
87-68-3	34391	Hexachlorobutadiene	ND	2.98	
77-47-4	34386	Hexachlorocyclopentadiene	ND	2.98	
67-72-1	34396	Hexachloroethane	ND	2.98	
193-39-5	34403	Indeno(1,2,3-cd)pyrene	ND	2.98	
78-59-1	34408	Isophorone	ND	2.98	
534-52-1	34657	2-methyl-4,6-dinitrophenol	ND	14.9	
91-20-3	34696	Naphthalene	ND	2.98	
98-95-3	34447	Nitrobenzene	ND	2.98	
88-75-5	34591	2-Nitrophenol	ND	2.98	
100-02-7	34646	4-Nitrophenol	ND	14.9	
86-30-3	34433	N-nitrosodiphenylamine	ND	2.98	
621-64-7	34428	N-Nitrosodi-n-propylamine	ND	2.98	
87-86-5	39032	Pentachlorophenol	ND	14.9	
85-01-8	34461	Phenanthrene	ND	2.98	
108-95-2	34694	Phenol	ND	2.98	
129-00-0	34469	Pyrene	ND	2.98	

(cont't)

US ENVIRONMENTAL PROTECTION AGENCY
REGION I LABORATORY
GC/MS EXTRACTABLE ORGANIC ANALYSIS

SAMPLE NO.: 63767
Sample Results Continued:

CAS NO.	STORET NO.	Compound	Conc. (mg/kg)	Det. Limit (mg/kg)	Comments
120-82-1	34551	1,2,4--Trichlorobenzene	ND	2.98	
88-06-2	34621	2,4,6-Trichlorophenol	ND	2.98	
		Hazardous Substances			
65-53-3	77089	Aniline	ND	2.98	
65-85-0	77247	Benzoic Acid	ND	14.9	
100-51-6	77147	Benzyl Alcohol	ND	2.98	
106-47-8		4-Chloroaniline	ND	2.98	
132-64-9	81302	Dibenzofuran	ND	2.98	
534-52-1		4,6-Dinitro-2-methylphenol	ND	14.9	
91-57-6		2-Methylnaphthalene	ND	2.98	
95-48-7		2-Methylphenol	ND	2.98	
106-44-5		4-Methylphenol	ND	2.98	
88-74-4		2-Nitroaniline	ND	14.9	
99-09-2		3-Nitroaniline	ND	14.9	
100-01-6		4-Nitroaniline	ND	14.9	
95-95-4	34621	2,4,5-Trichlorophenol	ND	14.9	
		Other Compounds Quantitated			
		None			

Tentatively Identified Compounds	Est. Conc. (mg/kg)	Det. Limit (mg/kg)
None		3

US ENVIRONMENTAL PROTECTION AGENCY
REGION I LABORATORY
GC/MS EXTRACTABLE ORGANIC ANALYSIS

SAMPLE NO.: 63767
Sample Results Continued:

Sample Recoveries For Surrogate Compounds:	Recoveries (%)	QC Range (%)
2-Fluorophenol	122	30-115
Phenol,d5	115	24-113
Nitrobenzene,d5	90	23-120
Fluorobiphenyl	101	30-115
2,4,6-Tribromophenol	120	19-122
p-Terphenyl,d14	114	18-137

Notes:

ND = none detected
~ = approximate
< = less than
> = greater than
NA = not available, due to sample dilution or interference

FACILITY SAMPLED: JARD CO

US ENVIRONMENTAL PROTECTION AGENCY
REGION I LABORATORY
GC/MS EXTRACTABLE ORGANIC ANALYSIS

SAMPLE NO.: 63768
SAMPLE LOCATION:
DATE OF COLLECTION:
TIME OF COLLECTION:
SAMPLE RESULTS:

Dilution Factor: 0.602
Percent Moisture: 12
Sample pH: 6.5

CAS NO.	STORET NO.	Compound	Conc. (mg/kg)	Det. Limit (mg/kg)	Comments
		Priority Pollutants			
83-32-9	34205	Acenaphthene	ND	6.02	
208-96-8	34200	Acenaphthylene	ND	6.02	
120-12-7	34220	Anthracene	ND	6.02	
309-00-2	39330	Aldrin	ND	6.02	
56-55-3	34526	Benzo(a)anthracene	ND	6.02	
205-99-2	34230	Benzo(b)fluoranthene	ND	6.02	
207-08-9	34242	Benzo(k)fluoranthene	ND	6.02	
50-32-8	34247	Benzo(a)pyrene	ND	6.02	
191-24-2	34521	Benzo(ghi)perylene	ND	6.02	
85-68-7	34292	Benzyl butyl phthalate	ND	6.02	
319-85-7	39338	beta-BHC	ND	6.02	
319-86-8	34259	delta-BHC	ND	6.02	
111-44-4	34273	Bis(2-chloroethyl)ether	ND	6.02	
111-91-1	34278	Bis(2-chloroethoxy)methane	ND	6.02	
117-81-7	**39100**	**Bis(2-ethylhexyl)phthalate**	**240**	**6.02**	
108-60-1	34283	Bis(2-chloroisopropyl)ether	ND	6.02	
101-55-3	34636	4-Bromophenylphenyl ether	ND	6.02	
59-50-7	34452	4-Chloro-3-methylphenol	ND	6.02	
91-58-7	34581	2-Chloronaphthalene	ND	6.02	
95-57-8	34586	2-Chlorophenol	ND	6.02	
7005-72-3	34641	4-Chlorophenylphenyl ether	ND	6.02	
218-01-9	34320	Chrysene	ND	6.02	
72-54-8	39310	4,4'-DDD	ND	6.02	
72-55-9	39320	4,4'-DDE	ND	6.02	
50-29-3	39300	4,4'-DDT	ND	6.02	
53-70-3	34556	Dibenzo(a,h)anthracene	ND	6.02	
84-74-2	39110	Di-n-butylphtalate	ND	6.02	
541-73-1	34566	1,3-Dichlorobenzene	ND	6.02	

(con't)

US ENVIRONMENTAL PROTECTION AGENCY
REGION I LABORATORY
GC/MS EXTRACTABLE ORGANIC ANALYSIS

SAMPLE NO.: 63768
Sample Results Continued:

CAS NO.	STORET NO.	Compound	Conc. (mg/kg)	Det. Limit (mg/kg)	Comments
95-50-1	34536	1,2-Dichlorobenzene	ND	6.02	
106-46-7	34571	1,4-Dichlorobenzene	ND	6.02	
91-94-1	34631	3,3'-Dichlorobenzidine	ND	12.04	
120-83-2	34601	2,4-Dichlorophenol	ND	6.02	
60-57-1	39380	Dieldrin	ND	6.02	
84-66-2	34336	Diethylphtalate	ND	6.02	
105-67-9	34606	2-4-Dimethylphenol	ND	6.02	
131-11-3	34341	Dimethylphthalate	ND	6.02	
51-28-5	34616	2,4-Dinitrophenol	ND	30.1	
121-14-2	34611	2,4-Dinitrotoluene	ND	6.02	
606-20-2	34626	2,6-Dinitrotoluene	ND	6.02	
117-84-0	34596	Di-n-octylphthalate	ND	6.02	
206-44-0	34376	Fluoranthene	ND	6.02	
86-73-7	34381	Fluorene	ND	6.02	
76-44-8	39410	Heptachlor	ND	6.02	
1024-57-3	39420	Heptachlor epoxide	ND	6.02	
118-74-1	39700	Hexachlorobenzene	ND	6.02	
87-68-3	34391	Hexachlorobutadiene	ND	6.02	
77-47-4	34386	Hexachlorocyclopentadiene	ND	6.02	
67-72-1	34396	Hexachloroethane	ND	6.02	
193-39-5	34403	Indeno(1,2,3-cd)pyrene	ND	6.02	
78-59-1	34408	Isophorone	ND	6.02	
534-52-1	34657	2-methyl-4,6-dinitrophenol	ND	30.1	
91-20-3	34696	Naphthalene	ND	6.02	
98-95-3	34447	Nitrobenzene	ND	6.02	
88-75-5	34591	2-Nitrophenol	ND	6.02	
100-02-7	34646	4-Nitrophenol	ND	30.1	
86-30-3	34433	N-nitrosodiphenylamine	ND	6.02	
621-64-7	34428	N-Nitrosodi-n-propylamine	ND	6.02	
87-86-5	39032	Pentachlorophenol	ND	30.1	
85-01-8	34461	Phenanthrene	ND	6.02	
108-95-2	34694	Phenol	ND	6.02	
129-00-0	34469	Pyrene	ND	6.02	

(cont't)

US ENVIRONMENTAL PROTECTION AGENCY
REGION I LABORATORY
GC/MS EXTRACTABLE ORGANIC ANALYSIS

SAMPLE NO.: 63768
Sample Results Continued:

CAS NO.	STORET NO.	Compound	Conc. (mg/kg)	Det. Limit (mg/kg)	Comments
120-82-1	34551	1,2,4--Trichlorobenzene	ND	6.02	
88-06-2	34621	2,4,6-Trichlorophenol	ND	6.02	
		Hazardous Substances			
65-53-3	77089	Aniline	ND	6.02	
65-85-0	77247	Benzoic Acid	ND	30.1	
100-51-6	77147	Benzyl Alcohol	ND	6.02	
106-47-8		4-Chloroaniline	ND	6.02	
132-64-9	81302	Dibenzofuran	ND	6.02	
534-52-1		4,6-Dinitro-2-methylphenol	ND	30.1	
91-57-6		2-Methylnaphthalene	ND	6.02	
95-48-7		2-Methylphenol	ND	6.02	
106-44-5		4-Methylphenol	ND	6.02	
88-74-4		2-Nitroaniline	ND	30.1	
99-09-2		3-Nitroaniline	ND	30.1	
100-01-6		4-Nitroaniline	ND	30.1	
95-95-4	34621	2,4,5-Trichlorophenol	ND	30.1	
		Other Compounds Quantitated			
		None			

Tentatively Identified Compounds	Est. Conc. (mg/kg)	Det. Limit (mg/kg)
None		6

US ENVIRONMENTAL PROTECTION AGENCY
REGION I LABORATORY
GC/MS EXTRACTABLE ORGANIC ANALYSIS

SAMPLE NO.: 63768
Sample Results Continued:

Sample Recoveries For Surrogate Compounds:	Recoveries (%)	QC Range (%)
2-Fluorophenol	96	30-115
Phenol,d5	90	24-113
Nitrobenzene,d5	76	23-120
Fluorobiphenyl	82	30-115
2,4,6-Tribromophenol	91	19-122
p-Terphenyl,d14	90	18-137

Notes:

ND = none detected
~ = approximate
< = less than
> = greater than
NA = not available, due to sample dilution or interference

FACILITY SAMPLED: JARD CO

US ENVIRONMENTAL PROTECTION AGENCY
REGION I LABORATORY
GC/MS EXTRACTABLE ORGANIC ANALYSIS

SAMPLE NO.: 63769
SAMPLE LOCATION:
DATE OF COLLECTION:
TIME OF COLLECTION:
SAMPLE RESULTS:

Dilution Factor: 1.53
Percent Moisture: 13
Sample pH: 6.3

CAS NO.	STORET NO.	Compound	Conc. (mg/kg)	Det. Limit (mg/kg)	Comments
		Priority Pollutants			
83-32-9	34205	Acenaphthene	ND	15.3	
208-96-8	34200	Acenaphthylene	ND	15.3	
120-12-7	34220	Anthracene	ND	15.3	
309-00-2	39330	Aldrin	ND	15.3	
56-55-3	34526	Benzo(a)anthracene	ND	15.3	
205-99-2	34230	Benzo(b)fluoranthene	ND	15.3	
207-08-9	34242	Benzo(k)fluoranthene	ND	15.3	
50-32-8	34247	Benzo(a)pyrene	ND	15.3	
191-24-2	34521	Benzo(ghi)perylene	ND	15.3	
85-68-7	34292	Benzyl butyl phthalate	ND	15.3	
319-85-7	39338	beta-BHC	ND	15.3	
319-86-8	34259	delta-BHC	ND	15.3	
111-44-4	34273	Bis(2-chloroethyl)ether	ND	15.3	
111-91-1	34278	Bis(2-chloroethoxy)methane	ND	15.3	
117-81-7	**39100**	**Bis(2-ethylhexyl)phthalate**	**~1000**	**15.3**	**> standard**
108-60-1	34283	Bis(2-chloroisopropyl)ether	ND	15.3	
101-55-3	34636	4-Bromophenylphenyl ether	ND	15.3	
59-50-7	34452	4-Chloro-3-methylphenol	ND	15.3	
91-58-7	34581	2-Chloronaphthalene	ND	15.3	
95-57-8	34586	2-Chlorophenol	ND	15.3	
7005-72-3	34641	4-Chlorophenylphenyl ether	ND	15.3	
218-01-9	34320	Chrysene	ND	15.3	
72-54-8	39310	4,4'-DDD	ND	15.3	
72-55-9	39320	4,4'-DDE	ND	15.3	
50-29-3	39300	4,4'-DDT	ND	15.3	
53-70-3	34556	Dibenzo(a,h)anthracene	ND	15.3	
84-74-2	39110	Di-n-butylphtalate	ND	15.3	
541-73-1	34566	1,3-Dichlorobenzene	ND	15.3	

(con't)

US ENVIRONMENTAL PROTECTION AGENCY
REGION I LABORATORY
GC/MS EXTRACTABLE ORGANIC ANALYSIS

SAMPLE NO.: 63769
Sample Results Continued:

CAS NO.	STORET NO.	Compound	Conc. (mg/kg)	Det. Limit (mg/kg)	Comments
95-50-1	34536	1,2-Dichlorobenzene	ND	15.3	
106-46-7	34571	1,4-Dichlorobenzene	ND	15.3	
91-94-1	34631	3,3'-Dichlorobenzidine	ND	30.6	
120-83-2	34601	2,4-Dichlorophenol	ND	15.3	
60-57-1	39380	Dieldrin	ND	15.3	
84-66-2	34336	Diethylphtalate	ND	15.3	
105-67-9	34606	2-4-Dimethylphenol	ND	15.3	
131-11-3	34341	Dimethylphthalate	ND	15.3	
51-28-5	34616	2,4-Dinitrophenol	ND	76.5	
121-14-2	34611	2,4-Dinitrotoluene	ND	15.3	
606-20-2	34626	2,6-Dinitrotoluene	ND	15.3	
117-84-0	34596	Di-n-octylphthalate	ND	15.3	
206-44-0	34376	Fluoranthene	ND	15.3	
86-73-7	34381	Fluorene	ND	15.3	
76-44-8	39410	Heptachlor	ND	15.3	
1024-57-3	39420	Heptachlor epoxide	ND	15.3	
118-74-1	39700	Hexachlorobenzene	ND	15.3	
87-68-3	34391	Hexachlorobutadiene	ND	15.3	
77-47-4	34386	Hexachlorocyclopentadiene	ND	15.3	
67-72-1	34396	Hexachloroethane	ND	15.3	
193-39-5	34403	Indeno(1,2,3-cd)pyrene	ND	15.3	
78-59-1	34408	Isophorone	ND	15.3	
534-52-1	34657	2-methyl-4,6-dinitrophenol	ND	76.5	
91-20-3	34696	Naphthalene	ND	15.3	
98-95-3	34447	Nitrobenzene	ND	15.3	
88-75-5	34591	2-Nitrophenol	ND	15.3	
100-02-7	34646	4-Nitrophenol	ND	76.5	
86-30-3	34433	N-nitrosodiphenylamine	ND	15.3	
621-64-7	34428	N-Nitrosodi-n-propylamine	ND	15.3	
87-86-5	39032	Pentachlorophenol	ND	76.5	
85-01-8	34461	Phenanthrene	ND	15.3	
108-95-2	34694	Phenol	ND	15.3	
129-00-0	34469	Pyrene	ND	15.3	

(cont't)

US ENVIRONMENTAL PROTECTION AGENCY
REGION I LABORATORY
GC/MS EXTRACTABLE ORGANIC ANALYSIS

SAMPLE NO.: 63769
Sample Results Continued:

CAS NO.	STORET NO.	Compound	Conc. (mg/kg)	Det. Limit (mg/kg)	Comments
120-82-1	34551	1,2,4--Trichlorobenzene	ND	15.3	
88-06-2	34621	2,4,6-Trichlorophenol	ND	15.3	
		Hazardous Substances			
65-53-3	77089	Aniline	ND	15.3	
65-85-0	77247	Benzoic Acid	ND	76.5	
100-51-6	77147	Benzyl Alcohol	ND	15.3	
106-47-8		4-Chloroaniline	ND	15.3	
132-64-9	81302	Dibenzofuran	ND	15.3	
534-52-1		4,6-Dinitro-2-methylphenol	ND	76.5	
91-57-6		2-Methylnaphthalene	ND	15.3	
95-48-7		2-Methylphenol	ND	15.3	
106-44-5		4-Methylphenol	ND	15.3	
88-74-4		2-Nitroaniline	ND	76.5	
99-09-2		3-Nitroaniline	ND	76.5	
100-01-6		4-Nitroaniline	ND	76.5	
95-95-4	34621	2,4,5-Trichlorophenol	ND	76.5	
		Other Compounds Quantitated			
		None			

Tentatively Identified Compounds	Est. Conc. (mg/kg)	Det. Limit (mg/kg)
None		15

US ENVIRONMENTAL PROTECTION AGENCY
REGION I LABORATORY
GC/MS EXTRACTABLE ORGANIC ANALYSIS

SAMPLE NO.: 63769
Sample Results Continued:

Sample Recoveries For Surrogate Compounds:	Recoveries (%)	QC Range (%)
2-Fluorophenol	96	30-115
Phenol,d5	91	24-113
Nitrobenzene,d5	78	23-120
Fluorobiphenyl	83	30-115
2,4,6-Tribromophenol	91	19-122
p-Terphenyl,d14	85	18-137

Notes:

ND = none detected
~ = approximate
< = less than
> = greater than
NA = not available, due to sample dilution or interference

FACILITY SAMPLED: JARD CO

US ENVIRONMENTAL PROTECTION AGENCY
REGION I LABORATORY
GC/MS EXTRACTABLE ORGANIC ANALYSIS

SAMPLE NO.: 63770
SAMPLE LOCATION:
DATE OF COLLECTION:
TIME OF COLLECTION:
SAMPLE RESULTS:

Dilution Factor: 0.298
Percent Moisture: 11
Sample pH: 7

CAS NO.	STORET NO.	Compound	Conc. (mg/kg)	Det. Limit (mg/kg)	Comments
		Priority Pollutants			
83-32-9	34205	Acenaphthene	ND	2.98	
208-96-8	34200	Acenaphthylene	ND	2.98	
120-12-7	34220	Anthracene	ND	2.98	
309-00-2	39330	Aldrin	ND	2.98	
56-55-3	34526	Benzo(a)anthracene	ND	2.98	
205-99-2	34230	Benzo(b)fluoranthene	ND	2.98	
207-08-9	34242	Benzo(k)fluoranthene	ND	2.98	
50-32-8	34247	Benzo(a)pyrene	ND	2.98	
191-24-2	34521	Benzo(ghi)perylene	ND	2.98	
85-68-7	34292	Benzyl butyl phthalate	ND	2.98	
319-85-7	39338	beta-BHC	ND	2.98	
319-86-8	34259	delta-BHC	ND	2.98	
111-44-4	34273	Bis(2-chloroethyl)ether	ND	2.98	
111-91-1	34278	Bis(2-chloroethoxy)methane	ND	2.98	
117-81-7	**39100**	**Bis(2-ethylhexyl)phthalate**	**25**	**2.98**	
108-60-1	34283	Bis(2-chloroisopropyl)ether	ND	2.98	
101-55-3	34636	4-Bromophenylphenyl ether	ND	2.98	
59-50-7	34452	4-Chloro-3-methylphenol	ND	2.98	
91-58-7	34581	2-Chloronaphthalene	ND	2.98	
95-57-8	34586	2-Chlorophenol	ND	2.98	
7005-72-3	34641	4-Chlorophenylphenyl ether	ND	2.98	
218-01-9	34320	Chrysene	ND	2.98	
72-54-8	39310	4,4'-DDD	ND	2.98	
72-55-9	39320	4,4'-DDE	ND	2.98	
50-29-3	39300	4,4'-DDT	ND	2.98	
53-70-3	34556	Dibenzo(a,h)anthracene	ND	2.98	
84-74-2	39110	Di-n-butylphtalate	ND	2.98	
541-73-1	34566	1,3-Dichlorobenzene	ND	2.98	

(con't)

US ENVIRONMENTAL PROTECTION AGENCY
REGION I LABORATORY
GC/MS EXTRACTABLE ORGANIC ANALYSIS

SAMPLE NO.: 63770
Sample Results Continued:

CAS NO.	STORET NO.	Compound	Conc. (mg/kg)	Det. Limit (mg/kg)	Comments
95-50-1	34536	1,2-Dichlorobenzene	ND	2.98	
106-46-7	34571	1,4-Dichlorobenzene	ND	2.98	
91-94-1	34631	3,3'-Dichlorobenzidine	ND	5.96	
120-83-2	34601	2,4-Dichlorophenol	ND	2.98	
60-57-1	39380	Dieldrin	ND	2.98	
84-66-2	34336	Diethylphtalate	ND	2.98	
105-67-9	34606	2-4-Dimethylphenol	ND	2.98	
131-11-3	34341	Dimethylphthalate	ND	2.98	
51-28-5	34616	2,4-Dinitrophenol	ND	14.9	
121-14-2	34611	2,4-Dinitrotoluene	ND	2.98	
606-20-2	34626	2,6-Dinitrotoluene	ND	2.98	
117-84-0	34596	Di-n-octylphthalate	ND	2.98	
206-44-0	34376	Fluoranthene	ND	2.98	
86-73-7	34381	Fluorene	ND	2.98	
76-44-8	39410	Heptachlor	ND	2.98	
1024-57-3	39420	Heptachlor epoxide	ND	2.98	
118-74-1	39700	Hexachlorobenzene	ND	2.98	
87-68-3	34391	Hexachlorobutadiene	ND	2.98	
77-47-4	34386	Hexachlorocyclopentadiene	ND	2.98	
67-72-1	34396	Hexachloroethane	ND	2.98	
193-39-5	34403	Indeno(1,2,3-cd)pyrene	ND	2.98	
78-59-1	34408	Isophorone	ND	2.98	
534-52-1	34657	2-methyl-4,6-dinitrophenol	ND	14.9	
91-20-3	34696	Naphthalene	ND	2.98	
98-95-3	34447	Nitrobenzene	ND	2.98	
88-75-5	34591	2-Nitrophenol	ND	2.98	
100-02-7	34646	4-Nitrophenol	ND	14.9	
86-30-3	34433	N-nitrosodiphenylamine	ND	2.98	
621-64-7	34428	N-Nitrosodi-n-propylamine	ND	2.98	
87-86-5	39032	Pentachlorophenol	ND	14.9	
85-01-8	34461	Phenanthrene	ND	2.98	
108-95-2	34694	Phenol	ND	2.98	
129-00-0	34469	Pyrene	ND	2.98	

(cont't)

US ENVIRONMENTAL PROTECTION AGENCY
REGION I LABORATORY
GC/MS EXTRACTABLE ORGANIC ANALYSIS

SAMPLE NO.: 63770
Sample Results Continued:

CAS NO.	STORET NO.	Compound	Conc. (mg/kg)	Det. Limit (mg/kg)	Comments
120-82-1	34551	1,2,4--Trichlorobenzene	ND	2.98	
88-06-2	34621	2,4,6-Trichlorophenol	ND	2.98	
		Hazardous Substances			
65-53-3	77089	Aniline	ND	2.98	
65-85-0	77247	Benzoic Acid	ND	14.9	
100-51-6	77147	Benzyl Alcohol	ND	2.98	
106-47-8		4-Chloroaniline	ND	2.98	
132-64-9	81302	Dibenzofuran	ND	2.98	
534-52-1		4,6-Dinitro-2-methylphenol	ND	14.9	
91-57-6		2-Methylnaphthalene	ND	2.98	
95-48-7		2-Methylphenol	ND	2.98	
106-44-5		4-Methylphenol	ND	2.98	
88-74-4		2-Nitroaniline	ND	14.9	
99-09-2		3-Nitroaniline	ND	14.9	
100-01-6		4-Nitroaniline	ND	14.9	
95-95-4	34621	2,4,5-Trichlorophenol	ND	14.9	
		Other Compounds Quantitated			
		None			

Tentatively Identified Compounds	Est. Conc. (mg/kg)	Det. Limit (mg/kg)
None		3

US ENVIRONMENTAL PROTECTION AGENCY
REGION I LABORATORY
GC/MS EXTRACTABLE ORGANIC ANALYSIS

SAMPLE NO.: 63770
Sample Results Continued:

Sample Recoveries For Surrogate Compounds:	Recoveries (%)	QC Range (%)
2-Fluorophenol	125	30-115
Phenol,d5	117	24-113
Nitrobenzene,d5	90	23-120
Fluorobiphenyl	107	30-115
2,4,6-Tribromophenol	129	19-122
p-Terphenyl,d14	116	18-137

Notes:

ND = none detected
~ = approximate
< = less than
> = greater than
NA = not available, due to sample dilution or interference

FACILITY SAMPLED: JARD CO

US ENVIRONMENTAL PROTECTION AGENCY
REGION I LABORATORY
GC/MS EXTRACTABLE ORGANIC ANALYSIS

SAMPLE NO.: 63771
SAMPLE LOCATION:
DATE OF COLLECTION:
TIME OF COLLECTION:
SAMPLE RESULTS:

Dilution Factor: 0.311
Percent Moisture: 15
Sample pH: 6.1

CAS NO.	STORET NO.	Compound	Conc. (mg/kg)	Det. Limit (mg/kg)	Comments
		Priority Pollutants			
83-32-9	34205	Acenaphthene	ND	3.11	
208-96-8	34200	Acenaphthylene	ND	3.11	
120-12-7	34220	Anthracene	ND	3.11	
309-00-2	39330	Aldrin	ND	3.11	
56-55-3	34526	Benzo(a)anthracene	ND	3.11	
205-99-2	34230	Benzo(b)fluoranthene	ND	3.11	
207-08-9	34242	Benzo(k)fluoranthene	ND	3.11	
50-32-8	34247	Benzo(a)pyrene	ND	3.11	
191-24-2	34521	Benzo(ghi)perylene	ND	3.11	
85-68-7	34292	Benzyl butyl phthalate	ND	3.11	
319-85-7	39338	beta-BHC	ND	3.11	
319-86-8	34259	delta-BHC	ND	3.11	
111-44-4	34273	Bis(2-chloroethyl)ether	ND	3.11	
111-91-1	34278	Bis(2-chloroethoxy)methane	ND	3.11	
117-81-7	**39100**	**Bis(2-ethylhexyl)phthalate**	**7.4**	**3.11**	
108-60-1	34283	Bis(2-chloroisopropyl)ether	ND	3.11	
101-55-3	34636	4-Bromophenylphenyl ether	ND	3.11	
59-50-7	34452	4-Chloro-3-methylphenol	ND	3.11	
91-58-7	34581	2-Chloronaphthalene	ND	3.11	
95-57-8	34586	2-Chlorophenol	ND	3.11	
7005-72-3	34641	4-Chlorophenylphenyl ether	ND	3.11	
218-01-9	34320	Chrysene	ND	3.11	
72-54-8	39310	4,4'-DDD	ND	3.11	
72-55-9	39320	4,4'-DDE	ND	3.11	
50-29-3	39300	4,4'-DDT	ND	3.11	
53-70-3	34556	Dibenzo(a,h)anthracene	ND	3.11	
84-74-2	39110	Di-n-butylphtalate	ND	3.11	
541-73-1	34566	1,3-Dichlorobenzene	ND	3.11	

(con't)

US ENVIRONMENTAL PROTECTION AGENCY
REGION I LABORATORY
GC/MS EXTRACTABLE ORGANIC ANALYSIS

SAMPLE NO.: 63771
Sample Results Continued:

CAS NO.	STORET NO.	Compound	Conc. (mg/kg)	Det. Limit (mg/kg)	Comments
95-50-1	34536	1,2-Dichlorobenzene	ND	3.11	
106-46-7	34571	1,4-Dichlorobenzene	ND	3.11	
91-94-1	34631	3,3'-Dichlorobenzidine	ND	6.22	
120-83-2	34601	2,4-Dichlorophenol	ND	3.11	
60-57-1	39380	Dieldrin	ND	3.11	
84-66-2	34336	Diethylphtalate	ND	3.11	
105-67-9	34606	2-4-Dimethylphenol	ND	3.11	
131-11-3	34341	Dimethylphthalate	ND	3.11	
51-28-5	34616	2,4-Dinitrophenol	ND	15.55	
121-14-2	34611	2,4-Dinitrotoluene	ND	3.11	
606-20-2	34626	2,6-Dinitrotoluene	ND	3.11	
117-84-0	34596	Di-n-octylphthalate	ND	3.11	
206-44-0	34376	Fluoranthene	ND	3.11	
86-73-7	34381	Fluorene	ND	3.11	
76-44-8	39410	Heptachlor	ND	3.11	
1024-57-3	39420	Heptachlor epoxide	ND	3.11	
118-74-1	39700	Hexachlorobenzene	ND	3.11	
87-68-3	34391	Hexachlorobutadiene	ND	3.11	
77-47-4	34386	Hexachlorocyclopentadiene	ND	3.11	
67-72-1	34396	Hexachloroethane	ND	3.11	
193-39-5	34403	Indeno(1,2,3-cd)pyrene	ND	3.11	
78-59-1	34408	Isophorone	ND	3.11	
534-52-1	34657	2-methyl-4,6-dinitrophenol	ND	15.55	
91-20-3	34696	Naphthalene	ND	3.11	
98-95-3	34447	Nitrobenzene	ND	3.11	
88-75-5	34591	2-Nitrophenol	ND	3.11	
100-02-7	34646	4-Nitrophenol	ND	15.55	
86-30-3	34433	N-nitrosodiphenylamine	ND	3.11	
621-64-7	34428	N-Nitrosodi-n-propylamine	ND	3.11	
87-86-5	39032	Pentachlorophenol	ND	15.55	
85-01-8	34461	Phenanthrene	ND	3.11	
108-95-2	34694	Phenol	ND	3.11	
129-00-0	34469	Pyrene	ND	3.11	

(cont't)

US ENVIRONMENTAL PROTECTION AGENCY
REGION I LABORATORY
GC/MS EXTRACTABLE ORGANIC ANALYSIS

SAMPLE NO.: 63771
Sample Results Continued:

CAS NO.	STORET NO.	Compound	Conc. (mg/kg)	Det. Limit (mg/kg)	Comments
120-82-1	34551	1,2,4--Trichlorobenzene	ND	3.11	
88-06-2	34621	2,4,6-Trichlorophenol	ND	3.11	
		Hazardous Substances			
65-53-3	77089	Aniline	ND	3.11	
65-85-0	77247	Benzoic Acid	ND	15.55	
100-51-6	77147	Benzyl Alcohol	ND	3.11	
106-47-8		4-Chloroaniline	ND	3.11	
132-64-9	81302	Dibenzofuran	ND	3.11	
534-52-1		4,6-Dinitro-2-methylphenol	ND	15.55	
91-57-6		2-Methylnaphthalene	ND	3.11	
95-48-7		2-Methylphenol	ND	3.11	
106-44-5		4-Methylphenol	ND	3.11	
88-74-4		2-Nitroaniline	ND	15.55	
99-09-2		3-Nitroaniline	ND	15.55	
100-01-6		4-Nitroaniline	ND	15.55	
95-95-4	34621	2,4,5-Trichlorophenol	ND	15.55	
		Other Compounds Quantitated			
		None			

Tentatively Identified Compounds	Est. Conc. (mg/kg)	Det. Limit (mg/kg)
None		3

US ENVIRONMENTAL PROTECTION AGENCY
REGION I LABORATORY
GC/MS EXTRACTABLE ORGANIC ANALYSIS

SAMPLE NO.: 63771
Sample Results Continued:

Sample Recoveries For Surrogate Compounds:	Recoveries (%)	QC Range (%)
2-Fluorophenol	116	30-115
Phenol,d5	109	24-113
Nitrobenzene,d5	84	23-120
Fluorobiphenyl	99	30-115
2,4,6-Tribromophenol	119	19-122
p-Terphenyl,d14	110	18-137

Notes:

ND = none detected
~ = approximate
< = less than
> = greater than
NA = not available, due to sample dilution or interference

Soil Sampling Results/PCBs

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION I
60 WESTVIEW STREET, LEXINGTON, MASSACHUSETTS 02173

DATE: April 9, 1991

SUBJ: Analysis of PCBs in Soils - **Jard Co.**

FROM: Elayne Lee, ESAT, Deb Thiem and Dick Siscanaw, Chemistry Section

THRU: Dr. William J. Andrade, Chief, Chemistry Section

TO: Mary Ellen Stanton

PROJECT NUMBER: 910104

ANALYTICAL PROCEDURE:

The method used for this analysis was the RCRA Method 3550 for the extraction, (medium-high concentration), Method 8081 for the capillary column GC technique, and CLP Quick Turn Around Methods-Analytical Method for Polychlorinated Biphenyls (PCBs) as Arochlors, 5/31/90 for cleanups. The analysis was carried out using high resolution capillary chromatography. The 30-m dual capillary system consists of a J&W DB - 1701 and DB-5, both with a 0.25mm ID and a 0.25 micron film thickness. Results are reported out in dry weight.

Date Samples Received by the Laboratory: 3/20/91

Date Samples Analyzed: 3/26/91 - 4/8/91

File: K:\CHEMSTRY\REPORTS\FINAL\910104SO.PCB

US ENVIRONMENTAL PROTECTION AGENCY
60 Westview Street
Lexington, MA 02173

QUALITY CONTROL:

1. One method blank was included in the analysis.

2. Each sample was spiked with a surrogate compound, decachlorobiphenyl, approximately at 10 mg/kg. The results for the surrogate recoveries are reported out with each sample.

3. One sample 63770, was spiked twice with Aroclor-1260 at approximately 10 mg/kg. The recovery is listed below.

	PCB	Recovery (%)
Matrix	Aroclor-1260	93
Matrix Duplicate	Aroclor-1260	93

SAMPLE ANALYZED: 63766 63767 63768 63769 63770 63771

FACILITY SAMPLED: JARD CO

US ENVIRONMENTAL PROTECTION AGENCY
REGION I LABORATORY
Polychlorinated Biphenyls

SAMPLE NO.: 63766
SAMPLE LOCATION:
DATE OF COLLECTIONECTION:
TIME OF COLLECTION:

Dilution Factor: 1.10
Percent Moisture: 22
Sample pH: 5.90

SAMPLE RESULTS:

CAS NO.	Compound	Conc. (mg/kg)	Det. Limit (mg/kg)	Comments
12674-11-2	**Aroclor-1016**	**32**	**0.55**	
11104-28-2	Aroclor-1221	ND	0.66	
11141-16-5	Aroclor-1232	ND	0.55	
53469-21-9	Aroclor-1242	ND	0.55	
12672-29-6	Aroclor-1248	ND	0.55	
11097-69-1	Aroclor-1254	ND	0.33	
11096-82-5	Aroclor-1260	ND	0.33	
11100-14-4	Aroclor-1262	ND	0.33	
37324-23-5	Aroclor-1268	ND	0.33	

Sample Recovery for Surrogate Compound:	Observed Recoveries (%)
Decachlorobiphenyl	62

Notes:

ND = none detected
~ = approximate
< = less than
> = greater than
NA = not applicable due to high sample dilutions or sample interferences

FACILITY SAMPLED: JARD CO

US ENVIRONMENTAL PROTECTION AGENCY
REGION I LABORATORY
Polychlorinated Biphenyls

SAMPLE NO.: 63767
SAMPLE LOCATION:
DATE OF COLLECTIONECTION:
TIME OF COLLECTION:

Dilution Factor: 0.98
Percent Moisture: 13
Sample pH: 6.20

SAMPLE RESULTS:

CAS NO.	Compound	Conc. (mg/kg)	Det. Limit (mg/kg)	Comments
12674-11-2	Aroclor-1016	ND	0.49	
11104-28-2	Aroclor-1221	ND	0.59	
11141-16-5	Aroclor-1232	ND	0.49	
53469-21-9	Aroclor-1242	ND	0.49	
12672-29-6	**Aroclor-1248**	**4.8**	**0.49**	
11097-69-1	Aroclor-1254	ND	0.29	
11096-82-5	Aroclor-1260	ND	0.29	
11100-14-4	Aroclor-1262	ND	0.29	
37324-23-5	Aroclor-1268	ND	0.29	

Sample Recovery for Surrogate Compound:	Observed Recoveries %
Decachlorobiphenyl	68

Notes:

ND = none detected
~ = approximate
< = less than
> = greater than
NA = not applicable due to high sample dilutions or sample interferences

FACILITY SAMPLED: JARD CO

US ENVIRONMENTAL PROTECTION AGENCY
REGION I LABORATORY
Polychlorinated Biphenyls

SAMPLE NO.: 63768
SAMPLE LOCATION:
DATE OF COLLECTIONECTION:
TIME OF COLLECTION:

Dilution Factor: 0.95
Percent Moisture: 11
Sample pH: 6.60

SAMPLE RESULTS:

CAS NO.	Compound	Conc. (mg/kg)	Det. Limit (mg/kg)	Comments
12674-11-2	Aroclor-1016	ND	0.48	
11104-28-2	Aroclor-1221	ND	0.57	
11141-16-5	Aroclor-1232	ND	0.48	
53469-21-9	Aroclor-1242	ND	0.48	
12672-29-6	**Aroclor-1248**	**26**	**0.48**	
11097-69-1	Aroclor-1254	ND	0.29	
11096-82-5	Aroclor-1260	ND	0.29	
11100-14-4	Aroclor-1262	ND	0.29	
37324-23-5	Aroclor-1268	ND	0.29	

Sample Recovery for Surrogate Compound:	Observed Recoveries %
Decachlorobiphenyl	75

Notes:

ND = none detected
~ = approximate
< = less than
> = greater than
NA = not applicable due to high sample dilutions or sample interferences

FACILITY SAMPLED: JARD CO

US ENVIRONMENTAL PROTECTION AGENCY
REGION I LABORATORY
Polychlorinated Biphenyls

SAMPLE NO.: 63769
SAMPLE LOCATION:
DATE OF COLLECTIONECTION:
TIME OF COLLECTION:

Dilution Factor: 0.95
Percent Moisture: 11
Sample pH: 6.20

SAMPLE RESULTS:

CAS NO.	Compound	Conc. (mg/kg)	Det. Limit (mg/kg)	Comments
12674-11-2	Aroclor-1016	ND	0.48	
11104-28-2	Aroclor-1221	ND	0.57	
11141-16-5	Aroclor-1232	ND	0.48	
53469-21-9	Aroclor-1242	ND	0.48	
12672-29-6	**Aroclor-1248**	**43**	**0.48**	
11097-69-1	Aroclor-1254	ND	0.29	
11096-82-5	Aroclor-1260	ND	0.29	
11100-14-4	Aroclor-1262	ND	0.29	
37324-23-5	Aroclor-1268	ND	0.29	

Sample Recovery for Surrogate Compound:	Observed Recoveries %
Decachlorobiphenyl	67

Notes:

ND = none detected
~ = approximate
< = less than
> = greater than
NA = not applicable due to high sample dilutions or sample interferences

FACILITY SAMPLED: JARD CO

US ENVIRONMENTAL PROTECTION AGENCY
REGION I LABORATORY
Polychlorinated Biphenyls

SAMPLE NO.: 63770
SAMPLE LOCATION:
DATE OF COLLECTIONECTION:
TIME OF COLLECTION:

Dilution Factor: 0.95
Percent Moisture: 11
Sample pH: 7.20

SAMPLE RESULTS:

CAS NO.	Compound	Conc. (mg/kg)	Det. Limit (mg/kg)	Comments
12674-11-2	Aroclor-1016	ND	0.48	
11104-28-2	Aroclor-1221	ND	0.57	
11141-16-5	Aroclor-1232	ND	0.48	
53469-21-9	Aroclor-1242	ND	0.48	
12672-29-6	Aroclor-1248	ND	0.48	
11097-69-1	Aroclor-1254	ND	0.29	
11096-82-5	Aroclor-1260	ND	0.29	
11100-14-4	Aroclor-1262	ND	0.29	
37324-23-5	Aroclor-1268	ND	0.29	

Sample Recovery for Surrogate Compound:	Observed Recoveries %
Decachlorobiphenyl	77

Notes:

ND = none detected
~ = approximate
< = less than
> = greater than
NA = not applicable due to high sample dilutions or sample interferences

FACILITY SAMPLED: JARD CO

US ENVIRONMENTAL PROTECTION AGENCY
REGION I LABORATORY
Polychlorinated Biphenyls

SAMPLE NO.: 63771
SAMPLE LOCATION:
DATE OF COLLECTIONECTION:
TIME OF COLLECTION:

Dilution Factor: 1.00
Percent Moisture: 16
Sample pH: 6.10

SAMPLE RESULTS:

CAS NO.	Compound	Conc. (mg/kg)	Det. Limit (mg/kg)	Comments
12674-11-2	Aroclor-1016	ND	0.50	
11104-28-2	Aroclor-1221	ND	0.60	
11141-16-5	Aroclor-1232	ND	0.50	
53469-21-9	Aroclor-1242	ND	0.50	
12672-29-6	**Aroclor-1248**	**44**	**0.50**	
11097-69-1	Aroclor-1254	ND	0.30	
11096-82-5	Aroclor-1260	ND	0.30	
11100-14-4	Aroclor-1262	ND	0.30	
37324-23-5	Aroclor-1268	ND	0.30	

Sample Recovery for Surrogate Compound:	Observed Recoveries %
Decachlorobiphenyl	73

Notes:

ND = none detected
~ = approximate
< = less than
> = greater than
NA = not applicable due to high sample dilutions or sample interferences

Soil Sampling Results/Metals

date: 4/26/91 XRF-80A

re: XRF Screening Report of Jard Site
Project # 910104

from: Dr. T. M. Spittler

to: Dr. William Andrade and Site Manager

Samples were rerun on the Kevex after repairs. The data has been modified as shown below.

6 samples were submitted for screening for heavy metals using the Kevex XRF analyser. Samples were homogenized and an aliquot was analysed using the HNu XRF instrument. All samples were found to contain no elements above normal background in soil except for the following:

Sample #	Field ID	Zn(ppm)	Zn (revised)
13689	63766	c. 25%	40%
13690	63767	c. 4%	5.5%
13691	63768		
13692	63769	5000	4,200
13693	63770	1200	
13694	63771	c. 7%	6,000

lc

Dorrie Gilten

File

Drum and Water Sampling Results/VOCs

M. E. Stanton

US ENVIRONMENTAL PROTECTION AGENCY
60 Westview Street
Lexington, MA. 02173

DATE: April 9, 1991

SUBJECT: Jard CO, INC., Bennington, VT - Organic Headspace Analysis
Samples Analyzed: 63764, 63765, 63772

FROM: Joseph Montanaro, EPA Chemist and Steven Heller, ESAT Chemist

TO: Mary Ellen Stanton, EER

THRU: Dr. William Andrade
Chief, Chemistry Section WJA 4/9/91

PROJECT NUMBER: 910104

DATE(S) SAMPLES RECEIVED BY THE LABORATORY:3/20/91

DATE(S) SAMPLES ANALYZED: 3/25/91 - 3/27/91

ANALYTICAL PROCEDURE:
An aliquot (~0.1 grams) of the liquid samples were weighed out. It was diluted in methanol and diluted again in organic-free water. The aqueous dilution was then analyzed using the EPA Region I headspace technique on a Photovac Model 10A10 gas chromatograph equipped with a photoionization detector and a 4' x 1/8" SE-30 column. Sample 63772 was an aqueous sample and was analyzed by direct headspace analysis technique. No dilution was required for this sample.

METHOD OF QUANTITATION:
Concentration of volatile organics in samples was calculated using the external standard technique. Cofirmation of late eluting compounds was performed using GC/MS, SW-846, 8240 Modified.

QUALITY CONTROL
1. Field Blank sample was analyzed with GC/MS soil samples.

2. Syringe checks are run routinely to check for cross-over contamination from one sample to the next.

DATA FILE: D:\LABRPTS\910104HS.VOA

cc: Suresh Srivastava - EPA Chemist, Steven Heller - ESAT Chemist

ANALYTICAL PARAMETERS
VOLATILE ORGANIC ANALYSIS
HEADSPACE TECHNIQUE

INSTRUMENTATION: PHOTOVAC 10A10 GAS CHROMATOGRAPH

DETECTOR: PHOTOIONIZATION DETECTOR

CHROMATOGRAPH

Column:	4' x 1/8" SE-30
Gas:	Air--zero grade
Program:	Isothermal at amb approximately 15 minutes
Gas flow:	Approximately 40

INSTRUMENTATION FOR CONFIRMATION: TEKMAR ALS - LSC-4000
FINNIGAN INCOS-50

US ENVIRONMENTAL PROTECTION AGENCY
REGION I LABORATORY

VOLATILE ORGANIC ANALYSIS--HEADSPACE TECHNIQUE

Aqueous

SAMPLE NO.: 63772
SAMPLE LOCATION:
DATE OF COLLECTION:

REFERENCE BOOK: Screen #3 & 100

TENTATIVE IDENTIFICATION AND QUANTITATION

Target Compound	ppb Conc. (ug/l)	Det. Limit (ug/l)	Comments
1,1 Dichloroethylene	ND	1	
Trans 1,2 Dichloroethylene	ND	1	
Cis 1,2 Dichloroethylene	ND	1	
1,1,1 Trichloroethane	ND	50	
Benzene	ND	1	
Trichloroethylene	ND	1	
Tetrachloroethylene	ND	1	
Chlorobenzene	ND	2	
Ethyl benzene	ND	2	
Total Xylenes/styrene	ND	1	
Toluene	ND	1	

Other Compounds identified and quantitated using GC/MS: See Next Page.

<=Less than
>=Greater than
~=Approximately
ND=Not detected

US ENVIRONMENTAL PROTECTION AGENCY
REGION I LABORATORY

VOLATILE ORGANIC ANALYSIS--CONFIRMATION-- GC/MC

Aqueous

SAMPLE NO.: 63772
SAMPLE LOCATION:
DATE OF COLLECTION:

REFERENCE BOOK: Screen #3 & 100

IDENTIFICATION AND QUANTITATION

Target Compound	ppb Conc. (ug/L)	Det. Limit (ug/L)	Comments
Chloroform	4.6	1	
1,2,4-Trichlorobenzene	4.1	1	
1,2,3-Trichlorobenzene	2.8	1	

Other Compounds Tentatively identified: None

<=Less than
>=Greater than
~=Approximately
ND=Not detected

US ENVIRONMENTAL PROTECTION AGENCY
REGION I LABORATORY

VOLATILE ORGANIC ANALYSIS--HEADSPACE TECHNIQUE

Liquid

SAMPLE NO.: 63764
SAMPLE LOCATION:
DATE OF COLLECTION:

REFERENCE BOOK: Screen #3 & 100

TENTATIVE IDENTIFICATION AND QUANTITATION

Target Compound	ppm Conc. (mg/g)	Det. Limit (mg/g)	Comments
1,1 Dichloroethylene	ND	59	
Trans 1,2 Dichloroethylene	ND	59	
Cis 1,2 Dichloroethylene	ND	59	
1,1,1 Trichloroethane	ND	2950	
Benzene	ND	59	
Trichloroethylene	ND	59	
Tetrachloroethylene	ND	59	
Chlorobenzene	ND	118	
Ethyl benzene	ND	118	
Total Xylenes/styrene	ND	59	
Toluene	770	59	

Other Compounds identified and quantitated using GC/MS: See Next Page

<=Less than
>=Greater than
~=Approximately
ND=Not detected

US ENVIRONMENTAL PROTECTION AGENCY
REGION I LABORATORY

VOLATILE ORGANIC ANALYSIS--CONFIMATION-- GC/MS

Liquid

SAMPLE NO.: 63764
SAMPLE LOCATION:
DATE OF COLLECTION:

REFERENCE BOOK: Screen #3 & 100

IDENTIFICATION AND QUANTITATION

Target Compound	ppm Conc. (mg/g)	Det. Limit (mg/g)	Comments
Toluene	820	59	

Other Compounds Tentatively identified: None

<=Less than
>=Greater than
~=Approximately
ND=Not detected

US ENVIRONMENTAL PROTECTION AGENCY
REGION I LABORATORY

VOLATILE ORGANIC ANALYSIS--HEADSPACE TECHNIQUE

Liquid

SAMPLE NO.: 63765
SAMPLE LOCATION:
DATE OF COLLECTION:

REFERENCE BOOK: Screen #3 & 100

TENTATIVE IDENTIFICATION AND QUANTITATION

Target Compound	ppm Conc. (ug/g)	Det. Limit (ug/g)	Comments
1,1 Dichloroethylene	ND	6.1	
Trans 1,2 Dichloroethylene	ND	6.1	
Cis 1,2 Dichloroethylene	ND	6.1	
1,1,1 Trichloroethane	ND	305	
Benzene	ND	6.1	
Trichloroethylene	ND	6.1	
Tetrachloroethylene	ND	6.1	
Chlorobenzene	ND	12.2	
Ethyl benzene	ND	12.2	
Total Xylenes/styrene	ND	6.1	
Toluene	ND	6.1	

Other Compounds identified and quantitated using GC/MS: See Next Page.

<=Less than
>=Greater than
~=Approximately
ND=Not detected

US ENVIRONMENTAL PROTECTION AGENCY
REGION I LABORATORY

VOLATILE ORGANIC ANALYSIS--CONFIRMATION-- GC/MS

Liquid

SAMPLE NO.: 63765
SAMPLE LOCATION:
DATE OF COLLECTION:

REFERENCE BOOK: Screen #3 & 100

IDENTIFICATION AND QUANTITATION

Tentative Compound List	ppm Conc. (mg/g)	Det. Limit (mg/g)	Comments
1-Pentanol,2-Methyl Acetate	<170	6.1	
1-Cyclopropylehanone	<440	6.1	
Hexylester Acetic Acid	<390	6.1	

Other Compounds Tentatively identified: None

<=Less than
>=Greater than
~=Approximately
ND=Not detected

Drum Sampling Results/BNAs

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION I

60 WESTVIEW STREET, LEXINGTON, MASSACHUSETTS 02173

DATE: April 9, 1991

SUBJ: Gas Chromatography-Mass Spectrometry Analysis of Extractable Organics in Drum Samples - **Jard Co.**

FROM: Delon Maas, ESAT, Deb Thiem and Dick Siscanaw, Chemistry Section

THRU: Dr. William J. Andrade, Chief, Chemistry Section

TO: Mary Ellen Stanton

PROJECT NUMBER: 910104

ANALYTICAL PROCEDURE:

EPA Consensus Protocol, Organic Analysis, Multi-Media, Multi-Concentration, High Level Preparation for Screening and Analysis of Semivolatiles (BNA), 1/87 (IFB WA 84-A266). All samples were screened on a gas chromatograph prior to the gas chromatograph-mass spectrometer analysis. All values are reported out on a dry weight basis.

Date(s) Samples Received by the Laboratory: 3/20/91

Date Samples Analyzed: 3/28/91 - 4/5/91

File: K:\CHEMSTRY\REPORTS\FINAL\910104DR.BNA

US ENVIRONMENTAL PROTECTION AGENCY
60 Westview Street
Lexington, MA 02173

QUALITY CONTROL:

1. A laboratory blank was analyzed before the sample analysis.

2. Each sample was spiked with several surrogate compounds at approximately 750 mg/kg concentration. The results for the surrogate recoveries are reported out for each sample.

3. One sample, 63764, was spiked twice as a matrix spike duplicate with the following compounds at approximately 750 mg/kg concentration.

Compound	Rec. (%)	Rec. (%)	QC Range (%)	Comments
Acenaphthene	79	79	31-137	
4-Chloro-3-methylphenol	78	79	26-103	
2-Chlorophenol	84	80	25-102	
1,4-Dichlorobenzene	82	79	28-104	
2,4-Dinitrotoluene	63	65	28-89	
4-Nitrophenol	55	50	11-114	
N-Nitrosodipropylamine	80	76	41-126	
Pentachlorophenol	41	40	17-109	
Phenol	82	78	26-90	
Pyrene	86	82	35-142	
1,2,4-Trichlorobenzene	84	81	38-107	

(Cont.)

US ENVIRONMENTAL PROTECTION AGENCY
60 Westview Street
Lexington, MA 02173

COMPOUNDS NOT IN THE SPIKING SOLUTION:

Target Compounds	Conc. (ug/L)	Conc. (ug/L)
None		

Tentatively Identified Compounds	Conc. (ug/L)	Conc. (ug/L)
None		

SAMPLE(S) ANALYZED: 63764 63765

US ENVIRONMENTAL PROTECTION AGENCY
60 Westview Street
Lexington, MA 02173

ANALYTICAL PARAMETERS

INSTRUMENTS:

Hewlett Packard 5880 Gas Chromatograph
Hewlett Packard 5987 Gas Chromatograph-Mass Spectrometer

GC/FID Screening Conditions:

Gas:	Hydrogen
Capillary Column:	DB-1, 30m, .32mm ID, 0.10 micron film thickness
Injection Mode:	Splitless
Temperature Program:	Isothermal for 3 min at 40°C, programmed at 20°C/min to 350°C

GC-MS Conditions:

Gas:	Helium
Capillary Column:	DB-5, 60m, .25mm ID, 0.25 micron film thickness
Injection Mode:	Splitless
Temperature Program:	Isothermal for 4 min at 40°C, programmed at 7°C/min to 300°C
Injector, Transfer Temperatures:	300°C, 290°C
Electron Energy:	70 V
Mass Range:	35-550
Scan Rate:	0.9 seconds

FACILITY SAMPLED: JARD CO

US ENVIRONMENTAL PROTECTION AGENCY
REGION I LABORATORY
GC/MS EXTRACTABLE ORGANIC ANALYSIS

SAMPLE NO.: 63764
SAMPLE LOCATION:
DATE OF COLLECTION:
TIME OF COLLECTION:
PERCENT MOISTURE:

Dilution Factor: 0.726
Density: 0.862 gm/ml

RESULTS:

CAS NO.	Compound	Conc. (mg/kg)	Det. Limit (mg/kg)	Comments
	Priority Pollutants			
83-32-9	Acenaphthene	ND	363	
208-96-8	Acenaphthylene	ND	363	
120-12-7	Anthracene	ND	363	
309-00-2	Aldrin	ND	363	
56-55-3	Benzo(a)anthracene	ND	363	
205-99-2	Benzo(b)fluoranthene	ND	363	
207-08-9	Benzo(k)fluoranthene	ND	363	
50-32-8	Benzo(a)pyrene	ND	363	
191-24-2	Benzo(ghi)perylene	ND	363	
85-68-7	Benzyl butyl phthalate	ND	363	
319-85-7	beta-BHC	ND	363	
319-86-8	delta-BHC	ND	363	
111-44-4	Bis(2-chloroethyl)ether	ND	363	
111-91-1	Bis(2-chloroethoxy)methane	ND	363	
117-81-7	Bis(2-ethylhexyl)phthalate	ND	363	
108-60-1	Bis(2-chloroisopropyl)ether	ND	363	
101-55-3	4-Bromophenylphenyl ether	ND	363	
59-50-7	4-Chloro-3-methylphenol	ND	363	
91-58-7	2-Chloronaphthalene	ND	363	
95-57-8	2-Chlorophenol	ND	363	
7005-72-3	4-Chlorophenylphenyl ether	ND	363	
218-01-9	Chrysene	ND	363	
72-54-8	4,4'-DDD	ND	363	
72-55-9	4,4'-DDE	ND	363	
50-29-3	4,4'-DDT	ND	363	
53-70-3	Dibenzo(a,h)anthracene	ND	363	

(con't)

US ENVIRONMENTAL PROTECTION AGENCY
REGION I LABORATORY
GC/MS EXTRACTABLE ORGANIC ANALYSIS

SAMPLE NO.: 63764
Results Continued:

CAS NO.	Compound	Conc. (mg/kg)	Det. Limit (mg/kg)	Comments
84-74-2	Di-n-butylphtalate	ND	363	
541-73-1	1,3-Dichlorobenzene	ND	363	
95-50-1	1,2-Dichlorobenzene	ND	363	
106-46-7	1,4-Dichlorobenzene	ND	363	
91-94-1	3,3'-Dichlorobenzidine	ND	726	
120-83-2	2,4-Dichlorophenol	ND	363	
60-57-1	Dieldrin	ND	363	
84-66-2	Diethylphtalate	ND	363	
105-67-9	2-4-Dimethylphenol	ND	363	
131-11-3	Dimethylphthalate	ND	363	
51-28-5	2,4-Dinitrophenol	ND	1815	
121-14-2	2,4-Dinitrotoluene	ND	363	
606-20-2	2,6-Dinitrotoluene	ND	363	
86-73-7	Fluorene	ND	363	
76-44-8	Heptachlor	ND	363	
1024-57-3	Heptachlor epoxide	ND	363	
118-74-1	Hexachlorobenzene	ND	363	
87-68-3	Hexachlorobutadiene	ND	363	
77-47-4	Hexachlorocyclopentadiene	ND	363	
67-72-1	Hexachloroethane	ND	363	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	363	
78-59-1	Isophorone	ND	363	
534-52-1	2-methyl-4,6-dinitrophenol	ND	1815	
91-20-3	Naphthalene	ND	363	
98-95-3	Nitrobenzene	ND	363	
88-75-5	2-Nitrophenol	ND	363	
100-02-7	4-Nitrophenol	ND	1815	
86-30-3	N-nitrosodiphenylamine	ND	363	
621-64-7	N-Nitrosodi-n-propylamine	ND	363	
87-86-5	Pentachlorophenol	ND	1815	
85-01-8	Phenanthrene	ND	363	
108-95-2	Phenol	ND	363	
129-00-0	Pyrene	ND	363	

(con't)

US ENVIRONMENTAL PROTECTION AGENCY
REGION I LABORATORY
GC/MS EXTRACTABLE ORGANIC ANALYSIS

SAMPLE NO.: 63764
Results Continued:

CAS NO.	Compound	Conc. (mg/kg)	Det. Limit (mg/kg)	Comments
120-82-1	1,2,4--Trichlorobenzene	ND	363	
88-06-2	2,4,6-Trichlorophenol	ND	363	
	Hazardous Substances			
65-53-3	Aniline	ND	363	
65-85-0	Benzoic Acid	ND	1815	
100-51-6	Benzyl Alcohol	ND	363	
106-47-8	4-Chloroaniline	ND	363	
132-64-9	Dibenzofuran	ND	363	
534-52-1	4,6-Dinitro-2-methylphenol	ND	1815	
91-57-6	2-Methylnaphthalene	ND	363	
95-48-7	2-Methylphenol	ND	363	
106-44-5	4-Methylphenol	ND	363	
88-74-4	2-Nitroaniline	ND	1815	
99-09-2	3-Nitroaniline	ND	1815	
100-01-6	4-Nitroaniline	ND	1815	
95-95-4	2,4,5-Trichlorophenol	ND	1815	
	Other Compounds Quantitated			
	None			
	Tentatively Identified Compounds		PQL (mg/kg)	
	None detected		400	

US ENVIRONMENTAL PROTECTION AGENCY
REGION I LABORATORY
GC/MS EXTRACTABLE ORGANIC ANALYSIS

SAMPLE NO.: 63764
Sample Results Continued:

Sample Recoveries For Surrogate Compounds:	Recoveries (%)	QC Range (%)
2-Fluorophenol	90	30-115
Phenol,d5	83	24-113
Nitrobenzene,d5	82	23-120
Fluorobiphenyl	81	30-115
2,4,6-Tribromophenol	77	19-122
p-Terphenyl,d14	88	18-137

Notes:

ND = none detected
~ = approximate
< = less than
> = greater than
NA = not available, due to sample dilution or interference

FACILITY SAMPLED: JARD CO

US ENVIRONMENTAL PROTECTION AGENCY
REGION I LABORATORY
GC/MS EXTRACTABLE ORGANIC ANALYSIS

SAMPLE NO.: 63765
SAMPLE LOCATION:
DATE OF COLLECTION:
TIME OF COLLECTION: Dilution Factor: 29
PERCENT MOISTURE: Density 0.878 gm/ml
RESULTS:

CAS NO.	Compound	Conc. (mg/kg)	Det. Limit (mg/kg)	Comments
	Priority Pollutants			
83-32-9	Acenaphthene	ND	14500	
208-96-8	Acenaphthylene	ND	14500	
120-12-7	Anthracene	ND	14500	
309-00-2	Aldrin	ND	14500	
56-55-3	Benzo(a)anthracene	ND	14500	
205-99-2	Benzo(b)fluoranthene	ND	14500	
207-08-9	Benzo(k)fluoranthene	ND	14500	
50-32-8	Benzo(a)pyrene	ND	14500	
191-24-2	Benzo(ghi)perylene	ND	14500	
85-68-7	Benzyl butyl phthalate	ND	14500	
319-85-7	beta-BHC	ND	14500	
319-86-8	delta-BHC	ND	14500	
111-44-4	Bis(2-chloroethyl)ether	ND	14500	
111-91-1	Bis(2-chloroethoxy)methane	ND	14500	
117-81-7	Bis(2-ethylhexyl)phthalate	ND	14500	
108-60-1	Bis(2-chloroisopropyl)ether	ND	14500	
101-55-3	4-Bromophenylphenyl ether	ND	14500	
59-50-7	4-Chloro-3-methylphenol	ND	14500	
91-58-7	2-Chloronaphthalene	ND	14500	
95-57-8	2-Chlorophenol	ND	14500	
7005-72-3	4-Chlorophenylphenyl ether	ND	14500	
218-01-9	Chrysene	ND	14500	
72-54-8	4,4'-DDD	ND	14500	
72-55-9	4,4'-DDE	ND	14500	
50-29-3	4,4'-DDT	ND	14500	
53-70-3	Dibenzo(a,h)anthracene	ND	14500	

(con't)

US ENVIRONMENTAL PROTECTION AGENCY
REGION I LABORATORY
GC/MS EXTRACTABLE ORGANIC ANALYSIS

SAMPLE NO.: 63765
Results Continued:

CAS NO.	Compound	Conc. (mg/kg)	Det. Limit (mg/kg)	Comments
84-74-2	Di-n-butylphtalate	ND	14500	
541-73-1	1,3-Dichlorobenzene	ND	14500	
95-50-1	1,2-Dichlorobenzene	ND	14500	
106-46-7	1,4-Dichlorobenzene	ND	14500	
91-94-1	3,3'-Dichlorobenzidine	ND	29000	
120-83-2	2,4-Dichlorophenol	ND	14500	
60-57-1	Dieldrin	ND	14500	
84-66-2	Diethylphtalate	ND	14500	
105-67-9	2-4-Dimethylphenol	ND	14500	
131-11-3	Dimethylphthalate	ND	14500	
51-28-5	2,4-Dinitrophenol	ND	72500	
121-14-2	2,4-Dinitrotoluene	ND	14500	
606-20-2	2,6-Dinitrotoluene	ND	14500	
86-73-7	Fluorene	ND	14500	
76-44-8	Heptachlor	ND	14500	
1024-57-3	Heptachlor epoxide	ND	14500	
118-74-1	Hexachlorobenzene	ND	14500	
87-68-3	Hexachlorobutadiene	ND	14500	
77-47-4	Hexachlorocyclopentadiene	ND	14500	
67-72-1	Hexachloroethane	ND	14500	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	14500	
78-59-1	Isophorone	ND	14500	
534-52-1	2-methyl-4,6-dinitrophenol	ND	72500	
91-20-3	Naphthalene	ND	14500	
98-95-3	Nitrobenzene	ND	14500	
88-75-5	2-Nitrophenol	ND	14500	
100-02-7	4-Nitrophenol	ND	72500	
86-30-3	N-nitrosodiphenylamine	ND	14500	
621-64-7	N-Nitrosodi-n-propylamine	ND	14500	
87-86-5	Pentachlorophenol	ND	72500	
85-01-8	Phenanthrene	ND	14500	
108-95-2	Phenol	ND	14500	
129-00-0	Pyrene	ND	14500	

(con't)

US ENVIRONMENTAL PROTECTION AGENCY
REGION I LABORATORY
GC/MS EXTRACTABLE ORGANIC ANALYSIS

SAMPLE NO.: 63765
Sample Results Continued:

CAS NO.	Compound	Conc. (mg/kg)	Det. Limit (mg/kg)	Comments
120-82-1	1,2,4--Trichlorobenzene	ND	14500	
88-06-2	2,4,6-Trichlorophenol	ND	14500	
	Hazardous Substances			
65-53-3	Aniline	ND	14500	
65-85-0	Benzoic Acid	ND	72500	
100-51-6	Benzyl Alcohol	ND	14500	
106-47-8	4-Chloroaniline	ND	14500	
132-64-9	Dibenzofuran	ND	14500	
534-52-1	4,6-Dinitro-2-methylphenol	ND	72500	
91-57-6	2-Methylnaphthalene	ND	14500	
95-48-7	2-Methylphenol	ND	14500	
106-44-5	4-Methylphenol	ND	14500	
88-74-4	2-Nitroaniline	ND	72500	
99-09-2	3-Nitroaniline	ND	72500	
100-01-6	4-Nitroaniline	ND	72500	
95-95-4	2,4,5-Trichlorophenol	ND	72500	

Other Compounds Quantitated

None

Tentatively Identified Compounds	Est. Conc. (mg/kg)	PQL (mg/kg)	Recov. (%)
C-10 Hydrocarbon	200000	14500	
C-10 Hydrocarbon	200000	14500	
C-10 Hydrocarbon	500000	14500	
Decane mixture			90%

US ENVIRONMENTAL PROTECTION AGENCY
REGION I LABORATORY
GC/MS EXTRACTABLE ORGANIC ANALYSIS

SAMPLE NO.: 63765
Sample Results Continued:

Sample Recoveries For Surrogate Compounds:	Recoveries (%)	QC Range (%)
2-Fluorophenol	84	30-115
Phenol,d5	95	24-113
Nitrobenzene,d5	82	23-120
Fluorobiphenyl	81	30-115
2,4,6-Tribromophenol	60	19-122
p-Terphenyl,d14	86	18-137

Notes:

ND = none detected
~ = approximate
< = less than
> = greater than
NA = not available, due to sample dilution or interference