The electronic version of this file/report should have the file name:

Type of document.Spill Number.Year-Month.File *Year-Year* or Report name.pdf

letter._____._____-_____.File spillfile___.pdf

report.hw.915028___.1987___-10-05.SITE INSPECTION REPORT.pdf

Project Site numbers will be proceeded by the following:

Municipal Brownfields - b
Superfund - hw
Spills - sp
ERP - e
VCP - v
BCP - c

non-releasable - put .nf.pdf
Example: letter.sp9875693.1998-01.Filespillfile.nf.pdf

NUS CORPORATION
A Halliburton Company

FIELD INVESTIGATION TEAM ACTIVITIES AT UNCONTROLLED HAZARDOUS SUBSTANCES FACILITIES — ZONE I

NUS CORPORATION
SUPERFUND DIVISION

02-8611-61-SI

FINAL DRAFT
SITE INSPECTION REPORT
AND HAZARD RANKING SYSTEM MODEL
GOLD BOND BUILDING PRODUCTS
CLARENCE CENTER, NEW YORK

PREPARED UNDER

TECHNICAL DIRECTIVE DOCUMENT NO. 02-8611-61
CONTRACT NO. 68-01-7346

FOR THE

ENVIRONMENTAL SERVICES DIVISION
U.S. ENVIRONMENTAL PROTECTION AGENCY

OCTOBER 5, 1987

NUS CORPORATION
SUPERFUND DIVISION

SUBMITTED BY:

Peter S. Morton

PETER S. MORTON
PROJECT MANAGER

REVIEWED/APPROVED BY:

STUART FERGUSON
REGIONAL MANAGER
REGION 2

C-584-10-87-30

October 5, 1987

Ms. Diana Messina
U.S. Environmental Protection Agency
Region 2
Edison, New Jersey 08817

Dear Diana:

Enclosed are the Site Inspection Report (EPA Form 2070-13) and the Hazard Ranking System (HRS) documents for Gold Bond Building Products. The site inspection was authorized under TDD No. 02-8611-61.

Very truly yours,

Peter S. Morton

Peter S. Morton

Reviewed and Approved:

PSM/jv

Enclosures

Contents

SECTION 1

SITE INSPECTION REPORT EXECUTIVE SUMMARY

NUS CORPORATION
A Halliburton Company

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
EXECUTIVE SUMMARY

Gold Bond Building Products **Site Name**	NYD002124444 **EPA Site ID Number**
8600 Roll Road Clarence Center, New York **Address**	02-8611-61 **TDD Number**

SITE DESCRIPTION

Gold Bond Building Products operated a gypsum landfill until January of 1982 that was listed as properly closed by the NYSDEC in the fall of 1983. There is a possibility that unknown hazardous wastes were also disposed of here. The facility is now Roll Road Industrial Park owned by Lorne Whiting, of Akron, New York.

The site is located in a rural area. The landfill is elevated in relation to the surrounding area. Got Creek is adjacent to the landfill to the south, and a drainage ditch leads from the landfill to the creek. There is a strawberry field east of the site. Two patches of leachate-stained ground were noted during the site inspection conducted on 12/9/86. The primary concern is leachate from the landfill contaminating the groundwater and the surface water.

During the site inspection three surface water/sediment samples and three soil samples were collected. No hazardous substances were detected in any of these samples that can be attributed to the landfill.

HAZARD RANKING SCORE: S_M=0.69 (S_{gw} = 0.92, S_{sw} = 0.75, S_a = 0)
S_{FE}= 0
S_{DC}= 0

Prepared by: Peter S. Morton **Date:** July 10, 1987
of NUS Corporation

SECTION 2

ENVIRONMENTAL PROTECTION AGENCY FORM 2070-13

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

I. IDENTIFICATION
01 STATE 02 SITE NUMBER
NY D002124444

II. SITE NAME AND LOCATION

01 SITE NAME (Legal, common, or descriptive name of site)
Gold Bond Building Products

02 STREET, ROUTE NO., OR SPECIFIC LOCATION IDENTIFIER
8600 Roll Road

03 CITY
Clarence Center

04 STATE | 05 ZIP CODE | 06 COUNTY | 07 COUNTY CODE | 08 CONG DIST.
NY | 14032 | Erie | 029 | 38

09 COORDINATES
LATITUDE: 43° 0' 14". N
LONGITUDE: 078° 40' 15". W

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

III. INSPECTION INFORMATION

01 DATE OF INSPECTION
12/ 9 /86
MONTH DAY YEAR

02 SITE STATUS
_ ACTIVE
X INACTIVE

03 YEARS OF OPERATION
late 1920's / 1982
BEGINNING YEAR ENDING YEAR
_ UNKNOWN

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

05 CHIEF INSPECTOR	06 TITLE	07 ORGANIZATION	08 TELEPHONE NO.
Peter Morton	Geologist	NUS Corporation	(201) 225-6160
09 OTHER INSPECTORS	**10 TITLE**	**11 ORGANIZATION**	**12 TELEPHONE NO.**
Al Cherepon	Geologist	NUS Corporation	(201) 225-6160
Peter Babich	Chemist	NUS Corporation	(201) 225-6160
Rick Lorfing	Biologist	NUS Corporation	(201) 225-6160
Peter von Schondorf	Geologist	NUS Corporation	(201) 225-6160
Dan de Bruijn	Technician	NUS Corporation	(201) 225-6160

13 SITE REPRESENTATIVES INTERVIEWED	14 TITLE	15 ADDRESS	16 TELEPHONE NO.
Mr. David Litchke	Manager	Roll Road Industrial Products 8600 Roll Road Clarence Center, NY 14032	(716) 741-2929

17 ACCESS GAINED BY (Check one)	18 TIME OF INSPECTION	19 WEATHER CONDITIONS
X PERMISSION _ WARRANT	0830	Overcast, raining, approximately 35°F, no wind

IV. INFORMATION AVAILABLE FROM

01 CONTACT	02 OF (Agency/Organization)	03 TELEPHONE NO.
Diana Messina	U.S. EPA Region 2, Edison, NJ	(201) 321-6685

04 PERSON RESPONSIBLE FOR SITE INSPECTION FORM	05 AGENCY	06 ORGANIZATION	07 TELEPHONE NO.	08 DATE
Peter Morton	U.S. EPA	NUS Corp., FIT 2	(201) 225-6160	12/29/86

MONTH DAY YEAR

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 2 - WASTE INFORMATION

I. IDENTIFICATION
01 STATE 02 SITE NUMBER
NY D002124444

II. WASTE STATES, QUANTITIES, AND CHARACTERISTICS

01 PHYSICAL STATES (Check all that apply)

- _ A. SOLID
- _ B. POWDER, FINES
- _ C. SLUDGE
- _ E. SLURRY
- _ F. LIQUID
- _ G. GAS
- X D. OTHER Unknown (Specify)

02 WASTE QUANTITY AT SITE (Measures of waste quantities must be independent)

TONS
CUBIC YARDS Unknown
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
- X M. NOT APPLICABLE

III. WASTE TYPE

CATEGORY	SUBSTANCE NAME	01 GROSS AMOUNT	02 UNIT OF MEASURE	03 COMMENTS
SLU	SLUDGE			No hazardous substances that can be attributed to the site were detected in any of the samples collected on 12/09/86.
OLW	OILY WASTE			
SOL	SOLVENTS			
PSD	PESTICIDES			
OCC	OTHER ORGANIC CHEMICALS			
IOC	INORGANIC CHEMICALS			
ACD	ACIDS			
BAS	BASES			
MES	HEAVY METALS			

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

CATEGORY	02 SUBSTANCE NAME	03 CAS NUMBER	04 STORAGE/DISPOSAL METHOD	05 CONCENTRATION	06 MEASURE OF CONCENTRATION

V. FEEDSTOCKS (See Appendix for CAS Numbers)

CATEGORY	01 FEEDSTOCK NAME	02 CAS NUMBER	CATEGORY	01 FEEDSTOCK NAME	02 CAS NUMBER
FDS	N/A		FDS		
FDS			FDS		
FDS			FDS		
FDS			FDS		

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

U.S. EPA background files, Gold Bond Building Products, NUS Corp., Edison, N.J.
Gold Bond Building Products file, filed under TDD No. 02-8611-61, NUS Corp., Edison, N.J., Sample Analysis Results.

II. HAZARDOUS CONDITIONS AND INCIDENTS

01 _ A. GROUNDWATER CONTAMINATION 02 _ OBSERVED (DATE: _____) _ POTENTIAL _ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: _____ 04 NARRATIVE DESCRIPTION

No groundwater samples were obtained during the site investigation on 12/9/86 because no downgradient wells exist. No hazardous substances were detected in any of the samples collected.

01 _ B. SURFACE WATER CONTAMINATION 02 _ OBSERVED (DATE: _____) _ POTENTIAL _ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: _____ 04 NARRATIVE DESCRIPTION

No hazardous substances were detected in the surface water samples collected on 12/9/86.

01 _ C. CONTAMINATION OF AIR 02 _ OBSERVED (DATE: _____) _ POTENTIAL _ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: _____ 04 NARRATIVE DESCRIPTION

No readings above background were detected on the OVA flame ionization detector or the HNu photoionization detector during the site inspection on 12/9/86. However, the odor of hydrogen sulfide was noted at several spots around the landfill.

01 _ D. FIRE/EXPLOSIVE CONDITIONS 02 _ OBSERVED (DATE: _____) _ POTENTIAL _ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: _____ 04 NARRATIVE DESCRIPTION

No fire/explosion conditions were noted on site during the site inspection on 12/9/86.

01 _ E. DIRECT CONTACT 02 _ OBSERVED (DATE: _____) _ POTENTIAL _ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: _____ 04 NARRATIVE DESCRIPTION

The site is not fenced. However, there is no hazardous substance present that creates a potential for exposure through direct contact.

01 _ F. CONTAMINATION OF SOIL 02 _ OBSERVED (DATE: _____) _ POTENTIAL _ ALLEGED
03 AREA POTENTIALLY AFFECTED: _____ (ACRES) 04 NARRATIVE DESCRIPTION

The soil samples collected on 12/9/86 are not contaminated. One sample had a small quantity of beta-BHC present, but it cannot be attributed to the gypsum landfill.

01 _ G. DRINKING WATER CONTAMINATION 02 _ OBSERVED (DATE: _____) _ POTENTIAL _ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: _____ 04 NARRATIVE DESCRIPTION

No hazardous substances that can be attributed to the site were detected in any of the samples collected on 12/9/86.

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

No potential exists for worker exposure/injury because no hazardous wastes are present on site.

01 _ I. POPULATION EXPOSURE/INJURY 02 _ OBSERVED (DATE: _____) _ POTENTIAL _ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: _____ 04 NARRATIVE DESCRIPTION

No hazardous substances were detected in any of the samples collected. There is no potential for population exposure/injury at the site.

II. HAZARDOUS CONDITIONS AND INCIDENTS (Continued)

01 _ J. DAMAGE TO FLORA 02 _ OBSERVED (DATE: _____) _ POTENTIAL _ ALLEGED
04 NARRATIVE DESCRIPTION

No damage to flora was noted during the site inspection on 12/9/86. No hazardous substances were detected in any of the samples which might cause damage to flora.

01 _ K. DAMAGE TO FAUNA 02 _ OBSERVED (DATE: _____) _ POTENTIAL _ ALLEGED
04 NARRATIVE DESCRIPTION (Include name(s) of species)

No damage to fauna was observed during the site inspection on 12/9/86. No hazardous substances were detected which might damage fauna.

01 _ L. CONTAMINATION OF FOOD CHAIN 02 _ OBSERVED (DATE: _____) _ POTENTIAL _ ALLEGED
04 NARRATIVE DESCRIPTION

No hazardous substances were detected in the samples collected on 12/9/86 which might contaminate the food chain.

01 _ M. UNSTABLE CONTAINMENT OF WASTES 02 _ OBSERVED (DATE: _____) _ POTENTIAL _ ALLEGED
(Spills/runoff/standing liquids/leaking drums)
03 POPULATION POTENTIALLY AFFECTED: _____ 04 NARRATIVE DESCRIPTION

The site is a gypsum landfill that has no lining, collection system, or runoff channels.

01 _ N. DAMAGE TO OFFSITE PROPERTY 02 _ OBSERVED (DATE: _____) _ POTENTIAL _ ALLEGED
04 NARRATIVE DESCRIPTION

No damage to off-site property was noted during the site inspection on 12/9/86.

01 _ O. CONTAMINATION OF SEWERS, STORM DRAINS, WWTPs 02 _ OBSERVED (DATE: _____) _ POTENTIAL _ ALLEGED
04 NARRATIVE DESCRIPTION

No sewers are used in the area.

01 X P. ILLEGAL/UNAUTHORIZED DUMPING 02 _ OBSERVED (DATE: _____) _ POTENTIAL X ALLEGED
04 NARRATIVE DESCRIPTION

There were allegations that paint sludges were disposed of here in the past. The Department of Environment and Planning was not able to substantiate this, however. No hazardous substances that can be attributed to the landfill were detected in the samples collected on 12/9/86.

05 DESCRIPTION OF ANY OTHER KNOWN, POTENTIAL, OR ALLEGED HAZARDS

None

III. TOTAL POPULATION POTENTIALLY AFFECTED: _____

IV. COMMENTS

The Gold Bond Building Products gypsum landfill was listed as properly closed by the NYSDEC in 1983. The site is currently active as Roll Road Industrial Park. They are renovating the buildings for future leasing.

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

Telecon note of call between Steve Maybury of NUS Corp., and Ron Kolsaja of Erie County Health Department dated 3/13/86.
U.S. EPA Gold Bond background files, NUS Corporation, Edison New Jersey.
NUS FIT 2 Site Inspection conducted on 12/9/86.

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

I. IDENTIFICATION
01 STATE 02 SITE NUMBER
NY D002124444

II. PERMIT INFORMATION

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

III. SITE DESCRIPTION

01 Storage/Disposal (Check all that apply)	02 AMOUNT	03 UNIT OF MEASURE
_ A. SURFACE IMPOUNDMENT		
_ B. PILES		
_ C. DRUMS, ABOVE GROUND		
_ D. TANK, ABOVE GROUND		
_ E. TANK, BELOW GROUND		
X F. LANDFILL	Unknown	
_ G. LANDFARM		
_ H. OPEN DUMP		
_ I. OTHER _____ (Specify)		

04 TREATMENT (Check all that apply)
- _ A. INCINERATION
- _ B. UNDERGROUND INJECTION
- _ C. CHEMICAL/PHYSICAL
- _ D. BIOLOGICAL
- _ E. WASTE OIL PROCESSING
- _ F. SOLVENT RECOVERY
- _ G. OTHER RECYCLING/RECOVERY
- X H. OTHER None (Specify)

05 OTHER
- X A. BUILDINGS ON SITE

06 AREA OF SITE
61 (Acres)
Area of landfill is 2 to 3 acres

07 COMMENTS

Gold Bond Building Products operated a gypsum landfill which was properly closed in 1983. There is a possibility that othe wastes were disposed of here. Gold Bond had a New York State consent order authorizing them to landfill gypsum wastes. Analysis of the samples collected on 12/9/86 showed no hazardous wastes that can be attributed to the landfill.

IV. CONTAINMENT

01 CONTAINMENT OF WASTES (Check one)

_ A. ADEQUATE, SECURE X B. MODERATE _ C. INADEQUATE, POOR _ D. INSECURE, UNSOUND, DANGEROUS

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

The landfill was listed as properly closed by the NYSDEC. During the site inspection on 12/9/86, several areas were noted where leachate was discharging from the landfill and flowing into a drainage ditch. The landfill had no liner or diversion systems.

V. ACCESSIBILITY

01 WASTE EASILY ACCESSIBLE: X YES _ NO

02 COMMENTS

The site is not fenced.

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

U.S. EPA background files, NUS Corporation, Edison, New Jersey.
NUS FIT 2 Site Inspection conducted on 12/9/86.

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

I. IDENTIFICATION
01 STATE 02 SITE NUMBER
NY D002124444

II. DRINKING WATER SUPPLY

01 TYPE OF DRINKING SUPPLY (Check as applicable)

02 STATUS

03 DISTANCE TO SITE

	SURFACE	WELL	ENDANGERED	AFFECTED	MONITORED	
COMMUNITY	A. X	B.	A.	B.	C. X	A. 3 (mi)
NON-COMMUNITY	C.	D. X	D.	E.	F.	B. 0.1 (mi)

III. GROUNDWATER

01 GROUNDWATER USE IN VICINITY (Check one)

_ A. ONLY SOURCE FOR DRINKING (Other sources available) COMMERCIAL, INDUSTRIAL, IRRIGATION (No other water sources available)

X B. DRINKING (Other sources available) COMMERCIAL, INDUSTRIAL, IRRIGATION (No other water sources available)

_ C. COMMERCIAL, INDUSTRIAL, IRRIGATION (Limited other sources available)

_ D. NOT USED, UNUSEABLE

02 POPULATION SERVED BY GROUND WATER: 38

03 DISTANCE TO NEAREST DRINKING WATER WELL: 0.1 (mi)

04 DEPTH TO GROUNDWATER	05 DIRECTION OF GROUNDWATER FLOW	06 DEPTH TO AQUIFER OF CONCERN	07 POTENTIAL YIELD OF AQUIFER	08 SOLE SOURCE AQUIFE
Approx. 18 (ft)	Northwest	Approx. 18 (ft)	720,000 - 1,440,000 (gpd)	_ YES X NO

09 DESCRIPTION OF WELLS (Including useage, depth, and location relative to population and buildings)

Fewer than 10 private residences use private wells for drinking water within 3 miles of the site. The location and depth of these wells are unknown.

10 RECHARGE AREA

X YES
_ NO

COMMENTS: The soil is a permeable silty loam, thus making it a potential recharge area.

11. DISCHARGE AREA

X YES
_ NO

COMMENTS: When the groundwater table is high, water discharges to Got Creek.

IV. SURFACE WATER

01 SURFACE WATER USE (Check one)

_ A. RESERVOIR, RECREATION DRINKING WATER SOURCE

X B. IRRIGATION, ECONOMICALLY IMPORTANT RESOURCES

_ C. COMMERCIAL, INDUSTRIAL

_ D. NOT CURRENTLY USED

02 AFFECTED/POTENTIALLY AFFECTED BODIES OF WATER

NAME:	AFFECTED	DISTANCE TO SITE
Got Creek	No	0.02 (mi)
		(mi)
		(mi)

V. DEMOGRAPHIC AND PROPERTY INFORMATION

01 TOTAL POPULATION WITHIN

ONE (1) MILE OF SITE	TWO (2) MILES OF SITE	THREE (3) MILES OF SITE
A. 3020 NO. OF PERSONS	B. 5640 NO. OF PERSONS	C. 20,295 NO. OF PERSONS

02 DISTANCE TO NEAREST POPULATION: Approximatley 0.25 (mi)

03 NUMBER OF BUILDINGS WITHIN TWO (2) MILES OF SITE: 1690

04 DISTANCE TO NEAREST OFF-SITE BUILDING: 0.25 (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)

The site is in a rural area. There are fewer than 20 private residences within 0.5 mile of the site.

VI. ENVIRONMENTAL INFORMATION

01 PERMEABILITY OF UNSATURATED ZONE (Check one)

_ A. 10^{-6} - 10^{-8} cm/sec _ B. 10^{-4} - 10^{-6} cm/sec X C. 10^{-4} - 10^{-3} cm/sec _ D. GREATER THAN 10^{-3} cm/sec

02 PERMEABILITY OF BEDROCK (Check one)

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

03 DEPTH TO BEDROCK	04 DEPTH OF CONTAMINATED SOIL ZONE	05 SOIL pH
Approximately 40 (ft)	Unknown (ft)	Unknown

06 NET PRECIPITATION	07 ONE YEAR 24 HOUR RAINFALL	08 SLOPE SITE SLOPE	DIRECTION OF SITE SLOPE	TERRAIN AVERAGE SLOP
7 (in)	2 (in)	17 %	South	1 %

09 FLOOD POTENTIAL 10

SITE IS IN 100 YEAR FLOODPLAIN _ SITE IS ON BARRIER ISLAND, COASTAL HIGH HAZARD AREA, RIVERINE FLOODWAY

11 DISTANCE TO WETLANDS (5 acre minimum)

ESTUARINE	OTHER
A. >2 (mi)	B. 0.03 (mi)

12 DISTANCE TO CRITICAL HABITAT (of endangered species)

>1 (mi)

ENDANGERED SPECIES: Not applicable

13 LAND USE IN VICINITY

DISTANCE TO:

COMMERCIAL/INDUSTRIAL	RESIDENTIAL AREAS: NATIONAL/STATE PARKS, FORESTS, OR WILDLIFE RESERVES	AGRICULTURAL LANDS PRIME AG LAND	AG LAND
A. 3 (mi)	B. 0.25 (mi)	C. 0.1 (mi)	D. 0.1 (mi)

14 DESCRIPTION OF SITE IN RELATION TO SURROUNDING TOPOGRAPHY

The site is in rural country. The landfill is elevated in relation to the surrounding area. Got Creek is adjacent to the site to the south. A drainage ditch drains the area of the landfill and feeds directly into the creek. A strawberry field lies to the east of the site.

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

U.S. EPA background files, NUS Corporation, Edison, New Jersey.
NUS FIT 2 Site Inspection conducted on 12/9/86.
Telecon note of call between Peter Morton of NUS Corp. and Don Berkhardt of Clarence Water Department dated 12/5/86.

II. SAMPLES TAKEN

SAMPLE TYPE	01 NUMBER OF SAMPLES TAKEN	02 SAMPLES SENT TO	03 ESTIMATED DATE RESULTS AVAILABLE
GROUNDWATER			
SURFACE WATER	3	Organic Lab: IT Analytical Services Knoxville, TN	
WASTE			
AIR			
RUNOFF			
SPILL			
SOIL	3	Inorganic Lab: Century Labs, Inc. Thorofare, NJ	
VEGETATION			
OTHER /Sediment	3		

III. FIELD MEASUREMENTS TAKEN

01 TYPE	02 COMMENTS
OVA	No readings above background were noted on 12/9/86 on either the OVA or the HNu.
HNu	

IV. PHOTOGRAPHS AND MAPS

01 TYPE X GROUND _ AERIAL 02 IN CUSTODY OF NUS Corporation Region 2 FIT
(Name of organization or individual)

03 MAPS 04 LOCATION OF MAPS

X YES
_ NO

NUS Corporation Region 2 FIT

V. OTHER FIELD DATA COLLECTED (Provide narrative description)

All field activities, samples collected, and photographs taken were logged in Field Notebook No. 1429, filed under TDD No. 02-8611-61, NUS Corporation, Edison, New Jersey.

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

NUS FIT 2 Site Inspection conducted on 12/9/86.

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

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
NY	D002124444

II. CURRENT OWNER(S)

01 NAME	02 D + B NUMBER	PARENT COMPANY (If applicable) 08 NAME	09 D + B NUMBER
Lorne Whiting Roll Road Industrial Park		Not applicable	

03 STREET ADDRESS (P.O. Box, RFD#, etc.)	04 SIC CODE	10 STREET ADDRESS (P.O. Box, RFD#, etc.)	11 SIC CODE
113 Cedar Street			

05 CITY	06 STATE	07 ZIP CODE	12 CITY	13 STATE	14 ZIP CODE
Akron	NY	14001			

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

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

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
Stockholders Gold Bond Building Products			

03 STREET ADDRESS (P.O. Box, RFD#, etc.)	04 SIC CODE	03 STREET ADDRESS (P.O. Box, RFD#, etc.)	04 SIC CODE
Not applicable			

05 CITY	06 STATE	07 ZIP CODE	05 CITY	06 STATE	07 ZIP CODE
Not applicable					

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)

NUS FIT 2 Site Inspection conducted on 12/9/86, field notebook No. 1429 filed under TDD No. 02-8611-61.

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 8 - OPERATOR INFORMATION

1. IDENTIFICATION
01 STATE 02 SITE NUMBER
NY D002124444

II. CURRENT OPERATOR(S)

01 NAME	02 D + B Number	OPERATOR'S PARENT COMPANY (If applicable) 10 NAME	11 D + B NUMBER
Not applicable			
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 only if different from owner)

01 NAME	02 D + B Number	PREVIOUS OPERATOR'S PARENT COMPANIES (If applicable) 10 NAME	11 D + B NUMBER
Gold Bond Building Products			
03 STREET ADDRESS (P.O. Box, RFD#, etc.)	04 SIC CODE	12 STREET ADDRESS (P.O. Box, RFD#, etc.)	13 SIC CODE
8600 Roll Road			
05 CITY 06 STATE	07 ZIP CODE	14 CITY 15 STATE	16 ZIP CODE
Clarence Center NY	14032		
08 YEARS OF OPERATION 09 NAME OF OWNER			

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			

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			

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

U.S. EPA background files, NUS Corporation, Edison, New Jersey.
NUS FIT 2 Site Inspection conducted on 12/9/86, field notebook No. 1429 filed under TDD No. 02-8611-61.

1. IDENTIFICATION
01 STATE 02 SITE NUMBER
NY D002124444

II ON-SITE GENERATOR

01 NAME	02 D + B NUMBER
Not applicable	
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
Unknown			
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	02 D + B NUMBER	01 NAME	02 D + B NUMBER
None			
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)

U.S. EPA background files, NUS Corporation, Edison, New Jersey.

II. PAST RESPONSE ACTIVITIES

01 ___ A. WATER SUPPLY CLOSED — 02 DATE: _____ — 03 AGENCY: _____
04 DESCRIPTION

No previous history
01 ___ B. TEMPORARY WATER SUPPLY PROVIDED — 02 DATE: _____ — 03 AGENCY: _____
04 DESCRIPTION

Not applicable
01 ___ C. PERMANENT WATER SUPPLY PROVIDED — 02 DATE: _____ — 03 AGENCY: _____
04 DESCRIPTION

Not applicable
01 ___ D. SPILLED MATERIAL REMOVED — 02 DATE: _____ — 03 AGENCY: _____
04 DESCRIPTION

Not applicable
01 ___ E. CONTAMINATED SOIL REMOVED — 02 DATE: _____ — 03 AGENCY: _____
04 DESCRIPTION

Not applicable
01 ___ F. WASTE REPACKAGED — 02 DATE: _____ — 03 AGENCY: _____
04 DESCRIPTION

Not applicable
01 ___ G. WASTE DISPOSED ELSEWHERE — 02 DATE: _____ — 03 AGENCY: _____
04 DESCRIPTION

Not applicable
01 ___ H. ON SITE BURIAL — 02 DATE: _____ — 03 AGENCY: _____
04 DESCRIPTION

Not applicable
01 ___ I. IN SITU CHEMICAL TREATMENT — 02 DATE: _____ — 03 AGENCY: _____
04 DESCRIPTION

Not applicable
01 ___ J. IN SITU BIOLOGICAL TREATMENT — 02 DATE: _____ — 03 AGENCY: _____
04 DESCRIPTION

Not applicable
01 ___ K. IN SITU PHYSICAL TREATMENT — 02 DATE: _____ — 03 AGENCY: _____
04 DESCRIPTION

Not applicable
01 ___ L. ENCAPSULATION — 02 DATE: _____ — 03 AGENCY: _____
04 DESCRIPTION

Not applicable
01 ___ M. EMERGENCY WASTE TREATMENT — 02 DATE: _____ — 03 AGENCY: _____
04 DESCRIPTION

Not applicable
01 ___ N. CUTOFF WALLS — 02 DATE: _____ — 03 AGENCY: _____
04 DESCRIPTION

Not applicable
01 ___ O. EMERGENCY DIKING/SURFACE WATER DIVERSION — 02 DATE: _____ — 03 AGENCY: _____
04 DESCRIPTION

Not applicable
01 ___ P. CUTOFF TRENCHES/SUMP — 02 DATE: _____ — 03 AGENCY: _____
04 DESCRIPTION

Not applicable
01 ___ Q. SUBSURFACE CUTOFF WALL — 02 DATE: _____ — 03 AGENCY: _____
04 DESCRIPTION

Not applicable

II. PAST RESPONSE ACTIVITIES

01 ___ R. BARRIER WALLS CONSTRUCTED — 02 DATE: _____ — 03 AGENCY: _____
04 DESCRIPTION

Not applicable
01 ___ S. CAPPING/COVERING — 02 DATE: _____ — 03 AGENCY: _____
04 DESCRIPTION

Not applicable
01 ___ T. BULK TANKAGE REPAIRED — 02 DATE: _____ — 03 AGENCY: _____
04 DESCRIPTION

Not applicable
01 ___ U. GROUT CURTAIN CONSTRUCTED — 02 DATE: _____ — 03 AGENCY: _____
04 DESCRIPTION

Not applicable
01 ___ V. BOTTOM SEALED — 02 DATE: _____ — 03 AGENCY: _____
04 DESCRIPTION

Not applicable
01 ___ W. GAS CONTROL — 02 DATE: _____ — 03 AGENCY: _____
04 DESCRIPTION

Not applicable
01 ___ X. FIRE CONTROL — 02 DATE: _____ — 03 AGENCY: _____
04 DESCRIPTION

Not applicable
01 ___ Y. LEACHATE TREATMENT — 02 DATE: _____ — 03 AGENCY: _____
04 DESCRIPTION

Not applicable
01 ___ Z. AREA EVACUATED — 02 DATE: _____ — 03 AGENCY: _____
04 DESCRIPTION

Not applicable
01 ___ 1. ACCESS TO SITE RESTRICTED — 02 DATE: _____ — 03 AGENCY: _____
04 DESCRIPTION

Not applicable
01 ___ 2. POPULATION RELOCATED — 02 DATE: _____ — 03 AGENCY: _____
04 DESCRIPTION

Not applicable
01 ___ 3. OTHER REMEDIAL ACTIVITIES — 02 DATE: _____ — 03 AGENCY: _____
04 DESCRIPTION

Not applicable

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

NUS FIT 2 Site Inspection conducted on 12/9/86.

II. ENFORCEMENT INFORMATION

01 PAST REGULATORY/ENFORCEMENT ACTION _ YES X NO

02 DESCRIPTION OF FEDERAL, STATE, LOCAL REGULATORY/ENFORCEMENT ACTION

No history of regulatory/enforcement action.

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

U.S. EPA background files, NUS Corporation, Edison, New Jersey.

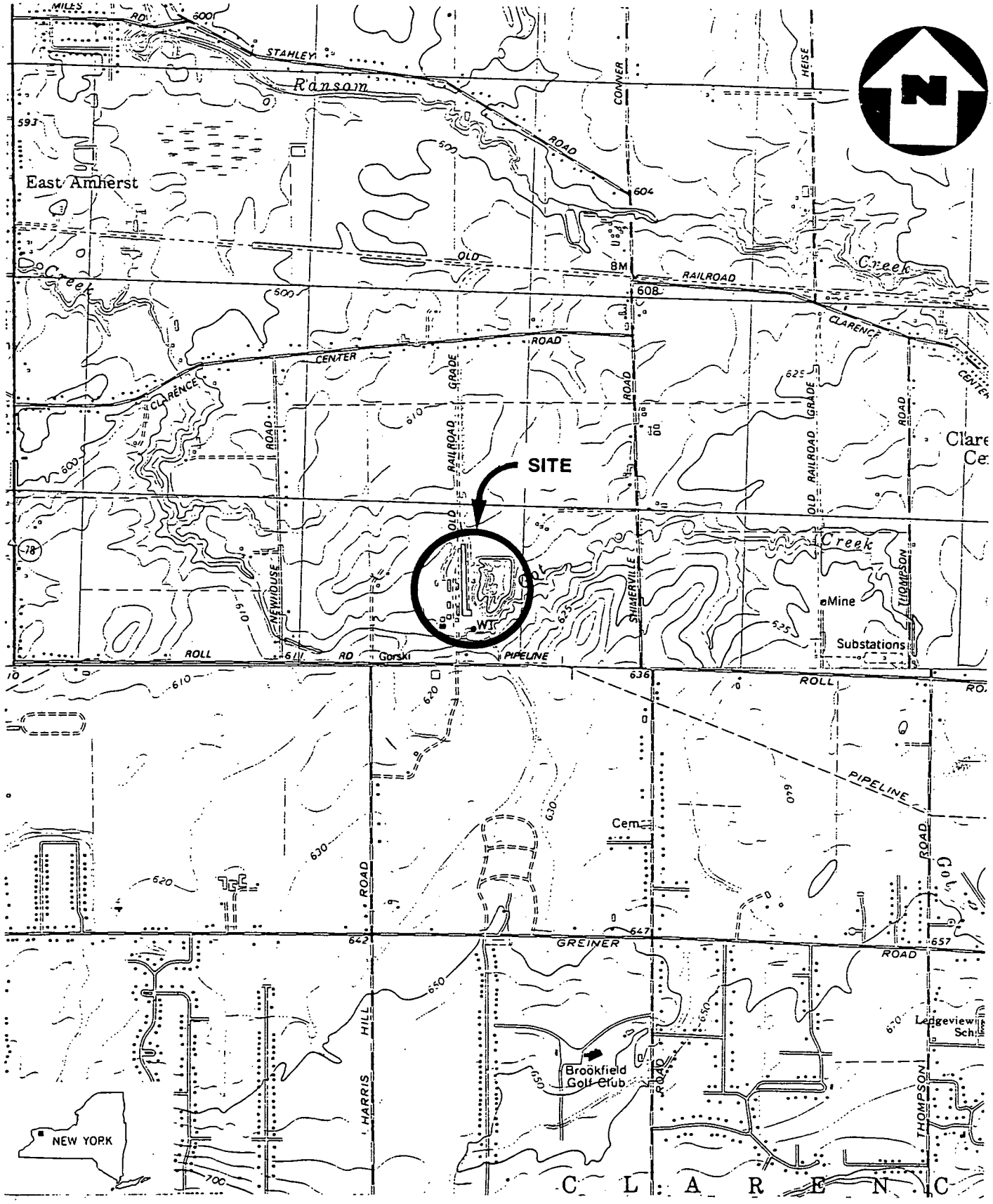
SECTION 3

MAPS AND PHOTOGRAPHS

MAPS AND PHOTOGRAPHS
GOLD BOND BUILDING PRODUCTS
CLARENCE CENTER, NEW YORK

TDD #02-8611-61

Figure 1 provides a Site Location Map
Figure 2 provides a Site Map
Figure 3 provides a Sample Location Map
Exhibit 1 provides photographs of the site



(QUAD) CLARENCE CENTER, N.Y.

FIGURE 1

SITE LOCATION MAP

GOLD BOND BLDG. PROD., CLARENCE CENTER, N.Y.

(SCALE: 1"=2000')

NUS CORPORATION

A Halliburton Company

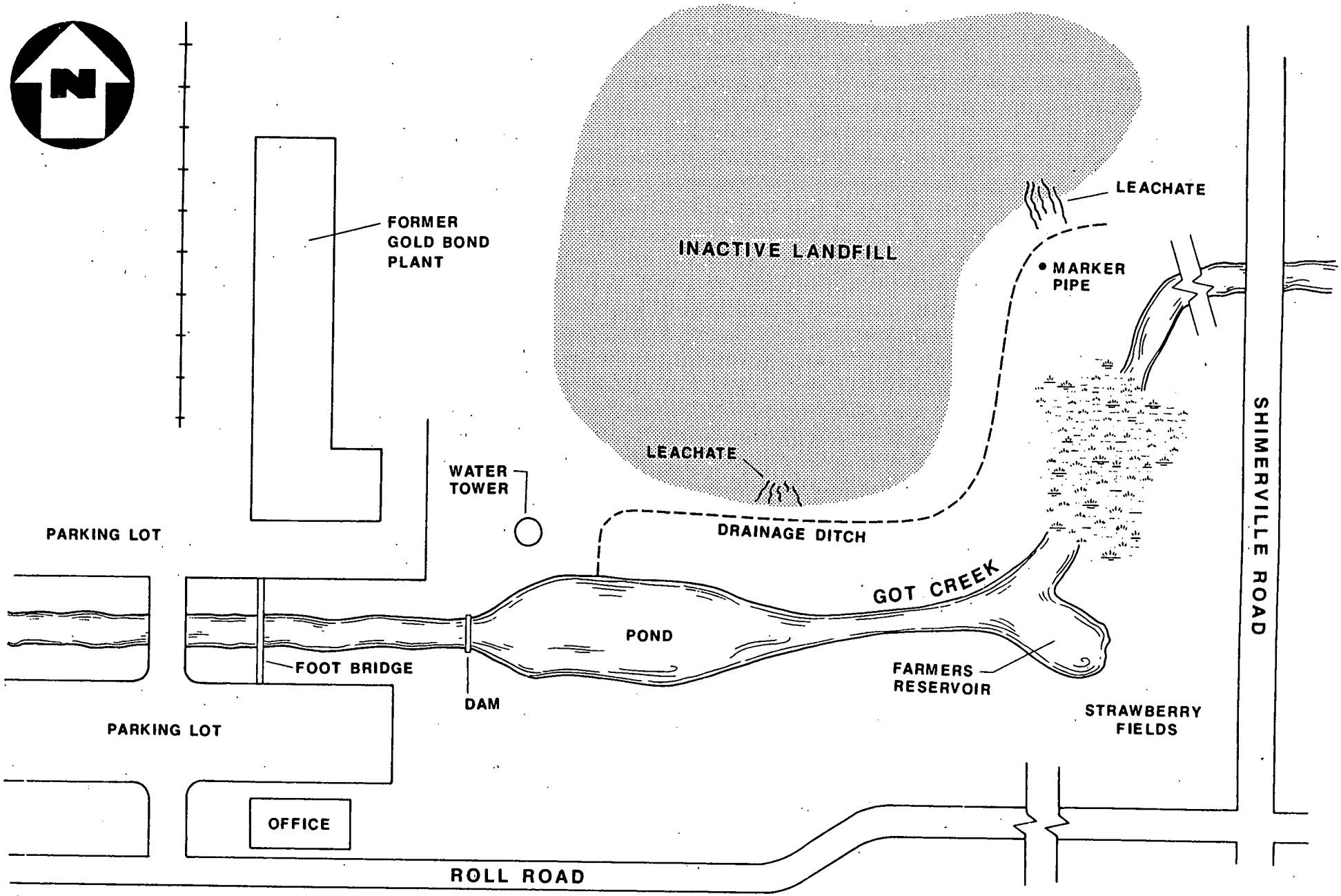


FIGURE 2

SITE MAP

GOLD BOND BUILDING PRODUCTS CLARENCE CENTER, N.Y.

(NOT TO SCALE)

NUS CORPORATION
A Halliburton Company

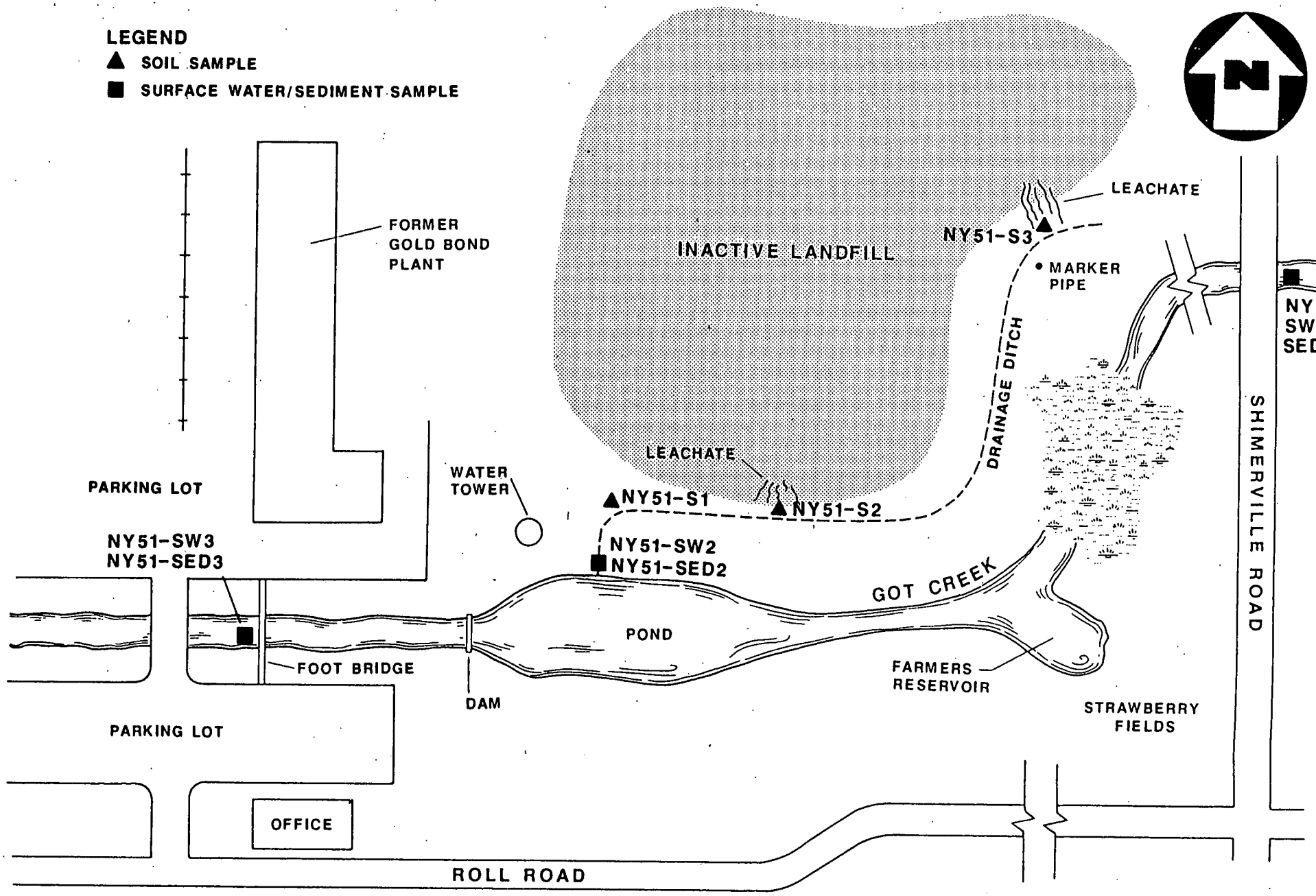


FIGURE 3

SAMPLE LOCATION MAP

GOLD BOND BUILDING PRODUCTS CLARENCE CENTER, N, Y.

(NOT TO SCALE)

NUS CORPORATION
A Halliburton Company

GOLD BOND BUILDING PRODUCTS
CLARENCE CENTER, NEW YORK
TDD# 02-8611-61
DECEMBER 9, 1986

PHOTOGRAPH LOG

GOLD BOND BUILDING PRODUCTS
CLARENCE CENTER, NEW YORK
TDD# 02-8611-61
DECEMBER 9, 1986

PHOTOGRAPH INDEX

ALL PHOTOGRAPHS TAKEN BY DAN DE BRUIJN

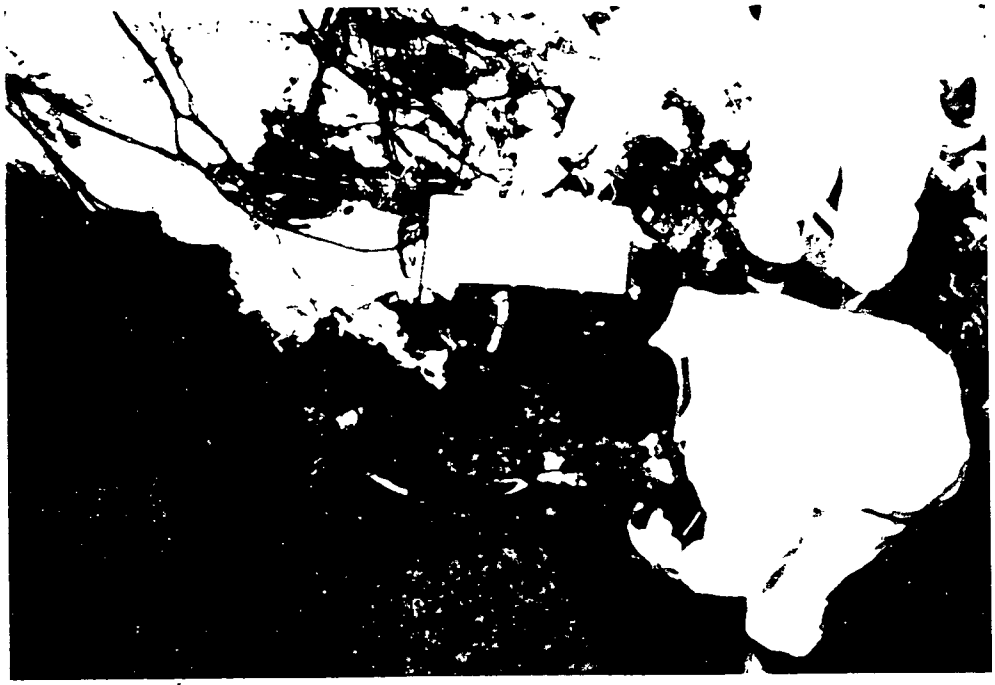
Photo Number	Description	Time
1P-1	View of landfill looking northeast.	1420
1P-2	R. Lorfing collecting sample SW-1.	1232
1P-3	J. Ducar collecting sample SED-1.	1237
1P-4	J. Ducar collecting sample SW-2.	1123
1P-5	R. Lorfing collecting sample SED-2.	1127
1P-6	R. Lorfing collecting sample SW-3.	1047
1P-7	J. Ducar collecting sample SED-3.	1049
1P-8	J. Ducar collecting sample S-1.	1217
1P-9	R. Lorfing collecting sample S-2.	1335
1P-10	J. Ducar collecting sample S-3.	1352
1P-11	R. Lorfing decontaminating sample bottles.	1102
1P-12	Sludgy material augered from S-3.	1353

GOLD BOND BUILDING PRODUCTS, CLARENCE CENTER, NEW YORK

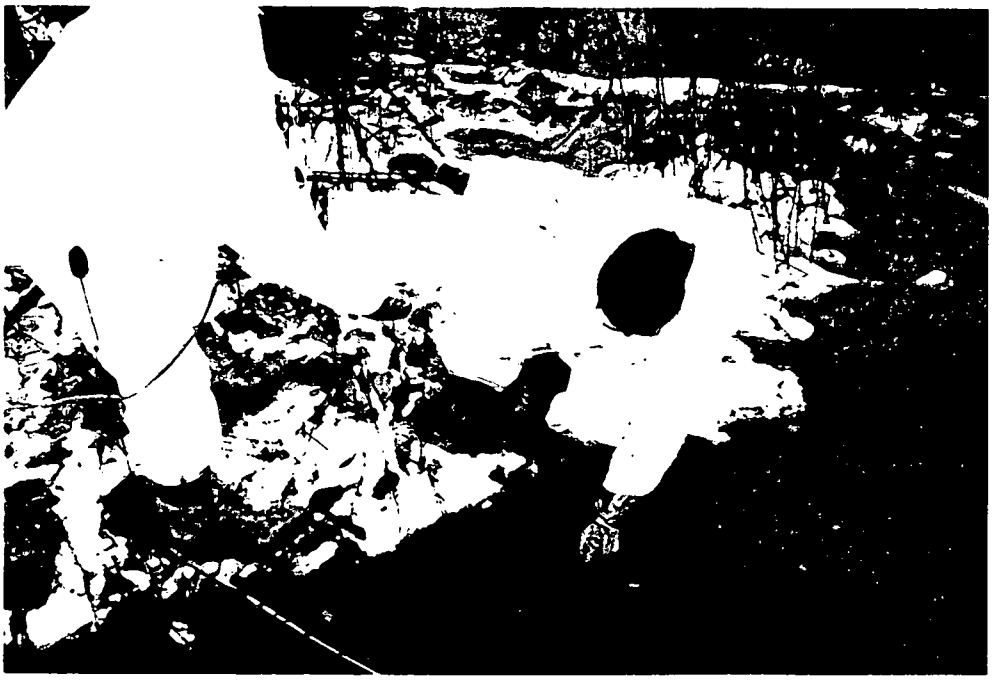
1P-1 December 9, 1986 1420
View of landfill looking northeast.
Photographer: Dan de Bruijn.

1P-2 December 9, 1986 1232
R. Lorfing collecting sample SW-1.
Photographer: Dan de Bruijn.

GOLD BOND BUILDING PRODUCTS, CLARENCE CENTER, NEW YORK



1P-3 December 9, 1986 1237
J. Ducar collecting sample SED-1.
Photographer: Dan de Bruijn.



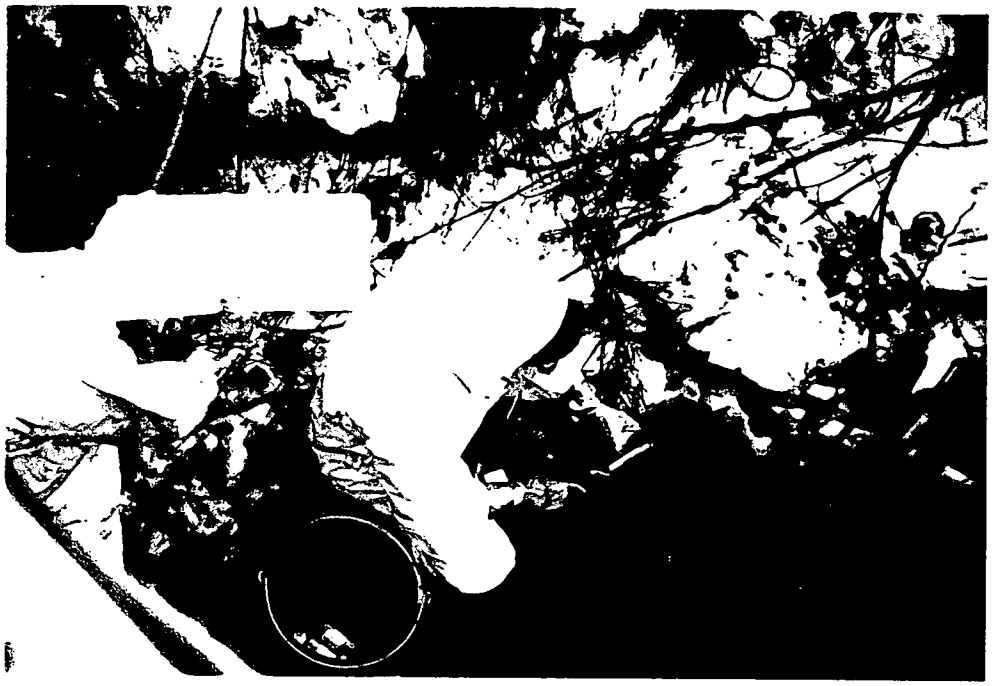
1P-4 December 9, 1986 1123
J. Ducar collecting sample SW-2.
Photographer: Dan de Bruijn.

GOLD BOND BUILDING PRODUCTS, CLARENCE CENTER, NEW YORK

1P-5 December 9, 1986 1127
R. Lorfing collecting sample SED-2.
Photographer: Dan de Bruijn.

1P-6 December 9, 1986 1047
R. Lorfing collecting sample SW-3.
Photographer: Dan de Bruijn.

GOLD BOND BUILDING PRODUCTS, CLARENCE CENTER, NEW YORK



1P-7 December 9, 1986 1049
J. Ducar collecting sample SED-3.
Photographer: Dan de Bruijn.

1P-8 December 9, 1986 1217
J. Ducar collecting sample S-1.
Photographer: Dan de Bruijn.

NUS CORPORATION

GOLD BOND BUILDING PRODUCTS, CLARENCE CENTER, NEW YORK

1P-9 December 9, 1986 1335
R. Lorfing collecting sample S-2.
Photographer: Dan de Bruijn.

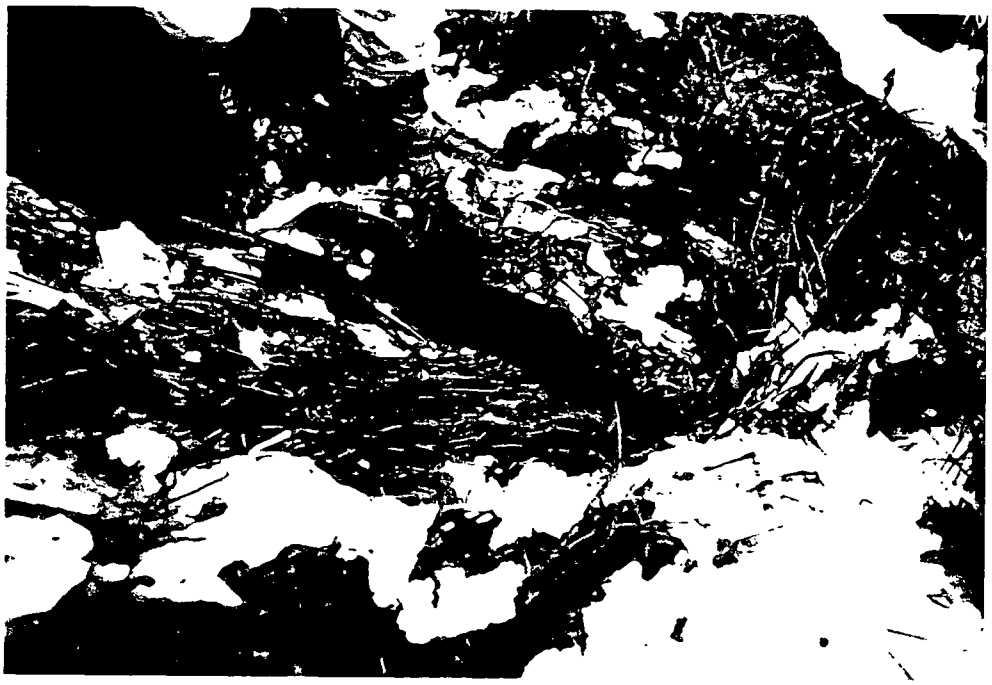
GOLD BOND BUILDING PRODUCTS, CLARENCE CENTER, NEW YORK

1P-10 December 9, 1986 1352
J. Ducar collecting sample S-3.
Photographer: Dan de Bruijn.

1P-11 December 9, 1986 1102
R. Lorfing decontaminating sample bottles.
Photographer: Dan de Bruijn.

NUS CORPORATION

GOLD BOND BUILDING PRODUCTS, CLARENCE CENTER, NEW YORK



1P-12 December 9, 1986 1353
Sludgy material augered from S-3.
Photographer: Dan de Bruijn.

SECTION 4

DOCUMENTATION RECORDS FOR HAZARD RANKING SYSTEM

FIT QUALITY ASSURANCE TEAM
DOCUMENTATION RECORDS
FOR
HAZARD RANKING SYSTEM

INSTRUCTIONS: As briefly as possible summarize the information you used to assign the score for each factor (e.g., "Waste quantity = 4,230 drums plus 800 cubic yards of sludges"). The source of information should be provided for each entry and should be a bibliographic-type reference. Include the location of the document.

FACILITY NAME: Gold Bond Building Products

LOCATION: 8600 Roll Rd., Clarence Center, Erie Co., New York

DATE SCORED: 07/09/87

PERSON SCORING: Peter Morton

PRIMARY SOURCE(S) OF INFORMATION (e.g., EPA region, state, FIT, etc.):
U.S. EPA background files, NUS Corp., Edison, New Jersey
FIT II site inspection conducted on 12/9/86.

FACTORS NOT SCORED DUE TO INSUFFICIENT INFORMATION:

COMMENTS OR QUALIFICATIONS:
The air route was scored a zero because no readings above background were noted on the OVA flame ionization detector or the HNu photoionization detector during the site inspection on 12/9/86. The fire/explosion route was scored zero because no potential for fire/explosion was noted on site.
Ref: #1

GROUNDWATER ROUTE

1 OBSERVED RELEASE

Contaminants detected (5 maximum):

No groundwater samples were collected on 12/09/86.

Rationale for attributing the contaminants to the facility:

N/A

* * *

2 ROUTE CHARACTERISTICS

Depth to Aquifer of Concern

Name/description of aquifer(s) of concern:

The aquifer of concern is the Camillus Shale. It is a gray shale with gray limestone and shale interbedded. There is also a significant amount of gypsum present.
Ref: #4, #5

Depth(s) from the ground surface to the highest seasonal level of the saturated zone water table(s) of the aquifer of concern:

The depth to groundwater is approximately 18 feet. Score: 3
Ref: #4

Depth from the ground surface to the lowest point of waste disposal/storage:

The depth of waste disposal is unknown, so a depth of 6 feet is assumed.
Ref: #2

Net Precipitation

Mean annual or seasonal precipitation (list months for seasonal):

34 inches

Ref: #2

Mean annual lake or seasonal evaporation (list months for seasonal):

27 inches

Ref: #2

Net precipitation (subtract the above figures):

7 inches Score: 2

Ref: #2

Permeability of Unsaturated Zone

Soil type in unsaturated zone:

The soils in the unsaturated zone are silty loams, primarily of the Odessa Series.

Ref: #3

Permeability associated with soil type:

10^{-3} - 10^{-5} cm/sec Score: 2

Ref: #2

Physical State

Physical state of substances at time of disposal (or at present time for generated gases):

There were allegations that hazardous wastes were disposed of here in the past, but the Department of Environment and Planning was unable to substantiate this. The physical state of the wastes, if any, is unknown. Score: 1

Ref: #5

3 CONTAINMENT

Containment

Method(s) of waste or leachate containment evaluated:

Unlined landfill.

Ref: #1

Method with highest score:

Unlined landfill scores 3.

Ref: #2

4 WASTE CHARACTERISTICS

Toxicity and Persistence

Compound(s) evaluated:

No groundwater samples were collected on 12/9/86.

Compound with highest score:

N/A

Hazardous Waste Quantity

Total quantity of hazardous substances at the facility, excluding those with a containment score of 0 (Give a reasonable estimate even if quantity is above maximum):

Any hazardous wastes present at the site were dumped without authorization and the amount is unknown. The New York State Department of Environment and Planning was unable to substantiate allegations of any hazardous waste dumping. Unknown quantity of waste scores 1.

Ref: #5

Basis of estimating and/or computing waste quantity:

N/A

5 TARGETS

Groundwater Use

Use(s) of aquifer(s) of concern within a 3-mile radius of the facility:

Fewer than 10 private residences within a 3 mile radius use the aquifer as their source of drinking water. Municipal hookups are available, so drinking water scores a 2.

Ref: #6

Distance to Nearest Well

Location of nearest well drawing from aquifer of concern or occupied building not served by a public water supply:

The nearest well is in a private residence on Shimerville Rd. approximately 200 yards north of the Shimerville Rd. - Roll Rd. intersection.

Ref: #7

Distance to above well or building:

0.1 miles Score: 4

Ref: #8

Population Served by Groundwater Wells Within a 3-Mile Radius

Identified water-supply well(s) drawing from aquifer(s) of concern within a 3-mile radius and populations served by each:

A maximum of 10 private residences x 3.8 $\frac{\text{people}}{\text{residence}}$ = 38 people maximum

Score: 1

Ref: #2, #6

Computation of land area irrigated by supply well(s) drawing from aquifer(s) of concern within a 3-mile radius, and conversion to population (1.5 people per acre).

Farmers in the area use surface water for irrigation.

Ref: #9

Total population served by groundwater within a 3-mile radius:

A maximum of 38 people are served by groundwater within a 3 mile radius of the site.

SURFACE WATER ROUTE

1 OBSERVED RELEASE

Contaminants detected in surface water at the facility or downhill from it (5 maximum):

No hazardous substances were detected in the surface water samples collected on 12/09/87. Assorted polyaromatic hydrocarbons were detected in the upgradient sediment sample, but these are presumably present from vehicular exhausts and fluids from Shimerville Road.

Ref: #1, #15

Rationale for attributing the contaminants to the facility:

N/A

* * *

2 ROUTE CHARACTERISTICS

Facility Slope and Intervening Terrain

Average slope of facility in percent:

17%

Ref: #8

Name/description of nearest downslope surface water:

The nearest downslope surface water is Got Creek which is adjacent to the site to the south. It is approximately 50 feet across.

Ref: #1, #8

Average slope of terrain between facility and above-cited surface water body in percent:

0-1 percent

Ref: #1, #8

Is the facility located either totally or partially in surface water?

Got Creek cuts through the facility property, but the landfill is north of the creek.

Ref: #1, #8

Is the facility completely surrounded by areas of higher elevation?

The landfill is elevated in relation to the surrounding topography.

Ref: #1, #8

1-Year 24-Hour Rainfall in Inches

2"

Score: 1

Ref: #2

Distance to Nearest Downslope Surface Water

Got Creek is approximately 100 feet (.02 miles) south of the landfill.

Score: 3

Ref: #1, #8

Physical State of Waste

If any hazardous wastes have been disposed of at this site, the physical state is unknown. Unknown quantity scores 1.

Ref: #2

* * *

3 CONTAINMENT

Containment

Method(s) of waste or leachate containment evaluated:

The landfill is unlined with no method of containment.

Ref: #10

Method with highest score:

Unlined landfill scores a 3

Ref: #2

4 WASTE CHARACTERISTICS

Toxicity and Persistence

Compound(s) evaluated

None

Ref: #17

Compound with highest score:

N/A

Hazardous Waste Quantity

Total quantity of hazardous substances at the facility, excluding those with a containment score of 0 (Give a reasonable estimate even if quantity is above maximum):

Unknown

Score: 1

Ref: #2

Basis of estimating and/or computing waste quantity:

N/A

* * *

5 TARGETS

Surface Water Use

Use(s) of surface water within 3 miles downstream of the hazardous substance:

The only surface water used within 3 miles downstream is for irrigation of the strawberry field adjacent to the site. Irrigation scores a 2.

Ref: #11, #12

Is there tidal influence?

No

Ref: #8

Distance to a Sensitive Environment

Distance to 5-acre (minimum) coastal wetland, if 2 miles or less:

N/A

Ref: #8

Distance to 5-acre (minimum) fresh-water wetland, if 1 mile or less:

.03 miles

Score: 2

Ref: #1, #8

Distance to critical habitat of an endangered species or national wildlife refuge, if 1 mile or less:

N/A

Ref: #16

Population Served by Surface Water

Location(s) of water-supply intake(s) within 3 miles (free-flowing bodies) or 1 mile (static water bodies) downstream of the hazardous substance and population served by each intake:

There are no water-supply intakes within 3 miles. The strawberry field adjacent to the site uses water from a reservoir in Got Creek for irrigation.

Ref: #8, #11

Computation of land area irrigated by above-cited intake(s) and conversion to population (1.5 people per acre):

The strawberry field is 34 acres in area.

$$34 \text{ acres} \times 1.5 \frac{\text{people}}{\text{acre}} = 51 \text{ people}$$

Ref: #12

Total population served:

Approximately 50 people use surface water within a 3-mile radius.

Name/description of nearest of above water bodies:

Got Creek is 0.02 mile south of the landfill and is approximately 50 feet wide.

Ref: #1, #8

Distance to above-cited intakes, measured in stream miles.

Distance to the irrigation pond intakes is approximately 150 feet (0.03 miles).

Ref: #8

AIR ROUTE

1 OBSERVED RELEASE

Contaminants detected:

No readings above background were noted on the OVA flame ionization detector or the HNu photoionization detector during the site inspection conducted on 12/9/86. Ref: #1

Date and location of detection of contaminants

N/A

Methods used to detect the contaminants:

N/A

Rationale for attributing the contaminants to the site:

N/A

* * *

2 WASTE CHARACTERISTICS

Reactivity and Incompatibility

Most reactive compound:

N/A

Most incompatible pair of compounds:

N/A

Toxicity

Most toxic compound:

N/A

Hazardous Waste Quantity

Total quantity of hazardous waste:

N/A

Basis of estimating and/or computing waste quantity:

N/A

* * *

3 TARGETS

Population Within 4-Mile Radius

Circle radius used, give population, and indicate how determined:

0 to 4 mi 0 to 1 mi 0 to 1/2 mi 0 to 1/4 mi

N/A

Distance to a Sensitive Environment

Distance to 5-acre (minimum) coastal wetland, if 2 miles or less:

N/A

Distance to 5-acre (minimum) fresh-water wetland, if 1 mile or less:

N/A

Distance to critical habitat of an endangered species, if 1 mile or less:
N/A

Land Use

Distance to commercial/industrial area, if 1 mile or less:
N/A

Distance to national or state park, forest, or wildlife reserve, if 2 miles or less:
N/A

Distance to residential area, if 2 miles or less:
N/A

Distance to agricultural land in production within past 5 years, if 1 mile or less:
N/A

Distance to prime agricultural land in production within past 5 years, if 2 miles or less:
N/A

Is a historic or landmark site (National Register or Historic Places and National Natural Landmarks) within the view of the site?
N/A

FIRE AND EXPLOSION

1 CONTAINMENT

Hazardous substances present:

N/A

Type of containment, if applicable:

N/A

* * *

2 WASTE CHARACTERISTICS

Direct Evidence

Type of instrument and measurements:

N/A

Ignitability

Compound used:

N/A

Reactivity

Most reactive compound:

N/A

Incompatibility

Most incompatible pair of compounds:

N/A

Hazardous Waste Quantity

Total quantity of hazardous substances at the facility:

N/A

Basis of estimating and/or computing waste quantity:

N/A

* * *

3 TARGETS

Distance to Nearest Population

N/A

Distance to Nearest Building

N/A

Distance to Sensitive Environment

Distance to wetlands:

N/A

Distance to critical habitat:

N/A

Land Use

Distance to commercial/industrial area, if 1 mile or less:

N/A

Distance to national or state park, forest, or wildlife reserve, if 2 miles or less:
N/A

Distance to residential area, if 2 miles or less:
N/A

Distance to agricultural land in production within past 5 years, if 1 mile or less:
N/A

Distance to prime agricultural land in production within past 5 years, if 2 miles or less:
N/A

Is a historic or landmark site (National Register or Historic Places and National Natural Landmarks) within the view of the site?
N/A

Population Within 2-Mile Radius
N/A

Buildings Within 2-Mile Radius
N/A

DIRECT CONTACT

1 OBSERVED INCIDENT

Date, location, and pertinent details of incident:

No incident of direct contact was observed during site inspection conducted on 12/9/86. There is no record of any such incidents.

Ref: #1

* * *

2 ACCESSIBILITY

Describe type of barrier(s):

There are no barriers surrounding the facility. Score: 3.

Ref: #1, #2

* * *

3 CONTAINMENT

Type of containment, if applicable:

There are no containment methods used at the site. However, no hazardous substances were detected in the samples collected on 12/9/86. Score: 0

Ref: #1, #2, #16

* * *

4 WASTE CHARACTERISTICS

<u>Toxicity</u>

Compounds evaluated:

N/A

Compound with highest score:

N/A

5 TARGETS

Population Within One-Mile Radius

Population of 3020 people live within 1 mile of the site.

Score: 4

Ref: #2, #8, #13

Distance to Critical Habitat (of Endangered Species)

N/A

SECTION 5

HAZARD RANKING SYSTEM SCORING FORMS

Facility name: Gold Bond Building Products

Location: 8600 Roll Road, Clarence Center, Erie Co., New York

EPA Region: 2

Persons(s) in charge of the facility: Mr. David Litchke
Roll Road Industrial Products
8600 Roll Road, Clarence Center, New York

Name of Reviewer: Peter Morton **Date:** 8/4/87

General description of the facility:
(For example: landfill, surface impoundment, pile, container; types of hazardous substances; location of the facility; contamination route of major concern; type of information needed for rating; agency action, etc.)

The Gold Bond Building Products site is an inactive gypsum landfill. There were allegations in the past that paint sludges and gypsum additives were also disposed of here. A representative of the Erie County Health Department believes that their sludges were cleaned up. Contamination of Gott Creek which flows past the landfill is of primary concern, because it is used for irrigation. Gott Creek is also a tributary to the Niagara River which is used as a drinking water source. No hazardous substances that can be attributed to the site were detected in any of the samples collected.

Score: $S_M = 0.69$ ($S_{gw} = 0.92$ $S_{sw} = 0.75$ $S_a = 0$)

$S_{FE} = 0$

$S_{DC} = 0$

HRS COVER SHEET

Ground Water Route Work Sheet

Rating Factor	Assigned Value (Circle One)	Multiplier	Score	Max. Score	Ref. (Section)
1 Observed Release	(0) 45	1	0	45	3.1
If observed release is given a score of 45, proceed to line 4. If observed release is given a score of 0, proceed to line 2.					
2 Route Characteristics					3.2
Depth to Aquifer of Concern	0 1 2 (3)	2	6	6	
Net Precipitation	0 1 (2) 3	1	2	3	
Permeability of the Unsaturated Zone	0 1 (2) 3	1	2	3	
Physical State	0 (1) 2 3	1	1	3	
Total Route Characteristics Score			11	15	
3 Containment	0 1 2 (3)	1	3	3	3.3
4 Waste Characteristics					3.4
Toxicity/Persistence	(0) 3 6 9 12 15 18	1	0	18	
Hazardous Waste Quantity	0 (1) 2 3 4 5 6 7 8	1	1	8	
Total Waste Characteristics Score			1	26	
5 Targets					3.5
Ground Water Use	0 1 (2) 3	3	6	9	
Distance to Nearest Well/Population Served	0 4 6 8 (10) / 12 16 18 20 / 24 30 32 35 40	1	10	40	
Total Targets Score			16	49	
6 If line 1 is 45, multiply 1 x 4 x 5. If line 1 is 0, multiply 2 x 3 x 4 x 5			528	57,330	
7 Divide line 6 by 57,330 and multiply by 100			S_{gw} = 0.92		

FIGURE 2
GROUND WATER ROUTE WORK SHEET

Surface Water Route Work Sheet

Rating Factor	Assigned Value (Circle One)	Multiplier	Score	Max. Score	Ref. (Section)
1 Observed Release	(0) 45	1	0	45	4.1
If observed release is given a value of 45, proceed to line 4. If observed release is given a value of 0, proceed to line 2.					
2 Route Characteristics					4.2
Facility Slope and Intervening Terrain	(0) 1 2 3	1	0	3	
1-yr. 24-hr. Rainfall	0 (1) 2 3	1	1	3	
Distance to Nearest Surface Water	0 1 2 (3)	2	6	6	
Physical State	0 (1) 2 3	1	1	3	
Total Route Characteristics Score			8	15	
3 Containment	0 1 2 (3)	1	3	3	4.3
4 Waste Characteristics					4.4
Toxicity/Persistence	(0) 3 6 9 12 15 18	1	0	18	
Hazardous Waste Quantity	0 (1) 2 3 4 5 6 7 8	1	1	8	
Total Waste Characteristics Score			1	26	
5 Targets					4.5
Surface Water Use	0 1 (2) 3	3	6	9	
Distance to a Sensitive Environment	0 1 (2) 3	2	4	6	
Population Served/Distance to Water Intake Downstream	0 4 6 8 (10) 12 16 18 20 24 30 32 35 40	1	10	40	
Total Targets Score			20	55	
6 If line 1 is 45, multiply 1 x 4 x 5 / If line 1 is 0, multiply 2 x 3 x 4 x 5			480	64,350	
7 Divide line 6 by 64,350 and multiply by 100			S_{sw} = 0.75		

FIGURE 7
SURFACE WATER ROUTE WORK SHEET

Air Route Work Sheet						
Rating Factor	Assigned Value (Circle One)		Multiplier	Score	Max. Score	Ref. (Section)
1 Observed Release	0	45	1	○	45	5.1
Date and Location:						
Sampling Protocol:						
If line 1 is 0, the S_a = 0. Enter on line 5. If line 1 is 45, then proceed to line 2.						
2 Waste Characteristics						5.2
Reactivity and Incompatibility	0 1 2 3		1		3	
Toxicity	0 1 2 3		3		9	
Hazardous Waste Quantity	0 1 2 3 4 5 6 7 8		1		8	
	Total Waste Characteristics Score				20	
3 Targets						5.3
Population Within 4-Mile Radius	0 9 12 15 18 21 24 27 30		1		30	
Distance to Sensitive Environment	0 1 2 3		2		6	
Land Use	0 1 2 3		1		3	
	Total Targets Score				39	
4 Multiply 1 x 2 x 3					35,100	
5 Divide line 4 by 35,100 and multiply by 100				S_a = ○		

FIGURE 9
AIR ROUTE WORK SHEET

	S	S^2
Groundwater Route Score (S_{gw})	0.92	0.85
Surface Water Route Score (S_{sw})	0.75	0.56
Air Route Score (S_a)	0	0
$S_{gw}^2 + S_{sw}^2 + S_a^2$		1.41
$\sqrt{S_{gw}^2 + S_{sw}^2 + S_a^2}$		1.19
$\sqrt{S_{gw}^2 + S_{sw}^2 + S_a^2} / 1.73 = S_M =$		0.69

FIGURE 10
WORKSHEET FOR COMPUTING S_M

Fire and Explosion Work Sheet						
Rating Factor	Assigned Value (Circle One)		Multi-plier	Score	Max. Score	Ref. (Section)
1 Containment	1	3	1		3	7.1
2 Waste Characteristics						7.2
Direct Evidence	0	3	1		3	
Ignitability	0 1 2 3		1		3	
Reactivity	0 1 2 3		1		3	
Incompatibility	0 1 2 3		1		3	
Hazardous Waste Quantity	0 1 2 3 4 5 6 7 8		1		8	
Total Waste Characteristics Score					20	
3 Targets						7.3
Distance to Nearest Population	0 1 2 3 4 5		1		5	
Distance to Nearest Building	0 1 2 3		1		3	
Distance to Sensitive Environment	0 1 2 3		1		3	
Land Use	0 1 2 3		1		3	
Population Within 2-Mile Radius	0 1 2 3 4 5		1		5	
Buildings Within 2-Mile Radius	0 1 2 3 4 5		1		5	
Total Targets Score					24	
4 Multiply 1 x 2 x 3					1,440	
5 Divide line 4 by 1,440 and multiply by 100			S_{FE} = ◇			

FIGURE 11
FIRE AND EXPLOSION WORK SHEET

Direct Contact Work Sheet					
Rating Factor	Assigned Value (Circle One)	Multiplier	Score	Max. Score	Ref. (Section)
1 Observed Incident	(0) 45	1	0	45	8.1
If line 1 is 45, proceed to line 4 If line 1 is 0, proceed to line 2					
2 Accessibility	0 1 2 (3)	1	3	3	8.2
3 Containment	(0) 15	1	0	15	8.3
4 Waste Characteristics Toxicity	(0) 1 2 3	5	0	15	8.4
5 Targets					8.5
Population Within a 1-Mile Radius	0 1 2 3 (4) 5	4	16	20	
Distance to a Critical Habitat	(0) 1 2 3	4	0	12	
Total Targets Score			16	32	
6 If line 1 is 45, multiply 1 x 4 x 5 If line 1 is 0, multiply 2 x 3 x 4 x 5			0	21,600	
7 Divide line 6 by 21,600 and multiply by 100			S_{DC} = 0		

FIGURE 12
DIRECT CONTACT WORK SHEET

SECTION 6

BIBLIOGRAPHY OF INFORMATION SOURCES

BIBLIOGRAPHY OF INFORMATION SOURCES

HRS MODEL

	SOURCE	LOCATION
1.	NUS FIT 2 site inspection conducted on 12/9/86, Field Notebook No. 1429.	NUS Files Edison, NJ
2.	Uncontrolled Hazardous Waste Site Ranking System, A User's Manual, Federal Register, 1982.	NUS Files Edison, NJ
3.	U.S. Department of Agriculture Soil Conservation Service, Soil Survey of Erie County, 1986.	NUS Files Edison, NJ
4.	The New York State Water Resources Commission, Erie-Niagara Basin, Groundwater Resources, 1968.	NUS Files Edison, NJ
5.	Letter from County of Erie Department of Environmental Planning to Hon. Richard R. Anderson, Legislator 16th District, dated 5/20/86.	NUS Files Edison, NJ
6.	Telecon note of phone call between Don Berkhardt of Clarence Water Department and Peter Morton of NUS Corporation dated 12/5/86.	NUS Files Edison, NJ
7.	Telecon note of phone call between Don Berkhardt of Clarence Water Department and Peter Morton of NUS Corporation dated 12/3/86.	NUS Files Edison, NJ
8.	United States geological survey topographic map, 7.5 Minute Series, Clarence Center, Wolcottsville, and Clarence Quadrangles.	NUS Files Edison, NJ
9.	Telecon note of phone call between J. Whittney of Erie Co. Soil Conservation Service and Peter von Schondorf of NUS Corporation dated 12/4/86.	NUS Files Edison, NJ
10.	Telecon note of phone call between Mr. Walker of Gold Bond Building Products, Charlotte, N.C., and Peter Morton of NUS Corp., dated 1/8/87.	NUS Files Edison, NJ
11.	Telecon note of phone call between Mr. Weeks, owner of farm adjacent to site, and Peter Morton of NUS Corporation dated 1/8/87.	NUS Files Edison, NJ
12.	Telecon note of phone call between Tom Meyers of Town of Clarence, Recreation Division, and Peter Morton of NUS Corp., dated 07/09/87.	NUS Files Edison, NJ
13.	Telecon note of phone call between Diane McMullen, Town of Clarence Assessor, and Peter Morton of NUS Corporation, dated 1/8/87.	NUS Files Edison, NJ

BIBLIOGRAPHY OF INFORMATION SOURCES (CONT'D)

HRS MODEL

	SOURCE	LOCATION
14.	General Sciences Corporation, 1984, Draft Graphical Exposure Modeling System (GEMS) User's Guide. Prepared for the U.S. EPA, Office of Pesticides and Toxic Substances, Landover, Maryland.	NUS Files Edison, NJ
15.	Sax, N. Irving, Dangerous Properties of Industrial Materials, Van Nostrand Reinhold Company, 1984.	NUS Files Edison, NJ
16.	Department of the Interior U.S. Fish and Wildlife Service, Endangered and Threatened Wildlife and Plants, January 1986.	NUS Files Edison, NJ
17.	U.S. EPA Contract Laboratory Program Sample Management Office. Analytical results of samples collected 12/09/86 by NUS Corp. FIT 2, Case #6659.	NUS Files Edison, NJ

SECTION 7

PRESS RELEASE SUMMARY-MITRE HAZARD RANKING SYSTEM

SUMMARY STATEMENT
GOLD BOND BUILDING PRODUCTS
CLARENCE CENTER, NEW YORK

The Gold Bond Building Products site is located in Clarence Center, Erie County, New York. Gold Bond Building Products operated a 2- to 3- acres gypsum landfill that was listed as properly closed by the NYSDEC in 1983. There is no record of any hazardous substances ever being disposed of here. The facility is now Roll Road Industrial Park owned by Lorne Whiting, of Akron, New York.

The site is located in a rural area seven miles northeast of Buffalo. Gott Creek, a small stream used for irrigation, is adjacent to the landfill to the south. A strawberry field that draws from Gott Creek lies to the east of the site. Fewer than forty people use groundwater as their drinking source within three miles of the site. No hazardous wastes that can be attributed to the landfill were detected in the soil or surface water samples collected in 12/9/86.

No clean-up actions or enforcement actions have taken place at the site.

SECTION 8

ATTACHMENTS-CITED DOCUMENTS

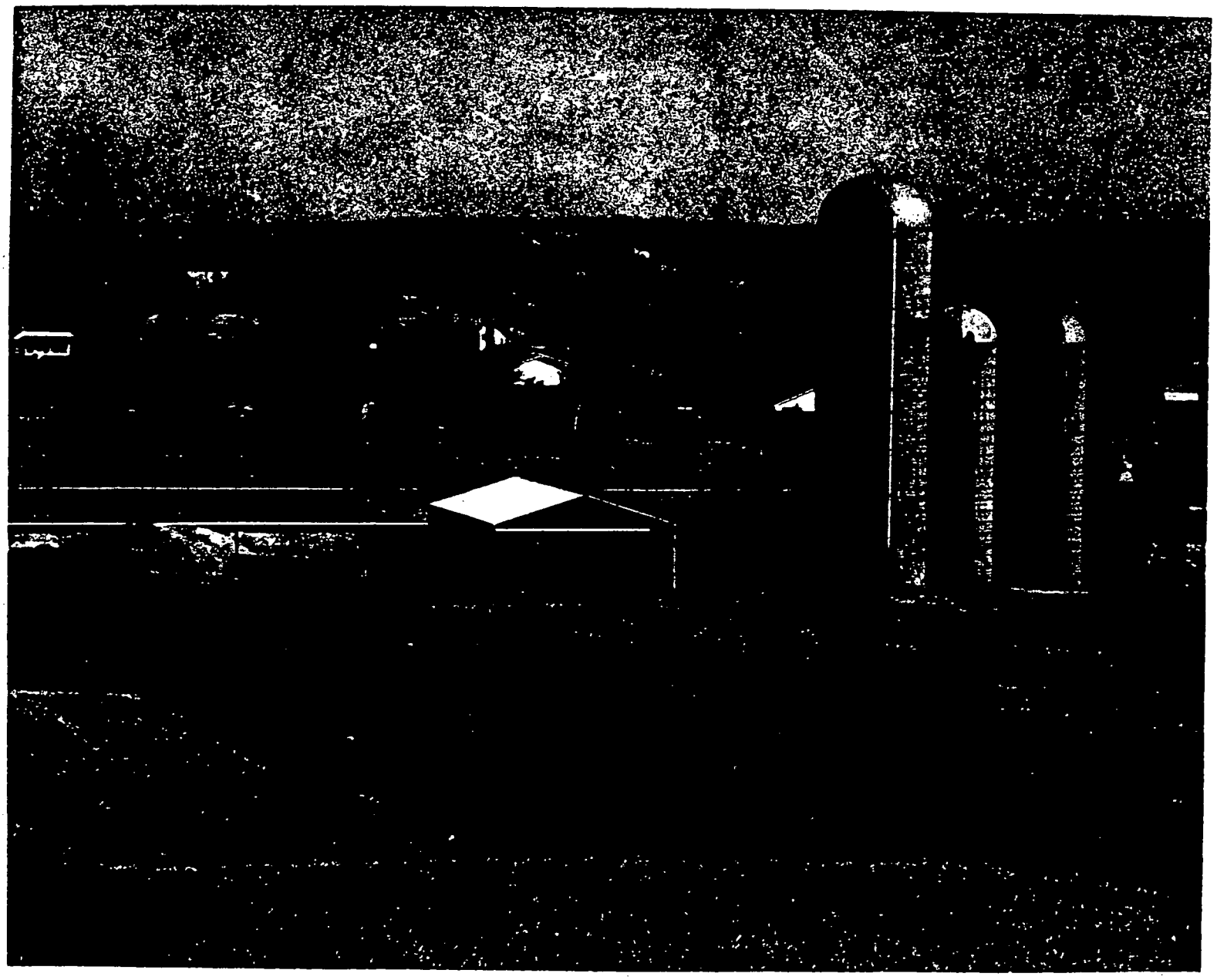
REFERENCE #3

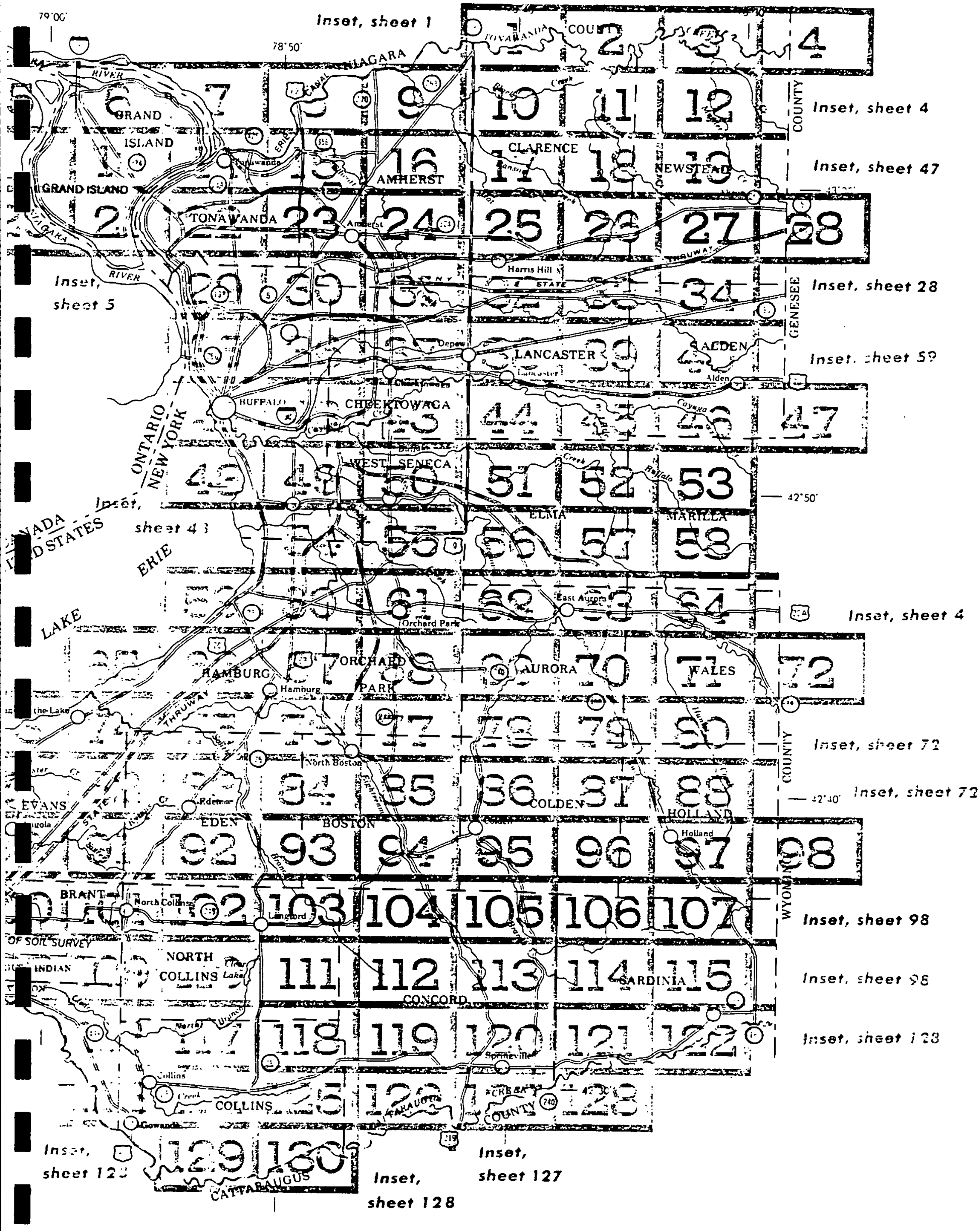
United States
Department of
Agriculture

Soil
Conservation
Service

In Cooperation with
the Cornell University
Agricultural
Experiment Station

Soil Survey of Erie County, New York





79°00'
78°50'
Inset, sheet 1
Inset, sheet 4
Inset, sheet 47
Inset, sheet 28
Inset, sheet 59
Inset, sheet 4
Inset, sheet 72
Inset, sheet 72
Inset, sheet 98
Inset, sheet 98
Inset, sheet 128
Inset, sheet 127
Inset, sheet 128
Inset, sheet 5
NIAGARA
GRAND ISLAND
TONAWANDA
AMHERST
CLARENCE
NEWSTEAD
LANCASTER
ALDEN
CHEEKTOWAGA
WEST SENECA
ELMA
MARILLA
ORCHARD PARK
AURORA
WALES
HAMBURG
EDEN
BOSTON
COLDEN
HOLLAND
EVANS
BRANT
NORTH COLLINS
CONCORD
SARDINIA
COLLINS
CATTARAUGUS
GENESEE COUNTY
WYOMING COUNTY
ONTARIO
NEW YORK
LAKE ERIE
Buffalo
Amherst
Depew
Lancaster
Alden
Harris Hill
East Aurora
Orchard Park
Hamburg
North Boston
Eden
Holland
North Collins
Langford
Springville
Collins
Gowanda
THRUWAY
42°50'
42°40'

ERIE COUNTY, NEW YORK — SHEET NUMBER 25

SOIL LEGEND

The publication symbol consists of letters. The first letter always is the initial letter of the mapping unit name. The second letter is a s The third letter, always a capital A, B, C, D, E, or F, indicates the slo without a slope letter are those of nearly level soils. A final number, that the soil is severely eroded.

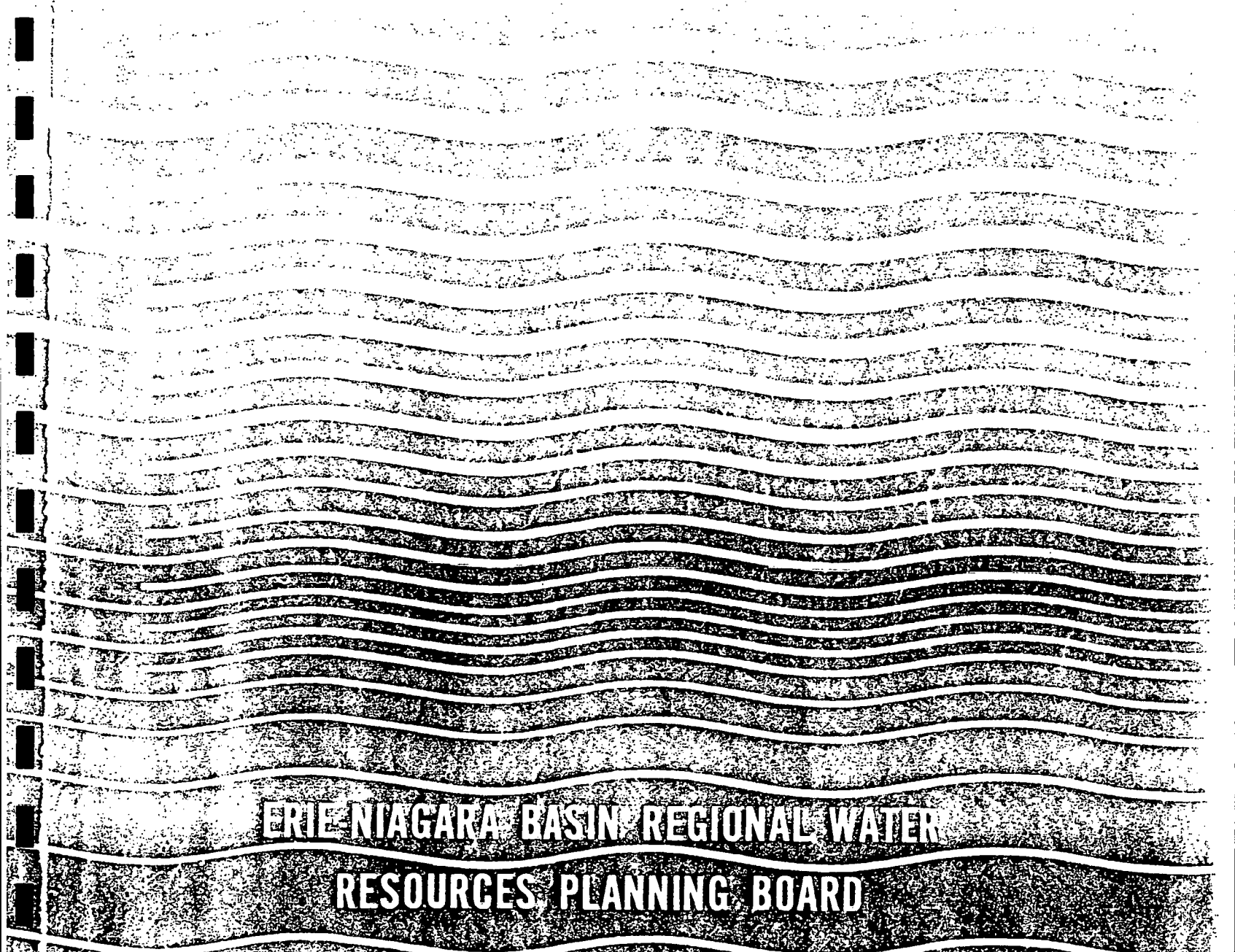
SYMBOL	NAME
AlA	Allard silt loam, 0 to 3 percent slopes
AlB	Allard silt loam, 3 to 8 percent slopes
AmA	Alton fine gravelly loam, 0 to 3 percent slopes
AmB	Alton fine gravelly loam, 3 to 8 percent slopes
AmC	Alton fine gravelly loam, 8 to 15 percent slopes
AnB	Alton gravelly loam, silty substratum, 3 to 8 percent slopes
AnC	Alton gravelly loam, silty substratum, 8 to 15 percent slopes
AoA	Angola silt loam, 0 to 3 percent slopes
AoB	Angola silt loam, 3 to 8 percent slopes
ApA	Appleton silt loam, 0 to 3 percent slopes
ApB	Appleton silt loam, 3 to 8 percent slopes
ArB	Arkport very fine sandy loam, 3 to 8 percent slopes
ArC	Arkport very fine sandy loam, 8 to 15 percent slopes
ArD	Arkport very fine sandy loam, 15 to 25 percent slopes
ArE	Arkport very fine sandy loam, 25 to 40 percent slopes
AuC	Aurora shaly silt loam, 8 to 15 percent slopes
Be	Beaches
BfA	Benson very cherty loam, 0 to 3 percent slopes
BfB	Benson very cherty loam, 3 to 8 percent slopes
BgC	Benson very cherty loam, very rocky, 8 to 15 percent slopes
BhB	Benson-Rock outcrop complex, 3 to 8 percent slopes
BlA	Blasdell shaly silt loam, 0 to 3 percent slopes
BlB	Blasdell shaly silt loam, 3 to 8 percent slopes
BlC	Blasdell shaly silt loam, 8 to 15 percent slopes
BlD	Blasdell shaly silt loam, 15 to 25 percent slopes
BrA	Brockport silty clay loam, 0 to 3 percent slopes
BrB	Brockport silty clay loam, 3 to 8 percent slopes
Ca	Canadice silt loam
Cb	Canadice silt loam, shaly till substratum
Cc	Canandaigua silt loam
Cd	Canandaigua mucky silt loam
CeA	Castile gravelly loam, 0 to 3 percent slopes
CeB	Castile gravelly loam, 3 to 8 percent slopes
CfB	Cayuga silt loam, 3 to 8 percent slopes
CfC	Cayuga silt loam, 8 to 15 percent slopes
CgB	Cazenovia silt loam, 3 to 8 percent slopes
CgC	Cazenovia silt loam, 8 to 15 percent slopes
Ch	Cheektowaga fine sandy loam
CkA	Chenango gravelly loam, 0 to 3 percent slopes
CkB	Chenango gravelly loam, 3 to 8 percent slopes
CkC	Chenango gravelly loam, 8 to 15 percent slopes
CkD	Chenango gravelly loam, 15 to 25 percent slopes
ClA	Chenango channery silt loam, fan, 0 to 3 percent slopes
ClB	Chenango channery silt loam, fan, 3 to 8 percent slopes
CmE	Chenango and Palmyra soils, 25 to 40 percent slopes
Cn	Chippewa silt loam
CoA	Churchville silt loam, 0 to 3 percent slopes
CoB	Churchville silt loam, 3 to 8 percent slopes
CrA	Claverack loamy fine sand, 0 to 3 percent slopes
CrB	Claverack loamy fine sand, 3 to 8 percent slopes
CsA	Collamer silt loam, 0 to 3 percent slopes
CsB	Collamer silt loam, 3 to 8 percent slopes
CsC	Collamer silt loam, 8 to 15 percent slopes
CtB	Collamer silt loam, till substratum, 3 to 8 percent slopes
CuB	Colonie loamy fine sand, 3 to 8 percent slopes
CuC	Colonie loamy fine sand, 8 to 15 percent slopes
Cv	Cosad loamy fine sand
DaB	Danley silt loam, 3 to 8 percent slopes
DaC	Danley silt loam, 8 to 15 percent slopes
DaD	Danley silt loam, 15 to 25 percent slopes
DbA	Darien silt loam, 0 to 3 percent slopes
DbB	Darien silt loam, 3 to 8 percent slopes
DbC	Darien silt loam, 8 to 15 percent slopes
DcB	Darien silt loam, silty substratum, 3 to 8 percent slopes
DdA	Derb silt loam, 0 to 3 percent slopes
DdB	Derb silt loam, 3 to 8 percent slopes
DdC	Derb silt loam, 8 to 15 percent slopes
Dp	Dumps
Du	Dumps, slag
Ed	Edwards muck
ElA	Elnora loamy fine sand, 0 to 3 percent slopes
ElB	Elnora loamy fine sand, 3 to 8 percent slopes
ErA	Erie channery silt loam, 0 to 3 percent slopes
ErB	Erie channery silt loam, 3 to 8 percent slopes
ErC	Erie channery silt loam, 8 to 15 percent slopes

SYMBOL	NAME
FaA	Farmington cherty loam, 0 to 3 percent slopes
FaB	Farmington cherty loam, 3 to 8 percent slopes
FbA	Farnham shaly silt loam, 0 to 3 percent slopes
FbB	Farnham shaly silt loam, 3 to 8 percent slopes
FcA	Farnham shaly silt loam, fan, 0 to 3 percent slopes
FcB	Farnham shaly silt loam, fan, 3 to 8 percent slopes
Fu	Fluvaquents and Udifluvents, frequently flooded
GaA	Galen very fine sandy loam, 0 to 3 percent slopes
GaB	Galen very fine sandy loam, 3 to 8 percent slopes
GbB	Galen fine sandy loam, till substratum, 3 to 8 percen
Ge	Getzville silt loam
Ha	Halsey silt loam
Hn	Haplaquolls, ponded
Hm	Hamlin silt loam
HoA	Honeoye loam, 0 to 3 percent slopes
HoB	Honeoye loam, 3 to 8 percent slopes
HrA	Hornell silt loam, 0 to 3 percent slopes
HrB	Hornell silt loam, 3 to 8 percent slopes
HsC	Hornell silt clay loam, 8 to 15 percent slopes
HuB	Hudson silt loam, 3 to 8 percent slopes
HuC	Hudson silt loam, 8 to 15 percent slopes
HvD	Hudson silty clay loam, 15 to 25 percent slopes
HvE	Hudson silty clay loam, 25 to 40 percent slopes
HwD	Hudson gravelly loam, hilly
In	Ilion silt loam
Ke	Kendaia silt loam
La	Lakemont silt loam
Lb	Lakemont mucky silt loam
Lc	Lamson very fine sandy loam
Ld	Lamson mucky very fine sandy loam
LfB	Langford channery silt loam, 3 to 8 percent slopes
LfC	Langford channery silt loam, 8 to 15 percent slopes
LfD	Langford channery silt loam, 15 to 25 percent slopes
LgC	Langford channery silt loam, silty substratum, 8 to 15
LgD	Langford channery silt loam, silty substratum, 15 to 2
LmA	Lima loam, 0 to 3 percent slopes
LmB	Lima loam, 3 to 8 percent slopes
Ly	Lyons silt loam
Lz	Lyons mucky silt loam
MaA	Manlius shaly silt loam, 0 to 3 percent slopes
MaB	Manlius shaly silt loam, 3 to 8 percent slopes
MaC	Manlius shaly silt loam, 8 to 15 percent slopes
MaD	Manlius shaly silt loam, 15 to 25 percent slopes
MbE	Manlius very shaly silt loam, 25 to 35 percent slopes
MbF	Manlius very shaly silt loam, 35 to 50 percent slopes
McB	Mardin silt loam, 3 to 8 percent slopes
McC	Mardin silt loam, 8 to 15 percent slopes
MdB	Mardin channery silt loam, 3 to 3 percent slopes
MdC	Mardin channery silt loam, 8 to 15 percent slopes
MdD	Mardin channery silt loam, 15 to 25 percent slopes
MeF	Mardin-Valois complex, 25 to 50 percent slopes
MfA	Marilla shaly silt loam, 0 to 3 percent slopes
MfB	Marilla shaly silt loam, 3 to 8 percent slopes
MfC	Marilla shaly silt loam, 8 to 15 percent slopes
Mg	Middlebury silt loam
Mh	Minoa very fine sandy loam
Ne	Newstead loam
NfA	Niagara silt loam, 0 to 3 percent slopes
NfB	Niagara silt loam, 3 to 8 percent slopes
Ng	Niagara silt loam, fan
Nh	Niagara silt loam, till substratum
Od	Odessa silt loam
Oe	Odessa-Lakemont silt loams
OrA	Orpark silty clay loam, 0 to 3 percent slopes
OrB	Orpark silty clay loam, 3 to 8 percent slopes
OrC	Orpark silty clay loam, 8 to 15 percent slopes
OvA	Ovid silt loam, 0 to 3 percent slopes
OvB	Ovid silt loam, 3 to 8 percent slopes
Pa	Palms muck
PbA	Palmyra gravelly loam, 0 to 3 percent slopes
PbB	Palmyra gravelly loam, 3 to 8 percent slopes

REFERENCE #4

Erie-Niagara Basin

Ground-Water Resources



ERIE-NIAGARA BASIN REGIONAL WATER RESOURCES PLANNING BOARD

THE NEW YORK STATE WATER RESOURCES COMMISSION

CONSERVATION DEPARTMENT • DIVISION OF WATER RESOURCES

ENB-3

Many domestic-supply wells penetrate from 1 foot to a few feet into the soluble rocks and produce small but adequate yields. On the other hand, industrial wells that were intended to produce large supplies of water give a truer picture of the water-supply potential of the rocks. Data on industrial wells show that the Camillus Shale will yield as much as 1,200 gpm and the limestone unit as much as 300 gpm and probably more. But the data also show that the rocks produce low yields at places. This is shown by such wells as 301-848-1 which was drilled to obtain a large supply for an industry but which yielded only 30 gpm. The water-bearing zones obviously are unevenly distributed through the rocks. Factors that control the occurrence of the water-bearing zones cannot be evaluated at the present time to the extent necessary to predict exactly where the zones occur.

The Lockport Dolomite is the least productive unit of the soluble rocks. Within the Erie-Niagara basin yields of wells in the Lockport range from about 4 to 90 gpm. Depth of the wells range from 20 to 70 feet. Most of the deeper wells were drilled where the depth to bedrock is greatest. Domestic-supply wells generally are finished in the fracture zone at the rock surface or in a bedding joint within the uppermost 30 feet of the rock. It is usually not necessary to drill deeper into the Lockport if only a small supply is needed.

Drilling deeper in an attempt to intersect additional bedding-plane openings at depth would provide higher yields but, generally, at the expense of lower water levels and therefore higher pump lifts. Johnston (1964) collected data on a much larger number of wells along the outcrop belt of the Lockport Dolomite than were inventoried in the Erie-Niagara basin. He found that wells drawing water from the lower 40 feet of the Lockport (the northern part of the outcrop area) yield from 1/2 to 20 gpm and have an average yield of 7 gpm. Wells finished in the upper part of the Lockport (the southern part of the outcrop area) yield from 2 to 110 gpm and have an average yield of 31 gpm. Yields of as much as 50 or 100 gpm are possible from the Lockport in the Erie-Niagara basin but would be exceptional.

CAMILLUS SHALE

Bedding and lithology

The Camillus Shale lies above the Lockport Dolomite and crops out to the south of where the dolomite is exposed. Exposures of the Camillus Shale are rare in the Erie-Niagara basin because of the low relief of the outcrop area and the cover of glacial deposits. Geologists who have studied the Camillus in the study basin agree that it consists mostly of gray shale. (For example, see Buehler and Tesmer, 1963, p. 29-30.) Subsurface data, on the other hand, indicate that a considerable amount of gray limestone and dolomite is interbedded with the shale. Along with these carbonates, gypsum comprises a significant part of the Camillus Shale. Some of the gypsum beds are as much as 5 feet thick. Gypsum also occurs in the Camillus as thin lenses and veins. Table 1,

CONCLUSIONS

The best sources of ground water in the area are exposed sand and gravel deposits distributed in the Cattaraugus Creek basin and in the Tonawanda Creek basin south of Batavia. Less extensive (but potentially productive) sand and gravel aquifers lie along Eighteenmile Creek, East Branch Cazenovia Creek, and Buffalo Creek. The water available in these deposits is on the order of 50 million gallons per day without considering the potential available from induced stream infiltration or the increased recharge that might be brought about by large withdrawals. The sand and gravel deposits with the largest potential are distributed through the part of the area most distant from and considerably higher in altitude than Lake Erie. They, therefore, are a ready source of water for the part of the area most difficult to serve from present distribution systems drawing water from the lake.

Large supplies of ground water, 500 to 1,000 gpm from individual wells, can be obtained from the Camillus Shale. Still larger supplies probably could be pumped from abandoned gypsum mines near Akron and operating mines near Clarence Center. The quality of water from the Camillus is poor and the water would be useful mainly for industrial uses, such as cooling.

The Onondaga Limestone will provide supplies of 100 gpm in many parts of its outcrop belt and occasional supplies of as much as 300 gpm. The quarry near Williamsville will provide a supply of about 3,000 gpm from inflowing ground water.

Small supplies are available from the remaining bedrock units and glacial deposits throughout the area. However, a small percentage of the wells drilled in shale in the southern half of the area have yields that are inadequate for a domestic supply.

Table 6.--Records of selected wells in the Erie-Niagara basin (Continued)

Well number	County	Owner	Year completed	Type of well	Depth of well (feet)	Diameter (inches)	Depth to bedrock (feet)	Water-bearing material	Altitude above sea level (feet)	Water level: Below land surface (feet)	Water level: Date	Method of lift	Estimated pumpage or flow (gallons per day)	Use	Remarks
259-823-1	Genesee	R. Reid	a1961	Drl	64.4	6	--	Sand	885	p36.8	9-17-63	Jet	300	D	Anal; iron; yield 30 gpm (r); cased to about 69 ft (r).
259-824-1	do.	Bell Aircraft Corp.	1957	Drl	r95	12	41.5	Limestone	870	r22	6- 3-57	--	--	T	Pumping test, 100 gpm, swl 22 ft, dd 30 ft.
-2	do.	do.	1957	Drl	r63.5	12	36	do.	870	r19	6-13-57	--	--	T	Pumping test, 100 gpm, swl 19 ft, dd 12 ft.
259-830-1	Erie	B. Wurthman	1964	Drl	32	6	--	Sand	795	11.9	8-18-64	Sw	250	D	Anal.
259-835-1	do.	R. Cummings	1959	Drl	77.1	6	--	Camillus Shale; sand	675	47.1	8-18-64	Jet	--	D	Anal; H_2S; cased to 88 ft (r).
-2	do.	J. Burns	1957	Drl	88.1	6	88	do.	675	45.2	8-18-64	Jet	--	D	Anal.
259-841-1	do.	Community Reformed Church	1955	Drl	51.7	6	a46	Camillus Shale	620	4.8	8-14-64	Jet	--	D	H_2S.
259-846-1	do.	A. Adorjan	1954	Drl	42.6	6	--	do.	595	14.3	8-13-64	Sw	--	D	Iron.
259-847-1	do.	D. Kuss	1954	Drl	30	6	--	do.	595	19.7	8-13-64	Jet	--	U, D	H_2S.
259-857-1	do.	Mesmer & Sons Dairy, Inc.	1953	Drl	r58	6	55	do.	595	r15	--	--	--	A	H_2S; yield 60 gpm (r).
259-900-1	do.	G. Franke	--	Drl	63.6	6	--	do.	590	28.5	7- 9-64	Jet	--	A	H_2S; low yield.
300-814-1	Genesee	W. Cox	1957	Drl	26.4	6	--	Limestone	885	p9.1	6-26-63	Sw	250	D	Anal; H_2S; temp 49.0.
300-815-1	do.	N. Johnson	--	Dug	20.9	32	--	Sand and gravel	900	17.5	9-16-63	Sw	400	D	Anal.
-2	do.	Alden Farms Co.	1962	Drl	33.7	6	--	Limestone	900	21.7	9-16-63	Sw	100	D	Do.
300-817-1	do.	W. McMullen	1961	Drl	r85	6	--	do.	920	--	--	Sub	400	D	Anal; H_2S.
300-820-1	do.	R. Gross	1956	Drl	r60	--	--	do.	890	--	--	Jet	250	D	Anal; iron.
300-824-1	do.	Bell Aircraft Corp.	1957	Drl	r100	12	24	do.	860	r33	6-25-57	--	--	T	Pumping test, 104 gpm, swl 33 ft, dd 28 ft.
-2	do.	J. Fuller	1955	Drl	42.3	6	--	Sand	855	12.9	7-23-64	Sw	100	D	Anal.
300-826-1	do.	E. VanAlstine	1952	Drl	53	6	--	Limestone	830	16.3	7-22-64	Jet	50	D	
-2	do.	A. Bettio	1960	Drl	r30	6	--	do.	840	9.1	7-23-64	Sw	200	D	
300-827-1	Erie	L. Weaver	--	Drl	r120	6	--	do.	830	45	7-22-64	Jet	150	D	
300-831-1	do.	A. Drechenberg	1963	Drl	38.5	6	a35	Camillus Shale	675	11.4	8-18-64	Sw	50	D	Anal; iron; H_2S.
300-833-1	do.	C. Colf	1960	Drl	46.3	6	a35	do.	685	7.6	8-18-64	Jet	200	D	Anal; iron.
300-839-1	do.	H. Thompson	1964	Drl	26	6	--	do.	610	18.1	8-17-64	Sw	--	U	Anal; H_2S.
300-842-1	do.	R. Blatter	--	Drl	41.9	6	--	do.	595	12.4	7-10-64	Sw	200	D	
300-844-1	do.	J. Calahan	1948	Drl	50	6	--	do.	585	2.4	8-14-64	--	--	A	Iron; H_2S.
300-848-1	do.	R. Lewis	1940	Drl	33.7	8, 6	--	do.	585	10.5	8-13-64	Sw	--	Ir	H_2S.
300-859-1	do.	L. Fleishman	1918	Drl	r55	6	55	do.	590	r14	--	Dw	--	Ag	Iron; H_2S.
-2	do.	--	1952	Drl	53	6	--	do.	595	18.3	7- 9-64	--	--	A	
301-813-1	Genesee	R. and R. Call	1961	Drl	r70	6	3	Limestone	925	--	--	Sub	--	F	Anal; iron; yield 10-15 gpm (r).
-2	do.	do.	1959	Drl	76.8	6	a5	do.	925	38.0	6-27-63	--	--	A	Iron.
301-822-1	do.	J. Deje	--	Drl	r39	6	--	do.	855	--	--	--	--	F	Anal.
Well number			Year completed	Type	Depth				850	r29	11-63	Jet	150	D	Yield 8-10 gpm (r).

Nearest well to Gold Bond site

REFERENCE #5

County of Erie

EDWARD J. RUTKOWSKI
COUNTY EXECUTIVE

DEPARTMENT OF ENVIRONMENT AND PLANNING

JOAN E. LORING
COMMISSIONER

ANTHONY T. VOELL
DEPUTY COMMISSIONER
ENVIRONMENTAL CONTROL

May 20, 1985

Hon. Richard R. Anderson
Legislator 16th District
8560 Main Street
Williamsville, New York 14221

Re: Town of Clarence Water Problem
Your Letter April 24, 1985

Dear Legislator Anderson:

As stated in Commissioner Loring's letter of May 6, 1985, the health aspects of the water quality question have been forwarded to the Erie County Health Department. The Health Department at the request of Town of Clarence had already sampled the two wells in question and found high sulfates at both wells. The Health Department also detected oil and grease and high iron concentrations in one of the wells.

The Health Department has since informed us that the two affected individuals on Newhouse Road have petitioned the Town of Clarence for a water main which the Town will construct as soon as possible.

We have checked with the United States Geological Survey which is working on a Groundwater Aquifer Study in the Clarence area. However, the USGS study is centered on the Onondaga Limestone Aquifer which is located to the south of these wells which draw from the Camillus Shale Aquifer and consequently the USGS study information was of limited value.

The Town of Clarence has done extensive investigation in the Camillus Shale as part of their wastewater management program and a drainage study. Samples taken in a well approximately two miles to the east contain sulphate concentrations eight times that of drinking water standards. Previous USGS studies also conclude that the Camillus Shale groundwater has a high sulfate and sulfide problem because of the gypsum beds found within this formation.

Your letter questions whether the former National Gypsum plant on Roll Road may be responsible for this contamination. It is apparent from the Town of Clarence sampling data and historic data that the sulfate levels are from natural sources. Presence of high iron and oil and grease found in the Health Department sampling of these wells cannot be explained. Our investigations of the Roll Road facility from 1983 through this year have found only slight oil contamination in localized areas of the plant which has been excavated and removed. Also for your information, the New York State Department of Environmental Conservation plans to delist this site from its Registry of Inactive Hazardous Waste Sites, since it is unable to substantiate past allegations of hazardous waste dumping on the former plant grounds.

If you have any questions, please contact me at 846-6339.

Very truly yours,

Anthony T. Voell

ANTHONY T. VOELL, P.E.
Deputy Commissioner
Division of Environmental Control

ATV:RAF:jk

cc: Joan Loring
John Kociela, ECHD

REFERENCE #6

02-8611-61

NUS CORPORATION — **TELECON NOTE**

CONTROL NO:	DATE:	TIME:
02-8611-61	12-5-86	9:30

DISTRIBUTION:

File

BETWEEN:	OF:	PHONE:
Don Berkhardt	Clarence H2O Dept.	(716) 741-3263

AND: Peter Morton (NUS)

DISCUSSION:

Call pertaining to private wells within 3 mls of Gold Bond site. They do not have records of private wells, but within 3 mls of the site, he estimates that fewer than 10 residences still rely on private wells for drinking water. He has no knowledge of how many people irrigate with well water.

ACTION ITEMS:

NUS 067 REVISED 0581

REFERENCE #7

02-8611-61

NUS CORPORATION	TELECON NOTE

CONTROL NO:	DATE:	TIME:
02-8611-61	12/03/86	10 - 10:30

DISTRIBUTION:

File

BETWEEN: Erie Co Health, Dept. of Env. and Planning, Clarence H2O Dept.	OF:	PHONE: Clarence H2O (716) 741-7265

AND: Pete Morton (NUS)

DISCUSSION:

None of the above departments have any record of or knowledge of private wells

— (Don Dersthardt)
~~Erie Co. Health~~ Clarence H2O 1 pm one private well in Ribbeck residence on Shimerville Rd., about 200 yards north of intersection with Goodroll Rd.

ACTION ITEMS:

NUS 067 REVISED 0581

REFERENCE #9

02-8611-61

NUS CORPORATION — TELECON NOTE

CONTROL NO:	DATE:	TIME:
02-8611-61	12-04-86	1458

DISTRIBUTION:

BETWEEN:	OF:	PHONE:
J Whittney	Soil Consv. Service	(716) 652 8480

AND: P. VanSchondorf (NUS)

DISCUSSION:

In Erie County the majority of well irrigation use is in the Eden Valley. Irrigation use in general is restricted to surface water intakes.

ACTION ITEMS:

NUS 067 REVISED 0581

REFERENCE #10

0022-C
02-8611-61

NUS CORPORATION — TELECON NOTE

CONTROL NO:	DATE:	TIME:
02-8611-61	1/8/87	10 30

DISTRIBUTION:

File

Gold Bond Building Products

BETWEEN:	OF:	PHONE:
Mr Walker	Gold Bond Building Products, Charlotte, N.C.	(704) 365-7300

AND: Peter Morton (NUS)

DISCUSSION:

Mr. Walker called me regarding letter I had sent him asking for permit info, etc. He wanted to know why they were on CERCLIS list, I referred him to Carol Petersen at Fed Plaza.

The questions I had written to him about:

1) There were no liners, collection system, etc. The only thing they disposed of was gypsum board

2) No permits were required, but they had a New York State consent order

3) the plant was in operation from the late 1920's and closed down Jan. 1982

ACTION ITEMS:

NUS 067 REVISED 0581

REFERENCE #11

002-1-C
02-8611-61

NUS CORPORATION — TELECON NOTE

CONTROL NO:	DATE:	TIME:
02-8611-61	1-8-87	1000

DISTRIBUTION:

File Gold Bond Building Products

BETWEEN:	OF: Farm adjacent to site	PHONE:
Mr. Weeks		(716) 741-9191

AND: Peter Morton (NUS)

DISCUSSION:

I called Mr. Weeks to inquire about irrigation from Cat Creek. His farm no longer uses it and he believes the only people using Cat Ck for irrigation is the area is the strawberry farm which is adjacent to the site

ACTION ITEMS:

REFERENCE #12

NUS CORPORATION AND SUBSIDIARIES

TELECON NOTE

CONTROL NO:	DATE: 7/9/87	TIME: 1315

DISTRIBUTION: File

BETWEEN: Mr. Tom Myers	OF: Town of Clarence Rec. Division	PHONE: (716) 241-2802

AND: Peter Morton

DISCUSSION:

I called regarding use of Got Creek downstream from the site. As far as he knows, no one uses the creek for 3 miles downstream. There are no public accesses.

ACTION ITEMS:

NUS 067 REVISED 0685

REFERENCE #13

002O-C
02-9611-61

NUS CORPORATION — TELECON NOTE

CONTROL NO:	DATE:	TIME:
02-8611-61	1-8-87	9:50

DISTRIBUTION:

FIA
Gold Bond Building Products

BETWEEN:	OF:	PHONE:
Diane McMullen	Clarence Assessor	(716) 741-2802

AND: Pete Morton (NUS)

DISCUSSION:

called about acreage of farm property near Gold Bond Site. The strawberry field covers approx. 34 acres. Weeks farm covers slightly greater than 56 acres. Gott Ck goes through property

ACTION ITEMS:

NUS 067 REVISED 0581

REFERENCE #14

Gold Bond Building Products

a List of Dataset: NY51 Number of Records = 6

ID #	POP	HOUSE	DISTANCE	SECTOR	
1	ε	0	ε	0	0.400000	1	1/4
2	3020	578	15	158	0.310000	1	1/2
3	3021 5690	2964	903	888	1.60000	1	1
4	5634 20275	2618	1688	785	3.20000	1	2
5	20294	14655	16449	4761	4.80000	1	3
6	35174 35175	14890	111504	5055	6.40000	1	4

ss RETURN to page forward, enter Pnnn to position the starting record
the next page, enter BACK to reselect vari

REFERENCE # 16

ENDANGERED AND THREATENED

WILDLIFE AND PLANTS

JANUARY 1, 1986

50 CFR 17.11 and 17.12

Department of the Interior
U.S. Fish and Wildlife Service

REFERENCE #17

TABLE 1
SAMPLE DESCRIPTIONS
GOLD BOND BUILDING PRODUCTS
CLARENCE CENTER, ERIE COUNTY, NEW YORK

Sample ID Number	Sample Type	Organic Traffic Report #	Inorganic Traffic Report #	Time (Hours)	Sample Location
NY51-S1	Soil	BG584	MBK126	1317	On landfill side of where drainage ditch turns and heads south.
NY51-S2	Soil	BG585	MBK127	1335	In leachate, 125 feet east of corner in drainage ditch.
NY51-S3	Soil	BG586	MBH040	1352	In leachate along eastern edge of landfill by metal marker stake.
NY51-SED1	Sediment	BG588	MBH042	1237	On eastern (upstream) side of where Shimerville Rd. crosses Got Creek.
NY51-SED2	Sediment	BG994	MBG200	1127	Just north of where drainage ditch enters Got Creek.
NY51-SED3	Sediment	BG995	MBE379	1049	On downstream side of where foot bridge crosses Got Creek.
NY51-SW1	Aqueous	BG580	MBH034	1232	Same as SED 1.
NY51-SW2	Aqueous	BG581	MBH035	1123	Same as SED 2.
NY51-SW3	Aqueous	BG582	MBH036	1047	Same as SED 3.
NY51-BL1	Aqueous	BG157	MBG387	N/A	U.S. EPA, Region II, FIT.

ORGANIC DATA REPORTING QUALIFIERS

For reporting results to EPA, the following results qualifiers are used. Additional flags or footnotes explaining results are encouraged. However, the definition of such flags must be explicit.

Value -If the result is a value greater than or equal to the detection limit, report the value.

U -Indicates compound was analyzed for but not detected. Report the minimum detection limit for the sample with the U (e.g., 10U) based on necessary concentration/dilution actions. (This is not necessarily the instrument detection limit.) The footnote should read: U-Compound was analyzed for but not detected. The number is the minimum attainable detection limit for the sample.

J -Indicates an estimated value. This flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed or when the mass spectral data indicates the presence of a compound that meets the identification criteria but the result is less than the specified detection limit but greater than zero. (e.g., 10J)

C -This flag applies to pesticide parameters where the identification has been confirmed by GC/MS. Single component pesticides $\geq$10 ng/ul in the final extract should be confirmed by GC/MS.

B -This flag is used when the analyte is found in the blank as well as a sample. It indicates possible/probable blank contamination and warns the data user to take appropriate action.

Other -Other specific flags and footnotes may be required to properly define the results. If used, they must be fully described and such description attached to the data summary report.

ANALYTICAL DATA
NAME: GOLD BOND BUILDING PRODUCTS
SAMPLING DATE: 12/9/86
CASE: 6659

VOLATILES

SAMPLE NUMBER	NY51-BL1	NY51-SW1	NY51-SW2	NY51-SW3	NY51-SED1	NY51-SED2	NY51-SED3	NY51-S1	NY51-S2	NY51-S3
TRAFFIC REPORT NUMBER	B6157	B6580	B6581	B6582	B6588	B6994	B6995	B6584	B6585	B6586
MATRIX	WATER	WATER	WATER	WATER	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
UNITS	UG/L	UG/L	UG/L	UG/L	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG
Chloromethane										
Bromomethane										
Vinyl Chloride										
Chloroethane										
Methylene Chloride			37		9	13	E	16	20	14
Acetone					14		63B	41	66	100
Carbon Disulfide										
1,1-Dichloroethene										
1,1-Dichloroethane										
Trans-1,2-Dichloroethene										
Chloroform							E	E	J	
1,2-Dichloroethane										
2-Butanone										
1,1,1-Trichloroethane										
Carbon Tetrachloride										
Vinyl Acetate										
Bromodichloromethane										
1,1,2,2-Tetrachloroethane										
1,2-Dichloropropane										
Trans-1,3-Dichloropropene										
Trichloroethene										
Dibromochloromethane										
1,1,2-Trichloroethane										
Benzene										
Cis-1,3-Dichloropropene										
2-Chloroethylvinylether										
Bromoform										
2-Hexanone										
4-Methyl-2-Pentanone										
Tetrachloroethene										
Toluene										
Chlorobenzene										
Ethylbenzene										
Styrene										
Total Xylenes										

NOTES:
Blank space - compound analyzed for but not detected
E - analysis did not pass QA/QC requirements
J - compound present below the specified detection limit
B - compound found in laboratory blank as well as the sample, indicates possible/probable blank contamination

ANALYTICAL DATA
NAME: GOLD BOND BUILDING PRODUCTS
SAMPLING DATE: 12/9/86
CASE: 6659

SEMI-VOLATILES

SAMPLE NUMBER	NY51-BL1	NY51-SW1	NY51-SW2	NY51-SW3	NY51-SED1	NY51-SED2	NY51-SED3	NY51-S1	NY51-S2	NY51-S3
TRAFFIC REPORT NUMBER	BG157	BG580	BG581	BG582	BG588	BG994	BG995	BG584	BG585	BG586
MATRIX	WATER	WATER	WATER	WATER	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
UNITS	UG/L	UG/L	UG/L	UG/L	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG
Phenol										
Bis(2-Chloroethyl)Ether										
2-Chlorophenol										
1,3-Dichlorobenzene										
1,4-Dichlorobenzene										
Benzyl Alcohol										
1,2-Dichlorobenzene										
2-Methylphenol										
Bis(2-Chloroisopropyl)Ether										
4-Methylphenol										
N-Nitroso-Di-n-Propylamine										
Hexachloroethane										
Nitrobenzene										
Isophorone										
2-Nitrophenol										
2,4-Dimethylphenol										
Benzoic Acid										
Bis(2-Chloroethoxy)Methane										
2,4-Dichlorophenol										
1,2,4-Trichlorobenzene										
Naphthalene										
4-Chloroaniline									J	
Hexachlorobutadiene										
4-Chloro-3-Methylphenol										
2-Methylnaphthalene										
Hexachlorocyclopentadiene									J	
2,4,6-Trichlorophenol										
2,4,5-Trichlorophenol										
2-Chloronaphthalene										
2-Nitroaniline										
Dimethyl Phthalate										
Acenaphthylene					J					
3-Nitroaniline										
Acenaphthene					J					
2,4-Dinitrophenol										
4-Nitrophenol										
Dibenzofuran					J					
2,4-Dinitrotoluene										
2,6-Dinitrotoluene										
Diethylphthalate										
4-Chlorophenylphenyl ether							J			
Fluorene					J					
4-Nitroaniline										
4,6-Dinitro-2-Methylphenol										

ANALYTICAL DATA
NAME: GOLD BOND BUILDING PRODUCTS
SAMPLING DATE: 12/9/86
CASE: 6659

SEMI-VOLATILES

SAMPLE NUMBER	NY51-BL1	NY51-SW1	NY51-SW2	NY51-SW3	NY51-SED1	NY51-SED2	NY51-SED3	NY51-S1	NY51-S2	NY51-S3
TRAFFIC REPORT NUMBER	B6157	B6580	B6581	B6582	B6588	B6994	B6995	B6584	B6585	B6586
MATRIX	WATER	WATER	WATER	WATER	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
UNITS	UG/L	UG/L	UG/L	UG/L	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG
N-Nitrosodiphenylamine					E	E	E	E	E	E
4-Bromophenylphenyl ether										
Hexachlorobenzene										
Pentachlorophenol										
Phenanthrene									J	
Anthracene					1800	J		J	J	
Di-n-Butylphthalate	JB		E	E	J					
Fluoranthene							J			
Pyrene					3000	J	J	J	J	
Butylbenzylphthalate					2800	J		J	J	
3,3'-Dichlorobenzidine										
Benzo(a)Anthracene										
Bis(2-Ethylhexyl)Phthalate					1900	J			J	
Chrysene		J								
Di-n-Octyl Phthalate					1300			J	J	
Benzo(b)Fluoranthene		J								
Benzo(k)Fluoranthene		J			1100		J		J	
Benzo(a)Pyrene		J			1000					
Indeno(1,2,3-cd)Pyrene		10			1100					
Dibenzo(a,h)Anthracene					770					
Benzo(ghi)Perylene		11			340					
					840					

NOTES:
Blank space - compound analyzed for but not detected
E - analysis did not pass QA/QC requirements
J - compound present below the specified detection limit
B - compound found in laboratory blank as well as the sample, indicates possible/probable blank contamination

ANALYTICAL DATA
NAME: GOLD BOND BUILDING PRODUCTS
SAMPLING DATE: 12/9/86
CASE: 6659

PESTICIDES/PCBs

SAMPLE NUMBER	NY51-BL1	NY51-SW1	NY51-SW2	NY51-SW3	NY51-SED1	NY51-SED2	NY51-SED3	NY51-S1	NY51-S2	NY51-S3
TRAFFIC REPORT NUMBER	B6157	B6580	B6581	B6582	B6588	B6994	B6995	B6584	B6585	B6586
MATRIX	WATER	WATER	WATER	WATER	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
UNITS	UG/L	UG/L	UG/L	UG/L	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG
Alpha-BHC										
Beta-BHC										
Delta-BHC									49	
Gamma-BHC (Lindane)										
Heptachlor										
Aldrin										
Heptachlor Epoxide										
Endosulfan I										
Dieldrin										
4,4'-DDE										
Endrin										
Endosulfan II										
4,4'-DDD										
Endosulfan sulfate										
Endrin Aldehyde										
4,4'-DDT										
Methoxychlor										
Endrin Ketone										
Chlordane										
Toxaphene										
Aroclor-1016										
Aroclor-1221										
Aroclor-1232										
Aroclor-1242										
Aroclor-1248										
Aroclor-1254										
Aroclor-1260										

NOTES:
Blank space - compound analyzed for but not detected
E - analysis did not pass QA/QC requirements
J - compound present below the specified detection limit
B - compound found in laboratory blank as well as the sample, indicates possible/probable blank contamination

ANALYTICAL DATA
NAME: GOLD BOND BUILDING PRODUCTS
SAMPLING DATE: 12/9/86
CASE: 6659

INORGANICS

SAMPLE NUMBER	NY51-BL1	NY51-SW1	NY51-SW2	NY51-SW3	NY51-SED1	NY51-SED2	NY51-SED3	NY51-S1	NY51-S2	NY51-S3
TRAFFIC REPORT NUMBER	MBG387	MBH034	MBH035	MBH036	MBH042	MBG200	MBE379	MBK126	MBK127	MBH040
MATRIX	WATER	WATER	WATER	WATER	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
UNITS	UG/L	UG/L	UG/L	UG/L	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG
Aluminum	J	390	1170	391	6700	7920	15,700	7280	2690	8320
Antimony	J				J	J	J	J	J	J
Arsenic			3.0		J	5.9	6.3	5.5	J	J
Barium		J	J	J	J	J	73	59	J	J
Beryllium					J	J	J	J		0.38
Cadmium					J	J	J			
Calcium		88,800	295,000	82,600	49,800	136,000	9710	30,800	151,000	88,400
Chromium	13	J	J	14	9.0	9.0	19	13		11
Cobalt	J				J		J	J		J
Copper	J	J	J	J	12	26	14	20	8.6	9.3
Iron	E	E	3120	E	10,200	14,300	17,800	19,030	7810	12,800
Lead		6.0	5.0	39	55	36	19	18	21	22
Magnesium		16,400	97,100	16,100	8440	35,900	6040	5880	6200	1240
Manganese	J	22	302	21	282	305	144	616	25	485
Mercury	E	E	E	E		1.0			0.4	5.3
Nickel	J				J		16	J		J
Potassium		J	12,700	J	J	1660	1570	J	J	J
Selenium					J	J	J	J	J	J
Silver	J								1.1	
Sodium		25,100		25,400						
Thallium										
Tin										
Vanadium	J				J	J	27	16	J	
Zinc	E	E	E	E	E	E	E	E	E	E

NOTES:
Blank space - compound analyzed for but not detected
E - analysis did not pass QA/QC requirements
J - compound present below the specified detection limit
B - compound found in laboratory blank as well as the sample, indicates possible/probable blank contamination

Sample Number
BG 584

Organics Analysis Data Sheet
(Page 1)

199

Laboratory Name: ITAS - Knoxville
Case No: 6659
Lab Sample ID No: AA5770
QC Report No:
Sample Matrix: Soil
Contract No: 68-01-7025
Data Release Authorized By: W.T. Gulow
Date Sample Received: 12-10-86

Volatile Compounds

Concentration: (Low) Medium (Circle One)
Date Extracted/Prepared: 12-17-86
Date Analyzed: 12-17-86
Conc/Dil Factor: 1 pH
Percent Moisture: (Not Decanted) 29

CAS Number		ug/l or (ug/Kg) (Circle One)
74-87-3	Chloromethane	10u
74-83-9	Bromomethane	10u
75-01-4	Vinyl Chloride	10u
75-00-3	Chloroethane	10u
75-09-2	Methylene Chloride	16.
67-64-1	Acetone	41.
75-15-0	Carbon Disulfide	5.0u
75-35-4	1, 1-Dichloroethene	5.0u
75-34-3	1, 1-Dichloroethane	5.0u
156-60-5	Trans-1, 2-Dichloroethene	5.0u
67-66-3	Chloroform	8.
107-06-2	1, 2-Dichloroethane	5.0u
78-93-3	2-Butanone	10u
71-55-6	1, 1, 1-Trichloroethane	5.0u
56-23-5	Carbon Tetrachloride	5.0u
108-05-4	Vinyl Acetate	10u
75-27-4	Bromodichloromethane	5.0u

CAS Number		ug/l or (ug/Kg) (Circle One)
78-87-5	1, 2-Dichloropropane	5.0u
10061-02-6	Trans-1, 3-Dichloropropene	5.0u
79-01-6	Trichloroethene	5.0u
124-48-1	Dibromochloromethane	5.0u
79-00-5	1, 1, 2-Trichloroethane	5.0u
71-43-2	Benzene	5.0u
10061-01-5	cis-1, 3-Dichloropropene	5.0u
110-75-8	2-Chloroethylvinylether	10u
75-25-2	Bromoform	5.0u
108-10-1	4-Methyl-2-Pentanone	10u
591-78-6	2-Hexanone	10u
127-18-4	Tetrachloroethene	5.0u
79-34-5	1, 1, 2, 2-Tetrachloroethane	5.0u
108-88-3	Toluene	5.0u
108-90-7	Chlorobenzene	5.0u
100-41-4	Ethylbenzene	5.0u
100-42-5	Styrene	5.0u
	Total Xylenes	5.0u

Data Reporting Qualifiers

For reporting results to EPA, the following results qualifiers are used. Additional flags or footnotes explaining results are encouraged. However, the definition of each flag must be explicit.

Value	If the result is a value greater than or equal to the detection limit, report the value
U	Indicates compound was analyzed for but not detected. Report the minimum detection limit for the sample with the U (e.g., 10U) based on necessary concentration/dilution action. (This is not necessarily the instrument detection limit.) The footnote should read U-Compound was analyzed for but not detected. The number is the minimum attainable detection limit for the sample
J	Indicates an estimated value. This flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed or when the mass spectral data indicated the presence of a compound that meets the identification criteria but the result is less than the specified detection limit but greater than zero (e.g., 10J). If limit of detection is 10 µg/l and a concentration of 3 µg/l is calculated, report as 3J.
C	This flag applies to pesticide parameters where the identification has been confirmed by GC-MS. Single component pesticides ≥10 ng·ul in the final extract should be confirmed by GC-MS
B	This flag is used when the analyte is found in the blank as well as a sample. It indicates possible/probable blank contamination and warns the data user to take appropriate action
Other	Other specific flags and footnotes may be required to properly define the results. If used, they must be fully described and such description attached to the data summary report

Laboratory Name: ITAS-Knoxville

Case No: 6659

Sample Number: BG 584

AA 5778

Organics Analysis Data Sheet
(Page 2)

Semivolatile Compounds

200

Concentration: (Low) Medium (Circle One)

Date Extracted/Prepared: 12-16-86

Date Analyzed: 12-24-86

Conc/Dil Factor: 47.17 x

Percent Moisture (Decanted): NA

GPC Cleanup ☐Yes ☒No

Separatory Funnel Extraction ☐Yes NA

Continuous Liquid - Liquid Extraction ☐Yes NA

CAS Number		ug/l or (ug/Kg) (Circle One)
108-95-2	Phenol	330u
111-44-4	bis(-2-Chloroethyl)Ether	
95-57-8	2-Chlorophenol	
541-73-1	1 3-Dichlorobenzene	
106-46-7	1 4-Dichlorobenzene	
100-51-6	Benzyl Alcohol	
95-50-1	1 2-Dichlorobenzene	
95-48-7	2-Methylphenol	
39638-32-9	bis(2-chloroisopropyl)Ether	
106-44-5	4-Methylpheno	
621-64-7	N-Nitroso-Di-n-Propylamine	
67-72-1	Hexachloroethane	
98-95-3	Nitrobenzene	
78-59-1	Isophorone	
88-75-5	2-Nitrophenol	
105-67-9	2, 4-Dimethylphenol	↓
65-85-0	Benzoic Acid	1600u
111-91-1	bis(-2-Chloroethoxy)Methane	330u
120-83-2	2, 4-Dichlorophenol	
120-82-1	1, 2, 4-Trichlorobenzene	
91-20-3	Naphthalene	
106-47-8	4-Chloroaniline	
87-68-3	Hexachlorobutadiene	
59-50-7	4-Chloro-3-Methylphenol	
91-57-6	2-Methylnaphthalene	
77-47-4	Hexachlorocyclopentadiene	
88-06-2	2, 4, 6-Trichlorophenol	↓
95-95-4	2, 4, 5-Trichlorophenol	1600u
91-58-7	2-Chloronaphthalene	330u
88-74-4	2-Nitroaniline	1600u
131-11-3	Dimethyl Phthalate	330u
208-96-8	Acenaphthylene	330u
99-09-2	3-Nitroaniline	1600u

CAS Number		ug/l or (ug/Kg) (Circle One)
83-32-9	Acenaphthene	330u
51-28-5	2, 4-Dinitrophenol	1600u
100-02-7	4-Nitrophenol	1600u
132-64-9	Dibenzofuran	330u
121-14-2	2 4-Dinitrotoluene	
606-20-2	2, 6-Dinitrotoluene	
84-66-2	Diethylphthalate	
7005-72-3	4-Chlorophenyl-phenylether	
86-73-7	Fluorene	↓
100-01-6	4-Nitroaniline	1600u
534-52-1	4, 6-Dinitro-2-Methylphenol	1600u
86-30-6	~~N-Nitrosodiphenylamine (1)~~	~~98. J~~ B
101-55-3	4-Bromophenyl-phenylether	330u
118-74-1	Hexachlorobenzene	330u
87-86-5	Pentachlorophenol	1600u
85-01-8	Phenanthrene	75. J
120-12-7	Anthracene	330u
84-74-2	Di-n-Butylphthalate	330u
206-44-0	Fluoranthene	62. J
129-00-0	Pyrene	140. J
85-68-7	Butylbenzylphthalate	330u
91-94-1	3, 3'-Dichlorobenzidine	660u
56-55-3	Benzo(a)Anthracene	330u
117-81-7	bis(2-Ethylhexyl)Phthalate	330u
218-01-9	Chrysene	77. J
117-84-0	Di-n-Octyl Phthalate	330u
205-99-2	Benzo(b)Fluoranthene	
207-08-9	Benzo(k)Fluoranthene	
50-32-8	Benzo(a)Pyrene	
193-39-5	Indeno(1, 2, 3-cd)Pyrene	
53-70-3	Dibenz(a, h)Anthracene	
191-24-2	Benzo(g, h, i)Perylene	↓

(1)-Cannot be separated from diphenylamine

Laboratory Name ITAS Knoxville

Case No 6659

Sample Number BG584

Organics Analysis Data Sheet
(Page 3)

Pesticide/PCBs

201

Concentration (Low) Medium (Circle One)

Date Extracted/Prepared 12-16-86

Date Analyzed 1-16,17,21-87

Conc/(Dil Factor) 1, 1/6

Percent Moisture (decanted) _____

GPC Cleanup ☐Yes ☒No

Separatory Funnel Extraction ☐Yes

Continuous Liquid - Liquid Extraction ☐Yes

CAS Number		ug/l or (ug/Kg) (Circle One)
319-84-6	Alpha-BHC	11.U
319-85-7	Beta-BHC	11.U
319-86-8	Delta-BHC	11.U
58-89-9	Gamma-BHC (Lindane)	11.U
76-44-8	Heptachlor	11.U
309-00-2	Aldrin	11.U
1024-57-3	Heptachlor Epoxide	11.U
959-98-8	Endosulfan I	11.U
60-57-1	Dieldrin	23.0U
72-55-9	4,4'-DDE	23.0U
72-20-8	Endrin	23.0U
33213-65-9	Endosulfan II	23.0U
72-54-8	4,4'-DDD	23.0U
1031-07-8	Endosulfan Sulfate	23.0U
50-29-3	4,4'-DDT	23.0U
72-43-5	Methoxychlor	110.U
53494-70-5	Endrin Ketone	23.0U
57-74-9	Chlordane	110.U
8001-35-2	Toxaphene	230.0U
12674-11-2	Aroclor-1016	110.U
11104-28-2	Aroclor-1221	110.U
11141-16-5	Aroclor-1232	110.U
53469-21-9	Aroclor-1242	110.U
12672-29-6	Aroclor-1248	110.U
11097-69-1	Aroclor-1254	230.0U
11096-82-5	Aroclor-1260	230.0U

V_i = Volume of extract injected (ul)

V_s = Volume of water extracted (ml)

W_s = Weight of sample extracted (g)

V_t = Volume of total extract (ul)

V_s _____ or W_s 30.02g V_t 20000ul V_i 5ul, 2ul

Form I

U.S. EPA Contract Laboratory Program
Sample Management Office
P.O. Box 818 - Alexandria, VA 22313
703/557-2490 FTS: 8-557-2490

EPA Sample No.
MBK-126

Date 1-4-87

INORGANIC ANALYSIS DATA SHEET

LAB NAME Century Laboratories, Inc. CASE NO. 6659

SOW NO. 785

LAB SAMPLE ID. NO. EPA-0009-03 QC REPORT NO. 010

Elements Identified and Measured

Concentration: Low ✓ Medium _____

Matrix: Water _____ Soil _____ Sludge _____ Other _____

ug/L or (mg/kg dry) weight (Circle One)

1.	Aluminum	7210P	13.	Magnesium	5480P
2.	Antimony	5.3 UPN J H	14.	Manganese	616P
3.	Arsenic	5.5F	15.	Mercury	0.13 U CVAAN
4.	Barium	59PN	16.	Nickel	[10]P
5.	Beryllium	[0.39]PN	17.	Potassium	[1170]P
6.	Cadmium	0.52 UPN	18.	Selenium	2.8 UFN J H
7.	Calcium	30,500P	19.	Silver	1.1 UP
8.	Chromium	13P	20.	Sodium	280 UP
9.	Cobalt	[4.2]P	21.	Thallium	0.55 UF
10.	Copper	20PN	22.	Vanadium	16PN
11.	Iron	19030P	23.	Zinc	~~73P~~ *
12.	Lead	18F	Precent Solids (%)		71.45

Cyanide _____

Footnotes: For reporting results to EPA, standard result qualifiers are used as defined on Cover Page. Additional flags or footnotes explaining results are encouraged. Definition of such flags must be explicit and contained on Cover Page, however.

Comments: COURSE DARK SOIL

Lab Manager _____

Sample Number
BG 585

Organics Analysis Data Sheet
(Page 1)

230

Laboratory Name: ITAS - Knoxville
Case No: 6659
Lab Sample ID No: AA 5771
QC Report No:
Sample Matrix: Soil
Contract No: 68-01-7025
Data Release Authorized By: W. T. Wilson
Date Sample Received: 12-10-86

Volatile Compounds

Concentration: (Low) Medium (Circle One)
Date Extracted/Prepared: 12-17-86
Date Analyzed: 12-17-86
Conc/Dil Factor: 1 pH
Percent Moisture: (Not Decanted) 35

CAS Number		ug/l or (ug/Kg) (Circle One)
74-87-3	Chloromethane	10u
74-83-9	Bromomethane	10u
75-01-4	Vinyl Chloride	10u
75-00-3	Chloroethane	10u
75-09-2	Methylene Chloride	26.
67-64-1	Acetone	66.
75-15-0	Carbon Disulfide	5.0u
75-35-4	1, 1-Dichloroethene	5.0u
75-34-3	1, 1-Dichloroethane	5.0u
156-60-5	Trans-1, 2-Dichloroethene	5.0u
67-66-3	Chloroform	3. J
107-06-2	1, 2-Dichloroethane	5.0u
78-93-3	2-Butanone	10u
71-55-6	1, 1, 1-Trichloroethane	5.0u
56-23-5	Carbon Tetrachloride	5.0u
108-05-4	Vinyl Acetate	10u
75-27-4	Bromodichloromethane	5.0u

CAS Number		ug/l or (ug/Kg) (Circle One)
78-87-5	1, 2-Dichloropropane	5.0u
10061-02-6	Trans-1, 3-Dichloropropene	5.0u
79-01-6	Trichloroethene	5.0u
124-48-1	Dibromochloromethane	5.0u
79-00-5	1, 1, 2-Trichloroethane	5.0u
71-43-2	Benzene	5.0u
10061-01-5	cis-1, 3-Dichloropropene	5.0u
110-75-8	2-Chloroethylvinylether	10u
75-25-2	Bromoform	5.0u
108-10-1	4-Methyl-2-Pentanone	10u
591-78-6	2-Hexanone	10u
127-18-4	Tetrachloroethene	5.0u
79-34-5	1, 1, 2, 2-Tetrachloroethane	5.0u
108-88-3	Toluene	5.0u
108-90-7	Chlorobenzene	5.0u
100-41-4	Ethylbenzene	5.0u
100-42-5	Styrene	5.0u
	Total Xylenes	5.0u

Data Reporting Qualifiers

For reporting results to EPA, the following results qualifiers are used. Additional flags or footnotes explaining results are encouraged. However, the definition of each flag must be explicit.

Value If the result is a value greater than or equal to the detection limit, report the value

U Indicates compound was analyzed for but not detected. Report the minimum detection limit for the sample with the U (e.g., 10U) based on necessary concentration/dilution action. (This is not necessarily the instrument detection limit.) The footnote should read U-Compound was analyzed for but not detected. The number is the minimum attainable detection limit for the sample

J Indicates an estimated value. This flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed or when the mass spectral data indicated the presence of a compound that meets the identification criteria but the result is less than the specified detection limit but greater than zero (e.g., 10J). If limit of detection is 10 µg/l and a concentration of 3 µg/l is calculated, report as 3J

C This flag applies to pesticide parameters where the identification has been confirmed by GC-MS. Single component pesticides ≥10 ng/ul in the final extract should be confirmed by GC/MS

B This flag is used when the analyte is found in the blank as well as a sample. It indicates possible/probable blank contamination and warns the data user to take appropriate action

Other Other specific flags and footnotes may be required to properly define the results. If used, they must be fully described and such description attached to the data summary report

Laboratory Name ITAS-Knoxville

Case No 6659

Sample Number
BG 585

AA 5779

Organics Analysis Data Sheet
(Page 2)

Semivolatile Compounds

291

Concentration: (Low) Medium (Circle One)

Date Extracted/Prepared 12-16-86

Date Analyzed: 12-26-86

Conc/Dil Factor: 51.39 x

Percent Moisture (Decanted) NA

GPC Cleanup ☐Yes ☑No

Separatory Funnel Extraction ☐Yes NA

Continuous Liquid - Liquid Extraction ☐Yes NA

CAS Number		ug/l or (ug/Kg) (Circle One)
108-95-2	Phenol	330u
111-44-4	bis(-2-Chloroethyl)Ether	
95-57-8	2-Chlorophenol	
541-73-1	1 3-Dichlorobenzene	
106-46-7	1 4-Dichlorobenzene	
100-51-6	Benzyl Alcohol	
95-50-1	1 2-Dichlorobenzene	
95-48-7	2-Methylphenol	
39638-32-9	bis(2-chloroisopropyl)Ether	
106-44-5	4-Methylpheno	
621-64-7	N-Nitroso-Di-n-Propylamine	
67-72-1	Hexachloroethane	
98-95-3	Nitrobenzene	
78-59-1	Isophorone	
88-75-5	2-Nitrophenol	
105-67-9	2. 4-Dimethylphenol	
65-85-0	Benzoic Acid	1600u
111-91-1	bis(-2-Chloroethoxy)Methane	330u
120-83-2	2. 4-Dichlorophenol	
120-82-1	1. 2. 4-Trichlorobenzene	
91-20-3	Naphthalene	79. J
106-47-8	4-Chloroaniline	330u
87-68-3	Hexachlorobutadiene	
59-50-7	4-Chloro-3-Methylphenol	
91-57-6	2-Methylnaphthalene	60. J
77-47-4	Hexachlorocyclopentadiene	330u
88-06-2	2. 4 6-Trichlorophenol	330u
95-95-4	2. 4. 5-Trichlorophenol	1600u
91-58-7	2-Chloronaphthalene	330u
88-74-4	2-Nitroaniline	1600u
131-11-3	Dimethyl Phthalate	330u
208-96-8	Acenaphthylene	330u
99-09-2	3-Nitroaniline	1600u

CAS Number		ug/l or (ug/Kg) (Circle One)
83-32-9	Acenaphthene	330u
51-28-5	2. 4-Dinitrophenol	1600u
100-02-7	4-Nitrophenol	1600u
132-64-9	Dibenzofuran	330u
121-14-2	2 4-Dinitrotoluene	
606-20-2	2. 6-Dinitrotoluene	
84-66-2	Diethylphthalate	
7005-72-3	4-Chlorophenyl-phenylether	
86-73-7	Fluorene	
100-01-6	4-Nitroaniline	1600u
534-52-1	4. 6-Dinitro-2-Methylphenol	1600u
~~86-30-6~~	~~N-Nitrosodiphenylamine (1)~~	~~330~~
101-55-3	4-Bromophenyl-phenylether	330u
118-74-1	Hexachlorobenzene	330u
87-86-5	Pentachlorophenol	110J
85-01-8	Phenanthrene	64. J
120-12-7	Anthracene	330u
84-74-2	Di-n-Butylphthalate	330u
206-44-0	Fluoranthene	62. J
129-00-0	Pyrene	130. J
85-68-7	Butylbenzylphthalate	330u
91-94-1	3. 3'-Dichlorobenzidine	660u
56-55-3	Benzo(a)Anthracene	58. J
117-81-7	bis(2-Ethylhexyl)Phthalate	330u
218-01-9	Chrysene	66. J
117-84-0	Di-n-Octyl Phthalate	330u
205-99-2	Benzo(b)Fluoranthene	77. J
207-08-9	Benzo(k)Fluoranthene	330u
50-32-8	Benzo(a)Pyrene	
193-39-5	Indeno(1. 2. 3-cd)Pyrene	
53-70-3	Dibenz(a h)Anthracene	
191-24-2	Benzo(g. h. i)Perylene	

(1)-Cannot be separated from diphenylamine

Laboratory Name ITAS Knoxville

Case No 6659

Sample Number BG585

Organics Analysis Data Sheet
(Page 3)

292

Pesticide/PCBs

Concentration (Low) Medium (Circle One)

Date Extracted/Prepared 12-16-86

Date Analyzed 1-16,18,21-87

Conc (Dil Factor) 1, 1/5

Percent Moisture (decanted) _____

GPC Cleanup ☐Yes ☒No

Separatory Funnel Extraction ☐Yes

Continuous Liquid - Liquid Extraction ☐Yes

CAS Number		ug/l or (ug/Kg) (Circle One)
319-84-6	Alpha-BHC	12.U
319-85-7	Beta-BHC	49.
319-86-8	Delta-BHC	12.U
58-89-9	Gamma-BHC (Lindane)	12.U
76-44-8	Heptachlor	12.U
309-00-2	Aldrin	12.U
1024-57-3	Heptachlor Epoxide	12.U
959-98-8	Endosulfan I	12.U
60-57-1	Dieldrin	25.0U
72-55-9	4,4'-DDE	25.0U
72-20-8	Endrin	25.0U
33213-65-9	Endosulfan II	25.0U
72-54-8	4,4'-DDD	25.0U
1031-07-8	Endosulfan Sulfate	25.0U
50-29-3	4,4'-DDT	25.0U
72-43-5	Methoxychlor	120.U
53494-70-5	Endrin Ketone	25.0U
57-74-9	Chlordane	120.U
8001-35-2	Toxaphene	250.0U
12674-11-2	Aroclor-1016	120.U
11104-28-2	Aroclor-1221	120.U
11141-16-5	Aroclor-1232	120.U
53469-21-9	Aroclor-1242	120.U
12672-29-6	Aroclor-1248	120.U
11097-69-1	Aroclor-1254	250.0U
11096-82-5	Aroclor-1260	250.0U

V_i = Volume of extract injected (ul)

V_s = Volume of water extracted (ml)

W_s = Weight of sample extracted (g)

V_t = Volume of total extract (ul)

V_s _____ or W_s 30.10g V_t 20000ul V_i 5ul, 2ul

Form I

U.S. EPA Contract Laboratory Program
Sample Management Office
P.O. Box 818 - Alexandria, VA 22313
703/557-2490 FTS: 8-557-2490

EPA Sample No.
MBK-127

Date 1-14-87

INORGANIC ANALYSIS DATA SHEET

LAB NAME Century Laboratories, Inc. CASE NO. 6659

SOW NO. 785

LAB SAMPLE ID. NO. EPA0009-02 QC REPORT NO. 010

Elements Identified and Measured

Concentration: Low ✓ Medium _____

Matrix: Water _____ Soil ✓ Sludge _____ Other _____

ug/L or (mg/kg) dry weight (Circle One)

1. Aluminum	2690P	13. Magnesium	6200P
2. Antimony	5.1UPN J [15]	14. Manganese	25P
3. Arsenic	[2.1]F	15. Mercury	0.40CVAAN
4. Barium	[25]PN	16. Nickel	1.6UP
5. Beryllium	0.27UPN	17. Potassium	[727]P
6. Cadmium	0.5UPN	18. Selenium	0.24FNU J [15]
7. Calcium	151,000P	19. Silver	1.1P
8. Chromium	1.1UP	20. Sodium	269UP
9. Cobalt	1.1UP	21. Thallium	0.47FU
10. Copper	5.6PN	22. Vanadium	[1.3]PN
11. Iron	7F10P	23. Zinc	~~35P~~ *
12. Lead	21F	Precent Solids (%)	67.7
Cyanide	_____		

Footnotes: For reporting results to EPA, standard result qualifiers are used as defined on Cover Page. Additional flags or footnotes explaining results are encouraged. Definition of such flags must be explicit and contained on Cover Page, however.

Comments: COARSE DARK SOIL

Lab Manager Kenneth Ford

Sample Number
BG 586

Organics Analysis Data Sheet
(Page 1)

381

Laboratory Name: ITAS - Knoxville
Case No: 6659
Lab Sample ID No: AA 5772
QC Report No:
Sample Matrix: Soil
Contract No: 68-01-7025
Data Release Authorized By: W.T. Culkin
Date Sample Received: 12-10-86

Volatile Compounds

Concentration: (Low) Medium (Circle One)
Date Extracted/Prepared: 12-19-86
Date Analyzed: 12-19-86
Conc/Dil Factor: 1 pH
Percent Moisture: (Not Decanted) 36

CAS Number		ug/l or (ug/Kg) (Circle One)
74-87-3	Chloromethane	10u
74-83-9	Bromomethane	10u
75-01-4	Vinyl Chloride	10u
75-00-3	Chloroethane	10u
75-09-2	Methylene Chloride	14.
67-64-1	Acetone	100
75-15-0	Carbon Disulfide	5.0u
75-35-4	1, 1-Dichloroethene	5.0u
75-34-3	1, 1-Dichloroethane	5.0u
156-60-5	Trans-1, 2-Dichloroethene	5.0u
67-66-3	Chloroform	5.0u
107-06-2	1, 2-Dichloroethane	5.0u
78-93-3	2-Butanone	10u
71-55-6	1, 1, 1-Trichloroethane	5.0u
56-23-5	Carbon Tetrachloride	5.0u
108-05-4	Vinyl Acetate	10u
75-27-4	Bromodichloromethane	5.0u

CAS Number		ug/l or (ug/Kg) (Circle One)
78-87-5	1, 2-Dichloropropane	5.0u
10061-02-6	Trans-1, 3-Dichloropropene	5.0u
79-01-6	Trichloroethene	5.0u
124-48-1	Dibromochloromethane	5.0u
79-00-5	1, 1, 2-Trichloroethane	5.0u
71-43-2	Benzene	5.0u
10061-01-5	cis-1, 3-Dichloropropene	5.0u
110-75-8	2-Chloroethylvinylether	10u
75-25-2	Bromoform	5.0u
108-10-1	4-Methyl-2-Pentanone	10u
591-78-6	2-Hexanone	10u
127-18-4	Tetrachloroethene	5.0u
79-34-5	1, 1, 2, 2-Tetrachloroethane	5.0u
108-88-3	Toluene	5.0u
108-90-7	Chlorobenzene	5.0u
100-41-4	Ethylbenzene	5.0u
100-42-5	Styrene	5.0u
	Total Xylenes	5.0u

Data Reporting Qualifiers

For reporting results to EPA, the following results qualifiers are used. Additional flags or footnotes explaining results are encouraged. However, the definition of each flag must be explicit.

Value	If the result is a value greater than or equal to the detection limit, report the value
U	Indicates compound was analyzed for but not detected. Report the minimum detection limit for the sample with the U (e.g., 10U) based on necessary concentration/dilution action. (This is not necessarily the instrument detection limit.) The footnote should read U - Compound was analyzed for but not detected. The number is the minimum attainable detection limit for the sample
J	Indicates an estimated value. This flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed or when the mass spectral data indicated the presence of a compound that meets the identification criteria but the result is less than the specified detection limit but greater than zero (e.g., 10J). If limit of detection is 10 µg/l and a concentration of 3 µg/l is calculated, report as 3J
C	This flag applies to pesticide parameters where the identification has been confirmed by GC-MS. Single component pesticides ≥10 ng·ul in the final extract should be confirmed by GC-MS
B	This flag is used when the analyte is found in the blank as well as a sample. It indicates possible·probable blank contamination and warns the data user to take appropriate action
Other	Other specific flags and footnotes may be required to properly define the results. If used, they must be fully described and such description attached to the data summary report

Laboratory Name: ITAS-Knoxville

Case No: 6659

Sample Number: BG 586

AR 5780

Organics Analysis Data Sheet
(Page 2)

Semivolatile Compounds

382

Concentration: (Low) Medium (Circle One)

Date Extracted/Prepared: 12-16-86

Date Analyzed: 12-26-86

Conc/Dil Factor: 51.69 x

Percent Moisture (Decanted): NA

GPC Cleanup ☐Yes ☑No

Separatory Funnel Extraction ☐Yes NA

Continuous Liquid - Liquid Extraction ☐Yes NA

CAS Number		ug/l or (ug/Kg) (Circle One)
108-95-2	Phenol	330u
111-44-4	bis(-2-Chloroethyl)Ether	
95-57-8	2-Chlorophenol	
541-73-1	1 3-Dichlorobenzene	
106-46-7	1 4-Dichlorobenzene	
100-51-6	Benzyl Alcohol	
95-50-1	1 2-Dichlorobenzene	
95-48-7	2-Methylphenol	
39638-32-9	bis(2-chloroisopropyl)Ether	
106-44-5	4-Methylpheno	
621-64-7	N-Nitroso-Di-n-Propylamine	
67-72-1	Hexachloroethane	
98-95-3	Nitrobenzene	
78-59-1	Isophorone	
88-75-5	2-Nitrophenol	
105-67-9	2. 4-Dimethylphenol	
65-85-0	Benzoic Acid	1600u
111-91-1	bis(-2-Chloroethoxy)Methane	330u
120-83-2	2. 4-Dichlorophenol	
120-82-1	1. 2. 4-Trichlorobenzene	
91-20-3	Naphthalene	
106-47-8	4-Chloroaniline	
87-68-3	Hexachlorobutadiene	
59-50-7	4-Chloro-3-Methylphenol	
91-57-6	2-Methylnaphthalene	
77-47-4	Hexachlorocyclopentadiene	
88-06-2	2. 4. 6-Trichlorophenol	
95-95-4	2 4. 5-Trichlorophenol	1600u
91-58-7	2-Chloronaphthalene	330u
88-74-4	2-Nitroaniline	1600u
131-11-3	Dimethyl Phthalate	330u
208-96-8	Acenaphthylene	330u
99-09-2	3-Nitroaniline	1600u

CAS Number		ug/l or (ug/Kg) (Circle One)
83-32-9	Acenaphthene	330u
51-28-5	2. 4-Dinitrophenol	1600u
100-02-7	4-Nitrophenol	1600u
132-64-9	Dibenzofuran	330u
121-14-2	2. 4-Dinitrotoluene	
606-20-2	2. 6-Dinitrotoluene	
84-66-2	Diethylphthalate	
7005-72-3	4-Chlorophenyl-phenylether	
86-73-7	Fluorene	
100-01-6	4-Nitroaniline	1600u
534-52-1	4. 6-Dinitro-2-Methylphenol	1600u
86-30-6	~~N-Nitrosodiphenylamine (1)~~	72. 3B
101-55-3	4-Bromophenyl-phenylether	330u
118-74-1	Hexachlorobenzene	330u
87-86-5	Pentachlorophenol	1600u
85-01-8	Phenanthrene	330u
120-12-7	Anthracene	
84-74-2	Di-n-Butylphthalate	
206-44-0	Fluoranthene	
129-00-0	Pyrene	
85-68-7	Butylbenzylphthalate	
91-94-1	3. 3'-Dichlorobenzidine	660u
56-55-3	Benzo(a)Anthracene	330u
117-81-7	bis(2-Ethylhexyl)Phthalate	
218-01-9	Chrysene	
117-84-0	Di-n-Octyl Phthalate	
205-99-2	Benzo(b)Fluoranthene	
207-08-9	Benzo(k)Fluoranthene	
50-32-8	Benzo(a)Pyrene	
193-39-5	Indeno(1. 2. 3-cd)Pyrene	
53-70-3	Dibenz(a. h)Anthracene	
191-24-2	Benzo(g. h. i)Perylene	

(1)-Cannot be separated from diphenylamine

Laboratory Name ITAS Knoxville

Case No 6659

Sample Number BG 586

Organics Analysis Data Sheet
(Page 3)

Pesticide/PCBs

383

Concentration (Low) Medium (Circle One)

Date Extracted/Prepared 12-16-86

Date Analyzed 1-16,26-87

Conc (Dil Factor) 1

Percent Moisture (decanted) _____

GPC Cleanup ☐Yes ☒No

Separatory Funnel Extraction ☐Yes

Continuous Liquid - Liquid Extraction ☐Yes

CAS Number		ug/l or (ug/Kg) (Circle One)
319-84-6	Alpha-BHC	12.U
319-85-7	Beta-BHC	12.U
319-86-8	Delta-BHC	12.U
58-89-9	Gamma-BHC (Lindane)	12.U
76-44-8	Heptachlor	12.U
309-00-2	Aldrin	12.U
1024-57-3	Heptachlor Epoxide	12.U
959-98-8	Endosulfan I	12.U
60-57-1	Dieldrin	25.0U
72-55-9	4,4'-DDE	25.0U
72-20-8	Endrin	25.0U
33213-65-9	Endosulfan II	25.0U
72-54-8	4,4'-DDD	25.0U
1031-07-8	Endosulfan Sulfate	25.0U
50-29-3	4,4'-DDT	25.0U
72-43-5	Methoxychlor	120.U
53494-70-5	Endrin Ketone	25.0U
57-74-9	Chlordane	120.U
8001-35-2	Toxaphene	250.0U
12674-11-2	Aroclor-1016	120.U
11104-28-2	Aroclor-1221	120.U
11141-16-5	Aroclor-1232	120.U
53469-21-9	Aroclor-1242	120.U
12672-29-6	Aroclor-1248	120.U
11097-69-1	Aroclor-1254	250.0U
11096-82-5	Aroclor-1260	250.0U

V_i = Volume of extract injected (ul)

V_s = Volume of water extracted (ml)

W_s = Weight of sample extracted (g)

V_t = Volume of total extract (ul)

V_s _____ or W_s 30.15 g V_t 20000ul V_i 5ul 2ul

Form I

U.S. EPA Contract Laboratory Program
Sample Management Office
P.O. Box 818 - Alexandria, VA 22313
703/557-2490 FTS: 8-557-2490

EPA Sample No.
MBH 040

Date 1-14-87

INORGANIC ANALYSIS DATA SHEET

LAB NAME Century Laboratories, Inc. CASE NO. 6659

SOW NO. 785

LAB SAMPLE ID. NO. EPA-0009-01 QC REPORT NO. 010

Elements Identified and Measured

Concentration: Low ✓ Medium _____

Matrix: Water _____ Soil ✓ Sludge _____ Other _____

ug/L or (mg/kg) dry weight (Circle One)

1.	Aluminum	8320 P	13.	Magnesium	1,240 P
2.	Antimony	6.6 PN J H	14.	Manganese	485 P
3.	Arsenic	[3.2] F	15.	Mercury	~~5.3~~ 5.3 CVAA N
4.	Barium	[45] PN	16.	Nickel	[2.7] P
5.	Beryllium	~~[3.4~~ 0.34 B PN	17.	Potassium	[1590] P
6.	Cadmium	0.69 U PN	18.	Selenium	3.6 U F N J H
7.	Calcium	84,400 P	19.	Silver	1.4 U P
8.	Chromium	11 P	20.	Sodium	347 U P
9.	Cobalt	[1.6] P	21.	Thallium	0.72 U F
10.	Copper	9.3 PN	22.	Vanadium	14 U PN
11.	Iron	12,800	23.	Zinc	~~72 P~~ X
12.	Lead	22 F		Precent Solids (%)	56.0 ✓
	Cyanide	_____			

Footnotes: For reporting results to EPA, standard result qualifiers are used as defined on Cover Page. Additional flags or footnotes explaining results are encouraged. Definition of such flags must be explicit and contained on Cover Page, however.

Comments: COURSE, DARK SOIL

Lab Manager: Kenneth Bond

Sample Number
BG 588

Organics Analysis Data Sheet
(Page 1)

153

Laboratory Name: ITAS - Knoxville
Case No: 6659
Lab Sample ID No: AA 5773
QC Report No:
Sample Matrix: soil
Contract No: 68-01-7025
Data Release Authorized By: W.T. Wilson
Date Sample Received: 12-10-86

Volatile Compounds

Concentration: (Low) Medium (Circle One)
Date Extracted/Prepared: 12-19-86
Date Analyzed: 12-19-86
Conc/Dil Factor: 1 pH
Percent Moisture: (Not Decanted) 33

CAS Number		ug/l or (ug/Kg) (Circle One)
74-87-3	Chloromethane	10u
74-83-9	Bromomethane	10u
75-01-4	Vinyl Chloride	10u
75-00-3	Chloroethane	10u
75-09-2	Methylene Chloride	9.
67-64-1	Acetone	14.
75-15-0	Carbon Disulfide	5.0u
75-35-4	1, 1-Dichloroethene	5.0u
75-34-3	1, 1-Dichloroethane	5.0u
156-60-5	Trans-1, 2-Dichloroethene	5.0u
67-66-3	Chloroform	5.0u
107-06-2	1, 2-Dichloroethane	5.0u
78-93-3	2-Butanone	10u
71-55-6	1, 1, 1-Trichloroethane	5.0u
56-23-5	Carbon Tetrachloride	5.0u
108-05-4	Vinyl Acetate	10u
75-27-4	Bromodichloromethane	5.0u

CAS Number		ug/l or (ug/Kg) (Circle One)
78-87-5	1, 2-Dichloropropane	5.0u
10061-02-6	Trans-1, 3-Dichloropropene	5.0u
79-01-6	Trichloroethene	5.0u
124-48-1	Dibromochloromethane	5.0u
79-00-5	1, 1, 2-Trichloroethane	5.0u
71-43-2	Benzene	5.0u
10061-01-5	cis-1, 3-Dichloropropene	5.0u
110-75-8	2-Chloroethylvinylether	10u
75-25-2	Bromoform	5.0u
108-10-1	4-Methyl-2-Pentanone	10u
591-78-6	2-Hexanone	10u
127-18-4	Tetrachloroethene	5.0u
79-34-5	1, 1, 2, 2-Tetrachloroethane	5.0u
108-88-3	Toluene	5.0u
108-90-7	Chlorobenzene	5.0u
100-41-4	Ethylbenzene	5.0u
100-42-5	Styrene	5.0u
	Total Xylenes	5.0u

Data Reporting Qualifiers

For reporting results to EPA, the following results qualifiers are used. Additional flags or footnotes explaining results are encouraged. However, the definition of each flag must be explicit.

Value — If the result is a value greater than or equal to the detection limit, report the value

U — Indicates compound was analyzed for but not detected. Report the minimum detection limit for the sample with the U (e.g., 10U) based on necessary concentration/dilution action. (This is not necessarily the instrument detection limit.) The footnote should read U-Compound was analyzed for but not detected. The number is the minimum attainable detection limit for the sample

J — Indicates an estimated value. This flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed or when the mass spectral data indicated the presence of a compound that meets the identification criteria but the result is less than the specified detection limit but greater than zero (e.g., 10J). If limit of detection is 10 µg/l and a concentration of 3 µg/l is calculated, report as 3J

C — This flag applies to pesticide parameters where the identification has been confirmed by GC-MS. Single component pesticides ≥10 ng/ul in the final extract should be confirmed by GC-MS

B — This flag is used when the analyte is found in the blank as well as a sample. It indicates possible/probable blank contamination and warns the data user to take appropriate action

Other — Other specific flags and footnotes may be required to properly define the results. If used, they must be fully described and such description attached to the data summary report

Laboratory Name: ITAS-Knoxville

Case No: 6659

Sample Number: BG 588

AA 5781

454

Organics Analysis Data Sheet
(Page 2)

Semivolatile Compounds

Concentration: (Low) Medium (Circle One)

Date Extracted/Prepared: 12-16-86

Date Analyzed: 12-26-86

Conc/Dil Factor: 49.98x

Percent Moisture (Decanted): NA

GPC Cleanup ☐Yes ☒No

Separatory Funnel Extraction ☐Yes NA

Continuous Liquid - Liquid Extraction ☐Yes NA

CAS Number		ug/l or (ug/Kg) (Circle One)
108-95-2	Phenol	330u
111-44-4	bis(-2-Chloroethyl)Ether	
95-57-8	2-Chlorophenol	
541-73-1	1 3-Dichlorobenzene	
106-46-7	1. 4-Dichlorobenzene	
100-51-6	Benzyl Alcohol	
95-50-1	1. 2-Dichlorobenzene	
95-48-7	2-Methylphenol	
39638-32-9	bis(2-chloroisopropyl)Ether	
106-44-5	4-Methylpheno	
621-64-7	N-Nitroso-Di-n-Propylamine	
67-72-1	Hexachloroethane	
98-95-3	Nitrobenzene	
78-59-1	Isophorone	
88-75-5	2-Nitrophenol	
105-67-9	2. 4-Dimethylphenol	
65-85-0	Benzoic Acid	1600u
111-91-1	bis(-2-Chloroethoxy)Methane	330u
120-83-2	2. 4-Dichlorophenol	
120-82-1	1. 2. 4-Trichlorobenzene	
91-20-3	Naphthalene	
106-47-8	4-Chloroaniline	
87-68-3	Hexachlorobutadiene	
59-50-7	4-Chloro-3-Methylphenol	
91-57-6	2-Methylnaphthalene	
77-47-4	Hexachlorocyclopentadiene	
88-06-2	2. 4. 6-Trichlorophenol	
95-95-4	2. 4. 5-Trichlorophenol	1600u
91-58-7	2-Chloronaphthalene	330u
88-74-4	2-Nitroaniline	1600u
131-11-3	Dimethyl Phthalate	330u
208-96-8	Acenaphthylene	220. J
99-09-2	3-Nitroaniline	1600u

CAS Number		ug/l or (ug/Kg) (Circle One)
83-32-9	Acenaphthene	62. J
51-28-5	2. 4-Dinitrophenol	1600u
100-02-7	4-Nitrophenol	1600u
132-64-9	Dibenzofuran	65. J
121-14-2	2 4-Dinitrotoluene	330u
606-20-2	2. 6-Dinitrotoluene	
84-66-2	Diethylphthalate	
7005-72-3	4-Chlorophenyl-phenylether	
86-73-7	Fluorene	150. J
100-01-6	4-Nitroaniline	1600u
534-52-1	4. 6-Dinitro-2-Methylphenol	1600u
86-30-6	~~N-Nitrosodiphenylamine (1)~~	~~63. J13~~
101-55-3	4-Bromophenyl-phenylether	330u
118-74-1	Hexachlorobenzene	330u
87-86-5	Pentachlorophenol	1600u
85-01-8	Phenanthrene	1800.
120-12-7	Anthracene	280. J
84-74-2	Di-n-Butylphthalate	330u
206-44-0	Fluoranthene	3000.
129-00-0	Pyrene	2800.
85-68-7	Butylbenzylphthalate	330u
91-94-1	3. 3'-Dichlorobenzidine	660u
56-55-3	Benzo(a)Anthracene	1900.
117-81-7	bis(2-Ethylhexyl)Phthalate	330u
218-01-9	Chrysene	1300.
117-84-0	Di-n-Octyl Phthalate	330u
205-99-2	Benzo(b)Fluoranthene	1100.
207-08-9	Benzo(k)Fluoranthene	1000.
50-32-8	Benzo(a)Pyrene	1100.
193-39-5	Indeno(1. 2. 3-cd)Pyrene	770.
53-70-3	Dibenz(a. h)Anthracene	340.
191-24-2	Benzo(g. h. i)Perylene	840.

(1)-Cannot be separated from diphenylamine

Laboratory Name ITAS Knoxville

Case No 6659

Sample Number BG 588

Organics Analysis Data Sheet
(Page 3)

Pesticide/PCBs

455

Concentration (Low) Medium (Circle One)

Date Extracted/Prepared 12-16-86

Date Analyzed 1-18,21-87

Conc (Dil Factor) 1/5

Percent Moisture (decanted) _____

GPC Cleanup ☐Yes ☒No

Separatory Funnel Extraction ☐Yes

Continuous Liquid - Liquid Extraction ☐Yes

CAS Number		ug/l or (ug/Kg) (Circle One)
319-84-6	Alpha-BHC	12.U
319-85-7	Beta-BHC	13.U
319-86-8	Delta-BHC	12.U
58-89-9	Gamma-BHC (Lindane)	12.U
76-44-8	Heptachlor	12.U
309-00-2	Aldrin	12.U
1024-57-3	Heptachlor Epoxide	12.U
959-98-8	Endosulfan I	24.0U
60-57-1	Dieldrin	24.0U
72-55-9	4,4'-DDE	24.0U
72-20-8	Endrin	24.0U
33213-65-9	Endosulfan II	24.0U
72-54-8	4,4'-DDD	24.0U
1031-07-8	Endosulfan Sulfate	24.0U
50-29-3	4,4'-DDT	24.0U
72-43-5	Methoxychlor	120.U
53494-70-5	Endrin Ketone	24.0U
57-74-9	Chlordane	120.U
8001-35-2	Toxaphene	240.0U
12674-11-2	Aroclor-1016	120.U
11104-28-2	Aroclor-1221	120.U
11141-16-5	Aroclor-1232	120.U
53469-21-9	Aroclor-1242	120.U
12672-29-6	Aroclor-1248	120.U
11097-69-1	Aroclor-1254	240.0U
11096-82-5	Aroclor-1260	240.0U

V_i = Volume of extract injected (ul)

V_s = Volume of water extracted (ml)

W_s = Weight of sample extracted (g)

V_t = Volume of total extract (ul)

V_s _____ or W_s 30.00g V_t 20000ul V_i 5ul, 2ul

Form I

U.S. EPA Contract Laboratory Program
Sample Management Office
P.O. Box 818 - Alexandria, VA 22313
703/557-2490 FTS: 8-557-2490

EPA Sample No.
MBH-042

Date 1-14-87

INORGANIC ANALYSIS DATA SHEET

LAB NAME Century Laboratories, Inc. CASE NO. 6659

SOW NO. 785

LAB SAMPLE ID. NO. EPA-0049-05 QC REPORT NO. 010

Elements Identified and Measured

Concentration: Low ✓ Medium _____

Matrix: Water _____ Soil ✓ Sludge _____ Other _____

ug/L or (mg/kg dry) weight (Circle One)

1.	Aluminum	6700 P	13.	Magnesium	8440 P
2.	Antimony	5.5 UPN J H-	14.	Manganese	242 P
3.	Arsenic	[2.2] F	15.	Mercury	0.1 CU CVAA N
4.	Barium	[40] PN	16.	Nickel	[5.4] P
5.	Beryllium	[0.32] PN	17.	Potassium	[844] P
6.	Cadmium	[0.5K] PN	18.	Selenium	0.27 UFN J H-S
7.	Calcium	49,000 P	19.	Silver	1.2 UP
8.	Chromium	9.0 P	20.	Sodium	291 UP
9.	Cobalt	[2.5] P	21.	Thallium	0.54 UF
10.	Copper	12 PN	22.	Vanadium	[13] PN
11.	Iron	10,200	23.	Zinc	~~79 P~~ *
12.	Lead	5.5 F			

Cyanide _____

Precent Solids (%) 62.4

Footnotes: For reporting results to EPA, standard result qualifiers are used as defined on Cover Page. Additional flags or footnotes explaining results are encouraged. Definition of such flags must be explicit and contained on Cover Page, however.

Comments: COURSE DARK SOIL

Lab Manager: Kenneth Bond

Sample Number
BG 994

Organics Analysis Data Sheet
(Page 1)

555

Laboratory Name: ITAS - Knoxville
Case No: 6659
Lab Sample ID No: AA 5774
QC Report No:
Sample Matrix: soil
Contract No: 68-01-7025
Data Release Authorized By: W.T. Wilson
Date Sample Received: 12-10-86

Volatile Compounds

Concentration: (Low) Medium (Circle One)
Date Extracted/Prepared: 12-19-86
Date Analyzed: 12-19-86
Conc/Dil Factor: 1 pH
Percent Moisture: (Not Decanted) 56

CAS Number		ug/l or (ug/Kg) (Circle One)
74-87-3	Chloromethane	10u
74-83-9	Bromomethane	10u
75-01-4	Vinyl Chloride	10u
75-00-3	Chloroethane	10u
75-09-2	Methylene Chloride	13.
67-64-1	Acetone	10u
75-15-0	Carbon Disulfide	5.0u
75-35-4	1, 1-Dichloroethene	5.0u
75-34-3	1, 1-Dichloroethane	5.0u
156-60-5	Trans-1, 2-Dichloroethene	5.0u
67-66-3	Chloroform	5.0u
107-06-2	1, 2-Dichloroethane	5.0u
78-93-3	2-Butanone	10u
71-55-6	1, 1, 1-Trichloroethane	5.0u
56-23-5	Carbon Tetrachloride	5.0u
108-05-4	Vinyl Acetate	10u
75-27-4	Bromodichloromethane	5.0u

CAS Number		ug/l or (ug/Kg) (Circle One)
78-87-5	1, 2-Dichloropropane	5.0u
10061-02-6	Trans-1, 3-Dichloropropene	5.0u
79-01-6	Trichloroethene	5.0u
124-48-1	Dibromochloromethane	5.0u
79-00-5	1, 1, 2-Trichloroethane	5.0u
71-43-2	Benzene	5.0u
10061-01-5	cis-1, 3-Dichloropropene	5.0u
110-75-8	2-Chloroethylvinylether	10u
75-25-2	Bromoform	5.0u
108-10-1	4-Methyl-2-Pentanone	10u
591-78-6	2-Hexanone	10u
127-18-4	Tetrachloroethene	5.0u
79-34-5	1, 1, 2, 2-Tetrachloroethane	5.0u
108-88-3	Toluene	5.0u
108-90-7	Chlorobenzene	5.0u
100-41-4	Ethylbenzene	5.0u
100-42-5	Styrene	5.0u
	Total Xylenes	5.0u

Data Reporting Qualifiers

For reporting results to EPA, the following results qualifiers are used. Additional flags or footnotes explaining results are encouraged. However, the definition of each flag must be explicit.

Value If the result is a value greater than or equal to the detection limit, report the value

U Indicates compound was analyzed for but not detected. Report the minimum detection limit for the sample with the U (e.g., 10U) based on necessary concentration/dilution action. (This is not necessarily the instrument detection limit.) The footnote should read U - Compound was analyzed for but not detected. The number is the minimum attainable detection limit for the sample

J Indicates an estimated value. This flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed or when the mass spectral data indicated the presence of a compound that meets the identification criteria but the result is less than the specified detection limit but greater than zero (e.g., 10J). If limit of detection is 10 µg/l and a concentration of 3 µg/l is calculated, report as 3J

C This flag applies to pesticide parameters where the identification has been confirmed by GC-MS. Single component pesticides ≥10 ng/µl in the final extract should be confirmed by GC-MS

B This flag is used when the analyte is found in the blank as well as a sample. It indicates possible/probable blank contamination and warns the data user to take appropriate action

Other Other specific flags and footnotes may be required to properly define the results. If used, they must be fully described and such description attached to the data summary report

Laboratory Name: [illegible]

Case No: 6659

Sample Number: BG 994

AA 5782

Organics Analysis Data Sheet
(Page 2)

Semivolatile Compounds

556

Concentration: (Low) Medium (Circle One)

Date Extracted/Prepared: 12-16-86

Date Analyzed: 12-26-86

Conc/Dil Factor: 75.62 x

Percent Moisture (Decanted): NA

GPC Cleanup ☐Yes ☑No

Separatory Funnel Extraction ☐Yes NA

Continuous Liquid - Liquid Extraction ☐Yes NA

CAS Number		ug/l or (ug/Kg) (Circle One)
108-95-2	Phenol	330u
111-44-4	bis(-2-Chloroethyl)Ether	
95-57-8	2-Chlorophenol	
541-73-1	1 3-Dichlorobenzene	
106-46-7	1 4-Dichlorobenzene	
100-51-6	Benzyl Alcohol	
95-50-1	1. 2-Dichlorobenzene	
95-48-7	2-Methylphenol	
39638-32-9	bis(2-chloroisopropyl)Ether	
106-44-5	4-Methylpheno	
621-64-7	N-Nitroso-Di-n-Propylamine	
67-72-1	Hexachloroethane	
98-95-3	Nitrobenzene	
78-59-1	Isophorone	
88-75-5	2-Nitrophenol	
105-67-9	2. 4-Dimethylphenol	↓
65-85-0	Benzoic Acid	1600u
111-91-1	bis(-2-Chloroethoxy)Methane	330u
120-83-2	2. 4-Dichlorophenol	
120-82-1	1. 2. 4-Trichlorobenzene	
91-20-3	Naphthalene	
106-47-8	4-Chloroaniline	
87-68-3	Hexachlorobutadiene	
59-50-7	4-Chloro-3-Methylphenol	
91-57-6	2-Methylnaphthalene	
77-47-4	Hexachlorocyclopentadiene	
88-06-2	2. 4. 6-Trichlorophenol	↓
95-95-4	2. 4. 5-Trichlorophenol	1600u
91-58-7	2-Chloronaphthalene	330u
88-74-4	2-Nitroaniline	1600u
131-11-3	Dimethyl Phthalate	330u
208-96-8	Acenaphthylene	330u
99-09-2	3-Nitroaniline	1600u

CAS Number		ug/l or (ug/Kg) (Circle One)
83-32-9	Acenaphthene	330u
51-28-5	2. 4-Dinitrophenol	1600u
100-02-7	4-Nitrophenol	1600u
132-64-9	Dibenzofuran	330u
121-14-2	2. 4-Dinitrotoluene	
606-20-2	2. 6-Dinitrotoluene	
84-66-2	Diethylphthalate	
7005-72-3	4-Chlorophenyl-phenylether	
86-73-7	Fluorene	↓
100-01-6	4-Nitroaniline	1600u
534-52-1	4. 6-Dinitro-2-Methylphenol	1600u
86-30-6	~~N-Nitrosodiphenylamine (1)~~	~~110. J~~
101-55-3	4-Bromophenyl-phenylether	330u
118-74-1	Hexachlorobenzene	330u
87-86-5	Pentachlorophenol	1600u
85-01-8	Phenanthrene	160. J
120-12-7	Anthracene	330u
84-74-2	Di-n-Butylphthalate	330u
206-44-0	Fluoranthene	120. J
129-00-0	Pyrene	110. J
85-68-7	Butylbenzylphthalate	330u
91-94-1	3. 3'-Dichlorobenzidine	660u
56-55-3	Benzo(a)Anthracene	81. J
117-81-7	bis(2-Ethylhexyl)Phthalate	330u
218-01-9	Chrysene	
117-84-0	Di-n-Octyl Phthalate	↓
205-99-2	Benzo(b)Fluoranthene	~~330u~~ 120 J
207-08-9	Benzo(k)Fluoranthene	330u
50-32-8	Benzo(a)Pyrene	
193-39-5	Indeno(1. 2. 3-cd)Pyrene	
53-70-3	Dibenz(a. h)Anthracene	
191-24-2	Benzo(g. h. i)Perylene	↓

Rm 1/23/87

(1)-Cannot be separated from diphenylamine

Laboratory Name ITAS Knoxville

Case No 6659

Sample Number BG994

Organics Analysis Data Sheet
(Page 3)

Pesticide/PCBs

557

Concentration (Low) Medium (Circle One)

Date Extracted/Prepared 12-16-86

Date Analyzed 1-17-87

Conc (Dil Factor) 1

Percent Moisture (decanted) _____

GPC Cleanup ☐Yes ☒No

Separatory Funnel Extraction ☐Yes

Continuous Liquid - Liquid Extraction ☐Yes

CAS Number		ug/l or (ug/Kg) (Circle One)
319-84-6	Alpha-BHC	18.U
319-85-7	Beta-BHC	18.U
319-86-8	Delta-BHC	18.U
58-89-9	Gamma-BHC (Lindane)	18.U
76-44-8	Heptachlor	18.U
309-00-2	Aldrin	18.U
1024-57-3	Heptachlor Epoxide	18.U
959-98-8	Endosulfan I	18.U
60-57-1	Dieldrin	37.0U
72-55-9	4,4'-DDE	37.0U
72-20-8	Endrin	37.0U
33213-65-9	Endosulfan II	37.0U
72-54-8	4,4'-DDD	37.0U
1031-07-8	Endosulfan Sulfate	37.0U
50-29-3	4,4'-DDT	37.0U
72-43-5	Methoxychlor	180.U
53494-70-5	Endrin Ketone	37.0U
57-74-9	Chlordane	180.U
8001-35-2	Toxaphene	370.0U
12674-11-2	Aroclor-1016	180.U
11104-28-2	Aroclor-1221	180.U
11141-16-5	Aroclor-1232	180.U
53469-21-9	Aroclor-1242	180.U
12672-29-6	Aroclor-1248	180.U
11097-69-1	Aroclor-1254	370.0U
11096-82-5	Aroclor-1260	370.0U

V_i = Volume of extract injected (ul)

V_s = Volume of water extracted (ml)

W_s = Weight of sample extracted (g)

V_t = Volume of total extract (ul)

V_s _____ or W_s 30.18g V_t 20000ul V_i 5ul

Form I

U.S. EPA Contract Laboratory Program
Sample Management Office
P.O. Box 818 - Alexandria, VA 22313
703/557-2490 FTS: 8-557-2490

EPA Sample No.
MB6-200

Date 1-14-87

INORGANIC ANALYSIS DATA SHEET

LAB NAME Century Laboratories, Inc. CASE NO. 6659

SOW NO. 785

LAB SAMPLE ID. NO. EPA-0009-04 QC REPORT NO. 010

Elements Identified and Measured

Concentration: Low ✓ Medium _____

Matrix: Water _____ Soil ✓ Sludge _____ Other _____

ug/L or (mg/kg dry) weight (Circle One)

1.	Aluminum	7920 P	13.	Magnesium	35 900 P
2.	Antimony	7.2 UPN J H5	14.	Manganese	305 P
3.	Arsenic	5.9 F	15.	Mercury	1.0 CVAA N
4.	Barium	[44] PN	16.	Nickel	2.3 UP
5.	Beryllium	[0.38] PN	17.	Potassium	1660 P
6.	Cadmium	~~U~~ [0.75] PN	18.	Selenium	0.42 UFN J H5
7.	Calcium	136,000 P	19.	Silver	1.6 UP
8.	Chromium	9.0 P	20.	Sodium	377 UP
9.	Cobalt	1.5 UP	21.	Thallium	0.45 UF
10.	Copper	26 PN	22.	Vanadium	[15] PN
11.	Iron	14 300 P	23.	Zinc	~~107 P~~ *
12.	Lead	36 F		Precent Solids (%)	46.53

Cyanide _____

Footnotes: For reporting results to EPA, standard result qualifiers are used as defined on Cover Page. Additional flags or footnotes explaining results are encouraged. Definition of such flags must be explicit and contained on Cover Page, however.

Comments: COURSE DARK SOIL

Lab Manager Kenneth Ford

Sample Number
BG 995

Organics Analysis Data Sheet
(Page 1)

633

Laboratory Name: ITAS - Knoxville
Case No: 6659
Lab Sample ID No: AA 5775
QC Report No:
Sample Matrix: Soil
Contract No: 68-01-7025
Data Release Authorized By: W. T. Winlam
Date Sample Received: 12-10-86

Volatile Compounds

Concentration: (Low) Medium (Circle One)
Date Extracted/Prepared: 12-16-86
Date Analyzed: 12-16-86
Conc/Dil Factor: 1 pH
Percent Moisture: (Not Decanted) 34

CAS Number		ug/l or (ug/Kg) (Circle One)
74-87-3	Chloromethane	10u
74-83-9	Bromomethane	10u
75-01-4	Vinyl Chloride	10u
75-00-3	Chloroethane	10u
75-09-2	Methylene Chloride	10. B
67-64-1	Acetone	63. B
75-15-0	Carbon Disulfide	5.0u
75-35-4	1, 1-Dichloroethene	5.0u
75-34-3	1, 1-Dichloroethane	5.0u
156-60-5	Trans-1, 2-Dichloroethene	5.0u
67-66-3	Chloroform	3. JB
107-06-2	1, 2-Dichloroethane	5.0u
78-93-3	2-Butanone	10u
71-55-6	1, 1, 1-Trichloroethane	5.0u
56-23-5	Carbon Tetrachloride	5.0u
108-05-4	Vinyl Acetate	10u
75-27-4	Bromodichloromethane	5.0u

CAS Number		ug/l or (ug/Kg) (Circle One)
78-87-5	1, 2-Dichloropropane	5.0u
10061-02-6	Trans-1, 3-Dichloropropene	5.0u
79-01-6	Trichloroethene	5.0u
124-48-1	Dibromochloromethane	5.0u
79-00-5	1, 1, 2-Trichloroethane	5.0u
71-43-2	Benzene	5.0u
10061-01-5	cis-1, 3-Dichloropropene	5.0u
110-75-8	2-Chloroethylvinylether	10u
75-25-2	Bromoform	5.0u
108-10-1	4-Methyl-2-Pentanone	10u
591-78-6	2-Hexanone	10u
127-18-4	Tetrachloroethene	5.0u
79-34-5	1, 1, 2, 2-Tetrachloroethane	5.0u
108-88-3	Toluene	5.0u
108-90-7	Chlorobenzene	5.0u
100-41-4	Ethylbenzene	5.0u
100-42-5	Styrene	5.0u
	Total Xylenes	5.0u

Data Reporting Qualifiers

For reporting results to EPA, the following results qualifiers are used. Additional flags or footnotes explaining results are encouraged. However, the definition of each flag must be explicit.

Value If the result is a value greater than or equal to the detection limit, report the value

U Indicates compound was analyzed for but not detected. Report the minimum detection limit for the sample with the U (e.g., 10U) based on necessary concentration/dilution action. (This is not necessarily the instrument detection limit.) The footnote should read U-Compound was analyzed for but not detected. The number is the minimum attainable detection limit for the sample

J Indicates an estimated value. This flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed or when the mass spectral data indicated the presence of a compound that meets the identification criteria but the result is less than the specified detection limit but greater than zero (e.g., 10J). If limit of detection is 10 µg/l and a concentration of 3 µg/l is calculated, report as 3J

C This flag applies to pesticide parameters where the identification has been confirmed by GC-MS. Single component pesticides ≥10 ng·ul in the final extract should be confirmed by GC-MS

B This flag is used when the analyte is found in the blank as well as a sample. It indicates possible/probable blank contamination and warns the data user to take appropriate action

Other Other specific flags and footnotes may be required to properly define the results. If used, they must be fully described and such description attached to the data summary report

Laboratory Name: ITAS-Knoxville

Case No: 6659

Sample Number: BG 995

Organics Analysis Data Sheet
(Page 2)

Semivolatile Compounds

634

Concentration: (Low) Medium (Circle One)

Date Extracted/Prepared: 12-16-86

Date Analyzed: 12-26-86

Conc/Dil Factor: 50.57 X

Percent Moisture (Decanted) NA

GPC Cleanup ☐Yes ☑No

Separatory Funnel Extraction ☐Yes NA

Continuous Liquid - Liquid Extraction ☐Yes NA

CAS Number		ug/l or ug/Kg (Circle One)
108-95-2	Phenol	330u
111-44-4	bis(-2-Chloroethyl)Ether	
95-57-8	2-Chlorophenol	
541-73-1	1 3-Dichlorobenzene	
106-46-7	1 4-Dichlorobenzene	
100-51-6	Benzyl Alcohol	
95-50-1	1 2-Dichlorobenzene	
95-48-7	2-Methylphenol	
39638-32-9	bis(2-chloroisopropyl)Ether	
106-44-5	4-Methylpheno	
621-64-7	N-Nitroso-Di-n-Propylamine	
67-72-1	Hexachloroethane	
98-95-3	Nitrobenzene	
78-59-1	Isophorone	
88-75-5	2-Nitrophenol	
105-67-9	2. 4-Dimethylphenol	
65-85-0	Benzoic Acid	1600u
111-91-1	bis(-2-Chloroethoxy)Methane	330u
120-83-2	2. 4-Dichlorophenol	
120-82-1	1. 2. 4-Trichlorobenzene	
91-20-3	Naphthalene	
106-47-8	4-Chloroaniline	
87-68-3	Hexachlorobutadiene	
59-50-7	4-Chloro-3-Methylphenol	
91-57-6	2-Methylnaphthalene	
77-47-4	Hexachlorocyclopentadiene	
88-06-2	2. 4. 6-Trichlorophenol	
95-95-4	2. 4. 5-Trichlorophenol	1600u
91-58-7	2-Chloronaphthalene	330u
88-74-4	2-Nitroaniline	1600u
131-11-3	Dimethyl Phthalate	330u
208-96-8	Acenaphthylene	330u
99-09-2	3-Nitroaniline	1600u

CAS Number		ug/l or ug/Kg (Circle One)
83-32-9	Acenaphthene	330u
51-28-5	2. 4-Dinitrophenol	1600u
100-02-7	4-Nitrophenol	1600u
132-64-9	Dibenzofuran	330u
121-14-2	2 4-Dinitrotoluene	
606-20-2	2. 6-Dinitrotoluene	
84-66-2	Diethylphthalate	51. J
7005-72-3	4-Chlorophenyl-phenylether	330u
86-73-7	Fluorene	330u
100-01-6	4-Nitroaniline	1600u
534-52-1	4. 6-Dinitro-2-Methylphenol	1600u
86-30-6	~~N-Nitrosodiphenylamine (1)~~	~~94, JB~~
101-55-3	4-Bromophenyl-phenylether	330u
118-74-1	Hexachlorobenzene	330u
87-86-5	Pentachlorophenol	1600u
85-01-8	Phenanthrene	330u
120-12-7	Anthracene	330u
84-74-2	Di-n-Butylphthalate	88. J
206-44-0	Fluoranthene	56. J
129-00-0	Pyrene	330u
85-68-7	Butylbenzylphthalate	330u
91-94-1	3. 3'-Dichlorobenzidine	660u
56-55-3	Benzo(a)Anthracene	330u
117-81-7	bis(2-Ethylhexyl)Phthalate	
218-01-9	Chrysene	
117-84-0	Di-n-Octyl Phthalate	
205-99-2	Benzo(b)Fluoranthene	96. J
207-08-9	Benzo(k)Fluoranthene	330u
50-32-8	Benzo(a)Pyrene	
193-39-5	Indeno(1. 2. 3-cd)Pyrene	
53-70-3	Dibenz(a. h)Anthracene	
191-24-2	Benzo(g. h. i)Perylene	

(1)-Cannot be separated from diphenylamine

Laboratory Name ITAS Knoxville

Case No 6659

Sample Number BG 995

Organics Analysis Data Sheet
(Page 3)

635

Pesticide/PCBs

Concentration (Low) Medium (Circle One)

Date Extracted/Prepared 12-16-86

Date Analyzed 1-17-87

Conc (Dil Factor) 1

Percent Moisture (decanted) _____

GPC Cleanup ☐Yes ☒No

Separatory Funnel Extraction ☐Yes

Continuous Liquid - Liquid Extraction ☐Yes

CAS Number		ug/l or (ug/Kg) (Circle One)
319-84-6	Alpha-BHC	12.U
319-85-7	Beta-BHC	12.U
319-86-8	Delta-BHC	12.U
58-89-9	Gamma-BHC (Lindane)	12.U
76-44-8	Heptachlor	12.U
309-00-2	Aldrin	12.U
1024-57-3	Heptachlor Epoxide	12.U
959-98-8	Endosulfan I	12.U
60-57-1	Dieldrin	24.0U
72-55-9	4,4'-DDE	24.0U
72-20-8	Endrin	24.0U
33213-65-9	Endosulfan II	24.0U
72-54-8	4,4'-DDD	24.0U
1031-07-8	Endosulfan Sulfate	24.0U
50-29-3	4,4'-DDT	24.0U
72-43-5	Methoxychlor	120.U
53494-70-5	Endrin Ketone	24.0U
57-74-9	Chlordane	120.U
8001-35-2	Toxaphene	240.0U
12674-11-2	Aroclor-1016	120.U
11104-28-2	Aroclor-1221	120.U
11141-16-5	Aroclor-1232	120.U
53469-21-9	Aroclor-1242	120.U
12672-29-6	Aroclor-1248	120.U
11097-69-1	Aroclor-1254	240.0U
11096-82-5	Aroclor-1260	240.0U

V_i = Volume of extract injected (ul)

V_s = Volume of water extracted (ml)

W_s = Weight of sample extracted (g)

V_t = Volume of total extract (ul)

V_s _____ or W_s 30.05g V_t 20000ul V_i 5ul

Form I

U.S. EPA Contract Laboratory Program
Sample Management Office
P.O. Box 818 - Alexandria, VA 22313
703/557-2490 FTS: 8-557-2490

EPA Sample No.
MBE-379

Date 1-14-87

INORGANIC ANALYSIS DATA SHEET

LAB NAME Century Laboratories, Inc. CASE NO. 6659

SOW NO. 785

LAB SAMPLE ID. NO. EPA-0009-06 QC REPORT NO. 010

Elements Identified and Measured

Concentration: Low ✓ Medium _____

Matrix: Water _____ Soil ✓ Sludge _____ Other _____

ug/L or mg/kg dry weight (Circle One)

1.	Aluminum	15,700 P	13.	Magnesium	6040P
2.	Antimony	5.0 UPN J (1)	14.	Manganese	144P
3.	Arsenic	6.3 F	15.	Mercury	0.15 UCVAAN
4.	Barium	73PN	16.	Nickel	16P
5.	Beryllium	[0.79]PN	17.	Potassium	1570P
6.	Cadmium	[0.52]PN	18.	Selenium	2.9UFN J (1)
7.	Calcium	9710P	19.	Silver	1.0 UP
8.	Chromium	19P	20.	Sodium	262UP
9.	Cobalt	[7.9]P	21.	Thallium	0.5 UF
10.	Copper	14PN	22.	Vanadium	27PN
11.	Iron	17,500P	23.	Zinc	~~44P~~ *
12.	Lead	19F	Precent Solids (%)		62.4
Cyanide					

Footnotes: For reporting results to EPA, standard result qualifiers are used as defined on Cover Page. Additional flags or footnotes explaining results are encouraged. Definition of such flags must be explicit and contained on Cover Page, however.

Comments: COULEE DARK SOIL

Lab Manager [signature]

Sample Number
BG 580

Organics Analysis Data Sheet
(Page 1)

Laboratory Name: ITAS - Knoxville
Case No: 6659 C58
Lab Sample ID No: AA5819
QC Report No:
Sample Matrix: Water
Contract No: EPA-68-01-7025
Data Release Authorized By: W. T. Wilson
Date Sample Received: 12-10-86

Volatile Compounds

Concentration: (Low) Medium (Circle One)
Date Extracted/Prepared: 12-15-86
Date Analyzed: 12-15-86
Conc/Dil Factor: 1 pH NA
Percent Moisture: (Not Decanted) NA

CAS Number		ug/l or ug/Kg (Circle One)
74-87-3	Chloromethane	10 U
74-83-9	Bromomethane	10 U
75-01-4	Vinyl Chloride	10 U
75-00-3	Chloroethane	10 U
75-09-2	Methylene Chloride	5.0 U
67-64-1	Acetone	10 U
75-15-0	Carbon Disulfide	5.0 U
75-35-4	1, 1-Dichloroethene	5.0 U
75-34-3	1, 1-Dichloroethane	5.0 U
156-60-5	Trans-1, 2-Dichloroethene	5.0 U
67-66-3	Chloroform	5.0 U
107-06-2	1, 2-Dichloroethane	5.0 U
78-93-3	2-Butanone	10 U
71-55-6	1, 1, 1-Trichloroethane	5.0 U
56-23-5	Carbon Tetrachloride	5.0 U
108-05-4	Vinyl Acetate	10 U
75-27-4	Bromodichloromethane	5.0 U

CAS Number		ug/l or ug/Kg (Circle One)
78-87-5	1, 2-Dichloropropane	5.0 U
10061-02-6	Trans-1, 3-Dichloropropene	5.0 U
79-01-6	Trichloroethene	5.0 U
124-48-1	Dibromochloromethane	5.0 U
79-00-5	1, 1, 2-Trichloroethane	5.0 U
71-43-2	Benzene	5.0 U
10061-01-5	cis-1, 3-Dichloropropene	5.0 U
110-75-8	2-Chloroethylvinylether	10 U
75-25-2	Bromoform	5.0 U
108-10-1	4-Methyl-2-Pentanone	10 U
591-78-6	2-Hexanone	10 U
127-18-4	Tetrachloroethene	5.0 U
79-34-5	1, 1, 2, 2-Tetrachloroethane	5.0 U
108-88-3	Toluene	5.0 U
108-90-7	Chlorobenzene	5.0 U
100-41-4	Ethylbenzene	5.0 U
100-42-5	Styrene	5.0 U
	Total Xylenes	5.0 U

Data Reporting Qualifiers

For reporting results to EPA, the following results qualifiers are used. Additional flags or footnotes explaining results are encouraged. However, the definition of each flag must be explicit.

Value If the result is a value greater than or equal to the detection limit, report the value

U Indicates compound was analyzed for but not detected. Report the minimum detection limit for the sample with the U (e g., 10U) based on necessary concentration/dilution action. (This is not necessarily the instrument detection limit.) The footnote should read: U-Compound was analyzed for but not detected. The number is the minimum attainable detection limit for the sample

J Indicates an estimated value. This flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed or when the mass spectral data indicated the presence of a compound that meets the identification criteria but the result is less than the specified detection limit but greater than zero (e g., 10J). If limit of detection is 10 µg/l and a concentration of 3 µg/l is calculated, report as 3J.

C This flag applies to pesticide parameters where the identification has been confirmed by GC-MS Single component pesticides ≥10 ng/ul in the final extract should be confirmed by GC/MS.

B This flag is used when the analyte is found in the blank as well as a sample. It indicates possible-probable blank contamination and warns the data user to take appropriate action

Other Other specific flags and footnotes may be required to properly define the results If used, they must be fully described and such description attached to the data summary report

Laboratory Name: ITAS - Knoxville

Case No: 6659

Sample Number: BG 580

AA 5786

Organics Analysis Data Sheet
(Page 2)

Semivolatile Compounds

059

Concentration: (Low) Medium (Circle One)

Date Extracted/Prepared: 12-12-86

Date Analyzed: 12-26-86

Conc/Dil Factor: 2.0 X

Percent Moisture (Decanted) NA

GPC Cleanup ☐Yes ☑No

Separatory Funnel Extraction ☑Yes

Continuous Liquid - Liquid Extraction ☐Yes NA

CAS Number		(ug/l) or ug/Kg (Circle One)
108-95-2	Phenol	10.U
111-44-4	bis(-2-Chloroethyl)Ether	
95-57-8	2-Chlorophenol	
541-73-1	1. 3-Dichlorobenzene	
106-46-7	1. 4-Dichlorobenzene	
100-51-6	Benzyl Alcohol	
95-50-1	1. 2-Dichlorobenzene	
95-48-7	2-Methylphenol	
39638-32-9	bis(2-chloroisopropyl)Ether	
106-44-5	4-Methylphenol	
621-64-7	N-Nitroso-Di-n-Propylamine	
67-72-1	Hexachloroethane	
98-95-3	Nitrobenzene	
78-59-1	Isophorone	
88-75-5	2-Nitrophenol	
105-67-9	2. 4-Dimethylphenol	
65-85-0	Benzoic Acid	50.U
111-91-1	bis(-2-Chloroethoxy)Methane	10.U
120-83-2	2. 4-Dichlorophenol	
120-82-1	1. 2. 4-Trichlorobenzene	
91-20-3	Naphthalene	
106-47-8	4-Chloroaniline	
87-68-3	Hexachlorobutadiene	
59-50-7	4-Chloro-3-Methylphenol	
91-57-6	2-Methylnaphthalene	
77-47-4	Hexachlorocyclopentadiene	
88-06-2	2. 4. 6-Trichlorophenol	
95-95-4	2. 4. 5-Trichlorophenol	50.U
91-58-7	2-Chloronaphthalene	10.U
88-74-4	2-Nitroaniline	50.U
131-11-3	Dimethyl Phthalate	10.U
208-96-8	Acenaphthylene	10.U
99-09-2	3-Nitroaniline	50.U

CAS Number		(ug/l) or ug/Kg (Circle One)
83-32-9	Acenaphthene	10.U
51-28-5	2. 4-Dinitrophenol	50.U
100-02-7	4-Nitrophenol	50.U
132-64-9	Dibenzofuran	10.U
121-14-2	2. 4-Dinitrotoluene	
606-20-2	2. 6-Dinitrotoluene	
84-66-2	Diethylphthalate	
7005-72-3	4-Chlorophenyl-phenylether	
86-73-7	Fluorene	
100-01-6	4-Nitroaniline	50.U
534-52-1	4. 6-Dinitro-2-Methylphenol	50.U
86-30-6	N-Nitrosodiphenylamine (1)	10.U
101-55-3	4-Bromophenyl-phenylether	
118-74-1	Hexachlorobenzene	
87-86-5	Pentachlorophenol	50U
85-01-8	Phenanthrene	10.U
120-12-7	Anthracene	
84-74-2	Di-n-Butylphthalate	
206-44-0	Fluoranthene	
129-00-0	Pyrene	
85-68-7	Butylbenzylphthalate	
91-94-1	3. 3'-Dichlorobenzidine	20.U
56-55-3	Benzo(a)Anthracene	10.U
117-81-7	bis(2-Ethylhexyl)Phthalate	10.U
218-01-9	Chrysene	2. J
117-84-0	Di-n-Octyl Phthalate	10.U
205-99-2	Benzo(b)Fluoranthene	5. J
207-08-9	Benzo(k)Fluoranthene	4. J
50-32-8	Benzo(a)Pyrene	5. J
193-39-5	Indeno(1. 2. 3-cd)Pyrene	10.
53-70-3	Dibenz(a h)Anthracene	10.U
191-24-2	Benzo(g. h. i)Perylene	11.

(1)-Cannot be separated from diphenylamine

Laboratory Name ITAS - Knoxville

Case No 6669

Sample Number BG 580

Organics Analysis Data Sheet
(Page 3)

Pesticide/PCBs

C60

Concentration (Low) Medium (Circle One)

Date Extracted/Prepared 12-12-86

Date Analyzed 1-15-87 12-22-86

Conc/(Dil Factor) 1

Percent Moisture (decanted) _____

GPC Cleanup ☐Yes ☒No

Separatory Funnel Extraction ☒Yes

Continuous Liquid - Liquid Extraction ☐Yes

CAS Number		(ug/L) or ug/Kg (Circle One)
319-84-6	Alpha-BHC	0.05U
319-85-7	Beta-BHC	0.05U
319-86-8	Delta-BHC	0.05U
58-89-9	Gamma-BHC (Lindane)	0.05U
76-44-8	Heptachlor	0.05U
309-00-2	Aldrin	0.05U
1024-57-3	Heptachlor Epoxide	0.05U
959-98-8	Endosulfan I	0.05U
60-57-1	Dieldrin	0.10U
72-55-9	4,4'-DDE	0.10U
72-20-8	Endrin	0.10U
33213-65-9	Endosulfan II	0.10U
72-54-8	4,4'-DDD	0.10U
1031-07-8	Endosulfan Sulfate	0.10U
50-29-3	4,4'-DDT	0.10U
72-43-5	Methoxychlor	0.5U
53494-70-5	Endrin Ketone	0.10U
57-74-9	Chlordane	0.5U
8001-35-2	Toxaphene	1.0U
12674-11-2	Aroclor-1016	0.5U
11104-28-2	Aroclor-1221	0.5U
11141-16-5	Aroclor-1232	0.5U
53469-21-9	Aroclor-1242	0.5U
12672-29-6	Aroclor-1248	0.5U
11097-69-1	Aroclor-1254	1.0U
11096-82-5	Aroclor-1260	1.0U

V_i = Volume of extract injected (ul)

V_s = Volume of water extracted (ml)

W_s = Weight of sample extracted (g)

V_t = Volume of total extract (ul)

V_s 1000 ml or W_s _____ V_t 10000 ul V_i 5 ul, 2 ul

Form I

U.S. EPA Contract Laboratory Program
Sample Management Office
P.O. Box 818 - Alexandria, VA 22313
703/557-2490 FTS: 8-557-2490

EPA Sample No.
MBH-034

Date 1-14-87

INORGANIC ANALYSIS DATA SHEET

LAB NAME Century Laboratories, Inc. CASE NO. 6659

SOW NO. 785

LAB SAMPLE ID. NO. EPA-0009-07 QC REPORT NO. 000

Elements Identified and Measured

Concentration: Low ✓ Medium _____

Matrix: Water ✓ Soil _____ Sludge _____ Other _____

(ug/L) or mg/kg dry weight (Circle One)

1. Aluminum	390P	13. Magnesium	16,400P
2. Antimony	19UP	14. Manganese	22
3. Arsenic	3.0UF	15. Mercury	~~0.2UCVAA~~
4. Barium	[22]P	16. Nickel	6.0UP
5. Beryllium	1.0UP	17. Potassium	[1810]P
6. Cadmium	2.0UP	18. Selenium	1.0UF
7. Calcium	88,800P	19. Silver	4.0UP
8. Chromium	[9.5]P	20. Sodium	25,100P
9. Cobalt	4.0UP	21. Thallium	2.0UF
10. Copper	[5.8]P	22. Vanadium	5.0UP
11. Iron	~~494P~~	23. Zinc	~~95P~~ 8
12. Lead	6.0F	Precent Solids (%)	
Cyanide			

Footnotes: For reporting results to EPA, standard result qualifiers are used as defined on Cover Page. Additional flags or footnotes explaining results are encouraged. Definition of such flags must be explicit and contained on Cover Page, however.

Comments: CLEAR LIQUID

Lab Manager Kenneth Brandt

Sample Number
BG 581

Organics Analysis Data Sheet
(Page 1)

112

Laboratory Name: ITAS- Knoxville
Case No: 6659
Lab Sample ID No: AA5820R2
QC Report No:
Sample Matrix: Water
Contract No: EPA-68-01-7025
Data Release Authorized By: W. T. Wilson
Date Sample Received: 12-10-86

Volatile Compounds

Concentration: (Low) Medium (Circle One)
Date Extracted/Prepared: 12-16-86
Date Analyzed: 12-16-86
Conc/Dil Factor: 1 pH NA
Percent Moisture: (Not Decanted) NA

CAS Number		(ug/l) or ug/Kg (Circle One)
74-87-3	Chloromethane	10 U
74-83-9	Bromomethane	10 U
75-01-4	Vinyl Chloride	10 U
75-00-3	Chloroethane	10 U
75-09-2	Methylene Chloride	37
67-64-1	Acetone	10 U
75-15-0	Carbon Disulfide	5.0 U
75-35-4	1, 1-Dichloroethene	5.0 U
75-34-3	1, 1-Dichloroethane	5.0 U
156-60-5	Trans-1, 2-Dichloroethene	5.0 U
67-66-3	Chloroform	5.0 U
107-06-2	1, 2-Dichloroethane	5.0 U
78-93-3	2-Butanone	10 U
71-55-6	1, 1, 1-Trichloroethane	5.0 U
56-23-5	Carbon Tetrachloride	5.0 U
108-05-4	Vinyl Acetate	10 U
75-27-4	Bromodichloromethane	5.0 U

CAS Number		(ug/l) or ug/Kg (Circle One)
78-87-5	1, 2-Dichloropropane	5.0 U
10061-02-6	Trans-1, 3-Dichloropropene	5.0 U
79-01-6	Trichloroethene	5.0 U
124-48-1	Dibromochloromethane	5.0 U
79-00-5	1, 1, 2-Trichloroethane	5.0 U
71-43-2	Benzene	5.0 U
10061-01-5	cis-1, 3-Dichloropropene	5.0 U
110-75-8	2-Chloroethylvinylether	10 U
75-25-2	Bromoform	5.0 U
108-10-1	4-Methyl-2-Pentanone	10 U
591-78-6	2-Hexanone	10 U
127-18-4	Tetrachloroethene	5.0 U
79-34-5	1, 1, 2, 2-Tetrachloroethane	5.0 U
108-88-3	Toluene	5.0 U
108-90-7	Chlorobenzene	5.0 U
100-41-4	Ethylbenzene	5.0 U
100-42-5	Styrene	5.0 U
	Total Xylenes	5.0 U

Data Reporting Qualifiers

For reporting results to EPA, the following results qualifiers are used. Additional flags or footnotes explaining results are encouraged. However, the definition of each flag must be explicit.

Value If the result is a value greater than or equal to the detection limit, report the value

U Indicates compound was analyzed for but not detected. Report the minimum detection limit for the sample with the U (e g., 10U) based on necessary concentration/dilution action. (This is not necessarily the instrument detection limit.) The footnote should read: U-Compound was analyzed for but not detected. The number is the minimum attainable detection limit for the sample

J Indicates an estimated value. This flag is used either when estimating a concentration for tentatively identified compounds where a 1 1 response is assumed or when the mass spectral data indicated the presence of a compound that meets the identification criteria but the result is less than the specified detection limit but greater than zero (e g., 10J). If limit of detection is 10 µg/l and a concentration of 3 µg/l is calculated, report as 3J.

C This flag applies to pesticide parameters where the identification has been confirmed by GC-MS Single component pesticides ≥10 ng/ul in the final extract should be confirmed by GC-MS.

B This flag is used when the analyte is found in the blank as well as a sample. It indicates possible probable blank contamination and warns the data user to take appropriate action

Other Other specific flags and footnotes may be required to properly define the results If used, they must be fully described and such description attached to the data summary report

Laboratory Name: ITAS - Knoxville

Case No: 6659

Sample Number: BG 581

AA 5787

Organics Analysis Data Sheet
(Page 2)

Semivolatile Compounds

Concentration: (Low) Medium (Circle One)

Date Extracted/Prepared: 12-12-86

Date Analyzed: 12-26-86

Conc/Dil Factor: 2.0 X

Percent Moisture (Decanted) NA

GPC Cleanup ☐Yes ☑No

Separatory Funnel Extraction ☑Yes

Continuous Liquid - Liquid Extraction ☐Yes NA

CAS Number		(ug/l) or ug/Kg (Circle One)
108-95-2	Phenol	10.U
111-44-4	bis(-2-Chloroethyl)Ether	
95-57-8	2-Chlorophenol	
541-73-1	1, 3-Dichlorobenzene	
106-46-7	1, 4-Dichlorobenzene	
100-51-6	Benzyl Alcohol	
95-50-1	1, 2-Dichlorobenzene	
95-48-7	2-Methylphenol	
39638-32-9	bis(2-chloroisopropyl)Ether	
106-44-5	4-Methylphenol	
621-64-7	N-Nitroso-Di-n-Propylamine	
67-72-1	Hexachloroethane	
98-95-3	Nitrobenzene	
78-59-1	Isophorone	
88-75-5	2-Nitrophenol	
105-67-9	2, 4-Dimethylphenol	
65-85-0	Benzoic Acid	50.U
111-91-1	bis(-2-Chloroethoxy)Methane	10.U
120-83-2	2, 4-Dichlorophenol	
120-82-1	1, 2, 4-Trichlorobenzene	
91-20-3	Naphthalene	
106-47-8	4-Chloroaniline	
87-68-3	Hexachlorobutadiene	
59-50-7	4-Chloro-3-Methylphenol	
91-57-6	2-Methylnaphthalene	
77-47-4	Hexachlorocyclopentadiene	
88-06-2	2, 4, 6-Trichlorophenol	
95-95-4	2, 4, 5-Trichlorophenol	50.U
91-58-7	2-Chloronaphthalene	10.U
88-74-4	2-Nitroaniline	50.U
131-11-3	Dimethyl Phthalate	10.U
208-96-8	Acenaphthylene	10.U
99-09-2	3-Nitroaniline	50.U

CAS Number		(ug/l) or ug/Kg (Circle One)
83-32-9	Acenaphthene	10.U
51-28-5	2, 4-Dinitrophenol	50.U
100-02-7	4-Nitrophenol	50.U
132-64-9	Dibenzofuran	10.U
121-14-2	2, 4-Dinitrotoluene	
606-20-2	2, 6-Dinitrotoluene	
84-66-2	Diethylphthalate	
7005-72-3	4-Chlorophenyl-phenylether	
86-73-7	Fluorene	
100-01-6	4-Nitroaniline	50.U
534-52-1	4, 6-Dinitro-2-Methylphenol	50.U
86-30-6	N-Nitrosodiphenylamine (1)	10.U
101-55-3	4-Bromophenyl-phenylether	
118-74-1	Hexachlorobenzene	
87-86-5	Pentachlorophenol	50.U
85-01-8	Phenanthrene	10.U
120-12-7	Anthracene	
84-74-2	~~Di-n-Butylphthalate~~	~~4.3J~~
206-44-0	Fluoranthene	10.U
129-00-0	Pyrene	
85-68-7	Butylbenzylphthalate	
91-94-1	3, 3'-Dichlorobenzidine	20.U
56-55-3	Benzo(a)Anthracene	10.U
117-81-7	bis(2-Ethylhexyl)Phthalate	
218-01-9	Chrysene	
117-84-0	Di-n-Octyl Phthalate	
205-99-2	Benzo(b)Fluoranthene	
207-08-9	Benzo(k)Fluoranthene	
50-32-8	Benzo(a)Pyrene	
193-39-5	Indeno(1, 2, 3-cd)Pyrene	
53-70-3	Dibenz(a, h)Anthracene	
191-24-2	Benzo(g, h, i)Perylene	

(1)-Cannot be separated from diphenylamine

Laboratory Name ITAS - Knoxville

Case No 6669

Sample Number BG 581

Organics Analysis Data Sheet
(Page 3)

Pesticide/PCBs

Concentration: (Low) Medium (Circle One)

Date Extracted/Prepared: 12-12-86

Date Analyzed: 1-15,21-87

Conc/(Dil Factor): 1

Percent Moisture (decanted): _____

GPC Cleanup ☐Yes ☒No

Separatory Funnel Extraction ☒Yes

Continuous Liquid - Liquid Extraction ☐Yes

CAS Number		(ug/L or ug/Kg (Circle One))
319-84-6	Alpha-BHC	0.05U
319-85-7	Beta-BHC	0.05U
319-86-8	Delta-BHC	0.05U
58-89-9	Gamma-BHC (Lindane)	0.05U
76-44-8	Heptachlor	0.05U
309-00-2	Aldrin	0.05U
1024-57-3	Heptachlor Epoxide	0.05U
959-98-8	Endosulfan I	0.05U
60-57-1	Dieldrin	0.10U
72-55-9	4,4'-DDE	0.10U
72-20-8	Endrin	0.10U
33213-65-9	Endosulfan II	0.10U
72-54-8	4,4'-DDD	0.10U
1031-07-8	Endosulfan Sulfate	0.10U
50-29-3	4,4'-DDT	0.10U
72-43-5	Methoxychlor	0.5U
53494-70-5	Endrin Ketone	0.10U
57-74-9	Chlordane	0.5U
8001-35-2	Toxaphene	1.0U
12674-11-2	Aroclor-1016	0.5U
11104-28-2	Aroclor-1221	0.5U
11141-16-5	Aroclor-1232	0.5U
53469-21-9	Aroclor-1242	0.5U
12672-29-6	Aroclor-1248	0.5U
11097-69-1	Aroclor-1254	1.0U
11096-82-5	Aroclor-1260	1.0U

V_i = Volume of extract injected (ul)

V_s = Volume of water extracted (ml)

W_s = Weight of sample extracted (g)

V_t = Volume of total extract (ul)

V_s 1000 ml or W_s _____ V_t 10000 ul V_i 5ul + 2ul

Form I

U.S. EPA Contract Laboratory Program
Sample Management Office
P.O. Box 818 - Alexandria, VA 22313
703/557-2490 FTS: 8-557-2490

EPA Sample No.
MBH 035

Date 1-14-87

INORGANIC ANALYSIS DATA SHEET

LAB NAME Century Laboratories, Inc. CASE NO. 6659

SOW NO. 785

LAB SAMPLE ID. NO. EPA-0009-05 QC REPORT NO. 010

Elements Identified and Measured

Concentration: Low ✓ Medium _____

Matrix: Water ✓ Soil _____ Sludge _____ Other _____

(ug/L) or mg/kg dry weight (Circle One)

1.	Aluminum	1,170 F	13.	Magnesium	97,100 P
2.	Antimony	19 UP	14.	Manganese	302 P
3.	Arsenic	3.0 F	15.	Mercury	~~0.2 UCVAA~~
4.	Barium	[25] P	16.	Nickel	6.0 UP
5.	Beryllium	1.0 UP	17.	Potassium	12,700 P
6.	Cadmium	1.0 UP	18.	Selenium	10 UF
7.	Calcium	295,000 P	19.	Silver	4.0 UP
8.	Chromium	[6.0] P	20.	Sodium	25,300 UP
9.	Cobalt	4.0 UP	21.	Thallium	2.0 UF
10.	Copper	[7.4] P	22.	Vanadium	5.0 UP
11.	Iron	3,120 P	23.	Zinc	~~7 P~~
12.	Lead	5.0 WF		Precent Solids (%)	
	Cyanide				

Footnotes: For reporting results to EPA, standard result qualifiers are used as defined on Cover Page. Additional flags or footnotes explaining results are encouraged. Definition of such flags must be explicit and contained on Cover Page, however.

Comments: CLEAR LIQUID

Lab Manager Kenneth Bond

Sample Number
BG582

Organics Analysis Data Sheet
(Page 1)

158

Laboratory Name: ITAS - Knoxville
Case No: 6659
Lab Sample ID No: AA5821
QC Report No:
Sample Matrix: Water
Contract No: EPA-68-01-7025
Data Release Authorized By: W.T. Wilson
Date Sample Received: 12-10-86

Volatile Compounds

Concentration: (Low) Medium (Circle One)
Date Extracted/Prepared: 12-16-86
Date Analyzed: 12-16-86
Conc/Dil Factor: 1 pH NA
Percent Moisture: (Not Decanted) NA

CAS Number		ug/l (or ug/Kg) (Circle One)
74-87-3	Chloromethane	10 U
74-83-9	Bromomethane	10 U
75-01-4	Vinyl Chloride	10 U
75-00-3	Chloroethane	10 U
75-09-2	Methylene Chloride	5.0 U
67-64-1	Acetone	10 U
75-15-0	Carbon Disulfide	5.0 U
75-35-4	1, 1-Dichloroethene	5.0 U
75-34-3	1, 1-Dichloroethane	5.0 U
156-60-5	Trans-1, 2-Dichloroethene	5.0 U
67-66-3	Chloroform	5.0 U
107-06-2	1, 2-Dichloroethane	5.0 U
78-93-3	2-Butanone	10 U
71-55-6	1, 1, 1-Trichloroethane	5.0 U
56-23-5	Carbon Tetrachloride	5.0 U
108-05-4	Vinyl Acetate	10 U
75-27-4	Bromodichloromethane	5.0 U

CAS Number		ug/l (or ug/Kg) (Circle One)
78-87-5	1, 2-Dichloropropane	5.0 U
10061-02-6	Trans-1, 3-Dichloropropene	5.0 U
79-01-6	Trichloroethene	5.0 U
124-48-1	Dibromochloromethane	5.0 U
79-00-5	1, 1, 2-Trichloroethane	5.0 U
71-43-2	Benzene	5.0 U
10061-01-5	cis-1, 3-Dichloropropene	5.0 U
110-75-8	2-Chloroethylvinylether	10 U
75-25-2	Bromoform	5.0 U
108-10-1	4-Methyl-2-Pentanone	10 U
591-78-6	2-Hexanone	10 U
127-18-4	Tetrachloroethene	5.0 U
79-34-5	1, 1, 2, 2-Tetrachloroethane	5.0 U
108-88-3	Toluene	5.0 U
108-90-7	Chlorobenzene	5.0 U
100-41-4	Ethylbenzene	5.0 U
100-42-5	Styrene	5.0 U
	Total Xylenes	5.0 U

Data Reporting Qualifiers

For reporting results to EPA, the following results qualifiers are used. Additional flags or footnotes explaining results are encouraged. However, the definition of each flag must be explicit.

Value	If the result is a value greater than or equal to the detection limit, report the value.
U	Indicates compound was analyzed for but not detected. Report the minimum detection limit for the sample with the U (e.g., 10U) based on necessary concentration/dilution action. (This is not necessarily the instrument detection limit.) The footnote should read: U-Compound was analyzed for but not detected. The number is the minimum attainable detection limit for the sample
J	Indicates an estimated value. This flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed or when the mass spectral data indicated the presence of a compound that meets the identification criteria but the result is less than the specified detection limit but greater than zero (e.g., 10J). If limit of detection is 10 µg/l and a concentration of 3 µg/l is calculated, report as 3J.
C	This flag applies to pesticide parameters where the identification has been confirmed by GC-MS. Single component pesticides ≥10 ng/ul in the final extract should be confirmed by GC/MS
B	This flag is used when the analyte is found in the blank as well as a sample. It indicates possible/probable blank contamination and warns the data user to take appropriate action
Other	Other specific flags and footnotes may be required to properly define the results. If used, they must be fully described and such description attached to the data summary report

Laboratory Name: ITAS - Knoxville

Case No: 6659

Sample Number: BG 582

AA 5788

Organics Analysis Data Sheet
(Page 2)

Semivolatile Compounds

159

Concentration: (Low) Medium (Circle One)

Date Extracted/Prepared: 12-12-86

Date Analyzed: 12-26-86

Conc/Dil Factor: 2.0

Percent Moisture (Decanted): NA

GPC Cleanup ☐Yes ☒No

Separatory Funnel Extraction ☒Yes

Continuous Liquid - Liquid Extraction ☐Yes NA

CAS Number		(ug/l) or ug/Kg (Circle One)
108-95-2	Phenol	10.u
111-44-4	bis(-2-Chloroethyl)Ether	
95-57-8	2-Chlorophenol	
541-73-1	1. 3-Dichlorobenzene	
106-46-7	1. 4-Dichlorobenzene	
100-51-6	Benzyl Alcohol	
95-50-1	1. 2-Dichlorobenzene	
95-48-7	2-Methylphenol	
39638-32-9	bis(2-chloroisopropyl)Ether	
106-44-5	4-Methylpheno:	
621-64-7	N-Nitroso-Di-n-Propylamine	
67-72-1	Hexachloroethane	
98-95-3	Nitrobenzene	
78-59-1	Isophorone	
88-75-5	2-Nitrophenol	
105-67-9	2. 4-Dimethylphenol	
65-85-0	Benzoic Acid	50.u
111-91-1	bis(-2-Chloroethoxy)Methane	10.u
120-83-2	2. 4-Dichlorophenol	
120-82-1	1. 2. 4-Trichlorobenzene	
91-20-3	Naphthalene	
106-47-8	4-Chloroaniline	
87-68-3	Hexachlorobutadiene	
59-50-7	4-Chloro-3-Methylphenol	
91-57-6	2-Methylnaphthalene	
77-47-4	Hexachlorocyclopentadiene	
88-06-2	2. 4. 6-Trichlorophenol	
95-95-4	2. 4. 5-Trichlorophenol	50.u
91-58-7	2-Chloronaphthalene	10.u
88-74-4	2-Nitroaniline	50.u
131-11-3	Dimethyl Phthalate	10.u
208-96-8	Acenaphthylene	10.u
99-09-2	3-Nitroaniline	50.u

CAS Number		(ug/l) or ug/Kg (Circle One)
83-32-9	Acenaphthene	10.u
51-28-5	2. 4-Dinitrophenol	50.u
100-02-7	4-Nitrophenol	50.u
132-64-9	Dibenzofuran	10.u
121-14-2	2 4-Dinitrotoluene	
606-20-2	2. 6-Dinitrotoluene	
84-66-2	Diethylphthalate	
7005-72-3	4-Chlorophenyl-phenylether	
86-73-7	Fluorene	
100-01-6	4-Nitroaniline	50.u
534-52-1	4. 6-Dinitro-2-Methylphenol	50.u
86-30-6	N-Nitrosodiphenylamine (1)	10.u
101-55-3	4-Bromophenyl-phenylether	
118-74-1	Hexachlorobenzene	
87-86-5	Pentachlorophenol	50.u
85-01-8	Phenanthrene	10.u
120-12-7	Anthracene	10.u
84-74-2	~~Di-n-Butylphthalate~~	~~4.50~~
206-44-0	Fluoranthene	10.u
129-00-0	Pyrene	
85-68-7	Butylbenzylphthalate	
91-94-1	3. 3'-Dichlorobenzidine	20.u
56-55-3	Benzo(a)Anthracene	10.u
117-81-7	bis(2-Ethylhexyl)Phthalate	
218-01-9	Chrysene	
117-84-0	Di-n-Octyl Phthalate	
205-99-2	Benzo(b)Fluoranthene	
207-08-9	Benzo(k)Fluoranthene	
50-32-8	Benzo(a)Pyrene	
193-39-5	Indeno(1. 2. 3-cd)Pyrene	
53-70-3	Dibenz(a. h)Anthracene	
191-24-2	Benzo(g. h. i)Perylene	

(1)-Cannot be separated from diphenylamine

Laboratory Name ITAS - Knoxville

Case No 6659

Sample Number 86 582

Organics Analysis Data Sheet
(Page 3)

160

Pesticide/PCBs

Concentration: (Low) Medium (Circle One)

Date Extracted/Prepared: 12-12-86

Date Analyzed: 12-22-86 1-15-87

Conc/(Dil Factor): 1

Percent Moisture (decanted): _____

GPC Cleanup ☐Yes ☒No

Separatory Funnel Extraction ☒Yes

Continuous Liquid - Liquid Extraction ☐Yes

CAS Number		(ug/l) or ug/Kg (Circle One)
319-84-6	Alpha-BHC	0.05U
319-85-7	Beta-BHC	0.05U
319-86-8	Delta-BHC	0.05U
58-89-9	Gamma-BHC (Lindane)	0.05U
76-44-8	Heptachlor	0.05U
309-00-2	Aldrin	0.05U
1024-57-3	Heptachlor Epoxide	0.05U
959-98-8	Endosulfan I	0.05U
60-57-1	Dieldrin	0.10U
72-55-9	4,4'-DDE	0.10U
72-20-8	Endrin	0.10U
33213-65-9	Endosulfan II	0.10U
72-54-8	4,4'-DDD	0.10U
1031-07-8	Endosulfan Sulfate	0.10U
50-29-3	4,4'-DDT	0.10U
72-43-5	Methoxychlor	0.5U
53494-70-5	Endrin Ketone	0.10U
57-74-9	Chlordane	0.5U
8001-35-2	Toxaphene	1.0U
12674-11-2	Aroclor-1016	0.5U
11104-28-2	Aroclor-1221	0.5U
11141-16-5	Aroclor-1232	0.5U
53469-21-9	Aroclor-1242	0.5U
12672-29-6	Aroclor-1248	0.5U
11097-69-1	Aroclor-1254	1.0U
11096-82-5	Aroclor-1260	1.0U

V_i = Volume of extract injected (ul)

V_s = Volume of water extracted (ml)

W_s = Weight of sample extracted (g)

V_t = Volume of total extract (ul)

V_s 1000 ml or W_s _____ V_t 10000 ul V_i 5ul, 2ul

Form I

U.S. EPA Contract Laboratory Program
Sample Management Office
P.O. Box 818 - Alexandria, VA 22313
703/557-2490 FTS: 8-557-2490

EPA Sample No.
MBH 086

Date 1-14-87

INORGANIC ANALYSIS DATA SHEET

LAB NAME Century Laboratories, Inc. CASE NO. 6659

SOW NO. 785

LAB SAMPLE ID. NO. EPA-0009-09 QC REPORT NO. 010

Elements Identified and Measured

Concentration: Low ✓ Medium _____

Matrix: Water ✓ Soil _____ Sludge _____ Other _____

(ug/L) or mg/kg dry weight (Circle One)

1.	Aluminum	391P	13.	Magnesium	16,100P
2.	Antimony	19uP	14.	Manganese	21P
3.	Arsenic	3.0uF	15.	Mercury	~~0.2uC~~ CVAA
4.	Barium	[23]P	16.	Nickel	6.0uP
5.	Beryllium	1.0uP	17.	Potassium	[1970]P
6.	Cadmium	1.0uP	18.	Selenium	1.0uF
7.	Calcium	82,600P	19.	Silver	4.0uP
8.	Chromium	14P	20.	Sodium	35,400P
9.	Cobalt	4.0uP	21.	Thallium	2.0uF
10.	Copper	[5.0]P	22.	Vanadium	5.0uP
11.	Iron	~~434P~~	23.	Zinc	~~55~~
12.	Lead	39		Precent Solids (%)	
	Cyanide				

Footnotes: For reporting results to EPA, standard result qualifiers are used as defined on Cover Page. Additional flags or footnotes explaining results are encouraged. Definition of such flags must be explicit and contained on Cover Page, however.

Comments: CLEAR LIQUID

Lab Manager: Kenneth Bond

Sample Number
BG 157

Organics Analysis Data Sheet
(Page 1)

021

Laboratory Name: ITAS - Knoxville
Case No: 6659
Lab Sample ID No: AA5822
QC Report No:
Sample Matrix: Water
Contract No: EPA-68-01-7025
Data Release Authorized By: W.T. Wilson
Date Sample Received: 12-10-86

Volatile Compounds

Concentration: (Low) Medium (Circle One)
Date Extracted/Prepared: 12-15-86
Date Analyzed: 12-15-86
Conc/Dil Factor: 1 pH NA
Percent Moisture: (Not Decanted) NA

CAS Number		ug/l or ug/Kg (Circle One)
74-87-3	Chloromethane	10 U
74-83-9	Bromomethane	10 U
75-01-4	Vinyl Chloride	10 U
75-00-3	Chloroethane	10 U
75-09-2	Methylene Chloride	5.0 U
67-64-1	Acetone	10 U
75-15-0	Carbon Disulfide	5.0 U
75-35-4	1, 1-Dichloroethene	5.0 U
75-34-3	1, 1-Dichloroethane	5.0 U
156-60-5	Trans-1, 2-Dichloroethene	5.0 U
67-66-3	Chloroform	5.0 U
107-06-2	1, 2-Dichloroethane	5.0 U
78-93-3	2-Butanone	10 U
71-55-6	1, 1, 1-Trichloroethane	5.0 U
56-23-5	Carbon Tetrachloride	5.0 U
108-05-4	Vinyl Acetate	10 U
75-27-4	Bromodichloromethane	5.0 U

CAS Number		ug/l or ug/Kg (Circle One)
78-87-5	1, 2-Dichloropropane	5.0 U
10061-02-6	Trans-1, 3-Dichloropropene	5.0 U
79-01-6	Trichloroethene	5.0 U
124-48-1	Dibromochloromethane	5.0 U
79-00-5	1, 1, 2-Trichloroethane	5.0 U
71-43-2	Benzene	5.0 U
10061-01-5	cis-1, 3-Dichloropropene	5.0 U
110-75-8	2-Chloroethylvinylether	10 U
75-25-2	Bromoform	5.0 U
108-10-1	4-Methyl-2-Pentanone	10 U
591-78-6	2-Hexanone	10 U
127-18-4	Tetrachloroethene	5.0 U
79-34-5	1, 1, 2, 2-Tetrachloroethane	5.0 U
108-88-3	Toluene	5.0 U
108-90-7	Chlorobenzene	5.0 U
100-41-4	Ethylbenzene	5.0 U
100-42-5	Styrene	5.0 U
	Total Xylenes	5.0 U

Data Reporting Qualifiers

For reporting results to EPA, the following results qualifiers are used. Additional flags or footnotes explaining results are encouraged. However, the definition of each flag must be explicit.

Value If the result is a value greater than or equal to the detection limit, report the value

U Indicates compound was analyzed for but not detected. Report the minimum detection limit for the sample with the U (e.g., 10U) based on necessary concentration/dilution action. (This is not necessarily the instrument detection limit.) The footnote should read: U-Compound was analyzed for but not detected. The number is the minimum attainable detection limit for the sample

J Indicates an estimated value. This flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed or when the mass spectral data indicated the presence of a compound that meets the identification criteria but the result is less than the specified detection limit but greater than zero (e.g., 10J). If limit of detection is 10 µg/l and a concentration of 3 µg/l is calculated, report as 3J.

C This flag applies to pesticide parameters where the identification has been confirmed by GC/MS. Single component pesticides ≥10 ng/ul in the final extract should be confirmed by GC/MS.

B This flag is used when the analyte is found in the blank as well as a sample. It indicates possible/probable blank contamination and warns the data user to take appropriate action

Other Other specific flags and footnotes may be required to properly define the results. If used, they must be fully described and such description attached to the data summary report

Laboratory Name: ITAS - Knoxville

Case No: 6659

Sample Number: BG 157

AA 5789

Organics Analysis Data Sheet
(Page 2)

Semivolatile Compounds

022

Concentration: (Low) Medium (Circle One)

Date Extracted/Prepared: 12-12-86

Date Analyzed: 12-26-86

Conc/Dil Factor: 2.0 X

Percent Moisture (Decanted) NA

GPC Cleanup ☐Yes ☑No

Separatory Funnel Extraction ☑Yes

Continuous Liquid - Liquid Extraction ☐Yes NA

CAS Number		(ug/l) or ug/Kg (Circle One)
108-95-2	Phenol	10.U
111-44-4	bis(-2-Chloroethyl)Ether	
95-57-8	2-Chlorophenol	
541-73-1	1 3-Dichlorobenzene	
106-46-7	1. 4-Dichlorobenzene	
100-51-6	Benzyl Alcohol	
95-50-1	1. 2-Dichlorobenzene	
95-48-7	2-Methylphenol	
39638-32-9	bis(2-chloroisopropyl)Ether	
106-44-5	4-Methylpheno:	
621-64-7	N-Nitroso-Di-n-Propylamine	
67-72-1	Hexachloroethane	
98-95-3	Nitrobenzene	
78-59-1	Isophorone	
88-75-5	2-Nitrophenol	
105-67-9	2. 4-Dimethylphenol	
65-85-0	Benzoic Acid	50.U
111-91-1	bis(-2-Chloroethoxy)Methane	10.U
120-83-2	2. 4-Dichlorophenol	
120-82-1	1. 2. 4-Trichlorobenzene	
91-20-3	Naphthalene	
106-47-8	4-Chloroaniline	
87-68-3	Hexachlorobutadiene	
59-50-7	4-Chloro-3-Methylphenol	
91-57-6	2-Methylnaphthalene	
77-47-4	Hexachlorocyclopentadiene	
88-06-2	2. 4. 6-Trichlorophenol	
95-95-4	2. 4. 5-Trichlorophenol	50.U
91-58-7	2-Chloronaphthalene	10.U
88-74-4	2-Nitroaniline	50.U
131-11-3	Dimethyl Phthalate	10.U
208-96-8	Acenaphthylene	10.U
99-09-2	3-Nitroaniline	50.U

CAS Number		(ug/l) or ug/Kg (Circle One)
83-32-9	Acenaphthene	10.U
51-28-5	2. 4-Dinitrophenol	50.U
100-02-7	4-Nitrophenol	50.U
132-64-9	Dibenzofuran	10.U
121-14-2	2. 4-Dinitrotoluene	
606-20-2	2. 6-Dinitrotoluene	
84-66-2	Diethylphthalate	
7005-72-3	4-Chlorophenyl-phenylether	
86-73-7	Fluorene	
100-01-6	4-Nitroaniline	50.U
534-52-1	4. 6-Dinitro-2-Methylphenol	50.U
86-30-6	N-Nitrosodiphenylamine (1)	10.U
101-55-3	4-Bromophenyl-phenylether	
118-74-1	Hexachlorobenzene	
87-86-5	Pentachlorophenol	50 U
85-01-8	Phenanthrene	10.U
120-12-7	Anthracene	10.U
84-74-2	Di-n-Butylphthalate	2. JB
206-44-0	Fluoranthene	10.U
129-00-0	Pyrene	
85-68-7	Butylbenzylphthalate	
91-94-1	3. 3'-Dichlorobenzidine	20.U
56-55-3	Benzo(a)Anthracene	10.U
117-81-7	bis(2-Ethylhexyl)Phthalate	
218-01-9	Chrysene	
117-84-0	Di-n-Octyl Phthalate	
205-99-2	Benzo(b)Fluoranthene	
207-08-9	Benzo(k)Fluoranthene	
50-32-8	Benzo(a)Pyrene	
193-39-5	Indeno(1. 2. 3-cd)Pyrene	
53-70-3	Dibenz(a. h)Anthracene	
191-24-2	Benzo(g. h. i)Perylene	

(1)-Cannot be separated from diphenylamine

Laboratory Name ITAS - Knoxville

Case No 6669

Sample Number BG 157

Organics Analysis Data Sheet
(Page 3)

Pesticide/PCBs

023

Concentration: (Low) Medium (Circle One)

Date Extracted/Prepared 12-12-86

Date Analyzed 1-15-87

Conc/(Dil Factor) 1

Percent Moisture (decanted) _____

GPC Cleanup ☐Yes ☒No

Separatory Funnel Extraction ☒Yes

Continuous Liquid - Liquid Extraction ☐Yes

CAS Number		(ug/l) or ug/Kg (Circle One)
319-84-6	Alpha-BHC	0.05U
319-85-7	Beta-BHC	0.05U
319-86-8	Delta-BHC	0.05U
58-89-9	Gamma-BHC (Lindane)	0.05U
76-44-8	Heptachlor	0.05U
309-00-2	Aldrin	0.05U
1024-57-3	Heptachlor Epoxide	0.05U
959-98-8	Endosulfan I	0.05U
60-57-1	Dieldrin	0.10U
72-55-9	4,4'-DDE	0.10U
72-20-8	Endrin	0.10U
33213-65-9	Endosulfan II	0.10U
72-54-8	4,4'-DDD	0.10U
1031-07-8	Endosulfan Sulfate	0.10U
50-29-3	4,4'-DDT	0.10U
72-43-5	Methoxychlor	0.5U
53494-70-5	Endrin Ketone	0.10U
57-74-9	Chlordane	0.5U
8001-35-2	Toxaphene	1.0U
12674-11-2	Aroclor-1016	0.5U
11104-28-2	Aroclor-1221	0.5U
11141-16-5	Aroclor-1232	0.5U
53469-21-9	Aroclor-1242	0.5U
12672-29-6	Aroclor-1248	0.5U
11097-69-1	Aroclor-1254	1.0U
11096-82-5	Aroclor-1260	1.0U

V_i = Volume of extract injected (ul)

V_s = Volume of water extracted (ml)

W_s = Weight of sample extracted (g)

V_t = Volume of total extract (ul)

V_s 1000 ml or W_s _____ V_t 10000 ul V_i 5 ul

Form I

U.S. EPA Contract Laboratory Program
Sample Management Office
P.O. Box 818 - Alexandria, VA 22313
703/557-2490 FTS: 8-557-2490

EPA Sample No.
MB6 3F7

Date 1-14-87

INORGANIC ANALYSIS DATA SHEET

LAB NAME Century Laboratories, Inc. CASE NO. 6659

SOW NO. 785

LAB SAMPLE ID. NO. EPA-0009-10 QC REPORT NO. 010

Elements Identified and Measured

Concentration: Low ✓ Medium _____

Matrix: Water ✓ Soil _____ Sludge _____ Other _____

(ug/L) or mg/kg dry weight (Circle One)

1. Aluminum	[137]P	13. Magnesium	300UP
2. Antimony	[33]P	14. Manganese	[5.0]P
3. Arsenic	3.0UF	15. Mercury	~~0.2UCVAA~~
4. Barium	10UP	16. Nickel	[7.7]
5. Beryllium	1.0UP	17. Potassium	900UP
6. Cadmium	1.0UP	18. Selenium	1.0UF
7. Calcium	400UP	19. Silver	[7.4]P
8. Chromium	13P	20. Sodium	1000UP
9. Cobalt	[7.0]P	21. Thallium	2.0UF
10. Copper	[49]P	22. Vanadium	[5.1]P
11. Iron	~~24P~~	23. Zinc	~~64P~~
12. Lead	5.0UF	Precent Solids (%)	
Cyanide			

Footnotes: For reporting results to EPA, standard result qualifiers are used as defined on Cover Page. Additional flags or footnotes explaining results are encouraged. Definition of such flags must be explicit and contained on Cover Page, however.

Comments: CLEAR LIQUID

Lab Manager: ~~Kenneth Ewell~~