

ENGINEERING INVESTIGATIONS AT INACTIVE HAZARDOUS WASTE SITES IN THE STATE OF NEW YORK

PRELIMINARY SITE ASSESSMENT VOLUME 2: APPENDICES

**Walmore Road - Johnson Property
Site Number 932101
Town of Wheatfield, Niagara County**

October 1994



Prepared for:

New York State Department of Environmental Conservation

50 Wolf Road, Albany, New York 12233
Langdon Marsh, Commissioner

Division of Hazardous Waste Remediation

Michael J. O'Toole, Jr., P.E., Director

Prepared by:

Ecology and Environment Engineering, P.C.

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ecology and environment
engineering, p.c.

BUFFALO CORPORATE CENTER
368 PLEASANTVIEW DRIVE, LANCASTER, NEW YORK 14086, TEL. 716/684-8060

APPENDIX A

EPA 2070-13 SITE INSPECTION FORM

POTENTIAL HAZARDOUS WASTE SITE SITE INSPECTION REPORT PART 1 - SITE LOCATION AND INSPECTION INFORMATION		I. IDENTIFICATION			
		01 State NY	02 Site Number 932101		
II. SITE NAME AND LOCATION					
01 Site Name (legal, common, or descriptive name of site) Walmore Road - Johnson Property			02 Street, Route No., or specific location identifier 6373 Walmore Road		
03 City Town of Wheatfield	04 State NY	05 Zip Code 14304	06 County Niagara	07 County Code 063	08 Cong. Dist.
09 Coordinates Latitude 43° 06' 58" N		Longitude 78° 55' 25" W		10 Type of Ownership (check one) <input checked="" type="checkbox"/> A. Private <input type="checkbox"/> B. Federal <input type="checkbox"/> C. State <input type="checkbox"/> D. County <input type="checkbox"/> E. Municipal <input type="checkbox"/> F. Other <input type="checkbox"/> G. Unknown	
III. INSPECTION INFORMATION					
01 Date of Inspection 6 / 23 / 93 Month Day Year		02 Site Status <input type="checkbox"/> Active <input checked="" type="checkbox"/> Inactive		03 Years of Operation _____ _____ Beginning Year Ending Year <input checked="" type="checkbox"/> Unknown (prior to 1980)	
04 Agency Performing Inspection (check all that apply) <input type="checkbox"/> A. EPA <input type="checkbox"/> B. EPA Contractor _____ (name of firm) <input type="checkbox"/> C. Municipal <input type="checkbox"/> D. Municipal Contractor _____ (name of firm) <input type="checkbox"/> E. State <input checked="" type="checkbox"/> F. State Contractor <u>Ecology and Environment Engineering, P.C.</u> (name of firm) <input type="checkbox"/> G. Other _____ (specify)					
05 Chief Inspector Chad Eich	06 Title Biologist	07 Organization E & E		08 Telephone No. (716) 684-8060	
09 Other Inspectors Michelle Christman	10 Title Environmental Scientist	11 Organization E & E		12 Telephone No. (716) 684-6060	
Abul Barkat	Engineer	NYSDEC		()	
				()	
13 Site Representatives Interviewed	14 Title	15 Address		16 Telephone No. ()	
				()	
				()	
				()	
17 Access Gained by (check one) <input checked="" type="checkbox"/> Permission <input type="checkbox"/> Warrant		18 Time of Inspection 10:00 a.m.		19 Weather Conditions Sunny, 80°F	
IV. INFORMATION AVAILABLE FROM					
01 Contact Abul Barkat		02 Of (Agency/Organization) NYSDEC		03 Telephone No. (716) 847-4585	
04 Person Responsible for Site Inspection Form Richard Watt		05 Agency	06 Organization E & E	07 Telephone No. (716) 684-8060	08 Date 1 / 13 / 94 Month Day Year

**POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT**

PART 2 - WASTE INFORMATION

I. IDENTIFICATION

01 State

NY

02 Site Number

932101

II. WASTE STATES, QUANTITIES, AND CHARACTERISTICS

01 Physical States (check all that apply)

- A. Solid
- B. Powder, Fines
- C. Sludge
- D. Other _____
- E. Slurry
- F. Liquid
- G. Gas

02 Waste Quantity at Site (measure of waste quantities must be independent)

Tons _____
Cubic Yards approx. 7,500
No. of Drums _____

03 Waste Characteristics (check all that apply)

- A. Toxic
- B. Corrosive
- C. Radioactive
- D. Persistent
- E. Soluble
- F. Infectious
- G. Flammable
- H. Ignitable
- I. Highly volatile
- J. Explosive
- K. Reactive
- L. Incompatible
- M. Not applicable

III. WASTE TYPE

Category	Substance Name	01 Gross Amount	02 Unit of Measure	03 Comments
SLU	Sludge			This property reportedly has been backfilled with graphite,
OLW	Oily waste			plastic battery cases, hardened resins, heat-treating salts,
SOL	Solvents			flyash, plastic tank sludge, and scrap wood to a depth of 5
PSD	Pesticides			feet. Fill actually encountered includes soil, graphite and
OOO	Other organic chemicals			flyash to maximum depth of 8 feet.
IOC	Inorganic chemicals			
ACD	Acids			
BAS	Bases			
MES	Heavy metals			

IV. HAZARDOUS SUBSTANCES (see Appendix for most frequently cited CAS Numbers)

01 Category	02 Substance Name	03 CAS Number	04 Storage/Disposal Method	05 Concentration	06 Measure of Concentration
OOO	PAHs			Various (max. 190)	ppm in samples
PSD	Numerous			Various (max. 1,200)	ppb in samples
MES	Numerous			Various	ppm in samples

V. FEEDSTOCKS (see Appendix for CAS Numbers)

Category	01 Feedstock Name	02 CAS Number	Category	01 Feedstock Name	02 CAS Number
FDS			FDS		
FDS			FDS		
FDS			FDS		
FDS			FDS		

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

Niagara County Department of Health files, Niagara Falls, New York; NYSDEC, Division of Solid and Hazardous Wastes, Inactive Hazardous Waste Disposal Report.

POTENTIAL HAZARDOUS WASTE SITE SITE INSPECTION REPORT		I. IDENTIFICATION	
PART 3 - DESCRIPTION OF HAZARDOUS CONDITIONS AND INCIDENTS		01 State NY	02 Site Number 932101
II. HAZARDOUS CONDITIONS AND INCIDENTS			
01 <input checked="" type="checkbox"/> A. Groundwater Contamination	02 <input type="checkbox"/> Observed (date _____)	[X] Potential	[] Alleged
03 Population Potentially Affected <u>Unknown</u>	04 Narrative Description:		
Potential exists because contaminants were detected in fill and leachate may enter groundwater system. However, well on site was sampled in 1985 by NCDOH and no contaminants were detected, therefore potential only. Groundwater is used for drinking water within 3 miles of the site.			
01 <input type="checkbox"/> B. Surface Water Contamination	02 <input type="checkbox"/> Observed (date _____)	[] Potential	[] Alleged
03 Population Potentially Affected _____	04 Narrative Description:		
No site-related contaminants detected at elevated levels downstream.			
01 <input type="checkbox"/> C. Contamination of Air	02 <input type="checkbox"/> Observed (date _____)	[] Potential	[] Alleged
03 Population Potentially Affected <u>Unknown</u>	04 Narrative Description:		
No organic vapors detected at surface; very low VOC concentrations in fill; soil/sod cover appears adequate to eliminate dust.			
01 <input type="checkbox"/> D. Fire/Explosive Conditions	02 <input type="checkbox"/> Observed (date _____)	[] Potential	[] Alleged
03 Population Potentially Affected <u>Unknown</u>	04 Narrative Description:		
Fill samples not ignitable (no flash at 140°F).			
01 <input type="checkbox"/> E. Direct Contact	02 <input type="checkbox"/> Observed (date _____)	[X] Potential	[] Alleged
03 Population Potentially Affected <u>Unknown</u>	04 Narrative Description:		
Potential indirect contact if excavation (for plumbing, plantings, etc.)			
01 <input checked="" type="checkbox"/> F. Contamination of Soil	02 <input type="checkbox"/> Observed (date _____)	[X] Potential	[] Alleged
03 Area Potentially Affected <u>-1 acres</u>	04 Narrative Description:		
Potential exists; fill material is in direct contact with soil. However, off-fill surface soil contains similar compounds as fill which are likely the result of background contamination.			
01 <input checked="" type="checkbox"/> G. Drinking Water Contamination	02 <input type="checkbox"/> Observed (date _____)	[X] Potential	[] Alleged
03 Population Potentially Affected <u>Unknown</u>	04 Narrative Description:		
No groundwater samples were collected; however, groundwater is used for drinking water within 3 miles of the site. Potential exists as groundwater is used as a source of drinking water on the Tuscarora Indian Reservation. However, groundwater flow in this area is generally south-southwest towards the PASNY conduits and away from the Tuscarora Reservation.			
01 <input type="checkbox"/> H. Worker Exposure/Injury	02 <input type="checkbox"/> Observed (date _____)	[] Potential	[] Alleged
03 Workers Potentially Affected _____	04 Narrative Description:		
None reported; fill material is covered with soil and vegetation.			
01 <input type="checkbox"/> I. Population Exposure/Injury	02 <input type="checkbox"/> Observed (date _____)	[] Potential	[] Alleged
03 Population Potentially Affected _____	04 Narrative Description:		
None reported; fill material is covered with soil and vegetation.			

POTENTIAL HAZARDOUS WASTE SITE SITE INSPECTION REPORT		I. IDENTIFICATION	
		01 State	02 Site Number
PART 3 - DESCRIPTION OF HAZARDOUS CONDITIONS AND INCIDENTS		NY	932101
II. HAZARDOUS CONDITIONS AND INCIDENTS (Cont.)			
01 <input type="checkbox"/> J. Damage to Flora	02 <input type="checkbox"/> Observed (date _____)	<input type="checkbox"/> Potential	<input type="checkbox"/> Alleged
04 Narrative Description: None reported or observed; waste is covered with soil and vegetation.			
01 <input type="checkbox"/> K. Damage to Fauna	02 <input type="checkbox"/> Observed (date _____)	<input type="checkbox"/> Potential	<input type="checkbox"/> Alleged
04 Narrative Description: None reported; waste is covered with soil and vegetation.			
01 <input checked="" type="checkbox"/> L. Contamination of Food Chain	02 <input type="checkbox"/> Observed (date _____)	<input checked="" type="checkbox"/> Potential	<input type="checkbox"/> Alleged
04 Narrative Description: Potential exists if bank erosion exposes fill to Cayuga Creek. However, currently no site-related surface water or sediment contamination observed.			
01 <input type="checkbox"/> M. Unstable Containment of Wastes (spills/ runoff/standing liquids, leaking drums)	02 <input type="checkbox"/> Observed (date _____)	<input type="checkbox"/> Potential	<input type="checkbox"/> Alleged
03 Population Potentially Affected: _____ 04 Narrative Description: Waste is covered with approximately 0.5 feet of soil and vegetation, and no leachate observed.			
01 <input type="checkbox"/> N. Damage to Off-site Property	02 <input type="checkbox"/> Observed (date _____)	<input type="checkbox"/> Potential	<input type="checkbox"/> Alleged
04 Narrative Description: None reported.			
01 <input type="checkbox"/> O. Contamination of Sewers, Storm Drains, WWTPs	02 <input type="checkbox"/> Observed (date _____)	<input type="checkbox"/> Potential	<input type="checkbox"/> Alleged
04 Narrative Description: None reported. No storm sewers are located near site.			
01 <input checked="" type="checkbox"/> P. Illegal/Unauthorized Dumping	02 <input type="checkbox"/> Observed (date _____)	<input type="checkbox"/> Potential	<input type="checkbox"/> Alleged
04 Narrative Description: Unable to document source of fill. Site currently inactive.			
05 Description of Any Other Known, Potential, or Alleged Hazards None identified.			
III. TOTAL POPULATION POTENTIALLY AFFECTED <u>413 within 1 mile, total number within 3 miles is unknown.</u>			
IV. COMMENTS			
V. SOURCES OF INFORMATION (cite specific references, e.g., state files, sample analysis, reports)			
NYSDEC Phase I investigation June 1989; Ecology and Environment Engineering, P.C. Site Inspection, May 2, 1991; Niagara County Health Department files, Niagara Falls, New York; Niagara County Department of Planning, Lockport, New York; Town of Wheatfield (NY) Water Division			

POTENTIAL HAZARDOUS WASTE SITE SITE INSPECTION REPORT		I. IDENTIFICATION			
PART 4 - PERMIT AND DESCRIPTIVE INFORMATION		01 State NY	02 Site Number 932101		
II. PERMIT INFORMATION					
01 Type of Permit Issued (check all that apply)	02 Permit Number	03 Date Issued	04 Expiration Date	05 Comments	
<input type="checkbox"/> A. NPDES					
<input type="checkbox"/> B. UIC					
<input type="checkbox"/> C. AIR					
<input type="checkbox"/> D. RCRA					
<input type="checkbox"/> E. RCRA Interim Status					
<input type="checkbox"/> F. SPCC Plan					
<input type="checkbox"/> G. State (specify)					
<input type="checkbox"/> H. Local (specify)					
<input type="checkbox"/> I. Other (specify)					
<input type="checkbox"/> J. None					
III. SITE DESCRIPTION					
01 Storage Disposal (check all that apply)	02 Amount	03 Unit of Measure	04 Treatment (check all that apply)	05 Other	
<input type="checkbox"/> A. Surface Impoundment	_____	_____	<input type="checkbox"/> A. Incineration	<input checked="" type="checkbox"/> Buildings On Site	
<input type="checkbox"/> B. Piles	_____	_____	<input type="checkbox"/> B. Underground Injection		
<input type="checkbox"/> C. Drum, Aboveground	_____	_____	<input type="checkbox"/> C. Chemical/Physical		
<input type="checkbox"/> D. Tank, Aboveground	_____	_____	<input type="checkbox"/> D. Biological		
<input type="checkbox"/> E. Tank, Belowground	_____	_____	<input type="checkbox"/> E. Waste Oil Processing		
<input checked="" type="checkbox"/> F. Landfill	7500	yd ³	<input type="checkbox"/> F. Solvent Recovery	06 Area of Site _____ 0.8 _____ Acres of fill on 2 acre parcel of land.	
<input type="checkbox"/> G. Landfarm	_____	_____	<input type="checkbox"/> G. Other Recycling Recovery		
<input type="checkbox"/> H. Open Dump	_____	_____	<input type="checkbox"/> H. Other _____ (specify)		
<input type="checkbox"/> I. Other _____ (specify)					
07 Comments Contaminants detected in fill samples, but did not meet the definition of a hazardous waste.					
IV. CONTAINMENT					
01 Containment of Wastes (check one)					
<input type="checkbox"/> A. Adequate, Secure <input checked="" type="checkbox"/> B. Moderate <input type="checkbox"/> C. Inadequate, Poor <input type="checkbox"/> D. Insecure, Unsound, Dangerous					
02 Description of Drums, Diking, Liners, Barriers, etc. Waste was used as fill material, placed on land surface, and covered.					
V. ACCESSIBILITY					
01 Waste Easily Accessible <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No					
02 Comments Waste covered by approximately 0.5 feet of soil and vegetation.					
VI. SOURCES OF INFORMATION (cite specific references, e.g., state files, sample analysis, reports)					
Niagara County Department of Health files, Niagara Falls, New York; Ecology and Environment Engineering, P.C. Site Inspection, May 2, 1991; NYSDEC Engineering Investigation Phase I, June 1989.					

POTENTIAL HAZARDOUS WASTE SITE SITE INSPECTION REPORT				I. IDENTIFICATION	
PART 5 - WATER, DEMOGRAPHIC, AND ENVIRONMENTAL DATA				01 State NY	02 Site Number 932101
II. DRINKING WATER SUPPLY					
01 Type of Drinking Supply (check as applicable)		02 Status		03 Distance to Site	
Community Non-community	Surface A. <input checked="" type="checkbox"/> B. <input type="checkbox"/> C. <input checked="" type="checkbox"/> D. <input checked="" type="checkbox"/>	Well B. <input type="checkbox"/> D. <input checked="" type="checkbox"/>	Endangered A. <input type="checkbox"/> D. <input type="checkbox"/>	Affected B. <input type="checkbox"/> E. <input type="checkbox"/>	Monitored C. <input checked="" type="checkbox"/> F. <input checked="" type="checkbox"/>
A _____ 5.5 _____ (mi)		B _____ 5.5/~3.0 _____ (mi)			
III. GROUNDWATER					
01 Groundwater Use in Vicinity (check one)					
<input type="checkbox"/> A. Only Source for Drinking <input checked="" type="checkbox"/> B. Drinking (other sources available) Commercial, Industrial, Irrigation (no other water sources available) <input type="checkbox"/> C. Commercial, Industrial, Irrigation (limited other sources available) <input type="checkbox"/> D. Not Used, Unusable					
02 Population Served by Groundwater _____ Unknown _____			03 Distance to Nearest Drinking Water Well _____ ~3 _____ (mi)		
04 Depth to Groundwater _____ 5 _____ (ft)	05 Direction of Groundwater Flow _____ Southwest _____	06 Depth to Aquifer of Concern _____ 15 _____ (ft)	07 Potential Yield of Aquifer _____ Unknown _____ (gpd)	08 Sole Source Aquifer <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Unknown	
09 Description of Wells (including usage, depth, and location relative to population and buildings)					
One well reportedly on site but no longer used. Wells within 3 miles of site are used for irrigation purposes only. Approximately 3 miles north of site drinking water wells exist a Tuscarora Reservation.					
10 Recharge Area <input checked="" type="checkbox"/> Yes Comments: Unconsolidated deposits. Aquifer is recharged with precipitation <input type="checkbox"/> No			11 Discharge Area <input checked="" type="checkbox"/> Yes Comments: Discharge likely occurs to Cayuga Creek <input type="checkbox"/> No		
IV. SURFACE WATER					
01 Surface Water (check one)					
<input type="checkbox"/> A. Reservoir, Recreation, Drinking Water Source <input type="checkbox"/> B. Irrigation, Economically Important Resources <input type="checkbox"/> C. Commercial, Industrial <input checked="" type="checkbox"/> D. Not Currently Used					
02 Affected/Potentially Affected Bodies of Water					
Name:				Affected	Distance to Site
Cayuga Creek				<input type="checkbox"/>	0 _____ (mi)
Niagara River				<input type="checkbox"/>	3.5 _____ (mi)
_____				<input type="checkbox"/>	_____ (mi)
V. DEMOGRAPHIC AND PROPERTY INFORMATION					
01 Total Population Within		One (1) Mile of Site A. _____ 413 _____ No. of Persons	Two (2) Miles of Site B. _____ 5,072 _____ No. of Persons	Three (3) Miles of Site C. _____ 21,584 _____ No. of Persons	02 Distance to Nearest Population _____ 0 _____ (mi)
03 Number of Buildings Within Two (2) Miles of Site _____ 1,181 _____				04 Distance to Nearest Off-Site Building _____ < 0.1 _____ (mi)	
05 Population Within Vicinity of Site (provide narrative description of nature of population within vicinity of site, e.g., rural, village, densely populated urban area)					
Site located in semi-rural area. Niagara Falls Air Force Base adjacent to site. City of Niagara Falls approximately 1.5 miles to the southwest of site.					

POTENTIAL HAZARDOUS WASTE SITE SITE INSPECTION REPORT PART 5 - WATER, DEMOGRAPHIC, AND ENVIRONMENTAL DATA		I. IDENTIFICATION	
		01 State NY	02 Site Number 932101
VI. ENVIRONMENTAL INFORMATION			
01 Permeability of Unsaturated Zone (check one)			
<input type="checkbox"/> A. Impermeable (less than 10 ⁻⁶ cm/sec) <input checked="" type="checkbox"/> B. Relatively Impermeable (10 ⁻⁴ - 10 ⁻⁶ cm/sec) <input type="checkbox"/> C. Relatively Permeable (10 ⁻² - 10 ⁻⁴ cm/sec) <input type="checkbox"/> D. Very Permeable (greater than 10 ⁻² cm/sec)			
02 Permeability of Bedrock (check one)			
<input type="checkbox"/> A. Impermeable (less than 10 ⁻⁶ cm/sec) <input type="checkbox"/> B. Relatively Impermeable (10 ⁻⁴ - 10 ⁻⁶ cm/sec) <input checked="" type="checkbox"/> C. Relatively Permeable (10 ⁻² - 10 ⁻⁴ cm/sec) <input type="checkbox"/> D. Very Permeable (greater than 10 ⁻² cm/sec)			
03 Depth to Bedrock _____ 15-20 _____ (ft)	04 Depth of Contaminated Soil Zone _____ 1 _____ (ft)		05 Soil pH _____ 6.9-8.6 _____
06 Net Precipitation _____ 4 _____ (in)	07 One Year 24-Hour Rainfall _____ 2.5 _____ (in)	08 Slope Site Slope _____ 2 _____ % Direction of Site Slope _____ NW _____ Terrain Average Slope _____ 2 _____ %	
09 Flood Potential Site is in _____ 100 _____ Year Floodplain	10 <input type="checkbox"/> Site is on Barrier Island, Coastal High Hazard Area, Riverine Floodway		
11 Distance to Wetlands (5 acre minimum) ESTUARINE OTHER A. _____ NA _____ (mi) B. _____ 2.25 _____ (mi)		12 Distance to Critical Habitat (of endangered species) _____ NA _____ (mi) Endangered Species: _____	
13 Land Use in Vicinity			
Distance to:			
COMMERCIAL/INDUSTRIAL	RESIDENTIAL AREAS, NATIONAL/STATE PARKS, FORESTS, OR WILDLIFE RESERVES	PRIME AG LAND	AGRICULTURAL LANDS AG LAND
A. _____ 0.1 _____ (mi)	B. _____ 0 _____ (mi)	C. _____ 0 _____ (mi)	D. _____ 0 _____ (mi)
14 Description of Site in Relation to Surrounding Topography			
This site is located in a flat area. The property is bounded on the west by Walmore Road, Cayuga Creek to the north and a Conrail railroad track embankment to the northeast and east. Rainwater runoff is expected to enter Cayuga Creek, which flows southwest to Niagara River.			
VII. SOURCES OF INFORMATION (cite specific references, e.g., state files, sample analysis, reports)			
USGS 7.5 Minute Topographic Maps, Ransomville and Tonawanda West Quads FEMA Flood Insurance Maps Soil Survey of Niagara County, New York Niagara County Department of Health, Niagara Falls, New York Town of Wheatfield Water Department, Wheatfield, New York NYSDEC Phase I Investigation, June 1989			

POTENTIAL HAZARDOUS WASTE SITE SITE INSPECTION REPORT PART 6 - SAMPLE AND FIELD INFORMATION		I. IDENTIFICATION	
		01 State NY	02 Site Number 932101
II. SAMPLES TAKEN			
Sample Type	01 Number of Samples Taken	02 Samples Sent To	03 Estimated Date Results Available
Groundwater	NA		
Surface Water	3	E & E Analytical Services Center	2/14/94
Waste	11	E & E Analytical Services Center	2/14/94
Air	NA		
Runoff	NA		
Spill	NA		
Soil	3	E & E Analytical Services Center	2/14/94
Vegetation	NA		
Other: Sediment	3	E & E Analytical Services Center	2/14/94
III. FIELD MEASUREMENTS TAKEN			
01 Type	02 Comments		
Air	Performed with HNu photoionization detector during site inspection. No readings above background noted.		
Radiation	Performed with Radiation Alert Monitor 4EC during site inspection. No readings above background noted.		
IV. PHOTOGRAPHS AND MAPS			
01 Type	<input checked="" type="checkbox"/> Ground <input checked="" type="checkbox"/> Aerial	02 In Custody of <u>Ecology and Environment Engineering, P.C.; Niagara County EMC</u> (name of organization or individual)	
03 Maps	04 Location of Maps		
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<u>NYSDEC, Region 9 and Ecology and Environment Engineering, P.C. Buffalo</u>		
V. OTHER FIELD DATA COLLECTED (provide narrative description of sampling activities)			
Surveyed sample locations and physical features of site.			
VI. SOURCES OF INFORMATION (cite specific references, e.g., state files, sample analysis, reports)			
Niagara County Department of Health Niagara County Environmental Management Council NYSDEC Phase I Investigation Report, June 1989 Ecology and Environment Engineering, P.C., Site Inspection, May 2, 1991			

POTENTIAL HAZARDOUS WASTE SITE SITE INSPECTION REPORT PART 7 - OWNER INFORMATION				I. IDENTIFICATION			
				01 State NY		02 Site Number 932101	
II. CURRENT OWNER(S)				PARENT COMPANY (if applicable)			
01 Name T. Dean and Pamela Johnson, Jr.		02 D&B Number		08 Name		09 D&B Number	
03 Street Address (P.O. Box, RFD #, etc.) 4169 Purdy Road			04 SIC Code	10 Street Address (P.O. Box, RFD #, etc.)			11 SIC Code
05 City Lockport		06 State NY	07 Zip Code 14094	12 City		13 State	14 Zip Code
01 Name		02 D&B Number		08 Name		09 D&B Number	
03 Street Address (P.O. Box, RFD #, etc.)			04 SIC Code	10 Street Address (P.O. Box, RFD #, etc.)			11 SIC Code
05 City		06 State	07 Zip Code	12 City		03 State	14 Zip Code
01 Name		02 D&B Number		08 Name		09 D&B Number	
03 Street Address (P.O. Box, RFD #, etc.)			04 SIC Code	10 Street Address (P.O. Box, RFD #, etc.)			11 SIC Code
05 City		06 State	07 Zip Code	12 City		13 State	14 Zip Code
III. PREVIOUS OWNER(S) (list most recent first)				IV. REALTY OWNER(S) (if applicable, list most recent first)			
01 Name		02 D&B Number		01 Name		02 D&B Number	
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	
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	
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)							
Town of Wheatfield Tax Map No. 147.							

POTENTIAL HAZARDOUS WASTE SITE SITE INSPECTION REPORT PART 8 - OPERATOR INFORMATION				I. IDENTIFICATION	
				01 State NY	02 Site Number 932101
II. CURRENT OPERATOR (provide if different from owner)				OPERATOR'S PARENT COMPANY (if applicable)	
01 Name	02 D&B Number	10 Name	11 D&B Number		
03 Street Address (P.O. Box, RFD #, etc.)		04 SIC Code	12 Street Address (P.O. Box, RFD #, etc.)		13 SIC Code
05 City	06 State	07 Zip Code	14 City	15 State	16 Zip Code
08 Years of Operation	09 Name of Owner				
III. PREVIOUS OPERATOR(S) (list most recent first; provide if different from owner)				PREVIOUS OPERATORS' PARENT COMPANIES (if applicable)	
01 Name	02 D&B Number	10 Name	11 D&B Number		
03 Street Address (P.O. Box, RFD #, etc.)		04 SIC Code	12 Street Address (P.O. Box, RFD #, etc.)		13 SIC Code
05 City	06 State	07 Zip Code	14 City	15 State	16 Zip Code
08 Years of Operation	09 Name of Owner During this Period				
01 Name	02 D&B Number	10 Name	11 D&B Number		
03 Street Address (P.O. Box, RFD #, etc.)		04 SIC Code	12 Street Address (P.O. Box, RFD #, etc.)		13 SIC Code
05 City	06 State	07 Zip Code	14 City	15 State	16 Zip Code
08 Years of Operation	09 Name of Owner During this Period				
01 Name	02 D&B Number	10 Name	11 D&B Number		
03 Street Address (P.O. Box, RFD #, etc.)		04 SIC Code	12 Street Address (P.O. Box, RFD #, etc.)		13 SIC Code
05 City	06 State	07 Zip Code	14 City	15 State	16 Zip Code
08 Years of Operation	09 Name of Owner During this Period				
IV. SOURCES OF INFORMATION (cite specific references, e.g., state files, sample analysis, reports)					

POTENTIAL HAZARDOUS WASTE SITE SITE INSPECTION REPORT PART 9 - GENERATOR/TRANSPORTER INFORMATION				I. IDENTIFICATION			
				01 State		02 Site Number	
NY		932101					
II. ON-SITE GENERATOR							
01 Name		02 D&B Number					
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	
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	
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 Haseley Trucking Co.		02 D&B Number		01 Name		02 D&B Number	
03 Street Address (P.O. Box, RFD #, etc.) 10315 Lockport Road		04 SIC Code	03 Street Address (P.O. Box, RFD #, etc.)		04 SIC Code		
05 City Wheatfield		06 State NY	07 Zip Code	05 City		06 State	07 Zip Code
01 Name		02 D&B Number		01 Name		02 D&B Number	
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)							
Hopkins 1984a.							

POTENTIAL HAZARDOUS WASTE SITE SITE INSPECTION REPORT PART 10 - PAST RESPONSE ACTIVITIES	I. IDENTIFICATION	
	01 State NY	02 Site Number 932101
II. PAST RESPONSE ACTIVITIES		
01 <input type="checkbox"/> A. Water Supply Closed 04 Description:	02 Date _____	03 Agency _____
01 <input type="checkbox"/> B. Temporary Water Supply Provided 04 Description:	02 Date _____	03 Agency _____
01 <input type="checkbox"/> C. Permanent Water Supply Provided 04 Description:	02 Date _____	03 Agency _____
01 <input type="checkbox"/> D. Spilled Material Removed 04 Description:	02 Date _____	03 Agency _____
01 <input type="checkbox"/> E. Contaminated Soil Removed 04 Description:	02 Date _____	03 Agency _____
01 <input type="checkbox"/> F. Waste Repackaged 04 Description:	02 Date _____	03 Agency _____
01 <input type="checkbox"/> G. Waste Disposed Elsewhere 04 Description:	02 Date _____	03 Agency _____
01 <input type="checkbox"/> H. On-Site Burial 04 Description:	02 Date _____	03 Agency _____
01 <input type="checkbox"/> I. <u>In Situ</u> Chemical Treatment 04 Description:	02 Date _____	03 Agency _____
01 <input type="checkbox"/> J. <u>In Situ</u> Biological Treatment 04 Description:	02 Date _____	03 Agency _____
01 <input type="checkbox"/> K. <u>In Situ</u> Physical Treatment 04 Description:	02 Date _____	03 Agency _____
01 <input type="checkbox"/> L. Encapsulation 04 Description:	02 Date _____	03 Agency _____
01 <input type="checkbox"/> M. Emergency Waste Treatment 04 Description:	02 Date _____	03 Agency _____
01 <input type="checkbox"/> N. Cutoff Walls 04 Description:	02 Date _____	03 Agency _____
01 <input type="checkbox"/> O. Emergency Diking/Surface Water Diversion 04 Description:	02 Date _____	03 Agency _____
01 <input type="checkbox"/> P. Cutoff Trenches/Sump 04 Description:	02 Date _____	03 Agency _____

POTENTIAL HAZARDOUS WASTE SITE SITE INSPECTION REPORT PART 10 - PAST RESPONSE ACTIVITIES	I. IDENTIFICATION	
	01 State NY	02 Site Number 932101
II. PAST RESPONSE ACTIVITIES (Cont.)		
01 <input type="checkbox"/> Q. Subsurface Cutoff Wall 04 Description:	02 Date _____	03 Agency _____
01 <input type="checkbox"/> R. Barrier Walls Constructed 04 Description:	02 Date _____	03 Agency _____
01 <input type="checkbox"/> S. Capping/Covering 04 Description:	02 Date _____	03 Agency _____
01 <input type="checkbox"/> T. Bulk Tankage Repaired 04 Description:	02 Date _____	03 Agency _____
01 <input type="checkbox"/> U. Grout Curtain Constructed 04 Description:	02 Date _____	03 Agency _____
01 <input type="checkbox"/> V. Bottom Sealed 04 Description:	02 Date _____	03 Agency _____
01 <input type="checkbox"/> W. Gas Control 04 Description:	02 Date _____	03 Agency _____
01 <input type="checkbox"/> X. Fire Control 04 Description:	02 Date _____	03 Agency _____
01 <input type="checkbox"/> Y. Leachate Treatment 04 Description:	02 Date _____	03 Agency _____
01 <input type="checkbox"/> Z. Area Evacuated 04 Description:	02 Date _____	03 Agency _____
01 <input type="checkbox"/> 1. Access to Site Restricted 04 Description:	02 Date _____	03 Agency _____
01 <input type="checkbox"/> 2. Population Relocated 04 Description:	02 Date _____	03 Agency _____
01 <input type="checkbox"/> 3. Other Remedial Activities 04 Description:	02 Date _____	03 Agency _____
III. SOURCES OF INFORMATION (cite specific references, e.g., state files, sample analysis, reports)		
_____ _____ _____		

<p>POTENTIAL HAZARDOUS WASTE SITE SITE INSPECTION REPORT</p> <p>PART 11 - ENFORCEMENT INFORMATION</p>	<p>I. IDENTIFICATION</p>	
	<p>01 State</p> <p style="text-align: center;">NY</p>	<p>02 Site Number</p> <p style="text-align: center;">932101</p>
<p>II. ENFORCEMENT INFORMATION</p>		
<p>01 Past Regulatory/Enforcement Action <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p>		
<p>02 Description of Federal, State, Local Regulatory/Enforcement Action</p>		
<p>III. SOURCES OF INFORMATION (cite specific references, e.g., state files, sample analysis, reports)</p>		
<p>NYSDEC Division of Solid and Hazardous Waste Inactive Hazardous Waste Site Registry files, Region 9.</p>		

APPENDIX B

GEOPHYSICAL REPORT



ecology and environment engineering, p.c.

BUFFALO CORPORATE CENTER
368 PLEASANTVIEW DRIVE, LANCASTER, NEW YORK 14086, TEL. 716/684-8060

September 2, 1993
(Revised February 10, 1994)

Ms. Valerie Woodward
Senior Engineering Geologist
Western Investigation Section
Bureau of Hazardous Site Control
Division of Hazardous Waste Remediation
New York State Department of Environmental Conservation
50 Wolf Road
Albany, NY 12233-7010

Re: NYS Standby Contract #D002625, Work Assignment #D002625-17
Walmore Road-Johnson Property (Site #932101) Geophysical Survey
Results

Dear Ms. Woodward:

Geophysical surveys were performed by Ecology and Environment Engineering, P.C., (E & E) at the Walmore Road-Johnson Property (Walmore) site located in the Town of Wheatfield, Niagara County, New York on August 18, 1993. The surveys were performed as requested in the New York State Department of Environmental Conservation (NYSDEC) scope-of-work (SOW) at two locations to identify landfill boundaries.

Grid 1 was located across the front yards and the area in between 6381 Walmore Road and 6373 Walmore Road (formerly a barn). Grid 2 was located in the back yard of the former barn and extended south to 6381 Walmore Road (see Attachment 1).

SURVEY TECHNIQUES

The geophysical surveys were performed using an EG&G Geometrics model G-856 proton precession magnetometer and a Geonics Ltd. model EM31 ground conductivity meter.

Grids were established over each survey area with 20-foot station and line spacings. Grid 1 was 120 feet along the X-axis and 240 feet along the Y-axis. Grid 2 was 60 feet along the X-axis and 220 feet along the Y-axis. Both grids were oriented north 5 degrees east with station

Ms. Valerie Woodward
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(0,0) located in the southwest corner of each grid. Compass directions are uncorrected for regional magnetic declination (8.5 degrees west).

One reading of the earth's total magnetic field (in units of gammas) was collected at each grid station. Magnetic readings were later corrected for diurnal drift from base station readings. Four readings were recorded at each grid station by the EM31. Two of these readings were collected with the instrument oriented parallel to the Y-axis (orientation 1) of the grid, and the remaining two were collected with the instrument oriented parallel to the X-axis (orientation 2). The readings in each orientation consisted of the quadrature phase component (conductivity) of the induced magnetic field in both the vertical and horizontal dipole modes.

The quadrature phase component measures ground conductivity in units of millimhos/meter (mmhos/m). In the vertical dipole mode, the instrument response has a depth of penetration of approximately 18 feet below ground surface and it is more sensitive to deeply buried objects. In the horizontal dipole mode, the instrument response has a depth of about 9 feet below ground surface and is more sensitive to shallow objects.

All instrument readings were electronically recorded and stored by the instruments. Magnetometer readings were down-loaded using MAGPAC Version 4.1.5-89 software (EG&G Geometrics) and EM31 readings were down-loaded using DAT31 Version 3.20 software (Geonics, Ltd.). All geophysical data were then plotted and contoured using Surfer Version 4.0 software (Golden Software, Inc.).

SURVEY RESULTS

Several contour maps of each survey grid were generated to illustrate survey results. Magnetometer contour maps are labeled "MAG", and EM31 maps are labeled "conductivity" for the quadrature phase component. Vertical and horizontal dipole modes in instrument orientations 1 and 2 are labeled V1, H1, V2, and H2 respectively. Attachment 2 contains the contour plots illustrating the survey results. Asterisks on the maps indicate data collection stations. Multiple contour intervals are presented for some orientations to better illustrate anomalies.

GRID 1

Irregular magnetic gradient fluctuations occurred through most of the western and northern half of the survey grid. This was supported and further delineated by the EM31 results. High conductivity values were recorded in both the vertical and horizontal dipole modes in both orientations 1 and 2 in the northern portion of the grid trending northeast/southwest. The strongest readings were centered at grid stations (40,140), (60,160), and (100,200). These anomalies may represent large, separately buried objects at these locations; a linear feature (pipeline or trench filled with metallic objects) trending northeast/southwest beneath the grid area; or most likely, the boundary of the landfill, between grid stations (0,80) and (120,140), which contains large amounts of metallic debris.

It appears, based upon the geophysical results of Grid 1, that the landfill begins along the southern bank of Cayuga Creek and extends partially onto the property of 6381 Walmore Road. It is unknown at this time whether the fill material extends north of Cayuga Creek. E & E recommends drilling the soil borings north of grid stations (0,80) to (120,140) to characterize the fill material, however, stations (0,100), (0,160), (0,200), (20,120), (40,100), (40,120), (40,140), (40,200), (60,140), (60,160), (60,240), (80,180), (80,200), and (100,200) should be avoided.

GRID 2

One large anomaly was detected at grid station (20,140) in both the magnetometer and most of the EM31 plots of grid 2. This anomaly represents a metal fence post in the garden behind 6373 Walmore Road. Another low gradient anomaly was detected by the magnetometer and the EM31 in the vertical dipole mode (thus indicating a deeply buried object) between grid stations (0,40) to (0,60). A shallow anomaly was also detected by the EM31 in the horizontal dipole mode at station (60,40). The source of these anomalies are unknown.

Based on the range of conductivity values detected in Grid 2, as well as the relative lack of magnetic and conductive anomalies, it appears that no fill exists behind 6373 Walmore Road. The fill area is primarily confined to the front yard along Walmore Road.

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CONCLUSIONS/RECOMMENDATIONS

Analysis of the magnetometer and EM31 data for each of the survey grids has indicated the presence of subsurface metallic debris in both grid areas. However, relatively few anomalies were detected in Grid 2 and the fill area appears confined to the front yard of 6373 Walmore Road extending from Cayuga Creek southward, partially onto the property of 6381 Walmore Road. Since Grid 1 had numerous subsurface anomalies, caution should be taken when drilling in this area. The drilling program at this site may proceed as scheduled following the recommendations stated above.

If you have any questions, or require additional information, please contact me or Gene Florentino at 716/684-8060.

Sincerely,

ECOLOGY AND ENVIRONMENT, INC.

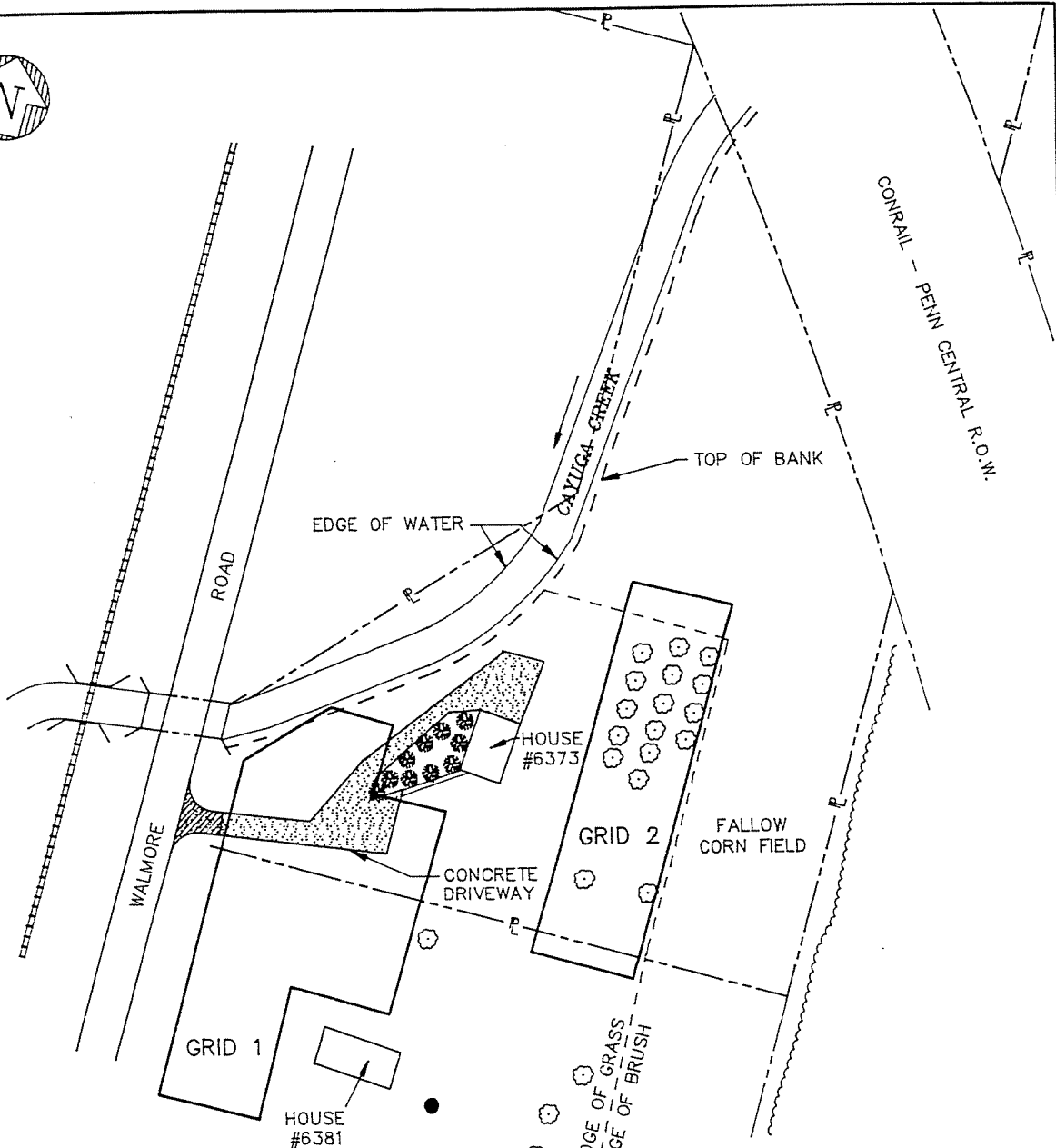
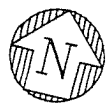
Richard M. Watt

Richard M. Watt
Site Manager/Geologist

sv/YR8030
SEC 2412

cc: B. Peck, Project Manager
J. Griffis, Project Director

ATTACHMENT
1
GRID LOCATION MAP

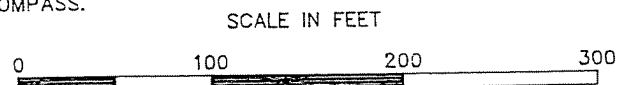


MONUMENTATION

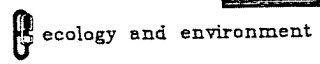
HORIZONTAL DATUM IS MAGNETIC NORTH WITH ASSUMED COORDINATES.
 VERTICAL DATUM IS INTERSECTION OF CENTERLINES OF LOCKPORT ROAD AND WALMORE ROAD (ELEV.=614' ON 1980 USGS TONAWANDA WEST QUADRANGLE MAP).

NOTE:

ALL R.O.W.'S AND PROPERTY LINES ARE APPROXIMATE LOCATIONS FROM TOWN OF WHEATFIELD TAX MAPS 146 AND 147.
 SURVEYED BY JOSEPH C. LU, P.E., P.C., PENFIELD ROAD PENFIELD, NY 14526
 GEOPHYSICAL SURVEY GRIDS NOT SURVEYED BUT MEASURED BY TAPE AND COMPASS.



LEGEND	
●	RESIDENTIAL WELL (APPROX. LOCATION)
○	DECIDUOUS TREE
⌘	APPROX. PROPERTY LINE
△	JCL SURVEY CONTROL POINT
▬▬▬	RAILROAD TRACKS
~~~~~	APPROX. TREELINE



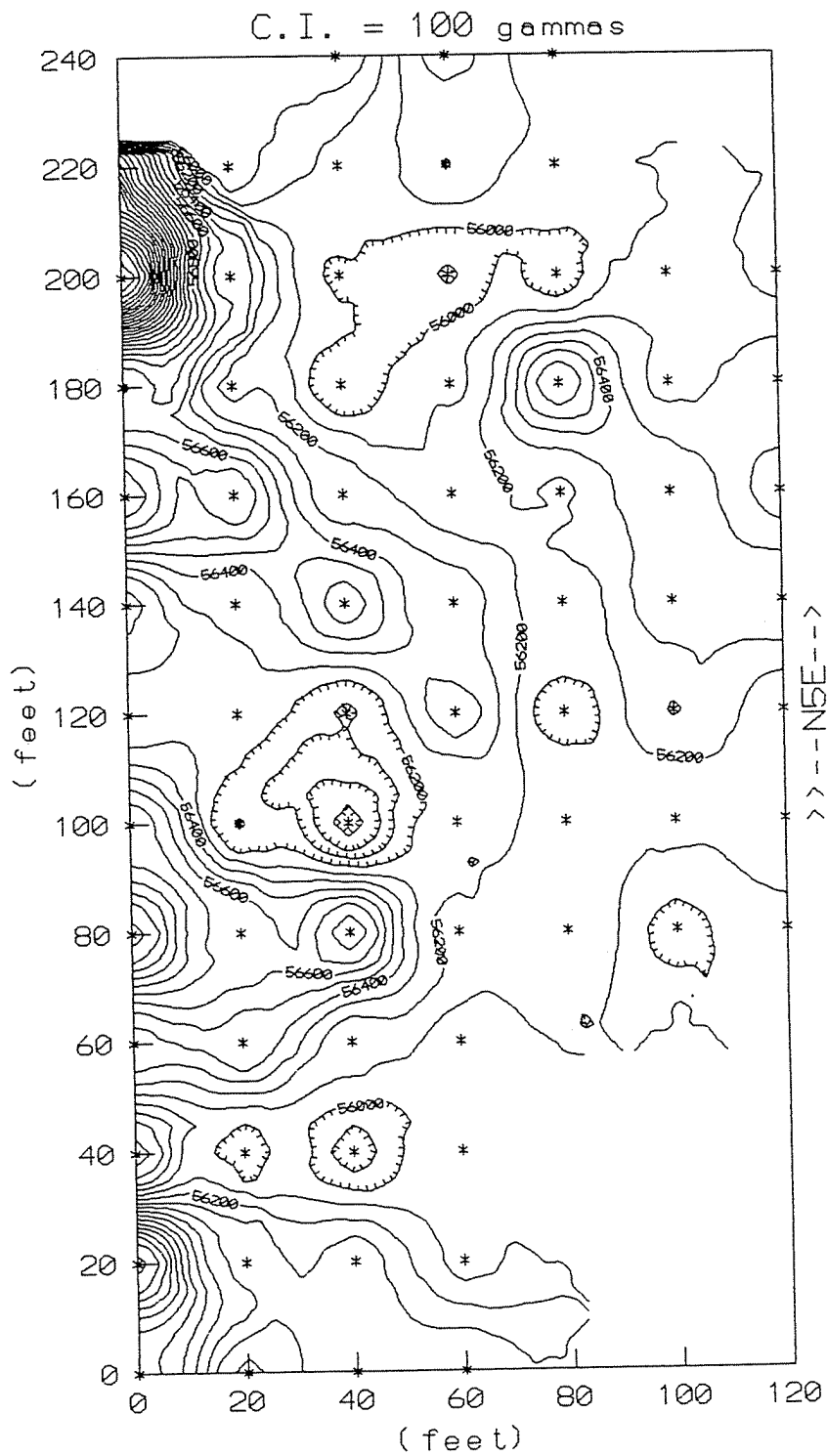
ATTACHMENT 1 GRID LOCATION MAP

**ATTACHMENT**

**2**

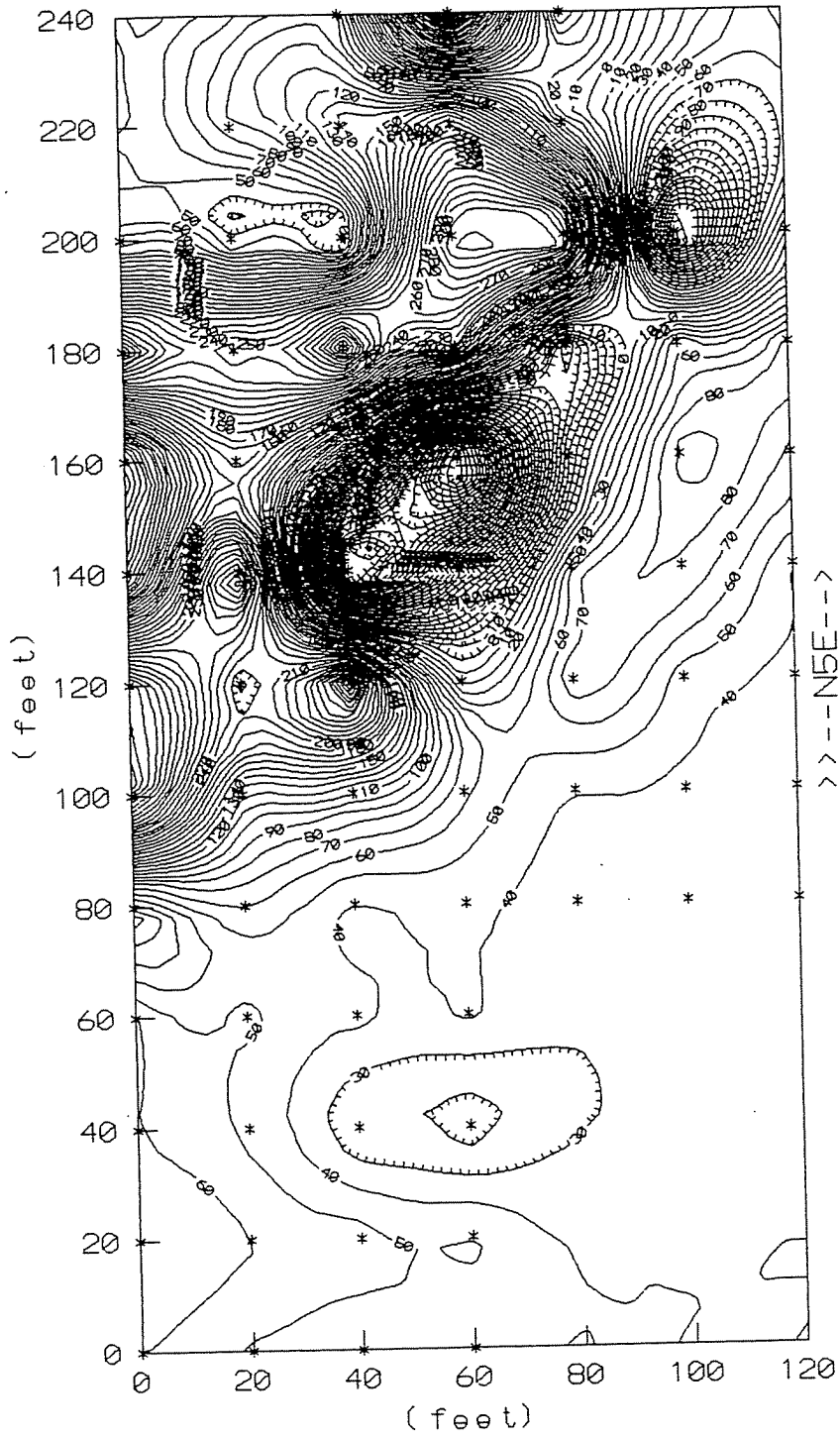
**GEOPHYSICAL SURVEY  
CONTOUR PLOTS**

# Walmore Magnetics Grid 1

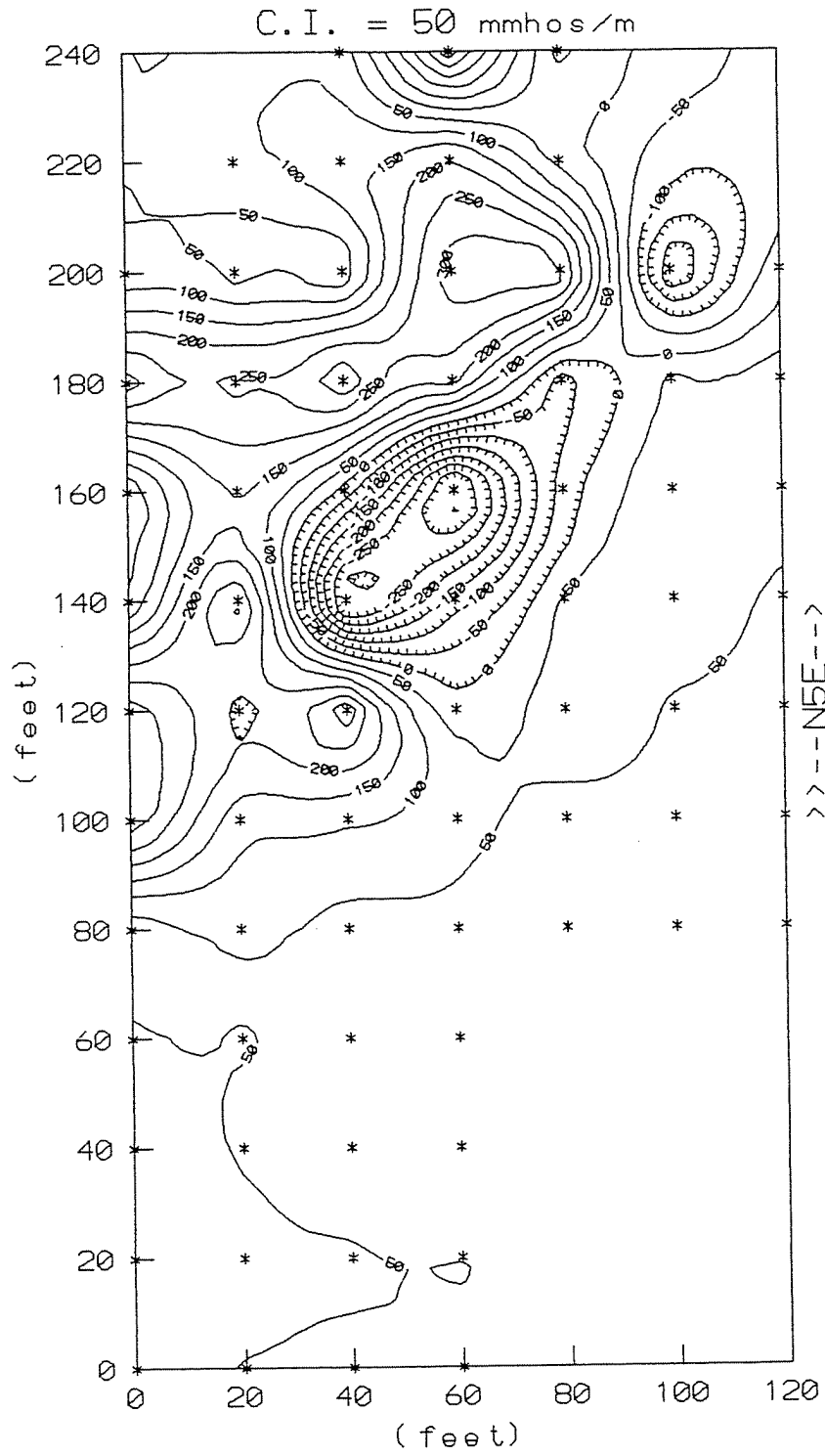


# Walmore V1 Conductivity Grid 1

C.I. = 10 mmhos/m

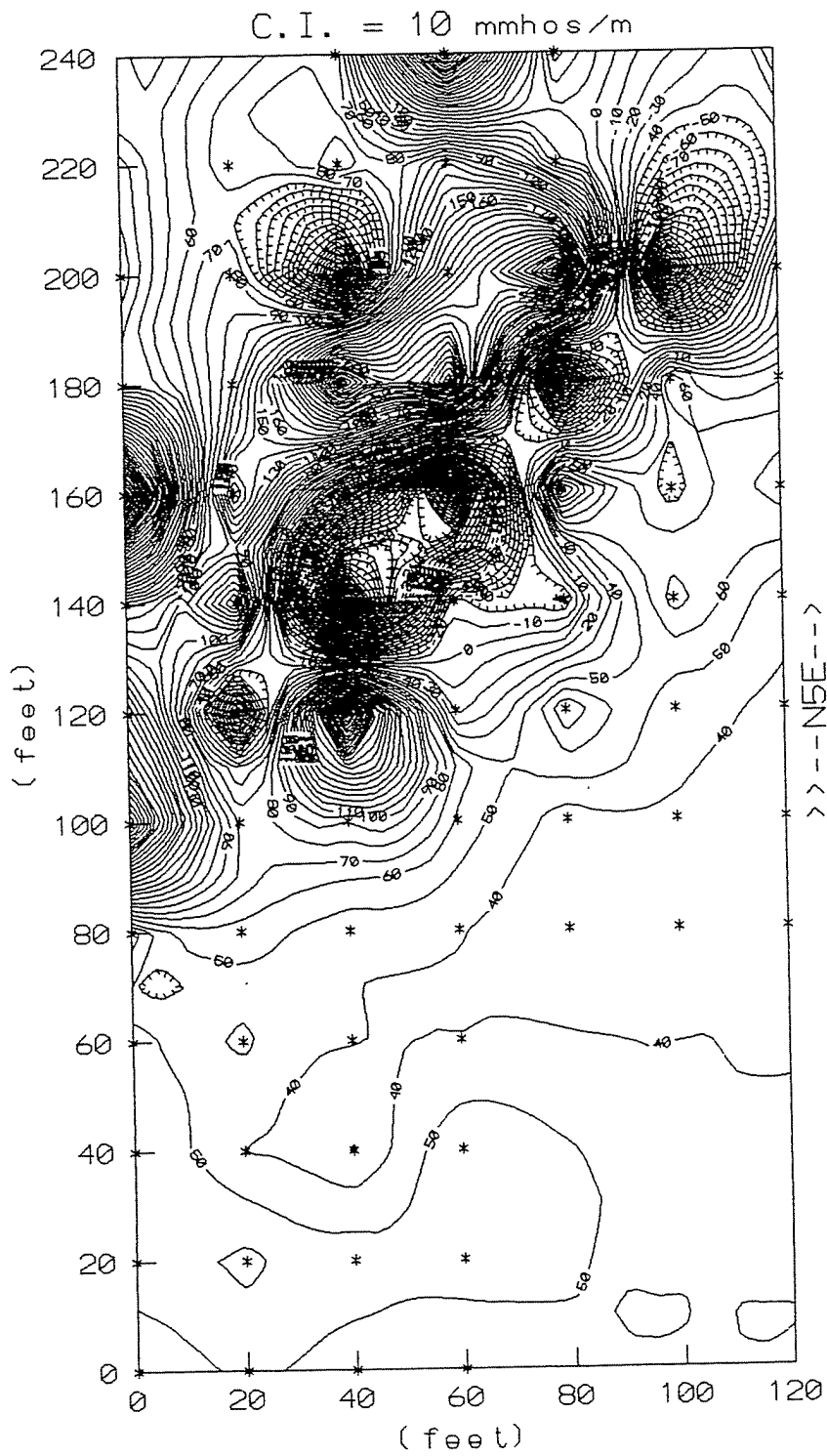


# Walmore V1 Conductivity Grid 1

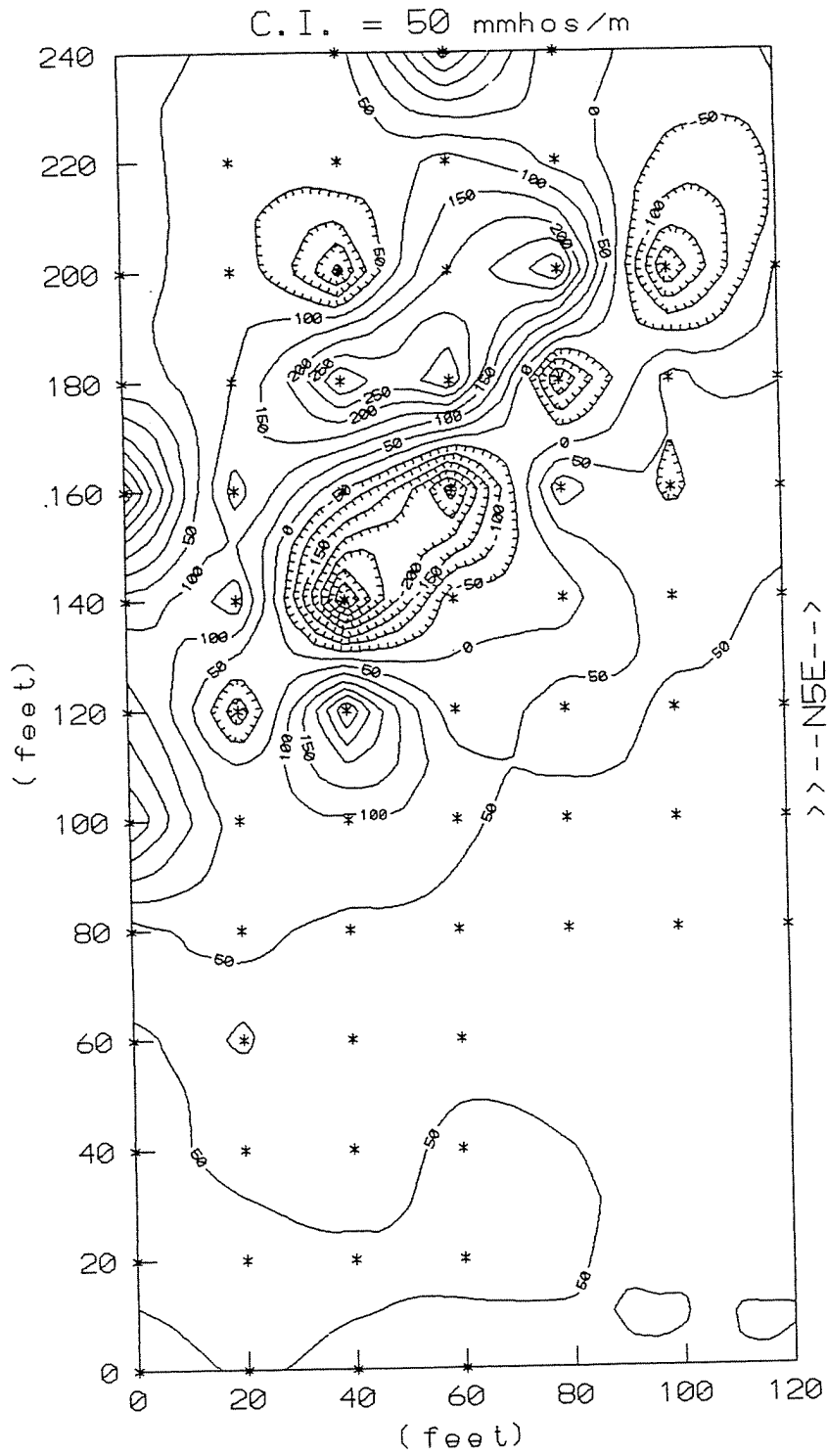




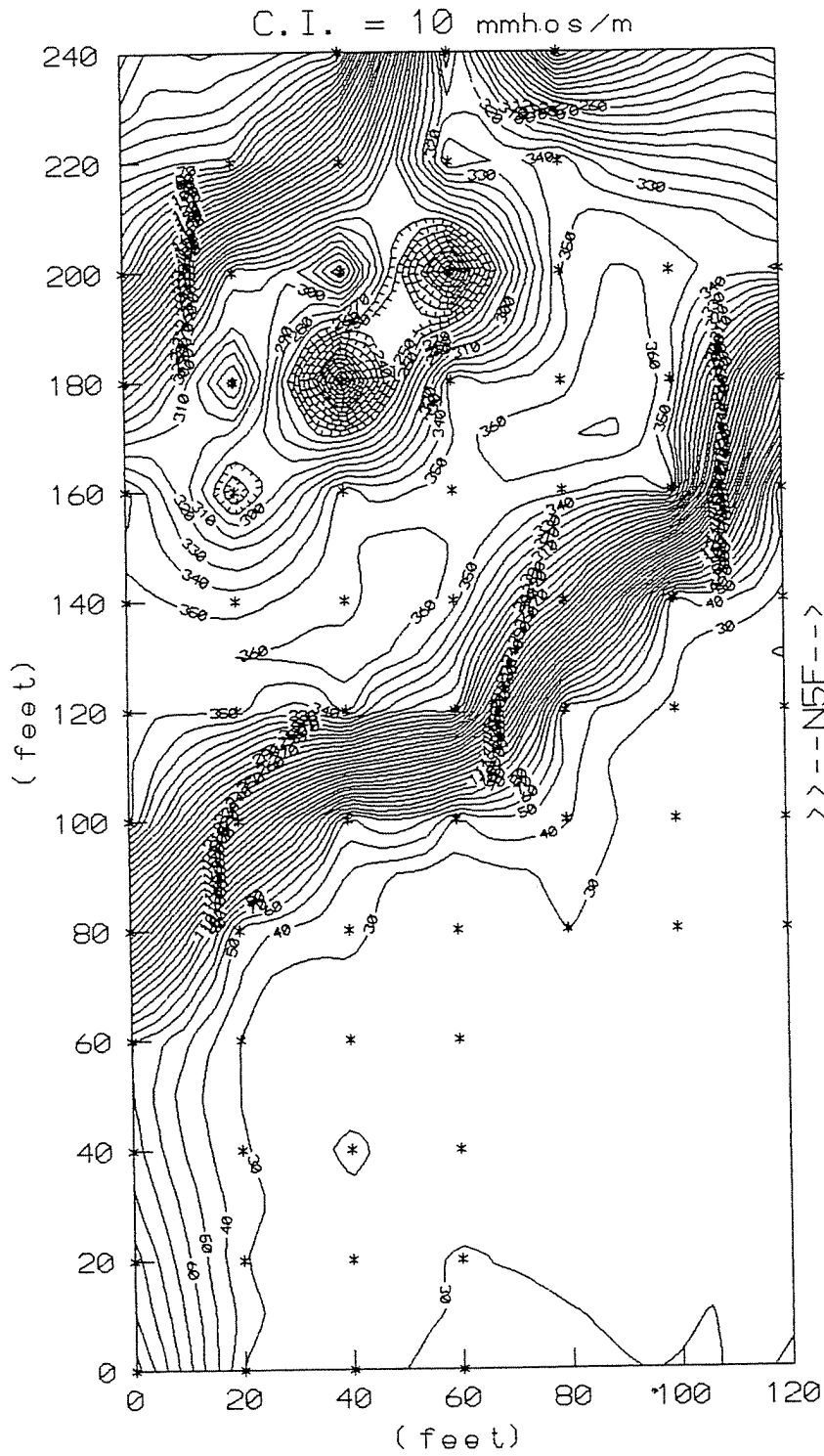
# Walmore V2 Conductivity Grid 1



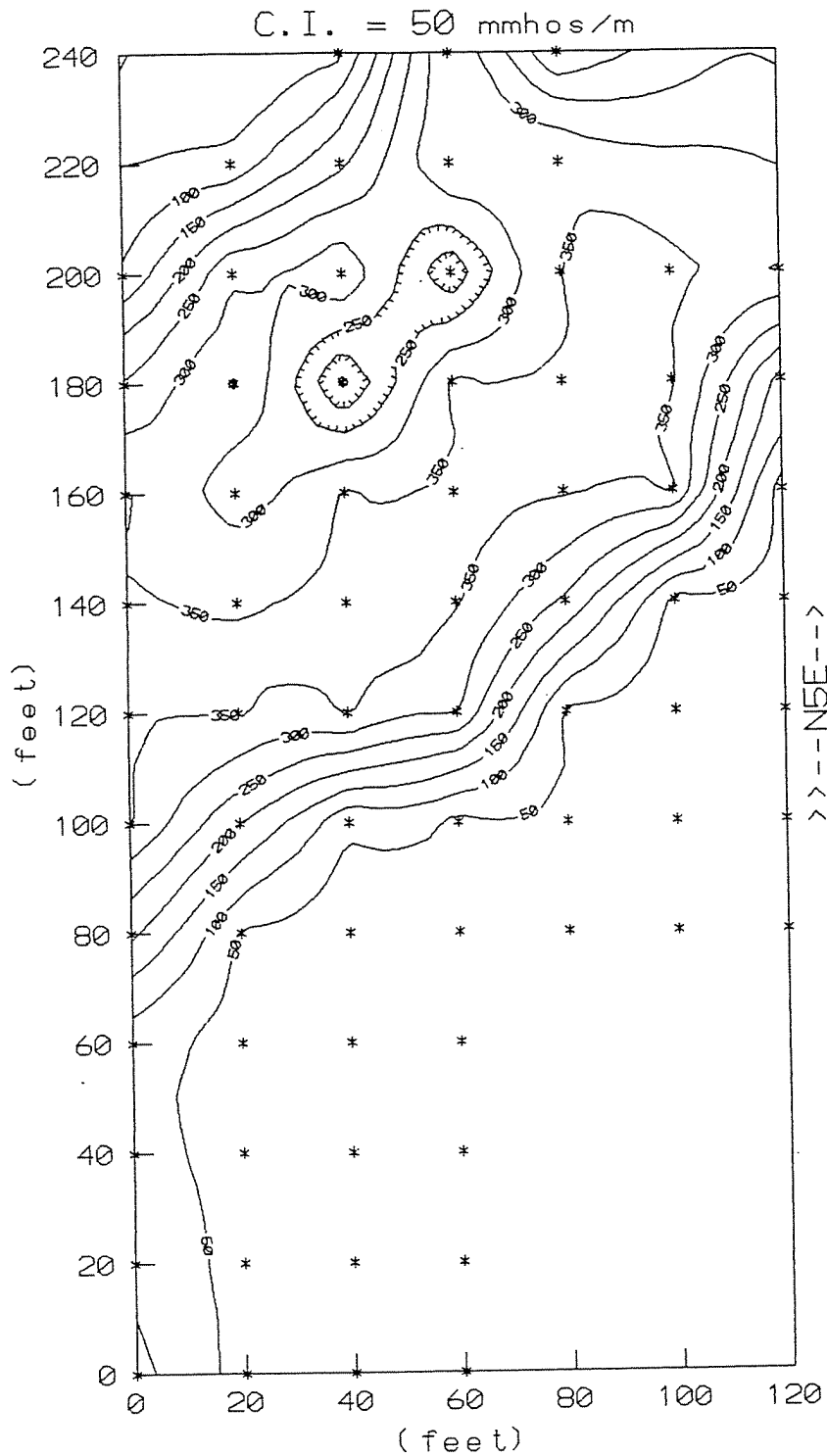
# Walmore V2 Conductivity Grid 1



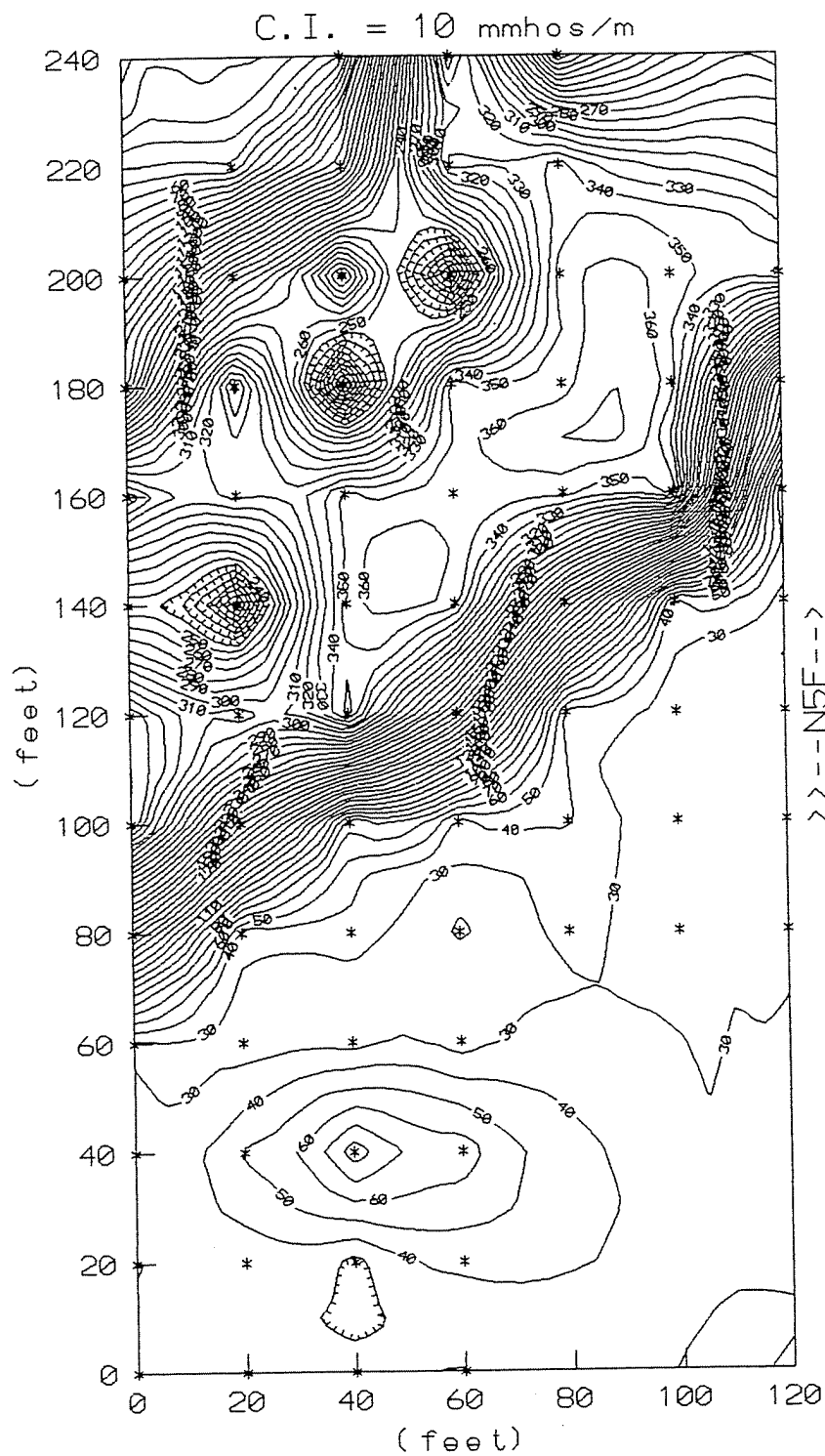
# Walmore H1 Conductivity Grid 1



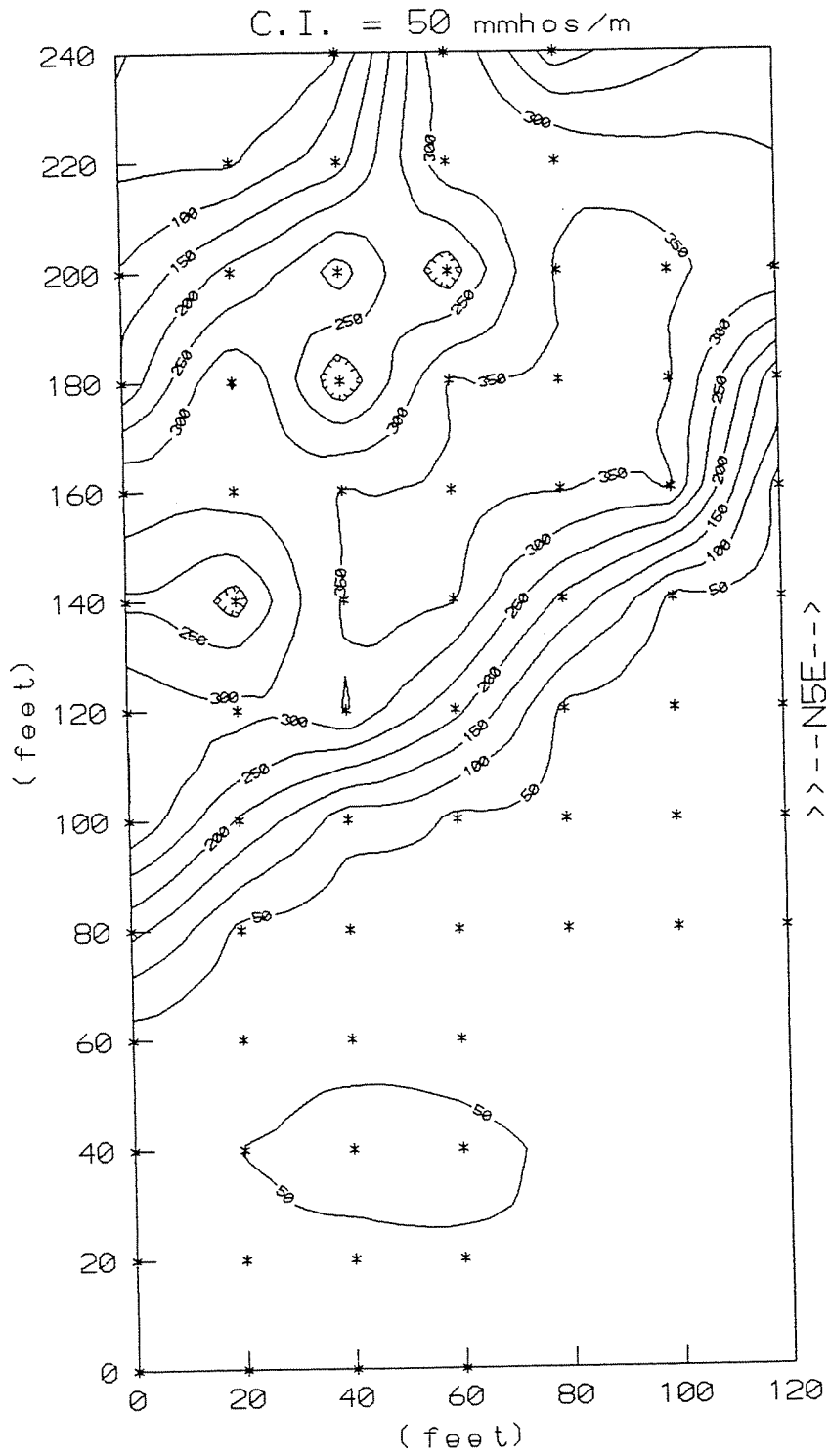
# Walmore H1 Conductivity Grid 1



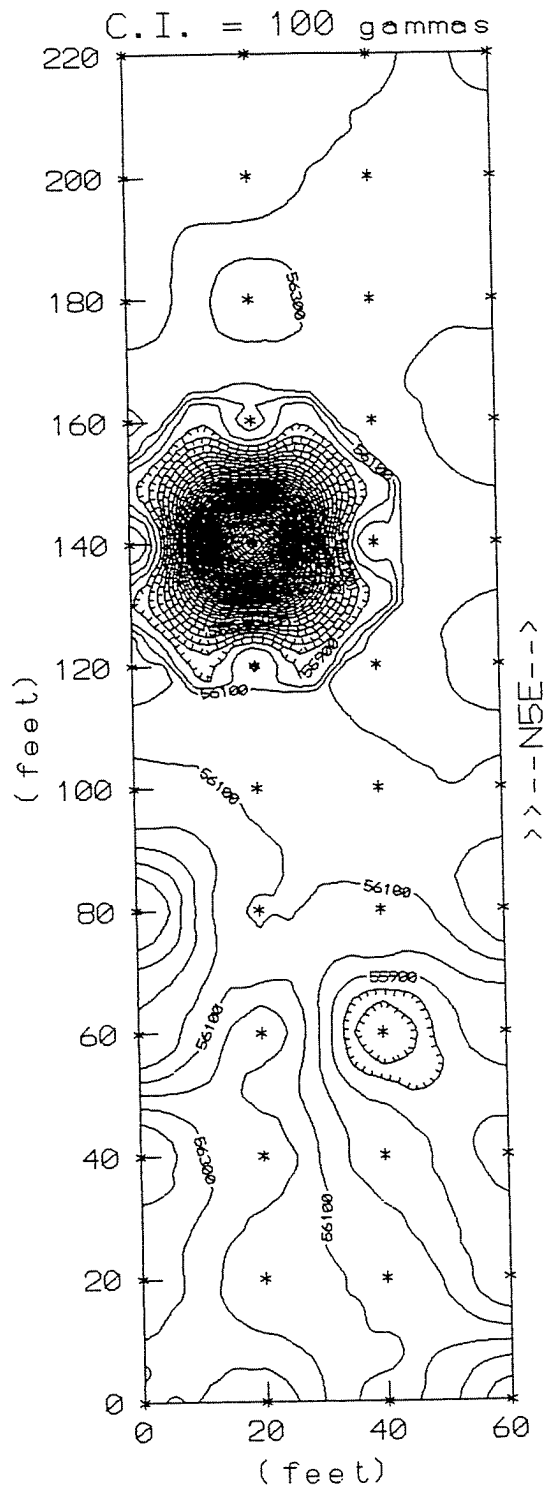
# Walmore H2 Conductivity Grid 1



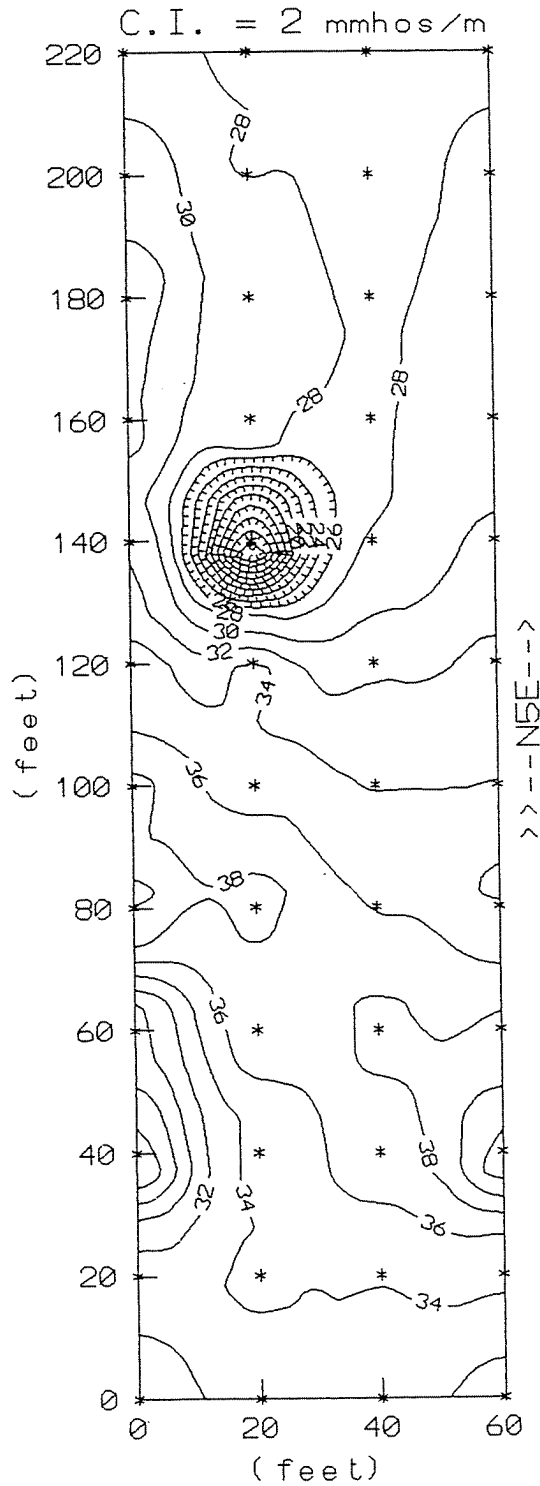
# Walmore H2 Conductivity Grid 1



# Walmore Magnetics Grid 2

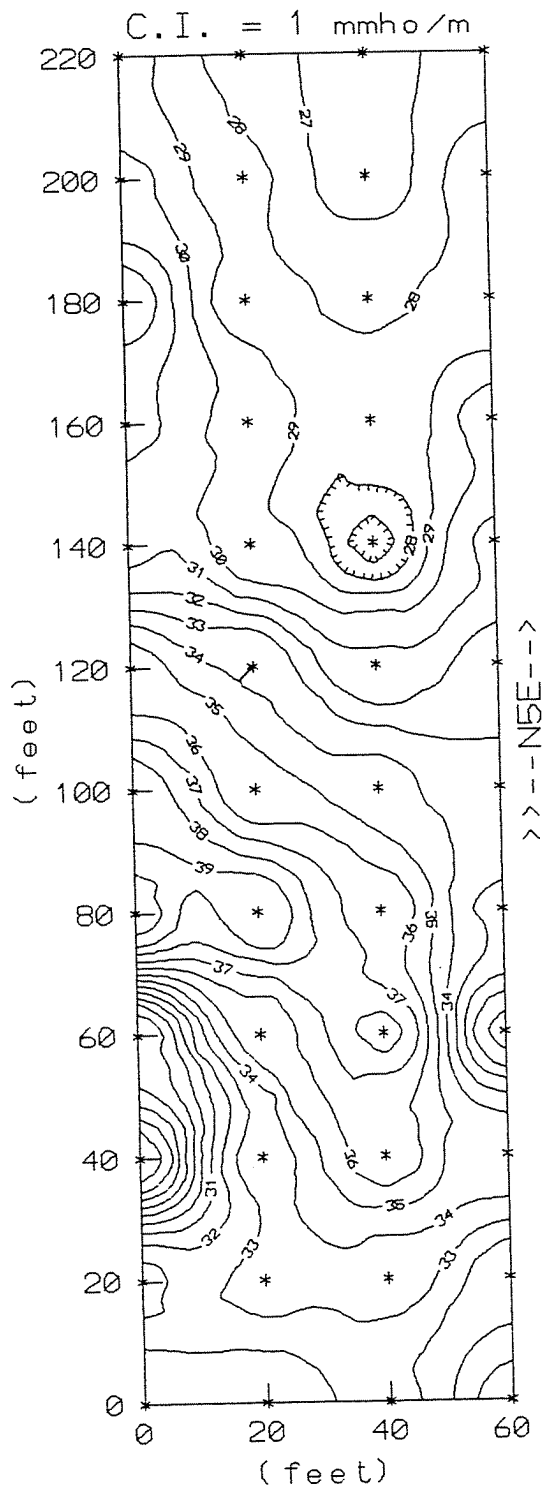


# Walmore V1 Conductivity Grid 2

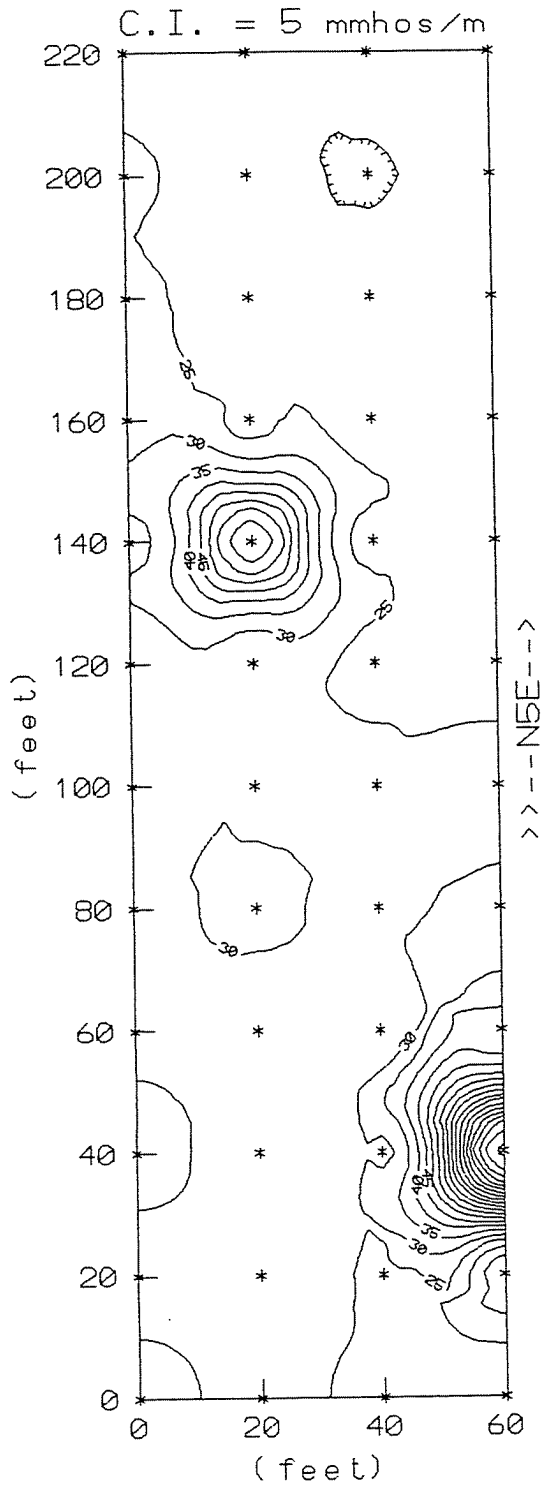




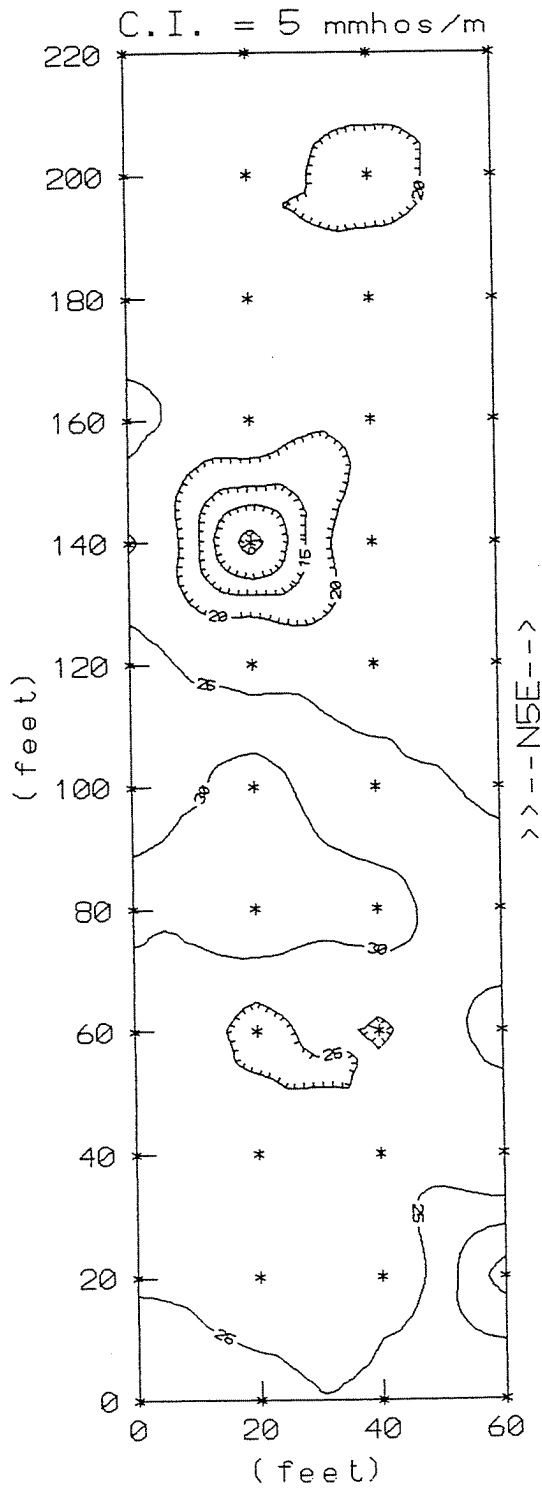
# Walmore V2 Conductivity Grid 2



# Walmore H1 Conductivity Grid 2



# Walmore H2 Conductivity Grid 2



**APPENDIX C**

**SUBSURFACE BORING LOGS AND WELL DIAGRAMS**

# DRILLING LOG OF BORING NO. B-1

Project: WALMORE ROAD - JOHNSON PROPERTY, SITE ID 932101

Total Depth of Hole (feet BGS): 9

Location: WHEATFIELD, N.Y.

Ground Elevation (feet above MSL): 592.75

Boring Coordinates/Reference System: N 5019.0450  
E 5049.9975

Date Started/Finished: 9-20-93 / 9-20-93

Drilling Company: BUFFALO DRILLING COMPANY

Driller/Geologist: DON RIMBECK / RICHARD WATT

DEPTH	GRAPHIC LOG	OVERBURDEN DESCRIPTION	SPLIT SPOON NO.	BLOW COUNT	SS RECOVERY (FT)	HNU/OVA (ppm)	COMMENTS
1		0.0-0.4' <u>SILT</u> ; dark brown, with clay and organics (loam).	SS 1	10 10	1.1	30.8/0	HNu readings are high, probably due to water vapor.
2		0.4-1.1' <u>FILL</u> ; reddish-brown, moist, somewhat varved clay with dolomite gravel.		17 15			Pushed a dolomite cobble.
3		2.0-2.8' <u>FILL</u> ; reddish-brown, dry, gravelly clay with sand and silt. Gravel is Lockport Dolostone.	SS 2	11 14	1.1	73.7/0	HNu reading due to water vapor.
4		2.8-2.8' <u>FILL</u> ; gray to black silty sand with gravel.		13 7			Resampled zone due to poor recovery (cobble caught in shoe).
5		2.8-3.1' <u>FILL</u> ; reddish-brown, dry, gravelly clay with sand and silt. Gravel is Lockport Dolostone.	SS 3&4	3 2	1.3	20/1.5	Sample B1-2 collected from 5-5.3' and 7-7.3' for RCRA analysis.
6		4.0-4.8' <u>FILL</u> ; reddish-brown silty gravel with clay and sand. Gravel is Lockport Dolostone.		2 1			
7		4.8-5.0' <u>FILL</u> ; gray, wet, gravel with silt and sand.					
8		5.0-5.3' <u>FILL</u> ; black, wet, silty gravel with clay and sand.					Split spoon sank to approximately 7'.
9		7.0-7.5' <u>FILL AND CLAY</u> ; few inches of gray-black silty gravel fill underlain by native clay at ~8'.	SS 5	2 1 2 7	0.5	NA/0	
10							
11							
12							
13							
14							
15							
16							
17							
18							



WALMORE ROAD - JOHNSON PROPERTY

# DRILLING LOG OF BORING NO. B-2

Project: WALMORE ROAD - JOHNSON PROPERTY, SITE ID 932101

Total Depth of Hole (feet BGS): 6.0

Location: WHEATFIELD, N.Y.

Ground Elevation (feet above MSL): 594.25

Boring Coordinates/Reference System: N 4982.5895  
E 5043.3434

Date Started/Finished: 9-20-93 / 9-20-93

Drilling Company: BUFFALO DRILLING COMPANY

Driller/Geologist: DON RIMBECK / RICHARD WATT

DEPTH	GRAPHIC LOG	OVERBURDEN DESCRIPTION	SPLIT SPOON NO.		SS RECOVERY (FT)	HNU/OVA (ppm)	COMMENTS
				BLOW COUNT			
0.0-0.4'		SILT; medium brown, with sand, clay, gravel, and organics (loam).		5			Cut away ~0.3' of sod.
0.4-1.8'		FILL; light gray to black gravel with trace clay, sand and silt, and minor slag.	SS 1	28 15	1.8	0/0	
1.8-2.0'		FILL; reddish-brown, gravelly clay with sand.		10			Sample B2-1 collected from 2-3.5' for full TCL analysis.
2.0-3.6'		FILL; reddish-brown, clay with gravel, trace sand, dry.	SS 2	15 13 20	1.8	0/0	
3.6-3.8'		FILL; black slag/graphite.					
4.0-4.4'		FILL; black slag/graphite, dry, mixed with brown clay.	SS 3	8 10 12 10	1.5	0/0	Sample B2-2 collected from 4.5-5' for RCRA analysis.
4.4-5.5'		FILL; reddish-brown, moist, clay with gravel and trace silt.					
5.5-6.0'							
6.0-6.5'							
6.5-7.0'							
7.0-7.5'							
7.5-8.0'							
8.0-8.5'							
8.5-9.0'							
9.0-9.5'							
9.5-10.0'							
10.0-10.5'							
10.5-11.0'							
11.0-11.5'							
11.5-12.0'							
12.0-12.5'							
12.5-13.0'							
13.0-13.5'							
13.5-14.0'							
14.0-14.5'							
14.5-15.0'							
15.0-15.5'							
15.5-16.0'							
16.0-16.5'							
16.5-17.0'							
17.0-17.5'							
17.5-18.0'							



WALMORE ROAD - JOHNSON PROPERTY

# DRILLING LOG OF BORING NO. B-3

Project: WALMORE ROAD - JOHNSON PROPERTY, SITE ID 932101

Total Depth of Hole (feet BGS): 8.0

Location: WHEATFIELD, N.Y.

Ground Elevation (feet above MSL): 594.20

Boring Coordinates/Reference System: N 4955.5508  
E 5045.8502

Date Started/Finished: 9-20-93 / 9-20-93

Drilling Company: BUFFALO DRILLING COMPANY

Driller/Geologist: DON RIMBECK / RICHARD WATT

DEPTH	GRAPHIC LOG	OVERBURDEN DESCRIPTION	SPLIT SPOON NO.	BLOW COUNT	SS RECOVERY (FT)	HNU/OVA (ppm)	COMMENTS
0.0-0.4'		<u>SILT</u> ; medium brown, with clay, gravel, sand, and organics (loam).		14 18 19 22	0.2	0/0	Pushed some dolomite gravel.
0.4-1.0'		<u>FILL</u> ; dolomite gravel. Auger cuttings indicate slag fill begins at ~ 1.0'.	SS 1				Sample B3-1 collected from 1-3' for RCRA analysis.
2.0-4.0'		<u>FILL</u> ; black slag and/or carbonaceous fill material (graphite), dark red at bottom, dry.	SS 2&3	3 9 9 5	1.5	0/0	Refusal on rock. Resampled at new location, 5'NE of initial location. Recovery of sample was compressed.
4.0-5.0'		<u>FILL</u> ; black slag and/or graphite, moist.					OVA: 0 ppm in slag and 1.5 ppm in clay.
5.0-6.3'		<u>FILL</u> ; brown to grayish-brown silty clay with trace of slag and/or graphite, moist.	SS 4	7 4 4 8	2.0	0/1.5	Sample B3-2 collected from 5-8' for full TCL analysis.
6.3-6.5'		<u>FILL</u> ; black slag and/or graphite.					
6.5-8.0'		<u>CLAY</u> ; native reddish-brown clay with occasional silt and sand layers.	SS 5	7 17 21 14	2.0	0/0	
8.0							



## WALMORE ROAD - JOHNSON PROPERTY

# DRILLING LOG OF BORING NO. B-4

Project: WALMORE ROAD - JOHNSON PROPERTY, SITE ID 932101

Total Depth of Hole (feet BGS): 7.2

Location: WHEATFIELD, N.Y.

Ground Elevation (feet above MSL): 594.28

Boring Coordinates/Reference System: N 5021.0437  
E 5093.8957

Date Started/Finished: 9-20-93 / 9-20-93

Drilling Company: BUFFALO DRILLING COMPANY

Driller/Geologist: DON RIMBECK / RICHARD WATT

DEPTH	GRAPHIC LOG	OVERBURDEN DESCRIPTION	SPLIT SPOON NO.		SS RECOVERY (FT)	HNU/OVA (ppm)	COMMENTS
			BLOW COUNT				
0.0-0.4'		<b>SILT</b> : brown, with clay, gravel, sand, and organics (loam).		40			Cut away ~0.3' of sod.
0.4-0.8'		<b>FILL</b> : light gray, dry, dolomite gravel with sand.	SS 1	22 49 30	1.8	0/0	
0.8-1.8'		<b>FILL</b> : reddish-brown gravelly clay, with trace sand and silt, dry.		26 32 18 40	1.4	4.5/0	HNU reading due to water vapor.
2.0-3.4'		<b>FILL</b> : mottled gray and reddish-brown. Silty gravel with sand and clay. Gravel is dolomite. Also contains trace quantities of foundry glass and/or slag.	SS 2				Collected another spoon from 4-5' due to insufficient soil to sample.
4.0-5.0'		<b>FILL</b> : same as above, with a purple-gray silt.	SS 3	12 21 19 18	1.0	NA/0	Sample B4-1 collected from 4-5' for RCRA analysis.
6.0-7.2'		<b>FILL</b> : reddish-brown, clayey gravel with sand and silt, with minor black, metallic-looking slag.	SS 4	20 19 21 24	1.2	0/0	Sample B4-2 collected from 6-7' for RCRA analysis.
7.2-7.4'							
8.0-8.2'							
9.0-9.2'							
10.0-10.2'							
11.0-11.2'							
12.0-12.2'							
13.0-13.2'							
14.0-14.2'							
15.0-15.2'							
16.0-16.2'							
17.0-17.2'							
18.0-18.2'							



WALMORE ROAD - JOHNSON PROPERTY



# DRILLING LOG OF BORING NO. B-5

Project: WALMORE ROAD - JOHNSON PROPERTY, SITE ID 932101

Total Depth of Hole (feet BGS): 5.0

Location: WHEATFIELD, N.Y.

Ground Elevation (feet above MSL): 595.17

Boring Coordinates/Reference System: N 4934.9888  
E 5099.1376

Date Started/Finished: 9-20-93 / 9-20-93

Drilling Company: BUFFALO DRILLING COMPANY

Driller/Geologist: DON RIMBECK / RICHARD WATT

DEPTH	GRAPHIC LOG	OVERBURDEN DESCRIPTION	SPLIT SPOON NO.	BLOW COUNT	SS RECOVERY (FT)	HNU/OVA (ppm)	COMMENTS
1		0.0-0.4' <u>SILT</u> ; medium brown, with clay, gravel, sand, and organic matter (loam).	SS 1	11 17	1.4	0/0	Cut away ~0.3' of sod.
2		0.4-1.8' <u>FILL</u> ; sand with gravel and minor clay, gray at top grading down to tan, dry. Some slag near the top. Red clay at base of shoe.	SS 2	12 17 32	1.8	0/0	Sample B5-1 collected from 1-3' for RCRA analysis.
3		2.0-2.4' <u>FILL</u> ; gray clayey gravel with concrete and slag fragments.	SS 2	17 32 30	1.8	0/0	Pushed a cobble.
4		2.4-3.6' <u>FILL</u> ; reddish to yellowish brown, dry, sandy clay with silt and minor gravel.	SS 3	11 15 29	1.0	0/0	Sample B5-2 collected from 4-5' for RCRA analysis.
5		4.0-5.0' <u>FILL</u> ; same as above.	SS 3	31			
6							
7							
8							
9							
10							
11							
12							
13							
14							
15							
16							
17							
18							



## WALMORE ROAD - JOHNSON PROPERTY

# DRILLING LOG OF BORING NO. B-6

Project: WALMORE ROAD - JOHNSON PROPERTY, SITE ID 932101

Total Depth of Hole (feet BGS): 5.0

Location: WHEATFIELD, N.Y.

Ground Elevation (feet above MSL): 594.47

Boring Coordinates/Reference System: N 4922.9361  
E 6057.1256

Date Started/Finished: 9-20-93 / 9-20-93

Drilling Company: BUFFALO DRILLING COMPANY

Driller/Geologist: DON RIMBECK / RICHARD WATT

DEPTH	GRAPHIC LOG	OVERBURDEN DESCRIPTION	SPLIT SPOON NO.	BLOW COUNT	SS RECOVERY (FT)	H ₂ O/OVA (ppm)	COMMENTS
0.0-0.4'		0.0-0.4' SILT; medium brown, with clay, gravel, sand, and organics (loam).	SS 1	7	1.4	0/0	Cut away ~0.3' of sod.  Sample B6-1 collected from 1-2' for RCRA analysis.
0.4-0.9'		0.4-0.9' FILL; reddish-brown clayey gravel.		18			
0.9-1.8'		0.9-1.8' FILL; gray slag and/or graphite with rusty-looking clay at base of shoe.		12			
2.0-2.2'		2.0-2.2' SAND WITH SLAG; rusty-looking sand with slag. Compact, hard slag at bottom of shoe prevented better recovery.	SS 2	8	0.2	0/0	Sample B6-2 collected from 4-5' for full TCL analysis.
4.0-4.4'		4.0-4.4' FILL; black slag and/or graphite, dry, some wood.		5			
4.4-5.0'		4.4-5.0' CLAYEY SAND WITH SILT; yellowish-brown, moist, maybe native.	SS 3	8	1.0	0/0	
5.0				7			
6.0				11			
7.0				13			
8.0							
9.0							
10.0							
11.0							
12.0							
13.0							
14.0							
15.0							
16.0							
17.0							
18.0							



WALMORE ROAD - JOHNSON PROPERTY

# LOG OF SPLIT SPOON NO. B-7

Project: WALMORE ROAD - JOHNSON PROPERTY, SITE ID 932101

Total Depth of Hole (feet BGS): 4.0

Location: WHEATFIELD, N.Y.

Ground Elevation (feet above MSL): _____

Boring Coordinates/Reference System: N  
E

Date Started/Finished: 4-29-94 / 4-29-94

Drilling Company: NA

Geologists: JIM RICHERT / RICHARD WATT

DEPTH	GRAPHIC LOG	OVERBURDEN DESCRIPTION	SPLIT SPOON NO.	BLOW COUNT	SS RECOVERY (FT)	HNu/OVA (ppm)	COMMENTS
0.0-0.4'		SANDY SILT: brown, with clay and organics.	SS 1	NA	1.8	0/0	Cut away ~0.3' of sod.
0.4-1.0'		FILL: black, graphite/ash.					
1.0-2.0'		FILL: clay.					
2.0-2.2'		FILL: gray, slag.	SS 2	NA	1.2	0/0	Fill hole to surface with cuttings patch hole in lawn with mulch and seed mix.
2.2-4.0'	FILL: reddish-brown, clay with silt and sand.						
4.0							
5							
6							
7							
8							
9							
10							
11							
12							
13							
14							
15							
16							
17							
18							



WALMORE ROAD - JOHNSON PROPERTY

# LOG OF SPLIT SPOON NO. B-8

Project: WALMORE ROAD - JOHNSON PROPERTY, SITE ID 932101

Total Depth of Hole (feet BGS): 4.0

Location: WHEATFIELD, N.Y.



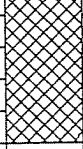
Ground Elevation (feet above MSL): _____

Boring Coordinates/Reference System: N  
E

Date Started/Finished: 4-29-94 / 4-29-94

Drilling Company: NA

Geologists: JIM RICHERT / RICHARD WATT

DEPTH	GRAPHIC LOG	OVERBURDEN DESCRIPTION	SPLIT SPOON NO.				COMMENTS
			SPLIT SPOON NO.	BLOW COUNT	SS RECOVERY (FT)	HNU/OVA (ppm)	
0.0-0.5'		<u>SANDY SILT</u> ; brown, with clay and organics.					Cut away ~0.3' of sod.
0.5-2.0'		<u>FILL</u> ; black, graphite/ash with brick stuck in shoe of split-spoon.	SS 1	NA	1.2	0/0	Sample B-8X collected from 0.0-2.0' for EPTOX organics analysis.
2.0-4.0'		<u>FILL</u> ; black, graphite/ash with minor amount of a needle-like fibrous material.	SS 2	NA	2.0	0/0	Sample B-8Z collected from 2.0-4.0' for EPTOX organics analysis.
4.0							Fill hole to surface with cuttings, patch lawn with mulch and seed mix.
5							
6							
7							
8							
9							
10							
11							
12							
13							
14							
15							
16							
17							
18							

WALMORE ROAD - JOHNSON PROPERTY



# LOG OF SPLIT SPOON NO. B-9

Project: WALMORE ROAD - JOHNSON PROPERTY, SITE ID 932101

Total Depth of Hole (feet BGS): 4.0

Location: WHEATFIELD, N.Y.

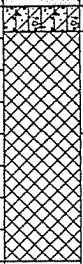
Ground Elevation (feet above MSL): _____

Boring Coordinates/Reference System: N  
E

Date Started/Finished: 4-29-94 / 4-29-94

Drilling Company: NA

Geologists: JIM RICHERT / RICHARD WATT

DEPTH	GRAPHIC LOG	OVERBURDEN DESCRIPTION	SPLIT SPOON NO.	BLOW COUNT	SS RECOVERY (FT)	HNI/OVA (ppm)	COMMENTS
0.0-0.4'		0.0-0.4' SANDY SILT; with clay and organics.					Cut away ~0.3' of sod.
0.4-2.0'		0.4-2.0' FILL; gray-black, graphite/ash with brick fragments.	SS 1	NA	1.2	0/0	Sample B-9X collected from 0.0-2.0' for EPTOX organics analysis.
2.0-4.0'		2.0-4.0' FILL; black, graphite/ash with native clay (varved) at bottom of shoe.	SS 2	NA	1.8	0/0	Sample B-9Z collected from 2.0-4.0' for EPTOX organics analysis.
4.0							Fill hole to surface with cuttings, patch holes in lawn with mulch and seed mix.
5							
6							
7							
8							
9							
10							
11							
12							
13							
14							
15							
16							
17							
18							

WALMORE ROAD - JOHNSON PROPERTY



# LOG OF SPLIT SPOON NO. B-10

Project: WALMORE ROAD - JOHNSON PROPERTY, SITE ID 932101

Total Depth of Hole (feet BGS): 4.0

Location: WHEATFIELD, N.Y.

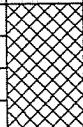
Ground Elevation (feet above MSL): _____

Boring Coordinates/Reference System: N  
E

Date Started/Finished: 9-20-93 / 9-20-93

Drilling Company: NA

Geologists: JIM RICHERT / RICHARD WATT

DEPTH	GRAPHIC LOG	OVERBURDEN DESCRIPTION	SPLIT SPOON NO.	BLOW COUNT	SS RECOVERY (FT)	HNU/OVA (ppm)	COMMENTS
1		0.0-2.0' FILL: dark brown, sandy silt with clay and organics.	SS 1	NA	0.9	0/0	Cut away ~0.3' of sod. No samples collected from B-10.
2		2.0-4.0' No recovery, pushed dolomite gravel.	SS 2	NA	0.1	0/0	
3							
4							
5							
6							
7							
8							
9							
10							
11							
12							
13							
14							
15							
16							
17							
18							



WALMORE ROAD - JOHNSON PROPERTY

**APPENDIX D**

**DATA SUMMARY**

## DATA USABILITY REVIEW

The data usability review for the Walmore Road-Johnson Property site consisted of the following:

- Checking chain-of-custody forms and analytical logs to confirm that samples were analyzed for the parameters requested on the chain-of-custody; and
- Reviewing the data to confirm that NYSDEC and laboratory quality control criteria were met.

These quality control criteria included:

- Holding times;
- Laboratory blank contamination;
- Surrogate recoveries;
- Internal standards area and retention times;
- Matrix spike/matrix spike duplicate (MS/MSD) results;
- Instrument calibration (initial and continuing); and
- For metals, the specific criteria were reviewed and problems noted. These criteria included laboratory method blanks, MS/MSDs, instrument calibration, and ICP interference check samples.

Based on the above-described review, memoranda were generated outlining any problems that affected the usability of the data. These memoranda were submitted to NYSDEC under separate cover as part of the reduced data packages. The problems commented on generally included blank contamination and holding time violation, and do not constitute a full data validation effort.

For the Walmore Road-Johnson Property site, all data were considered usable as qualified by the data review.

Data qualifiers used in the data summary forms are defined below. Table D-1 which follows provides a list of the PAHs analyzed for (as base/neutral extractables) and shows which are considered carcinogenic.



## Defined Qualifiers

- B Analyte is found in the associated blank as well as in the sample.
- J Indicates the value is estimated.
- UJ Indicates the quantitation limits are estimated.
- A Indicates that a TIC is a suspected aldol-condensation product.
- N Indicates presumptive evidence of a compound. Used only for TICs where the identification is based on a mass spectral library search.

<b>Table D-1</b>
<b>POLYNUCLEAR AROMATIC HYDROCARBON (PAH) ANALYSIS LIST</b>
Naphthalene
2-Methylnaphthalene
2-Chloronaphthalene
Acenaphthylene
Acenaphthene
Fluorene
Phenanthrene
Anthracene
Fluoranthene
Pyrene
Benzo(a)anthracene ^a
Chrysene ^a
Benzo(b)fluoranthene ^a
Benzo(k)fluoranthene ^a
Benzo(a)pyrene ^a
Indeno(1,2,3-cd)pyrene ^a
Dibenz(a,h)anthracene ^a
Benzo(g,h,i)perylene

^a Considered carcinogenic (Department of Health and Human Services, 1993).

DATA SUMMARY FORM: VOLATILES 1

WATER SAMPLES  
(µg/L)

Site Name: Walmere Road - Johnson Property

Case #: 9301.314 Sampling Date(s): 6-23-93

To calculate sample quantitation limit:  
(CRQL * Dilution Factor)

CRQL	COMPOUND	STORAGE_BLK	SW-1	SW-2	SW-3	VBLKW1	MSB	SW-IMS	SW-IMS
10	Chloromethane	1.0	1.0	1.0	1.0			1.0	1.0
10	Bromomethane								
10	Vinyl Chloride								
10	Chloroethane					2 J	3 BJ	11 BJ	11 BJ
10	Methylene Chloride								12 J
10	Acetone						60	130	130
10	Carbon Disulfide								
10	1,1-Dichloroethene								
10	1,1-Dichloroethane								
10	Total 1,2-Dichloroethene								
10	Chloroform								
10	1,2-Dichloroethane								
10	2-Butanone								
10	1,1,1-Trichloroethane								
10	Carbon Tetrachloride								
10	Vinyl Acetate								
10	Bromodichloromethane								

CRQL = Contract Required Quantitation Limit

SEE NARRATIVE FOR CODE DEFINITIONS  
revised 07

DATA SUMMARY FORM: VOLATILES 2

WATER SAMPLES  
(µg/L)

Site Name: Walmere Road - Johnson Property

Case #: 9301.314 Sampling Date(s): 6-23-93

To calculate sample quantitation limit:  
(CRQL * Dilution Factor)

CRQL	COMPOUND	STORAGE-BLK	SW-1	SW-2	SW-3	VBLKW1	MSB	SW-IMS	SW-IMSD
10	1,2-Dichloropropane	1.0	1.0						
10	Cis-1,3-Dichloropropene							1.0	
10	Trichloroethene						57	1.0	110
10	Dibromochloromethane								
10	1,1,2-Trichloroethane						54	1.0	110
10	Benzene								
10	Trans-1,3-Dichloropropene								
10	Bromoform								
10	4-Methyl-2-pentanone								
10	2-Hexanone								
10	Tetrachloroethene								
10	1,1,2,2-Tetrachloroethane						58	1.0	120
10	Toluene						54	1.0	110
10	Chlorobenzene								
10	Ethylbenzene								
10	Styrene								
10	Total Xylenes								

SEE NARRATIVE FOR CODE DEFINITION  
revised 07/93

CRQL = Contract Required Quantitation Limit

DATA SUMMARY FORM: VOLATILES I

SOIL SAMPLES  
(µg/Kg)

Site Name: Walmore Road - Johnson Property

Case # 9301314 Sampling Date(s): 23 Jun '93

To calculate sample quantitation limit:  
(CRQL * Dilution Factor) / ((100 - % moisture)/10)

CRQL	COMPOUND	SED-1	SED-2	SED-3	SS-1	SS-2	SS-3	VBLKS1	VBLKS2
	Sample No.	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
	Dilution Factor	14	24	27	22	19	23		
	% Moisture								
	Location								
10	Chloromethane								
10	Bromomethane								
10	Vinyl Chloride								
10	Chloroethane								
10	Methylene Chloride	9 BJ	7 BJ	23 B	35 B	26 B	25 B	21	7 J
10	Acetone	9 BJ	10 BJ	7 BJ	57 B	10 BJ	5 BJ	5 J	4 J
10	Carbon Disulfide								
10	1,1-Dichloroethene								
10	1,1-Dichloroethane								
10	Total 1,2-Dichloroethene								
10	Chloroform								
10	1,2-Dichloroethane								
10	2-Butanone								
10	1,1,1-Trichloroethane								
10	Carbon tetrachloride								
10	Vinyl Acetate								
10	Bromodichloromethane								

SEE NARRATIVE FOR CODE DEFINIT  
revised 0

CRQL = Contract Required Quantitation Limit

DATA SUMMARY FORM: VOLATILES 2

SOIL SAMPLES  
(µg/Kg)

Site Name: Walmore Road-Johnson Property

Case #: 9301314 Sampling Date(s): 23JUN93

To calculate sample quantitation limit:  
(CRQL * Dilution Factor) / ((100 - % moisture)/100)

CRQL	COMPOUND	SED-1	SED-2	SED-3	SS-1	SS-2	SS-3	VBLKS1	VBLKS2
10	1,2-Dichloropropane	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
10	Cis-1,3-Dichloropropene	14	24	27	22	19	23		
10	Trichloroethene								
10	Dibromochloromethane								
10	1,1,2-Trichloroethane								
10	Benzene								
10	Trans-1,3-Dichloropropene								
10	Bromoform								
10	4-Methyl-2-pentanone								
10	2-Hexanone								
10	Tetrachloroethene								
10	1,1,2,2-Tetrachloroethane								
10	Toluene								
10	Chlorobenzene								
10	Ethylbenzene								
10	Styrene								
10	Total Xylenes								

recycled paper

SEE NARRATIVE FOR CODE DEFINITION  
revised 07/

CRQL = Contract Required Quantitation Limit

DATA SUMMARY FORM: V O L A T I L E S 1

SOIL SAMPLES  
(µg/Kg)

Site Name: Waimore Road - Johnson Property

Case #: 301.314 Sampling Date(s): 6-23-93

To calculate sample quantitation limit  
(CRQL * Dilution Factor) / ((100 - % moisture)/10)

CRQL	COMPOUND	Sample No. Dilution Factor & Moisture Location	MSB1 1.0	SS-3MS 1.0	SS-3MSD 1.0					
10	Chloromethane									
10	Bromomethane									
10	Vinyl Chloride									
10	Chloroethane									
10	Methylene Chloride		42 B	59 B	65 B					
10	Acetone		5 BT							
10	Carbon Disulfide									
10	1,1-Dichloroethane		38	50	45					
10	1,1-Dichloroethane									
10	Total 1,2-Dichloroethane									
10	Chloroform									
10	1,2-Dichloroethane									
10	2-Butanone									
10	1,1,1-Trichloroethane									
10	Carbon Tetrachloride									
10	Vinyl Acetate									
10	Bromodichloromethane									

SEE NARRATIVE FOR CODE DEFINIT  
revised 0

CRQL = Contract Required Quantitation Limit

DATA SUMMARY FORM: VOLATILES 2

SOIL SAMPLES  
(µg/Kg)

Site Name: Walmore Road-Johnson Property

Case #: 9301.314 Sampling Date(s): 6-23-93

To calculate sample quantitation limit:  
(CRQL * Dilution Factor) / ((100 - % moisture)/100)

CRQL	COMPOUND	MSB1	SS-3MS	SS-3MSD					
10	1,2-Dichloropropane	1.0	1.0	1.0					
10	Cis-1,3-Dichloropropene								
10	Trichloroethene	36	49	47					
10	Dibromochloromethane								
10	1,1,2-Trichloroethane	41	55	55					
10	Benzene								
10	Trans-1,3-Dichloropropene								
10	Bromoform								
10	4-Methyl-2-pentanone								
10	2-Hexanone								
10	Tetrachloroethere								
10	1,1,2,2-Tetrachloroethane								
10	Toluene	40	54	58					
10	Chlorobenzene	43	58	57					
10	Ethylbenzene								
10	Styrene								
10	Total Xylenes								

SEE NARRATIVE FOR CODE DEFINITION revised 07/

CRQL = Contract Required Quantitation Limit



DATA SUMMARY FORM: B N A S 1

WATER SAMPLES  
(µg/L)

Site Name: Walmore Road-Johnson Property  
 Sample #: 9201.314 Sampling Date(s): 6-23-93

To calculate sample quantitation limit:  
(CRQL * Dilution Factor)

CRQL	COMPOUND	Sample No. Dilution Factor Location	SW-1 1.0	SW-2 1.0	SW-3 1.0	SBLKWI 1.0	SBLKWZ 1.0	MSBZ 1.0	SW-IMS 1.0	SW-IMSD 1.0
10	Phenol							57	89	130
10	bis(2-Chloroethyl) ether							69	130	150
10	2-Chlorophenol							47	80	91
10	1,3-Dichlorobenzene									
10	1,4-Dichlorobenzene									
10	1,2-Dichlorobenzene									
10	2-Methylphenol									
10	bis(2-Chloroisopropyl) ether									
10	4-Methylphenol									
10	N-Nitroso-dl-n-propylamine							51	100	120
10	Hexachloroethane									
10	Nitrobenzene									
10	Isophorone									
10	2-Nitrophenol									
10	2,4-Dimethylphenol									
10	bis(2-Chloroethoxy)methane							48	81	97
10	2,4-Dichlorophenol									
10	1,2,4-Trichlorobenzene									
10	Naphthalene									
10	4-Chloroaniline									

CRQL = Contract Required Quantitation Limit

SEE NARRATIVE FOR CODE DEFINITIONS  
revised 07/92

DATA SUMMARY FORM: B N A S 2

WATER SAMPLES  
(µg/L)

Site Name: Walmere Road-Johnson Property  
 Case #: 9301314 Sampling Date(s): 6-23-93

To calculate sample quantitation limit:  
(CRQL * Dilution Factor)

CRQL	COMPOUND	Sample No. Dilution Factor Location	SW-1 1.0	SW-2 1.0	SW-3 1.0	SBLKW1 1.0	SBLKW2 1.0	MSP2 1.0	SW-IMS 1.0	SW-IMS2 1.0
10	Hexachlorobutadiene									
10	4-Chloro-3-methylphenol									
10	2-Methylnaphthalene									
10	Hexachlorocyclopentadiene									
10	2,4,6-Trichlorophenol									
25	2,4,5-Trichlorophenol									
10	2-Chloronaphthalene									
25	2-Nitroaniline									
10	Dimethylphthalate									
10	Acenaphthylene									
10	2,6-Dinitrotoluene									
25	3-Nitroaniline								98	110
10	Acenaphthene									
25	2,4-Dinitrophenol								79	140
25	4-Nitrophenol									
10	Dibenzofuran									
10	2,4-Dinitrotoluene									
10	Diethylphthalate									
10	4-Chlorophenyl-phenylether									
10	Fluorene									
25	4-Nitroaniline									
25	4,6-Dinitro-2-methylphenol									

SEE NARRATIVE FOR CODE DEFINITIONS  
revised 07/92

CRQL = Contract Required Quantitation Limit

DATA SUMMARY FORM: B N A S 3

WATER SAMPLES  
(µg/L)

Site Name: Walmore Road - Johnson Property

Case #: 9301314 Sampling Date(s): 6-23-93

To calculate sample quantitation limit:  
(CRQL * Dilution Factor)

CRQL	COMPOUND	SW-1 1.0	SW-2 1.0	SW-3 1.0	SBLKW1 1.0	SBLKW2 1.0	MSBZ 1.0	SW-1MS 1.0	SW-1MSD 1.0
10	N-Nitrosodiphenylamine								
10	4-Bromophenyl-phenylether								
10	Hexachlorobenzene								
25	Pentachlorophenol						80	120	180
10	Phenanthrene								
10	Anthracene								
10	Carbazole								
10	Di-n-butylphthalate								
10	Fluoranthene							110	110
10	Pyrene								
10	Butylbenzylphthalate								
10	3,3'-Dichlorobenzidine								
10	Benzo(a)anthracene								
10	Chrysene			3 J			1 J	3 J	3 J
10	Bis(2-Ethylhexyl)phthalate	1 J							
10	Di-n-octylphthalate								
10	Benzo(b)fluoranthene								
10	Benzo(k)fluoranthene								
10	Benzo(a)pyrene								
10	Indeno(1,2,3-cd)pyrene								
10	Di-benz(a,h)anthracene								
10	Benzo(g,h,i)perylene								

SEE NARRATIVE FOR CODE DEFINITION  
revised 07/9

CRQL = Contract Required Quantitation Limit

DATA SUMMARY FORM: B N A S 1

SOIL SAMPLES  
(µg/Kg)

Site Name: Walmore Road - Johnson Property

Case #: 9301.314 Sampling Date: 6-23-93

To calculate sample quantitation limit  
(CRQL * Dilution Factor) / ((1 - % moisture) / 100)

CRQL	COMPOUND	Sample No. Dilution Factor % Moisture Location	SED-1	SED-2	SED-3	SS-1	SS-2	SS-3	SBLKSI	MSBI
330	Phenol		1.0	1.0	1.0	1.0	1.0	1.0		
330	bis(2-Chloroethyl) ether		14	24	27	22	19	23		1.0
330	2-Chlorophenol									
330	1,3-Dichlorobenzene									
330	1,4-Dichlorobenzene									
330	1,2-Dichlorobenzene									
330	2-Methylphenol									1200
330	bis(2-Chloroisopropyl) ether									1400
330	4-Methylphenol									1300
330	N-Nitroso-di-n-propylamine									
330	Hexachloroethane									940
330	Nitrobenzene									
330	Isophorone									
330	2-Nitrophenol									
330	2,4-Dimethylphenol									
330	bis(2-Chloroethoxy)methane									
330	2,4-Dichlorophenol									
330	1,2,4-Trichlorobenzene									1400
330	Naphthalene									
330	4-Chloroaniline									

SEE NARRATIVE FOR CODE DEFINITION revised 07/

CRQL = Contract Required Quantitation Limit

DATA SUMMARY FORM: B N A S 2

SOIL SAMPLES  
(µg/Kg)

Site Name: Walmore Road - Johnson Property

Case #: 9201.314 Sampling Date(s): 6-23-93

To calculate sample quantitation limit  
(CRQL * Dilution Factor) / ((100 - % moisture) / 100)

CRQL	COMPOUND	Sample No. Dilution Factor % Moisture Location	SED-1	SED-2	SED-3	SS-1	SS-2	SS-3	SBLKSI	MSBI
330	Hexachlorobutadiene		1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
330	4-Chloro-3-methylphenol		14	24	27	22	19	23		
330	2-Methylnaphthalene									
330	Hexachlorocyclopentadiene									
330	2,4,6-Trichlorophenol									
800	2,4,5-Trichlorophenol									
330	2-Chloronaphthalene									
800	2-Nitroaniline									1,400
330	Dimethylphthalate									
330	Acenaphthylene									
330	2,6-Dinitrotoluene									1,500
800	3-Nitroaniline									
330	Acenaphthene									
800	2,4-Dinitrophenol									1,400
800	4-Nitrophenol									1,100
330	Dibenzofuran									
330	2,4-Dinitrotoluene			630			98 J			
330	Diethylphthalate									
330	4-Chlorophenyl-phenylether									
330	Fluorene									
800	4-Nitroaniline									
800	4,6-Dinitro-2methylphenol									

CRQL = Contract Required Quantitation Limit

SEE NARRATIVE FOR CODE DEFINIT.  
revised 0

DATA SUMMARY FORM: B N A S 3

SOIL SAMPLES  
(µg/Kg)

Site Name: Washington Road-Johnson Property

Case #: 9301-314 Sampling Date(s): 6-23-93

To calculate sample quantitation limit:  
(CRQL * Dilution Factor) / ((100 - % moisture)/100)

CRQL	COMPOUND	Sample No. Dilution Factor & Moisture Location	SED-1	SED-2	SED-3	SS-1	SS-2	SS-3	SBUS-1	MSBI
330	M-Nitrosodiphenylamine		1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
330	4-Bromophenyl-phenylether		14	24	27	22	19	23		
330	Hexachlorobenzene									
800	Pentachlorophenol	56 J	110 J	250 J	49 J					
330	Phenanthrene			48 J						
330	Anthracene									
330	Carbazole									
330	Di-n-butylphthalate							74 J		
330	Fluoranthene	150 J	140 J	420 J	96 J		46 J	67 J		1,600
330	Pyrene	150 J	140 J	340 J	81 J					
330	Butylbenzylphthalate			54 J						
330	3,3'-Dichlorobenzidine									
330	Benzo(a)anthracene	120 J	87 J	190 J	50 J			54 J		
330	Chrysene	150 J	78 J	210 J	64 J					
330	bis(2-Ethylhexyl)phthalate									
330	Di-n-octylphthalate	230 J	100 J	250 J	77 J		52 J	130 J		
330	Benzo(b)fluoranthene	86 J		85 J	39 J			43 J		
330	Benzo(k)fluoranthene	140 J	70 J	180 J	49 J			200 J		
330	Benzo(a)pyrene	170 J	70 J	150 J	59 J			57 J		
330	Indeno(1,2,3-cd)pyrene	55 J		54 J						
330	Di-benz(a,h)anthracene	140 J	69 J	130 J	55 J			240 J		
330	Benzo(g,h)perylene									

SEE NARRATIVE FOR CODE DEFINITION  
revised 07/93

CRQL = Contract Required Quantitation Limit

DATA SUMMARY FORM: B N A S 1

SOIL SAMPLES  
(µg/Kg)

Site Name: Walmore Road-Johnson Property

Case #: 9301.314 Sampling Date: 6-23-93

To calculate sample quantitation limit  
(CRQL * Dilution Factor) / ((1 - % moisture)/100)

CRQL	COMPOUND	Sample No. Dilution Factor % Moisture Location	SS-3MS	SS-3MSD										
330	Phenol		1.0	1.0										
330	bis(2-Chloroethyl)ether		2.3	2.3										
330	2-Chlorophenol													
330	1,3-Dichlorobenzene													
330	1,4-Dichlorobenzene													
330	1,2-Dichlorobenzene													
330	2-Methylphenol													
330	bis(2-Chloroisopropyl)ether													
330	4-Methylphenol													
330	N-Nitroso-di-n-propylamine													
330	Hexachloroethane													
330	Nitrobenzene													
330	Isophorone													
330	2-Nitrophenol													
330	2,4-Dimethylphenol													
330	bis(2-Chloroethoxy)methane													
330	2,4-Dichlorophenol													
330	1,2,4-Trichlorobenzene													
330	Naphthalene													
330	4-Chloroaniline													

CRQL = Contract Required Quantitation Limit

SEE NARRATIVE FOR CODE DEFINITIONS  
revised 07/

DATA SUMMARY FORM: B N A S 2

SOIL SAMPLES  
(µg/Kg)

Site Name: Walmore Road - Johnson Property  
 Case #: 9301314 Sampling Date(s): 6-23-93

To calculate sample quantitation limit:  
 (CRQL * Dilution Factor) / ((100 - % moisture)/100)

CRQL	COMPOUND	Sample No. Dilution Factor % Moisture Location	SS-3MS	SS-3MSD						
330	Hexachlorobutadiene		1.0	55-3MSD						
330	4-Chloro-3-methylphenol		2.3	1.0						
330	2-Methylnaphthalene			2.3						
330	Hexachlorocyclopentadiene									
330	2,4,6-Trichlorophenol		1100	1500						
800	2,4,5-Trichlorophenol									
330	2-Chloronaphthalene									
800	2-Nitroaniline									
330	Dimethylphthalate									
330	Acenaphthylene		1500	1700						
330	2,6-Dinitrotoluene									
800	3-Nitroaniline									
330	Acenaphthene									
800	2,4-Dinitrophenol		1300	1900						
800	4-Nitrophenol									
330	Dibenzofuran		900	1200						
330	2,4-Dinitrotoluene									
330	Diethylphthalate									
330	4-Chlorophenyl-phenylether									
330	Fluorene									
800	4-Nitroaniline									
800	4,6-Dinitro-2methylphenol									

SEE NARRATIVE FOR CODE DEFINITIVE revised 07/

CRQL = Contract Required Quantitation Limit



DATA SUMMARY FORM: B N A S 3

SOIL SAMPLES  
(µg/Kg)

Site Name: Walmore Road-Johnson Property

Case #: 9301314 Sampling Date(s): 6-23-93

To calculate sample quantitation limit:  
(CRQL * Dilution Factor) / ((100 - % moisture)/100)

CRQL	COMPOUND	Sample No. Dilution Factor & Moisture Location	55-3MS	55-3MSD																	
330	N-Nitrosodiphenylamine		1.0	1.0																	
330	4-Bromophenyl-phenylether		23	23																	
330	Hexachlorobenzene																				
800	Pentachlorophenol		420 J	1100																	
330	Phenanthrene																				
330	Anthracene																				
330	Carbazole																				
330	Di-n-butylphthalate		80 J	75 J																	
330	Fluoranthene		1800	1900																	
330	Pyrene																				
330	Butylbenzylphthalate																				
330	3,3'-Dichlorobenzidine																				
330	Benzo(a)anthracene		51 J	50 J																	
330	Chrysene																				
330	bis(2-Ethylhexyl)phthalate																				
330	Di-n-octylphthalate																				
330	Benzo(b)fluoranthene		110 J	140 J																	
330	Benzo(k)fluoranthene		43 J	35 J																	
330	Benzo(e)pyrene																				
330	Indeno(1,2,3-cd)pyrene		180 J	210 J																	
330	Di(benz(a,h)anthracene		46 J	50 J																	
330	Benzo(g,h)perylene		220 J	2100 J																	

SEE NARRATIVE FOR CODE DEFINITION revised 07/

CRQL = Contract Required Quantitation Limit

WATER SAMPLES  
(µg/L)

Site Name: Walmore Road-Johnson Property

Case #: 9301-314 Sampling Date(s): 6-23-93

To calculate sample quantitation limits:  
(CRQL * Dilution Factor)

CRQL	COMPOUND	Sample No. Dilution Factor Location	SW-1 1.0	SW-2 1.0	SW-3 1.0	PBLKWI 1.0	MSBI 1.0	SW-ZMS 1.0	SW-ZMSD 1.0
0.05	alpha-BHC								
0.05	beta-BHC								
0.05	delta-BHC						0.57	0.97	1.1
0.05	gamma-BHC (Lindane)					0.075	0.48	0.81	0.93
0.05	Heptachlor						0.40	0.47	0.74
0.05	Aldrin								
0.05	Heptachlor Epoxide						1.1	1.9	2.0
0.05	Endosulfan I								
0.10	Dieldrin						1.0	1.9	1.9
0.10	4,4'-DDE								
0.10	Endrin								
0.10	Endosulfan II								
0.10	4,4'-DDD								
0.10	Endosulfan Sulfate						1.2	2.1	2.2
0.10	4,4'-DDT								
0.50	Methoxychlor								
0.10	Endrin Ketone								
0.10	Endrin Aldehyde								
0.05	alpha-Chlordane								
0.05	gamma-Chlordane								
5.0	Toxaphene								
1.0	Aroclor-1016								
2.0	Aroclor-1221								
1.0	Aroclor-1232								
1.0	Aroclor-1242								
1.0	Aroclor-1248								
1.0	Aroclor-1254								
1.0	Aroclor-1260								

CRQL = Contract Required Quantitation Limit

SEE NARRATIVE FOR CODE DEFINITIONS  
revised 07/

DATA SUMMARY FORM: PESTICIDES AND PCB'S

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SOIL SAMPLES  
(µg/Kg)

Site Name: Walpole Road - Johnson Property

Case #: 9201314 Sampling Date(s): 6-23-93

To calculate sample quantitation limit  
(CRQL * Dilution Factor) / ((100 - % moisture)/100)

CRQL	COMPOUND	Sample No.		SED-1	SED-2	SED-3	SS-1	SS-2	SS-3	PBLKS1	PBLKS2	SS-3MS
		Dilution Factor	% Moisture									
1.7	alpha-BHC	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
1.7	beta-BHC	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
1.7	delta-BHC	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
1.7	gamma-BHC (Lindane)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
1.7	Heptachlor	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
1.7	Aldrin	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
1.7	Heptachlor Epoxide	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
1.7	Endosulfan I	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
3.3	Dieldrin	3.9	JP	3.9	JP	3.9	JP	1.5	J	2.9	J	3.2
3.3	4,4'-DDE											3.1
3.3	Endrin											3.1
3.3	Endosulfan II											40
3.3	4,4'-DDD											
3.3	Endosulfan Sulfate											
3.3	4,4'-DDT	2.0	JP	2.0	JP	2.0	JP	1.7	JP	1.7	JP	
17	Methoxychlor											
3.3	Endrin Ketone											
3.3	Endrin Aldehyde											
1.7	alpha-Chlordane											
1.7	gamma-Chlordane											
172	Toxaphene											
33	Aroclor-1016											
67	Aroclor-1221											
33	Aroclor-1232											
33	Aroclor-1242											
33	Aroclor-1248											
33	Aroclor-1254											
33	Aroclor-1260											

CRQL = Contract Required Quantitation Limit  
SEE NARRATIVE FOR CODE DEFINIT revised 0

Site Name Walthore Road - Johnson Property

SOIL SAMPLES  
(µg/Kg)

Case #: 201314 Sampling Date(s): 6-23-93

To calculate sample quantitation limit:  
(CRQL * Dilution Factor) / ((100 - % moisture) / 100)

CRQL	COMPOUND	Sample No. Dilution Factor % Moisture Location									
		SS-3MSD									
		1.0									
		23									
1.7	alpha-BHC										
1.7	beta-BHC										
1.7	delta-BHC										
1.7	gamma-BHC (Lindane)	13									
1.7	Heptachlor	18									
1.7	Aldrin	12	P								
1.7	Heptachlor Epoxide										
1.7	Endosulfan I										
3.3	Dieldrin	31									
3.3	4,4'-DDE	31	J								
3.3	Endrin	31									
3.3	Endosulfan II										
3.3	4,4'-DDD										
3.3	Endosulfan Sulfate										
3.3	4,4'-DDT	42									
17	Methoxychlor										
3.3	Endrin Ketone										
3.3	Endrin Aldehyde										
1.7	alpha-Chlordane										
1.7	gamma-Chlordane										
170	Toxaphene										
33	Aroclor-1016										
67	Aroclor-1221										
33	Aroclor-1232										
33	Aroclor-1242										
33	Aroclor-1248										
33	Aroclor-1254										
33	Aroclor-1260										

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SEE NARRATIVE FOR CODE DEFINITION revised 07/

CRQL = Contract Required Quantitation Limit

DATA SUMMARY FORM: I N O R G A N I C S

WATER SAMPLES  
(µg/L)

Site Name: Walmore Road - Johnson Property

Case #: 9301.314 Sampling Date(s): 23 JUN 1993

+Due to dilution, sample quantitation limit is affected.  
See dilution table for specifics.

CRDL	ANALYTE	Sample No.			
		Dilution Factor	SW-1	SW-2	SW-3
200	Aluminum	471			
60	Antimony		279		694
10	Arsenic		1.1		1.1
200	Barium	58.5	58.6		59.2
5	Beryllium				
5	Cadmium				
5000	Calcium	110,000	113,000		121,000
10	Chromium				13.6
50	Cobalt				
25	Copper	2.7	2.5		2.5
100	Iron	193	290		891
3	Lead	1.7	1.2		1.8
5000	Magnesium	33,700	34,300		34,100
15	Manganese	37.8	40.8		58.9
0.2	Mercury				
40	Nickel				10.9
5000	Potassium	1,690	3,370		8,140
5	Selenium				1.0
10	Silver				
5000	Sodium	35,100	36,300		35,200
10	Thallium				
50	Vanadium				
20	Zinc	612	588		575
10	Cyanide				

SEE NARRATIVE FOR CODE DEFINITIONS  
revised 07/90

CRDL = Contract Required Detection Limit

DATA SUMMARY FORM: I N O R G A N I C S

SOIL SAMPLES  
(mg/Kg)

Site Name: Walmore Road - Johnson Property  
 Case #: 9301.314 Sampling Date(s): 23 Jun 1993

+Due to dilution, sample quantitation limit is affected.  
 See dilution table for specifics.

CRDL	Sample No. Dilution Factor % Solids Location	SED-1		SED-2		SED-3		SS-1		SS-2		SS-3		SS-3 MS		SS-3 MSD		MSB
		Value	Value	Value	Value	Value	Value	Value	Value	Value	Value	Value	Value	Value	Value	Value	Value	
40	Aluminum	2,100	1,850	2,500	10,000	12,100	5,350	76.0	5,830	305								
12	Antimony									244								
2	Arsenic	1.9	2.1	2.3	5.0	5.1	7.0	15.1	6.4	822								
40	Barium	18.9	26.4	57.3	72.0	100	72.6	65.6	77.4	5.4								
1	Beryllium				0.43	0.81	0.54	14.5	0.58	17.8								
1	Cadmium		1.3	2.0	0.85	0.85		14.3	0.78	41.7								
1000	Calcium	57,200	76,100	67,600	2,370	2,710	3,320	80.4	3430	170,000								
2	Chromium	9.3	44	9.4	16.3	22.5	13.0	14.8	74.4	101								
10	Cobalt	5.9	5.3	5.5	12.1	18.8	11.5	134	14.0	139								
5	Copper	11.9	7.9	10.3	20.0	20.9	33.5	32.6	32.6	6460								
20	Iron	15,400	7,850	8,810	20,000	24,600	18,400	19,200	19,200	21,700								
0.6	Lead	10.5	28.4	28.4	38.4	61.9	67.7	57.9	65.3	239								
1000	Magnesium	16,100	39,400	34,200	3,290	4,220	1,570	1240	1,740	119,000								
3	Manganese	440	668	400	351	576	912	1050	1,050	199								
0.2	Mercury		6.9	9.1	0.11	0.12	0.38	0.78	0.36	9.6								
8	Nickel	9.1	292	389	19.8	23.8	14.1	154	13.9	59.3								
1000	Potassium	267	105	140	772	1,150	1,160	2.4	1,240	65.6								
1	Selenium					0.45	0.62	18.2	0.28	33.0								
2	Silver							88.2	0.79	17.6								
1000	Sodium	105	127	140				13.0	88.2	92.9								
2	Thallium				28.4	35.1	20.1	161	0.26	45.4								
10	Vanadium	8.2	7.1	9.0	64.2	61.7	66.4	235	21.8	65.3								
4	Zinc	319	583	872	6.0	6.0	6.0	67.1	67.1	195								
2	Cyanide							32.3	32.3									

SEE NARRATIVE FOR CODE DEFINITIO  
 revised 07/

CRDL = Contract Required Detection Limit

DATA SUMMARY FORM: TENTATIVELY IDENTIFIED COMPOUNDS

Site Name: WALMORE ROAD - JOHNSON PROP SOIL SAMPLES (ug/Kg)

Case #: Q301.2/4 Sampling Date: 6-23-93

To calculate sample quantitation limit:  
(CRQL * Dilution Factor) / ((1 - % moisture)/100)

CRQL	Sample No. Dilution Factor % Moisture Location	SS-1	SS-2	SS-3	SED-1	SED-2	SED-3	SELSI
		1.0	1.0	1.0	1.0	1.0	1.0	1.0
		2.2	1.9	2.3	1.4	2.4	2.7	BLANK
		46 JN						
	ETHANOL (C ₂ H ₅ O)		48 J					
	UNKNOWN HYDROCARBON		100 J					
	UNKNOWN HYDROCARBON	2600 J		2000 J	4000 J	37000 J	12000 J	45000 JN
	UNKNOWN	17000 JN						
	ALIPHATIC CONDENSATION PRODUCT (C ₁₂ -C ₂₄ -2.2 CAS)							
	UNKNOWN				390 BJ	660 BJ	250 BJ	1000 J
	"				120 J	220 J		
	"	1100 BJ	1500 BJ	1400 BJ	1600 BJ	1000 BJ	480 BJ	1200 J
	"	1000 BJ	1500 BJ	1000 BJ	1700 BJ	960 BJ	910 BJ	1000 J
	"	380 BJ	740 BJ	880 J	890 BJ	170 BJ	430 J	380 J
	"		180 BJ	246 BJ	190 BJ	170 BJ	230 BJ	130 J
	"				140 BJ		250 BJ	170 J
	"				210 BJ			200 J
	"				210 BJ	170 BJ		
	"				250 BJ	240 BJ	200 BJ	220 J
	"		310 BJ	520 BJ	210 J	680 J	550 J	
	"		680 J	970 J	310 BJ	240 BJ		220 J
	UNKNOWN HYDROCARBON		330 BJ	560 J				
	UNKNOWN				140 J			130 J
	"				170 BJ			
	"	1200 J	940 J	1600 J	460 J	1100 J	570 J	
	UNKNOWN HYDROCARBON				790 J	320 J		83 J
	UNKNOWN	400 J		650 BJ	210 BJ			
	"	1700 J	610 J	710 J	190 J	740 J	480 J	
	"	400 J			280 J	250 J		
	"							

CRQL = Contract Required Quantitation Limit

DATA SUMMARY FORM: TENTATIVELY IDENTIFIED COMPOUNDS

SOIL SAMPLES (ug/kg)

Site Name: 10 PALMORE ROAD - JOHNSON PROPERTY  
 Case #: 9301-314 Sampling Date: 6-23-93

To calculate sample quantitation limit:  
 (CRQL = Dilution Factor) / (1 - % moisture/100)

CRQL	Sample No. Dilution Factor % Moisture Location	SS-1	SS-2	SS-3	SED-1	SED-2	SED-3	SOAKS1	COMPOUND	
									CRQL	CRQL
3.91	UNKNOWN	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
4.05	"	72	19	23	14	24				3000 J
8.19	"									
31.64	UNKNOWN HYDROCARBON					200 J				
36.79	UNKNOWN					260 J				
37.16	UNKNOWN					130 J				130 J
4.82	"									
4.39	"									
17.54	"									
21.91	"									
24.02	"									
25.95	"									
31.61	"	380 J								
33.01	UNKNOWN OXI. HYDROCARBON	790 J								
24.90	"	1100 J	610 J	1300 J						
36.68	"	510 J	490 J	690 J						
39.01	UNKNOWN	700 J								
39.43	"	600 J								
40.29	"	640 J								
40.27	"	890 J	610 J							
41.27	"	2600 J	1400 J							
41.47	"	320 J								
47.41	"	1100 J	550 J							
31.61	UNKNOWN OXI. HYDROCARBON		290 J							

CRQL = Contract Required Quantitation Limit





DATA SUMMARY FORM: TENTATIVELY IDENTIFIED COMPOUNDS

Site Name: WALMORE ROAD - JOHNSON PROPERTY WATER SAMPLES (ug/L)  
 Case #: 9301-314 Sampling Date: 6-23-93  
 To calculate sample quantitation limit: (CRQL * Dilution Factor)

CRQL	Sample No. Dilution Factor Location	SW-1	SW-2	SW-3	SBKWL1	SBKWL2	COMPOUND
		1.0	1.0	1.0	1.0	1.0	
5.49	LINKNOWN	2 J					
5.77	"	5 J					
6.30	"	6 J					
7.90	"	4 J					
11.01	"	41 J					
12.35	"	6 J					
12.78	"	18 J					
13.70	UNKNOWN OXY. HYDROCARBON	38 J					
14.03	LINKNOWN	2 J					
15.11	"	8 J					
15.41	"	10 J					
28.00	"	4 J					
29.82	"	2 J					
23.42	"	16 J					
53.84	"	180 J					
34.58	"	220 J	5 J	7 J			
12.61	"		2 J	2 J			
13.13	"			13 J			
2.50	"			13 J			
3.11	"			4 J			
5.96	"			2 J			
12.05	"			2 J			
13.21	"			2 J			
23.75	"				4 J		

CRQL = Contract Required Quantitation Limit

DATA SUMMARY FORM: VOLATILES I									
Site Name: <u>WALMORE ROAD - JOHNSON PROP.</u>		SOIL SAMPLES							
Job Number: <u>9202-101</u>		Sampling Date(s): <u>9-20-93</u>							
CRQL	Compound	Sample Number:		B3-Z		B4-Z		VBLSI	
		Dilution Factor	% Moisture	1.0	17	1.0	15	1.0	
		Location:		5-6'		4-5'		BLANK	
10	Chloromethane								
10	Bromomethane								
10	Vinyl chloride								
10	Chloroethane								
10	Methylene chloride	3 B				2 B		1 J	
10	Acetone	55 B		72 B		5 B		5 J	
10	Carbon disulfide								
10	1,1-Dichloroethane								
10	1,1-Dichloroethane								
10	Total 1,2-dichloroethane								
10	Chloroform								
10	1,2-Dichloroethane								
10	2-Butanone	5 J		13					
10	1,1,1-Trichloroethane								
10	Carbon tetrachloride								
10	Bromodichloromethane								

To calculate sample quantitation limit:  
 (CRQL * Dilution Factor) / ((100 - % moisture)/100)

CRQL = Contract Required Quantitation Limit.



**DATA SUMMARY FORM: VOLATILES 1**

Site Name: Walmore Rd - Johnson Property      WATER SAMPLES  
 Job Number: 9302-101 Sampling Date(s): 9-20-93      (µg/L)

To calculate sample quantitation limit  
(CRQL * Dilution Factor)

CRQL	Compound	Sample Number:	STORAGE BLK	VOL/KM/L																
		Dilution Factor:																		
		% Moisture:																		
		Location:																		
10	Chloromethane																			
10	Bromomethane																			
10	Vinyl chloride																			
10	Chloroethane																			
10	Methylene chloride		1	B	2	J														
10	Acetone																			
10	Carbon disulfide																			
10	1,1-Dichloroethene																			
10	1,1,1-Trichloroethane																			
10	Total 1,2-dichloroethene																			
10	Chloroform																			
10	1,2-Dichloroethane																			
10	2-Butanone																			
10	1,1,1-Trichloroethane																			
10	Carbon tetrachloride																			
10	Bromodichloromethane																			



DATA SUMMARY FORM: B N A S I										
Site Name: <u>WALMOR ROAD - JOHNSON PROP.</u>		SOIL SAMPLES		To calculate sample quantitation limit: (CRQL * Dilution Factor) / ((1 - % moisture)/100)						
Job Number: <u>9302-101</u>		Sampling Date(s): <u>9.20.93</u>								
CRQL	Compound	Sample Number:	Dilution Factor:	% Moisture:	Location:	B3-2	B6-2	SBKSI	B3-2 MS	B3-2 MSD
330	Phenol	B3-1	1.0	17	5-6'	1.0	50/200	1.0		
330	bin(2-Chloroethyl)ether	1.0	15	15	4-5'					
330	2-Chlorophenol	2-3.5'						BLANK	MATRIX SPIKE	MATRIX SPIKE DUTELATE
330	1,3-Dichlorobenzene								2270	2108
330	1,4-Dichlorobenzene								2030	1930
330	1,2-Dichlorobenzene								1376	1229
330	2-Methylphenol									
330	2,2'-oxybis(1-chloropropane)									
330	4-Methylphenol								1671	1556
330	N-Nitroso-di-n-propylamine									
330	Hexachloroethane									
330	Nitrobenzene									
330	Isophorone									
330	2-Nitrophenol									
330	2,4-Dimethylphenol									
330	bis(2-Chloroethoxy)methane									
330	2,4-Dichlorophenol								1669	1439
330	1,2,4-Trichlorobenzene						8500 J			
330	Naphthalene									
330	4-Chloroaniline									

CRQL = Contract Required Quantitation Limit.

**DATA SUMMARY FORM: B N A S 2**

Site Name: MALMORE ROAD-JOHNSON PROP. SOIL SAMPLES

Job Number: 9302-101 Sampling Date(s): 9-20-93 (CRQL * Dilution Factor) / ((100 - % moisture)/100)

CRQL	Compound	Location	% Moisture	Dilution Factor	Sample Number	B3-2	B6-Z	SBUKSI	B3-2 MS	B3-2 MSD
						B2-1				
						1.0	50/200	1.0		
						15	15			
						2-3-5'	4-5'	BLANK	MATRIX SPIKE	MATRIX SPIKE DUPLICATE
330	Hexachlorobutadiene									
330	4-Chloro-3-methylphenol									
330	2-Methylnaphthalene						3400 J		2398	2192
330	Hexachlorocyclopentadiene									
330	2,4,6-Trichlorophenol									
800	2,4,5-Trichlorophenol									
330	2-Chloronaphthalene									
800	2-Nitroniline									
330	Dimethylphthalate									
330	Acenaphthylene									
330	2,6-Dinitrotoluene									
800	3-Nitroaniline						86,000		1851	1690
330	Acenaphthene									
800	2,4-Dinitrophenol								2072	2856
800	4-Nitrophenol									
330	Dibenzofuran						92,000 J			
330	2,4-Dinitrotoluene								1867	1789
330	Diethylphthalate									
330	4-Chlorophenyl-phenylether									
330	Fluorene						23,000 J			
800	4-Nitroniline									
800	4,6-Dinitro-2-methylphenol									

CRQL = Contract Required Quantitation Limit.



DATA SUMMARY FORM: B N A S 3									
SOIL SAMPLES									
To calculate sample quantitation limit: (CRQL * Dilution Factor) / ((100 - % moisture)/100)									
CRQL	Compound	Location	B2-1	B3-2	B6-2	SBLKSI	B3-2 MS	B3-2 MSD	
		Sample Number:	B2-1	B3-2	B6-2	SBLKSI	B3-2 MS	B3-2 MSD	
		Dilution Factor:	1.0	1.0	50/200	1.0			
		% Moisture:	15	17	15				
		Location:	2-3.5'	5-6'	4-5'	BLANK	MATRIX SPIKE	MATRIX SPIKE DUPLICATE	
330	N-Nitrosodiphenylamine								
330	4-Bromophenyl-phenylether								
330	Hexachlorobenzene						2374	2328	
800	Pentachlorophenol								
330	Phenanthrene		230 J		110,000 D				
330	Anthracene				75,000 J				
330	Carbazole				51,000 J				
330	Di-n-butylphthalate		92 B			41 J			
330	Fluoranthene		260 J		190,000 D				
330	Pyrene		160 J		170,000 D		1851	1578	
330	Butylbenzylphthalate								
330	3,3'-Dichlorobenzidine								
330	Benzo(a)anthracene								
330	Chrysene								
330	bis(2-Ethylhexyl)phthalate					25 J			
330	Di-n-octylphthalate								
330	Benzo(b)fluoranthene		74 J	180 J	180,000 D				
330	Benzo(k)fluoranthene		32 J	46 J	150,000				
330	Benzo(a)pyrene		42 J	81 J	150,000 D				
330	Indeno(1,2,3-cd)pyrene		38 J	110 J	84,000 D				
330	Dibenz(a,h)anthracene				75,000 J				
330	Benzo(g,h,i)perylene		35 J	100 J	74,000 J				

Site Name: WALMORE ROAD-JOHNSON PROF.  
 Job Number: 7302-101 Sampling Date(s): 9-20-93

DATA SUMMARY FORM: PESTICIDES AND PCBs

Site Name: WAMORE ROAD - JOHNSON PROP.

SOIL SAMPLES  
(µg/kg)

To calculate sample quantitation limits:  
(CRQL * Dilution Factor) / ((100 - % moisture)/100)

Job Number: 9302.101 Sampling Date(s): 7.20.93

CRQL	Compound	Sample Number	B2-1	B3-2	B6-2	BKUSI			
		Dilution Factor:	1.0	1.0	10	1.0			
		% Moisture:	15	17	15				
		Location:	2-3.5'	5-6'	4-5'	BLANK			
1.7	alpha-BHC								
1.7	beta-BHC								
1.7	delta-BHC								
1.7	gamma-BHC (Lindane)								
1.7	Heptachlor								
1.7	Aldrin								
1.7	Heptachlor epoxide								
1.7	Endosulfan I								
3.3	Dieldrin								
3.3	4,4'-DDE		6.7		40 J				
3.3	Endrin								
3.3	Endosulfan II								
3.3	4,4'-DDD		7.8		39 J				
3.3	Endosulfan sulfate								
3.3	4,4'-DDT				55 J				
17	Methoxychlor				1,200				
3.3	Endrin ketone				180 J				
3.3	Endrin Aldehyde				67 J				
1.7	alpha-Chlordane								
1.7	gamma-Chlordane								
170	Toxaphene								
33	Aroclor-1016								
62	Aroclor-1221								

CRQL = Contract Required Quantitation Limit.



DATA SUMMARY FORM: INORGANICS									
SOIL SAMPLES (mg/kg)									
CRQL	Compound	Location	B2-1	B3-2	B6-2				
		Sample Number	Dilution Factor	% Moisture					
40	Aluminum	11,800	1.0	15	11,300	1.0	B6-2	6,230	
12	Antimony	5.6	4.4		4.4			8.1	
2	Arsenic	118	79.2		79.2			67.7	
40	Barium	0.60	0.58		0.58			0.46	
1	Beryllium	0.79	1.1		1.1			4.2	
1	Cadmium	41,000	3,440		3,440			24,500	
1000	Calcium	18.2	16.2		16.2			38.8	
2	Chromium	11.9	14.1		14.1			33.1	
10	Cobalt	19.4	39.1		39.1			149	
5	Copper	18,1600	17,700		17,700			77,300	
20	Iron	30.6	22.7		22.7			92.8	
0.6	Lead	21,900	3,360		3,360			4,880	
1000	Magnesium	504	743		743			468	
3	Manganese							2.9	
0.2	Mercury	24.6	20.0		20.0			67.2	
8	Nickel	1190	1100		1100			0.36	
1000	Potassium								
1	Selenium								
2	Silver								
1000	Sodium	332	174		174			337	
2	Thallium							0.54	
10	Vanadium	25.0	26.4		26.4			53.2	
4	Zinc	117	141		141			249	
2	Cyanide								

Site Name: WALMORE ROAD - JONSSON PROP.

Job Number: 9302-101 Sampling Date(s): 9-20-93

Due to dilution, sample quantitation limit is affected.  
See dilution table for specifics.

DATA SUMMARY FORM: EP TOX METALS														
CRQL	Compound	Sample Numbers	Dilution Factor:	% Moisture:	Location:	SOIL SAMPLES <i>(µg/kg)</i> <i>(MG/L in extract)</i>								Due to dilution, sample quantitation limit is affected. See dilution table for specifics.
						B1-2	B2-2	B3-1	B4-1	B4-2	B5-1	B5-2	B6-1	
			1.0											
		5-5-3', 4', 7-7-3'	1.0	4-5-5'	1-3'	4-5'	6-7'	1-3'				4-5'	1-2'	
	ARSENIC	826		305	23.3	645	382	601			960		761	
	BARIUM	16.0		6.2		10.2	10.1				3.2		2.7	
	CADMIUM	13.9		14.4										
	LEAD	169												
	MERCURY													
	SELENIUM		UJ	5.8	UJ	UJ	UJ	UJ						UJ
	SILVER													

Site Name: WALMORE ROAD - JOHNSON PROP.  
 Job Number: 7302-101 Sampling Date(s): 9-20-93

DL = Detection Limit.

DATA SUMMARY FORM: RCRA CHARACTERISTICS

SOIL SAMPLES

Site Name: WALMORE ROAD - JOHNSON PROP.

Job Number: 1302-101 Sampling Date(s): 9-20-93

Due to dilution, sample quantitation limit is affected.  
See dilution table for specifics.

CRQL	Compound	Sample Number	Dilution Factor	% Moisture	Location	B1-2		B2-2		B3-1		B4-1		B4-2		B5-1		B5-2		B6-1		
						5-5.3' + 7-7.3'	4-5-5'	1-3'	4-5'	6-7'	1-3'	4-5'	85	85	85	85						
	SOLIDS - Total (%)	84				81		84		83		85		85		85		85		85		85
	CYANIDE - Total (mg/kg)	2.3				0.85		0.75														1.4
	SULFIDE - Total (mg/kg)	47				100		55		87		23										
	PH	7.8				7.6		8.0		7.7		8.6										6.9
	IGNITABILITY	No Flash @ 140F				No Flash @ 140F		No Flash @ 140F		No Flash @ 140F		No Flash @ 140F		No Flash @ 140F		No Flash @ 140F		No Flash @ 140F		No Flash @ 140F		No Flash @ 140F

DL = Detection Limit.

DATA SUMMARY FORM: TENTATIVELY IDENTIFIED COMPOUNDS

SOIL SAMPLES  
(ug/Kg)

Site Name: WALMORE ROAD - JOHNSON PROP.  
Case #: 9302.101 Sampling Date: 9-20-93

To calculate sample quantitation limit:  
(CRQL = Dilution Factor) / ((1 - % moisture)/100)

Sample No. Dilution Factor % Moisture Location	B2-1		B3-2		B4-2		VBLKSI	SBLKSI
	1.0 15	8 17	1.0 17	50.0 15	1.0 15	1.0 15		
UNKNOWN SILOXANE	20 BJ	20 BJ	20 BJ	17 BJ	17 BJ	19 J		
UNKNOWN	8 BJ	8 BJ	8 BJ	10 BJ	10 BJ	8 J		
UNKNOWN SILOXANE		23 BJ						
INDANE (49-61-17)	350,000 ABJM	58,000 ABJM	130,000 ABJM	18 JN			270000 AJN	
ALDOL CONDENSATION PRODUCT	1100 BJ	1100 BJ					930 J	
UNKNOWN	200 BJ	260 BJ					150 J	
"	140 J							
"	250 J							
UNKNOWN ALKANOLIC ACID	530 J							
"	350 J							
UNKNOWN HYDROCARBON	210 J							
UNKNOWN	140 JN							
BENZO (C)XYLENE (14-27-72)	140 JN							
UNKNOWN HYDROCARBON	140 J							
Pharmaceutical Sulfur (17-04-34)			100 JN					
UNKNOWN			140 J					
Pharmaceutical Sulfur (10-54-4500)			400 JN					
UNKNOWN AMIDE			220 BJ				83 J	
UNKNOWN			240 J					
UNKNOWN AMIDE			140 J					
UNKNOWN ALKANE			100 J					
UNKNOWN			400 J					
UNKNOWN ALKANE			120 J					

CRQL = Contract Required Quantitation Limit

DATA SUMMARY FORM: TENTATIVELY IDENTIFIED COMPOUNDS

SOIL SAMPLES  
(ug/Kg)

Site Name: WALMORE ROAD-JOHNSON PROPERTY  
 Case #: 9302-101 Sampling Date: 9-20-93

To calculate sample quantitation limit:  
 (CRQL • Dilution Factor) / ((1 - % moisture)/100)

Sample No. Dilution Factor % Moisture Location	B2-1		B3-2		B6-2		VBLK-S1	SBCK-S1
	1.0	15	1.0	17	50.0	15		
22-161 UNKNOWN ALKANE			340 J					
23-24 UNKNOWN			700 J					
23-51 UNKNOWN ALKANE			240 J					
24-47 "			480 J					
25-07 UNKNOWN ORG. HYDROCARBON			800 J					
25-109 "			240 J					
26-07 UNKNOWN ALKANE			360 J					
26-91 UNKNOWN			220 J					
27-67 "			120 J					
27-67 "			200 J					
28-07 "					7800 J			
23-78 UNKNOWN PAH					8200 J			
26-76 UNKNOWN					10,000 J			
27-27 UNKNOWN PAH					13,000 J			
27-54 "					5100 J			
27-166 "					6100 J			
28-84 UNKNOWN					5700 J			
29-11 BENZONAPHTHOTHIONE KROMER					7800 J			
29-21 UNKNOWN PAH					5500 J			
30-15 "					5700 J			
31-16 UNKNOWN					29,000 J			
32-15 UNKNOWN PAH					68,000 J			
32-27 "					23,000 J			
33-21 UNKNOWN					27,000 J			
33-17 UNKNOWN PAH					35,000 J			

CRQL = Contract Required Quantitation Limit



DATA SUMMARY FORM: TENTATIVELY IDENTIFIED COMPOUNDS  
SOIL SAMPLES (ug/Kg)

Site Name: WALMORE ROAD-JOHNSON PROPERTY

Case #: 9302.101 Sampling Date: 9-20-93

To calculate sample quantitation limit:  
(CRQL = Dilution Factor) / ((1 - % moisture)/100)

Sample No.	Dilution Factor	% Moisture	Location	B2-1	B3-2	B6-2	VBLKSI	SOXKSI
37-25	1.0	15				50/100	1.0	
39-25	1.0	17				15	BLANK	BLANK
39-25			UNKNOWN PAH			42,000		
39-25			"			29,000		
39-25			UNKNOWN AMIDE					83 J
39-25			UNKNOWN PAH			35,000		66 J

CRQL = Contract Required Quantitation Limit





**DATA SUMMARY FORM EPTOX - Pesticides**

**SOIL SAMPLES** (mg/L)

Site Name: Walpole Road      Sampling Date(s): April 29, 1994

Job Number: 9400.8108

CRQL	Compound	Location	Sample Numbers					Dilution Factors					To calculate sample quantitation Multi: (CRQL • Dilution Factor) / (100 • % moisture / 100)				
			B-2X	B-3X	B-6X	B-7X	B-8X	B-8Z	B-9X	B-9Z	B-2X	B-3X	B-6X	B-7X	B-8X	B-8Z	B-9X
	gamma-BHC (Lindane)		1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
	Heptachlor																
	Heptachlor Epoxide																
	Endrin																
	Chlordane																
	Methoxychlor																
	Toxaphene																

CRQL = Contract Required Quantitation Limit.

... VERBODEN INZETTEN TEGEN DE WIND ...

DATA SUMMARY FORM

Site Name Walmsworth Road      Sampling Date(s) April 29, 1994      SOIL SAMPLES (mg. )

Job Number 9400.868      Sample Number B-10XMS      Dilution Factor 1.0      To calculate sample quantitation limit: (CRQL • Dilution Factor) / (100 - % moisture/100)

CRQL	Compound	Location	Method Blank	Method Spike	Method Spike Dup														
	gamma-BHC (lindane)		1.0	0.0040	0.0049														
	Heptachlor			0.0038	0.0049														
	Heptachlor Epoxide			0.0047	0.0056														
	Endrin			0.010	0.012														
	Chlordane																		
	Methoxychlor			0.047	0.054														
	Toxaphene																		

CRQL = Contract Required Quantitation Limit.

**APPENDIX E**

**PA SCORE**

# PA-SCORE

## PA SCORE SHEETS

Site Name: WALMORE ROAD-JOHNSON PROPERTY  
CERCLIS ID No.: NYD000514463  
Street Address: 6373 & 6381 WALMORE ROAD  
City/State/Zip: WHEATFIELD, NY 14305

Investigator: MR. CHAD EICH  
Agency/Organization: E&E ENGINEERING, P.C.  
Street Address: 368 PLEASANTVIEW DR.  
City/State: LANCASTER, NY

Date: 11/30/93

WASTE CHARACTERISTICS

Waste Characteristics (WC) Calculations:

1 landfill	Landfill	Ref: 1	WQ value	maximum
Area	8.00E-01 acres		1.03E+01	1.03E+01

The site consists of a 2-acre parcel of which approximately 0.8 acres has been filled. Subsurface borings drilled during the PSA investigation indicate fill depths between approximately 4.5 and 8 feet.

Ref: 8

** Only First WC Page Is Printed **

Waste Characteristics Score: WC = 18



Ground Water Pathway Criteria List  
 Suspected Release

Are sources poorly contained? (y/n/u)	Y
Is the source a type likely to contribute to ground water contamination (e.g., wet lagoon)? (y/n/u)	Y
Is waste quantity particularly large? (y/n/u)	U
Is precipitation heavy? (y/n/u)	N
Is the infiltration rate high? (y/n/u)	Y
Is the site located in an area of karst terrain? (y/n)	N
Is the subsurface highly permeable or conductive? (y/n/u)	N
Is drinking water drawn from a shallow aquifer? (y/n/u)	Y
Are suspected contaminants highly mobile in ground water? (y/n/u)	N
Does analytical or circumstantial evidence suggest ground water contamination? (y/n/u)	Y
Other criteria? (y/n)	N

SUSPECTED RELEASE? (y/n) Y

Summarize the rationale for Suspected Release:

AN UNKNOWN QUANTITY OF MATERIAL WAS LANDFILLED AT THE SITE INCLUDING, FLYASH, GRAPHITE, SOIL, ETC. THIS MATERIAL WAS FOUND TO CONTAIN MODERATE LEVELS OF PESTICIDES AND PAH'S AND LOW LEVELS OF PCB'S AND ORGANIC SOLVENTS. BOREHOLES INSTALLED AT THE SITE ENCOUNTERED FILL MATERIAL (SLAG, GRAPHITE ETC.) TO A MAXIMUM DEPTH OF APPROXIMATELY 8 FEET. GROUNDWATER DEPTH IN THE AREA IS REPORTEDLY 6 FEET. GROUNDWATER WAS ENCOUNTERED AT A DEPTH OF APPROXIMATELY 5.0 FEET IN ONE OF THE ON-SITE BORINGS.

Ref: 1,6,8

Ground Water Pathway Criteria List  
 Primary Targets

Is any drinking water well nearby? (y/n/u)	N
Has any nearby drinking water well been closed? (y/n/u)	U
Has any nearby drinking water well user reported foul-testing or foul-smelling water? (y/n/u)	N
Does any nearby well have a large drawdown/high production rate? (y/n/u)	U
Is any drinking water well located between the site and other wells that are suspected to be exposed to a hazardous substance? (y/n/u)	N
Does analytical or circumstantial evidence suggest contamination at a drinking water well? (y/n/u)	N
Does any drinking water well warrant sampling? (y/n/u)	N

Other criteria? (y/n) N

PRIMARY TARGET(S) IDENTIFIED? (y/n) N

Summarize the rationale for Primary Targets:

DRINKING WATER WELLS ARE LOCATED APPROXIMATELY 3-MILES NORTH OF THE SITE ON THE TUSCARORA INDIAN RESERVATION. SPECIFIC INFORMATION SUCH AS WELL CONSTRUCTION, DEPTH, SCREENED INTERVAL, NUMBER OF WELLS, AND POPULATION SERVED ARE NOT KNOWN. GROUNDWATER TARGET POPULATIONS WERE OBTAINED BY COUNTING HOUSES ON THE USGS TOPOGRAPHIC MAP AND MULTIPLYING BY 3.8. IT IS NOT KNOWN IF THE WELLS HAVE BEEN SAMPLED. THE TUSCARORA'S WELLS WILL BE CONSIDERED SECONDARY TARGETS. THERE IS NO DOCUMENTATION OF COMPLAINTS OR DRINKING WATER CONTAMINATION RELATED TO THE SITE.

Ref: 1,2,6

GROUND WATER PATHWAY SCORESHEETS

Pathway Characteristics

Pathway Characteristics			Ref.
Do you suspect a release? (y/n)	Yes		█
Is the site located in karst terrain? (y/n)	No		2
Depth to aquifer (feet):	5		8
Distance to the nearest drinking water well (feet):	16000		1
LIKELIHOOD OF RELEASE	Suspected Release	No Suspected Release	References
1. SUSPECTED RELEASE	550	█	█
2. NO SUSPECTED RELEASE	█	0	
LR =	550	0	

Targets

TARGETS	Suspected Release	No Suspected Release	References
3. PRIMARY TARGET POPULATION 0 person(s)	0	█	█
4. SECONDARY TARGET POPULATION Are any wells part of a blended system? (y/n) N	7	0	
5. NEAREST WELL	5	0	
6. WELLHEAD PROTECTION AREA None within 4 Miles	0	0	
7. RESOURCES	5	0	
T =	17	0	

WASTE CHARACTERISTICS

WC =

18	0
----	---

GROUND WATER PATHWAY SCORE:

2
---

Ground Water Target Populations

Primary Target Population Drinking Water Well ID	Dist. (miles)	Population Served	Reference	Value
None				
*** Note : Maximum of 5 Wells Are Printed ***				Total

Secondary Target Population Distance Categories	Population Served	Reference	Value
0 to 1/4 mile	0	1	0
Greater than 1/4 to 1/2 mile	0	1	0
Greater than 1/2 to 1 mile	0	1	0
Greater than 1 to 2 miles	15	2	1
Greater than 2 to 3 miles	125	2	2
Greater than 3 to 4 miles	570	2	4
Total			7

Apportionment Documentation for a Blended System

IT IS NOT KNOWN IF WATER FROM THE TUSCARORA INDIAN'S WELLS IS  
BLENDED TOGETHER PRIOR TO DISTRIBUTION OR IF INDIVIDUAL RESIDENCES  
HAVE THEIR OWN WELLS.

Ref: 1

Surface Water Pathway Criteria List  
 Suspected Release

Is surface water nearby? (y/n/u)	Y
Is waste quantity particularly large? (y/n/u)	N
Is the drainage area large? (y/n/u)	Y
Is rainfall heavy? (y/n/u)	N
Is the infiltration rate low? (y/n/u)	N
Are sources poorly contained or prone to runoff or flooding? (y/n/u)	Y
Is a runoff route well defined(e.g.ditch/channel to surf.water)? (y/n/u)	Y
Is vegetation stressed along the probable runoff path? (y/n/u)	N
Are sediments or water unnaturally discolored? (y/n/u)	N
Is wildlife unnaturally absent? (y/n/u)	N
Has deposition of waste into surface water been observed? (y/n/u)	N
Is ground water discharge to surface water likely? (y/n/u)	Y
Does analytical/circumstantial evidence suggest S.W. contam? (y/n/u)	N
Other criteria? (y/n)	N

SUSPECTED RELEASE? (y/n) N

Summarize the rationale for Suspected Release:

ANALYTICAL RESULTS FOR SURFACE WATER AND SEDIMENT SAMPLES COLLECTED FROM CAYUGA CREEK ADJACENT TO THE SITE DO NOT INDICATE SIGNIFICANT RELEASES FROM OF THE SITE OF ORGANIC OR INORGANIC ANALYTES.

Ref: 6

Surface Water Pathway Criteria List  
 Primary Targets

Is any target nearby? (y/n/u)                      If yes:                      Y  
     N Drinking water intake  
     Y Fishery  
     Y Sensitive environment

Has any intake, fishery, or recreational area been closed? (y/n/u)                      N

Does analytical or circumstantial evidence suggest surface water  
 contamination at or downstream of a target? (y/n/u)                      N

Does any target warrant sampling? (y/n/u)                      If yes:                      N  
     N Drinking water intake  
     N Fishery  
     N Sensitive environment

Other criteria? (y/n)                      N

PRIMARY INTAKE(S) IDENTIFIED? (y/n)                      N

Summarize the rationale for Primary Intakes:

THERE ARE NO DRINKING WATER INTAKES WITHIN THE TARGET DISTANCE LIMIT  
 OF 15 MILES DOWNSTREAM WHICH ARE SUSPECTED OF BEING CONTAMINATED  
 FROM THE SITE.

Ref: 1,6  
 continued -----

continued -----

Other criteria? (y/n) N

PRIMARY FISHERY(IES) IDENTIFIED? (y/n) N

Summarize the rationale for Primary Fisheries:

NO FISHERIES ARE SUSPECTED TO BE IMPACTED BY THE SITE.

Ref: 1,6

Other criteria? (y/n) N

PRIMARY SENSITIVE ENVIRONMENT(S) IDENTIFIED? (y/n) N

Summarize the rationale for Primary Sensitive Environments:

THERE ARE NO SENSITIVE ENVIRONMENTS WHICH ARE SUSPECTED TO BE IMPACTED BY THE SITE.

Ref: 1,6



SURFACE WATER PATHWAY SCORESHEETS

Pathway Characteristics			Ref.
Do you suspect a release? (y/n)	No		.....
Distance to surface water (feet):	0		1,2
Flood frequency (years):	100		3
What is the downstream distance (miles) to:			
a. the nearest drinking water intake?	6.0		2
b. the nearest fishery?	4.0		2
c. the nearest sensitive environment?	0.0		4
LIKELIHOOD OF RELEASE	Suspected Release	No Suspected Release	References
1. SUSPECTED RELEASE	0	.....	.....
2. NO SUSPECTED RELEASE	.....	500	
LR =	0	500	

Drinking Water Threat Targets

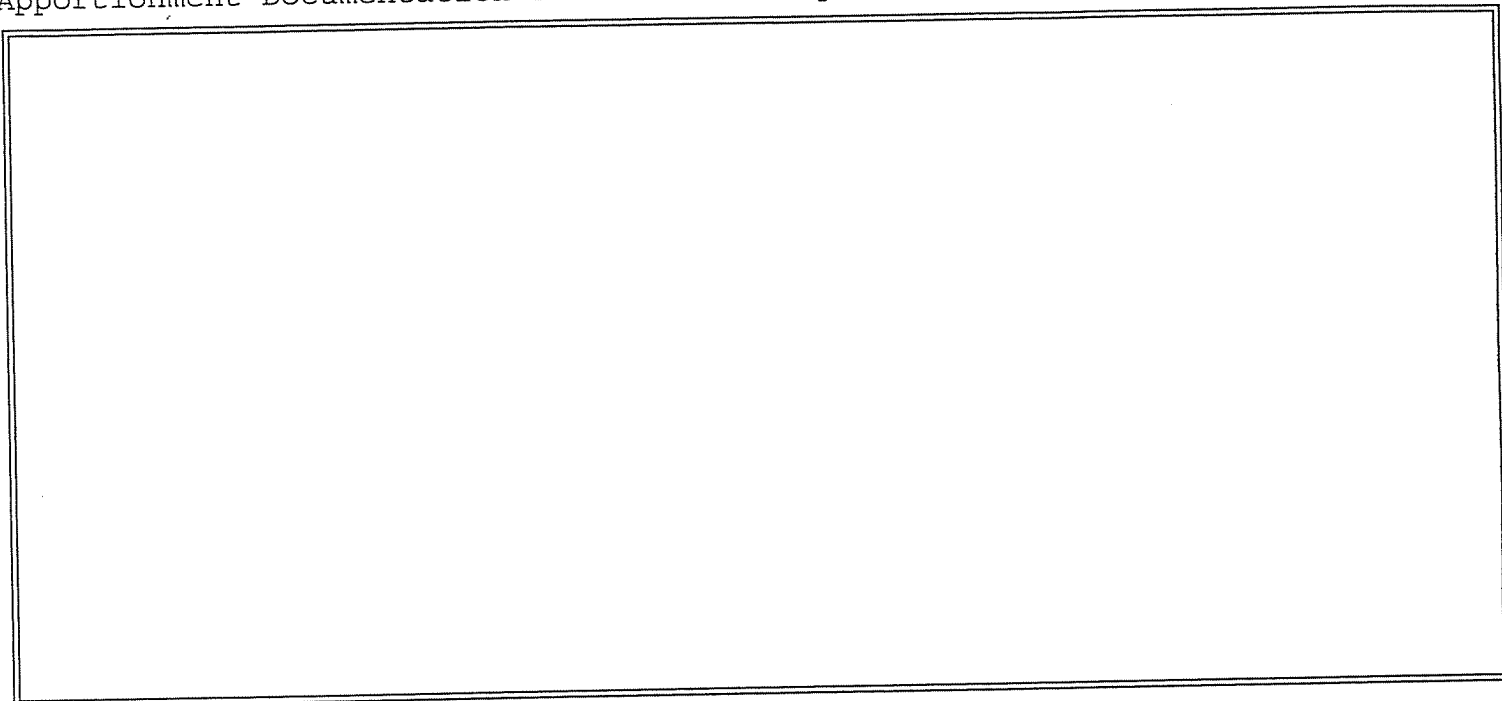
TARGETS	Suspected Release	No Suspected Release	References
3. Determine the water body type, flow (if applicable), and number of people served by each drinking water intake.			
4. PRIMARY TARGET POPULATION 0 person(s)	0		
5. SECONDARY TARGET POPULATION Are any intakes part of a blended system? (y/n): N	0	1	
6. NEAREST INTAKE	0	0	
7. RESOURCES	0	5	
T =	0	6	

Drinking Water Threat Target Populations

Intake Name	Primary (y/n)	Water Body Type/Flow	Population Served	Ref.	Value
1 NIAGRA R. INTAK	N	>10000 cfs	62000	7	0
Total Primary Target Population Value					0
Total Secondary Target Population Value					0

*** Note : Maximum of 6 Intakes Are Printed ***

Apportionment Documentation for a Blended System



Human Food Chain Threat Targets

TARGETS	Suspected Release	No Suspected Release	References
8. Determine the water body type and flow for each fishery within the target limit.	██████████	██████████	██████████
9. PRIMARY FISHERIES	0	██████████	
10. SECONDARY FISHERIES	0	12	
T =	0	12	

Human Food Chain Threat Targets

Fishery Name	Primary (y/n)	Water Body Type/Flow	Ref.	Value
1 CAYUGA CREEK	N	>100-1000 cfs	1,2	12
2 NIAGRA RIVER	N	>10000 cfs	1,2	12
Total Primary Fisheries Value				0
Total Secondary Fisheries Value				0

*** Note : Maximum of 6 Fisheries Are Printed ***

Environmental Threat Targets

TARGETS	Suspected Release	No Suspected Release	References
11. Determine the water body type and flow (if applicable) for each sensitive environment.	██████████	██████████	██████████
12. PRIMARY SENSITIVE ENVIRONMENTS	0	██████████	
13. SECONDARY SENSITIVE ENVIRONS.	0	75	
T =	0	75	

Environmental Threat Targets

Sensitive Environment Name	Primary (y/n)	Water Body Type/Flow	Ref.	Value
1 WETLAND	N	<10 cfs		75
Total Primary Sensitive Environments Value				0
Total Secondary Sensitive Environments Value				0

*** Note: Maximum of 6 Sensitive Environments Are Printed ***

Surface Water Pathway Threat Scores

Threat	Likelihood of Release (LR) Score	Targets (T) Score	Pathway Waste Characteristics (WC) Score	Threat Score LR x T x WC / 82,500
Drinking Water	500	6	18	1
Human Food Chain	500	12	18	1
Environmental	500	75	18	8

SURFACE WATER PATHWAY SCORE:

10
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Soil Exposure Pathway Criteria List  
 Resident Population

Is any residence, school, or daycare facility on or within 200 feet of an area of suspected contamination? (y/n/u)	Y
Is any residence, school, or daycare facility located on adjacent land previously owned or leased by the site owner/operator? (y/n/u)	Y
Is there a migration route that might spread hazardous substances near residences, schools, or daycare facilities? (y/n/u)	Y
Have onsite or adjacent residents or students reported adverse health effects, exclusive of apparent drinking water or air contamination problems? (y/n/u)	N
Does any neighboring property warrant sampling? (y/n/u)	N

Other criteria? (y/n) N

RESIDENT POPULATION IDENTIFIED? (y/n) Y

Summarize the rationale for Resident Population:

TWO PRIVATE RESIDENCES EXIST ADJACENT TO THE LANDFILLED AREA. AERIAL PHOTOS FROM 1968 SHOW A DISTURBED AREA WHICH COVERS THE FRONT LAWNS OF BOTH HOMES. THE GOEPHYSICAL INVESTIGATION CONDUCTED DURING THIS PHASE OF THE PSA SHOWED FILL UNDER THE FRONT YARDS OF 6373 AND 6381 WALMORE ROAD. IF FUTURE EXCAVATION SHOULD OCCUR AT THE SITE, POTENTIALLY CONTAMINATED FILL MAY BE EXPOSED.

Ref: 1,2,5,9

SOIL EXPOSURE PATHWAY SCORESHEETS

Pathway Characteristics

		Ref.
Do any people live on or within 200 ft of areas of suspected contamination? (y/n)	Yes	5
Do any people attend school or daycare on or within 200 ft of areas of suspected contamination? (y/n)	No	5
Is the facility active? (y/n):	No	5

LIKELIHOOD OF EXPOSURE	Suspected Contamination	References
1. SUSPECTED CONTAMINATION LE =	550	.....

Targets

2. RESIDENT POPULATION 10 resident(s) 0 school/daycare student(s)	100	..... 1 .....
3. RESIDENT INDIVIDUAL	50	..... 5 .....
4. WORKERS None	0	.....
5. TERRES. SENSITIVE ENVIRONMENTS	0	.....
6. RESOURCES	5	.....
T =	155	.....

WASTE CHARACTERISTICS

WC =

RESIDENT POPULATION THREAT SCORE:

NEARBY POPULATION THREAT SCORE:

Population Within 1 Mile: 1 - 10,000

SOIL EXPOSURE PATHWAY SCORE:



Soil Exposure Pathway Terrestrial Sensitive Environments

Terrestrial Sensitive Environment Name	Reference	Value
None		
Total Terrestrial Sensitive Environments Value		

*** Note : Maximum of 7 Sensitive Environments Are Printed ***

Air Pathway Criteria List  
Suspected Release

Are odors currently reported? (y/n/u) N

Has release of a hazardous substance to the air  
been directly observed? (y/n/u) N

Are there reports of adverse health effects (e.g., headaches,  
nausea, dizziness) potentially resulting from migration  
of hazardous substances through the air? (y/n/u) N

Does analytical/circumstantial evidence suggest release to air? (y/n/u) N

Other criteria? (y/n) N

SUSPECTED RELEASE? (y/n) N

Summarize the rationale for Suspected Release:

AIR PATHWAY SCORESHEETS

Pathway Characteristics

Do you suspect a release? (y/n)			No	Ref.
Distance to the nearest individual (feet):			0	1
LIKELIHOOD OF RELEASE	Suspected Release	No Suspected Release	References	
1. SUSPECTED RELEASE	0	████████████████████	████████████████████	
2. NO SUSPECTED RELEASE	████████████████████	500	████████████████████	
LR =	0	500	████████████████████	

Targets.

TARGETS	Suspected Release	No Suspected Release	References
3. PRIMARY TARGET POPULATION 0 person(s)	0	████████████████████	████████████████████
4. SECONDARY TARGET POPULATION	0	11	
5. NEAREST INDIVIDUAL	0	20	
6. PRIMARY SENSITIVE ENVIRONS.	0	████████████████████	
7. SECONDARY SENSITIVE ENVIRONS.	0	0	
8. RESOURCES	0	5	
T =	0	36	

WASTE CHARACTERISTICS

WC =	0	18
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AIR PATHWAY SCORE:

4
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Air Pathway Secondary Target Populations

Distance Categories	Population	References	Value
Onsite	10	5	1
Greater than 0 to 1/4 mile	0		0
Greater than 1/4 to 1/2 mile	0		0
Greater than 1/2 to 1 mile	413	1	1
Greater than 1 to 2 miles	4659	1	3
Greater than 2 to 3 miles	16512	1	4
Greater than 3 to 4 miles	25000		2
Total Secondary Population Value			11

Air Pathway Primary Sensitive Environments

Sensitive Environment Name	Reference	Value
None		
Total Primary Sensitive Environments Value		

*** Note : Maximum of 7 Sensitive Environments Are Printed***

Air Pathway Secondary Sensitive Environments

Sensitive Environment Name	Distance	Reference	Value
None			
Total Secondary Sensitive Environments Value			

PA-Score 2.1 Scoresheets  
WALMORE ROAD-JOHNSON PROPERTY - 10/19/94

SITE SCORE CALCULATION	SCORE
GROUND WATER PATHWAY SCORE:	2
SURFACE WATER PATHWAY SCORE:	10
SOIL EXPOSURE PATHWAY SCORE:	20
AIR PATHWAY SCORE:	4
SITE SCORE:	11

SUMMARY

1. Is there a high possibility of a threat to any nearby drinking water well(s) by migration of a hazardous substance in ground water? No

If yes, identify the well(s).

If yes, how many people are served by the threatened well(s)? 0

2. Is there a high possibility of a threat to any of the following by hazardous substance migration in surface water?
- A. Drinking water intake No
  - B. Fishery No
  - C. Sensitive environment (wetland, critical habitat, others) No

If yes, identify the target(s).

3. Is there a high possibility of an area of surficial contamination within 200 feet of any residence, school, or daycare facility? Yes

If yes, identify the properties and estimate the associated population(s)  
TWO RESIDENCES EXIST ADJACENT TO THE SITE, NO  
SCHOOLS OR DAYCARE FACILITIES. ASSOCIATED  
POPULATION IS 10 PEOPLE

4. Are there public health concerns at this site that are not addressed by PA scoring considerations? No

If yes, explain:

REFERENCE LIST

1. ENGINEERING INVESTIGATIONS AT INACTIVE HAZARDOUS WASTE SITES IN THE STATE OF NEW YORK, PRELIMINARY SITE ASSESSMENT TASK 1, WALMORE ROAD-JOHNSON PROPERTY SITE, SITE NUMBER 932101
2. UNITED STATES GEOLOGICAL SURVEY, 1980, 7.5 MINUTE SERIES TOPOGRAPHIC MAP, TONAWANDA WEST QUADRANGLE.
3. FLOOD INSURANCE RATE MAP, COMMUNITY PANEL NO.360513 0001 B, JULY 16, 1981
4. GAIL SPANN, OCTOBER 18, 1993, NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION, DIVISION OF FISH AND WILDLIFE,
5. ECOLOGY AND ENVIRONMENT ENGINEERING, P.C., JUNE 1993, SITE INSPECTION WALMORE ROAD-JOHNSON PROPERTY SITE
6. SAMPLE RESULTS FOR SURFACE SOIL, SUBSURFACE SOIL, SURFACE WATER AND SEDIMENT SAMPLES COLLECTED FROM THE WALMORE ROAD-JOHNSON PROPERTY SITE , JUNE 23, 1993 AND SEPTEMBER, 1993.
7. COLEMAN, JOHN, NIAGRA COUNTY WATER AUTHORITY, PERSONAL COMMUNICATION WITH CHAD EICH, ECOLOGY AND ENVIRONMENT, INC.
8. ECOLOGY AND ENVIRONMENT ENGINEERING, P.C., 1993, SUBSURFACE BORING LOGS FOR WALMORE ROAD PSA SITE.
9. ECOLOGY AND ENVIRONMENT ENGINEERING, P.C., 1993, GOEPHYSICAL INVESTIGATION OF THE WALMORE ROAD-JOHNSON PROPERTY SITE.



PA-Score 2.1 Scoresheets  
 WALMORE ROAD-JOHNSON PROPERTY - 08/15/94

OMB Approval Number: 2050-0095  
 Approved for Use Through: 4/95

POTENTIAL HAZARDOUS  WASTE SITE  PRELIMINARY ASSESSMENT FORM		IDENTIFICATION			
		State: NY	CERCLIS Number: NYD000514463		
		CERCLIS Discovery Date:			
1. General Site Information					
Name: WALMORE ROAD-JOHNSON PROPERTY			Street Address: 6373 & 6381 WALMORE ROAD		
City: WHEATFIELD	State: NY	Zip Code: 14305	County: NIAGARA	Co. Code: 063	Cong. Dist.:
Latitude: 43° 6' 58.0"	Longitude: 78° 55' 25.0"	Approx. Area of Site: 2 acres		Status of Site: Inactive	
2. Owner/Operator Information					
Owner: MR. KURT LARSON			Operator: MR. T. DEAN JOHNSON		
Street Address: 6374 WARD DR.			Street Address: 4169 PURDY RD.		
City: SANBOURN			City: LOCKPORT		
State: NY	Zip Code: 14132	Telephone: 716/731-3589	State: NY	Zip Code: 14094	Telephone: 716/439-0011
Type of Ownership: Private			How Initially Identified: Citizen Complaint		

POTENTIAL HAZARDOUS  WASTE SITE  PRELIMINARY ASSESSMENT FORM	IDENTIFICATION	
	State: NY	CERCLIS Number: NYD000514463
	CERCLIS Discovery Date:	

3. Site Evaluator Information

Name of Evaluator: MR. CHAD EICH	Agency/Organization: E&E ENGINEERING, P.C.	Date Prepared: 11/30/93
Street Address: 368 PLEASANTVIEW DR.	City: LANCASTER	State: NY
Name of EPA or State Agency Contact: ABUL BARKAT OR JAMES TUCK	Telephone:	
Street Address: 270 MICHIGAN AVE	City: BUFFALO	State: NY

4. Site Disposition (for EPA use only)

Emergency Response/Removal Assessment Recommendation: No	CERCLIS Recommendation: Other	Signature:
Date:	Date:	Name:
		Position:

POTENTIAL HAZARDOUS  WASTE SITE  PRELIMINARY ASSESSMENT FORM	IDENTIFICATION	
	State: NY	CERCLIS Number: NYD000514463
	CERCLIS Discovery Date:	

5. General Site Characteristics

Predominant Land Uses Within 1 Mile of Site: Commercial Residential Agricultural	Site Setting:  Rural	Years of Operation: Beginning Year: 0  Ending Year: 0  X Unknown
Type of Site Operations: Other Landfill	Waste Generated: Offsite	
	Waste Deposition Authorized By: Former Owner	
	Waste Accessible to the Public Yes	
	Distance to Nearest Dwelling, School, or Workplace: 0 Feet	

6. Waste Characteristics Information

Source Type Landfill	Quantity 8.00e-01 acres	Tier A	General Types of Waste: Metals Organics Solvents Construction/Demolition Waste Acids/Bases Other: PCB WASTE, HARDENED RESINS, FLY ASH, GRAPHITE.
Tier Legend C = Constituent    W = Wastestream V = Volume         A = Area			Physical State of Waste as Deposited Solid Liquid

POTENTIAL HAZARDOUS  WASTE SITE  PRELIMINARY ASSESSMENT FORM	IDENTIFICATION	
	State: NY	CERCLIS Number: NYD000514463
	CERCLIS Discovery Date:	

7. Ground Water Pathway																
Is Ground Water Used for Drinking Water Within 4 Miles: No	Is There a Suspected Release to Ground Water: Yes	List Secondary Target Population Served by Ground Water Withdrawn From:  <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="text-align: right;">0 - 1/4 Mile</td> <td style="text-align: right;">0</td> </tr> <tr> <td style="text-align: right;">&gt;1/4 - 1/2 Mile</td> <td style="text-align: right;">0</td> </tr> <tr> <td style="text-align: right;">&gt;1/2 - 1 Mile</td> <td style="text-align: right;">0</td> </tr> <tr> <td style="text-align: right;">&gt;1 - 2 Miles</td> <td style="text-align: right;">15</td> </tr> <tr> <td style="text-align: right;">&gt;2 - 3 Miles</td> <td style="text-align: right;">125</td> </tr> <tr> <td style="text-align: right;">&gt;3 - 4 Miles</td> <td style="text-align: right;">570</td> </tr> <tr> <td style="text-align: right;">Total</td> <td style="text-align: right;">710</td> </tr> </table>	0 - 1/4 Mile	0	>1/4 - 1/2 Mile	0	>1/2 - 1 Mile	0	>1 - 2 Miles	15	>2 - 3 Miles	125	>3 - 4 Miles	570	Total	710
0 - 1/4 Mile	0															
>1/4 - 1/2 Mile	0															
>1/2 - 1 Mile	0															
>1 - 2 Miles	15															
>2 - 3 Miles	125															
>3 - 4 Miles	570															
Total	710															
Type of Ground Water Wells Within 4 Miles: Private	Have Primary Target Drinking Water Wells Been Identified: No															
Depth to Shallowest Aquifer: 5 Feet	Nearest Designated Wellhead Protection Area: None within 4 Miles															
Karst Terrain/Aquifer Present: No																

POTENTIAL HAZARDOUS  WASTE SITE  PRELIMINARY ASSESSMENT FORM	IDENTIFICATION	
	State: NY	CERCLIS Number: NYD000514463
	CERCLIS Discovery Date:	

8. Surface Water Pathway Part 1 of 4

Type of Surface Water Draining Site and 15 Miles Downstream: Stream River Lake	Shortest Overland Distance From Any Source to Surface Water:  <div style="text-align: right;">                     0 Feet                      0.0 Miles                 </div>
-----------------------------------------------------------------------------------------	-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

Is there a Suspected Release to Surface Water: No	Site is Located in: >10 yr - 100 yr floodplai
---------------------------------------------------	--------------------------------------------------

8. Surface Water Pathway Part 2 of 4

Drinking Water Intakes Along the Surface Water Migration Path: Yes

Have Primary Target Drinking Water Intakes Been Identified: No

Secondary Target Drinking Water Intakes:

Name	Water Body/Flow(cfs)	Population Served
NIAGRA R. INTAKE	large river/ >10000	62000
	Total Within 15 Miles:	62000

POTENTIAL HAZARDOUS  WASTE SITE  PRELIMINARY ASSESSMENT FORM	IDENTIFICATION	
	State: NY	CERCLIS Number: NYD000514463
	CERCLIS Discovery Date:	

8. Surface Water Pathway Part 3 of 4

Fisheries Located Along the Surface Water Migration Path: Yes

Have Primary Target Fisheries Been Identified: No

Secondary Target Fisheries:

Fishery Name	Water Body Type/Flow(cfs)
CAYUGA CREEK	moderate-large stream/ >100-1000
NIAGRA RIVER	large river/ >10000

8. Surface Water Pathway Part 4 of 4

Wetlands Located Along the Surface Water Migration Path? (y/n) Yes

Have Primary Target Wetlands Been Identified? (y/n) No

Secondary Target Wetlands:

Water Body/Flow(cfs)	Frontage(mi)
minimal stream/ <10	>2 to 3

Other Sensitive Environments Along the Surface Water Migration Path: No

Have Primary Target Sensitive Environments Been Identified: No

Secondary Target Sensitive Environments:  
None

POTENTIAL HAZARDOUS  WASTE SITE  PRELIMINARY ASSESSMENT FORM	IDENTIFICATION	
	State: NY	CERCLIS Number: NYD000514463
	CERCLIS Discovery Date:	

9. Soil Exposure Pathway

Are People Occupying Residences or Attending School or Daycare on or Within 200 Feet of Areas of Known or Suspected Contamination: Yes  
 Total Resident Population: 10

Number of Workers Onsite: None

Have Terrestrial Sensitive Environments Been Identified on or Within 200 Feet of Areas of Known or Suspected Contamination: No

10. Air Pathway

Total Population on or Within:	
Onsite	10
0 - 1/4 Mile	0
>1/4 - 1/2 Mile	0
>1/2 - 1 Mile	413
>1 - 2 Miles	4659
>2 - 3 Miles	16512
>3 - 4 Miles	25000
Total	46594

Is There a Suspected Release to Air: No

Wetlands Located Within 1/2 Miles of the Site: No

Other Sensitive Environments Located Within 4 Miles of the Site: No

Sensitive Environments Within 1/2 Mile of the Site:  
 None

**APPENDIX F**

**COPIES OF PERTINENT RECORDS**



<u>Reference</u>	<u>Page</u>
Buzawa 1988	F-4
Haseley 1991	F-5
Herman 1988	F-6
Hopkins 1984a	F-8
Hopkins 1984b	F-9
Hopkins 1984c	F-10
Hopkins 1985	F-12
Johnson 1987	F-14
Niagara Falls Tactical Airlift Group 1985	F-16
Popovici 1985	F-21
Tygert 1986	F-22

Bell Aerospace Textron  
Division of Textron Inc.

Post Office Box One  
Buffalo, New York 14240-0001  
716/297-1000

29 July 1988

Jon Sundquist  
Ecology and Environment, Inc.  
Buffalo Corporate Center  
368 Pleasantview Drive  
Lancaster, NY 14086

Dear Mr. Sundquist:

I am writing in response to your May 20, 1988 letter to Brian Smith.

While we would like to provide assistance we are unable to do so at this time. We have no record of involvement at this site. Our manifest system started in 1981, after the period in question.

Sincerely,



Carl G. Buzawa  
Vice President - Division Counsel

cla

## INTERVIEW ACKNOWLEDGMENT FORM

SITE NAME: Walmore Road-Johnson Property Site

PERSON CONTACTED: Mark Haseley

AFFILIATION: Haseley Trucking Company

ADDRESS: 10315 Lockport Road, Wheatfield, New York

TYPE OF CONTACT: Telephone interview

I.D. NUMBER: 932101

DATE: May 15, 1991

PHONE NUMBER: (716) 297-1550

CONTACT PERSON(S): S. Glinski

### INTERVIEW SUMMARY:

**5/15/91** - Mark Haseley Trucking Company manager could not recall the contents of his company's fill transported to the Johnson property. He will conduct file search to find documentation, if any. He remembers many haulers bringing clean fill to the site.

**5/17/91** - Mr. Haseley's file search has turned up no record of what was hauled to the Johnson property for the time period in question.

### ACKNOWLEDGMENT

I have read the above transcript and I agree that it is an accurate summary of the information verbally conveyed to Ecology and Environment, Inc. interviewer(s) (as revised below, if necessary).

Revisions: (please write in any corrections needed to the above transcript)

Signature _____ Date _____



# ecology and environment, inc.

BUFFALO CORPORATE CENTER  
368 PLEASANTVIEW DRIVE, LANCASTER, NEW YORK 14086, TEL. 716/684-8060  
International Specialists in the Environment

May 9, 1988

Woody Herman  
Town of Wheatfield Water District  
3113 Niagara Falls Boulevard  
North Tonawanda, NY 14120

Dear Mr. Herman:

Thank you for providing the information concerning the water distribution system along Walmore Road in the Town of Wheatfield. Ecology and Environment is currently investigating the fill at 6373 Walmore Road for the New York State Department of Environmental Conservation (DEC). For the purpose of our contract with the DEC, we must have written confirmation of the information you provided to me over the telephone on May 6, 1988. I have listed the points we discussed on Attachment 1. If these statements on the attachment are correct to the best of your knowledge, please acknowledge this and return it to us. If you can recall anything else about the fill at this site, such as its extent, color, odor and whether the entire length or just portions of the copper distribution line was corroded, we would like to learn of this information.

Sincerely yours,

Jon Sundquist

JS:bf-06  
Attachment

Attachment I

- o The material of construction of the water main along Walmore Road in the Town of Wheatfield is Asbestos Concrete.
- o Distribution lines to residences along the road are usually constructed of copper.
- o The copper distribution line to 6373 Walmore Road corroded and had to be replaced with PVC.
- o The cause of the corrosion apparently was the fill in which it was buried, as no other customers along Walmore Road have had such problems.
- o The fill had the appearance of cinders.

This information is correct to best of my knowledge.

*[Handwritten Signature]*  
Signature

*[Handwritten Date]*  
Date

**NIAGARA COUNTY  
DEPARTMENT OF HEALTH**

Code Activity *Sheet 1 of 1*  
 Code Location  
 Service Request No.  
 Date Received Complaint *11/13/84*

Service Request *Well Water Supply / Landfill Concerns*  
 Originator of Complaint *Dean Johnson* Address *6373 Walmore Rd. - Tonawanda*  
 Owner Address *731-3888*  
 Occupant Address

**REPORT OF INVESTIGATION**

Date	Hours	
<i>11/13/84</i>		<p>Writer received call from Mr. Dean Johnson who resides at above address across from the Airbase entrance. Mr. Johnson is aware of the current investigation being conducted on the base regarding a former landfill site. Mr. Johnson has a <del>septic tank</del> ^{septic tank} on his property noted to consist of flyash. He has a well on site that used to supply drinking water but is now only used for watering and outside purposes. Mr. Johnson is concerned about the airbase landfill, his property and well water supply. Told him we would set appointment and examine property and find problem.</p> <p align="center"><i>Phone 731-3888 Thur AM to set appointment.</i></p>
<i>11/15/84</i>	<i>2 pm</i>	<p>I met with Mr. Johnson He informed me that:</p> <ol style="list-style-type: none"> <li>1) Portions of his property are filled with industrial waste materials including graphite, hardened resins, plastic battery cases, ect.</li> <li>2) The filled areas are up to 5 feet deep.</li> <li>3) He believes that the area was filled by Hascby Trucking.</li> <li>4) There is a well on the property used for irrigation, washing cars, ect but not for drinking.</li> </ol>

NIAGARA COUNTY HEALTH DEPARTMENT

MEMORANDUM

DATE: December 6, 1984

TO: Peter Buechi

FROM: Mike Hopkins *M. Hopkins*

SUBJECT: JOHNSON PROPERTY - 6373 WALMORE ROAD, WHEATFIELD, NY

In response to a complaint received from Mr. Dean Johnson of 6373 Walmore Rd., this department has begun an investigation of an apparent inactive disposal site at that address. According to Mr. Johnson, the site was filled with graphite hardened resin, crushed plastic battery cases and similar materials by the Hasely Trucking Company many years ago. The fill is reportedly five feet deep in some areas. An area of one to three acres may be involved. A site sketch is attached.

It seems likely that this site may be the site listed in the Disposal Site Registry as the "Walmore Road Site" which was previously believed to be located 1000 to 1200 feet north of 6373 Walmore Road. It appears likely that two distinct sites are present. The description of the waste materials present at both locations is similar (i.e., mainly graphite).

There is a well on the Johnson property which is used to water fruit trees, etc., but not for drinking water. It would be possible to sample water from this well.

Since it appears that there is evidence that waste materials are present beneath or adjacent to an occupied dwelling, this department recommends that samples be collected and analyzed. This department could collect the samples but does not currently have the resources to have the samples analyzed. We are therefore requesting that your department consider having one or more samples from this site analyzed. At a minimum, we feel that analysis of a well water sample for THO and heavy metals would be appropriate.

If DEC can arrange for analysis of samples from this site, please contact me so that arrangements for sampling can be made.

MEH:cs  
Attachment

cc: Mr. M. N. Vaughan  
Mr. A. Tyebbi/DEC-9

NIAGARA COUNTY  
DEPARTMENT OF HEALTH

Code Activity .....  
Code Location .....  
Service Request No. ....  
Date Received Complaint .....

Service Request *Collect Well Samples*  
Originator of Complaint *Dean Johnson* Address *6373 Wolmore Rd, Wheatfield*  
Owner " " Address " " " "  
Occupant " " Address " " " "

REPORT OF INVESTIGATION

Date Hours

*1-14-54 10:30 AM* I collected samples from the above ~~yard~~ *property*. One  
1-liter glass jar and 1 - 2 liter plastic jug were filled. No odor  
*or color* were noted in the well.

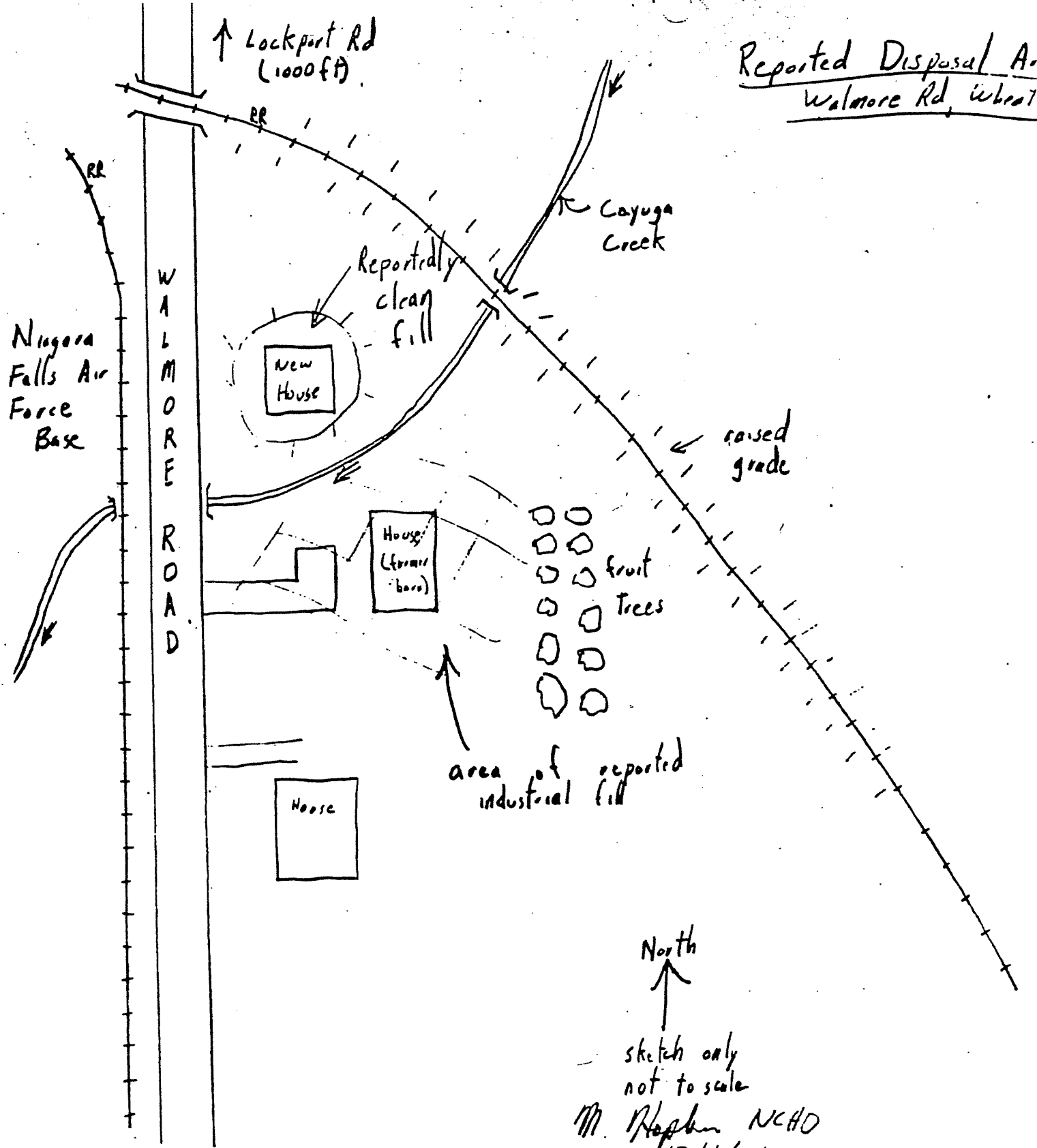
The well is a dug well 13' deep water depth is  
estimated to have been about 6'.

Several pieces of slag ect were observed in the yard at  
this time.

*M. Depina*

Date Abated ..... By .....





Reported Disposal Area  
Walmore Rd, west

North  
 ↑  
 sketch only  
 not to scale  
 M. Reppin NCHD  
 12/1/87



NIAGARA COUNTY

HEALTH DEPARTMENT  
HUMAN RESOURCES BUILDING  
MAIN POST OFFICE BOX 428  
10th AND EAST FALLS STREET  
NIAGARA FALLS, NEW YORK 14302

February 15, 1985

Mr. Dean Johnson  
6373 Walmore Road  
Niagara Falls, NY 14304

Dear Mr. Johnson:

Attached is a copy of the laboratory report submitted to this department from the Department of Environmental Conservation with the results of the analysis of water from your well. Please note that the Total Halogenated Organics (THO) concentration as well as the concentrations of Lead, Chromium and Cadmium were below detection limits.

Based on these results and considering that the well is not used for drinking water supply, this department sees no reason for concern regarding possible toxic contaminants in the well water. The water should be suitable for its present uses, which I understand to be as irrigation and washwater.

Please feel free to contact me with any questions.

Sincerely,

Michael E. Hopkins  
Ass't. P.H. Engineer

MEH:cs  
Attachment

cc: Mr. P. Buechi/DEC-9  
Mr. J. J. Devald

Mr. Peter Bucchi  
Dr. Frances Yang F.Y.  
Analytical Result of a Groundwater Sample from Town of Wheatfield  
February 11, 1985

A water sample (DEC-91) was submitted for THO and metals analysis on January 7, 1985. The sample was taken from Johnson residence, 6573 Walmore Road, by Niagara County Health Department.

Result:

<u>Sample Designation</u>	<u>THO</u>	<u>Lead</u>	<u>Chromium</u>	<u>Cadmium</u>
DEC-91	n.d.	n.d.	n.d.	n.d.

FY:jlw

cc: Mr. Mike Hopkins - NCHD



## ecology and environment, inc.

195 SUGG ROAD, P.O. BOX D, BUFFALO, NEW YORK 14225, TEL. 716-632-4491, TELEX 91-9183

International Specialists in the Environment

July 6, 1987

Mrs. Debbie Johnson  
2 Cranston Street  
Worcester, MA 01602

Dear Mrs. Johnson:

Thank you for calling last Friday, June 26, 1987 to provide information to Ecology and Environment, Inc. (E & E) concerning the Johnson property on Walmore Road in the Town of Wheatfield. To restate our role, E & E is working under a contract from the New York State Department of Environmental Conservation (DEC) to investigate suspected waste disposal sites in western New York. The Johnson property (specifically 6373 Walmore Road) is on the registry of such sites at the request of the owner, Mr. Dean Johnson, who suspected that industrial wastes may have been used as fill during the development of the property. For future reference, the DEC site code for this property is 932094. Any questions about the site or this investigation should be referred directly to the DEC.

With this letter, we would like to confirm the information you provided us over the telephone. This information is listed in Attachment 1. To provide sufficient documentation of this information, the DEC requires that we ask you to sign this document, acknowledging that the information (with any changes you may note) is correct to the best of your knowledge.

Thank you for your assistance in this investigation.

Sincerely,

Jon Sundquist

Attachment 1

Dean Johnson owns the property at 6373 Walmore Road (converted barn) and 6367 Walmore Rd. (Ranch-style house)

JAMES &

DEBRA

Debbie Johnson owns the property at 6381 Walmore Rd. (2 story farm house)

Debbie Johnson is Dean Johnson's sister-in-law

Debbie Johnson's father-in-law owns the property ~~between~~ ON THE SOUTH SIDE OF 6381 ~~the railroad embankment and~~ Walmore Road

- This land is leased to a farmer named Pfohl
- This farmer has farmed the land since at least 1979

The barn at 6373 Walmore Road was converted to a residence in 1980 APPROX. 1979 + 1980.

- Water line and septic tank installed at that time
- Water line runs from the road to the barn, parallel to the driveway on its north side

The water line had completely corroded and was leaking by 1984

- Water line was replaced with ^{POSSIBLE} PVC piping
  - Replacement work performed by Mr. Pete seeger, a licensed plumber *
- OUTSIDE- Plumbing at both 6367 and 6381 Walmore Road is in accordance with Town water regulations
- * ORIGINAL INSIDE PLUMBING DONE BY P. SEEGER, NOT SURE ON REPLACEMENT WORK OR OUTSIDE PLUMBING.

A military agency has tested the water in the well on the property AT 6381 WALMORE RD.

- Analytical results were sent to Debbie Johnson
- Military agency indicated they were testing because of a leaking fuel tank and possible buried transformers on the air force base across Walmore Road from the property

Debra J. Johnson  
Signature

7/22/87  
Date

MILITARY ANALYTICAL RESULTS ENCLOSED.

# ADVANCED ENVIRONMENTAL SYSTEMS, INC.

MONITORING and SUPPORT LABORATORY

**Location:**

4626 Royal Avenue  
Niagara Falls, New York

P.O. Box 165  
Niagara Falls, N.Y. 14304  
(716) 285-8883

February 28, 1985

COPY

236-2043

Mr. Dermont Smyth  
Engineering Office  
914 TAC ALFT GP (AFRES)  
Niagara Falls Intl Aprt  
Niagara Falls, New York 14304-5320

Dear Mr. Smyth:

The oil and grease calculation I quoted to you over the telephone was in error. When I recalculated, I found the oil and grease to be virtually none. The flask used had actually lost weight, not gained, and I miscalculated it as a positive number.

My sincere apologies for this error.

Very truly yours,

ADVANCED ENVIRONMENTAL SYSTEMS, INC.

*Marlene C. Moyer*

Marlene C. Moyer

MCM/mb

*This explains why  
we did not receive the  
report til now.  
Please go thru me  
if you have questions  
of the lab.  
Dermont Smyth  
236-2043.*

ANALYSIS OF ONE  
WATER SAMPLE

COPY

Report prepared For  
NIAGARA FALLS TECHNICAL AIRLIFT GROUP  
by  
ADVANCED ENVIRONMENTAL SYSTEMS, INC.

W. Joseph McDougall  
W. Joseph McDougall, Ph.D.  
Technical Evaluation

February 1, 1985

AES - Report APH

P.O. No.

F30617-85-11-0234

COPY

SCOPE OF WORK

Under the direction of Mr. Smyth, this work was performed to fulfill an analytical requirement for the Niagara Falls Tactical Airlift Group Facility.

RECEIPT OF SAMPLE

At 1:15 p.m., on January 7, 1985, Mr. Charles Calvert of Advanced Environmental Systems, Inc. sampled the groundwater well at the TAG Facility. Mr. Calvert then directly transported the sample to the Advanced Environmental Systems laboratory.



COPY

ADVANCED ENVIRONMENTAL SYSTEMS, INC.  
LABORATORY REPORT

TYPE OF ANALYSIS: RESULTS - WET CHEMISTRY  
UNITS OF MEASURE: MILLIGRAMS/LITER, OR PPM  
CLIENT: NIA AIR BASE A.E.S. JOB CODE 01APH

ANALYSIS METHOD REF SAMPLE IDENTIFICATION  
1/7/85 WELL WATER

ANALYSIS	METHOD	REF	SAMPLE IDENTIFICATION	DETERMINABLE LIMITS	1/7/85 WELL WATER
TDS	160.1	3		1	324
OIL & GREASE	503A	6		1	BDL
TOC	415.1	3		0.1	7.22
POX*	9020	5		5 PPB	BDL
TOX*	9020	5		5 PPB	29.2
PHENOLS	420.1	3		0.01	BDL

TDS - Total Dissolved Solids  
TOC - Total Organic Carbon  
POX - Purgible Organic Halides  
TOX - Total Organic Halides.

*Marlene C. Moyer*  
MARLENE C. MOYER  
WET CHEMISTRY DIVISION

*Results reported in micrograms/liter, or ppb

ADVANCED ENVIRONMENTAL SYSTEMS, INC.  
LABORATORY REPORT

COPY

=====  
TYPE OF ANALYSIS: RESULTS - METALS  
UNITS OF MEASURE: MILLIGRAMS/LITER, OR PPM  
CLIENT: NIA AIR BASE A.E.S. JOB CODE 01APH  
=====

ANALYSIS	METHOD	REF	SAMPLE IDENTIFICATION
			11
			DETERMINABLE 1/7/85
			LIMITS WELL WATER
LEAD	239.1	3	0.10 BDL

MICHAEL J. SIMPSON  
METALS DIVISION

COPY

PATRICIA M. POWELL  
Public Health Director  
716-439-6129



NIAGARA COUNTY

HEALTH DEPARTMENT  
5467 UPPER MOUNTAIN ROAD  
LOCKPORT, NEW YORK 14094

January 15, 1985

Mr. James Johnson  
6381 Walmore Road  
Niagara Falls, New York 14304

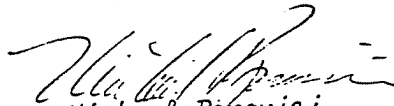
Re: Unsafe Private Water Supply  
6381 Walmore Road  
Town of Wheatfield

Dear Mr. Johnson:

On January 8, 1985, Mr. Stimson of this department made a sanitary survey of the well utilized as a source of private water supply for your residence at the above location. During this inspection, a sample of water was collected and submitted to the Niagara County Laboratory for bacterial examination. It is reported that organisms of the coliform group were present at the time of sampling, indicating that the supply was contaminated and unfit for human consumption at the time of sampling.

Inasmuch as the report of the survey indicates that this well is properly constructed and properly located with respect to known sources of pollution, it is quite possible that the contamination in this supply is of incidental origin. We would, therefore, suggest that this well be thoroughly disinfected in accordance with the enclosed instructions and this office notified so that a new sample may be taken. Until such time as a sanitary survey, confirmed by a bacterial analysis, indicates that this supply is of a safe sanitary quality, all water from it should be boiled before being used for human consumption, or culinary purposes.

Very truly yours,

  
Michael Popovici  
Supervisory Public  
Health Sanitarian

MP/cg  
Enclosures



New York State Department of Environmental Conservation

MEMORANDUM

TO: Mr. Demick - Western Investigation Section
FROM: Mr. Tygert - Region 9
SUBJECT: Walmore Road Site (932094)
DATE: September 17, 1986

On September 17, 1986, Mr. Clare of Region 9 and Mr. Lupe of your Section discussed the problem with site identification of the Walmore Road site. It was agreed that the two sites should be separated in the Registry. We recommend the following division be made:

- 1. 932094 - Existing file for Walmore Road. Change name to Lockport Road Site.
2. - Add new site identified by the Niagara County Health Department in 1982. Name this site Johnson Site - Walmore Road. - 6373 Walmore Rd

It is also recommended that the Johnson Site - Walmore Road be added to the next schedule of Phase I Investigations.

This recommendation was previously made to your Office in a memorandum (undated, unfortunately) written on March 6, 1986. Mr. Lupe advises that this request is not available in your file.

Your consideration of this recommendation will be appreciated.

Handwritten note: site will prepare appropriate forms as presented at Sept 25th ESWC meeting

Handwritten signature

- cc: Mr. Buechi
Mr. Clare
Mr. Olazagasti
Mr. Lupe
Mr. Hopkins