40813

R-585-8-4-11
SITE INSPECTION OF
DOMINO SALVAGE
PREPARED UNDER

TDD NO. F3-8311-12
EPA NO. PA-789
CONTRACT NO. 68-01-6699

FOR THE

HAZARDOUS SITE CONTROL DIVISION
U.S. ENVIRONMENTAL PROTECTION AGENCY

JUNE 14, 1985

NUS CORPORATION
SUPERFUND DIVISION

SUBMITTED BY	REVIEWED BY	APPROVED BY
Thomas W Brown for	William Wentworth	
MICHAEL NALIPINSKI	WILLIAM WENTWORTH	GARTH GLENN
ENVIRON. SPECIALIST	ASSISTANT MANAGER	MANAGER, FIT III

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APPENDICES

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SECTION 1

1.0 INTRODUCTION

1.1 Authorization

NUS performed this work under Environmental Protection Agency Contract No. 68-01-6699. This specific report was prepared in accordance with Technical Directive Document No. F3-8311-12 for the Domino Salvage/Warehouse 81 site located in Montour County, Pennsylvania.

1.2 Scope of Work

NUS Corporation, FIT III was tasked to perform a joint site inspection with the Pennsylvania Department of Environmental Resources (PA DER), Region IV, Solid Waste Division at the aforementioned site. A Hazardous Ranking System was also performed for the Domino Salvage site. The scores were S_m = 46.44, S_{gw} = 79.59, and S_{sw} = 10.91.

1.3 Summary

The Domino Salvage/Warehouse 81 site is currently closed due to PA DER legal actions. Prior to this closure, secondary recovery of copper from scrap wires was conducted using both chemical and mechanical processes. The by-product of these recovery processes is fluff material, which consists of finely divided metal wire scraps. There is an estimated 4,356,000 cubic feet of fluff remaining on site.

Results of the site inspection conducted by FIT III on February 15, 1984 indicated elevated concentrations of copper and lead in the waste piles, surface waters, groundwater, and off-site home wells. Chlorinated solvents were also detected on site and in the groundwater. For further toxicological information see section 7 of this report.

SECTION 2

2.0 THE SITE

2.1 Location

The facility is located along Pennsylvania State Route 54 in Montour County, Pennsylvania. Interstate 80 is approximately 1/2 mile north of the site and the city of Danville, Pennsylvania is 3 miles south of the site. The immediate properties, adjacent to the site, are farmlands to the north and west, a woodlot to the south, and PA 54 to the east. At the intersection of PA 54 and I-80 are a Sheraton Hotel, 3 gas stations, and a McDonald's restaurant.

2.2 Site Layout

Domino Salvage/Warehouse 81 site is currently inactive. It occupies approximately 20 acres, approximately 5 acres of which contain piles of fluff. The site consists of 3 mounds of processed and unprocessed fluff, 1 pile of "carbon black", 4 impoundments, and an area of contaminated soils. Three partially submerged, 500 to 1,000 gallon tanks were in the southern "tank lagoon" impoundment.

2.3 Ownership History

State records indicate that the current owner of the site is a limited partnership that exists between Warehouse 81 and Domino Salvage. Michael G. Sabia, Jr., is the proprietor for the partnership. This partnership has owned the property since January 1984. From May 1972 to January 1984, the Philadelphia National Bank had control of the property. According to PA DER records, Mr. Allan Levan of Doylestown, Pennsylvania, proprietor of M.W. Manufacturing Corporation, owned the property from May 26, 1969 to May 1972.

2.4 Site Use History

Excerpts from the Dunn Geoscience report, prepared for the site owner and located in PA DER Region IV files, was used to formulate the following site use history. The Warehouse 81 plant was engaged in the secondary recovery of copper from piles of finely divided metal wire scraps known as "fluff." The fluff piles were generated by the mechanical recovery process of the now bankrupt M.W. Manufacturing Corporation. According to the Dunn Report, M.W. Manufacturing used chlorinated solvents in their chemical recovery process which caused organic contamination in local groundwaters. The Dunn report also states that the only activities conducted by the Warehouse 81 partnership have been mechanical recovery processes. Information regarding solvent storage and disposal is unavailable. See appendix F for suspected groundwater contamination plumes that were formed by sampling conducted by Dunn Geoscience.

2.5 Permit and Regulatory Action History

The following list of violations against the various owners of the Domino Salvage/Warehouse 81 site has been compiled in chronological order by the PA DER Region IV:

December 1970	Cited for copper ions in outfall discharge.
April 8, 1971	Consent Decree for lack of fluff cover, oil discharge, and improper storage of drums containing industrial waste water.
May 13, 1971	Permit for extender aeration.
August 10, 1971	Cited for oil in outfall discharge.
October 6, 1971	Permit granted for industrial waste discharge.
December 2, 1971	Violation of Clean Streams Law, PA DER detected sewage in creek.
December 14, 1971	Ordered to correct previous violations by PA DER.
March 17, 1972	Letter from owner to PA DER stating items in Consent Decree have been corrected.

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May 1972	M.W. Manufacturing filed Chapter 11, Philadelphia National Bank (PNB) acquired the property.
August 1972	PA DER memo to "strike force," requesting investigation of pooled industrial waste, fluff storage, and off-site discharge.
November 1972	Order to PNB to remove fluff and contaminated water.
May 24, 1973	Disclaimer from Nassau Smelting and Refining Company to PA DER regarding fluff material.
September 12, 1981	A joint PA DER Bureau of Water Quality Management and Solid Waste Division sampling of the site.
February 19, 1982	Initial inspection by Solid Waste Division.
April 13, 1982	PA DER Solid Waste Management sampled the aforementioned site.
May 6, 1982	PA DER responded to report of an on-site fire at the recovery building. Samples were taken of fluff piles and tested for asbestos. Results were negative.
September 3, 1982	The original Consent Order and Agreement were forwarded to Mr. Sabia by PA DER.
September 22, 1982	PA DER held a meeting with Mr. Sabia, Mr. Richard Hammond (site operator), and Mr. Jeffrey Peffer (Dunn Geoscience - site consultant). PA DER provided an additional 24-month extension to a 36-month time schedule proposed in the Consent Order. Extension granted in order to find a market for the resale of the processed plastic.
November 1, 1982	On-site sampling conducted by Dunn Geoscience.
February 1, 1983	Initial results from November 1982 sampling forwarded to PA DER.

March 17, 1983	Meeting at PA DER-Williamsport to discuss proposal methods for waste residual from the previous processing operations.
February 14, 1984	FIT III conducted joint site investigation with PA DER's Solid Waste Division Region IV.

2.6 Remedial Action To Date

According to PA DER files, only small amounts of material have been removed from the site. Records indicate that most of the waste products have been buried on site. FIT III observed several above-ground and partially buried open-top drums that contained fluff material. The PA DER indicated that the drumming of the fluff was an attempt to contain the material when the recycling process first began. Dunn Geoscience has developed groundwater contamination plume maps which are included in appendix C.

SECTION 3

3.0 ENVIRONMENTAL SETTING

3.1 Water Supply

According to a United States Geological Survey (U.S.G.S) Topographic Map, there are approximately 400 homes using groundwater as their potable water source within a 3-mile radius of the site. Commercial establishments at the intersection of I-80 and State Route 54 also rely on groundwater. This count does not include any homes south of Montour Ridge, as homes located south of the ridge are supplied by the Danville Water Department. The city of Danville's water intake is located approximately 3-1/2 river miles on the Susquehanna from the Domino Salvage/Warehouse 81 site. According to the PA DER and FIT III samplings, the Artly well, located on site, has been contaminated with various organic and inorganic contaminants. On-site monitoring wells also revealed similar contaminants. The February 15, 1984 FIT III sampling of nearby off-site water wells did not reveal any organic and inorganic contaminants.

3.2 Surface Waters

FIT III personnel observed a drainage ditch along the northern edge of the site draining into the Mauses Creek. The Mauses Creek then drains into the Mahoning Creek and eventually into the North Branch of the Susquehanna River. Sampling conducted by FIT III on February 15, 1984 appears to indicate that lead and copper are migrating from the site via the drainage ditch. Downstream samples from the confluence of the ditch and the Mauses Creek indicate higher levels of organic and inorganic compounds than did the upstream samples (see sample results in section 6.0).

3.3 Geology and Soils

The site lies within the boundary of the Ridge and Valley Province. The bedrock geology at the site consists of the Wills Creek Formation (Cayuga Group - Upper Silivian) which contains medium-light gray calcarious shale and siltstone in the lower part with interbedded grayish-red calcarious siltstone. The formation also contains interbeds of limestone, solidified siltstone, and dolomite. The thickness of the Wills Creek Formation is approximately 650 to 820 feet. The site is also bordered by the Heiser-Tonoloway units, which range in depth from 33 to 699 feet. The aforementioned information was obtained from "Groundwater Resources of the Upper Susquehanna River Basin" (Taylor, Larry, Pennsylvania Geologic Survey, 1984, Report 58). According to Mr. Denny Fritz (PA DER Region IV Geologist), the Wills Creek Formation is interconnected via local fracture systems at depths of up to 250 feet.

According to the "Bureau of Topography and Geologic Survey, PA DER Groundwater Information System" and the "General Soils Map of Pennsylvania," the majority of the native soils beneath the Domino Salvage site consist of the Harlton-Berks Watson Association. The soils range from a 0 to 30 percent slope. Due to the lack of precise information, no remarks can be made regarding specific soil characteristics beneath the site.

3.4 Groundwaters

The seasonal high water table beneath the site ranges from 1/2 to 1-1/2 feet, according to "Groundwater in Northeastern Pennsylvania" (Leham, 1937) and the Danville U.S. Department of Agriculture Soil Conservation Service. On-site monitoring wells indicate 8 to 18 feet to the water table. Wells in the Wills Creek Formation range in depth from 40 to 328 feet. The groundwater flow is estimated to be in an east to southeast direction, towards Mauser and Mahoning Creeks. Both interconnected aquifers are used by the local populations (within 3 miles of the site) as their sole potable water source. The Dunn Geoscience Report indicates a presence of organic and inorganic groundwater contamination plumes. This report is located in PA DER Region IV files. Excerpts are located in appendix C of this report. (Additional geohydrogeological information has been requested from PA DER and the site consultant by FIT III.)

3.5 Climate and Meteorology

Central Pennsylvania is generally considered to have a humid continental type climate. Since the site is located within the Ridge and Valley provinces, the air movement, temperature extremes, and precipitation patterns are similar to a mountain-type climate. Montour County gets approximately 48 inches of precipitation per year. The estimated 1 year, 24-hour rainfall is 2.6 inches (Rainfall Frequency Atlas of the United States, U.S.G.P.O. 1963).

3.6 Land Use

Domino Salvage/Warehouse 81 is currently inactive and will remain so until action can be decided upon regarding proper closure plans for the site. North of the site is a Pennsylvania Department of Transportation storage yard. Proceeding further north is a McDonald's restaurant, 3 gas stations, and a Sheraton Hotel. West and south of the site are farm properties that are being used for agriculture. East of the site is State Route 54 and the marshy wooded area created by the confluence of Mauser and Mahoning creeks.

3.7 Population Distribution

The 6-member Artly family lives on site. The Danville Head Start School (enrollment 83) is located approximately 125 yards north of the site. According to the U.S.G.S. Topographic Map, there are approximately 400 homes within a 3-mile radius of the site. Therefore, the total approximate, nontransient population within 3 miles is 2,420 individuals (400 x 3.8). Another notable feature within 1/4 mile of the site is the intersection of I-80 and State Route 54. At this point there is a Sheraton Hotel, a McDonald's restaurant, and 3 gas stations. Approximately 3 miles south of the site is the city of Danville, with an estimated population of 7,000 people.

3.8 Critical Environments

According to the Pennsylvania Clean Streams Act, Mahoning Creek (which Mauser Creek flows into) is classified as a trout stocked stream. Available background information does not reveal any other critical environments within 1 mile of the site.

SECTION 4

4.0 WASTE TYPES AND QUANTITIES

According to Gordon Harvey, Solid Waste Specialist for the PA DER in Williamsport, the fluff material deposited on site covers 5 acres. The average height of the fluff piles is 20 feet. Using these figures, the approximate total quantity of fluff is 4,356,000 cubic feet. Also on site are 4 lagoons, three 500 to 1,000 gallon tanks, a pile of "carbon black", an area of contaminated soils, several partially filled open-top drums (containing fluff), and documented groundwater contamination plumes. The types of wastes are lead, copper, and organic solvents, all of which were detected in all the aforementioned areas of contamination during FIT III's sampling on February 15, 1984.

SECTION 5

5.0 FIELD TRIP REPORT

5.1 Summary

On February 15, 1984, FIT III members Michael Nalipinski, Edmund Reardon, Arthur Weber, and Laura Boornazian conducted a joint site inspection at the Domino Salvage/Warehouse 81 site. The site inspection was conducted with assistance from a 7-member team from the PA DER, Region IV.

Samples were obtained from 9 groundwater sample points, 7 surface water sample points, 6 waste samples, 5 runoff areas, and 4 stained soils. A total of 31 samples were taken.

Access to the site was obtained by PA DER for FIT III from Mr. Sabia. Jeffrey Peffer of Nassaux Hemsley represented the current owner during the sampling.

The weather during the site inspection was approximately 45°F, with continuous rain.

5.2 Persons Contacted

5.2.1 Prior to Field Trip

Richard Bittle - Solid Waste Manager
Gordon Harvey - Solid Waste Specialist
PA DER
200 Pine Street
Williamsport, PA 17701
(717) 327-3653

5.2.2 At The Site

Frank Bertovich - Regional Solid Waste Operations Supervisor
Richard Bittle - Regional Solid Waste Manager
Gordon Harvey - Solid Waste Specialist
John Hamilton - Regional Solid Waste Engineer
William Hazar - Soil Scientist
Kenneth Caputo - Hazardous Waste Coordinator
Denny Fritz - Regional Geologist
PA DER
200 Pine Street
Williamsport, PA 17701
(717) 327-3652

Continue - **5.2.2 At The Site**

Jeffrey Peffer, P.E.
Nassaux-Hemsley, Inc.
56 North Second Street
Chambersburg, PA
(717) 263-1409

5.2.3 After Site Visit

Jeffrey Peffer, P.E.
Nassaux-Hemsley, Inc.
56 North Second Street
Chambersburg, PA
(717) 263-1409

Yener Soylemez
U.S. EPA - Region III
Ninth and Chestnut Streets
Philadelphia, PA 19106
(215) 597-0804

Gordon Harvey
Denny Fritz
PA DER
200 Pine Street
Williamsport, PA 17701
(717) 327-3653

Karen De Walt
Water Supply Branch
U.S. EPA - Region III
Ninth and Chestnut Streets
Philadelphia, PA 19106
(215) 597-2702

Thomas Graham
Danville Water Department
(717) 275-1070

George Venarchick
Danville School District
(717) 275-2192

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TDD Number F3-8311-12
EPA Number PA-789

5.3 SAMPLE LOG

Site Name Domino Salvage

TRAFFIC REPORTS Organic	Inorganic	High Hazard	SAMPLING LOCATION	PHASE	SAMPLE DESCRIPTION	DATE	TIME	pH	COMMENTS/OBSERVATIONS	LABORATORY
4885	mc 3747		Water Supply On Site	AQ		2-15-84	1145	7.55		EAL Chemtech
4886	mc 3748		New Well	AQ			1300	6.36		EAL Chemtech
4887	mc 3749		Middle Tank	SED	500-750 gal 1/4 solids		1020		MED. CONC.	Hazelton chemtech
4888	mc 3750		Right Tank	SED	500-750 gal 1/2 full		1030		MED. CONC.	Hazelton chemtech
4889	mc 3751		Left Tank	SED	Approx 1000 gal 1/2 full		1025		MED. CONC	Hazelton chemtech
4890	mc 3752		Cope House Well	AQ			1215	8.01		EAL chemtech
4891	mc 3753		Barn Well	AQ			1230	6.63		EAL chemtech
4892	mc 3754		Blank	AQ			1330			EAL chemtech
4892	mc 3755		Blank	SED			1330			Hazelton chemtech
4677	mc 3740		West Unprocessed Pile	SED			1005		composite	Hazel chem
4678	mc 3741		Warehouse Pile	SED			1055		composite	Hazel chem
4679	mc 3742		Well #7	AQ			1415	6.99		EAL chem
4680	mc 3743		Well # 1	AQ			1145	7.30		EAL chem
4681	mc 3744		Well #4	AQ			1100	8.30		EAL chem
4883	mc 3745		Green Pile	SED			1055		composite	Hazel chem
4894	mc 3756	10001	Tank Lagoon	AQ			1205		greenish, Brown w/ oily Film	EAL chem
4815	mc 2966	10002	Middle Pile	SED			1030		composite	Hazel chem
4833	mc 2967	10003	Pallet SED	SED			1245			Hazel chem
4293	mc 3732		Mauses Crk at Bridge	AQ			1010	8.19		EAL chem
1294	mc 3733		Mauses Crk at Bridge	SED			1010			Hazel chem

TDD Number F3-8311-12
EPA Number PA-789

5.3 SAMPLE LOG

Site Name Domino Salvage

TRAFFIC REPORTS Organic	TRAFFIC REPORTS Inorganic	TRAFFIC REPORTS High Hazard	SAMPLING LOCATION	PHASE	SAMPLE DESCRIPTION	DATE	TIME	pH	COMMENTS/OBSERVATIONS	LABORATORY
c4295	mc3734		Mauses Crk Below Confl	AQ			1040	7.95		EAL chem
c4296	mc3735		Mauses Crk Below Confl	SED			1040			Hazel chem
c4297	mc3736		Union of Ditch	AQ			1120	6.51	foam at sample pt.	EAL chem
c4298	mc3737		Union of Ditch	SED			1130			Hazel chem
c4299	mc3738		Mauses Crk near Gate	AQ			1310	7.38		EAL chem
c4300	mc3739		Mauses Crk near Gate	SED			1310			Hazel chem
c4884	mc3746		Carbon Pile	SED			1045		composite	HAZEL chem
c4834	mc2968		Pallet Lagoon	AQ			1245	6.77		EAL chem
c4835	mc2969		Big Lagoon	AQ			1230	6.45		EAL chem
c4849	mc3781		Big Lagoon	SED			1230		composite	HAZEL chem
c4837	mc3780		Tank Lagoon	SED			1205			HAZEL chem
c4836	mc3779		School Well	AQ			1330	7.05		EAL chem
c7977	mc3800		Farm House	AQ			1330	6.77		EAL chem

5.4 Site Observations

- No HNU or mini-radiation alert levels were detected above background levels. An organic odor was detected during tank sampling so respiratory protection was elevated to Level C.

- The following is a chart regarding groundwater data from PA DER files:

Location	Total Depth in Feet	Reference Point	Reference Elevation in Feet	Depth to SWL in Feet	Elevation o SWL in Fee
MW1	23	top of casing	522.06	18.00	504.06
MW2	40	top of casing	508.67	11.10	497.57
MW3	N/A	top of casing	507.59	8.58	499.01
MW4	N/A	top of casing	507.54	9.04	498.50
MW5	N/A	N/A	N/A	N/A	N/A
MW6	N/A	top of casing	512.23	pumped	not static
MW7	73	top of cap	507.34	12.08	495.22
MW8	45	top of cap	503.35	10.44	492.91
MW9	40	top of cap	501.64	10.58	491.06
MW10	N/A	water surface	491.24	0	491.74
PennDot	N/A	concrete floor	513.13	16.13	497.00
Dug House	N/A	concrete rim	507.16	18.25	488.91
Drilled House	N/A	top of cap	506.24	N/A	N/A
Dug Barn	N/A	concrete rim	515.47	25.58	489.89
MW1	23	top of casing	N/A	13.00	N/A
Dug House Well	22	1 ft. stick up	N/A	11.00	N/A
Dug Barn Well	21	1 ft. stick up	N/A	12.00	N/A
PennDot Well	73	2 ft. stick up	N/A	12.00	N/A

- Field measurements by FIT III:

Sample Location	Specific Conductance (MG)	Temperature (°C)
Well No. 4	60	12
Confluence	350	6
Bridge	60	7
Drainage Ditch	75	6
Cope Well	150	9
On-site Water Well	215	8
Well No. 1	310	9
Big Lagoon	100	5
Farmhouse	250	7
Barn Well	85	7
New Well	2,200	9
Pallett Lagoon	50	6
Ditch as leaves site	90	7
School Well	330	10
Well No. 7	300	9
Tank Lagoon	(Sample not conducive to field measurements)	

5.5 PHOTOGRAPH LOG

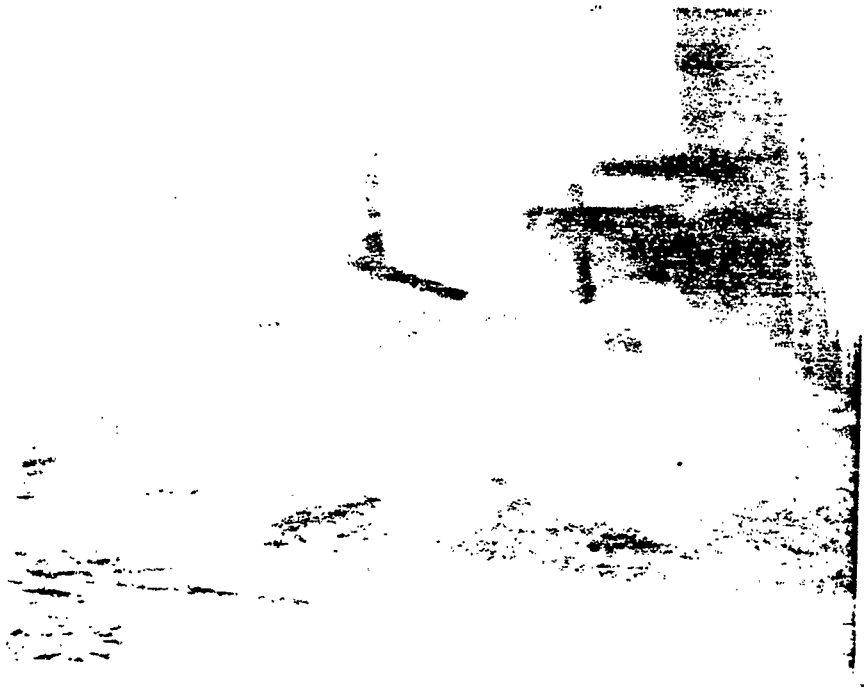

Photo 1 - Waste pile near warehouse.

Photo 2 - John Hamilton (DER) sampling middle pile.

Domino Salvage (D) R1 P12
8311-12
15 Feb '84

WASTE pile NEAR warehouse

M J Kalspinth for
Frank Bertovich

1045

Domino Salvage (D)
8311-12
15 Feb '84

John Hamilton (OER) sampling middle pile

M J Kalspinth for
Frank Bertovich

1025

Photo 3 - Michael Nalipinski sampling left tank.

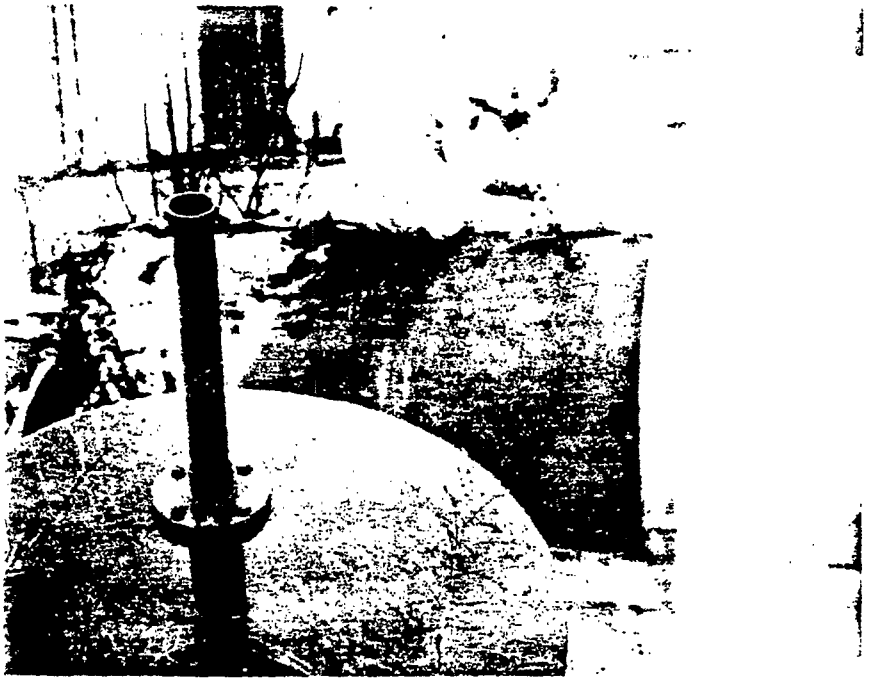

Photo 4 - Michael Nalipinski sampling middle tank.

Domino Salvage (3) R1 P1
8311-12
15 Feb '84

MIKE Nalepinski sampling left Tank

M.J. Nalepinski
Frank Bertovich 1025

Domino Salvage (4) R3 P7
8311-12
15 Feb '84

MIKE Nalepinski sampling middle Tank

M.J. Nalepinski for
Frank Bertovich 1020

Photo 5 - Michael Nalipinski sampling right tank.

Photo 6 - Edmund Reardon and DER sampling MW 4.

Domino Salvage
8311-12
15 Feb 84

(5) R3P11

MIKE Nalipinski sampling right TANK

M.J. Nalipinski for
FRANK Bertovich

1030

Domino Salvage
8311-12
15 Feb 84

(6) R3P8

ED REARDON and DER sampling M.W #4

M.J. Nalipinski for
FRANK Bertovich

1100

Photo 7 - Michael Nalipinski sampling carbon pile.

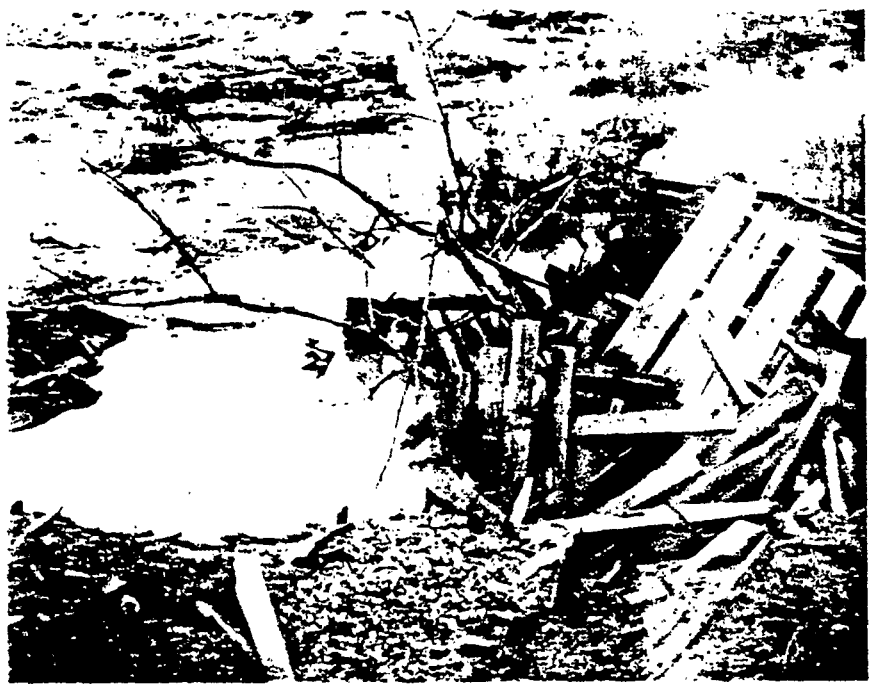

Photo 8 - Pallet Lagoon.

Domino Salvage
8311-12
15 Feb '84

⑦ R3P12

Mike Nalpinski sampling Caterpillar pile

M.J. Nalpinski for
Frank Bertovich

1045

Domino Salvage
8311-12
15 Feb '84

⑧ R1P4

Pallet Lagoon

FEB 1984

M.J. Nalpinski
M.J. Nalpinski

1245

000032

Photo 9 - Drainage ditch outside fence line.

Photo 10 - Union of drainage ditches.

Domino Salvage (9) R1P9
8311-12
15 Feb 84

Drainage ditch outside Fence line
FEB 1984

M.J. Nalpinski
M.J. Nalpinski 1310

Domino Salvage (10) R1 P10
8311-12
15 Feb 84

Union of Drainage Ditches

M.J. Nalpinski
M.J. Nalpinski 1120

Photo 11 - Arthur Weber sampling Mauses Creek at bridge.

Photo 12 - Arthur Weber sampling Mauses Creek below confluence.

Dominion Salvage
8311-12
15 Feb '84

(11) R215

Art Weber sampling Mauses Creek at Bridge.

M.J. Nalepinski for Richard Bittle

1010

Dominion Salvage
8311-12
15 Feb '84

(12) R217

Art Weber sampling Mauses Creek Below Confluence.

M.J. Nalepinski for Richard Bittle

1040

Photo 13 - Aerial photo taken by PA DER Water Quality Branch, Williamsport Region IV, in summer of 1984.

Dom SALVAGE
8311-12

000038

Aerial photo taken by PA DER Water Quality Branch,
Williamsport Region IV, ~~June~~ May (1-22-85) summer of 1984.

F3-8311-12

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 1 - SITE LOCATION AND INSPECTION INFORMATION

EPA

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
PA	789

II. SITE NAME AND LOCATION

01 SITE NAME (Legal, common, or descriptive name of site)	02 STREET, ROUTE NO., OR SPECIFIC LOCATION IDENTIFIER				
Domino Salvage/Warehouse 81	State Route 54 & I-80				
03 CITY	**04 STATE**	**05 ZIP CODE**	**06 COUNTY**	**07 COUNTY CODE**	**08 CONG. DIST.**
Valley Township	PA	17821	Montour	093	11

09 COORDINATES: LATITUDE 41° 59' 30" N | LONGITUDE 76° 38' 26" E

10 TYPE OF OWNERSHIP (Check one)
☒ A. PRIVATE ☐ B. FEDERAL _____ ☐ C. STATE ☐ D. COUNTY ☐ E. MUNICIPAL
☐ F. OTHER _____ ☐ G. UNKNOWN

III. INSPECTION INFORMATION

01 DATE OF INSPECTION	02 SITE STATUS	03 YEARS OF OPERATION
2 / 15 84 (MONTH DAY YEAR)	☐ ACTIVE ☒ INACTIVE	approx 1961 (BEGINNING YEAR) 1970 (ENDING YEAR) ___ UNKNOWN

04 AGENCY PERFORMING INSPECTION (Check all that apply)
☐ A. EPA ☒ B. EPA CONTRACTOR NUS Corp. (Name of firm) ☐ C. MUNICIPAL ☐ D. MUNICIPAL CONTRACTOR _____ (Name of firm)
☐ E. STATE ☐ F. STATE CONTRACTOR _____ (Name of firm) ☐ G. OTHER _____ (Specify)

05 CHIEF INSPECTOR	06 TITLE	07 ORGANIZATION	08 TELEPHONE NO
Michael Nalipinski	Environ. Specialist	NUS Corp.	(215) 687-9510
09 OTHER INSPECTORS	**10 TITLE**	**11 ORGANIZATION**	**12 TELEPHONE NO**
Laura Boornazian	Air Pollution Spec.	NUS Corp.	(215) 687-9510
Edmund Reardon	Environ. Engineer	NUS Corp.	(215) 687-9510
Arthur Weber	Environ. Technician	NUS Corp.	(215) 687-9510
Gordon Harvey	Solid Waste Specialist	PA DER	(717) 327-3653
John Hamilton	Reg. Solid Waste Spec.	PA DER	(717) 327-3653

13 SITE REPRESENTATIVES INTERVIEWED	14 TITLE	15 ADDRESS	16 TELEPHONE NO
William Hanzar	Soil Scien.	PA DER	(717) 327-3653
Ken Caputo	Haz. Waste Coord.	PA DER	(717) 327-3653
Denny Fritz	Geologist	PA DER	(717) 327-3653
Frank Bertovich	Reg. Solid Waste Operations Sup.	PA DER	(717) 327-3653
Richard Bittle	Reg. Solid Waste Manager	PA DER	(717) 327-3653
Jeff Peffer P.E. - Site Rep.		Nassaux-Hemsley, Inc. 56 North 2nd Street Chambersburgh, PA	(717) 263-1409

17 ACCESS GAINED BY (Check one)	18 TIME OF INSPECTION	19 WEATHER CONDITIONS
☒ PERMISSION ☐ WARRANT	9:00 AM	45°F and rainy (all day)

IV. INFORMATION AVAILABLE FROM

01 CONTACT	02 OF (Agency/Organization)	03 TELEPHONE NO
Richard Bittle	PA DER Region IV	(717) 327-3653

04 PERSON RESPONSIBLE FOR SITE INSPECTION FORM	05 AGENCY	06 ORGANIZATION	07 TELEPHONE NO.	08 DATE
Michael Nalipinski	FIT III	NUS	(215) 687-9510	2 15 84 (MONTH DAY YEAR)

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EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 3 - DESCRIPTION OF HAZARDOUS CONDITIONS AND INCIDENTS

I. IDENTIFICATION
01 STATE: PA | 02 SITE NUMBER: 789

II. HAZARDOUS CONDITIONS AND INCIDENTS

01 ☒ A. GROUNDWATER CONTAMINATION — 02 ☒ OBSERVED (DATE: 2/15/84) ☐ POTENTIAL ☒ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: unknown
04 NARRATIVE DESCRIPTION

Test results from FIT III's February 15, 1984 sampling, showed contaminated on-site monitoring wells.

01 ☒ B. SURFACE WATER CONTAMINATION — 02 ☒ OBSERVED (DATE: 2/15/84) ☐ POTENTIAL ☒ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: unknown
04 NARRATIVE DESCRIPTION

Test results from FIT III's February 15, 1984 sampling, showed contaminated surface waters.

01 ☒ C. CONTAMINATION OF AIR — 02 ☒ OBSERVED (DATE: 2/15/84) ☒ POTENTIAL ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: unknown
04 NARRATIVE DESCRIPTION

Odors were detected by FIT III on-site personnel. These odors combined with potential dust transport could cause airborne contamination.

01 ☒ D. FIRE/EXPLOSIVE CONDITIONS — 02 ☒ OBSERVED (DATE: 5/6/82) ☐ POTENTIAL ☒ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: unknown
04 NARRATIVE DESCRIPTION

The PA DER responded to a fire at the Domino Salvage Recovery Building. After the fire was extinguished, the PA DER sampled for asbestos. The results were negative.

01 ☒ E. DIRECT CONTACT — 02 ☒ OBSERVED (DATE: 2/15/84) ☒ POTENTIAL ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: unknown
04 NARRATIVE DESCRIPTION

Potential for direct contact is limited due to security at the site. Off-site contamination may be a vector for contact.

01 ☒ F. CONTAMINATION OF SOIL — 02 ☒ OBSERVED (DATE: 2/15/84) ☐ POTENTIAL ☒ ALLEGED
03 AREA POTENTIALLY AFFECTED: approx. 7 (Acres)
04 NARRATIVE DESCRIPTION

The waste (fluff material) has mixed with on-site soils. The fluff material and off-site drainage way sediments show inorganic and organic contamination based upon FIT III's February 15, 1984 sampling results.

01 ☒ G. DRINKING WATER CONTAMINATION — 02 ☒ OBSERVED (DATE: 2/15/84) ☐ POTENTIAL ☒ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: approx. 6
04 NARRATIVE DESCRIPTION

The Artly family, which lives in the warehouse, use the contaminated groundwater as their sole water source. The contamination was documented by PA DER's sampling.

01 ☐ H. WORKER EXPOSURE/INJURY — 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
03 WORKERS POTENTIALLY AFFECTED: _____
04 NARRATIVE DESCRIPTION

N/A

01 ☒ I. POPULATION EXPOSURE/INJURY — 02 ☒ OBSERVED (DATE: 2/15/84) ☐ POTENTIAL ☒ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: approx. 6
04 NARRATIVE DESCRIPTION

The Artly family is consuming contaminated water.

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION
PART 4 - PERMIT AND DESCRIPTIVE INFORMATION

I. IDENTIFICATION
01 STATE: PA | 02 SITE NUMBER: 789

II. PERMIT INFORMATION

None discovered during FIT III review of PA DER files

01 TYPE OF PERMIT ISSUED (Check all that apply)	02 PERMIT NUMBER	03 DATE ISSUED	04 EXPIRATION DATE	05 COMMENTS
☐ A. NPDES				
☐ B. UIC				
☐ C. AIR				
☐ D. RCRA				
☐ E. RCRA INTERIM STATUS				
☐ F. SPCC PLAN				
☐ G. STATE (Specify)				
☐ H. LOCAL (Specify)				
☐ I. OTHER (Specify)				
☒ J. NONE				

III. SITE DESCRIPTION

01 STORAGE/DISPOSAL (Check all that apply)	02 AMOUNT	03 UNIT OF MEASURE
☒ A. SURFACE IMPOUNDMENT	approx. 6	acres
☒ B. PILES	approx. 124,000	cu. yds.
☒ C. DRUMS, ABOVE GROUND	approx. 50	drums
☒ D. TANK, ABOVE GROUND	approx. 6,000	gals.
☐ E. TANK, BELOW GROUND	~~approx. 20,000~~	~~cu ft~~
☒ F. LANDFILL		
☐ G. LANDFARM		
☐ H. OPEN DUMP		
☐ I. OTHER (Specify)		

04 TREATMENT (Check all that apply)
- ☐ A. INCENERATION
- ☐ B. UNDERGROUND INJECTION
- ☒ C. CHEMICAL/PHYSICAL
- ☐ D. BIOLOGICAL
- ☐ E. WASTE OIL PROCESSING
- ☐ F. SOLVENT RECOVERY
- ☐ G. OTHER RECYCLING/RECOVERY
- ☐ H. OTHER (Specify)

05 OTHER
- ☒ A. BUILDINGS ON SITE

warehouse

06 AREA OF SITE
approx. 20 (Acres)

07 COMMENTS

The site consists of fluff piles, above-ground tanks, surface and buried drums, lagoons, and buried solids. These materials were generated during the physical and chemical recycling process of copper wire.

IV. CONTAINMENT

01 CONTAINMENT OF WASTES (Check one)

☐ A. ADEQUATE, SECURE ☒ B. MODERATE ☐ C. INADEQUATE, POOR ☐ D. INSECURE, UNSOUND, DANGEROUS

02 DESCRIPTION OF DRUMS, DIKING, LINERS, BARRIERS, ETC.

Several of the drums were open and others were buried or partially buried. The observed drums appeared to contain cutivated charcoal or carbon mixed with fluff material. According to PA DER Region IV records, none of the lagoons are lined.

V. ACCESSIBILITY

01 WASTE EASILY ACCESSIBLE: ☐ YES ☒ NO

02 COMMENTS

The area is secured by a fence with a locked gate. However, some of the fluff material was observed to be washed off site by the rain during the FIT III site inspection on February 15, 1984.

VI. SOURCES OF INFORMATION (Cite specific references, e.g. state files. Be as complete as possible.)

PA DER Region IV Files and NUS FIT III site inspection on February 15, 1984.

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 5 - WATER, DEMOGRAPHIC, AND ENVIRONMENTAL DATA

I. IDENTIFICATION
01 STATE: PA | 02 SITE NUMBER: 789

VI. ENVIRONMENTAL INFORMATION

01 PERMEABILITY OF UNSATURATED ZONE (Check one)

☐ A. $10^{-6} - 10^{-8}$ cm/sec ☒ B. $10^{-4} - 10^{-6}$ cm/sec ☐ C. $10^{-4} - 10^{-3}$ cm/sec ☐ D. GREATER THAN 10^{-3} cm/sec

02 PERMEABILITY OF BEDROCK (Check one)

☐ A. IMPERMEABLE (Less than 10^{-6} cm/sec) ☒ B. RELATIVELY IMPERMEABLE ($10^{-4} - 10^{-6}$ cm/sec) ☐ C. RELATIVELY PERMEABLE ($10^{-2} - 10^{-4}$ cm/sec) ☐ D. VERY PERMEABLE (Greater than 10^{-2} cm sec)

03 DEPTH TO BEDROCK	04 DEPTH OF CONTAMINATED SOIL ZONE	05 SOIL pH	
> 25 (ft)	0 (ft)	unknown	

06 NET PRECIPITATION	07 ONE YEAR 24 HOUR RAINFALL	08 SLOPE: SITE SLOPE	DIRECTION OF SITE SLOPE	TERRAIN AVERAGE SLOPE
11 (in)	2.75 (in)	0-1 %	northerly	1-5 %

09 FLOOD POTENTIAL
SITE IS IN no YEAR FLOODPLAIN

10 N/A
☐ SITE IS ON BARRIER ISLAND, COASTAL HIGH HAZARD AREA, RIVERINE FLOODWAY

11 DISTANCE TO WETLANDS (5 acre minimum)

ESTUARINE	OTHER
A. N/A (mi)	B. N/A (mi)

12 DISTANCE TO CRITICAL HABITAT (of endangered species)
N/A (mi)
ENDANGERED SPECIES: N/A

13 LAND USE IN VICINITY

DISTANCE TO:

COMMERCIAL/INDUSTRIAL	RESIDENTIAL AREAS; NATIONAL/STATE PARKS, FORESTS, OR WILDLIFE RESERVES	AGRICULTURAL LANDS: PRIME AG LAND	AG LAND
A. 1/2 (mi)	B. 1/2 (mi)	C. > 3 (mi)	D. 1/4 (mi)

14 DESCRIPTION OF SITE IN RELATION TO SURROUNDING TOPOGRAPHY

Domino Salvage/Warehouse 81 is located along PA State Route 54. I-80 is approximately 1/2 mile north of the site and the city of Danville, Pennsylvania, is 3 miles south of the site. The immediate properties, adjacent to the site, is farm land to the south and west, a wood lot is to the south, and PA 54 is to the east. At the intersection of PA 54 and I-80 is a Sheraton Hotel, 3 gas stations, and a McDonald's restaurant.

VII. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sample analysis, reports)

FIT III Site Inspection of 2/15/84 and PA DER Region IV Files.

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EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 7 - OWNER INFORMATION

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
PA	789

II. CURRENT OWNER(S)

01 NAME	02 D+B NUMBER	03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE	05 CITY	06 STATE	07 ZIP CODE
Michael G. Sabia, Jr.		Box 66		Conshohocken	PA	19428
N/A						
N/A						
N/A						

PARENT COMPANY (If applicable)

08 NAME	09 D+B NUMBER	10 STREET ADDRESS (P.O. Box, RFD #, etc.)	11 SIC CODE	12 CITY	13 STATE	14 ZIP CODE
Warehouse 81 Limited Partnership		Box 66		Conshohocken	PA	19428
N/A						
N/A						
N/A						

III. PREVIOUS OWNER(S) (List most recent first)

01 NAME	02 D+B NUMBER	03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE	05 CITY	06 STATE	07 ZIP CODE
PNB Bank - Mr. Van Deuson		Broad and Chesnut Streets		Philadelphia	PA	19103
Allen Levan		Fox Hill Farm, RD 2		Doylestown	PA	18901
N/A						

IV. REALTY OWNER(S) (If applicable - list most recent first)

01 NAME	02 D+B NUMBER	03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE	05 CITY	06 STATE	07 ZIP CODE
N/A						
N/A						
N/A						

V. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sample analysis, reports)

PA DER Region IV Files

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EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 9 - GENERATOR/TRANSPORTER INFORMATION

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
PA	789

II. ON-SITE GENERATOR

01 NAME	02 D+B NUMBER
Current Owner	

03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE

05 CITY	06 STATE	07 ZIP CODE

III. OFF-SITE GENERATOR(S)

01 NAME	02 D+B NUMBER	01 NAME	02 D+B NUMBER
N/A		N/A	

03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE	03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE

05 CITY	06 STATE	07 ZIP CODE	05 CITY	06 STATE	07 ZIP CODE

01 NAME	02 D+B NUMBER	01 NAME	02 D+B NUMBER
N/A		N/A	

03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE	03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE

05 CITY	06 STATE	07 ZIP CODE	05 CITY	06 STATE	07 ZIP CODE

IV. TRANSPORTER(S)

01 NAME	02 D+B NUMBER	01 NAME	02 D+B NUMBER
N/A		N/A	

03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE	03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE

05 CITY	06 STATE	07 ZIP CODE	05 CITY	06 STATE	07 ZIP CODE

01 NAME	02 D+B NUMBER	01 NAME	02 D+B NUMBER
N/A		N/A	

03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE	03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE

05 CITY	06 STATE	07 ZIP CODE	05 CITY	06 STATE	07 ZIP CODE

V. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sample analysis, reports)

There were no records available to FIT III regarding generator information.

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EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 10 - PAST RESPONSE ACTIVITIES

I. IDENTIFICATION
01 STATE: PA | 02 SITE NUMBER: 789

II PAST RESPONSE ACTIVITIES (Continued)

01 ☐ R. BARRIER WALLS CONSTRUCTED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
N/A

01 ☐ S. CAPPING/COVERING — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
N/A

01 ☐ T. BULK TANKAGE REPAIRED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
N/A

01 ☐ U. GROUT CURTAIN CONSTRUCTED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
N/A

01 ☐ V. BOTTOM SEALED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
N/A

01 ☐ W. GAS CONTROL — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
N/A

01 ☐ X. FIRE CONTROL — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
N/A

01 ☐ Y. LEACHATE TREATMENT — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
N/A

01 ☐ Z. AREA EVACUATED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
N/A

01 ☒ 1. ACCESS TO SITE RESTRICTED — 02 DATE 2/15/84 — 03 AGENCY FIT III Report
04 DESCRIPTION
Access is controlled by a fence and locked gate.

01 ☐ 2. POPULATION RELOCATED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
N/A

01 ☒ 3. OTHER REMEDIAL ACTIVITIES — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
A plan for remedial action has been submitted to the PA DER Region IV by Mr. Sabia's consultant. The plan was unacceptable to the PA DER. The reason for the remedial action denial is unknown at this time.

III. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sample analyses, reports)

NUS FIT III Site Inspection dated February 15, 1984 and PA DER personnel.

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SECTION 6

6.0 LABORATORY DATA

6.1 Sample Data Summary

TDD Number F3-8311-12
EPA Number PA-789

SAMPLE DATA SUMMARY
TARGET COMPOUNDS
☑ Organic ☐ Inorganic

Site Name Domino Salvage
Date of Sample 13, Feb 1984

Solid sample results reported as Dry weight.

Sample Number	Sample Description and Location	Phase	Units	Compounds Detected: Toluene	Tetrachloro-ethene	Bromodichloro-methane	Methylene Chloride	Ethylbenzene	Trans-1,3-dichloro propene	Trans-1,2-dichloro ethene	1,1-Dichloro-ethene	Bis(2-ethylhexyl) Phthalate	Di-n-butyl Phthalate	Di-n-octyl Phthalate	Dimethyl Phthalate	Benzyl Butyl Phthalate	Remarks
C4294	Malses Creek at Bridge	Sed	µg/kg	<7◇			16.7◇					<566◇		<566			
C4296	Malses Creek Below Confluence	Sed	µg/kg	<17.5◇	665		<35◇	<28		130		50,750	<700◇	822	<700		
C4298	Union of Ditch	sed	µg/kg	66	140		26◇			162		92,610	<588◇	4,704	<588		
C4300	Malses Creek at Gate	sed	µg/kg	11◇	169	<9.5◇	44◇			342		418,000	<760◇	<760	<760		
C4677	West Pile	sed	µg/g	0.048	0.83		0.59			<0.007	<0.007	102,120	1,076◇	5934			Medium Conc. Units
C4678	Warehouse Pile	sed	µg/g	0.092	2.3		0.11◇					117,600	980◇	3,332			Medium Conc Units
C4815	Middle Pile	sed	µg/g	0.085◇	0.39◇		0.084◇					162,500	1,225◇	3,750			Medium Conc Units
C4833	Pallet Sediment	Sed	µg/g	<0.009◇	0.62		0.035◇			0.039		4,900	<96.5◇	210		<96.5	Medium Conc Units
C4849	Big Lagoon	sed	µg/g	<0.029◇	1.1		<0.059◇			0.55		318		<70.5			Medium Conc Units
C4883	Green Pile	sed	µg/g	<0.011◇	2.1		<0.022◇					187,272		32,832			Medium Conc Units
C4884	Carbon Pile	sed	µg/g		2,288							915.2		<50			Medium Conc Units
C4893	BLANK	sed	µg/kg	<5			<10										
C4837	Tank Lagoon	Sed	µg/kg	<5◇	1015		<10◇										

840008

NOTE: For a review of this data and non-target, tentatively identified compounds, please see the Analytical Quality Assurance section of this report.

◇ Denotes results of questionable qualitative significance based upon quality assurance review of data.

TDD Number F3-8311-12
EPA Number PA-789

SAMPLE DATA SUMMARY
TARGET COMPOUNDS

☑ Organic ☐ Inorganic

Site Name Domino Salvage
Date of Sample 13, Feb 1984

Solid sample results reported as Dry weight.

Sample Number	Sample Description and Location	Phase	Units	Compounds Detected: Benzene	1,2-Dichloroethane	1,1-Dichloroethene	1,1,2-Trichloroethane	Chloroform	2-Hexanone	Styrene	Total Xylenes	Carbon Disulfide	2-Butanone	Acetone	Vinyl Chloride	Trichloroethene	Remarks
C4294	Malses Creek at Bridge	Sed	µg/kg	<7◇				<7◇			<7		<7◇	73.7◇			
C4296	Malses Creek Below Confluence	Sed	µg/kg				18				32		30◇	280◇		245	
C4298	Union of Ditch	Sed	µg/kg	<7.4◇	19			<7.4◇	9◇				36◇	206◇		78	
C4300	Malses Creek at Gate	Sed	µg/kg				19	<9.5◇	<9.5◇			59			106	84	
C4677	West Pile	Sed	µg/g	<0.007◇		<0.007	0.041	0.032◇	0.023◇			0.099	0.030◇	0.19◇			Medium Conc. Units
C4678	Warehouse Pile	Sed	µg/g				0.078	<0.049◇	<0.049◇					<0.39◇		<0.098	Medium Conc. Units
C4815	Middle Pile	Sed	µg/g	<0.016◇			0.013 K	<0.016◇	<0.016◇		<0.016			35◇		<0.033	Medium Conc Units
C4833	Pallet Sediment	Sed	µg/g				0.025	<0.009◇	<0.009◇							0.029	Medium Conc Units
C4849	Big Lagoon	Sed	µg/g				0.66	<0.029◇	<0.029◇			<0.029◇		<0.24◇	0.54	0.13	Medium Conc Units
C4883	Green Pile	Sed	µg/g				<0.011	<0.011◇	<0.011◇	<0.011◇	<0.011◇			<0.086◇			Medium Conc Units
C4884	Carbon Pile	Sed	µg/g				78.7	<0.066◇						<0.53◇			Medium Conc Units
C4893	BLANK	Sed	µg/kg					<5	<5				<5	<40			
C4837	TANK LAGOON	Sed	µg/kg				97	<5◇	<5◇			<5◇	67◇	872◇		<10	

NOTE: For a review of this data and non-target, tentatively identified compounds, please see the Analytical Quality Assurance section of this report.

◇ Denotes results of questionable qualitative significance based upon quality assurance review of data.

K-Approximate value: detected below quantitation limit.

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TDD Number F3-8311-12
EPA Number PA-789

SAMPLE DATA SUMMARY
TARGET COMPOUNDS
☑ Organic ☐ Inorganic

Site Name Domino Salvage
Date of Sample 13, Feb 1984

— Solid sample results reported as Dry weight. —

Compounds Detected

Sample Number	Sample Description and Location	Phase	Units	2,4-Dimethyl-Phenol	4-Methyl-Phenol	Phenol	Benzoic Acid	Benzyl Alcohol	Anthracene	Benzo (a) Anthracene	Pyrene	Benzo (a) Pyrene	Acenaphthene	Fluoranthene	Benzo (b) Fluoranthene	Benzo (k) Fluoranthene	Remarks
4294	Malses Creek at Bridge	Sed	µg/kg				<5560		<556	<566	862	<1112	<556	1015	<1112	<1112	
4296	Malses Creek Below Confluence	Sed	µg/kg				<7,000			<700	<700			<700			
4298	Union of Ditch	Sed	µg/kg	2940	1087	1323		<1176									
4300	Malses Creek at GATE	Sed	µg/kg	<760		<760											
4677	West Pile	Sed	µg/g														Medium Conc. Units
4678	Warehouse Pile	Sed	µg/g														Medium Conc Units
4815	Middle Pile	Sed	µg/g														Medium Conc Units
4833	Pallet Sediment	Sed	µg/g														Medium Conc Units
4849	Big Lagoon	Sed	µg/g														Medium Conc Units
4883	Green Pile	Sed	µg/g														Medium Conc Units
4884	Carbon Pile	Sed	µg/g														Medium Conc Units
4893	BLANK	Sed	µg/kg														
4837	Tank Lagoon	Sed	µg/kg														

NOTE: For a review of this data and non-target, tentatively identified compounds, please see the Analytical Quality Assurance section of this report.

◇ Denotes results of questionable qualitative significance based upon quality assurance review of data.

TDD Number F3-8311-12
EPA Number PA-789

SAMPLE DATA SUMMARY
TARGET COMPOUNDS
☑ Organic ☐ Inorganic

Site Name Domino Salvage
Date of Sample 13, Feb 1984

— Solid sample results reported as Dry weight.

Compounds Detected

Sample Number	Sample Description and Location	Phase	Units	Chrysene	Fluorene	Phenanthrene	Naphthalene	2-methyl-Naphthalene	α-BHC	Heptachlor	4,4'-DDT	4,4'-DDE	4,4'-DDD	PCB 1248			Remarks
C4294	Malses Creek at Bridge	Sed	µg/kg	<2224	<556	890	<556				<13.9◇		<13.9◇				
C4296	Malses Creek Below Confluence	Sed	µg/kg	<2800		<700	<700	<1,400						796			
C4298	Union of Ditch	Sed	µg/kg				<588	<1176					<14.7◇				
C4300	Malses Creek at GATE	Sed	µg/kg											5,361			
C4677	West Pile	Sed	µg/g								<6.9◇						Medium Conc. Units
C4678	Warehouse Pile	Sed	µg/g								<9.8◇						Medium Conc Units
C4815	Middle Pile	Sed	µg/g														Medium Conc. Units.
C4833	Pallet Sediment	Sed	µg/g														Medium Conc. Units
C4849	Big LAGOON	Sed	µg/g														Medium Conc. Units
C4883	Green Pile	Sed	µg/g									2.8◇					Medium Conc Units
C4884	Carbon Pile	Sed	µg/g							0.22◇	<0.72◇	<0.72◇					Medium Conc Units
C4893	BLANK	Sed	µg/kg														
C4837	TANK LAGOON	Sed	µg/kg						<10◇								

TC0000

NOTE: For a review of this data and non-target, tentatively identified compounds, please see the Analytical Quality Assurance section of this report.

◇ Denotes results of questionable qualitative significance based upon quality assurance review of data.

TDD Number: F3-8311-12

EPA Number: PA-789

SAMPLE DATA SUMMARY
TARGET POLLUTANT

☒ Organic ☐ Inorganic

Site Name: Lemon Salvage

Date of Sample: 13 Feb 1984

Compounds Detected

Sample Number	Sample Description and Location	Phase	Units	Pyrene	Benzene	Chlorobenzene	1,1,2-Trichloroethane	1,1-Dichloroethene	trans-1,2-Dichloroethene	Methylene Chloride	Tetrachloroethene	Toluene	Trichlorofluoroethene	Vinyl Chloride	Acetone	2-Butanone	Remarks
C4243	Masses Creek Bridge	Aq	ug/l	—	—	—	—	—		30◇			—	—	—	—	
C7977	Farm House	Aq	ug/l	—	—	—	—	—	—		22	—	98	—	—	—	
C4834	Pallet Location	Aq	ug/l	—	—	—	—		18	24◇	36◇		3K	—	—	—	
C4835	Big Location	Aq	ug/l	—	—	—	58	—	113	—	200	—	66	13	—	—	
C4245	Masses Creek Below Confluence	Aq	ug/l	—	—	—	—	—	70	—	236	—	56	—	—	—	
C4297	Union of Drainage Ditch	Aq	ug/l	—	—	—	80	14	143	—	179	—	57	14	—	—	
4244	Masses Creek Near Gate	Aq	ug/l	—	—	—	17	—	233	—	56	—	23	63	65K◇	—	
4679	Well #7	Aq	ug/l	—	—	—	—	—	—	—	—	—	4K◇	—	—	—	
4680	Well #1	Aq	ug/l	—	—	—	—	—	—	10◇	9	—	—	—	—	—	
4681	Well #4	Aq	ug/l	—	—	—	—	—	—	1080	364	—	31	—	4388◇	—	
4885	On Site Water Supply	Aq	ug/l	—	—	—	—	—	—	—	791	—	24	—	—	—	
4886	New Well	Aq	ug/l	—	14◇	—	—	—	323	—	29◇	—	24	21	—	—	
4890	Cope House Well	Aq	ug/l	—	—	—	—	—	—	—	4.6K◇	—	—	—	—	—	
4891	Barn Well	Aq	ug/l	—	—	—	—	—	—	3K◇	2.4K◇	—	—	—	—	—	

NOTE: For a review of this data and non-target, tentatively identified compounds, please see the Analytical Quality Assurance section of this report.

◇ Denotes results of questionable qualitative significance based upon quality assurance review of data.

— K-Approximate value; detected

TDD Number [redacted]

EPA Number AA-789

SAMPLE DATA SUMMARY
TARGET COMPOUNDS

☐ Organic ☐ Inorganic

Site Name [redacted]

Date of Sample [redacted]

K-Approximate value: detected below quantitation limit.

Sample Number	Sample Description and Location	Phase	Units	Compounds Detected: Pyrene	Benzene	Chlorobenzene	1,1,2-trichloroethane	1,1-dichloroethane	trans-1,2-dichloroethene	Methylene Chloride	Tetrachloroethene	Ethylbenzene	Toluene	Trichloroethene	Vinyl Chloride	Acetone	2-Butanone	Remarks
c4892	Blank Aq	Aq	ug/l	—	—	—	—	—	—	10	—	—	—	—	—	—	—	
c4894	Tank Lagoon	Aq	ug/l	—	—	—	34	—	7	—	30	—	4K	—	—	—	—	
c4936	School Well	Aq	ug/l	—	—	—	—	—	—	—	—	—	5	—	—	—	—	
c4889	Left Tank	oil	ug/kg	—	1900K	—	—	—	—	9400◇	4.8×10^4	—	—	—	—	15,000K◇		Mid conc
c4888	Right Tank sol	oil	ug/kg	—	—	—	—	—	—	19,000◇	4.9×10^4	—	20,000K	—	—	—	—	Mid conc (two phase)
c4887	Middle Tank	oil	ug/kg	—	3500K	—	—	—	—	25,000◇	4.2×10^4	770K	—	—	—	15,000K◇		Mid conc
c4888	Right Tank Aq	Aq	ug/l	—	—	—	710	—	—	370◇	290	—	—	—	—	—		low conc (two phase)

NOTE: For a review of this data and non-target, tentatively identified compounds, please see the Analytical Quality Assurance section of this report.

◇ Denotes results of questionable qualitative significance based upon quality assurance review of data

TDL Number -83-12
EPA Number PA-789

SA[illegible]DA [illegible]
ET C[illegible]OUND

☒ Organic ☐ Inorganic

te N D Sa[illegible]
Date of Sample 13 Feb 1987

Sample Number	Sample Description and Location	Phase	Units	Compounds Detected: Dieldrin	α-Endosulfan	Endosulfan Sulfate	Endrin	β-BHC	4,4'-DDE								Remarks
C4293	Masses Creek Below	Aq	ug/l	—	—	—	—	—	—								
C7977	Farm House	Aq	ug/l	—	—	—	—	—	—								
C4834	Pilot Lagoon	Aq	ug/l	—	—	—	—	—	—								
C4835	Big Lagoon	Aq	ug/l	—	—	—	—	—	—								
C4295	Masses Creek Below Confluence	Aq	ug/l	—	—	—	—	—	—								
C4297	Union of Drainage Ditch	Aq	ug/l	—	—	—	—	—	—								
C4299	Masses Creek Near Gate	Aq	ug/l	—	—	—	—	—	—								
C4679	Well #7	Aq	ug/l	—	—	0.2◇	—	—	—								
C4680	Well #1	Aq	ug/l	—	—	—	—	—	—								
C4681	Well #4	Aq	ug/l	—	—	—	—	—	—								
C4885	On Site Water Supply	Aq	ug/l	—	—	—	—	—	—								
C4886	New Well	Aq	ug/l	—	—	—	—	—	—								
C4890	Cope House Well	Aq	ug/l	—	—	—	—	—	—								
C4891	Barn Well	Aq	ug/l	—	—	—	—	—	—								

NOTE: For a review of this data and non-target, tentatively identified compounds, please see the Analytical Quality Assurance section of this report.

◇ Denotes results of questionable qualitative significance based upon quality assurance review of data.

— [illegible]

K Approximate value[illegible] detected

TDD Number F3-3511-12

EPA Number PA-789

SELECTED [redacted]UM
TARGET COMPOUNDS

☑ Organic ☐ Inorganic

Site Name [redacted]

Date of Sample

Sample Number	Sample Description and Location	Phase	Units	Compounds Detected: Dieldrin	α-Endosulfan	Endosulfan Sulfate	Endrin	β-BHC	4,4'-DDE	PCB 1254							Remarks
C4892	BLANK Aq	Aq	ug/l	—	—	—	—	—	—	—							
C4894	TANK LAGOON	Aq	ug/l	0.7◇	0.5◇	0.1◇	0.1◇	0.1◇	0.7◇	—							
C4936	School Well	Aq	ug/l	—	—	—	—	—	—	—							
C4889	Left Tank	0.1	ug/kg	—	—	—	—	—	—	4150							med conc
C4888	Right Tank	0.1	ug/kg	—	—	—	—	—	—	—							med conc
C4887	Middle Tank	0.1	ug/kg	—	—	—	—	—	—	3260							med conc
C4888	Right Tank lg	Aq	ug/l	—	—	—	—	—	—	—							low conc trip blk

NOTE: For a review of this data and non-target, tentatively identified compounds, please see the Analytical Quality Assurance section of this report.

◇ Denotes results of questionable qualitative significance based upon quality assurance review of data.

— K-Approximate value: detected —

T... Numb... F3-071-12
EPA Number PA-789

SAMPLE DATA SUMMARY
...RGET COMPOUNDS
☒ Organic ☐ Inorganic

Site Name Dunlap Salvage
Date of Sample 13 Feb ...

Compounds Detected

Sample Number	Sample Description and Location	Phase	Units	2,4 dimethylphenol	Pentachlorophenol	Phenol	Benzoic Acid	4-methylphenol	Acenaphthene	1,2,4-trichloro-Benzene	1,4-dichloro-benzene	2,4-dinitrotoluene	N-nitrosodi-propyl-Amine	bis(2-ethylhexyl) phthalate	di-n-butyl phthalate	di-n-octyl phthalate	Remarks
c4293	Mauses Creek Bridge	Aq	ug/l	—	—	—	—	—	—	—	—	—	—	16K◇	—	23	
c7477	Farm House	Aq	ug/l	—	—	—	—	—	—	—	—	—	—	—	—	—	
c4834	Pallet Lagoon	Aq	ug/l	—	—	—	—	—	—	—	—	—	—	80	—	—	
c4835	Big Lagoon	Aq	ug/l	23	—	—	—	20	—	—	—	—	—	1143	—	45	
c4295	Mauses Creek Below Confluence	Aq	ug/l	—	—	—	—	—	—	—	—	—	—	29.4◇	—	67.2	
4297	Union of Drainage ditch	Aq	ug/l	132	—	183	—	428	—	—	—	—	—	11K◇	—	—	
4299	Mauses Creek Near Gate	Aq	ug/l	21	—	—	—	—	—	—	—	—	—	288	—	—	
4679	Well #7	Aq	ug/l	—	—	—	—	—	—	—	—	—	—	—	—	—	
4680	Well #1	Aq	ug/l	—	—	—	—	—	—	—	—	—	—	—	—	—	
4681	Well #4	Aq	ug/l	—	—	—	—	—	—	—	—	—	—	36◇	—	42	
4885	On site Water Supply	Aq	ug/l	—	—	—	—	—	—	—	—	—	—	—	—	—	
4886	New Well	Aq	ug/l	—	—	—	—	—	—	—	—	—	—	—	—	—	
4890	Cope House Well	Aq	ug/l	—	—	—	—	—	—	—	—	—	—	—	—	—	
4891	Barn Well	Aq	ug/l	—	—	—	—	—	—	—	—	—	—	—	—	—	

E: For a review of this data and non-target, tentatively identified compounds, please see the Analytical Quality Assurance section of this report.

◇ Denotes results of questionable qualitative significance based upon quality assurance review of data.

TDD Number F3-8311-12

EPA Number PA-789

PLE[illegible] SUM Y
TARGET COMPOUNDS

☒ Organic ☐ Inorganic

Site Name [illegible]

Date of Sample [illegible]

Sample Number	Sample Description and Location	Phase	Units	Compounds Detected: 2,4 dimethylphenol	Pentachlorophenol	Phenol	Benzoic Acid	4-methylphenol	Acenaphthene	1,2,4-trichlorobenzene	1,4-dichlorobenzene	2,4-dinitrotoluene	N-nitrosodipropylamine	bis(2-Ethylhexyl) phthalate	di-n-butyl phthalate	di-n-octyl phthalate	Remarks
c4892	Blank Aq	Aq	ug/l	—	—	—	—	—	—	—	—	—	—	—	—	—	
c4894	Tank Lagoon	Aq	ug/l	—	—	—	—	—	—	—	—	—	—	45	—	—	
c4936	School Well	Aq	ug/l	—	—	—	—	—	—	—	—	—	—	—	—	—	
c4889	Left Tank	0.1	ug/kg	—	—	—	—	—	—	—	—	—	—	—	—	—	med conc
c4888	Right Tank	0.1	ug/kg	—	—	—	—	—	—	—	—	—	—	—	—	—	med conc tue phase
c4887	Middle Tank	0.1	ug/kg	—	—	—	—	—	—	—	—	—	—	—	—	—	med conc
c4888	Right Tank lq	Aq	ug/l	—	—	—	—	—	—	—	—	—	—	—	—	—	low conc tue phase

NOTE: For a review of this data and non-target, tentatively identified compounds, please see the Analytical Quality Assurance section of this report.

◇ Denotes results of questionable qualitative significance based upon quality assurance review of data.

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..ARG... ..OMPC ....S

... Numb... F3 wall - ...
EPA Number PA-789

☐ Organic ☒ Inorganic

Site Name Mon.no Sylacauga
Date of Sample 13 Feb 1984

Sample Number	Sample Description and Location	Phase	Units	Compounds Detected: Aluminum	Chromium	Barium	Beryllium	Cobalt	Copper	Iron	Nickel	Manganese	Zinc	Boron	Vanadium	Silver	Remarks
mc 3732	Mauses Creek Bridge	Sed	mg/kg	7225	17.1	60.7	1.0	14	24.4◇	25685	30.3	632	72.3		17.7		
mc 3733	Mauses Creek Bridge	Aq	ug/l	1331					202◇	2482		131	21◇				
mc 2966	Middle Pile	Sed	mg/kg	200	32.3	59.4			16545	1646		4.1	185			1.9	
mc 2967	Pallet Sed	Sed	mg/kg	938	7.9	32.5			2747	2161	4.1	34.8	123			0.71	
mc 2968	Pallet Lagoon	Aq	ug/l	376◇					2428	1018		653	524				
mc 2969	Big Lagoon	Aq	ug/l	671◇					8517	2989		623	549				
mc 3734	Mauses Creek Below Confluence	Aq	ug/l	402◇					442	957		270	167				
mc 3735	Mauses Creek Below Confluence	Sed	mg/kg	7310	12.1	69.8	0.78	9.8	422	17475	14.9	444	164		14.3		
mc 3736	Union of Drainage Ditch	Aq	ug/l	418◇					5805	2538		525	1326				
mc 3737	Union of Drainage Ditch	Sed	mg/kg	4765	6.8	58.3	0.60	7.1	6110	6980	8.4	55.4	391				
mc 3738	Mauses Creek near gate	Aq	ug/l	358◇					3055	1477		467	473				
mc 3739	Mauses Creek near gate	Sed	mg/kg	8485	11.1	84.3	0.73	6.5	409	14935	11.4	181	112		17.5		
mc 3740	West unprocessed pile	Sed	mg/kg	330	42.4	75.5			63850	663	2.4	7.4				1.9	
mc 3741	Warehouse Pile	Sed	mg/kg	371	19.7	105			9220	506	5.5	6.9	420	2.3		2.1	

NOTE: For a review of this data and non-target, tentatively identified compounds, please see the Analytical Quality Assurance section of this report.

◇ Denotes results of questionable qualitative significance based upon quality assurance review of data.

TDD Number F5-8511-12
EPA Number PA-789

PLE SUM Y
TARGET COMPOUNDS
☐ Organic ☒ Inorganic

Site Name Domino Salvage
Date of Sample 13 Feb 1984

Sample Number	Sample Description and Location	Phase	Units	Compounds Detected: Arsenic	Antimony	Selenium	Thallium	Mercury	Tin	Cadmium	Lead		Cyanide					Remarks
mc3732	Mauses Creek Bridge	Sed	mg/kg	9.5					1.1◇	0.18	23.5		0.43					
mc3733	Mauses Creek Bridge	Aq	ug/l								17◇							
mc2966	Middle Pile	Sed	mg/kg		123				416	1.5	1440 J							
mc2967	Pallet Sed	Sed	mg/kg		2.5				216	3.4	725 J		0.53					—
mc2968	Pallet Lagoon	Aq	ug/l		25				3800	11	6.1◇							
mc2969	Big Lagoon	Aq	ug/l		39				59◇	2.5	36.5◇							—
mc3734	Mauses Creek Below Confluence	Aq	ug/l							2.1◇	29◇							
mc3735	Mauses Creek Below Confluence	Sed	mg/kg	4.3		0.10				0.15◇	52		0.30					
mc3736	Union of Drainage Ditch	Aq	ug/l						28◇	34	454		57.0					
mc3737	Union of Drainage Ditch	Sed	mg/kg	1.1					2.0◇	15.2	375		1.53					
mc3738	Mauses Creek near gate	Aq	ug/l							9.8	178							
mc3739	Mauses Creek near gate	Sed	mg/kg	3.0					2.1◇	1.6	60		0.45					
mc3740	West unprocessed pile	Sed	mg/kg		84				805 J	8.2	2770 J		1.43					
mc3741	Warehouse Pile	Sed	mg/kg		61				450 J	3.4	1230 J		0.80					

NOTE: For a review of this data and non-target, tentatively identified compounds, please see the Analytical Quality Assurance section of this report.

◇ Denotes results of questionable qualitative significance based upon quality assurance review of data.

Num... F3-11

EPA Number PA-789

SAMPLE DATA SUMMARY
TARGET COMPOUNDS

☐ Organic ☒ Inorganic

Site Name Pomeroy Salvage

Date of Sample 13 Feb 1987

Sample Number	Sample Description and Location	Phase	Units	Compounds Detected: Aluminum	Chromium	Barium	Beryllium	Cobalt	Copper	Iron	Nickel	Manganese	Zinc	Boron	Vanadium	Silver	Remarks
mc3742	Well #7	Aq	ug/l	525◇					247◇	43010		178	246				
mc3743	Well #1	Aq	ug/l	124900	131	928	10◇	74	517	206◇	221	7292	438				
mc3744	Well #4	Aq	ug/l	719	11◇				2072	11340		347	141				
mc3745	Green Pile	Sed	mg/kg	198	39.5	15.5			14145	378		10.9	60.7			0.80	
mc3746	Carbon Pile	Sed	mg/kg	384	67.3	19.8			8490	552		2.1	72.6			0.46	
mc3747	ON site Water Supply	Aq	ug/l							213◇			61◇				
mc3748	New Well	Aq	ug/l	2610	37.0	710		65	438	61620	140	13430	223				
mc3752	Cope House Well	Aq	ug/l						60◇	243◇			43◇				
mc3753	BARN WELL	Aq	ug/l						103◇	168◇			38◇				
mc3754	Blank Aq	Aq	ug/l						59	111			20				
mc3755	Blank Sed	Sed	mg/kg							5.2			1.1				
mc3756	Tank Lagoon	Aq	ug/l	528◇					357	1841		154	387				
mc3779	School Well	Aq	ug/l							231◇		14	116				
mc3780	Tank Lagoon	Sed	mg/kg	10820	11.8	38.4	0.44◇	8.2	159	20845	14.4	317	52.2		13.8		

NOTE: For a review of this data and non-target, tentatively identified compounds, please see the Analytical Quality Assurance section of this report.

◇ Denotes results of questionable qualitative significance based upon quality assurance review of data.

TDD Number F3-8311-12
EPA Number PA-789

...PLE ...SUM ...Y
TARGET COMPOUNDS

☐ Organic ☒ Inorganic

Site Name Domino Sludge
Date of Sample 13 Feb 1984

Sample Number	Sample Description and Location	Phase	Units	Compounds Detected: Arsenic	Antimony	Selenium	Thallium	Mercury	Tin	Cadmium	Lead	Cyanide						Remarks
mc3742	Well #7	Aq	ug/l						270		35◇							
mc3743	Well #1	Aq	ug/l	14					169	1.5◇	241							
mc3744	Well #4	Aq	ug/l					0.6	349	1.8◇	78◇		14					
mc3745	Green Pile	Sed	mg/kg		17				980 SIP	2.1	1620 SIP							
mc3746	Carbon Pile	Sol	mg/kg		27.5				895 SIP	1.7	11350 SIP							
mc3747	On Site Water Supply	Aq	ug/l						45◇	1.6◇	11◇							
mc3748	New Well	Aq	ug/l	10					37◇	1.5◇	109							
mc3752	Cope House well	Aq	ug/l						28◇		24◇							
mc3753	Barn Well	Aq	ug/l						23◇		43◇							
mc3754	Blank Aq	Aq	ug/l								16							
mc3755	Blank Sed	Sed	mg/kg								0.55							
mc3756	Tank Lagoon	Aq	ug/l						23◇		264							
mc3779	School Well	Aq	ug/l								22◇							
mc3780	Tank Lagoon	Sed	mg/kg	5.6		0.10			1.6◇	0.18	48.3							

NOTE: For a review of this data and non-target, tentatively identified compounds, please see the Analytical Quality Assurance section of this report.

◇ Denotes results of questionable qualitative significance based upon quality assurance review of data.

Case Number 53-...1-12
EPA Number PA-789

...LE ...SUM...
TARGET COMPOUNDS
☐ Organic ☒ Inorganic

Site Name Domino Sludge
Date of Sample 13 Feb 1984

Compounds Detected

Sample Number	Sample Description and Location	Phase	Units	Aluminum	Chromium	Barium	Beryllium	Cobalt	Copper	Iron	Nickel	Manganese	Zinc	Boron	Vanadium	Silver	Remarks
MC3781	Big Lagoon	Sed	mg/kg	7615	44	65.1	0.54	5.4	6530	15840	13.8	125	100		14.4	0.83	
MC3800	Farm House	Aq	ug/l						44◇	262◇			66◇				
MC-3749	Middle Tank	Oil	mg/kg								44.8c◇						
MC-3750	Right Tank	Oil	mg/kg	73.8◇						121c◇		3.0◇	42.5c◇				
MC-3751	Left Tank	Oil	mg/kg	123					635c	273c◇	665c	4.8◇	493c				

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NOTE: For a review of this data and non-target, tentatively identified compounds, please see the Analytical Quality Assurance section of this report.

◇ Denotes results of questionable qualitative significance based upon quality assurance review of data.

TDD Number F3-8311-12

EPA Number PA-789

PL SUR Y
TARGET COMPOUNDS

☐ Organic ☒ Inorganic

Site Name Domino Salvage

Date of Sample 13 Feb 1984

Compounds Detected

Sample Number	Sample Description and Location	Phase	Units	Arsenic	Antimony	Selenium	Thallium	Mercury	Tin	Cadmium	Lead	Cyanide					Remarks
MC 3781	Big Lagoon	Sed	mg/kg	0.5	4.1				144	1.9	4470						
MC 3800	Farm House	Ag	ug/l								34◇						
MC-3749	Middle TANK	OIL	mg/kg						9.0◇	1.0◇							CYANIDE NOT ANALYZED
MC-3750	Right TANK	OIL	mg/kg						19.0◇	1.3◇							CYANIDE NOT ANALYZED
MC-3751	Left TANK	OIL	mg/kg						6.5◇	1.1◇							CYANIDE NOT ANALYZED

NOTE: For a review of this data and non-target, tentatively identified compounds, please see the Analytical Quality Assurance section of this report.

◇ Denotes results of questionable qualitative significance based upon quality assurance review of data.

6.2 Quality Assurance Review

6.2.1 Organic Data: Lab Case 2420/982C

6.2.1.1 Introduction

The organic analyses of samples for this case were performed by 3 CLP laboratories. All aqueous samples were analyzed by one laboratory, all sediment samples were analyzed by a second laboratory, and all oil samples were analyzed by a third laboratory. The findings offered in this report are based upon a general review of all available data, blank analysis results, surrogate and matrix spike recoveries, duplicate analysis results, evaluation of GC confirmations, and target compound matching quality.

6.2.1.2 Qualifiers

It is recommended that this data package be utilized only with the following qualifier statements:

- The following results may be qualitatively questionable:

Compound	Samples with Questionable Results
2-Hexanone	All positive sample results
Acetone	All postive sample results
2-Butanone	All positive sample results
Chloroform	All positive sample results
Methylene Chloride	All positive sample results, except C-4681 and C-4677
Toluene	All positive sample results, except C-4298, C-4677, C-4678, and C-4887
Benzene	All positive sample results, except C-4887 and C-4889
Tetrachloroethene	C-4815, C-4834, C-4886, C-4890, and C-4891
Trichloroethene	C-4679

Compound	Samples with Questionable Results
Carbon Disulfide	C-4849 and C-4837
Styrene	C-4883
O-xylene	C-4883
Bromodichloromethane	C-4300
Di-n-butyl phthalate	All positive sample results
Bis(2-ethylhexyl)phthalate	C-4293, C-4295, C-4297, and C-4681
Endosulfan sulfate	C-4679 and C-4894
Alpha-BHC	C-4837
4,4'-DDD	C-4294 and C-4298
4,4'-DDE	C-4883, C-4884, and C-4894
Heptachlor	C-4884
Alpha-endosulfan	C-4894
4,4'-DDT	C-4294, C-4677, C-4678, and C-4884
Endrin	C-4894
Dieldrin	C-4894
Beta-BHC	C-4894

The aforementioned results were designated questionable because there is evidence to doubt the presence of these compounds at concentrations less than or similar to the levels reported. However, with certain exceptions listed below, it can be assumed that concentrations significantly greater than the levels reported cannot be present.

- Actual detection limits for di-n-butyl phthalate, p-chloro-m-cresol, and 4-nitrophenol in sample C-4295 may be significantly higher than reported.

- Actual detection limits for pentachlorophenol and 4-nitrophenol in sample C-4300 may be significantly higher than reported. Furthermore, the actual detection limits for other acid compounds in this sample may also be significantly higher than reported. (excluding phenol and 2,4-dimethylphenol)

- The actual detection limit for some acid compounds in sample C-4886 may be significantly higher than reported.

- Although the positive result for di-n-butyl phthalate was questioned in sample C-4300, if this compound is present the reported concentration may not reflect the average concentration of this compound.

- The actual detection limits for pesticides in samples C-4296, C-4298, C-4300, C-4837, C-4677, C-4678, C-4833, C-4849, C-4883, C-4884, C-4887, C-4888 (oil), and C-4889 may be significantly higher than reported. (Although the presence DDT in sample C-4677, C-4678, and C-4884; DDD in sample C-4298; alpha-BHC in sample C-4837; DDE in samples C-4883 and C-4884; and heptachlor in sample C-4884 was questioned, if these compounds are present, the actual concentrations may be significantly higher than reported.)

- The actual detection limits for 1,2,4-trichlorobenzene, acenaphthene, 2,6-dinitrotoluene, di-n-butyl phthalate, pyrene, N-nitrosodipropylamine, 1,4-dichlorobenzene, pentachlorophenol, 4-chloro-3-methylphenol, phenol, 2-chlorophenol, dieldrin, endrin, and 4-nitrophenol may be significantly higher than reported in sample C-4887.

- Although negative result for PCBs in samples C-4887 and C-4889 were initially report, the laboratory was requested to reevaluate the chromatograms. The positive results of this resubmittal have been incorporated into the Sample Data Summary.

- Per EPA request, tentatively identified compounds, which were reported by the laboratory, are not included in this report.

6.2.1.3 Findings

- Laboratory and/or field blank analysis revealed the presence of 2-hexanone, acetone, 2-butanone, chloroform, toluene, methylene chloride, benzene, tetrachloroethene, carbon disulfide, di-n-butyl phthalate, and bis(2-ethylhexyl) phthalate at suffient levels to question the aforementioned sample results.

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- All positive results for acetone were questioned since this solvent was used as a decontamination rinse.

- The following may also be a result of chromatographic ghosting:

Sample Number	Compounds Reported	Preceding Run
C-4834	Tetrachloroethene	C-4681
C-4679	Trichloroethene	C-4297
C-4686	Tetrachloroethene	C-4885
C-4890	Tetrachloroethene	100ng - standard
C-4891	Tetrachloroethene	C-4890
C-4300	Bromodichloromethane	50ng - standard
	2-hexanone	
	Toluene	
C-4833	Chloroform	50ng-standard
	2-hexanone	
	Toluene	
C-4677	Benzene	200ng-standard
C-4637	Chloroform	C-4677
	2-hexanone	
	Carbon Disulfide	
	Toluene	
C-4883	Chloroform	50ng-standard
	2-hexanone	
	Styrene	
	O-xylene	
	Toluene	

- All positive results for 4,4'-DDT, 4,4'-DDE, 4,4'-DDD, alpha-BHC, beta-BHC, alpha-endosulfan, endosulfan sulfate, heptachlor, endrin, and dieldrin were questioned because the method of identification depends on a single peak response on dual GC columns. This methodology is subject to random chromatographic interferences.

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- Very low or zero recovery was reported for the matrix spike compounds: di-n-butyl phthalate, p-chloro-m-cresol, and 4-nitrophenol in sample C-4295.

- Zero recovery was reported for the matrix spike componds: pentachlorophenol and 4-nitrophenol in sample C-4300. In addition, zero recovery was reported for 1 acid surrogate spike in this sample. Phenol and 2,4-dimethylphenol are not effected since the surrogate compound d_5-phenol was recovered within acceptable criteria.

- Zero or very low recovery was reported for all 3 acid surrogate compounds in sample C-4886.

- Duplicate matrix spike recoveries for di-n-butyl phthalate in sample C-4300 revealed poor precision.

- Zero recovery was reported for the pesticide surrogate compound dibutyl chlorendate in samples: C-4296, C-4298, C-4300, C-4837, C-4677, C-4833, C-4849, C-4883, C-4884, C-4887, C-4888 (oil), and C-4889.

- Zero recovery was reported for the matrix spike compounds: 1,2,4-trichlorobenzene, acenaphthene, 2,6-dinitrotoluene, di-n-butyl phthalate, pyrene, N-nitrosodipropylamine, 1,4-dichlorobenzene, pentachlorophenol, 4-chloro-3-methylphenol, phenol, 2-chlorophenol, dieldrin, endrin, and 4-nitrophenol in sample C-4887.

- Examination of sample chromatograms indicated the presence of PCB-1254 in samples C-4887 and C-4889. The laboratory was requested to provide standards and quantitate these findings. However, it should be noted that the concentration of PCB-1254 in both samples is below the detection limit of 5,000 ug/kg initially reported by the laboratory.

- Tentatively identified compounds were examined only for possible target compound identifications.

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6.2.1.4 Summary

The attached Quality Assurance Review has identified the aforementioned areas of concern. Please see the accompanying Support Documentation for specifics in this Quality Assurance Review.

Report prepared by Rock J. Vitale Date: August 15, 1984

6.2.2 Inorganic Data: Lab Case 2420

6.2.2.1 Introduction

The findings offered in this report are based upon a general review of all available inorganic laboratory data, including a special analytical service (Task I and II for oil samples). The data package was examined for blank analysis results, matrix spike results, duplicate analysis results, and quality assurance documentation.

6.2.2.2 Qualifiers

It is recommended that this data package be utilized only with the following qualifier statements:

- The following results are considered questionable:

Constituent	Sample with Questionable Resutlts
aluminum	MC-2968, MC-2969, MC-3734, MC-3736, MC-3738, MC-3742, MC-3750, and MC-3756
chromium	MC-3744
beryllium	MC-3743 and MC-3780
copper	MC-3732, MC-3733, MC-3742, MC-3752, MC-3753, and MC-3800
iron	MC-3743, MC-3747, MC-3750, MC-3751, MC-3752, MC-3753, MC-3779, and MC-3800
nickel	MC-3749
zinc	MC-3733, MC-3747, MC-3752, MC-3753, and MC-3800

Constituent	Sample with Questionable Resutlts
tin	MC-2969, MC-3732, MC-3736, MC-3737, MC-3739, MC-3747, MC-3748, MC-3749, MC-3750, MC-3751, MC-3752, MC-3753, MC-3756, and MC-3780
cadmium	MC-3734, MC-3735, MC-3743, MC-3744, MC-3747, MC-3748, MC-3749, MC-3750, and MC-3751
lead	MC-2968, MC-2969, MC-3733, MC-3734, MC-3742, MC-3744, MC-3747, MC-3752, MC-3753, MC-3779, and MC-3800

The aforementioned results were designated questionable because there is evidence to doubt the presence of these constituents at concentrations less than or similar to the levels reported. However, it can be assumed that concentrations significantly greater than the levels reported cannot be present.

- The reported results for aluminum, copper, nickel, and zinc in sample MC-3751 may not reflect the average concentrations present in this sample. In addition, if iron were actually present, then the reported results for this constituent may not reflect the average concentration present in sample MC-3751.

6.2.2.3 Findings

- Aluminum, chromium, beryllium, copper, iron, nickel, zinc, tin, cadmium, and lead were detected in field and/or laboratory blanks at levels sufficient to question the aforementioned sample results.

- Aluminum, copper, nickel, zinc, and iron exhibited excessive variability in the duplicate analyses for sample MC-3751. This may be due to incomplete combustion of the oil sample during preparation.

6.2.2.4 Summary

The attached Quality Assurance Review has identified blank contamination as the primary area of concern. Please see the accompanying Support Documentation Appendix for specifics on this Quality Assurance Review.

Report prepared by Atwood F. Davis Date: August 15, 1984

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SECTION 7

7.0 TOXICOLOGICAL EVALUATION

7.1 Summary

Several contaminants reported in on-site samples including tetrachlorethylene (PCE), trichloroethylene (TCE), lead, and copper were also measured in groundwater and downstream Mauses Creek samples, suggesting off-site transport of contaminants found on the Domino Salvage site. Such transport may have impacts on human health and the environment. Note that the presence of lead in all off-site aqueous samples was questioned and transport of lead off site in these samples is suggested but not proven by current data.

Four monitoring wells (MWs) and the on-site well revealed the presence of potentially carcinogenic chlorinated solvents such as PCE and TCE, as well as the toxic and moderately toxic metals lead and copper. Groundwater samples also revealed limited evidence of additional chlorinated solvents such as trans-1,2-dichloroethylene, methylene chloride, and vinyl chloride and inorganic contaminants chromium, barium, arsenic, and aluminum. Contaminant concentrations are sufficiently high to possibly preclude future use of groundwater beneath the Domino site for potable purposes. Of particular concern is the on-site well, which is apparently used as a potable source. The highest groundwater concentration of PCE was reported in this well; long-term daily consumption of 2 liters of this well water may result in an increased cancer risk (about 10 cases per 100,000 persons exposed), as well as noncarcinogenic adverse effects.

The potential exists for continued migration of groundwater contaminants off site, which may affect nearby domestic wells. Current results suggest that PCE and TCE and possibly lead have contaminated an off-site well that is apparently downgradient of the site. The Cope domestic well, also apparently downgradient of the site, revealed no reliable evidence of any of the aforementioned contaminants; however, periodic resampling may be indicated to insure that reported solvents and metals have not reached this water source. Other domestic wells (Moll and Baumer residences) are nearby, and samples from these wells may also be indicated to confirm acceptable water quality.

A school well (located north of the site) revealed a low level of TCE and the questionable presence of a low level of lead. The reported TCE concentration is well within the Adjusted Acceptable Daily Intake (AADI); the accompanying potential carcinogenic risk is on the order of 1 case for every million persons exposed. The concentration of lead reported in the school well, if assumed to be real, is within the Maximum Contaminant Level (MCL) set for lead in public water supplies. However, the MCL may not provide an adequate margin of safety to children (who are especially susceptible to the toxic effects of lead), in view of other possible sources of lead intake. While this well appears to be upgradient of the site, resampling may be indicated to confirm or rule out the presence of a potentially significant concentration of lead.

Samples of waste piles, lagoon surface waters, and sediments revealed, in many cases, a pattern of contamination similar to that reported in groundwater. The notable concentrations of PCE, TCE, lead, and copper reported in site environmental samples should not pose substantial threats to human health via probable routes of exposure.

The drainage ditch and Mauses Creek samples, taken downstream of the Domino site, also revealed the presence of PCE, TCE, lead, and copper, suggesting off-site surface transport of contaminants. The concentration of copper and lead (if assumed to be real) reported in Mauses Creek downstream of the site may have adverse effects on some forms of aquatic life.

Other contaminants, including phthalate acid esters, 1,1,2-trichloroethane, and Polychlorinated biphenyls (PCBs) were measured in site environmental samples (but not groundwater). Drainage ditch and Mauses Creek samples also indicated the presence of each of these contaminants.

7.2 Support Data

7.2.1 Scope of Contamination

Groundwater, on-site lagoons, stained soils and sediments, and downgradient surface waters revealed notable concentrations of lead, copper, and various chlorinated aliphatics such as PCE, TCE, vinyl chloride, and methylene chloride. Other contaminants which were reliably reported primarily in stained soils and sediments, as well as in downgradient streams, but not groundwater included several phthalate acid esters, carbon disulfide, dimethyl- and methylphenol. Samples from three 500- to 1,000-gallon storage tanks revealed low levels of PCE, TCE, and benzene.

PCE was reported in the on-site well, used as a potable water source by the Artly family, at a concentration of 364 ug/l. PCE was also reported in the Cope well (4.6 ug/l), but was determined to be questionable by Quality Assurance review. Additional evidence of PCE contamination of groundwater is provided by monitoring and unused domestic well samples which revealed 9 to 364 ug/l of this potentially toxic solvent. PCE was also reported in a number of on-site aqueous and sediment samples, including the tank and big lagoons (30 to 200 ug/l), and the carbon pile (2,288 mg/kg). The highest concentration of PCE was reported in the right storage tank, which revealed 4,900 mg/kg.

Low levels of TCE were reported in the on-site water supply (24 ug/l), the school well (5 ug/l), and 2 on-site monitoring wells (24 to 31 ug/l). On-site lagoon and sediments revealed 3 to 66 ug/l and 29 to 130 ug/kg TCE. The right storage tank revealed about 20,000 ug/kg TCE.

Other chlorinated solvents reported in MW samples and 1 or more on-site samples included vinyl chloride (21 ug/l in the new well), methylene chloride (1,080 ug/l in MW 4), and trans-1,2-dichloroethylene (323 ug/l in the new well). On-site samples revealed 540 ug/kg and 13 ug/l vinyl chloride in the big lagoon sediment and surface water samples, 590 ug/kg methylene chloride in the west pile, 18 to 113 ug/l and 39 to 550 ug/kg trans-1,2-dichloroethylene in the pallet and big lagoon surface waters and sediments.

Low levels of several other organic contaminants were reported in samples of on-site lagoons and disposal piles, but not in groundwater. These contaminants were generally not chlorinated hydrocarbons. Included in this group were bis(2-ethylhexyl) phthalate, reported at concentrations of 45 to 1,143 ug/l in the tank and big lagoon aqueous samples, and 318 to 187,272 mg/kg (18.7 percent) in all on-site soil and sediment samples; 1,1,2-trichloroethane, 34 ug/l in lagoon aqueous samples and less than 11 to 97,000 ug/kg in all on-site soil and sediment samples (including 710 ug/kg in one tank sample) and benzene about 1,900 ug/kg to about 3,500 ug/kg in 2 storage tanks.

Notable inorganic contaminants reported in MW samples included: lead (109 to 241 ug/l in MW 1 and the new well); chromium (131 ug/l in MW 1); arsenic (10 and 14 ug/l in MW 4); barium (710 to 928 ug/l in the new well and MW 1); cobalt (74 ug/l in MW 1); and aluminum (24,610 to 124,900 ug/l in the new well and MW 1). Note that both MW 1 and the new well (both of which revealed the largest number of notable inorganic contaminants) are located on the southwest portion of the site, between the green pile and the west pile.

Inorganic analysis of soil and sediment samples from disposal piles and lagoons generally revealed notable concentrations of lead (48.3 to 11,350 mg/kg) and copper (159 to 63,800 mg/kg).

Aqueous and sediment samples taken from a drainage ditch and Mauses Creek downgradient of the Domino Salvage site revealed a pattern of contamination similar to that reported on the Domino site, suggesting off-site release of several contaminants. PCE, TCE, trans-1,2-dichloroethene, bis(2-ethylhexyl) phthalate, di- and n-octyl phthalate, 2,4-di- and 4-methyl phenol, 1,1,2-trichloroethane, PCBs, and vinyl chloride were all reported in 1 or more drainage ditch samples, as well as on site. None of these contaminants were reliably reported in the Mauses Creek samples taken upstream of the Domino Salvage site.

Notable concentrations of lead and copper were also reported in drainage ditch and downgradient Mauses Creek samples. Excessive concentrations of these metals were not reliably reported in the upstream Mauses Creek samples.

7.2.2 Toxicologic Considerations

7.2.2.1 PCE and TCE

Tetrachloroethylene (PCE) and trichloroethylene (TCE) are structurally related solvents used primarily in dry cleaning operations and metal degreasing. Both TCE and PCE can be found in small quantities in drinking water.

The widespread use of PCE and TCE has resulted in their release into water via aqueous effluents from production plants, consumer industries, and household sewage. PCE and TCE are volatile and generally do not persist in moving surface waters. When introduced into enclosed groundwater, these compounds can remain for extended periods of time.

Acute exposure to PCE and TCE, as with all chlorinated alkenes, may result in central nervous system (CNS) depression, incoordination, and unconsciousness. Inhalation exposure to low levels of either of these solvents may result in irritation of mucous membranes and intoxication, but generally no permanent injury.[1] Threshold levels for induction of early CNS depression in humans have been reported at 170 to 200 ppm for TCE and 100 ppm for PCE.[2,3,4]

Some studies also suggest that TCE and PCE may have carcinogenic potential. National Cancer Institute (NCI) bioassays assessing the carcinogenicity of TCE and PCE were published in 1976 and 1977, respectively. More recent NCI bioassays have been conducted on these chemicals and a draft technical report is available for TCE; the PCE bioassay is currently undergoing analysis. Utilizing the NCI bioassays and other available information, the International Agency for Research on Cancer (IARC) has concluded that PCE and TCE have limited evidence of carcinogenicity in animals and inadequate evidence from available human data. This means that the data suggest a carcinogenic effect in one species, but lack confirmation in others.

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Epidemiological evidence does not indicate that ingestion of low levels of TCE or PCE by humans will lead to cancer. However, in view of the NCI bioassays and IARC conclusions, it is prudent to assume that TCE and PCE may have carcinogenic potential in humans. Dose-response data from the bioassays have been used by the Safe Drinking Water Committee (SDWC) to develop statistical estimates of human cancer risks and are expressed as a probability of cancer after a lifetime consumption of .1 liter/day of water containing a specified amount of TCE or PCE.

The highest concentration of PCE measured on site was in the on-site well (791 ug/l). Contamination of this well may be of concern as this groundwater source is apparently consumed by the Artly family. An earlier sampling (4/83) of this well revealed about 24,000 ug/l PCE. TCE was also reported in this well at a concentration of 24 ug/l in current sample results.

Long-term use of the on-site well as a potable water source may result in some increased carcinogenic risk. Utilizing cancer risks developed by the SDWC, daily consumption of 2 liters of water from the on-site well would results in an increased cancer risk of about 10 cases per 100,000 persons exposed to the reported concentrations of PCE (estimated lifetime risk of 10×10^{-5}), and about 11 cases per 1,000,000 persons exposed to the reported concentration of TCE (estimated lifetime risk of about 11×10^{-6}).[5,6] For comparison purposes, the estimated lifetime risk of death from a cyclone or hurricane is estimated to be 5 to 50 times greater (2×10^{-5}).[7] Taking potential carcinogenic risks into consideration the World Health Organization has recommended tentative limits of 10 and 30 ug/l for PCE and TCE in drinking water. Note that the concentration of PCE in the on-site well far exceeds this recommended limit.

Repeated consumption of water from the on-site well may also pose noncarcinogenic risks. For both PCE and TCE, liver toxicity is considered to be the most sensitive indicator of adverse health effects. An AADI, considering potential noncarcinogenic health effects, has been developed by EPA; these values are 85 ug/l for PCE and 257 ug/l for TCE.[8] The concentration of PCE in the on-site well far exceeds the recommended AADI, suggesting that prolonged consumption of water from this well may also pose noncarcinogenic risks to human health.

Short-term (24 hours) adverse effects would not be expected to occur from limited use of water from the on-site well. The SDWC has developed 24-hour Suggested No-Adverse-Response Levels (SNARLs), which are intended to provide a basis for making judgment of possible short-term health effects. Respective 24-hour SNARLs for PCE and TCE are 172,000 and 105,000 ug/l, well above concentrations reported in the on-site well.[9]

Sampled monitoring wells on site also revealed 9 to 364 ug/l PCE and 24 to 31 ug/l TCE. Theoretical long-term consumption of water from these wells may also result in an increased risk of cancer, based on the SDWC estimates.

Two domestic wells were sampled off site. The school well (located north of Domino Salvage) revealed 5 ug/l TCE and no PCE. No adverse noncarcinogenic effects would be expected to result from consumption of water contaminated with the reported concentration of TCE. Accompanying lifetime carcinogenic risks that may result from long-term consumption of this water are far lower than those associated with consumption of water from the on-site well, on the order of about 1 case for every million persons exposed (1.1×10^{-6}). This 1 in one million lifetime risk is comparable to that incurred by traveling 30 miles by car (risk of accident) or living 2 months in an average stone or brick building (risk of cancer caused by natural radioactivity).[7]

The Cope domestic well (located south of the Domino Salvage site) revealed no PCE or TCE above analytical detection limits. Another domestic well, the farm-house well (currently not used for potable supply), revealed 22 ug/l PCE and 98 ug/l TCE. It should be noted that this well is located between the Cope well and the Domino site, possibly indicating migration of PCE and TCE off site. It must be assumed, therefore, that the potential for continued degradation of groundwater off site may exist. Periodic resampling of the Cope and school wells may be indicated to insure that contaminant concentrations do not approach those of more imminent concern.

Environmental samples taken both on and off the Domino site also revealed measurable levels of PCE and TCE. Lagoon aqueous and sediment samples revealed 30 to 200 ug/l and 620 to 2,288,000 ug/kg PCE (0.23 percent); TCE concentrations were reported at 4 to 66 ug/l and 29 to 130 ug/kg. Three storage tanks on site revealed 42,000 to 9,900,000 ug/kg PCE (about 1 percent) and 20,000 ug/kg TCE.

PCE and TCE are absorbed through intact skin; however, skin exposure is generally insignificant relative to inhalation exposure. During normal industrial use (leading to exposure levels that would likely far exceed any obtained from intermittent contact with PCE and TCE reported on the Domino site), it is not probable that toxic amounts of PCE and TCE will be absorbed through the skin.

While no HNU readings were obtained on site during the inspection (conducted during a heavy rain) note that solvent-like odors were detected by the site inspection team. A more precise assessment of possible inhalation exposure levels, ambient air contaminants, and potential toxic threats cannot be made without additional information. As previously noted, threshold concentrations for subjective complaints following exposure to PCE and TCE are substantial, on the order of 100 ppm for PCE and 170 to 200 ppm for TCE. Note also that the most serious exposures to PCE and TCE generally occur only in a relatively small industrial population.

Current sample results also suggest off-site surface transport of PCE and TCE. Aqueous and sediment drainage ditch samples revealed 56 to 179 ug/l and 140 to 169 ug/kg PCE; TCE was measured in these samples at concentrations of 23 to 57 ug/l and 78 to 84 ug/kg. An aqueous and sediment sample taken in Mauses Creek downstream of the Domino site revealed even higher concentrations of these contaminants in most cases (i.e., 236 ug/l and 665 ug/kg PCE, and 56 ug/l and 245 ug/kg TCE). No PCE or TCE was reported above analytical detection limits in aqueous and sediment samples taken from Mauses Creek upstream of the site.

The concentrations of PCE and TCE reported in Mauses Creek downstream of the Domino Salvage site also would not be expected to pose substantial toxic threats to aquatic life, as reported concentrations of these contaminants are well below the Ambient Water Quality Criteria (AWQC) of 340 and 21,900 ug/l recommended for PCE and TCE. Evidence for weak to moderate bioaccumulation of PCE and TCE in aquatic organisms exists; however, it has been noted that the bioaccumulation was not accompanied by any detected ill effects.[10] In general, it was also found that accumulation of these contaminants was greatest in fatty tissues such as liver, and far lower in edible muscle tissue.

PCE and TCE are volatile compounds and do not persist in moving surface waters. The ultimate fate of these contaminants in the environment is believed to be photoxidation in the troposphere.

7.2.2.2 Lead

Lead occurs in rocks primarily as the sulfide and in the form of oxides. It may replace some ions, such as calcium. Lead also occurs in potassium feldspar, where it replaces potassium. Lead carbonate is common in the oxidized zone of lead ores.

No beneficial health effects of lead have yet been found. Acute lead poisoning is extremely rare in the general population. The highest levels of lead exposure occur principally among people working in lead smelters and storage battery factories. In the general population, the major hazard posed by lead is for young children who chew and swallow objects contaminated with lead-containing paints (for example, flaking paint on walls and woodwork or weathered lead paint dust and flakes leaching from the exterior of residential and commercial structures into adjacent soil and dust).

Chronic low level lead exposure produces adverse effects on the hematopoietic system, central and peripheral nervous system, and kidneys. Disturbance in heme synthesis is considered to be the critical or first adverse effect of lead; such alterations have been reported in children with blood lead levels of 15 to 30 ug/dl (micrograms/deciliter).[11]

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Absorption of ingested lead (one of the primary exposure routes) is 5 to 10 percent in adults and 40-50 percent in children 2 to 3 years old.[12] No data are available for very young infants, but animal data indicate that the percentage absorbed is age related and may be higher in early infancy. This higher absorption rate plus a faster rate of CNS development illustrates why children are especially susceptible to the toxic effects of lead.

Two on-site monitoring wells, no. 1 and the new well, revealed reliable evidence of lead contamination at levels exceeding the Primary MCL of 50 ug/l. Lead was measured in these wells at 241 and 109 ug/l. The remaining monitoring well samples (nos. 4 and 7) revealed 35 to 78 ug lead per liter; the on-site well, being used for potable supply by the Artly family, revealed 11 ug/l lead. The presence of lead in MWs 4 and 7 and the on-site well was determined to be questionable due to blank contamination.

Research suggests that drinking water with lead concentrations greater than 100 ug/l may be sufficiently high to raise and sustain blood lead levels (PbB) above 25 ug/dl, the apparent threshold for alteration in heme synthesis.[13] Also, the Safe Drinking Water Committee has indicated that the present MCL of 50 ug/l may not provide a sufficient margin of safety,particularly for young, growing children, when other unknown sources of lead exposure are considered.[14]

Current levels of exposure to lead from the diet are estimated to be about 200 ug/day for adults and 40 to 200 ug/day for children (3 months to 9 years).[15] Theoretical use of groundwater beneath the Domino Salvage site as a potable source would result in lead intake from water that exceeded the average daily intake (assuming consumption of 2 liters of water per day). Note that the assumption does not consider other documented sources of lead exposure such as air or food, which could elevate daily intake to even higher levels. In addition, theoretical use of this groundwater as a potable source could produce subtle hematopoietic system effects, as discussed previously. It is important to note that more acute effects such as lead-induced encephalopathy would not be anticipated at the reported concentrations. The reported lead concentrations in this groundwater, therefore, may preclude its future use as a potable source.

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Off-site groundwater samples revealed no reliable evidence of lead contamination. The Cope and school wells (both used for potable supply) revealed 24 and 22 ug/l lead, respectively. The farmhouse and barn wells (currently not consumed) revealed respective lead concentrations of 34 and 43 ug/l. The presence of lead in all these samples was determined to be questionable due to blank contamination. Note that the school well is located north of the Domino site, while area groundwater flow is believed to be to the east-southeast.

If the reported presence of lead in the school well is assumed to be real, it may warrant attention due to the target population (children) consuming water from the source.

The Centers for Disease Control has recommended that an upper limit of normal for lead in the blood of children to be 30 ug/dl.[15] This PbB (blood lead level) was estimated to result in children when daily lead intake from all sources totaled 300 ug.[17] Daily consumption of 2 liters of water from the school well (if the reported lead concentration is assumed to be real) would contribute 44 ug (about 14.5 percent of the recommended upper limit) to the total daily intake. The actual lead intake of any given child from this well would probably be lower, as the school well is utilized by the school population as a sole source of potable water (i.e., school children are most likely to have access to this water supply for about 6 hours/day, 5 days/week). While the actual intake of lead from this water source would not appear to make an excessive contribution to total daily lead intake, note that lead intake from other likely sources (food, air) is not known. Generally, it has been reported that children living in urban areas have a higher lead intake than children in rural areas due to the higher lead content of soil, street dust, and ambient air. Consequently, urban children are more likely to exceed recommended daily lead intake levels. Ideally, lead concentrations in drinking water should be minimized to provide a greater margin of safety for lead intake from other sources. Resampling of the school well may be indicated to ascertain whether the presence of lead is real and to insure that lead levels do not approach those of more imminent concern.

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Environmental samples of lagoons and disposal piles on the Domino site also revealed excessive lead concentrations. The highest concentrations of lead on site were 725 to 11,350 mg/kg (1.13 percent), reported in disposal piles. Lagoon surface waters and sediments revealed 264 ug/l and 48.3 to 4,970 mg/kg lead. Lower levels (6.1 to 36.5 ug/l) of lead were measured in 2 lagoon aqueous samples, but were questioned by Quality Assurance Review due to blank contamination. Concentrations of lead, reported in disposal piles, generally exceed lead concentrations reported in nonpolluted soils of 2 to 200 mg/kg.[18] Inhalation of lead-laden dust particles from the disposal piles may serve as a possible route of human exposure. Such exposure may contribute to an increased body burden of lead; however, potential levels of exposure cannot be estimated from current information.

Transport of lead reported in disposal piles with surface runoff to nearby streams may pose threats to indigent aquatic life. Lead may also leach into underlying groundwater under acidic conditions. As previously discussed, current results indicate contamination of groundwater beneath the site with lead.

Drainage ditch samples also seem to suggest off-site transport of lead. Lead was reported in ditch aqueous and sediment samples at concentrations of 178 to 459 ug/l and 60 to 375 mg/kg. The reported aqueous lead concentrations are sufficiently high to have adverse effects on aquatic life. Note that while the drainage ditch is not intended to support aquatic life, it does drain into Mauses Creek. An aqueous sample, taken from Mauses Creek downstream of the confluence with the drainage ditch, did not reliably demonstrate the presence of lead (29 ug/l of lead was reported in this sample, but was questioned due to blank contamination). This questionable lead concentration, if assumed to be real, exceeds the recommended AWQC for the protection of aquatic life in soft water (proposed criterion) of 1.0 ug/l and may have adverse effects on some forms of aquatic fauna.

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The sediment sample taken downstream of the drainage ditch confluence revealed 52 mg/kg of lead, more than double the concentration reported in the upstream sediment sample. This sediment lead concentration, when considered in conjunction with drainage ditch sediment lead levels, seems to indicate off site transport of lead. While lead in an aqueous system generally adsorbs to bottom sediments, mobilization into overlying water is possible under certain conditions (low pH, etc.). The potential for degradation of Mauses Creek would, therefore, seem to exist.

7.2.2.3 Copper

Copper occurs as a natural or native metal, and in various mineral forms such as cuprite and malachite. Common uses for copper include electrical products, coins, and metal plating.

Copper is an essential trace element in animals and is required in the synthesis of hemoglobin. Copper is also required in plants for the synthesis of chlorophyll. The National Academy of Sciences's Food and Nutrition Board has estimated an adequate and safe copper intake of 2 to 3 mg/day.[19]

Copper has shown to be toxic to monogastric animals only when ingested in quantities that are 40 to 135 times greater than their respective requirements (80 to 270 mg for humans).[19] Except for sheep, all animals absorb copper poorly and their gastrointestinal tracts provide an excellent barrier against oral toxicity. The greatest danger of adverse effects in humans arises when children consume acidic beverages that have been in contact with copper containers or valves.[20] The current Secondary MCL for copper in drinking water is 1,000 ug/l; this maximum concentration has been recommended to minimize taste problems and has no toxicologic significance.

On the Domino site, MWs 1 and 4, and the new well reliably revealed 517, 2072, and 938 ug/l copper, respectively. Only the copper concentration reported in MW 4 exceeds the recommended Secondary MCL of 1,000 ug/l, which would render this water undesirable as a potable source but would not be expected to cause any adverse effects. MW 7 revealed 247 ug/l copper. This value was determined to be questionable due to blank contamination.

Measurable concentrations of copper were also reported in the Cope domestic well (60 ug/l), the farm well (94 ug/l), and the barn well (103 ug/l). The school well revealed no copper above analytical detection limits. The presence of copper in the Cope domestic well, the farm well, and the barn well was determined to be questionable due to blank contamination. Note, however, that the concentrations of copper reported in these wells are far below levels which would be expected to have adverse effects, if assumed to be real.

Substantial concentrations of copper, from 8,490 to 63,850 mg/kg (6.38 percent), were reported in all waste piles sampled on site. Sampled lagoon sediments revealed 159 to 6,530 mg/kg copper; lagoon aqueous samples revealed 357 to 8,517 ug/l of this metal. Nonpolluted soils generally contain about 2 to 100 mg/kg copper.[18] This value is used here for comparison purposes, as a waste pile or lagoon sediment cannot be considered normal soil.

The potential may exist for copper to be transported off site with surface runoff or to leach into groundwater. Current sample results seem to indicate that some transport of copper to these areas has occurred.

The drainage ditch aqueous and sediment samples also suggest off-site transport of copper. Copper was measured in these samples at concentrations of 3,055 to 6,110 ug/l and 409 to 5,805 mg/kg. Mauses Creek aqueous and sediment samples, taken downstream of the confluence with the drainage ditch, revealed 442 ug/l and 422 mg/kg copper, exceeding concentrations generally reported in normal soils and surface waters. (Mean surface water copper concentrations have been reported to be 15 ug/l; maximum levels are about 280 ug copper per liter.[21])

Although copper is an essential trace element, excessive concentrations in surface waters can be toxic to aquatic life. An AWQC of 5.8 ug/l for the protection of aquatic life has been proposed for copper in soft water. Copper has been reported to be acutely toxic to some aquatic species at concentrations as low as 60 ug/l in soft water.[22] The copper concentration measured in Mauses Creek exceeds both these levels and current copper concentrations in the creek may be toxic to some forms of aquatic life.

000087

7.2.2.4 Other Contaminants

Three additional chlorinated aliphatics were each reported at notable concentrations in one monitoring well on the Domino site. Individual contaminants were as follows: trans-1,2-dichloroethylene (trans-1,2-DCE), reported at a concentration of 323 ug/l in the new well; vinyl chloride, reported at a concentration of 21 ug/l in the new well; and methylene chloride, reported at a concentration of 1,080 ug/l in MW 4.

Vinyl chloride is a known human carcinogen, and theoretical long-term daily consumption of 2 liters of water from MW 2 may result in an increased cancer risk of about 2 cases per 100,000 persons so exposed, according to the National Academy of Science.[23] Noncarcinogenic adverse effects would not be expected to occur, as the concentration of vinyl chloride reported in MW 4 is below the AADI of 60 ug/l, even assuming a daily consumption of 2 liters.[24] Note that the AADI assumes 100 percent of exposure to vinyl chloride results from drinking water.

Methylene chloride has recently been determined to be carcinogenic in both mice and rats in a National Toxicology Program (NTP) bioassay.[25] Risk assessments based on the results of this bioassay are not available, as the NTP Review Committee found uncertainties in the study. It should be assumed, therefore, that use of water from MW 2 as a potable source would result in an increased carcinogenic risk; however, the magnitude of that risk cannot currently be determined. No AADI has been developed for methylene chloride, but, based on the 24-hour and 7-day SNARLs of 35 and 5 mg/l, no noncarcinogenic adverse effects would be expected to result from the concentration of methylene chloride reported in MW 2.[26]

000088

Limited toxicity information is available for trans-1,2-DCE. Based upon what information is available, an AADI of 350 ug/l/day has been developed.[27] The concentration of trans-1,2-DCE reported in the new well approaches this concentration, suggesting that use of water from the new well for potable purposes may not be desirable. Note that the computation of the AADI incorporates a safety factor of 100, and that there is no direct evidence to indicate that daily ingestion of this amount of trans-1,2-DCE would produce adverse effects in humans. No data are available which indicate that trans-1,2-DCE has carcinogenic potential; however, the structurally related compound, 1,1-DCE, has produced increases in tumor incidences in mice and rats following inhalation exposure.

Trace or low levels of vinyl chloride, methylene chloride, and trans-1,2-DCE were reported in a limited number of site samples, including drainage ditch aqueous or sediment samples. The reported concentrations of these contaminants would not be expected to pose significant threats to human health or the environment via likely routes of exposure, but do provide additional evidence of off-site contaminant release.

Other inorganic contaminants reported in 1 or more MW samples at concentrations of potential concern include chromium (131 ug/l in MW 1), aluminum (719, 24,610, and 124,900 ug/l in MW 4, the new well, and MW 1), arsenic (14 ug/l in MW 1), and barium (928 ug/l in MW 1). The concentration of chromium reported in MW 1 exceeds the Primary MCL set for this metal for public water supplies. The concentration of barium reported in MW 1 approaches the MCL of 1,000 ug/l. The concentration of arsenic reported in MW 1 is within the MCL of 50 ug/l; however, there is some indication that ingested arsenic may have carcinogenic potential.

No MCL has been set for aluminum, and the wide exposure of humans to aluminum in food, cosmetics, medicines, and water sources would suggest that aluminum is relatively nontoxic to the majority of the population. Chronic hemodialysis patients may, however, constitute a special population at risk. Aluminum has been shown to accumulate in the serum and tissues of these patients after it is absorbed from the gastrointestinal tract or after parenteral administration of a dialysis fluid containing a high concentration of aluminum.[28,29]

The concentration of aluminum reported in the new well and MW 1 exceed the 7-day and 24-hour SNARLs of 5 and 35 mg/l, suggesting that water from these wells would not be suitable for potable purposes.[29] Also note that these SNARLs exceed the solubility of aluminum in nonacidic solutions and therefore have limited usefulness for water supplies that are otherwise acceptable for potable use. Concentrations of aluminum greater than 100 ug/l generally occur only in water with a pH less than 5.[30] It is interesting to note that pH measurements obtained from these samples ranged from 6.36 to 8.30.

Environmental samples taken on- and off-site did not reveal remarkable concentrations of chromium, barium, arsenic, or aluminum. Off-site wells (including those used for potable purposes) and the on-site water supply revealed none of the aforementioned contaminants above analytical detection limits.

Several other contaminants were reported in on-site samples at notable concentrations, but did not appear at levels of concern in groundwater samples. These included phthalate acid esters such as bis(2-ethylhexyl) phthalate (DEHP), and di-n-octyl phthalate (DNOP). These ubiquitous plasticizers were reported in disposal pile and lagoon sediment samples at concentrations of 318 to 162,500 mg/kg or 16.2 percent (DEHP) and less than 50 to 32,832 mg/kg or 3.28 percent (DNOP). Lagoon surface waters revealed 45 to 1,143 ug/l (DEHP).

A chlorinated alkane, 1,1,2-trichloroethane (structurally closely related to TCE), was reported in 2 site aqueous samples at concentrations of 34 to 58 ug/l, and in all soil/sediment samples at concentrations of less than 0.011 mg/kg to 97 mg/kg.

The reported phthalate and 1,1,2-trichloroethane concentrations would not be expected to pose significant threats to human health or the environment via probable routes of exposure in this case. Some evidence of carcinogenicity is available for DEHP and 1,1,2-trichloroethane; however, the limited pathways for exposure suggests an equally limited potential for carcinogenic initiation.

Off-site transport of phthalates and 1,1,2-trichloroethane is indicated by the drainage ditch or creek concentrations of 17 to 80 ug/l and 18 to 19 ug/kg of 1,1,2-trichloroethane and 288 ug/l and 50,750 ug/kg to 418,000 ug/kg of DEHP. DNOP was reported in ditch and creek sediment samples at concentrations of less than 760 to 4,704 ug/kg. DNOP was reported in an aqueous creek sample, but was also reported in a creek sample taken upstream of the site, possibly indicating that its presence in creek aqueous samples may not be site related.

Contaminants of note reported in 3 large storage tanks sampled on site included PCE (42,000 to 4,900,000 ug/kg or 0.49 percent), TCE (about 20,000 ug/kg), benzene (about 1,900 to 3,500 ug/kg), and PCB 1254 (3,260 to 4,150 ug/kg). Significant concentrations of PCE and TCE were reported in on-site samples as discussed previously. No benzene was reliably reported in other on- or off-site samples. No PCB 1254 was reported in any environmental or groundwater samples; however, Aroclor 1248 was reported in drainage ditch and Mauses Creek sediment samples at concentrations of 796 to 5,361 ug/kg. Due to chromatographic similarities, it is difficult to distinguish PCB 1254 and 1248; consequently, it is possible that the Aroclors reported in on- and off-site samples may be identical in this case. PCBs are toxic, potentially carcinogenic, and persistent; however, the low levels and limited pathways for exposure suggest little threat in this case.

Prepared by: _____ Date: December 17,

Elizabeth A. Quinn, Toxicologist

000091

LIST OF SOURCES

1. National Academy of Sciences. 1980. Drinking Water and Health. Volume 3. Safe Drinking Water Committe, National Academy of Sciences, Washington, D.C. p. 137, 157.

2. Salvini, M.S., et al. 1971. Evaluation of the psychophysiological functions in humans exposed to trichloroethylene. Br. J. Ind. Med. 28:293-295.

3. Vesterberg, O. and I. Astrand. 1976. Exposure to trichloroethylene monitored by analysis of metabolites in blood and urine. J. Occup. Med. 18:224-226.

4. Stewart, R.D. et al. 1961. Human exposure to tetrachloroethylene vapor. Arch. Environ. Health 2:516-522.

5. Drinking Water and Health. Volume 3, p. 139.

6. National Academy of Sciences. 1983. Drinking Water and Health. Volume 5. Safe Drinking Water Committee, National Academy of Sciences, Washington, DC p. 84.

7. Wilson, R. 1979. Analyzing the daily risks of life. Tech. Rev. p. 41-46.

8. U.S. EPA. National Primary Drinking Water Regulations; Volatile Synthetic Organic Chemicals; Proposed Rulemaking. Federal Register, 40 CFR Part 141, June 12, 1984.

9. Drinking Water and Health. Volume 3, p. 140, 165.

10. Pearson, C.R. and G. McConnell. 1975. Chlorinated C_1 and C_2 hydrocarbons in the marine environment. Proc. Roy. Soc. London 189:305-322.

11. National Academy of Science. 1982. Drinking Water and Health. Volume 4. Safe Drinking Water Committee, National Academy of Sciences, Washington, DC p. 181.

12. Alexander, F.W. et al. 1973. The uptake and excretion by children of lead and other contaminants. In Environmental Health Aspects of Lead, Proc. Int. Symp., Amsterdam, Luxembourg, Commission of the European Communities p. 319-331.

13. Craum, G.F., and L.J. McCabe. 1975. Problems associated with metals in drinking water. J. Am. Water Works Assoc. 67:593-599.

14. Drinking Water and Health. Volume 4, p. 183.

15. U.S. EPA. 1980. Ambient Water Quality Criteria for Lead. Office of Water Regulations and Standards. Criteria and Standards Division, Washington, DC p. C-72.

16. U.S. EPA. 1976. Quality Criteria for Water. Office of Water Planning and Standards, Criteria and Standards Division, Washington, DC p. 83.

17. King, B.G. 1971. Maximum daily intake of lead without excessive body lead-burden in children. Amer. Jour. Dis. Children, 122:337.

18. Allaway, W.H. 1968. Agronomic controls over the environmental cycling of trace elements. Adv. Agron. 20:235-274.

19. Drinking Water and Health. Volume 3, p. 313.

20. Food and Drug Administration. 1975. Toxicity of Essential Minerals - Information Pertinent to Establishing Appropriate Levels of Single Mineral Dietary Supplements. Division of Nutrition, Bureau of Foods, Food and Drug Administration, Washington, DC.

21. Kopp. J.F. and R.C. Kroner. 1967. Trace metals in waters of the U.S. 1962-1967. Federal Water Pollution Control Administration, U.S. Department of Interior, Cincinnati, OH.

22. Jones, J.R. 1964. Fish and river pollution. Butterworth, London.

23. National Academy of Sciences. 1977. Drinking Water and Health. Volume 1. Safe Drinking Water Committee, National Academy of Sciences, Washington, DC p. 783-787.

24. U.S. EPA. 1984. Draft Criteria for Vinyl Chloride. Health Effects Branch, Criteria And Standards Division, Office of Drinking Water, Washington, DC.

25. National Toxicology Program. 1982. Bioassay of Methylene Chloride for Possible Carcinogenicity. (Final Report in Preparation.) Bethesda, MD: U.S. Department of Health and Human Services, Public Health Service, National Institutes of Health.

26. Drinking Water and Health. Volume 3, p. 128.

27. U.S. EPA. 1984. Draft Criteria for trans-1,2-dichloroethylene. Health Effects Branch, Criteria and Standards Division, Office of Drinking Water, Washington, DC.

28. Alfrey, A.C. et al. 1976. The dialysis encephalopathy syndrome. Possible aluminum intoxication. N. Engl. J. Med. 294:184-188.

29. Elliot, H.L. et al. 1978. Aluminum toxicity during regular haemodialysis. Br. Med. J. 1:1101-1103.

30. Drinking Water and Health. Volume 4, p. 166.

APPENDIX A

COST CENTER:

:COUNT NO.:

REM/FIT ZONE CONTRACT
TECHNICAL DIRECTIVE DOCUMENT (TDD)

2. NO.: F3-8311-12

3. PRIORITY:
- ☐ HIGH
- ☒ MEDIUM
- ☐ LOW

4. ESTIMATE OF TECHNICAL HOURS: 130

4A. ESTIMATE OF SUBCONTRACT COST:

5. EPA SITE ID: PA-789

5A. EPA SITE NAME: ~~Domino Salvage~~

6. COMPLETION DATE: 3 wks after QA

7. REFERENCE INFO.:
- ☐ YES ☐ NO
- ☐ ATTACHED
- ☐ PICK UP

8 GENERAL TASK DESCRIPTION: ~~Joint SI with Pa DER.~~

9. SPECIFIC ELEMENTS:

1.) Review background information.
2.) Submit sampling plan to EPA for approval.
3.) Coordinate Lab analysis.
4.) Conduct on and off site inspection and sampling.
5.) Take samples according to standard protocol.
6.) Complete HRS.

10. INTERIM DEADLINES:

1 DESIRED REPORT FORM: FORMAL REPORT ☒ LETTER REPORT ☐ FORMAL BRIEFING ☐

THER (SPECIFY):

1 COMMENTS:

1 AUTHORIZING RPO: Harold G. Byrn (SIGNATURE)

14. DATE: 11/21/83

1 RECEIVED BY: ☒ ACCEPTED ☐ ACCEPTED WITH EXCEPTIONS ☐ REJECTED

(CONTRACTOR RPM SIGNATURE)

16. DATE: 11/22/83

Sheet 1 White – FITL Copy
Sheet 2 Canary – OPO Copy
Sheet 3 Pink – Contracting Officer's Copy (Washington, D. C.)
Sheet 4 Goldenrod – Project Officer's Copy (Washington, D. C.)

000096

APPENDIX B

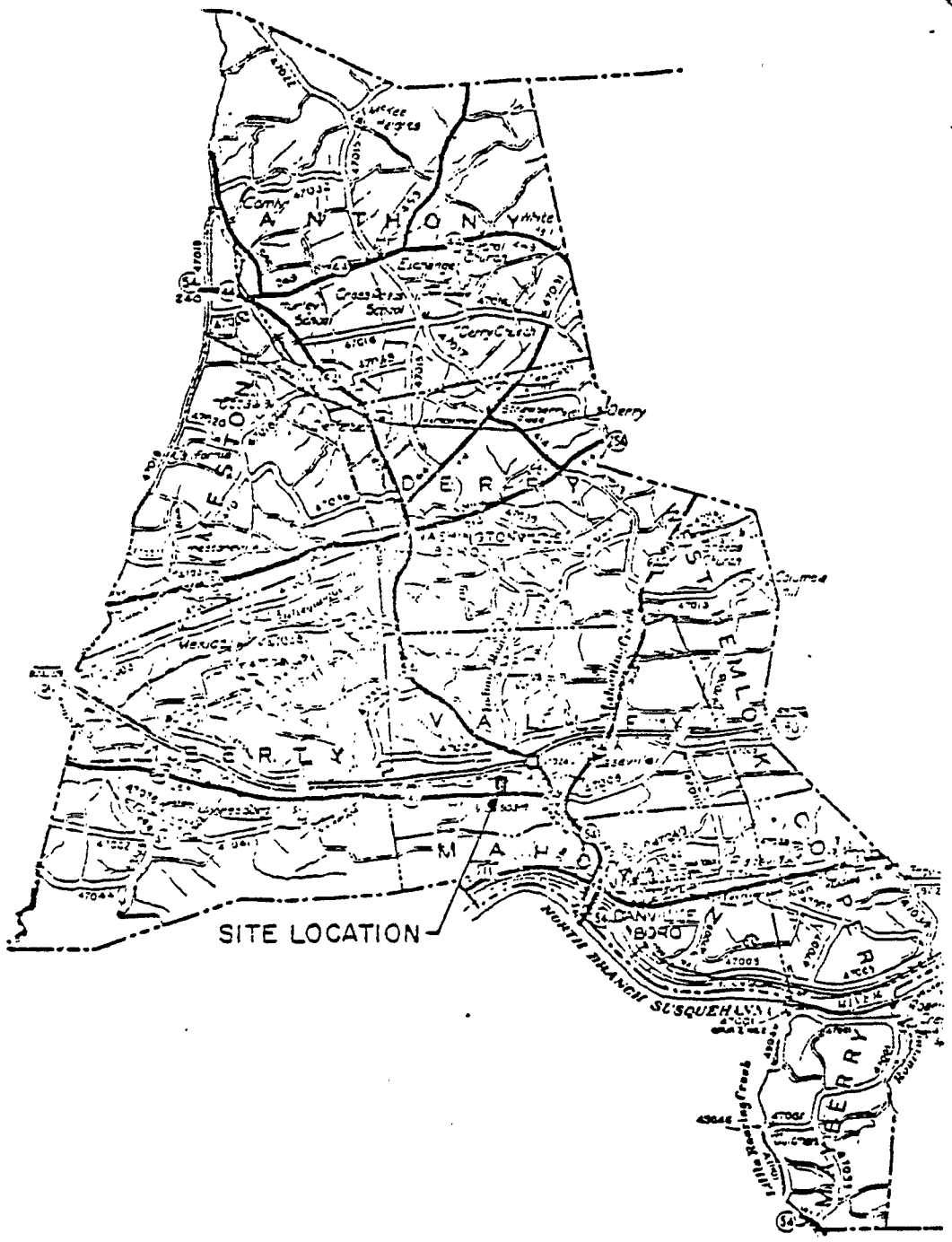


FIGURE 1

SITE LOCATION MAP

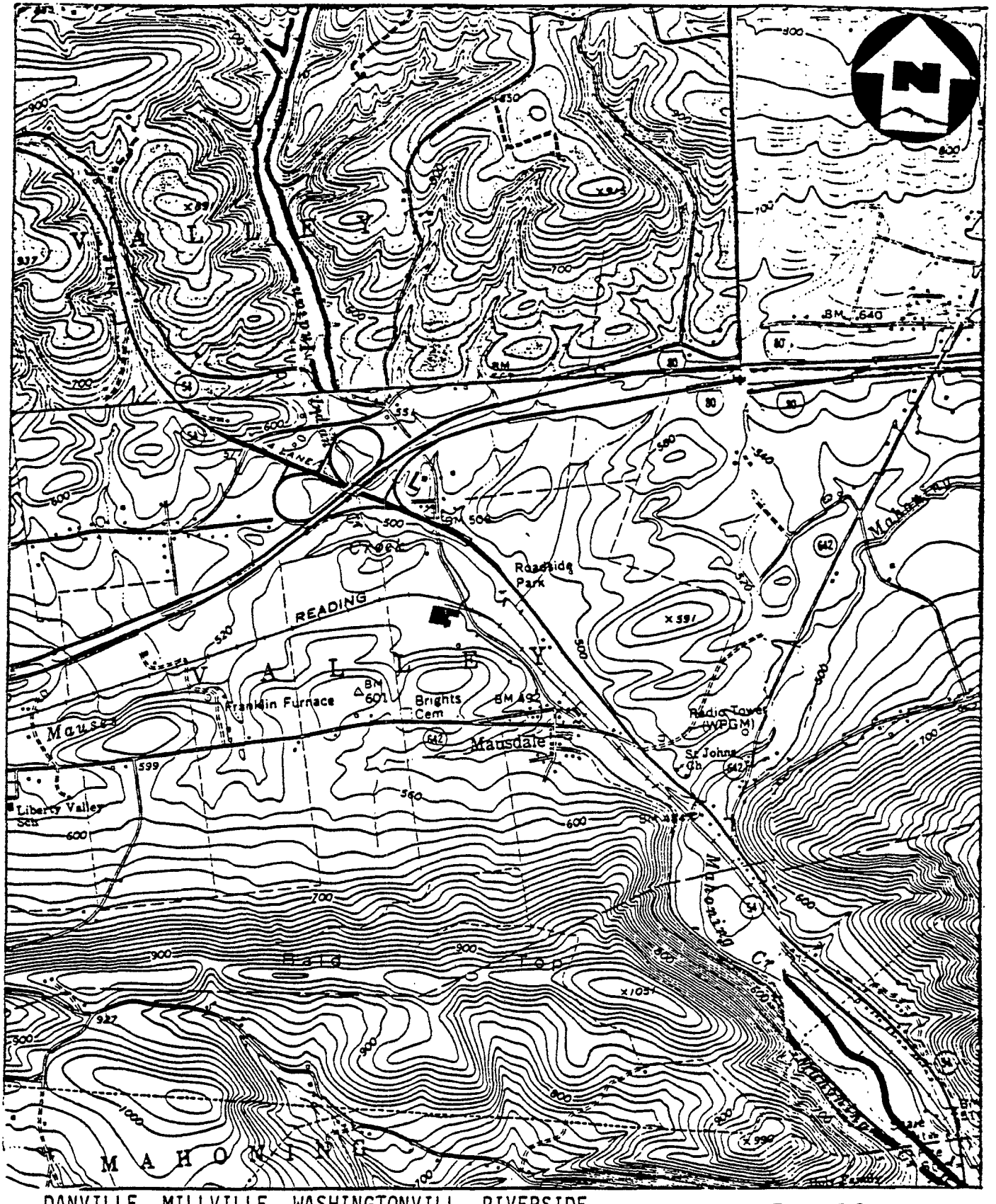
DOMINO SALVAGE ,MONTOUR CO., PA.

(NO SCALE)

NUS CORPORATION

A Halliburton Company

AR000098



DANVILLE, MILLVILLE, WASHINGTONVILL, RIVERSIDE PA QUADRANGLES (7.5 MINUTE SERIES). CONTOUR INTERVAL 20 FEET.

FIGURE 2

TOPOGRAPHIC MAP

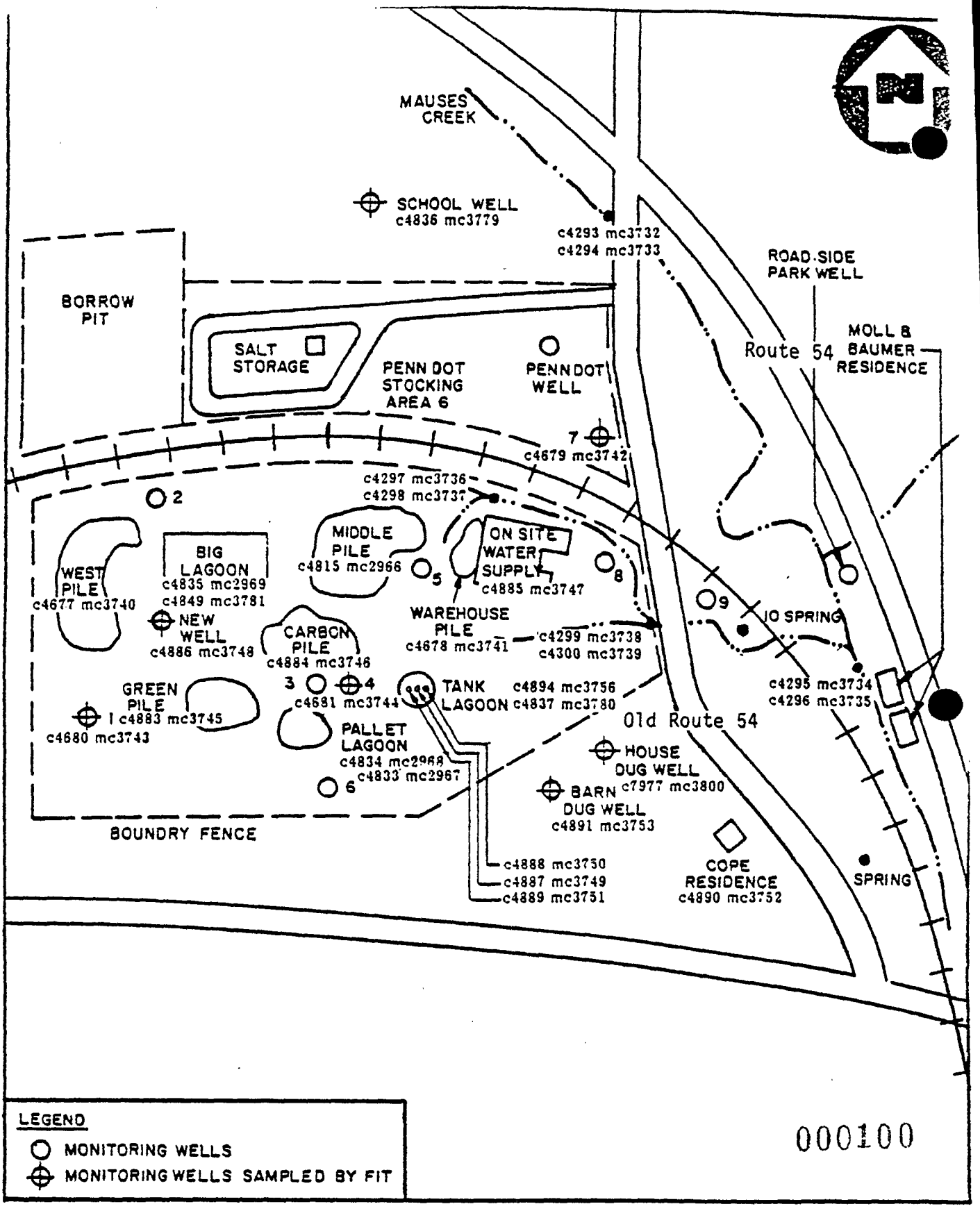
DOMINO SALVAGE, VALLEY TWP, MONTOUR CO. PA

SCALE 1:24000

NUS CORPORATION

A Halliburton Company

000099



000100

SAMPLE LOCATION MAP

DOMINO SALVAGE, MONTOUR CO., PA.

(NO SCALE)

FIGURE 3

NUS CORPORATION

A Halliburton Company

APPENDIX C

II. INTRODUCTION

This report presents the results of an investigation by Dunn Geoscience Corporation of the nature, sources, and extent of ground water contamination at the site of the Warehouse 81 Limited Partnership Plant situated northwest of the Village of Mausdale in Valley Township, Montour County, Pennsylvania. The report also presents an inventory and classification of on-site wastes, cost-benefit analysis of remediation options, and a remedial clean-up plan.

The Warehouse 81 plant is engaged in the secondary recover of copper from piles of finely divided metal wire scraps known as "fluff", with plans for future recovery of plastic from the insulation associated with the fluff. The waste fluff piles were generated by the original site operator, the now bankru M. W. Manufacturing Corp. M. W. operated both mechanical and chemical processes for the primary recovery of copper from whol scrap wire. As part of the chemical processes, M. W. Manufacturing Corp., used chlorinated solvents which were apparently dumped on-site when spent. These solvents are the primary contaminants in the site area. Unlike M. W. Manufacturing, Warehouse 81 has operated the plant with mechanical processes only. All ground water contamination in the site area, therefc stems from the activities of the previous operator, M. W. Manufacturing Corp.

TABLE F-1

Summary of selected Parameters from PADER Ground Water Samples - (Parameters all mg/l except pH, which is dimensionless, and Volatiles which are ppb)

PADER SAMPLE LOCATION	SAMPLE NUMBER	DATE	pH	Alk	SO_4	Cl	Al	Pb	Zn	Cu	Fe	Mn	TDS	TCE	PCE	1,2 Dichloroethene	1,1,2 Tri-chloroethane	Arocior 1242
MW3(PaDER#1)	0503083	3/24/82												>1000	>1000	>200	21	-
MW3(PaDER#1)	0503080	3/24/82	7.7	120	15	32	0.13		0.89	0.36	12.58	0.26	216					
MW4(PaDER#2)	0503084	3/24/82												>800	>1000	72	3	-
MW4(PaDER#2)	0503081	3/24/82	7.4	160	20	14	0.18		0.22	0.23	1.07	0.08	298					
MW5(PaDER#4)	0503095-6	4/13/82												>3500	>6500	>500	>1000	2.5
MW5(PaDER#4)	0503097	4/13/82	7.3	148	45	91	0.06	<.005	0.04	0.08	1.34	0.26	498					
MW6(PaDER#3)	0503085	3/24/82												27	>1000	ND	13	-
MW6(PaDER#3)	0503082	3/24/82	7.6	144	25	11	0.09		0.04	0.07	0.04	0.02	280					
Unoccupied House Dug Well	0503130	5/20/82	7.8	174	30	12	0.15	0.0185	0.14	0.15	0.10	0.03	302	>400	>100			
Danville Area Sch. Dist. Well	0503092-3	4/13/82												ND	ND	ND	ND	ND
Danville Area Sch. Dist. Well	0503094	4/13/82	7.2	142	65	37	0.02	<.005	0.14	0.04	0.12	0.03	280					
PennDot Trailer Well	0503131	5/20/82	7.6	152	30	198	0.06	0.1585	0.14	0.09	9.81	0.43	758	ND	ND	ND	ND	-
Cope Residence Well	0503139	7/6/82	7.8	110	30	4	-	<.005	0.03	0.07	0.02	0.02	270	ND	ND	ND	ND	-
Spring SE of Cope Residence	0503140	7/6/82	7.6	106	25	28	-	<.005	0.01	0.03	0.02	0.01	304	ND	ND	ND	ND	-
Roadside Park Well	0503138	7/6/82	7.5	196	-	22	-		-	-	0.21	-	-	5	4	1	ND	-
Harvey Moll Well So. Roadside Pk.	1424944	8/30/82												Possible Trace	4	ND	ND	-
Ira Baumer Well So. Roadside Pk.	1424945	8/30/82												ND	2	ND	ND	

TABLE F-2

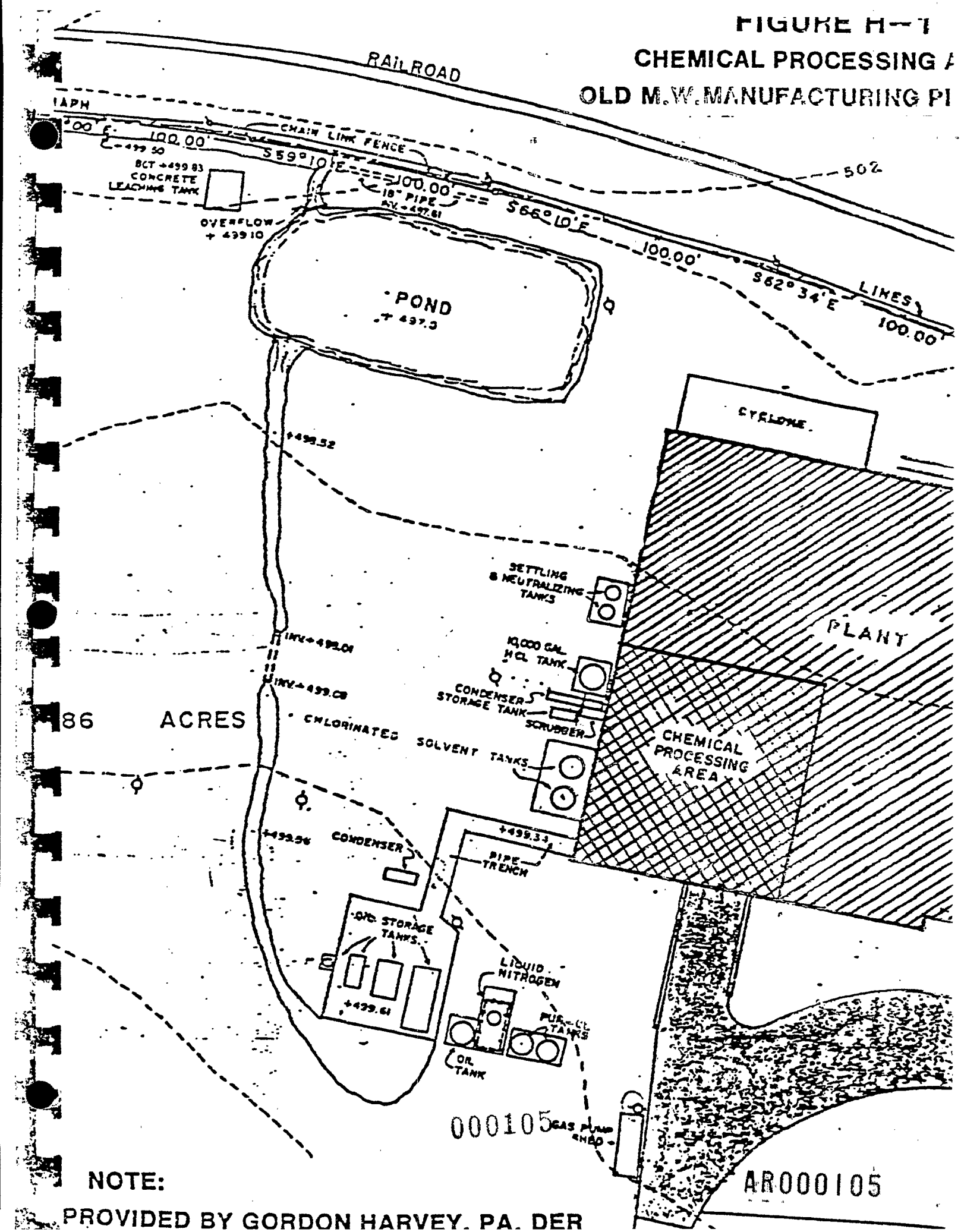
Summary of selected parameters from DER Waste Sample Analyses -(Parameter all mg/l except pH which is dimensionless, and volatiles which are ppb)

SAMPLE LOCATION	SAMPLE NUMBER	DATE	pH	Alk	SO_4	Cl	Al	Pb	Zn	Cu	Fe	Mn	TCE	PCE	12 Di	112 Tri
Leachate Pool adj. Fluff pile ?	0512151	4/03/79	4.8	136	25	145	1.78	4	5.75	20.125	14.22	1.31				
Leachate Pool adj. Fluff pile	0520005	3/24/82	4.8	42	10	74	0.98		2.93	122.5	20.6	0.85				
Leachate Discharge Fr. fluff-wetweather ditch front of Plant	0512152	4/03/79	6.7	102	25	70	0.13	0.	136 2.8	3.35	21.24	1.23				
Leachate Discharge Fr. fluff-wetweather ditch front of Plant	0512059	3/24/82	6.6	66	15	20	-		- 1.53	0.86	8.79	-				
Impoundment #1	250347												5	63	72	>100
Impoundment #2													11	47	64	3

FIGURE H-1

CHEMICAL PROCESSING A

OLD M.W. MANUFACTURING PI



000105

NOTE:

PROVIDED BY GORDON HARVEY. PA. DER

AR000105

LABORATORY ANALYSIS REPORT

Lancaster Laboratories INCORPORATED

LLI Sample No TL 209231

Dunn Geoscience Corporation
18 S. 18th Street
Camp Hill, PA 17011

Date Reported 11/26/8
Date Submitted 11/
Discard Date 12/26/8
P. O. No.
Collected by Client

E.P. Toxicity of JRP # 4 "Paper Pile"
~~Warehouse~~ 81 (lg.pink paper pile reprocessed fluff

ANALYSIS	AS RECEIVED		LAB CODE
Arsenic	0.004	mg/l	245-54-(
Barium	0.1	mg/l	246-54-(
Cadmium	0.044	mg/l	249-54-(
Chromium	< 0.05	mg/l	251-54-(
Copper	31.5	mg/l	253-54-(
Lead	0.43	mg/l	255-54-(
Mercury	< 0.001	mg/l	259-54-(
Selenium	< 0.2	mg/l	264-54-(
Silver	< 0.01	mg/l	266-54-(

The above analyses were performed on an EP Toxicity leachate of the submitted waste prepared according to the procedure specified in Federal Register May 19 1980 p. 33127.
Leachate Preparation:
140.5 grams waste / 2248 ml distilled water
Initial pH = 5.6 Controlling the leachate pH at 5.0 during the 24 hour agitation period as prescribed entailed adding 11 ml 0.5 N acetic acid. The 2259 ml of this intermediate leachate was filtered through a 0.45 micron membrane filter and brought to a final volume of 2810 ml with distilled water to form the 'EP Leachate' on which the analyses were performed.
The characteristic of EP Toxicity is determined by whether any of the contaminant concentrations (mg/l) in the leachate exceed the following maxima (100 X's Primary Drinking Water Standards): Arsenic 5.0; Barium 100.0; Cadmium 1.0; Chromium 5.0; Lead 5.0 ; Mercury 0.2; Selenium 1.0; Silver 5.0; Endrin 0.02; Lindane 0.4; Methoxychlor 10. Toxaphene 0.5; 2,4-D 10.0; 2,4,5-TP 1.0

The above analyses indicate that the submitted waste DOES NOT exhibit t characteristic of EP Toxicity as defined in Section 261.24 Fed Reg 19E p. 33122

1 COPY TO Dunn Geoscience Corporation Attn: Jeff Peffer

000106

Samp Prep 125.00

INV TO- Dunn Geoscience Corporat 245.00 1213 Respectfully submitted
Lancaster Laboratories,

Robert F. Beisel, M.A.,

LABORATORY ANALYSIS REPORT

Lancaster Laboratories INCORPORATED

LLI Sample No TL 209228

Date Reported 11/26/8
Date Submitted 11/ 4/8
Discard Date 12/26/8
P. O. No.
Collected by Client

Dunn Geoscience Corporation
18 S. 18th Street
Camp Hill, PA .17011

E.P. Toxicity of JRP # 1A large carbon black pile
~~11/1 Composite~~ Warehouse 81

ANALYSIS	AS RECEIVED		LAB CODE
Arsenic	< 0.004	mg/l	245-54-(
Barium	< 0.1	mg/l	246-54-(
Cadmium	< 0.005	mg/l	249-54-(
Chromium	< 0.05	mg/l	251-54-(
Copper	54.4	mg/l	253-54-(
Lead	37.8	mg/l	255-54-(
Mercury	< 0.001	mg/l	259-54-(
Selenium	< 0.2	mg/l	264-54-(
Silver	< 0.01	mg/l	266-54-(

The above analyses were performed on an EP Toxicity leachate of the submitted waste prepared according to the procedure specified in Federal Register May 19 1980 p. 33127.

Leachate Preparation:

146.0 grams waste / 2336 ml distilled water
Initial pH = 5.0 Controlling the leachate pH at 5.0 during the 24 hour agitation period as prescribed entailed adding 5 ml 0.5 N acetic acid. The 2341 ml of this intermediate leachate was filtered through a 0.45 micron membrane filter and brought to a final volume of 2920 ml with distilled water to form the 'EP Leachate' on which the analyses were performed.

The characteristic of EP Toxicity is determined by whether any of the contaminant concentrations (mg/l) in the leachate exceed the following maxima (100 X's Primary Drinking Water Standards): Arsenic 5.0; Barium 100.0; Cadmium 1.0; Chromium 5.0; Lead 5.0 ; Mercury 0.2; Selenium 1.0; Silver 5.0; Endrin 0.02; Lindane 0.4; Methoxychlor 10.0 Toxaphene 0.5; 2,4-D 10.0; 2,4,5-TP 1.0

The above analyses indicate that the submitted waste DOES exhibit the characteristic of ~~EP~~ Toxicity as defined in Section 261.24 Fed Reg 198 p. 33122.

1 COPY TO Dunn Geoscience Corporation Attn: Jeff Peffer

000107

Samp Prep 125.00

INV TO- Dunn Geoscience Corporat 245.00 1213 Respectfully submitted
Lancaster Laboratories, I

AR000107

Robert F Reuse

LABORATORY ANALYSIS REPORT

Lancaster Laboratories INCORPORATED

LLI Sample No TL 20922

Date Reported 11/2[illegible]
Date Submitted 11/[illegible]
Discard Date 12/26/
P. O. No.
Collected by Client

Dunn Geoscience Corporation
18 S. 18th Street
Camp Hill, PA 17011

E.P. Toxicity of JRP # 2 small carbon black piles
~~11/1 Composite~~ Warehouse 81

ANALYSIS	AS RECEIVED		LAB COD
Arsenic	< 0.004	mg/l	245-54-
Barium	< 0.1	mg/l	246-54-
Cadmium	0.016	mg/l	249-54-
Chromium	< 0.05	mg/l	251-54-
~~Copper~~	114.	mg/l	253-54-
Lead	13.3	mg/l	255-54-
Mercury	< 0.001	mg/l	259-54-
Selenium	< 0.2	mg/l	264-54-
Silver	< 0.01	mg/l	266-54-

The above analyses were performed on an EP Toxicity leachate of the submitted waste prepared according to the procedure specified in Federal Register May 19 1980 p. 33127.
Leachate Preparation:
147.0 grams waste / 2352 ml distilled water
Initial pH = 4.4 Controlling the leachate pH at 5.0 during the 24 hour agitation period as prescribed entailed adding 0 ml 0.5 N acetic acid. The 2352 ml of this intermediate leachate was filtered through a 0.45 micron membrane filter and brought to a final volume of 2940 ml with distilled water to form the 'EP Leachate' on which the analyses were performed.
The characteristic of EP Toxicity is determined by whether any of the contaminant concentrations (mg/l) in the leachate exceed the following maxima (100 X's Primary Drinking Water Standards): Arsenic 5.0; Barium 100.0; Cadmium 1.0; Chromium 5.0; Lead 5.0 ; Mercury 0.2; Selenium 1.0; Silver 5.0; Endrin 0.02; Lindane 0.4; Methoxychlor 10. Toxaphene 0.5; 2,4-D 10.0; 2,4,5-TP 1.0

The above analyses indicate that the submitted waste DOES exhibit the characteristic of EP Toxicity as defined in Section 261.24 Fed Reg 19[illegible] p. 33122

1 COPY TO Dunn Geoscience Corporation Attn: Jeff Peffer

000103

Samp Prep 125.00

INV TO- Dunn Geoscience Corporat 245.00 1213

Respectfully submitted
Lancaster Laboratories,

Robert F Reisch

LABORATORY ANALYSIS REPORT

Lancaster Laboratories INCORPORATED

LLI Sample No TL 209229

Date Reported 11/26/8
Date Submitted 11/ 4/8
Discard Date 12/26/8
P. O. No.
Collected by Client

Dunn Geoscience Corporation
18 S. 18th Street
Camp Hill, PA 17011

E.P. Toxicity of JRP # 2 small carbon black piles
~~11/1 Composite~~ Warehouse 81

ANALYSIS	AS RECEIVED		LAB COD
Arsenic	< 0.004	mg/l	245-54-(
Barium	< 0.1	mg/l	246-54-(
Cadmium	0.016	mg/l	249-54-(
Chromium	< 0.05	mg/l	251-54-
Copper	114.	mg/l	253-54-
Lead	13.3	mg/l	255-54-
Mercury	< 0.001	mg/l	259-54-
Selenium	< 0.2	mg/l	264-54-
Silver	< 0.01	mg/l	266-54-

The above analyses were performed on an EP Toxicity leachate of the submitted waste prepared according to the procedure specified in Federal Register May 19 1980 p. 33127.
Leachate Preparation:
147.0 grams waste / 2352 ml distilled water
Initial pH = 4.4 Controlling the leachate pH at 5.0 during the 24 hour agitation period as prescribed entailed adding 0 ml 0.5 N acetic acid. The 2352 ml of this intermediate leachate was filtered through a 0.45 micron membrane filter and brought to a final volume of 2940 ml with distilled water to form the 'EP Leachate' on which the analyses were performed.
The characteristic of EP Toxicity is determined by whether any of the contaminant concentrations (mg/l) in the leachate exceed the following maxima (100 X's Primary Drinking Water Standards): Arsenic 5.0; Barium 100.0; Cadmium 1.0; Chromium 5.0; Lead 5.0 ; Mercury 0.2; Selenium 1.0; Silver 5.0; Endrin 0.02; Lindane 0.4; Methoxychlor 10 Toxaphene 0.5; 2,4-D 10.0; 2,4,5-TP 1.0

The above analyses indicate that the submitted waste DOES exhibit the characteristic of EP Toxicity as defined in Section 261.24 Fed Reg 19 p. 33122

1 COPY TO Dunn Geoscience Corporation Attn: Jeff Peffer

000109

Samp Prep 125.00

INV TO- Dunn Geoscience Corporat 245.00 1213 Respectfully submitted
Lancaster Laboratories,

AR000109

Robert F Bersel

LABORATORY ANALYSIS REPORT

ancaster Laboratories INCORPORATED

LLI Sample No TL 20

Date Reported
Date Submitted 11/
Discard Date 12/
P. O. No.
Collected by Clien

eoscience Corporation
18th Street
ill, PA 17011

E.P. Toxicity of JRP # 3 bluish salt deposit
~~Warehouse 81~~ (east side large carbon pile)

SIS	AS RECEIVED		LAB
ic	< 0.004	mg/l	245-
m	0.2	mg/l	246-
ium	0.015	mg/l	249-
nium	< 0.05	mg/l	251-
er	203.	mg/l	253-
	15.3	mg/l	255-
ury	< 0.001	mg/l	259-
nium	< 0.2	mg/l	264-
er	< 0.01	mg/l	266-

above analyses were performed on an EP Toxicity leachate of the
nitted waste prepared according to the procedure specified in
eral Register May 19 1980 p. 33127.
chate Preparation:
147.3 grams waste / 2357 ml distilled water
Initial pH = 4.90 Controlling the leachate pH at 5.0 during 24 hour agitation period as prescribed entailed adding 15 ml 0.5 N acetic acid. The 2372 ml of this intermediate leachate filtered through a 0.45 micron membrane filter and brought to final volume of 2946 ml with distilled water to form the 'EP Leachate' on which the analyses were performed.

e characteristic of EP Toxicity is determined by whether any of th
ntaminant concentrations (mg/l) in the leachate exceed the followi
xima (100 X's Primary Drinking Water Standards): Arsenic 5.0;
arium 100.0; Cadmium 1.0; Chromium 5.0; Lead 5.0 ; Mercury 0.2;
elenium 1.0; Silver 5.0; Endrin 0.02; Lindane 0.4; Methoxychlor
oxaphene 0.5; 2,4-D 10.0; 2,4,5-TP 1.0

The above analyses indicate that the submitted waste DOES exhibit th characteristic of EP Toxicity as defined in Section 261.24 Fed Reg p. 33122

1 COPY TO Dunn Geoscience Corporation Attn: Jeff Peffer

Samp Prep 125.00

000110

INV TO- Dunn Geoscience Corporat 245.00 1213

Respectfully submitted
Lancaster Laboratories

Robert F Beisel

LABORATORY ANALYSIS REPORT

Lancaster Laboratories INCORPORATED

LLI Sample No SW 208096

Date Reported 12/13/82
Date Submitted 11/ 2/82
Discard Date 1/12/83
P. O. No.

Dunn Geoscience Corporation
18 S. 18th Street
Camp Hill, PA 17011

JRP # 6 Oil Sludge
Largest of 3 tanks 11/1/82

ANALYSIS	AS RECEIVED			LAB CODE
Arsenic	< 0.5	ppm		145-54-0
Barium	< 5.	ppm		146-54-0
Cadmium	< 0.2	ppm		149-54-0
Chromium	< 1.	ppm		151-54-0
Copper	11.4	ppm		153-54-0
Lead	22.3	ppm		155-54-0
Mercury	< 0.05	ppm		159-54-0
Selenium	< 0.5	ppm		164-54-0
Silver	< 0.2	ppm		166-54-0
PCB'S	< 5.	ppm		174-70-0
Sulfuric/Flor. Method				
Ash	< 0.05	% by wt.		195-56-0
Flash Point for Liquids			see below	430-52-0
BTU/lb	18820.	BTU/lb.		999-24-0
Organic Chlorine	0.05	%		999-24-0
Sulfur	0.02	%		999-24-0

Flashpoint: No Flash observed.
Test flame extinguished at 208F.
Flashpoint was determined using Pensky Martens closed cup apparatus.

1 COPY TO Dunn Geoscience Corporation Attn: Jeff Peffer

000111

Samp Prep 25.00

INV TO- Dunn Geoscience Corporat 320.85 1213 Respectfully submitted
Lancaster Laboratories, In

AR000111

MAIN LABORATORY:

LABORATORY ANALYSIS REPORT

Lancaster Laboratories INCORPORATED

LLI Sample No SW 208898

Date Reported 12/13/8
Date Submitted 11/ 2/82
Discard Date 1/12/83
P. O. No.

Dunn Geoscience Corporation
18 S. 18th Street
Camp Hill, PA 17011

JRP # 7 Oil Sludge (middle of 3 tanks)

ANALYSIS	AS RECEIVED			LAB CODE
Arsenic	< 0.5	ppm		145-54-02
Barium	< 5.	ppm		146-54-01
Cadmium	< 0.2	ppm		149-54-01
Chromium	< 1.	ppm		151-54-01
Copper	60.7	ppm		153-54-01
Lead	30.1	ppm		155-54-01
Mercury	< 0.05	ppm		159-54-02
Selenium	< 0.5	ppm		164-54-03
Silver	< 0.2	ppm		166-54-01
PCB'S	< 5.	ppm		174-70-06
Sulfuric/Flor. Method				
Ash	< 0.05	% by wt.		195-56-
Flash Point for Liquids			see below	430-52-02
BTU/lb	19250.	BTU/lb.		999-20-01
Organic Chlorine	0.05	% by wt.		999-20-03
Sulfur	0.03	% by wt.		999-20-01

Flashpoint: No Flash observed.
Test flame extinguished at 215F.
Flashpoint was determined using Pensky Martens closed cup apparatus.

1 COPY TO Dunn Geoscience Corporation Attn: Jeff Peffer

000112

Samp Prep 25.00

INV TO- Dunn Geoscience Corporat 320.85 1213 Respectfully submitted
Lancaster Laboratories, Inc

Robert F Kreiser

LABORATORY ANALYSIS REPORT

Lancaster Laboratories INCORPORATED

LLI Sample No SW 208397

Dunn Geoscience Corporation
18 S. 18th Street
Camp Hill, PA 17011

Date Reported 12/13/82
Date Submitted 11/ 2/82
Discard Date 1/12/83
P. O. No.

JRP # 8 Oil-Sludge (from smallest of 3 tanks)
Warehouse 81

ANALYSIS	AS RECEIVED		LAB CODE
Arsenic	< 0.5	ppm	145-54-028
Barium	< 5.	ppm	146-54-012
Cadmium	< 0.2	ppm	149-54-010
Chromium	< 1.	ppm	151-54-010
Copper	89.4	ppm	153-54-010
Lead	748.	ppm	155-54-010
Mercury	< 0.05	ppm	159-54-028
Selenium	< 0.5	ppm	164-54-030
Silver	< 0.2	ppm	166-54-010
PCB'S	< 5.	ppm	174-70-060
Sulfuric/Flor. Method			
Ash	0.64	% by wt.	195-56-006
BTU/lb	821.	BTU/lb.	999-20-011
Organic Chlorine	0.43	% by wt.	999-20-033
Sulfur	< 0.01	% by wt.	999-20-012

1 COPY TO Dunn Geoscience Corporation Attn: Jeff Peffer

000113

Samp Prep 25.00

INV TO- Dunn Geoscience Corporat 295.85 1213 Respectfully submitted
Lancaster Laboratories, Inc

Rosa F Bissel

LABORATORY ANALYSIS REPORT

Lancaster Laboratories INCORPORATED

LLI Sample No SW 219835

Date Reported 2/ 8/83
Date Submitted 1/27/83
Discard Date 2/15/83
P. O. No.

Dunn Geoscience Corporation
E S. 18th Street
Camp Hill, PA 17011

Warehouse 81 Carbon black pile composite
JRP # 1A JRP # 1B extra sample

ANALYSIS	AS RECEIVED		LAB CODE
Oil (Soxhlet Ext.)	1.47	%	236-76-03000
Trichloroethylene	26.	ppm	418-36-00500
Tetrachloroethylene	5.0	% by wt.	420-36-00500
1,1,2-Trichloroethane	1340.	ppm	999-36-00500

Analytical recovery data are not available for this sample matrix.
1 g of sample was extracted for 2 hrs. with 20 ml of methanol followed by analysis of the extract.

1 COPY TO Dunn Geoscience Corporation Attn: Jeff Peffer

000114

Samp Prep 15.00

INV TO- Dunn Geoscience Corporat 60.00 1213

Respectfully submitted
Lancaster Laboratories, Inc

J. Wilson Hershey/BY
J. Wilson Hershey B.A. Mgr.
Instrumental Analysis Program

MAIN LABORATORY:
2425 New Holland Pike, Lancaster, Pa. 17601 • (717) 656-2301
FRANKLIN DIVISION:
P.O. Box 467, 5424 Buchanan Trail East
Waynesboro, PA 17268 • (717) 762-9127

09:07:54- 40685 - 8 - 1 Y

LABORATORY ANALYSIS REPORT

Lancaster Laboratories INCORPORATED

LLI Sample No SW 208891

Date Reported 12/13/82
Date Submitted 11/ 2/82
Discard Date 1/12/83
P. O. No.
Collected by Client

n Geoscience Corporation
S. 18th Street
mp Hill, PA 17011

JRP # 1 Large Carbon Black Pile 11/1
Warehouse 81 Composite JRP # 1A & JRP # 1B

ALYSIS	AS RECEIVED		LAB CODE
enic	0.9	ppm	145-54-02800
erium	168.	ppm	146-54-01200
dmium	1.0	ppm	149-54-01000
omium	356.	ppm	151-54-01000
pper	0.864	% by wt.	153-54-01000
ead	7.40	% by wt.	155-54-01000
cury	< 0.05	ppm	159-54-02800
enium	< 1.	ppm	164-53-03000
lver	1.9	ppm	166-54-01000

OPY TO Dunn Geoscience Corporation Attn: Jeff Peffer

000115

mp Prep 10.00

V TO- Dunn Geoscience Corporat 158.00 1213 Respectfully submitted
Lancaster Laboratories, Inc.

AR000115

Robert F. Beisel, M.A., Mgr.

09:08:16- 40685 - 8 - 1 Y

LABORATORY ANALYSIS REPORT

Lancaster Laboratories INCORPORATED

LLI Sample No SW 208892

Date Reported 12/13/82
Date Submitted 11/ 2/82
Discard Date 1/12/83
P. O. No.
Collected by LLI#Y

Dunn Geoscience Corporation
18 S. 18th Street
Camp Hill, PA 17011

JRP # 2 Composite of Small Carbon Black Piles
Warehouse 81 11/1/82

ANALYSIS	AS RECEIVED		LAB CODE
Arsenic	1.6	ppm	145-54-0280(
Barium	146.	ppm	146-54-0120(
Cadmium	1.2	ppm	149-54-0100(
Chromium	299.	ppm	151-54-0100(
Copper	2.77	% by wt.	153-54-0100
Lead	7.87	% by wt.	155-54-0100
Mercury	< 0.05	ppm	159-54-0280
Selenium	< 1.	ppm	164-53-0300
Silver	0.5	ppm	166-54-0100

1 COPY TO Dunn Geoscience Corporation Attn: Jeff Peffer

000116

Samp Prep 10.00

INV TO- Dunn Geoscience Corporat 158.00 1213 Respectfully submitted
Lancaster Laboratories, Inc

MAIN LABORATORY:
2425 New Holland Pike, Lancaster, Pa. 17601 • (717) 656-2301
FRANKLIN DIVISION:
P.O. Box 467, 5424 Buchanan Trail East

AR000116

Robert F. Beisel

Robert F. Beisel, M.A., Mgr

09:08:38- 40685 - B - 1 Y

LABORATORY ANALYSIS REPORT

Lancaster Laboratories INCORPORATED

LLI Sample No SW 208893

Date Reported 12/13/82
Date Submitted 11/ 2/82
Discard Date 1/12/83
P. O. No.
Collected by Client

Dunn Geoscience Corporation
18 S. 18th Street
Camp Hill, PA 17011

JRP # 3 Bluish Salt Deposit on Surface
Warehouse 81 (eastside large carbon pile)

ANALYSIS	AS RECEIVED		LAB CODE
Arsenic	1.7	ppm	145-54-0280
Barium	157.	ppm	146-54-0120
Cadmium	1.4	ppm	149-54-0100
Chromium	357.	ppm	151-54-0100
Copper	2.11	% by wt.	153-54-0100
Lead	6.87	% by wt.	155-54-0100
Mercury	< 0.05	ppm	159-54-0280
Selenium	< 1.	ppm	164-53-0300
Silver	3.8	ppm	166-54-0100

1 COPY TO Dunn Geoscience Corporation Attn: Jeff Peffer

000117

Samp Prep 10.00

INV TO- Dunn Geoscience Corporat 158.00 1213 Respectfully submitted
Lancaster Laboratories, Inc.

MAIN LABORATORY:
2425 New Holland Pike, Lancaster, Pa. 1
FRANKLIN DIVISION:
P.O. Box 467, 5424 Buchanan Trail East

AR000117

Robert F. Beisel

Robert F. Beisel, M.A., Mgr.

LABORATORY ANALYSIS REPORT

Lancaster Laboratories INCORPORATED

LLI Sample No SW 208894

Dunn Geoscience Corporation
S. 18th Street
Camp Hill, PA 17011

Date Reported 12/13/82
Date Submitted 11/ 2/82
Discard Date 1/12/83
P. O. No.
Collected by LLI#y

JRP # 4 "Paper Pile"
Warehouse 81(lg. pink paper pile reprocessed fluff

ANALYSIS	AS RECEIVED		LAB CODE
Arsenic	1.8	ppm	145-54-02800
Barium	272.	ppm	146-54-01200
Cadmium	4.0	ppm	149-54-01000
Chromium	103.	ppm	151-54-01000
Copper	1.88	% by wt.	153-54-01000
Lead	3.15	% by wt.	155-54-01000
Mercury	0.17	ppm	159-54-02800
Selenium	< 1.	ppm	164-53-03000
Silver	14.1	ppm	166-54-01000

1 COPY TO Dunn Geoscience Corporation Attn: Jeff Peffer

000118

Camp Prep 10.00

TO- Dunn Geoscience Corporat 158.00 1213 Respectfully submitted
Lancaster Laboratories, Inc.

Robert F. Beisel

Robert F. Beisel, M.A., Mgr.

MAIN LABORATORY:
2425 New Holland Pike, Lancaster, Pa. 17601 • (717) 656-2301
FRANKLIN DIVISION:
P.O. Box 467, 5424 Buchanan Trail East
Waynesboro, PA 17268 • (717) 762-9127

JANUARY 25-26, 1983

GROUND WATER QUALITY SURVEY

SAMPLE	WELL	CONDUCTIVITY	COMMENT	TEMP.	SAMPLING TECHNIQUE
DGC 1 (MW7)	New MW PennDot Prop.	560	Sulfide Oder	11°C	pumped
DGC 2 (MW2)	New MW RR tracks & fence corner	420		10.5°C	pumped
DGC 3	PennDot Trailer Well	990	Sulfide Oder	12.0°C	pumped
DGC 4 (MW9)	New MW RR tracks-east of plant	730		12.0°C	pumped
DGC 5 (MW10)	Sp. RR tracks closest to plant	440		10.5°C	grab
DGC 6	Sp. RR tracks furthest from plant-large sycamore	390		7°C	grab
DGC 7	Barn Dug Well (at unoccupied house)	270		8°C	bailed
DGC 8	House dug well(unoccupied house)	490		7.5°C	bailed
DGC 9 (MW1)	Plastic 6" MW prop corner	580		9.5°C	bailed
DGC 10 (MW5)	At plant make up water	780		9°C	spigot
DGC 11 (MW6)	Well at hog pen	415		9.5°C	spigot
DGC 12 (MW4)	Well near plant	NR		NR	bailed
DGC 13 (MW3)	Well near pole	NR		NR	bailed
DGC 14	Cope House well	NR		NR	spigot
DGC 15	School	NR		NR	spigot
DGC 16 (MW8)	Well at plant entrance	650		11.5°C	pumped

LABORATORY ANALYSIS REPORT

Lancaster Laboratories INCORPORATED

LLI Sample No WW 219819

Date Reported 2/ 8/83
Date Submitted 1/27/83
Discard Date 2/15/83
P. O. No.

n Geoscience Corporation
1b S. 18th Street
Camp Hill, PA 17011

DGC-1 1/25/83 along road

ANALYSIS	AS RECEIVED		LAB CODE
enolphthalein Alk.	00000.	mg/l	201-76-00400
Total Alkalinity	171.	mg/l	202-76-00400
loride	18.	mg/l	224-76-00700
pper	< 0.03	mg/l	253-44-01100
Lead	0.15	mg/l	255-44-01100
richloroethylene	< 0.5	ppb	418-36-00500
trachloroethylene	< 0.5	ppb	420-36-00500
t.ans-1,2-Dichloroethene	< 0.5	ppb	999-36-00500
,1,2-Trichloroethane	< 0.5	ppb	999-36-00500

Sample for lead and copper field filtered and acidified.
nple for volatile organics collected in teflon-sealed glass vials without eadspace. Sample Cl and Alk collected in glass without preservation.

COPY TO Dunn Geoscience Corporation Attn: Jeff Peffer

000120

INV TO- Dunn Geoscience Corporat 57.00 1213

Respectfully submitted
Lancaster Laboratories, Inc.

J. Wilson Hershey/mep

J. Wilson Hershey B.A. Mgr.

14:08:50- 44698 - 17 - 1 Y

LABORATORY ANALYSIS REPORT

Lancaster Laboratories INCORPORATED

LLI Sample No WW 219820

n Geoscience Corporation
8 S. 18th Street
p Hill, PA 17011

Date Reported 2/ 8/83
Date Submitted 1/27/83
Discard Date 2/15/83
P. O. No.

DGC-2 1/25/83 Along tracks

ANALYSIS	AS RECEIVED		LAB CODE
Phenolphthalein Alk.	0.	mg/l	201-76-00400
Total Alkalinity	145.	mg/l	202-76-00400
loride	25.	mg/l	224-76-00700
opper	< 0.03	mg/l	253-44-01100
ead	0.09	mg/l	255-44-01100
ichloroethylene	< 0.5	ppb	418-36-00500
trachloroethylene	< 0.5	ppb	420-36-00500
trans-1,2-Dichloroethene	< 0.5	ppb	999-36-00500
1,2-Trichloroethane	< 0.5	ppb	999-36-00500

ample for lead and copper field filtered and acidified.
mple for volatile organics collected in teflon-sealed glass vials without headspace. Sample Cl and Alk collected in glass without preservation.

COPY TO Dunn Geoscience Corporation Attn: Jeff Peffer

000121

INV TO- Dunn Geoscience Corporat 57.00 1213 Respectfully submitted
Lancaster Laboratories, Inc.

AR000121

J. Wilson Hershey/MRA

MAIN LABORATORY:
2425 New Holland Pike, Lancaster, Pa

LABORATORY ANALYSIS REPORT

Lancaster Laboratories, INCORPORATED

LLI Sample No WW 219822

Date Reported 2/ 8/83
Date Submitted 1/27/83
Discard Date 2/15/83
P. O. No.

nn Geoscience Corporation
. 18th Street
.. Hill, PA 17011

DGC-4 1/25/83 Along tracks near spring

YSIS	AS RECEIVED		LAB CODE
enolphthalein Alk.	0.	mg/l	201-76-00400
t l Alkalinity	223.	mg/l	202-76-00400
loride	74.	mg/l	224-76-00700
oper	< 0.03	mg/l	253-44-01100
)	< 0.05	mg/l	255-44-01100
i hloroethylene	4900.	ppb	418-36-00500
etrachloroethylene	12000.	ppb	420-36-00500
s-1,2-Dichloroethene	6200.	ppb	999-36-00500
2-Trichloroethane	300.	ppb	999-36-00500

le for Lead and Copper field filtered and acidified. Sample for olatile organics collected in teflon sealed glass vials without head ace. Sample for Cl and Alk collected in glass without preservation.

COPY TO Dunn Geoscience Corporation Attn: Jeff Peffer

000122

TO- Dunn Geoscience Corporat 57.00 1213

Respectfully submitted
Lancaster Laboratories, Inc.

J. Wilson Hershey Jr. M.P.

J. Wilson Hershey B.A. Mgr.
Instrumental Analysis Program

MAIN LABORATORY:
2425 New Holland Pike, Lancaster, Pa. 17601 • (717) 656-2301
FRANKLIN DIVISION:
P.O. Box 467, 5424 Buchanan Trail East
Waynesboro, PA 17268 • (717) 762-9127

LABORATORY ANALYSIS REPORT

Lancaster Laboratories INCORPORATED

LLI Sample No WW 219821

Date Reported 2/ 8/83
Date Submitted 1/27/83
Discard Date 2/15/83
P. O. No.

[illegible]-n Geoscience Corporation
[illegible] S. 18th Street
[illegible]amp Hill, PA 17011

DGC-3 1/25/83 Penn Dot Well

[illegible]N.LYSIS	AS RECEIVED		LAB CODE
[illegible]nolphthalein Alk.	0.	mg/l	201-76-00400
[illegible]c al Alkalinity	229.	mg/l	202-76-00400
[illegible]hloride	217.	mg/l	224-76-00700
[illegible]: per	< 0.03	mg/l	253-44-01100
[illegible]:d	0.08	mg/l	255-44-01100
[illegible]richloroethylene	< 0.5	ppb	418-36-00500
[illegible]e+rachloroethylene	< 0.5	ppb	420-36-00500
[illegible]r ns-1,2-Dichloroethene	< 0.5	ppb	999-36-00500
[illegible],1,2-Trichloroethane	< 0.5	ppb	999-36-00500

[illegible]a...ple for lead and copper field filtered and acidified.
[illegible]ample for volatile organics collected in teflon-sealed glass vials without [illegible]r adspace. Sample Cl and Alk collected in glass without preservation.

[illegible]COPY TO Dunn Geoscience Corporation Attn: Jeff Peffer

000123

[illegible]/ TO- Dunn Geoscience Corporat 57.00 1213 Respectfully submitted
Lancaster Laboratories, Inc.

MAIN LABORATORY:
2425 New Holland Pike, Lancaster, Pa.
FRANKLIN DIVISION:
P.O. Box 467, 5424 Buchanan Trail East
Waynesboro, PA 17268 • (717) 762-9127

J. Wilson Hershey/mk

J. Wilson Hershey B.A. Mgr.
Instrumental Analysis Program

LABORATORY ANALYSIS REPORT

Lancaster Laboratories INCORPORATED

LLI Sample No WW 219823

Date Reported 2/ 8/83
Date Submitted 1/27/83
Discard Date 2/15/83
P. O. No.

Dunn Geoscience Corporation
8 S. 18th Street
Camp Hill, PA 17011

DGC-5 1/25/83 Spring # 1

ANALYSIS	AS RECEIVED		LAB CODE
Phenolphthalein Alk.	0.	mg/l	201-76-00400
Total Alkalinity	138.	mg/l	202-76-00400
Chloride	24.	mg/l	224-76-00700
Copper	< 0.03	mg/l	253-44-01100
Lead	< 0.05	mg/l	255-44-01100
Trichloroethylene	110.	ppb	418-36-00500
Tetrachloroethylene	970.	ppb	420-36-00500
Trans-1,2-Dichloroethane	2.7	ppb	999-36-00500
1,1,2-Trichloroethane	24.5	ppb	999-36-00500

Sample for Lead and Copper field filtered and acidified. Sample for volatile organics collected in teflon sealed glass vials without head space. Sample for Cl and Alk collected in glass without preservation.

1 COPY TO Dunn Geoscience Corporation Attn: Jeff Peffer

000124

WW TO- Dunn Geoscience Corporat 57.00 1213 Respectfully submitted
Lancaster Laboratories, Inc.

J. Wilson Hershey/mm

J. Wilson Hershey B.A. Mgr.
Instrumental Analysis D

MAIN LABORATORY:
2425 New Holland Pike, Lancaster, Pa. 17601 • (717) 656-2301
FRANKLIN DIVISION:
P.O. Box 467, 5424 Buchanan Trail East
Waynesboro, PA 17268 • (717) 762-9127

14:10:30- 44698 - 17 - 1 Y

LABORATORY ANALYSIS REPORT

Lancaster Laboratories INCORPORATED

LLI Sample No WW 219824

Dunn Geoscience Corporation
18 S. 18th Street
Camp Hill, PA 17011

Date Reported 2/ 8/83
Date Submitted 1/27/83
Discard Date 2/15/83
P. O. No.

DGC-6 1/25/83 Spring # 2

ANALYSIS	AS RECEIVED		LAB CODE
Phenolphthalein Alk.	0.	mg/l	201-76-004C
Total Alkalinity	114.	mg/l	202-76-004C
Chloride	26.	mg/l	224-76-007C
Copper	< 0.03	mg/l	253-44-011C
Lead	< 0.05	mg/l	255-44-011C
Trichloroethylene	0.6	ppb	418-36-005C
Tetrachloroethylene	7.4	ppb	420-36-005C
trans-1,2-Dichloroethane	< 0.5	ppb	999-36-005C
1,1,2-Trichloroethane	< 0.5	ppb	999-36-005C

Sample for Lead and Copper field filtered and acidified. Sample for volatile organics collected in teflon sealed glass vials without head space. Sample for Cl and Alk collected in glass without preservation.

1 COPY TO Dunn Geoscience Corporation Attn: Jeff Peffer

000125

INV TO- Dunn Geoscience Corporat 57.00 1213 Respectfully submitted
Lancaster Laboratories, Inc.

MAIN LABORATORY:
2425 New Holland Pike, Lancaster, Pa
FRANKLIN DIVISION:

AR000125

J Wilson Hensley

LABORATORY ANALYSIS REPORT

Lancaster Laboratories INCORPORATED

LLI Sample No WW 219825

Date Reported 2/ 8/83
Date Submitted 1/27/83
Discard Date. 2/15/83
P. O. No.

...n Geoscience Corporation
...S. 18th Street
amp Hill, PA 17011

DGC-7 1/25/83 Dug well at barn

..LYSIS	AS RECEIVED		LAB CODE
nolphthalein Alk.	0.	mg/l	201-76-0040C
al Alkalinity	74.	mg/l	202-76-0040C
hloride	8.	mg/l	224-76-0070C
- per	< 0.03	mg/l	253-44-0110C
d	0.05	mg/l	255-44-01100
richloroethylene	1.5	ppb	418-36-00500
...rachloroethylene	43.	ppb	420-36-00500
ns-1,2-Dichloroethene	< 0.5	ppb	999-36-00500
,1,2-Trichloroethane	0.9	ppb	999-36-00500

...ple for Lead and Copper field filtered and acidified. Sample for olatile organics collected in teflon sealed glass vials without head ce. Sample for Cl and Alk collected in glass without preservation.

COPY TO Dunn Geoscience Corporation Attn: Jeff Peffer

000126

TO- Dunn Geoscience Corporat 57.00 1213

Respectfully submitted
Lancaster Laboratories, Inc.

J. Wilson Hershey B.A. Mgr.

MAIN LABORATORY:
2425 New Holland Pike, Lancaster, Pa. 17601 • (717) 656-2301
FRANKLIN DIVISION:
P.O. Box 467, 5424 Buchanan Trail East
Waynesboro, PA 17268 • (717) 762-9127

14:11:20- 44698 - 17 - 1 Y

LABORATORY ANALYSIS REPORT

Lancaster Laboratories INCORPORATED

LLI Sample No WW 219826

Date Reported 2/ 8/83
Date Submitted 1/27/83
Discard Date 2/15/83
P. O. No.

Geoscience Corporation
S. 18th Street
p Hill, PA 17011

DGC-8 1/25/83 Dug well at hse

ALYSIS	AS RECEIVED		LAB CODE
e olphthalein Alk.	0.	mg/l	201-76-00400
otal Alkalinity	180.	mg/l	202-76-00400
ride	11.	mg/l	224-76-00700
er	< 0.03	mg/l	253-44-01100
ead	< 0.05	mg/l	255-44-01100
-chloroethylene	420.	ppb	418-36-00500
achloroethylene	160.	ppb	420-36-00500
rans-1,2-Dichloroethene	3.5	ppb	999-36-00500
1,2-Trichloroethane	5.2	ppb	999-36-00500

ample for Lead and Copper field filtered and acidified. Sample for
l tile organics collected in teflon sealed glass vials without head
e. Sample for Cl and Alk collected in glass without preservation.

PY TO Dunn Geoscience Corporation Attn: Jeff Peffer

000127

NV TO- Dunn Geoscience Corporat 57.00 1213 Respectfully submitted
Lancaster Laboratories, Inc.

J. Wilson Hershey B.A. Mgr.

14:11:47- 44698 - 17 - 1 Y

LABORATORY ANALYSIS REPORT

Lancaster Laboratories INCORPORATED

LLI Sample No WW 219827

Date Reported 2/ 8/83
Date Submitted 1/27/83
Discard Date 2/15/83
P. O. No.

unn Geoscience Corporation
18 S. 18th Street
Camp Hill, PA 17011

DGC-9 1/25/83 Well at fence cor.

ANALYSIS	AS RECEIVED		LAB CODE
Phenolphthalein Alk.	0.	mg/l	201-76-00400
Total Alkalinity	248.	mg/l	202-76-00400
Chloride	7.	mg/l	224-76-00700
Copper	< 0.03	mg/l	253-44-01100
Lead	< 0.05	mg/l	255-44-01100
Trichloroethylene	6.1	ppb	418-36-00500
Tetrachloroethylene	470.	ppb	420-36-00500
trans-1,2-Dichloroethene	21.	ppb	999-36-00500
1,1,2-Trichloroethane	< 0.5	ppb	999-36-00500

Sample for Lead and Copper field filtered and acidified. Sample for volatile organics collected in teflon sealed glass vials without head space. Sample for Cl and Alk collected in glass without preservation.

1 COPY TO Dunn Geoscience Corporation Attn: Jeff Peffer

000128

INV TO- Dunn Geoscience Corporat 57.00 1213

Respectfully submitted
Lancaster Laboratories, Inc.

J. Wilson Hershey B.A. Mgr.

MAIN LABORATORY:
2425 New Holland Pike, Lancaster, Pa. 17601 • (717) 656-2301
FRANKLIN DIVISION:
P.O. Box 467, 5424 Buchanan Trail East

LABORATORY ANALYSIS REPORT

Lancaster Laboratories INCORPORATED

LLI Sample No WW 21982

Dunn Geoscience Corporation
18 S. 18th Street
Camp Hill, PA 17011

Date Reported 2/ 8/
Date Submitted 1/27/
Discard Date 2/15/
P. O. No.

DGC-10 1/25/83 Plant make up

ANALYSIS	AS RECEIVED		LAB CODE
Phenolphthalein Alk.	0.	mg/l	201-76-(
Total Alkalinity	146.	mg/l	202-76-(
Chloride	80.	mg/l	224-76-(
Copper	< 0.03	mg/l	253-44-(
Lead	0.09	mg/l	255-44-(
Trichloroethylene	4000.	ppb	418-36-(
Tetrachloroethylene	23000.	ppb	420-36-(
trans-1,2-Dichloroethene	400.	ppb	999-36-(
1,1,2-Trichloroethane	1350.	ppb	999-36-(

Sample for Lead and Copper field filtered and acidified. Sample for volatile organics collected in teflon sealed glass vials without head space. Sample for Cl and Alk collected in glass without preservation.

1 COPY TO Dunn Geoscience Corporation Attn: Jeff Peffer

000129

INV TO- Dunn Geoscience Corporat 57.00 1213 Respectfully submitted
Lancaster Laboratories, Inc

J. Wilson Hershey

14:12:35- 44698 - 17 - 1 Y

LABORATORY ANALYSIS REPORT

Lancaster Laboratories INCORPORATED

LLI Sample No WW 219829

Date Reported 2/ 8/83
Date Submitted 1/27/83
Discard Date 2/15/83
P. O. No.

Dunn Geoscience Corporation
18 S. 18th Street
Camp Hill, PA 17011

DGC-11 1/25/83 Well at hog pen

ANALYSIS	AS RECEIVED		LAB CODE
Phenolphthalein Alk.	00.	mg/l	201-76-00
Total Alkalinity	158.	mg/l	202-76-00
Chloride	10.	mg/l	224-76-00
Copper	< 0.03	mg/l	253-44-01
Lead	< 0.05	mg/l	255-44-01
Trichloroethylene	29.	ppb	418-36-00
Tetrachloroethylene	1200.	ppb	420-36-00
trans-1,2-Dichloroethene	0.6	ppb	999-36-00
1,1,2-Trichloroethane	22.	ppb	999-36-00

Sample for Lead and Copper field filtered and acidified. Sample for volatile organics collected in teflon sealed glass vials without head space. Sample for Cl and Alk collected in glass without preservation.

1 COPY TO Dunn Geoscience Corporation Attn: Jeff Peffer

000130

INV TO- Dunn Geoscience Corporat 57.00 1213

Respectfully submitted
Lancaster Laboratories, Inc.

J. Wilson Hershey

J. Wilson Hershey P.A. Mgr

MAIN LABORATORY:
2425 New Holland Pike, Lancaster, Pa. 17601 • (717) 656-2301
FRANKLIN DIVISION:
P.O. Box 467, 5424 Buchanan Trail East

14:12:59- 44698 - 17 - 1 Y

LABORATORY ANALYSIS REPORT

Lancaster Laboratories INCORPORATED

LLI Sample No WW 219830

Date Reported 2/ 8/83
Date Submitted 1/27/83
Discard Date 2/15/83
P. O. No.

nn Geoscience Corporation
S. 18th Street
Camp Hill, PA 17011

DGC-12 1/25/83 Well near plant

ALYSIS	AS RECEIVED		LAB CODE
enolphthalein Alk.	0.	mg/l	201-76-00400
tal Alkalinity	91.	mg/l	202-76-00400
Chloride	14.	mg/l	224-76-00700
pper	1.77	mg/l	253-44-01100
d	0.13	mg/l	255-44-01100
Trichloroethylene	750.	ppb	418-36-00500
Tetrachloroethylene	860.	ppb	420-36-00500
ns-1,2-Dichloroethene	43.	ppb	999-36-00500
,1,2-Trichloroethane	11.	ppb	999-36-00500

mple for Lead and Copper was field acidified. Sample for olatile organics collected in teflon sealed glass vials without head ce. Sample for Cl and Alk collected in glass without preservation.

COPY TO Dunn Geoscience Corporation Attn: Jeff Peffer

000131

TO- Dunn Geoscience Corporat 57.00 1213 Respectfully submitted
Lancaster Laboratories, Inc.

J. Wilson Hershey /mek

MAIN LABORATORY:
2425 New Holland Pike, Lancaster, Pa. 17601 • (717) 656-2301
FRANKLIN DIVISION:
P.O. Box 467, 5424 Buchanan Trail East

AR000131

14:13:23- 44698 - 17 - 1 Y

LABORATORY ANALYSIS REPORT

Lancaster Laboratories INCORPORATED

LLI Sample No WW 219831

Date Reported 2/ 8/83
Date Submitted 1/27/83
Discard Date 2/15/83
P. O. No.

in Geoscience Corporation
16 S. 18th Street
Camp Hill, PA 17011

DGC -13 1/25/83 Well near pole

ANALYSIS	AS RECEIVED		LAB CODE
enolphthalein Alk.	0.	mg/l	201-76-00400
Total Alkalinity	131.	mg/l	202-76-00400
Chloride	13.	mg/l	224-76-00700
Copper	0.54	mg/l	253-44-01100
Lead	0.08	mg/l	255-44-01100
Trichloroethylene	200.	ppb	418-36-00500
trachloroethylene	150.	ppb	420-36-00500
ans-1,2-Dichloroethene	17.	ppb	999-36-00500
1,1,2-Trichloroethane	3.0	ppb	999-36-00500

Sample for Lead and Copper field acidified. Sample for volatile organics collected in teflon sealed glass vials without head space. Sample for Cl and Alk collected in glass without preservation.

1 COPY TO Dunn Geoscience Corporation Attn: Jeff Peffer

000132

INV TO- Dunn Geoscience Corporat 57.00 1213

Respectfully submitted
Lancaster Laboratories, Inc.

J. Wilson Hershey/mzh

J. Wilson Hershey B.A. Mgr.

MAIN LABORATORY:
2425 New Holland Pike, Lancaster, Pa. 17601 • (717) 656-2301
FRANKLIN DIVISION:
P.O. Box 467, 5424 Buchanan Trail East

LABORATORY ANALYSIS REPORT

Lancaster Laboratories INCORPORATED

LLI Sample No WW 219834

Date Reported 2/ 8/8
Date Submitted 1/27/8
Discard Date 2/15/8
P. O. No.

Dunn Geoscience Corporation
18 S. 18th Street
Camp Hill, PA 17011

DGC-16 1/26/83 Well at pump test

ANALYSIS	AS RECEIVED		LAB CODE
Phenolphthalein Alk.	0.	mg/l	201-76-C
Total Alkalinity	151.	mg/l	202-76-C
Chloride	69.	mg/l	224-76-C
Copper	< 0.03	mg/l	253-44-C
Lead	< 0.05	mg/l	255-44-C
Trichloroethylene	4600.	ppb	418-36-C
Tetrachloroethylene	6600.	ppb	420-36-C
trans-1,2-Dichloroethene	2700.	ppb	999-36-C
1,1,2-Trichloroethane	1100.	ppb	999-36-C

Sample for Lead and Copper field filtered and acidified. Sample for volatile organics collected in teflon sealed glass vials without head space. Sample for Cl and Alk collected in glass without preservation.

1 COPY TO Dunn Geoscience Corporation Attn: Jeff Peffer

000133

INV TO- Dunn Geoscience Corporat 57.00 1213

Respectfully submitted
Lancaster Laboratories, In

J. Wilson Hershey

J. Wilson Hershey B.A. Mgr

MAIN LABORATORY:
2425 New Holland Pike, Lancaster, Pa. 17601 • (717) 656-2301
FRANKLIN DIVISION:
P.O. Box 467, 5424 Buchanan Trail East

LABORATORY ANALYSIS REPORT

Lancaster Laboratories INCORPORATED

LLI Sample No WW 219833

Date Reported 2/ 8/83
Date Submitted 1/27/83
Discard Date 2/15/83
P. O. No.

Geoscience Corporation
. 18th Street
mp Hill, PA 17011

DGC-15 1/26/83 School

ALYSIS	AS RECEIVED		LAB CODE
olphthalein Alk.	0.	mg/l	201-76-00400
tal Alkalinity	139.	mg/l	202-76-00400
loride	30.	mg/l	224-76-00700
er	0.04	mg/l	253-44-01100
	< 0.05	mg/l	255-44-01100
ichloroethylene	0.7	ppb	418-36-00500
achloroethylene	5.3	ppb	420-36-00500
s-1,2-Dichloroethene	< 0.5	ppb	999-36-00500
1,2-Trichloroethane	< 0.5	ppb	999-36-00500

mple for Lead and Copper field filtered and acidified. Sample for latile organics collected in teflon sealed glass vials without head e. Sample for Cl and Alk collected in glass without preservation.

COPY TO Dunn Geoscience Corporation Attn: Jeff Peffer

000134

TO- Dunn Geoscience Corporat 57.00 1213 Respectfully submitted
Lancaster Laboratories, Inc.

MAIN LABORATORY:
2425 New Holland Pike, Lancaster, Pa. 17601 • (717) 656-2301
FRANKLIN DIVISION:
P.O. Box 467, 5424 Buchanan Trail East

J. Wilson Hershey B.A. Mgr.

8-13.1
/81

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL RESOURCES
BUREAU OF LABORATORIES
SPECIAL ANALYSES REPORT

Lab Number 11941
Date Received 4/5/83

ESTABLISHMENT	CASE	FACILITY	COLL NUMBER
Domino Salvage	M-W. Mfg		0403

COUNTY	MUNICIPALITY	PROGRAM	COLL NAME	TYPE	STD ANALYSIS
Montour	Valley Twp	Iw	Martha Keth	0	

CARD 13	ID CODE (ALL CARDS) 4-16 (Cnty, Mun, T, Est, Case, Fac.)	LATITUDE 4-10	LONGITUDE 11-18	DATE 19-24 (M D Y)	TIME 25-28 (Hr Min)	KIND 29
2			0	040483	1110	4

USGS-G 30-34	BUREAU 35-37 AMIS	SAMPLE NUMBER 38-43	STREAM NAME 44-57	RELATIVE POINT 58
	~~WGS~~ 713	040 31/89	GROUNDWATER	

FULL DESCRIPTION WHERE SAMPLE TAKEN: MW #3

ADDITIONAL LAB ANALYSES
~~[illegible]~~
PCB's

CUSTODY LOG
Shipped: Purolator Date 04/04/83
Legal Seal No. 098108
Sealed by: J. Yoder
Legal Seal Condition: Intact

QUALITATIVE REPORT

DO NOT WRITE BELOW THIS LINE

QUANTITATIVE RESULTS

ANALYSIS:	UNITS:	ANALYSIS CODE	RESULTS (SHOW DECIMAL POINTS ON LINES)
Aroclor 1242	ug/l		40.

RECEIVED
...3
WATER QUALITY MGT.
WILLIAMSPORT REGION

ANALYST J. H. Gualpeiac
SIGNATURE

DATE 4/8/83

AR000135

000135

AB-13.1

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL RESOURCES
BUREAU OF LABORATORIES
SPECIAL ANALYSES REPORT

Lab Number 11042

Date Received 4/5/83

SURVEY	CASE	FACILITY	COLL NUMBER
Domino Sludge	MW Mfg		040

MUNICIPALITY	PROGRAM	COLL NAME	TYPE TR	STD ANALYSIS
Moi Tour	Valley Twp	DW	Martha Kerr	0

CARD 2	D CODE (ALL CARDS) 4-5	LATITUDE 4-10	LONGITUDE 11-18	DATE 19-24	TIME 25-28	KIND 29
1/2	Cnty / Mun / T / Est / Case / Fac		0	M 04 D 14 Y 83	Hr 13 Min 00	4

USGS-Q 30-34	BUREAU 35-37 AM S	SAMPLE NUMBER 38-43	STREAM NAME 44-57	RELATIVE POINT 58
	71 3	040319 0	GROUNDWATER	

DESCRIPTION WHERE SAMPLE TAKEN: MW #4

ADDITIONAL LAB ANALYSES: [redacted] PCB's

CUSTODY LOG
Shipped Purolator Date 4/4/83
Seal No. 099407
Received by: J Lifter
Seal Condition: Intact

QUALITATIVE REPORT

DO NOT WRITE BELOW THIS LINE

QUANTITATIVE RESULTS

ANALYSIS	UNITS:	ANALYSIS CODE	RESULTS (SHOW DECIMAL POINTS ON LINES)
Aroclor 1242	ug/l		46

RECEIVED
[illegible] REGION

ANALYST J. H. Malpiece (SIGNATURE)

DATE 4/8/83

000136

AR000136

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL RESOURCES
BUREAU OF LABORATORIES
SPECIAL ANALYSES REPORT

Lab Number 1194
Date Received 4/5/83

ESTABLISHMENT	CASE	FACILITY	COLL NUMBER
Domino Salvage	mw mfg		0403

CITY	MUNICIPALITY	PROGRAM	COLL NAME	TYPE TP	STD ANALYSIS
Mohtour	Valley Twp	Dw	Matthe Rem	0	

CARD 1/2	CODE ALL CARDS 4-16 (City, Mun, T, Est, Case, Fac)	LATITUDE 4-10	LONGITUDE 11-18	DATE 19-24 (M D Y)	TIME 25-28 (Hr Min)	KIND 29
			0	04 04 83	13 30	4

USGS-QUAD 30-34	BUREAU 35-37 AMS	SAMPLE NUMBER 38-43	STREAM NAME 44-57	RELATIVE POINT 58
	713	040319 1	GROUNDWATER	

DESCRIPTION WHERE SAMPLE TAKEN: mw-8

ADDITIONAL LAB ANALYSES: PCB's

CUSTODY LOG
Shipped: Purolator Date: 4/4/83
Legal Seal No. 096442
Received by: J Yoder
Seal Condition: Intact

QUALITATIVE REPORT

DO NOT WRITE BELOW THIS LINE

QUANTITATIVE RESULTS

ANALYSIS:	UNITS:	ANALYSIS CODE	RESULTS (SHOW DECIMAL POINTS ON LINES)
Aroclor 1242	ug/l		00.94-

RECEIVED
[illegible] REPORT REGION

ANALYST J. H. Malpiedi (SIGNATURE) DATE 4/8/83

AR000137 000137

LAB-13.1
1

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL RESOURCES
BUREAU OF LABORATORIES
SPECIAL ANALYSES REPORT

Lab Number 4/5/83
Date Received 11064

ESTABLISHMENT	CASE	FACILITY	COLL NUMBER
Domino Sales	MW Mfg Co Inc		04

NTY	MUNICIPALITY	PROGRAM	COLL NAME	TYPE TS	STD ANALYSIS
MonTour	Valley Twp	FW	Martha Kerg	0	

CARD (3)	ID CODE (ALL CARDS) 4-16						LATITUDE 4-10	LONGITUDE 11-18	DATE 19-24			TIME 25-28		< ND 29
1/2	Cnty	Mun	T	Str	Case	Fac		0	M	D	Y	Hr	Min	4
									04	04	83	09	45	

USGS (30-34)	BUREAU (35-37 4 MIS)	SAMPLE NUMBER 38-43	STREAM NAME 44-57	RELATIVE POINT 58
	711 3	04 10 3 1 8 7	GROUND WATER	

AL DESCRIPTION WHERE SAMPLE TAKEN MW #1

ADDITIONAL LAB ANALYSES
VOA

CUSTODY LOG
v Shipped Pond Tour Date 4/4/83
Legal Seal No. 099412
eived by: MH
Legal Seal Condition INTACT

QUALITATIVE REPORT

DO NOT WRITE BELOW THIS LINE

GC/MS VOA

QUANTITATIVE RESULTS

ANALYSIS:	UNITS:	ANALYSIS CODE	RESULTS (SHOW DECIMAL POINTS ON LINES)
1,2 DICHLORETHENE	ug/L	F	7
TETRACHLORETHENE	ug/L	F	9

ANALYST Michael L. Kaufman SIGNATURE
DATE 4-14-83

000138

AR000138

3-Lab-12.1
81

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL RESOURCES
BUREAU OF LABORATORIES
SPECIAL ANALYSES REPORT

Lab Number 11045

Date Received 4/5/83

Dominio Salvage	Mw Mfg Co.				0403
Mon Tour	Valley Twp	FW	Hart Rd Kern.	0	

RD 3.	ID CODE ALL CARDS 4-16						LATITUDE 4-10	LONGITUDE 11-18	DATE 19-24		TIME 25-28		KIND 29
1 2	Serv	Mun	T	Es	Case	Fac		0	M 04	D 04	Hr 10	Min 25	4

LOCATION 30-34	BUREAU 35-37 AMIS	SAMPLE NUMBER 38-43	STREAM NAME 44-57	RELATIVE POINT 58
	713	040318	GROUNDWATER	

FULL DESCRIPTION WHERE SAMPLE TAKEN: MW-#2

ADDITIONAL LAB ANALYSES: V.O.A.

CUSTODY LOG
How Shipped: PuroLator Date: 4/4/83
Seal No. 099403
Received by: MH
Original Seal Condition: INTACT

QUALITATIVE REPORT

DO NOT WRITE BELOW THIS LINE

GC/MS VOA NONE DETECTED

QUANTITATIVE RESULTS

ANALYSIS:	UNITS:	ANALYSIS CODE	RESULTS (SHOW DECIMAL POINTS ON LINES)

RECEIVED
APR 18 1983
WATER QUALITY MGMT.
WILLIAMSPORT REGION

ANALYST Michael L. Hausman SIGNATURE AR000139 DATE 4-14-83

000139

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL RESOURCES
BUREAU OF LABORATORIES
SPECIAL ANALYSES REPORT

Lab Number 12945
Date Received 4/5/83

CLIENT: Dornino Salvage	CASE: MW Mfg Co	FACILITY			COLL. NUMBER: 0403
CITY: Mont Tour	MUNICIPALITY: Valley Twp	PROGRAM: DW	COLL. NAME: Martha Kern	TYPE TR: 0	STD ANALYSIS

D 13	ID CODE (ALL CARDS) 4-16						LATITUDE 4-10	LONGITUDE 11-18	DATE 19-24	TIME 25-28	KIND 29
1/2	Cons	Mun	F	Est	Case	Fac.		0	M D Y: 01 04 83	Hr 11	Min 00	40

D 30-34	BUREAU 35-37 AMIS	SAMPLE NUMBER 38-43	STREAM NAME 44-57	RELATIVE POINT 58
	7 1 3	0 4 0 3 1 8 9	GROUNDWATER	

DESCRIPTION WHERE SAMPLE TAKEN: MW # 3 Duplicate Samples Collected

ADDITIONAL LAB ANALYSES: VOA.

CUSTODY LOG
Shipped: Purolator Date: 4/4/83
Bill No. 099408, 099409
Received by: MH
Seal Condition: Intact (Yes)

QUALITATIVE REPORT

DO NOT WRITE BELOW THIS LINE

GC/MS VOA

QUANTITATIVE RESULTS

ANALYSIS:	UNITS:	ANALYSIS CODE	RESULTS (SHOW DECIMAL POINTS ON LINES)
1,2 DICHLOROETHENE	ug/L		1.6
TRICHLOROETHENE	ug/L		EST > 250.
TETRACHLOROETHENE	ug/L		EST > 200.

ANALYST: Michael L. Weisbrom (SIGNATURE) DATE: 4-14-83

AR000140

-13.1

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL RESOURCES
BUREAU OF LABORATORIES
SPECIAL ANALYSES REPORT

Lab Number 11057
Date Received 4/5/83

Domino Sludge	CASE MW-W	FACILITY			COLL NUMBER 0403
MonTour	MUNICIPALITY Valley Twp	PROGRAM EW	COLL NAME Mary Beth Kern	TYPE TS 0	STD ANALYSIS

CARD 1-2	ID CODE/ALL CARDS 3-16						LATITUDE 4-10	LONGITUDE 11-17	DATE 19-24			TIME 25-28		KIND 29
	County	Mun	T	Est	Case	Fac.			M	D	Y	Hr	Min	
2								0						4

GS 30-34	BUREAU 35-37 AMIS	SAMPLE NUMBER 38-43	STREAM NAME 44-53	RELATIVE POINT 54
	713	041031910		

SCRIPTION WHERE SAMPLE TAKEN: MW #4 Duplicate Samples Taken.

ADDITIONAL LAB ANALYSES: VOA

CUSTODY LOG
pped PuroLator Date 4/4/83
l Seal No. 099468, 099469
l by: MH
al Condition: Intact

QUALITATIVE REPORT

DO NOT WRITE BELOW THIS LINE

NOTE: SAMPLE DILUTED 1 ml TO 10 ml

GC/MS VOA

QUANTITATIVE RESULTS

ALYSIS:	UNITS:	ANALYSIS CODE	RESULTS (SHOW DECIMAL POINTS ON LINES)
1,2 DICHLOROETHENE	ug/L		10
TRICHLOROETHENE	ug/L		180
TETRACHLOROETHENE	ug/L		130

RECEIVED APR 18 1983 WATER QUALITY MANAGEMENT

ANALYST Michael L. Heishman (SIGNATURE) DATE 4-14-83

000141

AR000141

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COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL RESOURCES
BUREAU OF LABORATORIES
SPECIAL ANALYSES REPORT

Lab Number 11099
Date Received 4/5/83

ESTABLISHMENT	CASE	FACILITY	COLLECTOR NUMBER
Domino Sibuiga	MW Mfg Co		0403

CNTY	MUNICIPALITY	PROGRAM	COLL NAME	TYPE TR	STD ANALYSIS
				0	

CARD (3)	ID CODE (ALL CARDS) 4 - 16						LATITUDE 4 - 10	LONGITUDE 11 - 18	DATE 19 - 24			TIME 25 - 28		KIND 29
1/2	Cnty	Mun	T	Est	Case	Fac.			M	D	Y	Hr	Min	
								0	04	04	83	13	30	4

USGS-O 30-34	BUREAU 35-37 AMIS	SAMPLE NUMBER 38-43	STREAM NAME 44-57	RELATIVE POINT 58
	713	040319	GROUNDWATER	

L DESCRIPTION WHERE SAMPLE TAKEN: MW #8 Duplicate Sample Taken

ADDITIONAL LAB ANALYSES: V.O.A.

CUSTODY LOG
Shipped Purolator Date 4/4/83
Legal Seal No. 096443, 096444
ived by:
Legal Seal Condition: INTACT

QUALITATIVE REPORT

DO NOT WRITE BELOW THIS LINE

NOTE: SAMPLE DILUTED 1 TO 10

GC/MS VOA

RECEIVED
APR 8 1983
WATER QUALITY MANAGEMENT

QUANTITATIVE RESULTS

ANALYSIS:	UNITS:	ANALYSIS CODE	RESULTS (SHOW DECIMAL POINTS ON LINES)
1,1 DICHLOROETHENE	ug/L		30
1,2 DICHLOROETHENE	ug/L		EST > 1200
TRICHLOROETHENE	ug/L		EST > 2500
1,2 TRICHLOROETHANE	ug/L		500
TETRACHLOROETHENE	ug/L		EST > 4300

ANALYST Michael L. Heishman (SIGNATURE) DATE 4-14-83

AR000142 000142

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL RESOURCES
BUREAU OF LABORATORIES
SPECIAL ANALYSES REPORT

Lab Number 11249
Date Received 4/5/83

INVENT	CASE	FACILITY	COLL. NUMBER
Domino Salvage	M.W. MFG.	MW-3	0403

MUNICIPALITY	PROGRAM	COLL NAME	TYPE TR	STD ANALYSIS
Lenhartsville Valley	IW	Martha H Kern	O	—

CARD 1	DODE (ALL CARDS) 4-16						LATITUDE 4-10	LONGITUDE 11-18	DATE 19-24			TIME 25-28		MED 29
2	Cnty	Mun	T	Est	Case	Fac.		0	M 01	D 14	Y 83	Hr 10	Min 512	4

30-34	BUREAU 35-37 AMIS	SAMPLE NUMBER 38-43	STREAM NAME 44-57	RELATIVE POINT 58
15 11714	701 3	014013 1 1 9 12	GROUND WATER 1	

SCRIPTION WHERE SAMPLE TAKEN: MW-3 - bailed

ADDITIONAL LAB ANALYSES: Organics - solvents petroleum products

CUSTODY LOG
pped Porciator Date 4/4/83
l seal No. 099404
ved by:
al Condition:

QUALITATIVE REPORT

DO NOT WRITE BELOW THIS LINE

UV-IR - Long Chain Hydrocarbon oil. Possibly a Lubricating oil.
CHROMATOGRAPHY - F.I.D.: "OIL" LAYER NO AROMATIC SOLVENTS DETECTED DET LIMIT ~ 3.5ug/ml. NO CHLORINATED SOLVENTS SUCH AS 1,1,1-TCE TCE PCE DETECTED, DET LIMIT ~ 16 ug/ml. SEVERAL TINY UNIDENTIFIED PEAKS PRESENT. 21, Mone 4/7/83

QUANTITATIVE RESULTS

ALYSIS:	UNITS:	ANALYSIS CODE	RESULTS (SHOW DECIMAL POINTS ON LINES)

RECEIVED
[illegible]
[illegible] REGION

ANALYST Michael DeFilippo DATE 4/5/83
SIGNATURE

AR000143 000143

AB-13.1
3/80

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL RESOURCES
BUREAU OF LABORATORIES
SPECIAL ANALYSES REPORT

Lab Number 11294
Date Received 4/6/83

STABLISHMENT	CASE	FACILITY	COLL NUMBER
Domico Salvage	MW MG	MW-5	0403

MUNICIPALITY	PROGRAM	COLL NAME	TYPE TR	STD ANALYSIS
Montour / Valley Twp	DW	Mark H Ken	O	—

CARD 13	ID CODE (ALL CARDS) 4-16						LATITUDE 4-10	LONGITUDE 11-18	DATE 19-24			TIME 25-28		KIND 29
	Cnty	Mun	T	Est	Case	Fac			M	D	Y	Hr	Min	
2								0	04	05	83	13	40	4

USGS 30-34	BUREAU 35-37 AMIS	SAMPLE NUMBER 38-43	STREAM NAME 44-57	RELATIVE POINT 58
15174	703	040311917	GROUND WATER	

FULL DESCRIPTION WHERE SAMPLE TAKEN: 13Ldg Spigot

ADDITIONAL LAB ANALYSES: PCB's

CUSTODY LOG
Shipped Purolator Date 4/5/83
Legal Seal No. 098198
ved by: J Yzbr
Legal Seal Condition: Intact

QUALITATIVE REPORT

DO NOT WRITE BELOW THIS LINE

Aroclor 1242 - present - estimated at .40 ug/l.
Quantitation is estimated due to interference from large "solvent" peaks.

QUANTITATIVE RESULTS

ANALYSIS:	UNITS:	ANALYSIS CODE	RESULTS (SHOW DECIMAL POINTS ON LINES)

RECEIVED
APR 83
ENVIRONMENTAL REGION

ANALYST J. H. Smalzer
SIGNATURE

DATE 4/8/83

AR000144

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COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL RESOURCES
BUREAU OF LABORATORIES
SPECIAL ANALYSES REPORT

Lab Number 11216
Date Received 4/6/83

ESTABLISHMENT	CASE	FACILITY	COLL NUMBER
Domino Salvage	M.W Mfg	Penn D.O.T well	0403

MUNICIPALITY	PROGRAM	COLL NAME	TYPE FD	STD ANALYSIS
Montour Valley	IW	Month Year	0	—

RD (3)	ID CODE (ALL CARDS) 4/16						LATITUDE 4-10	LONGITUDE 11-18	DATE 19-24			TIME 25-28		FND 29
2	Cnty	Mun	T	Est	Case	Fac.		0	M	D	Y	Hr	Mn	4
									04	05	83	11	05	

FGS (30-34)	BUREAU (35-37) AMIS	SAMPLE NUMBER (38-43)	STREAM NAME (44-57)	RELATIVE POINT (58)
15 17 4	7 0 3	C 4 0 3 1 9 3	GROUND WATER	

FULL DESCRIPTION WHERE SAMPLE TAKEN: well pumped for 20 minutes - at trailer - Penn. D.O.T.

ADDITIONAL LAB ANALYSES: VOA

CUSTODY LOG
Shipped Purolator Date 4/5/83
Seal No. 098111
By: MH
Seal Condition: INTACT

QUALITATIVE REPORT

DO NOT WRITE BELOW THIS LINE

C/MS VOA NONE DETECTED

QUANTITATIVE RESULTS

PARMS:	UNITS:	ANALYSIS CODE	RESULTS (SHOW DECIMAL POINTS ON LINES)

RECEIVED APR 18 1983 WATER QUALITY MGMT. WILLIAMSPORT, PA. REGION

ANALYST Michael L. Hershman SIGNATURE
DATE 4-14-83

AR000145
000145

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COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL RESOURCES
BUREAU OF LABORATORIES
SPECIAL ANALYSES REPORT

Lab Number 11217

Date Received 4/6/83

ESTABLISHMENT	CASE	FACILITY	COLL NUMBER
Domino Salvage	M.W. Mfg.	MW-7	0403

MUNICIPALITY	REPORT	COLL NAME	TYPE TP	STD ANALYSIS
Manta -	Valley	JW	Injection Test	O	—

PERIOD 3	D CODE ALL CAPOS 4-8	LATITUDE 4-10	LONGITUDE 11-18	DATE 19-24	TIME 25-28	KIND 29
2	Cnty Mun T Est Cnty Fac		0	M D Y: 04 05 83	Hr Min: 10 25	4

USGS Q 30-34	BUREAU 35-37 AMIS	SAMPLE NUMBER 38-43	STREAM NAME 44-57	RELATIVE POINT 58
15174	710 13	040319 4	GROUND WATER	

FULL DESCRIPTION WHERE SAMPLE TAKEN: well evacuated by pumping MW-7, sample bailed

ADDITIONAL LAB ANALYSES: VOA

CUSTODY LOG
Relinquished Date 4/5/83
Seal No. 03540
Received by: MH
Seal Condition: INTACT

QUALITATIVE REPORT

DO NOT WRITE BELOW THIS LINE

GC/MS VOA — NONE DETECTED

QUANTITATIVE RESULTS

ANALYSIS:	UNITS:	ANALYSIS CODE	RESULTS (SHOW DECIMAL POINTS ON LINES)

ANALYST Michael L. Heidman (SIGNATURE) DATE 4-14-83

AR000146 000146

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL RESOURCES
BUREAU OF LABORATORIES
SPECIAL ANALYSES REPORT

Lab Number 11218
Date Received 4/6/83

ESTABLISHMENT	CASE	FACILITY	COLL. NUMBER
Domino Salvage	M.W. MEG	MW-6	0403

COUNTY	MUNICIPALITY	PROGRAM	COLL NAME	TYPE	STD ANALYSIS
Montour	Valley	IW	Wanda Kem	C	—

CARD ID	ID CODE (ALL CARDS) 4-16	LATITUDE 17-22	LONGITUDE 23-28	DATE 29-34	TIME 35-36	KIND 37
1/2	Co. Mun. T. Es. Case Fac.		0	M D Y: 04 05 83	Hr. Min: 11 30	4

GS-O 30-34	BUREAU 35-37 AMIS	SAMPLE NUMBER 38-43	STREAM NAME 44-57	RELATIVE POINTER
C 5 1 7 4	7 C 3	C 4 C 3 1 9 5	GROUND WATER	—

FULL DESCRIPTION WHERE SAMPLE TAKEN: MW6 - pumped for 10 min, sample taken from spigot at hog pen

ADDITIONAL LAB ANALYSES: V.O.A.

CUSTODY LOG
Lab Shipped: Pulaski Date: 4/5/83
Seal No.: 096448
Received by: MH
Seal Condition: INTACT

QUALITATIVE REPORT

DO NOT WRITE BELOW THIS LINE

NOTE: SAMPLE DILUTED 1ml TO 10ml

GC/MS VOA

QUANTITATIVE RESULTS

ANALYSIS	UNITS	ANALYSIS CODE	RESULTS (SHOW DECIMAL POINTS ON LINES)
TRICHLOROETHENE	ug/l		10
1,1,2 TRICHLOROETHANE	ug/l		10
TETRACHLOROETHENE	ug/l		840

RECEIVED APR 18 1983 WATER QUALITY MGT. WILLIAMSPORT REGION

ANALYST: Michael L. Hashman SIGNATURE — 000147

DATE: 4-14-83

000147

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL RESOURCES
BUREAU OF LABORATORIES
SPECIAL ANALYSES REPORT

Lab Number 44220
Date Received 4/6/83

ESTABLISHMENT	CASE	FACILITY	COLL NUMBER
Atmore Salvage	M.W Mfg	MW-9	0403

COUNTY	MUNICIPALITY	PROGRAM	COLL NAME	TYPE TR	STD ANALYSIS
Allegheny	Valley	TW	Merrill H Kem	0	—

CARD (3)	ID CODE (ALL CARDS) 9-16						LATITUDE 41-10	LONGITUDE 11-18	DATE 19-24			TIME 25-28		KIND 29
1/2	Cnty	Mun	T	Est	Case	Fac.			M	D	Y	Hr	Min	
								0	04	05	83	12	05	4

GS 0 30-34	BUREAU 35-37 AMIS	SAMPLE NUMBER 38-43	STREAM NAME 44-57	RELATIVE POINT 58
C 5 1 1 7 1 4	7 0 3	0 4 0 3 1 9 6	G R O U N D W A T E R	

DESCRIPTION WHERE SAMPLE TAKEN: MW-#9

ADDITIONAL LAB ANALYSES: VOA

Purged 20 Min. Prior to Sampling
Duplicates Collected

CUSTODY LOG
Shipped Courier Date 4/5/83
Seal No. 098114, 098115
Received by: MH
Seal Condition: Intact

QUALITATIVE REPORT

DO NOT WRITE BELOW THIS LINE

GC/MS VOA
NOTE: SAMPLE DILUTED 1ml TO 100 ml.

QUANTITATIVE RESULTS

ANALYSIS:	UNITS:	ANALYSIS CODE	RESULTS (SHOW DECIMAL POINTS ON LINES
1,1 DICHLOROETHENE	ug/L		1700
TETRACHLOROETHENE	ug/L		4400
1,2 DICHLOROETHENE	ug/L		2000

RECEIVED APR 18 1983 WATER QUALITY MGMT. NORTHWEST REGION

000148

AR000148

ANALYST Michael L. Heishman (SIGNATURE) DATE 4-14-83

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL RESOURCES
BUREAU OF LABORATORIES
SPECIAL ANALYSES REPORT

Lab Number 11250
Date Received 4/6/83

Ionia Salvage	M.W. MG	MW-5			COLL NUMBER 0403
COUNTY Montour	MUN OR TWSHP Valley Twp	PROGRAM IW	COLL NAME Mark H Kem	TYPE TR 0	STD ANALYSIS —

ID CODE/ALL CARDS 1-16	LATITUDE 4-10	LONGITUDE 11-18	DATE 19-24	TIME 25-28	KIND 29
2	0		04 05 83	13 40	4

30-34	BUREAU 35-37 AMS	SAMPLE NUMBER 38-43	STREAM NAME 44-57	RELATIVE POINT 58
C 5 11714	703	040B 19	GROUND WATER	

FULL DESCRIPTION WHERE SAMPLE TAKEN: Bldg spigot.

ADDITIONAL LAB ANALYSES: VOA

CUSTODY LOG
Shipped Rochester Date 4/5/83
Seal No. 099199, 099200
Received by: M H
Seal Condition: INTACT

QUALITATIVE REPORT

DO NOT WRITE BELOW THIS LINE

NOTE: SAMPLE DILUTED 1ml TO 100 ml
GC/MS VOA

RECEIVED
APR 13 1983
BUREAU OF LABORATORIES

QUANTITATIVE RESULTS

ANALYSIS	UNITS:	ANALYSIS CODE	RESULTS (SHOW DECIMAL POINTS ON LINES)
1,1 DICHLOROETHENE	ug/L		150.
1, DICHLOROETHENE	ug/L		430.
TRICHLOROETHENE	ug/L		4400.
1,1,2 TRICHLOROETHANE	ug/L		990.
TETRACHLOROETHENE	ug/L		EST > 24000.

ANALYST Michael L. Fleischman SIGNATURE
DATE 4-14-83

AR000149

000149

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL RESOURCES
BUREAU OF LABORATORIES
SPECIAL ANALYSES REPORT

Lab Number 11221
Date Received 4/6/83

ESTABLISHMENT	CASE	FACILITY	COLLECTOR
Domino Salvage	M.W. Mfg	MW-10	0403

COUNTY	MUNICIPALITY	PROGRAM	COLL NAME	TYPE TR	STD ANALYSIS
Montour	Valley	IW	Timothy H Kem	0	—

CARD (1)	ID CODE (ALL CARDS) 4-10						LATITUDE 4-10	LONGITUDE 11-19	DATE 19-24			TIME 25-29		AMD
1/2	Entry	Mun	T	Est	Case	Fac.		0	M	D	Y	Hr	Min	
									04	05	83	14	00	4

USGS QUAD 31-34	BUREAU 35-37 AMIS	SAMPLE NUMBER 38-43	STREAM NAME 44-57	RELATIVE POINT
015	714	703	040318	GROUND WATER

FULL DESCRIPTION WHERE SAMPLE TAKEN: MW10, Spring along ER tracks — grab sample

ADDITIONAL LAB ANALY: VOA

CUSTODY LOG
How Shipped: Purolator Date: 4/5/83
Legal Seal No.: 698193
Received by: MH
Legal Seal Condition: Intact

QUALITATIVE REPORT

DO NOT WRITE BELOW THIS LINE

NOTE: SAMPLE DILUTED 1 ml TO 10 ml
VIAL CONTAINED BUBBLE
SAMPLE ANALYZED AFTER EPA RECOMMENDED HOLD TIME OF SEVEN DAYS.

QUANTITATIVE RESULTS

RECEIVED APR 18 1983 WATER QUALITY MGT. WILLIAMSPORT REGION

ANALYSIS:	UNITS:	ANALYSES CODE	RESULTS (SHOW DECIMAL POINTS OF)
TRICHLOROETHENE	ug/L		40
1,1,2 TRICHLOROETHANE	ug/L		<
TETRACHLOROETHENE	ug/L		EST> 390

000150

AR000150

ANALYST Michael L. Hershman (SIGNATURE) DATE 4-14-83

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COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL RESOURCES
BUREAU OF LABORATORIES
SPECIAL ANALYSES REPORT

Lab Number 11508

Date Received 4/7/83

ESTABLISHMENT	CASE	FACILITY	SAMPLE NUMBER
Domino Salvage	MW Mfg Co	Barn Dug Well	0403

COUNTY	MUNICIPALITY	PROGRAM	COLL NAME	TYPE TR	SPEC ANALYSIS
Montour	Valley Twp	IW	Martha Kerry	0	

SPEC	ID CODE - ALL CARDS (4-16)						LATITUDE (17-22)	LONGITUDE (23-29)	DATE (30-35)			TIME (36-39)		KIND (40)
1/2	County	Mun	T	Est	Case	Fac		0	M: 04	D: 06	Y: 83	Hr: 10	Min: 00	4

QUAL (41-42)	BUREAU (43-45) AMIS	SAMPLE NUMBER (46-53)	STREAM NAME (54-67)	RELATIVE POINT (68-69)
	711 3	04013 1919	GROUNDWATER	

FULL DESCRIPTION WHERE SAMPLE TAKEN: Barn Dug Well at Unoccupied Farm.

ADDITIONAL LAB ANALYSES: VOH.

CUSTODY LOG
How Shipped: Purolator Date: 04/06/83
Receipt No.: 098192
Received by: MH
Physical Condition: INTACT

QUALITATIVE REPORT

DO NOT WRITE BELOW THIS LINE

RECEIVED
APR 18 1983
WATER QUALITY MGT.
WILKES-BARRE REGION

EC/MB VOA — NONE DETECTED

QUANTITATIVE RESULTS

	UNITS:	ANALYSIS CODE	RESULTS (SHOW DECIMAL POINTS ON LINES)
		000151	

AR000151

ANALYST: Michael L. Hoshman (SIGNATURE)

DATE: 4-14-83

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL RESOURCES
BUREAU OF LABORATORIES
SPECIAL ANALYSES REPORT

Lab Number 11509

Date Received 4/7/83

Domino Salvage	MW Mfg Co	Dug Well AT Farm House		0403
Mon Tour	Valley Twp	IW	Martha Kerns	C

APD	ID CODE (ALL CARDS)	LATITUDE	LONGITUDE	DATE	TIME	MIS
1/2	Com / Mun / T / Est / Case / Fac		0	M 04 D 06 Y 83	Hr 10 Mn 40	4

S O	BUREAU AMIS	SAMPLE NUMBER	STREAM NAME	RELATIVE POINT
	713	04032 00	GROUND WATER	

ALL DESCRIPTION WHERE SAMPLE TAKEN: Dug Well at Unoccupied farm house

ADDITIONAL LAB ANALYSES: VOA

CUSTODY LOG
How Shipped: Pitcairn Date: 04/06/83
Seal No. 098189
Received by: MH
Seal Condition: Intact

QUALITATIVE REPORT

DO NOT WRITE BELOW THIS LINE

GC/MS VOA

RECEIVED
APR 13 1983
WATER QUALITY MGT.
WILLIAMSPORT REGION

QUANTITATIVE RESULTS

ANALYSIS	UNITS	ANALYSES CODE	RESULTS (SHOW DECIMAL POINTS ON LINES)
1,2 DICHLOROETHENE	ug/L		POSSIBLE TRACE
TRICHLOROETHENE	ug/L		EST > 350
TETRACHLOROETHENE	ug/L		93

000152

ANALYST Michael L. Haisman (SIGNATURE) DATE 4-14-83

AR000152

LAB-13.1

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL RESOURCES
BUREAU OF LABORATORIES
SPECIAL ANALYSES REPORT

Lab Number 11510
Date Received 4/7/83

ESTABLISHMENT	CASE	FACILITY	COLL NUMBER
Domino Salvage	M.W. Mfg.		0412

MUNICIPALITY	PROGRAM	COLL NAME	TYPE TP	STU ANALYSIS
Monroe / Valley Twp	FW	Ronald Topel	O	→

CARD 3	ID CODE 4-CARDS 4-78	LATITUDE 40	LONGITUDE 41 49	DATE 13 24	TIME 25 28	KIND 29
	Div Mun Est Case Fac		0	M D Y: 04 06 83	Hr Min: 13 10	4

USGS CSC 34	BUREAU 35 37 AM D	SAMPLE NUMBER 38-43	STREAM NAME 44 57	RELATIVE POINT 58
2 15 11714	7 0 13	0 4 1 2 0 6 5	M A U S E S C R E E K	

DESCRIPTION WHERE SAMPLE TAKEN: at discharge into Mauses Creek, culvert-ditch that leads from swampy area west of Creek and old M.W. site.

ADDITIONAL LAB ANALYSES: VOA

CUSTODY LOG
Shipped Private Date 4/6/83
Legal Seal No. 098187
Received by: MH
Legal Seal Condition: INTACT

QUALITATIVE REPORT

DO NOT WRITE BELOW THIS LINE

GC/MS VOA

RECEIVED
APR 13 1983
WATER QUALITY MGT.
NORTHEAST REGION

QUANTITATIVE RESULTS

ANALYSIS	UNITS:	ANALYSIS CODE	RESULTS (SHOW DECIMAL POINTS ON LINE)
1 DICHLOROETHENE	mg/L		EST 1.
2 DICHLOROETHENE	mg/L		EST > 120.
TRICHLOROETHENE	mg/L		EST > 350.
2 TRICHLOROETHANE	mg/L		31.
TETRACHLOROETHENE	mg/L		EST > 950.
1 HLOROETHENE	mg/L		7.

000153

ANALYST Richard L. Hershman SIGNATURE DATE 4-14-83

AR000153

WATER AND WASTEWATER REPORT
SAMPLE NUMBER - 8311082

COLLECTOR - MARTHA H KERN #694 COLLECTOR NO - 0403191
ESTAB - DOMINE SALVAGE
CASE NAME - M-4 MFG CO INC
FACILITY - MW 4
ID CODE - NONE WQN STATION NUMBER - 000 SEAL INTACT
SAMPLING DATE - 4/04/83 TIME - 13:00 LAT - 00:00:00.0 LONG - 00:00:00.0

TYPE - 01 SOURCE - 03 STD ANAL - 500, RECEIVED ON - 4/05/83
SEAL NO(S) 99405 99406 FAH
REPORT REVIEWED BY FAH DATE - 4/22/83

STORET	DESCRIPTION		RESULT	UNIT	VERIFY BY	VERIFY DATE	COMM CODE
LABORATORY ANALYSIS :							
00340	COD HI LEVEL		40.0000	MG/L	G RLS	4/21/83	
00403	PH LAB		7.1000		G HWS	4/05/83	
00410	T ALK CACO3		64.0000	MG/L	G HWS	4/05/83	
00515	RES DISS/105		244.0000	MG/L	3 HMJ	4/05/83	
00940	CHLORIDE		16.0000	MG/L	G IOS	4/05/83	
00945	SO4 TOT		25.0000	MG/L	G BLF	4/07/83	
01027	CD TOT UG/L		0.2000	UG/L	G BHL	4/06/83	
01034	CR TOT UG/L	<	10.0000	UG/L	G MRO	4/11/83	
01042	CU TOT UG/L		100.0000	UG/L	G MRO	4/11/83	
01045	FE TOT		1220.0000	UG/L	G MRO	4/08/83	
01051	PB,TOTAL		12.2000	UG/L	G BHL	4/06/83	
01055	MN TOTAL		150.0000	UG/L	G MRO	4/11/83	
01067	NI,TOTAL		20.0000	UG/L	G MRO	4/11/83	
01092	ZN,TOT UG/L		40.0000	UG/L	G MRO	4/11/83	
01105	AL,TOTAL		320.0000	UG/L	G MRO	4/11/83	

SAMPLE COMMENTS
NO SAMPLE COMMENTS

TOTAL NUMBER TEST FOR THIS SAMPLE 15

WATER AND WASTEWATER REPORT
SAMPLE NUMBER - EE11093

COLLECTOR - MARTHA H KEPH WDM, COLLECTOR NO - 0403189
ESTAB - DOVING SALVAGE
CASE NAME - MW MFG
FACILITY - MW-2
ID CODE - NONE NON STATION NUMBER - 000 SEAL INTACT
SAMPLING DATE - 4/04/83 TIME - 10:20 LAT - 00:00:00.0 LONG - 00:00:00.0

TYPE - 01 SOURCE - 03 STD ANAL - 500 RECEIVED ON - 4/05/83
SEAL NO(S) 99401 99402 JCA
REPORT REVIEWED BY JCH! DATE - 4/22/83

STORET	DESCRIPTION		RESULT	CONC	VERIFY BY	VERIFY DATE	COMM CODE
LABORATORY ANALYSIS :							
00340	COD HI LEVEL	<	10.0000	MG/L	G	RLG	4/21/83
00403	PH LAB		7.5000		G	WWS	4/05/83
00410	T ALK CACO3		138.0000	MG/L	G	WLG	4/05/83
00515	RES DRIED/105		278.0000	MG/L	G	WWJ	4/05/83
00940	CHLORIDE		23.0000	MG/L	G	ICB	4/05/83
00945	SO4 TOT		45.0000	MG/L	G	BLF	4/07/83
01027	CD TOT UG/L	<	0.0000	UG/L	G	BHL	4/06/83
01034	CR TOT UG/L		60.0000	UG/L	G	MRO	4/11/83
01042	CU TOT UG/L	<	10.0000	UG/L	G	MRO	4/11/83
01045	FE TOT		1350.0000	UG/L	G	MRO	4/08/83
01051	PB,TOTAL	<	5.0000	UG/L	G	BHL	4/06/83
01055	MN TOTAL		80.0000	UG/L	G	MRO	4/11/83
01067	NI,TOTAL		40.0000	UG/L	G	MRO	4/11/83
01092	ZN,TOT UG/L		70.0000	UG/L	G	MRO	4/11/83
01105	AL,TOTAL		110.0000	UG/L	G	MRO	4/11/83

SAMPLE COMMENTS
NO SAMPLE COMMENTS

TOTAL NUMBER TEST FOR THIS SAMPLE 15

RECEIVED
MAY 2 1983
[illegible]

WATER AND WASTEWATER REPORT
SAMPLE NUMBER - 8311084

COLLECTOR - MARTHA H KERN WQMA COLLECTOR NO - 0403197
ESTAB - COMINO SALVAGE
CASE NAME - M.W. MW3
FACILITY - MW-1
ID CODE - NONE WSN STATION NUMBER - 000 SEAL INTACT
SAMPLING DATE - 4/04/83 TIME - 9:40 LAT - 00:00:00.0 LONG - 00:00:00.0

TYPE - 01 SOURCE - 03 STD ANAL - 500 RECEIVED ON - 4/05/83
SEAL NO(S) 99143 99414 Fax
REPORT REVIEWED BY DATE - 4/22/83

SYMBOL	DESCRIPTION		RESULT	CONC	VERIFY BY	VERIFY DATE	COMM CODE
LABORATORY ANALYSIS :							
00340	COD HI LEVEL		17.0000	MG/L	G	RLS	4/21/83
00403	PH LAB		7.4000		G	HWS	4/05/83
00410	T ALK CACO3		258.0000	MG/L	G	HWS	4/05/83
00515	RES DISS/105		352.0000	MG/L	G	HNJ	4/05/83
00940	CHLORIDE		7.0000	MG/L	G	ICB	4/05/83
00945	SO4 TOT		35.0000	MG/L	G	SLF	4/07/83
01027	CD TOT UG/L		0.6000	UG/L	G	BHL	4/06/83
01034	CR TOT UG/L		120.0000	UG/L	G	MRO	4/11/83
01042	CU TOT UG/L	<	10.0000	UG/L	G	MRO	4/11/83
01045	FE TOT		820.0000	UG/L	G	MRO	4/08/83
01051	PB,TOTAL		50.0000	UG/L	G	BHL	4/06/83
01055	MN TOTAL		470.0000	UG/L	G	MRO	4/11/83
01067	NI,TOTAL		30.0000	UG/L	G	MRO	4/11/83
01092	ZN,TOT UG/L		70.0000	UG/L	G	MRO	4/11/83
01105	AL,TOTAL		310.0000	UG/L	G	MRO	4/11/83

SAMPLE COMMENTS
NO SAMPLE COMMENTS

TOTAL NUMBER TEST FOR THIS SAMPLE 19

WATER AND WASTEWATER REPORT
SAMPLE NUMBER - 8311087

COLLECTOR - MARTHA H KERN MGW4 COLLECTOR NO - 0407189
ESTAB - DIKING SALVAGE
CASE NAME - [illegible] MFG
FACILITY - MW-3
ID CODE - NONE MGW STATION NUMBER - 000 SEAL INTACT
SAMPLING DATE - 4/04/83 TIME - 10:50 LAT - 00:00:00.0 LONG - 00:00:00.0

TYPE - 01 SOURCE - 03 STD ANAL - 500 RECEIVED ON - 4/05/83
SEAL NO(S) 99410 99411
REPORT REVIEWED BY DATE - 4/22/83

STORET	DESCRIPTION		RESULT	CONC	VERIFY BY	VERIFY DATE	CONT CODE
LABORATORY ANALYSIS :							
00340	COD HI LEVEL		57.0000	MG/L	G	RLS	4/21/83
00403	PH LAB		7.9000		G	MWS	4/05/83
00410	T ALK CACO3		122.0000	MG/L	G	MWS	4/05/83
00515	RES 0105/105		210.0000	MG/L	G	MWJ	4/05/83
00940	CHLORIDE		16.0000	MG/L	G	IC3	4/05/83
00945	SO4 TOT		30.3000	MG/L	G	SLF	4/07/83
01027	CD TOT UG/L		0.7000	UG/L	G	BHL	4/06/83
01034	CR TOT UG/L	<	10.0000	UG/L	G	MRO	4/11/83
01042	CU TOT UG/L		50.0000	UG/L	G	MRO	4/11/83
01045	FE TOT		650.0000	UG/L	G	MRO	4/08/83
01051	PB,TOTAL		7.6000	UG/L	G	BHL	4/06/83
01055	MN TOTAL		310.0000	UG/L	G	MRO	4/11/83
01067	NI,TOTAL		10.0000	UG/L	G	MRO	4/11/83
01092	ZN,TOT UG/L		20.0000	UG/L	G	MRO	4/11/83
01105	AL,TOTAL		100.0000	UG/L	G	MRO	4/11/83

SAMPLE COMMENTS
NO SAMPLE COMMENTS

TOTAL NUMBER TEST FOR THIS SAMPLE 15

WATER AND WASTEWATER REPORT

SAMPLE NUMBER - 8811058

COLLECTOR - [illegible] COLLECTOR NO - 0403191

[illegible]

[illegible]

[illegible]

ID CODE - NONE WSN STATION NUMBER - 000 SEAL INTACT

SAMPLING DATE - 4/04/83 TIME - 13:30 LAT - 00:00:00.0 LONG - 00:00:00.0

TYPE - 41 SOURCE - 03 STD ANAL - 500 RECEIVED ON - 4/05/83

SEAL NO(S) 96440 96441

REPORT REVIEWED BY [signature] DATE - 4/22/83

STORET	DESCRIPTION		RESULT	CODE	VERIFY BY	VERIFY DATE	QUAL CODE
LABORATORY ANALYSIS :							
00010	TEMP AT LEVEL		14.0000	DEG C	G	RLS	4/21/83
00403	PH LAB		7.5000		G	HWS	4/05/83
00410	T ALK CACO3		149.0000	MG/L	G	HWS	4/05/83
00515	RES TDS/105		442.0000	MG/L	G	HMJ	4/05/83
00940	CHLORIDE		47.0000	MG/L	G	ISB	4/05/83
00945	SO4 TOT		45.0000	MG/L	G	SLF	4/07/83
01027	CD TOT UG/L	<	0.2000	UG/L	G	BHL	4/06/83
01034	CR TOT UG/L	<	10.0000	UG/L	G	MRO	4/11/83
01042	CU TOT UG/L	*	20.0000	UG/L	G	MRO	4/11/83
01045	FE TOT		6850.0000	UG/L	G	MRO	4/08/83
01051	PB,TOTAL	<	5.0000	UG/L	G	BHL	4/06/83
01055	MN TOTAL		40.0000	UG/L	G	MRO	4/11/83
01067	NI,TOTAL	<	10.0000	UG/L	G	MRO	4/11/83
01092	ZN,TOT UG/L	<	10.0000	UG/L	G	MRO	4/11/83
01105	AL,TOTAL		60.0000	UG/L	G	MRO	4/11/83

SAMPLE COMMENTS

NO SAMPLE COMMENTS

TOTAL NUMBER TEST FOR THIS SAMPLE 15

RECEIVED
APR 2 1983

000158

AR000158

S. ENVIRONMENTAL PROTECTION AGENCY - CLP Sample Management Office
O. Box 818, Alexandria, Virginia 22313 - 703/557-2690

Sample Number
C-4297

ORGANICS ANALYSIS DATA SHEET

aboratory Name: EAL CORPORATION
Case No: 2420
Lab Sample ID No: 2920- 1-3
QC Report No:
mple Matrix: WATER
Contract No.: 68-01-6854
ta Release Authorized By: BJT
Date Sample Received: 2-17-84

SEMIVOLATILE COMPOUNDS

CONCENTRATION: (LOW) MEDIUM HIGH (circle one)
DATE EXTRACTED/PREPARED: 2-22-84
DATE ANALYZED: 3-7-84
PERCENT MOISTURE:
CONC./DILUTION FACTOR: 1

P #	CAS #		ug/l or ug/kg (circle one)
1A)	88-06-2	2,4,6- trichlorophenol	20U
(22A)	59-50-7	p-chloro-m-cresol	40U
4A)	95-57-8	2- chlorophenol	20U
1A)	120-83-2	2,4-dichlorophenol	20U
(34A)	105-67-9	2,4-dimethylphenol	132 ~~200~~ BJT
7A)	88-75-5	2- nitrophenol	40U
8A)	100-02-7	4-nitrophenol	100U
(59A)	51-28-5	2,4-dinitrophenol	100U
)A)	534-52-1	4,6-dinitro-2-methylphenol	40U
(64A)	87-86-5	pentachlorophenol	40U
(65A)	108-95-2	phenol	183 ~~200~~ BJT
	65-85-0	benzoic acid	200U
	95-48-7	2-methylphenol	20U
	108-39-4	4-methylphenol	428 ~~200~~ BJT
	95-95-4	2,4,5-trichlorophenol	200U
1B)	83-32-9	acenaphthene	20U
B)	92-87-5	benzidine	80U
)	120-82-1	1,2,4-trichlorobenzene	20U
9B)	118-74-1	hexachlorobenzene	20U
B)	67-72-1	hexachloroethane	20U
B)	111-44-4	bis(2-chloroethyl)ether	20U
20B)	91-58-7	2-chloronaphthalene	20U
B)	95-50-1	1,2-dichlorobenzene	20U
B)	541-73-1	1,3-dichlorobenzene	20U
27B)	106-46-7	1,4-dichlorobenzene	20U
B)	91-94-1	3,3'-dichlorobenzidine	40U
B)	121-14-2	2,4-dinitrotoluene	40U
36B)	606-20-2	2,6-dinitrotoluene	40U
B)	122-66-7	1,2-diphenylhydrazine	40U
B)	206-44-0	fluoranthene	20U
0B)	7005-72-3	4-chlorophenyl phenyl ether	20U
B)	101-55-3	4-bromophenyl phenyl ether	20U
3)	39638-32-9	bis (2-chloroisopropyl) ether	40U
3B)	111-91-1	bis (2-chloroethoxy) methane	40U

PP #	CAS #		ug/l or ug/kg (circle one)
(52B)	87-68-3	hexachlorobutadiene	20U
(53B)	77-47-4	hexachlorocyclopentadiene	20U
(54B)	78-59-1	isophorone	20U
(55B)	91-20-3	naphthalene	20U
(56B)	98-95-3	nitrobenzene	20U
(61B)	62-75-9	N-nitrosodimethylamine	20U
(62B)	86-30-6	N-nitrosodiphenylamine	20U
(63B)	621-64-7	N-nitrosodipropylamine	40U
(66B)	117-81-7	bis (2-ethylhexyl) phthalate	11LT ~~200~~ 0
(67B)	85-68-7	benzyl butyl phthalate	20U
(68B)	84-74-2	di-n-butyl phthalate	20U
(69B)	117-84-0	di-n-octyl phthalate	20U
(70B)	84-66-2	diethyl phthalate	20U
(71B)	131-11-3	dimethyl phthalate	20U
(72B)	56-55-3	benzo(a)anthracene	20U
(73B)	50-32-8	benzo(a)pyrene	40U
(74B)	205-99-2	benzo(b)fluoranthene	40U
(75B)	207-08-9	benzo(k)fluoranthene	40U
(76B)	218-01-9	chrysene	20U
(77B)	208-96-8	acenaphthylene	20U
(78B)	120-12-7	anthracene	20U
(79B)	191-24-2	benzo(ghi)perylene	40U
(80B)	86-73-7	fluorene	20U
(81B)	85-01-8	phenanthrene	20U
(82B)	53-70-3	dibenzo(a,h)anthracene	40U
(83B)	193-39-5	indeno(1,2,3-cd)pyrene	40U
(84B)	129-00-0	pyrene	20U
	62-53-3	aniline	20U
	100-51-6	benzyl alcohol	40U
	106-47-8	4-chloroaniline	100U
	132-64-9	dibenzofuran	20U
	91-57-6	2-methylnaphthalene	40U
	88-74-4	2-nitroaniline	200U
	99-09-2	3-nitr	200U

C00159

AR000159

...ge 818, Alexandria, Virginia ...

ORGANICS ANALYSIS DATA SHEET

LOW WATER

...ory Name: EAL CORPORATION
...ple ID No: 2920-1-3
...ple Matrix:
...e Release Authorized By: BJS

Case No: 2420
QC Report No:
Contract No: 68-01-6854
Date Sample Received: 2/17/84

VOLATILES

...CENTRATION: (LOW) MEDIUM HIGH (circle one)
...TE EXTRACTED/PREPARED:
DATE ANALYZED: 2/22/84
...CENT MOISTURE:

... #	CAS #		ug/l or ug/kg (circle one)
...V)	107-02-8	acrolein	100U
(3V)	107-13-1	acrylonitrile	100U
...V)	71-43-2	benzene	5U
(5V)	56-23-5	carbon tetrachloride	5U
(7V)	108-90-7	chlorobenzene	5U
...V)	107-06-2	1,2-dichloroethane	5U
(11V)	71-55-6	1,1,1-trichloroethane	5U
(...V)	75-34-3	1,1-dichloroethane	5U
...V)	79-00-5	1,1,2-trichloroethane	80 5U BJS
(15V)	79-34-5	1,1,2,2-tetrachloroethane	5U
...6V)	75-00-3	chloroethane	5U
...9V)	110-75-8	2-chloroethylvinyl ether	5U
(23V)	67-66-3	chloroform	5U
...9V)	75-35-4	1,1-dichloroethene	14 5U BJS
...0V)	156-60-5	trans-1,2-dichloroethene	143 5U BJS
(32V)	78-87-5	1,2-dichloropropane	5U
...3V)	10061-02-6	trans-1,3-dichloropropene	5U
	10061-01-05	cis-1,3-dichloropropene	10U
(38V)	100-41-4	ethylbenzene	5U
(44V)	75-09-2	methylene chloride	5U
(45V)	74-87-3	chloromethane	5U
(46V)	74-83-9	bromomethane	5U
(47V)	75-25-2	bromoform	5U
(48V)	75-27-4	bromodichloromethane	5U
(49V)	75-69-4	fluorotrichloromethane	5U
(50V)	75-71-8	dichlorodifluoromethane	5U
(51V)	124-48-1	chlorodibromomethane	5U
(85V)	127-18-4	tetrachloroethene	179 5U BJS
(86V)	108-88-3	toluene	5U
(87V)	79-01-6	trichloroethene	57 5U BJS
(88V)	75-01-4	vinyl chloride	14 5U BJS
	67-64-1	acetone	100U
	78-93-3	2-butanone	200U
	75-15-0	carbondisulfide	10U
	519-78-6	2-hexanone	100U
	108-10-1	4-methyl-2-pentanone	100U
	100-42-5	styrene	5U
	108-05-4	vinyl acetate	10U
	1330-20-7	total xylenes	5U

PESTICIDES

CONCENTRATION: (LOW) MEDIUM HIGH (circle one)
DATE EXTRACTED/PREPARED:
DATE ANALYZED:
PERCENT MOISTURE:

PP #	CAS #		ug/l or ug/kg (circle one)
(89P)	309-00-2	aldrin	0.1U
(90P)	60-57-1	dieldrin	0.1U
(91P)	57-74-9	chlordane	0.1U
(92P)	50-29-3	4,4'-DDT	0.1U
(93P)	72-55-9	4,4'-DDE	0.1U
(94P)	72-54-8	4,4'-DDD	0.1U
(95P)	115-29-7	α-endosulfan	0.1U
(96P)	115-29-7	β-endosulfan	0.1U
(97P)	1031-07-8	endosulfan sulfate	0.1U
(98P)	72-20-8	endrin	0.1U
(99P)	7421-93-4	endrin aldehyde	0.1U
(100P)	76-44-8	heptachlor	0.1U
(101P)	1024-57-3	heptachlor epoxide	0.1U
(102P)	319-84-6	α-BHC	0.1U
(103P)	319-85-7	β-BHC	0.1U
(104P)	319-86-8	δ-BHC	0.1U
(105P)	58-89-9	γ-BHC (lindane)	0.1U
(106P)	53469-21-9	PCB-1242	0.1U
(107P)	11097-69-1	PCB-1254	0.1U
(108P)	11104-28-2	PCB-1221	0.1U
(109P)	11141-16-5	PCB-1232	0.1U
(110P)	12672-29-6	PCB-1248	0.1U
(111P)	11096-82-5	PCB-1260	0.1U
(112P)	12674-11-2	PCB-1016	0.1U
(113P)	8001-35-2	toxaphene	0.1U

DIOXINS

CONCENTRATION: LOW MEDIUM HIGH (circle one)
DATE EXTRACTED/PREPARED:
DATE ANALYZED:
PERCENT MOISTURE:

PP #	CAS #		ng/l or ng/g (circle
(129D)	1746-01-6	2,3,7,8-tetrachlorodibenzo-p-dioxin	0.1 JBJ

U.S. ENVIRONMENTAL PROTECTION AGENCY - CLP Sample Management Office
P.O. Box 818, Alexandria, Virginia 22313 - 703/557-2490

Sample Number
C4297

ORGANICS ANALYSIS DATA SHEET

Laboratory Name: EAL CORPORATION
Lab Sample ID No: 2920- 1 - 3
Sample Matrix: WATER
Data Release Authorized By: BJT

Case No: 2420
QC Report No:
Contract No.: 68-01-6854
Date Sample Received: 2-17-84

VOLATILES

CONCENTRATION: (LOW) MEDIUM HIGH (circle one)
DATE EXTRACTED/PREPARED:
DATE ANALYZED:
PERCENT MOISTURE:
CONC./DILUTION FACTOR:

PP #	CAS #		ug/l or ug/kg (circle one)
(2V)	107-02-8	acrolein	100U
(3V)	107-13-1	acrylonitrile	100U
(4V)	71-43-2	benzene	5U
(6V)	56-23-5	carbon tetrachloride	5U
(7V)	108-90-7	chlorobenzene	5U
(10V)	107-06-2	1,2-dichloroethane	5U
(11V)	71-55-6	1,1,1-trichloroethane	5U
(13V)	75-34-3	1,1-dichloroethane	5U
(14V)	79-00-5	1,1,2-trichloroethane	5U
(15V)	79-34-5	1,1,2,2-tetrachloroethane	5U
(16V)	75-00-3	chloroethane	5U
(19V)	110-75-8	2-chloroethylvinyl ether	5U
(23V)	67-66-3	chloroform	5U
(29V)	75-35-4	1,1-dichloroethene	5U
(30V)	156-60-5	trans-1,2-dichloroethene	5U
(32V)	78-87-5	1,2-dichloropropane	5U
(33V)	10061-02-6	trans-1,3-dichloropropene	5U
	10061-01-05	cis-1,3-dichloropropene	10U
(38V)	100-41-4	ethylbenzene	5U
(44V)	75-09-2	methylene chloride	5U
(45V)	74-87-3	chloromethane	5U
(46V)	74-83-9	bromomethane	5U
(47V)	75-25-2	bromoform	5U
(48V)	75-27-4	bromodichloromethane	5U
(49V)	75-69-4	fluorotrichloromethane	5U
(50V)	75-71-8	dichlorodifluoromethane	5U
(51V)	124-48-1	chlorodibromomethane	5U
(85V)	127-18-4	tetrachloroethene	5U
(86V)	108-88-3	toluene	5U
(87V)	79-01-6	trichloroethene	5U
(88V)	75-01-4	vinyl chloride	5U
	67-64-1	acetone	5U
	78-93-3	2-butanone	5U
	75-15-0	carbondisulfide	5U
	519-78-6	2-hexanone	5U
	108-10-1	4-methyl-2-pentanone	5U
	100-42-5	styrene	5U
	108-05-4	vinyl acetate	5U

PESTICIDES

CONCENTRATION: (LOW) MEDIUM HIGH (circle one)
DATE EXTRACTED/PREPARED: 2-21-84
DATE ANALYZED: 3-8-84
PERCENT MOISTURE:
CONC./DILUTION FACTOR:

PP #	CAS #		ug/l or ug/kg (circle on)	
(89P)	309-00-2	aldrin	0.1U	
(90P)	60-57-1	dieldrin	0.1U	
(91P)	57-74-9	chlordane	0.1U	
(92P)	50-29-3	4,4'-DDT	0.1U	
(93P)	72-55-9	4,4'-DDE	0.1U	
(94P)	72-54-8	4,4'-DDD	0.1U	
(95P)	115-29-7	α-endosulfan	0.1U	
(96P)	115-29-7	β-endosulfan	0.1U	
(97P)	1031-07-8	endosulfan sulfate	0.1U	
(98P)	72-20-8	endrin	0.1U	
(99P)	7421-93-4	endrin aldehyde	0.1U	
(100P)	76-44-8	heptachlor	0.1U	
(101P)	1024-57-3	heptachlor epoxide	0.1U	
(102P)	319-84-6	α-BHC	0.1U	
(103P)	319-85-7	β-BHC	0.1U	
(104P)	319-86-8	δ-BHC	0.1U	
(105P)	58-89-9	γ-BHC (lindane)	0.1U	
(106P)	53469-21-9	PCB-1242	0.2U	~~0.1U~~
(107P)	11097-69-1	PCB-1254	0.5U	~~0.1U~~
(108P)	11104-28-2	PCB-1221	0.3U	~~0.1U~~
(109P)	11141-16-5	PCB-1232	0.4U	~~0.1U~~
(110P)	12672-29-6	PCB-1248	0.3U	~~0.1U~~
(111P)	11096-82-5	PCB-1260	0.7U	~~0.1U~~
(112P)	12674-11-2	PCB-1016	0.2U	~~0.1U~~
(113P)	8001-35-2	toxaphene	4.0U	~~0.1U~~

DIOXINS

CONCENTRATION: (LOW) MEDIUM HIGH (circle one)
DATE EXTRACTED/PREPARED: 2-21-84
DATE ANALYZED: 3-8-84
PERCENT MOISTURE:
CONC./DILUTION FACTOR:

000161

PP #	CAS #		ug/l or ug/kg (circle on)
(129B)	1746-01-6	2,3,7,8-tetrachlorodibenzo-p-dioxin	0.1U

AR000161

December 19

U.S. ENVIRONMENTAL PROTECTION AGENCY - CLP Sample Management Office
P.O. Box 818, Alexandria, Virginia 22313 - 703/557-2490

Sample Number
C4295

ORGANICS ANALYSIS DATA SHEET

Laboratory Name: EAL CORPORATION
Case No: 2420
Lab Sample ID No: 2920- 1-2
QC Report No:
Sample Matrix: WATER
Contract No.: 68-01-6854
Data Release Authorized By: BJT
Date Sample Received: 2-17-84

VOLATILES

CONCENTRATION: (LOW) MEDIUM HIGH (circle one)
DATE EXTRACTED/PREPARED:
DATE ANALYZED:
PERCENT MOISTURE:
CONC./DILUTION FACTOR:

PP #	CAS #		ug/l or ug/kg (circle one)
(2V)	107-02-8	acrolein	100U
(3V)	107-13-1	acrylonitrile	100U
(4V)	71-43-2	benzene	5U
(6V)	56-23-5	carbon tetrachloride	5U
(7V)	108-90-7	chlorobenzene	5U
(10V)	107-06-2	1,2-dichloroethane	5U
(11V)	71-55-6	1,1,1-trichloroethane	5U
(13V)	75-34-3	1,1-dichloroethane	5U
(14V)	79-00-5	1,1,2-trichloroethane	5U
(15V)	79-34-5	1,1,2,2-tetrachloroethane	5U
(16V)	75-00-3	chloroethane	5U
(19V)	110-75-8	2-chloroethylvinyl ether	5U
(23V)	67-66-3	chloroform	5U
(29V)	75-35-4	1,1-dichloroethene	5U
(30V)	156-60-5	trans-1,2-dichloroethene	5U
(32V)	78-87-5	1,2-dichloropropane	5U
(33V)	10061-02-6	trans-1,3-dichloropropene	5U
	10061-01-05	cis-1,3-dichloropropene	10U
(38V)	100-41-4	ethylbenzene	5U
(44V)	75-09-2	methylene chloride	5U
(45V)	74-87-3	chloromethane	5U
(46V)	74-83-9	bromomethane	5U
(47V)	75-25-2	bromoform	5U
(48V)	75-27-4	bromodichloromethane	5U
(49V)	75-69-4	fluorotrichloromethane	5U
(50V)	75-71-8	dichlorodifluoromethane	5U
(51V)	124-48-1	chlorodibromomethane	5U
(85V)	127-18-4	tetrachloroethene	5U
(86V)	108-88-3	toluene	5U
(87V)	79-01-6	trichloroethene	5U
(88V)	75-01-4	vinyl chloride	5U
	67-64-1	acetone	5U
	78-93-3	2-butanone	5U
	75-15-0	carbondisulfide	5U
	519-78-6	2-hexanone	5U
	108-10-1	4-methyl-2-pentanone	5U
	100-42-5	styrene	5U
	108-05-4	vinyl acetate	5U
	1330-20-7	xylenes	5U

PESTICIDES

CONCENTRATION: (LOW) MEDIUM HIGH (circle one)
DATE EXTRACTED/PREPARED: 2-21-84
DATE ANALYZED: 3-8-84
PERCENT MOISTURE:
CONC./DILUTION FACTOR:

PP #	CAS #		ug/l or ug/kg (circle one)	
(89P)	309-00-2	aldrin	0.1U	
(90P)	60-57-1	dieldrin	0.1U	
(91P)	57-74-9	chlordane	0.1U	
(92P)	50-29-3	4,4'-DDT	0.1U	
(93P)	72-55-9	4,4'-DDE	0.1U	
(94P)	72-54-8	4,4'-DDD	0.1U	
(95P)	115-29-7	α-endosulfan	0.1U	
(96P)	115-29-7	β-endosulfan	0.1U	
(97P)	1031-07-8	endosulfan sulfate	0.1U	
(98P)	72-20-8	endrin	0.1U	
(99P)	7421-93-4	endrin aldehyde	0	
(100P)	76-44-8	heptachlor	0.1U	
(101P)	1024-57-3	heptachlor epoxide	0.1U	
(102P)	319-84-6	α-BHC	0.1U	
(103P)	319-85-7	β-BHC	0.1U	
(104P)	319-86-8	δ-BHC	0.1U	
(105P)	58-89-9	γ-BHC (lindane)	0.1U	
(106P)	53469-21-9	PCB-1242	0.2U	~~0.1U~~
(107P)	11097-69-1	PCB-1254	0.5U	~~0.1U~~
(108P)	11104-28-2	PCB-1221	0.3U	~~0.1U~~
(109P)	11141-16-5	PCB-1232	0.3U	~~0.1U~~
(110P)	12672-29-6	PCB-1248	0.3U	~~0.1U~~
(111P)	11096-82-5	PCB-1260	0.7U	~~0.1U~~
(112P)	12674-11-2	PCB-1016	0.2U	~~0.1U~~
(113P)	8001-35-2	toxaphene	4.0U	~~0.1U~~

DIOXINS

000162

CONCENTRATION: (LOW) MEDIUM HIGH (circle one)
DATE EXTRACTED/PREPARED: 2-21-84
DATE ANALYZED: 3-8-84
PERCENT MOISTURE:
CONC./DILUTION FACTOR:

PP #	CAS #		ug/l or ug/kg (circle one)
(129B)	1746-01-6	2,3,7,8-tetrachlorodibenzo-p-dioxin	0.1U

AR000162

U.S. ENVIRONMENTAL PROTECTION AGENCY - CLP Sample Management Office
P.O. Box 818, Alexandria, Virginia 22313 - 703/557-2490

Sample Number
C-4295

LOW WATER

ORGANICS ANALYSIS DATA SHEET

Laboratory Name: EAL CORPORATION
Case No: 2420
Lab Sample ID No: 2920-1-2
QC Report No:
Sample Matrix:
Contract No.: 68-01-6854
Data Release Authorized By: BJS
Date Sample Received: 4/17/84

VOLATILES

CONCENTRATION: (LOW) MEDIUM HIGH (circle one)
DATE EXTRACTED/PREPARED:
DATE ANALYZED: 4/22/84
PERCENT MOISTURE:

PP #	CAS #		ug/l or ug/kg (circle one)
(2V)	107-02-8	acrolein	100U
(3V)	107-13-1	acrylonitrile	100U
(4V)	71-43-2	benzene	5U
(6V)	56-23-5	carbon tetrachloride	5U
(7V)	108-90-7	chlorobenzene	5U
(10V)	107-06-2	1,2-dichloroethane	5U
(11V)	71-55-6	1,1,1-trichloroethane	5U
(13V)	75-34-3	1,1-dichloroethane	5U
(14V)	79-00-5	1,1,2-trichloroethane	5U
(15V)	79-34-5	1,1,2,2-tetrachloroethane	5U
(16V)	75-00-3	chloroethane	5U
(19V)	110-75-8	2-chloroethylvinyl ether	5U
(23V)	67-66-3	chloroform	5U
(29V)	75-35-4	1,1-dichloroethene	5U
(30V)	156-60-5	trans-1,2-dichloroethene	70 5U BJS
(32V)	78-87-5	1,2-dichloropropane	5U
(33V)	10061-02-6	trans-1,3-dichloropropene	5U
	10061-01-05	cis-1,3-dichloropropene	10U
(38V)	100-41-4	ethylbenzene	5U
(44V)	75-09-2	methylene chloride	5U
(45V)	74-87-3	chloromethane	5U
(46V)	74-83-9	bromomethane	5U
(47V)	75-25-2	bromoform	5U
(48V)	75-27-4	bromodichloromethane	5U
(49V)	75-69-4	fluorotrichloromethane	5U
(50V)	75-71-8	dichlorodifluoromethane	5U
(51V)	124-48-1	chlorodibromomethane	5U
(85V)	127-18-4	tetrachloroethene	236 5U BJS
(86V)	108-88-3	toluene	5U
(87V)	79-01-6	trichloroethene	56 5U BJS
(88V)	75-01-4	vinyl chloride	5U
	67-64-1	acetone	100U
	78-93-3	2-butanone	200U
	75-15-0	carbondisulfide	10U
	519-78-6	2-hexanone	100U
	108-10-1	4-methyl-2-pentanone	100U
	100-42-5	styrene	5U
	108-05-4	vinyl acetate	10U
	1330-20-7	total xylenes	5U

PESTICIDES

CONCENTRATION: (LOW) MEDIUM HIGH (circle one)
DATE EXTRACTED/PREPARED:
DATE ANALYZED:
PERCENT MOISTURE:

PP #	CAS #		ug/l or ug/kg (circle one)
(89P)	309-00-2	aldrin	0.1U
(90P)	60-57-1	dieldrin	0.1U
(91P)	57-74-9	chlordane	0.1U
(92P)	50-29-3	4,4'-DDT	0.1U
(93P)	72-55-9	4,4'-DDE	0.1U
(94P)	72-54-8	4,4'-DDD	0.1U
(95P)	115-29-7	α-endosulfan	0.1U
(96P)	115-29-7	β-endosulfan	0.1U
(97P)	1031-07-8	endosulfan sulfate	0.1U
(98P)	72-20-8	endrin	0.1U
(99P)	7421-93-4	endrin aldehyde	0.1U
(100P)	76-44-8	heptachlor	0.1U
(101P)	1024-57-3	heptachlor epoxide	0.1U
(102P)	319-84-6	α-BHC	0.1U
(103P)	319-85-7	β-BHC	0.1U
(104P)	319-86-8	δ-BHC	0.1U
(105P)	58-89-9	γ-BHC (lindane)	0.1U
(106P)	53469-21-9	PCB-1242	0.1U
(107P)	11097-69-1	PCB-1254	0.1U
(108P)	11104-28-2	PCB-1221	0.1U
(109P)	11141-16-5	PCB-1232	0.1U
(110P)	12672-29-6	PCB-1248	0.1U
(111P)	11096-82-5	PCB-1260	0.1U
(112P)	12674-11-2	PCB-1016	0.1U
(113P)	8001-35-2	toxaphene	0.1U

DIOXINS

CONCENTRATION: LOW MEDIUM HIGH (circle one)
DATE EXTRACTED/PREPARED:
DATE ANALYZED:
PERCENT MOISTURE:

PP #	CAS #		ug/l or ug/kg (circle
(129D)	1746-01-6	2,3,7,8-tetrachlorodibenzo-p-dioxin	0.1

July

U.S. ENVIRONMENTAL PROTECTION AGENCY - CLP Sample Management Office
P.O. Box 818, Alexandria, Virginia 22313 - 703/557-2490

Sample Number
C-4295

ORGANICS ANALYSIS DATA SHEET

Laboratory Name: EAL CORPORATION
Case No: 2420
Lab Sample ID No: 2920- 1-2
QC Report No:
Sample Matrix: WATER
Contract No.: 68-01-6854
Data Release Authorized By: BJT
Date Sample Received: 2-17-84

SEMIVOLATILE COMPOUNDS

CONCENTRATION: (LOW) MEDIUM HIGH (circle one)
DATE EXTRACTED/PREPARED: 2-22-84
DATE ANALYZED: 3-7-84
PERCENT MOISTURE:
CONC./DILUTION FACTOR: x 1.4

PP #	CAS #		ug/l or ug/kg (circle one)
21A)	88-06-2	2,4,6- trichlorophenol	20U
(22A)	59-50-7	p-chloro-m-cresol	40U
24A)	95-57-8	2- chlorophenol	20U
31A)	120-83-2	2,4-dichlorophenol	20U
34A)	105-67-9	2,4-dimethylphenol	20U
37A)	88-75-5	2- nitrophenol	40U
38A)	100-02-7	4-nitrophenol	100U
59A)	51-28-5	2,4-dinitrophenol	100U
60A)	534-52-1	4,6-dinitro-2-methylphenol	40U
64A)	87-86-5	pentachlorophenol	40U
65A)	108-95-2	phenol	20U
	65-85-0	benzoic acid	200U
	95-48-7	2-methylphenol	20U
	108-39-4	4-methylphenol	20U
	95-95-4	2,4,5-trichlorophenol	200U
3B)	83-32-9	acenaphthene	20U
5B)	92-87-5	benzidine	80U
8B)	120-82-1	1,2,4-trichlorobenzene	20U
9B)	118-74-1	hexachlorobenzene	20U
12B)	67-72-1	hexachloroethane	20U
8B)	111-44-4	bis(2-chloroethyl)ether	20U
10B)	91-58-7	2-chloronaphthalene	20U
25B)	95-50-1	1,2-dichlorobenzene	20U
5B)	541-73-1	1,3-dichlorobenzene	20U
27B)	106-46-7	1,4-dichlorobenzene	20U
28B)	91-94-1	3,3'-dichlorobenzidine	40U
5B)	121-14-2	2,4-dinitrotoluene	40U
26B)	606-20-2	2,6-dinitrotoluene	40U
37B)	122-66-7	1,2-diphenylhydrazine	40U
9B)	206-44-0	fluoranthene	20U
0B)	7005-72-3	4-chlorophenyl phenyl ether	20U
1B)	101-55-3	4-bromophenyl phenyl ether	20U
2B)	39638-32-9	bis (2-chloroisopropyl) ether	40U
3B)	111-91-1	bis (2-chloroethoxy) methane	40U

PP #	CAS #		ug/l or ug/kg (circle one)
(52B)	87-68-3	hexachlorobutadiene	20U
(53B)	77-47-4	hexachlorocyclopentadiene	20U
(54B)	78-59-1	isophorone	20U
(55B)	91-20-3	naphthalene	20U
(56B)	98-95-3	nitrobenzene	20U
(61B)	62-75-9	N-nitrosodimethylamine	20U
(62B)	86-30-6	N-nitrosodiphenylamine	20U
(63B)	621-64-7	N-nitrosodipropylamine	40U
(66B)	117-81-7	bis (2-ethylhexyl) phthalate	21 ~~200U~~
(67B)	85-68-7	benzyl butyl phthalate	20U
(68B)	84-74-2	di-n-butyl phthalate	20U
(69B)	117-84-0	di-n-octyl phthalate	48 ~~200U~~
(70B)	84-66-2	diethyl phthalate	20U
(71B)	131-11-3	dimethyl phthalate	20U
(72B)	56-55-3	benzo(a)anthracene	20U
(73B)	50-32-8	benzo(a)pyrene	40U
(74B)	205-99-2	benzo(b)fluoranthene	40U
(75B)	207-08-9	benzo(k)fluoranthene	40U
(76B)	218-01-9	chrysene	20U
(77B)	208-96-8	acenaphthylene	20U
(78B)	120-12-7	anthracene	20U
(79B)	191-24-2	benzo(ghi)perylene	40U
(80B)	86-73-7	fluorene	20U
(81B)	85-01-8	phenanthrene	20U
(82B)	53-70-3	dibenzo(a,h)anthracene	40U
(83B)	193-39-5	indeno(1,2,3-cd)pyrene	40U
(84B)	129-00-0	pyrene	20U
	62-53-3	aniline	20U
	100-51-6	benzyl alcohol	40U
	106-47-8	4-chloroaniline	100U
	132-64-9	dibenzofuran	20U
	91-57-6	2-methylnaphthalene	40U
	88-74-4	2-nitroaniline	200U
	99-09-2	3-nitroaniline	200U

U.S. ENVIRONMENTAL PROTECTION AGENCY - CLP Sample Management Office
P.O. Box 818, Alexandria, Virginia 22313 - 703/557-2490

Sample Number
C-4293

ORGANICS ANALYSIS DATA SHEET

Laboratory Name: EAL CORPORATION
Case No: 2420
Lab Sample ID No: 2920- 1-1
QC Report No:
Sample Matrix: WATER
Contract No.: 68-01-6854
Data Release Authorized By: BJT
Date Sample Received: 2-17-84

SEMIVOLATILE COMPOUNDS

CONCENTRATION: (LOW) MEDIUM HIGH (circle one)
DATE EXTRACTED/PREPARED: 2-22-84
DATE ANALYZED: 3-7-84
PERCENT MOISTURE:
CONC./DILUTION FACTOR:

PP #	CAS #		ug/l or ug/kg (circle one)
21A)	88-06-2	2,4,6- trichlorophenol	20U
(22A)	59-50-7	p-chloro-m-cresol	40U
'24A)	95-57-8	2- chlorophenol	20U
31A)	120-83-2	2,4-dichlorophenol	20U
(34A)	105-67-9	2,4-dimethylphenol	20U
'57A)	88-75-5	2- nitrophenol	40U
58A)	100-02-7	4-nitrophenol	100U
(59A)	51-28-5	2,4-dinitrophenol	100U
'60A)	534-52-1	4,6-dinitro-2-methylphenol	40U
64A)	87-86-5	pentachlorophenol	40U
(65A)	108-95-2	phenol-	20U
	65-85-0	benzoic acid	200U
	95-48-7	2-methylphenol	20U
	108-39-4	4-methylphenol	20U
	95-95-4	2,4,5-trichlorophenol	200U
B)	83-32-9	acenaphthene	20U
5B)	92-87-5	benzidine	80U
B)	120-82-1	1,2,4-trichlorobenzene	20U
B)	118-74-1	hexachlorobenzene	20U
12B)	67-72-1	hexachloroethane	20U
8B)	111-44-4	bis(2-chloroethyl)ether	20U
0B)	91-58-7	2-chloronaphthalene	20U
25B)	95-50-1	1,2-dichlorobenzene	20U
6B)	541-73-1	1,3-dichlorobenzene	20U
7B)	106-46-7	1,4-dichlorobenzene	20U
28B)	91-94-1	3,3'-dichlorobenzidine	40U
5B)	121-14-2	2,4-dinitrotoluene	40U
6B)	606-20-2	2,6-dinitrotoluene	40U
37B)	122-66-7	1,2-diphenylhydrazine	40U
B)	206-44-0	fluoranthene	20U
0B)	7005-72-3	4-chlorophenyl phenyl ether	20U
1B)	101-55-3	4-bromophenyl phenyl ether	20U
2B)	39638-32-9	bis (2-chloroisopropyl) ether	40U
3B)	111-91-1	bis (2-chloroethoxy) methane	40U

PP #	CAS #		ug/l or ug/kg (circle one
(52B)	87-68-3	hexachlorobutadiene	20U
(53B)	77-47-4	hexachlorocyclopentadiene	20U
(54B)	78-59-1	isophorone	20U
(55B)	91-20-3	naphthalene	20U
(56B)	98-95-3	nitrobenzene	20U
(61B)	62-75-9	N-nitrosodimethylamine	20U
(62B)	86-30-6	N-nitrosodiphenylamine	20U
(63B)	621-64-7	N-nitrosodipropylamine	40U
(66B)	117-81-7	bis (2-ethylhexyl) phthalate	16JT ~~20U~~
(67B)	85-68-7	benzyl butyl phthalate	20U
(68B)	84-74-2	di-n-butyl phthalate	20U
(69B)	117-84-0	di-n-octyl phthalate	23 ~~20U~~
(70B)	84-66-2	diethyl phthalate	20U
(71B)	131-11-3	dimethyl phthalate	20U
(72B)	56-55-3	benzo(a)anthracene	20U
(73B)	50-32-8	benzo(a)pyrene	40U
(74B)	205-99-2	benzo(b)fluoranthene	40U
(75B)	207-08-9	benzo(k)fluoranthene	40U
(76B)	218-01-9	chrysene	20U
(77B)	208-96-8	acenaphthylene	20U
(78B)	120-12-7	anthracene	20U
(79B)	191-24-2	benzo(ghi)perylene	40U
(80B)	86-73-7	fluorene	20U
(81B)	85-01-8	phenanthrene	20U
(82B)	53-70-3	dibenzo(a,h)anthracene	40U
(83B)	193-39-5	indeno(1,2,3-cd)pyrene	40U
(84B)	129-00-0	pyrene	20U
	62-53-3	aniline	20U
	100-51-6	benzyl alcohol	40U
	106-47-8	4-chloroaniline	100U
	132-64-9	dibenzofuran	20U
	91-57-6	2-methylnaphthalene	40U
	88-74-4	2-nitroaniline	200U
	99-09-2	3-nit	200U

U.S. ENVIRONMENTAL PROTECTION AGENCY - CLP Sample Management Office
P.O. Box 818, Alexandria, Virginia 22313 - 703/557-2490

Sample Number
C4293

ORGANICS ANALYSIS DATA SHEET

Laboratory Name: EAL CORPORATION
Case No: 2420
Lab Sample ID No: 2920-1-1
QC Report No:
Sample Matrix: WATER
Contract No.: 68-01-6854
Data Release Authorized By: BJT
Date Sample Received: 2-17-84

VOLATILES

CONCENTRATION: (LOW) MEDIUM HIGH (circle one)
DATE EXTRACTED/PREPARED:
DATE ANALYZED:
PERCENT MOISTURE:
CONC./DILUTION FACTOR:

PP #	CAS #		ug/l or ug/kg (circle one)
(2V)	107-02-8	acrolein	100U
(3V)	107-13-1	acrylonitrile	100U
(4V)	71-43-2	benzene	5U
(6V)	56-23-5	carbon tetrachloride	5U
(7V)	108-90-7	chlorobenzene	5U
(10V)	107-06-2	1,2-dichloroethane	5U
(11V)	71-55-6	1,1,1-trichloroethane	5U
(13V)	75-34-3	1,1-dichloroethane	5U
(14V)	79-00-5	1,1,2-trichloroethane	5U
(15V)	79-34-5	1,1,2,2-tetrachloroethane	5U
(16V)	75-00-3	chloroethane	5U
(19V)	110-75-8	2-chloroethylvinyl ether	5U
(23V)	67-66-3	chloroform	5U
(29V)	75-35-4	1,1-dichloroethene	5U
(30V)	156-60-5	trans-1,2-dichloroethene	5U
(32V)	78-87-5	1,2-dichloropropane	5U
(33V)	10061-02-6	trans-1,3-dichloropropene	5U
	10061-01-05	cis-1,3-dichloropropene	10U
(38V)	100-41-4	ethylbenzene	5U
(44V)	75-09-2	methylene chloride	5U
(45V)	74-87-3	chloromethane	5U
(46V)	74-83-9	bromomethane	5U
(47V)	75-25-2	bromoform	5U
(48V)	75-27-4	bromodichloromethane	5U
(49V)	75-69-4	fluorotrichloromethane	5U
(50V)	75-71-8	dichlorodifluoromethane	5U
(51V)	124-48-1	chlorodibromomethane	5U
(85V)	127-18-4	tetrachloroethene	5U
(86V)	108-88-3	toluene	5U
(87V)	79-01-6	trichloroethene	5U
(88V)	75-01-4	vinyl chloride	5U
	67-64-1	acetone	5U
	78-93-3	2-butanone	5U
	75-15-0	carbondisulfide	5U
	519-78-6	2-hexanone	5U
	108-10-1	4-methyl-2-pentanone	5U
	100-42-5	styrene	5U
	108-05-4	vinyl acetate	5U

PESTICIDES

CONCENTRATION: (LOW) MEDIUM HIGH (circle one)
DATE EXTRACTED/PREPARED: 2-21-84
DATE ANALYZED: 3-8-84
PERCENT MOISTURE:
CONC./DILUTION FACTOR:

PP #	CAS #		ug/l or ug/kg (circle one)
(89P)	309-00-2	aldrin	0.1U
(90P)	60-57-1	dieldrin	0.1U
(91P)	57-74-9	chlordane	0.1U
(92P)	50-29-3	4,4'-DDT	0.1U
(93P)	72-55-9	4,4'-DDE	0.1U
(94P)	72-54-8	4,4'-DDD	0.1U
(95P)	115-29-7	α-endosulfan	0.1U
(96P)	115-29-7	β-endosulfan	0.1U
(97P)	1031-07-8	endosulfan sulfate	0.1U
(98P)	72-20-8	endrin	0.
(99P)	7421-93-4	endrin aldehyde	0.1U
(100P)	76-44-8	heptachlor	0.1U
(101P)	1024-57-3	heptachlor epoxide	0.1U
(102P)	319-84-6	α-BHC	0.1U
(103P)	319-85-7	β-BHC	0.1U
(104P)	319-86-8	δ-BHC	0.1U
(105P)	58-89-9	γ-BHC (lindane)	0.1U
(106P)	53469-21-9	PCB-1242	0.2U ~~0.1U~~
(107P)	11097-69-1	PCB-1254	0.4U ~~0.1U~~
(108P)	11104-28-2	PCB-1221	0.3U ~~0.1U~~
(109P)	11141-16-5	PCB-1232	0.3U ~~0.1U~~
(110P)	12672-29-6	PCB-1248	0.3U ~~0.1U~~
(111P)	11096-82-5	PCB-1260	0.7U ~~0.1U~~
(112P)	12674-11-2	PCB-1016	0.2U ~~0.1U~~
(113P)	8001-35-2	toxaphene	4.0U ~~0.1U~~

000166

DIOXINS

CONCENTRATION: (LOW) MEDIUM HIGH (circle one)
DATE EXTRACTED/PREPARED: 2-21-84
DATE ANALYZED: 3-8-84
PERCENT MOISTURE:
CONC./DILUTION FACTOR:

PP #	CAS #		ug/l or ug/kg (circle one)
(129S)	1746-01-6	2,3,7,8-tetrachlorodibenzo-p-dioxin	0.1U

AR000166

U.S. ENVIRONMENTAL PROTECTION AGENCY - CLP Organics Data Review Section
P.O. Box 818, Alexandria, Virginia 22313 - 703/557-2490

Organics Number: C-4293

LOW WATER

ORGANICS ANALYSIS DATA SHEET

Laboratory Name: FAL CORPORATION
Lab Sample ID No: 2920-1-1
Sample Matrix:
Data Release Authorized By: BJS

Case No: 2420
QC Report No:
Contract No.: 68-01-6854
Date Sample Received: 2/17/84

VOLATILES

CONCENTRATION: (LOW) MEDIUM HIGH (circle one)
DATE EXTRACTED/PREPARED:
DATE ANALYZED: 2/22/84
PERCENT MOISTURE:

PP #	CAS #		(ug/l or ug/kg) (circle one)
(2V)	107-02-8	acrolein	100U
(3V)	107-13-1	acrylonitrile	100U
(4V)	71-43-2	benzene	5U
(6V)	56-23-5	carbon tetrachloride	5U
(7V)	108-90-7	chlorobenzene	5U
(10V)	107-06-2	1,2-dichloroethane	5U
(11V)	71-55-6	1,1,1-trichloroethane	5U
(13V)	75-34-3	1,1-dichloroethane	5U
(14V)	79-00-5	1,1,2-trichloroethane	5U
(15V)	79-34-5	1,1,2,2-tetrachloroethane	5U
(16V)	75-00-3	chloroethane	5U
(19V)	110-75-8	2-chloroethylvinyl ether	5U
(23V)	67-66-3	chloroform	5U
(29V)	75-35-4	1,1-dichloroethene	5U
(30V)	156-60-5	trans-1,2-dichloroethene	5U
(32V)	78-87-5	1,2-dichloropropane	5U
(33V)	10061-02-6	trans-1,3-dichloropropene	5U
	10061-01-05	cis-1,3-dichloropropene	10U
(38V)	100-41-4	ethylbenzene	5U
(44V)	75-09-2	methylene chloride 30 ~~5U~~ BJS	
(45V)	74-87-3	chloromethane	5U
(46V)	74-83-9	bromomethane	5U
(47V)	75-25-2	bromoform	5U
(48V)	75-27-4	bromodichloromethane	5U
(49V)	75-69-4	fluorotrichloromethane	5U
(50V)	75-71-8	dichlorodifluoromethane	5U
(51V)	124-48-1	chlorodibromomethane	5U
(85V)	127-18-4	tetrachloroethene	5U
(86V)	108-88-3	toluene	5U
(87V)	79-01-6	trichloroethene	5U
(88V)	75-01-4	vinyl chloride	5U
	67-64-1	acetone	100U
	78-93-3	2-butanone	200U
	75-15-0	carbondisulfide	10U
	519-78-6	2-hexanone	100U
	108-10-1	4-methyl-2-pentanone	100U
	100-42-5	styrene	5U
	108-05-4	vinyl acetate	10U
	1330-20-7	total xylenes	5U

PESTICIDES

CONCENTRATION: (LOW) MEDIUM HIGH (circle one)
DATE EXTRACTED/PREPARED:
DATE ANALYZED:
PERCENT MOISTURE:

PP #	CAS #		(ug/l or ug/kg) (circle)
(89P)	309-00-2	aldrin	0.1U
(90P)	60-57-1	dieldrin	0.1U
(91P)	57-74-9	chlordane	0.1U
(92P)	50-29-3	4,4'-DDT	0.1U
(93P)	72-55-9	4,4'-DDE	0.1U
(94P)	72-54-8	4,4'-DDD	0.1U
(95P)	115-29-7	α-endosulfan	0.1U
(96P)	115-29-7	β-endosulfan	0.1U
(97P)	1031-07-8	endosulfan sulfate	0.1U
(98P)	72-20-8	endrin	0.1U
(99P)	7421-93-4	endrin aldehyde	0.1U
(100P)	76-44-8	heptachlor	0.1U
(101P)	1024-57-3	heptachlor epoxide	0.1U
(102P)	319-84-6	α-BHC	0.1U
(103P)	319-85-7	β-BHC	0.1U
(104P)	319-86-8	δ-BHC	0.1U
(105P)	58-89-9	γ-BHC (lindane)	0.1U
(106P)	53469-21-9	PCB-1242	0.1U
(107P)	11097-69-1	PCB-1254	0.1U
(108P)	11104-28-2	PCB-1221	0.1U
(109P)	11141-16-5	PCB-1232	0.1U
(110P)	12672-29-6	PCB-1248	0.1U
(111P)	11096-82-5	PCB-1260	0.1U
(112P)	12674-11-2	PCB-1016	0.1U
(113P)	8001-35-2	toxaphene	0.1U

DIOXINS

CONCENTRATION: LOW MEDIUM HIGH (circle one)
DATE EXTRACTED/PREPARED:
DATE ANALYZED:
PERCENT MOISTURE:

PP #	CAS #		(ug/l or ug/kg) (circle
(129D)	1746-01-6	2,3,7,8-tetrachlorodibenzo-p-dioxin	0.

July

ASE # SAS # - 9320 LABORATORY: IT/WCTS SAMPLE #: METHOD BLANK
DATE REC'D 03 Oct 84 CONTRACT # SAS % MOISTURE: NA
DATA RELEASE AUTHORIZED BY

ORGANICS ANALYSIS DATA SHEET - PAGE 2
BASE/NEUTRAL AND ACID COMPOUNDS

LEVEL	MEDIUM
MATRIX	OIL
QC REPORT # SAS#	9320-1
GPC--IE/TRACT	BASED ON 2 CC'S 10ML
STANDARD ID	BNA2447
SENSITIVITY ID	SENS52
LABORATORY ID	28393F10
DATE EXTRACTED	09/11/84
DATE ANALYZED	09/28/84
UNITS	UG/KG

CC #	CAS #		CONC
9320	99-30-9	2,6-DINITROBENZENAMINE	5000 U
9320	121-14-2	2,4-DINITROBENZENAMINE	5000 U
9320	117-81-7	BIS(2-ETHYLHEXYL)PHTHALATE	5000 U
9320	85-68-7	BUTYLBENZYL PHTHALATE	5000 U
9320	84-74-2	DI-N-BUTYL PHTHALATE	5000 U
9320	117-84-0	DI-N-OCTYL PHTHALATE	5000 U
9320	84-66-2	DIETHYL PHTHALATE	5000 U
9320	131-11-3	DIMETHYL PHTHALATE	5000 U
9320	56-55-3	BENZO(A)ANTHRACENE	5000 U
9320	218-01-9	CHRYSENE	5000 U
9320	53-70-3	DIBENZ(A,H)ANTHRACENE	5000 U
9320	206-44-0	FLUORANTHENE	5000 U
9320	86-73-7	FLUORENE	5000 U
9320	193-39-5	INDENO(1,2,3-CD)PYRENE	5000 U
9320	91-20-3	NAPHTHALENE	5000 U
9320	85-01-8	PHENANTHRENE	5000 U
9320	129-00-0	PYRENE	5000 U
9320	91-22-5	QUINOLINE	5000 U
9320	62-53-3	ANILINE	5000 U
9320	100-51-6	BENZYL ALCOHOL	5000 U
9320	106-47-8	4-CHLOROANILINE	5000 U
9320	132-64-9	DIBENZOFURAN	5000 U
9320	91-57-6	2-METHYLNAPHTHALENE	5000 U
9320	88-74-4	2-NITROANILINE	5000 U
9320	99-09-2	3-NITROANILINE	5000 U
9320	100-01-6	4-NITROANILINE	5000 U

U - COMPOUND WAS NOT DETECTED (REPORTED VALUE IS DETECTION LIMIT - DL)
J - VALUE WAS BELOW QUANTITATION LIMIT (QUANTITATION LIMIT IS 10 X DL)

000168

AR000168

SE # SAS # - PET1 LABORATORY IT WOTS SAMPLE # METHOD BLANK
ATE REC'D 03/16/84 CONTRACT # SAS % MOISTURE NA
ATA RELEASE AUTHORIZED BY: Thomas A. Adams

ORGANICS ANALYSIS DATA SHEET
BASE/NEUTRAL AND ACID COMPOUNDS

LEVEL	MEDIUM
MATRIX	SOIL
LAB REPORT #	SAS# PET1-1
SAMPLE WT/VOL	SAMPLE WT 30.0 10ML
STANDARD ID	BNA1147
SENSITIVITY	SENSEI
LABORATORY ID	PHEROMYL
DATE EXTRACTED	03/21/84
DATE ANALYZED	03/26/84
UNITS	UG/L

RF #	CAS #		CONC
a1A	88-06-2	2,4,6-TRICHLOROPHENOL	5000 U
a2A	59-50-7	4-CHLORO-3-METHYLPHENOL	5000 U
b4A	95-57-8	2-CHLOROPHENOL	5000 U
b1A	120-83-2	2,4-DICHLOROPHENOL	5000 U
b4A	105-67-9	2,4-DIMETHYLPHENOL	5000 U
b5A	88-75-5	2-NITROPHENOL	5000 U
b8A	100-02-7	4-NITROPHENOL	5000 U
b9A	51-28-5	2,4-DINITROPHENOL	5000 U
	534-52-1	4,6-DINITRO-2-METHYLPHENOL	5000 U
n1A	87-86-5	PENTACHLOROPHENOL	5000 U
n2A	108-95-2	PHENOL	5000 U
	65-85-0	BENZOIC ACID	5000 U
	95-48-7	2-METHYLPHENOL	5000 U
	108-39-4	4-METHYLPHENOL	5000 U
	88-85-7	2,4-DINITRO-2-METHYLPHENOL	5000 U
	80-32-7	BENZIDINE	5000 U
1	62-87-9	ANILINE	5000 U
b6	120-82-1	1,2,4-TRICHLOROBENZENE	5000 U
b2	118-74-1	HEXACHLOROBENZENE	5000 U
b3A	67-72-1	HEXACHLOROETHANE	5000 U
b7	11-44-0	BIS(2-CHLOROETHYL)ETHER	5000 U
b10	91-58-7	2-CHLORONAPHTHALENE	5000 U
b11	95-50-1	1,2-DICHLOROBENZENE	5000 U
b12	541-73-1	1,3-DICHLOROBENZENE	5000 U
b13	106-46-7	1,4-DICHLOROBENZENE	5000 U
b14	91-94-1	3,3'-DICHLOROBENZIDINE	5000 U
b15	51-14-2	2,4-DINITROTOLUENE	5000 U
b16	606-20-2	2,6-DINITROTOLUENE	5000 U
b17	122-66-7	1,2-DIPHENYLHYDRAZINE	5000 U
b18	206-44-0	FLUORANTHENE	5000 U
b19	7005-72-3	4-CHLOROPHENYL PHENYL ETHER	5000 U
b20	101-55-3	4-BROMOPHENYL PHENYL ETHER	5000 U
b21	108-60-1	BIS(2-CHLOROISOPROPYL)ETHER	5000 U
b22	111-91-1	BIS(2-CHLOROETHOXY)METHANE	5000 U
b23	87-68-3	HEXACHLOROBUTADIENE	5000 U
b24	77-47-4	HEXACHLOROCYCLOPENTADIENE	5000 U
b25	78-59-1	ISOPHORONE	5000 U
b26	91-20-3	NAPHTHALENE	5000 U
b27	98-95-3	NITROBENZENE	5000 U
b28	62-75-9	N-NITROSODIMETHYLAMINE	5000 U

000169
AR000169

CASE #/SAS #: -/982C LABORATORY: IT/WCTS SAMPLE #: LAB BLANK
DATE REC'D: 03/06/84 CONTRACT #: SAS % MOISTURE: NA
DATA RELEASE AUTHORIZED BY: J Thomas A Rhinehart

982C-10

ORGANICS ANALYSIS DATA SHEET
VOLATILE COMPOUNDS

LEVEL: MEDIUM
MATRIX: OIL
QC REPORT #: SAS#982C-1
SPL-->EXTRACT: BASED ON 1.0G: 5MLS ---50UL: 5MLS
STANDARD ID: VOA467
SENSITIVITY ID: BFD379
LABORATORY ID: 28893N1
DATE ANALYZED: 03/08/84
UNITS: UG/KG

PP #	CAS #		CONC
2V	107-02-8	ACROLEIN	5000. U
3V	107-13-1	ACRYLONITRILE	5000. U
4V	71-43-2	BENZENE	500. U
6V	56-23-5	CARBON TETRACHLORIDE	500. U
7V	108-90-7	CHLOROBENZENE	500. U
10V	107-06-2	1,2-DICHLOROETHANE	500. U
11V	71-55-6	1,1,1-TRICHLOROETHANE	500. U
13V	75-34-3	1,1-DICHLOROETHANE	500. U
14V	79-00-5	1,1,2-TRICHLOROETHANE	500. U
15V	79-34-5	1,1,2,2-TETRACHLOROETHANE	500. U
16V	75-00-3	CHLOROETHANE	500. U
17V	542-88-1	BIS(CHLOROMETHYL)ETHER	500. U
19V	110-75-8	2-CHLOROETHYLVINYL ETHER	5000. U
23V	67-66-3	CHLOROFORM	500. U
29V	75-35-4	1,1-DICHLOROETHENE	500. U
30V	156-60-5	TRANS-1,2-DICHLOROETHENE	500. U
32V	78-87-5	1,2-DICHLOROPROPANE	500. U
33VT	10061-02-6	TRANS-1,3-DICHLOROPROPENE	500. U
33VC	10061-01-5	CIS-1,3-DICHLOROPROPENE	500. U
38V	100-41-4	ETHYLBENZENE	500. U
44V	75-09-2	METHYLENE CHLORIDE	2400. A
45V	74-87-3	CHLOROMETHANE	500. U
46V	74-83-9	BROMOMETHANE	500. U
47V	75-25-2	BROMOFORM	500. U
48V	75-27-4	BROMODICHLOROMETHANE	500. U
49V	75-69-4	TRICHLOROFLUOROMETHANE	500. U
50V	75-71-8	DICHLORODIFLUOROMETHANE	500. U
51V	124-48-1	CHLORODIBROMOMETHANE	500. U
85V	127-18-4	TETRACHLOROETHENE	500. U
86V	108-88-3	TOLUENE	500. U
87V	79-01-6	TRICHLOROETHENE	500. U
88V	75-01-4	VINYL CHLORIDE	500. U
	67-64-1	ACETONE	5000. U
	78-93-3	2-BUTANONE	5000. U
	75-15-0	CARBON DISULFIDE	500. U
	519-78-6	2-HEXANONE	500. U
	108-10-1	4-METHYL-2-PENTANONE	500. U
	100-42-5	STYRENE	500. U
	108-05-4	VINYL ACETATE	500. U
	95-47-6	TOTAL XYLENES	500. U

U - ANALYZED FOR BUT NOT DETECTED (REPORTED VALUE IS DETECTION LIMIT - DL)
A - DETECTED BELOW QUANTITATION LIMIT (QUANTITATION LIMIT AR000170

SAS #: -/982C LABORATORY: IT/WCTS SAMPLE #: C4889
RCVD. 03/06/84 CONTRACT #: SAS % MOISTURE: 4.76
RELEASE AUTHORIZED BY: Thomas A. Adams

ORGANICS ANALYSIS DATA SHEET - PAGE 2
BASE/NEUTRAL AND ACID COMPOUNDS

LEVEL:	MEDIUM
MATRIX:	OIL
QC REPORT #:	SAS# 982C-1
SPL-->EXTRACT:	2.10G:10ML 1:20 DIL
STANDARD ID:	BNAZ445
SENSITIVITY ID:	SENS50
LABORATORY ID:	28893F6
DATE EXTRACTED:	03/10/84
DATE ANALYZED:	03/27/84
UNITS:	UG/KG

PP #	CAS #		CONC
62B	86-30-6	N-NITROSODIPHENYLAMINE	100000. U
63B	621-64-7	N-NITROSODIPROPLYAMINE	100000. U
66B	117-81-7	BIS(2-ETHYLHEXYL)PHTHALATE	100000. U
67B	85-68-7	BUTYL BENZYL PHTHALATE	100000. U
68B	84-74-2	DI-N-BUTYL PHTHALATE	100000. U
69B	117-84-0	DI-N-OCTYL PHTHALATE	100000. U
70B	84-66-2	DIETHYL PHTHALATE	100000. U
71B	131-11-3	DIMETHYL PHTHALATE	100000. U
72B	56-55-3	BENZO(A)ANTHRACENE	100000. U
73B	50-32-8	BENZO(A)PYRENE	100000. U
74B	205-99-2	BENZO(B&K)FLUORANTHENE	100000. U
75B	207-08-9	BENZO(K)FLUORANTHENE	100000. U
76B	218-01-9	CHRYSENE	100000. U
77B	208-96-8	ACENAPHTHYLENE	100000. U
78B	120-12-7	ANTHRACENE	100000. U
79B	191-24-2	BENZO(GHI)PERYLENE	100000. U
80B	86-73-7	FLUORENE	100000. U
81B	85-01-8	PHENANTHRENE	100000. U
82B	53-70-3	DIBENZO(A,H)ANTHRACENE	100000. U
83B	193-39-5	INDENO(1,2,3-CD)PYRENE	100000. U
84B	129-00-0	PYRENE	100000. U
	62-53-3	ANILINE	100000. U
	100-51-6	BENZYL ALCOHOL	100000. U
	106-47-8	4-CHLOROANILINE	100000. U
	132-64-9	DIBENZOFURAN	100000. U
	91-57-6	2-METHYLNAPHTHALENE	100000. U
	88-74-4	2-NITROANILINE	100000. U
	99-09-2	3-NITROANILINE	100000. U
	100-01-6	4-NITROANILINE	100000. U

U - ANALYZED FOR BUT NOT DETECTED (REPORTED VALUE IS DETECTION LIMIT - DL)
A - DETECTED BELOW QUANTITATION LIMIT (QUANTITATION LIMIT IS 10 X DL)

CASE #: [illegible] LABORATORY: IT/WCTB SAMPLE #: 04EB5
SDG: 03/06/84 CONTRACT #: SAS % MOISTURE: 4.76%
RELEASE AUTHORIZED BY: Thomas J. Rohrer

ORGANICS ANALYSIS DATA SHEET
BASE/NEUTRAL AND ACID COMPOUNDS

LEVEL:	MEDIUM
MATRIX:	OIL
QC REPORT #:	SAS#982C-1
SPL-->EXTRACT:	2.10G:10ML 1:20 DIL
STANDARD ID:	BNAZ445
SENSITIVITY ID:	SENS50
LABORATORY ID:	28893F6
DATE EXTRACTED:	03/10/84
DATE ANALYZED:	03/27/84
UNITS:	UG/KG

PP #	CAS #		CONC
21A	88-06-2	2,4,6-TRICHLOROPHENOL	100000. U
22A	59-50-7	4-CHLORO-3-METHYLPHENOL	100000. U
24A	95-57-8	2-CHLOROPHENOL	100000. U
31A	120-33-2	2,4-DICHLOROPHENOL	100000. U
34A	105-67-9	2,4-DIMETHYLPHENOL	100000. U
57A	88-75-5	2-NITROPHENOL	100000. U
58A	100-02-7	4-NITROPHENOL	100000. U
59A	51-28-5	2,4-DINITROPHENOL	100000. U
60A	534-52-1	4,6-DINITRO-2-METHYLPHENOL	100000. U
64A	87-86-5	PENTACHLOROPHENOL	100000. U
65A	108-95-2	PHENOL	100000. U
	65-85-0	BENZOIC ACID	100000. U
	95-48-7	2-METHYLPHENOL	100000. U
	108-39-4	4-METHYLPHENOL	100000. U
	95-95-4	2,4,5-TRICHLOROPHENOL	100000. U
1B	83-32-9	ACENAPHTHENE	100000. U
5B	92-87-5	BENZIDINE	100000. U
8B	120-82-1	1,2,4-TRICHLOROBENZENE	100000. U
9B	118-74-1	HEXACHLOROBENZENE	100000. U
12B	67-72-1	HEXACHLOROETHANE	100000. U
18B	111-44-4	BIS(2-CHLOROETHYL)ETHER	100000. U
20B	91-58-7	2-CHLORONAPHTHALENE	100000. U
25B	95-50-1	1,2-DICHLOROBENZENE	100000. U
26B	541-73-1	1,3-DICHLOROBENZENE	100000. U
27B	106-46-7	1,4-DICHLOROBENZENE	100000. U
28B	91-94-1	3,3'-DICHLOROBENZIDINE	100000. U
35B	121-14-2	2,4-DINITROTOLUENE	100000. U
36B	606-20-2	2,6-DINITROTOLUENE	100000. U
37B	122-66-7	1,2-DIPHENYLHYDRAZINE	100000. U
39B	206-44-0	FLUORANTHENE	100000. U
40B	7005-72-3	4-CHLOROPHENYL PHENYL ETHER	100000. U
41B	101-55-3	4-BROMOPHENYL PHENYL ETHER	100000. U
42B	39638-32-9	BIS(2-CHLOROISOPROPYL)ETHER	100000. U
43B	111-91-1	BIS(2-CHLOROETHOXY)METHANE	100000. U
52B	87-68-3	HEXACHLOROBUTADIENE	100000. U
53B	77-47-4	HEXACHLOROCYCLOPENTADIENE	100000. U
54B	78-59-1	ISOPHORONE	100000. U
55B	91-20-3	NAPHTHALENE	100000. U
56B	98-95-3	NITROBENZENE	100000. U
61B	62-75-9	N-NITROSODIMETHYLAMINE	100000. U

000172

CASE #/SAS #: -/982C LABORATORY: IT/WCTS SAMPLE #: C4889
DATE REC'D: 03/06/84 CONTRACT #: SAS % MOISTURE: 4.76

DATA RELEASE AUTHORIZED BY: Thomas A Adams

982C-10

ORGANICS ANALYSIS DATA SHEET
VOLATILE COMPOUNDS

LEVEL: MEDIUM
MATRIX: OIL
QC REPORT #: SAS# 982C-1
SPL-->EXTRACT: 10G ~~1ML~~: 5ML MEOH---50UL: 5ML H2O
STANDARD ID: VOA469
SENSITIVITY ID: BFD381
LABORATORY ID: 28893N16
DATE ANALYZED: 03/09/84
UNITS: UG/KG

PP #	CAS #		CONC
2V	107-02-8	ACROLEIN	5000. U
3V	107-13-1	ACRYLONITRILE	5000. U
4V	71-43-2	BENZENE	1900. A
6V	56-23-5	CARBON TETRACHLORIDE	500. U
7V	108-90-7	CHLOROBENZENE	500. U
10V	107-06-2	1,2-DICHLOROETHANE	500. U
11V	71-55-6	1,1,1-TRICHLOROETHANE	500. U
13V	75-34-3	1,1-DICHLOROETHANE	500. U
14V	79-00-5	1,1,2-TRICHLOROETHANE	500. U
15V	79-34-5	1,1,2,2-TETRACHLOROETHANE	500. U
16V	75-00-3	CHLOROETHANE	500. U
17V	542-88-1	BIS(CHLOROMETHYL)ETHER	500. U
19V	110-75-8	2-CHLOROETHYLVINYL ETHER	5000. U
23V	67-66-3	CHLOROFORM	500. U
29V	75-35-4	1,1-DICHLOROETHENE	500. U
30V	156-60-5	TRANS-1,2-DICHLOROETHENE	500. U
32V	78-87-5	1,2-DICHLOROPROPANE	500. U
33VT	10061-02-6	TRANS-1,3-DICHLOROPROPENE	500. U
33VC	10061-01-5	CIS-1,3-DICHLOROPROPENE	500. U
38V	100-41-4	ETHYLBENZENE	500. U
44V	75-09-2	METHYLENE CHLORIDE	9400.
45V	74-87-3	CHLOROMETHANE	500. U
46V	74-83-9	BROMOMETHANE	500. U
47V	75-25-2	BROMOFORM	500. U
48V	75-27-4	BROMODICHLOROMETHANE	500. U
49V	75-69-4	TRICHLOROFLUOROMETHANE	500. U
50V	75-71-8	DICHLORODIFLUOROMETHANE	500. U
51V	124-48-1	CHLORODIBROMOMETHANE	500. U
85V	127-18-4	TETRACHLOROETHENE	48000.
86V	108-88-3	TOLUENE	500. U
87V	79-01-6	TRICHLOROETHENE	500. U
88V	75-01-4	VINYL CHLORIDE	500. U
	67-64-1	ACETONE	5000. U
	78-93-3	2-BUTANONE	15000. A
	75-15-0	CARBON DISULFIDE	500. U
	519-78-6	2-HEXANONE	500. U
	108-10-1	4-METHYL-2-PENTANONE	500. U
	100-42-5	STYRENE	500. U
	108-05-4	VINYL ACETATE	500. U
	95-47-6	TOTAL XYLENES	500 U

000173

- ANALYZED FOR BUT NOT DETECTED (REPORTED VALUE IS DETECTI...
- DETECTED BELOW QUANTITATION LIMIT (QUANTITATION LIMIT I...

AR000173

SAS #: -/982C LABORATORY: IT/WCTS SAMPLE #: C4887
REC'D: 03/06/84 CONTRACT #: SAS % MOISTURE: 11.59%
RELEASE AUTHORIZED BY: Thomas A Robinson

ORGANICS ANALYSIS DATA SHEET - PAGE 2
BASE/NEUTRAL AND ACID COMPOUNDS

LEVEL:	MEDIUM
MATRIX:	OIL
GC REPORT #: SAS#	982C-1
SPL-->EXTRACT:	2.45G:10ML 1:50 DIL
STANDARD ID:	BNAZ445
SENSITIVITY ID:	SENS50
LABORATORY ID:	22893F8
DATE EXTRACTED:	03/10/84
DATE ANALYZED:	03/27/84
UNITS:	UG/KG

PP #	CAS #		CONC
62B	86-30-6	N-NITROSODIPHENYLAMINE	250000. U
63B	621-64-7	N-NITROSODIPROPLYAMINE	250000. U
66B	117-81-7	BIS(2-ETHYLHEXYL)PHTHALATE	250000. U
67B	85-68-7	BUTYL BENZYL PHTHALATE	250000. U
68B	84-74-2	DI-N-BUTYL PHTHALATE	250000. U
69B	117-84-0	DI-N-OCTYL PHTHALATE	250000. U
70B	84-66-2	DIETHYL PHTHALATE	250000. U
71B	131-11-3	DIMETHYL PHTHALATE	250000. U
72B	56-55-3	BENZO(A)ANTHRACENE	250000. U
73B	50-32-8	BENZO(A)PYRENE	250000. U
74B	205-99-2	BENZO(B&K)FLUORANTHENE	250000. U
75B	207-08-9	BENZO(K)FLUORANTHENE	250000. U
76B	218-01-9	CHRYSENE	250000. U
77B	208-96-8	ACENAPHTHYLENE	250000. U
78B	120-12-7	ANTHRACENE	250000. U
79B	191-24-2	BENZO(GHI)PERYLENE	250000. U
80B	86-73-7	FLUORENE	250000. U
81B	85-01-8	PHENANTHRENE	250000. U
82B	53-70-3	DIBENZO(A,H)ANTHRACENE	250000. U
83B	193-39-5	INDENO(1,2,3-CD)PYRENE	250000. U
84B	129-00-0	PYRENE	250000. U
	62-53-3	ANILINE	250000. U
	100-51-6	BENZYL ALCOHOL	250000. U
	106-47-8	4-CHLOROANILINE	250000. U
	132-64-9	DIBENZOFURAN	250000. U
	91-57-6	2-METHYLNAPHTHALENE	250000. U
	88-74-4	2-NITROANILINE	250000. U
	99-09-2	3-NITROANILINE	250000. U
	100-01-6	4-NITROANILINE	250000. U

U - ANALYZED FOR BUT NOT DETECTED (REPORTED VALUE IS DETECTION LIMIT - DL)
A - DETECTED BELOW QUANTITATION LIMIT (QUANTITATION LIMIT IS 10 X DL)

AS #: 47820 LABORATORY: LT/WCTS SAMPLE # C4887
D 03/06/84 CONTRACT #: SAS % MOISTURE: 11.59%
RELEASE AUTHORIZED BY: Thomas R Lomax

ORGANICS ANALYSIS DATA SHEET
BASE/NEUTRAL AND ACID COMPOUNDS

LEVEL: MEDIUM
MATRIX: OIL
QC REPORT #: SAS#F82C-1
SPL-->EXTRACT: 2.45G:10ML 1:50 DIL
STANDARD ID: BNAZ445
SENSITIVITY ID: SENS50
LABORATORY ID: 28893F8
DATE EXTRACTED: 03/10/84
DATE ANALYZED: 03/27/84
UNITS: UG/KG

PP #	CAS #		CONC
21A	88-06-2	2,4,6-TRICHLOROPHENOL	250000. U
22A	59-50-7	4-CHLORO-3-METHYLPHENOL	250000. U
24A	95-57-8	2-CHLOROPHENOL	250000. U
31A	120-33-2	2,4-DICHLOROPHENOL	250000. U
34A	105-67-9	2,4-DIMETHYLPHENOL	250000. U
57A	88-75-5	2-NITROPHENOL	250000. U
58A	100-02-7	4-NITROPHENOL	250000. U
59A	51-28-5	2,4-DINITROPHENOL	250000. U
60A	534-52-1	4,6-DINITRO-2-METHYLPHENOL	250000. U
64A	87-86-5	PENTACHLOROPHENOL	250000. U
65A	108-95-2	PHENOL	250000. U
	65-85-0	BENZOIC ACID	250000. U
	95-48-7	2-METHYLPHENOL	250000. U
	108-39-4	4-METHYLPHENOL	250000. U
	95-95-4	2,4,5-TRICHLOROPHENOL	250000. U
1B	83-32-9	ACENAPHTHENE	250000. U
5B	92-87-5	BENZIDINE	250000. U
8B	120-82-1	1,2,4-TRICHLOROBENZENE	250000. U
9B	118-74-1	HEXACHLOROBENZENE	250000. U
12B	67-72-1	HEXACHLOROETHANE	250000. U
18B	111-44-4	BIS(2-CHLOROETHYL)ETHER	250000. U
20B	91-58-7	2-CHLORONAPHTHALENE	250000. U
25B	95-50-1	1,2-DICHLOROBENZENE	250000. U
26B	541-73-1	1,3-DICHLOROBENZENE	250000. U
27B	106-46-7	1,4-DICHLOROBENZENE	250000. U
28B	91-94-1	3,3'-DICHLOROBENZIDINE	250000. U
35B	121-14-2	2,4-DINITROTOLUENE	250000. U
36B	606-20-2	2,6-DINITROTOLUENE	250000. U
37B	122-66-7	1,2-DIPHENYLHYDRAZINE	250000. U
39B	206-44-0	FLUORANTHENE	250000. U
40B	7005-72-3	4-CHLOROPHENYL PHENYL ETHER	250000. U
41B	101-55-3	4-BROMOPHENYL PHENYL ETHER	250000. U
42B	39638-32-9	BIS(2-CHLOROISOPROPYL)ETHER	250000. U
43B	111-91-1	BIS(2-CHLOROETHOXY)METHANE	250000. U
52B	87-68-3	HEXACHLOROBUTADIENE	250000. U
53B	77-47-4	HEXACHLOROCYCLOPENTADIENE	250000. U
54B	78-59-1	ISOPHORONE	250000. U
55B	91-20-3	NAPHTHALENE	250000. U
56B	98-95-3	NITROBENZENE	250000. U
61B	62-75-9	N-NITROSODIMETHYLAMINE	250000. U

000175

AR000175

CASE #/SAS #: -/982C LABORATORY: IT/WCTS SAMPLE #: C4887
DATE REC'D: 03/06/84 CONTRACT #: SAS % MOISTURE: 11.59%
DATA RELEASE AUTHORIZED BY: Thomas A. Edmonds

982C-10

ORGANICS ANALYSIS DATA SHEET
VOLATILE COMPOUNDS

LEVEL: MEDIUM
MATRIX: OIL
QC REPORT #: SAS*982C-1
SPL-->EXTRACT: 1.000G+5ML MEOH---50UL: 5ML H2
STANDARD ID: VOA467
SENSITIVITY ID: BFD379
LABORATORY ID: 28893N6
DATE ANALYZED: 03/08/84
UNITS: UG/KG

PP #	CAS #		CONC
2V	107-02-8	ACROLEIN	5000. U
3V	107-13-1	ACRYLONITRILE	5000. U
4V	71-43-2	BENZENE	3500. A
6V	56-23-5	CARBON TETRACHLORIDE	500. U
7V	108-90-7	CHLOROBENZENE	500. U
10V	107-06-2	1,2-DICHLOROETHANE	500. U
11V	71-55-6	1,1,1-TRICHLOROETHANE	500. U
13V	75-34-3	1,1-DICHLOROETHANE	500. U
14V	79-00-5	1,1,2-TRICHLOROETHANE	500. U
15V	79-34-5	1,1,2,2-TETRACHLOROETHANE	500. U
16V	75-00-3	CHLOROETHANE	500. U
17V	542-88-1	BIS(CHLOROMETHYL)ETHER	500. U
19V	110-75-8	2-CHLOROETHYLVINYL ETHER	5000. U
23V	67-66-3	CHLOROFORM	500. U
29V	75-35-4	1,1-DICHLOROETHENE	500. U
30V	156-60-5	TRANS-1,2-DICHLOROETHENE	500. U
32V	78-87-5	1,2-DICHLOROPROPANE	500. U
33VT	10061-02-6	TRANS-1,3-DICHLOROPROPENE	500. U
33VC	10061-01-5	CIS-1,3-DICHLOROPROPENE	500. U
38V	100-41-4	ETHYLBENZENE	500. U
44V	75-09-2	METHYLENE CHLORIDE	25000.
45V	74-87-3	CHLOROMETHANE	500. U
46V	74-83-9	BROMOMETHANE	500. U
47V	75-25-2	BROMOFORM	500. U
48V	75-27-4	BROMODICHLOROMETHANE	500. U
49V	75-69-4	TRICHLOROFLUOROMETHANE	500. U
50V	75-71-8	DICHLORODIFLUOROMETHANE	500. U
51V	124-48-1	CHLORODIBROMOMETHANE	500. U
85V	127-18-4	TETRACHLOROETHENE	42000.
86V	108-88-3	TOLUENE	770. A
87V	79-01-6	TRICHLOROETHENE	500. U
88V	75-01-4	VINYL CHLORIDE	500. U
	67-64-1	ACETONE	5000. U
	78-93-3	2-BUTANONE	15000. A
	75-15-0	CARBON DISULFIDE	500. U
	519-78-6	2-HEXANONE	500. U
	108-10-1	4-METHYL-2-PENTANONE	500. U
	100-42-5	STYRENE	500. U
	108-05-4	VINYL ACETATE	500. U
	95-47-6	TOTAL XYLENES	500. U

000176

U - ANALYZED FOR BUT NOT DETECTED (REPORTED VALUE IS DET
A - DETECTED BELOW QUANTITATION LIMIT (QUANTITATION LIMIT

AR000176

IT CORPORATION

17605 Fabrica Way
Cerritos, California 90701
(213) 921-9831

Mike Nal. get resubmittal of C 4889 & C 4887 in here

CERTIFICATE OF ANALYSIS

TO:	USEPA Region III NUS Corporation 992 Old Eagle School Road Suite 916 Wayne, PA 19087 Attn: Russell Sloboda	DATE REPORTED: PROJECT CODE: ORDER NUMBER: Rec'd:	September 12, 1984 SAS # 982C 28893A Page 1 of 2 March 6, 1984

Results of Re-analysis of Pesticide Fractions
Of Samples C4887 and C4889 for PCB's
Original Data Submitted April 3, 1984

Enclosures

Enclosed are results for samples in SAS # 982C. Samples analyzed under this SAS are associated with samples in Case # 2420.

The results enclosed are for the re-analyzed Pesticide fractions of samples numbered C4887 and C4889. Results of the re-analysis of sample C4888S will be sent as soon as they are completed.

The copy of this data sent to SMO includes an extra set of the Case Summary and Data Summary sections of this Case Data Package.

Approved by: _____
Linda R. Krokenberger
Assistant Lab Manager

Domino Sal
8311-12

Data Receipt Acknowledgement - Please Sign, Date and Return in envelope provided.

Signature _____

Date _____

000177
AR000177

CHEMTECH
CONSULTING GROUP LTD. 360 West 11th Street / New York, New York 10014 (212)255-2100

Note to SAS 982C

Samples were oxidized using Schoniger combustion into a nitric acid matrix. Dilution factor was 1: 200.

The preparation blank contained some metals above detection levels and lead, well above. This may be due to contamination and the lead results are not reported, although they do appear on the raw data.

The sample chosen to perform a duplicate analysis (MC 3751) resulted in widely varying results for some of the metals. We feel, therefore, that there was incomplete combustion in one and are reporting the results for the higher one. The "duplicate" was the sample spiked.

D. Hessemer
8/14/84

Domino Sale
8311-12

000178

AR000178

APPENDIX E

Detection Limits Results

Detection limits were reported for all samples analyzed: Yes ✓ No ___

Exceptions: _____

Detection limits were less than or equal to the required detection limits specified in WA83-A196. Yes ✓ No ___

Exceptions: _____

Instrument Sensitivity Reports

Instrument sensitivity reports were documented for all parameters:

Yes ___ No ✓

Comments: Detection Limits were documented in RAW data, instrument sensitivity must have been adequate.

Other Remarks Concerning this Case:

Although Task I metals were reported as <CRDL, the data was not affected since there were no unquestioned results that were within 5X CRDL. All results above 5X CRDL could either be questioned by blanks or not questioned. However all results within 5X CRDL were questioned by blanks above CRDL.

INTERFERENCE STANDARDS (ICP)

CASE NUMBER SAS 982C

	ICSB INITIAL 3/15/84 15:15			ICSB FINAL 3/15 16:10					
	I.D.			ID			ID		
METALS	FOUND	TRUE	%REC	FOUND	TRUE	%REC	FOUND	TRUE	%REC
Aluminum	236			234					
Boron	.478	.500	96	475	.500	95			
Barium	.453	.500	91	.452	.500	90			
Beryllium	.491	.500	98	.490	.500	98			
Calcium	219			216					
Chromium	.451	.500	90	.448	.500	90			
Cobalt	.411	.500	82	.406*	.500	81*			
Copper	.574	.500	115	.580	.500	116*			
Iron	212			210					
Magnesium	228			226					
Manganese	.429	.500	86	.419	.500	84			
Nickel	.435	.500	87	.431	.500	86			
Silver	.459	.500	92	.458	.500	92			
Sodium	205			203					
Vanadium	.450	.500	90	.447	.500	89			
Zinc	.506	.500	101	.504	.500	101			

*Asterisked values outside control range.

COMMENTS: Control range adopted for review purposes 85-115%. Asterisked values not commented upon are not sufficiently out of range to question sample results.

Initial Calibration Verification and Continuing Calibration Verification

Documentation indicates calibrations were performed and checked every ten samples: Yes ✓

Exceptions: _____

Calibrations and verifications were all within the control limits specified in WA83-A196 : Yes ✓ N

Outliers are listed below:

Parameter	Acceptable Range (%)	Calibration Identifier	% of True Value	Comments

Interference QC Results

Documentation indicates interference QC samples were run before and after every ten samples: NA

Exceptions: Interference samples run at beginning & end of sample run as per IF

Interference QC results were all within the control limits specified in those adopted for review purposes of 85-115%. See next page for results. Yes ___ No

Exceptions:

Parameter	Acceptable Range (%)	Calibration Identifier	% of True Value	Comments

Duplicate Analysis Results

The applicable duplicate pairs are:

sample no.	MC-3751	Synthetic ✓Std.				
Field duplicate						
Lab duplicate						
sample level						
sample matrix						
Fraction	ALL Except TI, Sn	TI, Sn				

The relative percent difference (RPD) for each parameter group was evaluated. The duplicate analysis RPD acceptance criteria should be:

Fraction	maximum acceptable Percent Difference	
Oils	40%	ADOPTED for review purposes.

The RPD's exceeding the maximum acceptable percent difference were:

Fraction	Compound	Actual RPD	Comparison Sample	conc.	conc.
II	Ag (results BDL)	121.6%	MC-3751	10	41 mg/
II	Sn (1)	41.2%	"	27	41
I	Ni	176.7%	"	2710	167
I	Mn (1)	200%	"	19	<10
I	Zn	161.3%	"	2100	225
I	Al	111.9%	"	492	139
I	Cu	176.4%	"	2660	167
I	Fe	153%	"	1510	201

Comments: (1) Not sufficiently out of range to question sample results (for Mn because of low level conc.
(2) Lab narrative stated "The sample chosen to perform a duplicate analysis (MC-3751) resulted in widely varying results for some of the metals. We feel, therefore, that there was incomplete combustion in one and are reporting results for the higher one." As a result the reported results for these constituents in sample MC-3751 may not reflect the average conc. actually present.

MATRIX SPIKE RECOVERIES

Sample No.	MC-3751	MC-3750				
Field Spike						
Lab Spike	✓	✓				
Matrix	OIL	OIL				
Conc. Level	MED	MED				
Method Std.						
Fraction	ALL except Sn, Cd	Sn, Cd				

All matrix spike recoveries were within the established control ranges specified in; IFB WA83-A196, Exhibit E, Table 2. ✓ Yes ___ No

Exception(s):

Parameter	Accepted Range (%)	Actual % Rec.	Sample Number	Org. Result	Spike Added	Spike Result	Units

Comments: _____

BLANK ANALYSIS RESULTS

TASK	TYPE	CONC	MATRIX	SAMPLE #	SOURCE OF H_2O	CONTAMINANTS (CONCENTRATION / DETECTION LIM
ALL	Lab Prep.	Lo	AQ	D-BLK 1	Chemtech	Tl (2 ug/L / 10) 2 Cu (124 ug/L / 50) 1 Cd (.1 ug/L / 10) 2 Fe (416 ug/L / 50) 1 Ag (27 ug/L / 10) 1 Pb ("Hi" / 5) 4 Ni (52 ug/L / 40) 1 Pb (6,859 ug/L / 5) 4
						Zn (133 ug/L / 10) 1 Mn (4.6 ug/L / 5) 2 B (279 ug/L / 100) 1 Cr (45 ug/L / 10) 1 Al (91 ug/L / 200) 2
ALL	LAB Prep.	Lo	AQ	D-BLK II	Chemtech	Sb (8 ug/L / 20) 2 Sn (46 ug/L / 20) 1 Cd (10.6 ug/L / 1) 1 Pb (Lab reported "hi" / 5) 4
ALL	Lab	Lo	AQ	R-BLK (3)	Chemtech	

LABORATORY REPORTED FIELD BLANK DATA IS COMPARED WITH THE SAMPLE DATA IN A TABULATION FORM WITH SAMPLE ANALYTICAL DATA SUMMARY.

COMMENTS: MULTIPLY Aqueous results by 250 to get solid units X5 for questioning

(1) RESULT REPORTED BY LABORATORY AND CONFIRMED BY REVIEWER.

(2) RESULT INFERRED FROM RAW DATA

(3) Several reagent blanks listed, highest R.BLK result tabulated

(4) Lab NARRATIVE stated "The PREPARATION BLANK CONTAINED some metals above detection levels and lead, well above. This may be due to CONTAMINATION and the lead results are NOT reported, although they do appear ON the raw data." Since this sample contained a high, albeit unknown to reviewer, INFERRED RESULTS amount of lead the the lab did NOT feel confident to report lead results it was probably high enough for this review to question all lead results also. Raw data indicates a level of 6,859 ug/L reported in this blank by ICP.

000185

AR000185

DATA COMPLETENESS	CONC./ MATRIX	M/OIL	M/OIL	M/OIL
	TRAFFIC REPORT # MC	3749	3750	3751
	LAB I.D. #GZ-182A	01	02	03
FIELD QC	BLANK			
	DUPLICATE		✓SN TR	✓
	SPIKE		✓ CA SN	✓
TASK I: ICAP OR AA: METALS	RAW DATA	✓		
	TAB. RESULTS	✓		
	TAB. D.L.'s	✓		
	QA FORM	✓		
	ICAP INTER. QC	✓		
	INSTR. SENS.	MS		
TASK II: FURNACE AA: METALS	RAW DATA	✓		
	TAB. RESULTS	✓		
	TAB. D.L.'s	✓		
	QA FORM	✓		
	INSTR. SENS.	MS		
TASK II: COLD VAPOR AA: MERCURY	RAW DATA	✓		
	TAB. RESULTS	✓		
	TAB. D.L.'s	✓		
	QA FORM	✓		
	INSTR. SENS.	MS		
TASK III: CYANIDE	RAW DATA	NA		
	TAB. RESULTS	NA		
	TAB. D.L.'s	NA		
	QA FORM.	NA		
	INSTR. SENS.	NA		
OTHER (SPECIFY):	RAW DATA			
	TAB. RESULTS			
	TAB. D.L.'s			
	QA FORM			
	INSTR. SENS.			
OTHER (SPECIFY):	RAW DATA			
	TAB. RUSULTS			
	TAB. D.L.'s			
	QA FORM			
	INSTR. SENS.			

COMMENTS:

000186

AR000186

DATA EVALUATION SCORE CATEGORIES

ACCEPTABLE: Data is within established control limits, or the data which is outside established control limits does not affect the validity of the analytical results.

ACCEPTABLE WITH EXCEPTION(S): Data is not completely within established control limits. The deficiences are identified and specific data is still valid, given certain qualifications which are listed below.

QUESTIONABLE: Data is not within established control limits. The deficiences bring the validity of the entire data set into question. However, the data validity is neither proved nor disproved by the available information.

UNACCEPTABLE: Data is not within established control limits. The deficiences imply the results are not meaningful.

ROJECT NAME: Domino Salvage
DD NO: F3-8311-12

EPA SITE NO.:
REGION: III

QUALITY ASSURANCE REVIEW OF INORGANIC ANALYTICAL DATA PACKAGE

ase No.: SAS 982C / 2420
Contract No.: 68-01-6829 for RAS
ontract Laboratory: Chemtech
.pplicable IFB No.: WA83-A196 *
Reviewer: Atwood F. Davis
eview Date: 12/7/84

Applicable Sample No's.:
MC-3749, MC-3750, and MC-3751

he inorganic analytical data for this case has been reviewed. The quality assurance evaluation is summarized in the following table:

eviewer's Evaluation*	Fraction			
	TASK I ICP or AA METALS	TASK II FURNACE AA METALS	TASK II COLD VAPOR AA MERCURY	TASK III CYANIDE [1]
Acceptable			✓	N/A
cceptable with exception(s)	✓(3,4)	✓(3,4)		
Questionable				
nacceptable				

* Definitions of the evaluation score categories are listed on next page.

is evaluation was based upon an analysis of the review items indicated below:

- ● DATA COMPLETENESS
- ● BLANK ANALYSIS RESULTS
- ● MATRIX SPIKE RESULTS
- ● DUPLICATE ANALYSIS RESULTS
- (2) ○ STANDARD ADDITIONS RESULTS
- ± ● QUANTITATIVE CALCULATIONS
- ● INITIAL CALIBRATION VERIFICATION
- ● CONTINUING CALIBRATION VERIFICATION
- ● INTERFERENCE QC RESULTS
- ● DETECTION LIMITS RESULTS
- ● INSTRUMENT SENSITIVITY REPORTS

Data review forms are attached for each of the review items indicated above.

ǂ No errors noted, no form attached.

◒ Spot Check performed.

mments: * IFB Adapted for Review purposes for Recoveries, RPD, & Other QA RANGES.
[1] Not ANALYZED in Oil Samples.
[2] Not APPLICABLE all results within CONTROL RANGES for matrix spikes.
[3] See BLANK ANALYSIS results.
[4] See duplicate ANALYSIS results.

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Detection Limits Results

Detection limits were reported for all samples analyzed: Yes ✓ No ___

Exceptions: _____

Detection limits were less than or equal to the required detection limits specified in WA 83 - A196. Yes ✓ No ___

Exceptions: _____

Instrument Sensitivity Reports

Instrument sensitivity reports were documented for all parameters:

Yes ___ No ✓

Comments: Since CRDL (contract required Det. limits) were met & documented in all analyses, sensitivity is assumed to have been adequate and as a result the data should not be affected.

Other Remarks Concerning this Case:

INTERFERENCE STANDARDS (ICP)

CASE NUMBER =CASE

	I.D. 2-25-84 INITIAL 11:54 (1)			ICSB INITIAL ID 2-25-84 16:18			ICSB FINAL ID 2-26-84 4:00			
METALS	FOUND	TRUE	%REC	FOUND	TRUE	%REC	FOUND	TRUE	%REC	
Aluminium	40			421			413			
Boron	.479	.500	89	.475	.500	95	.475	.500	95	
Barium	.467	.500	92	.437	.500	87	.431	.500	86	
Beryllium	.490	.500	92	.490	.500	98	.509	.500	102	
Calcium	426			407			412			
Chromium	.456	.500	91	.4101	.500	92	.458	.500	92	
Cobalt	.0131	.500	19*	.382	.500	76*	.382	.500	76*	
Copper	.557	.500	111	.605	.500	121*	.609	.500	122	
Iron	410			388			377			
Magnesium	447			476			429			
Manganese	.420	.500	84	.433	.500	87	.413	.500	83	
Nickel	.307	.500	61*	.438	.500	88	.444	.500	89	
Silver	.429	.500	86	.428	.500	84*	.41	.500	82*	
Sodium	297			312			338			
Vanadium	.435	.500	87	.459	.500	92	.45	.500	90	
Zinc	.428	.500	88	.4[illegible]	.500	89	.471	.500	94	

* Asterisk values out of RANGE adopted for review 85-115%

Comments: (1) ICSB NOT USED - SAMPLES CORRESPONDING TO 9AM RUN - RE-RUN ON 3/2/84 - ONLY 2 SAMPLES IMC-2966 & IMC-2967.
ICSB 16:18 RUN 3½ HRS AFTER NEW CALIBRATION

ASTERISKED VALUES DO NOT COMMENTED UPON - NOT SIGNIFICANTLY OUT OF RANGE TO QUESTION SAMPLE RESULTS

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INTERFERENCE STANDARDS (ICP)

CASE NUMBER

	ICSB INITIAL I.D. 3-2-84 9:49			ICSB INITIAL ID 3-2-84 9:58			ICSB FINAL ID 3-2-84 21:12		
METALS	FOUND	TRUE	%REC	FOUND	TRUE	%REC	FOUND	TRUE	%REC
Aluminum	424			419			437		
Boron	.447	.500	89	.445	.500	89	.486	.500	97
Barium	.436	.500	87	.432	.500	86	.456	.500	91
Beryllium	.456	.500	91	.466	.500	93	.511	.500	102
Calcium	379			381			422		
Chromium	.427	.500	84*	.427	.500	85	.465	.500	93
Cobalt	.352	.500	70*	.358	.500	72*	.400	.500	80*
Copper	.617	.500	123*	591	.500	118*	.600	.500	120*
Iron	357			358			400		
Magnesium	405			406			439		
Manganese	.386	.500	77*	.389	.500	78*	.428	.500	86
Nickel	.393	.500	79*	.401	.500	80*	.454	.500	91
Silver	.396	.500	79*	.396	.500	79*	.418	.500	84*
Sodium	371			361			360		
Vanadium	.405	.500	81*	.417	.500	82*	.447	.500	89
Zinc	.424	.500	85	.422	.500	84*	.461	.500	92

*Analytes within 20% of RANGE adopted for Review 25-150%

COMMENTS: Underlined value not considered upon - not significant out of RANGE to question sample results.

Initial Calibration Verification and Continuing Calibration Verification

Documentation indicates calibrations were performed and checked every ten samples: Yes ✓ No

Exceptions: _____

Calibrations and verifications were all within the control limits specified in WA83-A196: Yes ✓ N

Outliers are listed below:

Parameter	Acceptable Range (%)	Calibration Identifier	% of True Value	Comments

Interference QC Results

Documentation indicates interference QC samples were run before and after every ten samples: NA

Exceptions: Per IFB run @ beginning & end of run minimum twice per shift. Houmere 2-25-85 Final run 8 hrs. IAK @ 2-26 4:00

Interference QC results were all within the control limits specified in adopting for review purposes 85-115%: Yes ___ No

Exceptions:

Parameter	Acceptable Range (%)	Calibration Identifier	% of True Value	Comments

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Duplicate Analysis Results

The applicable duplicate pairs are:

sample no.	MC-2969	MC-3732	MC-3747			
Field duplicate						
Lab duplicate	✓	✓	✓			
sample level	Lo	Lo	Lo			
sample matrix	AQ	AQ	AQ			
Fraction	CN^-	ALL	I, II			

The relative percent difference (RPD) for each parameter group was evaluated. The duplicate analysis RPD acceptance criteria should be:

Fraction	maximum acceptable Percent Difference	
ALL AQUEOUS	20%	ADOPTED FOR
ALL SOLID	40%	REVIEW PURPOSES

The RPD's exceeding the maximum acceptable percent difference were:

Fraction	Compound	Actual RPD	Sample	Comparison conc.	conc.
II	CADMIUM	42.7 (1)	MC-3732	3.5	5.8 ug/l
I	LEAD	21.2	MC-3732	40.7	377 ug/l
II	TIN	35.3	MC-3732	21	30 ug/l
I	ZINC	35.1	MC-3747	60.6	475 ug/l
II	TIN	25.2	MC-3747	45	58 ug/l

Comments:

(1) Low sample conc. level - Higher RPD NOT significant to qualify sample results.
VALUES (120 ug/l) COMMENSURATE WITH MDL'S - NOT significantly out of range to question result.

MATRIX SPIKE RECOVERIES

Sample No.	MC-2969	MC-3737	MC-3747			
Field Spike						
Lab Spike	✓	✓	✓			
Matrix	AQ		AQ			
Conc. Level	LO	LO	LO			
Method Std.						
Fraction	CN-	ALL	I, II			

All matrix spike recoveries were within the established control ranges specified in; IFB WA83-A196, Exhibit E, Table 2. ✓ Yes ___ No

Exception(s):

Parameter	Accepted Range (%)	Actual % Rec.	Sample Number	Org. Result	Spike Added	Spike Result	Units

Comments: _____

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BLANK ANALYSIS RESULTS

TASK	TYPE	CONC	MATRIX	SAMPLE #	SOURCE OF H_2O	CONTAMINANTS (CONCENTRATION / DETECTION LI
I	R.BLK. LAB	LO	AQ	R BLK 3-02-84	CHEMTECH	Be (.002 mg/L .005) 2
I	LAB 3-02-84	LO	AQ	D-BLK	CHEMTECH	NONE FOUND
				D-BLK-2	CHEMTECH	NONE FOUND
I	LAB 2-15-84	LO	AQ	R BLK	CHEMTECH	NONE FOUND
I	LAB 2-15-84	LO	AQ	D-BLK I	CHEMTECH	NONE FOUND (T2 REPORTED A TIME EFF.
				D-BLK II	CHEMTECH	NONE FOUND (
I	R LAB 2-15-84 (16:40)	LO	AQ	R-BLK	CHEMTECH	Al (.32 mg/L .05) 2 Cr (.025 mg/L .01) 2
						Fe (.002 mg/L .005) 2 Fe (.03 mg/L .02) 2
I	FIELD	LO	AQ	MC-3754	NUS	Cu (.05 mg/L .02) 1
						Fe (.11 mg/L .02) 1
						Zn (.020 mg/L .01) 1
						Pb (.01 mg/L .005) 1
I	FIELD	LO	SOL	MC-3755	NUS	Cr (.3 mg/kg .5) 2 Pb (.55 mg/kg .2)
						Cu (1.3 mg/kg 1.0) 1
						Fe (5.2 mg/kg 1.0) 1
						Zn (1.1 mg/kg .5) 1
II	LAB	LO	AQ	R.BLK	CHEMTECH	Sn (.010 mg/L .02) 2
						Sb (.004 mg/L .01) 2
II	LAB	LO	AQ	I. BLK.	CHEMTECH	Sb (.09 mg/L .02) 2
						Cd (.0013 mg/L .005) 2
II	LAB	LO	AQ	D BLK II	CHEMTECH	Sn (.01 mg/L .02) 2
						Cd (.0016 mg/L .005) 2

LABORATORY REPORTED FIELD BLANK DATA IS COMPARED WITH THE SAMPLE DATA IN A TABULATION FORM WITH SAMPLE ANALYTICAL DATA SUMMARY.

COMMENTS:

(1) RESULT REPORTED BY LABORATORY AND CONFIRMED BY REVIEWER.

(2) RESULT INFERRED FROM RAW DATA

DATA COMPLETENESS	CONC./ MATRIX	L/A	L/A	L/A	L/A	L/A	L/S	L/A	L/A	L/E	L/S	L/A	L/A	L/S	L/A
	TRAFFIC REPORT # MC	3751	3752	3753	3754	3755	3756	3757	3758	3759	3760	3300	3301	3302	3303
	LAB I.D. # G2-1827	20	21	22	23	24	25	26	27	28	29	30	07	08	09
FIELD QC	BLANK	√ I, II				✓	✓								
	DUPLICATE	√ I, II													
	SPIKE														
TASK I: ICAP OR AA: METALS	RAW DATA	√													
	TAB. RESULTS	√													
	TAB. D.L.'s	√													
	QA FORM	√													
	ICAP INTER. QC	√													
	INSTR. SENS.	MS													
TASK II: FURNACE AA: METALS	RAW DATA	√													
	TAB. RESULTS	√													
	TAB. D.L.'s	√													
	QA FORM	√													
	INSTR. SENS.	MS													
TASK II: COLD VAPOR AA: MERCURY	RAW DATA	√													
	TAB. RESULTS	√													
	TAB. D.L.'s	√													
	QA FORM	√													
	INSTR. SENS.	MS													
TASK III: CYANIDE	RAW DATA	√													
	TAB. RESULTS	√													
	TAB. D.L.'s	√													
	QA FORM.	√													
	INSTR. SENS.	MS													
OTHER (SPECIFY):	RAW DATA														
	TAB. RESULTS														
	TAB. D.L.'s														
	QA FORM														
	INSTR. SENS.														
OTHER (SPECIFY):	RAW DATA														
	TAB. RUSULTS														
	TAB. D.L.'s														
	QA FORM														
	INSTR. SENS.														

COMMENTS:

DATA COMPLETENESS	CONC./ MATRIX	L/S	L/S	L/A	L/A	L/S	L/A	L/A	L/S	L/S	L/S	L/A	L/A	L/A	L/S
	TRAFFIC REPORT # MC	3736	3737	3738	3739	3740	3733	3733	3737	3740	3741	3742	3743	3744	3745
	LAB I.D. #G2-182	01	02	03	04	05	06	11	12	13	14	15	16	17	18
FIELD QC	BLANK											-			
	DUPLICATE				√CN	√									
	SPIKE				√CN	√						—			
TASK I: ICAP OR AA: METALS	RAW DATA	√													
	TAB. RESULTS	√													
	TAB. D.L.'s	√													
	QA FORM	√													
	ICAP INTER. QC	√													
	INSTR. SENS.	MLS													
TASK II: FURNACE AA: METALS	RAW DATA	√													
	TAB. RESULTS	√													
	TAB. D.L.'s	√													
	QA FORM	√													
	INSTR. SENS.	MLS													
TASK II: COLD VAPOR AA: MERCURY	RAW DATA	√													
	TAB. RESULTS	√													
	TAB. D.L.'s	√													
	QA FORM	√													
	INSTR. SENS.	MLS													
TASK III: CYANIDE	RAW DATA	√													
	TAB. RESULTS	√													
	TAB. D.L.'s	√													
	QA FORM.	√													
	INSTR. SENS.	MLS													
OTHER (SPECIFY):	RAW DATA														
	TAB. RESULTS														
	TAB. D.L.'s														
	QA FORM														
	INSTR. SENS.														
OTHER (SPECIFY):	RAW DATA														
	TAB. RUSULTS														
	TAB. D.L.'s														
	QA FORM														
	INSTR. SENS.														

COMMENTS:

DATA EVALUATION SCORE CATEGORIES

ACCEPTABLE: Data is within established control limits, or the data which is outside established control limits does not affect the validity of the analytical results.

ACCEPTABLE WITH EXCEPTION(S): Data is not completely within established control limits. The deficiences are identified and specific data is still valid, given certain qualifications which are listed below.

QUESTIONABLE: Data is not within established control limits. The deficiences bring the validity of the entire data set into question. However, the data validity is neither proved nor disproved by the available information.

UNACCEPTABLE: Data is not within established control limits. The deficiences imply the results are not meaningful.