SDMS Document
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Reviewer: Juan E. Davila
Document : SSI
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EQ : L

SITE INSPECTION

AMERICAN CYANAMID LANDFILL

CARTARET, MIDDLESEX COUNTY

EPA ID No.: NJD986603439

Volume I of II

New Jersey Department of Environmental Protection and Energy
Division of Responsible Party Site Remediation
Bureau of Site Assessment

AMERICAN CYANAMID LANDFILL - CARTERET
DRIFTWAY STREET, CARTERET BORO
MIDDLESEX COUNTY, NEW JERSEY
EPA ID # NJD986603439

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NARRATIVE

AMERICAN CYANAMID LANDFILL - CARTERET
DRIFTWAY STREET, CARTERET BORO
MIDDLESEX COUNTY, NEW JERSEY
EPA ID # NJD986603439

GENERAL INFORMATION AND SITE HISTORY

The American Cyanamid Landfill is a 110-acre site which occupies Block 9.03, Lot 21; Block 10, Lots 8, 9, 10, 12 through 21; and Block 11.01, Lots 8, 10, 11, 12, 13, 14 and 28 in Carteret, Middlesex County. The landfill is located along the Rahway River approximately 2,000 feet before its confluence with the Arthur Kill. The New Jersey Turnpike is approximately 0.75 mile to the west and the area is generally industrialized. Approximately 166,700 residents reside within 4 miles of the site.

American Cyanamid has owned the property since 1939 and operated the landfill from that time until it closed in 1973. The area was a wetland prior to 1939.

SITE OPERATIONS OF CONCERN

The American Cyanamid Landfill accepted wastes from two chemical manufacturing processes at the Warners Plant in Linden, New Jersey. The sludge wastes were piped via aboveground lines from the Warners Plant, across the Rahway River and into a series of six unlined impoundments where it was slowly dewatered. The impoundments were constructed with both earthen and wooden dikes and eventually covered approximately 100 acres. They are estimated to contain just under two million tons of sludge. The sludge wastes were generated from the production of alum (aluminum sulfate) and yellow prussiate of soda (YPS). Alum is a chemical used in water treatment and styptic pencils and YPS is a complex ferro-cyanide salt used as an additive to table salt and road salt, among other uses.

The production of alum involved the digestion of bauxite ore with sulfuric acid. The resulting muds, primarily silica, were slurried with water, neutralized and pumped to the Carteret facility. The production of YPS (a commerical dye intermediate) involved the reaction of calcium cyanide with ferrous sulfate and soda ash to form sodium ferrocyanide. The resultant muds, primarily calcium carbonate, were slurried with water, neutralized and also pumped to the Carteret facility. The disposal of YPS sludge ceased in 1970 and the disposal of alum sludge ceased in 1973. There has been no sludge disposal at the facility since 1973.

Following the closure of the landfill in 1973, American Cyanamid undertook a study of methods for vegetating and stabilizing the sludge. The vegetation would also minimize wind erosion of the dried surface sediment which, in the past, has blown across roadways. Because the sludge was deficient of several essential nutrients (phosphorus and organic content), composted sewage sludge from Camden and Philadelphia was utilized as a base for vegetative growth. American Cyanamid began vegetating in 1986 and completed the work on Impounds 4 and 5 in 1987. Roads were also installed throughout the landfill in 1987 with the road base being constructed from the remains of two buildings which were demolished at the Linden plant. Inert materials such as concrete and terra-cotta pipe were used as the road base. By 1989 all of the impounds had undergone revegetation efforts.

In 1981 American Cyanamid collected water and sludge samples from the impoundments and had the samples analyzed for cyanides and metals. Complex cyanides were detected at levels up to 3,500 parts per million (ppm) in the sludge.

On May 19, 1986 Martin Marietta Environmental Systems of Columbia, Maryland analyzed eight aqueous and five sludge samples collected by Hydrosystems, Inc. of Dunn Loring, Virginia. Total cyanides in the aqueous samples reached 124 ppm and 3,660 ppm in the sludge samples.

GROUNDWATER ROUTE

The American Cyanamid Landfill is located on the boundary between the Piedmont and Coastal Plain Physiographic Provinces. Surficial deposits consist of about 20 to 40 feet of Quaternary alluvium composed of interbedded silt, sand, gravel and clay with buried peat and organic rich horizons. Bedrock underlying the alluvium is the Triassic age Brunswick Formation consisting of a dense, hard, red siltstone.

There is a shallow groundwater zone consisting of fill material, meadow mat and black organic rich sandy silt approximately 2 feet below the ground surface. The Brunswick Formation contains the deep groundwater in the area and transmits groundwater through fractures in the siltstone.

Shallow groundwater is mounded beneath the impoundments and flows radially outward from the central area of the impoundments. The shallow groundwater originating within the impoundments discharges into the surrounding surface water. The deeper groundwater is confined and hydraulically separated from the shallow zone by the intervening red-brown clay layer. Groundwater flow in the deeper aquifer is north or northeast where it also discharges into the Rahway River.

Five pairs of monitoring wells were installed at the site in 1987 to provide monitoring data on the shallow and deep groundwater zones. Five wells were screened from depths of 13 to 23 feet in the shallow, black, organic rich, meadow mat and are designated as the "S" wells. Four deep wells were screened in the upper part of the Brunswick Formation and one deep well was screened just above the Brunswick Formation in a gravel layer. These wells are designated as "D" wells. MW1S and MW1D are considered the background wells.

	WELL #									
	1S	1D	2S	2D	3S	3D	4S	4D	5S	5D
TOTAL DEPTH OF WELL (ft.) FROM TOP OF CASING	23	55	23	55	33	63	28	63	23	50
DEPTH TO SCREEN (ft.)	13	45	13	45	23	53	18	53	13	40

The ten monitoring wells were sampled and analyzed by Environmental Testing and Certification Corporation of Edison, New Jersey quarterly from July 31, 1987 to October 16, 1990. The parameters included metals, cyanide, phenols and volatile organic compounds (VOCs). There have been many exceedances of permit limitations within the fifteen quarterly sampling episodes (Attachment N). Metals such as arsenic, cadmium, iron and manganese have been detected as well as high levels of total cyanide (up to 279 ppm in MW-1S). VOCs which exceeded permit limits include benzene (up to 375 ppb in MW-1S), 1,1-dichloroethane (up to 127 ppb in MW-1S), methylene chloride (up to 150 ppb in MW-1S) and toluene (up to 6,490 ppb in MW-1S and 2,940 ppb in MW-1D).

There are no public supply wells within a 4-mile radius of the site; however, there are several industrial wells. There are no known private wells in the area.

American Cyanamid maintains a NJPDES/Discharge to Groundwater (DGW) Permit (#0061611) which was issued on August 18, 1986 and expired on September 29, 1989. A renewal permit application was submitted on March 30, 1989.

Subsequent to the issuance of the NJPDES permit, American Cyanamid challenged a number of permit provisions and entered into negotiations with the NJDEP. The negotiations resulted in the signing of an Administrative Consent Order (ACO) on December 8, 1987.

SURFACE WATER ROUTE

American Cyanamid's Carteret Landfill occupies over 1 mile of shoreline along the Rahway River which discharges into the Arthur Kill approximately 1,600 feet to the southeast. The Arthur Kill flows approximately 10 miles to Raritan Bay. Oyster Creek and Deep Creek flow through the eastern portion of the site and Cross Creek is located on the western boundary. All three creeks discharge into the Rahway River. The Rahway River, the Arthur Kill and Raritan Bay may be used for fishing.

On October 9, 1986 Hydrosystems, Inc. of Dunn Loring, Virginia collected three upstream and four downstream samples at high tide and six upstream and four downstream samples at low tide. The aqueous samples were collected in the Rahway River upstream and downstream of the impoundments and were analyzed for total and free cyanides. All samples except for one collected from Cross Creek upstream of the landfill (0.032 ppm) exibited cyanide concentrations below the detection limit.

No Intakes

Although there has been no quantitative evidence of release from the impoundments, there is a potential for surface water contamination via the shallow water table discharging directly into the Rahway River.

The landfill lies adjacent to an estaurine intertidal emergent wetlands area along the Rahway River. No additional wetlands areas are present along the 15 stream-mile pathway.

AIR ROUTE

Prior to the landfill being vegetated, dust from the dried sludge blew freely throughout the area. Currently a potential for an air release does not exist.

SOIL

The northern 75 percent of the site is underlain by Psamments, waste substratum (PW), while the remainder of the site is underlain by sulfaquents and sulfihemists, frequently flooded (SU). The PW unit consists of excessively-drained to well-drained soils that have been mainly used to cover landfills. The material is generally 2 to 4 feet thick. The SU unit is level, very poorly-drained organic soils in tidal march areas which are subject to tidal flooding. Generally, the sulfaquents have a surface layer of mucky silt loam over a sandy substratum and sulfihemists are mucky soils that range in thickness from 18 to 60 inches. The permeability of this unit is moderate and the water table is near the surface.

On October 24, 1991 ten soil samples were collected from the landfill by the NJDEPE, Division of Responsible Party Site Remediation (DRPSR), Bureau of Site Assessment (BSA). Three samples (S-1, S-2, S-3) were collected from Impound 3, two samples (S-5, S-6) from Impound 2, two samples (S-7, S-8) from Impound 5 and three samples (S-9, S-10, S-11) from Impound 4. No volatile organic compounds (VOCs) were detected in any of the samples. In S-1, alpha-chlordane was detected at 12 ppb and Aroclor 1254 at 170 ppb; pesticides or PCBs were not detected in any other sample. Numerous semivolatile compounds and metals were detected in the samples. Cyanide concentrations ranged from 3.9 ppm to 1,020 ppm. See the Summary of Sampling Data section of this report for complete results.

The nearest resident is approximately 0.5 mile from the site. Approximately 7,460 residents are within 1 mile of the site.

DIRECT CONTACT

There have been no reported incidents of direct contact at the site. The entire perimeter of the landfill is fenced with several locked gates barring entrance or is bordered by the Rahway River.

FIRE AND EXPLOSION
There have been no reported incidents of fire or explosion and no potential due to type of operations and materials deposited in the impoundments.

ADDITIONAL CONSIDERATIONS
During a 1981 study on erosion control, Dames and Moore of Cranford, New Jersey, consultants for American Cyanamid's revegetation project, observed a number of sick and dead seagulls at the Carteret Landfill. The seagulls regularly use the landfill for loafing, bathing and consuming food scavenged from the adjacent Carteret municipal landfill. American Cyanamid hired an authority from Rutgers University to determine the cause of the mortalities and it was concluded that a botulism outbreak may have occurred. It is not known if any follow-up studies were conducted.

Damage to flora has occurred due to landfilling activities on site. Impound 1 naturally revegetated itself. Impounds 2, 4 and 5 were revegetated; however, patches of unvegetated areas are present. Although Impound 3 has been attempted to be revegetated, the majority of it remains unvegetated. Impound 6 is currently under water.

There has been no documented damage to off-site property.

ENFORCEMENT ACTIONS
Other than the December 8, 1987 ACO, there have been no other enforcement actions regarding the American Cyanamid Landfill.

SUMMARY OF SAMPLING DATA

1. Sampling date: May 19, 1986

   Sampled by: Hydrosystems, Inc.
   Dunn Loring, Virginia

   Samples: Eight aqueous samples
   Five sludge samples

   Laboratory: Martin Marietta Environmental Systems
   Columbia, Maryland

   Parameters: Total and free cyanide and extractable (EP Toxicity) metals

   Sample description: Sludge samples were collected from borings on site and the aqueous samples were from sludge pore water.

   Contaminants detected: Mercury was detected in Borings 3 and 4 at 0.57 and 0.69 ppb, respectively. Cyanide results are summarized below:

SAMPLE NO.	IMPOUND	TOTAL CYANIDE (ppm)	FREE CYANIDE (ppm)
B1a	4	683	14
B2	5	452	18
B2 (Dup.)	5	NA	NA
B3	6	3,660	103
B4	3	437	38
B4 (Dup.)	3	NA	NA
B5	2	433	9
CART-2	AQUEOUS	85	0.33
CART-4	AQUEOUS	124	2.4
CART-5	AQUEOUS	105	0.50
CART-6	AQUEOUS	62	2.3
CART-7	AQUEOUS	49	0.55

SAMPLE NO.	IMPOUND	TOTAL CYANIDE (ppm)	FREE CYANIDE (ppm)
CART-8	AQUEOUS	2	0.084
CART-9	AQUEOUS	0.37	0.012

NA = Not analyzed

QA/QC: Limited QA/QC information was submitted to the NJDEPE.

File location: Attachment A
NJDEPE, Division of Publicly Funded Site Remediation (DPFSR),
Bureau of Groundwater Discharge Control (BGWDC)
Trenton, New Jersey

2. Sampling date: October 9, 1986

Sampled by: Hydrosystems, Inc.
Dunn Loring, Virginia

Samples: Seventeen surface water samples

Laboratory: Hydrosystems, Inc.
Dunn Loring, Virginia

Parameters: Total and free cyanide

Sample description: Three upstream and four downstream samples were collected at high tide and six upstream and four downstream samples were collected at low tide.

Contaminants detected: All samples except the one collected from Cross Creek upstream of the landfill (0.032 ppm) exhibited cyanide concentrations below the detection limit.

QA/QC: Limited QA/QC information was submitted to the NJDEPE.

File location: Attachment A
NJDEPE, DPFSR, BGWDC
Trenton, New Jersey

3. Sampling dates: July 31, 1987; January 19, 1988; January 10, 1989; January 16, 1990

Sampled by: Environmental Testing and Certification Corporation (ETC)
Edison, New Jersey

Samples: Ten groundwater samples during each episode

Laboratory: ETC
Edison, New Jersey
Laboratory Certification #12257

Parameters: Volatile organic compounds (VOCs), phenols, metals and cyanide.

Sample description: Samples were collected from the ten on-site monitoring wells.

Contaminants detected: VOCs and phenols detected in each sampling episode are discussed below:

CONTAMINANT (ppb)	JULY 31, 1987 MW-1S	JANUARY 19, 1988 MW-1S	JANUARY 19, 1988 MW-5D
benzene	195	207	ND
chlorobenzene	18.2	34	ND
1,1-dichloroethane	65.5	127	ND
1,1-dichloroethylene	19	23.7	ND
ethylbenzene	21.9	29.9	70.4
toluene	2,940	4,340	21.4
1,1,1-trichloroethane	18.4	67.3	ND
trichloroethylene	83.5	98.3	ND
vinyl chloride	12.3	19.9	ND
chloroethane	45.1	36	ND
1,2-trans-dichloroethylene	72.6	86.7	ND
2-chlorophenol	9.72	BDL	ND
2,4-dichlorophenol	3.43	BDL	ND
2,4-dimethylphenol	3.77	BDL	ND
phenol	66.8	376	ND
isophorone	168	BDL	ND
naphthalene	5.65	BDL	5.87
nitrobenzene	28.8	BDL	ND
chloroform	BDL	8.11	ND

BDL = below detection limit
ND = not detected

JANUARY 10, 1989

CONTAMINANT (ppb)	MW-1S	MW-2S	MW-4S	MW-5D
benzene	176	0.631	ND	3.01
chlorobenzene	21.6	ND	ND	ND
1,1-dichloroethane	62	ND	ND	0.404
toluene	3,240	1.73	0.379	43.6
trichloroethylene	45.5	ND	ND	ND
1,2-trans-dichloroethylene	27.5	ND	ND	ND
isophorone	561	ND	ND	ND
phenol	ND	ND	13.3	ND
ethylbenzene	ND	ND	ND	62
chloroethane	ND	ND	ND	2.55
naphthalene	ND	ND	ND	14.5

ND = not detected

Toluene was also detected in other wells on January 10, 1989 at low concentrations: MW-1D (3.89 ppb), MW-3S (0.370 ppb) and MW-3D (0.397 ppb).

JANUARY 16, 1990

CONTAMINANT (ppb)	MW-1S	MW-2S	MW-4S	MW-5S	MW-5D
benzene	375	0.498	0.854	ND	6.12
toluene	6,490	1.2	0.416	1.81	7.43
2,4-dimethylphenol	56.6	ND	ND	ND	ND
isophorone	1,070	ND	ND	ND	ND
methylchloride	ND	ND	2.0	ND	ND
trichloroethylene	ND	ND	ND	2.33	ND
ethylbenzene	ND	ND	ND	ND	6.25
acenaphthene	ND	ND	ND	ND	2.05

CONTAMINANT (ppb)	MW-1S	MW-2S	MW-4S	MW-5S	MW-5D
fluorene	ND	ND	ND	ND	2.27
naphthalene	ND	ND	ND	ND	7.37
phenanthrene	ND	ND	ND	ND	2.38

ND = not detected

Trichloroethylene was also detected in MW-1D at 0.991 ppb on January 16, 1990.

QA/QC: Limited QA/QC information was submitted to the NJDEPE.

File location: Attachment W
NJDEPE, Central Files
Trenton, New Jersey

4. Sampling date: October 24, 1991

Sampled by: NJDEPE, DRPSR, Bureau of Site Assessment
Robbinsville, New Jersey

Samples: Ten soil samples

Laboratory: Nytest Environmental, Inc.
Port Washington, New York
Laboratory Certification No. 73469

Parameters: Target Compound List

Sample description:

SAMPLE NO.	IMPOUND NO.	DEPTH
S-1	3	1 foot
S-2	3	4-5 feet
S-3	3	18 inches
S-5	2	3 feet
S-6	2	3 feet
S-7	5	3 feet
S-8	5	2.5-3 feet
S-9	4	3 feet
S-10	4	2 feet
S-11	4	3 feet
S-12	duplicate of S-9	

Contaminants detected: No VOCs were detected in any of the samples. In S-1, alpha-chlordane and Aroclor-1254 were detected at 12 ppb and 170 ppb, respectively. Zinc was detected above action levels at 914 ppm in S-1. No other metals were detected above action levels. Cyanide concentrations were as follows:

SAMPLE NO.	CONCENTRATION (ppm)
S-1	3.9
S-2	337
S-3	472
S-5	768
S-6	153
S-7	9.7
S-8	403

SAMPLE NO.	CONCENTRATION (ppm)
S-9	972
S-10	1,020
S-11	68.7
S-12	103

Numerous semivolatile tentatively identified compounds were detected in the samples. See Attachment V for data. Semivolatile compounds detected are summarized in Tables 1 and 2.

QA/QC: A formal QA/QC review was conducted on the data. All soil samples results for semivolatiles and pesticides/PCBs were rejected because the samples were not subjected to mandatory GPC cleanup. However, the data may be usable because all other QC requirements were met. Several inorganic analytes were qualified because they were outside the quality control limits for various criteria.

File location: Attachment T
NJDEPE, DRPSR, BSA
Robbinsville, New Jersey

RECOMMENDATIONS

American Cyanamid's Carteret Landfill discharged production waste sludges into six impoundments from 1939 to 1973. Data from the ten on-site monitoring wells reveal levels of metals, cyanides, phenols and VOCs which exceeded permit limitations. American Cyanamid has been monitoring the groundwater quarterly since July 31, 1987 even though the company's NJPDES/ Discharge to Groundwater Permit was determined invalid effective April 19, 1989. The permit became invalid because the landfill closed prior to January 1, 1982 and became subject to the New Jersey Supreme Court decision in the case of Vi-Concrete vs. the NJDEP.

The NJDEPE, Division of Publicly Funded Site Remediation, Bureau of Aquifer Protection is currently reviewing all groundwater data.

Soil sampling in October 1991 by the NJDEPE, DRPSR, BSA revealed contamination with semivolatile compounds, metals and cyanide. Due to the on-site soil and groundwater contamination it is recommended that this site be transferred to the NJDEPE, DRPSR, Bureau of State Case Management for further action. Further action under CERCLA is not warranted at this time.

Submitted by:

Donna J. van Veldhuisen
HSMS II
Bureau of Site Assessment
January 1992

TABLE 1

CONTAMINANT (ppb)	S-1	S-2	S-3	S-5	S-6	S-12
NAPHTHALENE	610J	19J	32J	ND	ND	ND
2-METHYLNAPHTHALENE	1,500	ND	13J	12J	11J	ND
ACENAPHTHYLENE	89J	ND	ND	ND	ND	ND
ACENAPHTHENE	1,300	ND	ND	11J	ND	ND
DIBENZOFURAN	970	ND	ND	5J	ND	ND
FLUORENE	1,300	ND	ND	ND	ND	ND
PHENANTHRENE	4,400	44J	31J	86J	21J	15J
ANTHRACENE	1,400	ND	ND	18J	ND	ND
CARBAZOLE	470J	ND	ND	ND	ND	ND
DI-N-BUTYLPHTHALATE	310BJ	340BJ	340BJ	350BJ	610BJ	680B
FLUORANTHENE	4,100	44J	56J	90J	22J	ND
PYRENE	5,100	34J	44J	77J	16J	17J
BUTYLBENZYL PHTHALATE	290J	ND	41J	ND	20J	16J
BENZO(a)ANTHRACENE	2,100	19J	25J	38J	ND	ND
CHRYSENE	2,600	21J	30J	45J	ND	ND
BIS (2-ETHYLHEXYL) PHTHALATE	390BJ	200BJ	150BJ	190BJ	200J	240J
BENZO (b) FLUORANTHENE	1,200	ND	ND	ND	ND	ND

TABLE 1 (continued)

CONTAMINANT (ppb)	S-1	S-2	S-3	S-5	S-6	S-12
BENZO (k) FLUORANTHENE	1,400	ND	ND	ND	ND	ND
BENZO (a) PYRENE	1,800	ND	ND	ND	ND	ND
INDENO (1,2,3-cd) PYRENE	590J	ND	ND	ND	ND	ND
DIBENZ (a,h) ANTHRACENE	320J	ND	ND	ND	ND	ND
BENZO (g,h,i) PERYLENE	1,100	ND	ND	ND	ND	ND
HEXACHLOROBENZENE	ND	56J	170J	110J	59J	ND
PENTACHLOROPHENOL	ND	ND	ND	ND	41J	ND

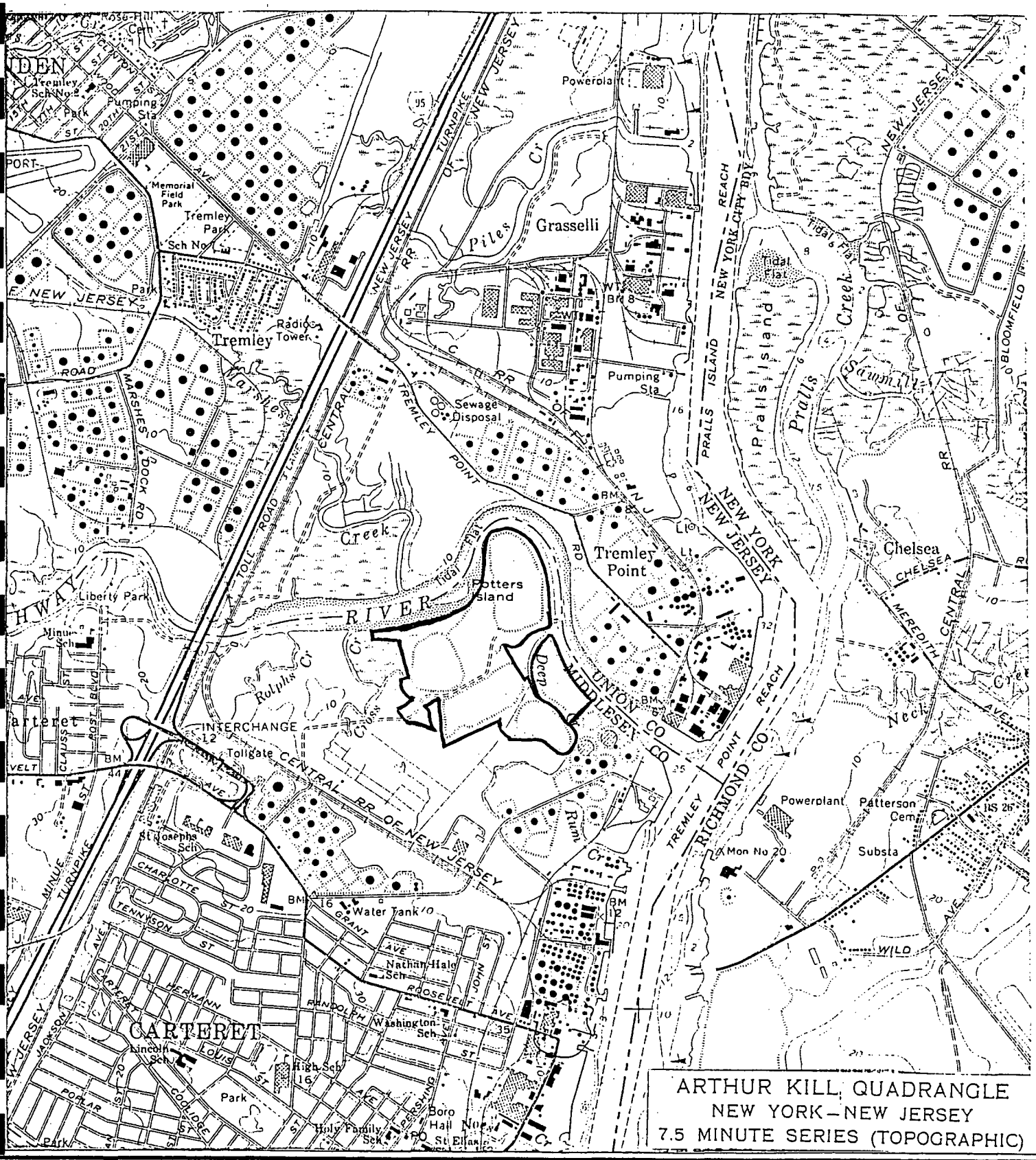
ND = not detected
B = analyte also found in blank
J = estimated value

TABLE 2

	DI-N-BUTYLPHTHALATE	BIS (2-ETHYLHEXYL) PHTHALATE
S-7	410BJ	110BJ
S-8	430BJ	100BJ
S-9	620BJ	150BJ
S-10	1,000B	150BJ
S-11	640BJ	110BJ

B = analyte also found in blank
J = estimated value

MAPS



ARTHUR KILL QUADRANGLE
NEW YORK–NEW JERSEY
7.5 MINUTE SERIES (TOPOGRAPHIC)

SCALE 1:24000

1 ½ 0 1 MILE

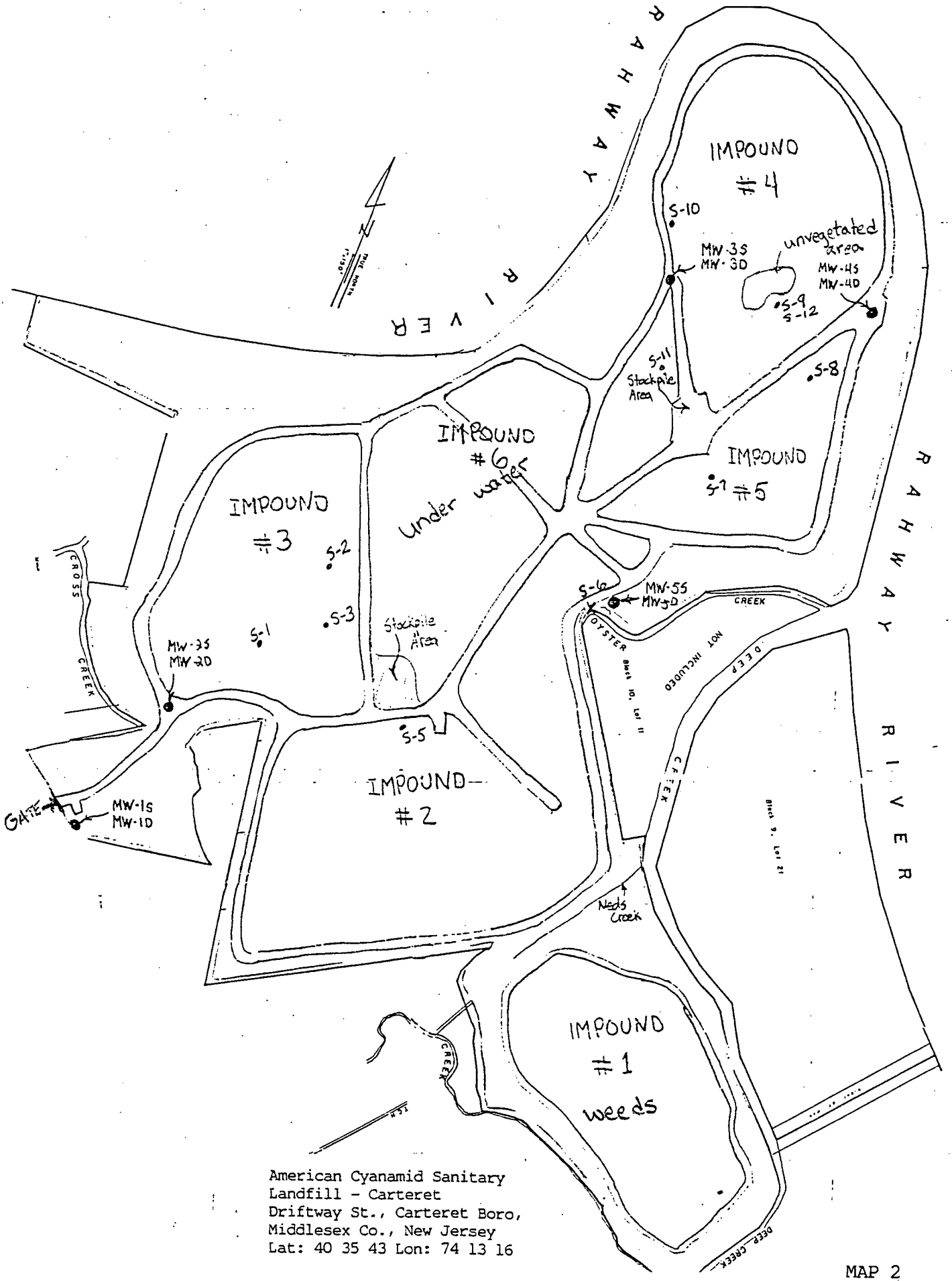
1000 0 1000 2000 3000 4000 5000 6000 7000 FEET

1 .5 0 1 KILOMETER

CONTOUR INTERVAL 20 FEET
DATUM IS MEAN SEA LEVEL

American Cyanamid Sanitary Landfill - Carteret
Driftway St., Carteret Boro,
Middlesex Co., New Jersey
Lat: 40 35 43 Lon: 74 13 16

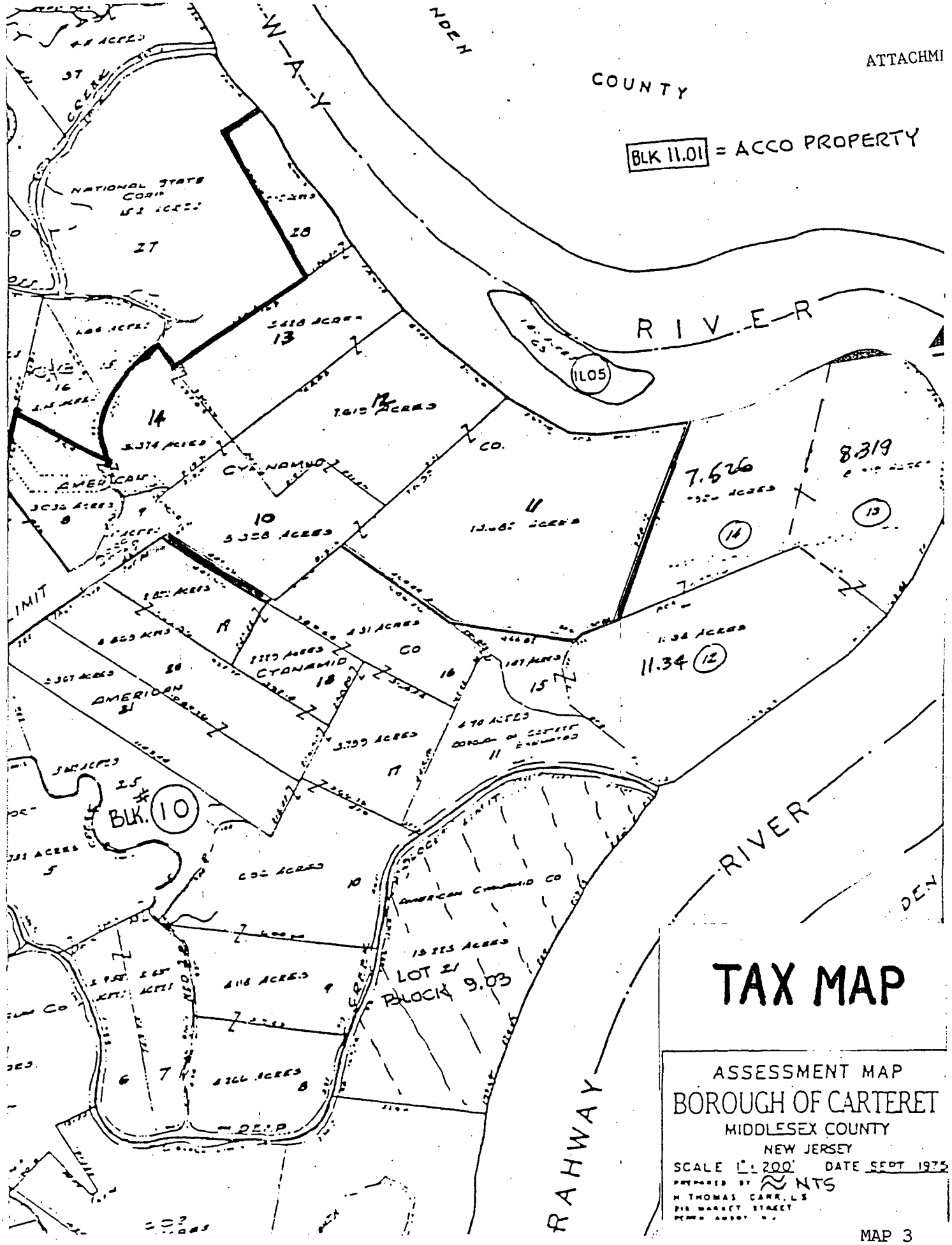
MAP 1



American Cyanamid Sanitary
Landfill - Carteret
Driftway St., Carteret Boro,
Middlesex Co., New Jersey
Lat: 40 35 43 Lon: 74 13 16

MAP 2

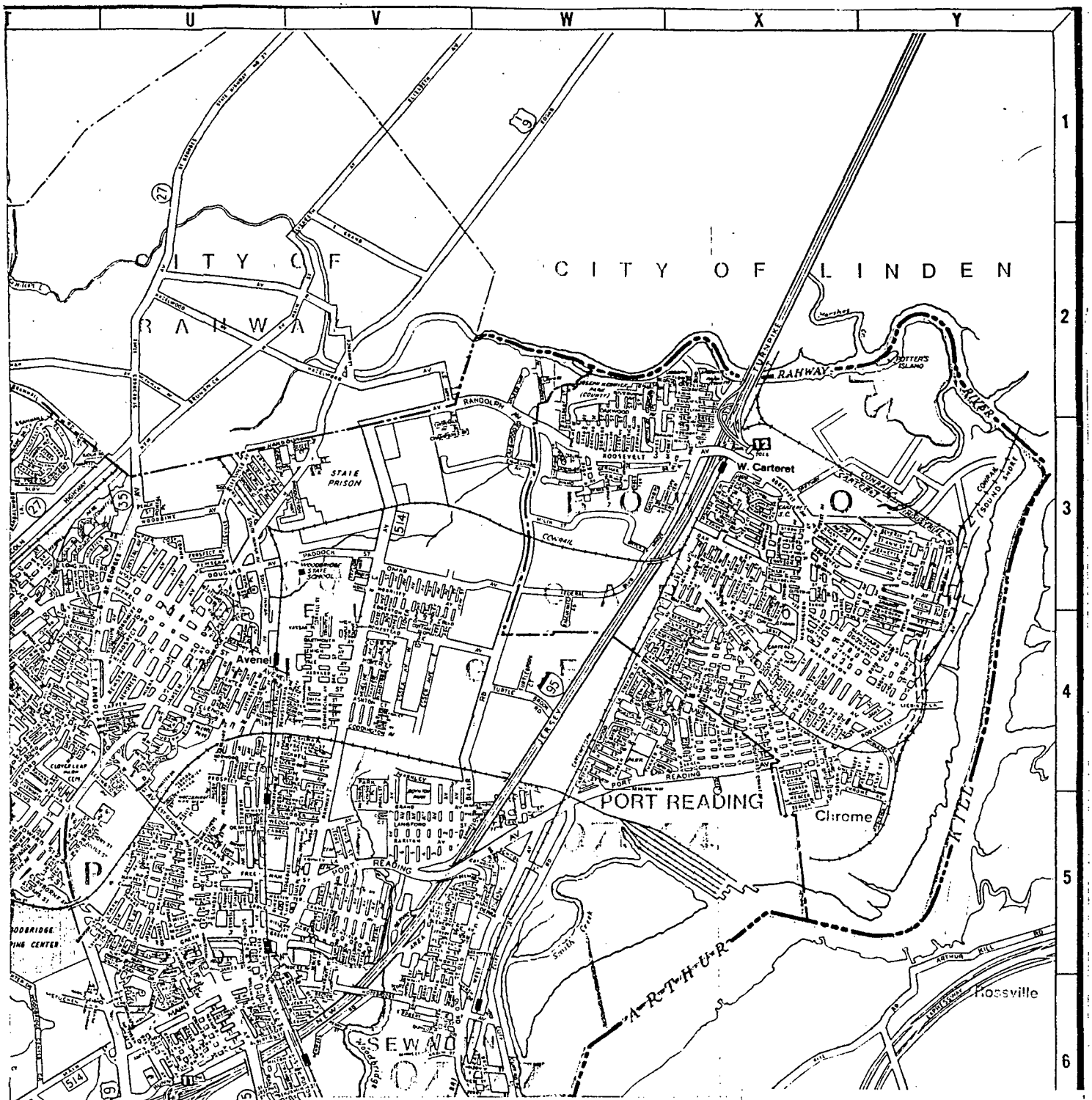
ATTACHMI



TAX MAP

ASSESSMENT MAP
BOROUGH OF CARTERET
MIDDLESEX COUNTY
NEW JERSEY
SCALE 1" = 200' DATE SEPT 1975
PREPARED BY NTS
H. THOMAS CARR, L.S.
215 MARKET STREET

MAP 3



Middlesex County

American Cyanamid Sanitary Landfill - Carteret
Driftway St., Carteret Boro, Middlesex Co., New Jersey
Lat: 40 35 43 Lon: 74 13 16

MAP 4

Scales approx.

0 2,000 4,000 6,000 8,000 10,000 Ft
1 Mile

0 1 2 3 Km

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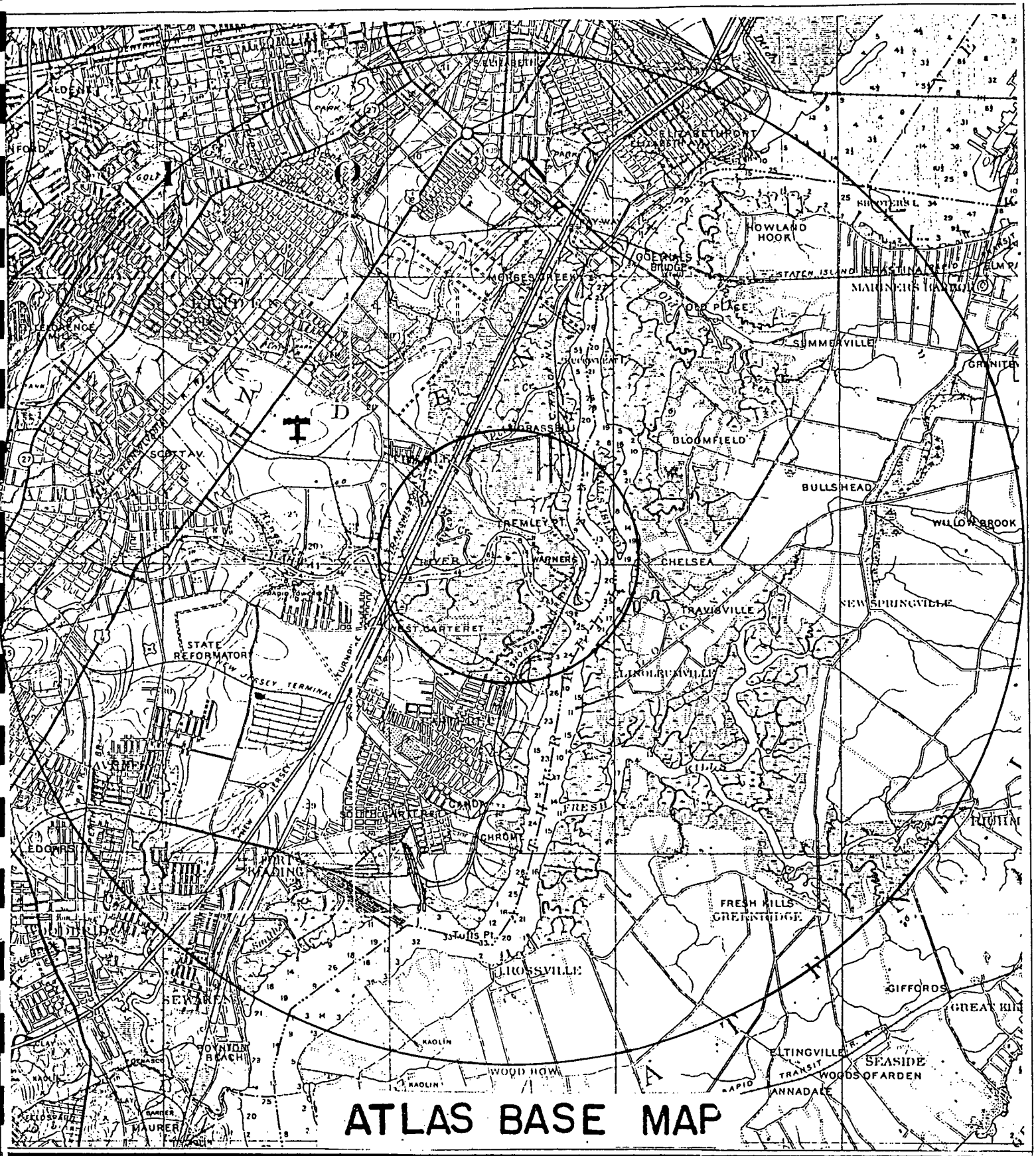


ATLAS BASE MAP

Scale: 1 Mile to an Inch.

Miles: 1 3/4 1/2 1/4 0 1 2 3

Yards: 1000 500 0 1000 2000 3000

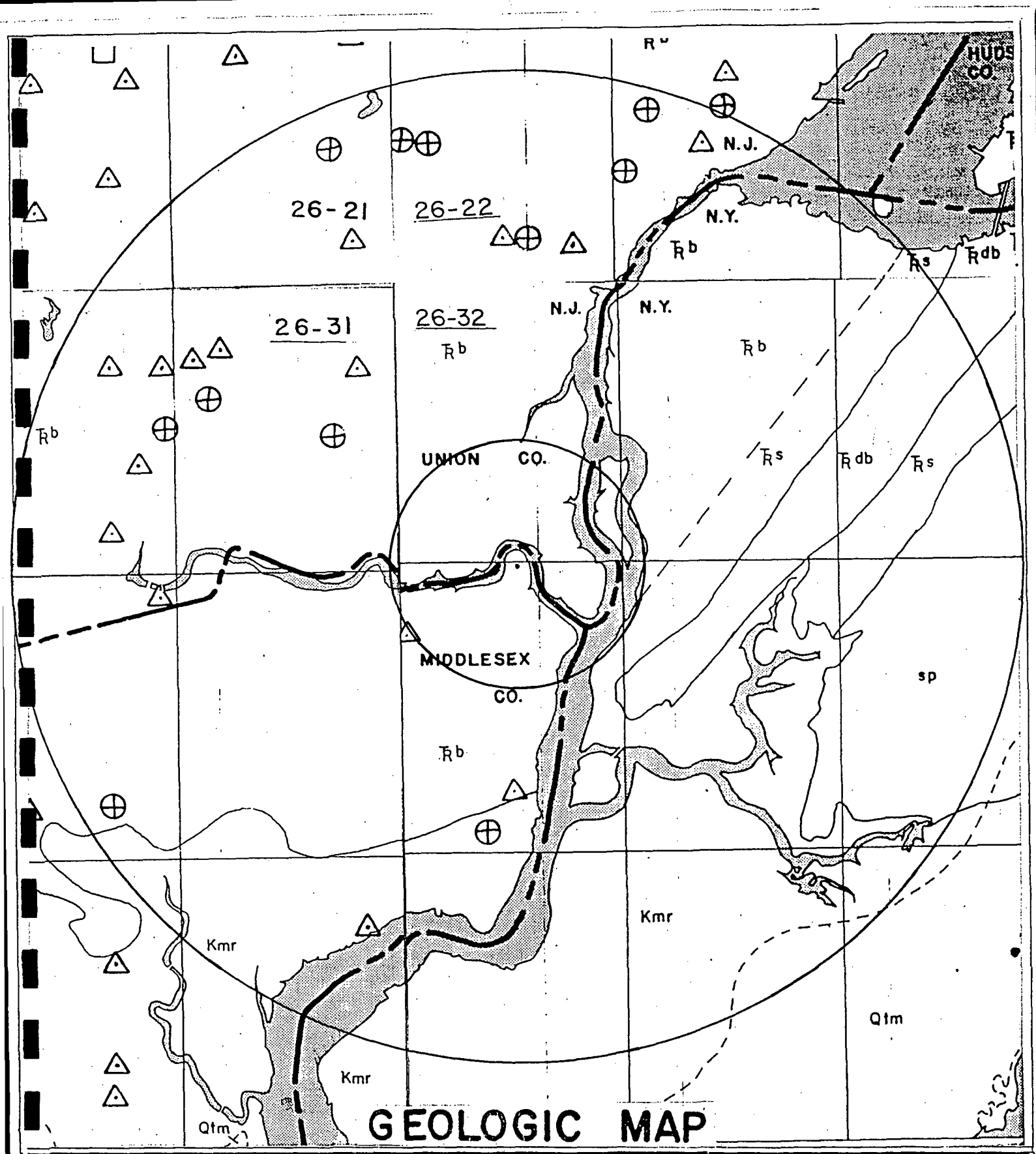
Meters: 1000 500 0 1000 2000 3000

A. HOEN & CO. BALTIMORE, MD

Contour interval: 20 feet

American Cyanamid Sanitary Landfill - Carteret
Driftway St., Carteret Boro
Middlesex Co., New Jersey
Lat: 40 35 43 Lon: 74 13 16

MAP 5



GEOLOGIC MAP

Scale: 1 Mile to an Inch.

Miles: 1 3/4 1/2 1/4 0 1 2 3

Yards: 1000 0 1000 2000 3000

Meters: 1000 500 0 1000 2000 3000

A. HOEN & CO. BALTIMORE, MD

Contour Interval: 20 feet

American Cyanamid Sanitary Landfill - Carteret
Driftway St., Carteret Boro.
Middlesex Co., New Jersey
Lat: 40 35 43 Lon: 74 13 16

MAP 6

LEGEND FOR ATLAS SHEET

△ — INDUSTRIAL WELL YIELD OVER 70 GALLONS PER MINUTE (INCLUDING PRIVATE WELLS)

□ — PUBLIC SUPPLY WELL YIELDING OVER 70 GALLONS PER MINUTE

⊕ — UNSUCCESSFUL ROCK WELL YIELDING LESS THAN 70 GALLONS PER MINUTE

⊙ — UNSUCCESSFUL SAND WELL YIELDING LESS THAN 70 GALLONS PER MINUTE

⊡ — NO TEST — NO DATA ON YIELD

FAULT (DASHED WHERE INFERRED)

CONTACT (DASHED WHERE INFERRED)

PHYSIOGRAPHIC PROVINCE BOUNDARY

WATER SUPPLY TRANSMISSION LINE

NOTE: WHERE THE PRECAMBRIAN FORMATION BOUNDARIES TERMINATE ABRUPTLY, IT IS THE GEOLOGIST'S OPINION THAT THE GEOLOGICAL COMPLEXITY OF THE AREA PREVENTS FURTHER INTERPRETATIONS.

Kmr — CRETACEOUS MAGOTHY AND RARITAN FORMATIONS (SAND AND CLAY)

Trb — TRIASSIC BRUNSWICK FORMATION

Trc — TRIASSIC CONGLOMERATE BEDS OF THE STOCKTON FORMATION

Trl — TRIASSIC LOCKATONG FORMATION

Trdb — TRIASSIC DIABASE

Trbs — TRIASSIC BASALT FLOWS

Sd — SILURIAN DECKER LIMESTONE AND LONGWOOD SHALE FORMATIONS

Sgp — SILURIAN GREEN POND CONGLOMERATE

Omb — ORDOVICIAN MARTINSBURG SHALE

€Ok — CAMBRO ORDOVICIAN KITTATINNY LIMESTONE

€h — CAMBRIAN HARDYSTON SANDSTONE

PRECAMBRIAN:

gh - HORNBLENDE GRANITE WITH PYROXENE GRANITE

ga - ALASKITE

am - AMPHIBOLITE

px - PYROXENE GNEISS

gnq - QUARTZ PLAGIOCLASE GNEISS

gnb - BIOTITE GNEISS

sk - SKARN, GRAPHITE SCHIST

fnd — FORMATION NOT DETERMINED

WATER SUPPLY MAP

Scale: 1 Mile to an Inch.

Miles: 1 ¾ ½ ¼ 0 1 2 3

Yards: 1000 500 0 1000 2000 3000

Meters: 1000 500 0 1000 2000 3000

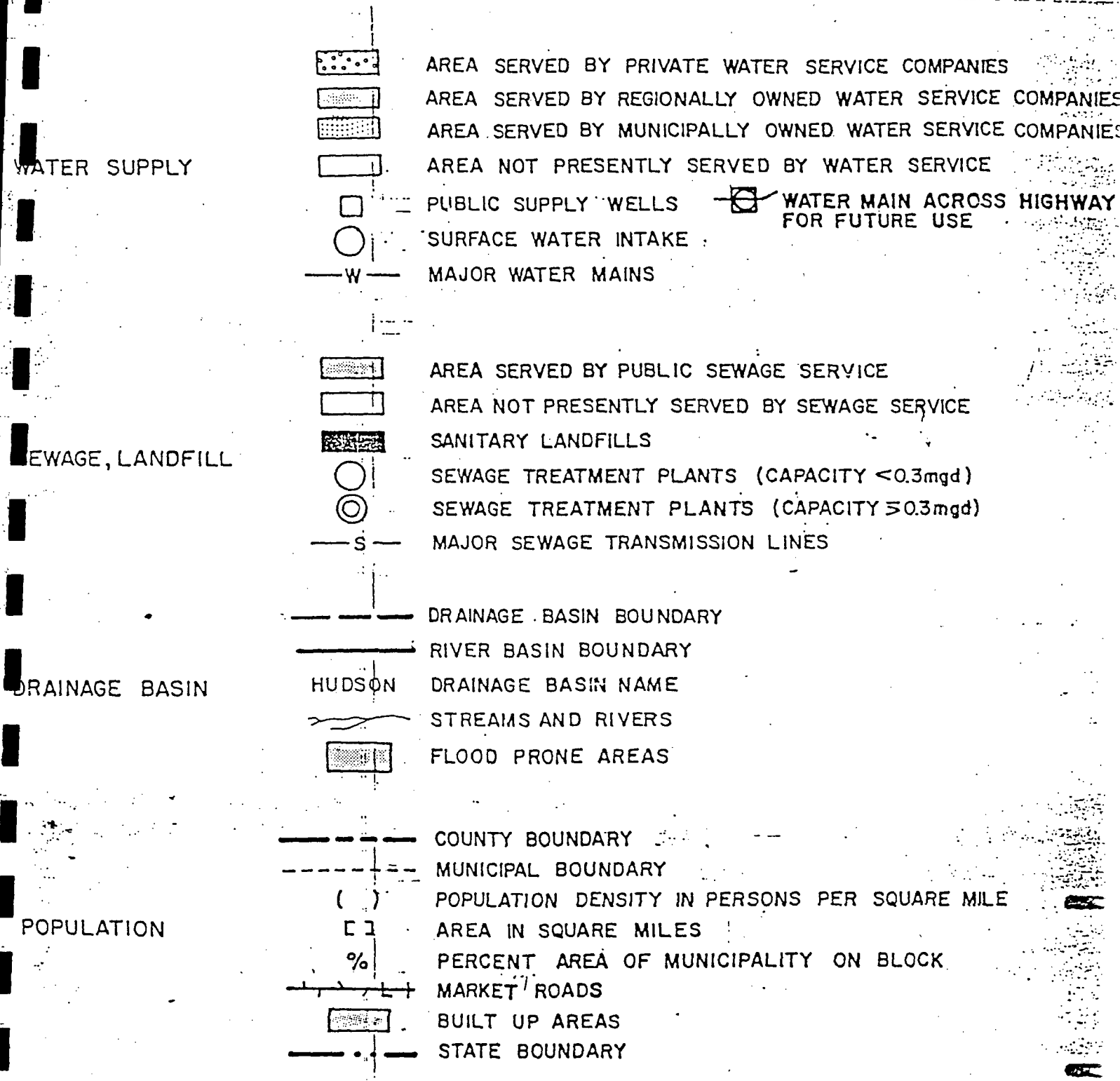
A. HOEN & CO. BALTIMORE, MD

Contour Interval: 20 feet

American Cyanamid Sanitary Landfill - Carteret
Driftway St., Carteret Boro,
Middlesex Co., New Jersey
Lat: 40 35 43 Lon: 74 13 16

MAP 7

LEGEND


AREA SERVED BY PRIVATE WATER SERVICE COMPANIES
AREA SERVED BY REGIONALLY OWNED WATER SERVICE COMPANIES
AREA SERVED BY MUNICIPALLY OWNED WATER SERVICE COMPANIES
WATER SUPPLY
AREA NOT PRESENTLY SERVED BY WATER SERVICE
PUBLIC SUPPLY WELLS
WATER MAIN ACROSS HIGHWAY FOR FUTURE USE
SURFACE WATER INTAKE
W
MAJOR WATER MAINS
AREA SERVED BY PUBLIC SEWAGE SERVICE
AREA NOT PRESENTLY SERVED BY SEWAGE SERVICE
SANITARY LANDFILLS
SEWAGE, LANDFILL
SEWAGE TREATMENT PLANTS (CAPACITY <0.3mgd)
SEWAGE TREATMENT PLANTS (CAPACITY ≥0.3mgd)
S
MAJOR SEWAGE TRANSMISSION LINES
DRAINAGE BASIN BOUNDARY
RIVER BASIN BOUNDARY
DRAINAGE BASIN
HUDSON
DRAINAGE BASIN NAME
STREAMS AND RIVERS
FLOOD PRONE AREAS
COUNTY BOUNDARY
MUNICIPAL BOUNDARY
( )
POPULATION DENSITY IN PERSONS PER SQUARE MILE
POPULATION
[ ]
AREA IN SQUARE MILES
%
PERCENT AREA OF MUNICIPALITY ON BLOCK
MARKET ROADS
BUILT UP AREAS
STATE BOUNDARY

A. Elizabeth

B. Arthur Kill-Elizabeth, Elizabeth Channel, Morses Creek; Passaic-Lower Passaic

C. 1. Newark WSO AP - Detailed meteorologic data

2. Map No.	Location	Period of Record
67	Elizabeth River at Irvington	1931-1938
68	Elizabeth River at Nye Ave., Irvington	7/23/38
72	Elizabeth River at Elizabeth	1921-
3. 262	Passaic River at Harrison	1967-1971
272	Elizabeth River at Morris Ave., Elizabeth	1964-

Water Quality Standards: (explained in Atlas Sheet description)
FW3, TW2 except where classified TW3

D. Brunswick Formation (Trb), Stockton Formation (Trs), Diabase (Trdb)

E. 1. Physiographic Province: Piedmont
Subdivision: Triassic Lowlands
Major Topographic Features: Wisconsin Terminal Moraine, Red Sandstone Plain, Hackensack Meadows, Newark Bay, Palisades Ridge
Elevations (ft.above sea level): ridges 300, valleys 0
Relief (ft.): 200

2. a. Normal Year: 44"
Dry Year: 36"
Wet Year: 53"

b. January: 32°F
July: 74°F

c. 243 days. Last killing frost: 4/15; first killing frost 10/20

F. Essex County:
Weequahic Park
Union County:
Elizabeth River Park
Warinanco Park

H. Boxwood Hall/Boudinot Mansion, Elizabeth (State Owened)

I. Water Well Records

Location	Owner	Year Drilled	Screen Setting or Depth of Casing	Total Depth	g/m Yield	Formation
26-22-143	Irvington Smelting & Ref.Wks.	1953	71	209	192	Trb
26-22-143	"	1953	62'4"	304	300	"
26-22-145	Associated Mech.Devices	1960	83	250	80	"
26-22-149	Gallo Asphalt Co.	1961	107	201	200	"
26-22-213	Krueger Brewing Co.			656	435	"
26-22-228	Smith & Smith Funeral Parlor			776	25	"
26-22-234	U.S. Navy			565	39	"
26-22-237	Conmar Corp.			300	450	"
26-22-262	National Lock Washer Co.			800	100	"
26-22-275	Linde Air Products Co.	1954	44'5"	500	124	"
26-22-293	New York Port Authority	1968	60	370	260	"
26-22-322	Standard Bitulithic Co.	1964	89'11"	406	360	"
26-22-327	Pfeiffer, H.			505	12	"
26-22-333	Arkansas Co., Inc.	1965	72'9"	400	65	"
26-22-333	Ronson Metals Corp.	1965	80	300	220	"
26-22-334	Wilson, H.A. Co.			778	8	"
26-22-345	Chem-Fleur	1965	97	306	200	"
26-22-355	Englehard Ind., Inc.	1966	54/79'8"	428	167	"
26-22-355	"	1965	80'7"	400	401	"
26-22-356	"	1966	78.5/92	495	4	"
26-22-368	Rutherford & Delaney Hldg.Co.	1956	42	220	100	"
26-22-411	Bristol Meyers	1967	49	500	159	"
26-22-418	Dillon-Beck Mfg. Co.			379	100	"
26-22-449	Elizabethtown Water Co.			400	550	"
26-22-463	Orbis Products Corp.	1958	157	350	12	"
26-22-517	Pennick, S.B. Co.	1961	64'10"	585	24	"
26-22-518	Pure Carbonic			600	30	"
26-22-546	Black Diamond Grit Co.	1960	92	265	150	"
26-22-574	Londat Aetz Fabric Co.	1965	50	600	30	"
26-22-574	Elizabeth Abbatoir			641	75	"
⊕ 26-22-744	Morey LaRue Laundry			700	15	"
⊕ 26-22-745	"			600	14	"
△ 26-22-785	Stevenson Car Co.			300	95	"
⊕ 26-22-786	Feldman Brothers			805	54	"
△ 26-22-795	Reichold Chemical Co.	1967	39'6"	400	415	"
26-22-828	Singer Mfg. Co.			1200	90	"
26-22-833	General Chemical Co.	1965	106	500	70	"
⊕ 26-22-842	Clauss Bottling Works			500	50	"
⊕ 26-22-847	Elizabethtown Gas & Light			300	0	"
26-22-852	Riker Motor Co.			500	0	"
△ 26-22-854	Thomas & Betts Co., Inc.			500	264	"

J. Geodetic Control Survey monuments described
Index Map 26; adjacent Index Map 31

A. Elizabeth, Roselle

B. Arthur Kill-Morses Creek, Rahway, Elizabeth

C. 1. Cranford - Non-recording temperature and precipitation gauges
Springfield - Recording precipitation gauge

2.

Map No.	Location	Period of Record
68	Elizabeth River at Nye Ave., Irvington	7/23/38
69	Elizabeth River at Lyons Ave., Irvington	7/23/38
70	Elizabeth River at York Ave., Irvington	7/23/38
71	Elizabeth River at Chancellor Ave.,Irvington	7/23/38
73	West Branch Rahway River at Millburn	1938,1940-1950
74	Rahway River near Springfield	1938-

Water Quality Standards: (explained in Atlas Sheet description)
FW2 except where classified FW3

D. Brunswick Formation (Trb), Basalt Flows (Trbs)

E. 1. Physiographic Province: Piedmont
Subdivision: Triassic Lowlands
Major Topographic Features: Wisconsin Terminal Moraine, Red Sandstone Plain
Elevations (ft.above sea level): ridges 500, valleys 50
Relief (ft.): 450

2. a. Normal Year: 47"
Dry Year: 39"
Wet Year: 55"
b. January: 32°F
July: 74°F
c. 242 days. Last killing frost: 4/20; first killing frost: 10/20

3. a. About 75% is urban or suburban. Areas of Clark, Cranford, Elizabeth, Hillside, Irvington, Millburn, Springfield, Union, Westfield are included.
b. Agricultural production is not a significant land use.
c. About 15% covered by oak forest. Forested areas primarily within the Watchung Reservation, South Mountain Reservation, and Rahway River Park System.
e. Traprock from quarries in Springfield.
d. Garden State Parkway, U.S.22, N.J.28, N.J.24, and N.J.527.
Railroads - Lehigh Valley, Penn Central, Central Railroad of New Jersey, Erie-Lackawanna, Rahway Valley

F. Essex County:
South Mountain Reservation
Union County:
Lenape Park
Rahway River Parkway
Galloping Hill Park and Golf Course
Warinanco Park
Short Hills Water Company:
Private Watershed

H. First Presbyterian Congregation of Connecticut Farms, Union

26-21-838	All Disc Records	1963	36	300	215	Trb
26-21-867	Food Fair Stores, Inc.			304	150	"
26-21-881	Benderson Development, Inc.	1963	21'8"	300	383	"
26-21-916	National Color Laboratory	1964	41.5	282	239	"
26-21-935	Leland Tube Co.	1965	33	500	100	"
26-21-964	Lampert Dairy Farms, Inc.	1959	62.5	803	72	"
26-21-995	Eastern Packing Co.			400	100	"

J. Geodetic Control Survey monuments described
Index Maps 25,26; adjacent Index Maps 30,31

I. Water Well Records

	Location	Owner	Year Drilled	Screen Setting or Depth of Casing	Total Depth	g/m Yield	Formation
	26-31-132	Hyatt Roller Bearing Div.			501	500	Trb
△	26-31-237	Tingley-Reliance Rubber Co.			122	120	"
△	26-31-239	Hatfield Wire & Cable Co.	1959	52	350	323	"
	26-31-243	Rahway, City of	1953	21.75	57	355	Q
⊕	26-31-266	Quinn & Boden	1966	35	35	23	Trb
△	26-31-268	"			357	150	"
	26-31-274	Rahway, City of			301	12	"
△	26-31-294	Rahway Theater			349	100	"
△	26-31-315	Linden Ice Co.	1959	40	550	70	"
△	26-31-317	General Gum Products	1953	39'9"	316	100	"
△	26-31-338	Winews, C.H. & John			200	750	"
⊕	26-31-342	Layne, New York Co.	1955	36	310	30	"
⊕	26-31-364	Lampert Dairy Farms Inc.	1967	39	290	17	"
	26-31-465	Middlesex Water Co.	1964	32'8"	505	495	"
△	26-31-533	Maclac Co.			151	91	"
	26-31-576	Costa's Ice Cream Co.	1961	40	359	300	"
⊕	26-31-594	Security Steel Equip. Inc.	1957	26	614	34	"
	26-31-861	Sabol National Grocery	1956	24	200	70	"
	26-31-891	Swift & Co.	1955	43'8"	61	70	Kmr
	26-31-894	California Refining Co.			288	92	"
△	26-31-938	Second Reverse Terminal Inc.	1958	109'6"	168	150	Q

J. Geodetic Control Survey monuments described
Index Maps 30,31; adjacent Index Maps 25,26

A. Arthur Kill, Elizabeth

B. Arthur Kill-Morses Creek, Rahway, Woodbridge

C. Water Quality Standards: (explained in Atlas Sheet description)
FW3, TW2 except where classified TW3

D. Wisconsin Terminal Moraine (Qtm), Magothy and Raritan Formation (Kmr), Stockton Formation (Trs), Diabase (Trdb), serpentine (sp)

E. 1. Physiographic Province: Piedmont
Subdivision: Triassic Lowlands
Major Topographic Features: Red Sandstone Plain, Arthur Kill
Elevations (ft.above sea level): hills 30, valleys 0
Relief (ft.): 30

Physiographic Province: Coastal Plain
Subdivision: Inner Plain
Major Topographic Features: Arthur Kill, Clay and Marl Region
Elevations (ft.above sea level): hills 20, valleys 0
Relief (ft.): 20

2. a. Normal Year: 46"
Dry Year: 38"
Wet Year: 52"

b. January: 32°F
July: 74°F

c. 242 days. Last killing frost: 4/20; first killing frost: 10/20

I. Water Well Records

	Location	Owner	Year Drilled	Screen Setting or Depth of Casing	Total Depth	g/m Yield	Formation
△	26-32-417	Gulf Stream Development	1967	54	145	100	Trdb
△	26-32-485	Liebig Works			60	200	Q
⊕	26-32-487	U. S. Metals Refining Co.			117	0	Kmr

J. Geodetic Control Survey monuments described
Index Map 31; adjacent Index Map 26

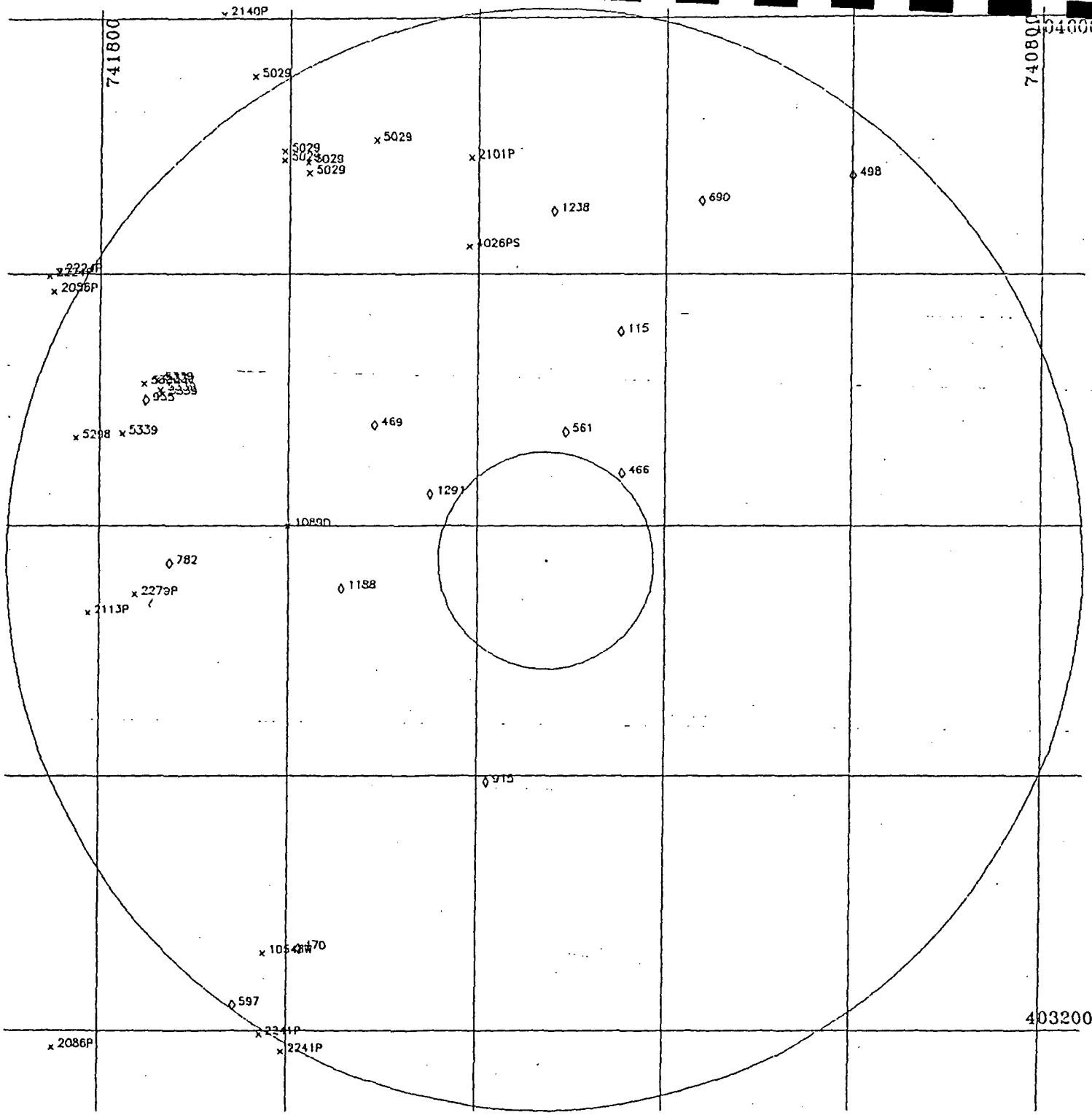
UBJECT TO REVISION

WATER WITHDRAWAL POINTS AND NJGS CASE INDEX SITES WITHIN 5.0 MILES OF:

LATITUDE 403543
LONGITUDE 741316

DRAFT

SCALE: 1:63,360
(1 Inch = 1 Mile)



× WATER WITHDRAWAL POINTS
◊ NJGS CASE INDEX SITES
1 MILE AND 5 MILE RADII INDICATED

NJGS CASE INDEX DATA RETRIEVED FROM:
NEW JERSEY GEOLOGICAL SURVEY
ON 12/22/87

PLOT PRODUCED BY:
NJDEP
DIVISION OF WATER RESOURCES
BUREAU OF WATER ALLOCATION
CN-029
TRENTON, NJ 08625

DATE: 03/27/91

SUBJECT TO REVISION

NUMBER	NAME	SOURCEID	LOCID	LAT	LON	LLACC	DISTANCE	COUNTY	PLN	DEPTH	GEO1	GEO2	CAPACITY
0549W	AMERICAN CYANAMID COMPANY	2601899	2	403237	741615	U	4.4	23	25	62	GRM		120
0895P	UNION COUNTY UTL. AUTHERITY			403600	741600	U	2.4	39	13	20	GRS		300
0986P	UNITED STATES GYPSUM COMPANY	4600006	1	403152	741629		6.4	39	02	505	GTRB		500
	UNITED STATES GYPSUM COMPANY	2600204	2	403752	741629	U	5.2	39	02	303	GTRB		250
1101P	DECORATOR PLASTICS, INC.	2604727		403835	741405		3.7	39	04	570	GTRB		200
1113P	COLONIA COUNTRY CLUB	2601806	1	403516	741607		4.3	23	25	314	GTRB		400
1140P	ROTARY PEN CORPORATION	2602831	2	404002	741642		5.8	39	08	402	GTRB		105
1224P	HYATT CLARK INDUSTRIES INC.	4600107	1	403759	741832		5.3	39	02	501	GTRB		500
	HYATT CLARK INDUSTRIES INC.	4600106	2	403759	741832		5.3	39	02	505	GTRB		500
	HYATT CLARK INDUSTRIES INC.	2600680	3	403801	741826		5.2	39	02	504	GTRB		500
2241P	CHEVRON USA, INC.	4600185	1	403150	741603	F	5.1	23	16	84	GKRF		350
	CHEVRON USA, INC.	4600186	2	403158	741617	F	5.0	23	16	105	GKRF		350
2279P	VULCO BRASS - WELL SEALED 2/88	2600049	1	403527	741737		3.8	39	08	435	GTRB		350
4026PS	EXXON COMPANY USA	MORGES CREEK		403813	741406	T	3.0	39	09		SY		
5029	ELIZABETHTOWN WATER COMPANY	2602393	CHANDLER	403903	741505	F	4.1	39	14	350	GTRB		300
	ELIZABETHTOWN WATER COMPANY	2601696	FIRST AVE	403933	741622	F	5.2	39	14	509	GTRB		450
	ELIZABETHTOWN WATER COMPANY	2602302	WALABURGA1	403854	741603	F	4.4	39	14	350	GTRB		350
	ELIZABETHTOWN WATER COMPANY	2602360	WALABURGA2	403848	741547	F	4.2	39	14	348	GTRB		200
	ELIZABETHTOWN WATER COMPANY	2602412	WALABURGA3	403858	741603	F	4.5	39	14	321	GTRB		360
	ELIZABETHTOWN WATER COMPANY	2602463	WALABURGA4	403853	741548	F	4.3	39	14	325	GTRB		450
5298	MIDDLESEX WATER COMPANY	MIDDLESEX	RESERVOIR	403642	741615		4.5	39	02		SYRFH		9.0
5329	RAHWAY, CITY OF	2600381	1	403710	741723		4.0	39	13	50.5	GRSD		300
	RAHWAY, CITY OF	2600330	2	403709	741722		3.9	39	13	51.5	GRSD		300
	RAHWAY, CITY OF	2600724	3	403708	741731		4.1	39	13	7e	GTRB		350
	RAHWAY, CITY OF	2601671	4	403705	741721		3.9	39	13	127	GTRB		400
	RAHWAY, CITY OF	2601672	5	403703	741720		3.9	39	13	135	GTRB		400
	RAHWAY, CITY OF	2603795	6	403644	741745		4.1	39	13	269	GTRB		400

Number of Observations: 27

Map 8

age 1 of NJGS CASE INDEX SITES WITHIN 5.0 MILES OF 403543 LAT. 741316 LON. AS OF 12/22/87 (IN ORDER BY SITE NUMBER) - 03/27/91

ITE#/M	NAME	LAT	LON	DISTANCE	CONTAI	FMCODE1	FMCODE2	STATUS1	STATUS2
115	EXXON REFINERY, RAHWAY LINDEN, UNION CO.	403733	741229	2.2	1	103	3070	9	H
465	LINDEN CHLORINE, LINDEN, UNION CO.	403625	741258	1.1	56	3070	0	9	
469	SOLVENTS RECOVERY SERVICE, LINDEN, UNION CO.	403648	741505	2.0	1	130	3070	9	
470	CP CHEMICALS INC., SEWAREN, MIDDLESEX CO.	403239	741552	4.2	41	100	130	9	
498	CONRAIL E-PORT, ELIZABETHPORT, UNION CO.	403647	741000	4.5	1	103	130	2	
561	GAF CORP., LINDEN, UNION CO.	403645	741304	1.2	1	100	3070	9	
597	WITCO, PERTH AMBOY, MIDDLESEX CO.	403212	741634	5.0	50	103	3095	1	E
690	CHEMICAL CONTROL, ELIZABETH, UNION CO.	403835	741137	3.6	0	0100	3070	1	E
782	DRI-PRINT FOILS, INC, RAHWAY	403542	741715	3.5	0	0100	3070	1	
915	DISTRIGAS, PORT READING,MIDDLESEX CO.	403357	741354	2.1	00	0170	2080	1	E
955	RAHWAY WATER DEPT., RAHWAY, UNION CO.	403700	741730	4.0	00	3070	0	1	C
1182	SINTH TRANSFER CORP., 21 ENGLEHARD AVE., WOODBRIDGE, MIDDLESEX CO.	403530	741526	1.9	52			3	
1238	CONVERTERS INK, LINDEN, UNION CO.	403830	741312	3.2	55	3070		1	C
1291	GULF PRODUCTS CO.-LINDEN TERMINAL, UNION CO.	403615	741430	1.2	63	0102	3070	1	B

Number of Observations: 14

Map 8

ATTACHMENT A

ENVIRONMENTAL ASSESSMENT OF THE CARTERET IMPOUNDMENTS AMERICAN CYANAMID COMPANY LINDEN, NEW JERSEY

PREPARED FOR

ALICE BOOMHOWER
ENVIRONMENTAL ENGINEER
WARNERS PLANT
AMERICAN CYANAMID COMPANY
PO BOX 31
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PREPARED BY

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March 10, 1989

A1

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A3

EXECUTIVE SUMMARY

This report present a review of the hydrogeologic and water quality conditions in the vicinity of American Cyanamid Company's Carteret Impoundments (the "Site"). It is primarily based upon the results of the quarterly groundwater monitoring program conducted from July 1987 through October 1988. Hydrogeological characterizations are based upon information obtained at the time of the installation of the groundwater monitoring wells and upon work performed at the Site in preparation for the initial Discharge to Groundwater Permit Application.

In addition to reviewing the results of the monitoring program from a technical perspective, the report evaluates:

a. whether sufficient data are available to develop appropriate groundwater quality standards at this time, and

b. whether there is a need for corrective action at the impoundments.

The Carteret Impoundments are a closed facility located in an industrialized section of Carteret, New Jersey off Driftway Drive. The impoundments accepted sludges from the production of alum and Yellow Prussiate of Soda (YPS) from 1939 to 1973. During this time, sludge was placed in a series of six impoundments which ultimately covered approximately 100 acres. Currently, American Cyanamid is undertaking a program to establish permanent vegetation at the Site. This revegetation project will be completed in 1989.

Geologically, the Site is underlain by Quaternary alluvium consisting of silt, sand, clay and some gravel with buried organic rich meadow mat. The alluvium overlies the Triassic aged Brunswick Formation which consists of a dense, hard siltstone in the vicinity of the Site.

Five sets of paired monitoring well clusters were installed at the Site in 1987 to provide monitoring of a shallow and a deep groundwater zone. Five wells were screened from depths of 10 to 20 feet in the shallow, black organic-rich sand/meadow mat and fill material and are designated "S" wells. Four wells were screened in the upper part of the Brunswick Formation at depths from 40 to 60 feet. One deep well was screened just above the Brunswick Formation in a gravel layer at a depth of 25 to 35 feet. These deep wells are designated "D" wells.

Shallow groundwater is mounded beneath the impoundments, and groundwater flow is radially outward from the central area of the impoundments. The shallow groundwater originating within the impoundments discharges into the surrounding surface water. The groundwater monitored in the deeper zone appears to be confined and hydraulically separated from the shallow zone by the intervening red-brown clay layer that was found under most of the Site. The

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clay was not found in MW-5D, though. Groundwater flow in the deeper zone appears to be towards the north and northeast where it probably is discharging into the Rahway River, Arthur Kill, and Atlantic Ocean.

As expected, the shallow groundwater contains elevated levels of ammonia, cyanide, sulfate, and possibly sodium. Concentrations of total cyanide (free and complexed cyanide dissolved species) were detected above background in shallow wells MW-2S, MW-4S and MW-5S at average values of 25 mg/l, 103 mg/l and 4.2 mg/l, respectively. Ammonia concentrations in MW-2S, 4S, and 5S are elevated above the average background level of less than 8 mg/l with average values of 164, 410, 26.7 mg/l, respectively. Sodium concentrations are elevated by a factor of approximately two over background with averages of 5,235 mg/l in MW-2S, 8,442 mg/l in MW-4S, and 7,093 mg/l in MW-5S. Sulfate concentrations are elevated by a factor of approximately five to ten over background with averages of 4,658 mg/l in MW-2S, 3,325 mg/l in MW-4S.

Generally, these same constituents have not been detected in the deeper groundwater zone. For the deep monitoring wells, only MW-5D samples were reported to have significant levels of total cyanide with an average of 10.8 mg/l. These cyanide levels are similar to those reported for MW-5S which averaged 4.2 mg/l. However, these levels are much lower than those detected in the shallow wells MW-2S and 4S. Since the clay confining layer was not found in MW-5D, the shallow and deep wells at this location could be expected to have similar chemical characteristics. Well MW-4D samples had an average total cyanide concentration of only 0.54 mg/l. No other inorganic constituents in deep well samples are significantly above concentrations in the background well MW-1D.

Based on the results of a chemical loading rate model and confirmed by surface water sampling conducted in the Rahway River and several tributaries, there is no detectable impact of the impoundments on surface water quality.

The Administrative Consent Order (ACO) between NJDEP and American Cyanamid presents numerical groundwater standards used to review the groundwater monitoring data and evaluate the impact of the facility on groundwater quality. The numerical standards contained in the ACO correspond to a GW/3 groundwater classification scheme under NJAC 7:9-6.1 et seq. The groundwater monitoring data for the facility clearly illustrate that the total dissolved solids (TDS) concentration exceeds the 500 to 10,000 mg/l used for the GW/3 classification. Thus, the Carteret Impoundments should be evaluated under the GW/4 classification scheme for which standards are set on a case-by-case basis.

Based on the results of this Assessment, it may be concluded that the impact of the Carteret Impoundments on the local groundwater and surface water is negligible. No corrective action appears warranted at this time.

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With respect to the development of possible future groundwater protection standards for the impoundments, it is noted that NJDEP is currently considering substantial revisions to the State Ground Water Quality Standards including policies, classification system, use designations, and numerical criteria. Pending the development and promulgation of the revised standards, it is suggested that the derivation of the site-specific standards for the Carteret Impoundments be deferred. In the interim, routine monitoring can be continued to confirm the absence of significant adverse health or environmental impacts, while improving the data base from which the standards may ultimately be developed.

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1.0 INTRODUCTION

1.1 Purpose

The purpose of this report is to present a summary and compilation of the hydrologic investigations of the Carteret Impoundments (hereinafter referred to as the "Site"). This assessment summarizes the impacts of the impoundments on the underlying groundwater and adjacent Rahway River, and formulates recommendations concerning the Site.

Subsurface and hydrologic investigations compiled for this report include the following.

Preliminary report of test borings and dike evaluation at the impoundments, prepared by M. Disko Associates, January 1982.

Surface water, and groundwater investigations completed by HYDROSYSTEMS in 1986.

Data obtained during monitoring well installation at the Site, supervised by HYDROSYSTEMS, Inc. in May, 1987.

Groundwater monitoring results for six quarterly groundwater sampling events, July 1987 through October 1988.

The specific objectives of this environmental assessment of the Carteret impoundments include the following.

1. Summarize the findings of various studies at the site which characterize its hydrogeology.

2. Review the analytical results for the groundwater monitoring program and identify any data trends and data gaps.

3. Establish the relationship between the Site's hydrogeology and the results of the groundwater monitoring program.

4. Characterize the behavior and fate for any potential constituents of concern along the groundwater and surface-water migration pathways.

5. Identify potential receptors of the constituents of concern released by the impoundments, and evaluate the human health and environmental risk presented by any such release.

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1.2 Site History

Figure 1 shows the location of the Carteret impoundments on a portion of the Arthur Kill, New York-New Jersey topographic quadrangle map. The impoundments were used from 1939 to 1973 for the disposal of acidic sludge from an alum process and alkaline sludge from the yellow prussiate of soda (YPS) process.

The production of alum involved the digestion of bauxite ore with sulfuric acid. The resulting muds, primarily silica, were slurried with water, neutralized, and pumped to the impoundments for settling. The production of YPS involved the reaction of calcium cyanide with copperas (hydrated ferrous sulfate) and soda ash to form sodium ferrocyanide. The resulting muds, primarily calcium carbonate, were slurried with water, neutralized, and pumped to the impoundments for settling.

The sludges from the two processes were combined in the impoundments to form a near neutral sludge. A series of six impoundments was constructed above ground with wooden and earthen dikes. The sludges were pumped from the plant on the north side of the Rahway River to the impoundments through an above ground pipeline. The impoundments eventually covered approximately 100 acres and are estimated to contain just under two million tons of sludge.

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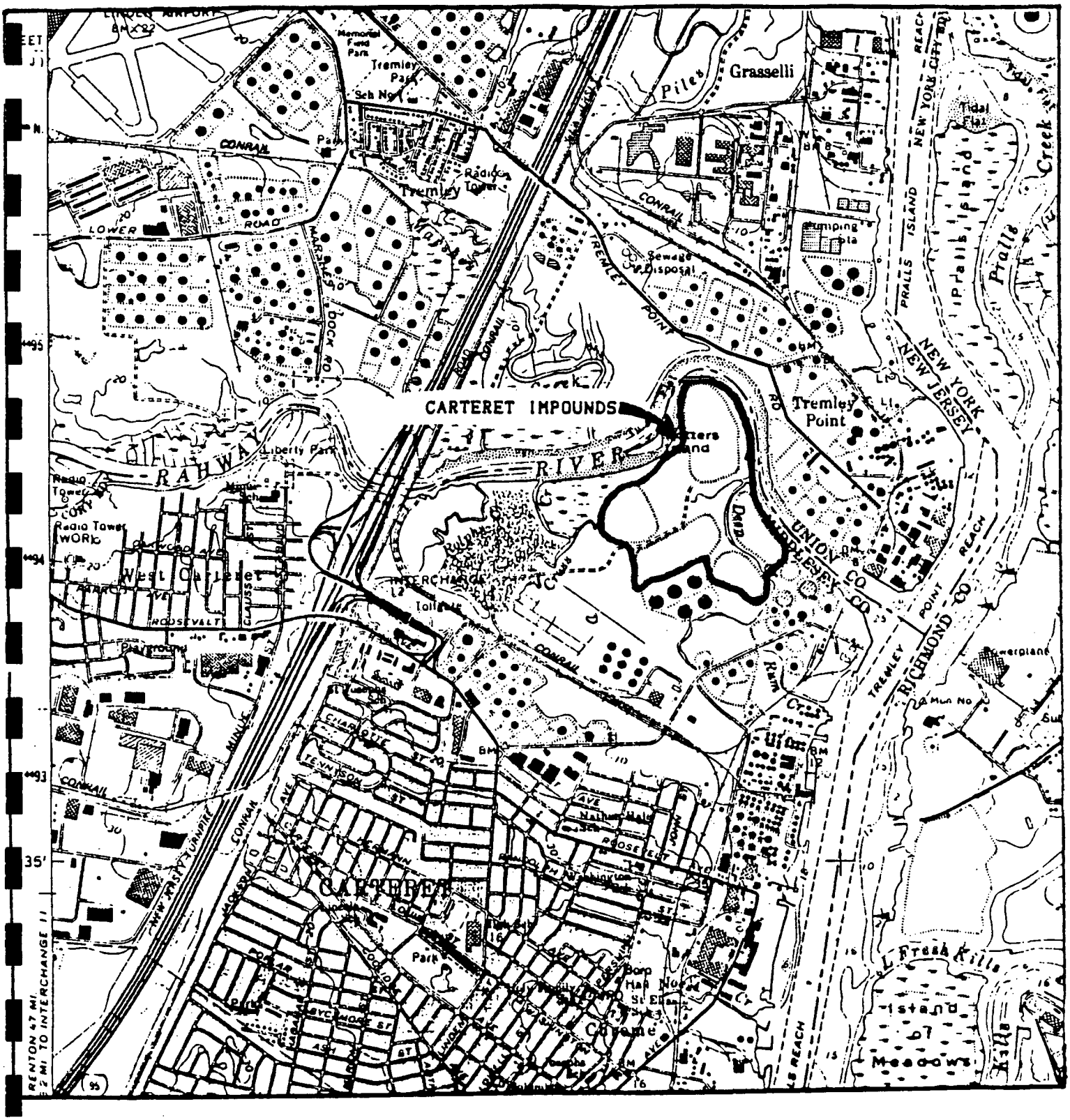

Figure 1. Location map for the Carteret impoundments, Carteret, New Jersey.

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1.3 ON-GOING WORK AT THE SITE

Over the past eight years, American Cyanamid has been undertaking a major project to vegetate and stabilize the sludge. The sludges in the impoundments are deficient in several essential nutrients necessary for plant growth. Phosphorus concentrations are minimal and organic content is extremely low. Cyanamid studied the augmentation of nutrients in the sludge and, beginning in 1986, undertook to establish vegetation on the sludge surface using a composted sewage sludge product to provide essential nutrients. Approximately 75% of the Site has now been vegetated. The vegetation of the remaining impoundment will be completed during the 1989 growing season.

The vegetation project has had a number of benefits. These include:

1. The sludge is stabilized and less susceptible to erosion and wind dispersal.

2. In the absence of vegetation, the sludge is thixotropic and has a very low bearing capacity. Vegetated areas have adequate bearing capacity to support individuals and light vehicles.

3. The vegetation project has established a community of perennial plants which is expected to decrease infiltration and leachate production through the increase in evapotranspiration.

The impact of the vegetation project on groundwater and surface water conditions at the Site is unknown at this time. Monitoring results will be reviewed over a period of years to assess the results of the vegetation project.

2.0 SITE INVESTIGATIONS

2.1 Pre-Permit Investigations

Geotechnical investigations at the Carteret Site have been conducted over the past 10 years. In 1981, M. Disko and Associates completed test borings within the sludge impoundments (approximate test boring locations shown in Figure 2). In May of 1986, HYDROSYSTEMS conducted preliminary investigations of sludge and leachate quality involving the collection of grab samples from hand augered borings. Subsequently, in October 1986, HYDROSYSTEMS conducted a systematic sampling of surface water with upstream and downstream stations in the Rahway River.

2.2 Monitoring Well Installation

In 1987, in response to NJPDES/DGW permit requirements, ten monitoring wells were installed under the supervision of HYDROSYSTEMS at five locations with screens set at shallow and deep zones. All wells were located outside of the impoundments. The approximate locations of the wells, numbered MW-1 through MW-5, are also shown in Figure 2. Each cluster consists of two wells: a shallow well, designated "S", screened in the fill, black organic sand or red-brown clay overlying the Brunswick Shale; and a deep well, designated "D", screened in the Triassic-aged Brunswick Formation or a sand and gravel layer overlying the Brunswick in the case of MW-5D.

The wells were drilled with a mud-rotary rig using bentonite drilling fluid. An 8-inch rock drill bit was used and all wells were installed with 4-inch ID, Schedule 40, flush-jointed, threaded PVC well casing and 10 foot lengths of 0.020-inch machine slotted PVC well screens. Sand pack consisting of coarse-grained #2 quartz sand was placed around each well screen to a minimum of one foot above the top of the screen. Approximately two feet of bentonite pellets were placed above the sand pack to form the seal. The wells were then grouted to about two feet below ground surface with a 5% bentonite/cement slurry. Steel casings with locking caps were installed and cement was brought to the surface. Monitoring well construction diagrams and geologic logs are included in Appendix A. Also, the State of New Jersey permit to drill the well and the monitoring well certification, Form A, for each well are included in Appendix A.

The wells were developed after installation by pumping with a 4-inch submersible pump until the discharged water remained clear of silt and drilling fluid. Approximately one week after the initial development, the wells were developed again using a suction lift centrifugal pump and bailer.

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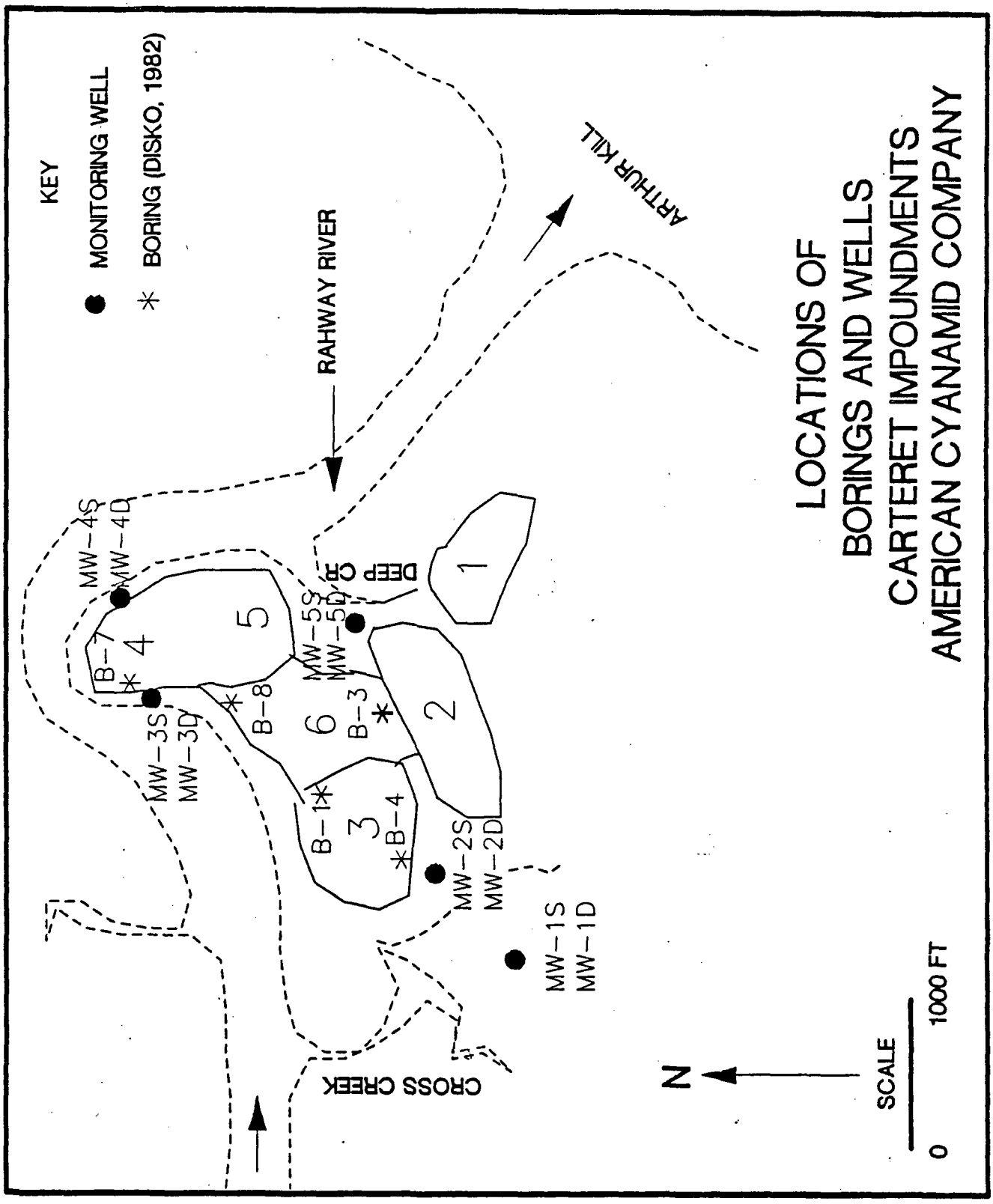

Figure 2. Site map showing the locations of the borings installed by M. Disko Associates at the Carteret Impounds in 1981 and the monitoring wells installed in 1986.

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3.0 SITE CHARACTERIZATION

3.1 Solid Waste Characterization

In May of 1986, HYDROSYSTEMS conducted investigations to characterize the quality of the sludge. The specific tests included field pH of sludge pore water, total and free cyanide, and extractable (EP Toxicity) metals. Samples from five borings, the locations of which are shown in Figure 4, were collected for analysis.

Field pH measurements of sludge pore water were made using "colorpHast" brand pH indicator strips, a product of EM Science (catalog no. 9590, pH range of 0-14). Results of the field pH measurements are presented in Table 1, and indicate the near-neutral condition of the mixed alum/YPS sludge.

Seven samples of sludge were analyzed for EP Toxicity (metals) and total and free cyanide content. Two of the seven sludge samples were duplicate samples from the same borings. Table 2 presents the results of the EP Toxicity and cyanide analyses for the sludge samples. Laboratory data for these analyses are included in Appendix B. The results of the pH and EP Toxicity tests indicate the sludge is nonhazardous under RCRA regulations. Free cyanide levels were also substantially below SW-846 threshold levels which would characterize the materials as hazardous waste, i.e., 250 mg/kg releasable cyanide.

TABLE 1. Field pH of leachate in contact with sludge in the Carteret impoundments.

BORING NO.	FIELD pH OF LEACHATE IN CONTACT WITH SLUDGE
B1b	7
B2	7
B4	7
B5	7
B6	8
B7	8

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TABLE 2. Laboratory analyses for EP Toxicity and Free and Total Cyanide content in sludge samples from the Carteret impoundments.

PARAMETER	METHOD OF ANALYSIS (NOTE 1)	DETECTION LIMIT (ug/l)	EP TOXICITY CRITERIA (ug/l)	SAMPLE NO.- BORING NO.- IMPOUND NO.-	C1 B1a 4	C2 B2 5	C2* B2 5	C3 B3 6	C4 B4 3	C4* B4 3	C5 B5 2	LAB BLANK
					(ug/l)							
ARSENIC	ICP	200.0	5,000.0		BDL	BDL	NA	BDL	BDL	BDL	BDL	BDL
BARIUM	ICP	200.0	100,000.0		BDL	BDL	NA	BDL	BDL	BDL	BDL	BDL
CADMIUM	ICP	50.0	1,000.0		BDL	BDL	NA	BDL	BDL	BDL	BDL	BDL
CHROMIUM	ICP	50.0	5,000.0		BDL	BDL	NA	BDL	BDL	BDL	BDL	BDL
LEAD	ICP	200.0	5,000.0		BDL	BDL	NA	BDL	BDL	BDL	BDL	BDL
MERCURY	CV	0.3	200.0		BDL	BDL	BDL	0.57	0.69	NA	BDL	BDL
SELENIUM	ICP	200.0	1,000.0		BDL	BDL	NA	BDL	BDL	BDL	BDL	BDL
SILVER	ICP	50.0	5,000.0		BDL	BDL	NA	BDL	BDL	BDL	BDL	BDL
UNITS FOR CYANIDE ANALYSES IN MG/KG AVERAGE												
TOTAL CYANIDE	335	0.5	NONE		683	452	NA	3660	437	NA	433	NONE
FREE CYANIDE	412	0.5	NONE		14	18	NA	103	38	NA	9	NONE

NOTES:

1. ICP = INDUCTIVELY COUPLED PLASMA SPECTROMETRY
   CV = COLD VAPOR ATOMIC ABSORPTION SPECTROSCOPY
   335 = METHOD 335.2 OF STANDARD METHODS FOR CHEMICAL ANALYSIS OF WATER AND WASTE, EPA-600/4-79-020, REVISED MARCH 1983.
   412 = METHOD 412 OF STANDARD METHODS, 16TH EDITION 1985.

2. BDL = BELOW DETECTION LIMIT
   NA = NOT ANALYZED
   * = DUPLICATE

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3.2 Geology

The inactive alum impoundments at Carteret are located on the boundary between the Piedmont and Coastal Plain physiographic provinces. Surficial deposits consist of about 20 to 40 feet of Quaternary alluvium composed of interbedded silt, sand, gravel, and clay with buried peat and organic rich horizons. This alluvium was deposited in a brackish estuarine, salt-marsh environment (Nemickas, 1976).

Bedrock underlying the alluvium is the Triassic-age Brunswick Formation generally consisting of bedded shales, mudstones and sandstones which attain a maximum thickness of 6,000 to 8,000 feet in New Jersey (Nemickas, 1976). The Brunswick Formation encountered at the impoundments consists of a dense, hard, red siltstone.

During monitoring well installation, split-spoon samples were collected in the unconsolidated sediments and fill material. Geologic logs were prepared for each well cluster (included in Appendix A). Cross-sections have been developed from these logs and those presented by Disko (1982) for the Site. The locations of the cross-sections are shown on Figure 3 and the cross-sections are presented in Figures 4 and 5. The logs for MW-1, MW-2, MW-3 and MW-4 indicate the presence of 10 to 25 feet of a black organic sandy silt, corresponding to the meadow mat, gray organic silt, and sand and gravel zones encountered in the Disko (1982) borings. The shallow wells at these four locations were screened in the black, sandy silt and red/brown clay. A continuous zone of red-brown clay, approximately 8 to 25 feet thick, exists beneath the organic sandy silt in these wells and corresponds to the red clay layer present in Disko (1982) borings B-1 and B-4 (see Figures 4 and 5).

A dense, hard, red and grey siltstone, typical of the Brunswick Formation, was encountered beneath the clay at a depth of from 30 to 42 feet in MW-1 through MW-4. The deep wells at these locations were screened in the upper part of the Brunswick Formation. The black organic-rich sandy silt layer encountered in the other wells was not encountered in MW-5S. Therefore, the screen for MW-5S was set in the lower part of the fill and upper part of the clay zone beneath the fill. This clay is most likely the same clay strata encountered in MW-1 through MW-4.

Beneath the clay at MW-5D, a zone of red-brown and grey sand and gravel was encountered overlying the Brunswick Formation. (The screen for MW-5D was set in this sand and gravel zone, rather than in the Brunswick Formation to allow sampling of groundwater from the more permeable zone.)

3.3 Hydrostratigraphy

The shallow groundwater zone consists of the permeable fill material, meadow mat, and black organic-rich sandy silt. The water table was encountered at a depth of approximately 2 feet below ground surface in the shallow wells. The Brunswick Formation contains the deep groundwater in the area and transmits groundwater through fractures in the siltstone. The sand and gravel layer encountered in MW-5D is most likely in hydraulic connection with the underlying Brunswick Formation.

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Figures 4 and 5 show cross-sections A-B and C-D, located in Figure 3, which indicate that the Brunswick Formation is overlain by a clay confining layer. The clay strata appears to be continuous across the Site except in the vicinity of Disko's (1982) boring B-3. The clay strata probably acts as a confining layer for much of the underlying Brunswick Formation (and gravel layer encountered in MW-5D). Where present, the clay strata acts to restrict the vertical flow of groundwater between the shallow and deep groundwater zones.

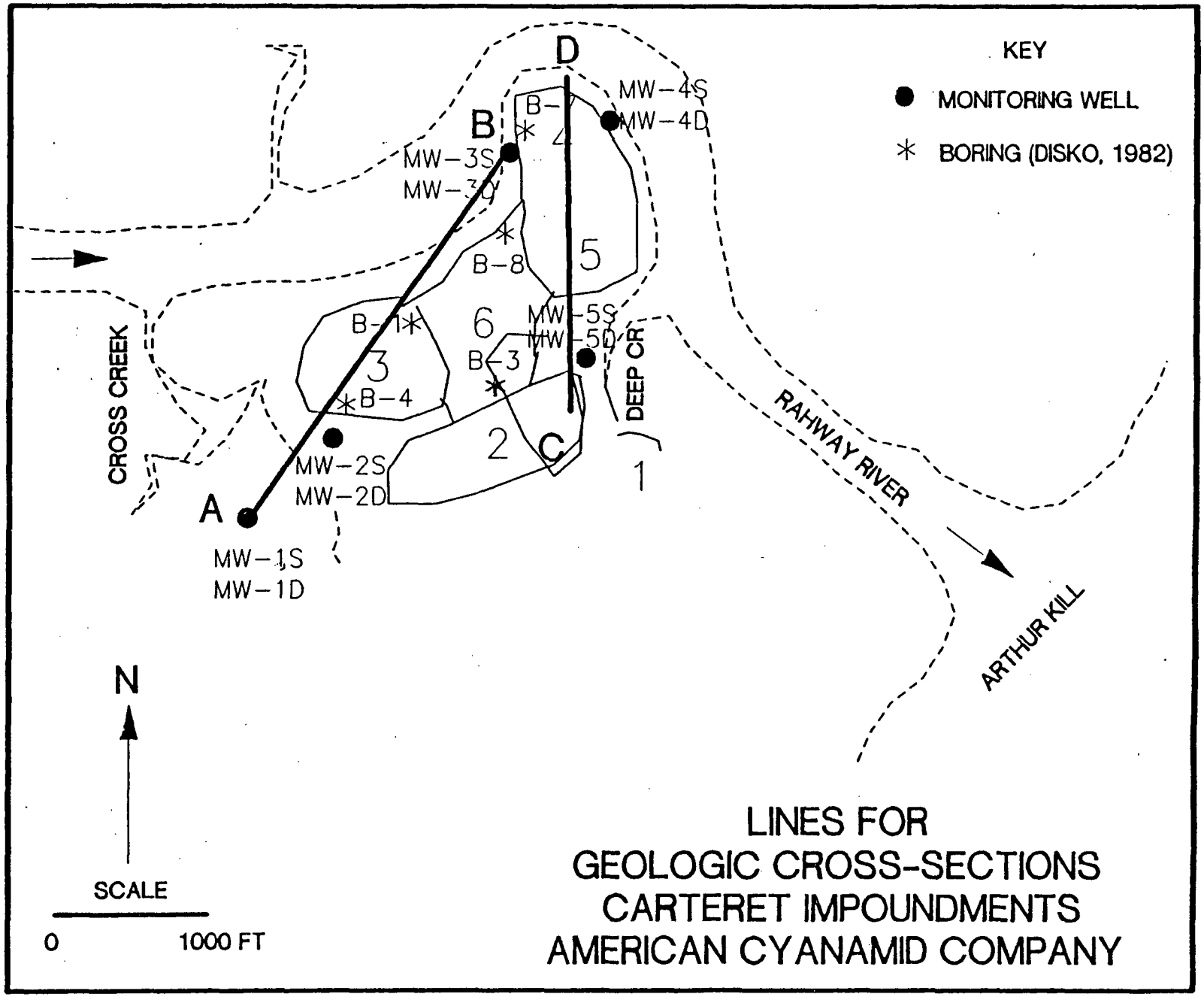

Figure 3. Locations of geologic cross-section A-B and C-D.

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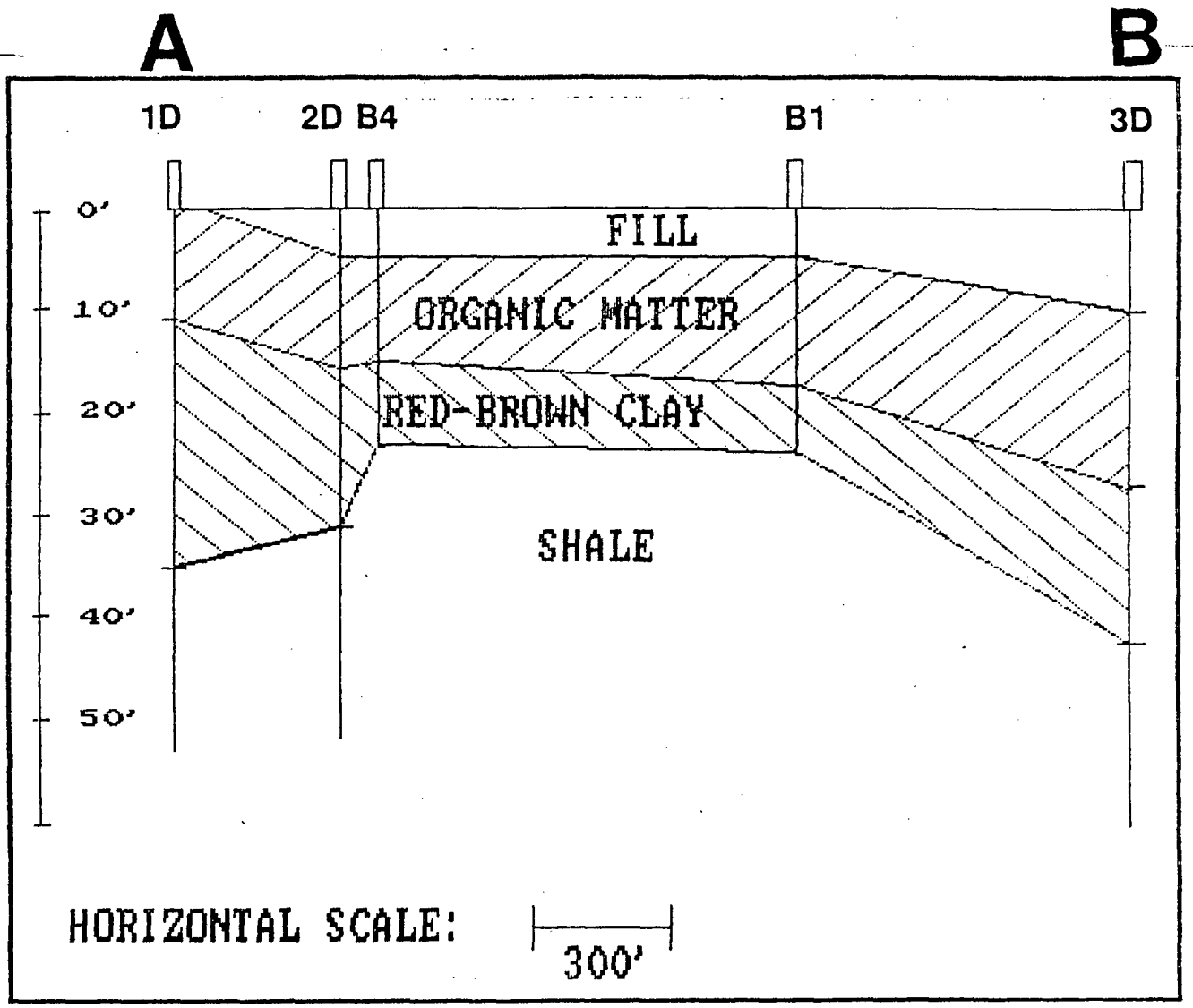

Figure 4. Geologic cross-section along line A-B shown in Figure 3 for the Carteret Impoundments.

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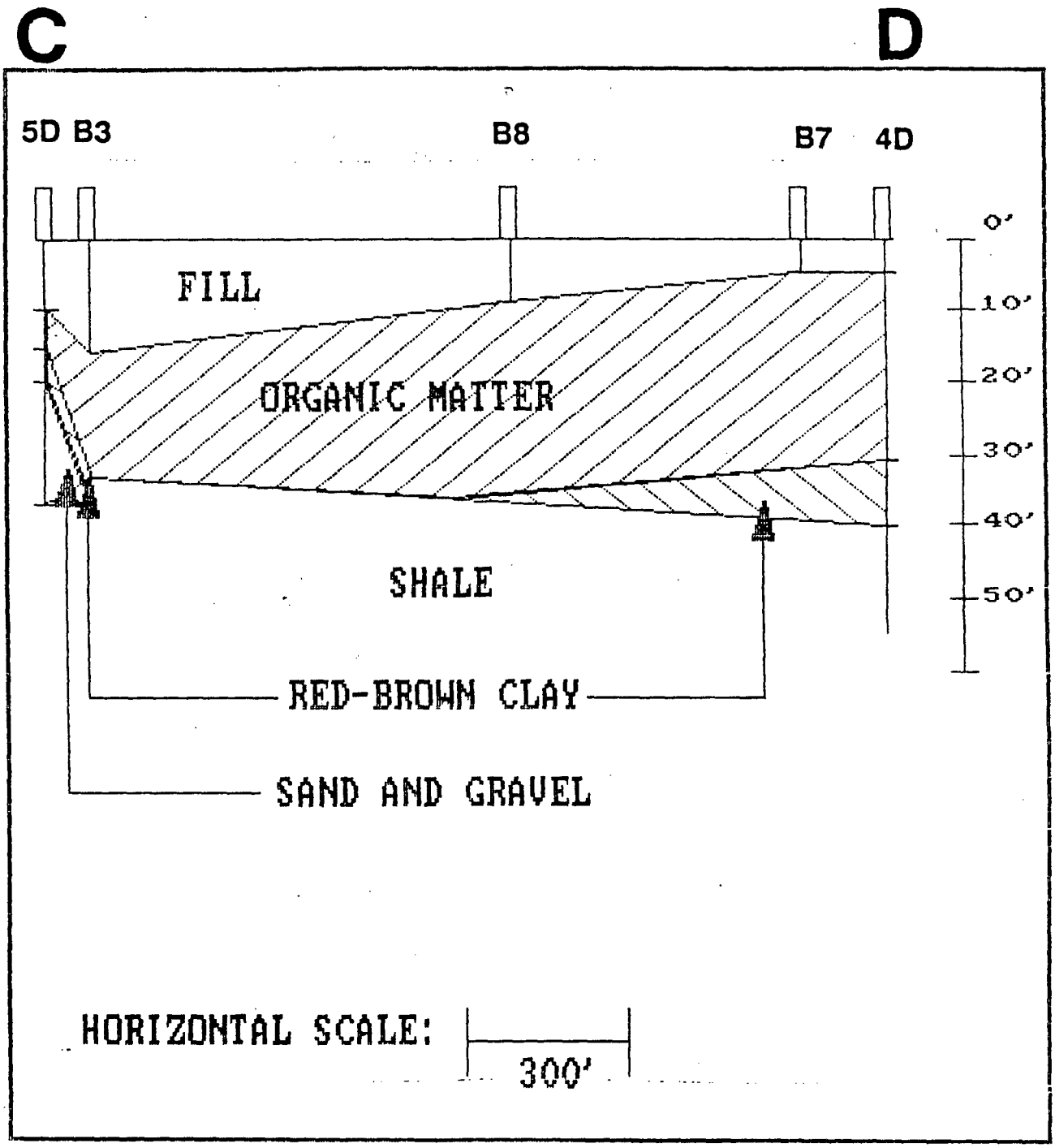

Figure 5. Geologic cross-section along line C-D shown in Figure 3 for the Carteret Impoundments.

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3.4 Aquifer Properties

Disko (1982) completed permeability tests on subsurface samples, and reported hydraulic conductivities ranging from 2 x 10^{-6} to 3.8 x 10^{-3} cm/sec (0.006 to 10 ft/d) for the clay, sand, and gravel materials he encountered in the upper 24 feet underlying the impoundments. Effective porosity for the shallow aquifer material is estimated to average 20% for sands and gravels and 5% for clays and clayey silts (Walton, 1970).

3.5 Groundwater Flow

Water levels were measured in the 10 monitoring wells prior to evacuation and sampling for each quarterly monitoring event. The measured depth to water and casing elevations are provided in Appendix A. The water level elevations were calculated, and generalized groundwater contour maps were constructed for both the shallow and deep zones and are presented in Figures 6 and 7. Estimated water table elevations determined by HYDROSYSTEMS while installing the hand-augered borings in 1986 were also used to prepare the contour map of the shallow zone. These data are for the time prior to the vegetation project.

The contour map presented in Figure 6 indicates that, at that time (1986-87), shallow groundwater was mounded beneath the impoundments, and flowed radially outward from the impoundments toward the Rahway River, Deep Creek, and Cross Creek. The water table mound centered on impoundments 4, 5, and 6, which are the highest topographically. The mound had an elevation approximately 10 feet above mean sea level beneath these impoundments. The generalized contour map of groundwater elevations prepared for the deep zone indicates a groundwater flow towards the north and northeast (See Figure 7). Interpretation of the water level data for the deeper zone supports the conclusion based on stratigraphic evidence (see Section 3.3) that the shallow and deep zones are separated hydraulically by the red-brown clay over most of the area (except at MW-5D where the clay was not found).

Figure 8 shows a generalized north-south cross-section through the impoundments. The regional groundwater flow in the Brunswick Formation is seaward and upward toward the northeast with discharge to surface water including, potentially, the lower Rahway River, Arthur Kill, and, eventually, the Atlantic Ocean. The groundwater originating within the impoundments moves radially outward and discharges into the surface water surrounding the impoundments, i.e., the Rahway River, Cross Creek, and Deep Creek.

Groundwater originating within the impoundments is further isolated from the regional groundwater by a groundwater density contrast. The mounded groundwater within the impoundments is less dense, with a specific conductivity of about 1,000 umhos/cm, or a total dissolved solids (TDS) of about 600 mg/l (Hem, 1970, p. 100), than the underlying groundwater in the shallow and deep zones with a TDS ranging from about 15,000 to 25,000 mg/l. Therefore, the less dense groundwater within the impoundments tends to "float" on top of the underlying brackish groundwater.

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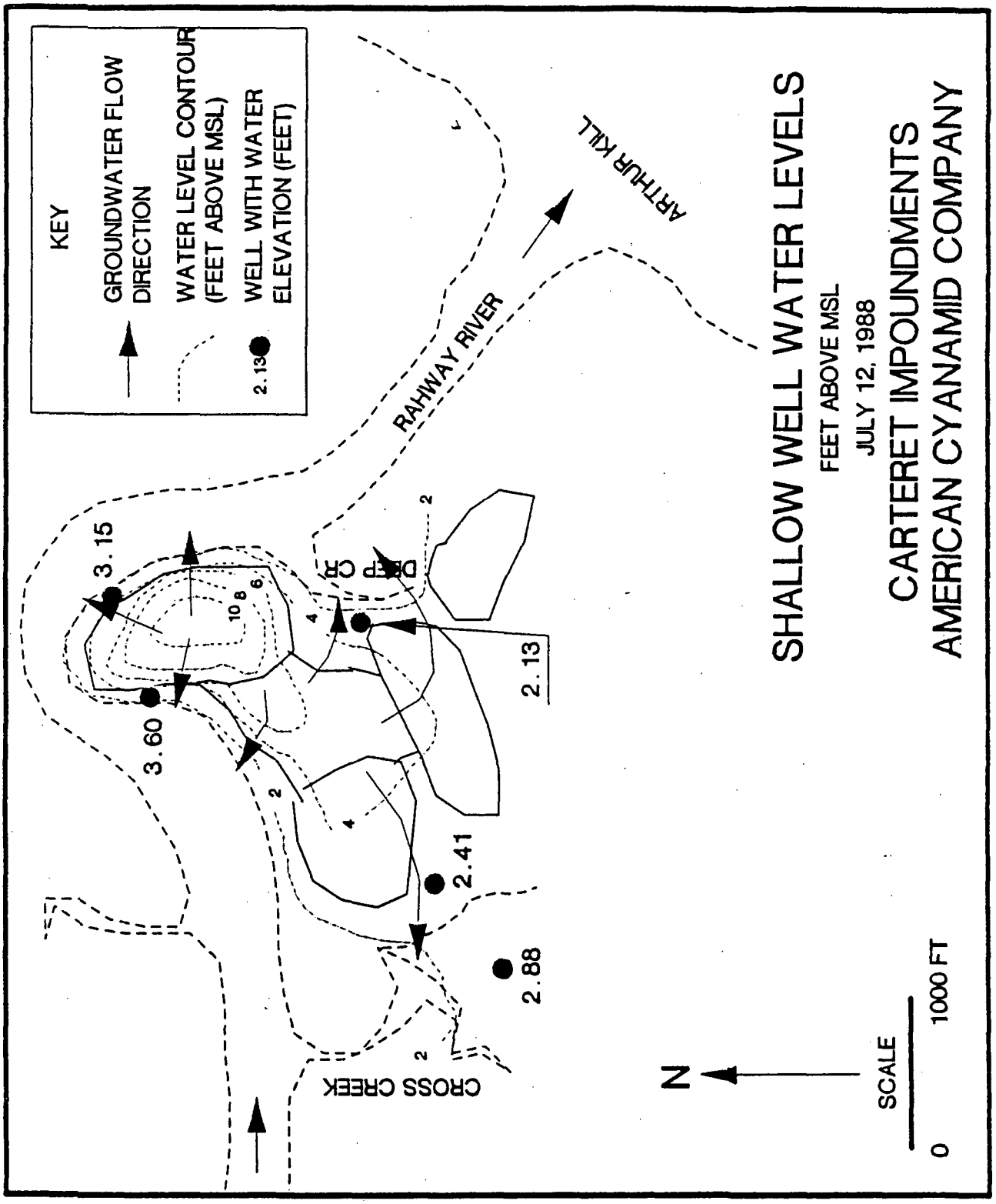

Figure 6. Generalized water table elevation contour map for the shallow aquifer showing groundwater flow directions (arrows).

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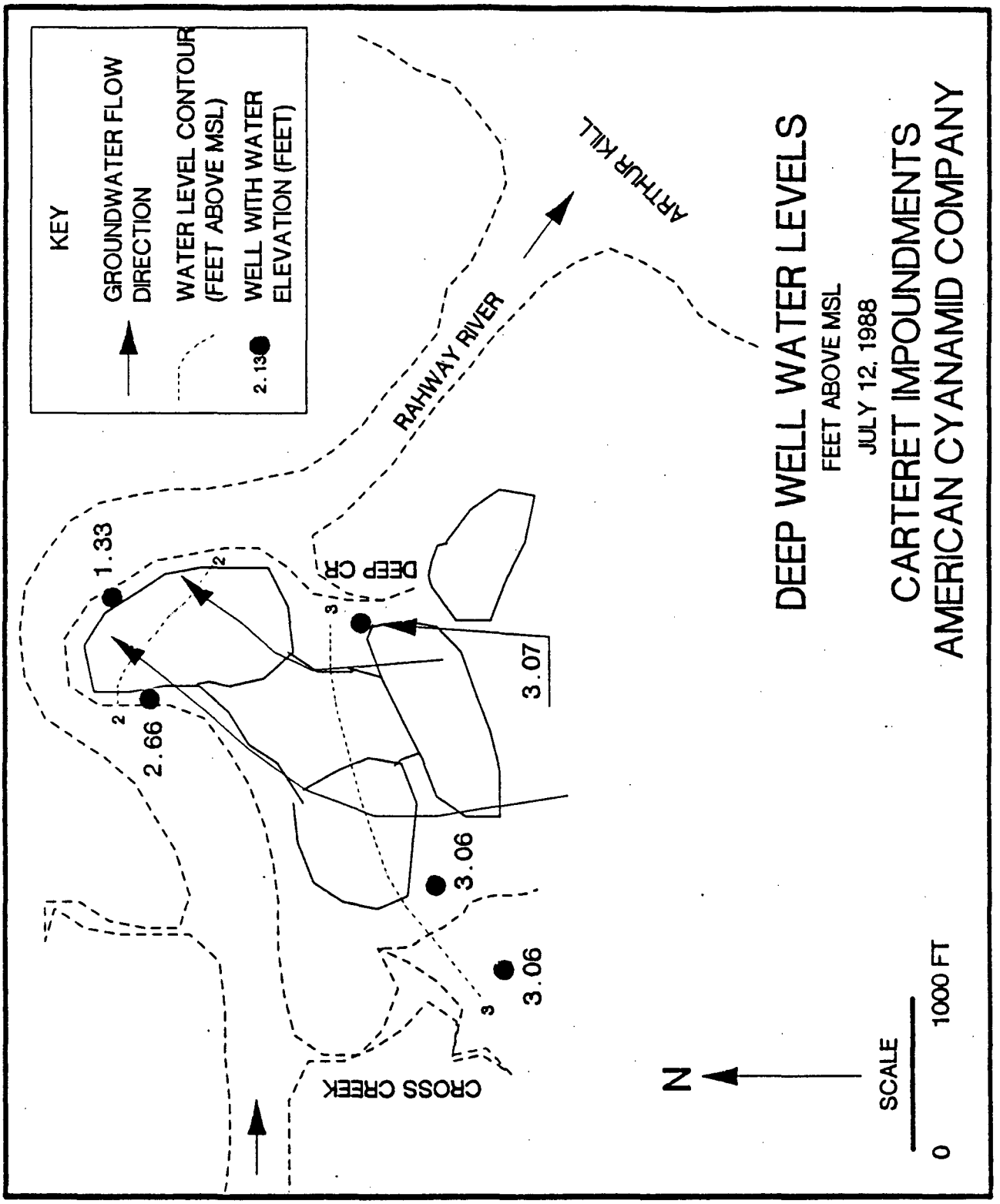

Figure 7. Generalized water table elevation contour map for the deep aquifer showing groundwater flow directions (arrows).

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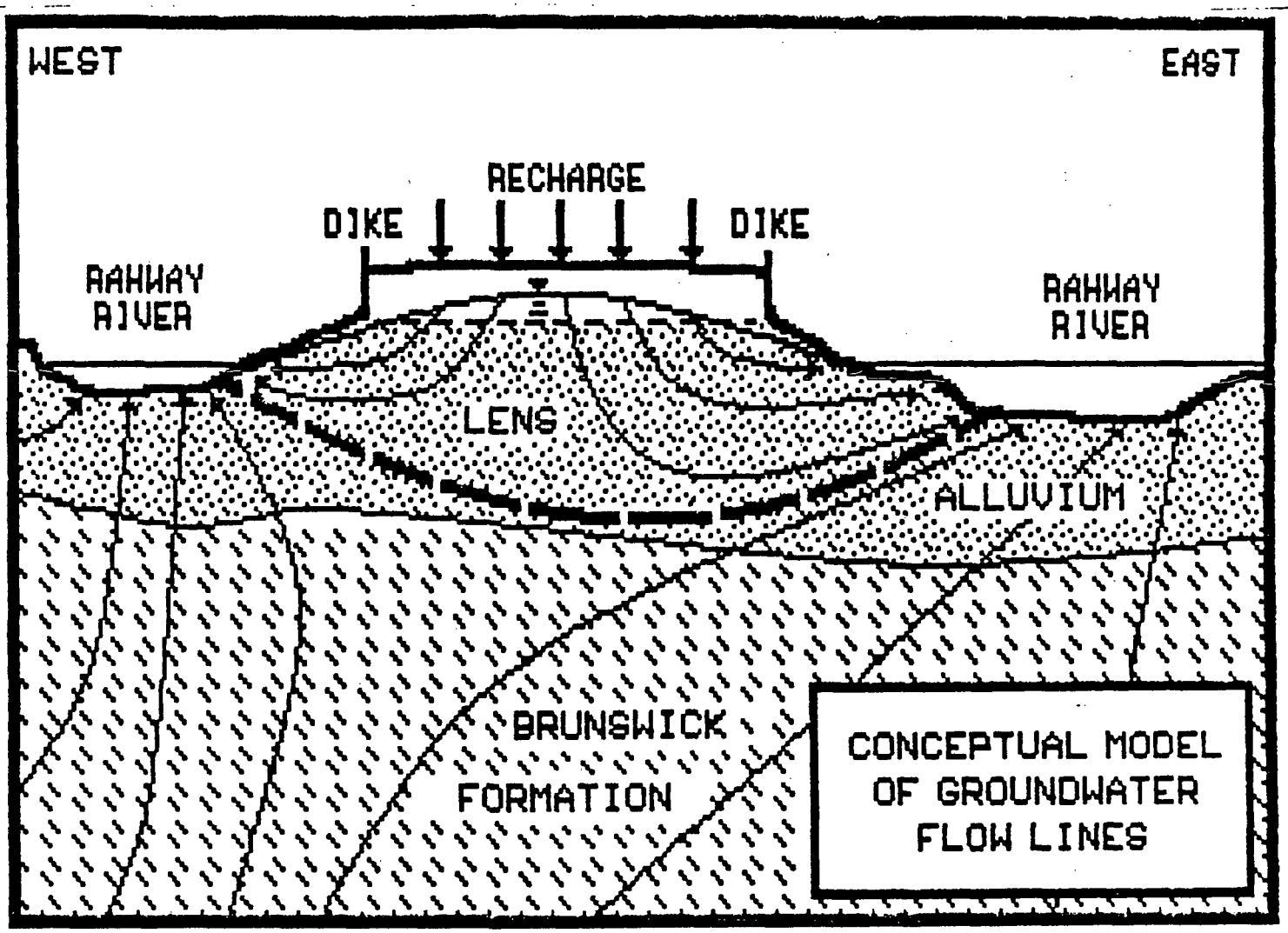

Figure 8. Generalized east-west cross-section beneath the Carteret impoundments showing the conceptualized groundwater flow system with a shallow flow system created by the mounded water table within the impoundments separated from a deeper groundwater flow system.

A23

The combined effects of the site being in a groundwater discharge area, the presence of the confining clay, and the high density contrast between the leachate and groundwater results in the lateral and vertical hydraulic isolation of groundwater flowing from the impoundments.

3.6 Groundwater Flow Velocity

The velocity of groundwater flow out of the water table mound underlying the impoundments is estimated from the equation:

$$v = Ki/n$$

where v is groundwater pore velocity, K is the hydraulic conductivity, i is the gradient, and n is the effective porosity.

The maximum hydraulic gradient for the shallow aquifer is on the order of 10 feet over 1,000 feet, or 0.01 (measured on the water table contour map of Figure 6). For the sands and gravels, assuming a K of 3.8×10^{-3} cm/sec (10 ft/d) and an effective porosity of 0.1, groundwater velocity would be on the order of 0.33 meters per day (about 1.0 ft/d). For the clays, assuming a K of 2×10^{-6} cm/sec (0.006 ft/d) and an effective porosity of 0.05, groundwater velocity would be on the order of 0.03 meters per day (about 0.1 ft/d)

3.7 Hydrologic Budget

A hydrologic budget is used to estimate recharge to the groundwater through the impoundments by the following general equation:

Recharge = Precipitation - Runoff - Evapotranspiration

This equation is solved on a monthly basis using a modification of the U.S. Environmental Protection Agency method presented by Fenn et al. (1975) in which monthly runoff is estimated using the Soil Conservation Service runoff curve number method (Bureau of Reclamation, 1978), monthly evapotranspiration (ET) is estimated using the Thornthwaite method (described in Rosenberg et al., 1968), and monthly precipitation is obtained from climatic data.

A Lotus 1-2-3 spreadsheet program developed for this equation is presented in Appendix C.

Input requirements for the hydrologic budget analysis are:

Soil type (assumed to be similar to a silt),

Vegetation cover (two cases, 5% and 100% to represent before and after the vegetation project),

Surface area (100 acres),

Monthly precipitation,

Monthly mean temperature, and

Estimated monthly average antecedent

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moisture content for upper one foot of soil (sludge in this case).

Soil type, vegetation cover, and antecedent moisture content are used to select the appropriate runoff curve number for each month. The estimated monthly runoff is then estimated based on the monthly curve number and the monthly precipitation as a percent of precipitation.

The results of this analysis provide the following estimated hydrologic budget for the Carteret impoundments:

Actual ET = 22 inches per year,

Runoff = 9 inches per year, and

Groundwater recharge (i.e., leachate production) =

17 inches per year for the 5% vegetated surface.

11 inches per year for the 100% vegetated surface.

Over the 100 acres of impoundment area, for the pre-vegetation case with 5% vegetated cover, 17 inches per year of recharge (i.e., leachate production), or 17,000 cubic feet per day (cfd), is predicted. For the post-vegetation case with 100% vegetated cover, 11 inches per year of recharge, or 11,000 cfd, is predicted.

4.0 GROUNDWATER EVALUATION

4.1 Groundwater Quality - Inorganic Constituents

Six sets of quarterly groundwater samples have been collected from the 10 monitoring wells from July 1987 through January 1989, although results are available only through the October 1988 quarterly event. Inorganic parameters including total and free cyanide and some metals are analyzed quarterly. Priority pollutant organics (volatiles, acid extractables, base-neutrals, and pesticides/PCBs) are analyzed annually. The full set of analytical data has been submitted to the NJDEP previously. Inorganic chemical data for each monitoring well are summarized in Tables 4 through 14. These data are compared to the State's GW/3 groundwater standards (second column in each table) for illustrative purposes. It should be emphasized that the natural TDS levels exceed the GW/3 criteria of 500-10,000 mg/l. Therefore, the local groundwater is more properly classified as GW/4, for which numerical standards are set on a case-by-case basis.

The data for the background wells, MW-1S and MW-1D, indicate no significant contamination migrating towards the background well location from the impoundments. The potential contaminants from the impounds, i.e., total cyanide, sodium, and sulfate, are at low, near background concentrations. The average total cyanide in MW-1S is below the GW/3 standard and below the detection limit in MW-1D samples. Sodium concentrations averaged 2,787 mg/l in MW-1S and 2,365 mg/l in MW-1D. Sulfate concentrations averaged 578 mg/l in MW-1S and 818 mg/l in MW-1D.

Iron, manganese, and ammonia concentrations are elevated above the GW/3 standards in the background well. Iron concentrations averaged 287 mg/l in MW-1S and 43 mg/l in MW-1D. Manganese

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concentrations averaged 7.2 mg/l in MW-1S and 6.7 mg/l in MW-1D. Ammonia was found to average 7.3 mg/l in the shallow well, and 0.8 mg/l in the deeper well. High iron and manganese concentrations are expected to occur naturally under the reducing conditions established in the highly organic shallow aquifer. Hem (1970, p. 124) states that strata containing oxidized iron minerals and organic debris may provide an environment favorable for reduction of ferric iron (the insoluble form) to ferrous iron (the soluble form) and give rise to rather high concentrations of dissolved iron. This scenario is supported by the considerable effervescence observed in the groundwater produced during development of MW-1S, which was probably caused by methane gas evolved by anaerobic bacteria living in the highly organic, oxygen deficient environment of the shallow aquifer.

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TABLE 4. Summary of analyses for major inorganic constituents in groundwater samples for MW-1S.

PARAMETER	GW/3 STANDARD	DETECTION LIMIT	DATE 7/31/87	10/20/87	1/19/88	4/12/88	7/12/88	10/14/88	AVERAGE
ARSENIC	0.05	0.01	0.024		BDL				0.02
BARIUM	1.0		0.656		0.494				0.575
CADMIUM	0.01	0.004	BDL		BDL				BDL
CHLORIDE	BACKGROUND	1.0	5830.	5780.	6530.	4400.	4350.	5250.	5357.
CHROMIUM, +6	0.05	0.026	BDL		BDL			0.005	
COPPER	1.0	0.01	BDL	0.019	BDL	BDL	BDL	BDL	BDL
CYANIDE-TOTAL	0.2	0.025	0.348	0.059	0.057	0.103	0.178	0.216	0.2
CYANIDE-FREE		0.05		BDL	BDL	BDL	BDL	BDL	BDL
FLUORIDE		0.1	2.0		2.9				2.45
IRON	0.3	0.15	113.	717.	610.	62.1	101.	120.	287.
LEAD	0.05	0.005	BDL	0.03	BDL	BDL	0.0012	BDL	BDL
	0.005								
MANGANESE	0.05	0.005	3.5	14.	10.9	4.76	5.33	4.74	7.2
MERCURY	0.002	0.0002	BDL	BDL	BDL	BDL	BDL	BDL	BDL
NICKEL		0.014	0.015						0.015
NITROGEN-AMMONIA	0.5	0.2	5.4	6.1	9.7	6.80	7.3	8.4	7.28
NITROGEN-NITRATE	10.0	1.0	0.2	BDL	INT	INT	BDL	BDL	0.05
pH	5-9		5.89	5.9	5.77	6.46	6.07	6.18	6.04
PHENOLS-TOTAL	3.5	0.05	0.59	1.98	0.44	INT	INT	0.88	0.89
SELENIUM	0.01	0.005	BDL		BDL				BDL
SILVER	0.05	0.023	BDL		BDL				BDL
SODIUM	BACKGROUND	0.5	2930.	4180.	3190.	2220.	2160.	2040.	2787.
SULFATE	BACKGROUND	5.0	310.	760.	990.	200.	590.	620.	578.
TDS	BACKGROUND	10.0	11900.	16600.	13900.	7900.	8800.	9490.	9800.
TOC		1.0	329.	762.5	226.	114.	397.	444.8	379.
TOX		0.5	1.36	1.75	5.52	1.3	0.372	0.975	1.7
ZINC	5.0	0.02	0.036	0.12	0.093	0.06	BDL	0.18	0.082

NOTE - CONCENTRATIONS IN MG/L.
BLANK SPACE = NOT ANALYZED
BDL = BELOW DETECTION LIMIT
INT = INTERFERENCE, INDETERMINANT

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TABLE 5. *Summary of analyses for major inorganic constituents in groundwater samples for MW-1D.*

PARAMETER	GW/3 STANDARD	DETECTION LIMIT	DATE 7/31/87	10/20/87	1/19/88	4/12/88	7/12/88	10/14/88	AVERAGE
ARSENIC	0.05	0.01	BDL		BDL				BDL
BARIUM	1.0		0.07		0.0940				0.082
CADMIUM	0.01	0.004	BDL		BDL				BDL
CHLORIDE	BACKGROUND	1.0	9800.	9260.	9400.	9290.	9980.	9930.	9610.
CHROMIUM, +6	0.05	0.026	BDL		BDL				BDL
COPPER	1.0	0.01	BDL	0.014	BDL	BDL	BDL	BDL	BDL
CYANIDE-TOTAL	0.2	0.025	BDL	BDL	BDL	BDL	BDL	BDL	BDL
CYANIDE-FREE		0.05		0.025	BDL	BDL	BDL	BDL	BDL
FLUORIDE		0.1	BDL		0.1				0.05
IRON	0.3	0.15	53.4	50.9	48.9	54.7	40.2	8.8	42.9
LEAD	0.05	0.005	BDL	0.0085	BDL	BDL	BDL	BDL	BDL
MANGANESE	0.05	0.005	6.81	7.26	6.76	7.23	6.49	5.78	6.72
MERCURY	0.002	0.0002	BDL	BDL	BDL	BDL	BDL	BDL	BDL
NICKEL		0.014	BDL						BDL
NITROGEN-AMMONIA	0.5	0.2	BDL	1.1		1.2	1.1	0.7	0.82
NITROGEN-NITRATE	10.0	1.0	BDL	BDL	BDL	BDL	BDL		BDL
pH	5-9		6.6	6.03	6.12	6.36	6.31	6.64	6.34
PHENOLS-TOTAL	3.5	0.05	BDL	INT	INT	INT	BDL		BDL
SELENIUM	0.01	0.005	BDL		BDL				BDL
SILVER	0.05	0.023	BDL		BDL				BDL
SODIUM	BACKGROUND	0.5	2140.	2450.	2300.	2400.	2360.	2540.	2365.
SULFATE	BACKGROUND	5.0	800.	790.	800.	810.	840.	870.	818.
TDS	BACKGROUND	10.0	26600.	24900.	19700.	20600.		23700.	23100.
TOC		1.0	22.2	5.4	6.3	3.1	5.4	3.0	8.8
TOX		0.5	2.42	1.79	1.39	3.77	6.33	2.50	3.03
ZINC	5.0	0.02	0.037	0.048	0.037	0.087	BDL	0.068	0.046

NOTE - CONCENTRATIONS IN MG/L.
BLANK SPACE = NOT ANALYZED
BDL = BELOW DETECTION LIMIT
INT = INTERFERENCE, INDETERMINANT

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TABLE 6. Summary of analyses for major inorganic constituents in groundwater samples for MW-2S.

PARAMETER	GW/3 STANDARD	DETECTION LIMIT	DATE 7/31/87	10/20/87	1/19/88	4/12/88	7/12/88	10/14/88	AVERAGE
ARSENIC	0.05	0.01	0.04		0.09				0.065
BARIUM	1.0		0.034		0.018				0.026
CADMIUM	0.01	0.004	BDL		BDL				BDL
CHLORIDE	BACKGROUND	1.0	9460.	9770.	8110.	7890.	9160.	8740.	8855.
CHROMIUM, +6	0.05	0.026	BDL		BDL				BDL
COPPER	1.0	0.01	BDL	0.012	BDL	BDL	BDL	BDL	BDL
CYANIDE-TOTAL	0.2	0.025	17.1	2.	41.		34.3	31.5	25.2
CYANIDE-FREE		0.05		0.034	BDL		BDL	0.2	0.058
FLUORIDE		0.1	4.		9.3				6.65
IRON	0.3	0.15	0.64	2.1	4.2	1.9	2.7	5.	2.76
LEAD	0.05	0.005	BDL	BDL	BDL	BDL	BDL	BDL	BDL
MANGANESE	0.05	0.005	0.6	0.35	0.02	0.015	0.11	0.034	0.13
MERCURY	0.002	0.0002	BDL	BDL	BDL	BDL	BDL	BDL	BDL
NICKEL		0.014	BDL						BDL
NITROGEN-AMMONIA	0.5	0.2	120.	170.		180.	170.	180.	164.
NITROGEN-NITRATE	10.0	1.0	0.2	BDL	BDL	BDL	BDL	BDL	BDL
pH	5-9		6.9	6.6	7.36	7.74	7.07	7.43	7.18
PHENOLS-TOTAL	3.5	0.05	BDL	1.09	0.354	BDL	BDL	BDL	0.241
SELENIUM	0.01	0.005	BDL		BDL				BDL
SILVER	0.05	0.023	BDL		BDL				BDL
SODIUM	BACKGROUND	0.5	5370.	5840.	4690.	4650.	5500.	5360.	5235.
SULFATE	BACKGROUND	5.0	2890.	3780.	12500.	2670.	2580.	3530.	4658.
TDS	BACKGROUND	10.0	20700.	22900.	18100.	17400.		20200.	19860.
TOC		1.0	29.1	18.3	25.	25.	23.7	44.2	27.5
TOX		0.5	1.77	2.46	7.82		2.88	2.95	3.58
ZINC	5.0	0.02	BDL	0.024	BDL	BDL	BDL	0.031	0.014

NOTE - CONCENTRATIONS IN MG/L.
BLANK SPACE = NOT ANALYZED
BDL = BELOW DETECTION LIMIT
INT = INTERFERENCE, INDETERMINANT

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TABLE 7. Summary of analyses for major inorganic constituents in groundwater samples for MW-2D.

PARAMETER	GW/3 STANDARD	DETECTION LIMIT	DATE 7/31/87	10/20/87	1/19/88	4/12/88	7/12/88	10/14/88	AVERAGE
ARSENIC	0.05	0.01	BDL		BDL				BDL
BARIUM	1.0		0.039		0.038				0.038
CADMIUM	0.01	0.004	BDL		BDL				BDL
CHLORIDE	BACKGROUND	1.0	10100.	11000.	10900.	10000.	7470.	6950.	9403.
CHROMIUM, +6	0.05	0.026	BDL		BDL				BDL
COPPER	1.0	0.01	BDL	0.012	BDL	0.013	BDL	BDL	BDL
CYANIDE-TOTAL	0.2	0.025	1.16	0.071	BDL	3.3	7.6	2.43	2.43
CYANIDE-FREE		0.05		BDL	BDL	0.069	BDL	BDL	BDL
FLUORIDE		0.1	0.7		BDL				0.35
IRON	0.3	0.15	8.	17.	14.	1.4	BDL	1.2	6.9
LEAD	0.05	0.005	BDL	0.018	BDL	BDL	BDL	BDL	BDL
MANGANESE	0.05	0.005	1.42	1.46	1.04	1.17	1.37	1.79	1.38
MERCURY	0.002	0.0002	BDL	BDL	BDL	BDL	BDL	BDL	BDL
NICKEL		0.014	BDL						BDL
NITROGEN-AMMONIA	0.5	0.2	5.	2.8	2.8	5.5	51.	30.	16.2
NITROGEN-NITRATE	10.0	1.0	BDL	BDL	BDL	BDL	BDL	BDL	BDL
pH	5-9			6.27	6.44		6.59		6.43
PHENOLS-TOTAL	3.5	0.05	0.25	INT	INT	INT	BDL	BDL	0.083
SELENIUM	0.01	0.005	BDL		BDL				BDL
SILVER	0.05	0.023	BDL		BDL				BDL
SODIUM	BACKGROUND	0.5	4900.	5450.	5280.	5060.	3860.	4750.	4883.
SULFATE	BACKGROUND	5.0	1000.	940.	880.	1070.	1530.	1310.	1122.
TDS	BACKGROUND	10.0	21900.	22900.	19420.	18900.		19600.	20544.
TOC		1.0	12.6	5.5	6.	8.4	17.5	14.1	10.7
TOX		0.5	1.46	0.695	5.81	0.426	3.45	2.15	2.33
ZINC	5.0	0.02	BDL	0.028	BDL	0.10	BDL	0.037	0.028

NOTE - CONCENTRATIONS IN MG/L.
BLANK SPACE = NOT ANALYZED
BDL = BELOW DETECTION LIMIT
INT = INTERFERENCE, INDETERMINANT

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TABLE 8. Summary of analyses for major inorganic constituents in groundwater samples for MW-3S.

PARAMETER	GW/3 STANDARD	DETECTION LIMIT	DATE 7/31/87	10/20/87	1/19/88	4/12/88	7/12/88	10/14/88	AVERAGE
ARSENIC	0.05	0.01	BDL		BDL				BDL
BARIUM	1.0		0.16		0.16				0.16
CADMIUM	0.01	0.004	BDL		BDL				BDL
CHLORIDE	BACKGROUND	1.0	1180.	12000.	12500.	6230.	10300.	11130.	8890.
CHROMIUM, +6	0.05	0.026	BDL		BDL				BDL
COPPER	1.0	0.01	BDL	0.01	BDL	BDL	BDL	BDL	BDL
CYANIDE-TOTAL	0.2	0.025	BDL	BDL	BDL	0.422	0.458	BDL	0.147
CYANIDE-FREE		0.05		BDL	BDL	BDL	BDL	BDL	BDL
FLUORIDE		0.1	0.1		0.6				0.35
IRON	0.3	0.15	BDL	0.41	0.22	0.59	BDL	0.17	0.23
LEAD	0.05	0.005	BDL	0.017	BDL	BDL	BDL		BDL
MANGANESE	0.05	0.005	0.42	0.073	0.05	0.612	0.32	0.021	0.12
MERCURY	0.002	0.0002	BDL	BDL	BDL	BDL	BDL	BDL	BDL
NICKEL		0.014	BDL						BDL
NITROGEN-AMMONIA	0.5	0.2	16.	36.	42.	21.	27.	30.	28.6
NITROGEN-NITRATE	10.0	1.0	BDL	BDL	BDL	INT	BDL	BDL	BDL
pH	5-9		6.63	6.20	6.44	6.67	6.48	6.69	6.52
PHENOLS-TOTAL	3.5	0.05	0.505	INT	INT	INT	INT	BDL	0.25
SELENIUM	0.01	0.005	BDL		BDL				BDL
SILVER	0.05	0.023	BDL		BDL				BDL
SODIUM	BACKGROUND	0.5	5550.	6120.	6120.	4770.	5020.	5870.	5575.
SULFATE	BACKGROUND	5.0	110.	290.	44.	890.	400.	67.	300.
TDS	BACKGROUND	10.0	20900.	22200.	20400.	13100.	19000.	21600.	19533.
TOC		1.0	69.	43.	38.3	36.7	52.4	71.4	51.8
TOX		0.5	2.51	0.37	2.33	1.74	4.52	4.4	3.0
ZINC	5.0	0.02	0.025	BDL	BDL	BDL	BDL	BDL	BDL

NOTE - CONCENTRATIONS IN MG/L.
BLANK SPACE = NOT ANALYZED
BDL = BELOW DETECTION LIMIT
INT = INTERFERENCE, INDETERMINANT

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TABLE 9. Summary of analyses for major inorganic constituents in groundwater samples for MW-3D.

PARAMETER	GW/3 STANDARD	DETECTION LIMIT	DATE 7/31/87	10/20/87	1/19/88	4/12/88	7/12/88	10/14/88	AVERAGE
ARSENIC	0.05	0.01	BDL		BDL				BDL
BARIUM	1.0		0.093		0.080				0.087
CADMIUM	0.01	0.004	0.0047		BDL				BDL
CHLORIDE	BACKGROUND	1.0	7750.	11100.	11300.	12200.	10500.	11960.	10802.
CHROMIUM, +6	0.05	0.026	BDL		BDL				BDL
COPPER	1.0	0.01	BDL	0.01	BDL	BDL	BDL	BDL	BDL
CYANIDE-TOTAL	0.2	0.025	0.28	BDL	BDL	0.03	BDL	0.788	0.141
CYANIDE-FREE		0.05		BDL	BDL	BDL	BDL	BDL	BDL
FLUORIDE		0.1	1.2		0.6				0.9
IRON	0.3	0.15	1.4	17.	17.9	33.8	21.	9.6	16.8
LEAD	0.05	0.005	BDL	0.02	BDL	BDL	BDL	BDL	BDL
MANGANESE	0.05	0.005	0.802	0.915	0.765	0.817	0.64	0.96	0.822
MERCURY	0.002	0.0002	BDL	BDL	BDL	BDL	BDL	BDL	BDL
NICKEL		0.014	0.026						0.026
NITROGEN-AMMONIA	0.5	0.2	2.2	4.5	4.9	5.4	5.7	23.	7.62
NITROGEN-NITRATE	10.0	1.0	BDL	BDL	BDL	INT	BDL	BDL	BDL
pH	5-9		6.80	6.82	6.48	6.6	6.57	6.67	6.66
PHENOLS-TOTAL	3.5	0.05	BDL	INT	INT	INT	BDL	BDL	BDL
SELENIUM	0.01	0.005	BDL		BDL				BDL
SILVER	0.05	0.023	BDL		BDL				BDL
SODIUM	BACKGROUND	0.5	3550.	5130.	5200.	5180.	5220.	5350.	4938.
SULFATE	BACKGROUND	5.0	940.	1090.	1090.	1150.	1160.	1650.	1180.
TDS	BACKGROUND	10.0	15100.	24800.	20900.	21900.		23400.	21220.
TOC		1.0	56.9	8.3	12.0	8.6	15.9	32.8	22.4
TOX		0.5	0.505	0.610	2.67	0.95	7.22	5.95	2.98
ZINC	5.0	0.02	0.038	0.025	0.028	BDL	BDL	0.066	0.026

NOTE - CONCENTRATIONS IN MG/L.
BLANK SPACE = NOT ANALYZED
BDL = BELOW DETECTION LIMIT
INT = INTERFERENCE, INDETERMINANT

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TABLE 10. Summary of analyses for major inorganic constituents in groundwater samples for MW-4S.

PARAMETER	GW/3 STANDARD	DETECTION LIMIT	DATE 7/31/87	10/20/87	1/19/88	4/12/88	7/12/88	10/14/88	AVERAGE
ARSENIC	0.05	0.01	0.033		BDL				0.016
BARIUM	1.0		0.026		0.028				0.027
CADMIUM	0.01	0.004	BDL		BDL				BDL
CHLORIDE	BACKGROUND	1.0	16300.	16100.	17100.	15300.	14900.	13050.	15458.
CHROMIUM, +6	0.05	0.026	BDL		BDL				BDL
COPPER	1.0	0.01	BDL	0.013	BDL	BDL	0.027	0.16	0.033
CYANIDE-TOTAL	0.2	0.025	106.	90.	100.	56.	112.	157.	103.5
CYANIDE-FREE		0.05		0.29	BDL	0.17	0.19	BDL	0.13
FLUORIDE		0.1	3.9		5.4				4.65
IRON	0.3	0.15	14.	17.	8.1	8.6	7.4	120.	29.2
LEAD	0.05	0.005	BDL	0.014	BDL	BDL	BDL	BDL	BDL
MANGANESE	0.05	0.005	BDL	0.011	BDL	BDL	BDL	0.012	BDL
MERCURY	0.002	0.0002	BDL	BDL	BDL	BDL	BDL	BDL	BDL
NICKEL		0.014	BDL						BDL
NITROGEN-AMMONIA	0.5	0.2	400.	510.	410.	380.	400.	360.	410.
NITROGEN-NITRATE	10.0	1.0	BDL	BDL	BDL	INT	BDL	BDL	BDL
pH	5-9		8.72	8.87	8.89	8.98	8.6	8.25	8.72
PHENOLS-TOTAL	3.5	0.05	BDL	BDL	INT	INT	INT	BDL	BDL
SELENIUM	0.01	0.005	BDL		BDL				BDL
SILVER	0.05	0.023	BDL		BDL				BDL
SODIUM	BACKGROUND	0.5	8200.	8710.	9140.	8620.	8190.	7790.	8442.
SULFATE	BACKGROUND	5.0	3120.	3290.	3240.	2850.	2650.	4800.	3325.
TDS	BACKGROUND	10.0	28100.	29800.	27900.	27100.	27000.	27400.	27883.
TOC		1.0	119.	179.	127.	144.	133.9	116.1	136.5
TOX		0.5	1.4	0.49	3.02	2.28		4.9	2.42
ZINC	5.0	0.02	BDL	0.035	BDL	0.023	BDL	0.051	0.018

NOTE - CONCENTRATIONS IN MG/L.
BLANK SPACE = NOT ANALYZED
BDL = BELOW DETECTION LIMIT
INT = INTERFERENCE, INDETERMINANT

A33

TABLE 11. Summary of analyses for major inorganic constituents in groundwater samples for MW-4D.

PARAMETER	GW/3 STANDARD	DETECTION LIMIT	DATE 7/31/87	10/20/87	1/19/88	4/12/88	7/12/88	10/14/88	AVERAGE
ARSENIC	0.05	0.01	BDL		BDL				BDL
BARIUM	1.0		0.056		0.062				0.059
CADMIUM	0.01	0.004	BDL		BDL				BDL
CHLORIDE	BACKGROUND	1.0	11600.	11600.	11300.	12200.	12300.	12200.	11867.
CHROMIUM, +6	0.05	0.026	BDL		BDL				BDL
COPPER	1.0	0.01	BDL	0.012	BDL	BDL	BDL	BDL	BDL
CYANIDE-TOTAL	0.2	0.025	0.7	0.18	0.535	0.302	0.363	0.632	0.54
CYANIDE-FREE		0.05		BDL	BDL	BDL	BDL	BDL	BDL
FLUORIDE		0.1	0.4		0.5				0.45
IRON	0.3	0.15	29.1	32.	20.	57.8	6.2	23.	28.02
LEAD	0.05	0.005	BDL	BDL	BDL	BDL	BDL	BDL	BDL
MANGANESE	0.05	0.005	1.47	1.83	1.41	1.46	1.19	1.08	1.4
MERCURY	0.002	0.0002	BDL	BDL	BDL	BDL	BDL	BDL	BDL
NICKEL		0.014	BDL						BDL
NITROGEN-AMMONIA	0.5	0.2	3.4	5.0	9.0	5.1	6.1	5.3	5.6
NITROGEN-NITRATE	10.0	1.0	BDL	BDL	BDL	INT	BDL	BDL	BDL
pH	5-9		6.40	6.40	6.48	6.57	6.61	6.55	6.50
PHENOLS-TOTAL	3.5	0.05	BDL	INT	INT	INT	BDL	BDL	BDL
SELENIUM	0.01	0.005	BDL		BDL				BDL
SILVER	0.05	0.023	BDL		BDL				BDL
SODIUM	BACKGROUND	0.5	4140.	4290.	4410.	8970.	4990.	4730.	5255.
SULFATE	BACKGROUND	5.0	1180.	1160.	1090.	970.	1030.	1050.	1080.
TDS	BACKGROUND	10.0	25100.	26300.	22000.	24100.	25000.	25700.	24700.
TOC		1.0	21.4	12.2	9.3	9.7	14.0	12.1	13.1
TOX		0.5	1.56	0.57	3.21	1.06	9.98	0.85	2.87
ZINC	5.0	0.02	BDL	0.047	0.045	0.020	BDL	0.041	0.026

NOTE - CONCENTRATIONS IN MG/L.
BLANK SPACE = NOT ANALYZED
BDL = BELOW DETECTION LIMIT
INT = INTERFERENCE, INDETERMINANT

A34

TABLE 12. Summary of analyses for major inorganic constituents in groundwater samples for MW-5S.

PARAMETER	GW/3 STANDARD	DETECTION LIMIT	DATE 7/31/87	10/20/87	1/19/88	4/12/88	7/12/88	10/14/88	AVERAGE
ARSENIC	0.05	0.01	0.016		BDL				BDL
BARIUM	1.0		0.287		0.26				0.27
CADMIUM	0.01	0.004	BDL		BDL				BDL
CHLORIDE	BACKGROUND	1.0	9790.	14500.	14900.	14500.	14100.	14470.	13710.
CHROMIUM, +6	0.05	0.026	BDL		BDL				BDL
COPPER	1.0	0.01	BDL	0.012	BDL	BDL	BDL	BDL	BDL
CYANIDE-TOTAL	0.2	0.025	4.05	BDL	6.1	6.96	4.76	3.4	4.21
CYANIDE-FREE		0.05		BDL	BDL	0.047	BDL	BDL	BDL
FLUORIDE		0.1	0.5		0.3				0.4
IRON	0.3	0.15	0.93	1.4	1.5	1.6	1.1	0.89	1.24
LEAD	0.05	0.005	BDL	BDL	BDL	BDL	BDL	BDL	BDL
MANGANESE	0.05	0.005	0.33		0.033	0.025	0.0094	0.014	0.082
MERCURY	0.002	0.0002	BDL	BDL	BDL	BDL	BDL	BDL	BDL
NICKEL		0.014	BDL						BDL
NITROGEN-AMMONIA	0.5	0.2	23.	31.	30.	28.	27.	21.	26.7
NITROGEN-NITRATE	10.0	1.0	BDL	BDL	BDL	INT	BDL	BDL	BDL
pH	5-9		7.05	6.92	6.75	6.78	6.75	6.73	6.83
PHENOLS-TOTAL	3.5	0.05	0.39	BDL	INT	INT	BDL	BDL	0.10
SELENIUM	0.01	0.005	BDL		BDL				BDL
SILVER	0.05	0.023	BDL		BDL				BDL
SODIUM	BACKGROUND	0.5	6400.	7130.	7130.	7350.	7000.	7550.	7093.
SULFATE	BACKGROUND	5.0	130.	350.	250.	140.	210.	240.	220.
TDS	BACKGROUND	10.0	25000.	26300.	23900.	24000.	24400.	25300.	24817.
TOC		1.0	39.4	32.	31.1	28.9	280.2	37.6	74.9
TOX		0.5	1.22	3.66	6.28	4.06	4.3	4.4	3.9
ZINC	5.0	0.02	BDL	0.026	BDL	0.029	BDL	0.036	0.015

NOTE - CONCENTRATIONS IN MG/L.
BLANK = NOT ANALYZED
BDL = BELOW DETECTION LIMIT
INT = INTERFERENCE, INDETERMINANT

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TABLE 13. Summary of analyses for major inorganic constituents in groundwater samples for MW-5D.

PARAMETER	GW/3 STANDARD	DETECTION LIMIT	DATE 7/31/87	10/20/87	1/19/88	4/12/88	7/12/88	10/14/88	AVERAGE
ARSENIC	0.05	0.01	0.01		BDL				BDL
BARIUM	1.0		0.251		0.27				0.26
CADMIUM	0.01	0.004	BDL		BDL				BDL
CHLORIDE	BACKGROUND	1.0	12100.	12000.	9120.	7810.	9600.	8400.	9838.
CHROMIUM, +6	0.05	0.026	BDL		BDL				BDL
COPPER	1.0	0.01	BDL	BDL	BDL	BDL	BDL	BDL	BDL
CYANIDE-TOTAL	0.2	0.025	2.56	4.5	10.6	12.2	25.6	9.45	10.8
CYANIDE-FREE		0.05		BDL	BDL	BDL	BDL	BDL	BDL
FLUORIDE		0.1	BDL		1.4				0.7
IRON	0.3	0.15	1.1	4.2	2.4	2.7	5.	2.7	3.02
LEAD	0.05	0.005	BDL	0.013	BDL	BDL	BDL	BDL	BDL
MANGANESE	0.05	0.005	1.55	1.72	0.606	0.439	0.19	0.27	0.80
MERCURY	0.002	0.0002	BDL	BDL	BDL	BDL	BDL	BDL	BDL
NICKEL		0.014	BDL						BDL
NITROGEN-AMMONIA	0.5	0.2	5.2	9.0	9.9	6.	10.	8.2	8.05
NITROGEN-NITRATE	10.0	1.0	BDL	BDL	BDL	INT	BDL	BDL	BDL
pH	5-9		7.15	6.52	7.01	6.62	7.12	7.83	7.04
PHENOLS-TOTAL	3.5	0.05	0.525	INT	INT	INT	BDL	BDL	0.18
SELENIUM	0.01	0 .005	BDL		BDL				BDL
SILVER	0.05	0.023	BDL		BDL				BDL
SODIUM	BACKGROUND	0.5	5460.	5690.	5000.	4260.	5210.	5110.	5122.
SULFATE	BACKGROUND	5.0	470.	670.	1410.	1580.	430.	670.	872.
TDS	BACKGROUND	10.0	21000.	23500.	17400.	15800.	17700.	16800.	18700.
TOC		1.0	26.	13.9	25.4	20.8	47.2	55.6	31.5
TOX		0.5	1.11	0.99	2.97	3.62	2.53	1.18	2.06
ZINC	5.0	0.02	BDL	0.025	BDL	0.056	BDL	BDL	BDL

NOTE - CONCENTRATIONS IN MG/L.
BLANK SPACE = NOT ANALYZED
BDL = BELOW DETECTION LIMIT
INT = INTERFERENCE, INDETERMINANT

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Significant concentrations of total cyanide (free and complexed cyanide dissolved species) were detected in shallow wells MW-2S, MW-4S and MW-5S at average values of 25 mg/l, 103 mg/l and 4.2 mg/l, respectively. Nitrogen-ammonia (ammonia) concentrations in MW-2S, 4S, and 5S are elevated above background with average values of 164, 410, 26.7 mg/l, respectively. Sodium concentrations are elevated by a factor of approximately two over the background well MW-1S average of 2,787 mg/l with averages of 5,235 mg/l in MW-2S, 8,442 mg/l in MW-4S, and 7,093 mg/l in MW-5S. Sulfate concentrations are elevated by a factor of approximately five to ten over the background average of 578 mg/l in MW-1S with averages of 4,658 mg/l in MW-2S, 3,325 mg/l in MW-4S. However, in MW-5S, the sulfate concentration has averaged only 220 mg/l, which is only about one-third the background value.

In contrast to the other wells, shallow well MW-3S samples had an average total cyanide concentration of only 0.15 mg/l, well below the GW/3 standard, and an average sulfate concentration one-half the background value with an average of 300 mg/l. Ammonia averaged 28.6 mg/l, which was above background, but below the averages for MW-2S and 4S. Sodium levels in MW-3S are elevated above the background levels in MW-1S, with an average of 5,575 mg/l versus 2,787 mg/l in MW-1S.

All other inorganic constituents in wells MW-2S, 3S, 4S, and 5S were found to be below the detection limits or near the concentrations in the background well.

The high levels of ammonia, especially in MW-2S and 4S, are believed to be the result of the degradation of cyanide, possibly due to bacterial processes. This interpretation is supported by a regression of ammonia versus cyanide, shown in Table 14 and Figure 9, for the average concentrations in all shallow wells. This regression analysis indicates that 98.7% of the variance of the average ammonia concentration is accounted for by the variance of the average total cyanide concentration.

In summary, the inorganic data supports the conclusion that MW-1S is a background well virtually unaffected by the impoundments. Wells MW-2S, 4S, and 5S appear to be affected by leachate from the impoundments with elevated total cyanide, ammonia, sulfate, and sodium. MW-3S, initially expected to produce contaminated groundwater, has, in contrast to MW-2S, 4S, and 5S, produced samples with very low total cyanide, no detectable free cyanide, relatively low ammonia, and below background levels for sulfate, although sodium is somewhat elevated.

For the deep monitoring wells, only MW-5D samples were reported to have significant levels of total cyanide with an average of 10.8 mg/l. These cyanide levels are similar to those reported for MW-5S which averaged 4.2 mg/l. It should be recalled that MW-5D is screened at a shallower interval than the other deep wells and is screened in the same geologic formation as MW-5S. Thus, MW-5S and 5D could be expected to produce groundwater samples with more similar chemical characteristics.

Well MW-4D samples had an average total cyanide concentration of 0.54 mg/l, only slightly above the GS/3 standard of 0.2 mg/l. No other inorganic constituents in deep well samples are significantly above concentrations in the background well MW-1D.

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In summary, contamination from the impoundments is not migrating to a significant depth, but is remaining in the shallow zone above a depth of 50 feet.

4.2 Groundwater Quality - Organic Constituents

Results of organic analyses of the groundwater samples demonstrate that there is no organic contamination migrating from the impoundments. The results for wells MW-2S, MW-3S, MW-4S, and MW-5S show no consistently detectable levels of priority pollutant volatiles, acid extractables, base/neutral extractables, or pesticides/PCBs.

Analytical results for MW-1S, the background well, indicate the presence of numerous priority pollutant organic compounds. Table 9 summarizes the organic constituents detected in MW-1S.

American Cyanamid's Carteret impoundments are located in a highly industrialized area. The Site is surrounded by petroleum product storage tank farms, the Township of Carteret owns a closed sanitary landfill west of the impoundments, and a private "salvage" yard has operated for a number of years adjacent to the impoundments on the west. Cyanamid found the salvage operations had encroached on to Cyanamid's property in the vicinity of MW-1 at the time the monitoring well locations were initially determined.

Prior to installation of MW-1S and 1D, the salvage material was removed from Cyanamid's property. This material included an inoperable truck and semi-trailer, metal pipe, two steel tanks of approximately 20,000-gallon capacity, and miscellaneous trash. The organic contamination found at MW-1S is limited to the shallow zone and suspected to originate from the adjacent properties.

Low levels of phenol were detected in samples for the July 31, 1987 event from MW-3S and MW-4S at concentrations of 4.92 ug/l and 22.5 ug/l, respectively. The origin of these trace levels of phenol is unknown as phenol was not a constituent of the inorganic process wastes deposited in the impoundments.

Ethylbenzene and toluene were detected in the MW-5D January 19, 1988 sample at concentrations of 70.4 ug/l and 21.4 ug/l, respectively. The origin of these two compounds which were previously undetected in this well is unknown since neither of these were constituents of the inorganic process wastes deposited in the impoundments. These petroleum related compounds may originate at the adjacent properties.

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TABLE 15. Summary of analyses for organic constituents in groundwater samples for MW-1S.

PARAMETER	DETECTION LIMIT	MW-1S 7/31/87	MW-1S 1/19/88	TRIP BLANK 7/31/87
PRIORITY POLLUTANT VOLATILES				
BENZENE	4.4	195.	207.	BDL
CHLOROBENZENE	6.0	18.2	34.	BDL
CHLOROFORM	1.6	BDL	8.11	BDL
1,1-DICHLOROETHANE	4.7	65.5	127.	BDL
1,1-DICHLOROETHYLENE	2.8	19.	23.7	BDL
ETHYLBENZENE	7.2	21.9	29.9	BDL
METHYLENE CHLORIDE	2.8	BDL	150.	15.5
TOLUENE	6.0	2940.	4340.	BDL
1,1,1-TRICHLOROETHANE	3.8	18.4	67.3	BDL
TRICHLOROETHYLENE	1.9	83.5	98.3	BDL
VINYL CHLORIDE	10.0	12.3	19.9	BDL
CHLOROETHANE	10.0	45.1	36.	BDL
1,2-TRANS-DICHLOROETHYLENE	1.6	72.6	86.7	BDL
PRIORITY POLLUTANT ACID EXTRACTABLE				
2-CHLOROPHENOL	3.4	9.72	BDL	BDL
2,4-DICHLOROPHENOL	2.8	3.43	BDL	BDL
2,4-DIMETHYLPHENOL	2.8	3.77	BDL	BDL
PHENOL	1.5	66.8	376.	BDL
PRIORITY POLLUTANT BASE/NEUTRAL EXTRACTABLE				
ISOPHORONE	2.2	168.	BDL	BDL
NAPHTHALENE	1.6	5.65	BDL	BDL
NITROBENZENE	1.9	28.8	BDL	BDL

NOTE - ALL CONCENTRATIONS IN UG/L.
BDL = BELOW DETECTION LIMIT

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4.3 Potential Groundwater Receptors

The Brunswick Formation is not known to be used as a source of groundwater for consumptive purposes in the vicinity of the Site. The closest water supply well to the impoundments is 4,000 feet southwest and upgradient of the Site near the intersection of Roosevelt Avenue and the New Jersey Turnpike. This well, reported by Disko (1981) to be owned by Gulf Stream Development, has a reported yield of 100 gpm which is too low to cause a reversal in groundwater flow at the distance of the impoundments. Even in areas where the Brunswick is used as a source of water, the groundwater has been reported to be locally high in sulfate and hardness due to the presence of evaporite deposits, i.e., gypsum and salt (Disko, 1982). In the vicinity of the Carteret impoundments, the high salinity of the groundwater precludes the use of the Brunswick Formation as a source of groundwater.

Based on the information gathered concerning the groundwater flow system at the Site, no water supply wells producing from the Brunswick Formation can draw groundwater that originates in the impoundments. The survey of groundwater usage conducted by Disko (1982) indicates that no water supply wells are located downgradient of the impoundments.

5.0 SURFACE WATER EVALATION

5.1 Surface Water System

The Carteret impoundments are in the Rahway River drainage basin, located from 0.5 and 1.0 miles upstream of the confluence with the Arthur Kill. The impoundments are bordered on the north and east by the Rahway, on the west by a small tributary to the Rahway named Cross Creek, and on the south and east by another small tributary to the Rahway called Deep Creek (shown in Figure 1). These surface waters are tidal with average tidal variations on the order of four feet.

5.2 Surface Water Flow

The flow of the Rahway River has been monitored by the U.S. Geological Survey at Rahway, New Jersey. For the water years 1922-1984, the average flow of the Rahway was 47.5 cubic feet per second (U.S. Geological Survey, 1983).

5.3 Surface Water Quality

A theoretical worst-case calculation for free cyanide concentration in the Rahway River has been performed to assess the impact of the leachate on surface waters. The following conditions were utilized in a simple dilution calculation:

1. The highest concentration of free cyanide detected in the groundwater (0.29 mg/l),

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2. 11,000 to 17,000 cfd flow of groundwater into the Rahway River, and

3. An average flow in the Rahway River of 47.5 cfs.

Based on these worst case values, free cyanide concentrations in the Rahway should range from 0.8 to 1.2 ug/l (ppb).

To confirm the absence of an impact on the Rahway River, a comprehensive surface water study was conducted in October 1986. Figure 10 shows the locations of the surface water sampling points in the Rahway River upstream and downstream of the impoundments, in Cross Creek, and in Marsh Creek opposite the impoundments. The upstream and downstream stations in the Rahway River consisted of three stations at each location providing samples one-quarter, one-half, and three-quarters across the channel. At each station, the sample was collected from a four-foot interval centered on the mid-depth. In water less than four feet deep, the sample represented the full column of water. Each station was sampled twice, at high (except stations 7 and 8 in the creeks) and low tides. Appendix D presents the laboratory reports for the surface water analyses for total and free cyanide.

The results of the river sampling program indicate that both total and free cyanide were below the detection limit of 0.025 mg/l in all samples for the Rahway River and Marsh Creek opposite the impoundments. The sample collected in the mouth of Cross Creek was reported to have 0.032 mg/l of total cyanide and 0.032 mg/l of free cyanide. These results are consistent with the theoretical calculations presented above.

5.4 Potential Surface Water Receptors

No surface water intakes for drinking water are known downstream of the impoundments. The Rahway River and its tributaries in the vicinity of the impoundments are brackish with observed salinities of 15 parts per thousand.

6.0 FATE OF CYANIDE IN SURFACE WATER AND GROUNDWATER

The fate of cyanide released in leachate leaving the Carteret impoundments is dominated by three processes: dilution, volatilization, and biodegradation. These processes operate to reduce the concentration of both total and free cyanide in water as it migrates from the impoundments.

Callahan et al. (1979) report that in water with a pH less than 7, over 99% of the free cyanide will be in the form HCN (hydrogen cyanide), which is highly volatile. Therefore, the free cyanide tends to volatilize and decrease the concentration of total cyanide as the equilibrium between complexed and free cyanide shifts towards the free cyanide. EPA (1986) reported a half-life of between 0.33 and 0.80 days in surface water.

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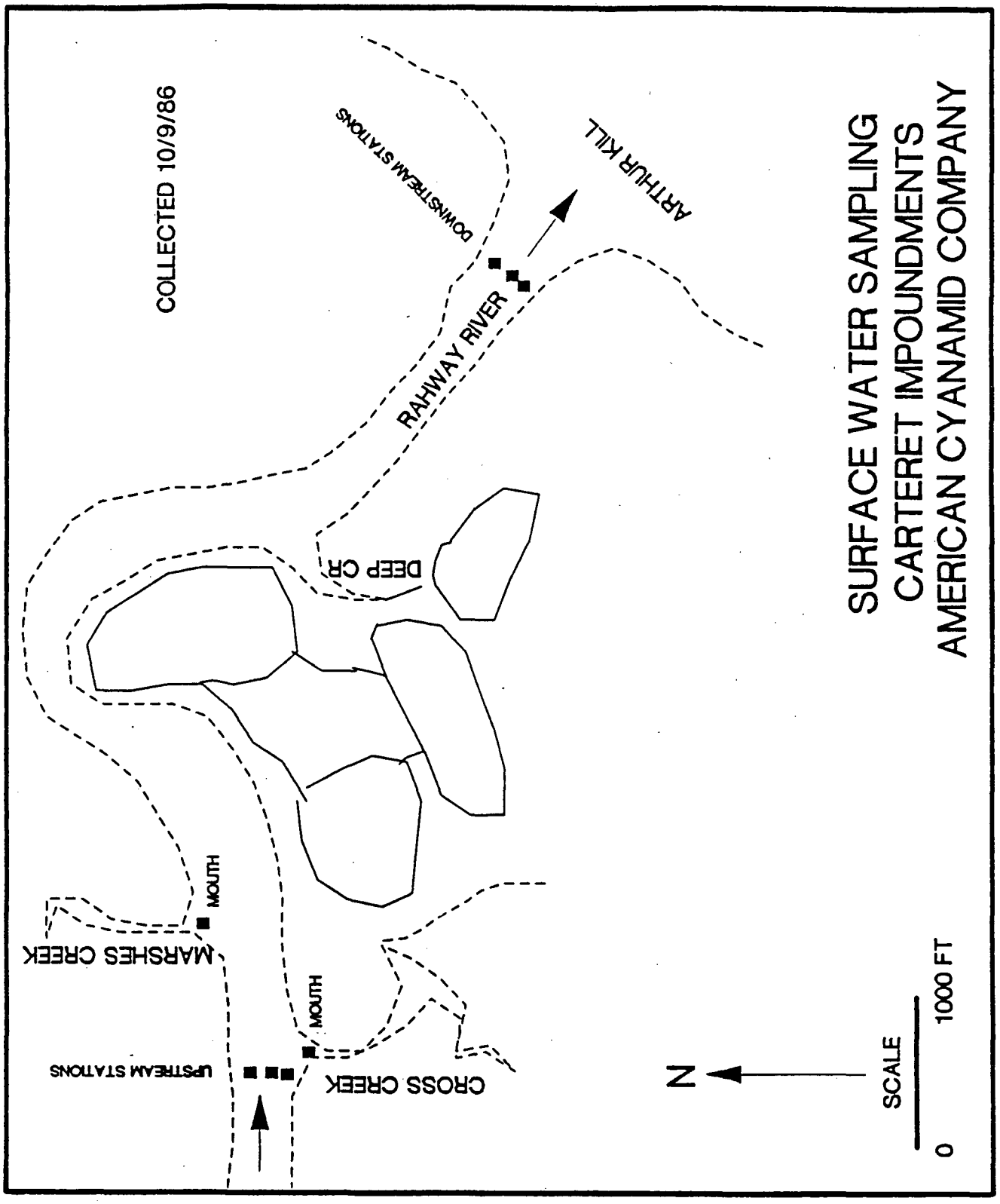

Figure 10. Locations of surface water sampling stations for the October 1986 study.

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Callahan et al. (1979) also report that biodegradation of cyanide occurs in all organisms where the cyanide concentration is below toxic levels. They report virtually complete degradation of cyanide occurs in anaerobic and aerobic sewage treatment. Callahan et al. (1979) cite experiments which indicate the biodegradation of hydrogen cyanide produces methane and ammonia under reducing conditions. The high concentrations of ammonia found in the groundwater samples downgradient of the impoundments and the high correlation between the ammonia and total cyanide, as discussed earlier, provides evidence that anaerobic biodegradation in the subsurface may be an important degradation process.

7.0 HUMAN HEALTH AND ENVIRONMENTAL ASSESSMENT

7.1 Human Health Assessment

Based on the results of the sludge, groundwater, and surface water analyses, the constituent of concern being released from the impoundments is cyanide. Since no surface water or groundwater sources of drinking water are downgradient or capable of disturbing the local groundwater flow system or of drawing water that originates in the impoundments, there are no potential risks to human health via drinking water.

Since the impoundments are inaccessible to unauthorized persons, risks to human health via direct contact are negligible.

7.2 Environmental Assessment

The standards promulgated under the New Jersey Pollutant Discharge Elimination System (NJPDES) establishe a water-quality criteria of 0.03 mg/l free cyanide for protection of aquatic life in salt water (Title 7, Chapter 14, section 7:14a, Appendix F, Values for Determination of NJPDES Permit Toxic Effluent Limits).

The results of the surface water analyses discussed in section 5.3 indicate that the Rahway River adjacent and downstream of the impoundments achieves the NJPDES standard of 0.03 mg/l free cyanide.

8.0 CONCLUSIONS AND IMPLICATIONS

8.1 Hydrogeology

Migration of potential contaminants originating in the impoundments are confined to a limited volume of the shallow aquifer immediately below the impoundments. The upward flow of groundwater out of the Brunswick Formation and the density contrast between the relatively lighter leachate and the denser natural groundwater combine to create a floating lens of leachate on the natural groundwater.

The impoundments receive recharge from precipitation which creates a mounded water table beneath the impoundments. The water table mound is within the sludge of the impoundments at a minimum depth of about five feet in the central part of the impoundments. The shallow groundwater flows radially outward from the groundwater

mound and discharges into the surrounding surface water, i.e., the Rahway River on the north, Cross Creek on the west, and Deep Run Creek on the south and east.

Deep groundwater within the Brunswick Formation is flowing out of the Brunswick into the shallow groundwater and also is discharging to surface water. The groundwater mound within the impoundments has not created a significant downward vertical flow component into the Brunswick Formation. Thus, the leachate does not penetrate vertically into the aquifer more than 50 feet. This has been substantiated by the lack of significant contamination in the deeper wells that are screened at approximately 50 feet below the surface.

8.2 Groundwater Quality

The results of the quarterly groundwater monitoring indicate the impoundments are contributing contamination to the shallow groundwater system, that is, groundwater in the zone overlying the Brunswick Formation. The contaminants migrating from the impoundments are total cyanide, ammonia, sulfate, and possibly sodium. Due to the shallow vertical extent of migration of groundwater from the impoundments, the deep monitoring well data indicate the contamination from the impoundments is contained within the shallow zone within the upper 50 feet.

8.3 Surface Water Quality

Analyses of surface water samples collected in the Rahway River both upstream and downstream of the impoundments indicates no detectable cyanide is present (detection limit of 0.025 mg/l). The lack of detectable cyanide in the river samples and results of literature research concerning the fate of cyanide in the aquatic environment support the conclusion that the impoundments have no significant impact on the Rahway River.

Results of analyses of surface water samples collected in the mouth of Cross Creek where it enters the Rahway River (0.032 mg/l free cyanide) indicate that, although low levels of cyanide are entering Cross Creek via groundwater discharge, the levels appear to be at or below the NJPDES surface water quality criteria of 0.03 mg/l free cyanide.

8.4 Appropriate Groundwater Quality Standards

Currently, groundwater in the shallow aquifer and in the Brunswick Formation in the vicinity of the Site is not used for drinking water. Considering the naturally high salinity and iron content of the groundwater, it is unlikely that this groundwater would be used in the foreseeable future. In addition, although the Brunswick Formation is used as a source of water upgradient of the Site, there are no existing wells capable of reversing groundwater gradients to capture groundwater underlying the impoundments.

In consideration of the low risk presented by the impoundments and the fact that the NJDEP is currently considering substantial revisions to the State Ground Water Quality Standards, it is

suggested that the determination of a groundwater standard applicable to the Carteret Impoundments be deferred.

8.5 Need for Corrective Action

During 1989, the revegetation of the surface of the Carteret Impoundments will be completed. During the growing season, the fully revegetated impoundment surface will substantially reduce the recharge of groundwater underlying the impoundments due to the increase of evapotranspiration. The reduction in generation of leachate will further reduce the any impact presented by the impoundments. No additional corrective actions are required at this time.

8.6 Future Work

Monitoring at the Carteret Impoundments should be continued to confirm the conclusions of this assessment. However, it is recommended that the inorganic water quality parameters be reduced to field pH, total cyanide, ammonia, and sulfate in all wells on a semiannual basis.

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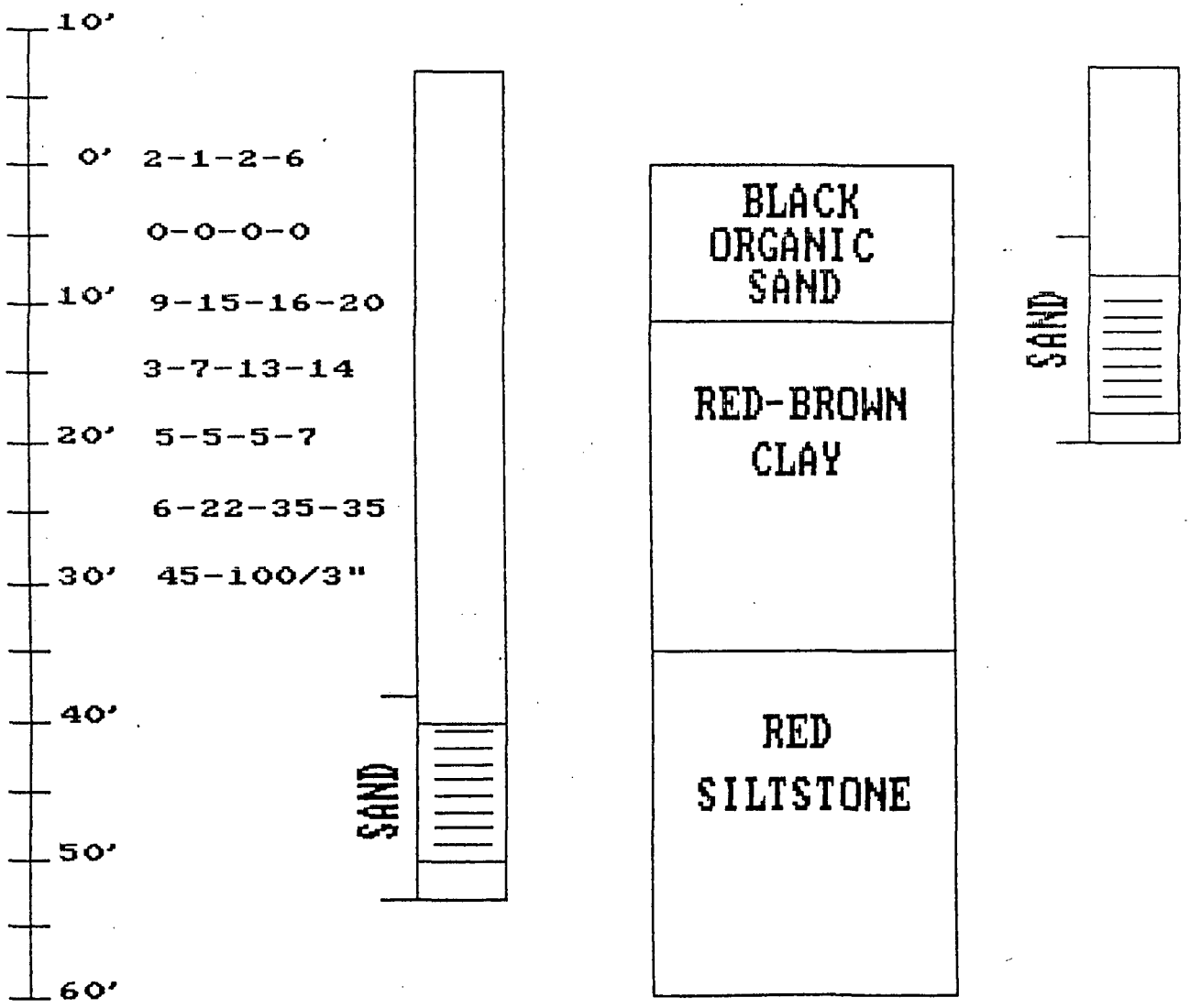
APPENDIX A

Monitoring Well Construction Diagrams
Geologic Logs
State of New Jersey Permit to Drill
Monitoring Well Certification, Form A

MONITORING WELL DESCRIPTION
GEOLOGIC LOG

DRILLER: TESTWELL CRAIG TEST BORING
DATE DRILLED: MAY 3 AND JULY 6, 1987
LOGGED BY: PAUL FERRE' AND JOHN BUCKLEY



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MONITORING WELL DESCRIPTION
AS BUILT DRAWING

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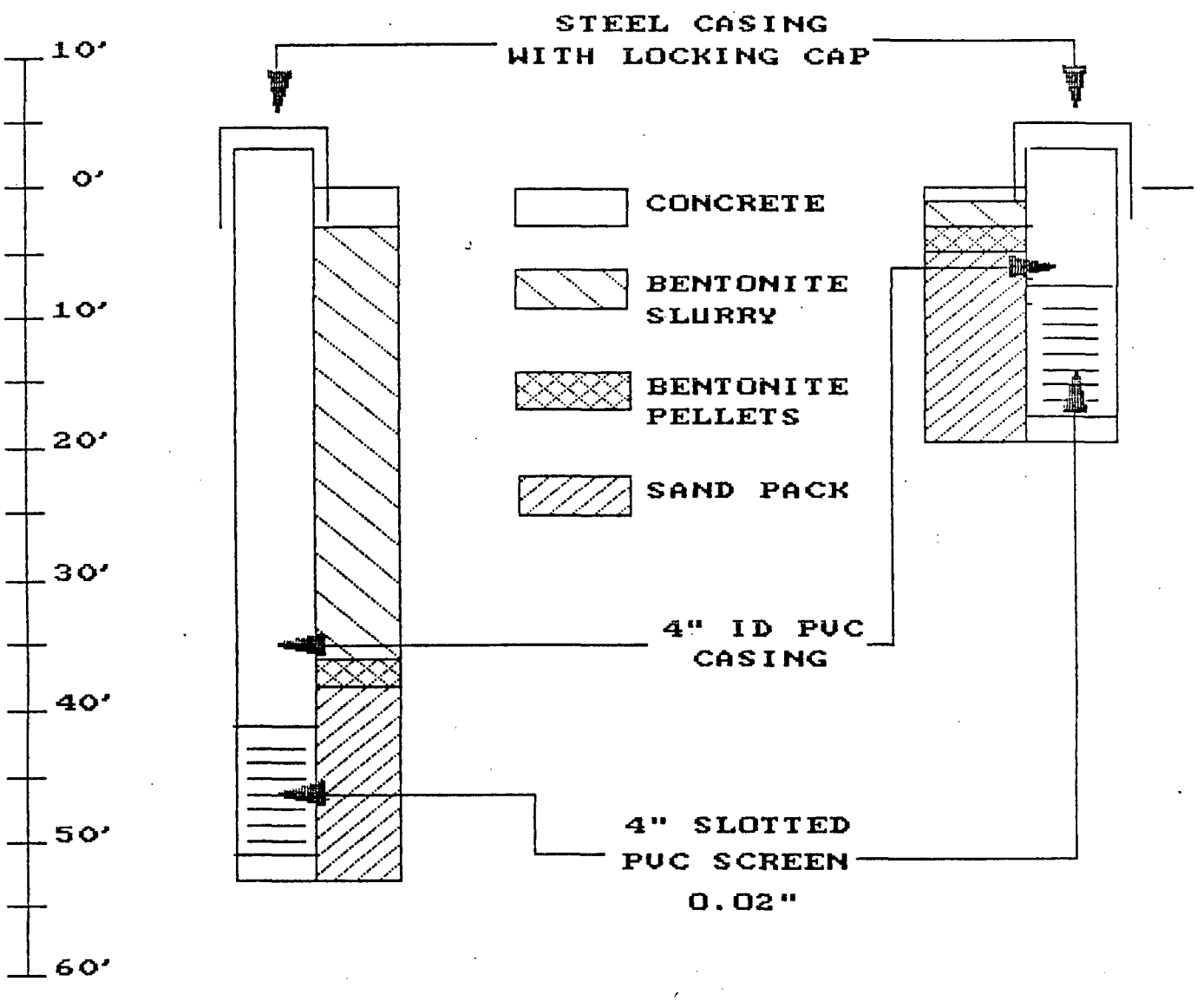

MONITORING WELL DESCRIPTION
GEOLOGIC LOG

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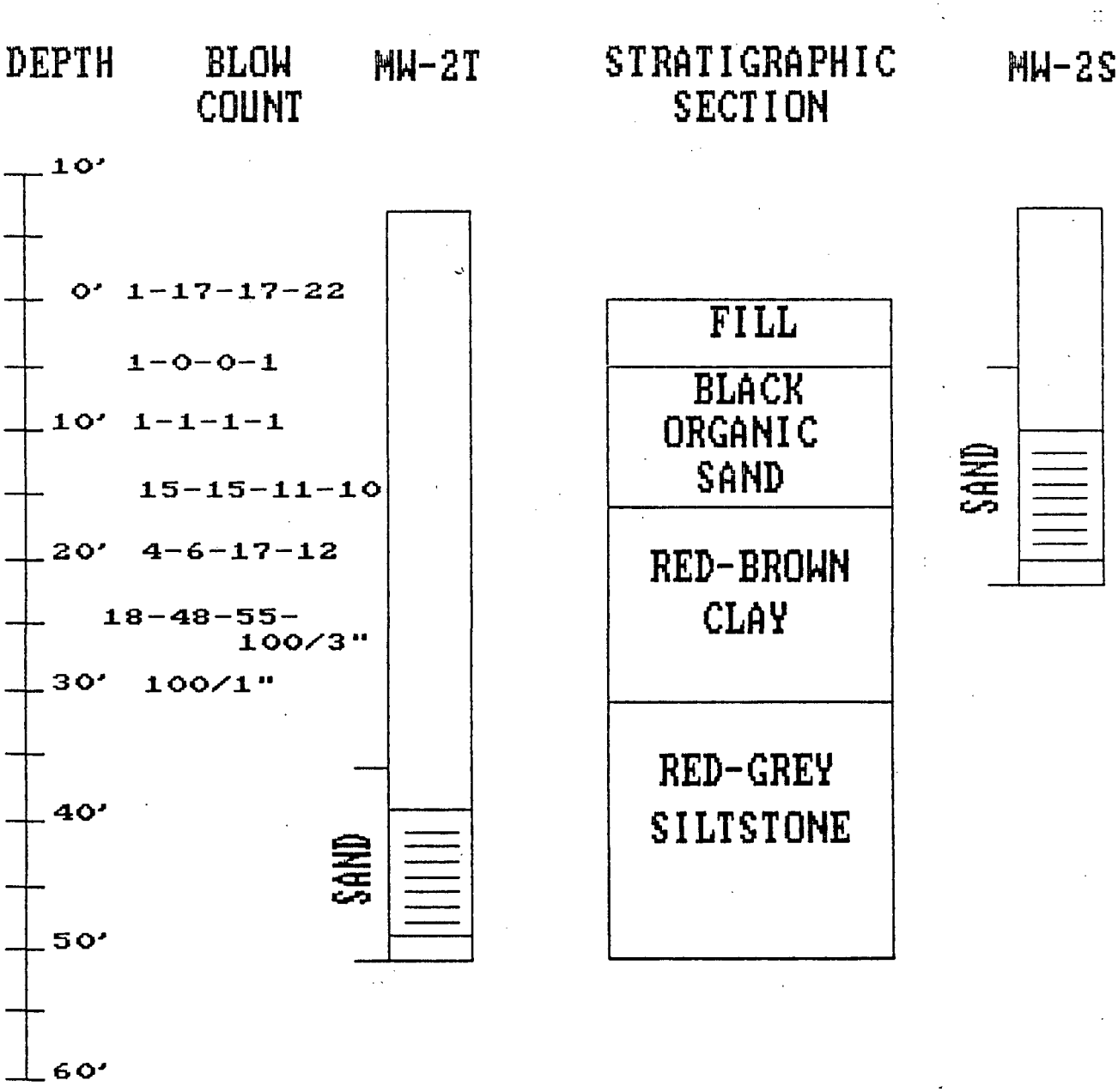

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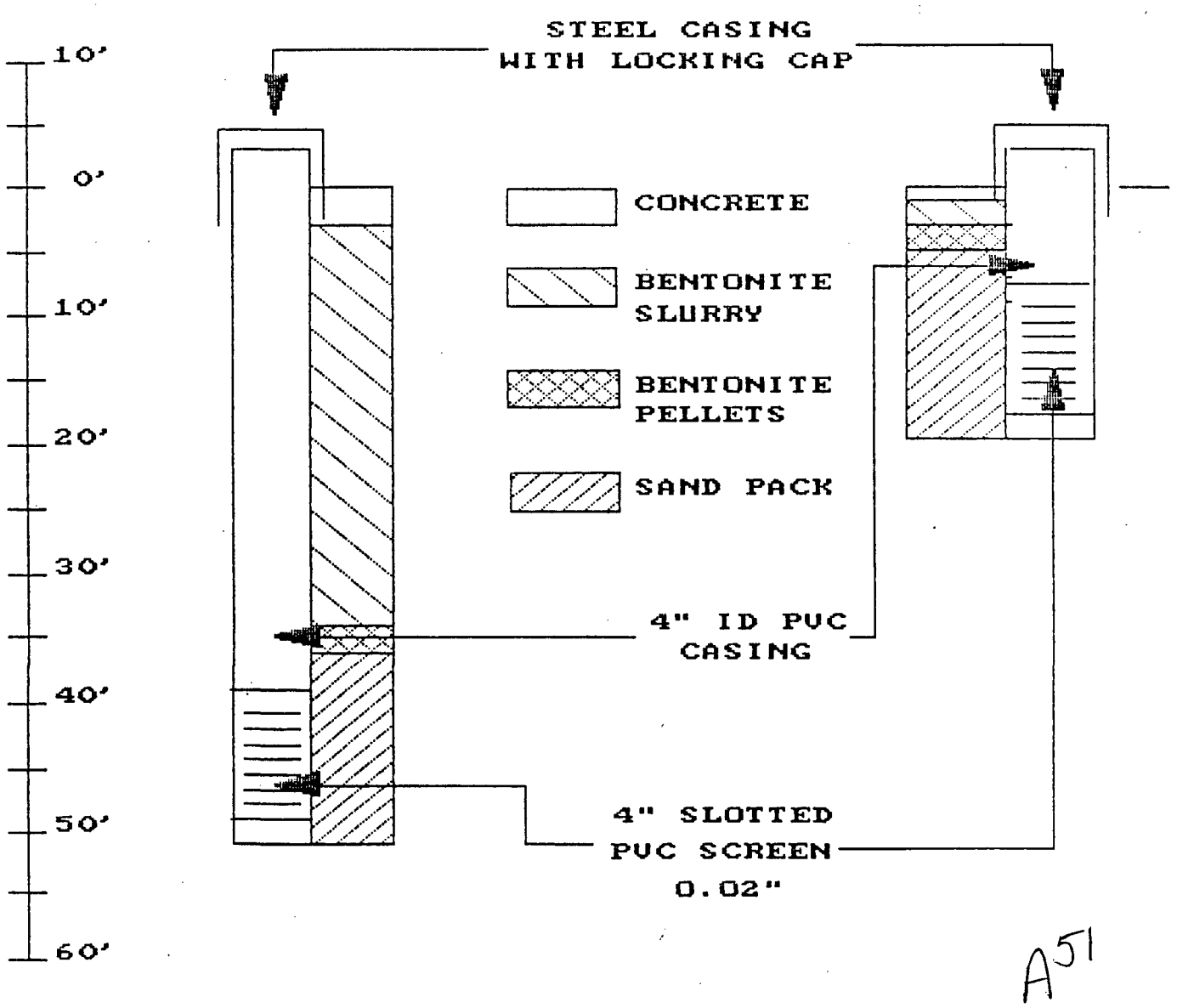

A51

MONITORING WELL DESCRIPTION
GEOLOGIC LOG

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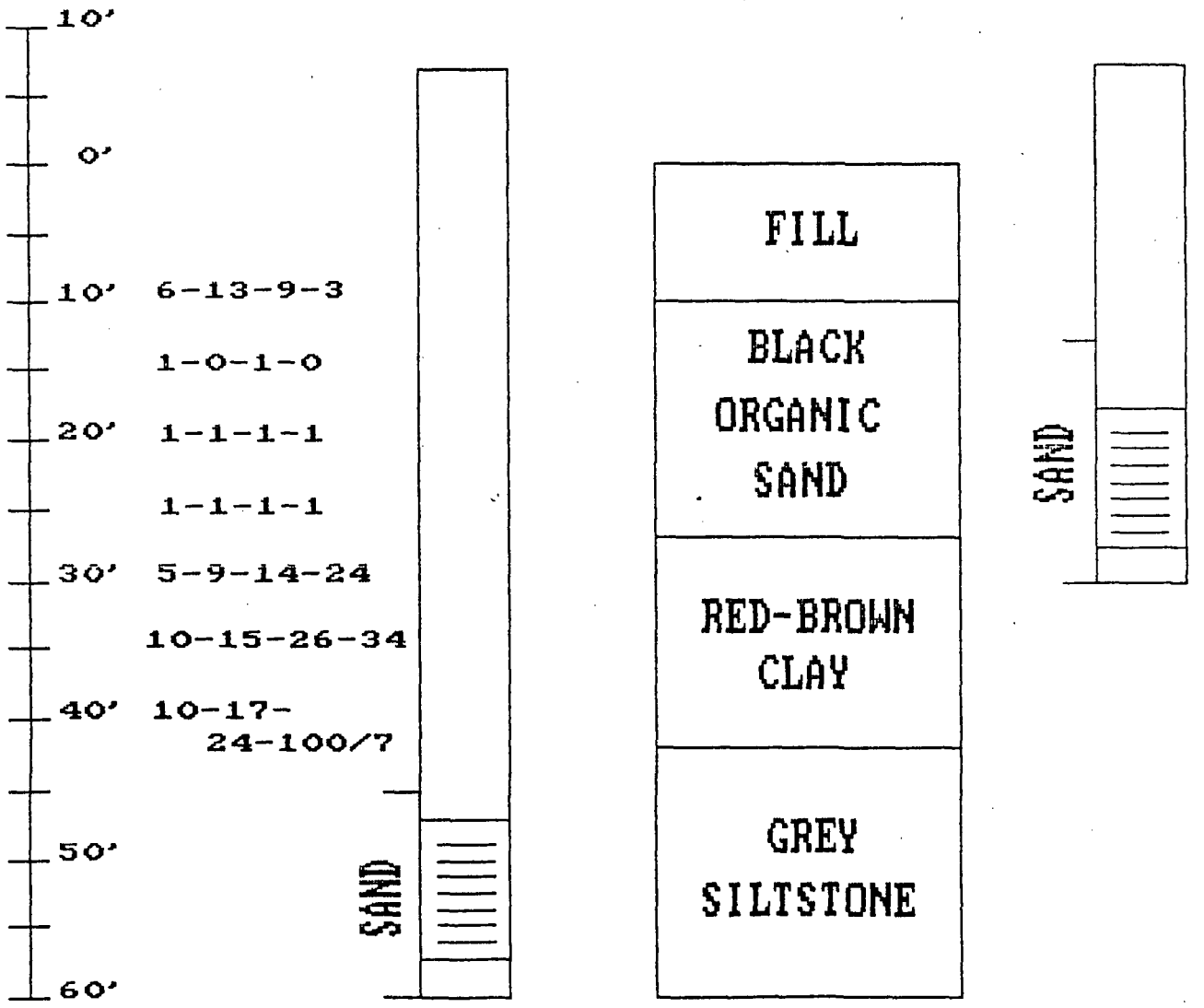
DATE DRILLED: JULY 28, 1987
LOGGED BY: PAUL FERRE'



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AS BUILT DRAWING

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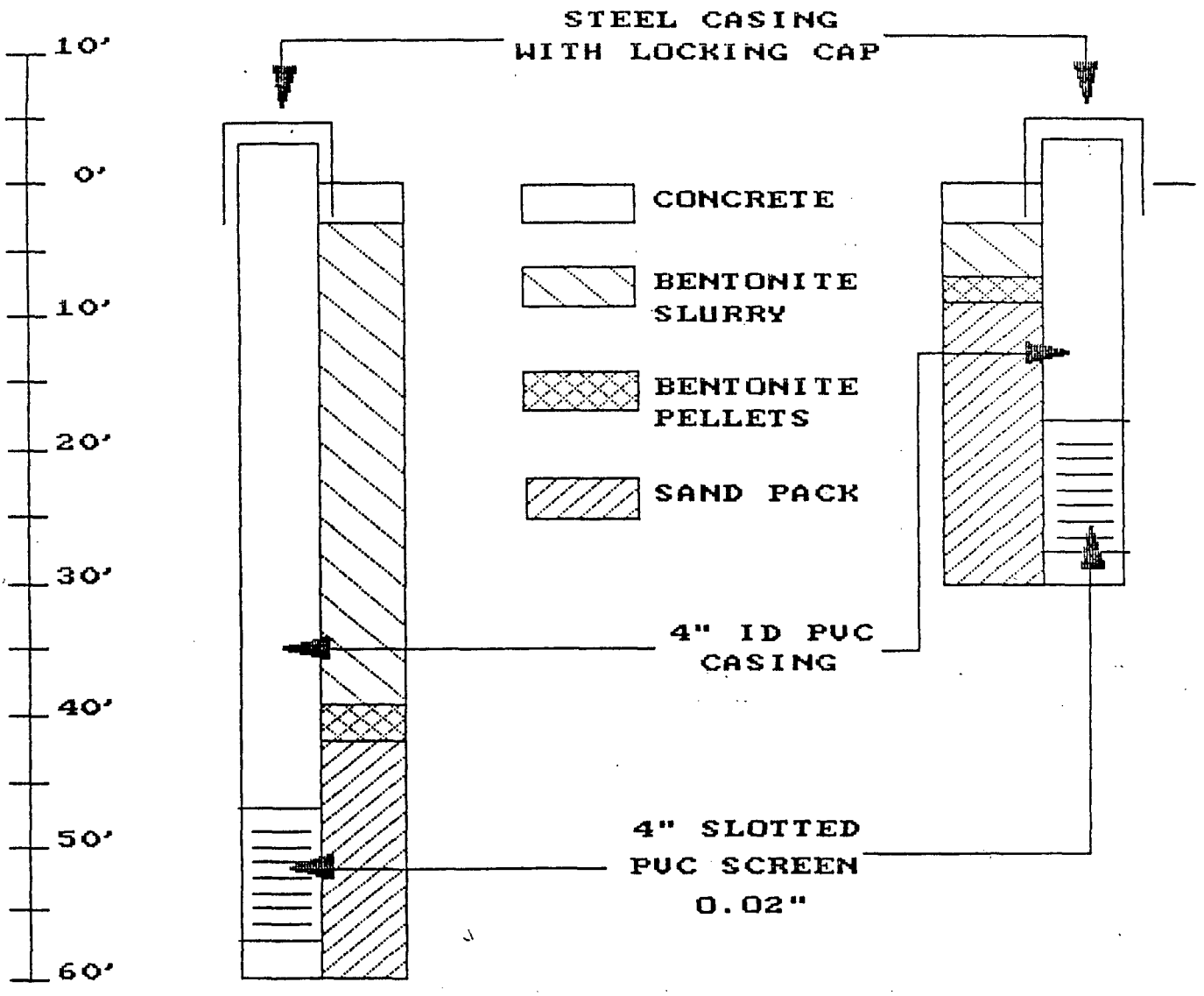
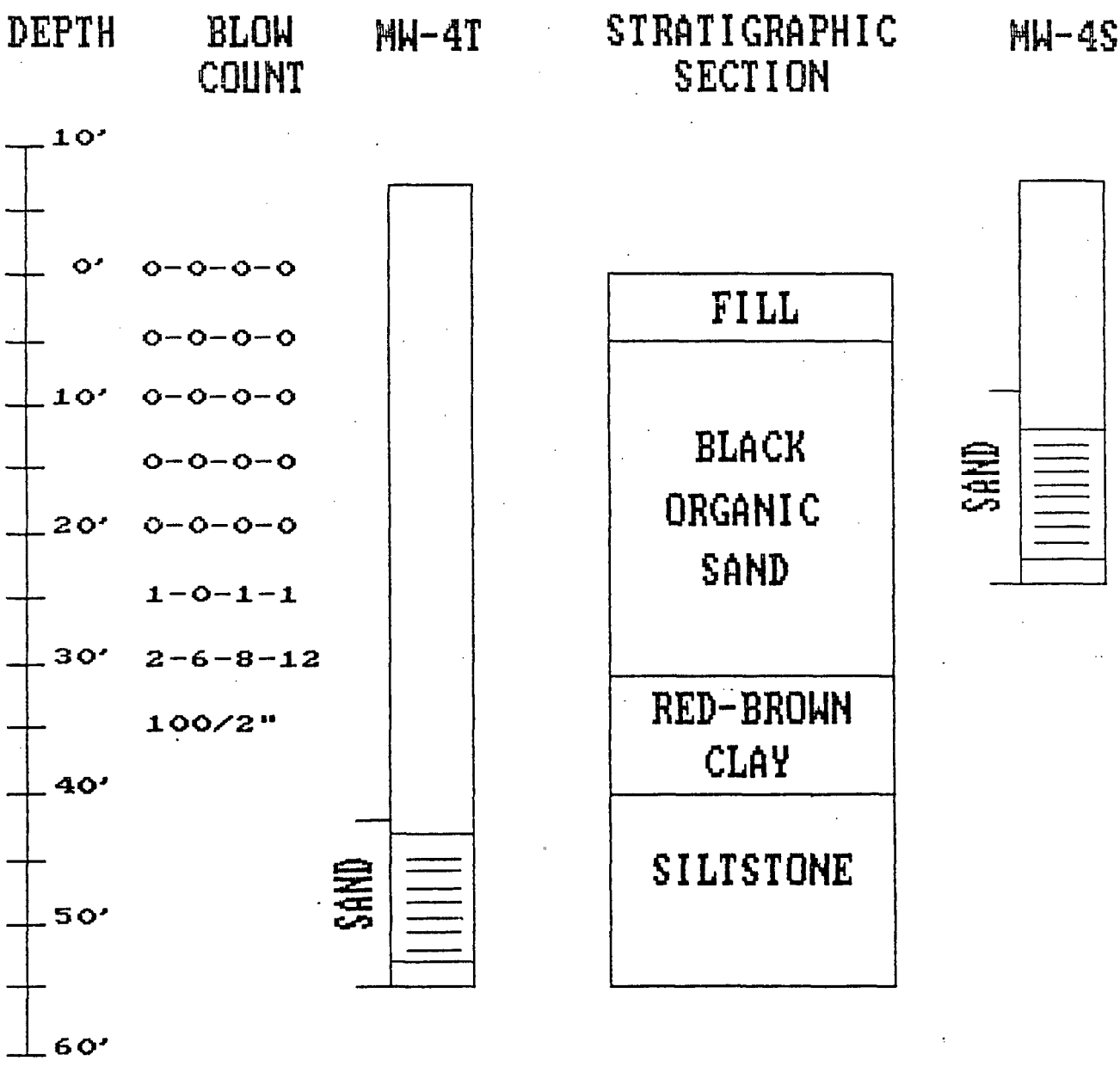


A53

MONITORING WELL DESCRIPTION
GEOLOGIC LOG

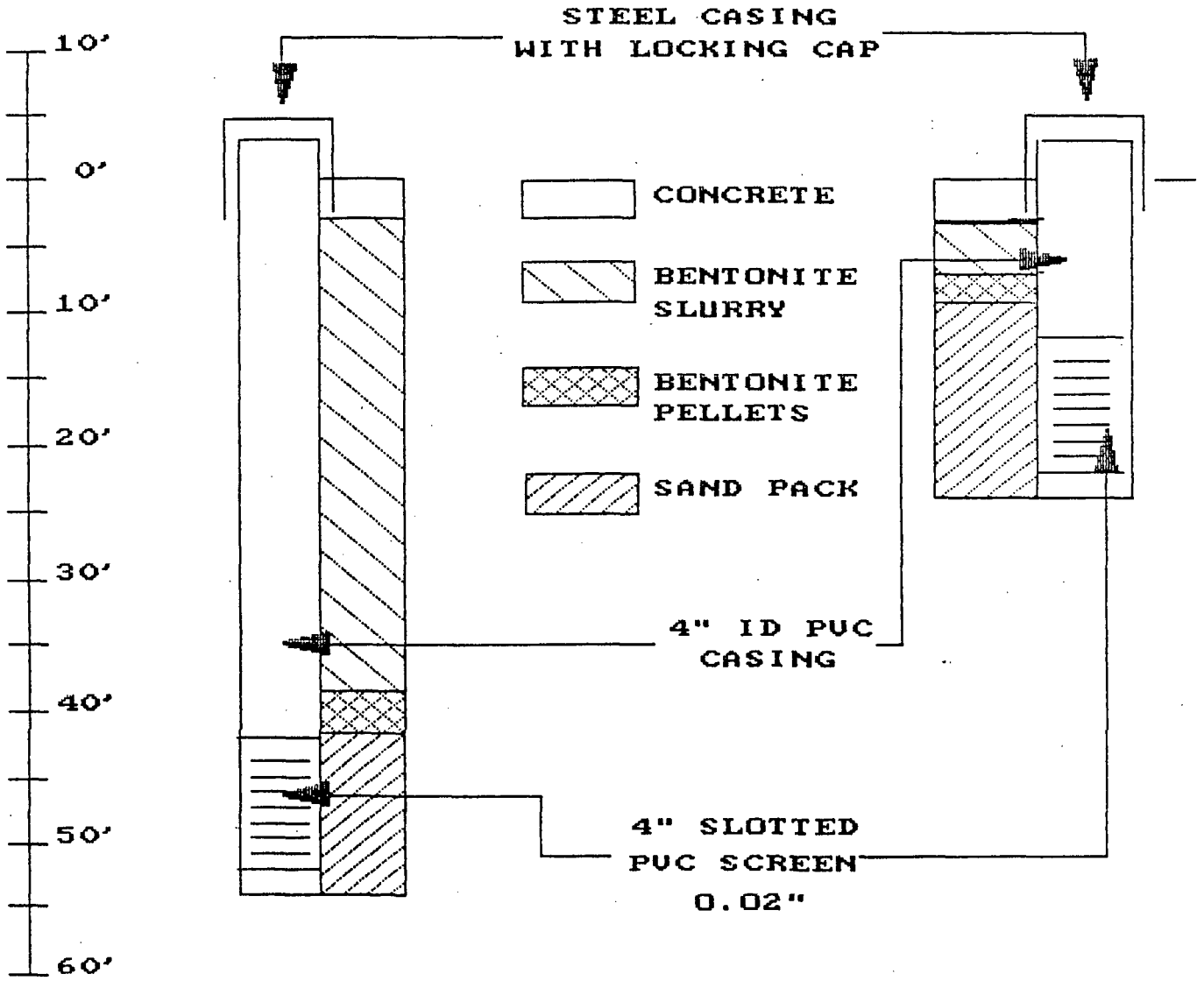
DRILLER: TESTWELL CRAIG TEST BORING
DATE DRILLED: JULY 24, 1987
LOGGED BY: JOHN BUCKLEY



A54

MONITORING WELL DESCRIPTION
AS BUILT DRAWING

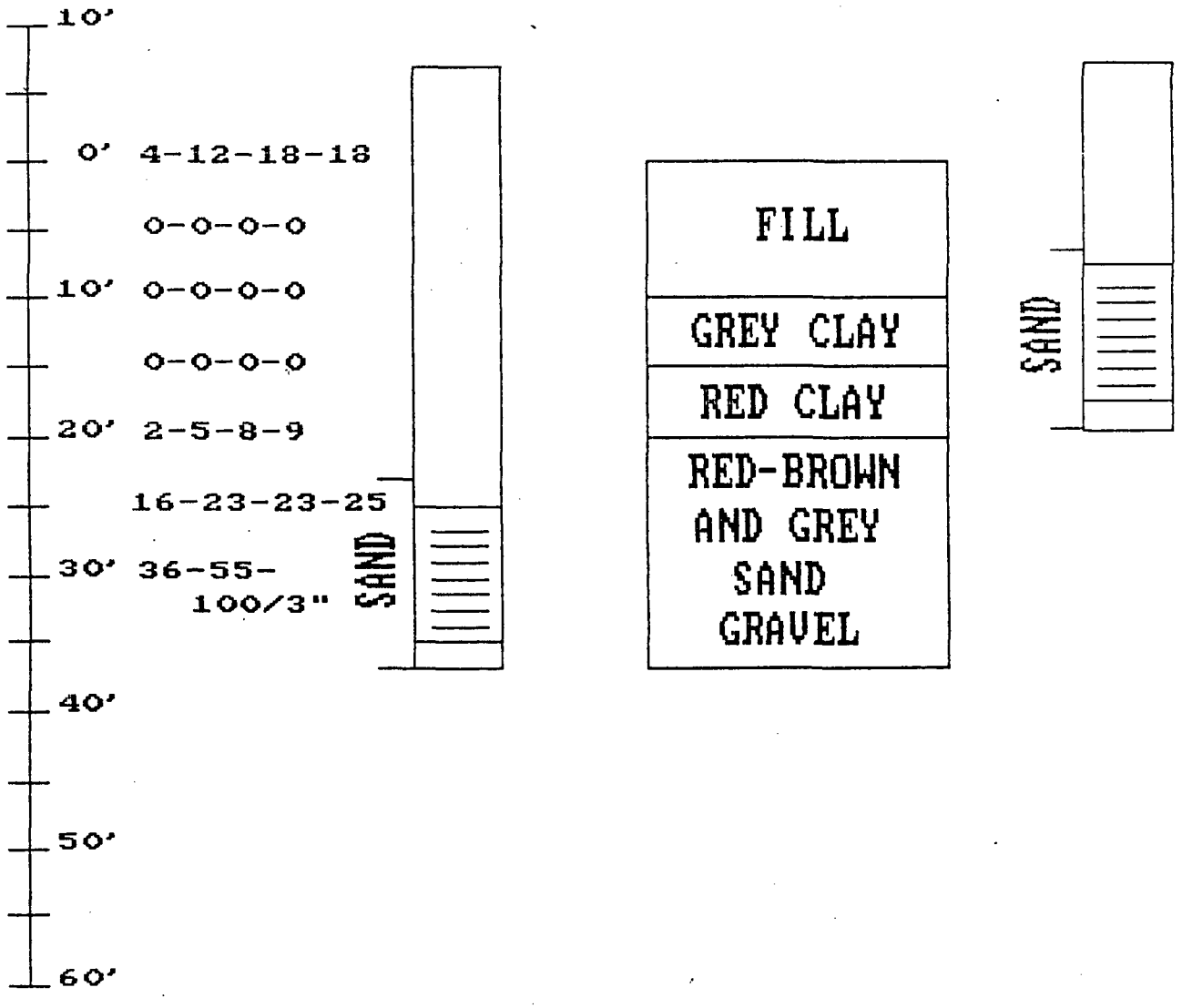
DRILLER: TESTWELL CRAIG TEST BORING
DATE DRILLED: JULY 24, 1987



A55

MONITORING WELL DESCRIPTION
GEOLOGIC LOG

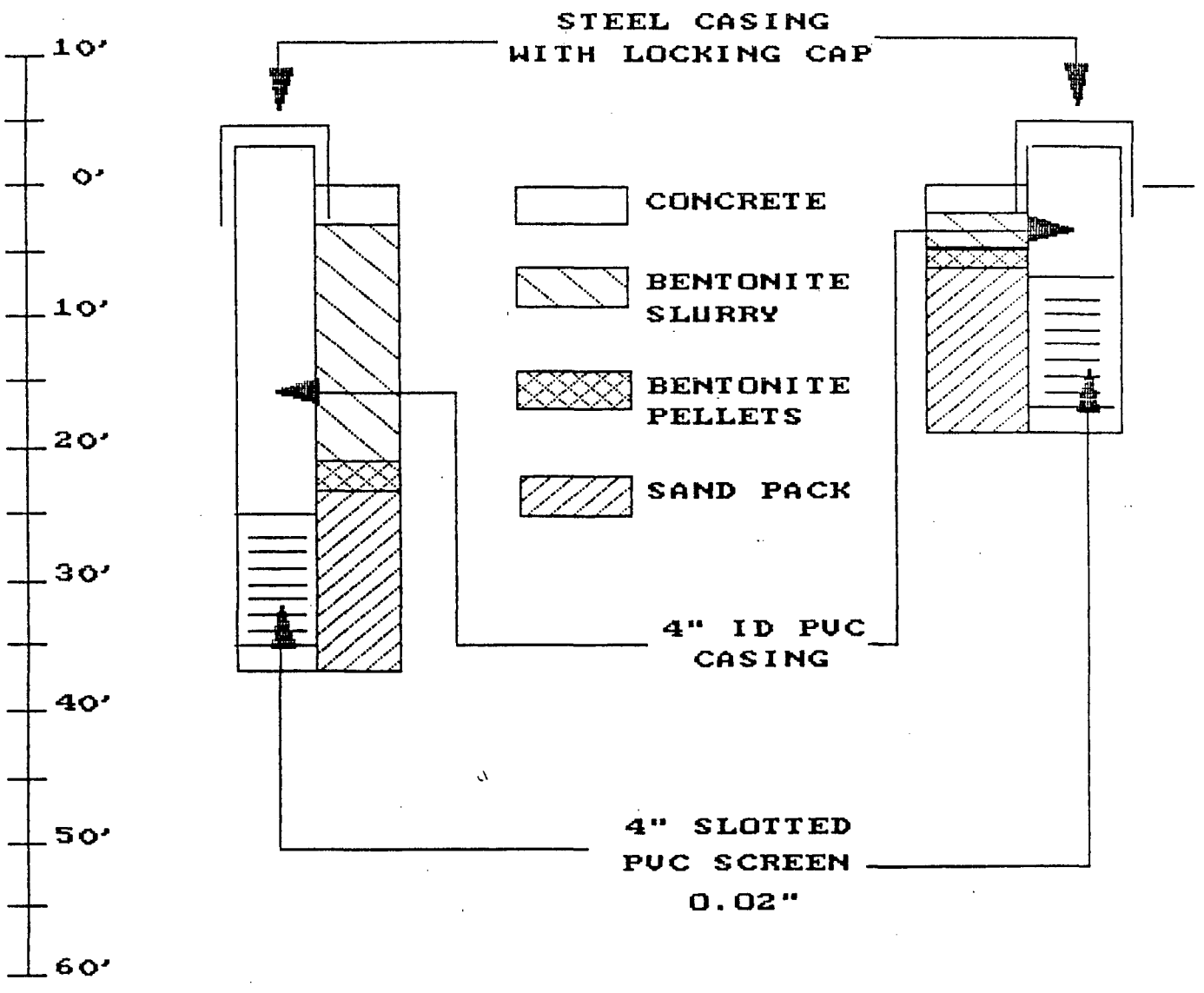
DRILLER: TESTWELL CRAIG TEST BORING
DATE DRILLED: MAY 28, 1987
LOGGED BY: JOHN BUCKLEY



A56

MONITORING WELL DESCRIPTION
AS BUILT DRAWING

DRILLER: TESTWELL CRAIG TEST BORING
DATE DRILLED: MAY 28, 1987



A57

DWR-133 (5/85)

STATE OF NEW JERSEY
DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES
TRENTON, N.J.

Mail to

Water Allocation
CN 029
Trenton, N.J. 08625

Permit No. 2410 37

01

PERMIT TO DRILL WELL

VALID ONLY AFTER APPROVAL BY THE D.E.P. 10 WELLS 26 42 1

Owner AMERICAN CYANAMID CO.
Address PO BOX 31
LINDEN, NJ

Driller TOM WARD/TESTWELL CRAIG
Address PO BOX 477
MAYS LANDING, NJ

Name of Facility SLUDGE IMPOUND AREA
Address WARNER'S PLANT
~~LINDEN NJ~~ CARTERET, NJ

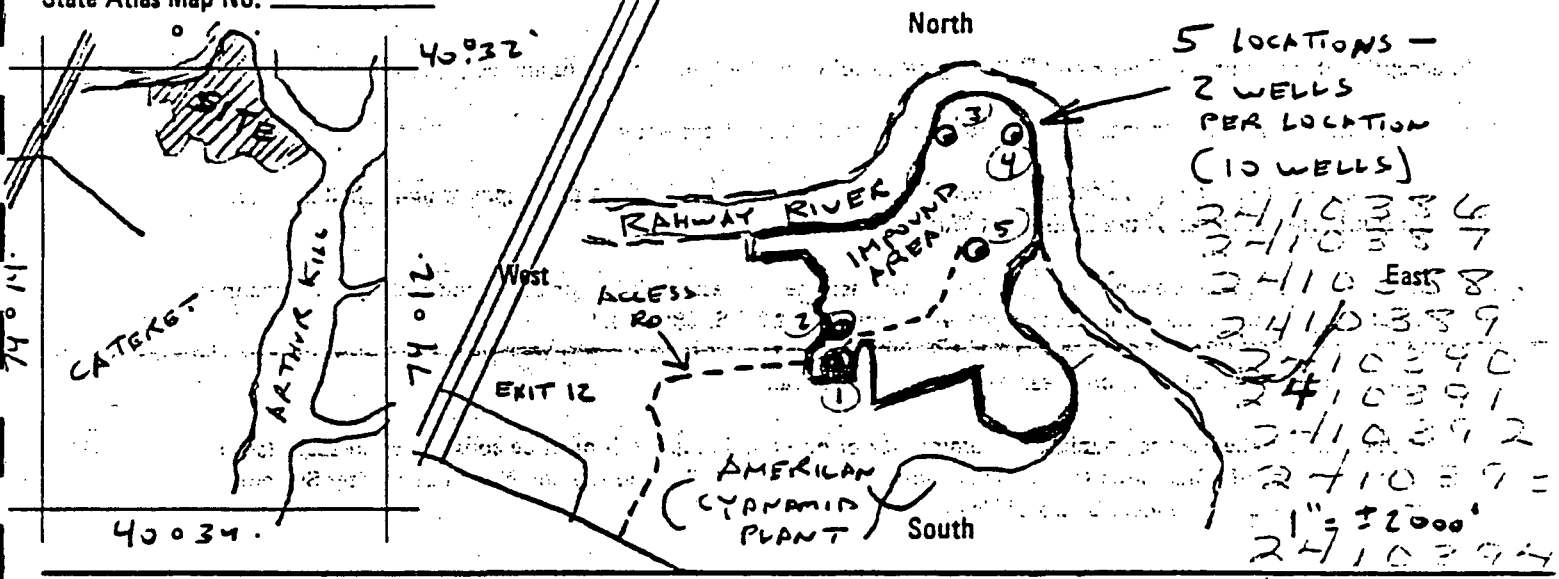
Diameter of Well 4 Inches	Proposed Depth of Well ±25 Feet
Proposed Capacity of Pump — GPM	Method of Drilling (cable-tool, rotary, etc.) AUGER
Use of Well (See Reverse) GW MONITORING	

LOCATION OF WELL

Lot #	Block #	Municipality	County
—	—	CARTERET	MIDDLESEX

State Atlas Map No. 26

Draw sketch showing distance and relations of well site to nearest public roads, streets, septic systems, etc.



SEE REVERSE SIDE for IMPORTANT PROVISIONS AND REGULATIONS pertaining to this permit. APPROVAL of this permit is made SUBJECT TO acceptance of and compliance with the following ADDITIONAL CONDITIONS.

- ☐ Pinelands - Well must be drilled over 100' deep or a clay layer at least 4' in thickness must be encountered.
- ☐ It is necessary that Geophysical Logs of this well be made. Permanent pumping equipment SHALL NOT be installed until such logs are made.
- ☐ Authorization by rule under N.J.A.C. 7:14A-1 et seq.
- ☐ Samples of cuttings required every _____ feet or change in material.
- ☐ The results of a volatile organic scan mut be obtained prior to using the water and submitted to _____.
- ☐ Domestic Potable Water Supply - The service line for water from the public community water supply system shall be turned off at the curb cock, and the meter shall be removed by the water purveyor.
- ☐ Domestic Irrigation Supply - No piping from the well for which the permit applies shall enter any building.
- ☐ Industrial/Commercial Supply - A physical connection permit shall be obtained pursuant to the provisions of N.J.A.C. 7:10-10-1 et seq., and a vigorous cross connections control program shall be instituted and maintained within the premises.
- ☐ Heat Pump Wells - Wells must be 50 feet apart and the water must be returned to the same aquifer as the production well.
- ☐ _____

This Space for Approval Stamp

WELL PERMIT APPROVED
Dept. of Environmental Protection
Water Resources/Water Allocation

MAR 18 1987

In compliance with R.S. 58:4A-14, application is made for a permit to drill a well as described above.

A58

Date _____ Signature of Owner _____

COPIES: Water Allocation - White Health Dept. - Yellow Owner - Blue Driller - White

USE OF WELL:	Domestic	Heat Pump
	Deepening	Recharge
Please Specify	Replacement	Test
	Irrigation	Industrial
	Observation	Commercial
	Monitoring	Public Supply
	Exploration	Non-Community
	Dewatering	Fire Protection
	Recovery	Decontamination

Application must be accompanied by a legal fee of ten dollars ($10.00) for wells under 70 gallons per minute and twenty five dollars ($25.00) for over 70 gallons per minute.

Make Checks Payable to: **STATE OF NEW JERSEY – WELL PERMITS**

In accepting this permit the Owner and Driller agree to abide by the following terms and conditions:

1. This permit conveys no rights, either expressed or implied, to divert water.
2. If the pump capacity applied for is less than 70 gpm, no subsequent increase to 70 gpm or more shall be made without prior approval of the Division of Water Resources.
3. In the event this well is abandoned, the Owner will assume full responsiblity for filling and sealing it in a manner satisfactory to the Division, in accordance with provisions of R.S. 58:4A-4.1.
4. This permit will be valid for one year from date of approval.
5. If this well is to be used for public non-community or non-public supply, it must be constructed in accordance with provisions of "Standards for the Construction of Public Non-Community and Non-Public Water Systems" and be approved by the local Board of Health.
6. A well record must be filed with the Water Allocation Office within 60 days after the well is completed.
7. Authorization by rule may be revoked at any time.

MAR 1 8 1987

A59

(One form must be completed for each well.)

Name of Permittee: American Cyanamid Co.
Name of Facility: American Cyanamid Sanitary Landfill - Carteret
Location:

NJPDES Permit No: NJ 0061611

CERTIFICATION

Well Permit Number (As assigned by NJDEP's Well Drilling Perits Section (609 - 984-6831)):	24-10386-
Owner's Well Number (As shown on the application or plans):	MW-1T
Well Completion Date:	5-3-87
Distance from Top of Casing (cap off) to ground surface (one-hundredth of a foot):	3"
Total Depth of Well (one-hundredth of a foot):	52'
Depth to Top of Screen From Top of Casing (one-hundredth of a foot):	45'
Screen Length (feet):	10'
Screen or Slot Size:	.020"
Screen or Slot Material:	Sch. 40 PVC
Casing Material: (PVC, Steel or Other-Specify):	Sch. 40 PVC
Casing Diameter (Inches):	4"
Static Water Level From Top of Casing at The Time of Installation (one-hundredth of a foot):	18'
Yield (Gallons per Minute):	8 +
Length of time Well Pumped or Bailed	1 Hours - Minutes
Lithologic Log:	Attach

AUTHENTICATION

I certify under penalty of law that, where applicable, I meet the requirements as specified on the reverse of this page, that I have personally examined and am familiar with the information submitted in this document and all attachments, and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe the submitted information is true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

Ken Hamilton
NAME (TYPE OR PRINT)

[signature]
SIGNATURE

N.J. License #1297
CERTIFICATION OF LICENSE NUMBER

SEAL

Testwell Craig Test Boring Co., Inc.
CERTIFICATION OF CORPORATE OFFICER OR SUCH AUTHORIZED REPRESENTATIVE

F. Gordon Craig
NAME (TYPE OR PRINT)

[signature]
SIGNATURE

President
TITLE

12-16-87
DATE

A60

Name of Permittee: American Cyanamid Co.
Name of Facility: American Cyanamid Sanitary Landfill - Carteret
Location:

NJPDES Permit No: NJ 0061611

CERTIFICATION

Well Permit Number (As assigned by NJDEP's Well Drilling Perits Section (609 - 984-6831)):	24-10387-
Owner's Well Number (As shown on the application or plans):	MW-1S
Well Completion Date:	7-6-87
Distance from Top of Casing (cap off) to ground surface (one-hundredth of a foot):	3'
Total Depth of Well (one-hundredth of a foot):	20'
Depth to Top of Screen From Top of Casing (one-hundredth of a foot):	13'
Screen Length (feet):	10'
Screen or Slot Size:	.020"
Screen or Slot Material:	Sch. 40 PVC
Casing Material: (PVC, Steel or Other-Specify):	Sch. 40 PVC
Casing Diameter (Inches):	4"
Static Water Level From Top of Casing at The Time of Installation (one-hundredth of a foot):	17'
Yield (Gallons per Minute):	8 +
Length of time Well Pumped or Bailed	1 Hours - Minutes
Lithologic Log:	ATTACH

AUTHENTICATION

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Ken Hamilton
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SIGNATURE

N.J. License #1297
CERTIFICATION OF LICENSE NUMBER

SEAL

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CERTIFICATION BY EXECUTIVE OFFICER OR DULY AUTHORIZED REPRESENTATIVE

F. Gordon Craig
NAME (TYPE OR PRINT)

SIGNATURE

President
TITLE

12-16-87
DATE

A61

MONITORING WELL CERTIFICATION - [illegible]

(One form must be completed for each well)

Name of Permittee: American Cyanamid Co.
Name of Facility: American Cyanamid Sanitary Landfill - Carteret
Location:

NJPDES Permit No: NJ 0061611

CERTIFICATION

Well Permit Number (As assigned by NJDEP's Well Drilling Perits Section (609 - 984-6831)):	2 4 - 1 0 3 8 8
Owner's Well Number (As shown on the application or plans):	MW-2T
Well Completion Date:	6-26-87
Distance from Top of Casing (cap off) to ground surface (one-hundredth of a foot):	3"
Total Depth of Well (one-hundredth of a foot):	52'
Depth to Top of Screen From Top of Casing (one-hundredth of a foot):	45'
Screen Length (feet):	10'
Screen or Slot Size:	.020"
Screen or Slot Material:	Sch. 40 PVC
Casing Material: (PVC, Steel or Other-Specify):	Sch. 40 PVC
Casing Diameter (Inches):	4"
Static Water Level From Top of Casing at The Time of Installation (one-hundredth of a foot):	20'
Yield (Gallons per Minute):	8 +
Length of time Well Pumped or Bailed	1 Hours - Minutes
Lithologic Log:	ATTACH

AUTHENTICATION

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Ken Hamilton
NAME (TYPE OR PRINT)

Ken Hamilton
SIGNATURE

N.J. License #1297
CERTIFICATION OR LICENSE NUMBER

SEAL

Testwell Craig Test Boring Co., Inc.
CERTIFICATION BY EXECUTIVE OFFICER OR DULY AUTHORIZED REPRESENTATIVE

F. Gordon Craig
NAME (TYPE OR PRINT)

F Gordon Craig
SIGNATURE

President
TITLE

12-16-87
DATE

A62

(One form must be completed for each well)

Name of Permittee: American Cyanamid Co.
Name of Facility: American Cyanamid Sanitary Landfill - Carteret
Location:

NJPDES Permit No: NJ 0061611

CERTIFICATION

Well Permit Number (As assigned by NJDEP's Well Drilling Perits Section (609 - 984-6831)):	24-10389-
Owner's Well Number (As shown on the application or plans):	MW-2S
Well Completion Date:	6-26-87
Distance from Top of Casing (cap off) to ground surface (one-hundredth of a foot):	3'
Total Depth of Well (one-hundredth of a foot):	20'
Depth to Top of Screen From Top of Casing (one-hundredth of a foot):	13'
Screen Length (feet):	10'
Screen or Slot Size:	.020"
Screen or Slot Material:	Sch. 40 PVC
Casing Material: (PVC, Steel or Other-Specify):	Sch. 40 PVC
Casing Diameter (Inches):	4"
Static Water Level From Top of Casing at The Time of Installation (one-hundredth of a foot):	18'
Yield (Gallons per Minute):	8 +
Length of time Well Pumped or Bailed	1 Hours - Minutes
Lithologic Log:	Attach

AUTHENTICATION

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SIGNATURE

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F. Gordon Craig
NAME (TYPE OR PRINT)

SIGNATURE

President
TITLE

12-16-87
DATE

A63

MONITORING WELL CERTIFICATION - FORM A - NJPDES

(One form must be completed for each well)

Name of Permittee: American Cyanamid Co.
Name of Facility: American Cyanamid Sanitary Landfill - Carteret
Location:

NJPDES Permit No: NJ 0061611

CERTIFICATION

Well Permit Number (As assigned by NJDEP's Well Drilling Perits Section (609 - 984-6831)):	24-10390-
Owner's Well Number (As shown on the application or plans):	MW-3T
Well Completion Date:	7-28-87
Distance from Top of Casing (cap off) to ground surface (one-hundredth of a foot):	3'
Total Depth of Well (one-hundredth of a foot):	60'
Depth to Top of Screen From Top of Casing (one-hundredth of a foot):	53'
Screen Length (feet):	10'
Screen or Slot Size:	.020"
Screen or Slot Material:	Sch. 40 PVC
Casing Material: (PVC, Steel or Other-Specify):	Sch. 40 PVC
Casing Diameter (Inches):	4"
Static Water Level From Top of Casing at The Time of Installation (one-hundredth of a foot):	20'
Yield (Gallons per Minute):	8 +
Length of time Well Pumped or Bailed	1 Hours - Minutes
Lithologic Log:	ATTACH

AUTHENTICATION

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SIGNATURE

N.J. License #1297
CERTIFICATION OR LICENSE NUMBER

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F. Gordon Craig
NAME (TYPE OR PRINT)

SIGNATURE

President
TITLE

12-16-87
DATE

A64

(One form must be completed for each well)

Name of Permittee: American Cyanamid Co.
Name of Facility: American Cyanamid Sanitary Landfill - Carteret
Location:

NJPDES Permit No: NJ 0061611

CERTIFICATION

Well Permit Number (As assigned by NJDEP's Well Drilling Perits Section (609 - 984-6831)):	2 4 - 1 0 3 9 1 -
Owner's Well Number (As shown on the application or plans):	MW-3S
Well Completion Date:	7-28-87
Distance from Top of Casing (cap off) to ground surface (one-hundredth of a foot):	3'
Total Depth of Well (one-hundredth of a foot):	30'
Depth to Top of Screen From Top of Casing (one-hundredth of a foot):	23'
Screen Length (feet):	10'
Screen or Slot Size:	.020"
Screen or Slot Material:	Sch. 40 PVC
Casing Material: (PVC, Steel or Other-Specify):	Sch. 40 PVC
Casing Diameter (Inches):	4"
Static Water Level From Top of Casing at The Time of Installation (one-hundredth of a foot):	19'
Yield (Gallons per Minute):	8 +
Length of time Well Pumped or Bailed	1 Hours - Minutes
Lithologic Log:	ATTACH

AUTHENTICATION

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F. Gordon Craig
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SIGNATURE

President
TITLE

12-16-87
DATE

A65

Name of Permittee: American Cyanamid Co.
Name of Facility: American Cyanamid Sanitary Landfill - Carteret
Location:

NJPDES Permit No: NJ 0061611

CERTIFICATION

Well Permit Number (As assigned by NJDEP's Well Drilling Perits Section (609 - 984-6831)):	2 4 - 1 0 3 9 2 -
Owner's Well Number (As shown on the application or plans):	MW-4T
Well Completion Date:	7-24-87
Distance from Top of Casing (cap off) to ground surface (one-hundredth of a foot):	3'
Total Depth of Well (one-hundredth of a foot):	60'
Depth to Top of Screen From Top of Casing (one-hundredth of a foot):	53'
Screen Length (feet):	10'
Screen or Slot Size:	.020"
Screen or Slot Material:	Sch. 40 PVC
Casing Material: (PVC, Steel or Other-Specify):	Sch. 40 PVC
Casing Diameter (Inches):	4"
Static Water Level From Top of Casing at The Time of Installation (one-hundredth of a foot):	18'
Yield (Gallons per Minute):	8 +
Length of time Well Pumped or Bailed	1 Hours - Minutes
Lithologic Log:	ATTACH

AUTHENTICATION

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N.J. License #1297
CERTIFICATION OF LICENSE NUMBER

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CERTIFICATION BY EXECUTIVE OFFICER OR SUCH AUTHORIZED REPRESENTATIVE

F. Gordon Craig
NAME (TYPE OR PRINT)

SIGNATURE

President
TITLE

12-16-87
DATE

A66

Name of Permittee: American Cyanamid Co.
Name of Facility: American Cyanamid Sanitary Landfill - Carteret
Location:

NJPDES Permit No: NJ 0061611

CERTIFICATION

Well Permit Number (As assigned by NJDEP's Well Drilling Perits Section (609 - 984-6831)):	24-10393-
Owner's Well Number (As shown on the application or plans):	MW-4S
Well Completion Date:	7-24-87
Distance from Top of Casing (cap off) to ground surface (one-hundredth of a foot):	3'
Total Depth of Well (one-hundredth of a foot):	25'
Depth to Top of Screen From Top of Casing (one-hundredth of a foot):	18'
Screen Length (feet):	10'
Screen or Slot Size:	.020"
Screen or Slot Material:	Sch. 40 PVC
Casing Material: (PVC, Steel or Other-Specify):	Sch. 40 PVC
Casing Diameter (Inches):	4"
Static Water Level From Top of Casing at The Time of Installation (one-hundredth of a foot):	19'
Yield (Gallons per Minute):	8 +
Length of time Well Pumped or Bailed	1 Hours - Minutes
Lithologic Log:	ATTACH

AUTHENTICATION

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SIGNATURE

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CERTIFICATION BY EXECUTIVE OFFICER OR DULY AUTHORIZED REPRESENTATIVE

F. Gordon Craig
NAME (TYPE OR PRINT)

SIGNATURE

President
TITLE

12-16-87
DATE

A67

Name of Permittee: American Cyanamid Co.
Name of Facility: American Cyanamid Sanitary Landfill - Carteret
Location:

NJPDES Permit No: NJ 0061611

CERTIFICATION

Well Permit Number (As assigned by NJDEP's Well Drilling Perits Section (609 - 984-6831)):	24-10394-
Owner's Well Number (As shown on the application or plans):	MW-5T
Well Completion Date:	5-28-87
Distance from Top of Casing (cap off) to ground surface (one-hundredth of a foot):	3"
Total Depth of Well (one-hundredth of a foot):	47'
Depth to Top of Screen From Top of Casing (one-hundredth of a foot):	40'
Screen Length (feet):	10'
Screen or Slot Size:	.020"
Screen or Slot Material:	Sch. 40 PVC
Casing Material: (PVC, Steel or Other-Specify):	Sch. 40 PVC
Casing Diameter (Inches):	4"
Static Water Level From Top of Casing at The Time of Installation (one-hundredth of a foot):	20'
Yield (Gallons per Minute):	8 +
Length of time Well Pumped or Bailed	1 Hours - Minutes
Lithologic Log:	ATTACH

AUTHENTICATION

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Ken Hamilton
NAME (TYPE OR PRINT)

[signature]
SIGNATURE

N.J. License #1297
CERTIFICATION OF LICENSE NUMBER

SEAL

Testwell Craig Test Boring Co., Inc.
CERTIFICATION BY EXECUTIVE OFFICER OR DULY AUTHORIZED REPRESENTATIVE

F. Gordon Craig
NAME (TYPE OR PRINT)

[signature]
SIGNATURE

President
TITLE

12-16-87
DATE

A68

(One form must be completed for each well)

Name of Permittee: American Cyanamid Co.
Name of Facility: American Cyanamid Sanitary Landfill - Carteret
Location:

NJPDES Permit No: NJ 0061611

CERTIFICATION

Well Permit Number (As assigned by NJDEP's Well Drilling Perits Section (609 - 984-6831)):	24-10395-
Owner's Well Number (As shown on the application or plans):	MW-5S
Well Completion Date:	5-28-87
Distance from Top of Casing (cap off) to ground surface (one-hundredth of a foot):	3'
Total Depth of Well (one-hundredth of a foot):	20'
Depth to Top of Screen From Top of Casing (one-hundredth of a foot):	13'
Screen Length (feet):	10'
Screen or Slot Size:	.020"
Screen or Slot Material:	Sch. 40 PVC
Casing Material: (PVC, Steel or Other-Specify):	Sch. 40 PVC
Casing Diameter (Inches):	4"
Static Water Level From Top of Casing at The Time of Installation (one-hundredth of a foot):	19'
Yield (Gallons per Minute):	8 +
Length of time Well Pumped or Bailed	1 Hours - Minutes
Lithologic Log:	Attach

AUTHENTICATION

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Ken Hamilton
NAME (TYPE OR PRINT)

SIGNATURE

N.J. License #1297
CERTIFICATION OR LICENSE NUMBER

SEAL

Testwell Craig Test Boring Co., Inc.
CERTIFICATION BY EXECUTIVE OFFICER OR DULY AUTHORIZED REPRESENTATIVE

F. Gordon Craig
NAME (TYPE OR PRINT)

SIGNATURE

President
TITLE

12-16-87
DATE

A69

APPENDIX B

EP Toxicity (Metals) and Cyanide Analyses
for Sludge, and Grab Samples
of Leachate, Groundwater, and Surface Water
Conducted in May 1986

RESULTS OF ANALYSIS FOR EP TOXIC METALS

AND CYANIDE IN SAMPLES COLLECTED ON 16 MAY 1986

BY HYDROSYSTEMS, INC.

Prepared for

Hydrosystems, Inc.
P.O. Box 348
Dunn Loring, VA 22027

Prepared by
Martin Marietta Environmental Systems
9200 Rumsey Road
Columbia, MD 21045

24 July 1986

A71

ANALYTICAL REPORT

On 19 May 1986, Martin Marietta Environmental Systems received 8 aqueous samples and 5 sludge samples collected on 16 May 1986 by Hydrosystems, Inc. A list of the samples received and corresponding laboratory tracking numbers is shown in Table 1. Additional sample information can be found on the enclosed chain of custody forms included as Appendix A.

Samples were analyzed for free cyanide using Method 412 as specified in "Standard Methods," 16th Edition, 1985, and total cyanide using Method 335.2 as specified in "Standard Methods for Chemical Analysis of Water and Wastes," EPA-600/4-79-020, revised March 1983. The EP Toxicity test was performed on the sludge samples and the leachates analyzed for metals using Method 1310 as specified in SW-846 (2nd edition), "Test Methods for Evaluating Solid Waste," USEPA, 1982. Results of analyses are presented in Tables 2 and 3. Quality control sample data are contained in Appendix B. Maximum concentrations of metals for determining the EP Toxicity characteristic are given in Appendix C.

A72

Table 1. List of samples received on 19 May 1986 and corresponding laboratory tracking numbers

Hydrosystems, Inc. Sample I.D.		Martin Marietta Environmental Systems Lab I.D.
CART-2	5/16/86	3352
CART-4	5/16/86	3353
CART-5	5/16/86	3354
CART-6	5/16/86	3355
CART-7	5/16/86	3356
CART-8	5/16/86	3357
CART-9	5/16/86	3358
Trip Blank	5/12/86	3359
Sludge-C1	5/16/86	3360
Sludge-C2	5/16/86	3361
Sludge-C3	5/16/86	3362
Sludge-C4	5/16/86	3363
Sludge-C5	5/16/86	3364

A73

Table 2. Results of EP Toxicity analysis for metals in sludge samples collected on 16 May 1986 by Hydrosystems, Inc.

Reported as total metals from EP TOX extract Units: ppb (µg/L)

MMES ID			3360	3361	3361 (a)	3362	3363	3363 (b)	3364	Prep (c) Blank
Client ID			C1	C2	C2	C3	C4	C4	C5	
Sample Date			5/16/86	5/16/86	5/16/86	5/16/86	5/16/86	5/16/86	5/16/86	
Metal	Method	Analysis Date								
Arsenic	ICP(d)	6/16/86	< 200	< 200	—(e)	< 200	< 200	< 200	< 200	< 200
Barium	ICP	6/12/86	< 200	< 200	—	< 200	< 200	< 200	< 200	< 200
Cadmium	ICP	6/16/86	< 50	< 50	—	< 50	< 50	< 50	< 50	< 50
Chromium	ICP	6/16/86	< 50	< 50	—	< 50	< 50	< 50	< 50	< 50
Lead	ICP	6/16/86	< 200	< 200	—	< 200	< 200	< 200	< 200	< 200
Mercury	CV(f)	6/3/86	< 0.3	< 0.3	< 0.3	0.57	0.69	—	< 0.3	< 0.3
Selenium	ICP	6/16/86	< 200	< 200	—	< 200	< 200	< 200	< 200	< 200
Silver	ICP	6/16/86	< 50	< 50	—	< 50	< 50	< 50	< 50	< 50

(a) Duplicate aliquot of extract analyzed
(b) Duplicate sample extraction and analysis
(c) Laboratory reagent water analyzed
(d) Inductively coupled plasma spectrometry
(e) Sample not analyzed for this parameter
(f) Cold vapor atomic absorption spectroscopy

Table 3. Results of analysis for free and total cyanide in samples collected on 16 May 1986 by Hydrosystems, Inc.

MMES Lab ID	Hydrosystems Sample ID	Total Cyanide (mg/L)	Free Cyanide (mg/L)
3352	CART-2	85	0.33
3353	CART-4	124	2.4
3354	CART-5	105	0.50
3355	CART-6	62	2.3
3356	CART-7	49	0.55
3357	CART-8	2	0.084
3358	CART-9	0.37	0.012
3359	Trip Blank	0.013	0.007

MMES Lab ID	Hydrosystems Sample ID	Total Cyanide (mg/kg)	Free Cyanide (mg/kg)
3360	C1	683	14
3361	C2	452	18
3362	C3	3660	103
3363	C4	437	38
3364	C5	433	9

A-75

APPENDIX A

CHAIN OF CUSTODY RECORD

A-76

MARTIN MARIETTA ENVIRONMENTAL SYSTEMS CHAIN OF CUSTODY	9200 Rumsey Road Columbia, MD 21045-1934 (301)964-9200 FAX #(301)964-9200, Ext. 361

Client: HYDROSYSTEMS, Inc
Client Address: 2042 Peach Orchard Drive
Falls Church VA 22043

Contact Person: Lyle R. Silka phone (703) 573-1690

Sampled by: Lyle R. Silka Date: 5-16-86

	Client sample identification	Location/Test Parameters	Sampling date/time	# of samples/ volume	preservative
		~~Fee~~ + ~~Total~~			
3352	CART-2	CN^-	5-16-86	~1 l	NaOH
3353	CART-4	"	"	"	"
3354	CART-5	"	"	"	"
3355	CART-6	"	"	"	"
3356	CART-7	"	"	"	"
3357	CART-8	"	"	"	"
3358	CART-9	"	"	"	"
3359	Trip Blank	"	5-12-86	"	"

released by:	date/time	received by:	date/time:
Lyle R. Silka	5-19-86/1107		
released by:	date/time	received by:	date/time:
received in laboratory by:	date/time	method of shipment:	
A. Brooke Simeon	5/19 11:30	Ice Chest	
comments: Run for Free + Total CN^-			

A77

MARTIN MARIETTA ENVIRONMENTAL SYSTEMS
CHAIN OF CUSTODY

9200 Rumsey Road
Columbia, MD 21045-1934
(301)964-9200
FAX #(301)964-9200, Ext. 361

Client: HYDROSYSTEMS, Inc
Client Address: 2042 Peach Orchard Dr.
Falls Church VA 22043

Contact Person: Lyle R. Silka phone: (703) 573-1690

Sampled by: Lyle R. Silka Date: 5-16-86

	Client sample identification	Location/Test Parameters	Sampling date/time	# of samples/ volume	preservative
3360	Sludge - C1	EP TOX Metals +	5/16/86	500 gm	Refrig
3361	Sludge - C2	Free + Total CN	"	"	"
3362	Sludge - C3	"	"	"	"
3363	Sludge - C4	"	"	"	"
3364	Sludge - C5	"	"	"	"

released by: Lyle R. Silka 5/19/86/1120 date/time
received by: date/time:

released by: date/time
received by: date/time:

received in laboratory by: A. Brooke Smulson 5/19 11:30 date/time
method of shipment:

comments: EP TOX Metals + Free + Total CN⁻

A78

APPENDIX B

EP Toxicity (Metals) and Cyanide Analyses
for Sludge, and Grab Samples
of Leachate, Groundwater, and Surface Water
Conducted in May 1986

RESULTS OF ANALYSIS FOR EP TOXIC METALS

AND CYANIDE IN SAMPLES COLLECTED ON 16 MAY 1986

BY HYDROSYSTEMS, INC.

Prepared for

Hydrosystems, Inc.
P.O. Box 348
Dunn Loring, VA 22027

Prepared by
Martin Marietta Environmental Systems
9200 Rumsey Road
Columbia, MD 21045

24 July 1986

A-80

ANALYTICAL REPORT

On 19 May 1986, Martin Marietta Environmental Systems received 8 aqueous samples and 5 sludge samples collected on 16 May 1986 by Hydrosystems, Inc. A list of the samples received and corresponding laboratory tracking numbers is shown in Table 1. Additional sample information can be found on the enclosed chain of custody forms included as Appendix A.

Samples were analyzed for free cyanide using Method 412 as specified in "Standard Methods," 16th Edition, 1985, and total cyanide using Method 335.2 as specified in "Standard Methods for Chemical Analysis of Water and Wastes," EPA-600/4-79-020, revised March 1983. The EP Toxicity test was performed on the sludge samples and the leachates analyzed for metals using Method 1310 as specified in SW-846 (2nd edition), "Test Methods for Evaluating Solid Waste," USEPA, 1982. Results of analyses are presented in Tables 2 and 3. Quality control sample data are contained in Appendix B. Maximum concentrations of metals for determining the EP Toxicity characteristic are given in Appendix C.

Table 1. List of samples received on 19 May 1986 and corresponding laboratory tracking numbers

Hydrosystems, Inc. Sample I.D.		Martin Marietta Environmental Systems Lab I.D.
CART-2	5/16/86	3352
CART-4	5/16/86	3353
CART-5	5/16/86	3354
CART-6	5/16/86	3355
CART-7	5/16/86	3356
CART-8	5/16/86	3357
CART-9	5/16/86	3358
Trip Blank	5/12/86	3359
Sludge-C1	5/16/86	3360
Sludge-C2	5/16/86	3361
Sludge-C3	5/16/86	3362
Sludge-C4	5/16/86	3363
Sludge-C5	5/16/86	3364

A82

Table 2. Results of EP Toxicity analysis for metals in sludge samples collected on 16 May 1986 by Hydrosystems, Inc.

Reported as total metals from EP TOX extract Units: ppb (µg/L)

MMES ID			3360	3361	3361 (a)	3362	3363	3363 (b)	3364	Prep (c) Blank
Client ID			C1	C2	C2	C3	C4	C4	C5	
Sample Date			5/16/86	5/16/86	5/16/86	5/16/86	5/16/86	5/16/86	5/16/86	
Metal	Method	Analysis Date								
Arsenic	ICP(d)	6/16/86	< 200	< 200	—(e)	< 200	< 200	< 200	< 200	< 200
Barium	ICP	6/12/86	< 200	< 200	—	< 200	< 200	< 200	< 200	< 200
Cadmium	ICP	6/16/86	< 50	< 50	—	< 50	< 50	< 50	< 50	< 50
Chromium	ICP	6/16/86	< 50	< 50	—	< 50	< 50	< 50	< 50	< 50
Lead	ICP	6/16/86	< 200	< 200	—	< 200	< 200	< 200	< 200	< 200
Mercury	CV(f)	6/3/86	< 0.3	< 0.3	< 0.3	0.57	0.69ppb	—	< 0.3	< 0.3
Selenium	ICP	6/16/86	< 200	< 200	—	< 200	< 200	< 200	< 200	< 200
Silver	ICP	6/16/86	< 50	< 50	—	< 50	< 50	< 50	< 50	< 50

(a) Duplicate aliquot of extract analyzed
(b) Duplicate sample extraction and analysis
(c) Laboratory reagent water analyzed
(d) Inductively coupled plasma spectrometry
(e) Sample not analyzed for this parameter
(f) Cold vapor atomic absorption spectroscopy

A83.

Table 3. Results of analysis for free and total cyanide in samples collected on 16 May 1986 by Hydrosystems, Inc.

MMES Lab ID	Hydrosystems Sample ID	Total Cyanide (mg/L) ppm	Free Cyanide (mg/L)
3352	CART-2	85	0.33
3353	CART-4	124	2.4
3354	CART-5	105	0.50
3355	CART-6	62	2.3
3356	CART-7	49	0.55
3357	CART-8	2	0.084
3358	CART-9	0.37	0.012
3359	Trip Blank	0.013	0.007

MMES Lab ID	Hydrosystems Sample ID	Total Cyanide (mg/kg) ppm	Free Cyanide (mg/kg)
3360	C1	683	14
3361	C2	452	18
3362	C3	3660	103
3363	C4	437	38
3364	C5	433	9

A84

APPENDIX C

MAXIMUM CONCENTRATION OF CONTAMINANTS FOR CHARACTERISTIC OF EP TOXICITY

A85

MAXIMUM CONCENTRATION OF CONTAMINANTS

FOR CHARACTERISTIC OF EP TOXICITY*

	Maximum Concentration	
Contaminant	mg/L	ppb
Arsenic	5.0	5,000
Barium	100.0	100,000
Cadmium	1.0	1,000
Chromium	5.0	5,000
Lead	5.0	5,000
Mercury	0.2	200
Selenium	1.0	1,000
Silver	5.0	5,000

* From SW-846 (2nd Edition), "Test Methods for Evaluating Solid Waste," USEPA, 1982

A86

APPENDIX D

Cyanide Analyses for Surface Water Samples
Conducted in October 1986

RAHWAY RIVER SAMPLING PROGRAM
SUMMARY OF ANALYTICAL RESULTS
FOR TOTAL AND FREE CYANIDE
IN SURFACE WATER
NEAR THE CARTERET IMPOUNDS
COLLECTED BY HYDROSYSTEMS, INC.
OCTOBER 9, 1986

HYDROSYSTEMS' SAMPLE ID NUMBER	SAMPLING LOCATION DESCRIPTION	CYANIDE CONCENTRATION (IN MG/L) TOTAL	FREE
THE FOLLOWING SAMPLES WERE COLLECTED JUST BEFORE HIGH TIDE RIVER FLOW IS INLAND			
H1	UPSTREAM OF IMPOUNDS IN RAHWAY RIVER 1/4 STREAM WIDTH FROM FAR BANK	BDL	BDL
H2	UPSTREAM OF IMPOUNDS IN RAHWAY RIVER MID STREAM	BDL	BDL
H3	UPSTREAM OF IMPOUNDS IN RAHWAY RIVER 1/4 STREAM WIDTH FROM NEAR BANK	BDL	BDL
H4	DOWNSTREAM OF IMPOUNDS IN RAHWAY RIVER 1/4 STREAM WIDTH FROM FAR BANK	BDL	BDL
H5	DOWNSTREAM OF IMPOUNDS IN RAHWAY RIVER MID STREAM	BDL	BDL
H6	DOWNSTREAM OF IMPOUNDS IN RAHWAY RIVER 1/4 STREAM WIDTH FROM NEAR BANK	BDL	BDL
H16	DUPLICATE SAMPLE OF NO. H6	BDL	BDL
H20	FIELD BLANK	BDL	BDL

BDL = BELOW DETECTION LIMIT OF 0.025 MG/L

A88

RAHWAY RIVER SAMPLING PROGRAM
SUMMARY OF ANALYTICAL RESULTS
FOR TOTAL AND FREE CYANIDE
IN SURFACE WATER
NEAR THE CARTERET IMPOUNDS
COLLECTED BY HYDROSYSTEMS, INC.
OCTOBER 9, 1986

HYDROSYSTEMS' SAMPLE ID NUMBER	SAMPLING LOCATION DESCRIPTION	CYANIDE CONCENTRATION (IN MG/L) TOTAL	FREE
THE FOLLOWING SAMPLES WERE COLLECTED JUST BEFORE LOW TIDE RIVER FLOW IS SEAWARD			
L1	UPSTREAM OF IMPOUNDS IN RAHWAY RIVER 1/4 STREAM WIDTH FROM FAR BANK	BDL	BDL
L2	UPSTREAM OF IMPOUNDS IN RAHWAY RIVER MID STREAM	BDL	BDL
L12	DUPLICATE SAMPLE OF NO. L2	BDL	BDL
L3	UPSTREAM OF IMPOUNDS IN RAHWAY RIVER 1/4 STREAM WIDTH FROM NEAR BANK	BDL	BDL
L4	DOWNSTREAM OF IMPOUNDS IN RAHWAY RIVER 1/4 STREAM WIDTH FROM FAR BANK	BDL	BDL
L5	DOWNSTREAM OF IMPOUNDS IN RAHWAY RIVER MID STREAM	BDL	BDL
L15	DUPLICATE SAMPLE OF NO. L5	BDL	BDL
L6	DOWNSTREAM OF IMPOUNDS IN RAHWAY RIVER 1/4 STREAM WIDTH FROM NEAR BANK	BDL	BDL
L7	UPSTREAM OF IMPOUNDS IN MARSH CREEK FAR BANK OF RAHWAY RIVER	BDL	BDL
L8	UPSTREAM OF IMPOUNDS IN CROSS CREEK NEAR BANK OF RAHWAY RIVER	0.032	0.032
L20	FIELD BLANK	BDL	BDL

BDL = BELOW DETECTION LIMIT OF 0.025 MG/L

RAHWAY RIVER SAMPLING PROGRAM
SUMMARY OF FIELD DATA ON TOTAL AND SAMPLING DEPTH,
TEMPERATURE, SALINITY, AND SPECIFIC CONDUCTIVITY
IN SURFACE WATER
NEAR THE CARTERET IMPOUNDS
COLLECTED BY HYDROSYSTEMS, INC.
OCTOBER 9, 1986

HYDROSYSTEMS' SAMPLE ID NUMBER	SAMPLING TIME (24 HOUR)	TOTAL DEPTH (FT)	SAMPLING DEPTH (FT)	TEMP (CELSIUS)	SALINITY (o/oo)	CONDUCTIVITY (UMHOS/CM)
	DAY: OCTOBER 9, 1986					
H1	1030	5.5	0.0	20.7	15.0	22,000
			2.5	20.5	16.0	23,000
			5.5	21.0	16.0	23,200
H2	1055	11.0	0.0	20.0	19.0	26,000
			5.0	20.0	19.0	26,200
			10.0	20.0	19.5	26,300
H3	1110	5.5	0.0	20.5	19.0	26,500
			2.5	20.2	19.0	26,900
			5.5	20.2	17.5	24,200
H4	1130	7.5	0.0	19.8	20.0	28,000
			3.0	19.0	20.0	28,000
			7.0	19.0	19.9	27,900
H5	1140	13.5	0.0	20.0	19.9	28,000
			6.0	20.0	20.0	28,100
			12.0	20.0	20.9	28,200
H6	1150.	11.5	0.0	20.0	21.5	28,000
			5.0	20.0	21.5	28,200
			10.0	20.0	21.5	28,200
H16	1200 (FIELD DATA SAME AS SAMPLE NO. H6)					
H20	1205 (FIELD BLANK)					

NOTE: HIGH TIDE MAXIMUM AT APPROXIMATELY 1200 HOURS

A90

RAHWAY RIVER SAMPLING PROGRAM
SUMMARY OF FIELD DATA ON TOTAL AND SAMPLING DEPTH,
TEMPERATURE, SALINITY, AND SPECIFIC CONDUCTIVITY
IN SURFACE WATER
NEAR THE CARTERET IMPOUNDS
COLLECTED BY HYDROSYSTEMS, INC.
OCTOBER 9, 1986

HYDROSYSTEMS' SAMPLE ID NUMBER	SAMPLING TIME (24 HOUR)	TOTAL DEPTH (FT)	SAMPLING DEPTH (FT)	TEMP (CELSIUS)	SALINITY (o/oo)	CONDUCTIVITY (UMHOS/CM)
	DAY: OCTOBER 9, 1986					
L1	1655	6.0	3.0	20.5	17.0	24,500
L2	1645	8.5	4.0	20.0	17.9	25,000
L3	1615	3.5	2.0	19.9	18.5	26,000
L4	1730	5.0	2.0	20.0	19.5	27,500
L5	1720	9.0	5.0	20.0	19.5	27,500
L15	1725 (FIELD DATA SAME AS SAMPLE NO. L5)					
L6	1715	4.0	2.0	19.9	19.5	27,500
L7	1705	3.5	1.5	20.0	18.0	25,200
L8	1605	3.5	2.0	19.0	18.9	26,000
L20	1755 (FIELD BLANK)					

NOTE: LOW TIDE MINIMUM AT APPROXIMATELY 1844 HOURS

A91

ATTACHMENT B

CYANAMID

Call Georgianne Hand Delivered

1131D

American Cyanamid Company
P.O. Box 31
Linden, NJ 07036
(201) 862-6000

Carteret - Warners

August 19, 1987

RECEIVED
AUG 20 ...

STATE OF NEW JERSEY
DEPT. ENVIRONMENTAL PROTECTION
DIVISION WATER RESOURCES

Mr. Alfred Rattie, Vice President
Earthlife Sales Company
354 North Main Street
Doylestown, PA 18901

Dear Mr. Rattie:

I have enclosed a completed Compost Application Site Information Sheet for our closed landfill in Carteret, New Jersey. This information will be used to obtain a permit from NJDEP to apply your Earthlife material to the landfill surface for soil improvement and turf establishment.

The landfill consists of approximately 125 acres of land in Carteret, New Jersey across the Rahway River from our Warners Plant located in Linden, New Jersey. The facility received waste generated at the Warners Plant from two chemical manufacturing processes. Production of Alum (Aluminum Sulfate) involved digestion of Bauxite ore with Sulfuric Acid. The resulting muds, primarily silica, were slurried with water, neutralized and pumped to the Carteret facility. Production of Yellow Prussiate of Soda (a commercial dye intermediate) involved the reaction of Calcium Cyanide with Copperas and Soda Ash to form Sodium Ferrocyanide. The resultant muds, primarily calcium carbonate, were slurried with water, neutralized and pumped to the Carteret facility. Disposal of muds from the Yellow Prussiate of Soda process ceased in 1970 and disposal of muds from Alum production ceased in 1973. There has been no disposal activity at the facility since 1973.

The objective of the present revegetation effort is to minimize wind erosion of the dried surface sediment which in the past had been blown across public roadways. Earthlife was identified as the most effective soil additive from test plantings at the facility. The revegetation project is being implemented in a phased approach. The present information is submitted for Phase I which will consist of approximately 14 acres.

If you have any questions regarding this matter, please contact me at 201-862-6000 Ext. 439.

Need to wait until samples come in

Stopped dumping

Very truly yours,

AMERICAN CYANAMID COMPANY

Daniel R. Callahan
Environmental Engineer

DRC:g
Attach.

Testing grounds? compost
Shirley Schulman - Hazwaste Evaluation
No closure plan submitted

- Get Ground water sample
- well in (4)
- get sample - wait

B

ATTACHMENT C

CYANAMID

ATTACHMENT VI

American Cyanamid Company
P.O. Box 31
Linden, NJ 07036
(201) 862-6000

February 26, 1982

Mr. Francis Cap
Sanitary Inspector
Board of Health
216 Pershing Avenue
Carteret, N. J. 07008

Dear Mr. Cap:

This letter is to summarize and confirm the conversation I had with you several weeks ago regarding the Cyanamid Carteret property.

In the course of studies during the summer and fall 1981 on erosion control, our consultant on revegetation, Dames and Moore of Cranford, New Jersey, observed a number of sick and dead seagulls on our site. In a letter to us dated January 5, 1982, they speculated that the birds were being poisoned by something on our site. American Cyanamid retained Dr. Joanna Burger, Chairman of the Rutgers Biology Department and a recognized authority on seagulls and Dr. Michael Gochfield from Rutgers Department of Environmental Medicine. These professors visited the site on January 7, 1982.

Dr. Burger's preliminary report indicates that the seagulls are regularly using the Cyanamid site for loafing, bathing and consuming food scavenged from the municipal landfill. Most of the dead seagulls, according to Dr. Burger, appear to have died in late summer or early fall; they were predominantly immature birds and, based on body pose, appear to have died in a botulism outbreak. Botulism, Dr. Burger has advised, is a known cause of death in seagull populations and may be attributable to the municipal landfill or to stagnant water on our site or to a combination of the two.

As you know, the American Cyanamid Company site is located just north of the Carteret municipal landfill and was used from 1939 to 1973 to collect spent ore from the production of alum and precipitated muds from the production of yellow prussiate of soda. Alum is a chemical used in water treatment and styptic pencils; yellow prussiate of soda is a complex ferrocyanide salt used as an additive to table salt and road salt among other uses. The site has been inactive since 1973.

In May, 1981 toxicological studies were run on representative samples of the muds. The results of the oral toxicity study with rats and dermal irritation studies with rabbits indicate these muds are non-toxic. We have analyzed for complex cyanides, free cyanide and heavy metals in water and mud samples from the site. Complex cyanides were detected (levels as high as 3500 ppm) on shallow core samples of the residues, confirming the presence of yellow prussiate of soda which had been entrained in the muds discharged

C1

to the site. Yellow prussiate of soda is stable and non-toxic. Samples from the Rahway River (both up and down stream) and samples from stagnant water near where large numbers of birds have been observed had no detectable levels of free cyanide. Samples of sub-surface material did contain trace levels of free cyanide. However, our Corporate Toxicologist, Dr. M. A. Friedman, indicates to us that these trace levels of cyanide are non-toxic. Heavy metals such as lead, chromium are also below toxic levels. Based on all these studies and on chemical analyses, we believe that the seagull mortality problem is not due to the material on our site.

Dr. Burger has outlined for us a series of studies to more conclusively ascertain specific causes of seagull deaths. In addition, we will proceed with topographic studies leading to possible future land reclamation of our property.

We have brought this to your attention because the possibility of seagulls dying of botulism may be a public health concern. We welcome your suggestions and will keep you appraised of any further developments. In the interim, please feel free to contact me.

Very truly yours,

J. B. Halladay

J. B. Halladay
Plant Manager

JBH:mes

cc: Dr. J. Burger - Rutgers
Mr. J. Dette - Dames & Moore
Mr. W. Beggs - N.J.D.E.P.
Dir. A. Schiffman - N.J.D.E.P., Div. of Water Resources

C2

ATTACHMENT D

(20)

Form ADM-012

MEMO NEW JERSEY STATE DEPARTMENT OF ENVIRONMENTAL PROTECTION

TO Al Kaczoroski DATE 5/5/87

FROM Robert Leary through Pat Ferraro

SUBJECT American Cyanamid sludge site, Carteret, Middlesex County

Nature of investigation: American Cyanamid plans to build roadways from demolition material in order to install monitoring wells and re-vegetate sludge site. I am to check the site to ascertain if this project is acceptable to DEP, Division of Solid Waste, Bureau of Field Operations.

April 23, 1987

I met with Dan Callahan and Mike Caponegro of American Cyanamid. They told me that the road base would be constructed from the remains of two buildings at the Linden plant which are being torn down. Only inert materials such as concrete and terra-cotta pipe would be used as road base.

The Linden plant piped a liquid sludge waste from the production of aluminum sulfate across the Rahway River to the Carteret property. The material was placed in lagoons and dewatered slowly. The material is still soft particularly after rainy weather. The company needs to construct roads to provide access to areas where monitoring wells are to be installed and also for their re-vegetation project. The company has experimented with a variety of soil enrichment materials and has chosen a product called Earthlife. Three inches of this product will be disked into the sludge and seeded to re-establish a grassy vegetative growth throughout this site. The new roads will provide access to the various areas of this 125 acre site.

Conclusions: I have no objections to this project.

SW8:jms

D

ATTACHMENT E

CYANAMID

American Cyanamid Company
P.O. Box 31
Linden, NJ 07036
(201) 862-6000

December 21, 1988

Mr. George G. McCann, Director
Division of Water Resources
N. J. Dept. of Environmental Protection
CN 029
Trenton, New Jersey 08625

Dear Mr. McCann:

During the Assistant Commissioner's meeting with American Cyanamid Co. at our Linden plant on December 16, 1988, we discussed our ongoing project to vegetate the Company's inactive landfill site in Carteret. We also discussed our frustration concerning NJDEP's requirement to submit a CAFRA program permit application for this site maintenance work. This letter is in response to your suggestion that we summarize the project and our perspective on it. Attached please find the correspondence between ourselves and NJDEP's CAFRA group.

Essentially we are requesting you review the need for a CAFRA permit and, if it is found that one will be required, lay out specific requirements rather than a broad spectrum of items that we consider costly, time consuming, nonproductive and unnecessary. Our work at the site has focused in three specific areas. First, there was and is some maintenance work required on the landfill's berms to ensure they are sound and will continue to contain the landfill sludge. Second, we are vegetating the sludge surface to reduce its erosion potential, reduce the tendency for windborne dust formation, and improve the landfills aesthetic appearance. Third, we are taking steps to ensure that the relatively minor portion of sludge which was previously cast out of the landfill's impounds is returned inside the impounds and is incorporated into the material receiving vegetative cover. We believe this may be the portion of the work which triggered the CAFRA request.

The work we are conducting does not impact the original elevations of the landfill, nor does it change the dike structure design from their initial construction 25 years ago. We obtained permits from the Soil Conservation District and from the NJDEP for the use of Sewage Sludge Compost which we used as nutrient material to initiate vegetation. The landfill is permitted by the State's NJPDES program, and we conduct quarterly groundwater monitoring in accordance with that program. The site has been inspected by NJPDES/DGW personnel, by Soil Conservation District representatives, by representatives of the local government and other regulators.

E1

The history of this site is as follows:

1. From the late 1930's to the early 1970's American Cyanamid Company's Warners plant disposed of spent bauxite ore (alum sludge) and sludge from the production of Yellow Prussiate of Soda (YPS muds) in 6 impoundments at a 110 acre site in Carteret.

2. Following closure of the landfill in the 1970's. Cyanamid undertook a study of methods for vegetating and stabilizing the sludge in these impounds. A portion of our work addressed action items contained in an Administrative Consent Order with the State of New Jersey, Division of Solid Waste Management issued in 1978.

3. We began vegetating in 1986 and completed the work on two impounds (Nos. 4 and 5) during 1987. Permits were obtained from various local and state groups (including NJDEP) when the work was initiated. This was coupled with a series of meetings with NJDEP's water resources and solid waste departments to assure all needed permits were addressed and that the approach utilized would satisfy the NJDEP and the intent of the ACO.

4. In 1988, the Company proposed to continue the vegetation effort for two more impounds (Nos. 3 and 6). We again obtained the required permits. During NJDEP review of one of our permit applications, an NJDEP representative recommended that we contact the Coastal Enforcement Division to determine whether or not a permit was required. Cyanamid forwarded a copy of the plans for the project to the Coastal Division. A representative of this group stated in a phone conversation on June 3, 1988, that the group would have to inspect the site and would contact us should we require a permit. We proceeded with our proposed work at the impounds when the required soil conservation and sludge applicaton permits were received.

5. In October, the Coastal Enforcement Division contacted us and informed us that the NJDEP had inspected the landfill, that we were required to have a permit.

6. As discussed above, the work we are conducting at the impounds includes maintenance of berms and vegetation of the impounds. We are also returning cast out sludge to one impound. This sludge was cast out of the impounds during the later operating days of the impounds in an effort to increase the impound's capacity. We believe it prudent environmental practice to return this material to the impound from which it came.

E2

CYANAMID

7. Cyanamid received a packet of information concerning the submission of a Coastal permit application, but were unsure why specifically the State was requiring the permit or what permit(s) were required. We met with Coastal Division representatives on November 14, 1988, and these individuals restated their contention that we require a permit for the past work, but were unable to clarify what specific action(s) or work triggered this requirement and the applicable regulatory situation(s).

Cyanamid has not to date received adequate explanation for the Coastal Division's requirement for a permit. We continue to question whether a permit is required, and believe that the work we are conducting at this site is maintenance work for a facility which existed long before CAFRA. We maintain that the permitting process as it relates to the maintenance work at the Carteret site is neither helpful or protective of public health and the environment. We also believe this permitting process is unnecessarily burdensome to both the State and Cyanamid.

We look forward to your review of this situation. We would welcome the opportunity to meet with you and provide any further information needed to complete your review. Please contact our plant Environmental Engineer, Alice Boomhower, or myself at telephone (201) 862-6000 in this regard.

This submission and any past or future communications or discussions regarding this matter are not intended to admit any fact of liability or to waive or affect any rights.

Very truly yours,

AMERICAN CYANAMID COMPANY

R. B. Tabakin
Plant Manager

RBT:g
Attach.

E3

Let's protect our earth

NOV 28 1988

State of New Jersey

DEPARTMENT OF ENVIRONMENTAL PROTECTION

TRENTON

Division of Coastal Resources

November 22, 1988

Please address reply to:
CN 401
Trenton, N.J. 08625-0401

American Cyanamid Company
P.O. Box 31
Linden, N.J. 07036

Attn: Alice E. Boomhower
Environmental Engineer

RE: Pre-application Conference
Coastal Application Inquiry P# 2097
Carteret Landfill, Middlesex County

Dear Ms. Boomhower:

Based on staff review of the information presented and discussed at the pre-application conference held on November 14, 1988, your project has the following status in terms of the Rules on Coastal Resources and Development (N.J.A.C. 7:7E-1.1 et seq.) as amended to February 3, 1986. This staff review refers to specific regulations by Section number. Please understand that in accordance with N.J.A.C. 7:7-3.5(c) this informal guidance is not a binding commitment by the Department to approve or deny any forthcoming permit application for this project or site.

Project Description

Vegetation of impounds Nos. 3 & 6 and maintenance of berms surrounding the impounds. The project also proposes to return cast-off sludge to impound No. 6.

Earthlife, a composted sewage sludge product, will be used as an organic soil amendment to improve the organic content and fertility of the soils in impounds Nos. 3 & 6.

Location Policies

The coastal lands and water of New Jersey are diverse. Under the Rules on Coastal Resource and Development (N.J.A.C. 7:7E-1.1 et seq.) all permits are reviewed using appropriate special area policies, use policies, and resource policies. At the meeting, the Division highlighted those regulations which require your detailed attention. Please be aware, as was stated, it is your responsibility to address all appropriate policy issues whether or not they were specifically mentioned during the course of this meeting or in this letter.

SPECIAL AREAS

Special areas are those 45 types of coastal areas which merits focus attention and special management practice. The following section deals with those special areas located or adjacent to those areas involved in your proposal.

Intertidal and Subtidal Shallows (7:7E-3.15)
Filled Water's Edge (7:7E-7.16)
Wetlands (7:7E-3.25)
Wetlands Buffer (7:7E-3.26)
Intermittent Stream Corridors (7:7E-3.30)
Steep Slopes (7:7E-3.32)
Special Hazard Areas (7:7E-3.39)
Geodetic Control Reference Marks (7:7E-3.45)

GENERAL WATERS AREAS

Medium Rivers, Streams and Creeks (7:7E-4.8)
Acceptability Conditions for Uses (7:7E-4.11) (h,i)

USE POLICIES

Coastal Engineering (7:7E-7.11)

RESOURCE POLICIES

Water Quality (7:7E-8.4)
Groundwater Use (7:7E-8.6)
Stormwater Runoff (7:7E-8.7)
Vegetation (7:7E-8.8)
Air Quality (7:7E-8.10)
Public Access to the Waterfront (7:7E-8.11)
Buffers and Compatibility of Uses (7:7E-8.13)
Wet Soils and High Permeability Moist Soils (7:7E-8.17)
Flood Prone Areas (7:7E-8.19)

Also, you should contact Mr. James R. Johnson, Chief, Bureau of Tidelands to assure that the appropriate Tidelands conveyance i.e. grant, lease or license for the area is in your possession.

The applicant should also contact the Bureau of Freshwater Wetlands to see if a permit is required from their office.

The Division is also requesting the following information concerning the above mentioned project.

1. Submit a copy of your NJPDES permit #0061611.

E5

2. Explain the material composition of Alum sludge and sludge from the production of yellow Prussiate of Soda. (i.e. formula).

3. Concerning the product Earthlife, provide the Division with its source, manufacturer, amount required, method of distribution, and composition.

4. Will there be a change in the areas or size around the berms?

5. Provide us with an approximate time when the area outside of impound No. 6 was filled.

6. Concerning the cast-out sludge to be returned to impound No. 6, provide the Division with an approximate number of cubic yards of the sludge to be returned to the impound, and the composition of the cast-out sludge material.

7. The Division will also require the amount of seed needed to vegetate the site and schedule of seeding.

I trust this guidance helps you proceed along the design and development process. If you have any questions about coastal permit process, please contact me at the above address or at (609) 984-0266.

This application would receive a status of being conditionally acceptable provided it is in compliance with all applicable Coastal Resources and Development policies.

Sincerely,

Charlie Welch

Charlie Welch
Project Review Officer
Bureau of Coastal Project Review

CW/dr
c: Richard Ambrosio, Freehold Soil Conservation District
Tom Hannigan, Coastal Enforcement
James R. Johnson, Chief, Bureau of Tidelands

E6

ATTACHMENT F

Let's protect our earth

State of New Jersey
DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES
CN 029
TRENTON, NEW JERSEY 08625

GEORGE G. McCANN, P.E.
DIRECTOR

DIRK C. HOFMAN, P.E.
DEPUTY DIRECTOR

OCT 08 1987

Mr. Roger Tuttle, President
Delchem Sales, Inc.
354 North Main Street
Doylestown, Pa. 18901

Re: NJPDES Permit Exemption to Utilize Compost Generated by the City of Philadelphia at the Carteret American Cyanamid Landfill (NJPDES Permit No. NJ0061611)

Dear Mr. Tuttle:

The Water Quality Management Element is in receipt of your firm's request, dated August 19, 1987, to utilize compost generated by the City of Philadelphia at the inactive American Cyanamid Landfill (NJPDES Permit No. NJ0061611) located in the Borough of Carteret, Middlesex County, as a soil amendment for reclamation and revegetation.

Pursuant to N.J.A.C. 7:14A-10.8(b) of the "Regulations Implementing the New Jersey Water Pollution Control Act" (N.J.A.C. 58:10A et seq.), sludge-derived products which are distributed in accordance with a Department approved Distribution Program shall be exempt from obtaining a NJPDES permit. It is recognized that Delchem Sales, Inc's distribution program was approved by the Department and is exempt from permitting associated with compost distribution in New Jersey (see August 14, 1987 letter, attachment #1). You have proposed to use the City of Philadelphia's compost for the project pursuant to the terms and conditions of the Memorandum of Agreement between the City of Philadelphia, Camden County Municipal Utilities Authority, and the NJDEP. Your firm's request to land apply compost is exempt from the permit requirements of N.J.A.C. 7:14A-10.8(b) subject to the following conditions:

1. Authorization to utilize compost on the landfill for revegetation purposes is required to be secured by the American Cyanamid Company (the owner of said landfill) from the Division of Solid Waste Management, Bureau of Sanitary Landfill Closure, of the Department, prior to commencing compost applications on this

landfill.

2. Compost shall only be utilized on the fourteen (14) acre parcel of land on the landfill identified on the plans entitled. "American Cyanamid Warners - Linden, N.J., Carteret Landfill : Earthlife Soil Improvement and Turf Establishment Phase-1", dated August 19, 1987, prepared by the American Cyanamid Company. A generalized map of the project site is attached (attachment #2).

3. Compost applications shall only proceed on the landfill, if the Soil Erosion and Sediment Control Plan required pursuant to N.J.S.A. 4:24-39 et seq. has been approved by the local Soil Conservation District and is implemented, in accordance with the terms and conditions specified therein.

4. Soil pH in the compost application areas (impoundments #4, #5, and #5A) shall be adjusted to 6.5 or above prior to compost applications and maintained at that level until compost applications terminate.

5. Compost shall not be stockpiled (stored) a) for a period greater than ten (10) days; b) in areas where the soils are saturated (marsh lands and swamps); and c) on lands which lie within one hundred (100) feet of surface waters.

6. Compost shall appropriately be incorporated within the top 15 to 20 cm of soil within twenty four (24) hours of application.

7. Compost shall not be applied between November 15 of one calendar year and March 15 of the following calendar year and/or when the ground is frozen, snow, or ice covered.

8. A crop shall be sown within fifteen (15) calendar days following the termination of compost applications in each impoundment provided field conditions permit or as soon thereafter as field conditions permit.

9. No more than four hundred (400) cubic yards of unscreened compost per acre (assuming a compost density of approximately seven hundred and fifty (750) pounds per cubic yard at a moisture content of about fifty (50) percent) may be applied from the City of Philadelphia.

10. A log of the dates and volumes of compost delivered shall be kept and submitted with the quarterly report required pursuant to Condition 8. of Delchem's NJPDES permit exemption to distribute compost in New Jersey.

This NJPDES permit exemption shall in no way waive the Department's authority to regulate or permit other operations or discharges at this landfill for which the American Cyanamid Company is responsible. The Department reserves the right to withdrawal this NJPDES permit exemption at any time for due cause.

F2

If you have any questions regarding this action, please contact Tim Ruby, of my staff, at (609)984-4429 or by letter through this Division.

Sincerely,

Helen Pettit Chase, Section Chief
Residuals Management Section
Bureau of Municipal Waste Management
Water Quality Management

WQM152

c: Anthony Pilawski, Geologist, Residuals Management
Timothy Cochran, Environ. Specialist, Residuals Management
Peter J. Sica, Mayor, Borough of Carteret
Laszlo Szabo, Health Officer, Middlesex County Health Depart.
Freehold Soil Conservation District
Gene Gruber, City of Philadelphia Water Department
Daniel Callahan, Environ. Engineer, American Cyanamid Company
William Ding, Bureau of Sanitary Landfill Closure, DWM
Ruth Foster, Bureau of Ground Water Qual. Mgt., DWR
Central File

F3

Attachment #1

State of New Jersey
DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES
CN 029
TRENTON, NEW JERSEY 08625

GEORGE G. McCANN, P.E.
DIRECTOR

DIRK C. HOFMAN, P.E.
DEPUTY DIRECTOR

AUG 14 1987

Roger Tuttle, President
Delchem Sales, Inc.
354 North Main Street
Doylestown, PA 18901

RE: Letter of NJPDES Permit Exemption to allow distribution of compost in New Jersey.

Dear Mr. Tuttle:

This letter shall serve as formal notice that the sludge derived product distribution program detailed by Delchem Sales, Inc. (Delchem) has been reviewed and has been determined to be in compliance with NJAC 7:14A-10.8,b), and with the terms and conditions for sludge derived product distribution which are detailed in the Department of Environmental Protection permits and approvals to sewage sludge product producers. Accordingly, Delchem is exempted from permitting under the New Jersey Pollutant Discharge Elimination System Regulations and may proceed with distribution and marketing of sludge derived products. This Permit Exemption is conditioned on adherence to the conditions below and may be rescinded at any time for failure to meet these conditions.

CONDITIONS:

1. Exemption for this activity is for the period ending June 30, 1988. The Department will reevaluate this determination on or before 6/30/88 based upon satisfactory performance of the distribution and marketing program.

2. Only products from facilities which are operating in compliance with a valid New Jersey Pollutant Discharge Elimination System (NJPDES) Permit for the processing of

F4

sludge, or from facilities operating under NJDEP approved Memorandum of Agreement (MOA) may be distributed or marketed pursuant to this determination.

3. All distributed products must be registered with the New Jersey Department of Agriculture in conformance with the New Jersey Commercial Fertilizer and Soil Conditioner Law (Chapter 66, 1970).

4. A Letter of Permit Exemption must be secured for any site using or stockpiling more than 100 cubic yards of product at any time. Requests for letters of Permit Exemption for specific sites shall include the following:

   1. Form RMS - 01, Commercial Site Information Sheet
   2. Form RMS - 02, Property Owner's Certification II

   Such requests shall be submitted to :

   Division of Water Resources
   Bureau of Municipal Waste Management
   Residuals Management Section
   CN029
   Trenton, New Jersey, 08625

5. Special requirements for bagged products:

   a. If sludge derived product is to be bagged and distributed, the bags must conform to labeling requirements described by the New Jersey Commercial Fertilizer and Soil Conditioner Law (Chapter 66,1970).

   b. All bags must indicate the site of the bagging operation, date of bagging, and the product source.

   c. Bags must be labeled to notify consumers of the availability of instructional literature specifying instructional subjects and source of the information.

   d. Bags must be of no more than 50 pound capacity.

   e. All bagging locations must receive prior NJPDES Permit Exemption Letters pursuant to Condition 4., above.

6. Special Conditions for Bulk Distribution:

   a. No more than 100 cubic yards may be stored or used at any user site or retail distributor at any time unless a Permit Exemption for the specific site has been secured pursuant to Condition 4., above.

b. No Letter of Permit Exemption is required for the use of 100 cubic yards of product or less.

c. Applications shall be restricted to levels identified in the instructional literature required per Condition 9.

7. Special Conditions for the Production of Product Mixtures:

a. Sludge products may be mixed with sand, peat moss, or other amendments.

b. All mixing facilities must receive Letters of Permit Exemption pursuant to Condition 4., above.

c. Application shall be restricted to levels identified in the instructional literature required per Condition 9.

8. Reporting and Record Keeping Requirements

a. Delchem must submit a quarterly report to the Residuals Management Section, NJDEP, identifying all retail distribution sites, bagging locations and large end users which received greater than 100 cubic yards of product. The report shall include the amount of product delivered to each retail distributor and large end user from each product source, and the amounts delivered per month. This information shall be submitted on Form RMS - 09.

b. Records shall be kept of all small end users, and shall be made available to the Department upon request.

c. Reports shall be submitted according to the following schedule:

Monitoring Period:	Reporting Date:
January 1 - March 31	April 30
April 1 - June 30	July 30
July 1 - September 30	October 30
October 1 - December 31	January 30

9. Special Requirements Regarding Public Notice for Proper Use:

a. Delchem shall provide instructional literature to all product users as per examples provided to the Residuals Management Section in their Distribution Program submissions. The NJDEP shall be notified of any changes or additions to this literature.

b. Failure to assure satisfactory user compliance with the

F-6

instructional literature shall be grounds for the rescission of this Letter of Permit Exemption.

10. Failure to Comply

a. Failure to comply with the provisions of this Letter of Permit Exemption shall result in a prohibition of any further distribution of sludge derived material by Delchem until such violation is corrected.

b. If a violation is not corrected within 30 days, the Department shall rescind this Permit Exemption for distribution upon 30 day notice, shall impose full NJPDES regulatory requirements for land application, and notify all NJPDES sludge processing permittees (and equivalent) of such rescission, pursuant to Section 1.b of this determination.

If you have any comments or questions, you may contact Mr. Akos Fekete of my staff at (609) 984-4429.

Sincerely,

Helen Pettit-Chase, Chief
Residuals Management Section
Bureau of Municipal Waste Management

WQM145

c. Anton Muschal, Chief Counsel
Office of the Secretary
NJ Dept. of Agriculture

F7

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

Attachment #2

77

F8

ATTACHMENT G

Let's protect our earth

State of New Jersey
DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES
CN 029
TRENTON, NEW JERSEY 08625

GEORGE G. McCANN, P.E.
DIRECTOR

DIRK C. HOFMAN, P.E.
DEPUTY DIRECTOR

JUN 13 1988

Mr. Roger Tuttle, President
Delchem Sales, Inc.
354 North Main Street
Doylestown, Pa. 18901

RE: NJPDES Permit Exemption to Utilize Compost Generated by the Camden County Municipal Utilities Authority at the Carteret American Cyanamid Landfill (NJPDES Permit No. NJ0061611) as a Soil Amendment for Reclamation and Revegetation

Dear Mr. Tuttle:

The Wastewater Facilities Management Element, Bureau of Pretreatment and Residuals, of the Department, is in receipt of your firm's request, dated May 13, 1988, to utilize compost generated by the Camden County Municipal Utilities Authority at the inactive American Cyanamid Landfill (NJPDES Permit No. NJ0061611) located in the Borough of Carteret, Middlesex County, as a soil amendment for reclamation and revegetation.

Pursuant to N.J.A.C. 7:14A-10.8(b) of the "Regulations Implementing the New Jersey Water Pollution Control Act" (N.J.A.C. 58:10A et seq.), sludge-derived products which are distributed in accordance with a Department approved Distribution Program shall be exempt from obtaining a NJPDES permit. It is recognized that Delchem Sales, Inc's distribution program was approved by the Department and is exempt from permitting associated with compost distribution in New Jersey (see August 14, 1987 letter, attachment #1). You have proposed to use the Camden County Municipal Utilities Authority's compost for the project pursuant to the terms and conditions of the Memorandum of Agreement between the City of Philadelphia, Camden County Municipal Utilities Authority, and the New Jersey Department of Environmental Protection. Your firm's request to land apply compost is exempt from the permit requirements of N.J.A.C. 7:14A-10.8(b) subject to the following conditions:

G1

1. Authorization to utilize compost on the landfill for revegetation purposes is required to be secured by the American Cyanamid Company (the owner of said landfill) from the Division of Solid Waste Management, Bureau of Sanitary Landfill Closure, of the Department, prior to commencing compost applications on the landfill.

2. Pursuant to this permit exemption compost shall only be utilized in impoundment #6 of the landfill identified on the plans entitled "American Cyanamid Company, Warners Plant, Linden, New Jersey : Vegetation and Restoration of Containment Dike at Carteret Landfill", dated March 18, 1988, prepared by the American Cyanamid Company. A generalized map of the project site is attached (attachment #2).

3. Compost applications shall only proceed on the landfill, if the Soil Erosion and Sediment Control Plan required pursuant to N.J.S.A. 4:24-39 et seq. has been approved by the local Soil Conservation District and is implemented, in accordance with the terms and conditions specified therein.

4. If necessary, the soil pH in impoundment #6 of the landfill shall be adjusted to 6.5 or above prior to compost applications and maintained at that level until compost applications terminate.

5. Compost shall not be stockpiled (stored) a) for a period greater than ten (10) days; b) on lands that are water saturated to within two (2) feet of the ground surface; c) on lands which lie within one hundred (100) feet of surface waters; and d) within fifty (50) feet of property boundaries.

6. Compost shall be spread evenly and be incorporated within the top 15 to 20 cm of soil within twenty four (24) hours of application, provided field conditions permit or as soon thereafter as field conditions permit.

7. Compost shall not be applied between November 1 of one calendar year and March 15 of the following calendar year and/or when the ground is frozen, snow, or ice covered.

8. Compost shall not be applied immediately prior to, during, or immediately following periods of precipitation, or to lands where water is ponded on the surface and/or are water saturated to within two (2) feet of the ground surface.

9. A crop shall be sown within thirty (30) calendar days following the termination of compost applications, provided field conditions permit or as soon thereafter as field conditions permit.

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10 No more than four hundred and five (405) cubic yards of unscreened compost per acre (assuming a compost density of approximately 750 lbs per cubic yard at a moisture content of about fifty (50) percent) shall be applied.

11 A log of the dates and volumes of compost delivered shall be kept and submitted with the quarterly report required pursuant to Condition B. of Delchem's NJPDES permit exemption to *distribute compost in New Jersey.*

This NJPDES permit exemption for compost distribution shall in no way waive the Department's authority to regulate or permit other operations, activities, or discharges at the Carteret American Cyanamid Landfill for which the American Cyanamid Company may be responsible. The Department reserves the right to withdraw this NJPDES permit exemption at any time for due cause.

If you have any questions regarding this action, please contact Tim Ruby, of my staff, at (609)984-4429 or by letter through this office.

Sincerely,

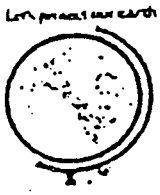
Helen Pettit-Chase, Acting Chief
Bureau of Pretreatment and Residuals
Wastewater Facilities Management Element

WQM152
Attachments

c: Anthony Pilawski, Geologist, Pretreatment and Residuals, DWR
Laszlo Szabo, Health Officer, Middlesex County Health Dept.
Herman B. Engelbert, Executive Director, Camden County MUA
Gary Lee, Bureau of Sanitary Landfill Closure, DSWM
Ruth Foster, Bureau of Groundwater Discharge Control, DWR
Alice Boomhower, Environ. Engineer, American Cyanamid Company
Peter J. Sica, Mayor, Borough of Carteret
Freehold Soil Conservation District
Central File

G3

Attachment #1



State of New Jersey
DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES
CN 029
TRENTON, NEW JERSEY 08625

GEORGE G. McCANN, P.E.
DIRECTOR

DIRK C. HOFMAN, P.E.
DEPUTY DIRECTOR

AUG 14 1987

Roger Tuttle, President
Delchem Sales, Inc.
354 North Main Street
Doylestown, PA 18901

RE: Letter of NJPDES Permit Exemption to allow distribution of compost in New Jersey.

Dear Mr. Tuttle:

This letter shall serve as formal notice that the sludge derived product distribution program detailed by Delchem Sales, Inc. (Delchem) has been reviewed and has been determined to be in compliance with NJAC 7:14A-10.8,b), and with the terms and conditions for sludge derived product distribution which are detailed in the Department of Environmental Protection permits and approvals to sewage sludge product producers. Accordingly, Delchem is exempted from permitting under the New Jersey Pollutant Discharge Elimination System Regulations and may proceed with distribution and marketing of sludge derived products. This Permit Exemption is conditioned on adherence to the conditions below and may be rescinded at any time for failure to meet these conditions.

CONDITIONS:

1. Exemption for this activity is for the period ending June 30, 1988. The Department will reevaluate this determination on or before 6/30/88 based upon satisfactory performance of the distribution and marketing program.

2. Only products from facilities which are operating in compliance with a valid New Jersey Pollutant Discharge Elimination System (NJPDES) Permit for the processing of

sludge, or from facilities operating under NJDEP approved Memorandum of Agreement (MOA) may be distributed or marketed pursuant to this determination.

3. All distributed products must be registered with the New Jersey Department of Agriculture in conformance with the New Jersey Commercial Fertilizer and Soil Conditioner Law (Chapter 66, 1970).

4. A Letter of Permit Exemption must be secured for any site using or stockpiling more than 100 cubic yards of product at any time. Requests for letters of Permit Exemption for specific sites shall include the following:

   1. Form RMS - 01, Commercial Site Information Sheet
   2. Form RMS - 02, Property Owner's Certification II

   Such requests shall be submitted to :

   Division of Water Resources
   Bureau of Municipal Waste Management
   Residuals Management Section
   CN029
   Trenton, New Jersey, 08625

5. Special requirements for bagged products:

   a. If sludge derived product is to be bagged and distributed, the bags must conform to labeling requirements described by the New Jersey Commercial Fertilizer and Soil Conditioner Law (Chapter 66,1970).

   b. All bags must indicate the site of the bagging operation, date of bagging, and the product source.

   c. Bags must be labeled to notify consumers of the availability of instructional literature specifying instructional subjects and source of the information.

   d. Bags must be of no more than 50 pound capacity.

   e. All bagging locations must receive prior NJPDES Permit Exemption Letters pursuant to Condition 4., above.

6. Special Conditions for Bulk Distribution:

   a. No more than 100 cubic yards may be stored or used at any user site or retail distributor at any time unless a Permit Exemption for the specific site has been secured pursuant to Condition 4., above.

b. No Letter of Permit Exemption is required for the use of 100 cubic yards of product or less.

c. Applications shall be restricted to levels identified in the instructional literature required per Condition 9.

7. Special Conditions for the Production of Product Mixtures:

a. Sludge products may be mixed with sand, peat moss, or other amendments.

b. All mixing facilities must receive Letters of Permit Exemption pursuant to Condition 4., above.

c. Application shall be restricted to levels identified in the instructional literature required per Condition 9.

8. Reporting and Record Keeping Requirements

a. Delchem must submit a quarterly report to the Residuals Management Section, NJDEP, identifying all retail distribution sites, bagging locations and large end users which received greater than 100 cubic yards of product. The report shall include the amount of product delivered to each retail distributor and large end user from each product source, and the amounts delivered per month. This information shall be submitted on Form RMS - 09.

b. Records shall be kept of all small end users, and shall be made available to the Department upon request.

c. Reports shall be submitted according to the following schedule:

Monitoring Period:	Reporting Date:
January 1 - March 31	April 30
April 1 - June 30	July 30
July 1 - September 30	October 30
October 1 - December 31	January 30

9. Special Requirements Regarding Public Notice for Proper Use:

a. Delchem shall provide instructional literature to all product users as per examples provided to the Residuals Management Section in their Distribution Program submissions. The NJDEP shall be notified of any changes or additions to this literature.

b. Failure to assure satisfactory user compliance with the

instructional literature shall be grounds for the rescission of this Letter of Permit Exemption.

10. Failure to Comply

a. Failure to comply with the provisions of this Letter of Permit Exemption shall result in a prohibition of any further distribution of sludge derived material by Delchem until such violation is corrected.

b. If a violation is not corrected within 30 days, the Department shall rescind this Permit Exemption for distribution upon 30 day notice, shall impose full NJPDES regulatory requirements for land application, and notify all NJPDES sludge processing permittees (and equivalent) of such rescission, pursuant to Section 1.b of this determination.

If you have any comments or questions, you may contact Mr. Akos Fekete of my staff at (609) 984-4429.

Sincerely,

Helen Pettit-Chase, Chief
Residuals Management Section
Bureau of Municipal Waste Management

WQM145

c. Anton Muschal, Chief Counsel
Office of the Secretary
NJ Dept. of Agriculture

G7

ATTACHMENT H

(14)

Let's protect our earth

State of New Jersey

DEPARTMENT OF ENVIRONMENTAL PROTECTION

DIVISION OF SOLID WASTE MANAGEMENT
CN 028, Trenton, N.J. 08625
609 - 292 - 8879

MICHAEL F. DeBONIS
ACTING DIRECTOR

TO: Pat Ferraro, Principal Environmental Specialist
Bureau of Inspections and Investigations
Division of Solid Waste Management

FROM: Alan Kaczoroski, Acting Chief A.K
Bureau of Inspections and Investigations
Division of Solid Waste Management

SUBJECT: American Cyanamid Company
Borough of Carteret - Middlesex County

DATE: April 16, 1987

I received a telephone call from Mike Winka, Bureau of Resource Recovery, asking if we could look at a fill proposal by American Cyanamid in Carteret.

The company wants to place demo waste on their former landfill for road building purposes. Mike Winka is considering the proposal application but wants to be assured that our unit would have no problem with the proposal and that there are no on site conditions which would prevent him from approving the proposal.

Would you please assign someone to visit the landfill area and conduct an inspection of the site with a representative of the company relative to their proposal. The contact individual for the company is a Mr. Tabakan. He can be reached at 201-862-6000. After the inspection please have the inspector contact Mike Winka with his findings.

Thank you.

SW1:jms

H1

Investigative Report

Nature of Complaint: Cyanamid property near back of Carteret Landfill, Carteret Boro, Middlesex County - garbage dumped on Cyanamid's property #89-11-2202 (Part #2)

Date of Investigation: December 12, 1989

Investigator: Robert Leary RL

I looked over at the Cyanamid property from the highest point on the Carteret Landfill. I did not see anything unusual nor any activity at this time, however due to the presence of precipitation (snow) the visibility today was poor. There is an entrance to this property, but a locked gate with additional fencing on each side of it prevented me from obtaining access to the property.

I will contact American Cyanamid's Environmental Coordinator in the near future to obtain access to this site in order to finalize this investigation.

Note: Several years ago Cyanamid obtained permission from DEP Solid Waste Engineering to place concrete demolition on certain areas of their property to obtain access for the installation of groundwater monitoring wells.

SW8:jms

H2

ATTACHMENT I

Let's protect our earth

State of New Jersey

DEPARTMENT OF ENVIRONMENTAL PROTECTION

STANDARD APPLICATION FORM (CP # 1)
CONSTRUCTION AND DISCHARGE PERMITS

FOR OFFICIAL USE

READ REQUIREMENTS
PLEASE TYPE OR PRINT

1. Applicant/Owner* American Cyanamid Company Telephone (201) 862-6000

   Permanent Legal Address Foot of Tremley Point Road, P. O. Box 31

   City or Town Linden State NJ Zip Code 07036

2. Location of Work Site Carteret, New Jersey

   Name of Facility, if applicable Closed Sanitary Landfill

   Street/Road Off Driftway Drive

   Lot No. See Table 1 Block No. _____

   City or Town Carteret State NJ Zip Code 07008

   Municipality Carteret County Middlesex

3. If applicable, give name of: Engineer/Surveyor (Well Driller) Geologist/Soil Scientist *(Specify).*

   Name Ken Hamilton N.J. License No. 1297

   Name of Firm, if employee Testwell Craig Test Boring Co., Inc.

   Address P. O. Box J 565 E. Harding Highway County Atlantic

   Municipality Mays Landing State NJ Zip Code 08330

   Telephone (609) 625-1700

4. This is an application for NJPDES/DGW Permit
   (Name of permit, certification, approval or exemption. See Item 9. Next Page.)
   No.: NJ0061611

5. Fee is attached (If applicable). $ Not Applicable
   (Provide explanation of how fee was calculated. Read Requirements Section of Standard Application booklet.)

6. Estimated construction cost of project:

   a. $ Not Applicable total cost of the project.

   b. $ _____ portion for which this permit is requested.

7. I have included certifications of any public notifications. Yes _____ No _____ Not Applicable

8. If applicable: Not Applicable
   (For Waterfront Development applications, 8c. must be completed.)

   a. Source of Water Supply _____

   b. For Treatment at (Water Treatment Plant) _____

   c. Stream, Waterway, Pond or Lake _____

   d. Wastewater Treatment Facility _____

* *Applicant/Owner must be the individual or municipality, public agency, utility, company, industry who will be the eventual owner and operator of said facility (sewer extension or treatment works) when completed.*

APR 04 1990
DEPT. ENVIRON. PROTECTION
Division Water Pollution Control & Permits

7/82

FOLLOW INSTRUCTIONS CAREFULLY

9. Have any other applications for this site/project been submitted for this project? *(If yes, indicate status and project number below.)*

No ..... Yes ..X..... Decision .....

	PERMIT TYPE *(Use additional sheets if necessary.)*	APPLICATION STATUS (PENDING - APPROVED)	PROJECT #
9.1	CAFRA		
9.2	Waterfront Development (Riparian)		
9.3	Wetlands		
9.4	Purchase Water		
	Diversion:		
9.5	Divert Water Supply for Public Use		
9.6	Divert Surface Waters for Private Use		
9.7	Divert Subsurface/Percolating Water for Private Use		
9.8	Well Drilling 24-10386-1, 24-10387-0, 24-10388-8, 24-10389-6, 24-10390-0, 24-10391-8, 24-10392-6, 24-10393-4, Water Lowering: 24-10394-2, 24-10395-1	Approved	
9.9	Permanent Lowering		
9.10	Temporary Lowering		
9.11	Construct/Modify, Operate Public Potable Water Works		
9.12	Connection between an approved water supply and non-approved supply		
9.13	Water Quality Certification		
9.14	Construct/Repair Dam		
9.15	Stream Encroachment		
9.16	Sewer Systems: Collectors, Pump Station, etc.		
9.17	Exemption from Sewer Ban		
9.18	New Jersey Pollutant Discharge Elimination System (Specify)	Approved	NJ0061611*
9.19	Solid Waste Permits (Specify)		
9.20	Air Quality Permits (Specify)		
9.21	Delaware and Raritan Canal Review Zone "Certificate of Approval"		
9.22	Other State agencies' permits Freehold Soil Conservation District	Permit	See Below**
9.23	Local Permits		
9.24	Federal Permits		

10. Brief Description of the Proposed Project and Intended Use:

*NJPDES issued 8/18/86 and modified by Administrative Consent Order dated 01/06/88.

**Vegetation permits from Soil Conservation District: 87-666, 88-376, & 89-32

11. I hereby certify that the information furnished on this application (and the attachments) is true. I am aware that false swearing is a crime in this State and subject to prosecution.

J. B. Reid 3/28/89

Type: Name and Date

Vice President
Chemical Products Division

Type: Position

Signature of Applicant

3/28/89

Date

I-2

Form WQM-1
12/81

STATE OF NEW JERSEY
DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES

NEW JERSEY POLLUTANT DISCHARGE ELIMINATION SYSTEM
SUPPLEMENT TO THE STANDARD APPLICATION FORM CP # 1

APPLICATION TO DISCHARGE WASTEWATERS AND RESIDUALS TO THE STATE'S LAND AND WATER

Answer all questions. Please print or type.

1. Circle the letter(s) for those discharge activities presently conducted or to be conducted as part of the facility's operation. (Seasonal facility operation shall be considered as a present operation.)
   - In the space provided, indicate if there is an existing NPDES or NJPDES permit for each circled activity (yes/no).
   - In the space provided, indicate if this application is for a "new" source, an "existing" source, or a "renewal" of a current permit.

DISCHARGE ACTIVITY		YES/NO	NEW, EXISTING, RENEWAL
A.	Municipal Surface Water Discharge		
B.	Industrial/Commercial Surface Water Discharge		
C.	Thermal Surface Water Discharge		
D.	Land Application of Sludge and Septage		
E.	Land Application of Industrial Waste Residues		
F.	Landfill Wastes	Yes	Renewal (Closed site)
G.	Spray Irrigation		
H.	Overland Flow		
I.	Rapid Infiltration		
J.	Surface Impoundment		
K.	Underground Injection		
L.	Discharge to a Domestic Treatment Works		

2. Facility: Latitude 40° 35' Longitude 74° 12-13'

3. Name and address of applicant's parent corporation, subsidiary, or partnership data. *(Attach additional sheets if necessary.)*

Name American Cyanamid Company Telephone No. (201) 862-6000

Mailing Address P. O. Box 31

City or Town Linden State NJ Zip Code 07036

4. Facility's Contact Person *(This person must be responsible for and familiar with the facility operation.)*

Name Alice E. Boomhower Telephone No. (201) 862-6000

Address of Operator Foot of Tremley Point Road

City or Town Linden State NJ Zip Code 07036

5. Is the facility a
   - ☐ Federal Facility
   - ☐ State Facility
   - ☐ Public Facility (a local government subdivision)
   - ☒ Private Facility

(Over)

I 3

Form WQM-2
12/81

DIVISION OF WATER RESOURCES
NEW JERSEY POLLUTANT DISCHARGE ELIMINATION SYSTEM (NJPDES)

APPLICATION FOR PERMIT TO DISCHARGE EFFLUENT TO GROUNDWATER

American Cyanamid Company
Name of Applicant (s)

DEP ID No.

DEP Receipt Date

1. Application for Groundwater and other Discharge Permits *(Check appropriate type)*

☒ F - Wastewaters from Landfills ☐ G - Spray Irrigation ☐ H - Overland Flow

☐ I - Infiltration-percolation Lagoon ☐ J - Surface Impoundment ☐ Other *(Specify)* _____

2. List each soil mapping unit present.
Udifluvents

3. Geologic formation name (s) Brunswick Formation is bedrock overlain by Quaternary alluvium

4. Shallowest overburden depth 31 ft. to top of Brunswick Formation is MW-2D

5. Supply the minimum 1.47 ft., maximum 9.22 ft. depth to the water table using monitoring wells and/or borings and date measured. Minimum depth of 1.47 ft. measured in MW1D on 10/14/88.
Maximum depth of 9.22 ft. measured in MW4D on 1/19/88.

6. Describe seasonal water table fluctuations. Seasonal fluctuations range from three ft. in MW-5S to less than one foot in MW-3S. See Attachment E.

7. Do all springs have a continuous year-round flow? ☐ Yes ☐ No If no, explain Not Applicable

8. Has bedrock decomposed to saprolite? ☐ Yes ☒ No If yes, describe texture. _____

9. If bedrock is carbonate rock, are there any undrained surface depressions, solution channels or sinkholes? *(Describe)*
Not Applicable

10. *If site is within a glaciated area, check deposits present:* ☐ *Glacial* ☐ *Colluvial* ☒ *Alluvial* ☐ *Lacustrine*

A. Describe the type and texture of the unconsolidated materials. Alluvial silty clay, sand and gravel deposited in marine environment by Rahway and ancestral Rahway

B. The minimum 31 ft., maximum 42 ft. thickness of material and how it was determined Minimum alluvium thickness in MW-2D, maximum alluvium thickness in MW-3D. See Attachment E for soil boring logs.

10. C. Describe the interaction of discharges on these materials. No significant interaction, See Attachment E

11. Do any underground and/or surface mines exist within ½ mile of the facility boundaries? ☐ Yes ☒ No If yes, answer the following:

A. The minimum and maximum depth of surface or deep mines within ½ mile is _____

B. Describe the mine's mineral resource extracted, source of data, most recent date of active mining, and extent of mined-out area.

C. Does the groundwater drain into the mines? ☐ Yes ☐ No

12. Describe all perched or special water table conditions. None. A mounded condition is expected to be present within the landfill. See Attachment E.

13. Describe below, using numbers keyed to water supply map for all groundwater monitoring points for approval. *(Attach additional sheets, if necessary.)*

See Table 1 Attached

MONITORING POINT	DRILLING METHOD	DRILLING DEPTH	CASING SIZE & DEPTH	CASING ZONES* PERFORATED	LOCATION† LATITUDE	LOCATION† LONGITUDE	SURFACE ELEVATION

* Zones or depths casing is perforated

† Report in degrees, minutes, seconds

14. The maximum slope at the proposed site is 12.5 percent.

15. Describe the occurrence of folding as it applies to the site. Not Applicable

A. Strike _____ and plunge _____ of fold axis Not Applicable

B. Location of site in relation to local structure Not Applicable

C. Attitude of: *(Attach additional sheets as necessary.)* Not Applicable

	STRIKE *	DIP *	FORMATION *
a. Bedding			
b. Jointing			
c. Cleavage			
d. Faults			

* *Index and key each to a corresponding number on geologic map.*

D. Are joints open? ☐ Yes ☐ No What is the respective spacing of these joints? Not Applicable

I5

AEB:g
#032

TABLE 2

Monitoring Point	Drilling Method	Drilling Depth	Casing Size/Depth	Casing Zones Perforated	Location Latitude	Location Longitude	Surface Elevation
CRT IS	Mud Rotary	20'	4"/10'	Blk sandy silt Red/Bwn clay	40° 35'43"	74° 13'16"	8.00
CRT ID	Mud Rotary	52'	4"/10'	Red Siltstone			8.16
CRT 2S	Mud Rotary	20'	4"/10'	Blk sandy silt Red/Bwn clay	40° 35'47"	74° 13'14"	8.86
CRT 2D	Mud Rotary	52'	4"/10'	Red Siltstone			8.84
CRT 3S	Mud Rotary	30'	4"/10'	Blk sandy silt Red/Bwn clay	40° 36'05"	74° 13'1"	12.73
CRT 3D	Mud Rotary	60'	4"/10'	Red Siltstone			12.88
CRT 4S	Mud Rotary	25'	4"/10'	Blk sandy silt Red/Bwn clay	40° 36'6"	74° 12'51"	13.65
CRT 4D	Mud Rotary	60'	4"/10'	Red Siltstone			12.65
CRT 5S	Mud Rotary	20'	4"/10'	Sand/Gravel	40° 35'55"	74° 12'57"	8.08
CRT 5D	Mud Rotary	47'	4"/10'	Sand/Gravel			8.07

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6

15. E. Briefly characterize factures, joints, etc., and discuss their control of the movement or infiltration of water or ground water.
Not Applicable

16. A. Indicate if there are soil horizons that may not be permeable enough for the rate of wastewater application, and describe how the problem will be overcome.
Not Applicable

B. AFTER CONSULTATION WITH THE DEPARTMENT, complete this table for soil analysis:
(Attach additional sheets as necessary. Other analysis may be requested.) Not Applicable

PARAMETERS	BORING #	BORING #	BORING #	METHOD REFERENCE
Total Kjeldahl Nitrogen (mg/l)				
Total Organic Carbon (mg/l)				
pH (Standard Units)				
Electrical Conductivity (micromhos/cm				

C. If fragipan is present, indicate shallowest depth and how depth was determined. Not Applicable

17. Will this be an all-season operation? ☐ Yes ☐ No If seasonal, provide operational dates.
Not Applicable
From _____ to _____

18. Precipitation (in./yr.) Maximum 56.1 Average 41.45

19. Monthly precipitation (in./mo.) Maximum 11.84 Average 3.45

20. Station of record, length of historical record Newark International Airport (22 years)

21. Part or all of site would be inundated once in 10 years. *(Indicate 5, 10, 25, 50, 100 years or never)*

22. Source of precipitation and flooding information National Oceanic and Atmospheric Administration, Environmental Data Service, June 1982. Federal Insurance Administration, City of Linden.

23. If there is a discharge or potential discharge to groundwater, describe how background water quality was determined.
Background groundwater monitoring locations MW-1S and MW-1D were placed on opposite side of groundwater discharge boundary (Cross Creek) from site.
See Attachment E

26. TABLE "A" continued

PARAMETER	ANALYSIS (RAW)	ANALYSIS (TREATED)	*LBS/ACRE	LAB & DATE PERFORMED
28. Endrin				
29. Heptachlor				
30. Heptachlor-Epoxide				
31. DDT				
32. p,p'-DDE				
33. p,p'-TDE				
34. Methoxychlor				
35. Chlordane				
36. Lindane				
37. Mirex				
38. PCB's				
39. Toxaphene				
40. Cyanide				
41. Oil & Grease				
42. Phenols				

* Furnish supporting calculations

27. List current use of adjacent lands within 400 feet of area receiving the waste. The landfill is bordered by oil and gasoline storage tank farms on the west and south, the closed Carteret Municipal landfill on the west and north, and the Rahway River on the east. See Attachment H.

28. Are any changes anticipated in use of adjacent lands? ☐ Yes ☒ No If yes, explain _____

ATTACHMENT J

United States
Department of
Agriculture

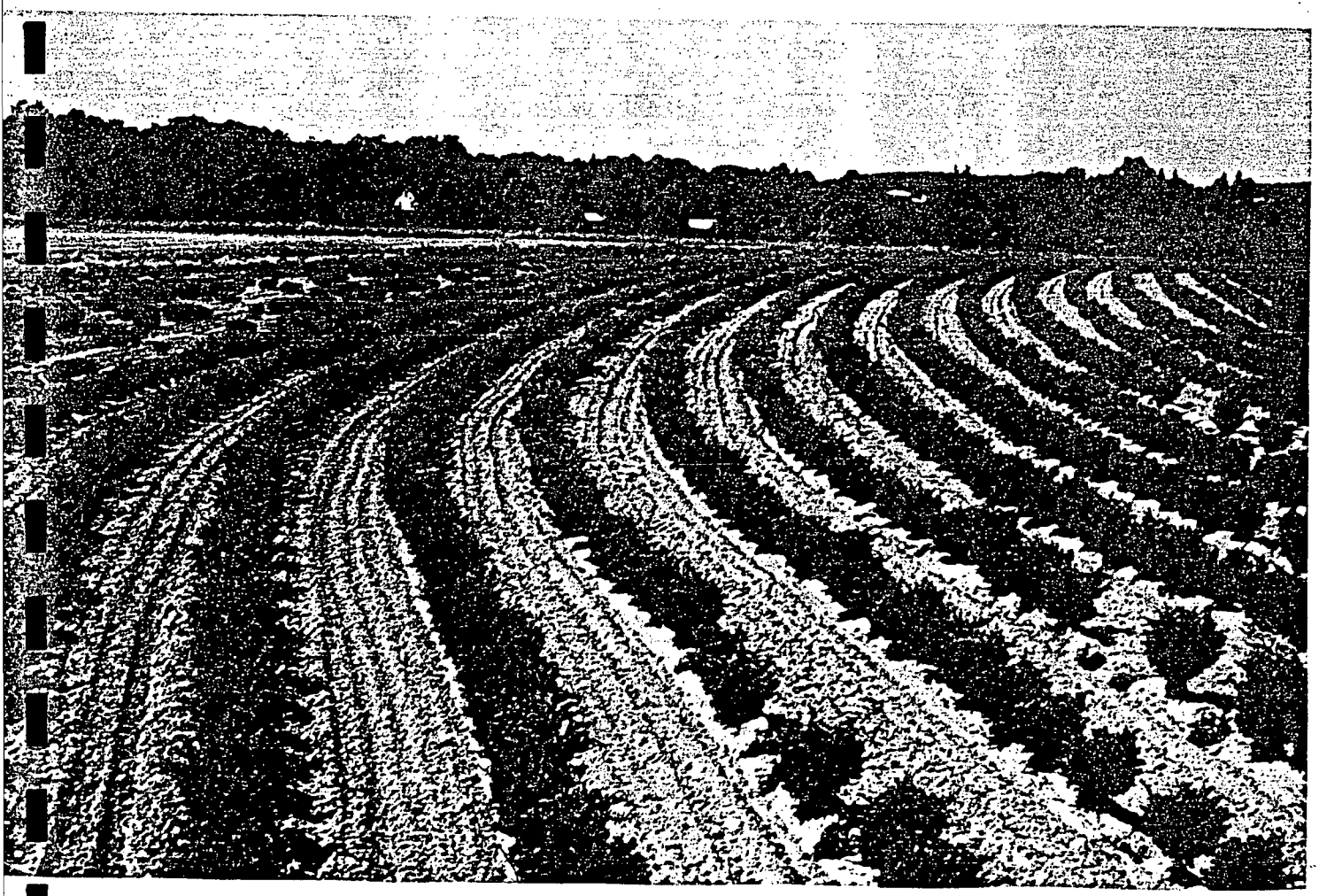
Soil
Conservation
Service

In cooperation with
New Jersey Agricultural
Experiment Station,
Cook College,
Rutgers,
the State University,
and the
New Jersey Department of
Agriculture

Soil Survey of Middlesex County New Jersey

6/12/87

OHWM BPA



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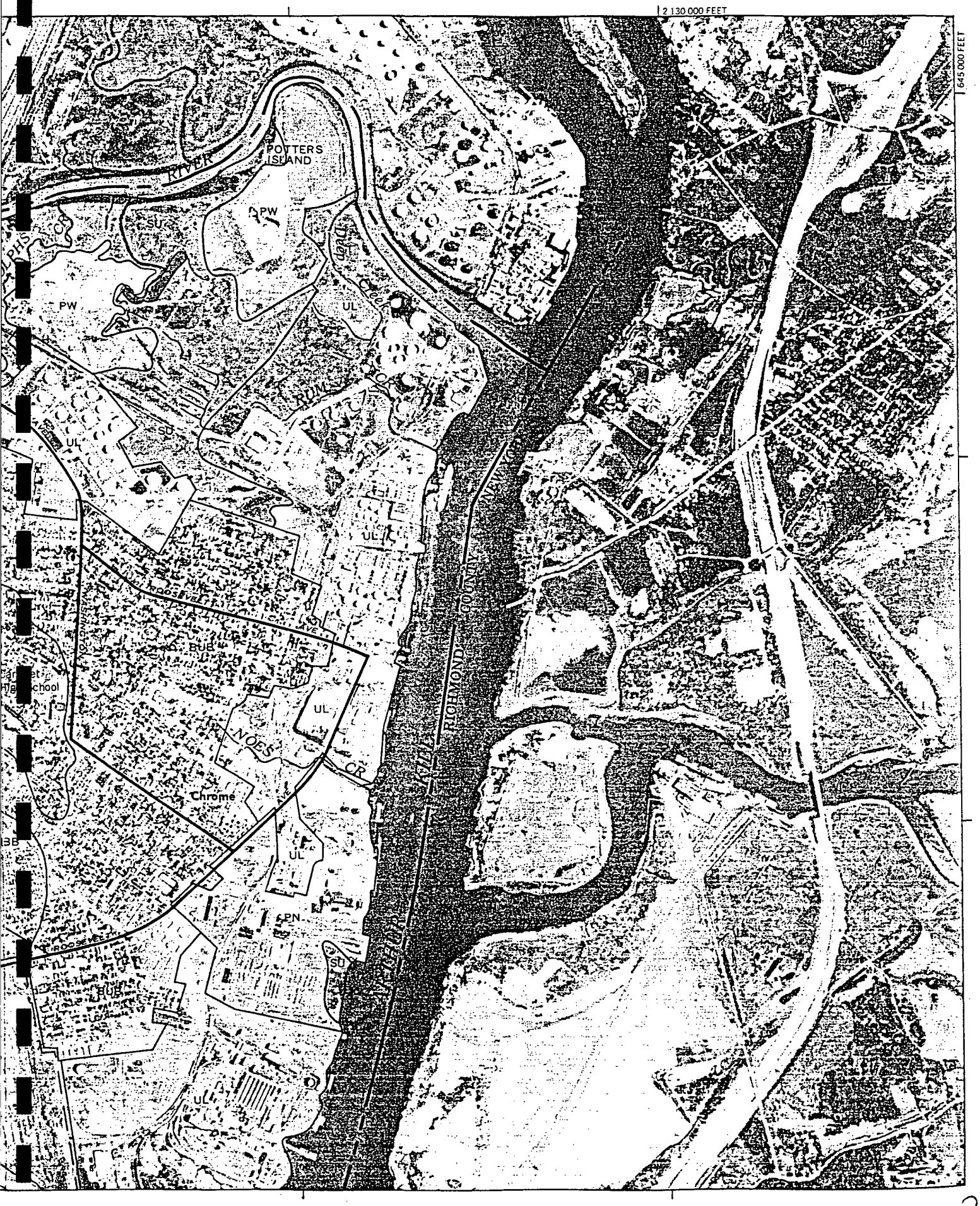
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J2

SOIL LEGEND

The first letter, always a capital, is the initial letter of the soil name. The second letter is a capital if the mapping unit is broadly defined; otherwise, it is a small letter. The third letter, always a capital, A, B, C, D or E, indicates the slope. Most symbols without a slope letter are those of nearly level soils; however, some are for soils that have a considerable range of slope but have similar use interpretations.

NAME	SYMBOL	NAME
Atsion sand	Ma	Manahawkin muck
	MeA	Matapeake silt loam, 0 to 2 percent slopes
Boonton loam, 2 to 5 percent slopes	MeB	Matapeake silt loam, 2 to 5 percent slopes
Boonton loam, 5 to 10 percent slopes	MgA	Mattapex silt loam, 0 to 2 percent slopes
Boonton loam, 10 to 15 percent slopes	MgB	Mattapex silt loam, 2 to 5 percent slopes
Boonton-Urban land complex, 0 to 5 percent slopes	MoA	Mount Lucas silt loam, 0 to 2 percent slopes
	MoB	Mount Lucas silt loam, 2 to 5 percent slopes
Chalfont silt loam, 0 to 2 percent slopes	MsB	Mount Lucas very stony silt loam, 0 to 5 percent slopes
Chalfont loam, 2 to 5 percent slopes	Mu	Mullica sandy loam
Downer loamy sand, 0 to 5 percent slopes	NaA	Nixon loam, 0 to 2 percent slopes
Downer loamy sand, 5 to 10 percent slopes	NaB	Nixon loam, 2 to 5 percent slopes
Downer sandy loam, 2 to 5 percent slopes	NCB	Nixon-Urban land complex, 0 to 5 percent slopes
Downer-Urban land complex, 0 to 10 percent slopes	NfA	Nixon Variant loam, 0 to 2 percent slopes
Downer-Urban land complex, 10 to 15 percent slopes	NfB	Nixon Variant loam, 2 to 5 percent slopes
Dunellen-Urban land complex, 0 to 5 percent slopes	NGA	Nixon Variant-Urban land complex, 0 to 5 percent slopes
Dunellen Variant sandy loam, 0 to 2 percent slopes		
Dunellen Variant sandy loam, 2 to 5 percent slopes	Pa	Parsippany silt loam
Dunellen Variant-Urban land complex, 0 to 5 percent slopes	Pb	Parsippany silt loam, frequently flooded
	Pc	Parsippany Variant silt loam
Elkton loam	PeA	Pemberton loamy sand, 0 to 3 percent slopes
Ellington Variant sandy loam, 0 to 2 percent slopes	PfA	Penn silt loam, 0 to 2 percent slopes
Ellington Variant sandy loam, 2 to 5 percent slopes	PfB	Penn silt loam, 2 to 5 percent slopes
Ellington Variant-Urban land complex, 0 to 5 percent slopes	PhD	Phalanx loamy sand, 2 to 15 percent slopes
Evesboro sand, 0 to 5 percent slopes	PL	Pits, clay
Evesboro sand, 5 to 10 percent slopes	PM	Pits, sand and gravel
Evesboro sand, 10 to 15 percent slopes	PN	Psamments, nearly level
	PO	Psamments, sulfidic substratum
Fallsington sandy loam	PW	Psamments, waste substratum
Fallsington loam		
Fallsington Variant loam	ReA	Reaville silt loam, 0 to 2 percent slopes
Fort Mott loamy sand, 0 to 5 percent slopes	ReB	Reaville silt loam, 2 to 5 percent slopes
	RFA	Reaville-Urban land, complex, 0 to 5 percent slopes
Haledon silt loam, 0 to 2 percent slopes	Rh	Reaville Variant silt loam
Haledon silt loam, 2 to 5 percent slopes	Ro	Rowland silt loam
Haledon-Urban land complex, 0 to 5 percent slopes		
Haledon Variant silt loam, 0 to 2 percent slopes	SaA	Sassafras sandy loam, 0 to 2 percent slopes
Hammonton loamy sand, 0 to 3 percent slopes	SaB	Sassafras sandy loam, 2 to 5 percent slopes
Hammonton loamy sand, clayey substratum, 0 to 3 percent slopes	SaC	Sassafras sandy loam, 5 to 10 percent slopes
Hammonton sandy loam, 0 to 2 percent slopes	SgB	Sassafras gravelly sandy loam, 2 to 5 percent slopes
Holmdel fine sandy loam, 0 to 2 percent slopes	SgC	Sassafras gravelly sandy loam, 5 to 10 percent slopes
Humaquepts, frequently flooded	SgD	Sassafras gravelly sandy loam, 10 to 15 percent slopes
	SlA	Sassafras loam, 0 to 2 percent slopes
Keyport sandy loam, 0 to 2 percent slopes	SlB	Sassafras loam, 2 to 5 percent slopes
Keyport sandy loam, 2 to 5 percent slopes	SMB	Sassafras-Urban land complex, 0 to 5 percent slopes
Keyport sandy loam, 10 to 15 percent slopes	SrA	Shrewsbury sandy loam, 0 to 2 percent slopes
Keyport loam, 0 to 2 percent slopes	SU	Sulfaquents and Sulfihemists, frequently flooded
Keyport loam, 2 to 5 percent slopes		
Keyport loam, 5 to 10 percent slopes		
Keyport loam, 10 to 15 percent slopes	TnB	Tinton loamy sand, 0 to 5 percent slopes
Keyport-Urban land complex, 0 to 10 percent slopes		
Klej loamy sand, 0 to 3 percent slopes	UB	Udorthents, bedrock substratum
klej loamy sand, clayey substratum, 0 to 3 percent slopes	UC	Udorthents, clayey substratum
Klej clayey substratum-Urban land complex, 0 to 5 percent slopes	UD	Udorthents, wet substratum-urban land complex
Klinesville shaly loam, 0 to 5 percent slopes	UL	Urban land
Klinesville shaly loam, 5 to 15 percent slopes		
Klinesville shaly loamy, 15 to 25 percent slopes	Wa	Watchung very stony silt loam, 0 to 2 percent slopes
Klinesville-Urban land complex, 0 to 5 percent slopes	WdA	Woodstown sandy loam, 0 to 2 percent slopes
	WdB	Woodstown sandy loam, 2 to 5 percent slopes
Lakehurst sand, 0 to 3 percent slopes	WkA	Woodstown sandy loam, clayey substratum, 0 to 2 percent slopes
Lakewood sand, 2 to 8 percent slopes	WkB	Woodstown sandy loam, clayey substratum, 2 to 5 percent slopes
Lansdowne silt loam, 0 to 2 percent slopes	WlA	Woodstown loam, 0 to 2 percent slopes
Lansdowne silt loam, 2 to 5 percent slopes	WlB	Woodstown loam, 2 to 5 percent slopes
Lansdowne-Urban land complex, 0 to 5 percent slopes	WU	Woodstown-Urban land complex, 0 to 5 percent slopes
Lansdowne Variant silt loam, 0 to 2 percent slopes		

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Included with this unit in mapping are small areas of Downer, Hammonton, and Klej soils.

The characteristics of this unit are variable. The water table is within several feet of the surface, and there is a wide range in the texture of the soil.

Some areas of this unit are used for sanitary landfills or building sites or recreation areas. Onsite investigation is needed to determine the suitability of the unit for any use.

Capability subclass: not assigned.

PN—Psamments, nearly level. This unit consists of deep, well drained or moderately well drained soils dominantly in regraded sand pits or borrow areas that have been smoothed.

The thickness of the fill material in this unit is as much as 48 inches, but in most areas it is about 24 inches. The content of pebbles is as much as 50 percent, but the dominant range is 5 to 20 percent. The other characteristics of the unit are variable, and there is a wide range in texture of the soil.

Some areas of this unit are used for building sites, but the variability of the unit makes onsite investigation necessary to determine the suitability of the unit for any use.

Capability subclass: not assigned.

PO—Psamments, sulfidic substratum. This unit is deep to shallow, moderately well drained and somewhat poorly drained soils that consist of dredged material, principally from the South River and the Raritan River, that has been placed on adjoining Sulfaquents or Sulfihemists. The surface has been smoothed, and most areas are nearly level.

Included with this unit in mapping are areas of Sulfaquents and Sulfihemists and Atsion and Klej soils. Nearly all of those soils have no vegetation.

The characteristics of the unit are variable, and there is a wide range in the texture and thickness of the soil. The areas that are near the point of deposition are as much as 4 feet thick and have a large content of gravel and cobblestones. The material that is farther from the point of deposition is as thin as a few inches and ranges in texture from sand to silt and clay.

Because of the variability of the characteristics, onsite investigation is needed to determine the suitability of this unit for any use.

Capability subclass: not assigned.

PW—Psamments, waste substratum. This unit consists of excessively drained to well drained soils that mainly have been used to cover landfills. The surface in most places is smoothed, and the areas are nearly level or gently sloping.

Included with this unit in mapping are areas of Sulfaquents and Sulfihemists, most of which are used for landfills.

The characteristics of this unit are variable. The material generally is 2 to 4 feet thick and covers layers of soil and household and industrial trash. Onsite investigation is needed to determine the suitability of this unit for any use.

Capability subclass: not assigned.

ReA—Reaville silt loam, 0 to 2 percent slopes. This soil is nearly level and moderately well drained. It is on side slopes, divides, and toe slopes, principally in Piscataway, Edison, and North Brunswick Townships. Slopes are smooth or convex. The areas are irregular in shape and range from 50 to 100 acres.

Typically, the surface layer is dark reddish brown silt loam about 10 inches thick. The subsoil is light reddish brown and reddish brown shaly silt loam about 12 inches thick. The substratum is reddish brown shaly silt loam 6 inches thick. Reddish brown, partially weathered shale bedrock is at a depth of 28 inches.

Included with this soil in mapping are small areas of Ellington Variant, Lansdowne, and Klinesville soils. They make up as much as 25 percent of the unit and generally are managed the same as this Reaville soil. Also included are small areas of Rowland soils that make up as much as 5 percent of the unit. The Rowland soils are in drainageways mainly in Piscataway Township. The Ellington Variant soils are mainly at the heads of streams and on stream terraces principally in Piscataway and South Plainfield Townships. The Lansdowne and Klinesville soils are throughout the unit.

The permeability of this Reaville soil is moderate to slow. Available water capacity is moderate. This soil is subject to severe frost heaving. The subsoil is friable to firm. Excess water is perched in the subsoil in winter and early spring and following heavy rains. Runoff is slow, and the erosion hazard is slight. Root penetration is restricted by the shale bedrock. Natural fertility is medium, and organic matter content is moderate. In unlimed areas the surface layer and subsoil are slightly acid.

If drained, this soil is suitable for cultivated crops, but only a small acreage is farmed. The common cultivated crops are corn, soybeans, tomatoes, cabbage, and other vegetables. Wetness is the main limitation. The soil cannot be worked early because of excess water in the subsoil, and tilth is difficult to maintain unless organic matter content is maintained. If worked when wet, this soil tends to crust and puddles form on the surface. If this soil is cultivated, conservation tillage and using cover crops and grasses and legumes in the cropping system are practices that help to reduce runoff, control erosion, and maintain tilth. Using crop residue makes the soil more friable. Tilling within the proper range of moisture content reduces soil compaction and clodding.

If drained, this soil is suited to pasture. Overgrazing is a main concern of pasture management. Use of proper stocking rates, rotation and deferred grazing, and

J4

The undisturbed areas of soils in this unit are mainly in yards and around and between structures. Those areas range from 500 to 7,000 square feet. The soils and fill in those areas are generally suitable for lawns, shade trees, ornamental trees, shrubs and vines, and vegetable gardens. The areas that have been disturbed generally are sandy and droughty and have poor suitability for plants, trees, and grasses.

Capability subclass: not assigned.

ShrA—Shrewsbury sandy loam, 0 to 2 percent slopes. This soil is nearly level and poorly drained. It is on low-lying flats in or beside drainageways in Monroe Township. The slopes are smooth or convex. The areas generally are long and narrow or irregular in shape and range from 10 to 200 acres.

Typically, the surface layer is very dark brown sandy loam 10 inches thick and is 5 percent glauconite. The subsurface soil is mottled, gray sandy loam 9 inches thick and is 5 percent glauconite. The subsoil is mottled, greenish gray loam about 17 inches thick and is 5 percent glauconite. The substratum is greenish gray loamy sand and is 3 to 15 percent glauconite. It extends to a depth of 60 inches or more.

Included with this soil in mapping are small areas of Fallsington that make up as much as 15 percent of the unit and generally are managed the same as this Shrewsbury soil. Also included are small areas of Mullica, Holmdel, Pemberton, and Hammonton soils and frequently flooded Humaquepts. They make up as much as 10 percent of the unit. The Holmdel, Pemberton, and Hammonton soils are on slight knolls. The Humaquepts are in drainageways throughout the unit. The Fallsington and Mullica soils are intermingled with the Shrewsbury soil.

The permeability of this Shrewsbury soil is moderate to moderately slow in the subsoil. Available water capacity is high. This soil is subject to severe frost heaving. The seasonal high water table is between the surface and a depth of 1 foot from late fall to late spring. Runoff is slow, and the erosion hazard is slight. Water is frequently ponded on the surface in late winter and in spring. The rooting zone extends to a depth of 60 inches. Natural fertility is high, and organic matter content is moderate. In unlimed areas the surface layer is extremely acid and the subsoil is very strongly acid.

The seasonal high water table and a lack of suitable drainage outlets make this soil generally unsuitable for most cultivated crops. The main management concerns are wetness, soil reaction, and poor aeration in the subsoil. If artificially drained, this soil is suited to such cultivated crops such as corn, soybeans, and grass-legume hay. This soil warms slowly in the spring. Tilth can be maintained by using cover crops, tilling the soils at optimum moisture content, and using crop residue. The use of lime and fertilizer offsets acidity and increases fertility.

The soil is suited to trees, and potential productivity is high. Yellow-poplar, upland oaks, sweetgum, beech, red maple, and ash are the common trees. Seasonal wetness limits the use of timber equipment during winter and spring.

The high water table limits the soil as a site for most urban uses, such as onsite septic systems, dwellings with basements, and local roads and streets.

Capability subclass: IIIw.

SU—Sulfaquents and Sulfihemists, frequently flooded. This unit consists of level, very poorly drained organic soils mainly along the Raritan River and Raritan Bay in Old Bridge, Edison, Sayreville, Woodbridge, East Brunswick, and New Brunswick Townships. The soils are in tidal marsh areas and are subject to tidal flooding. The vegetation is saltmeadow cordgrass and smooth cordgrass.

Generally, the Sulfaquents have a surface layer of mucky silt loam over a sandy substratum. The Sulfihemists are mucky soils that range in thickness from 18 to 60 inches or more but are typically about 24 inches thick over a sandy substratum.

Included with these soils in mapping are small areas of Atsion, Mullica, and Fallsington soils. These inclusions make up about 15 percent of the unit. Also included are small areas of Psamments, sulfidic substratum, and Psamments, waste substratum. They make up as much as 10 percent of the unit.

The permeability of this unit is moderate, and available water capacity is high. The water table is near the surface and fluctuates very little. Reaction of the soil in the moist areas is strongly acid to neutral. If excavated and exposed to oxygen, the organic matter in these soils oxidizes and forms sulfides that become extremely acid. The acidity from the sulfides becomes the dominant soil characteristic.

Most of the acreage of this unit is used for wildlife habitat. The unit is not suitable for farmland, pasture, or woodland.

Flooding and the high water table limit the use of this unit for urban development.

Capability subclass: VIIIw.

TnB—Tinton loamy sand, 0 to 5 percent slopes. This soil is nearly level to gently sloping and is well drained. It is on divides and side slopes in Monroe Tonwship. The slopes are smooth or convex and uniform. The areas generally are long and narrow or irregular in shape and range from 10 to 50 acres.

Typically, the surface layer is yellowish brown loamy sand 18 inches thick. The subsurface layer is yellowish brown loamy sand 16 inches thick. The subsoil is yellowish brown sandy loam 14 inches thick. The substratum consists of yellowish brown loamy sand to a depth of 60 inches or more.

J5

ATTACHMENT K

Let's preserve our earth

State of New Jersey
DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES
CN 029
Trenton, N.J. 08625-0029

Eric J. Evenson
Acting Director

(609) 292-1637
Fax # (609) 984-7938

AMERICAN CYANAMID COMPANY
PO BOX 31
LINDEN, NJ 07036

FEB 0 6 1990

Gentlemen:

RE: Landfill Name: AMERICAN CYANAMID COMPANY
New Jersey Pollutant Discharge Elimination System/
Discharge to Ground-Water Permit Number: 0061611

Pursuant to the New Jersey Supreme Court decision in Vi-Concrete Company v. State of New Jersey, Department of Environmental Protection, the above-referenced New Jersey Pollutant Discharge Elimination System/ Discharge to Ground-Water (NJPDES/DGW) permit which addresses the landfill at your facility, has been determined to be invalid effective April 19, 1989. This determination is based on the Department's understanding that the subject landfill closed prior to January 1, 1982. If the landfill closed subsequent to January 1, 1982, you have an affirmative obligation to notify the Department of the actual closing date.

The Court's decision is without prejudice to the future issuance of a new or replacement NJPDES/DGW permit and the associated fees. The decision does not affect any conditions or requirements of the existing permit which address other regulated units at your facility. These conditions and/or requirements remain in full force and effect. Additionally, the Court's decision does not affect other applicable legal obligations to undertake or continue a ground-water monitoring program, and/or any other preventive or remedial actions which may be required by other existing laws.

Presently, the Department is drafting ground-water regulations which may affect the subject landfill. Therefore, we recommend that you maintain any existing ground-water monitor wells constructed to monitor the landfill and continue to implement any ground-water monitoring program which has been instituted at the landfill.

Sincerely,

Arnold Schiffman, Assistant Director
Ground Water Quality Management
(609) 292-5262

GWQM167

10-16-90 - latest gw sampling

New Jersey is an Equal Opportunity Employer

ATTACHMENT L

CYANAMID

Joel Jerome
At in Paladino
Cart ACC

CERTIFIED MAIL P 151 936 287
RETURN RECEIPT REQUESTED

American Cyanamid Company
One Cyanamid Plaza
Wayne, NJ 07470

February 18, 1987

RECEIVED
FEB 24 1987
Dept. Environmental Protection
Division Water Resources
Bureau of Ground Water Quality Mgt.

Mr. Arnold Schiffman, Administrator
Water Quality Management
New Jersey Department of Environmental Protection
Division of Water Resources
CN-029
Trenton, New Jersey 08625

RE: AMERICAN CYANAMID CARTERET LANDFILL
NJPDES PERMIT #0061611

Dear Mr. Schiffman:

During an American Cyanamid/NJDEP meeting on February 9, 1987 with Georgeanne Engel (DWR), George Schlosser (ORS) and David Weinsoff (ORS), we were advised that it would be appropriate to request an extension of time for the installation of monitoring wells at our closed Carteret Landfill. We are writing this letter to formally make this request, and, at the same time, to explain the events resulting in delayed well installation.

The Carteret Landfill consists of approximately 120 acres of a neutralized sludge placed on a peninsula of land surrounded by the Arthur Kill and the Rahway River. Before we received the final NJPDES permit, issued in October, 1986, we visited the site with Georgeanne Engel to a review well placement. During this site visit we pointed out the various concerns we had about proper well placement, including limitations on accessibility for both installation and monitoring purposes.

After receipt of the final permit, we again discussed well locations with Ms. Engel and were advised that wells could be installed through the sludge, if necessary. NJDEP well specifications for such an installation, were received from William Brown, in a letter dated November 25, 1986. Although this communication set forth specifications for such an installation, it did state that this type of installation should be avoided whenever possible.

CYANAMID

After extensive review of these specifications, and the uncertain integrity of a well located through sludge, we made the decision to avoid drilling through the sludge, if at all possible.

This extensive technical review process, in addition to the site accessibility problems due to climatic conditions, have resulted in several months delay in soliciting proposals from certified well installers. Working with our hydrogeological consultant, HYDROSYSTEMS, INC., we have developed the attached plan for the installation of 5 pairs of cluster wells, to better define impacts, if any, from this landfill. It should be noted that the original permit only required the installation of 4 single monitoring wells. This program is consistent with an ongoing hydrogeological assessment at our closed Linden landfill.

As a result of site conditions due to the winter weather, we anticipate that installation of these wells can be initiated during the month of March, 1987. We, therefore, are requesting an extension of time for well completion until April, 1987 with sampling results for the first quarter to be submitted by August, 1987.

If you have any questions, or require additional information, I can be reached at 201-831-2873.

Sincerely,

Joel Jerome

Joel Jerome
Environmental Project Manager

JJ:gh

CC: Georgeanne Engel----------CERTIFIED MAIL P 151 936 288
David Weinsoff, Esq. RETURN RECEIPT REQUESTED

L2

February 12, 1987

Mr. Dan Callahan
American Cyanamid Company
P.O. Box 31
Linden, NJ 07036

re: Proposed Monitoring Well Plan for the Carteret Impounds

Dear Dan:

Per our recent discussions concerning the probable hydrogeologic regime in the vicinity of the Carteret impounds, we recommend that an alternate monitoring well plan be submitted for consideration by the NJDEP. The initial plan called for four monitoring wells screened over the depth interval of approximately -5 to -25 feet below surface.

In our discussions, we identified several shortcomings in the data that would be provided by the four wells with 20-foot screens.

1. The wells will provide data on the hydraulic head that will be an average over the 20-foot screened interval. Therefore, the vertical hydraulic gradients will not be determined. Attachment 1 presents a conceptual model of the groundwater flow system underlying the impounds. The hydraulic gradient in the deeper Triassic Brunswick Shale should have a strong upward component, causing the groundwater in the Brunswick to discharge into the surface water. Groundwater in the impounds will flow downward under the force of the groundwater mound until the downward gradient is dissipated. The potential effect of the upward flow of groundwater out of the Brunswick is to isolate the shallow groundwater originating in the impounds within a lens-shaped zone.

   It is recommended that paired wells be used with one well screened over a shallow interval and the other screened over a deeper interval. Data obtained at different depths will provide information on the vertical components as well as the horizontal components of the hydraulic gradient.

P.O. Box 348
Dunn Loring, VA 22027-0454
(703) 573-1690

303 Minor Ridge Road
Charlottesville, VA 22901
(804) 973-9740

2. The 20-foot screened interval provides only an average value for the concentration of constituents in the groundwater. If significant contamination is found, little interpretation is possible concerning its extent or rates of attenuation. The use of the paired wells screened at different depths will provide better information concerning the extent of downward migration of contamination.

3. The original placement of downgradient wells is suitable for monitoring for releases from the impounds. However, the original placement of the "background" well near the front gate is not anticipated to provide true background quality. This is due to the fact that it was placed on the impound side of Cross Creek. Attachment 2 presents a conceptual model of groundwater flow in the horizontal direction. Due to the mounding of groundwater within the impounds, there is a possibility that groundwater from the impounds will flow westward and discharge into Cross Creek (as portrayed by the arrows in Attachment 2). Therefore, the original placement of the "backgroumd" well would intercept potentially contaminated groundwater.

   It is recommended that a fifth pair of wells be added to the monitoring system and be located on the west side of the tributary of Cross Creek near the front gate. This pair of wells should intercept groundwater originating outside of the impounds. Attachment 2 shows the proposed locations of the five pairs of wells (numbered 1S through 5S and 1T through 5T).

In addition to the aforementioned problems, discussions concerning the pros and cons of the placement of the wells have led to the recommendation that the wells be installed outside of the impound dikes if possible. The major difficulties with installation through the sludge are that the sludge is thixotropic (likely to become liquid after prolonged vibration during drilling) and difficult to prevent cross-contamination during well construction. Therefore, ramps will be required to allow access to the drilling locations outside the dike by the drill rig.

Specifications for the shallow and deep (referred to as "Triassic" wells) wells are presented in Attachments 3 and 4.

Sincerely,

Lyle R. Silka
Senior Hydrogeologist

Enclosures

cc. Joel Jerome

ATTACHMENT M

Let's protect our earth

STATE OF NEW JERSEY
DEPARTMENT OF ENVIRONMENTAL PROTECTION
CN 402
Trenton, N.J. 08625

PERMIT

The New Jersey Department of Environmental Protection grants this permit in accordance with your application, attachments accompanying same application, and applicable laws and regulations. This permit is also subject to the further conditions and stipulations enumerated in the supporting documents which are agreed to by the permittee upon acceptance of the permit.

Permit No.	Issuance Date	Effective Date	Expiration Date
NJ #0061611	8/18/86	10/1/86	9/29/89

Name and Address of Applicant	Location of Activity/Facility	Name and Address of Owner
American Cyanamid Company P.O. Box 31 Linden, NJ 07036	American Cyanamid SLF-Carteret Driftway Strett Carteret, NJ 07008	SAME AS APPLICANT

Issuing Division	Type of Permit	Statute(s) N.J.S.A.	Application No.
WATER RESOURCES	NJPDES PERMIT FOR DISCHARGE TO GROUND WATER	58:10A-1 et seq. N.J.A.C.	N/A

This permit requires American Cyanamid Co. 7:14A-1 et seq.

to monitor the ground water at a sanitary landfill in Carteret by operating and maintaining 4 ground water monitoring wells according to the specific and general conditions of this Initial Interim NJPDES permit. The Initial Interim NJPDES permit is intended to establish an adequate ground water monitoring program at the above named facility. This permit is only intended to obtain ground water data to evaluate the current status and impact of this facility on ground water. It shall not be construed, nor is it intended to be an approval of any activity that the permittee has conducted which adversely affects the environment, ground or surface water quality, or threatens the public health, safety, or welfare.

The issuance of this Initial Interim permit does not indicate that the Department has made a determination of the technical adequacy of the information available. Initial Interim permits shall not be construed as, nor are they intended to be, long-term approvals; these permits are of limited duration.

The data generated through the Initial Interim NJPDES permit will be used by the Department to evaluate the current status and impact of existing facilities on ground water quality. It will also give the Department information to determine if there is any potential or actual threat to public health or safety or damage to the environment due to current or past practices. Based on the information generated by the issuance of this permit, the Department may require the permittee to reduce the quantity of discharge, upgrade or install additional treatment, install additional monitor wells, conduct ground water decontamination procedures or cease discharges to waters of the state.

The issuance of this Initial Interim NJPDES permit does not bind the Department to renew this permit, nor does it relieve the permittee of the duty to submit additional information as specified in Chapters 6 and 10 of the NJPDES regulations at the time of application renewal or as may be required by the Department prior to permit renewal. Additionally, this Initial Interim NJPDES permit does not relieve the permittee of any liabilities associated with public health or safety problems or environmental damage created as a result of the permittee's activities.

Documents attached hereto shall become part of this permit.

Approved by the Department of Environmental Protection
BY AUTHORITY OF:
GEORGE G. MCCANN, P.E., DIRECTOR
DIVISION OF WATER RESOURCES

ARNOLD SCHIFFMAN, ADMINISTRATOR
WATER QUALITY MANAGEMENT ELEMENT

DATE

* *The word permit means "approval, certification, registration, etc."*

(GENERAL CONDITIONS ARE ON THE REVERSE SIDE.)

Form DSR 007 (8/83)

M1

FACT SHEET

for N.J.P.D.E.S. Permit to Discharge
into the Ground Waters of the State

Name and Address of Applicant:

American Cyanamid Co.
P.O. Box 31
Linden, NJ 07036

Name and Address of Facility Where Discharge Occurs:

American Cyanamid Sanitary Landfill - Carteret
Driftway Street
Carteret, NJ

Receiving Water:

Ground waters of the state. The discharge is to the Brunswick formation of Mesozoic Age.

Description of Facility:

The American Cyanamid Sanitary Landfill - Carteret is an existing, closed 110 acre landfill that accepted dry industrial waste.

Description of NJPDES Ground Water Monitoring Permit:

The discharge from the landfill is in the form of leachate. Four (4) ground water monitoring wells will be tested on a periodic basis.

Permit Conditions:

Issue an Initial NJPDES Permit with the attached general and special conditions.

m2

GROUND WATER MONITORING REQUIREMENTS AND LIMITATIONS

The permittee shall install and sample a total of 4 ground water monitoring wells according to the schedule below. All ground water elevations must be determined prior to pumping and sampling the ground water monitoring wells. Sampling of the ground water monitoring wells shall be performed according to the methodology specified in Section 6.12 of the NJPDES regulations and the Department's Field Procedures Manual for Water Data Acquisition. The permittee shall sample for all parameters for which there is an "X" to the left of the parameter name. Sampling shall be performed during the months which are specified for that parameter.

	PARAMETER	LIMITATION		SAMPLING MONTH	SAMPLE TYPE	REPORTING MONTH
___	Aldrin/Dieldrin	0.003	ppb	JFMAMJJASOND	Grab	JFMAMJJASOND
X	Ammonia-Nitrogen	0.5	ppm	JFMAMJJASOND	Grab	JFMAMJJASOND
X	Arsenic and Compounds	0.05	ppm	JFMAMJJASOND	Grab	JFMAMJJASOND
X	Barium	1.0	ppm	JFMAMJJASOND	Grab	JFMAMJJASOND
___	Benzidine	0.1	ppb	JFMAMJJASOND	Grab	JFMAMJJASOND
___	Biochemical Oxygen Demand (BOD_5)		ppm	JFMAMJJASOND	Grab	JFMAMJJASOND
X	Cadmium	0.01	ppm	JFMAMJJASOND	Grab	JFMAMJJASOND
___	Calcium		ppm	JFMAMJJASOND	Grab	JFMAMJJASOND
X	Chemical Oxygen Demand (COD)		ppm	JFMAMJJASOND	Grab	JFMAMJJASOND
X	Chloride	250	ppm	JFMAMJJASOND	Grab	JFMAMJJASOND
X	Chromium (Hexavalent) and Compounds	0.05	ppm	JFMAMJJASOND	Grab	JFMAMJJASOND
X	Coliform Bacteria	(1)		JFMAMJJASOND	Grab	JFMAMJJASOND
___	Color	None Noticeable		JFMAMJJASOND	Grab	JFMAMJJASOND
X	Copper	1.0	ppm	JFMAMJJASOND	Grab	JFMAMJJASOND
X	Cyanide	0.2	ppm	JFMAMJJASOND	Grab	JFMAMJJASOND
___	DDT and Metabolites	0.001	ppb	JFMAMJJASOND	Grab	JFMAMJJASOND
___	Endrin	0.004	ppb	JFMAMJJASOND	Grab	JFMAMJJASOND
___	Fecal Coliform, MPN per 100 ml	( )		JFMAMJJASOND	Grab	JFMAMJJASOND
X	Fluoride	2.0	ppm	JFMAMJJASOND	Grab	JFMAMJJASOND
X	Foaming Agents	0.5	ppm	JFMAMJJASOND	Grab	JFMAMJJASOND
___	Gross Alpha			JFMAMJJASOND	Grab	JFMAMJJASOND
___	Gross Beta			JFMAMJJASOND	Grab	JFMAMJJASOND
___	Hardness		ppm	JFMAMJJASOND	Grab	JFMAMJJASOND
X	Iron	0.3	ppm	JFMAMJJASOND	Grab	JFMAMJJASOND

M3

GROUND WATER MONITORING REQUIREMENTS AND LIMITATIONS - Page 2

	PARAMETER	LIMITATION		SAMPLING MONTH	SAMPLE TYPE	REPORTING MONTH
___	Kjeldahl Nitrogen		ppm	JFMAMJJASOND	Grab	JFMAMJJASOND
X	Lead and Compounds	0.05	ppm	JFMAMJJASOND	Grab	JFMAMJJASOND
___	Lindane		ppb	JFMAMJJASOND	Grab	JFMAMJJASOND
___	Magnesium		ppm	JFMAMJJASOND	Grab	JFMAMJJASOND
X	Manganese	0.05	ppm	JFMAMJJASOND	Grab	JFMAMJJASOND
X	Mercury and Compounds	0.002	ppm	JFMAMJJASOND	Grab	JFMAMJJASOND
___	Methoxychlor		ppb	JFMAMJJASOND	Grab	JFMAMJJASOND
X	Nitrate-Nitrogen (NO_3-N)	10	ppm	JFMAMJJASOND	Grab	JFMAMJJASOND
___	Odor and Taste	None Noticeable		JFMAMJJASOND	Grab	JFMAMJJASOND
___	Oil and Grease	10.0	ppm	JFMAMJJASOND	Grab	JFMAMJJASOND
X	pH	5-9	S.U.	JFMAMJJASOND	Grab	JFMAMJJASOND
X	Phenols	3.5	ppm	JFMAMJJASOND	Grab	JFMAMJJASOND
___	Phosphate, Total		ppm	JFMAMJJASOND	Grab	JFMAMJJASOND
___	Polychlorinated Biphenyls (PCBs)	0.001	ppb	JFMAMJJASOND	Grab	JFMAMJJASOND
___	Radionuclides	(2)		JFMAMJJASOND	Grab	JFMAMJJASOND
___	Radium			JFMAMJJASOND	Grab	JFMAMJJASOND
X	Selenium and Compounds	0.01	ppm	JFMAMJJASOND	Grab	JFMAMJJASOND
X	Silver and Compounds	0.05	ppm	JFMAMJJASOND	Grab	JFMAMJJASOND
X	Sodium	50	ppm	JFMAMJJASOND	Grab	JFMAMJJASOND
___	Specific Conductance (mmho·cm)			JFMAMJJASOND	Grab	JFMAMJJASOND
X	Sulfate	250	ppm	JFMAMJJASOND	Grab	JFMAMJJASOND
X	Total Dissolved Solids (TDS)	500	ppm	JFMAMJJASOND	Grab	JFMAMJJASOND
X	Total Organic Carbon (TOC)		ppm	JFMAMJJASOND	Grab	JFMAMJJASOND
X	Total Organic Halogen (TOH or TOX)		ppm	JFMAMJJASOND	Grab	JFMAMJJASOND
X	Total Volatile Organics by GC/MS Scan (3)	10	ppb	JFMAMJJASOND	Grab	JFMAMJJASOND
___	Toxaphene	0.005	ppb	JFMAMJJASOND	Grab	JFMAMJJASOND
___	Turbidity		ppm	JFMAMJJASOND	Grab	JFMAMJJASOND
X	Zinc and Compounds	5.0	ppm	JFMAMJJASOND	Grab	JFMAMJJASOND
___	2,4 D		ppb	JFMAMJJASOND	Grab	JFMAMJJASOND
___	2,4,5-TP Silvex		ppb	JFMAMJJASOND	Grab	JFMAMJJASOND

3F

AMERICAN CYANAMID CO., CARTERET LF (NJ0061611) 10:21 FRIDAY, FEBRUARY 15, 1991

DATA SUMMARY---NUMBER OF OBSERVATIONS

	2416837	MW - 1D	MW - 1S	MW - 2D	MW - 2S	MW - 3D	MW - 3S	MW - 4D	MW - 4S	MW - 5D	MW - 5S
	2416837	2410386	2410387	2410388	2410389	2410390	2410391	2410392	2410393	2410394	2410395
07/31/87	.	54	53	52	54	53	46	53	21	54	54
10/20/87	.	19	21	20	21	20	19	20	20	19	19
01/19/88	.	140	141	141	140	141	142	140	141	143	140
04/15/88	.	4	4	4	4	4	4	4	4	4	4
07/12/88	.	4	4	4	4	4	4	4	4	4	4
10/14/88	.	23	23	23	23	23	23	23	23	23	23
01/10/89	57	4	61	142	85	142	142	142	140	33	142
04/17/89	.	24	23	24	24	.	.	.	.	.	.
04/18/89	.	.	.	.	.	24	24	25	24	23	24
07/11/89	.	24	24	23	24	24	24	24	24	24	24
10/10/89	.	.	.	1	.	.	1	.	.	.	.
01/16/90	.	142	131	141	142	142	140	124	142	141	141
04/17/90	.	23	23	12	23	22	23	23	22	23	23
07/17/90	.	22	22	22	22	22	22	22	22	22	22

ATTACHMENT N

AMERICAN CYANAMID CO., CARTERET LF (NJ0061611) 10:21 FRIDAY, FEBRUARY 15, 1991
LIST OF EXCEEDANCES

PNAME	WELLNAME	DATE	VALUE	REMARKS	UNIT	LIMIT	WELL_ID	NJPDES	LABNO
ARSENIC, DISSOLVED	MW - 2S	01/19/88	90		PPB	50	2410389	61611	12257
ARSENIC, DISSOLVED	MW - 5D	01/16/90	69	J	PPB	50	2410394	61611	12257
CADMIUM, DISSOLVED	MW - 1D	01/16/90	22		PPB	10	2410386	61611	12257
CADMIUM, DISSOLVED	MW - 1S	01/16/90	41		PPB	10	2410387	61611	12257
CADMIUM, DISSOLVED	MW - 2D	01/16/90	17		PPB	10	2410388	61611	12257
CADMIUM, DISSOLVED	MW - 2S	01/16/90	15		PPB	10	2410389	61611	12257
CADMIUM, DISSOLVED	MW - 3D	01/16/90	24		PPB	10	2410390	61611	12257
CADMIUM, DISSOLVED	MW - 3S	01/16/90	12		PPB	10	2410391	61611	12257
CADMIUM, DISSOLVED	MW - 4D	01/16/90	22		PPB	10	2410392	61611	12257
CADMIUM, DISSOLVED	MW - 4S	01/16/90	11		PPB	10	2410393	61611	12257
CADMIUM, DISSOLVED	MW - 5S	01/16/90	21		PPB	10	2410395	61611	12257
CHLORIDE, DISSOLVED	MW - 1D	07/31/87	5830000		PPB	250000	2410386	61611	12257
CHLORIDE, DISSOLVED	MW - 1D	10/20/87	9260000		PPB	250000	2410386	61611	12257
CHLORIDE, DISSOLVED	MW - 1D	01/19/88	9400000		PPB	250000	2410386	61611	12257
CHLORIDE, DISSOLVED	MW - 1D	10/14/88	9930000		PPB	250000	2410386	61611	12257
CHLORIDE, DISSOLVED	MW - 1D	04/17/89	1010000		PPB	250000	2410386	61611	12257
CHLORIDE, DISSOLVED	MW - 1D	07/11/89	1010000		PPB	250000	2410386	61611	12257
CHLORIDE, DISSOLVED	MW - 1D	01/16/90	1000000		PPB	250000	2410386	61611	12257
CHLORIDE, DISSOLVED	MW - 1D	04/17/90	1070000		PPB	250000	2410386	61611	12257
CHLORIDE, DISSOLVED	MW - 1D	07/17/90	9730000		PPB	250000	2410386	61611	12257
CHLORIDE, DISSOLVED	MW - 1S	07/31/87	9800000		PPB	250000	2410387	61611	12257
CHLORIDE, DISSOLVED	MW - 1S	10/20/87	5780000		PPB	250000	2410387	61611	12257
CHLORIDE, DISSOLVED	MW - 1S	01/19/88	6530000		PPB	250000	2410387	61611	12257
CHLORIDE, DISSOLVED	MW - 1S	10/14/88	5250000		PPB	250000	2410387	61611	12257
CHLORIDE, DISSOLVED	MW - 1S	01/10/89	4810000		PPB	250000	2410387	61611	12257
CHLORIDE, DISSOLVED	MW - 1S	04/17/89	6530000		PPB	250000	2410387	61611	12257
CHLORIDE, DISSOLVED	MW - 1S	07/11/89	6820000		PPB	250000	2410387	61611	12257
CHLORIDE, DISSOLVED	MW - 1S	01/16/90	6550000		PPB	250000	2410387	61611	12257
CHLORIDE, DISSOLVED	MW - 1S	04/17/90	5630000		PPB	250000	2410387	61611	12257
CHLORIDE, DISSOLVED	MW - 1S	07/17/90	5860000		PPB	250000	2410387	61611	12257
CHLORIDE, DISSOLVED	MW - 2D	07/31/87	9460000		PPB	250000	2410388	61611	12257
CHLORIDE, DISSOLVED	MW - 2D	01/19/88	1090000		PPB	250000	2410388	61611	12257
CHLORIDE, DISSOLVED	MW - 2D	10/14/88	6950000		PPB	250000	2410388	61611	12257
CHLORIDE, DISSOLVED	MW - 2D	01/10/89	8530000		PPB	250000	2410388	61611	12257
CHLORIDE, DISSOLVED	MW - 2D	04/17/89	8460000		PPB	250000	2410388	61611	12257
CHLORIDE, DISSOLVED	MW - 2D	07/11/89	1086000		PPB	250000	2410388	61611	12257
CHLORIDE, DISSOLVED	MW - 2D	01/16/90	6640000		PPB	250000	2410388	61611	12257
CHLORIDE, DISSOLVED	MW - 2D	04/17/90	5480000		PPB	250000	2410388	61611	12257
CHLORIDE, DISSOLVED	MW - 2D	07/17/90	4630000		PPB	250000	2410388	61611	12257
CHLORIDE, DISSOLVED	MW - 2S	07/31/87	1010000		PPB	250000	2410389	61611	12257
CHLORIDE, DISSOLVED	MW - 2S	10/20/87	9770000		PPB	250000	2410389	61611	12257
CHLORIDE, DISSOLVED	MW - 2S	01/19/88	8110000		PPB	250000	2410389	61611	12257
CHLORIDE, DISSOLVED	MW - 2S	10/14/88	8740000		PPB	250000	2410389	61611	12257
CHLORIDE, DISSOLVED	MW - 2S	04/17/89	8100000		PPB	250000	2410389	61611	12257
CHLORIDE, DISSOLVED	MW - 2S	07/11/89	7860000		PPB	250000	2410389	61611	12257
CHLORIDE, DISSOLVED	MW - 2S	01/16/90	7750000		PPB	250000	2410389	61611	12257
CHLORIDE, DISSOLVED	MW - 2S	04/17/90	7200000		PPB	250000	2410389	61611	12257
CHLORIDE, DISSOLVED	MW - 2S	07/17/90	6820000		PPB	250000	2410389	61611	12257
CHLORIDE, DISSOLVED	MW - 3D	07/31/87	1180000		PPB	250000	2410390	61611	12257
CHLORIDE, DISSOLVED	MW - 3D	10/20/87	1110000		PPB	250000	2410390	61611	12257
CHLORIDE, DISSOLVED	MW - 3D	01/19/88	1130000		PPB	250000	2410390	61611	12257
CHLORIDE, DISSOLVED	MW - 3D	10/14/88	1196000		PPB	250000	2410390	61611	12257
CHLORIDE, DISSOLVED	MW - 3D	01/10/89	1101000		PPB	250000	2410390	61611	12257
CHLORIDE, DISSOLVED	MW - 3D	04/18/89	4990000		PPB	250000	2410390	61611	12257

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AMERICAN CYANAMID CO., CARTERET LF (NJ0061611) 10:21 FRIDAY, FEBRUARY 15, 1991

LIST OF EXCEEDANCES

PNAME	WELLNAME	DATE	VALUE	REMARKS	UNIT	LIMIT	WELL_ID	NJPIDES	LABNO
COLIFORM GROUP	MW - 1D	01/16/90	10.0	J	CNT	4.0	2410386	61611	12257
COLIFORM GROUP	MW - 1S	01/16/90	10.0	J	CNT	4.0	2410387	61611	12257
COLIFORM GROUP	MW - 2D	01/19/88	320.0		CNT	4.0	2410388	61611	12257
COLIFORM GROUP	MW - 2D	01/16/90	10.0	J	CNT	4.0	2410388	61611	12257
COLIFORM GROUP	MW - 2S	01/19/88	3000.0		CNT	4.0	2410389	61611	12257
COLIFORM GROUP	MW - 3D	01/19/88	5600.0		CNT	4.0	2410390	61611	12257
COLIFORM GROUP	MW - 3D	01/10/89	50.0		CNT	4.0	2410390	61611	12257
COLIFORM GROUP	MW - 3S	01/19/88	46000.0		CNT	4.0	2410391	61611	12257
COLIFORM GROUP	MW - 3S	01/10/89	40.0		CNT	4.0	2410391	61611	12257
COLIFORM GROUP	MW - 3S	01/16/90	10.0	J	CNT	4.0	2410391	61611	12257
COLIFORM GROUP	MW - 4D	01/19/88	1200.0		CNT	4.0	2410392	61611	12257
COLIFORM GROUP	MW - 4D	01/10/89	15.0		CNT	4.0	2410392	61611	12257
COLIFORM GROUP	MW - 4D	01/16/90	25.0		CNT	4.0	2410392	61611	12257
COLIFORM GROUP	MW - 4S	01/10/89	10.0		CNT	4.0	2410393	61611	12257
COLIFORM GROUP	MW - 4S	01/16/90	880.0		CNT	4.0	2410393	61611	12257
COLIFORM GROUP	MW - 5D	01/19/86	1200.0		CNT	4.0	2410394	61611	12257
COLIFORM GROUP	MW - 5D	01/10/89	200.0		CNT	4.0	2410394	61611	12257
COLIFORM GROUP	MW - 5D	01/16/90	10.0	J	CNT	4.0	2410394	61611	12257
COLIFORM GROUP	MW - 5S	01/19/88	4200.0		CNT	4.0	2410395	61611	12257
CYANIDE, TOTAL	MW - 1S	01/10/89	279.0		PPM	0.2	2410387	61611	12257
CYANIDE, TOTAL	MW - 1S	07/11/89	0.3		PPM	0.2	2410387	61611	12257
CYANIDE, TOTAL	MW - 2D	01/10/89	8.6		PPM	0.2	2410388	61611	12257
CYANIDE, TOTAL	MW - 2D	07/11/89	0.2		PPM	0.2	2410386	61611	12257
CYANIDE, TOTAL	MW - 2D	01/16/90	3.4		PPM	0.2	2410388	61611	12257
CYANIDE, TOTAL	MW - 2D	07/17/90	5.1		PPM	0.2	2410386	61611	12257
CYANIDE, TOTAL	MW - 2S	01/19/88	41.0		PPM	0.2	2410389	61611	12257
CYANIDE, TOTAL	MW - 2S	04/17/89	26.8		PPM	0.2	2410389	61611	12257
CYANIDE, TOTAL	MW - 2S	07/11/89	19.2		PPM	0.2	2410389	61611	12257
CYANIDE, TOTAL	MW - 2S	07/17/90	18.6		PPM	0.2	2410389	61611	12257
CYANIDE, TOTAL	MW - 3D	01/10/89	1.5		PPM	0.2	2410390	61611	12257
CYANIDE, TOTAL	MW - 3D	04/18/89	0.2		PPM	0.2	2410390	61611	12257
CYANIDE, TOTAL	MW - 3D	07/11/89	0.4		PPM	0.2	2410390	61611	12257
CYANIDE, TOTAL	MW - 3S	01/10/89	0.4		PPM	0.2	2410391	61611	12257
CYANIDE, TOTAL	MW - 3S	01/16/90	0.2		PPM	0.2	2410391	61611	12257
CYANIDE, TOTAL	MW - 4D	01/19/88	0.5		PPM	0.2	2410392	61611	12257
CYANIDE, TOTAL	MW - 4D	01/10/89	0.7		PPM	0.2	2410392	61611	12257
CYANIDE, TOTAL	MW - 4D	04/18/89	0.2		PPM	0.2	2410392	61611	12257
CYANIDE, TOTAL	MW - 4D	07/11/89	0.4		PPM	0.2	2410392	61611	12257
CYANIDE, TOTAL	MW - 4S	01/19/88	100.0		PPM	0.2	2410393	61611	12257
CYANIDE, TOTAL	MW - 4S	04/18/89	116.0		PPM	0.2	2410393	61611	12257
CYANIDE, TOTAL	MW - 4S	07/11/89	63.5		PPM	0.2	2410393	61611	12257
CYANIDE, TOTAL	MW - 4S	01/16/90	69.4		PPM	0.2	2410393	61611	12257
CYANIDE, TOTAL	MW - 4S	07/17/90	98.0		PPM	0.2	2410393	61611	12257
CYANIDE, TOTAL	MW - 5D	01/19/88	10.6	B	PPM	0.2	2410394	61611	12257
CYANIDE, TOTAL	MW - 5D	01/10/89	7.8		PPM	0.2	2410394	61611	12257
CYANIDE, TOTAL	MW - 5D	04/18/89	10.7		PPM	0.2	2410394	61611	12257
CYANIDE, TOTAL	MW - 5D	07/11/89	9.6		PPM	0.2	2410394	61611	12257
CYANIDE, TOTAL	MW - 5D	01/16/90	12.3		PPM	0.2	2410394	61611	12257
CYANIDE, TOTAL	MW - 5D	07/17/90	21.3		PPM	0.2	2410394	61611	12257
CYANIDE, TOTAL	MW - 5S	01/19/88	6.1		PPM	0.2	2410395	61611	12257
CYANIDE, TOTAL	MW - 5S	01/10/89	2.9		PPM	0.2	2410395	61611	12257
CYANIDE, TOTAL	MW - 5S	04/18/89	2.7		PPM	0.2	2410395	61611	12257
CYANIDE, TOTAL	MW - 5S	07/11/89	1.9		PPM	0.2	2410395	61611	12257
CYANIDE, TOTAL	MW - 5S	01/16/90	0.6		PPM	0.2	2410395	61611	12257

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LIST OF EXCEEDANCES

PNAME	WELLNAME	DATE	VALUE	REMARKS	UNIT	LIMIT	WELL_ID	NJPDES	LABNO
CYANIDE, TOTAL	MW - 5S	07/17/90	2		PPM	0.2	2410395	61611	12257
FLUORIDE, DISSOLVED	MW - 1S	01/19/88	3		PPM	2.0	2410387	61611	12257
FLUORIDE, DISSOLVED	MW - 1S	01/10/89	4		PPM	2.0	2410387	61611	12257
FLUORIDE, DISSOLVED	MW - 1S	01/16/90	2		PPM	2.0	2410387	61611	12257
FLUORIDE, DISSOLVED	MW - 2D	01/10/89	2		PPM	2.0	2410388	61611	12257
FLUORIDE, DISSOLVED	MW - 2D	01/16/90	2		PPM	2.0	2410388	61611	12257
FLUORIDE, DISSOLVED	MW - 2S	01/19/88	9		PPM	2.0	2410389	61611	12257
FLUORIDE, DISSOLVED	MW - 2S	01/16/90	9		PPM	2.0	2410389	61611	12257
FLUORIDE, DISSOLVED	MW - 3D	01/10/89	4		PPM	2.0	2410390	61611	12257
FLUORIDE, DISSOLVED	MW - 4S	01/19/88	5		PPM	2.0	2410393	61611	12257
FLUORIDE, DISSOLVED	MW - 4S	01/16/90	6		PPM	2.0	2410393	61611	12257
IRON, DISSOLVED	MW - 1D	07/31/87	113000		PPB	300.0	2410386	61611	12257
IRON, DISSOLVED	MW - 1D	10/20/87	50900		PPB	300.0	2410386	61611	12257
IRON, DISSOLVED	MW - 1D	01/19/88	48900		PPB	300.0	2410386	61611	12257
IRON, DISSOLVED	MW - 1D	10/14/88	8800		PPB	300.0	2410386	61611	12257
IRON, DISSOLVED	MW - 1D	04/17/89	37300		PPB	300.0	2410386	61611	12257
IRON, DISSOLVED	MW - 1D	07/11/89	15700		PPB	300.0	2410386	61611	12257
IRON, DISSOLVED	MW - 1D	01/16/90	39500		PPB	300.0	2410386	61611	12257
IRON, DISSOLVED	MW - 1D	07/17/90	990		PPB	300.0	2410386	61611	12257
IRON, DISSOLVED	MW - 1S	07/31/87	53400	Dup of 1D 13,800	PPB	300.0	2410387	61611	12257
IRON, DISSOLVED	MW - 1S	10/20/87	717000		PPB	300.0	2410387	61611	12257
IRON, DISSOLVED	MW - 1S	01/19/88	610000		PPB	300.0	2410387	61611	12257
IRON, DISSOLVED	MW - 1S	10/14/88	120000		PPB	300.0	2410387	61611	12257
IRON, DISSOLVED	MW - 1S	01/10/89	257000		PPB	300.0	2410387	61611	12257
IRON, DISSOLVED	MW - 1S	04/17/89	590000		PPB	300.0	2410387	61611	12257
IRON, DISSOLVED	MW - 1S	07/11/89	554000		PPB	300.0	2410387	61611	12257
IRON, DISSOLVED	MW - 1S	01/16/90	564000		PPB	300.0	2410387	61611	12257
IRON, DISSOLVED	MW - 1S	04/17/90	108000		PPB	300.0	2410387	61611	12257
IRON, DISSOLVED	MW - 1S	07/17/90	126000		PPB	300.0	2410387	61611	12257
IRON, DISSOLVED	MW - 2D	07/31/87	640		PPB	300.0	2410388	61611	12257
IRON, DISSOLVED	MW - 2D	10/20/87	17000		PPB	300.0	2410388	61611	12257
IRON, DISSOLVED	MW - 2D	01/19/88	14000		PPB	300.0	2410388	61611	12257
IRON, DISSOLVED	MW - 2D	10/14/88	1200		PPB	300.0	2410388	61611	12257
IRON, DISSOLVED	MW - 2D	01/10/89	610		PPB	300.0	2410388	61611	12257
IRON, DISSOLVED	MW - 2D	04/17/89	4900		PPB	300.0	2410388	61611	12257
IRON, DISSOLVED	MW - 2D	01/16/90	9500		PPB	300.0	2410388	61611	12257
IRON, DISSOLVED	MW - 2D	04/17/90	410		PPB	300.0	2410388	61611	12257
IRON, DISSOLVED	MW - 2D	07/17/90	560		PPB	300.0	2410388	61611	12257
IRON, DISSOLVED	MW - 2S	07/31/87	8000		PPB	300.0	2410389	61611	12257
IRON, DISSOLVED	MW - 2S	10/20/87	2100		PPB	300.0	2410389	61611	12257
IRON, DISSOLVED	MW - 2S	01/19/88	4200		PPB	300.0	2410389	61611	12257
IRON, DISSOLVED	MW - 2S	10/14/88	5000		PPB	300.0	2410389	61611	12257
IRON, DISSOLVED	MW - 2S	04/17/89	1300		PPB	300.0	2410389	61611	12257
IRON, DISSOLVED	MW - 2S	07/11/89	2700		PPB	300.0	2410389	61611	12257
IRON, DISSOLVED	MW - 2S	01/16/90	2900		PPB	300.0	2410389	61611	12257
IRON, DISSOLVED	MW - 2S	04/17/90	2600		PPB	300.0	2410389	61611	12257
IRON, DISSOLVED	MW - 2S	07/17/90	2600		PPB	300.0	2410389	61611	12257
IRON, DISSOLVED	MW - 3D	10/20/87	17000		PPB	300.0	2410390	61611	12257
IRON, DISSOLVED	MW - 3D	01/19/89	17900		PPB	300.0	2410390	61611	12257
IRON, DISSOLVED	MW - 3D	10/14/88	9600		PPB	300.0	2410390	61611	12257
IRON, DISSOLVED	MW - 3D	01/10/89	860		PPB	300.0	2410390	61611	12257
IRON, DISSOLVED	MW - 3D	07/11/89	5600		PPB	300.0	2410390	61611	12257
IRON, DISSOLVED	MW - 3D	01/16/90	12000		PPB	300.0	2410390	61611	12257
IRON, DISSOLVED	MW - 3D	04/17/90	11000		PPB	300.0	2410390	61611	12257

AMERICAN CYANAMID CO., CARTERET LF (NJ0061611) 10:21 FRIDAY, FEBRUARY 15, 1991

LIST OF EXCEEDANCES

PNAME	WELLNAME	DATE	VALUE	REMARKS	UNIT	LIMIT	WELL_ID	NJPDES	LABNO
IRON, DISSOLVED	MW - 3D	07/17/90	9800		PPB	300	2410390	61611	12257
IRON, DISSOLVED	MW - 3S	07/31/87	1400		PPB	300	2410391	61611	12257
IRON, DISSOLVED	MW - 3S	10/20/87	410		PPB	300	2410391	61611	12257
IRON, DISSOLVED	MW - 3S	01/16/90	770		PPB	300	2410391	61611	12257
IRON, DISSOLVED	MW - 4D	07/31/87	14000		PPB	300	2410392	61611	12257
IRON, DISSOLVED	MW - 4D	10/20/87	32600		PPB	300	2410392	61611	12257
IRON, DISSOLVED	MW - 4D	01/19/88	20000		PPB	300	2410392	61611	12257
IRON, DISSOLVED	MW - 4D	10/14/88	23000		PPB	300	2410392	61611	12257
IRON, DISSOLVED	MW - 4D	01/10/89	4200		PPB	300	2410392	61611	12257
IRON, DISSOLVED	MW - 4D	04/18/89	23800		PPB	300	2410392	61611	12257
IRON, DISSOLVED	MW - 4D	07/11/89	4600		PPB	300	2410392	61611	12257
IRON, DISSOLVED	MW - 4D	01/16/90	22200		PPB	300	2410392	61611	12257
IRON, DISSOLVED	MW - 4D	04/17/90	20500		PPB	300	2410392	61611	12257
IRON, DISSOLVED	MW - 4D	07/17/90	12000		PPB	300	2410392	61611	12257
IRON, DISSOLVED	MW - 4S	07/31/87	29100		PPB	300	2410393	61611	12257
IRON, DISSOLVED	MW - 4S	10/20/87	17000		PPB	300	2410393	61611	12257
IRON, DISSOLVED	MW - 4S	01/19/88	9100		PPB	300	2410393	61611	12257
IRON, DISSOLVED	MW - 4S	10/14/88	120000		PPB	300	2410393	61611	12257
IRON, DISSOLVED	MW - 4S	01/10/89	12000		PPB	300	2410393	61611	12257
IRON, DISSOLVED	MW - 4S	04/18/89	9800		PPB	300	2410393	61611	12257
IRON, DISSOLVED	MW - 4S	01/16/90	13000		PPB	300	2410393	61611	12257
IRON, DISSOLVED	MW - 4S	04/17/90	3700		PPB	300	2410393	61611	12257
IRON, DISSOLVED	MW - 4S	07/17/90	3200		PPB	300	2410393	61611	12257
IRON, DISSOLVED	MW - 5D	07/31/87	930		PPB	300	2410394	61611	12257
IRON, DISSOLVED	MW - 5D	10/20/87	4200		PPB	300	2410394	61611	12257
IRON, DISSOLVED	MW - 5D	01/19/88	2400		PPB	300	2410394	61611	12257
IRON, DISSOLVED	MW - 5D	10/14/88	2700		PPB	300	2410394	61611	12257
IRON, DISSOLVED	MW - 5D	01/10/89	1800		PPB	300	2410394	61611	12257
IRON, DISSOLVED	MW - 5D	04/18/89	2000		PPB	300	2410394	61611	12257
IRON, DISSOLVED	MW - 5D	07/11/89	2700		PPB	300	2410394	61611	12257
IRON, DISSOLVED	MW - 5D	01/16/90	2200		PPB	300	2410394	61611	12257
IRON, DISSOLVED	MW - 5D	04/17/90	2500		PPB	300	2410394	61611	12257
IRON, DISSOLVED	MW - 5D	07/17/90	4000		PPB	300	2410394	61611	12257
IRON, DISSOLVED	MW - 5S	07/31/87	1100		PPB	300	2410395	61611	12257
IRON, DISSOLVED	MW - 5S	10/20/87	1400		PPB	300	2410395	61611	12257
IRON, DISSOLVED	MW - 5S	01/19/88	1500		PPB	300	2410395	61611	12257
IRON, DISSOLVED	MW - 5S	10/14/88	990		PPB	300	2410395	61611	12257
IRON, DISSOLVED	MW - 5S	01/10/89	690		PPB	300	2410395	61611	12257
IRON, DISSOLVED	MW - 5S	04/18/89	530		PPB	300	2410395	61611	12257
IRON, DISSOLVED	MW - 5S	07/11/89	420		PPB	300	2410395	61611	12257
IRON, DISSOLVED	MW - 5S	01/16/90	440		PPB	300	2410395	61611	12257
IRON, DISSOLVED	MW - 5S	07/17/90	630		PPB	300	2410395	61611	12257
MANGANESE, DISSOLVED	MW - 1D	01/19/88	5760		PPB	50	2410386	61611	12257
MANGANESE, DISSOLVED	MW - 1D	10/14/88	5780		PPB	50	2410386	61611	12257
MANGANESE, DISSOLVED	MW - 1D	04/17/89	5200		PPB	50	2410386	61611	12257
MANGANESE, DISSOLVED	MW - 1D	07/11/89	5080		PPB	50	2410386	61611	12257
MANGANESE, DISSOLVED	MW - 1D	01/16/90	5160		PPB	50	2410386	61611	12257
MANGANESE, DISSOLVED	MW - 1D	04/17/90	4400		PPB	50	2410386	61611	12257
MANGANESE, DISSOLVED	MW - 1D	07/17/90	4860		PPB	50	2410386	61611	12257
MANGANESE, DISSOLVED	MW - 1S	01/19/88	10900		PPB	50	2410387	61611	12257
MANGANESE, DISSOLVED	MW - 1S	10/14/88	4740		PPB	50	2410387	61611	12257
MANGANESE, DISSOLVED	MW - 1S	01/10/89	5900		PPB	50	2410387	61611	12257
MANGANESE, DISSOLVED	MW - 1S	04/17/89	9410		PPB	50	2410387	61611	12257
MANGANESE, DISSOLVED	MW - 1S	07/11/89	8690		PPB	50	2410387	61611	12257

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LIST OF EXCEEDANCES

PNAME	WELLNAME	DATE	VALUE	REMARKS	UNIT	LIMIT	WELL_ID	NJPDES	LABNO
MANGANESE, DISSOLVED	MW - 1S	01/16/90	13200.0		PPB	50.0	2410387	61611	12257
MANGANESE, DISSOLVED	MW - 1S	04/17/90	4530.0		PPB	50.0	2410387	61611	12257
MANGANESE, DISSOLVED	MW - 1S	07/17/90	5230.0		PPB	50.0	2410387	61611	12257
MANGANESE, DISSOLVED	MW - 2D	01/19/88	1040.0		PPB	50.0	2410388	61611	12257
MANGANESE, DISSOLVED	MW - 2D	10/14/88	1790.0		PPB	50.0	2410388	61611	12257
MANGANESE, DISSOLVED	MW - 2D	01/10/89	2290.0		PPB	50.0	2410388	61611	12257
MANGANESE, DISSOLVED	MW - 2D	04/17/89	1060.0		PPB	50.0	2410388	61611	12257
MANGANESE, DISSOLVED	MW - 2D	07/11/89	996.0		PPB	50.0	2410388	61611	12257
MANGANESE, DISSOLVED	MW - 2D	01/16/90	1020.0		PPB	50.0	2410388	61611	12257
MANGANESE, DISSOLVED	MW - 2D	04/17/90	1010.0		PPB	50.0	2410388	61611	12257
MANGANESE, DISSOLVED	MW - 2D	07/17/90	914.0		PPB	50.0	2410388	61611	12257
MANGANESE, DISSOLVED	MW - 3S	07/11/89	110.0		PPB	50.0	2410389	61611	12257
MANGANESE, DISSOLVED	MW - 3D	01/19/88	765.0		PPB	50.0	2410390	61611	12257
MANGANESE, DISSOLVED	MW - 3D	10/14/88	960.0		PPB	50.0	2410390	61611	12257
MANGANESE, DISSOLVED	MW - 3D	01/10/89	2050.0		PPB	50.0	2410390	61611	12257
MANGANESE, DISSOLVED	MW - 3D	04/18/89	1910.0		PPB	50.0	2410390	61611	12257
MANGANESE, DISSOLVED	MW - 3D	07/11/89	1810.0		PPB	50.0	2410390	61611	12257
MANGANESE, DISSOLVED	MW - 3D	01/16/90	691.0		PPB	50.0	2410390	61611	12257
MANGANESE, DISSOLVED	MW - 3D	04/17/90	480.0		PPB	50.0	2410390	61611	12257
MANGANESE, DISSOLVED	MW - 3D	07/17/90	490.0		PPB	50.0	2410390	61611	12257
MANGANESE, DISSOLVED	MW - 4D	01/19/88	1410.0		PPB	50.0	2410392	61611	12257
MANGANESE, DISSOLVED	MW - 4D	10/14/88	1090.0		PPB	50.0	2410392	61611	12257
MANGANESE, DISSOLVED	MW - 4D	01/10/89	875.0		PPB	50.0	2410392	61611	12257
MANGANESE, DISSOLVED	MW - 4D	04/18/89	890.0		PPB	50.0	2410392	61611	12257
MANGANESE, DISSOLVED	MW - 4D	01/16/90	739.0		PPB	50.0	2410392	61611	12257
MANGANESE, DISSOLVED	MW - 4D	04/17/90	673.0		PPB	50.0	2410392	61611	12257
MANGANESE, DISSOLVED	MW - 4D	07/17/90	759.0		PPB	50.0	2410392	61611	12257
MANGANESE, DISSOLVED	MW - 4S	07/11/89	821.0		PPB	50.0	2410393	61611	12257
MANGANESE, DISSOLVED	MW - 5D	01/19/88	60.6		PPB	50.0	2410394	61611	12257
MANGANESE, DISSOLVED	MW - 5D	10/14/88	270.0		PPB	50.0	2410394	61611	12257
MANGANESE, DISSOLVED	MW - 5D	01/10/89	1210.0		PPB	50.0	2410394	61611	12257
MANGANESE, DISSOLVED	MW - 5D	04/18/89	1450.0		PPB	50.0	2410394	61611	12257
MANGANESE, DISSOLVED	MW - 5D	07/11/89	865.0		PPB	50.0	2410394	61611	12257
MANGANESE, DISSOLVED	MW - 5D	01/16/90	350.0		PPB	50.0	2410394	61611	12257
MANGANESE, DISSOLVED	MW - 5D	04/17/90	220.0		PPB	50.0	2410394	61611	12257
MANGANESE, DISSOLVED	MW - 5D	07/17/90	190.0		PPB	50.0	2410394	61611	12257
MBAS (SURFACTANTS)	MW - 1D	07/11/89	12.0		PPM	0.5	2410386	61611	12257
MBAS (SURFACTANTS)	MW - 1S	07/31/87	0.7		PPM	0.5	2410387	61611	12257
MBAS (SURFACTANTS)	MW - 1S	07/11/89	8.7		PPM	0.5	2410387	61611	12257
MBAS (SURFACTANTS)	MW - 1S	01/16/90	0.6		PPM	0.5	2410387	61611	12257
MBAS (SURFACTANTS)	MW - 2D	07/11/89	14.0		PPM	0.5	2410388	61611	12257
MBAS (SURFACTANTS)	MW - 2D	01/16/90	0.6		PPM	0.5	2410388	61611	12257
MBAS (SURFACTANTS)	MW - 2S	07/11/89	5.3		PPM	0.5	2410389	61611	12257
MBAS (SURFACTANTS)	MW - 2S	01/16/90	2.0		PPM	0.5	2410389	61611	12257
MBAS (SURFACTANTS)	MW - 3D	07/11/89	21.0		PPM	0.5	2410390	61611	12257
MBAS (SURFACTANTS)	MW - 3S	10/20/87	1.1		PPM	0.5	2410391	61611	12257
MBAS (SURFACTANTS)	MW - 3S	07/11/89	20.0		PPM	0.5	2410391	61611	12257
MBAS (SURFACTANTS)	MW - 4D	07/11/89	5.0	J	PPM	0.5	2410392	61611	12257
MBAS (SURFACTANTS)	MW - 4S	07/11/89	12.0		PPM	0.5	2410393	61611	12257
MBAS (SURFACTANTS)	MW - 4S	01/16/90	0.7		PPM	0.5	2410393	61611	12257
MBAS (SURFACTANTS)	MW - 5D	01/19/88	11.0		PPM	0.5	2410394	61611	12257
MBAS (SURFACTANTS)	MW - 5D	07/11/89	33.0		PPM	0.5	2410394	61611	12257
MBAS (SURFACTANTS)	MW - 5D	01/16/90	0.7		PPM	0.5	2410394	61611	12257
MBAS (SURFACTANTS)	MW - 5D	07/17/90	2.0	J	PPM	0.5	2410394	61611	12257

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LIST OF EXCEEDANCES

PNAME	WELLNAME	DATE	VALUE	REMARKS	UNIT	LIMIT	WELL_ID	NJPDES	LABNO
AMMONIA, DISSOLVED	MW - 4D	10/20/87	5.00		PPM	0.5	2410392	61611	12257
AMMONIA, DISSOLVED	MW - 4D	01/19/88	9.00		PPM	0.5	2410392	61611	12257
AMMONIA, DISSOLVED	MW - 4D	10/14/88	5.30		PPM	0.5	2410392	61611	12257
AMMONIA, DISSOLVED	MW - 4D	01/10/89	9.10		PPM	0.5	2410392	61611	12257
AMMONIA, DISSOLVED	MW - 4D	04/18/89	5.50		PPM	0.5	2410392	61611	12257
AMMONIA, DISSOLVED	MW - 4D	07/11/89	5.90		PPM	0.5	2410392	61611	12257
AMMONIA, DISSOLVED	MW - 4D	04/17/90	6.20		PPM	0.5	2410392	61611	12257
AMMONIA, DISSOLVED	MW - 4D	07/17/90	5.30		PPM	0.5	2410392	61611	12257
AMMONIA, DISSOLVED	MW - 4S	07/31/87	3.40		PPM	0.5	2410393	61611	12257
AMMONIA, DISSOLVED	MW - 4S	10/20/87	510.00		PPM	0.5	2410393	61611	12257
AMMONIA, DISSOLVED	MW - 4S	01/19/88	410.00		PPM	0.5	2410393	61611	12257
AMMONIA, DISSOLVED	MW - 4S	10/14/88	360.00		PPM	0.5	2410393	61611	12257
AMMONIA, DISSOLVED	MW - 4S	01/10/89	400.00		PPM	0.5	2410393	61611	12257
AMMONIA, DISSOLVED	MW - 4S	04/18/89	380.00		PPM	0.5	2410393	61611	12257
AMMONIA, DISSOLVED	MW - 4S	07/11/89	33.00		PPM	0.5	2410393	61611	12257
AMMONIA, DISSOLVED	MW - 4S	01/16/90	390.00		PPM	0.5	2410393	61611	12257
AMMONIA, DISSOLVED	MW - 4S	07/17/90	390.00		PPM	0.5	2410393	61611	12257
AMMONIA, DISSOLVED	MW - 5D	07/31/87	23.00		PPM	0.5	2410394	61611	12257
AMMONIA, DISSOLVED	MW - 5D	10/20/87	9.00		PPM	0.5	2410394	61611	12257
AMMONIA, DISSOLVED	MW - 5D	01/19/88	9.90		PPM	0.5	2410394	61611	12257
AMMONIA, DISSOLVED	MW - 5D	10/14/88	8.20		PPM	0.5	2410394	61611	12257
AMMONIA, DISSOLVED	MW - 5D	01/10/89	6.30		PPM	0.5	2410394	61611	12257
AMMONIA, DISSOLVED	MW - 5D	04/18/89	7.70		PPM	0.5	2410394	61611	12257
AMMONIA, DISSOLVED	MW - 5D	07/11/89	13.00		PPM	0.5	2410394	61611	12257
AMMONIA, DISSOLVED	MW - 5D	01/16/90	6.50		PPM	0.5	2410394	61611	12257
AMMONIA, DISSOLVED	MW - 5D	04/17/90	26.00		PPM	0.5	2410394	61611	12257
AMMONIA, DISSOLVED	MW - 5D	07/17/90	13.00		PPM	0.5	2410394	61611	12257
AMMONIA, DISSOLVED	MW - 5S	07/31/87	5.20		PPM	0.5	2410395	61611	12257
AMMONIA, DISSOLVED	MW - 5S	10/20/87	31.00		PPM	0.5	2410395	61611	12257
AMMONIA, DISSOLVED	MW - 5S	01/19/88	30.00		PPM	0.5	2410395	61611	12257
AMMONIA, DISSOLVED	MW - 5S	10/14/88	21.00		PPM	0.5	2410395	61611	12257
AMMONIA, DISSOLVED	MW - 5S	01/10/89	22.00		PPM	0.5	2410395	61611	12257
AMMONIA, DISSOLVED	MW - 5S	04/18/89	27.00		PPM	0.5	2410395	61611	12257
AMMONIA, DISSOLVED	MW - 5S	07/11/89	29.00		PPM	0.5	2410395	61611	12257
AMMONIA, DISSOLVED	MW - 5S	01/16/90	23.00		PPM	0.5	2410395	61611	12257
AMMONIA, DISSOLVED	MW - 5S	04/17/90	43.00		PPM	0.5	2410395	61611	12257
AMMONIA, DISSOLVED	MW - 5S	07/17/90	26.00		PPM	0.5	2410395	61611	12257
PH	MW - 1S	07/31/87	660.00			9.0	2410387	61611	12257
PH	MW - 3D	04/18/89	4.08			9.0	2410390	61611	12257
PH	MW - 4S	01/10/89	9.03			9.0	2410393	61611	12257
PH	MW - 4S	04/18/89	9.07			9.0	2410393	61611	12257
PHENOLS, TOTAL	MW - 1D	04/17/89	500.00	J	PPB	300.0	2410386	61611	12257
PHENOLS, TOTAL	MW - 1D	07/11/89	500.00	J	PPB	300.0	2410386	61611	12257
PHENOLS, TOTAL	MW - 1S	10/20/87	1980.00		PPB	300.0	2410387	61611	12257
PHENOLS, TOTAL	MW - 1S	01/19/88	440.00		PPB	300.0	2410387	61611	12257
PHENOLS, TOTAL	MW - 1S	10/14/88	880.00		PPB	300.0	2410387	61611	12257
PHENOLS, TOTAL	MW - 1S	01/10/89	403.00		PPB	300.0	2410387	61611	12257
PHENOLS, TOTAL	MW - 1S	04/17/89	1840.00		PPB	300.0	2410387	61611	12257
PHENOLS, TOTAL	MW - 1S	07/11/89	1005.00		PPB	300.0	2410387	61611	12257
PHENOLS, TOTAL	MW - 1S	04/17/90	490.00		PPB	300.0	2410387	61611	12257
PHENOLS, TOTAL	MW - 1S	07/17/90	515.00		PPB	300.0	2410387	61611	12257
PHENOLS, TOTAL	MW - 2D	04/17/89	500.00	J	PPB	300.0	2410388	61611	12257
PHENOLS, TOTAL	MW - 2S	10/20/87	1090.00		PPB	300.0	2410389	61611	12257
PHENOLS, TOTAL	MW - 2S	01/19/88	354.00		PPB	300.0	2410389	61611	12257

↑ 3,500?
for Phenol Action Limit

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LIST OF EXCEEDANCES

PNAME	WELLNAME	DATE	VALUE	REMARKS	UNIT	LIMIT	WELL_ID	NJPDES	LABNO
PHENOLS, TOTAL	MW - 2S	07/11/89	500	J	PPB	300	2410389	61611	12257
PHENOLS, TOTAL	MW - 3D	01/10/89	500	J	PPB	300	2410390	61611	12257
PHENOLS, TOTAL	MW - 3D	07/11/89	500	J	PPB	300	2410390	61611	12257
PHENOLS, TOTAL	MW - 3S	04/18/89	500	J	PPB	300	2410391	61611	12257
PHENOLS, TOTAL	MW - 3S	07/11/89	500	J	PPB	300	2410391	61611	12257
PHENOLS, TOTAL	MW - 3S	01/16/90	710		PPB	300	2410391	61611	12257
PHENOLS, TOTAL	MW - 3S	04/17/90	500	J	PPB	300	2410391	61611	12257
PHENOLS, TOTAL	MW - 4D	04/18/89	500	J	PPB	300	2410392	61611	12257
PHENOLS, TOTAL	MW - 4D	07/11/89	500	J	PPB	300	2410392	61611	12257
PHENOLS, TOTAL	MW - 4S	04/18/89	500	J	PPB	300	2410393	61611	12257
PHENOLS, TOTAL	MW - 4S	07/11/89	500	J	PPB	300	2410393	61611	12257
PHENOLS, TOTAL	MW - 4S	07/17/90	500	J	PPB	300	2410393	61611	12257
PHENOLS, TOTAL	MW - 5D	07/17/90	500	J	PPB	300	2410394	61611	12257
PHENOLS, TOTAL	MW - 5S	04/18/89	1000		PPB	300	2410395	61611	12257
PHENOLS, TOTAL	MW - 5S	07/11/89	500	J	PPB	300	2410395	61611	12257
PHENOLS, TOTAL	MW - 5S	01/16/90	500	J	PPB	300	2410395	61611	12257
SELENIUM, DISSOLVED	MW - 4D	01/10/89	25		PPB	10	2410392	61611	12257
SODIUM, DISSOLVED	MW - 1D	07/31/87	2930		PPM	50	2410386	61611	12257
SODIUM, DISSOLVED	MW - 1D	10/20/87	2450		PPM	50	2410386	61611	12225
SODIUM, DISSOLVED	MW - 1D	01/19/88	2300		PPM	50	2410386	61611	12257
SODIUM, DISSOLVED	MW - 1D	10/14/88	2540		PPM	50	2410386	61611	12257
SODIUM, DISSOLVED	MW - 1D	04/17/89	3330		PPM	50	2410386	61611	12257
SODIUM, DISSOLVED	MW - 1D	07/11/89	3300		PPM	50	2410386	61611	12257
SODIUM, DISSOLVED	MW - 1D	01/16/90	3180		PPM	50	2410386	61611	12257
SODIUM, DISSOLVED	MW - 1D	04/17/90	3120		PPM	50	2410386	61611	12257
SODIUM, DISSOLVED	MW - 1D	07/17/90	3120		PPM	50	2410386	61611	12257
SODIUM, DISSOLVED	MW - 1S	07/31/87	2140		PPM	50	2410387	61611	12257
SODIUM, DISSOLVED	MW - 1S	10/20/87	4180		PPM	50	2410387	61611	12257
SODIUM, DISSOLVED	MW - 1S	01/19/88	3190		PPM	50	2410387	61611	12257
SODIUM, DISSOLVED	MW - 1S	10/14/88	2040		PPM	50	2410387	61611	12257
SODIUM, DISSOLVED	MW - 1S	01/10/89	2620		PPM	50	2410387	61611	12257
SODIUM, DISSOLVED	MW - 1S	07/11/89	3240		PPM	50	2410387	61611	12257
SODIUM, DISSOLVED	MW - 1S	01/16/90	4310		PPM	50	2410387	61611	12257
SODIUM, DISSOLVED	MW - 1S	04/17/90	2260		PPM	50	2410387	61611	12257
SODIUM, DISSOLVED	MW - 1S	07/17/90	2430		PPM	50	2410387	61611	12257
SODIUM, DISSOLVED	MW - 2D	07/31/87	5370		PPM	50	2410388	61611	12257
SODIUM, DISSOLVED	MW - 2D	10/20/87	5450		PPM	50	2410388	61611	12257
SODIUM, DISSOLVED	MW - 2D	01/19/88	5280		PPM	50	2410388	61611	12277
SODIUM, DISSOLVED	MW - 2D	10/14/88	4750		PPM	50	2410388	61611	12257
SODIUM, DISSOLVED	MW - 2D	01/10/89	4440		PPM	50	2410388	61611	12257
SODIUM, DISSOLVED	MW - 2D	04/17/89	5150		PPM	50	2410388	61611	12257
SODIUM, DISSOLVED	MW - 2D	07/11/89	5340		PPM	50	2410388	61611	12257
SODIUM, DISSOLVED	MW - 2D	01/16/90	5410		PPM	50	2410388	61611	12257
SODIUM, DISSOLVED	MW - 2D	07/17/90	2280		PPM	50	2410388	61611	12257
SODIUM, DISSOLVED	MW - 2S	07/31/87	4900		PPM	50	2410389	61611	12257
SODIUM, DISSOLVED	MW - 2S	10/20/87	5840		PPM	50	2410389	61611	12257
SODIUM, DISSOLVED	MW - 2S	01/19/88	4690		PPM	50	2410389	61611	12257
SODIUM, DISSOLVED	MW - 2S	10/14/88	5360		PPM	50	2410389	61611	12257
SODIUM, DISSOLVED	MW - 2S	04/17/89	4560		PPM	50	2410389	61611	12257
SODIUM, DISSOLVED	MW - 2S	07/11/89	4850		PPM	50	2410389	61611	12257
SODIUM, DISSOLVED	MW - 2S	01/16/90	4160		PPM	50	2410389	61611	12257
SODIUM, DISSOLVED	MW - 2S	04/17/90	4000		PPM	50	2410389	61611	12257
SODIUM, DISSOLVED	MW - 2S	07/17/90	4130		PPM	50	2410389	61611	12257
SODIUM, DISSOLVED	MW - 3D	10/20/87	5170		PPM	50	2410390	61611	12257

AMERICAN CYANAMID CO., CARTERET LF (NJ0061611) 10:21 FRIDAY, FEBRUARY 15, 1991

LIST OF EXCEEDANCES

PNAME	WELLNAME	DATE	VALUE	REMARKS	UNIT	LIMIT	WELL_ID	NJPDES	LABNO
TOTAL DISSOLVED SOLIDS	MW - 5S	07/11/89	23900.0		PPM	500.000	2410395	61611	12257
TOTAL DISSOLVED SOLIDS	MW - 5S	01/16/90	24600.0		PPM	500.000	2410395	61611	12257
TOTAL DISSOLVED SOLIDS	MW - 5S	04/17/90	26300.0		PPM	500.000	2410395	61611	12257
TOTAL DISSOLVED SOLIDS	MW - 5S	07/17/90	24800.0		PPM	500.000	2410395	61611	12257
TOXAPHENE	MW - 1S	01/16/90	8.0		PPB	0.005	2410387	61611	12257
BENZENE	MW - 1D	07/31/87	195.0		PPB	0.000	2410386	61611	12257
BENZENE	MW - 1S	01/19/88	207.0		PPB	0.000	2410387	61611	12257
BENZENE	MW - 1S	01/10/89	176.0		PPB	0.000	2410387	61611	12257
BENZENE	MW - 1S	01/16/90	375.0	J	PPB	0.000	2410387	61611	12257
BENZENE	MW - 2S	01/16/90	0.5	J	PPB	0.000	2410389	61611	12257
BENZENE	MW - 4D	07/31/87	1.8		PPB	0.000	2410392	61611	12257
BENZENE	MW - 4S	01/10/89	1.0		PPB	0.000	2410393	61611	12257
BENZENE	MW - 4S	01/16/90	0.9	J	PPB	0.000	2410393	61611	12257
BENZENE	MW - 5D	01/16/90	6.1		PPB	0.000	2410394	61611	12257
CHLOROBENZENE	MW - 1D	07/31/87	18.2		PPB	0.000	2410386	61611	12257
CHLOROBENZENE	MW - 1S	01/10/89	21.6	J	PPB	0.000	2410387	61611	12257
CHLOROFORM	MW - 1S	01/19/88	8.1		PPB	0.000	2410387	61611	12257
1,1 DICHLOROETHANE	MW - 1D	07/31/87	65.5		PPB	0.000	2410386	61611	12257
1,1 DICHLOROETHANE	MW - 1S	01/19/88	127.0		PPB	0.000	2410387	61611	12257
1,1 DICHLOROETHANE	MW - 1S	01/10/89	62.0		PPB	0.000	2410387	61611	12257
1,2-DICHLOROETHANE	MW - 1D	07/31/87	3.5		PPB	0.000	2410386	61611	12257
1,1 DICHLOROETHYLENE	MW - 1D	07/31/87	19.0		PPB	0.000	2410386	61611	12257
1,1 DICHLOROETHYLENE	MW - 1S	01/19/88	23.7		PPB	0.000	2410387	61611	12257
ETHYLBENZENE	MW - 1D	07/31/87	21.9		PPB	0.000	2410386	61611	12257
ETHYLBENZENE	MW - 1S	01/19/88	29.9		PPB	0.000	2410387	61611	12257
ETHYLBENZENE	MW - 5D	01/19/88	70.4		PPB	0.000	2410394	61611	12257
ETHYLBENZENE	MW - 5D	01/16/90	6.3		PPB	0.000	2410394	61611	12257
METHYLENE CHLORIDE	MW - 1D	01/19/88	9.0		PPB	0.000	2410386	61611	12257
METHYLENE CHLORIDE	MW - 1S	01/19/88	150.0		PPB	0.000	2410387	61611	12257
METHYLENE CHLORIDE	MW - 1S	01/10/89	40.7		PPB	0.000	2410387	61611	12257
METHYLENE CHLORIDE	MW - 2D	07/31/87	6.3		PPB	0.000	2410388	61611	12257
METHYLENE CHLORIDE	MW - 2D	01/10/89	0.5	J	PPB	0.000	2410388	61611	12257
METHYLENE CHLORIDE	MW - 2S	07/31/87	8.8		PPB	0.000	2410389	61611	12257
METHYLENE CHLORIDE	MW - 2S	01/19/88	7.8		PPB	0.000	2410389	61611	12257
METHYLENE CHLORIDE	MW - 2S	01/16/90	2.2		PPB	0.000	2410389	61611	12257
METHYLENE CHLORIDE	MW - 4D	07/31/87	4.1		PPB	0.000	2410392	61611	12257
METHYLENE CHLORIDE	MW - 4S	01/16/90	4.1		PPB	0.000	2410393	61611	12257
METHYLENE CHLORIDE	MW - 5D	07/31/87	4.4		PPB	0.000	2410394	61611	12257
TOLUENE	MW - 1D	07/31/87	2940.0		PPB	0.000	2410386	61611	12257
TOLUENE	MW - 1S	01/19/88	4340.0		PPB	0.000	2410387	61611	12257
TOLUENE	MW - 1S	01/10/89	3240.0		PPB	0.000	2410387	61611	12257
TOLUENE	MW - 1S	01/16/90	6490.0		PPB	0.000	2410387	61611	12257
TOLUENE	MW - 2S	01/16/90	1.2	J	PPB	0.000	2410389	61611	12257
TOLUENE	MW - 3D	01/10/89	0.4	J	PPB	0.000	2410390	61611	12257
TOLUENE	MW - 3S	01/10/89	0.4	J	PPB	0.000	2410391	61611	12257
TOLUENE	MW - 4S	01/10/89	0.4	J	PPB	0.000	2410393	61611	12257
TOLUENE	MW - 4S	01/16/90	0.4	J	PPB	0.000	2410393	61611	12257
TOLUENE	MW - 5D	01/19/88	21.4		PPB	0.000	2410394	61611	12257
TOLUENE	MW - 5D	01/16/90	7.4		PPB	0.000	2410394	61611	12257
TOLUENE	MW - 5S	01/16/90	1.8		PPB	0.000	2410395	61611	12257
1,1,1 TRICHLOROETHANE	MW - 1D	07/31/87	18.4		PPB	0.000	2410386	61611	12257
1,1,1 TRICHLOROETHANE	MW - 1S	01/19/88	67.3		PPB	0.000	2410387	61611	12257
TRICHLOROETHYLENE	MW - 1D	07/31/87	83.5		PPB	0.000	2410386	61611	12257
TRICHLOROETHYLENE	MW - 1D	01/16/90	1.0		PPB	0.000	2410386	61611	12257

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LIST OF EXCEEDANCES

NAME	WELLNAME	DATE	VALUE	REMARKS	UNIT	LIMIT	WELL_ID	NJPDES	LABNO
TRICHLOROETHYLENE	MW - 1S	01/19/88	98.30		PPB	0	2410387	61611	12257
TRICHLOROETHYLENE	MW - 1S	01/10/89	45.50		PPB	0	2410387	61611	12257
TRICHLOROETHYLENE	MW - 5S	01/16/90	2.33		PPB	0	2410395	61611	12257
VINYL CHLORIDE	MW - 1D	07/31/87	12.30		PPB	0	2410386	61611	12257
CHLOROETHANE	MW - 1D	07/31/87	45.10		PPB	0	2410386	61611	12257
METHYL CHLORIDE	MW - 4S	01/16/90	2.00		PPB	0	2410393	61611	12257
1,2 TRANS-DICHLOROETHYLENE	MW - 1D	07/31/87	72.60		PPB	0	2410386	61611	12257
1,2 TRANS-DICHLOROETHYLENE	MW - 1S	01/19/88	86.70		PPB	0	2410387	61611	12257
1,2-TRANS-DICHLOROETHYLENE	MW - 1S	01/10/89	27.50		PPB	0	2410387	61611	12257
2,4 DIMETHYLPHENOL	MW - 1S	01/16/90	56.60	J	PPB	0	2410387	61611	12257
PHENOL	MW - 1S	01/19/88	376.00		PPB	0	2410387	61611	12257
PHENOL	MW - 4S	01/19/88	62.50		PPB	0	2410393	61611	12257
PHENOL	MW - 4S	01/10/89	13.30		PPB	0	2410393	61611	12257
ACENAPHTHENE	MW - 5D	01/16/90	2.05		PPB	0	2410394	61611	12257
BIS(2 ETHYLHEXYL)PHTHALATE	MW - 1D	01/19/88	18.00		PPB	0	2410386	61611	12257
BIS(2 ETHYLHEXYL)PHTHALATE	MW - 1D	01/16/90	3.71	J	PPB	0	2410386	61611	12257
BIS(2-ETHYLHEXYL)PHTHALATE	MW - 2S	01/10/89	0.76	J	PPB	0	2410389	61611	12257
BIS(2 ETHYLHEXYL)PHTHALATE	MW - 3D	01/10/89	2.19	J	PPB	0	2410390	61611	12257
BIS(2 ETHYLHEXYL)PHTHALATE	MW - 3D	01/16/90	6.16	J	PPB	0	2410390	61611	12257
BIS(2 ETHYLHEXYL)PHTHALATE	MW - 4D	01/16/90	2.26	J	PPB	0	2410392	61611	12257
FLUORENE	MW - 5D	01/16/90	2.27		PPB	0	2410394	61611	12257
ISOPHORONE	2416837	01/10/89	561.00		PPB	0	2416837	61611	12257
ISOPHORONE	MW - 1S	01/16/90	1070.00		PPB	0	2410387	61611	12257
NAPHTHALENE	MW - 5D	01/19/88	5.87		PPB	0	2410394	61611	12257
NAPHTHALENE	MW - 5D	01/16/90	7.37		PPB	0	2410394	61611	12257
PHENANTHRENE	MW - 5D	01/16/90	2.38	J	PPB	0	2410394	61611	12257

ATTACHMENT O

CYAN

American C
P.O. Box 31
Linden, NJ 0
(201) 862-6

NJ0061611
F-5142

MAR 30 1989

CERTIFIED
Return Rec

P 788 301

Bureau of Permits
Division of Water Resources
CN 029
Trenton, New Jersey 08625

RECEIVED
APR 11 1989
DEPT. ENVIRONMENTAL PROTECTION
Division of Water Resources
Bureau of Permits Administration

Subject: NJPDES/DGW No.: NJ0061611
Renewal Permit Application

Dear Sir:

Pursuant to N.J.A.C. 7:14A-2.1(f)5, we submit herewith two copies of our application for renewal of NJPDES Permit No. NJ0061611 for our closed landfill in Carteret. Each application package includes completed forms WQM-001, WQM-002, CP#1, and a series of attachments, as follows:

Attachment A - Topographic Map
Attachment B - Groundwater Supply Map (1982)

Please note that upon inquiry to Ms. Ruth Foster of NJDEP, we were advised that data for wells installed previous to 1982 is adequate for this submission.

Attachment C - Geologic Map
Attachments D1 and D2 - Borings and Soils Maps
Attachment E - Hydrogeologic Report
Attachment F - Land Use Zoning Map
Attachment G - Administrative Consent Order
Attachments H1 and H2 - Property Maps
Attachment I - Monitoring Well Plot Plan

We wish to call attention to Attachment G, which is a copy of the Administrative Consent Order (ACO), entered into by American Cyanamid and the Department in December 1987. Under the terms of the ACO, the NJDEP has agreed to make certain modifications to the subject NJPDES/DGW permit.

Also included in the packet as Attachment E, is a Hydrogeologic Report for the site. Cyanamid prepared this information based on data obtained over the past ten years. We concluded it would be useful to both NJDEP and the company to consolidate the extensive technical information available for the site. The report summarizes results of the

groundwater monitoring program, the installation of the groundwater monitoring wells, soils analyses and other information. Cyanamid's intent in presenting this report is to provide documentation for NJDEP to make informed judgments concerning on-going programs at the site, including this permit renewal.

As part of this permit renewal, Cyanamid is requesting revisions to the groundwater monitoring parameters outlined in the current Administrative Consent Order. The extensive monitoring conducted during the past one and one-half years has shown that some parameters are not applicable to the Carteret site. We request these be deleted. Some parameters are redundant or inappropriate to the facility. We request that indicator parameters be substituted in their place. As Ms. Ruth Foster of NJDEP suggested, we are also requesting a reduction in monitoring frequency from quarterly to semiannually. The Hydrogeologic Report is submitted, in part, to support our request for reduction in monitoring parameters and frequency.

Cyanamid requests the following monitoring frequency and parameters for our new permit:

Parameter	Frequency	Justification
Parameters Recommended for Modification		
Elevation of top of monitor well casing	semiannually	
Depth to Water Table from top of casing	semiannually	
Depth to Water Table from original ground level	semiannually	
Ammonia Nitrogen	semiannually	Baseline now established.
Chloride	semiannually	Baseline now established.
Cyanide, total	semiannually	Baseline now established.
Nitrate Nitrogen	semiannually	Baseline now established.
pH	semiannually	Baseline now established.

Parameter	Frequency	Justification
Parameters Recommended for Modification (Continued)		
Priority Pollutant Organics (Plus 40 by GC/MS)	annually	Organic contamination consistently found only in upgradient well. Not believed to originate from Cyanamid site.
Sodium	semiannually	Baseline now established.
Sulfate	semiannually	Baseline now established.
Total Dissolved Solids (TDS)	semiannually	Baseline now established.
Total Organic Carbon (TOC)	semiannually	Baseline now established.
Metals (Cu, Fe, Mn)	annually	Metals typical to area. Baseline concentrations established.
Parameters Recommended for Deletion		
Biological Oxygen Demand	delete	Parameter is better represented by TOC at this site.
Chemical Oxygen Demand	delete	Subject to interference by background chlorides. Use TOC as organic indicator.
Coliform Bacteria	delete	No sanitary waste disposal at this site.
Foaming Agents	delete	Surfactants were not associated with waste disposal at this facility. No surfactants have been found during monitoring.

Parameter	Frequency	Justification
Parameters Recommended for Deletion (Continued)		
Phenols	delete	Parameter subject to interferences. Phenolics included in priority pollutant scans. No organics disposal at this site.
Specific Conductance	delete	Redundant indicator. Use TDS and major ions.
Total Organic Halogen (TOX or TOH)	delete	Parameter subject to interferences by high chlorides and is not meaningful. No organic halogen disposal at this site.
Metals	delete	Metals not detected (As, Ba, Cd, Pb, Cr[IV], Se, Ag) during two years of monitoring. EP Toxicity shows no toxic metals leaching from site.

If you have any questions or comments concerning this permit application, please contact Alice Boomhower at (201) 862-6000 X439.

This submission and any past or future communications or discussions regarding this matter are not intended to admit any fact of liability or to waive or affect any rights.

Sincerely,

AMERICAN CYANAMID COMPANY

R. B. Tabakin
Plant Manager

AEB:g

04

ATTACHMENT P

Carteret ACO
Signed
~ Dec 8, 1987

IN THE MATTER OF	:	ADMINISTRATIVE
AMERICAN CYANAMID COMPANY	:	CONSENT ORDER
SANITARY LANDFILL - CARTERET	:	
NJPDES/DGW PERMIT NO. NJ0061611	:	

This Administrative Consent Order is entered into pursuant to the authority vested in the Commissioner of the Department of Environmental Protection ("NJDEP" or "the Department") by N.J.S.A. 13:1D-1 et seq. and the Water Pollution Control Act, N.J.S.A. 58:10A-1 et seq., and duly delegated to the Assistant Director for Enforcement, Division of Solid Waste Management pursuant to N.J.S.A. 13:1B-4.

FINDINGS

1. On August 18, 1986, the Department issued a New Jersey Pollutant Discharge Elimination System/Discharge to Ground Water permit No. NJ0061611 ("NJPDES/DGW permit") to the American Cyanamid Company ("American Cyanamid") to monitor ground water quality at the American Cyanamid sanitary landfill on Block 9, Lot 21; Block 10, Lots 8, 9, 10, 12, 13, 14, 16, 17, and 18; and Block 11, Lots 8, 10, 11, 12, 13, 14, and 28 in Carteret, Middlesex County, New Jersey. The NJPDES/DGW permit has an effective date of October 1, 1986.

2. On October 7, 1986, the Department received a letter from American Cyanamid dated October 1, 1986, requesting an adjudicatory hearing to contest certain conditions in the NJPDES/DGW permit.

3. On February 9, 1987 and April 13, 1987, pursuant to N.J.A.C. 1:1-5.4, the Department and American Cyanamid met in an attempt to resolve the contested conditions. The parties have agreed to resolve the contested conditions in the NJPDES/DGW permit without an adjudicatory hearing. The terms of that resolution are set forth herein below.

P1

ORDER

NOW, THEREFORE, IT IS HEREBY ORDERED AND AGREED THAT:

I. PERMIT MODIFICATION

4. American Cyanamid shall immediately comply with Attachment A, attached hereto and incorporated herein. The effective date of the NJPDES/DGW permit shall, for the purpose of this paragraph only, be the effective date of this Administrative Consent Order. American Cyanamid is the permittee for the purpose of this paragraph and Attachment A.

5. American Cyanamid shall comply with all other provisions of the August 18, 1986 permit which are not otherwise modified by Attachment A.

6. The Department agrees to modify American Cyanamid's NJPDES/DGW permit by incorporating the conditions in Attachment A as a Major Modification pursuant to N.J.A.C. 7:14A-2.12.

7. American Cyanamid's obligations pursuant to this Administrative Consent Order shall terminate upon the date the draft Major Modification becomes effective as a final permit.

8. By entering into this Administrative Consent Order, American Cyanamid withdraws its request for an adjudicatory hearing on the NJPDES/DGW permit.

9. By entering into this Administrative Consent Order, American Cyanamid waives its rights, pursuant to N.J.A.C. 7:14A-8.1 et seq., to request a public hearing on the draft Major Modification to the extent it is not inconsistent with Attachment A.

10. The Department reserves its rights to modify the draft Major Modification in response to public comment.

11. To the extent that the final Major Modification is not inconsistent with Attachment A, American Cyanamid waives its right, pursuant to N.J.A.C. 7:14A-8.1 et seq., to request an adjudicatory hearing on the final Major Modification.

II. RESERVATION OF RIGHTS

12. The Department reserves the right to require American Cyanamid to take additional actions should the Department determine that such actions are necessary to protect health, safety, welfare, or the environment. Nothing in this Administrative Consent Order shall constitute a waiver of

any statuatory right of the Department pertaining to any of the laws of the State of New Jersey should the Department determine that such measures are necessary. American Cyanamid reserves its rights in defense of such actions by the Department.

III. GENERAL PROVISIONS

13. The provisions of this Administrative Consent Order shall be binding on American Cyanamid, its principals, directors, officers, agents, successors, assignees, and any trustee in bankruptcy or receiver appointed pursuant to a proceeding in law or equity.

14. American Cyanamid hereby consents to and agrees to comply with this Administrative Consent Order which shall be fully enforceable as an Order in New Jersey Superior Court upon the filing of an action for compliance pursuant to N.J.S.A. 13:1D-1 et seq. and the Water Pollution Control Act, N.J.S.A. 58.10A-1 et seq.

15. If any event occurs which American Cyanamid believes will or may cause delays in the achievement of any provisions of this Administrative Consent Order, American Cyanamid shall notify the Department in writing within seven (7) calendar days of the delay or anticipated delay, as appropriate, referencing this paragraph and describing the anticipated length of the delay, the precise cause or causes of the delay, any measures taken or to be taken to minimize the delay,and the time required to take any such measures to minimize the delay. American Cyanamid shall take all necessary action to prevent or minimize any such delay.

16. If the Department finds that: (a) American Cyanamid has complied with the notice requirements of the preceding paragraph and; (b) that any delay or anticipated delay has been or will be caused by fire, flood, riot, strike, or other circumstances beyond the control of American Cyanamid, the Department shall extend the time for performance hereunder for a period no longer than the delay resulting from such circumstances. If the Department determines that either American Cyanamid has not complied with the notice requirements of the preceding paragraph or the event causing the delay is not beyond the control of American Cyanamid, failure to comply with the provisions of this Administrative Consent Order shall constitute a breach of the requirements of this Administrative Consent Order. The burden of proving that any delay is caused by circumstances beyond the control of American Cyanamid and the length of any such delay attributable to those circumstances shall rest with American Cyanamid. Increases in the cost of expenses incurred by American Cyanamid in fulfilling the requirements of this Administrative Consent Order shall not be a basis for an

extension of time. Delay in an interim requirement shall not automatically justify or excuse delay in the attainment of subsequent requirements.

17. American Cyanamid agrees not to contest the authority or jurisdiction of the Department to issue this Administrative Consent Order and also agrees not to contest the terms of this Administrative Consent Order in any action to enforce its provisions, except as otherwise provided in Attachment A.

18. American Cyanamid shall not construe any informal advice, guidance, suggestions, or comments by the Department, or by persons acting on behalf of the Department, as relieving American Cyanamid of its obligation to obtain written approvals as may be required herein, unless such advice, guidance, suggestions, or comments by the Department shall be submitted in writing to American Cyanamid.

19. No modification or waiver of this Administrative Consent Order shall be valid except by written amendment to this Administrative Consent Order duly executed by American Cyanamid and the Department.

20. This Administrative Consent Order shall take effect upon American Cyanamid's receipt of a fully executed copy of this Administrative Consent Order.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

DATE: _____ By: _____
Edward J. Londres
Assistant Director
Division of Solid Waste Management

AMERICAN CYANAMID COMPANY

DATE: _____ By: _____

Name: _____

Title: _____

WQM228

ATTACHMENT A

1. The permittee shall replace any existing monitor wells that are damaged, destroyed, inaccessible or inoperable in accordance with NJDEP well specifications and in locations acceptable to the Department.

2. In lieu of compliance with the requirements set forth in Additional General Condition 9 of the NJPDES/DGW permit, inspection of the monitoring wells may be performed as necessary to ensure timely submission of all required data. However, in the event that the requirements of Additional General Condition 9 are not strictly adhered to, the permittee's compliance with the provisions of this special condition shall not constitute a defense to any failure by the permittee to comply with the requirements of this permit.

3. Sampling parameters will not include Odor and Taste. Ground water analysis must include all other parameters listed in #6 below. However, after one year of sampling has been completed, a request may be made that the submitted data be reviewed for a possible reduction in sampling parameters.

4. a. The permittee shall implement the "Proposed Monitoring Well Plan for the Carteret Impounds" (hereinafter "the Assessment Program") included herein by reference.

b. The results of the Assessment Program will be submitted to the Department according to the attached sampling/reporting schedule. A summary of the results from the first year of sampling must be submitted to the Department in writing no later than ~~January 1, 1989~~. Sept 1, 88

c. The Department will require the permittee to submit a compliance monitoring program as set forth in N.J.A.C. 7:14A-6.15 (j) within 60 days of the date of notification, if, after full review of the data submitted as well as other relevant information, the Department determines that additional information is necessary or that corrective action must be taken. The compliance monitoring program shall include an implementation schedule for further study as may be necessary to define the source of contamination, the specific constituents of concern, and the extent of the vertical and horizantal plumes. The requirements of this paragraph may be stayed only upon express request of the permittee filed together with its request for an administrative hearing to review the Department's determination of the necessity for the submission of a compliance monitoring program.

d. The permittee shall begin the approved study within 30 days of receiving written Departmental approval of the ground water compliance monitoring program required in subsection c of this paragraph.

e. The permittee shall complete the approved study within 180 days of the Department's written approval of the program or any longer period agreed to in writing by the Department.

f. The permittee shall submit to the Department, within 30 days of the completion of the approved study identified in subsection d of this paragraph, the results of the study and recommendations concerning a corrective action program as set forth in N.J.A.C. 7:14A-6.15 (j).

g. The permittee shall not be required to submit a corrective action program as delineated above in the event that the permittee, pursuant to N.J.A.C. 7:14A-6.15 (j) 10, can demonstrate to the Department's satisfaction that the permittee is not responsible for the ground water protection standard being exceeded at any ground water monitor well at the point of compliance.

h. The Department shall make a determination on the need for corrective action based on the information submitted in accordance with the provisions above and any other available information. If the Department determines that corrective actions are necessary, the Department will require the permittee to implement corrective action through an Administrative Order, an Administrative Consent Order, a Major Modification of the permit and/or other appropriate Departmental action. By agreeing to this condition in this Administrative Consent Order, the permittee has not waived any rights to challange a Major Modification of the permit pursuant to N.J.A.C. 7:14A-2.12, 7:14A-7.1 et seq. and 7:14A-8.1 et seq., the issuance of an Administrative Order or other appropriate departmental action, including, but not limited to, a challenge to the formation to which any discharge is alleged to be occurring.

5. GROUND WATER MONITORING REQUIREMENTS AND STANDARDS:

The permittee shall install and sample a total of ten ground water monitor wells according to the schedule below. All ground water elevations must be determined prior to pumping and sampling the ground water monitor wells..Sampling of the wells shall be performed according to the methodology specified in Section 6.12 of the NJPDES regulations and the Department's Field Procedures Manual for Water Data Acquisition. The permittee shall sample for all parameters listed below. Sampling shall be performed and reported during the months which are specified for that parameter.

The standards included in this Table do not represent effluent or discharge limits or cleanup standards. Rather, the standards are used in a review of the data generated and an evaluation of the current status and impact of the facility on ground water quality. It will also give the Department information to determine if there is any actual or potential threat to human health or the environment due to current or past practices. These ground water standards are based on the NJPDES regulations, N.J.A.C. 7:14A-1 et seq. and the Ground Water Quality Standards, N.J.A.C. 7:9-6.1 et seq., except where noted by **.

SAMPLING PARAMETER	GROUND WATER QUALITY STANDARD	SAMPLING FREQUENCY	SAMPLE TYPE	REPORTING MONTH
Elevation of top of monitor well casing (to be determined once but reported as indicated)		JanAprJulOct	N/A	Mar June Sept Dec FebMayAugNov
Depth to Water Table from top of casing prior to sampling		JanAprJulOct	N/A	FebMayAugNov
Depth to Water Table from original ground level prior to sampling		JanAprJulOct	N/A	FebMayAugNov
Ammonia-Nitrogen	0.5 ppm	JanAprJulOct	grab #1	FebMayAugNov
Arsenic & Compounds	0.05 ppm	Jan	grab	March Feb
Barium	1.0 ppm	Jan	grab	Feb
Biological Oxygen Demand (BOD)	** ppm	JanAprJulOct	grab	FebMayAugNov
Cadmium	0.01 ppm	Jan	grab	Feb
Chemical Oxygen Demand (COD)	** ppm	JanAprJulOct	grab	FebMayAugNov
Chloride	250 ppm	JanAprJulOct	grab	FebMayAugNov
Chromium (Hex.) & Compounds	0.05 ppm	Jan	grab	Feb
Coliform Bacteria	*3	Jan	grab	Feb
Copper	1.0 ppm	JanAprJulOct	grab	FebMayAugNov

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Cyanide	0.2	ppm	Jan	grab	Feb
Fluoride	2.0	ppm	Jan	grab	Feb
Foaming Agents	0.5	ppm	JanAprJulOct	grab	FebMayAugNov
Iron	0.3	ppm	JanAprJulOct	grab	FebMayAugNov
Lead & Compounds	0.05	ppm	JanAprJulOct	grab	FebMayAugNov
Manganese	0.05	ppm	JanAprJulOct	grab	FebMayAugNov
Mercury & Compounds	0.002	ppm	JanAprJulOct	grab	FebMayAugNov
Nitrate Nitrogen	10.0	ppm	JanAprJulOct	grab	FebMayAugNov
pH	5-9	SU	JanAprJulOct	grab	FebMayAugNov
Phenols	0.3	ppm	JanAprJulOct	grab	FebMayAugNov
Priority Pollutant Scan plus 40 by GC/MS	*2,*4		Jan	grab	Feb
Selenium & Compounds	0.01	ppm	Jan	grab	Feb
Silver & Compounds	0.05	ppm	Jan	grab	Feb
Sodium	50	ppm	JanAprJulOct	grab	FebMayAugNov
Specific Conductance	(umho/cm)		JanAprJulOct	grab	FebMayAugNov
Sulfate	250	ppm	JanAprJulOct	grab	FebMayAugNov
Total Dissolved Solids (TDS)	500	ppm	JanAprJulOct	grab	FebMayAugNov
Total Organic Carbon (TOC)	**	ppm	JanAprJulOct	grab	FebMayAugNov
Total Organic Halogen (TOX or TOH)	**	ppm	JanAprJulOct	grab	FebMayAugNov
Zinc & Compounds	5	ppm	JanAprJulOct	grab	FebMayAugNov

NOTES:

*1

"Grab" means an individual sample of at least 100 milliliters collected over a period not exceeding 15 minutes.

Currently, based upon scientific consensus, the following shall comprise NJDEP Group A and NJDEP Groups B-1 and B-2:

NJDEP Group A	NJDEP Group B-1
acrylonitrile	acrolein
benzene	bromoform
carbon tetrachloride	chlorobenzene
chloroform	chlorodibromomethane
1,2-dichloroethane	chloroethane
1,1-dichloroethylene	2-chloroethylvinyl ether
methylene chloride	dichorobromomethane
1,1,2,2-tetrachloroethane	1,1-dichloroethane
tetrachloroethylene	1,2-dichloropropane
vinyl chloride	1,3-dichloropropylene
1,1,2-trichloroethane	ethlybenzene
	methyl bromide
	methyl chloride
	toluene
	1,2-trans-dichloroethylene

NJDEP Group B-2	MCL* (ppb)
1,1,1-trichloroethane	200

*EPA Proposed

B. Chemical compounds classified in NJDEP Group A are carcinogens and pose some level of risk even at low doses.

C. 40 CRF Part 136-Method 624 shall be used to identify and monitor for the volatile organic compounds identified in Appendix B of the NJPDES Regulations. The GC/MS method 624 shall be utilized until the concentration of the constituents reaches the corrective action criteria or the method detection limit, whichever is higher. If the method 624 method detection limit is higher than the corrective action criteria, 40 CRF Part 136 Methods 601, 602, and/or 603 shall be utilized until the mandated corrective action criteria are achieved.

Corrective Action Criteria

A. The corrective action criteria for ground water of 5 parts per billion (ppb) shall apply to individual chemical compounds classified in NJDEP Group A. Hence, the ambient concentration of any compound in NJDEP Group A shall not exceed 5 parts per billion in ground water.

*2

GC/MS scan for acid compounds and/or base neutral organic toxic pollutants identified in Appendix B of the NJPDES regulations must have a method limit of detection of 10 ppb or better for each substance. The concentration for specific parameters shall be 10-6 Cancer Risk for those items listed in Appendix F of the NJPDES regulations which have a value for the 10-6 Cancer Risk limit. The total concentration for all volatiles, acid compounds and base/neutral organic toxic pollutants shall not exceed a concentration of 50 ppb.

*3

A. By membrane filtration, not to exceed four per 100 ml in more than one sample when less than 20 are examined per month, or B. by fermentation tube, with a standard 10 ml portion, not to be present in three or more portions in more than one sample when less than 20 are examined per month, or C. prevailing criteria adopted pursuant to the Federal Safe Drinking Water Act (PL 93-523).

*4

A. Volatile Organic Toxic Pollutants as defined in N.J.A.C. 7:14A-1.1 et. seq., Appendix B can be reasonably divided into two classes; (A) carcinogens and (B) non-carcinogens.

i. Any chemical demonstrated to be carcinogenic to humans or experimental animals in a test peer-reviewed by either the National Toxicology Program of the U.S. Department of Health and Human Services or the International Agency for Research on Cancer will be considered to be a carcinogen (NJDEP Group A).

ii. Chemicals which do not meet the criteria for placement in NJDEP Group A will be placed in NJDEP Group B. NJDEP Group B is further divided into Group B-1, chemicals for which no State or Federal maximum contaminant level (MCL) exists, and NJDEP Group B-2, chemicals for which a State or Federal MCL exists. Where both a State and Federal MCL exists, the more stringent standard, limitation, or prohibition shall apply. Any chemical in NJDEP Group B-1 which does not currently meet the criteria for placement in NJDEP Group B-2 shall be transferred to NJDEP Group B-2 if they meet the criteria for placement in NJDEP Group B-2 in the future. Chemicals which do not currently meet the criteria for placement in NJDEP Group A will be placed in NJDEP Group B-1 or NJDEP Group B-2 and shall be transferred to NJDEP Group A if they meet the criteria for placement in NJDEP Group A in the future.

B. The corrective action criteria for ground water of 50 parts per billion total Volatile Organic Toxic Pollutants shall apply to the sum of all compounds listed in NJDEP Group A and NJDEP Group B-1. Hence, the ambient concentration of the sum of all compounds listed in NJDEP Groups A and B-1 shall not exceed 50 parts per billion in ground water.

C. The corrective action criteria for ground water for the compounds listed in NJDEP Group B-2 shall be equal to or less than their individual State or Federal MCL, the more stringent standard, limitation or prohibition shall apply. Hence, the ambient concentration of any compound in NJDEP Group B-2 shall not exceed it's MCL in ground water.

ATTACHMENT Q

State of New Jersey

DEPARTMENT OF LAW AND PUBLIC SAFETY
DIVISION OF LAW

MEMORANDUM

DATE: September 16, 1987

TO: Karen Locha, Esq., ORS

FROM: A. Colleen Malloy, DAG

SUBJECT: American Cyanamid Landfill (Carteret) v. DEP
OAL Docket No. EWR 00386-87
Agency Reference No. 87-06
Request for Settlement Approval

SEP 21 1987
Dept. Environmental Protection
Division of Water
Bureau of Ground Water

BACKGROUND

This case involves an administrative challenge to the Department's issuance of a New Jersey Pollutant Discharge Elimination System ("NJPDES") permit to the petitioner. The petitioner owns a closed landfill which operated from 1939 until 1973. The landfill was used for the disposal of copper sulfate sludge, which the Department has determined to be a nonhazardous waste. The purpose of the permit is to monitor ground water in the vicinity of the landfill in order to determine whether any contamination is present.

American Cyanamid has challenged a number of the provisions of the permit. The challenges are set out in the attachments hereto labeled I, II and III. Subsequent to the issuance of the permit, American Cyanamid and DEP entered into negotiations regarding the challenged provisions. Those negotiations have resulted in the drafting of an Administrative Consent Order ("ACO"), a copy of which is attached hereto as Attachment IV. Through the ACO, the Depatment proposes to amend the existing NJPDES permit. I will discuss each issue raised by the company, and the suggested resolution below.

EFFLUENT "LIMITATIONS"

(See Attachment I, paragraphs 1, 3, 5 & 7; Attachment II, paragraphs 5 & 8; and Attachment III, paragraph 1).

The NJPDES permit issued to American Cyanamid states that it requires the company "to monitor the ground water at a sanitary landfill in Carteret by operating and maintaining four ground water monitoring wells according to the specific and general conditions of this Initial Interim NJPDES permit. The Initial Interim NJPDES permit is intended to establish an adequate ground water monitoring program at the named facility. This permit is only intended to obtain ground water data to evaluate the current status and impact of this facility on ground water." (emphasis added). Further on, the permit contains tables entitled "Ground Water Monitoring Requirements and Limitations". The company contends that the imposition of limitations in an Initial Interim permit is inappropriate until a baseline database can be established through the new ground water monitoring well network. The company is further concerned that by complying with the permit, it will be potentially setting itself up for immediate enforcement action.

Initially there was some disagreement at the Department regarding whether the "limitations" are limitations for purposes of enforcement. The Department has decided that in the present case it will use the limits as standards or guidelines only and not enforceable effluent limitations. It is the Department's decision that more testing should be done before the Department can say for certain what the effluent limitations should be.

The proposed resolution of this matter is set out at the last paragraph on page 6 of the Draft ACO. (Attachment IV). Therein, the Department agrees to incorporate language into the NJPDES permit which states that the standards "do not represent effluent or discharge limits or cleanup standards. Rather, the standards are used in a review of the data generated and in evaluation of the current status and impact of the facility on ground water quality. It will also give the Department information to determine if there is any actual or potential threat to human health or the environment due to current or past practices."

It is the goal of the Department to have ground water monitoring commence as soon as possible. Through settlement of this issue, the company will begin ground water monitoring and the Department can then determine whether there is any threat to ground water quality. If a threat exists, then the Department may take enforcement action at which time the company could challenge whatever effluent limitations the Department decides are appropriate.

DESIGNATION OF RECEIVING WATERS

(See Attachment I, paragraph 2 and Attachment II, paragraph 2). The company has challenged that provision of the NJPDES permit which states that the Brunswick Formation is the receiving water of discharges from the landfill. The Department is in agreement with the company that additional studies will yield more data with regard to this issue. Accordingly, American Cyanamid has agreed to install six ground water monitoring wells over and above the number of wells required in the NJPDES permit. The Department has agreed to wait until ground water monitoring data has been collected from all of the wells prior to making a determination regarding the receiving body of water.

The resolution of this issue is set out in the ACO (Attachment IV) at page 5, paragraph 5, which includes by reference an assessment program regarding installation of a total of ten wells and collection of information from those wells. In the event that the assessment program does not yield the required information, then the Department will require a compliance monitoring program as set out in paragraph 5c.

DEP'S FAILURE TO CONSIDER COMMENTS

(See Attachment I, paragraph 6). During the public comment period, American Cyanamid submitted comments to the Department on the draft permit. The Department never responded to these comments. American Cyanamid now raises the Department's failure to respond as a challenge to the final permit. The company's comments are set out in Attachment III. Eventually, after the issuance of the final permit, the Department did respond to the comments and those issues agreed upon are incorporated in the Draft Administrative Consent Order.

Q2

FREQUENCY OF MONITORING WELL INSPECTION

(See Attachment II, paragraph 6 and Attachment III, paragraph 3). The company has challenged that condition of the permit which requires that the ground water monitoring wells be inspected weekly. The Department has agreed to delete the weekly requirement in lieu of the following language which is contained in the Draft ACO at page 5, paragraph 2: "In lieu of compliance with the requirements set forth in Additional General Condition 9 of the NJPDES/DGW permit, inspection of the monitoring wells may be performed as necessary to ensure timely submission of all required data. However, in the event that the requirements of Additional General Condition 9 are not strictly adhered to, the permitee's compliance with the provisions of this special condition shall not constitute a defense to any failure by the permittee to comply with the requirements of this permit."

Thus, while the permittee will not be required to make weekly inspections of the ground water monitoring wells, it is still responsible to ensure that the wells are in a condition so that the required data may be submitted in a timely manner to the Department. As set forth above, a malfunction of a well may not be used as a defense if the company does not meet a permit requirement deadline, unless the company has actually conducted weekly inspections of the well.

WELL INSTALLATION

(Attachment III, paragraph 2). The company has challenged DEP's well specifications due to the hydrogeologic conditions at the site. The Department was in agreement that the well installation specification should be changed, and such changes are addressed in the Draft ACO at page 5, paragraph 3. Therein, the Department states that if first water is encountered less than five feet below the surface, then the company is to contact the Department's geologist prior to setting the well screen. In this way, DEP and the company can make case by case determinations with regard to setting of the well screens on each well.

ANALYTICAL PARAMETERS

(Attachment III, paragraph 4). The company has challenged several parameters as inappropriate for the landfill. The Department was in agreement that odor and taste as testing parameters should be deleted. This modification is contained in the Draft ACO at page 5, paragraph 4.

ISSUES CONCEDED BY AMERICAN CYANAMID

Certain issues raised by the company have been conceded. These conceded issues are set out at: Attachment I, paragraph 4; and Attachment II, paragraphs 1, 3, 4, 7 and 9.

Q3

CONCLUSION

At this point, the Draft Administrative Consent Order has been approved by the Department's technical staff, per Ruth Foster, and has been forwarded to American Cyanamid for review. Considering the technical nature of the issues in this case and the Department's satisfaction with the resolution of these issues, it is recommended that your office approve the Draft Administrative Consent Order. If there are any substantive changes in the Draft ACO as the result of American Cyanamid's review of same, I will be sure to let you know. Note that this is a very similar Consent Order to that involving American Cyanamid's Linden facility, which the Department has already signed off on. The Administrative Law Judge assigned to the case has been trying to move the case along as quickly as possible and has requested that I report to him by September 18, 1987 on the status of the case. Please let me know if you have any problem with the proposed settlement.

Thank you for your consideration.

A.C.M.

ACM:nwm
Attachments

cc: Ruth Foster

Q4

ATTACHMENT R

(19)

Investigative Report

Complaint: 89-11-22-02 (Part #2)
American Cyanamid sludge lagoons, Carteret Boro, Middlesex County

Date of Investigation: December 20, 1989

Investigator: Robert Leary RL.

I met with Alice Boomhower of American Cyanamid. We toured the entire site. There was no evidence of solid waste dumping anywhere on the property. Alice informed me that there had previously been illegal dumping near the GATX property, but Cyanamid and GATX had the waste materials hauled away and disposed at their own expense. A fence has been installed to prevent new dumping.

There is also no other means of access from the Carteret or Arace Landfill, than through the existing access road which has several locked gates and fences barring entrance to this area. Tidal creeks lie between the properties.

The property was used for the disposal of aluminum sulfate sludge and yellow prussiate of soda sludge. The property was last used for the disposal of sludge in 1973. The company has been and is continuing to establish vegetation on the site.

Alice also expressed Cyanamid's displeasure with the existing condition of the Garecki property. I told her that I would inform my supervisor about this situation. On the Garecki property there is a large number of junk cars, trucks, and other debris.

SW8:jms

R

ATTACHMENT S

CYANAMID

bcc: J. M. Burnell WA
N. P. Mulvey WA
R. B. Tabakin NA
M. R. Tribble NA

American Cyanamid Company
P.O. Box 31
Linden, NJ 07036
(201) 862-6000

June 22, 1982

Mr. John Trela, Chief
Ground Water Permits Review Section
Bureau of Ground Water Management
Division of Water Resources
N. J. Department of Environmental Protection
P. O. Box CN-029
Trenton, New Jersey 08625

Reference: Mr. Kenneth Goldstein to
Dr. Jeanne M. Burnell Dated 2/18/82

Dear Mr. Trela:

This is in response to the referenced letter concerning NJPDES permit requirements for two inactive landfills located in Linden and Carteret and steam condensate discharges at Cyanamid's Warners Plant in Linden.

Linden Landfill

Confirming Mr. Kaplan's visit and agreement regarding the location of two additional monitoring wells at this site, we have enclosed a drawing SKW-A-14207 (Attachment I) showing the locations agreed upon. Also enclosed is a sketch (Attachment II) showing the details of the well construction.

Carteret Landfill

The referenced letter requests analytical data on the muds contained in this site. Therefore, we have enclosed EP toxicity data previously submitted to the NJDOT on June 16, 1981 and heavy metal data (Attachments III and IV). These muds were generated during the production of aluminum sulfate (Alum) and yellow prussiate of soda (YPS). Production of Alum involved digestion of bauxite ore with sulfuric acid. Production of YPS involved the reaction of calcium cyanide with copperas and soda ash to form sodium ferrocyanide (YPS). Analysis of shallow core samples confirms the presence of small amounts of complex cyanides and trace amounts of free cyanides. Analysis of runoff water from a small rain water pond showed the pH to be 7.0 and no trace cyanides were found. This information was transmitted to the NJDOT and the NJDEP on February 17, 1981 (Attachment V).

During the course of studies aimed at erosion control at the Carteret site, our consultant on revegetation, Dames and Moore, observed a number of sick and dead seagulls. We retained Dr. Joanna Burger of Rutgers, a

Attachment S

5

CYANAMID

a noted expert on seagulls, to investigate. Dr. Burger's report indicated that the seagulls appear to have died in a botulism outbreak. We informed the Carteret Board of Health and the NJDEP of this possibility on February 26, 1982 (Attachment VI). Additional studies conducted by Dr. Burger indicate that the gulls are using the adjacent Carteret municipal landfill for foraging and are bringing food from the municipal landfill to our landfill site to eat it, discarding the bones. Analysis of the bones found on the site indicates that only 6% are gull bones, and over 60% are mammal bones. Additional studies during the late summer, which is the time when botulism outbreaks occur, are planned.

In May 1981, toxicological studies were run on mud samples. The results indicate that the mud is non-toxic. These results are referenced in Attachment VI and are enclosed (Attachment VII).

We do not believe that the enclosed data indicate the need for a NJPDES permit for the Carteret landfill site.

Steam Condensate Discharges

The referenced letter indicates that these discharges do not meet the definition of injection wells but requests that an analysis be submitted. Therefore, we have also enclosed an analysis of these discharges (Attachment VIII). The analysis indicates that there is no contamination present. Therefore, we do not believe that a NJPDES permit is required for these discharges.

We would like to meet with you and your staff to discuss these data and the need for a NJPDES permit for the Linden landfill. Please contact me at (201) 862-6000, to arrange a suitable meeting time.

Sincerely yours,

AMERICAN CYANAMID COMPANY

A. A. Groeller

AAG:hf
Attachments

A. A. Groeller
Manager, Environmental Services

cc: Mr. K. Goldstein NJDEP
Mr. D. Kaplan NJDEP
Dr. M. M. Sadat NJDEP
Dr. J. B. Halladay ACCO Plant Manager

(4-2)

S2

SITE INSPECTION

AMERICAN CYANAMID LANDFILL

CARTARET, MIDDLESEX COUNTY

EPA ID No.: NJD986603439

Volume II of II

New Jersey Department of Environmental Protection and Energy
Division of Responsible Party Site Remediation
Bureau of Site Assessment

ATTACHMENT T

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

FIELDBLK

Lab Name: NYTEST ENV INC Contract: _____

Lab Code: NYTEST Case No.: 6320 SAS No.: _____ SDG No.: _____

Matrix: (soil/water) WATER Lab Sample ID: 1018614

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: D7358

Level: (low/med) LOW Date Received: 10/25/91

% Moisture: not dec. ____ Date Analyzed: 10/30/91

GC Column: PACK ID: 2.00 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
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	2	BJ
67-64-1	Acetone	10	U
75-15-0	Carbon Disulfide	2	J
75-35-4	1,1-Dichloroethene	10	U
75-34-3	1,1-Dichloroethane	10	U
540-59-0	1,2-Dichloroethene (total)	10	U
67-66-3	Chloroform	10	U
107-06-2	1,2-Dichloroethane	10	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	10	U
56-23-5	Carbon Tetrachloride	10	U
75-27-4	Bromodichloromethane	10	U
78-87-5	1,2-Dichloropropane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
79-01-6	Trichloroethene	10	U
124-48-1	Dibromochloromethane	10	U
79-00-5	1,1,2-Trichloroethane	10	U
71-43-2	Benzene	10	U
10061-02-6	trans-1,3-Dichloropropene	10	U
75-25-2	Bromoform	10	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	10	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
108-88-3	Toluene	10	U
108-90-7	Chlorobenzene	10	U
100-41-4	Ethylbenzene	10	U
100-42-5	Styrene	10	U
1330-20-7	Xylene (total)	10	U

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

S-1

Lab Name: NYTEST ENV INC Contract: 9118432

Lab Code: NYTEST Case No.: 10186 SAS No.: SDG No.:

Matrix: (soil/water) SOIL Lab Sample ID: 1018601

Sample wt/vol: 5.0 (g/mL) G Lab File ID: D7411

Level: (low/med) LOW Date Received: 10/25/91

% Moisture: not dec. 15 Date Analyzed: 11/02/91

GC Column: PACK ID: 2.00 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	12	U
74-83-9	Bromomethane	12	U
75-01-4	Vinyl Chloride	12	U
75-00-3	Chloroethane	12	U
75-09-2	Methylene Chloride	8	J
67-64-1	Acetone	20	
75-15-0	Carbon Disulfide	1	J
75-35-4	1,1-Dichloroethene	12	U
75-34-3	1,1-Dichloroethane	12	U
540-59-0	1,2-Dichloroethene (total)	12	U
67-66-3	Chloroform	12	U
107-06-2	1,2-Dichloroethane	12	U
78-93-3	2-Butanone	12	U
71-55-6	1,1,1-Trichloroethane	12	U
56-23-5	Carbon Tetrachloride	12	U
75-27-4	Bromodichloromethane	12	U
78-87-5	1,2-Dichloropropane	12	U
10061-01-5	cis-1,3-Dichloropropene	12	U
79-01-6	Trichloroethene	12	U
124-48-1	Dibromochloromethane	12	U
79-00-5	1,1,2-Trichloroethane	12	U
71-43-2	Benzene	12	U
10061-02-6	trans-1,3-Dichloropropene	12	U
75-25-2	Bromoform	12	U
108-10-1	4-Methyl-2-Pentanone	12	U
591-78-6	2-Hexanone	12	U
127-18-4	Tetrachloroethene	12	U
79-34-5	1,1,2,2-Tetrachloroethane	12	U
108-88-3	Toluene	1	J
108-90-7	Chlorobenzene	12	U
100-41-4	Ethylbenzene	12	U
100-42-5	Styrene	12	U
1330-20-7	Xylene (total)	12	U

T2

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

S-2

Lab Name: NYTEST ENV INC Contract: 9118432

Lab Code: NYTEST Case No.: 10186 SAS No.: \ SDG No.:

Matrix: (soil/water) SOIL Lab Sample ID: 1018602

Sample wt/vol: 5.0 (g/mL) G Lab File ID: D7433

Level: (low/med) LOW Date Received: 10/25/91

% Moisture: not dec. 42 Date Analyzed: 11/04/91

GC Column: PACK ID: 2.00 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	17	U
74-83-9	Bromomethane	17	U
75-01-4	Vinyl Chloride	17	U
75-00-3	Chloroethane	17	U
75-09-2	Methylene Chloride	6	BJ
67-64-1	Acetone	17	U
75-15-0	Carbon Disulfide	17	U
75-35-4	1,1-Dichloroethene	17	U
75-34-3	1,1-Dichloroethane	17	U
540-59-0	1,2-Dichloroethene (total)	17	U
67-66-3	Chloroform	17	U
107-06-2	1,2-Dichloroethane	17	U
78-93-3	2-Butanone	17	U
71-55-6	1,1,1-Trichloroethane	17	U
56-23-5	Carbon Tetrachloride	17	U
75-27-4	Bromodichloromethane	17	U
78-87-5	1,2-Dichloropropane	17	U
10061-01-5	cis-1,3-Dichloropropene	17	U
79-01-6	Trichloroethene	17	U
124-48-1	Dibromochloromethane	17	U
79-00-5	1,1,2-Trichloroethane	17	U
71-43-2	Benzene	17	U
10061-02-6	trans-1,3-Dichloropropene	17	U
75-25-2	Bromoform	17	U
108-10-1	4-Methyl-2-Pentanone	17	U
591-78-6	2-Hexanone	17	U
127-18-4	Tetrachloroethene	17	U
79-34-5	1,1,2,2-Tetrachloroethane	17	U
108-88-3	Toluene	17	U
108-90-7	Chlorobenzene	17	U
100-41-4	Ethylbenzene	17	U
100-42-5	Styrene	17	U
1330-20-7	Xylene (total)	17	U

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

S-3

Lab Name: NYTEST ENV INC Contract: 9118432

Lab Code: NYTEST Case No.: 10186 SAS No.: SDG No.:

Matrix: (soil/water) SOIL Lab Sample ID: 1018605

Sample wt/vol: 5.0 (g/mL) G Lab File ID: D7416

Level: (low/med) LOW Date Received: 10/25/91

% Moisture: not dec. 45 Date Analyzed: 11/02/91

GC Column: PACK ID: 2.00 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	18	U
74-83-9	Bromomethane	18	U
75-01-4	Vinyl Chloride	18	U
75-00-3	Chloroethane	18	U
75-09-2	Methylene Chloride	18	U
67-64-1	Acetone	18	U
75-15-0	Carbon Disulfide	18	U
75-35-4	1,1-Dichloroethene	18	U
75-34-3	1,1-Dichloroethane	18	U
540-59-0	1,2-Dichloroethene (total)	18	U
67-66-3	Chloroform	18	U
107-06-2	1,2-Dichloroethane	18	U
78-93-3	2-Butanone	18	U
71-55-6	1,1,1-Trichloroethane	18	U
56-23-5	Carbon Tetrachloride	18	U
75-27-4	Bromodichloromethane	18	U
78-87-5	1,2-Dichloropropane	18	U
10061-01-5	cis-1,3-Dichloropropene	18	U
79-01-6	Trichloroethene	18	U
124-48-1	Dibromochloromethane	18	U
79-00-5	1,1,2-Trichloroethane	18	U
71-43-2	Benzene	18	U
10061-02-6	trans-1,3-Dichloropropene	18	U
75-25-2	Bromoform	18	U
108-10-1	4-Methyl-2-Pentanone	18	U
591-78-6	2-Hexanone	18	U
127-18-4	Tetrachloroethene	18	U
79-34-5	1,1,2,2-Tetrachloroethane	18	U
108-88-3	Toluene	18	U
108-90-7	Chlorobenzene	18	U
100-41-4	Ethylbenzene	18	U
100-42-5	Styrene	18	U
1330-20-7	Xylene (total)	18	U

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

S-5

Lab Name: NYTEST ENV INC Contract: 9118432

Lab Code: NYTEST Case No.: 10186 SAS No.: SDG No.:

Matrix: (soil/water) SOIL Lab Sample ID: 1018606

Sample wt/vol: 5.0 (g/mL) G Lab File ID: D7436

Level: (low/med) LOW Date Received: 10/25/91

% Moisture: not dec. 51 Date Analyzed: 11/04/91

GC Column: PACK ID: 2.00 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	20	U
74-83-9	Bromomethane	20	U
75-01-4	Vinyl Chloride	20	U
75-00-3	Chloroethane	20	U
75-09-2	Methylene Chloride	18	BJ
67-64-1	Acetone	20	U
75-15-0	Carbon Disulfide	20	U
75-35-4	1,1-Dichloroethene	20	U
75-34-3	1,1-Dichloroethane	20	U
540-59-0	1,2-Dichloroethene (total)	20	U
67-66-3	Chloroform	20	U
107-06-2	1,2-Dichloroethane	20	U
78-93-3	2-Butanone	20	U
71-55-6	1,1,1-Trichloroethane	20	U
56-23-5	Carbon Tetrachloride	20	U
75-27-4	Bromodichloromethane	20	U
78-87-5	1,2-Dichloropropane	20	U
10061-01-5	cis-1,3-Dichloropropene	20	U
79-01-6	Trichloroethene	20	U
124-48-1	Dibromochloromethane	20	U
79-00-5	1,1,2-Trichloroethane	20	U
71-43-2	Benzene	20	U
10061-02-6	trans-1,3-Dichloropropene	20	U
75-25-2	Bromoform	20	U
108-10-1	4-Methyl-2-Pentanone	20	U
591-78-6	2-Hexanone	20	U
127-18-4	Tetrachloroethene	20	U
79-34-5	1,1,2,2-Tetrachloroethane	20	U
108-88-3	Toluene	20	U
108-90-7	Chlorobenzene	20	U
100-41-4	Ethylbenzene	20	U
100-42-5	Styrene	20	U
1330-20-7	Xylene (total)	20	U

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

S-6

Lab Name: NYTEST ENV INC Contract: 9118432

Lab Code: NYTEST Case No.: 10186 SAS No.: \ SDG No.:

Matrix: (soil/water) SOIL Lab Sample ID: 1018607

Sample wt/vol: 5.0 (g/mL) G Lab File ID: D7437

Level: (low/med) LOW Date Received: 10/25/91

% Moisture: not dec. 55 Date Analyzed: 11/04/91

GC Column: PACK ID: 2.00 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	22	U
74-83-9	Bromomethane	22	U
75-01-4	Vinyl Chloride	22	U
75-00-3	Chloroethane	22	U
75-09-2	Methylene Chloride	17	BJ
67-64-1	Acetone	22	U
75-15-0	Carbon Disulfide	22	U
75-35-4	1,1-Dichloroethene	22	U
75-34-3	1,1-Dichloroethane	22	U
540-59-0	1,2-Dichloroethene (total)	22	U
67-66-3	Chloroform	22	U
107-06-2	1,2-Dichloroethane	22	U
78-93-3	2-Butanone	22	U
71-55-6	1,1,1-Trichloroethane	22	U
56-23-5	Carbon Tetrachloride	22	U
75-27-4	Bromodichloromethane	22	U
78-87-5	1,2-Dichloropropane	22	U
10061-01-5	cis-1,3-Dichloropropene	22	U
79-01-6	Trichloroethene	22	U
124-48-1	Dibromochloromethane	22	U
79-00-5	1,1,2-Trichloroethane	22	U
71-43-2	Benzene	22	U
10061-02-6	trans-1,3-Dichloropropene	22	U
75-25-2	Bromoform	22	U
108-10-1	4-Methyl-2-Pentanone	22	U
591-78-6	2-Hexanone	22	U
127-18-4	Tetrachloroethene	22	U
79-34-5	1,1,2,2-Tetrachloroethane	22	U
108-88-3	Toluene	22	U
108-90-7	Chlorobenzene	22	U
100-41-4	Ethylbenzene	22	U
100-42-5	Styrene	22	U
1330-20-7	Xylene (total)	22	U

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

S-7

Lab Name: NYTEST ENV INC Contract: 9118432

Lab Code: NYTEST Case No.: 10186 SAS No.:) SDG No.:

Matrix: (soil/water) SOIL Lab Sample ID: 1018608

Sample wt/vol: 5.0 (g/mL) G Lab File ID: D7419

Level: (low/med) LOW Date Received: 10/25/91

% Moisture: not dec. 47 Date Analyzed: 11/02/91

GC Column: PACK ID: 2.00 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	19	U
74-83-9	Bromomethane	19	U
75-01-4	Vinyl Chloride	19	U
75-00-3	Chloroethane	19	U
75-09-2	Methylene Chloride	2	J
67-64-1	Acetone	19	U
75-15-0	Carbon Disulfide	19	U
75-35-4	1,1-Dichloroethene	19	U
75-34-3	1,1-Dichloroethane	19	U
540-59-0	1,2-Dichloroethene (total)	19	U
67-66-3	Chloroform	19	U
107-06-2	1,2-Dichloroethane	19	U
78-93-3	2-Butanone	19	U
71-55-6	1,1,1-Trichloroethane	19	U
56-23-5	Carbon Tetrachloride	19	U
75-27-4	Bromodichloromethane	19	U
78-87-5	1,2-Dichloropropane	19	U
10061-01-5	cis-1,3-Dichloropropene	19	U
79-01-6	Trichloroethene	19	U
124-48-1	Dibromochloromethane	19	U
79-00-5	1,1,2-Trichloroethane	19	U
71-43-2	Benzene	19	U
10061-02-6	trans-1,3-Dichloropropene	19	U
75-25-2	Bromoform	19	U
108-10-1	4-Methyl-2-Pentanone	19	U
591-78-6	2-Hexanone	19	U
127-18-4	Tetrachloroethene	19	U
79-34-5	1,1,2,2-Tetrachloroethane	19	U
108-88-3	Toluene	19	U
108-90-7	Chlorobenzene	19	U
100-41-4	Ethylbenzene	19	U
100-42-5	Styrene	19	U
1330-20-7	Xylene (total)	19	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

S-7

Lab Name: NYTEST ENV INC Contract: 9118432

Lab Code: NYTEST Case No.: 10186 SAS No.: ` SDG No.:

Matrix: (soil/water) SOIL Lab Sample ID: 1018608

Sample wt/vol: 5.0 (g/mL) G Lab File ID: D7419

Level: (low/med) LOW Date Received: 10/25/91

% Moisture: not dec. 47 Date Analyzed: 11/02/91

GC Column: PACK ID: 2.00 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Number TICs found: 1

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 76-13-1	FREON 113	14.24	10	JN

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VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

S-7RE

Lab Name: NYTEST ENV INC Contract: 9118432

Lab Code: NYTEST Case No.: 10186 SAS No.: SDG No.:

Matrix: (soil/water) SOIL Lab Sample ID: 1018608

Sample wt/vol: 5.0 (g/mL) G Lab File ID: D7438

Level: (low/med) LOW Date Received: 10/25/91

% Moisture: not dec. 47 Date Analyzed: 11/04/91

GC Column: PACK ID: 2.00 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	19	U
74-83-9	Bromomethane	19	U
75-01-4	Vinyl Chloride	19	U
75-00-3	Chloroethane	19	U
75-09-2	Methylene Chloride	17	BJ
67-64-1	Acetone	19	U
75-15-0	Carbon Disulfide	19	U
75-35-4	1,1-Dichloroethene	19	U
75-34-3	1,1-Dichloroethane	19	U
540-59-0	1,2-Dichloroethene (total)	19	U
67-66-3	Chloroform	19	U
107-06-2	1,2-Dichloroethane	19	U
78-93-3	2-Butanone	19	U
71-55-6	1,1,1-Trichloroethane	19	U
56-23-5	Carbon Tetrachloride	19	U
75-27-4	Bromodichloromethane	19	U
78-87-5	1,2-Dichloropropane	19	U
10061-01-5	cis-1,3-Dichloropropene	19	U
79-01-6	Trichloroethene	19	U
124-48-1	Dibromochloromethane	19	U
79-00-5	1,1,2-Trichloroethane	19	U
71-43-2	Benzene	19	U
10061-02-6	trans-1,3-Dichloropropene	19	U
75-25-2	Bromoform	19	U
108-10-1	4-Methyl-2-Pentanone	19	U
591-78-6	2-Hexanone	19	U
127-18-4	Tetrachloroethene	19	U
79-34-5	1,1,2,2-Tetrachloroethane	19	U
108-88-3	Toluene	19	U
108-90-7	Chlorobenzene	19	U
100-41-4	Ethylbenzene	19	U
100-42-5	Styrene	19	U
1330-20-7	Xylene (total)	19	U

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VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

S-8

Lab Name: NYTEST ENV INC Contract: 9118432

Lab Code: NYTEST Case No.: 10186 SAS No.: SDG No.:

Matrix: (soil/water) SOIL Lab Sample ID: 1018609

Sample wt/vol: 5.0 (g/mL) G Lab File ID: D7439

Level: (low/med) LOW Date Received: 10/25/91

% Moisture: not dec. 49 Date Analyzed: 11/04/91

GC Column: PACK ID: 2.00 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	20	U
74-83-9	Bromomethane	20	U
75-01-4	Vinyl Chloride	20	U
75-00-3	Chloroethane	20	U
75-09-2	Methylene Chloride	22	B
67-64-1	Acetone	20	U
75-15-0	Carbon Disulfide	20	U
75-35-4	1,1-Dichloroethene	20	U
75-34-3	1,1-Dichloroethane	20	U
540-59-0	1,2-Dichloroethene (total)	20	U
67-66-3	Chloroform	20	U
107-06-2	1,2-Dichloroethane	20	U
78-93-3	2-Butanone	20	U
71-55-6	1,1,1-Trichloroethane	20	U
56-23-5	Carbon Tetrachloride	20	U
75-27-4	Bromodichloromethane	20	U
78-87-5	1,2-Dichloropropane	20	U
10061-01-5	cis-1,3-Dichloropropene	20	U
79-01-6	Trichloroethene	20	U
124-48-1	Dibromochloromethane	20	U
79-00-5	1,1,2-Trichloroethane	20	U
71-43-2	Benzene	20	U
10061-02-6	trans-1,3-Dichloropropene	20	U
75-25-2	Bromoform	20	U
108-10-1	4-Methyl-2-Pentanone	20	U
591-78-6	2-Hexanone	20	U
127-18-4	Tetrachloroethene	20	U
79-34-5	1,1,2,2-Tetrachloroethane	20	U
108-88-3	Toluene	20	U
108-90-7	Chlorobenzene	20	U
100-41-4	Ethylbenzene	20	U
100-42-5	Styrene	20	U
1330-20-7	Xylene (total)	20	U

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VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

S-9

Lab Name: NYTEST ENV INC Contract: 9118432

Lab Code: NYTEST Case No.: 10186 SAS No.: SDG No.:

Matrix: (soil/water) SOIL Lab Sample ID: 1018610

Sample wt/vol: 5.0 (g/mL) G Lab File ID: D7440

Level: (low/med) LOW Date Received: 10/25/91

% Moisture: not dec. 48 Date Analyzed: 11/04/91

GC Column: PACK ID: 2.00 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	19	U
74-83-9	Bromomethane	19	U
75-01-4	Vinyl Chloride	19	U
75-00-3	Chloroethane	19	U
75-09-2	Methylene Chloride	19	BJ
67-64-1	Acetone	19	U
75-15-0	Carbon Disulfide	19	U
75-35-4	1,1-Dichloroethene	19	U
75-34-3	1,1-Dichloroethane	19	U
540-59-0	1,2-Dichloroethene (total)	19	U
67-66-3	Chloroform	19	U
107-06-2	1,2-Dichloroethane	19	U
78-93-3	2-Butanone	19	U
71-55-6	1,1,1-Trichloroethane	19	U
56-23-5	Carbon Tetrachloride	19	U
75-27-4	Bromodichloromethane	19	U
78-87-5	1,2-Dichloropropane	19	U
10061-01-5	cis-1,3-Dichloropropene	19	U
79-01-6	Trichloroethene	19	U
124-48-1	Dibromochloromethane	19	U
79-00-5	1,1,2-Trichloroethane	19	U
71-43-2	Benzene	19	U
10061-02-6	trans-1,3-Dichloropropene	19	U
75-25-2	Bromoform	19	U
108-10-1	4-Methyl-2-Pentanone	19	U
591-78-6	2-Hexanone	19	U
127-18-4	Tetrachloroethene	19	U
79-34-5	1,1,2,2-Tetrachloroethane	19	U
108-88-3	Toluene	19	U
108-90-7	Chlorobenzene	19	U
100-41-4	Ethylbenzene	19	U
100-42-5	Styrene	19	U
1330-20-7	Xylene (total)	19	U

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VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

S-10

Lab Name: NYTEST ENV INC Contract: 9118432

Lab Code: NYTEST Case No.: 10186 SAS No.:) SDG No.:

Matrix: (soil/water) SOIL Lab Sample ID: 1018611

Sample wt/vol: 5.0 (g/mL) G Lab File ID: D7441

Level: (low/med) LOW Date Received: 10/25/91

% Moisture: not dec. 54 Date Analyzed: 11/04/91

GC Column: PACK ID: 2.00 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	22	U
74-83-9	Bromomethane	22	U
75-01-4	Vinyl Chloride	22	U
75-00-3	Chloroethane	22	U
75-09-2	Methylene Chloride	29	B
67-64-1	Acetone	22	U
75-15-0	Carbon Disulfide	22	U
75-35-4	1,1-Dichloroethene	22	U
75-34-3	1,1-Dichloroethane	22	U
540-59-0	1,2-Dichloroethene (total)	22	U
67-66-3	Chloroform	22	U
107-06-2	1,2-Dichloroethane	22	U
78-93-3	2-Butanone	22	U
71-55-6	1,1,1-Trichloroethane	22	U
56-23-5	Carbon Tetrachloride	22	U
75-27-4	Bromodichloromethane	22	U
78-87-5	1,2-Dichloropropane	22	U
10061-01-5	cis-1,3-Dichloropropene	22	U
79-01-6	Trichloroethene	22	U
124-48-1	Dibromochloromethane	22	U
79-00-5	1,1,2-Trichloroethane	22	U
71-43-2	Benzene	22	U
10061-02-6	trans-1,3-Dichloropropene	22	U
75-25-2	Bromoform	22	U
108-10-1	4-Methyl-2-Pentanone	22	U
591-78-6	2-Hexanone	22	U
127-18-4	Tetrachloroethene	22	U
79-34-5	1,1,2,2-Tetrachloroethane	22	U
108-88-3	Toluene	22	U
108-90-7	Chlorobenzene	22	U
100-41-4	Ethylbenzene	22	U
100-42-5	Styrene	22	U
1330-20-7	Xylene (total)	22	U

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VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

S-11

Lab Name: NYTEST ENV INC Contract: 9118432

Lab Code: NYTEST Case No.: 10186 SAS No.: ____ SDG No.: ____

Matrix: (soil/water) SOIL Lab Sample ID: 1018612

Sample wt/vol: 5.0 (g/mL) G Lab File ID: D7442

Level: (low/med) LOW Date Received: 10/25/91

% Moisture: not dec. 51 Date Analyzed: 11/04/91

GC Column: PACK ID: 2.00 (mm) Dilution Factor: 1.0

Soil Extract Volume: ____ (uL) Soil Aliquot Volume: ____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	20	U
74-83-9	Bromomethane	20	U
75-01-4	Vinyl Chloride	20	U
75-00-3	Chloroethane	20	U
75-09-2	Methylene Chloride	26	B
67-64-1	Acetone	20	U
75-15-0	Carbon Disulfide	20	U
75-35-4	1,1-Dichloroethene	20	U
75-34-3	1,1-Dichloroethane	20	U
540-59-0	1,2-Dichloroethene (total)	20	U
67-66-3	Chloroform	20	U
107-06-2	1,2-Dichloroethane	20	U
78-93-3	2-Butanone	20	U
71-55-6	1,1,1-Trichloroethane	20	U
56-23-5	Carbon Tetrachloride	20	U
75-27-4	Bromodichloromethane	20	U
78-87-5	1,2-Dichloropropane	20	U
10061-01-5	cis-1,3-Dichloropropene	20	U
79-01-6	Trichloroethene	20	U
124-48-1	Dibromochloromethane	20	U
79-00-5	1,1,2-Trichloroethane	20	U
71-43-2	Benzene	20	U
10061-02-6	trans-1,3-Dichloropropene	20	U
75-25-2	Bromoform	20	U
108-10-1	4-Methyl-2-Pentanone	20	U
591-78-6	2-Hexanone	20	U
127-18-4	Tetrachloroethene	20	U
79-34-5	1,1,2,2-Tetrachloroethane	20	U
108-88-3	Toluene	20	U
108-90-7	Chlorobenzene	20	U
100-41-4	Ethylbenzene	20	U
100-42-5	Styrene	20	U
1330-20-7	Xylene (total)	20	U

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VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

S-12

Lab Name: NYTEST ENV INC Contract: 9118432

Lab Code: NYTEST Case No.: 10186 SAS No.: SDG No.:

Matrix: (soil/water) SOIL Lab Sample ID: 1018613

Sample wt/vol: 5.0 (g/mL) G Lab File ID: D7424

Level: (low/med) LOW Date Received: 10/25/91

% Moisture: not dec. 51 Date Analyzed: 11/02/91

GC Column: PACK ID: 2.00 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	20	U
74-83-9	Bromomethane	20	U
75-01-4	Vinyl Chloride	20	U
75-00-3	Chloroethane	20	U
75-09-2	Methylene Chloride	20	U
67-64-1	Acetone	20	U
75-15-0	Carbon Disulfide	20	U
75-35-4	1,1-Dichloroethene	20	U
75-34-3	1,1-Dichloroethane	20	U
540-59-0	1,2-Dichloroethene (total)	20	U
67-66-3	Chloroform	20	U
107-06-2	1,2-Dichloroethane	20	U
78-93-3	2-Butanone	20	U
71-55-6	1,1,1-Trichloroethane	20	U
56-23-5	Carbon Tetrachloride	20	U
75-27-4	Bromodichloromethane	20	U
78-87-5	1,2-Dichloropropane	20	U
10061-01-5	cis-1,3-Dichloropropene	20	U
79-01-6	Trichloroethene	20	U
124-48-1	Dibromochloromethane	20	U
79-00-5	1,1,2-Trichloroethane	20	U
71-43-2	Benzene	20	U
10061-02-6	trans-1,3-Dichloropropene	20	U
75-25-2	Bromoform	20	U
108-10-1	4-Methyl-2-Pentanone	20	U
591-78-6	2-Hexanone	20	U
127-18-4	Tetrachloroethene	20	U
79-34-5	1,1,2,2-Tetrachloroethane	20	U
108-88-3	Toluene	20	U
108-90-7	Chlorobenzene	20	U
100-41-4	Ethylbenzene	20	U
100-42-5	Styrene	20	U
1330-20-7	Xylene (total)	20	U

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VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

S-12RE

Lab Name: NYTEST ENV INC Contract: 9118432

Lab Code: NYTEST Case No.: 10186 SAS No.: SDG No.:

Matrix: (soil/water) SOIL Lab Sample ID: 1018613

Sample wt/vol: 5.0 (g/mL) G Lab File ID: D7443

Level: (low/med) LOW Date Received: 10/25/91

% Moisture: not dec. 48 Date Analyzed: 11/04/91

GC Column: PACK ID: 2.00 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	19	U
74-83-9	Bromomethane	19	U
75-01-4	Vinyl Chloride	19	U
75-00-3	Chloroethane	19	U
75-09-2	Methylene Chloride	17	BJ
67-64-1	Acetone	19	U
75-15-0	Carbon Disulfide	19	U
75-35-4	1,1-Dichloroethene	19	U
75-34-3	1,1-Dichloroethane	19	U
540-59-0	1,2-Dichloroethene (total)	19	U
67-66-3	Chloroform	19	U
107-06-2	1,2-Dichloroethane	19	U
78-93-3	2-Butanone	19	U
71-55-6	1,1,1-Trichloroethane	19	U
56-23-5	Carbon Tetrachloride	19	U
75-27-4	Bromodichloromethane	19	U
78-87-5	1,2-Dichloropropane	19	U
10061-01-5	cis-1,3-Dichloropropene	19	U
79-01-6	Trichloroethene	19	U
124-48-1	Dibromochloromethane	19	U
79-00-5	1,1,2-Trichloroethane	19	U
71-43-2	Benzene	19	U
10061-02-6	trans-1,3-Dichloropropene	19	U
75-25-2	Bromoform	19	U
108-10-1	4-Methyl-2-Pentanone	19	U
591-78-6	2-Hexanone	19	U
127-18-4	Tetrachloroethene	19	U
79-34-5	1,1,2,2-Tetrachloroethane	19	U
108-88-3	Toluene	19	U
108-90-7	Chlorobenzene	19	U
100-41-4	Ethylbenzene	19	U
100-42-5	Styrene	19	U
1330-20-7	Xylene (total)	19	U

SEMIVOLATILE ORGANICS 1B ANALYSIS DATA SHEET

EPA SAMPLE NO.

FIELDBLK

Lab Name: NYTEST ENV INC Contract: 9118432

Lab Code: NYTEST Case No.: 10186 SAS No.: Y SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 1018614

Sample wt/vol: 1000 (g/mL) ML Lab File ID: B6022

Level: (low/med) LOW Date Received: 10/25/91

% Moisture: decanted: (Y/N) Date Extracted: 10/29/91

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/07/91

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
108-95-2	Phenol	10	U
111-44-4	bis(2-Chloroethyl)Ether	10	U
95-57-8	2-Chlorophenol	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
95-50-1	1,2-Dichlorobenzene	10	U
95-48-7	2-Methylphenol	10	U
108-60-1	2,2'-oxybis(1-Chloropropane)	10	U
106-44-5	4-Methylphenol	10	U
621-64-7	N-Nitroso-di-n-propylamine	10	U
67-72-1	Hexachloroethane	10	U
98-95-3	Nitrobenzene	10	U
78-59-1	Isophorone	10	U
88-75-5	2-Nitrophenol	10	U
105-67-9	2,4-Dimethylphenol	10	U
111-91-1	bis(2-Chloroethoxy)methane	10	U
120-83-2	2,4-Dichlorophenol	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U
91-20-3	Naphthalene	10	U
106-47-8	4-Chloroaniline	10	U
87-68-3	Hexachlorobutadiene	10	U
59-50-7	4-Chloro-3-methylphenol	10	U
91-57-6	2-Methylnaphthalene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
88-06-2	2,4,6-Trichlorophenol	10	U
95-95-4	2,4,5-Trichlorophenol	25	U
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	25	U
131-11-3	Dimethylphthalate	10	U
208-96-8	Acenaphthylene	10	U
606-20-2	2,6-Dinitrotoluene	10	U
99-09-2	3-Nitroaniline	25	U
83-32-9	Acenaphthene	10	U

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

FIELDBLK

Lab Name: NYTEST ENV INC Contract: 9118432

Lab Code: NYTEST Case No.: 10186 SAS No.: SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 1018614

Sample wt/vol: 1000 (g/mL) ML Lab File ID: B6022

Level: (low/med) LOW Date Received: 10/25/91

% Moisture: decanted: (Y/N) Date Extracted: 10/29/91

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/07/91

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
51-28-5	2,4-Dinitrophenol	25	U
100-02-7	4-Nitrophenol	25	U
132-64-9	Dibenzofuran	10	U
121-14-2	2,4-Dinitrotoluene	10	U
84-66-2	Diethylphthalate	10	U
7005-72-3	4-Chlorophenyl-phenylether	10	U
86-73-7	Fluorene	10	U
100-01-6	4-Nitroaniline	25	U
534-52-1	4,6-Dinitro-2-methylphenol	25	U
86-30-6	N-Nitrosodiphenylamine (1)	10	U
101-55-3	4-Bromophenyl-phenylether	10	U
118-74-1	Hexachlorobenzene	10	U
87-86-5	Pentachlorophenol	25	U
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
86-74-8	Carbazole	10	U
84-74-2	Di-n-Butylphthalate	10	U
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	U
85-68-7	Butylbenzylphthalate	10	U
91-94-1	3,3'-Dichlorobenzidine	10	U
56-55-3	Benzo(a)anthracene	10	U
218-01-9	Chrysene	10	U
117-81-7	bis(2-Ethylhexyl)phthalate	10	U
117-84-0	Di-n-octylphthalate	10	U
205-99-2	Benzo(b)fluoranthene	10	U
207-08-9	Benzo(k)fluoranthene	10	U
50-32-8	Benzo(a)pyrene	10	U
193-39-5	Indeno(1,2,3-cd)pyrene	10	U
53-70-3	Dibenz(a,h)anthracene	10	U
191-24-2	Benzo(g,h,i)perylene	10	U

(1) - Cannot be separated from Diphenylamine

T17

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

FIELDBLK

Lab Name: NYTEST ENV INC Contract: 9118432

Lab Code: NYTEST Case No.: 10186 SAS No.: ____ SDG No.: ____

Matrix: (soil/water) WATER Lab Sample ID: 1018614

Sample wt/vol: 1000 (g/mL) ML Lab File ID: B6022

Level: (low/med) LOW Date Received: 10/25/91

% Moisture: ____ decanted: (Y/N) ___ Date Extracted: 10/29/91

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/07/91

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

Number TICs found: 6

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	5.74	5	J
2.	UNKNOWN	6.88	18	J
3.	UNKNOWN	7.27	3	J
4.	UNKNOWN	7.62	4	J
5.	UNKNOWN	7.76	9	J
6.	UNKNOWN CYCLOALKANE	7.86	11	J

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

S-1

Lab Name: NYTEST ENV INC Contract: 9118432

Lab Code: NYTEST Case No.: 10186 SAS No.: SDG No.:

Matrix: (soil/water) SOIL Lab Sample ID: 1018601

Sample wt/vol: 30.0 (g/mL) G Lab File ID: F9038

Level: (low/med) LOW Date Received: 10/25/91

% Moisture: 15 decanted: (Y/N) N Date Extracted: 10/31/91

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 11/30/91

Injection Volume: 2.0(uL) Dilution Factor: 2.0

GPC Cleanup: (Y/N) ~~Y~~ N pH: 7.0 12/04/91

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	780	U
111-44-4	bis(2-Chloroethyl)Ether	780	U
95-57-8	2-Chlorophenol	780	U
541-73-1	1,3-Dichlorobenzene	780	U
106-46-7	1,4-Dichlorobenzene	780	U
95-50-1	1,2-Dichlorobenzene	780	U
95-48-7	2-Methylphenol	780	U
108-60-1	2,2'-oxybis(1-Chloropropane)	780	U
106-44-5	4-Methylphenol	780	U
621-64-7	N-Nitroso-di-n-propylamine	780	U
67-72-1	Hexachloroethane	780	U
98-95-3	Nitrobenzene	780	U
78-59-1	Isophorone	780	U
88-75-5	2-Nitrophenol	780	U
105-67-9	2,4-Dimethylphenol	780	U
111-91-1	bis(2-Chloroethoxy)methane	780	U
120-83-2	2,4-Dichlorophenol	780	U
120-82-1	1,2,4-Trichlorobenzene	780	U
91-20-3	Naphthalene	610	J
106-47-8	4-Chloroaniline	780	U
87-68-3	Hexachlorobutadiene	780	U
59-50-7	4-Chloro-3-methylphenol	780	U
91-57-6	2-Methylnaphthalene	1500	
77-47-4	Hexachlorocyclopentadiene	780	U
88-06-2	2,4,6-Trichlorophenol	780	U
95-95-4	2,4,5-Trichlorophenol	1900	U
91-58-7	2-Chloronaphthalene	780	U
88-74-4	2-Nitroaniline	1900	U
131-11-3	Dimethylphthalate	780	U
208-96-8	Acenaphthylene	89	J
606-20-2	2,6-Dinitrotoluene	780	U
99-09-2	3-Nitroaniline	1900	U
83-32-9	Acenaphthene	1300	

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

S-1

Lab Name: NYTEST ENV INC Contract: 9118432

Lab Code: NYTEST Case No.: 10186 SAS No.: SDG No.:

Matrix: (soil/water) SOIL Lab Sample ID: 1018601

Sample wt/vol: 30.0 (g/mL) G Lab File ID: F9038

Level: (low/med) LOW Date Received: 10/25/91

% Moisture: 15 decanted: (Y/N) N Date Extracted: 10/31/91

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 11/30/91

Injection Volume: 2.0(uL) Dilution Factor: 2.0

GPC Cleanup: (Y/N) ~~Y~~ N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	1900	U
100-02-7	4-Nitrophenol	1900	U
132-64-9	Dibenzofuran	970	
121-14-2	2,4-Dinitrotoluene	780	U
84-66-2	Diethylphthalate	780	U
7005-72-3	4-Chlorophenyl-phenylether	780	U
86-73-7	Fluorene	1300	
100-01-6	4-Nitroaniline	1900	U
534-52-1	4,6-Dinitro-2-methylphenol	1900	U
86-30-6	N-Nitrosodiphenylamine (1)	780	U
101-55-3	4-Bromophenyl-phenylether	780	U
118-74-1	Hexachlorobenzene	780	U
87-86-5	Pentachlorophenol	1900	U
85-01-8	Phenanthrene	4400	
120-12-7	Anthracene	1400	
86-74-8	Carbazole	470	J
84-74-2	Di-n-Butylphthalate	310	BJ
206-44-0	Fluoranthene	4100	
129-00-0	Pyrene	5100	
85-68-7	Butylbenzylphthalate	290	J
91-94-1	3,3'-Dichlorobenzidine	780	U
56-55-3	Benzo(a)anthracene	2100	
218-01-9	Chrysene	2600	
117-81-7	bis(2-Ethylhexyl)phthalate	390	BJ
117-84-0	Di-n-octylphthalate	780	U
205-99-2	Benzo(b)fluoranthene	1200	
207-08-9	Benzo(k)fluoranthene	1400	
50-32-8	Benzo(a)pyrene	1800	
193-39-5	Indeno(1,2,3-cd)pyrene	590	J
53-70-3	Dibenz(a,h)anthracene	320	J
191-24-2	Benzo(g,h,i)perylene	1100	

(1) - Cannot be separated from Diphenylamine

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

S-1

Lab Name: NYTEST ENV INC Contract: 9118432

Lab Code: NYTEST Case No.: 10186 SAS No.: \ SDG No.:

Matrix: (soil/water) SOIL Lab Sample ID: 1018601

Sample wt/vol: 30.0 (g/mL) G Lab File ID: F9038

Level: (low/med) LOW Date Received: 10/25/91

% Moisture: 15 decanted: (Y/N) N Date Extracted: 10/31/91

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 11/30/91

Injection Volume: 2.0(uL) Dilution Factor: 2.0

GPC Cleanup: (Y/N) ~~Y~~ N pH: 7.0

AD 12/04/91

Number TICs found: 20 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		UNKNOWN	8.26	2700	J
2.	90120	1-METHYLNAPHTHALENE	13.50	950	JN
3.		DIMETHYL NAPHTHALENE ISOMER	14.83	390	J
4.		DIMETHYL NAPHTHALENE ISOMER	15.05	470	J
5.	92-87-5	BENZIDINE	19.33	390	JN
6.		UNKNOWN AROMATIC	20.45	500	J
7.		C15H12 AROMATIC HYDROCARBON	20.88	730	J
8.		C15H12 AROMATIC HYDROCARBON	20.96	930	J
9.		UNKNOWN	21.17	1900	J
10.		C16H12 AROMATIC HYDROCARBON	21.67	770	J
11.		C16H14 AROMATIC HYDROCARBON	22.34	470	J
12.		C16H14 AROMATIC HYDROCARBON	22.42	390	J
13.		C15H12 AROMATIC HYDROCARBON	22.59	480	J
14.		UNKNOWN AROMATIC	23.06	420	J
15.		C17H12 AROMATIC HYDROCARBON	23.85	680	J
16.		C17H12 AROMATIC HYDROCARBON	24.12	1500	J
17.		C17H12 AROMATIC HYDROCARBON	24.29	660	J
18.		C17H12 AROMATIC HYDROCARBON	24.38	510	J
19.		UNKNOWN AROMATIC	25.81	430	J
20.		C20H12 AROMATIC HYDROCARBON	31.40	1500	J

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

S-2

Lab Name: NYTEST ENV INC Contract: 9118432

Lab Code: NYTEST Case No.: 10186 SAS No.: SDG No.:

Matrix: (soil/water) SOIL Lab Sample ID: 1018602

Sample wt/vol: 30.0 (g/mL) G Lab File ID: F9035

Level: (low/med) LOW Date Received: 10/25/91

% Moisture: 42 decanted: (Y/N) N Date Extracted: 10/31/91

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 11/30/91

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) ~~Y~~ N 11/04/91 pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	570	U
111-44-4	bis(2-Chloroethyl)Ether	570	U
95-57-8	2-Chlorophenol	570	U
541-73-1	1,3-Dichlorobenzene	570	U
106-46-7	1,4-Dichlorobenzene	570	U
95-50-1	1,2-Dichlorobenzene	570	U
95-48-7	2-Methylphenol	570	U
108-60-1	2,2'-oxybis(1-Chloropropane)	570	U
106-44-5	4-Methylphenol	570	U
621-64-7	N-Nitroso-di-n-propylamine	570	U
67-72-1	Hexachloroethane	570	U
98-95-3	Nitrobenzene	570	U
78-59-1	Isophorone	570	U
88-75-5	2-Nitrophenol	570	U
105-67-9	2,4-Dimethylphenol	570	U
111-91-1	bis(2-Chloroethoxy)methane	570	U
120-83-2	2,4-Dichlorophenol	570	U
120-82-1	1,2,4-Trichlorobenzene	570	U
91-20-3	Naphthalene	19	J
106-47-8	4-Chloroaniline	570	U
87-68-3	Hexachlorobutadiene	570	U
59-50-7	4-Chloro-3-methylphenol	570	U
91-57-6	2-Methylnaphthalene	5	J
77-47-4	Hexachlorocyclopentadiene	570	U
88-06-2	2,4,6-Trichlorophenol	570	U
95-95-4	2,4,5-Trichlorophenol	1400	U
91-58-7	2-Chloronaphthalene	570	U
88-74-4	2-Nitroaniline	1400	U
131-11-3	Dimethylphthalate	570	U
208-96-8	Acenaphthylene	570	U
606-20-2	2,6-Dinitrotoluene	570	U
99-09-2	3-Nitroaniline	1400	U
83-32-9	Acenaphthene	570	U

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

S-2

Lab Name: NYTEST ENV INC Contract: 9118432

Lab Code: NYTEST Case No.: 10186 SAS No.: \ SDG No.:

Matrix: (soil/water) SOIL Lab Sample ID: 1018602

Sample wt/vol: 30.0 (g/mL) G Lab File ID: F9035

Level: (low/med) LOW Date Received: 10/25/91

% Moisture: 42 decanted: (Y/N) N Date Extracted: 10/31/91

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 11/30/91

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) ~~Y~~ N AD 12/04/91 pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	1400	U
100-02-7	4-Nitrophenol	1400	U
132-64-9	Dibenzofuran	3	J
121-14-2	2,4-Dinitrotoluene	570	U
84-66-2	Diethylphthalate	570	U
7005-72-3	4-Chlorophenyl-phenylether	570	U
86-73-7	Fluorene	570	U
100-01-6	4-Nitroaniline	1400	U
534-52-1	4,6-Dinitro-2-methylphenol	1400	U
86-30-6	N-Nitrosodiphenylamine (1)	570	U
101-55-3	4-Bromophenyl-phenylether	570	U
118-74-1	Hexachlorobenzene	56	J
87-86-5	Pentachlorophenol	1400	U
85-01-8	Phenanthrene	44	J
120-12-7	Anthracene	7	J
86-74-8	Carbazole	570	U
84-74-2	Di-n-Butylphthalate	340	BJ
206-44-0	Fluoranthene	44	J
129-00-0	Pyrene	34	J
85-68-7	Butylbenzylphthalate	570	U
91-94-1	3,3'-Dichlorobenzidine	570	U
56-55-3	Benzo(a)anthracene	19	J
218-01-9	Chrysene	21	J
117-81-7	bis(2-Ethylhexyl)phthalate	200	BJ
117-84-0	Di-n-octylphthalate	570	U
205-99-2	Benzo(b)fluoranthene	570	U
207-08-9	Benzo(k)fluoranthene	570	U
50-32-8	Benzo(a)pyrene	570	U
193-39-5	Indeno(1,2,3-cd)pyrene	570	U
53-70-3	Dibenz(a,h)anthracene	570	U
191-24-2	Benzo(g,h,i)perylene	570	U

(1) - Cannot be separated from Diphenylamine

T23

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

S-2

Lab Name: NYTEST ENV INC Contract: 9118432

Lab Code: NYTEST Case No.: 10186 SAS No.: \ SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: 1018602

Sample wt/vol: 30.0 (g/mL) G Lab File ID: F9035

Level: (low/med) LOW Date Received: 10/25/91

% Moisture: 42 decanted: (Y/N) N Date Extracted: 10/31/91

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 11/30/91

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) ~~Y~~ N pH: 7.0

AD 12/04/91

Number TICs found: 7 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		UNKNOWN	5.62	250	J
2.		UNKNOWN	6.55	480	J
3.		UNKNOWN	7.42	490	J
4.		UNKNOWN	8.31	2200	J
5.		UNKNOWN	17.22	230	J
6.	57103	HEXADECANOIC ACID	21.16	210	JN
7.		UNKNOWN ALKANE	31.14	240	J

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

S-3

Lab Name: NYTEST ENV INC Contract: 9118432

Lab Code: NYTEST Case No.: 10186 SAS No.: Y SDG No.:

Matrix: (soil/water) SOIL Lab Sample ID: 1018605

Sample wt/vol: 30.0 (g/mL) G Lab File ID: F9014

Level: (low/med) LOW Date Received: 10/25/91

% Moisture: 45 decanted: (Y/N) N Date Extracted: 10/31/91

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 11/28/91

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) ~~Y~~ N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	600	U
111-44-4	bis(2-Chloroethyl)Ether	600	U
95-57-8	2-Chlorophenol	600	U
541-73-1	1,3-Dichlorobenzene	600	U
106-46-7	1,4-Dichlorobenzene	600	U
95-50-1	1,2-Dichlorobenzene	600	U
95-48-7	2-Methylphenol	600	U
108-60-1	2,2'-oxybis(1-Chloropropane)	600	U
106-44-5	4-Methylphenol	600	U
621-64-7	N-Nitroso-di-n-propylamine	600	U
67-72-1	Hexachloroethane	600	U
98-95-3	Nitrobenzene	600	U
78-59-1	Isophorone	600	U
88-75-5	2-Nitrophenol	600	U
105-67-9	2,4-Dimethylphenol	600	U
111-91-1	bis(2-Chloroethoxy)methane	600	U
120-83-2	2,4-Dichlorophenol	600	U
120-82-1	1,2,4-Trichlorobenzene	600	U
91-20-3	Naphthalene	32	J
106-47-8	4-Chloroaniline	600	U
87-68-3	Hexachlorobutadiene	600	U
59-50-7	4-Chloro-3-methylphenol	600	U
91-57-6	2-Methylnaphthalene	13	J
77-47-4	Hexachlorocyclopentadiene	600	U
88-06-2	2,4,6-Trichlorophenol	600	U
95-95-4	2,4,5-Trichlorophenol	1500	U
91-58-7	2-Chloronaphthalene	600	U
88-74-4	2-Nitroaniline	1500	U
131-11-3	Dimethylphthalate	600	U
208-96-8	Acenaphthylene	600	U
606-20-2	2,6-Dinitrotoluene	600	U
99-09-2	3-Nitroaniline	1500	U
83-32-9	Acenaphthene	600	U

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

S-3

Lab Name: NYTEST ENV INC Contract: 9118432

Lab Code: NYTEST Case No.: 10186 SAS No.: SDG No.:

Matrix: (soil/water) SOIL Lab Sample ID: 1018605

Sample wt/vol: 30.0 (g/mL) G Lab File ID: F9014

Level: (low/med) LOW Date Received: 10/25/91

% Moisture: 45 decanted: (Y/N) N Date Extracted: 10/31/91

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 11/28/91

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) ~~Y~~ N 12/04/91 pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	1500	U
100-02-7	4-Nitrophenol	1500	U
132-64-9	Dibenzofuran	600	U
121-14-2	2,4-Dinitrotoluene	600	U
84-66-2	Diethylphthalate	600	U
7005-72-3	4-Chlorophenyl-phenylether	600	U
86-73-7	Fluorene	600	U
100-01-6	4-Nitroaniline	1500	U
534-52-1	4,6-Dinitro-2-methylphenol	1500	U
86-30-6	N-Nitrosodiphenylamine (1)	600	U
101-55-3	4-Bromophenyl-phenylether	600	U
118-74-1	Hexachlorobenzene	170	J
87-86-5	Pentachlorophenol	1500	U
85-01-8	Phenanthrene	31	J
120-12-7	Anthracene	600	U
86-74-8	Carbazole	600	U
84-74-2	Di-n-Butylphthalate	340	BJ
206-44-0	Fluoranthene	56	J
129-00-0	Pyrene	44	J
85-68-7	Butylbenzylphthalate	41	J
91-94-1	3,3'-Dichlorobenzidine	600	U
56-55-3	Benzo(a)anthracene	25	J
218-01-9	Chrysene	30	J
117-81-7	bis(2-Ethylhexyl)phthalate	150	BJ
117-84-0	Di-n-octylphthalate	600	U
205-99-2	Benzo(b)fluoranthene	600	U
207-08-9	Benzo(k)fluoranthene	600	U
50-32-8	Benzo(a)pyrene	600	U
193-39-5	Indeno(1,2,3-cd)pyrene	600	U
53-70-3	Dibenz(a,h)anthracene	600	U
191-24-2	Benzo(g,h,i)perylene	600	U

(1) - Cannot be separated from Diphenylamine

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

S-3

Lab Name: NYTEST ENV INC Contract: 9118432

Lab Code: NYTEST Case No.: 10186 SAS No.: ____ SDG No.: ____

Matrix: (soil/water) SOIL Lab Sample ID: 1018605

Sample wt/vol: 30.0 (g/mL) G Lab File ID: F9014

Level: (low/med) LOW Date Received: 10/25/91

% Moisture: 45 decanted: (Y/N) N Date Extracted: 10/31/91

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 11/28/91

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) ~~Y~~ N pH: 7.0

Number TICs found: 7

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	5.62	290	J
2.	UNKNOWN	6.54	600	J
3.	UNKNOWN	7.40	550	J
4.	UNKNOWN	8.27	3000	J
5.	UNKNOWN	17.23	210	J
6. 57103	HEXADECANOIC ACID	21.15	200	JN
7.	UNKNOWN ALKANE	26.13	140	J

T27

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

S-5

Lab Name: NYTEST ENV INC Contract: 9118432

Lab Code: NYTEST Case No.: 10186 SAS No.: SDG No.:

Matrix: (soil/water) SOIL Lab Sample ID: 1018606

Sample wt/vol: 30.0 (g/mL) G Lab File ID: F9015

Level: (low/med) LOW Date Received: 10/25/91

% Moisture: 51 decanted: (Y/N) N Date Extracted: 10/31/91

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 11/28/91

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) ~~Y~~ N 10/31/91 pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	670	U
111-44-4	bis(2-Chloroethyl)Ether	670	U
95-57-8	2-Chlorophenol	670	U
541-73-1	1,3-Dichlorobenzene	670	U
106-46-7	1,4-Dichlorobenzene	670	U
95-50-1	1,2-Dichlorobenzene	670	U
95-48-7	2-Methylphenol	670	U
108-60-1	2,2'-oxybis(1-Chloropropane)	670	U
106-44-5	4-Methylphenol	670	U
621-64-7	N-Nitroso-di-n-propylamine	670	U
67-72-1	Hexachloroethane	670	U
98-95-3	Nitrobenzene	670	U
78-59-1	Isophorone	670	U
88-75-5	2-Nitrophenol	670	U
105-67-9	2,4-Dimethylphenol	670	U
111-91-1	bis(2-Chloroethoxy)methane	670	U
120-83-2	2,4-Dichlorophenol	670	U
120-82-1	1,2,4-Trichlorobenzene	670	U
91-20-3	Naphthalene	670	U
106-47-8	4-Chloroaniline	670	U
87-68-3	Hexachlorobutadiene	670	U
59-50-7	4-Chloro-3-methylphenol	670	U
91-57-6	2-Methylnaphthalene	12	J
77-47-4	Hexachlorocyclopentadiene	670	U
88-06-2	2,4,6-Trichlorophenol	670	U
95-95-4	2,4,5-Trichlorophenol	1600	U
91-58-7	2-Chloronaphthalene	670	U
88-74-4	2-Nitroaniline	1600	U
131-11-3	Dimethylphthalate	670	U
208-96-8	Acenaphthylene	670	U
606-20-2	2,6-Dinitrotoluene	670	U
99-09-2	3-Nitroaniline	1600	U
83-32-9	Acenaphthene	11	J

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

S-5

Lab Name: NYTEST ENV INC Contract: 9118432

Lab Code: NYTEST Case No.: 10186 SAS No.: SDG No.:

Matrix: (soil/water) SOIL Lab Sample ID: 1018606

Sample wt/vol: 30.0 (g/mL) G Lab File ID: F9015

Level: (low/med) LOW Date Received: 10/25/91

% Moisture: 51 decanted: (Y/N) N Date Extracted: 10/31/91

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 11/28/91

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) ~~Y~~ N 12/04/91 pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	1600	U
100-02-7	4-Nitrophenol	1600	U
132-64-9	Dibenzofuran	5	J
121-14-2	2,4-Dinitrotoluene	670	U
84-66-2	Diethylphthalate	670	U
7005-72-3	4-Chlorophenyl-phenylether	670	U
86-73-7	Fluorene	670	U
100-01-6	4-Nitroaniline	1600	U
534-52-1	4,6-Dinitro-2-methylphenol	1600	U
86-30-6	N-Nitrosodiphenylamine (1)	670	U
101-55-3	4-Bromophenyl-phenylether	670	U
118-74-1	Hexachlorobenzene	110	J
87-86-5	Pentachlorophenol	1600	U
85-01-8	Phenanthrene	86	J
120-12-7	Anthracene	18	J
86-74-8	Carbazole	670	U
84-74-2	Di-n-Butylphthalate	350	BJ
206-44-0	Fluoranthene	90	J
129-00-0	Pyrene	77	J
85-68-7	Butylbenzylphthalate	670	U
91-94-1	3,3'-Dichlorobenzidine	670	U
56-55-3	Benzo(a)anthracene	38	J
218-01-9	Chrysene	45	J
117-81-7	bis(2-Ethylhexyl)phthalate	190	BJ
117-84-0	Di-n-octylphthalate	670	U
205-99-2	Benzo(b)fluoranthene	670	U
207-08-9	Benzo(k)fluoranthene	670	U
50-32-8	Benzo(a)pyrene	670	U
193-39-5	Indeno(1,2,3-cd)pyrene	670	U
53-70-3	Dibenz(a,h)anthracene	670	U
191-24-2	Benzo(g,h,i)perylene	670	U

(1) - Cannot be separated from Diphenylamine

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

S-5

Lab Name: NYTEST ENV INC Contract: 9118432

Lab Code: NYTEST Case No.: 10186 SAS No.: _____ SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: 1018606

Sample wt/vol: 30.0 (g/mL) G Lab File ID: F9015

Level: (low/med) LOW Date Received: 10/25/91

% Moisture: 51 decanted: (Y/N) N Date Extracted: 10/31/91

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 11/28/91

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) ~~Y~~ N 12/04/91 pH: 7.0

Number TICs found: 5 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	5.61	320	J
2.	UNKNOWN	6.53	660	J
3.	UNKNOWN	7.41	600	J
4.	UNKNOWN	8.29	2500	J
5.	UNKNOWN ACID	21.15	160	J

T30

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

S-6

Lab Name: NYTEST ENV INC Contract: 9118432

Lab Code: NYTEST Case No.: 10186 SAS No.: SDG No.:

Matrix: (soil/water) SOIL Lab Sample ID: 1018607

Sample wt/vol: 30.0 (g/mL) G Lab File ID: F9016

Level: (low/med) LOW Date Received: 10/25/91

% Moisture: 55 decanted: (Y/N) N Date Extracted: 10/31/91

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 11/28/91

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) ~~Y~~ N AM 12/04/91 pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	730	U
111-44-4	bis(2-Chloroethyl)Ether	730	U
95-57-8	2-Chlorophenol	730	U
541-73-1	1,3-Dichlorobenzene	730	U
106-46-7	1,4-Dichlorobenzene	730	U
95-50-1	1,2-Dichlorobenzene	730	U
95-48-7	2-Methylphenol	730	U
108-60-1	2,2'-oxybis(1-Chloropropane)	730	U
106-44-5	4-Methylphenol	730	U
621-64-7	N-Nitroso-di-n-propylamine	730	U
67-72-1	Hexachloroethane	730	U
98-95-3	Nitrobenzene	730	U
78-59-1	Isophorone	730	U
88-75-5	2-Nitrophenol	730	U
105-67-9	2,4-Dimethylphenol	730	U
111-91-1	bis(2-Chloroethoxy)methane	730	U
120-83-2	2,4-Dichlorophenol	730	U
120-82-1	1,2,4-Trichlorobenzene	730	U
91-20-3	Naphthalene	730	U
106-47-8	4-Chloroaniline	730	U
87-68-3	Hexachlorobutadiene	730	U
59-50-7	4-Chloro-3-methylphenol	730	U
91-57-6	2-Methylnaphthalene	11	J
77-47-4	Hexachlorocyclopentadiene	730	U
88-06-2	2,4,6-Trichlorophenol	730	U
95-95-4	2,4,5-Trichlorophenol	1800	U
91-58-7	2-Chloronaphthalene	730	U
88-74-4	2-Nitroaniline	1800	U
131-11-3	Dimethylphthalate	730	U
208-96-8	Acenaphthylene	730	U
606-20-2	2,6-Dinitrotoluene	730	U
99-09-2	3-Nitroaniline	1800	U
83-32-9	Acenaphthene	730	U

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

S-6

Lab Name: NYTEST ENV INC Contract: 9118432

Lab Code: NYTEST Case No.: 10186 SAS No.: 1 SDG No.:

Matrix: (soil/water) SOIL Lab Sample ID: 1018607

Sample wt/vol: 30.0 (g/mL) G Lab File ID: F9016

Level: (low/med) LOW Date Received: 10/25/91

% Moisture: 55 decanted: (Y/N) N Date Extracted: 10/31/91

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 11/28/91

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) ~~Y~~ N 11/04/91 pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	1800	U
100-02-7	4-Nitrophenol	1800	U
132-64-9	Dibenzofuran	730	U
121-14-2	2,4-Dinitrotoluene	730	U
84-66-2	Diethylphthalate	730	U
7005-72-3	4-Chlorophenyl-phenylether	730	U
86-73-7	Fluorene	730	U
100-01-6	4-Nitroaniline	1800	U
534-52-1	4,6-Dinitro-2-methylphenol	1800	U
86-30-6	N-Nitrosodiphenylamine (1)	730	U
101-55-3	4-Bromophenyl-phenylether	730	U
118-74-1	Hexachlorobenzene	59	J
87-86-5	Pentachlorophenol	41	J
85-01-8	Phenanthrene	21	J
120-12-7	Anthracene	730	U
86-74-8	Carbazole	730	U
84-74-2	Di-n-Butylphthalate	610	BJ
206-44-0	Fluoranthene	22	J
129-00-0	Pyrene	16	J
85-68-7	Butylbenzylphthalate	20	J
91-94-1	3,3'-Dichlorobenzidine	730	U
56-55-3	Benzo(a)anthracene	730	U
218-01-9	Chrysene	730	U
117-81-7	bis(2-Ethylhexyl)phthalate	200	BJ
117-84-0	Di-n-octylphthalate	730	U
205-99-2	Benzo(b)fluoranthene	730	U
207-08-9	Benzo(k)fluoranthene	730	U
50-32-8	Benzo(a)pyrene	730	U
193-39-5	Indeno(1,2,3-cd)pyrene	730	U
53-70-3	Dibenz(a,h)anthracene	730	U
191-24-2	Benzo(g,h,i)perylene	730	U

(1) - Cannot be separated from Diphenylamine

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

S-6

Lab Name: NYTEST ENV INC Contract: 9118432

Lab Code: NYTEST Case No.: 10186 SAS No.: SDG No.:

Matrix: (soil/water) SOIL Lab Sample ID: 1018607

Sample wt/vol: 30.0 (g/mL) G Lab File ID: F9016

Level: (low/med) LOW Date Received: 10/25/91

% Moisture: 55 decanted: (Y/N) N Date Extracted: 10/31/91

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 11/28/91

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) ~~Y~~ N pH: 7.0

12/04/91

Number TICs found: 20 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		UNKNOWN	5.70	300	J
2.		UNKNOWN	5.77	280	J
3.		UNKNOWN	6.61	300	J
4.		UNKNOWN	7.48	570	J
5.		UNKNOWN	8.36	1400	J
6.		UNKNOWN	9.40	320	J
7.		UNKNOWN ALKANE	17.25	250	J
8.		UNKNOWN	17.33	350	J
9.		UNKNOWN ALKANE	17.85	250	J
10.		UNKNOWN ALKANE	18.45	330	J
11.		UNKNOWN ALKANE	18.52	440	J
12.		UNKNOWN ALKANE	19.58	230	J
13.		UNKNOWN ALKANE	20.66	280	J
14.		UNKNOWN ALKANE	21.68	310	J
15.		UNKNOWN ALKANE	22.67	320	J
16.		UNKNOWN ALKANE	23.61	330	J
17.		UNKNOWN ALKANE	24.52	290	J
18.		UNKNOWN ALKANE	25.39	320	J
19.		UNKNOWN ALKANE	26.23	480	J
20.		UNKNOWN ALKANE	27.16	290	J

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

S-7

Lab Name: NYTEST ENV INC Contract: 9118432

Lab Code: NYTEST Case No.: 10186 SAS No.: 1 SDG No.:

Matrix: (soil/water) SOIL Lab Sample ID: 1018608

Sample wt/vol: 30.0 (g/mL) G Lab File ID: F9017

Level: (low/med) LOW Date Received: 10/25/91

% Moisture: 47 decanted: (Y/N) N Date Extracted: 10/31/91

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 11/28/91

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) ~~Y~~ N ~~N~~ 11/04/91 pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	620	U
111-44-4	bis(2-Chloroethyl)Ether	620	U
95-57-8	2-Chlorophenol	620	U
541-73-1	1,3-Dichlorobenzene	620	U
106-46-7	1,4-Dichlorobenzene	620	U
95-50-1	1,2-Dichlorobenzene	620	U
95-48-7	2-Methylphenol	620	U
108-60-1	2,2'-oxybis(1-Chloropropane)	620	U
106-44-5	4-Methylphenol	620	U
621-64-7	N-Nitroso-di-n-propylamine	620	U
67-72-1	Hexachloroethane	620	U
98-95-3	Nitrobenzene	620	U
78-59-1	Isophorone	620	U
88-75-5	2-Nitrophenol	620	U
105-67-9	2,4-Dimethylphenol	620	U
111-91-1	bis(2-Chloroethoxy)methane	620	U
120-83-2	2,4-Dichlorophenol	620	U
120-82-1	1,2,4-Trichlorobenzene	620	U
91-20-3	Naphthalene	620	U
106-47-8	4-Chloroaniline	620	U
87-68-3	Hexachlorobutadiene	620	U
59-50-7	4-Chloro-3-methylphenol	620	U
91-57-6	2-Methylnaphthalene	620	U
77-47-4	Hexachlorocyclopentadiene	620	U
88-06-2	2,4,6-Trichlorophenol	620	U
95-95-4	2,4,5-Trichlorophenol	1500	U
91-58-7	2-Chloronaphthalene	620	U
88-74-4	2-Nitroaniline	1500	U
131-11-3	Dimethylphthalate	620	U
208-96-8	Acenaphthylene	620	U
606-20-2	2,6-Dinitrotoluene	620	U
99-09-2	3-Nitroaniline	1500	U
83-32-9	Acenaphthene	620	U

00085 T34

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

S-7

Lab Name: NYTEST ENV INC Contract: 9118432

Lab Code: NYTEST Case No.: 10186 SAS No.: \ SDG No.:

Matrix: (soil/water) SOIL Lab Sample ID: 1018608

Sample wt/vol: 30.0 (g/mL) G Lab File ID: F9017

Level: (low/med) LOW Date Received: 10/25/91

% Moisture: 47 decanted: (Y/N) N Date Extracted: 10/31/91

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 11/28/91

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) ~~Y~~ N AD 11/04/91 pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	1500	U
100-02-7	4-Nitrophenol	1500	U
132-64-9	Dibenzofuran	620	U
121-14-2	2,4-Dinitrotoluene	620	U
84-66-2	Diethylphthalate	620	U
7005-72-3	4-Chlorophenyl-phenylether	620	U
86-73-7	Fluorene	620	U
100-01-6	4-Nitroaniline	1500	U
534-52-1	4,6-Dinitro-2-methylphenol	1500	U
86-30-6	N-Nitrosodiphenylamine (1)	620	U
101-55-3	4-Bromophenyl-phenylether	620	U
118-74-1	Hexachlorobenzene	620	U
87-86-5	Pentachlorophenol	1500	U
85-01-8	Phenanthrene	620	U
120-12-7	Anthracene	620	U
86-74-8	Carbazole	620	U
84-74-2	Di-n-Butylphthalate	410	BJ
206-44-0	Fluoranthene	620	U
129-00-0	Pyrene	620	U
85-68-7	Butylbenzylphthalate	620	U
91-94-1	3,3'-Dichlorobenzidine	620	U
56-55-3	Benzo(a)anthracene	620	U
218-01-9	Chrysene	620	U
117-81-7	bis(2-Ethylhexyl)phthalate	110	BJ
117-84-0	Di-n-octylphthalate	620	U
205-99-2	Benzo(b)fluoranthene	620	U
207-08-9	Benzo(k)fluoranthene	620	U
50-32-8	Benzo(a)pyrene	620	U
193-39-5	Indeno(1,2,3-cd)pyrene	620	U
53-70-3	Dibenz(a,h)anthracene	620	U
191-24-2	Benzo(g,h,i)perylene	620	U

(1) - Cannot be separated from Diphenylamine

1F

EPA SAMPLE NO.

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

S-7

Lab Name: NYTEST ENV INC Contract: 9118432

Lab Code: NYTEST Case No.: 10186 SAS No.: SDG No.:

Matrix: (soil/water) SOIL Lab Sample ID: 1018608

Sample wt/vol: 30.0 (g/mL) G Lab File ID: F9017

Level: (low/med) LOW Date Received: 10/25/91

% Moisture: 47 decanted: (Y/N) N Date Extracted: 10/31/91

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 11/28/91

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) ~~Y~~ N AD 12/04/91 pH: 7.0

Number TICs found: 6 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	5.77	280	J
2.	UNKNOWN	6.70	590	J
3.	UNKNOWN	7.59	550	J
4.	UNKNOWN	8.47	1700	J
5.	UNKNOWN	17.41	370	J
6.	SULFUR (S8)	22.79	160	JN

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

S-8

Lab Name: NYTEST ENV INC Contract: 9118432

Lab Code: NYTEST Case No.: 10186 SAS No.: SDG No.:

Matrix: (soil/water) SOIL Lab Sample ID: 1018609

Sample wt/vol: 30.0 (g/mL) G Lab File ID: F9018

Level: (low/med) LOW Date Received: 10/25/91

% Moisture: 49 decanted: (Y/N) N Date Extracted: 10/31/91

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 11/28/91

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) ~~Y~~ N AD 12/04/91 pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	650	U
111-44-4	bis(2-Chloroethyl)Ether	650	U
95-57-8	2-Chlorophenol	650	U
541-73-1	1,3-Dichlorobenzene	650	U
106-46-7	1,4-Dichlorobenzene	650	U
95-50-1	1,2-Dichlorobenzene	650	U
95-48-7	2-Methylphenol	650	U
108-60-1	2,2'-oxybis(1-Chloropropane)	650	U
106-44-5	4-Methylphenol	650	U
621-64-7	N-Nitroso-di-n-propylamine	650	U
67-72-1	Hexachloroethane	650	U
98-95-3	Nitrobenzene	650	U
78-59-1	Isophorone	650	U
88-75-5	2-Nitrophenol	650	U
105-67-9	2,4-Dimethylphenol	650	U
111-91-1	bis(2-Chloroethoxy)methane	650	U
120-83-2	2,4-Dichlorophenol	650	U
120-82-1	1,2,4-Trichlorobenzene	650	U
91-20-3	Naphthalene	650	U
106-47-8	4-Chloroaniline	650	U
87-68-3	Hexachlorobutadiene	650	U
59-50-7	4-Chloro-3-methylphenol	650	U
91-57-6	2-Methylnaphthalene	650	U
77-47-4	Hexachlorocyclopentadiene	650	U
88-06-2	2,4,6-Trichlorophenol	650	U
95-95-4	2,4,5-Trichlorophenol	1600	U
91-58-7	2-Chloronaphthalene	650	U
88-74-4	2-Nitroaniline	1600	U
131-11-3	Dimethylphthalate	650	U
208-96-8	Acenaphthylene	650	U
606-20-2	2,6-Dinitrotoluene	650	U
99-09-2	3-Nitroaniline	1600	U
83-32-9	Acenaphthene	650	U

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

S-8

Lab Name: NYTEST ENV INC Contract: 9118432

Lab Code: NYTEST Case No.: 10186 SAS No.: SDG No.:

Matrix: (soil/water) SOIL Lab Sample ID: 1018609

Sample wt/vol: 30.0 (g/mL) G Lab File ID: F9018

Level: (low/med) LOW Date Received: 10/25/91

% Moisture: 49 decanted: (Y/N) N Date Extracted: 10/31/91

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 11/28/91

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) ~~Y~~ N AD 12/04/91 pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	1600	U
100-02-7	4-Nitrophenol	1600	U
132-64-9	Dibenzofuran	650	U
121-14-2	2,4-Dinitrotoluene	650	U
84-66-2	Diethylphthalate	650	U
7005-72-3	4-Chlorophenyl-phenylether	650	U
86-73-7	Fluorene	650	U
100-01-6	4-Nitroaniline	1600	U
534-52-1	4,6-Dinitro-2-methylphenol	1600	U
86-30-6	N-Nitrosodiphenylamine (1)	650	U
101-55-3	4-Bromophenyl-phenylether	650	U
118-74-1	Hexachlorobenzene	650	U
87-86-5	Pentachlorophenol	1600	U
85-01-8	Phenanthrene	650	U
120-12-7	Anthracene	650	U
86-74-8	Carbazole	650	U
84-74-2	Di-n-Butylphthalate	430	BJ
206-44-0	Fluoranthene	650	U
129-00-0	Pyrene	650	U
85-68-7	Butylbenzylphthalate	650	U
91-94-1	3,3'-Dichlorobenzidine	650	U
56-55-3	Benzo(a)anthracene	650	U
218-01-9	Chrysene	650	U
117-81-7	bis(2-Ethylhexyl)phthalate	100	BJ
117-84-0	Di-n-octylphthalate	650	U
205-99-2	Benzo(b)fluoranthene	650	U
207-08-9	Benzo(k)fluoranthene	650	U
50-32-8	Benzo(a)pyrene	650	U
193-39-5	Indeno(1,2,3-cd)pyrene	650	U
53-70-3	Dibenz(a,h)anthracene	650	U
191-24-2	Benzo(g,h,i)perylene	650	U

(1) - Cannot be separated from Diphenylamine

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

S-8

Lab Name: NYTEST ENV INC Contract: 9118432

Lab Code: NYTEST Case No.: 10186 SAS No.: SDG No.:

Matrix: (soil/water) SOIL Lab Sample ID: 1018609

Sample wt/vol: 30.0 (g/mL) G Lab File ID: F9018

Level: (low/med) LOW Date Received: 10/25/91

% Moisture: 49 decanted: (Y/N) N Date Extracted: 10/31/91

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 11/28/91

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) ~~Y~~ N 12/04/91 pH: 7.0

Number TICs found: 6

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		UNKNOWN	5.80	300	J
2.		UNKNOWN	6.73	610	J
3.		UNKNOWN	7.61	550	J
4.		UNKNOWN	8.51	2400	J
5.		UNKNOWN	17.45	280	J
6.		UNKNOWN	27.18	420	J

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

S-9

Lab Name: NYTEST ENV INC Contract: 9118432

Lab Code: NYTEST Case No.: 10186 SAS No.: SDG No.:

Matrix: (soil/water) SOIL Lab Sample ID: 1018610

Sample wt/vol: 30.0 (g/mL) G Lab File ID: F9019

Level: (low/med) LOW Date Received: 10/25/91

% Moisture: 48 decanted: (Y/N) N Date Extracted: 10/31/91

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 11/28/91

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) ~~Y~~ N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	630	U
111-44-4	bis(2-Chloroethyl)Ether	630	U
95-57-8	2-Chlorophenol	630	U
541-73-1	1,3-Dichlorobenzene	630	U
106-46-7	1,4-Dichlorobenzene	630	U
95-50-1	1,2-Dichlorobenzene	630	U
95-48-7	2-Methylphenol	630	U
108-60-1	2,2'-oxybis(1-Chloropropane)	630	U
106-44-5	4-Methylphenol	630	U
621-64-7	N-Nitroso-di-n-propylamine	630	U
67-72-1	Hexachloroethane	630	U
98-95-3	Nitrobenzene	630	U
78-59-1	Isophorone	630	U
88-75-5	2-Nitrophenol	630	U
105-67-9	2,4-Dimethylphenol	630	U
111-91-1	bis(2-Chloroethoxy)methane	630	U
120-83-2	2,4-Dichlorophenol	630	U
120-82-1	1,2,4-Trichlorobenzene	630	U
91-20-3	Naphthalene	630	U
106-47-8	4-Chloroaniline	630	U
87-68-3	Hexachlorobutadiene	630	U
59-50-7	4-Chloro-3-methylphenol	630	U
91-57-6	2-Methylnaphthalene	630	U
77-47-4	Hexachlorocyclopentadiene	630	U
88-06-2	2,4,6-Trichlorophenol	630	U
95-95-4	2,4,5-Trichlorophenol	1500	U
91-58-7	2-Chloronaphthalene	630	U
88-74-4	2-Nitroaniline	1500	U
131-11-3	Dimethylphthalate	630	U
208-96-8	Acenaphthylene	630	U
606-20-2	2,6-Dinitrotoluene	630	U
99-09-2	3-Nitroaniline	1500	U
83-32-9	Acenaphthene	630	U

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

S-9

Lab Name: NYTEST ENV INC Contract: 9118432

Lab Code: NYTEST Case No.: 10186 SAS No.: 1 SDG No.:

Matrix: (soil/water) SOIL Lab Sample ID: 1018610

Sample wt/vol: 30.0 (g/mL) G Lab File ID: F9019

Level: (low/med) LOW Date Received: 10/25/91

% Moisture: 48 decanted: (Y/N) N Date Extracted: 10/31/91

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 11/28/91

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) ~~Y~~ N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	1500	U
100-02-7	4-Nitrophenol	1500	U
132-64-9	Dibenzofuran	630	U
121-14-2	2,4-Dinitrotoluene	630	U
84-66-2	Diethylphthalate	630	U
7005-72-3	4-Chlorophenyl-phenylether	630	U
86-73-7	Fluorene	630	U
100-01-6	4-Nitroaniline	1500	U
534-52-1	4,6-Dinitro-2-methylphenol	1500	U
86-30-6	N-Nitrosodiphenylamine (1)	630	U
101-55-3	4-Bromophenyl-phenylether	630	U
118-74-1	Hexachlorobenzene	630	U
87-86-5	Pentachlorophenol	1500	U
85-01-8	Phenanthrene	630	U
120-12-7	Anthracene	630	U
86-74-8	Carbazole	630	U
84-74-2	Di-n-Butylphthalate	620	BJ
206-44-0	Fluoranthene	630	U
129-00-0	Pyrene	630	U
85-68-7	Butylbenzylphthalate	630	U
91-94-1	3,3'-Dichlorobenzidine	630	U
56-55-3	Benzo(a)anthracene	630	U
218-01-9	Chrysene	630	U
117-81-7	bis(2-Ethylhexyl)phthalate	150	BJ
117-84-0	Di-n-octylphthalate	630	U
205-99-2	Benzo(b)fluoranthene	630	U
207-08-9	Benzo(k)fluoranthene	630	U
50-32-8	Benzo(a)pyrene	630	U
193-39-5	Indeno(1,2,3-cd)pyrene	630	U
53-70-3	Dibenz(a,h)anthracene	630	U
191-24-2	Benzo(g,h,i)perylene	630	U

(1) - Cannot be separated from Diphenylamine

T41

1F

EPA SAMPLE NO.

S-9

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: NYTEST ENV INC Contract: 9118432

Lab Code: NYTEST Case No.: 10186 SAS No.: SDG No.:

Matrix: (soil/water) SOIL Lab Sample ID: 1018610

Sample wt/vol: 30.0 (g/mL) G Lab File ID: F9019

Level: (low/med) LOW Date Received: 10/25/91

% Moisture: 48 decanted: (Y/N) N Date Extracted: 10/31/91

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 11/28/91

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) ~~Y~~ N 12/04/91 pH: 7.0

Number TICs found: 14 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		UNKNOWN	5.62	420	J
2.		UNKNOWN	6.14	180	J
3.		UNKNOWN	6.33	390	J
4.		UNKNOWN	6.56	750	J
5.		UNKNOWN	7.40	620	J
6.		UNKNOWN	8.29	2600	J
7.		UNKNOWN	8.59	540	J
8.		UNKNOWN	9.08	150	J
9.		UNKNOWN	9.18	5900	J
10.		SULFUR (S6)	16.30	300	JN
11.		SULFUR (S7)	19.85	300	JN
12.	57103	HEXADECANOIC ACID	21.17	180	JN
13.	10544500	SULFUR (S8)	22.67	2400	JN
14.		UNKNOWN	26.95	140	J

SEMIVOLATILE ORGANICS 1B ANALYSIS DATA SHEET

EPA SAMPLE NO.

S-10

Lab Name: NYTEST ENV INC Contract: 9118432

Lab Code: NYTEST Case No.: 10186 SAS No.: _____ SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: 1018611

Sample wt/vol: 30.0 (g/mL) G Lab File ID: F9020

Level: (low/med) LOW Date Received: 10/25/91

% Moisture: 54 decanted: (Y/N) N Date Extracted: 10/31/91

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 11/28/91

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) ~~Y~~ N # 1 10/04/91 pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	720	U
111-44-4	bis(2-Chloroethyl)Ether	720	U
95-57-8	2-Chlorophenol	720	U
541-73-1	1,3-Dichlorobenzene	720	U
106-46-7	1,4-Dichlorobenzene	720	U
95-50-1	1,2-Dichlorobenzene	720	U
95-48-7	2-Methylphenol	720	U
108-60-1	2,2'-oxybis(1-Chloropropane)	720	U
106-44-5	4-Methylphenol	720	U
621-64-7	N-Nitroso-di-n-propylamine	720	U
67-72-1	Hexachloroethane	720	U
98-95-3	Nitrobenzene	720	U
78-59-1	Isophorone	720	U
88-75-5	2-Nitrophenol	720	U
105-67-9	2,4-Dimethylphenol	720	U
111-91-1	bis(2-Chloroethoxy)methane	720	U
120-83-2	2,4-Dichlorophenol	720	U
120-82-1	1,2,4-Trichlorobenzene	720	U
91-20-3	Naphthalene	720	U
106-47-8	4-Chloroaniline	720	U
87-68-3	Hexachlorobutadiene	720	U
59-50-7	4-Chloro-3-methylphenol	720	U
91-57-6	2-Methylnaphthalene	7	J
77-47-4	Hexachlorocyclopentadiene	720	U
88-06-2	2,4,6-Trichlorophenol	720	U
95-95-4	2,4,5-Trichlorophenol	1700	U
91-58-7	2-Chloronaphthalene	720	U
88-74-4	2-Nitroaniline	1700	U
131-11-3	Dimethylphthalate	720	U
208-96-8	Acenaphthylene	720	U
606-20-2	2,6-Dinitrotoluene	720	U
99-09-2	3-Nitroaniline	1700	U
83-32-9	Acenaphthene	720	U

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

S-10

Lab Name: NYTEST ENV INC Contract: 9118432

Lab Code: NYTEST Case No.: 10186 SAS No.: SDG No.:

Matrix: (soil/water) SOIL Lab Sample ID: 1018611

Sample wt/vol: 30.0 (g/mL) G Lab File ID: F9020

Level: (low/med) LOW Date Received: 10/25/91

% Moisture: 54 decanted: (Y/N) N Date Extracted: 10/31/91

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 11/28/91

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) ~~Y~~ N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	1700	U
100-02-7	4-Nitrophenol	1700	U
132-64-9	Dibenzofuran	720	U
121-14-2	2,4-Dinitrotoluene	720	U
84-66-2	Diethylphthalate	720	U
7005-72-3	4-Chlorophenyl-phenylether	720	U
86-73-7	Fluorene	720	U
100-01-6	4-Nitroaniline	1700	U
534-52-1	4,6-Dinitro-2-methylphenol	1700	U
86-30-6	N-Nitrosodiphenylamine (1)	720	U
101-55-3	4-Bromophenyl-phenylether	720	U
118-74-1	Hexachlorobenzene	720	U
87-86-5	Pentachlorophenol	1700	U
85-01-8	Phenanthrene	720	U
120-12-7	Anthracene	720	U
86-74-8	Carbazole	720	U
84-74-2	Di-n-Butylphthalate	1000	B
206-44-0	Fluoranthene	720	U
129-00-0	Pyrene	720	U
85-68-7	Butylbenzylphthalate	720	U
91-94-1	3,3'-Dichlorobenzidine	720	U
56-55-3	Benzo(a)anthracene	720	U
218-01-9	Chrysene	720	U
117-81-7	bis(2-Ethylhexyl)phthalate	150	BJ
117-84-0	Di-n-octylphthalate	720	U
205-99-2	Benzo(b)fluoranthene	720	U
207-08-9	Benzo(k)fluoranthene	720	U
50-32-8	Benzo(a)pyrene	720	U
193-39-5	Indeno(1,2,3-cd)pyrene	720	U
53-70-3	Dibenz(a,h)anthracene	720	U
191-24-2	Benzo(g,h,i)perylene	720	U

(1) - Cannot be separated from Diphenylamine

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

S-10

Lab Name: NYTEST ENV INC Contract: 9118432

Lab Code: NYTEST Case No.: 10186 SAS No.: _____ SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: 1018611

Sample wt/vol: 30.0 (g/mL) G Lab File ID: F9020

Level: (low/med) LOW Date Received: 10/25/91

% Moisture: 54 decanted: (Y/N) N Date Extracted: 10/31/91

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 11/28/91

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) ~~Y~~ N AD 12/04/91 pH: 7.0

Number TICs found: 5

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	5.63	280	J
2.	UNKNOWN	6.55	740	J
3.	UNKNOWN	7.42	540	J
4.	UNKNOWN	8.30	3600	J
5.	UNKNOWN	17.23	340	J

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

S-11

Lab Name: NYTEST ENV INC Contract: 9118432

Lab Code: NYTEST Case No.: 10186 SAS No.: SDG No.:

Matrix: (soil/water) SOIL Lab Sample ID: 1018612

Sample wt/vol: 30.0 (g/mL) G Lab File ID: F9021

Level: (low/med) LOW Date Received: 10/25/91

% Moisture: 51 decanted: (Y/N) N Date Extracted: 10/31/91

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 11/28/91

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) ~~Y~~ N 10/29/91 pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	670	U
111-44-4	bis(2-Chloroethyl)Ether	670	U
95-57-8	2-Chlorophenol	670	U
541-73-1	1,3-Dichlorobenzene	670	U
106-46-7	1,4-Dichlorobenzene	670	U
95-50-1	1,2-Dichlorobenzene	670	U
95-48-7	2-Methylphenol	670	U
108-60-1	2,2'-oxybis(1-Chloropropane)	670	U
106-44-5	4-Methylphenol	670	U
621-64-7	N-Nitroso-di-n-propylamine	670	U
67-72-1	Hexachloroethane	670	U
98-95-3	Nitrobenzene	670	U
78-59-1	Isophorone	670	U
88-75-5	2-Nitrophenol	670	U
105-67-9	2,4-Dimethylphenol	670	U
111-91-1	bis(2-Chloroethoxy)methane	670	U
120-83-2	2,4-Dichlorophenol	670	U
120-82-1	1,2,4-Trichlorobenzene	670	U
91-20-3	Naphthalene	670	U
106-47-8	4-Chloroaniline	670	U
87-68-3	Hexachlorobutadiene	670	U
59-50-7	4-Chloro-3-methylphenol	670	U
91-57-6	2-Methylnaphthalene	670	U
77-47-4	Hexachlorocyclopentadiene	670	U
88-06-2	2,4,6-Trichlorophenol	670	U
95-95-4	2,4,5-Trichlorophenol	1600	U
91-58-7	2-Chloronaphthalene	670	U
88-74-4	2-Nitroaniline	1600	U
131-11-3	Dimethylphthalate	670	U
208-96-8	Acenaphthylene	670	U
606-20-2	2,6-Dinitrotoluene	670	U
99-09-2	3-Nitroaniline	1600	U
83-32-9	Acenaphthene	670	U

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

S-11

Lab Name: NYTEST ENV INC Contract: 9118432

Lab Code: NYTEST Case No.: 10186 SAS No.: SDG No.:

Matrix: (soil/water) SOIL Lab Sample ID: 1018612

Sample wt/vol: 30.0 (g/mL) G Lab File ID: F9021

Level: (low/med) LOW Date Received: 10/25/91

% Moisture: 51 decanted: (Y/N) N Date Extracted: 10/31/91

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 11/28/91

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) ~~Y~~ N pH: 7.0 AH 11/04/91

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	1600	U
100-02-7	4-Nitrophenol	1600	U
132-64-9	Dibenzofuran	670	U
121-14-2	2,4-Dinitrotoluene	670	U
84-66-2	Diethylphthalate	670	U
7005-72-3	4-Chlorophenyl-phenylether	670	U
86-73-7	Fluorene	670	U
100-01-6	4-Nitroaniline	1600	U
534-52-1	4,6-Dinitro-2-methylphenol	1600	U
86-30-6	N-Nitrosodiphenylamine (1)	670	U
101-55-3	4-Bromophenyl-phenylether	670	U
118-74-1	Hexachlorobenzene	670	U
87-86-5	Pentachlorophenol	1600	U
85-01-8	Phenanthrene	670	U
120-12-7	Anthracene	670	U
86-74-8	Carbazole	670	U
84-74-2	Di-n-Butylphthalate	640	BJ
206-44-0	Fluoranthene	670	U
129-00-0	Pyrene	670	U
85-68-7	Butylbenzylphthalate	670	U
91-94-1	3,3'-Dichlorobenzidine	670	U
56-55-3	Benzo(a)anthracene	670	U
218-01-9	Chrysene	670	U
117-81-7	bis(2-Ethylhexyl)phthalate	110	BJ
117-84-0	Di-n-octylphthalate	670	U
205-99-2	Benzo(b)fluoranthene	670	U
207-08-9	Benzo(k)fluoranthene	670	U
50-32-8	Benzo(a)pyrene	670	U
193-39-5	Indeno(1,2,3-cd)pyrene	670	U
53-70-3	Dibenz(a,h)anthracene	670	U
191-24-2	Benzo(g,h,i)perylene	670	U

(1) - Cannot be separated from Diphenylamine

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

S-11

Lab Name: NYTEST ENV INC Contract: 9118432

Lab Code: NYTEST Case No.: 10186 SAS No.: \ SDG No.:

Matrix: (soil/water) SOIL Lab Sample ID: 1018612

Sample wt/vol: 30.0 (g/mL) G Lab File ID: F9021

Level: (low/med) LOW Date Received: 10/25/91

% Moisture: 51 decanted: (Y/N) N Date Extracted: 10/31/91

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 11/28/91

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) ~~Y~~ N pH: 7.0

AD 12/04/91

Number TICs found: 5

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	5.61	310	J
2.	UNKNOWN	6.53	760	J
3.	UNKNOWN	7.40	580	J
4.	UNKNOWN	8.29	3300	J
5.	UNKNOWN	17.24	310	J

SEMIVOLATILE ORGANICS 1B ANALYSIS DATA SHEET

EPA SAMPLE NO.

S-12

Lab Name: NYTEST ENV INC Contract: 9118432

Lab Code: NYTEST Case No.: 10186 SAS No.: SDG No.:

Matrix: (soil/water) SOIL Lab Sample ID: 1018613

Sample wt/vol: 30.0 (g/mL) G Lab File ID: F9022

Level: (low/med) LOW Date Received: 10/25/91

% Moisture: 48 decanted: (Y/N) N Date Extracted: 10/31/91

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 11/28/91

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) X N ~~N~~ 12/04/91 pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	630	U
111-44-4	bis(2-Chloroethyl)Ether	630	U
95-57-8	2-Chlorophenol	630	U
541-73-1	1,3-Dichlorobenzene	630	U
106-46-7	1,4-Dichlorobenzene	630	U
95-50-1	1,2-Dichlorobenzene	630	U
95-48-7	2-Methylphenol	630	U
108-60-1	2,2'-oxybis(1-Chloropropane)	630	U
106-44-5	4-Methylphenol	630	U
621-64-7	N-Nitroso-di-n-propylamine	630	U
67-72-1	Hexachloroethane	630	U
98-95-3	Nitrobenzene	630	U
78-59-1	Isophorone	630	U
88-75-5	2-Nitrophenol	630	U
105-67-9	2,4-Dimethylphenol	630	U
111-91-1	bis(2-Chloroethoxy)methane	630	U
120-83-2	2,4-Dichlorophenol	630	U
120-82-1	1,2,4-Trichlorobenzene	630	U
91-20-3	Naphthalene	630	U
106-47-8	4-Chloroaniline	630	U
87-68-3	Hexachlorobutadiene	630	U
59-50-7	4-Chloro-3-methylphenol	630	U
91-57-6	2-Methylnaphthalene	630	U
77-47-4	Hexachlorocyclopentadiene	630	U
88-06-2	2,4,6-Trichlorophenol	630	U
95-95-4	2,4,5-Trichlorophenol	1500	U
91-58-7	2-Chloronaphthalene	630	U
88-74-4	2-Nitroaniline	1500	U
131-11-3	Dimethylphthalate	630	U
208-96-8	Acenaphthylene	630	U
606-20-2	2,6-Dinitrotoluene	630	U
99-09-2	3-Nitroaniline	1500	U
83-32-9	Acenaphthene	630	U

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

S-12

Lab Name: NYTEST ENV INC Contract: 9118432

Lab Code: NYTEST Case No.: 10186 SAS No.: \ SDG No.:

Matrix: (soil/water) SOIL Lab Sample ID: 1018613

Sample wt/vol: 30.0 (g/mL) G Lab File ID: F9022

Level: (low/med) LOW Date Received: 10/25/91

% Moisture: 48 decanted: (Y/N) N Date Extracted: 10/31/91

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 11/28/91

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) ~~Y~~ N 10/04/91 pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	1500	U
100-02-7	4-Nitrophenol	1500	U
132-64-9	Dibenzofuran	630	U
121-14-2	2,4-Dinitrotoluene	630	U
84-66-2	Diethylphthalate	630	U
7005-72-3	4-Chlorophenyl-phenylether	630	U
86-73-7	Fluorene	630	U
100-01-6	4-Nitroaniline	1500	U
534-52-1	4,6-Dinitro-2-methylphenol	1500	U
86-30-6	N-Nitrosodiphenylamine (1)	630	U
101-55-3	4-Bromophenyl-phenylether	630	U
118-74-1	Hexachlorobenzene	630	U
87-86-5	Pentachlorophenol	1500	U
85-01-8	Phenanthrene	15	J
120-12-7	Anthracene	630	U
86-74-8	Carbazole	630	U
84-74-2	Di-n-Butylphthalate	680	B
206-44-0	Fluoranthene	630	U
129-00-0	Pyrene	17	J
85-68-7	Butylbenzylphthalate	16	J
91-94-1	3,3'-Dichlorobenzidine	630	U
56-55-3	Benzo(a)anthracene	630	U
218-01-9	Chrysene	630	U
117-81-7	bis(2-Ethylhexyl)phthalate	240	BJ
117-84-0	Di-n-octylphthalate	630	U
205-99-2	Benzo(b)fluoranthene	630	U
207-08-9	Benzo(k)fluoranthene	630	U
50-32-8	Benzo(a)pyrene	630	U
193-39-5	Indeno(1,2,3-cd)pyrene	630	U
53-70-3	Dibenz(a,h)anthracene	630	U
191-24-2	Benzo(g,h,i)perylene	630	U

(1) - Cannot be separated from Diphenylamine

T50

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

S-12

Lab Name: NYTEST ENV INC Contract: 9118432

Lab Code: NYTEST Case No.: 10186 SAS No.: \ SDG No.:

Matrix: (soil/water) SOIL Lab Sample ID: 1018613

Sample wt/vol: 30.0 (g/mL) G Lab File ID: F9022

Level: (low/med) LOW Date Received: 10/25/91

% Moisture: 48 decanted: (Y/N) N Date Extracted: 10/31/91

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 11/28/91

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) ~~Y~~ N pH: 7.0

12/04/91

Number TICs found: 19 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		UNKNOWN	5.64	360	J
2.		UNKNOWN	5.70	150	J
3.		UNKNOWN	6.34	630	J
4.		UNKNOWN	6.56	820	J
5.		UNKNOWN	7.42	520	J
6.		UNKNOWN	8.30	2100	J
7.		UNKNOWN	8.60	540	J
8.		UNKNOWN	9.08	130	J
9.		UNKNOWN	9.21	3000	J
10.		UNKNOWN	9.36	3200	J
11.		UNKNOWN	16.01	170	J
12.		UNKNOWN	16.32	460	J
13.		UNKNOWN	17.24	300	J
14.		UNKNOWN	19.03	140	J
15.		SULFUR (S7)	19.87	290	JN
16.	57103	HEXADECANOIC ACID	21.19	530	JN
17.		SULFUR (S8)	22.68	2600	JN
18.		UNKNOWN ACID	23.17	170	J
19.		UNKNOWN	25.78	160	J

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

FIELD_BLK

Lab Name: NYTEST ENV INC Contract: 9118432

Lab Code: NYTEST Case No.: 10186 SAS No.: _____ SDG No.: _____

Matrix: (soil/water) WATER Lab Sample ID: 1018614

Sample wt/vol: 1000 (g/mL) ML Lab File ID: _____

% Moisture: _____ decanted: (Y/N) ___ Date Received: 10/25/91

Extraction: (SepF/Cont/Sonc) SEPF Date Extracted: 10/29/91

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 11/09/91

Injection Volume: 1.00 (uL) Dilution Factor: 1.00

GPC Cleanup: (Y/N) N pH: 7.0 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
319-84-6	alpha-BHC	0.050	U
319-85-7	beta-BHC	0.050	U
319-86-8	delta-BHC	0.050	U
58-89-9	gamma-BHC (Lindane)	0.050	U
76-44-8	Heptachlor	0.050	U
309-00-2	Aldrin	0.050	U
1024-57-3	Heptachlor epoxide	0.050	U
959-98-8	Endosulfan I	0.050	U
60-57-1	Dieldrin	0.10	U
72-55-9	4,4'-DDE	0.10	U
72-20-8	Endrin	0.10	U
33213-65-9	Endosulfan II	0.10	U
72-54-8	4,4'-DDD	0.10	U
1031-07-8	Endosulfan sulfate	0.10	U
50-29-3	4,4'-DDT	0.10	U
72-43-5	Methoxychlor	0.50	U
53494-70-5	Endrin ketone	0.10	U
53494-70-5	Endrin aldehyde	0.10	U
5103-71-9	alpha-Chlordane	0.050	U
5103-74-2	gamma-Chlordane	0.050	U
8001-35-2	Toxaphene	5.0	U
12674-11-2	Aroclor-1016	1.0	U
11104-28-2	Aroclor-1221	2.0	U
11141-16-5	Aroclor-1232	1.0	U
53469-21-9	Aroclor-1242	1.0	U
12672-29-6	Aroclor-1248	1.0	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	1.0	U

00094 T52

1D

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

S1

Name: NYTEST ENV INC Contract: 9118432

Lab Code: NYTEST Case No.: 10186 SAS No.: _____ SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: 1018601

Sample wt/vol: 30.0 (g/mL) G Lab File ID: _____

% Moisture: 15 decanted: (Y/N) N Date Received: 10/25/91

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 10/31/91

Concentrated Extract Volume: 5000 (uL) Date Analyzed: 11/09/91

Injection Volume: 1.00 (uL) Dilution Factor: 5.00

GPC Cleanup: (Y/N) X N pH: 7.0 Sulfur Cleanup: (Y/N) N

JE 11/29/91

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	10	U
319-85-7	beta-BHC	10	U
319-86-8	delta-BHC	10	U
58-89-9	gamma-BHC (Lindane)	10	U
76-44-8	Heptachlor	10	U
309-00-2	Aldrin	10	U
1024-57-3	Heptachlor epoxide	10	U
959-98-8	Endosulfan I	10	U
60-57-1	Dieldrin	19	U
72-55-9	4,4'-DDE	19	U
72-20-8	Endrin	19	U
33213-65-9	Endosulfan II	19	U
72-54-8	4,4'-DDD	19	U
1031-07-8	Endosulfan sulfate	19	U
50-29-3	4,4'-DDT	19	U
72-43-5	Methoxychlor	100	U
53494-70-5	Endrin ketone	19	U
53494-70-5	Endrin aldehyde	19	U
5103-71-9	alpha-Chlordane	12	P
5103-74-2	gamma-Chlordane	10	U
8001-35-2	Toxaphene	1000	U
12674-11-2	Aroclor-1016	190	U
11104-28-2	Aroclor-1221	390	U
11141-16-5	Aroclor-1232	190	U
53469-21-9	Aroclor-1242	190	U
12672-29-6	Aroclor-1248	190	U
11097-69-1	Aroclor-1254	170	JP
11096-82-5	Aroclor-1260	190	U

1D

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

S2

Lab Name: NYTEST ENV INC Contract: 9118432

Lab Code: NYTEST Case No.: 10186 SAS No.: _____ SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: 1018602

Sample wt/vol: 30.0 (g/mL) G Lab File ID: _____

% Moisture: 42 decanted: (Y/N) N Date Received: 10/25/91

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 10/31/91

Concentrated Extract Volume: 5000 (uL) Date Analyzed: 11/09/91

Injection Volume: 1.00 (uL) Dilution Factor: 1.00

GPC Cleanup: (Y/N) XN pH: 7.0 Sulfur Cleanup: (Y/N) N

JE 11/20/91

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	2.9	U
319-85-7	beta-BHC	2.9	U
319-86-8	delta-BHC	2.9	U
58-89-9	gamma-BHC (Lindane)	2.9	U
76-44-8	Heptachlor	2.9	U
309-00-2	Aldrin	2.9	U
1024-57-3	Heptachlor epoxide	2.9	U
959-98-8	Endosulfan I	2.9	U
60-57-1	Dieldrin	5.7	U
72-55-9	4,4'-DDE	5.7	U
72-20-8	Endrin	5.7	U
33213-65-9	Endosulfan II	5.7	U
72-54-8	4,4'-DDD	5.7	U
1031-07-8	Endosulfan sulfate	5.7	U
50-29-3	4,4'-DDT	5.7	U
72-43-5	Methoxychlor	29	U
53494-70-5	Endrin ketone	5.7	U
53494-70-5	Endrin aldehyde	5.7	U
5103-71-9	alpha-Chlordane	2.9	U
5103-74-2	gamma-Chlordane	2.9	U
8001-35-2	Toxaphene	290	U
12674-11-2	Aroclor-1016	57	U
11104-28-2	Aroclor-1221	120	U
11141-16-5	Aroclor-1232	57	U
53469-21-9	Aroclor-1242	57	U
12672-29-6	Aroclor-1248	57	U
11097-69-1	Aroclor-1254	57	U
11096-82-5	Aroclor-1260	57	U

00096 T54

1D

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

S3

Lab Name: NYTEST ENV INC Contract: 9118432

Lab Code: NYTEST Case No.: 10186 SAS No.: _____ SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: 1018605

Sample wt/vol: 30.0 (g/mL) G Lab File ID: _____

% Moisture: 45 decanted: (Y/N) N Date Received: 10/25/91

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 10/31/91

Concentrated Extract Volume: 5000 (uL) Date Analyzed: 11/09/91

Injection Volume: 1.00 (uL) Dilution Factor: 1.00

GPC Cleanup: (Y/N) Y N pH: 7.0 Sulfur Cleanup: (Y/N) N

JE 11/20/91

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	3.1	U
319-85-7	beta-BHC	3.1	U
319-86-8	delta-BHC	3.1	U
58-89-9	gamma-BHC (Lindane)	3.1	U
76-44-8	Heptachlor	3.1	U
309-00-2	Aldrin	3.1	U
1024-57-3	Heptachlor epoxide	3.1	U
959-98-8	Endosulfan I	3.1	U
60-57-1	Dieldrin	6.0	U
72-55-9	4,4'-DDE	6.0	U
72-20-8	Endrin	6.0	U
33213-65-9	Endosulfan II	6.0	U
72-54-8	4,4'-DDD	6.0	U
1031-07-8	Endosulfan sulfate	6.0	U
50-29-3	4,4'-DDT	6.0	U
72-43-5	Methoxychlor	31	U
53494-70-5	Endrin ketone	6.0	U
53494-70-5	Endrin aldehyde	6.0	U
5103-71-9	alpha-Chlordane	3.1	U
5103-74-2	gamma-Chlordane	3.1	U
8001-35-2	Toxaphene	310	U
12674-11-2	Aroclor-1016	60	U
11104-28-2	Aroclor-1221	120	U
11141-16-5	Aroclor-1232	60	U
53469-21-9	Aroclor-1242	60	U
12672-29-6	Aroclor-1248	60	U
11097-69-1	Aroclor-1254	60	U
11096-82-5	Aroclor-1260	60	U

1D

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

S5

Lab Name: NYTEST ENV INC Contract: 9118432

Lab Code: NYTEST Case No.: 10186 SAS No.: _____ SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: 1018606

Sample wt/vol: 30.0 (g/mL) G Lab File ID: _____

% Moisture: 51 decanted: (Y/N) N Date Received: 10/25/91

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 10/31/91

Concentrated Extract Volume: 5000 (uL) Date Analyzed: 11/09/91

Injection Volume: 1.00 (uL) Dilution Factor: 1.00

GPC Cleanup: (Y/N) N pH: 7.0 Sulfur Cleanup: (Y/N) N

JE 11/20/91

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	3.5	U
319-85-7	beta-BHC	3.5	U
319-86-8	delta-BHC	3.5	U
58-89-9	gamma-BHC (Lindane)	3.5	U
76-44-8	Heptachlor	3.5	U
309-00-2	Aldrin	3.5	U
1024-57-3	Heptachlor epoxide	3.5	U
959-98-8	Endosulfan I	3.5	U
60-57-1	Dieldrin	6.7	U
72-55-9	4,4'-DDE	6.7	U
72-20-8	Endrin	6.7	U
33213-65-9	Endosulfan II	6.7	U
72-54-8	4,4'-DDD	6.7	U
1031-07-8	Endosulfan sulfate	6.7	U
50-29-3	4,4'-DDT	6.7	U
72-43-5	Methoxychlor	35	U
53494-70-5	Endrin ketone	6.7	U
53494-70-5	Endrin aldehyde	6.7	U
5103-71-9	alpha-Chlordane	3.5	U
5103-74-2	gamma-Chlordane	3.5	U
8001-35-2	Toxaphene	350	U
12674-11-2	Aroclor-1016	67	U
11104-28-2	Aroclor-1221	140	U
11141-16-5	Aroclor-1232	67	U
53469-21-9	Aroclor-1242	67	U
12672-29-6	Aroclor-1248	67	U
11097-69-1	Aroclor-1254	67	U
11096-82-5	Aroclor-1260	67	U

1D

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

S6

Lab Name: NYTEST ENV INC Contract: 9118432

Lab Code: NYTEST Case No.: 10186 SAS No.: _____ SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: 1018607

Sample wt/vol: 30.0 (g/mL) G Lab File ID: _____

% Moisture: 55 decanted: (Y/N) N Date Received: 10/25/91

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 10/31/91

Concentrated Extract Volume: 5000 (uL) Date Analyzed: 11/09/91

Injection Volume: 1.00 (uL) Dilution Factor: 1.00

GPC Cleanup: (Y/N) ~~N~~ N pH: 7.0 Sulfur Cleanup: (Y/N) N

JE 11/20/91

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	3.8	U
319-85-7	beta-BHC	3.8	U
319-86-8	delta-BHC	3.8	U
58-89-9	gamma-BHC (Lindane)	3.8	U
76-44-8	Heptachlor	3.8	U
309-00-2	Aldrin	3.8	U
1024-57-3	Heptachlor epoxide	3.8	U
959-98-8	Endosulfan I	3.8	U
60-57-1	Dieldrin	7.3	U
72-55-9	4,4'-DDE	7.3	U
72-20-8	Endrin	7.3	U
33213-65-9	Endosulfan II	7.3	U
72-54-8	4,4'-DDD	7.3	U
1031-07-8	Endosulfan sulfate	7.3	U
50-29-3	4,4'-DDT	7.3	U
72-43-5	Methoxychlor	38	U
53494-70-5	Endrin ketone	7.3	U
53494-70-5	Endrin aldehyde	7.3	U
5103-71-9	alpha-Chlordane	3.8	U
5103-74-2	gamma-Chlordane	3.8	U
8001-35-2	Toxaphene	380	U
12674-11-2	Aroclor-1016	73	U
11104-28-2	Aroclor-1221	150	U
11141-16-5	Aroclor-1232	73	U
53469-21-9	Aroclor-1242	73	U
12672-29-6	Aroclor-1248	73	U
11097-69-1	Aroclor-1254	73	U
11096-82-5	Aroclor-1260	73	U

1D

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

S7

Lab Name: NYTEST ENV INC Contract: 9118432

Lab Code: NYTEST Case No.: 10186 SAS No.: _____ SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: 1018608

Sample wt/vol: 30.0 (g/mL) G Lab File ID: _____

% Moisture: 47 decanted: (Y/N) N Date Received: 10/25/91

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 10/31/91

Concentrated Extract Volume: 5000 (uL) Date Analyzed: 11/09/91

Injection Volume: 1.00 (uL) Dilution Factor: 1.00

GPC Cleanup: (Y/N) N pH: 7.0 Sulfur Cleanup: (Y/N) N

JE 11/29/91

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	3.2	U
319-85-7	beta-BHC	3.2	U
319-86-8	delta-BHC	3.2	U
58-89-9	gamma-BHC (Lindane)	3.2	U
76-44-8	Heptachlor	3.2	U
309-00-2	Aldrin	3.2	U
1024-57-3	Heptachlor epoxide	3.2	U
959-98-8	Endosulfan I	3.2	U
60-57-1	Dieldrin	6.2	U
72-55-9	4,4'-DDE	6.2	U
72-20-8	Endrin	6.2	U
33213-65-9	Endosulfan II	6.2	U
72-54-8	4,4'-DDD	6.2	U
1031-07-8	Endosulfan sulfate	6.2	U
50-29-3	4,4'-DDT	6.2	U
72-43-5	Methoxychlor	32	U
53494-70-5	Endrin ketone	6.2	U
53494-70-5	Endrin aldehyde	6.2	U
5103-71-9	alpha-Chlordane	3.2	U
5103-74-2	gamma-Chlordane	3.2	U
8001-35-2	Toxaphene	320	U
12674-11-2	Aroclor-1016	62	U
11104-28-2	Aroclor-1221	130	U
11141-16-5	Aroclor-1232	62	U
53469-21-9	Aroclor-1242	62	U
12672-29-6	Aroclor-1248	62	U
11097-69-1	Aroclor-1254	62	U
11096-82-5	Aroclor-1260	62	U

1D

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

S8

Lab Name: NYTEST ENV INC Contract: 9118432

Lab Code: NYTEST Case No.: 10186 SAS No.: _____ SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: 1018609

Sample wt/vol: 30.0 (g/mL) G Lab File ID: _____

% Moisture: 49 decanted: (Y/N) N Date Received: 10/25/91

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 10/31/91

Concentrated Extract Volume: 5000 (uL) Date Analyzed: 11/09/91

Injection Volume: 1.00 (uL) Dilution Factor: 1.00

GPC Cleanup: (Y/N) ~~X~~ N pH: 7.0 Sulfur Cleanup: (Y/N) N

JE 11/20/91

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	3.3	U
319-85-7	beta-BHC	3.3	U
319-86-8	delta-BHC	3.3	U
58-89-9	gamma-BHC (Lindane)	3.3	U
76-44-8	Heptachlor	3.3	U
309-00-2	Aldrin	3.3	U
1024-57-3	Heptachlor epoxide	3.3	U
959-98-3	Endosulfan I	3.3	U
60-57-1	Dieldrin	6.5	U
72-55-9	4,4'-DDE	6.5	U
72-20-8	Endrin	6.5	U
33213-65-9	Endosulfan II	6.5	U
72-54-8	4,4'-DDD	6.5	U
1031-07-8	Endosulfan sulfate	6.5	U
50-29-3	4,4'-DDT	6.5	U
72-43-5	Methoxychlor	33	U
53494-70-5	Endrin ketone	6.5	U
53494-70-5	Endrin aldehyde	6.5	U
5103-71-9	alpha-Chlordane	3.3	U
5103-74-2	gamma-Chlordane	3.3	U
8001-35-2	Toxaphene	330	U
12674-11-2	Aroclor-1016	65	U
11104-28-2	Aroclor-1221	130	U
11141-16-5	Aroclor-1232	65	U
53469-21-9	Aroclor-1242	65	U
12672-29-6	Aroclor-1248	65	U
11097-69-1	Aroclor-1254	65	U
11096-82-5	Aroclor-1260	65	U

1D

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

S9

Lab Name: NYTEST ENV INC Contract: 9118432

Lab Code: NYTEST Case No.: 10186 SAS No.: _____ SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: 1018610

Sample wt/vol: 30.0 (g/mL) G Lab File ID: _____

% Moisture: 48 decanted: (Y/N) N Date Received: 10/25/91

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 10/31/91

Concentrated Extract Volume: 5000 (uL) Date Analyzed: 11/09/91

Injection Volume: 1.00 (uL) Dilution Factor: 1.00

GPC Cleanup: (Y/N) N pH: 7.0 Sulfur Cleanup: (Y/N) N

JE 11/20/91

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

CAS NO.	COMPOUND		Q
319-84-6	alpha-BHC	3.3	U
319-85-7	beta-BHC	3.3	U
319-86-8	delta-BHC	3.3	U
58-89-9	gamma-BHC (Lindane)	3.3	U
76-44-8	Heptachlor	3.3	U
309-00-2	Aldrin	3.3	U
1024-57-3	Heptachlor epoxide	3.3	U
959-98-8	Endosulfan I	3.3	U
60-57-1	Dieldrin	6.3	U
72-55-9	4,4'-DDE	6.3	U
72-20-8	Endrin	6.3	U
33213-65-9	Endosulfan II	6.3	U
72-54-8	4,4'-DDD	6.3	U
1031-07-8	Endosulfan sulfate	6.3	U
50-29-3	4,4'-DDT	6.3	U
72-43-5	Methoxychlor	33	U
53494-70-5	Endrin ketone	6.3	U
53494-70-5	Endrin aldehyde	6.3	U
5103-71-9	alpha-Chlordane	3.3	U
5103-74-2	gamma-Chlordane	3.3	U
8001-35-2	Toxaphene	330	U
12674-11-2	Aroclor-1016	63	U
11104-28-2	Aroclor-1221	130	U
11141-16-5	Aroclor-1232	63	U
53469-21-9	Aroclor-1242	63	U
12672-29-6	Aroclor-1248	63	U
11097-69-1	Aroclor-1254	63	U
11096-82-5	Aroclor-1260	63	U

0v102

1D

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

S10

Lab Name: NYTEST ENV INC Contract: 9113432

Lab Code: NYTEST Case No.: 10186 SAS No.: _____ SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: 1018611

Sample wt/vol: 30.0 (g/mL) G Lab File ID: _____

% Moisture: 54 decanted: (Y/N) N Date Received: 10/25/91

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 10/31/91

Concentrated Extract Volume: 5000 (uL) Date Analyzed: 11/09/91

Injection Volume: 1.00 (uL) Dilution Factor: 1.00

GPC Cleanup: (Y/N) X N pH: 7.0 Sulfur Cleanup: (Y/N) N

JE 11/20/91

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	3.7	U
319-85-7	beta-BHC	3.7	U
319-86-8	delta-BHC	3.7	U
58-89-9	gamma-BHC (Lindane)	3.7	U
76-44-8	Heptachlor	3.7	U
309-00-2	Aldrin	3.7	U
1024-57-3	Heptachlor epoxide	3.7	U
959-98-8	Endosulfan I	3.7	U
60-57-1	Dieldrin	7.2	U
72-55-9	4,4'-DDE	7.2	U
72-20-8	Endrin	7.2	U
33213-65-9	Endosulfan II	7.2	U
72-54-8	4,4'-DDD	7.2	U
1031-07-8	Endosulfan sulfate	7.2	U
50-29-3	4,4'-DDT	7.2	U
72-43-5	Methoxychlor	37	U
53494-70-5	Endrin ketone	7.2	U
53494-70-5	Endrin aldehyde	7.2	U
5103-71-9	alpha-Chlordane	3.7	U
5103-74-2	gamma-Chlordane	3.7	U
8001-35-2	Toxaphene	370	U
12674-11-2	Aroclor-1016	72	U
11104-28-2	Aroclor-1221	150	U
11141-16-5	Aroclor-1232	72	U
53469-21-9	Aroclor-1242	72	U
12672-29-6	Aroclor-1248	72	U
11097-69-1	Aroclor-1254	72	U
11096-82-5	Aroclor-1260	72	U

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PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

S11

Lab Name: NYTEST ENV INC Contract: 9118432

Lab Code: NYTEST Case No.: 10186 SAS No.: _____ SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: 1018612

Sample wt/vol: 30.0 (g/mL) G Lab File ID: _____

% Moisture: 51 decanted: (Y/N) N Date Received: 10/25/91

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 10/31/91

Concentrated Extract Volume: 5000 (uL) Date Analyzed: 11/09/91

Injection Volume: 1.00 (uL) Dilution Factor: 1.00

GPC Cleanup: (Y/N) XN JE 11/20/91 pH: 7.0 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	3.5	U
319-85-7	beta-BHC	3.5	U
319-86-8	delta-BHC	3.5	U
58-89-9	gamma-BHC (Lindane)	3.5	U
76-44-8	Heptachlor	3.5	U
309-00-2	Aldrin	3.5	U
1024-57-3	Heptachlor epoxide	3.5	U
959-98-8	Endosulfan I	3.5	U
60-57-1	Dieldrin	6.7	U
72-55-9	4,4'-DDE	6.7	U
72-20-8	Endrin	6.7	U
33213-65-9	Endosulfan II	6.7	U
72-54-8	4,4'-DDD	6.7	U
1031-07-8	Endosulfan sulfate	6.7	U
50-29-3	4,4'-DDT	6.7	U
72-43-5	Methoxychlor	35	U
53494-70-5	Endrin ketone	6.7	U
53494-70-5	Endrin aldehyde	6.7	U
5103-71-9	alpha-Chlordane	3.5	U
5103-74-2	gamma-Chlordane	3.5	U
8001-35-2	Toxaphene	350	U
12674-11-2	Aroclor-1016	67	U
11104-28-2	Aroclor-1221	140	U
11141-16-5	Aroclor-1232	67	U
53469-21-9	Aroclor-1242	67	U
12672-29-6	Aroclor-1248	67	U
11097-69-1	Aroclor-1254	67	U
11096-82-5	Aroclor-1260	67	U

1D

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

S12

Lab Name: NYTEST ENV INC Contract: 9118432

Lab Code: NYTEST Case No.: 10186 SAS No.: _____ SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: 1018613

Sample wt/vol: 30.0 (g/mL) G Lab File ID: _____

% Moisture: 48 decanted: (Y/N) N Date Received: 10/25/91

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 10/31/91

Concentrated Extract Volume: 5000 (uL) Date Analyzed: 11/09/91

Injection Volume: 1.00 (uL) Dilution Factor: 1.00

GPC Cleanup: (Y/N) XN pH: 7.0 Sulfur Cleanup: (Y/N) N

JE 11/20/91

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	3.3	U
319-85-7	beta-BHC	3.3	U
319-86-8	delta-BHC	3.3	U
58-89-9	gamma-BHC (Lindane)	3.3	U
76-44-8	Heptachlor	3.3	U
309-00-2	Aldrin	3.3	U
1024-57-3	Heptachlor epoxide	3.3	U
959-98-8	Endosulfan I	3.3	U
60-57-1	Dieldrin	6.3	U
72-55-9	4,4'-DDE	6.3	U
72-20-8	Endrin	6.3	U
33213-65-9	Endosulfan II	6.3	U
72-54-8	4,4'-DDD	6.3	U
1031-07-8	Endosulfan sulfate	6.3	U
50-29-3	4,4'-DDT	6.3	U
72-43-5	Methoxychlor	33	U
53494-70-5	Endrin ketone	6.3	U
53494-70-5	Endrin aldehyde	6.3	U
5103-71-9	alpha-Chlordane	3.3	U
5103-74-2	gamma-Chlordane	3.3	U
8001-35-2	Toxaphene	330	U
12674-11-2	Aroclor-1016	63	U
11104-28-2	Aroclor-1221	130	U
11141-16-5	Aroclor-1232	63	U
53469-21-9	Aroclor-1242	63	U
12672-29-6	Aroclor-1248	63	U
11097-69-1	Aroclor-1254	63	U
11096-82-5	Aroclor-1260	63	U

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U.S. EPA - CLP

EPA SAMPLE NO.

1

INORGANIC ANALYSIS DATA SHEET

FBLANK

Lab Name: NYTEST ENVIRONMENTAL INC. Contract: 9118432

Lab Code: 73469 Case No.: 10186 SAS No.: SDG No.: SDG450

Matrix (soil/water): WATER Lab Sample ID: 018614

Level (low/med): LOW Date Received: 10/25/91

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	41.8	U		P
7440-36-0	Antimony	22.0	U		P
7440-38-2	Arsenic	5.0	U		F
7440-39-3	Barium	19.0	U		P
7440-41-7	Beryllium	1.7	U		P
7440-43-9	Cadmium	3.5	U		P
7440-70-2	Calcium	933	U		P
7440-47-3	Chromium	5.1	U		P
7440-48-4	Cobalt	8.4	U		P
7440-50-8	Copper	2.5	B		P
7439-89-6	Iron	23.0	U		P
7439-92-1	Lead		U		F
7439-95-4	Magnesium	702	U		P
7439-96-5	Manganese	1.6	U		P
7439-97-6	Mercury	0.20	U		CV
7440-02-0	Nickel	21.9	U		P
7440-09-7	Potassium	965	U		P
7782-49-2	Selenium	5.0	U		F
7440-22-4	Silver	4.6	U		P
7440-23-5	Sodium	1400	U		P
7440-28-0	Thallium	5.0	U	W	F
7440-62-2	Vanadium	6.6	U		P
7440-66-6	Zinc	3.8	U		P
	Cyanide	10.0	U		AS

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:
FIELD BLANK

T64

U.S. EPA - CLP

EPA SAMPLE NO.

1

INORGANIC ANALYSIS DATA SHEET

S-0001

Lab Name: NYTEST ENVIRONMENTAL INC. Contract: 9118432

Lab Code: 73469 Case No.: 10186 SAS No.: SDG No.: SDG450

Matrix (soil/water): SOIL Lab Sample ID: 018601

Level (low/med): LOW Date Received: 10/25/91

% Solids: 85.3

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	16400			P
7440-36-0	Antimony	3.1	B		P
7440-38-2	Arsenic	8.0		N*+	F
7440-39-3	Barium	113			P
7440-41-7	Beryllium	1.2			P
7440-43-9	Cadmium	0.41	U		P
7440-70-2	Calcium	8690			P
7440-47-3	Chromium	24.7		N	P
7440-48-4	Cobalt	13.1			P
7440-50-8	Copper	127		N	P
7439-89-6	Iron	18200		E	P
7439-92-1	Lead	174			P
7439-95-4	Magnesium	4320			P
7439-96-5	Manganese	260			P
7439-97-6	Mercury	0.19		*	CV
7440-02-0	Nickel	27.5			P
7440-09-7	Potassium	2920			P
7782-49-2	Selenium	0.59	U	N	F
7440-22-4	Silver	0.54	U		P
7440-23-5	Sodium	1980			P
7440-28-0	Thallium	0.59	U	W	F
7440-62-2	Vanadium	29.6		N	P
7440-66-6	Zinc	914		E*	P
	Cyanide	3.9		N	AS

Color Before: BROWN Clarity Before: Texture: MEDIUM

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:
S-1
ARSENIC - 1:2 DIL

E : DUE TO HIGH RELATIVE PERCENT DIFFERENCE ON SERIAL DILUTION.

T6

U.S. EPA - CLP

EPA SAMPLE NO.

1

INORGANIC ANALYSIS DATA SHEET

S-0002

Lab Name: NYTEST ENVIRONMENTAL INC. Contract: 9118432

Lab Code: 73469 Case No.: 10186 SAS No.: SDG No.: SDG450

Matrix (soil/water): SOIL Lab Sample ID: 018602

Level (low/med): LOW Date Received: 10/25/91

% Solids: 58.2

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	27700			P
7440-36-0	Antimony	3.8	B		P
7440-38-2	Arsenic	8.9		NS*	F
7440-39-3	Barium	61.4			P
7440-41-7	Beryllium	0.94			P
7440-43-9	Cadmium	0.60	U		P
7440-70-2	Calcium	167000			P
7440-47-3	Chromium	27.1		N	P
7440-48-4	Cobalt	4.4	B		P
7440-50-8	Copper	3.2	B	N	P
7439-89-6	Iron	10700		E	P
7439-92-1	Lead	44.6			P
7439-95-4	Magnesium	13900			P
7439-96-5	Manganese	310			P
7439-97-6	Mercury	0.69		*	CV
7440-02-0	Nickel	4.0	B		P
7440-09-7	Potassium	474	B		P
7782-49-2	Selenium	8.6	U	N	F
7440-22-4	Silver	0.79	U		P
7440-23-5	Sodium	2340			P
7440-28-0	Thallium	0.86	U		F
7440-62-2	Vanadium	38.3		N	P
7440-66-6	Zinc	38.5		E*	P
	Cyanide	337		N	AS

Color Before: GREY Clarity Before: Texture: FINE

Color After: YELLOW Clarity After: CLEAR Artifacts:

Comments:

S-2
ARSENIC - 1:2 DIL, SELENIUM - 1:10 DIL
CYANIDE - 1:80 DIL, CALCIUM - 1:5 DIL
E : DUE TO HIGH RELATIVE PERCENT DIFFERENCE ON SERIAL DILUTION.

T66

U.S. EPA - CLP

EPA SAMPLE NO.

1

INORGANIC ANALYSIS DATA SHEET

S-0003

Lab Name: NYTEST ENVIRONMENTAL INC. Contract: 9118432

Lab Code: 73469 Case No.: 10186 SAS No.: SDG No.: SDG450

Matrix (soil/water): SOIL Lab Sample ID: 018605

Level (low/med): LOW Date Received: 10/25/91

% Solids: 54.8

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	25800			P
7440-36-0	Antimony	4.0	U		P
7440-38-2	Arsenic	3.0		N*	F
7440-39-3	Barium	49.4			P
7440-41-7	Beryllium	0.56	B		P
7440-43-9	Cadmium	0.64	U		P
7440-70-2	Calcium	195000			P
7440-47-3	Chromium	26.1		N	P
7440-48-4	Cobalt	2.4	B		P
7440-50-8	Copper	10.7		N	P
7439-89-6	Iron	9060		E	P
7439-92-1	Lead	32.3			P
7439-95-4	Magnesium	15700			P
7439-96-5	Manganese	269			P
7439-97-6	Mercury	0.36		*	CV
7440-02-0	Nickel	6.6	B		P
7440-09-7	Potassium	176	U		P
7782-49-2	Selenium	9.1	U	NW	F
7440-22-4	Silver	0.84	U		P
7440-23-5	Sodium	3600			P
7440-28-0	Thallium	0.91	U		F
7440-62-2	Vanadium	30.0		N	P
7440-66-6	Zinc	29.4		E*	P
	Cyanide	472		N	AS

Color Before: GREY Clarity Before: Texture: FINE

Color After: YELLOW Clarity After: CLEAR Artifacts:

Comments:

S-3

SELENIUM - 1:10 DIL, CYANIDE - 1:80 DIL

CALCIUM - 1:5 DIL

E : DUE TO HIGH RELATIVE PERCENT DIFFERENCE ON SERIAL DILUTION.

U.S. EPA - CLP

EPA SAMPLE NO.

1

INORGANIC ANALYSIS DATA SHEET

S-0005

Lab Name: NYTEST ENVIRONMENTAL INC. Contract: 9118432

Lab Code: 73469 Case No.: 10186 SAS No.: SDG No.: SDG450

Matrix (soil/water): SOIL Lab Sample ID: 018606

Level (low/med): LOW Date Received: 10/25/91

% Solids: 49.0

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	27200			P
7440-36-0	Antimony	4.5	U		P
7440-38-2	Arsenic	3.5		N*	F
7440-39-3	Barium	59.2			P
7440-41-7	Beryllium	1.0	B		P
7440-43-9	Cadmium	0.71	U		P
7440-70-2	Calcium	208000			P
7440-47-3	Chromium	25.0		N	P
7440-48-4	Cobalt	6.3	B		P
7440-50-8	Copper	15.5		N	P
7439-89-6	Iron	10400		E	P
7439-92-1	Lead	40.9			P
7439-95-4	Magnesium	12300			P
7439-96-5	Manganese	296			P
7439-97-6	Mercury	0.19	U	*	CV
7440-02-0	Nickel	13.3			P
7440-09-7	Potassium	774	B		P
7782-49-2	Selenium	10.0	U	NW	F
7440-22-4	Silver	0.94	U		P
7440-23-5	Sodium	2750			P
7440-28-0	Thallium	1.0	U		F
7440-62-2	Vanadium	30.2		N	P
7440-66-6	Zinc	32.0		E*	P
	Cyanide	768		N	AS

Color Before: GREY Clarity Before: Texture: FINE

Color After: YELLOW Clarity After: CLEAR Artifacts:

Comments:

S-5

SELENIUM - 1:10 DIL, CYANIDE - 1:80 DIL

CALCIUM - 1:5 DIL

E : DUE TO HIGH RELATIVE PERCENT DIFFERENCE ON SERIAL DILUTION.

U.S. EPA - CLP

EPA SAMPLE NO.

1

INORGANIC ANALYSIS DATA SHEET

S-0006

Lab Name: NYTEST ENVIRONMENTAL INC. Contract: 9118432

Lab Code: 73469 Case No.: 10186 SAS No.: SDG No.: SDG450

Matrix (soil/water): SOIL Lab Sample ID: 018607

Level (low/med): LOW Date Received: 10/25/91

% Solids: 45.1

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	21400			P
7440-36-0	Antimony	9.9	B		P
7440-38-2	Arsenic	3.5		N*	F
7440-39-3	Barium	41.1	B		P
7440-41-7	Beryllium	0.81	B		P
7440-43-9	Cadmium	0.78	U		P
7440-70-2	Calcium	219000			P
7440-47-3	Chromium	18.8		N	P
7440-48-4	Cobalt	4.8	B		P
7440-50-8	Copper	0.44	U	N	P
7439-89-6	Iron	8850		E	P
7439-92-1	Lead	28.9			P
7439-95-4	Magnesium	31500			P
7439-96-5	Manganese	281			P
7439-97-6	Mercury	0.22	U	*	CV
7440-02-0	Nickel	4.9	U		P
7440-09-7	Potassium	473	B		P
7782-49-2	Selenium	11.0	U	NW	F
7440-22-4	Silver	1.0	U		P
7440-23-5	Sodium	11300			P
7440-28-0	Thallium	1.1	U		F
7440-62-2	Vanadium	31.5		N	P
7440-66-6	Zinc	15.6		E*	P
	Cyanide	153		N	

Color Before: GREY Clarity Before: Texture: FINE

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

S-6

SELENIUM - 1:10 DIL, CYANIDE - 1:80 DIL

CALCIUM - 1:5 DIL

E : DUE TO HIGH RELATIVE PERCENT DIFFERENCE ON SERIAL DILUTION.

T69

U.S. EPA - CLP

EPA SAMPLE NO.

1

INORGANIC ANALYSIS DATA SHEET

S-0007

Lab Name: NYTEST ENVIRONMENTAL INC. Contract: 9118432

Lab Code: 73469 Case No.: 10186 SAS No.: SDG No.: SDG450

Matrix (soil/water): SOIL Lab Sample ID: 018608

Level (low/med): LOW Date Received: 10/25/91

% Solids: 53.4

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	10400			P
7440-36-0	Antimony	4.1	U		P
7440-38-2	Arsenic	0.94	U	N*	F
7440-39-3	Barium	78.1			P
7440-41-7	Beryllium	0.57	B		P
7440-43-9	Cadmium	0.66	U		P
7440-70-2	Calcium	247000			P
7440-47-3	Chromium	12.9		N	P
7440-48-4	Cobalt	1.6	U		P
7440-50-8	Copper	2.2	B	N	P
7439-89-6	Iron	742		E	P
7439-92-1	Lead	18.3			P
7439-95-4	Magnesium	752	B		P
7439-96-5	Manganese	11.4			P
7439-97-6	Mercury	0.17	U	*	CV
7440-02-0	Nickel	7.2	B		P
7440-09-7	Potassium	348	B		P
7782-49-2	Selenium	9.4	U	NW	F
7440-22-4	Silver	0.86	U		P
7440-23-5	Sodium	2110			P
7440-28-0	Thallium	0.94	U	W	F
7440-62-2	Vanadium	12.3		N	P
7440-66-6	Zinc	3.4	B	E*	P
	Cyanide	9.7		N	AS

Color Before: BLUE Clarity Before: Texture: FINE

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

S-7
SELENIUM - 1:10 DIL, CYANIDE - 1:5 DIL
CALCIUM - 1:5 DIL
E : DUE TO HIGH RELATIVE PERCENT DIFFERENCE ON SERIAL DILUTION.

T70

U.S. EPA - CLP

EPA SAMPLE NO.

1

INORGANIC ANALYSIS DATA SHEET

S-0008

Lab Name: NYTEST ENVIRONMENTAL INC. Contract: 9118432

Lab Code: 73469 Case No.: 10186 SAS No.: SDG No.: SDG450

Matrix (soil/water): SOIL Lab Sample ID: 018609

Level (low/med): LOW Date Received: 10/25/91

% Solids: 51.0

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	4450			P
7440-36-0	Antimony	5.9	B		P
7440-38-2	Arsenic	0.98	U	N*	F
7440-39-3	Barium	45.0			P
7440-41-7	Beryllium	0.36	B		P
7440-43-9	Cadmium	0.69	U		P
7440-70-2	Calcium	194000			P
7440-47-3	Chromium	6.7		N	P
7440-48-4	Cobalt	1.6	U		P
7440-50-8	Copper	0.39	U	N	P
7439-89-6	Iron	1360		E	P
7439-92-1	Lead	10.7		S	F
7439-95-4	Magnesium	1650			P
7439-96-5	Manganese	38.8			P
7439-97-6	Mercury	0.20	U	*	CV
7440-02-0	Nickel	4.3	U		P
7440-09-7	Potassium	189	U		P
7782-49-2	Selenium	9.8	U	NW	F
7440-22-4	Silver	0.90	U		P
7440-23-5	Sodium	5210			P
7440-28-0	Thallium	0.98	U	W	F
7440-62-2	Vanadium	9.9		N	P
7440-66-6	Zinc	0.75	U	E*	P
	Cyanide	403		N	AS

Color Before: BLUE Clarity Before: Texture: FINE

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

S-8
SELENIUM - 1:10 DIL, CYANIDE - 1:5 DIL
CALCIUM - 1:5 DIL
E : DUE TO HIGH RELATIVE PERCENT DIFFERENCE ON SERIAL DILUTION.

U.S. EPA - CLP

EPA SAMPLE NO.

1

INORGANIC ANALYSIS DATA SHEET

S-0009

Lab Name: NYTEST ENVIRONMENTAL INC. Contract: 9118432

Lab Code: 73469 Case No.: 10186 SAS No.: SDG No.: SDG450

Matrix (soil/water): SOIL Lab Sample ID: 018610

Level (low/med): LOW Date Received: 10/25/91

% Solids: 52.4

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	6260			P
7440-36-0	Antimony	4.2	U		P
7440-38-2	Arsenic	0.95	U	N*	F
7440-39-3	Barium	105			P
7440-41-7	Beryllium	0.70	B		P
7440-43-9	Cadmium	0.67	U		P
7440-70-2	Calcium	233000			P
7440-47-3	Chromium	12.0		N	P
7440-48-4	Cobalt	4.0	B		P
7440-50-8	Copper	4.9		N	P
7439-89-6	Iron	3070		E	P
7439-92-1	Lead	21.4			P
7439-95-4	Magnesium	3270			P
7439-96-5	Manganese	53.1			P
7439-97-6	Mercury	0.19	U	*	CV
7440-02-0	Nickel	6.7	B		P
7440-09-7	Potassium	412	B		P
7782-49-2	Selenium	9.5	U	NW	F
7440-22-4	Silver	0.88	U		P
7440-23-5	Sodium	12100			P
7440-28-0	Thallium	0.95	U		F
7440-62-2	Vanadium	17.4		N	P
7440-66-6	Zinc	10.5		E*	P
	Cyanide	972		N	AS

Color Before: BLUE Clarity Before: Texture: FINE

Color After: YELLOW Clarity After: CLEAR Artifacts:

Comments:

S-9

SELENIUM - 1:10 DIL, CYANIDE - 1:5 DIL

CALCIUM - 1:5 DIL

E : DUE TO HIGH RELATIVE PERCENT DIFFERENCE ON SERIAL DILUTION.

U.S. EPA - CLP

EPA SAMPLE NO.

1

INORGANIC ANALYSIS DATA SHEET

S-0010

Lab Name: NYTEST ENVIRONMENTAL INC. Contract: 9118432

Lab Code: 73469 Case No.: 10186 SAS No.: SDG No.: SDG450

Matrix (soil/water): SOIL Lab Sample ID: 018611

Level (low/med): LOW Date Received: 10/25/91

% Solids: 46.3

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	15900			P
7440-36-0	Antimony	8.8	B		P
7440-38-2	Arsenic	2.2		N*	F
7440-39-3	Barium	40.7	B		P
7440-41-7	Beryllium	1.2			P
7440-43-9	Cadmium	0.76	U		P
7440-70-2	Calcium	264000			P
7440-47-3	Chromium	25.1		N	P
7440-48-4	Cobalt	5.5	B		P
7440-50-8	Copper	11.1		N	P
7439-89-6	Iron	5880		E	P
7439-92-1	Lead	25.9			P
7439-95-4	Magnesium	12600			P
7439-96-5	Manganese	253			P
7439-97-6	Mercury	0.22	U	*	CV
7440-02-0	Nickel	6.7	B		P
7440-09-7	Potassium	300	B		P
7782-49-2	Selenium	11.0	U	NW	F
7440-22-4	Silver	0.99	U		P
7440-23-5	Sodium	1740			P
7440-28-0	Thallium	1.1	U	W	F
7440-62-2	Vanadium	31.3		N	P
7440-66-6	Zinc	22.4		E*	P
	Cyanide	1020		N	AS

Color Before: GREY Clarity Before: Texture: FINE

Color After: YELLOW Clarity After: CLEAR Artifacts:

Comments:
S-10
SELENIUM - 1:10 DIL, CYANIDE - 1:500 DIL
CALCIUM - 1:5 DIL
E : DUE TO HIGH RELATIVE PERCENT DIFFERENCE ON SERIAL DILUTION.

U.S. EPA - CLP

1

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

S-0011

Lab Name: NYTEST ENVIRONMENTAL INC. Contract: 9118432

Lab Code: 73469 Case No.: 10186 SAS No.: SDG No.: SDG450

Matrix (soil/water): SOIL Lab Sample ID: 018612

Level (low/med): LOW Date Received: 10/25/91

% Solids: 48.6

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	11700			P
7440-36-0	Antimony	4.5	U		P
7440-38-2	Arsenic	1.2	B	N*	F
7440-39-3	Barium	21.9	B		P
7440-41-7	Beryllium	0.79	B		P
7440-43-9	Cadmium	0.72	U		P
7440-70-2	Calcium	218000			P
7440-47-3	Chromium	16.4		N	P
7440-48-4	Cobalt	2.3	B		P
7440-50-8	Copper	1.5	B	N	P
7439-89-6	Iron	2780		E	P
7439-92-1	Lead	12.6		S	F
7439-95-4	Magnesium	2570			P
7439-96-5	Manganese	55.3			P
7439-97-6	Mercury	0.21	U	*	CV
7440-02-0	Nickel	4.5	U		P
7440-09-7	Potassium	198	U		P
7782-49-2	Selenium	1.0	U	NW	F
7440-22-4	Silver	0.95	U		P
7440-23-5	Sodium	1200			P
7440-28-0	Thallium	1.0	U		F
7440-62-2	Vanadium	19.6		N	P
7440-66-6	Zinc	2.5	B	E*	P
	Cyanide	68.7		N	AS

Color Before: GREY Clarity Before: Texture: FINE

Color After: YELLOW Clarity After: CLEAR Artifacts:

Comments:

S-11

CYANIDE - 1:80 DIL

CALCIUM - 1:5 DIL

E : DUE TO HIGH RELATIVE PERCENT DIFFERENCE ON SERIAL DILUTION.

T74

U.S. EPA - CLP

1

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

S-0012

Lab Name: NYTEST ENVIRONMENTAL INC. Contract: 9118432

Lab Code: 73469 Case No.: 10186 SAS No.: SDG No.: SDG450

Matrix (soil/water): SOIL Lab Sample ID: 018613

Level (low/med): LOW Date Received: 10/25/91

% Solids: 51.6

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	8870			P
7440-36-0	Antimony	4.3	U		P
7440-38-2	Arsenic	1.6	B	N*	F
7440-39-3	Barium	64.5			P
7440-41-7	Beryllium	0.99			P
7440-43-9	Cadmium	0.68	U		P
7440-70-2	Calcium	264000			P
7440-47-3	Chromium	16.7		N	P
7440-48-4	Cobalt	3.3	B		P
7440-50-8	Copper	11.7		N	P
7439-89-6	Iron	3930		E	P
7439-92-1	Lead	30.4			P
7439-95-4	Magnesium	4390			P
7439-96-5	Manganese	97.7			P
7439-97-6	Mercury	0.19	U	*	CV
7440-02-0	Nickel	6.5	B		P
7440-09-7	Potassium	469	B		P
7782-49-2	Selenium	9.7	U	N	F
7440-22-4	Silver	0.89	U		P
7440-23-5	Sodium	11800			P
7440-28-0	Thallium	0.97	U		F
7440-62-2	Vanadium	30.0		N	P
7440-66-6	Zinc	25.9		E*	P
	Cyanide	103		N	AS

Color Before: BROWN Clarity Before: Texture: FINE

Color After: YELLOW Clarity After: CLEAR Artifacts:

Comments:

S-12

SELENIUM - 1:10 DIL, CYANIDE - 1:80 DIL

E : DUE TO HIGH RELATIVE PERCENT DIFFERENCE ON SERIAL DILUTION.

ATTACHMENT U

orm VWX-015 A
4/83

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES

WATER QUALITY MANAGEMENT ELEMENT

GROUND WATER ANALYSIS – MONITORING WELL REPORT

PLEASE TYPE OR PRINT WITH BALLPOINT PEN

FACILITY NAME: American Cyanamid Company - Carteret Landfill

SW ID NO.:

LAB NAME: Environmental Testing and Certification

R	NJPDES NO.	WELL PERMIT NO.	SAMPLE DATE YR. | MO. | DAY	NJ LAB CERT. NO.	WQM USE
1	NJ 0 0 6 1 6 1 1 (2–8)	2 4 1 0 3 8 4 - (9–16)	8 7 0 7 3 1 (17–22)	1 2 2 5 7 (23–27)	(28)

CRT1S

THE SCHEDULE INDICATED BELOW IS TO BE OBSERVED FROM MO. YR. TO MO. YR.

SUBMIT WITH SIGNED T-VWX-014

SAMPLING MONTHS (Jan. Feb. Mar. Apr. May June July Aug. Sept. Oct. Nov. Dec.)	ANALYSIS	UNITS	PARAMETER	VALUE	REMARKS
x x x x x x	Elevation of top of well casing with cap off (as specified in well completion report)	feet MSL: to nearest .01		8.00	
x x x x x x	Elevation of original ground level (as specified in well completion report)	feet MSL: to nearest .01		5.05	
x x x x x x	Depth to water table from top of casing prior to sampling with cap off	feet: to nearest .01	82546	4.80	
x x x x x x	Depth to water table from original ground level prior to sampling	feet: to nearest .01	72019	1.95	
x	Arsenic, Dissolved	UG/L as As	01000		
x	Barium, Dissolved	UG/L as Ba	01005		
x x x x x x	Biochemical Oxygen Demand - 5 Day	MG/L	00310	620	
x	Cadmium, Dissolved	UG/L as Cd	01025		
x x x x x x	Chloride, Dissolved	UG/L as Cl	82295	5830000	
	Chromium, Dissolved	UG/L as Cr	01030		
x	Chromium, Dissolved, Hexavalent	UG/L as Cr	01220		
x x x x x x	Chemical Oxygen Demand (COD), Dissolved	MG/L	00341	1150	
x	Coliform Group	N/100 ML	74056		
x x x x x x	Color	Pt - Co	00080		
x x x x x x	Copper, Dissolved	UG/L as Cu	01040	3.5	K
x	Cyanide, Total	MG/L as CN	00720		
	Endrin, Total	UG/L	39390		
x	Fluoride, Dissolved	MG/L as F	00950		
	Gross Alpha, Dissolved	Pc/L	01503		
	Gross Beta, Dissolved	Pc/L	03503		
x	Hardness, Total as $CaCO_3$	MG/L	00900		
x x x x x x	Iron, Dissolved	UG/L as Fe	01046	113000	
x x x x x x	Lead, Dissolved	UG/L as Pb	01049	0	K
	Lindane, Total	UG/L	39782		
x	Manganese, Dissolved	UG/L	01056		
x	Mercury, Dissolved	UG/L	71890		

VALUE CODING RULES AND
REMARK CODES ON REVERSE

29 33 34 40 41
42 46 47 53 54
55 59 60 66 67
68 72 73 79 80

Form VWX-015 B
4/83

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES
WATER QUALITY MANAGEMENT ELEMENT

GROUND WATER ANALYSIS — MONITORING WELL REPORT

PLEASE TYPE OR PRINT WITH BALLPOINT PEN

FACILITY NAME: American Cyanamid Sanitary Landfill - Carteret

SW ID NO.:

LAB NAME: ENVIRONMENTAL TESTING & CERTIFICATION

	NJPDES NO.	WELL PERMIT NO.	SAMPLE DATE YR. MO. DAY	NJ LAB CERT. NO.	WQM USE
S	NJ 0061611	24-10386--	870731	12257	

CRT-1S

THE SCHEDULE INDICATED BELOW IS TO BE OBSERVED FROM MO. YR. TO MO. YR.

SUBMIT WITH SIGNED T-VWX-014

SAMPLING MONTHS

Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	ANALYSIS	UNITS	PARAMETER	VALUE	REMARKS
												Methoxychlor, Total	UG/L	39480		
X			X			X			X			Methylene Blue Active Substances	MG/L	38260	0.1	
X			X			X			X			Nitrogen, Ammonia, Dissolved $NH_3 + NH_4$ as N	MG/L as N	00608	5.4	
X			X			X			X			Nitrogen, Nitrate, Dissolved	MG/L as N	00618	0.2	
												Odor	T.O.N.	00085		
X			X			X			X			pH	Standard Units	00400	5.89	
X			X			X			X			Phenols, Total Recoverable	UG/L	32730	0.59	
												Radium 226, Dissolved	Pc/L	09503		
												Radium 228, Dissolved	Pc/L	81366		
X												Selenium, Dissolved	UG/L	01145	5	
X												Silver, Dissolved	UG/L	01075	23	
X			X			X			X			Sodium, Dissolved	MG/L	00930	2930	
X			X			X			X			Sulfate, Dissolved (as SO_4)	MG/L	00946	310	
X			X			X			X			Total Dissolved Solids (TDS)	PPM	70300	11900	
X			X			X			X			Total Organic Carbon (TOC)	PPM	00680	329	
X			X			X			X			Total Organic Halogen (TOX)	UG/L	70353	1360	
												Toxaphene	UG/L	39400		
X												Turbidity	NTU	00076		
X			X			X			X			Zinc, Dissolved	UG/L	01090	36	
												2, 4—D, Total	UG/L	39370		
												2, 4, 5—TP, Total	UG/L	39045		

VALUE CODING RULES AND

U2

Form VWX-016
4/83

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES
WATER QUALITY MANAGEMENT ELEMENT

GROUND WATER ANALYSIS – VOLATILE ORGANICS REPORT

PLEASE TYPE OR PRINT WITH BALLPOINT PEN

FACILITY NAME: American Cyanamid Sanitary Landfill - Carteret
SW ID NO.:
LAB NAME: ETC Corp

T | NJPDES NO.: NJ 0 0 6 1 6 1 1 | WELL PERMIT NO.: 2 4 - 1 0 3 8 6 CRT1S | SAMPLE DATE YR. MO. DAY: 8 7 0 7 3 1 | NJ LAB CERT. NO.: 1 2 2 5 7 | WQM USE

THE SCHEDULE INDICATED BELOW IS TO BE OBSERVED FROM MO. YR. TO MO. YR.

SUBMIT WITH SIGNED T-VWX-014

SAMPLING MONTHS (Jan. Feb. Mar. Apr. May June July Aug. Sept. Oct. Nov. Dec.)	ANALYSIS	UNITS	PARAMETER	VALUE
X	Acrylonitrile	UG/L	34215	0
X	Benzene	UG/L	34030	195
X	Bromoform	UG/L	32104	0
X	Carbon Tetrachloride	UG/L	32102	0
X	Chlorobenzene	UG/L	34301	18.2
X	Chlorodibromoethane	UG/L	34306	0
X	Chloroform	UG/L	32106	0
X	1, 1 - Dichloroethane	UG/L	34496	65.5
X	1, 2 - Dichloroethane	UG/L	34531	3.49
X	1, 1 - Dichloroethylene	UG/L	34501	19.0
X	1, 2 - Dichloropropane	UG/L	34541	0
X	Ethylbenzene	UG/L	34371	21.9
X	Methylene Chloride	UG/L	34423	0
X	1, 1, 2, 2 - Tetrachloroethane	UG/L	34516	0
X	Tetrachloroethylene	UG/L	34475	0
X	Toluene	UG/L	34012	2940
X	1, 1, 1 - Trichloroethane	UG/L	34506	18.4
X	1, 1, 2 - Trichloroethane	UG/L	34511	0
X	Trichloroethylene	UG/L	39180	83.5
X	Vinyl Chloride	UG/L	39175	12.3
X	Acrolein	UG/L	34210	0
X	Chloroethane	UG/L	34311	45.1
X	2 - Chloroethylvinyl Ether	UG/L	34576	0
X	Dichlorobromomethane	UG/L	32105	0
X	1, 3 - Dichloropropylene	UG/L	34699	0
X	Methyl Bromide	UG/L	34413	0
X	Methyl Chloride	UG/L	34418	0
X	1, 2 - trans - Dichloroethylene	UG/L	34546	72.6
X	1, 2 Dichlorobenzene	UG/L	34536	0
X	1, 3 Dichlorobenzene	UG/L	34566	0
X	1, 4 Dichlorobenzene	UG/L	34571	0

VALUE CODING RULES AND
REMARK CODES ON REVERSE

U3

Form VWX-015 A
3/8

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES
WATER QUALITY MANAGEMENT ELEMENT

GROUND WATER ANALYSIS – MONITORING WELL REPORT

PLEASE TYPE OR PRINT WITH BALLPOINT PEN

FACILITY NAME: American Cyanamid Company - Carteret Landfill | SW ID NO.:

LAB NAME: Environmental Testing and Certification

	NJPDES NO.	WELL PERMIT NO.	SAMPLE DATE YR. | MO. | DAY	NJ LAB CERT. NO.	WQM USE
	R	NJ 0 0 6 1 6 1 1 1	2 4 | 1 0 3 3 7 -	8 7 0 7 3 1	1 2 2 5 7	
	1	2 – 8	9 – 16	17 – 22	23 – 27	28

CRTID

THE SCHEDULE INDICATED BELOW IS TO BE OBSERVED FROM ___ ___ (MO. YR.) TO ___ ___ (MO. YR.)

SUBMIT WITH SIGNED T-VWX-014

SAMPLING MONTHS												ANALYSIS	UNITS	PARAMETER	VALUE	REMARKS
Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.					
			X			X			X			Elevation of top of well casing with cap off (as specified in well completion report)	feet MSL: to nearest .01		8.16	
X			X			X			X			Elevation of original ground level (as specified in well completion report)	feet MSL: to nearest .01		5.11	
X			X			X			X			Depth to water table from top of casing prior to sampling with cap off	feet: to nearest .01	8 2 5 4 6	4.92	
X			X			X			X			Depth to water table from original ground level prior to sampling	feet: to nearest .01	7 2 0 1 9	1.97	
X												Arsenic, Dissolved	UG/L as As	0 1 0 0 0		
X												Barium, Dissolved	UG/L as Ba	0 1 0 0 5		
X			X			X			X			Biochemical Oxygen Demand - 5 Day	MG/L	0 0 3 1 0	4 4	
X												Cadmium, Dissolved	UG/L as Cd	0 1 0 2 5		
X			X			X			X			Chloride, Dissolved	UG/L as Cl	8 2 2 9 5	9 8 0 0 0 0 0	
												Chromium, Dissolved	UG/L as Cr	0 1 0 3 0		
X												Chromium, Dissolved, Hexavalent	UG/L as Cr	0 1 2 2 0		
X			X			X			X			Chemical Oxygen Demand (COD), Dissolved	MG/L	0 0 3 4 1	1 6 5	
X												Coliform Group	N/100 ML	7 4 0 5 6		
X			X			X			X			Color	Pt - Co	0 0 0 8 0		
X			X			X			X			Copper, Dissolved	UG/L as Cu	0 1 0 4 0	0	K
X												Cyanide, Total	MG/L as CN	0 0 7 2 0		
												Endrin, Total	UG/L	3 9 3 9 0		
X												Fluoride, Dissolved	MG/L as F	0 0 9 5 0		
												Gross Alpha, Dissolved	Pc/L	0 1 5 0 3		
												Gross Beta, Dissolved	Pc/L	0 3 5 0 3		
X												Hardness, Total as $CaCO_3$	MG/L	0 0 9 0 0		
X			X			X			X			Iron, Dissolved	UG/L as Fe	0 1 0 4 6	5 3 4 0 0	
X			X			X			X			Lead, Dissolved	UG/L as Pb	0 1 0 4 9	0	K
												Lindane, Total	UG/L	3 9 7 8 2		
X												Manganese, Dissolved	UG/L	0 1 0 5 6		
X												Mercury, Dissolved	UG/L	7 1 8 9 0		

VALUE CODING RULES AND
REMARK CODES ON REVERSE

29 33 34
42 46 47
55 59 60
68 72 73

U4

Form VWX-015 B
4/83

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES
WATER QUALITY MANAGEMENT ELEMENT

GROUND WATER ANALYSIS – MONITORING WELL REPORT

PLEASE TYPE OR PRINT WITH BALLPOINT PEN

FACILITY NAME: American Cyanamid Sanitary Landfill - Carteret
SW ID NO.:
LAB NAME: ENVIRONMENTAL TESTING & CERTIFICATION

	NJPDES NO.	WELL PERMIT NO.	SAMPLE DATE YR. MO. DAY	NJ LAB CERT. NO.	WQM USE
	S NJ 0006161 (1–8)	24-1033 7-- (9–16)	87 07 31 (17–22)	12257 (23–27)	(28)

CRT ID

THE SCHEDULE INDICATED BELOW IS TO BE OBSERVED FROM MO. YR. TO MO. YR.

SUBMIT WITH SIGNED T-VWX-014

SAMPLING MONTHS (Jan. Feb. Mar. Apr. May June July Aug. Sept. Oct. Nov. Dec.)	ANALYSIS	UNITS	PARAMETER	VALUE	REMARKS
	Methoxychlor, Total	UG/L	39480		
X X X X	Methylene Blue Active Substances	MG/L	38260	0.7	
X X X X	Nitrogen, Ammonia, Dissolved $NH_3 + NH_4$ as N	MG/L as N	00608	0.2	
X X X X	Nitrogen, Nitrate, Dissolved	MG/L as N	00618	0.1	
	Odor	T.O.N.	00085		
X X X X	pH	Standard Units	00400	6.6	0
X X X X	Phenols, Total Recoverable	UG/L	32730		N D
	Radium 226, Dissolved	Pc/L	09503		
	Radium 228, Dissolved	Pc/L	81366		
X	Selenium, Dissolved	UG/L	01145		1 0
X	Silver, Dissolved	UG/L	01075		2 3
X X X X	Sodium, Dissolved	MG/L	00930	21	4 0
X X X X	Sulfate, Dissolved (as SO_4)	MG/L	00946	8	0 0
X X X X	Total Dissolved Solids (TDS)	PPM	70300	216	0 0
X X X X	Total Organic Carbon (TOC)	PPM	00680		2 2
X X X X	Total Organic Halogen (TOX)	UG/L	70353	24	2 0
	Toxaphene	UG/L	39400		
	Turbidity	NTU	00076		
X X X X	Zinc, Dissolved	UG/L	01090		3 7
	2, 4–D, Total	UG/L	39370		
	2, 4, 5–TP, Total	UG/L	39045		

VALUE CODING RULES AND

US

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4/83

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES
WATER QUALITY MANAGEMENT ELEMENT

GROUND WATER ANALYSIS – VOLATILE ORGANICS REPORT

PLEASE TYPE OR PRINT WITH BALLPOINT PEN

FACILITY NAME: American Cyanamid Sanitary Landfill - Carteret
SW ID NO.:
LAB NAME: ETC CORP

	NJPDES NO.	WELL PERMIT NO.	SAMPLE DATE YR. MO. DAY	NJ LAB CERT. NO.	WQM USE
T	NJ 0061611	24-10387-1 CRT1D	87 07 31	12257	

THE SCHEDULE INDICATED BELOW IS TO BE OBSERVED FROM ___ MO. YR. TO ___ MO. YR.

SUBMIT WITH SIGNED T-VWX-014

SAMPLING MONTHS

Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	ANALYSIS	UNITS	PARAMETER	VALUE
X												Acrylonitrile	UG/L	34215	0
X												Benzene	UG/L	34030	0
X												Bromoform	UG/L	32104	0
X												Carbon Tetrachloride	UG/L	32102	0
X												Chlorobenzene	UG/L	34301	0
X												Chlorodibromoethane	UG/L	34306	0
X												Chloroform	UG/L	32106	0
X												1, 1 - Dichloroethane	UG/L	34496	0
X												1, 2 - Dichloroethane	UG/L	34531	0
X												1, 1 - Dichloroethylene	UG/L	34501	0
X												1, 2 - Dichloropropane	UG/L	34541	0
X												Ethylbenzene	UG/L	34371	0
X												Methylene Chloride	UG/L	34423	0
X												1, 1, 2, 2 - Tetrachloroethane	UG/L	34516	0
X												Tetrachloroethylene	UG/L	34475	0
X												Toluene	UG/L	34012	0
X												1, 1, 1 - Trichloroethane	UG/L	34506	0
X												1, 1, 2 - Trichloroethane	UG/L	34511	0
X												Trichloroethylene	UG/L	39180	0
X												Vinyl Chloride	UG/L	39175	0
X												Acrolein	UG/L	34210	0
X												Chloroethane	UG/L	34311	0
X												2 - Chloroethylvinyl Ether	UG/L	34576	0
X												Dichlorobromomethane	UG/L	32105	0
X												1, 3 - Dichloropropylene	UG/L	34699	0
X												Methyl Bromide	UG/L	34413	0
X												Methyl Chloride	UG/L	34418	0
X												1, 2 - trans - Dichloroethylene	UG/L	34546	0
X												1, 2 Dichlorobenzene	UG/L	34536	0
X												1, 3 Dichlorobenzene	UG/L	34566	0
X												1, 4 Dichlorobenzene	UG/L	34571	0

29 33 34 40
42 46 47 53
55 59 60 66
68 72 73 71

VALUE CODING RULES AND
REMARK CODES ON REVERSE

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Form VWX-015 A
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NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES

WATER QUALITY MANAGEMENT ELEMENT

GROUND WATER ANALYSIS – MONITORING WELL REPORT

PLEASE TYPE OR PRINT WITH BALLPOINT PEN

FACILITY NAME: American Cyanamid Company - Carteret Landfill | SW ID NO.:

LAB NAME: Environmental Testing and Certification

NJPDES NO.	WELL PERMIT NO.	SAMPLE DATE YR. | MO. | DAY	NJ LAB CERT. NO.	WQM USE
R NJ 0 0 6 1 6 1 1	2 4 1 0 3 9 8 -	8 7 0 7 3 1	1 2 2 5 7	
1 2 8	9 CRT2S 16	17 22	23 27	28

THE SCHEDULE INDICATED BELOW IS TO BE OBSERVED FROM MO. YR. TO MO. YR.

SUBMIT WITH SIGNED T-VWX-014

SAMPLING MONTHS (Jan. Feb. Mar. Apr. May June July Aug. Sept. Oct. Nov. Dec.)	ANALYSIS	UNITS	PARAMETER	VALUE	REMARKS
X X X X	Elevation of top of well casing with cap off (as specified in well completion report)	feet MSL: to nearest .01		8.86	
X X X X	Elevation of original ground level (as specified in well completion report)	feet MSL: to nearest .01		6.32	
X X X X	Depth to water table from top of casing prior to sampling with cap off	feet: to nearest .01	82546	5.64	
X X X X	Depth to water table from original ground level prior to sampling	feet: to nearest .01	72019	3.10	
X	Arsenic, Dissolved	UG/L as As	01000		
X	Barium, Dissolved	UG/L as Ba	01005		
X X X X	Biochemical Oxygen Demand - 5 Day	MG/L	00310	1.10	
X	Cadmium, Dissolved	UG/L as Cd	01025		
X X X X	Chloride, Dissolved	UG/L as Cl	82295	9460000	
	Chromium, Dissolved	UG/L as Cr	01030		
X	Chromium, Dissolved, Hexavalent	UG/L as Cr	01220		
X X X X	Chemical Oxygen Demand (COD), Dissolved	MG/L	00341	314	
X	Coliform Group	N/100 ML	74056		
X X X X	Color	Pt - Co	00080		
X X X X	Copper, Dissolved	UG/L as Cu	01040	3.1	K
X	Cyanide, Total	MG/L as CN	00720		
	Endrin, Total	UG/L	39390		
X	Fluoride, Dissolved	MG/L as F	00950		
	Gross Alpha, Dissolved	Pc/L	01503		
	Gross Beta, Dissolved	Pc/L	03503		
X	Hardness, Total as $CaCO_3$	MG/L	00900		
X X X X	Iron, Dissolved	UG/L as Fe	01046	640	
X X X X	Lead, Dissolved	UG/L as Pb	01049	0	K
	Lindane, Total	UG/L	39782		
X	Manganese, Dissolved	UG/L	01056		
X	Mercury, Dissolved	UG/L	71890		

VALUE CODING RULES AND
REMARK CODES ON REVERSE

29 33 34 40 41
42 46 47 53 54
55 59 60 66 67
68 72 73 79 80

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4/83

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES
WATER QUALITY MANAGEMENT ELEMENT

GROUND WATER ANALYSIS – MONITORING WELL REPORT

PLEASE TYPE OR PRINT WITH BALLPOINT PEN

FACILITY NAME: American Cyanamid Sanitary Landfill - Carteret
SW ID NO.:
LAB NAME: ENVIRONMENTAL TESTING & CERTIFICATION

S | NJPDES NO.: NJ 0 0 6 1 6 1 1 | WELL PERMIT NO.: 24-10398-1 | SAMPLE DATE YR. MO. DAY: 8 7 0 7 3 1 | NJ LAB CERT. NO.: 12257 | WQM USE:

CRT-25

THE SCHEDULE INDICATED BELOW IS TO BE OBSERVED FROM MO. YR. TO MO. YR.

SUBMIT WITH SIGNED T-VWX-014

SAMPLING MONTHS	ANALYSIS	UNITS	PARAMETER	VALUE	REMARKS
	Methoxychlor, Total	UG/L	39480		
X	Methylene Blue Active Substances	MG/L	38260	0.05	
X	Nitrogen, Ammonia, Dissolved $NH_3 + NH_4$ as N	MG/L as N	00608	1.20	
X	Nitrogen, Nitrate, Dissolved	MG/L as N	00618	10.2	
	Odor	T.O.N.	00085		
X	pH	Standard Units	00400	6.90	
X	Phenols, Total Recoverable	UG/L	32730	0.05	
	Radium 226, Dissolved	Pc/L	09503		
	Radium 228, Dissolved	Pc/L	81366		
X	Selenium, Dissolved	UG/L	01145	5	
X	Silver, Dissolved	UG/L	01075	2.3	
X	Sodium, Dissolved	MG/L	00930	53.70	
X	Sulfate, Dissolved (as SO_4)	MG/L	00946	23.90	
X	Total Dissolved Solids (TDS)	PPM	70300	270.00	
X	Total Organic Carbon (TOC)	PPM	00680	2.1	
X	Total Organic Halogen (TOX)	UG/L	70353	7.70	
	Toxaphene	UG/L	39400		
X	Turbidity	NTU	00076		
X	Zinc, Dissolved	UG/L	01090	1.20	
	2, 4–D, Total	UG/L	39370		
	2, 4, 5–TP, Total	UG/L	39045		

VALUE CODING RULES AND

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4/83

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES
WATER QUALITY MANAGEMENT ELEMENT

GROUND WATER ANALYSIS – VOLATILE ORGANICS REPORT

PLEASE TYPE OR PRINT WITH BALLPOINT PEN

FACILITY NAME: American Cyanamid Sanitary Landfill - Carteret
SW ID NO.:
LAB NAME: ETC CORP

NJPDES NO.: T NJ 0 0 6 1 6 1 1 (1–9)
WELL PERMIT NO.: 2 4 - 1 C 3 2 8 - (9–15) CRT2S
SAMPLE DATE YR. MO. DAY: 8 7 0 7 3 1 (17–22)
NJ LAB CERT. NO.: 1 2 2 5 7 (23–27)
WQM USE: (28)

THE SCHEDULE INDICATED BELOW IS TO BE OBSERVED FROM MO. YR. TO MO. YR.

SUBMIT WITH SIGNED T-VWX-014

SAMPLING MONTHS (Jan Feb Mar Apr May June July Aug Sept Oct Nov Dec)	ANALYSIS	UNITS	PARAMETER	VALUE	
X	Acrylonitrile	UG/L	34215	0	K
X	Benzene	UG/L	34030	0	K
X	Bromoform	UG/L	32104	0	K
X	Carbon Tetrachloride	UG/L	32102	0	K
X	Chlorobenzene	UG/L	34301	0	K
X	Chlorodibromoethane	UG/L	34306	0	K
X	Chloroform	UG/L	32106	0	K
X	1, 1 - Dichloroethane	UG/L	34496	0	F
X	1, 2 - Dichloroethane	UG/L	34531	0	F
X	1, 1 - Dichloroethylene	UG/L	34501	0	F
X	1, 2 - Dichloropropane	UG/L	34541	0	F
X	Ethylbenzene	UG/L	34371	0	F
X	Methylene Chloride	UG/L	34423	6.26	
X	1, 1, 2, 2 - Tetrachloroethane	UG/L	34516	0	F
X	Tetrachloroethylene	UG/L	34475	0	F
X	Toluene	UG/L	34012	0	F
X	1, 1, 1 - Trichloroethane	UG/L	34506	0	F
X	1, 1, 2 - Trichloroethane	UG/L	34511	0	
X	Trichloroethylene	UG/L	39180	0	
X	Vinyl Chloride	UG/L	39175	0	
X	Acrolein	UG/L	34210	0	
X	Chloroethane	UG/L	34311	0	
X	2 - Chloroethylvinyl Ether	UG/L	34576	0	
X	Dichlorobromomethane	UG/L	32105	0	
X	1, 3 - Dichloropropylene	UG/L	34699	0	
X	Methyl Bromide	UG/L	34413	0	
X	Methyl Chloride	UG/L	34418	0	
X	1, 2 - trans - Dichloroethylene	UG/L	34546	0	
X	1, 2 Dichlorobenzene	UG/L	34536	0	
X	1, 3 Dichlorobenzene	UG/L	34566	0	
X	1, 4 Dichlorobenzene	UG/L	34571	0	

VALUE CODING RULES AND
REMARK CODES ON REVERSE

29 33 34 40
42 46 47 53
55 59 60 66
68 72 73 79

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4/83

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES

WATER QUALITY MANAGEMENT ELEMENT

GROUND WATER ANALYSIS – MONITORING WELL REPORT

PLEASE TYPE OR PRINT WITH BALLPOINT PEN

FACILITY NAME: American Cyanamid Company - Carteret Landfill
SW ID NO.:

LAB NAME: Environmental Testing and Certification

NJPDES NO.	WELL PERMIT NO.	SAMPLE DATE YR. | MO. | DAY	NJ LAB CERT. NO.	WQM USE
R NJ 0061611	24-1038-7 CRT2D	87 07 31	12257	

THE SCHEDULE INDICATED BELOW IS TO BE OBSERVED FROM ___ ___ (MO. YR.) TO ___ ___ (MO. YR.)

SUBMIT WITH SIGNED T-VWX-014

SAMPLING MONTHS: Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	ANALYSIS	UNITS	PARAMETER	VALUE	REMARKS
X			X			X			X			Elevation of top of well casing with cap off (as specified in well completion report)	feet MSL: to nearest .01		8.94	
X			X			X			X			Elevation of original ground level (as specified in well completion report)	feet MSL: to nearest .01		6.28	
X			X			X			X			Depth to water table from top of casing prior to sampling with cap off	feet: to nearest .01	82546	5.64	
X			X			X			X			Depth to water table from original ground level prior to sampling	feet: to nearest .01	72019	3.08	
X												Arsenic, Dissolved	UG/L as As	01000		
X												Barium, Dissolved	UG/L as Ba	01005		
X			X			X			X			Biochemical Oxygen Demand - 5 Day	MG/L	00310	10	
X												Cadmium, Dissolved	UG/L as Cd	01025		
X			X			X			X			Chloride, Dissolved	UG/L as Cl	82295	10 1 0 0 0 0	
												Chromium, Dissolved	UG/L as Cr	01030		
X												Chromium, Dissolved, Hexavalent	UG/L as Cr	01220		
X			X			X			X			Chemical Oxygen Demand (COD), Dissolved	MG/L	00341	159	
X												Coliform Group	N/100 ML	74056		
X			X			X			X			Color	Pt - Co	00080		
X			X			X			X			Copper, Dissolved	UG/L as Cu	01040	0	K
X												Cyanide, Total	MG/L as CN	00720		
												Endrin, Total	UG/L	39390		
X												Fluoride, Dissolved	MG/L as F	00950		
												Gross Alpha, Dissolved	Pc/L	01503		
												Gross Beta, Dissolved	Pc/L	03503		
X												Hardness, Total as $CaCO_3$	MG/L	00900		
X			X			X			X			Iron, Dissolved	UG/L as Fe	01046	8000	
X			X			X			X			Lead, Dissolved	UG/L as Pb	01049	0	K
												Lindane, Total	UG/L	39782		
X												Manganese, Dissolved	UG/L	01056		
X												Mercury, Dissolved	UG/L	71890		

VALUE CODING RULES AND
REMARK CODES ON REVERSE

29 33 34 40 41
42 46 47 53 54
55 59 60 66 67
68 72 73 79 80

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4/83

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES
WATER QUALITY MANAGEMENT ELEMENT

GROUND WATER ANALYSIS – MONITORING WELL REPORT

PLEASE TYPE OR PRINT WITH BALLPOINT PEN

FACILITY NAME: American Cyanamid Sanitary Landfill - Carteret
SW ID NO.:
LAB NAME: ENVIRONMENTAL TESTING & CERTIFICATION

S | NJPDES NO.: NJ 0 0 6 1 6 1 1 | WELL PERMIT NO.: 2 4 - 1 0 3 8 9 - | SAMPLE DATE YR. MO. DAY: 8 7 0 7 3 1 | NJ LAB CERT. NO.: 1 2 2 5 7 | WQM USE

CRT-2D

THE SCHEDULE INDICATED BELOW IS TO BE OBSERVED FROM MO. YR. TO MO. YR.

SUBMIT WITH SIGNED T-VWX-014

SAMPLING MONTHS (Jan. Feb. Mar. Apr. May June July Aug. Sept. Oct. Nov. Dec.)	ANALYSIS	UNITS	PARAMETER	VALUE	REMARKS
	Methoxychlor, Total	UG/L	39480		
X X X X	Methylene Blue Active Substances	MG/L	38260	0.05	
X X X X	Nitrogen, Ammonia, Dissolved $NH_3 + NH_4$ as N	MG/L as N	00608	5.0	
X X X X	Nitrogen, Nitrate, Dissolved	MG/L as N	00618	<1	
	Odor	T.O.N.	00085		
X X X X	pH	Standard Units	00400	6.6	
X X X X	Phenols, Total Recoverable	UG/L	32730	0.25	
	Radium 226, Dissolved	Pc/L	09503		
	Radium 228, Dissolved	Pc/L	81366		
X	Selenium, Dissolved	UG/L	01145	5	
X	Silver, Dissolved	UG/L	01075	2.3	
X X X X	Sodium, Dissolved	MG/L	00930	49.0	
X X X X	Sulfate, Dissolved (as SO_4)	MG/L	00946	100.0	
X X X X	Total Dissolved Solids (TDS)	PPM	70300	219.0	
X X X X	Total Organic Carbon (TOC)	PPM	00680	1.2	
X X X X	Total Organic Halogen (TOX)	UG/L	70353	14.6	
	Toxaphene	UG/L	39400		
X	Turbidity	NTU	00076		
X X X	Zinc, Dissolved	UG/L	01090	2.0	
	2, 4–D, Total	UG/L	39370		
	2, 4, 5–TP, Total	UG/L	39045		

VALUE CODING RULES AND

Form VWX-016
4/83

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES
WATER QUALITY MANAGEMENT ELEMENT

GROUND WATER ANALYSIS – VOLATILE ORGANICS REPORT

PLEASE TYPE OR PRINT WITH BALLPOINT PEN

FACILITY NAME: American Cyanamid Sanitary Landfill - Carteret
SW ID NO.:
LAB NAME: ETC CORP

T | NJPDES NO.: NJ 0 0 6 1 6 1 1 | WELL PERMIT NO.: 2 4 - 1 C 3 8 9 - | SAMPLE DATE YR. MO. DAY: 8 7 0 7 3 1 | NJ LAB CERT. NO.: 1 2 3 5 7 | WQM USE

CRT2D

THE SCHEDULE INDICATED BELOW IS TO BE OBSERVED FROM MO. YR. TO MO. YR.

SUBMIT WITH SIGNED T-VWX-014

SAMPLING MONTHS (Jan. Feb. Mar. Apr. May June July Aug. Sept. Oct. Nov. Dec.)	ANALYSIS	UNITS	PARAMETER	VALUE	
X	Acrylonitrile	UG/L	34215	0	K
X	Benzene	UG/L	34030	0	K
X	Bromoform	UG/L	32104	0	K
X	Carbon Tetrachloride	UG/L	32102	0	K
X	Chlorobenzene	UG/L	34301	0	K
X	Chlorodibromoethane	UG/L	34306	0	K
X	Chloroform	UG/L	32106	0	F
X	1, 1 - Dichloroethane	UG/L	34496	0	F
X	1, 2 - Dichloroethane	UG/L	34531	0	J
X	1, 1 - Dichloroethylene	UG/L	34501	0	
X	1, 2 - Dichloropropane	UG/L	34541	0	
X	Ethylbenzene	UG/L	34371	0	
X	Methylene Chloride	UG/L	34423	8.82	
X	1, 1, 2, 2 - Tetrachloroethane	UG/L	34516	0	
X	Tetrachloroethylene	UG/L	34475	0	
X	Toluene	UG/L	34012	0	
X	1, 1, 1 - Trichloroethane	UG/L	34506	0	
X	1, 1, 2 - Trichloroethane	UG/L	34511	0	
X	Trichloroethylene	UG/L	39180	0	
X	Vinyl Chloride	UG/L	39175	0	
X	Acrolein	UG/L	34210	0	
X	Chloroethane	UG/L	34311	0	
X	2 - Chloroethylvinyl Ether	UG/L	34576	0	
X	Dichlorobromomethane	UG/L	32105	0	
X	1, 3 - Dichloropropylene	UG/L	34699	0	
X	Methyl Bromide	UG/L	34413	0	
X	Methyl Chloride	UG/L	34418	0	
X	1, 2 - trans - Dichloroethylene	UG/L	34546	0	
X	1, 2 Dichlorobenzene	UG/L	34536	0	
X	1, 3 Dichlorobenzene	UG/L	34566	0	
X	1, 4 Dichlorobenzene	UG/L	34571	0	

VALUE CODING RULES AND REMARK CODES ON REVERSE

29 42 55 68 | 33 34 46 47 59 60 72 73

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Form VWX-015 A
4/83

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES

WATER QUALITY MANAGEMENT ELEMENT

GROUND WATER ANALYSIS – MONITORING WELL REPORT

PLEASE TYPE OR PRINT WITH BALLPOINT PEN

FACILITY NAME: American Cyanamid Company - Carteret Landfill | SW ID NO.:

LAB NAME: Environmental Testing and Certification

NJPDES NO.	WELL PERMIT NO.	SAMPLE DATE YR. | MO. | DAY	NJ LAB CERT. NO.	WQM USE
R NJ 0 0 6 1 6 1 1	2 4 / C 3 7 C	8 7 0 7 3 1	1 2 2 5 7	
1 2–8	9 CRT3S 16	17 22	23 27	28

THE SCHEDULE INDICATED BELOW IS TO BE OBSERVED FROM ___ (MO. YR.) TO ___ (MO. YR.)

SUBMIT WITH SIGNED T-VWX-014

SAMPLING MONTHS: Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	ANALYSIS	UNITS	PARAMETER	VALUE	REMARKS
X			X			X			X			Elevation of top of well casing with cap off (as specified in well completion report)	feet MSL: to nearest .01		12.73	
X			X			X			X			Elevation of original ground level (as specified in well completion report)	feet MSL: to nearest .01		9.33	
X			X			X			X			Depth to water table from top of casing prior to sampling with cap off	feet: to nearest .01	82546	9.40	
X			X			X			X			Depth to water table from original ground level prior to sampling	feet: to nearest .01	72019	5.00	
X												Arsenic, Dissolved	UG/L as As	01000		
X												Barium, Dissolved	UG/L as Ba	01005		
X			X			X			X			Biochemical Oxygen Demand - 5 Day	MG/L	00310	2.9 | 0	
X												Cadmium, Dissolved	UG/L as Cd	01025		
X			X			X			X			Chloride, Dissolved	UG/L as Cl	82295	11800 | 00	
												Chromium, Dissolved	UG/L as Cr	01030		
X												Chromium, Dissolved, Hexavalent	UG/L as Cr	01220		
X			X			X			X			Chemical Oxygen Demand (COD), Dissolved	MG/L	00341	40 | 0	
X												Coliform Group	N/100 ML	74058		
X			X			X			X			Color	Pt - Co	00080		
X			X			X			X			Copper, Dissolved	UG/L as Cu	01040	2 | .3	K
X												Cyanide, Total	MG/L as CN	00720		
												Endrin, Total	UG/L	39390		
X												Fluoride, Dissolved	MG/L as F	00950		
												Gross Alpha, Dissolved	Pc/L	01503		
												Gross Beta, Dissolved	Pc/L	03503		
X												Hardness, Total as $CaCO_3$	MG/L	00900		
X			X			X			X			Iron, Dissolved	UG/L as Fe	01046	20 | 0	K
X			X			X			X			Lead, Dissolved	UG/L as Pb	01049	.0	K
												Lindane, Total	UG/L	39782		
X												Manganese, Dissolved	UG/L	01056		
X												Mercury, Dissolved	UG/L	71890		

VALUE CODING RULES AND REMARK CODES ON REVERSE

29 33 34 40 41
42 46 47 53 54
55 59 60 66 67
68 72 73 79 80

U13

Form VWX-015 B
4/83

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES
WATER QUALITY MANAGEMENT ELEMENT

GROUND WATER ANALYSIS – MONITORING WELL REPORT

PLEASE TYPE OR PRINT WITH BALLPOINT PEN

FACILITY NAME: American Cyanamid Sanitary Landfill - Carteret
SW ID NO.:
LAB NAME: ENVIRONMENTAL TESTING & CERTIFICATION

S | NJPDES NO.: NJ 0 0 6 4 1 6 1 1 | WELL PERMIT NO.: 2 4 - 1 0 3 9 0 - | SAMPLE DATE YR. MO. DAY: 8 7 0 7 3 1 | NJ LAB CERT. NO.: 1 2 2 5 7 | WQM USE

CRT - 35

THE SCHEDULE INDICATED BELOW IS TO BE OBSERVED FROM MO. YR. TO MO. YR.

SUBMIT WITH SIGNED T-VWX-014

SAMPLING MONTHS	ANALYSIS	UNITS	PARAMETER	VALUE	REMARKS
	Methoxychlor, Total	UG/L	39480		
X	Methylene Blue Active Substances	MG/L	38260	0.05	
X	Nitrogen, Ammonia, Dissolved $NH_3 + NH_4$ as N	MG/L as N	00608	1.6	
X	Nitrogen, Nitrate Dissolved	MG/L as N	00618	0.1	
	Odor	T.O.N.	00085		
X	pH	Standard Units	00400	6.6 3	
X	Phenols, Total Recoverable	UG/L	32730	0.5	
	Radium 226, Dissolved	Pc/L	09503		
	Radium 228, Dissolved	Pc/L	81366		
X	Selenium, Dissolved	UG/L	01145	5	
X	Silver, Dissolved	UG/L	01075	2.3	
X	Sodium, Dissolved	MG/L	00930		
X	Sulfate, Dissolved (as SO_4)	MG/L	00946	11.0	
X	Total Dissolved Solids (TDS)	PPM	70300	209.0	
X	Total Organic Carbon (TOC)	PPM	00680	6.9	
X	Total Organic Halogen (TOX)	UG/L	70353	25.10	
	Toxaphene	UG/L	39400		
X	Turbidity	NTU	00076		
X	Zinc, Dissolved	UG/L	01090	25	
	2, 4–D, Total	UG/L	39370		
	2, 4, 5–TP, Total	UG/L	39045		

VALUE CODING RULES AND

Form VWX-016
4/83

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES
WATER QUALITY MANAGEMENT ELEMENT

GROUND WATER ANALYSIS – VOLATILE ORGANICS REPORT

PLEASE TYPE OR PRINT WITH BALLPOINT PEN

FACILITY NAME: American Cyanamid Sanitary Landfill - Carteret
SW ID NO.:
LAB NAME: ETC CORP

T | NJPDES NO.: NJ 0 0 6 1 6 1 1 | WELL PERMIT NO.: 2 4 - 1 0 3 7 0 - CRT3S | SAMPLE DATE YR. 8 7 MO. 0 7 DAY 3 1 | NJ LAB CERT. NO.: 1 2 2 5 7 | WQM USE

THE SCHEDULE INDICATED BELOW IS TO BE OBSERVED FROM MO. YR. TO MO. YR.

SUBMIT WITH SIGNED T-VWX-014

Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	ANALYSIS	UNITS	PARAMETER	VALUE	
X												Acrylonitrile	UG/L	34215	0	K
X												Benzene	UG/L	34030	0	K
X												Bromoform	UG/L	32104	0	K
X												Carbon Tetrachloride	UG/L	32102	0	K
X												Chlorobenzene	UG/L	34301	0	K
X												Chlorodibromoethane	UG/L	34306	0	K
X												Chloroform	UG/L	32106	0	K
X												1, 1 - Dichloroethane	UG/L	34496	0	K
X												1, 2 - Dichloroethane	UG/L	34531	0	K
X												1, 1 - Dichloroethylene	UG/L	34501	0	K
X												1, 2 - Dichloropropane	UG/L	34541	0	K
X												Ethylbenzene	UG/L	34371	0	K
X												Methylene Chloride	UG/L	34423	4.04	
X												1, 1, 2, 2 - Tetrachloroethane	UG/L	34516	0	K
X												Tetrachloroethylene	UG/L	34475	0	K
X												Toluene	UG/L	34012	0	K
X												1, 1, 1 - Trichloroethane	UG/L	34506	0	K
X												1, 1, 2 - Trichloroethane	UG/L	34511	0	K
X												Trichloroethylene	UG/L	39180	0	K
X												Vinyl Chloride	UG/L	39175	0	K
X												Acrolein	UG/L	34210	0	K
X												Chloroethane	UG/L	34311	0	K
X												2 - Chloroethylvinyl Ether	UG/L	34576	0	K
X												Dichlorobromomethane	UG/L	32105	0	K
X												1, 3 - Dichloropropylene	UG/L	34699	0	F
X												Methyl Bromide	UG/L	34413	0	F
X												Methyl Chloride	UG/L	34418	0	F
X												1, 2 - trans - Dichloroethylene	UG/L	34546	0	F
X												1, 2 Dichlorobenzene	UG/L	34536	0	F
X												1, 3 Dichlorobenzene	UG/L	34566	0	F
X												1, 4 Dichlorobenzene	UG/L	34571	0	F

VALUE CODING RULES AND REMARK CODES ON REVERSE

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Form VWX-015 A
4/83

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES

WATER QUALITY MANAGEMENT ELEMENT

GROUND WATER ANALYSIS – MONITORING WELL REPORT

PLEASE TYPE OR PRINT WITH BALLPOINT PEN

FACILITY NAME: American Cyanamid Company - Carteret Landfill
SW ID NO.:

LAB NAME: Environmental Testing and Certification

R	NJPDES NO.	WELL PERMIT NO.	SAMPLE DATE YR. | MO. | DAY	NJ LAB CERT. NO.	WQM USE
1	NJ 0061611 (2–8)	24 19391 - (9–16)	87 07 31 (17–22)	12257 (23–27)	(28)

CRT3D

THE SCHEDULE INDICATED BELOW IS TO BE OBSERVED FROM [ ][ ] MO. [ ][ ] YR. TO [ ][ ] MO. [ ][ ] YR.

SUBMIT WITH SIGNED T-VWX-014

Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	ANALYSIS	UNITS	PARAMETER	VALUE	REMARKS
X			X			X			X			Elevation of top of well casing with cap off (as specified in well completion report)	feet MSL: to nearest .01		12.38	
X			X			X			X			Elevation of original ground level (as specified in well completion report)	feet MSL: to nearest .01		9.77	
X			X			X			X			Depth to water table from top of casing prior to sampling with cap off	feet: to nearest .01	82546	37.05	
X			X			X			X			Depth to water table from original ground level prior to sampling	feet: to nearest .01	72019	33.94	
X												Arsenic, Dissolved	UG/L as As	01000		
X												Barium, Dissolved	UG/L as Ba	01005		
X			X			X			X			Biochemical Oxygen Demand - 5 Day	MG/L	00310	19 8	
X												Cadmium, Dissolved	UG/L as Cd	01025		
X			X			X			X			Chloride, Dissolved	UG/L as Cl	82295	77500000	
												Chromium, Dissolved	UG/L as Cr	01030		
X												Chromium, Dissolved, Hexavalent	UG/L as Cr	01220		
X			X			X			X			Chemical Oxygen Demand (COD), Dissolved	MG/L	00341	26 14	
X												Coliform Group	N/100 ML	74056		
X			X			X			X			Color	Pt - Co	00080		
X			X			X			X			Copper, Dissolved	UG/L as Cu	01040	61.18	K
X												Cyanide, Total	MG/L as CN	00720		
												Endrin, Total	UG/L	39390		
X												Fluoride, Dissolved	MG/L as F	00950		
												Gross Alpha, Dissolved	Pc/L	01503		
												Gross Beta, Dissolved	Pc/L	03503		
X												Hardness, Total as $CaCO_3$	MG/L	00900		
X			X			X			X			Iron, Dissolved	UG/L as Fe	01046	1400	
X			X			X			X			Lead, Dissolved	UG/L as Pb	01049	0	K
												Lindane, Total	UG/L	39782		
X												Manganese, Dissolved	UG/L	01056		
X												Mercury, Dissolved	UG/L	71890		

VALUE CODING RULES AND
REMARK CODES ON REVERSE

29 33 34 40 41
42 46 47 53 54
55 59 60 66 67
68 72 73 79 80

U16

Form VWX-015 B
4/83

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES
WATER QUALITY MANAGEMENT ELEMENT

GROUND WATER ANALYSIS – MONITORING WELL REPORT

PLEASE TYPE OR PRINT WITH BALLPOINT PEN

FACILITY NAME: American Cyanamid Sanitary Landfill - Carteret
SW ID NO.:

LAB NAME: ENVIRONMENTAL TESTING & CERTIFICATION

S | NJPDES NO.: NJ 0 0 6 1 6 1 1 (1–8) | WELL PERMIT NO.: 2 4 - 1 0 3 9 1 - (9–16) | SAMPLE DATE YR. MO. DAY: 8 7 0 7 3 1 (17–22) | NJ LAB CERT. NO.: 1 2 2 5 7 (23–27) | WQM USE (25)

CRT-3D

THE SCHEDULE INDICATED BELOW IS TO BE OBSERVED FROM MO. YR. TO MO. YR.

SUBMIT WITH SIGNED T-VWX-014

SAMPLING MONTHS (Jan Feb Mar Apr May June July Aug Sept Oct Nov Dec)	ANALYSIS	UNITS	PARAMETER	VALUE	REMARKS
	Methoxychlor, Total	UG/L	39480		
X X X X	Methylene Blue Active Substances	MG/L	38260		
X X X X	Nitrogen, Ammonia, Dissolved $NH_3 + NH_4$ as N	MG/L as N	00608		
X X X X	Nitrogen, Nitrate, Dissolved	MG/L as N	00618	.01	
	Odor	T.O.N.	00085		
X X X X	pH	Standard Units	00400	6.30	
X X X X	Phenols, Total Recoverable	UG/L	32730		
	Radium 226, Dissolved	Pc/L	09503		
	Radium 228, Dissolved	Pc/L	81366		
X	Selenium, Dissolved	UG/L	01145	5	
X	Silver, Dissolved	UG/L	01075	23	
X X X X	Sodium, Dissolved	MG/L	00930	3550	
X X X X	Sulfate, Dissolved (as SO_4)	MG/L	00946		
X X X X	Total Dissolved Solids (TDS)	PPM	70300		
X X X X	Total Organic Carbon (TOC)	PPM	00680		
X X X X	Total Organic Halogen (TOX)	UG/L	70353		
	Toxaphene	UG/L	39400		
X	Turbidity	NTU	00076		
X X X X	Zinc, Dissolved	UG/L	01090		
	2, 4–D, Total	UG/L	39370		
	2, 4, 5–TP, Total	UG/L	39045		

VALUE CODING RULES AND

U17

Form VWX-016
4/83

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES
WATER QUALITY MANAGEMENT ELEMENT

GROUND WATER ANALYSIS – VOLATILE ORGANICS REPORT

PLEASE TYPE OR PRINT WITH BALLPOINT PEN

FACILITY NAME: American Cyanamid Sanitary Landfill - Carteret
SW ID NO.:

LAB NAME: ETC CORP

T | NJPDES NO.: NJ 0 0 6 1 6 1 1 | WELL PERMIT NO.: 2 4 - 1 0 3 9 1 - | SAMPLE DATE YR. MO. DAY: 8 7 0 7 3 1 | NJ LAB CERT. NO.: 1 2 2 5 7 | WQM USE

CRT3D

THE SCHEDULE INDICATED BELOW IS TO BE OBSERVED FROM ___ ___ (MO. YR.) TO ___ ___ (MO. YR.)

SUBMIT WITH SIGNED T-VWX-014

SAMPLING MONTHS: Jan. Feb. Mar. Apr. May June July Aug. Sept. Oct. Nov. Dec.

Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	ANALYSIS	UNITS	PARAMETER	VALUE	
X												Acrylonitrile	UG/L	34215	0	K
X												Benzene	UG/L	34030	0	K
X												Bromoform	UG/L	32104	0	K
X												Carbon Tetrachloride	UG/L	32102	0	K
X												Chlorobenzene	UG/L	34301	0	K
X												Chlorodibromoethane	UG/L	34306	0	K
X												Chloroform	UG/L	32106	0	
X												1, 1 - Dichloroethane	UG/L	34496	0	
X												1, 2 - Dichloroethane	UG/L	34531	0	
X												1, 1 - Dichloroethylene	UG/L	34501	0	
X												1, 2 - Dichloropropane	UG/L	34541	0	
X												Ethylbenzene	UG/L	34371	0	
X												Methylene Chloride	UG/L	34423	0	
X												1, 1, 2, 2 - Tetrachloroethane	UG/L	34516	0	
X												Tetrachloroethylene	UG/L	34475	0	
X												Toluene	UG/L	34012	0	
X												1, 1, 1 - Trichloroethane	UG/L	34506	0	
X												1, 1, 2 - Trichloroethane	UG/L	34511	0	
X												Trichloroethylene	UG/L	39180	0	
X												Vinyl Chloride	UG/L	39175	0	
X												Acrolein	UG/L	34210	0	
X												Chloroethane	UG/L	34311	0	
X												2 - Chloroethylvinyl Ether	UG/L	34576	0	
X												Dichlorobromomethane	UG/L	32105	0	
X												1, 3 - Dichloropropylene	UG/L	34699	0	
X												Methyl Bromide	UG/L	34413	0	
X												Methyl Chloride	UG/L	34418	0	
X												1, 2 - trans - Dichloroethylene	UG/L	34546	0	
X												1, 2 Dichlorobenzene	UG/L	34536	0	
X												1, 3 Dichlorobenzene	UG/L	34566	0	
X												1, 4 Dichlorobenzene	UG/L	34571	0	

VALUE CODING RULES AND
REMARK CODES ON REVERSE

U18

Form VWX-015 A
4/83

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES

WATER QUALITY MANAGEMENT ELEMENT

GROUND WATER ANALYSIS – MONITORING WELL REPORT

PLEASE TYPE OR PRINT WITH BALLPOINT PEN

FACILITY NAME: American Cyanamid Company - Carteret Landfill
SW ID NO.:

LAB NAME: Environmental Testing and Certification

R	NJPDES NO.	WELL PERMIT NO.	SAMPLE DATE YR. MO. DAY	NJ LAB CERT. NO.	WQM USE
1	NJ 0 0 6 1 6 1 1 (2–8)	2 4 1 3 7 2 – (9–16) CRT4S	8 7 0 7 3 1 (17–22)	1 2 2 5 7 (23–27)	(28)

THE SCHEDULE INDICATED BELOW IS TO BE OBSERVED FROM MO. YR. TO MO. YR.

SUBMIT WITH SIGNED T-VWX-014

SAMPLING MONTHS (Jan. Feb. Mar. Apr. May June July Aug. Sept. Oct. Nov. Dec.)	ANALYSIS	UNITS	PARAMETER	VALUE	REMARKS
x x x x	Elevation of top of well casing with cap off (as specified in well completion report)	feet MSL: to nearest .01		13.65	
x x x x	Elevation of original ground level (as specified in well completion report)	feet MSL: to nearest .01		10.38	
x x x x	Depth to water table from top of casing prior to sampling with cap off	feet: to nearest .01	82546	10.22	
x x x x	Depth to water table from original ground level prior to sampling	feet: to nearest .01	72019	6.95	
x	Arsenic, Dissolved	UG/L as As	01000		
x	Barium, Dissolved	UG/L as Ba	01005		
x x x x	Biochemical Oxygen Demand - 5 Day	MG/L	00310	18 7	
x	Cadmium, Dissolved	UG/L as Cd	01025		
x x x x	Chloride, Dissolved	UG/L as Cl	82295	16300000	
	Chromium, Dissolved	UG/L as Cr	01030		
x	Chromium, Dissolved, Hexavalent	UG/L as Cr	01220		
x x x x	Chemical Oxygen Demand (COD), Dissolved	MG/L	00341	48	
x	Coliform Group	N/100 ML	74056		
x x x x	Color	Pt - Co	00080		
x x x x	Copper, Dissolved	UG/L as Cu	01040	3.1	K
x	Cyanide, Total	MG/L as CN	00720		
	Endrin, Total	UG/L	39390		
x	Fluoride, Dissolved	MG/L as F	00950		
	Gross Alpha, Dissolved	Pc/L	01503		
	Gross Beta, Dissolved	Pc/L	03503		
x	Hardness, Total as $CaCO_3$	MG/L	00900		
x x x x	Iron, Dissolved	UG/L as Fe	01046	14000	
x x x x	Lead, Dissolved	UG/L as Pb	01049	0	K
	Lindane, Total	UG/L	39782		
x	Manganese, Dissolved	UG/L	01056		
x	Mercury, Dissolved	UG/L	71890		

VALUE CODING RULES AND
REMARK CODES ON REVERSE

29 33 34 40 41
42 46 47 53 54
55 59 60 66 67
68 72 73 79 80

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Form VWX-015 B
4/83

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES
WATER QUALITY MANAGEMENT ELEMENT

GROUND WATER ANALYSIS – MONITORING WELL REPORT

PLEASE TYPE OR PRINT WITH BALLPOINT PEN

FACILITY NAME: American Cyanamid Sanitary Landfill - Carteret
SW ID NO.:
LAB NAME: ENVIRONMENTAL TESTING & CERTIFICATION

S	NJPDES NO.	WELL PERMIT NO.	SAMPLE DATE YR. MO. DAY	NJ LAB CERT. NO.	WQM USE
1	NJ 0 0 6 1 6 1 1 (2–8)	2 4 - 1 0 3 9 2 - (9–15)	8 7 0 7 3 1 (17–22)	1 2 2 5 7 (23–27)	(28)

CRT-45

THE SCHEDULE INDICATED BELOW IS TO BE OBSERVED FROM ___ ___ (MO. YR.) TO ___ ___ (MO. YR.)

SUBMIT WITH SIGNED T-VWX-014

SAMPLING MONTHS (Jan Feb Mar Apr May June July Aug Sept Oct Nov Dec)	ANALYSIS	UNITS	PARAMETER	VALUE	REMARKS
	Methoxychlor, Total	UG/L	39480		
X X X X	Methylene Blue Active Substances	MG/L	38260	0.05	
X X X X	Nitrogen, Ammonia, Dissolved $NH_3 + NH_4$ as N	MG/L as N	00608	4.0	
X X X X	Nitrogen, Nitrate Dissolved	MG/L as N	00618	0.12	
	Odor	T.O.N.	00085		
X X X X	pH	Standard Units	00400	8.72	
X X X X	Phenols, Total Recoverable	UG/L	32730	1 N.D	
	Radium 226, Dissolved	Pc/L	09503		
	Radium 228, Dissolved	Pc/L	81366		
X	Selenium, Dissolved	UG/L	01145	1.0	
X	Silver, Dissolved	UG/L	01075	2.3	
X X X X	Sodium, Dissolved	MG/L	00930	8200	
X X X X	Sulfate, Dissolved (as SO_4)	MG/L	00946	312.0	
X X X X	Total Dissolved Solids (TDS)	PPM	70300	2810.0	
X X X X	Total Organic Carbon (TOC)	PPM	00680	1.1 9	
X X X X	Total Organic Halogen (TOX)	UG/L	70353	140.0	
	Toxaphene	UG/L	39400		
X	Turbidity	NTU	00076		
X X X X	Zinc, Dissolved	UG/L	01090	2.0	
	2, 4–D, Total	UG/L	39370		
	2, 4, 5–TP, Total	UG/L	39045		

VALUE CODING RULES AND REMARK CODES ON REVERSE

U 20

Form VWX-016
4/83

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES
WATER QUALITY MANAGEMENT ELEMENT

GROUND WATER ANALYSIS – VOLATILE ORGANICS REPORT

PLEASE TYPE OR PRINT WITH BALLPOINT PEN

FACILITY NAME: American Cyanamid Sanitary Landfill - Carteret
SW ID NO.:
LAB NAME: ETC CORP

T (1) NJPDES NO.: NJ 0 0 6 1 6 1 1 (2–8)
WELL PERMIT NO. (9–16): 2 4 - 1 0 3 9 2 -
CRT4S
SAMPLE DATE (17–22) YR. | MO. | DAY: 8 7 | 0 7 | 3 1
NJ LAB CERT. NO. (23–27): 1 2 2 5 7
WQM USE (28):

THE SCHEDULE INDICATED BELOW IS TO BE OBSERVED FROM ___ ___ (MO. YR.) TO ___ ___ (MO. YR.)

SUBMIT WITH SIGNED T-VWX-014

SAMPLING MONTHS (Jan. Feb. Mar. Apr. May June July Aug. Sept. Oct. Nov. Dec.)	ANALYSIS	UNITS	PARAMETER	VALUE	
X	Acrylonitrile	UG/L	34215	0	K
X	Benzene	UG/L	34030	1.77	K
X	Bromoform	UG/L	32104	0	K
X	Carbon Tetrachloride	UG/L	32102	0	K
X	Chlorobenzene	UG/L	34301	0	K
X	Chlorodibromoethane	UG/L	34306	0	K
X	Chloroform	UG/L	32106	0	K
X	1, 1 - Dichloroethane	UG/L	34496	0	K
X	1, 2 - Dichloroethane	UG/L	34531	0	K
X	1, 1 - Dichloroethylene	UG/L	34501	0	K
X	1, 2 - Dichloropropane	UG/L	34541	0	K
X	Ethylbenzene	UG/L	34371	0	K
X	Methylene Chloride	UG/L	34423	4.13	
X	1, 1, 2, 2 - Tetrachloroethane	UG/L	34516	0	K
X	Tetrachloroethylene	UG/L	34475	0	K
X	Toluene	UG/L	34012	0	K
X	1, 1, 1 - Trichloroethane	UG/L	34506	0	K
X	1, 1, 2 - Trichloroethane	UG/L	34511	0	K
X	Trichloroethylene	UG/L	39180	0	K
X	Vinyl Chloride	UG/L	39175	0	K
X	Acrolein	UG/L	34210	0	K
X	Chloroethane	UG/L	34311	0	K
X	2 - Chloroethylvinyl Ether	UG/L	34576	0	K
X	Dichlorobromomethane	UG/L	32105	0	K
X	1, 3 - Dichloropropylene	UG/L	34699	0	K
X	Methyl Bromide	UG/L	34413	0	K
X	Methyl Chloride	UG/L	34418	0	K
X	1, 2 - trans - Dichloroethylene	UG/L	34546	0	K
X	1, 2 Dichlorobenzene	UG/L	34536	0	K
X	1, 3 Dichlorobenzene	UG/L	34566	0	
X	1, 4 Dichlorobenzene	UG/L	34571	0	

VALUE CODING RULES AND
REMARK CODES ON REVERSE

U21

Form VWX-015 A
4/83

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES

WATER QUALITY MANAGEMENT ELEMENT

GROUND WATER ANALYSIS – MONITORING WELL REPORT

PLEASE TYPE OR PRINT WITH BALLPOINT PEN

FACILITY NAME: American Cyanamid Company - Carteret Landfill
SW ID NO.:

LAB NAME: Environmental Testing and Certification

NJPDES NO.	WELL PERMIT NO.	SAMPLE DATE YR. | MO. | DAY	NJ LAB CERT. NO.	WQM USE
R NJ 0061611	24 1037 3 - CRT4D	87 07 31	12257	

THE SCHEDULE INDICATED BELOW IS TO BE OBSERVED FROM ____ (MO. YR.) TO ____ (MO. YR.)

SUBMIT WITH SIGNED T-VWX-014

Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	ANALYSIS	UNITS	PARAMETER	VALUE	REMARKS
X			X			X			X			Elevation of top of well casing with cap off (as specified in well completion report)	feet MSL: to nearest .01		12.65	
X			X			X			X			Elevation of original ground level (as specified in well completion report)	feet MSL: to nearest .01		10.07	
X			X			X			X			Depth to water table from top of casing prior to sampling with cap off	feet: to nearest .01	82546	11.05	
X			X			X			X			Depth to water table from original ground level prior to sampling	feet: to nearest .01	72019	8.47	
X												Arsenic, Dissolved	UG/L as As	01000		
X												Barium, Dissolved	UG/L as Ba	01005		
X			X			X			X			Biochemical Oxygen Demand - 5 Day	MG/L	00310	154	
X												Cadmium, Dissolved	UG/L as Cd	01025		
X			X			X			X			Chloride, Dissolved	UG/L as Cl	82295	116000	
												Chromium, Dissolved	UG/L as Cr	01030		
X												Chromium, Dissolved, Hexavalent	UG/L as Cr	01220		
X			X			X			X			Chemical Oxygen Demand (COD), Dissolved	MG/L	00341		
X												Coliform Group	N/100 ML	74056		
X			X			X			X			Color	Pt - Co	00080		
X			X			X			X			Copper, Dissolved	UG/L as Cu	01040	21.3	K
X												Cyanide, Total	MG/L as CN	00720		
												Endrin, Total	UG/L	39390		
X												Fluoride, Dissolved	MG/L as F	00950		
												Gross Alpha, Dissolved	Pc/L	01503		
												Gross Beta, Dissolved	Pc/L	03503		
X												Hardness, Total as $CaCO_3$	MG/L	00900		
X			X			X			X			Iron, Dissolved	UG/L as Fe	01046	2910 00	
X			X			X			X			Lead, Dissolved	UG/L as Pb	01049	0	K
												Lindane, Total	UG/L	39782		
X												Manganese, Dissolved	UG/L	01056		
X												Mercury, Dissolved	UG/L	71890		

VALUE CODING RULES AND
REMARK CODES ON REVERSE

29 33 34 40 41
42 46 47 53 54
55 59 60 66 67
68 72 73 79 80

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Form VWX-015 B
4/83

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES
WATER QUALITY MANAGEMENT ELEMENT

GROUND WATER ANALYSIS – MONITORING WELL REPORT

PLEASE TYPE OR PRINT WITH BALLPOINT PEN

FACILITY NAME: American Cyanamid Sanitary Landfill - Carteret
SW ID NO.:
LAB NAME: ENVIRONMENTAL TESTING & CERTIFICATION

S | NJPDES NO.: NJ 0 0 6 1 6 1 1 | WELL PERMIT NO.: 2 4 - 1 0 3 3 - | SAMPLE DATE YR. MO. DAY: 8 7 0 7 3 1 | NJ LAB CERT. NO.: 1 2 2 5 7 | WQM USE

CRT-4D

THE SCHEDULE INDICATED BELOW IS TO BE OBSERVED FROM MO. YR. TO MO. YR.

SUBMIT WITH SIGNED T-VWX-014

SAMPLING MONTHS (Jan. Feb. Mar. Apr. May June July Aug. Sept. Oct. Nov. Dec.)	ANALYSIS	UNITS	PARAMETER	VALUE	REMARKS
	Methoxychlor, Total	UG/L	39480		
X X X X	Methylene Blue Active Substances	MG/L	38260	0.05	
X X X X	Nitrogen, Ammonia, Dissolved $NH_3 + NH_4$ as N	MG/L as N	00608	3.4	
X X X X	Nitrogen, Nitrate, Dissolved	MG/L as N	00618	0.1	
	Odor	T.O.N.	00085		
X X X X	pH	Standard Units	00400	6.4	0
X X X X	Phenols, Total Recoverable	UG/L	32730	1	N D
	Radium 226, Dissolved	Pc/L	09503		
	Radium 228, Dissolved	Pc/L	81366		
X	Selenium, Dissolved	UG/L	01145	5	
X	Silver, Dissolved	UG/L	01075	2.3	
X X X X	Sodium, Dissolved	MG/L	00930	41.4	0
X X X X	Sulfate, Dissolved (as SO_4)	MG/L	00946	1.1.8	0
X X X X	Total Dissolved Solids (TDS)	PPM	70300	251.0	0
X X X X	Total Organic Carbon (TOC)	PPM	00680	12.24	
X X X X	Total Organic Halogen (TOX)	UG/L	70353	1.5.6	0
	Toxaphene	UG/L	39400		
X	Turbidity	NTU	00076		
X X X X	Zinc, Dissolved	UG/L	01090	20	
	2, 4–D, Total	UG/L	39370		
	2, 4, 5–TP, Total	UG/L	39045		

VALUE CODING RULES AND REMARK CODES ON REVERSE

U23

Form VWX-016
4/83

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES
WATER QUALITY MANAGEMENT ELEMENT

GROUND WATER ANALYSIS – VOLATILE ORGANICS REPORT

PLEASE TYPE OR PRINT WITH BALLPOINT PEN

FACILITY NAME: American Cyanamid Sanitary Landfill - Carteret
SW ID NO.:
LAB NAME: ETC CORP

NJPDES NO.: T NJ 0 0 6 1 6 1 1 (1–8)
WELL PERMIT NO.: 2 4 - 1 0 3 9 3 (9–16)
SAMPLE DATE YR. MO. DAY: 8 7 0 7 3 1 (17–22)
NJ LAB CERT. NO.: 1 2 2 5 7 (23–27)
WQM USE: (28)

CRT4D

THE SCHEDULE INDICATED BELOW IS TO BE OBSERVED FROM MO. YR. TO MO. YR.

SUBMIT WITH SIGNED T-VWX-014

SAMPLING MONTHS (Jan. Feb. Mar. Apr. May June July Aug. Sept. Oct. Nov. Dec.)	ANALYSIS	UNITS	PARAMETER	VALUE
X	Acrylonitrile	UG/L	34215	0
X	Benzene	UG/L	34030	0
X	Bromoform	UG/L	32104	0
X	Carbon Tetrachloride	UG/L	32102	0
X	Chlorobenzene	UG/L	34301	0
X	Chlorodibromoethane	UG/L	34306	0
X	Chloroform	UG/L	32106	0
X	1, 1 - Dichloroethane	UG/L	34496	0
X	1, 2 - Dichloroethane	UG/L	34531	0
X	1, 1 - Dichloroethylene	UG/L	34501	0
X	1, 2 - Dichloropropane	UG/L	34541	0
X	Ethylbenzene	UG/L	34371	0
X	Methylene Chloride	UG/L	34423	4.52
X	1, 1, 2, 2 - Tetrachloroethane	UG/L	34516	0
X	Tetrachloroethylene	UG/L	34475	0
X	Toluene	UG/L	34012	0
X	1, 1, 1 - Trichloroethane	UG/L	34506	0
X	1, 1, 2 - Trichloroethane	UG/L	34511	0
X	Trichloroethylene	UG/L	39180	0
X	Vinyl Chloride	UG/L	39175	0
X	Acrolein	UG/L	34210	0
X	Chloroethane	UG/L	34311	0
X	2 - Chloroethylvinyl Ether	UG/L	34576	0
X	Dichlorobromomethane	UG/L	32105	0
X	1, 3 - Dichloropropylene	UG/L	34699	0
X	Methyl Bromide	UG/L	34413	0
X	Methyl Chloride	UG/L	34418	0
X	1, 2 - trans - Dichloroethylene	UG/L	34546	0
X	1, 2 Dichlorobenzene	UG/L	34536	0
X	1, 3 Dichlorobenzene	UG/L	34566	0
X	1, 4 Dichlorobenzene	UG/L	34571	0

VALUE CODING RULES AND
REMARK CODES ON REVERSE

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Form VWX-015 A
/83

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES

WATER QUALITY MANAGEMENT ELEMENT

GROUND WATER ANALYSIS – MONITORING WELL REPORT

PLEASE TYPE OR PRINT WITH BALLPOINT PEN

FACILITY NAME: American Cyanamid Company - Carteret Landfill | SW ID NO.:

LAB NAME: Environmental Testing and Certification

R	NJPDES NO.	WELL PERMIT NO.	SAMPLE DATE YR. | MO. | DAY	NJ LAB CERT. NO.	WQM USE
1	NJ 0 0 6 1 6 1 1 (2–8)	2 4 1 0 3 2 4 – (9–16) CRT5S	8 7 0 7 3 1 (17–22)	1 2 2 5 7 (23–27)	(28)

THE SCHEDULE INDICATED BELOW IS TO BE OBSERVED FROM ___ ___ (MO. YR.) TO ___ ___ (MO. YR.)

SUBMIT WITH SIGNED T-VWX-014

SAMPLING MONTHS (Jan. Feb. Mar. Apr. May June July Aug. Sept. Oct. Nov. Dec.)	ANALYSIS	UNITS	PARAMETER	VALUE	REMARKS
x x x x	Elevation of top of well casing with cap off (as specified in well completion report)	feet MSL: to nearest .01		8.08	
x x x x	Elevation of original ground level (as specified in well completion report)	feet MSL: to nearest .01		5.22	
x x x x	Depth to water table from top of casing prior to sampling with cap off	feet: to nearest .01	82546	7.70	
x x x x	Depth to water table from original ground level prior to sampling	feet: to nearest .01	72019	4.84	
x	Arsenic, Dissolved	UG/L as As	01000		
x	Barium, Dissolved	UG/L as Ba	01005		
x x x x	Biochemical Oxygen Demand - 5 Day	MG/L	00310	2 4 0	
x	Cadmium, Dissolved	UG/L as Cd	01025		
x x x x	Chloride, Dissolved	UG/L as Cl	82295	97900000	
	Chromium, Dissolved	UG/L as Cr	01030		
x	Chromium, Dissolved, Hexavalent	UG/L as Cr	01220		
x x x x	Chemical Oxygen Demand (COD), Dissolved	MG/L	00341	541	
x	Coliform Group	N/100 ML	74056		
x x x x	Color	Pt - Co	00080		
x x x x	Copper, Dissolved	UG/L as Cu	01040	0	K
x	Cyanide, Total	MG/L as CN	00720		
	Endrin, Total	UG/L	39390		
x	Fluoride, Dissolved	MG/L as F	00950		
	Gross Alpha, Dissolved	Pc/L	01503		
	Gross Beta, Dissolved	Pc/L	03503		
x	Hardness, Total as $CaCO_3$	MG/L	00900		
x x x x	Iron, Dissolved	UG/L as Fe	01046	930	
x x x x	Lead, Dissolved	UG/L as Pb	01049	0	K
	Lindane, Total	UG/L	39782		
x	Manganese, Dissolved	UG/L	01056		
x	Mercury, Dissolved	UG/L	71890		

VALUE CODING RULES AND
REMARK CODES ON REVERSE

29 33 34 40 41
42 46 47 53 54
55 59 60 66 67
68 72 73 79 80

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4/83

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES
WATER QUALITY MANAGEMENT ELEMENT

GROUND WATER ANALYSIS — MONITORING WELL REPORT

PLEASE TYPE OR PRINT WITH BALLPOINT PEN

FACILITY NAME: American Cyanamid Sanitary Landfill - Carteret

SW ID NO.:

LAB NAME: ENVIRONMENTAL TESTING & CERTIFICATION

	NJPDES NO.	WELL PERMIT NO.	SAMPLE DATE YR. MO. DAY	NJ LAB CERT. NO.	WQM USE
S	NJ 0061611	24-10394--	870731	12257	

CRT 5S

THE SCHEDULE INDICATED BELOW IS TO BE OBSERVED FROM ___ MO. YR. TO ___ MO. YR.

SUBMIT WITH SIGNED T-VWX-014

SAMPLING MONTHS

Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	ANALYSIS	UNITS	PARAMETER	VALUE	REMARKS
												Methoxychlor, Total	UG/L	39480		
X			X			X			X			Methylene Blue Active Substances	MG/L	38260	0.05	
X			X			X			X			Nitrogen, Ammonia, Dissolved $NH_3 + NH_4$ as N	MG/L as N	00608	.23	
X			X			X			X			Nitrogen, Nitrate, Dissolved	MG/L as N	00618	1 ND	
												Odor	T.O.N.	00085		
X			X			X			X			pH	Standard Units	00400	7.05	
X			X			X			X			Phenols, Total Recoverable	UG/L	32730	0.39	
												Radium 226, Dissolved	Pc/L	09503		
												Radium 228, Dissolved	Pc/L	81366		
X												Selenium, Dissolved	UG/L	01145	10	
X												Silver, Dissolved	UG/L	01075	23	
X			X			X			X			Sodium, Dissolved	MG/L	00930	6400	
X			X			X			X			Sulfate, Dissolved (as SO_4)	MG/L	00946	130	
X			X			X			X			Total Dissolved Solids (TDS)	PPM	70300	25000	
X			X			X			X			Total Organic Carbon (TOC)	PPM	00680	39.4	
X			X			X			X			Total Organic Halogen (TOX)	UG/L	70353	1220	
												Toxaphene	UG/L	39400		
X												Turbidity	NTU	00076		
X			X			X			X			Zinc, Dissolved	UG/L	01090	20	
												2, 4—D, Total	UG/L	39370		
												2, 4, 5—TP, Total	UG/L	39045		

VALUE CODING RULES AND

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Form VWX-016
4/83

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES
WATER QUALITY MANAGEMENT ELEMENT

GROUND WATER ANALYSIS – VOLATILE ORGANICS REPORT

PLEASE TYPE OR PRINT WITH BALLPOINT PEN

FACILITY NAME: American Cyanamid Sanitary Landfill - Carteret
SW ID NO.:

LAB NAME: ETC Corp.

NJPDES NO.: T NJ 0 0 6 1 6 1 1 (1–9)
WELL PERMIT NO.: 2 4 - 1 0 3 9 4 - (10–16)
SAMPLE DATE YR. MO. DAY: 8 7 0 7 3 1 (17–22)
NJ LAB CERT. NO.: 1 2 2 5 7 (23–27)
WQM USE: (28)

CRT5S

THE SCHEDULE INDICATED BELOW IS TO BE OBSERVED FROM MO. YR. TO MO. YR.

SUBMIT WITH SIGNED T-VWX-014

SAMPLING MONTHS (Jan Feb Mar Apr May June July Aug Sept Oct Nov Dec)	ANALYSIS	UNITS	PARAMETER	VALUE
X	Acrylonitrile	UG/L	34215	0
X	Benzene	UG/L	34030	0
X	Bromoform	UG/L	32104	0
X	Carbon Tetrachloride	UG/L	32102	0
X	Chlorobenzene	UG/L	34301	0
X	Chlorodibromoethane	UG/L	34306	0
X	Chloroform	UG/L	32106	0
X	1, 1 - Dichloroethane	UG/L	34496	0
X	1, 2 - Dichloroethane	UG/L	34531	0
X	1, 1 - Dichloroethylene	UG/L	34501	0
X	1, 2 - Dichloropropane	UG/L	34541	0
X	Ethylbenzene	UG/L	34371	0
X	Methylene Chloride	UG/L	34423	4.42
X	1, 1, 2, 2 - Tetrachloroethane	UG/L	34516	0
X	Tetrachloroethylene	UG/L	34475	0
X	Toluene	UG/L	34012	0
X	1, 1, 1 - Trichloroethane	UG/L	34506	0
X	1, 1, 2 - Trichloroethane	UG/L	34511	0
X	Trichloroethylene	UG/L	39180	0
X	Vinyl Chloride	UG/L	39175	0
X	Acrolein	UG/L	34210	0
X	Chloroethane	UG/L	34311	0
X	2 - Chloroethylvinyl Ether	UG/L	34576	0
X	Dichlorobromomethane	UG/L	32105	0
X	1, 3 - Dichloropropylene	UG/L	34699	0
X	Methyl Bromide	UG/L	34413	0
X	Methyl Chloride	UG/L	34418	0
X	1, 2 - trans - Dichloroethylene	UG/L	34546	0
X	1, 2 Dichlorobenzene	UG/L	34536	0
X	1, 3 Dichlorobenzene	UG/L	34566	0
X	1, 4 Dichlorobenzene	UG/L	34571	0

VALUE CODING RULES AND
REMARK CODES ON REVERSE

29 33 34 41
42 46 47 51
55 59 60 61
68 72 73 77

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Form VWX-015 A
/83

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES

WATER QUALITY MANAGEMENT ELEMENT

GROUND WATER ANALYSIS – MONITORING WELL REPORT

PLEASE TYPE OR PRINT WITH BALLPOINT PEN

FACILITY NAME: American Cyanamid Company - Carteret Landfill

SW ID NO.:

LAB NAME: Environmental Testing and Certification

	NJPDES NO.	WELL PERMIT NO.	SAMPLE DATE YR. | MO. | DAY	NJ LAB CERT. NO.	WQM USE
R	NJ 0061611	24-10395--	87 07 31	12257	
1	2 8	9 16	17 22	23 27	28

CRT5D

THE SCHEDULE INDICATED BELOW IS TO BE OBSERVED FROM ___ MO. YR. TO ___ MO. YR.

SUBMIT WITH SIGNED T-VWX-014

SAMPLING MONTHS

Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	ANALYSIS	UNITS	PARAMETER	VALUE	REMARKS
X			X			X			X			Elevation of top of well casing with cap off (as specified in well completion report)	feet MSL: to nearest .01		8.07	
X			X			X			X			Elevation of original ground level (as specified in well completion report)	feet MSL: to nearest .01		5.23	
X			X			X			X			Depth to water table from top of casing prior to sampling with cap off	feet: to nearest .01	82546	5.55	
X			X			X			X			Depth to water table from original ground level prior to sampling	feet: to nearest .01	72019	2.71	
X												Arsenic, Dissolved	UG/L as As	01000		
X												Barium, Dissolved	UG/L as Ba	01005		
X			X			X			X			Biochemical Oxygen Demand - 5 Day	MG/L	00310	73	
X												Cadmium, Dissolved	UG/L as Cd	01025		
X			X			X			X			Chloride, Dissolved	UG/L as Cl	82295	12100000	
												Chromium, Dissolved	UG/L as Cr	01030		
X												Chromium, Dissolved, Hexavalent	UG/L as Cr	01220		
X			X			X			X			Chemical Oxygen Demand (COD), Dissolved	MG/L	00341	229	
X												Coliform Group	N/100 ML	74056		
X			X			X			X			Color	Pt - Co	00080		
X			X			X			X			Copper, Dissolved	UG/L as Cu	01040	2.3	K
X												Cyanide, Total	MG/L as CN	00720		
												Endrin, Total	UG/L	39390		
X												Fluoride, Dissolved	MG/L as F	00950		
												Gross Alpha, Dissolved	Pc/L	01503		
												Gross Beta, Dissolved	Pc/L	03503		
X												Hardness, Total as $CaCO_3$	MG/L	00900		
X			X			X			X			Iron, Dissolved	UG/L as Fe	01046	1100	
X			X			X			X			Lead, Dissolved	UG/L as Pb	01049	0	K
												Lindane, Total	UG/L	39782		
X												Manganese, Dissolved	UG/L	01056		
X												Mercury, Dissolved	UG/L	71890		

VALUE CODING RULES AND
REMARK CODES ON REVERSE

29 33 34 40 4
42 46 47 53 5
55 59 60 66 6
68 72 73 79 8

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4/83

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES
WATER QUALITY MANAGEMENT ELEMENT

GROUND WATER ANALYSIS – MONITORING WELL REPORT

PLEASE TYPE OR PRINT WITH BALLPOINT PEN

FACILITY NAME: American Cyanamid Sanitary Landfill - Carteret
SW ID NO.:
LAB NAME: ENVIRONMENTAL TESTING & CERTIFICATION

S | NJPDES NO.: NJ 0 0 6 1 6 1 1 | WELL PERMIT NO.: 2 4 - 1 0 3 9 5 - | SAMPLE DATE YR. MO. DAY: 8 7 0 7 3 1 | NJ LAB CERT. NO.: 1 2 2 5 7 | WQM USE

CRT-SD

THE SCHEDULE INDICATED BELOW IS TO BE OBSERVED FROM MO. YR. TO MO. YR.

SUBMIT WITH SIGNED T-VWX-014

Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	ANALYSIS	UNITS	PARAMETER	VALUE	REMARKS
												Methoxychlor, Total	UG/L	39480		
X		X			X			X				Methylene Blue Active Substances	MG/L	38260	0.16	
X		X			X			X				Nitrogen, Ammonia, Dissolved $NH_3 + NH_4$ as N	MG/L as N	00608	5.2	
X		X			X			X				Nitrogen, Nitrate Dissolved	MG/L as N	00618	0.1	
												Odor	T.O.N.	00085		
X		X			X			X				pH	Standard Units	00400	7.15	
X		X			X			X				Phenols, Total Recoverable	UG/L	32730	0.525	
												Radium 226, Dissolved	Pc/L	09503		
												Radium 228, Dissolved	Pc/L	81366		
X												Selenium, Dissolved	UG/L	01145	1.0	
X												Silver, Dissolved	UG/L	01075	2.3	
X		X			X			X				Sodium, Dissolved	MG/L	00930	54.60	
X		X			X			X				Sulfate, Dissolved (as SO_4)	MG/L	00946	47.0	
X		X			X			X				Total Dissolved Solids (TDS)	PPM	70300	210.0	
X		X			X			X				Total Organic Carbon (TOC)	PPM	00680	2.6	
X		X			X			X				Total Organic Halogen (TOX)	UG/L	70353	1.10	
												Toxaphene	UG/L	39400		
X												Turbidity	NTU	00076		
X		X			X			X				Zinc, Dissolved	UG/L	01090	2.0	
												2, 4–D, Total	UG/L	39370		
												2, 4, 5–TP, Total	UG/L	39045		

VALUE CODING RULES AND

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Form VWX-016
4/83

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES
WATER QUALITY MANAGEMENT ELEMENT

GROUND WATER ANALYSIS – VOLATILE ORGANICS REPORT

PLEASE TYPE OR PRINT WITH BALLPOINT PEN

FACILITY NAME: American Cyanamid Sanitary Landfill - Carteret
SW ID NO.:

LAB NAME: ETC - CORP.

T | NJPDES NO.: NJ 0 0 6 1 6 1 1 | WELL PERMIT NO.: 2 4 - 1 0 3 9 5 - | SAMPLE DATE YR. MO. DAY: 8 7 0 7 3 1 | NJ LAB CERT. NO.: 1 2 2 5 7 | WQM USE

CRT5D

THE SCHEDULE INDICATED BELOW IS TO BE OBSERVED FROM ___ ___ (MO. YR.) TO ___ ___ (MO. YR.)

SUBMIT WITH SIGNED T-VWX-014

SAMPLING MONTHS (Jan Feb Mar Apr May June July Aug Sept Oct Nov Dec)	ANALYSIS	UNITS	PARAMETER	VALUE	
X	Acrylonitrile	UG/L	34215	0	K
X	Benzene	UG/L	34030	0	K
X	Bromoform	UG/L	32104	0	K
X	Carbon Tetrachloride	UG/L	32102	0	K
X	Chlorobenzene	UG/L	34301	0	K
X	Chlorodibromoethane	UG/L	34306	0	K
X	Chloroform	UG/L	32106	0	K
X	1, 1 - Dichloroethane	UG/L	34496	0	K
X	1, 2 - Dichloroethane	UG/L	34531	0	K
X	1, 1 - Dichloroethylene	UG/L	34501	0	
X	1, 2 - Dichloropropane	UG/L	34541	0	
X	Ethylbenzene	UG/L	34371	0	
X	Methylene Chloride	UG/L	34423	0	
X	1, 1, 2, 2 - Tetrachloroethane	UG/L	34516	0	
X	Tetrachloroethylene	UG/L	34475	0	
X	Toluene	UG/L	34012	0	
X	1, 1, 1 - Trichloroethane	UG/L	34506	0	
X	1, 1, 2 - Trichloroethane	UG/L	34511	0	
X	Trichloroethylene	UG/L	39180	0	
X	Vinyl Chloride	UG/L	39175	0	
X	Acrolein	UG/L	34210	0	
X	Chloroethane	UG/L	34311	0	
X	2 - Chloroethylvinyl Ether	UG/L	34576	0	
X	Dichlorobromomethane	UG/L	32105	0	
X	1, 3 - Dichloropropylene	UG/L	34699	0	
X	Methyl Bromide	UG/L	34413	0	
X	Methyl Chloride	UG/L	34418	0	
X	1, 2 - trans - Dichloroethylene	UG/L	34546	0	
X	1, 2 Dichlorobenzene	UG/L	34536	0	
X	1, 3 Dichlorobenzene	UG/L	34566	0	
X	1, 4 Dichlorobenzene	UG/L	34571	0	

VALUE CODING RULES AND REMARK CODES ON REVERSE

U30

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NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES
WATER QUALITY MANAGEMENT ELEMENT

GROUND WATER ANALYSIS – VOLATILE ORGANICS REPORT

PLEASE TYPE OR PRINT WITH BALLPOINT PEN

FACILITY NAME: American Cyanamid Sanitary Landfill - Carteret
SW ID NO.:
LAB NAME: Environmental Testing and Certification

NJPDES NO.: T NJ 0 0 6 1 6 1 1 (1–8)
WELL PERMIT NO.: 2 4 - 1 0 3 8 7 - 0 (9–15)
CRT1S
SAMPLE DATE YR. MO. DAY: 8 8 0 1 1 9 (17–22)
NJ LAB CERT. NO.: 1 2 3 5 7 (23–27)
WQM USE: (28)

THE SCHEDULE INDICATED BELOW IS TO BE OBSERVED FROM 0 1 8 8 (MO. YR.) TO 0 3 8 8 (MO. YR.)

SUBMIT WITH SIGNED T-VWX-014

SAMPLING MONTHS (Jan. Feb. Mar. Apr. May June July Aug. Sept. Oct. Nov. Dec.)	ANALYSIS	UNITS	PARAMETER	VALUE	
X	Acrylonitrile	UG/L	34215	0	K
X	Benzene	UG/L	34030	207	
X	Bromoform	UG/L	32104	0	K
X	Carbon Tetrachloride	UG/L	32102	0	K
X	Chlorobenzene	UG/L	34301	34.0	
X	Chlorodibromoethane	UG/L	34306	0	
X	Chloroform	UG/L	32106	8.	
X	1, 1 - Dichloroethane	UG/L	34496	1	
X	1, 2 - Dichloroethane	UG/L	34531		
X	1, 1 - Dichloroethylene	UG/L	34501	23	
X	1, 2 - Dichloropropane	UG/L	34541	0	
X	Ethylbenzene	UG/L	34371	29.9	
X	Methylene Chloride	UG/L	34423	15	0
X	1, 1, 2, 2 - Tetrachloroethane	UG/L	34516	0	
X	Tetrachloroethylene	UG/L	34475	0	
X	Toluene	UG/L	34012	43.4	0
X	1, 1, 1 - Trichloroethane	UG/L	34506	67.3	
X	1, 1, 2 - Trichloroethane	UG/L	34511	0	
X	Trichloroethylene	UG/L	39180	98.3	
X	Vinyl Chloride	UG/L	39175	19.9	
X	Acrolein	UG/L	34210	0	
X	Chloroethane	UG/L	34311	36.0	
X	2 - Chloroethylvinyl Ether	UG/L	34576	0	
X	Dichlorobromomethane	UG/L	32105	0	
X	1, 3 - Dichloropropylene	UG/L	34699	0	
X	Methyl Bromide	UG/L	34413	0	
X	Methyl Chloride	UG/L	34418	0	
X	1, 2 - trans - Dichloroethylene	UG/L	34546	85.7	
X	1, 2 Dichlorobenzene	UG/L	34536	0	
X	1, 3 Dichlorobenzene	UG/L	34566	0	
X	1, 4 Dichlorobenzene	UG/L	34571	0	

VALUE CODING RULES AND
REMARK CODES ON REVERSE

U31

Form VWX-015 A
4/83

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES
WATER QUALITY MANAGEMENT ELEMENT

GROUND WATER ANALYSIS – MONITORING WELL REPORT

PLEASE TYPE OR PRINT WITH BALLPOINT PEN

FACILITY NAME: American Cyanamid Company - Carteret Landfill
SW ID NO.:

LAB NAME: Environmental Testing and Certification

NJPDES NO.	WELL PERMIT NO.	SAMPLE DATE YR. MO. DAY	NJ LAB CERT. NO.	WQM USE
R NJ 0061611	24 10387 - 0	88 01 19	12257	
1 2 8	9 CRT1S 16	17 22	23 27	28

THE SCHEDULE INDICATED BELOW IS TO BE OBSERVED FROM 01 88 (MO. YR.) TO 03 88 (MO. YR.)

SUBMIT WITH SIGNED T-VWX-014

SAMPLING MONTHS (Jan. Feb. Mar. Apr. May June July Aug. Sept. Oct. Nov. Dec.)	ANALYSIS	UNITS	PARAMETER	VALUE	REMARKS
x x x x x	Elevation of top of well casing with cap off (as specified in well completion report)	feet MSL: to nearest .01		2.00	
x x x x x	Elevation of original ground level (as specified in well completion report)	feet MSL: to nearest .01		5.05	
x x x x x	Depth to water table from top of casing prior to sampling with cap off	feet: to nearest .01	82546	5.10	
x x x x x	Depth to water table from original ground level prior to sampling	feet: to nearest .01	72019	2.15	
x	Arsenic, Dissolved	UG/L as As	01000	16	K
x	Barium, Dissolved	UG/L as Ba	01005	494	
x x x x x	Biochemical Oxygen Demand - 5 Day	MG/L	00310	20 1.0	
x	Cadmium, Dissolved	UG/L as Cd	01025	0	K
x x x x x	Chloride, Dissolved	UG/L as Cl	82295	653000	
	Chromium, Dissolved	UG/L as Cr	01030		
x	Chromium, Dissolved, Hexavalent	UG/L as Cr	01220	10	K
x x x x x	Chemical Oxygen Demand (COD), Dissolved	MG/L	00341	699 0	
x	Coliform Group	N/100 ML	74056	100	K
x x x x x	Color	Pt - Co	00080		
x x x x x	Copper, Dissolved	UG/L as Cu	01040	51.9	K
x	Cyanide, Total	MG/L as CN	00720	0.057	
	Endrin, Total	UG/L	39390		
x	Fluoride, Dissolved	MG/L as F	00950	2.9	
	Gross Alpha, Dissolved	Pc/L	01503		
	Gross Beta, Dissolved	Pc/L	03503		
x	Hardness, Total as $CaCO_3$	MG/L	00900		
x x x x x	Iron, Dissolved	UG/L as Fe	01046	6100 0 0	
x x x x x	Lead, Dissolved	UG/L as Pb	01049	0	K
	Lindane, Total	UG/L	39782		
x	Manganese, Dissolved	UG/L	01056	1090 00	
x	Mercury, Dissolved	UG/L	71890	0	K

VALUE CODING RULES AND REMARK CODES ON REVERSE

I = Indeterminant, Interferences

29 33 34 40 41
42 46 47 53 54
55 59 60 66 67
68 72 73 79 80

U32

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NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES
WATER QUALITY MANAGEMENT ELEMENT

GROUND WATER ANALYSIS – MONITORING WELL REPORT

PLEASE TYPE OR PRINT WITH BALLPOINT PEN

FACILITY NAME: American Cyanamid Sanitary Landfill - Carteret
SW ID NO.:
LAB NAME: Environmental Testing and Certification

S | NJPDES NO.: NJ 0061611 | WELL PERMIT NO.: a4-10387-0 | SAMPLE DATE YR. 80 MO. 1 DAY 19 | NJ LAB CERT. NO.: 12257 | WQM USE

CRT1S

THE SCHEDULE INDICATED BELOW IS TO BE OBSERVED FROM 01 88 (MO. YR.) TO 03 88 (MO. YR.)

SUBMIT WITH SIGNED T-VWX-014

SAMPLING MONTHS (Jan Feb Mar Apr May June July Aug Sept Oct Nov Dec)	ANALYSIS	UNITS	PARAMETER	VALUE
	Methoxychlor, Total	UG/L	39480	
X X X X	Methylene Blue Active Substances	MG/L	38260	0.11
X X X X	Nitrogen, Ammonia, Dissolved $NH_3 + NH_4$ as N	MG/L as N	00608	9.7
X X X X	Nitrogen, Nitrate Dissolved	MG/L as N	00618	
X X X X	Odor	T.O.N.	00085	
X X X X	pH	Standard Units	00400	5.7
X X X X	Phenols, Total Recoverable	UG/L	32730	4.40
	Radium 226, Dissolved	Pc/L	09503	
	Radium 228, Dissolved	Pc/L	81366	
X	Selenium, Dissolved	UG/L	01145	5.7
X	Silver, Dissolved	UG/L	01075	1.8
X X X X	Sodium, Dissolved	MG/L	00930	31190
X X X X	Sulfate, Dissolved (as SO_4)	MG/L	00946	90
X X X X	Total Dissolved Solids (TDS)	PPM	70300	3900
X X X X	Total Organic Carbon (TOC)	PPM	00680	26
X X X X	Total Organic Halogen (TOX)	UG/L	70353	4.80
	Toxaphene	UG/L	39400	
X	Turbidity	NTU	00076	
X X X X	Zinc, Dissolved	UG/L	01090	93
	2, 4–D, Total	UG/L	39370	
	2, 4, 5–TP, Total	UG/L	39045	
	Total Organic Carbon	PPM		28
	Total Organic Halogen (TOX)	UG/L		5520

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NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES

WATER QUALITY MANAGEMENT ELEMENT

GROUND WATER ANALYSIS – MONITORING WELL REPORT

PLEASE TYPE OR PRINT WITH BALLPOINT PEN

FACILITY NAME: American Cyanamid Company - Carteret Landfill

SW ID NO.:

LAB NAME: Environmental Testing and Certification

	NJPDES NO.	WELL PERMIT NO.	SAMPLE DATE YR. MO. DAY	NJ LAB CERT. NO.	WQM USE
R	NJ 0061611	24-10386-1	88 01 19	12257	
1	2 8	9 16	17 22	23 27	28

CRT1D

THE SCHEDULE INDICATED BELOW IS TO BE OBSERVED FROM 01 88 (MO. YR.) TO 03 88 (MO. YR.)

SUBMIT WITH SIGNED T-VWX-014

SAMPLING MONTHS

Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	ANALYSIS	UNITS	PARAMETER	VALUE	REMARKS
X			X			X			X			Elevation of top of well casing with cap off (as specified in well completion report)	feet MSL: to nearest .01		8.16	
X			X			X			X			Elevation of original ground level (as specified in well completion report)	feet MSL: to nearest .01		5.11	
X			X			X			X			Depth to water table from top of casing prior to sampling with cap off	feet: to nearest .01	82546	5.10	
X			X			X			X			Depth to water table from original ground level prior to sampling	feet: to nearest .01	72019	2.05	
X												Arsenic, Dissolved	UG/L as As	01000	1.4	K
X												Barium, Dissolved	UG/L as Ba	01005	94	
X			X			X			X			Biochemical Oxygen Demand - 5 Day	MG/L	00310	8	
X												Cadmium, Dissolved	UG/L as Cd	01025	0	K
X			X			X			X			Chloride, Dissolved	UG/L as Cl	82295	94000000	
												Chromium, Dissolved	UG/L as Cr	01030		
X												Chromium, Dissolved, Hexavalent	UG/L as Cr	01220	10	K
X			X			X			X			Chemical Oxygen Demand (COD), Dissolved	MG/L	00341	–	I
X												Coliform Group	N/100 ML	74056	8	
X			X			X			X			Color	Pt - Co	00080		
X			X			X			X			Copper, Dissolved	UG/L as Cu	01040	2.2	K
X												Cyanide, Total	MG/L as CN	00720	0.025	K
												Endrin, Total	UG/L	39390		
X												Fluoride, Dissolved	MG/L as F	00950	0.1	K
												Gross Alpha, Dissolved	Pc/L	01503		
												Gross Beta, Dissolved	Pc/L	03503		
X												Hardness, Total as $CaCO_3$	MG/L	00900		
X			X			X			X			Iron, Dissolved	UG/L as Fe	01046	48900	
X			X			X			X			Lead, Dissolved	UG/L as Pb	01049	0	K
												Lindane, Total	UG/L	39782		
X												Manganese, Dissolved	UG/L	01056	67.60	
X												Mercury, Dissolved	UG/L	71890	0	K

29 42 55 68 | 33 34 46 47 59 60 72 73 | 40 41 53 54 66 67 79 80

VALUE CODING RULES AND
REMARK CODES ON REVERSE

U34

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NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES
WATER QUALITY MANAGEMENT ELEMENT

GROUND WATER ANALYSIS – MONITORING WELL REPORT

PLEASE TYPE OR PRINT WITH BALLPOINT PEN

FACILITY NAME: American Cyanamid Sanitary Landfill - Carteret
SW ID NO.:
LAB NAME:

NJPDES NO.	WELL PERMIT NO.	SAMPLE DATE YR. MO. DAY	NJ LAB CERT. NO.	WQM USE
S NJ 0 0 6 1 6 1 1	A 4 - 1 0 3 8 6 - 1	8 8 0 1 1 9	1 2 3 5 7	

CRT1D

THE SCHEDULE INDICATED BELOW IS TO BE OBSERVED FROM 0 1 8 8 (MO. YR.) TO 0 3 8 8 (MO. YR.)

SUBMIT WITH SIGNED T-VWX-014

SAMPLING MONTHS

Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec	ANALYSIS	UNITS	PARAMETER	VALUE
												Methoxychlor, Total	UG/L	39480	
X			X			X			X			Methylene Blue Active Substances	MG/L	38260	0.06
X			X			X			X			Nitrogen, Ammonia, Dissolved $NH_3 + NH_4$ as N	MG/L as N	00608	
X			X			X			X			Nitrogen, Nitrate Dissolved	MG/L as N	00618	0.1
X			X			X			X			Odor	T.O.N.	00085	
X			X			X			X			pH	Standard Units	00400	6.12
X			X			X			X			Phenols, Total Recoverable	UG/L	32730	
												Radium 226, Dissolved	Pc/L	09503	
												Radium 228, Dissolved	Pc/L	81366	
X												Selenium, Dissolved	UG/L	01145	3.8
X												Silver, Dissolved	UG/L	01075	0.86
X			X			X			X			Sodium, Dissolved	MG/L	00930	230.0
X			X			X			X			Sulfate, Dissolved (as SO_4)	MG/L	00946	80.0
X			X			X			X			Total Dissolved Solids (TDS)	PPM	70300	1970.0
X			X			X			X			Total Organic Carbon (TOC)	PPM	00680	5.7
X			X			X			X			Total Organic Halogen (TOX)	UG/L	70353	67.5
												Toxaphene	UG/L	39400	
X												Turbidity	NTU	00076	
X			X			X			X			Zinc, Dissolved	UG/L	01090	37
												2, 4–D, Total	UG/L	39370	
												2, 4, 5–TP, Total	UG/L	39045	
												Total Organic Carbon	PPM		6.1
												Total Organic Halogen (TOX)	UG/L		139

VALUE CODING RULES AND

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NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES
WATER QUALITY MANAGEMENT ELEMENT

GROUND WATER ANALYSIS – VOLATILE ORGANICS REPORT

PLEASE TYPE OR PRINT WITH BALLPOINT PEN

FACILITY NAME: American Cyanamid Sanitary Landfill - Carteret
SW ID NO.:

LAB NAME: Environmental Testing and Certification

NJPDES NO.	WELL PERMIT NO.	SAMPLE DATE YR. MO. DAY	NJ LAB CERT. NO.	WQM USE
T NJ 0 0 6 1 6 1 1	2 4 - 1 0 3 8 6 - 1	8 8 01 1 9	1 2 2 5 7	
	CRT1D			

THE SCHEDULE INDICATED BELOW IS TO BE OBSERVED FROM 01 88 (MO. YR.) TO 03 88 (MO. YR.)

SUBMIT WITH SIGNED T-VWX-014

SAMPLING MONTHS

Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	ANALYSIS	UNITS	PARAMETER	VALUE	
X												Acrylonitrile	UG/L	34215	0	K
X												Benzene	UG/L	34030	0	K
X												Bromoform	UG/L	32104	0	K
X												Carbon Tetrachloride	UG/L	32102	0	K
X												Chlorobenzene	UG/L	34301	0	K
X												Chlorodibromoethane	UG/L	34306	0	K
X												Chloroform	UG/L	32106	0	K
X												1, 1 - Dichloroethane	UG/L	34496	0	K
X												1, 2 - Dichloroethane	UG/L	34531	0	K
X												1, 1 - Dichloroethylene	UG/L	34501	0	K
X												1, 2 - Dichloropropane	UG/L	34541	0	K
X												Ethylbenzene	UG/L	34371	0	F
X												Methylene Chloride	UG/L	34423	9.05	
X												1, 1, 2, 2 - Tetrachloroethane	UG/L	34516	0	I
X												Tetrachloroethylene	UG/L	34475	0	I
X												Toluene	UG/L	34010	0	I
X												1, 1, 1 - Trichloroethane	UG/L	34506	0	I
X												1, 1, 2 - Trichloroethane	UG/L	34511	0	I
X												Trichloroethylene	UG/L	39180	0	
X												Vinyl Chloride	UG/L	39175	0	
X												Acrolein	UG/L	34210	0	
X												Chloroethane	UG/L	34311	0	
X												2 - Chloroethylvinyl Ether	UG/L	34576	0	
X												Dichlorobromomethane	UG/L	32105	0	
X												1, 3 - Dichloropropylene	UG/L	34699	0	
X												Methyl Bromide	UG/L	34413	0	
X												Methyl Chloride	UG/L	34418	0	
X												1, 2 - trans - Dichloroethylene	UG/L	34546	0	
X												1, 2 Dichlorobenzene	UG/L	34536	0	
X												1, 3 Dichlorobenzene	UG/L	34566	0	
X												1, 4 Dichlorobenzene	UG/L	34571	0	

VALUE CODING RULES AND
REMARK CODES ON REVERSE

U36

orm VWX-015 A
4/83

NEW JE..EY DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES

WATER QUALITY MANAGEMENT ELEMENT

GROUND WATER ANALYSIS – MONITORING WELL REPORT

PLEASE TYPE OR PRINT WITH BALLPOINT PEN

FACILITY NAME: American Cyanamid Company - Carteret Landfill | SW ID NO.:

LAB NAME: Environmental Testing and Certification

R	NJPDES NO.	WELL PERMIT NO.	SAMPLE DATE YR. | MO. | DAY	NJ LAB CERT. NO.	WQM USE
1	NJ 0 0 6 1 6 1 1 (2–8)	2 4 | 1 0 3 8 9 | 6 (9–16) CRT2S	8 8 | 0 1 | 1 9 (17–22)	1 2 2 5 7 (23–27)	(28)

THE SCHEDULE INDICATED BELOW IS TO BE OBSERVED FROM 0 1 \| 8 8 (MO. YR.) TO 0 3 \| 8 8 (MO. YR.)

SUBMIT WITH SIGNED T-VWX-014

SAMPLING MONTHS: Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	ANALYSIS	UNITS	PARAMETER	VALUE	REMARKS
X			X			X			X			Elevation of top of well casing with cap off (as specified in well completion report)	feet MSL: to nearest .01		8.86	
X			X			X			X			Elevation of original ground level (as specified in well completion report)	feet MSL: to nearest .01		6.32	
X			X			X			X			Depth to water table from top of casing prior to sampling with cap off	feet: to nearest .01	82546	5.81	
X			X			X			X			Depth to water table from original ground level prior to sampling	feet: to nearest .01	72019	3.27	
X												Arsenic, Dissolved	UG/L as As	01000	90	
X												Barium, Dissolved	UG/L as Ba	01005	18	
X			X			X			X			Biochemical Oxygen Demand - 5 Day	MG/L	00310	170	
X												Cadmium, Dissolved	UG/L as Cd	01025	0	K
X			X			X			X			Chloride, Dissolved	UG/L as Cl	82295	81100000	
												Chromium, Dissolved	UG/L as Cr	01030		
X												Chromium, Dissolved, Hexavalent	UG/L as Cr	01220	10	K
X			X			X			X			Chemical Oxygen Demand (COD), Dissolved	MG/L	00341	-	H
X												Coliform Group	N/100 ML	74056	300 0	
X			X			X			X			Color	Pt - Co	00080		
X			X			X			X			Copper, Dissolved	UG/L as Cu	01040	3.4	K
X												Cyanide, Total	MG/L as CN	00720	41.0	
												Endrin, Total	UG/L	30390		
X												Fluoride, Dissolved	MG/L as F	00950	9.3	
												Gross Alpha, Dissolved	Pc/L	01503		
												Gross Beta, Dissolved	Pc/L	03503		
X												Hardness, Total as $CaCO_3$	MG/L	00900		
X			X			X			X			Iron, Dissolved	UG/L as Fe	01046	420 0	
X			X			X			X			Lead, Dissolved	UG/L as Pb	01049	0	K
												Lindane, Total	UG/L	39782		
X												Manganese, Dissolved	UG/L	01056	20	
X												Mercury, Dissolved	UG/L	71890	0	K

VALUE CODING RULES AND
REMARK CODES ON REVERSE

29 33 34 40 41
42 46 47 53 54
55 59 60 66 67
68 72 73 79 80

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4/83

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES
WATER QUALITY MANAGEMENT ELEMENT

GROUND WATER ANALYSIS – MONITORING WELL REPORT

PLEASE TYPE OR PRINT WITH BALLPOINT PEN

FACILITY NAME: American Cyanamid Sanitary Landfill - Carteret
SW ID NO.:
LAB NAME: Environmental Testing and Certification

S | NJPDES NO.: NJ 0 0 6 1 6 1 1 | WELL PERMIT NO.: 2 4 - 1 5 3 8 9 - 6 | SAMPLE DATE YR. MO. DAY: 8 8 0 1 1 9 | NJ LAB CERT. NO.: 1 2 2 5 9 | WQM USE

CRT2S

THE SCHEDULE INDICATED BELOW IS TO BE OBSERVED FROM 0 1 8 8 (MO. YR.) TO 0 3 8 8 (MO. YR.)

SUBMIT WITH SIGNED T-VWX-014

SAMPLING MONTHS: Jan. Feb. Mar. Apr. May June July Aug. Sept. Oct. Nov. Dec.

ANALYSIS	UNITS	PARAMETER	VALUE	
Methoxychlor, Total	UG/L	39480		
Methylene Blue Active Substances	MG/L	38260	0.4	K
Nitrogen, Ammonia, Dissolved $NH_3 + NH_4$ as N	MG/L as N	00608		C
Nitrogen, Nitrate Dissolved	MG/L as N	00618	0.2	K
Odor	T.O.N.	00085		
pH	Standard Units	00400	7.3	6
Phenols, Total Recoverable	UG/L	32730	35	4
Radium 226, Dissolved	Pc/L	09503		
Radium 228, Dissolved	Pc/L	81366		
Selenium, Dissolved	UG/L	01145	1.	9
Silver, Dissolved	UG/L	01075	0	.2 6
Sodium, Dissolved	MG/L	00930	4	69 0
Sulfate, Dissolved (as SO_4)	MG/L	00946	12	50 0
Total Dissolved Solids (TDS)	PPM	70300	18	10 0
Total Organic Carbon (TOC)	PPM	00680		25
Total Organic Halogen (TOX)	UG/L	70393	7	10 0
Toxaphene	UG/L	39400		
Turbidity	NTU	00076		
Zinc, Dissolved	UG/L	01090	8.	1
2, 4–D, Total	UG/L	39370		
2, 4, 5–TP, Total	UG/L	39045		
Total Organic Carbon	PPM			2 5
Total Organic Halogen (TOX)	UG/L		7	8 2 0

U3

Form VWX-016
4/83

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES
WATER QUALITY MANAGEMENT ELEMENT

GROUND WATER ANALYSIS – VOLATILE ORGANICS REPORT

PLEASE TYPE OR PRINT WITH BALLPOINT PEN

FACILITY NAME: American Cyanamid Sanitary Landfill - Carteret
SW ID NO.:
LAB NAME: Environmental Testing and Certification

T | NJPDES NO.: NJ 0 0 6 1 6 1 1 | WELL PERMIT NO.: 2 4 - 1 0 3 8 9 - G (CRT2S) | SAMPLE DATE YR. 8 8 MO. 0 1 DAY 1 9 | NJ LAB CERT. NO.: 1 2 2 5 4 | WQM USE

THE SCHEDULE INDICATED BELOW IS TO BE OBSERVED FROM 0 1 8 8 (MO. YR.) TO 0 3 8 8 (MO. YR.)

SUBMIT WITH SIGNED T-VWX-014

SAMPLING MONTHS (Jan Feb Mar Apr May June July Aug Sept Oct Nov Dec)	ANALYSIS	UNITS	PARAMETER	VALUE
X	Acrylonitrile	UG/L	34215	OK
X	Benzene	UG/L	34030	OK
X	Bromoform	UG/L	32104	OK
X	Carbon Tetrachloride	UG/L	32102	OK
X	Chlorobenzene	UG/L	34301	OK
X	Chlorodibromoethane	UG/L	34306	OK
X	Chloroform	UG/L	32106	OK
X	1, 1 - Dichloroethane	UG/L	34496	OK
X	1, 2 - Dichloroethane	UG/L	34531	OK
X	1, 1 - Dichloroethylene	UG/L	34501	OK
X	1, 2 - Dichloropropane	UG/L	34541	OK
X	Ethylbenzene	UG/L	34371	OK
X	Methylene Chloride	UG/L	34423	7.85
X	1, 1, 2, 2 - Tetrachloroethane	UG/L	34516	OK
X	Tetrachloroethylene	UG/L	34475	OK
X	Toluene	UG/L	34012	OK
X	1, 1, 1 - Trichloroethane	UG/L	34506	OK
X	1, 1, 2 - Trichloroethane	UG/L	34511	OK
X	Trichloroethylene	UG/L	39180	OK
X	Vinyl Chloride	UG/L	39175	OK
X	Acrolein	UG/L	34210	OK
X	Chloroethane	UG/L	34311	OK
X	2 - Chloroethylvinyl Ether	UG/L	34576	OK
X	Dichlorobromomethane	UG/L	32105	OK
X	1, 3 - Dichloropropylene	UG/L	34699	OK
X	Methyl Bromide	UG/L	34413	OK
X	Methyl Chloride	UG/L	34418	OK
X	1, 2 - trans - Dichloroethylene	UG/L	34546	OK
X	1, 2 Dichlorobenzene	UG/L	34536	OK
X	1, 3 Dichlorobenzene	UG/L	34566	OK
X	1, 4 Dichlorobenzene	UG/L	34571	OK

VALUE CODING RULES AND
REMARK CODES ON REVERSE

UP

Form VWX-015 A
4/83

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES

WATER QUALITY MANAGEMENT ELEMENT

GROUND WATER ANALYSIS – MONITORING WELL REPORT

PLEASE TYPE OR PRINT WITH BALLPOINT PEN

FACILITY NAME: American Cyanamid Company - Carteret Landfill
SW ID NO.:

LAB NAME: Environmental Testing and Certification

R	NJPDES NO.	WELL PERMIT NO.	SAMPLE DATE YR. MO. DAY	NJ LAB CERT. NO.	WQM USE
1	NJ 0061611 (2–8)	24-10388-6 (9–16)	88 01 19 (17–22)	12257 (23–27)	(28)

CRT2D

THE SCHEDULE INDICATED BELOW IS TO BE OBSERVED FROM 01 88 (MO. YR.) TO 03 88 (MO. YR.)

SUBMIT WITH SIGNED T-VWX-014

SAMPLING MONTHS (Feb. Mar. Apr. May June July Aug. Sept. Oct. Nov. Dec.)	ANALYSIS	UNITS	PARAMETER	VALUE	REMARKS
X X X X X	Elevation of top of well casing with cap off (as specified in well completion report)	feet MSL: to nearest .01		8.84	
X X X X X	Elevation of original ground level (as specified in well completion report)	feet MSL: to nearest .01		6.28	
X X X X X	Depth to water table from top of casing prior to sampling with cap off	feet: to nearest .01	82546	5.78	
X X X X X	Depth to water table from original ground level prior to sampling	feet: to nearest .01	72019	3.22	
X	Arsenic, Dissolved	UG/L as As	01000	1.4	K
X	Barium, Dissolved	UG/L as Ba	01005	38	
X X X X X	Biochemical Oxygen Demand - 5 Day	MG/L	00310	2	K
X	Cadmium, Dissolved	UG/L as Cd	01025	0	K
X X X X X	Chloride, Dissolved	UG/L as Cl	82295	1090	
	Chromium, Dissolved	UG/L as Cr	01030		
X	Chromium, Dissolved, Hexavalent	UG/L as Cr	01220	1	K
X X X X X	Chemical Oxygen Demand (COD), Dissolved	MG/L	00341	12	K
X	Coliform Group	N/100 ML	74056	32	
X X X X X	Color	Pt - Co	00060		
X X X X X	Copper, Dissolved	UG/L as Cu	01040	3.1	K
X	Cyanide, Total	MG/L as CN	00720	.025	K
	Endrin, Total	UG/L	39330		
X	Fluoride, Dissolved	MG/L as F	00950	0.1	K
	Gross Alpha, Dissolved	Pc/L	01503		
	Gross Beta, Dissolved	Pc/L	03503		
X	Hardness, Total as $CaCO_3$	MG/L	00900		
X X X X X	Iron, Dissolved	UG/L as Fe	01046	140	
X X X X X	Lead, Dissolved	UG/L as Pb	01049	0	K
	Lindane, Total	UG/L	39782		
X	Manganese, Dissolved	UG/L	01056	10.4	
X	Mercury, Dissolved	UG/L	71890	0	K

VALUE CODING RULES AND
REMARK CODES ON REVERSE

29 33 34 40 41
42 46 47 53 54
55 59 60 66 67
68 72 73 79 80

U40

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4/83

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES
WATER QUALITY MANAGEMENT ELEMENT

GROUND WATER ANALYSIS – MONITORING WELL REPORT

PLEASE TYPE OR PRINT WITH BALLPOINT PEN

FACILITY NAME: American Cyanamid Sanitary Landfill - Carteret
SW ID NO.:
LAB NAME: Environmental Testing and Certification

NJPDES NO.	WELL PERMIT NO.	SAMPLE DATE YR. MO. DAY	NJ LAB CERT. NO.	WQM USE
S NJ 0006116 1	94-1038 8-8 CRT2D	88 01 19	12277	

THE SCHEDULE INDICATED BELOW IS TO BE OBSERVED FROM 01 88 (MO. YR.) TO 03 88 (MO. YR.)

SUBMIT WITH SIGNED T-VWX-014

SAMPLING MONTHS: Jan Feb Mar Apr May June July Aug Sept Oct Nov Dec

ANALYSIS	UNITS	PARAMETER	VALUE
Methoxychlor, Total	UG/L	39480	
Methylene Blue Active Substances	MG/L	38260	0.05
Nitrogen, Ammonia, Dissolved $NH_3 + NH_4$ as N	MG/L as N	00608	2.8
Nitrogen, Nitrate, Dissolved	MG/L as N	00618	0.1
Odor	T.O.N.	00085	–
pH	Standard Units	00400	6.4
Phenols, Total Recoverable	UG/L	32730	–
Radium 226, Dissolved	Pc/L	09503	
Radium 228, Dissolved	Pc/L	81366	
Selenium, Dissolved	UG/L	01145	1.9
Silver, Dissolved	UG/L	01075	4.6
Sodium, Dissolved	MG/L	00930	528.0
Sulfate, Dissolved (as SO_4)	MG/L	00946	88.0
Total Dissolved Solids (TDS)	PPM	70300	1942.0
Total Organic Carbon (TOC)	PPM	00680	6.0
Total Organic Halogen (TOX)	UG/L	70353	496.0
Toxaphene	UG/L	39400	
Turbidity	NTU	00076	
Zinc, Dissolved	UG/L	01090	18
2, 4–D, Total	UG/L	39370	
2, 4, 5–TP, Total	UG/L	39045	
Total Organic Carbon	PPM		7.1
Total Organic Halogen (TOX)	UG/L		581.0
			4.1

Form VWX-015 A
4/83

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES
WATER QUALITY MANAGEMENT ELEMENT

GROUND WATER ANALYSIS – MONITORING WELL REPORT

PLEASE TYPE OR PRINT WITH BALLPOINT PEN

FACILITY NAME: American Cyanamid Company - Carteret Landfill
SW ID NO.:
LAB NAME: Environmental Testing and Certification

R	NJPDES NO.	WELL PERMIT NO.	SAMPLE DATE YR. MO. DAY	NJ LAB CERT. NO.	WQM USE
	NJ 0061611	94 1039 1 - 8	88 01 19	12257	
1	2 – 8	9 – 16	17 – 22	23 – 27	28

CRT3S

THE SCHEDULE INDICATED BELOW IS TO BE OBSERVED FROM 01 88 (MO. YR.) TO 03 88 (MO. YR.)

SUBMIT WITH SIGNED T-VWX-014

SAMPLING MONTHS (Feb. Mar. Apr. May June July Aug. Sept. Oct. Nov. Dec.)	ANALYSIS	UNITS	PARAMETER	VALUE	REMARKS
x x x x	Elevation of top of well casing with cap off (as specified in well completion report)	feet MSL: to nearest .01		12.73	
x x x x	Elevation of original ground level (as specified in well completion report)	feet MSL: to nearest .01		9.33	
x x x x	Depth to water table from top of casing prior to sampling with cap off	feet: to nearest .01	82546	8.90	
x x x x	Depth to water table from original ground level prior to sampling	feet: to nearest .01	72019	5.50	
x	Arsenic, Dissolved	UG/L as As	01000	1.2	K
x	Barium, Dissolved	UG/L as Ba	01005	160	
x x x x	Biochemical Oxygen Demand - 5 Day	MG/L	00310	330	
x	Cadmium, Dissolved	UG/L as Cd	01025	0	K
x x x x	Chloride, Dissolved	UG/L as Cl	82295	12500000	
	Chromium, Dissolved	UG/L as Cr	01030		
x	Chromium, Dissolved, Hexavalent	UG/L as Cr	01220	10	K
x x x x	Chemical Oxygen Demand (COD), Dissolved	MG/L	00341	1140	
x	Coliform Group	N/100 ML	74056	460000	
x x x x	Color	Pt - Co	00080		
x x x x	Copper, Dissolved	UG/L as Cu	01040	2.6	K
x	Cyanide, Total	MG/L as CN	00720	0.025	
	Endrin, Total	UG/L	34390		
x	Fluoride, Dissolved	MG/L as F	00950	0.6	
	Gross Alpha, Dissolved	Pc/L	01503		
	Gross Beta, Dissolved	Pc/L	03503		
x	Hardness, Total as $CaCO_3$	MG/L	00900		
x x x x	Iron, Dissolved	UG/L as Fe	01046	220	
x x x x	Lead, Dissolved	UG/L as Pb	01049	0	K
	Lindane, Total	UG/L	39782		
x	Manganese, Dissolved	UG/L	01056	50	
x	Mercury, Dissolved	UG/L	71890	0	K

VALUE CODING RULES AND REMARK CODES ON REVERSE

29 42 55 68 | 33 34 46 47 59 60 72 73 | 40 41 53 54 66 67 79 80

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4/83

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES
WATER QUALITY MANAGEMENT ELEMENT

GROUND WATER ANALYSIS – MONITORING WELL REPORT

PLEASE TYPE OR PRINT WITH BALLPOINT PEN

FACILITY NAME: American Cyanamid Sanitary Landfill - Carteret | SW ID NO.:

LAB NAME: Environmental Testing and Certificate

NJPDES NO.	WELL PERMIT NO.	SAMPLE DATE YR. MO. DAY	NJ LAB CERT. NO.	WQM USE
S NJ 0 0 6 1 6 1 1	2 4 - 1 0 3 9 1 - 8 (CRT3S)	8 8 0 1 1 9	1 2 2 5 7	

THE SCHEDULE INDICATED BELOW IS TO BE OBSERVED FROM 0 1 (MO.) 8 8 (YR.) TO 0 3 (MO.) 8 8 (YR.)

SUBMIT WITH SIGNED T-VWX-014

SAMPLING MONTHS (Jan Feb Mar Apr May June July Aug Sept Oct Nov Dec)	ANALYSIS	UNITS	PARAMETER	VALUE
	Methoxychlor, Total	UG/L	39480	
X X X X X	Methylene Blue Active Substances	MG/L	38260	0.24
X X X X X	Nitrogen, Ammonia, Dissolved $NH_3 + NH_4$ as N	MG/L as N	00608	42
X X X X X	Nitrogen, Nitrate Dissolved	MG/L as N	00618	0.2
X X X X X	Odor	T.O.N.	00085	
X X X X X	pH	Standard Units	00400	6.4
X X X X X	Phenols, Total Recoverable	UG/L	32730	
	Radium 226, Dissolved	Pc/L	09503	
	Radium 228, Dissolved	Pc/L	81366	
X	Selenium, Dissolved	UG/L	01145	1.9
X	Silver, Dissolved	UG/L	01075	10
X X X X X	Sodium, Dissolved	MG/L	00930	612.0
X X X X X	Sulfate, Dissolved (as SO_4)	MG/L	00946	44
X X X X X	Total Dissolved Solids (TDS)	PPM	70300	2040.0
X X X X X	Total Organic Carbon (TOC)	PPM	00680	37.5
X X X X X	Total Organic Halogen (TOX)	UG/L	73063	231.0
	Toxaphene	UG/L	39400	
X	Turbidity	NTU	00076	
X X X X	Zinc, Dissolved	UG/L	01090	15
	2, 4–D, Total	UG/L	39370	
	2, 4, 5–TP, Total	UG/L	39045	
	Total Organic Carbon	PPM		38.3
	Total Organic Halogen (TOX)	UG/L		233.0
				U ug/l

Form VWX-016
4/83

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES
WATER QUALITY MANAGEMENT ELEMENT

GROUND WATER ANALYSIS – VOLATILE ORGANICS REPORT

PLEASE TYPE OR PRINT WITH BALLPOINT PEN

FACILITY NAME: American Cyanamid Sanitary Landfill - Carteret | SW ID NO.:

LAB NAME: Environmental Testing and Certification

NJPDES NO.	WELL PERMIT NO.	SAMPLE DATE YR. MO. DAY	NJ LAB CERT. NO.	WQM USE
T NJ 0 0 6 1 6 1 1	2 4 - 1 0 3 9 1 - 8	8 8 0 1 1 9	1 2 3 5 7	

CRT3S

THE SCHEDULE INDICATED BELOW IS TO BE OBSERVED FROM 0 1 8 8 (MO. YR.) TO 0 3 8 8 (MO. YR.)

SUBMIT WITH SIGNED T-VWX-014

SAMPLING MONTHS: Jan. Feb. Mar. Apr. May June July Aug. Sept. Oct. Nov. Dec.

Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	ANALYSIS	UNITS	PARAMETER	VALUE	
X												Acrylonitrile	UG/L	34215		OK
X												Benzene	UG/L	34030		OK
X												Bromoform	UG/L	32104		OK
X												Carbon Tetrachloride	UG/L	32102		OK
X												Chlorobenzene	UG/L	34301		OK
X												Chlorodibromoethane	UG/L	34306		OK
X												Chloroform	UG/L	32106		OK
X												1, 1 - Dichloroethane	UG/L	34496		OK
X												1, 2 - Dichloroethane	UG/L	34531		OK
X												1, 1 - Dichloroethylene	UG/L	34501		OK
X												1, 2 - Dichloropropane	UG/L	34541		OK
X												Ethylbenzene	UG/L	34371		OK
X												Methylene Chloride	UG/L	34423		OK
X												1, 1, 2, 2 - Tetrachloroethane	UG/L	34516	2.75	K
X												Tetrachloroethylene	UG/L	34475		OK
X												Toluene	UG/L	34012		OK
X												1, 1, 1 - Trichloroethane	UG/L	34506		OK
X												1, 1, 2 - Trichloroethane	UG/L	34511		OK
X												Trichloroethylene	UG/L	39180		OK
X												Vinyl Chloride	UG/L	39175		OK
X												Acrolein	UG/L	34210		OK
X												Chloroethane	UG/L	34311		OK
X												2 - Chloroethylvinyl Ether	UG/L	34576		OK
X												Dichlorobromomethane	UG/L	32105		OK
X												1, 3 - Dichloropropylene	UG/L	34699		OK
X												Methyl Bromide	UG/L	34413		OK
X												Methyl Chloride	UG/L	34418		OK
X												1, 2 - trans - Dichloroethylene	UG/L	34546		OK
X												1, 2 Dichlorobenzene	UG/L	34536		OF
X												1, 3 Dichlorobenzene	UG/L	34566		OF
X												1, 4 Dichlorobenzene	UG/L	34571		OF

29 42 55 68 | 33 34 46 47 59 60 72 73 | 40 51 61 71

VALUE CODING RULES AND
REMARK CODES ON REVERSE

U45

Form VWX-015 A
4/83

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES
WATER QUALITY MANAGEMENT ELEMENT

GROUND WATER ANALYSIS – MONITORING WELL REPORT

PLEASE TYPE OR PRINT WITH BALLPOINT PEN

FACILITY NAME: American Cyanamid Company - Carteret Landfill
SWID NO.:
LAB NAME: Environmental Testing and Certification

NJPDES NO.	WELL PERMIT NO.	SAMPLE DATE YR. MO. DAY	NJ LAB CERT. NO.	WQM USE
R NJ0061611	24 10390 - 0	88 01 19	12257	
	CRT3D			

THE SCHEDULE INDICATED BELOW IS TO BE OBSERVED FROM 01 88 (MO. YR.) TO 03 88 (MO. YR.)

SUBMIT WITH SIGNED T-VWX-014

SAMPLING MONTHS (Feb. Mar. Apr. May June July Aug. Sept. Oct. Nov. Dec.)	ANALYSIS	UNITS	PARAMETER	VALUE	REMARKS
x x x x x x	Elevation of top of well casing with cap off (as specified in well completion report)	feet MSL: to nearest .01		12.88	
x x x x x x	Elevation of original ground level (as specified in well completion report)	feet MSL: to nearest .01		9.74	
x x x x x x	Depth to water table from top of casing prior to sampling with cap off	feet: to nearest .01	82546	10.63	
x x x x x x	Depth to water table from original ground level prior to sampling	feet: to nearest .01	72019	7.52	
x	Arsenic, Dissolved	UG/L as As	01000	0.013	K
x	Barium, Dissolved	UG/L as Ba	01005	80	
x x x x x x	Biochemical Oxygen Demand - 5 Day	MG/L	00310	2	K
x	Cadmium, Dissolved	UG/L as Cd	01025	0.004	K
x x x x x x	Chloride, Dissolved	UG/L as Cl	82295	1130000	
	Chromium, Dissolved	UG/L as Cr	01030		
x	Chromium, Dissolved, Hexavalent	UG/L as Cr	01220	10	K
x x x x x x	Chemical Oxygen Demand (COD), Dissolved	MG/L	00341	60	
x	Coliform Group	N/100 ML	74056	5600	
x x x x x x	Color	Pt - Co	00080		
x x x x x x	Copper, Dissolved	UG/L as Cu	01040	11.3	K
x	Cyanide, Total	MG/L as CN	00720	0.025	K
	Endrin, Total	UG/L	39390		
x	Fluoride, Dissolved	MG/L as F	00950	0.6	
	Gross Alpha, Dissolved	Pc/L	01503		
	Gross Beta, Dissolved	Pc/L	03503		
x	Hardness, Total as $CaCO_3$	MG/L	00900		
x x x x x x	Iron, Dissolved	UG/L as Fe	01046	17900	
x x x x x x	Lead, Dissolved	UG/L as Pb	01049	0	K
	Lindane, Total	UG/L	39782		
x	Manganese, Dissolved	UG/L	01056	765	
x	Mercury, Dissolved	UG/L	71890	0	K

VALUE CODING RULES AND
REMARK CODES ON REVERSE

29 42 55 68 | 33 34 46 47 59 60 72 73 | 40 41 53 54 66 67 79 80

U46

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES
WATER QUALITY MANAGEMENT ELEMENT

GROUND WATER ANALYSIS – MONITORING WELL REPORT

PLEASE TYPE OR PRINT WITH BALLPOINT PEN

FACILITY NAME: American Cyanamid Sanitary Landfill - Carteret
SW ID NO.:
LAB NAME: Environmental Testing and Certification

S | NJPDES NO.: NJ 0 0 6 1 6 1 1 | WELL PERMIT NO.: 2 4 - 1 0 3 9 0 - C | SAMPLE DATE YR. 8 8 MO. 0 1 DAY 1 9 | NJ LAB CERT. NO.: 1 2 2 5 7 | WQM USE

CRT3D

THE SCHEDULE INDICATED BELOW IS TO BE OBSERVED FROM 01 (MO.) 88 (YR.) TO 03 (MO.) 88 (YR.)

SUBMIT WITH SIGNED T-VWX-014

SAMPLING MONTHS	ANALYSIS	UNITS	PARAMETER	VALUE
	Methoxychlor, Total	UG/L	39480	
X X X X	Methylene Blue Active Substances	MG/L	38260	0.08
X X X X	Nitrogen, Ammonia, Dissolved $NH_3 + NH_4$ as N	MG/L as N	00608	4.9
X X X X	Nitrogen, Nitrate Dissolved	MG/L as N	00618	0.1 K
X X X X	Odor	T.O.N.	00085	
X X X X	pH	Standard Units	00400	6.48
X X X X	Phenols, Total Recoverable	UG/L	32730	
	Radium 226, Dissolved	Pc/L	09503	
	Radium 228, Dissolved	Pc/L	81366	
X	Selenium, Dissolved	UG/L	01145	0 I
X	Silver, Dissolved	UG/L	01075	0.86 I
X X X X	Sodium, Dissolved	MG/L	00930	52.00
X X X X	Sulfate, Dissolved (as SO_4)	MG/L	00946	10.90
X X X X	Total Dissolved Solids (TDS)	PPM	70300	20.900
X X X X	Total Organic Carbon (TOC)	PPM	00680	11.8
X X X X	Total Organic Halogen (TOX)	UG/L	70353	16.80
	Toxaphene	UG/L	39400	
X	Turbidity	NTU	00076	
X X X X	Zinc, Dissolved	UG/L	01090	28
	2, 4–D, Total	UG/L	39370	
	2, 4, 5–TP, Total	UG/L	39045	T
	Total Organic Carbon	PPM		12
	Total Organic Halogen (TOX)	UG/L		26.70
				4.7
				U

38 39 40

Form VWX-016
4/83

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES
WATER QUALITY MANAGEMENT ELEMENT

GROUND WATER ANALYSIS – VOLATILE ORGANICS REPORT

PLEASE TYPE OR PRINT WITH BALLPOINT PEN

FACILITY NAME: American Cyanamid Sanitary Landfill - Carteret
SW ID NO.:

LAB NAME: Environmental Testing and Certification

NJPDES NO.: T NJ 0 0 6 1 6 1 1 (1–8)
WELL PERMIT NO.: 2 4 - 1 0 8 9 0 - 0 (9–15)
CRT3D
SAMPLE DATE YR. MO. DAY: 8 8 0 1 1 9 (17–22)
NJ LAB CERT. NO.: 1 2 3 5 7 (23–27)
WQM USE: (28)

THE SCHEDULE INDICATED BELOW IS TO BE OBSERVED FROM 0 1 8 8 (MO. YR.) TO 0 3 8 8 (MO. YR.)

SUBMIT WITH SIGNED T-VWX-014

SAMPLING MONTHS

Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	ANALYSIS	UNITS	PARAMETER	VALUE
X												Acrylonitrile	UG/L	34215	0K
X												Benzene	UG/L	34030	0K
X												Bromoform	UG/L	32104	0K
X												Carbon Tetrachloride	UG/L	32102	0K
X												Chlorobenzene	UG/L	34301	0K
X												Chlorodibromoethane	UG/L	34306	0K
X												Chloroform	UG/L	32106	0K
X												1, 1 - Dichloroethane	UG/L	34496	0K
X												1, 2 - Dichloroethane	UG/L	34531	0K
X												1, 1 - Dichloroethylene	UG/L	34501	0K
X												1, 2 - Dichloropropane	UG/L	34541	0K
X												Ethylbenzene	UG/L	34371	0K
X												Methylene Chloride	UG/L	34423	0K
X												1, 1, 2, 2 - Tetrachloroethane	UG/L	34516	0K
X												Tetrachloroethylene	UG/L	34475	0K
X												Toluene	UG/L	34012	0K
X												1, 1, 1 - Trichloroethane	UG/L	34506	0K
X												1, 1, 2 - Trichloroethane	UG/L	34511	0K
X												Trichloroethylene	UG/L	39180	0K
X												Vinyl Chloride	UG/L	39175	0K
X												Acrolein	UG/L	34210	0K
X												Chloroethane	UG/L	34311	0K
X												2 - Chloroethylvinyl Ether	UG/L	34576	0K
X												Dichlorobromomethane	UG/L	32105	0K
X												1, 3 - Dichloropropylene	UG/L	34699	0K
X												Methyl Bromide	UG/L	34413	0K
X												Methyl Chloride	UG/L	34418	0K
X												1, 2 - trans - Dichloroethylene	UG/L	34546	0K
X												1, 2 Dichlorobenzene	UG/L	34536	0K
X												1, 3 Dichlorobenzene	UG/L	34566	0K
X												1, 4 Dichlorobenzene	UG/L	34571	0K

VALUE CODING RULES AND
REMARK CODES ON REVERSE

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Form VWX-015 A
4/83

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES

WATER QUALITY MANAGEMENT ELEMENT

GROUND WATER ANALYSIS – MONITORING WELL REPORT

PLEASE TYPE OR PRINT WITH BALLPOINT PEN

FACILITY NAME: American Cyanamid Company - Carteret Landfill | SW ID NO.:

LAB NAME: Environmental Testing and Certification

R	NJPDES NO.	WELL PERMIT NO.	SAMPLE DATE YR. MO. DAY	NJ LAB CERT. NO.	WQM USE
1	NJ 0061611 (2–8)	34 10393 - 4 (9–16)	88 01 19 (17–22)	12257 (23–27)	(28)

CRT4S

THE SCHEDULE INDICATED BELOW IS TO BE OBSERVED FROM 01 88 (MO. YR.) TO 03 88 (MO. YR.)

SUBMIT WITH SIGNED T-VWX-014

Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	ANALYSIS	UNITS	PARAMETER	VALUE	REMARKS
X			X			X			X			Elevation of top of well casing with cap off (as specified in well completion report)	feet MSL: to nearest .01		13.65	
X			X			X			X			Elevation of original ground level (as specified in well completion report)	feet MSL: to nearest .01		10.38	
X			X			X			X			Depth to water table from top of casing prior to sampling with cap off	feet: to nearest .01	82546	10.22	
X			X			X			X			Depth to water table from original ground level prior to sampling	feet: to nearest .01	72019	6.95	
X												Arsenic, Dissolved	UG/L as As	01000	4	K
X												Barium, Dissolved	UG/L as Ba	01005	28	
X			X			X			X			Biochemical Oxygen Demand - 5 Day	MG/L	00310	9 1	
X												Cadmium, Dissolved	UG/L as Cd	01025	0	K
X			X			X			X			Chloride, Dissolved	UG/L as Cl	82295	17100 00 0	
												Chromium, Dissolved	UG/L as Cr	01030		
X												Chromium, Dissolved, Hexavalent	UG/L as Cr	01220	10	K
X			X			X			X			Chemical Oxygen Demand (COD), Dissolved	MG/L	00341	12	
X												Coliform Group	N/100 ML	74056	100	K
X			X			X			X			Color	Pt - Co	00080		
X			X			X			X			Copper, Dissolved	UG/L as Cu	01040	26	K
X												Cyanide, Total	MG/L as CN	00720	10 0	
												Endrin, Total	UG/L	39390		
X												Fluoride, Dissolved	MG/L as F	00950	5.4	
												Gross Alpha, Dissolved	Pc/L	01503		
												Gross Beta, Dissolved	Pc/L	03503		
X												Hardness, Total as $CaCO_3$	MG/L	00900		
X			X			X			X			Iron, Dissolved	UG/L as Fe	01046	810 00	
X			X			X			X			Lead, Dissolved	UG/L as Pb	01049	0	K
												Lindane, Total	UG/L	39782		
X												Manganese, Dissolved	UG/L	01056	0 . 75	K
X												Mercury, Dissolved	UG/L	71890	0	K

VALUE CODING RULES AND
REMARK CODES ON REVERSE

29 33 34 40 41
42 46 47 53 54
55 59 60 66 67
68 72 73 79 80

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4/83

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES
WATER QUALITY MANAGEMENT ELEMENT

GROUND WATER ANALYSIS – MONITORING WELL REPORT

PLEASE TYPE OR PRINT WITH BALLPOINT PEN

FACILITY NAME: American Cyanamid Sanitary Landfill - Carteret
SW ID NO.:
LAB NAME: Environmental Testing and Certification

S	NJPDES NO.	WELL PERMIT NO.	SAMPLE DATE TR.	MO.	DAY	NJ LAB CERT. NO.	WQM USE
	NJ 0 0 6 1 6 1 1	a4-1839-4	8	80	1 1 9	12257	

CRT4S

THE SCHEDULE INDICATED BELOW IS TO BE OBSERVED FROM 0 1 8 8 (MO. YR.) TO 0 3 8 8 (MO. YR.)

SUBMIT WITH SIGNED T-VWX-014

SAMPLING MONTHS	ANALYSIS	UNITS	PARAMETER	VALUE
	Methoxychlor, Total	UG/L	39480	
X	Methylene Blue Active Substances	MG/L	38260	0.05
X	Nitrogen, Ammonia, Dissolved $NH_3 + NH_4$ as N	MG/L as N	00608	4.10
X	Nitrogen, Nitrate Dissolved	MG/L as N	00618	0.1K
X	Odor	T.O.N.	00085	
X	pH	Standard Units	00400	8.89
X	Phenols, Total Recoverable	UG/L	32730	
	Radium 226, Dissolved	Pc/L	09503	
	Radium 228, Dissolved	Pc/L	81366	
X	Selenium, Dissolved	UG/L	01145	0K
X	Silver, Dissolved	UG/L	01075	1.3K
X	Sodium, Dissolved	MG/L	00930	91.40
X	Sulfate, Dissolved (as SO_4)	MG/L	00946	32.40
X	Total Dissolved Solids (TDS)	PPM	70300	279.00
X	Total Organic Carbon (TOC)	PPM	00680	1.20
X	Total Organic Halogen (TOX)	UG/L	70353	29.10
	Toxaphene	UG/L	39400	
X	Turbidity	NTU	00076	
X	Zinc, Dissolved	UG/L	01090	4.6
	2, 4-D, Total	UG/L	39370	
	2, 4, 5-TP, Total	UG/L	39045	
	Total Organic Carbon	PPM		1.27
	Total Organic Halogen (TOX)	UG/L		30.20

1.50

Form VWX-016
4/83

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES
WATER QUALITY MANAGEMENT ELEMENT

GROUND WATER ANALYSIS – VOLATILE ORGANICS REPORT

PLEASE TYPE OR PRINT WITH BALLPOINT PEN

FACILITY NAME: American Cyanamid Sanitary Landfill - Carteret
SW ID NO.:

LAB NAME: Environmental Testing and Certification

NJPDES NO.: T NJ 0 0 6 1 6 1 1
WELL PERMIT NO.: 2 4 - 1 0 3 9 3 - 4 (CRT4S)
SAMPLE DATE YR. MO. DAY: 8 8 0 1 1 9
NJ LAB CERT. NO.: 1 2 2 5 7
WQM USE:

THE SCHEDULE INDICATED BELOW IS TO BE OBSERVED FROM 0 1 8 8 (MO. YR.) TO 0 3 8 8 (MO. YR.)

SUBMIT WITH SIGNED T-VWX-014

SAMPLING MONTHS: Jan. X | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. | Oct. | Nov. | Dec.

ANALYSIS	UNITS	PARAMETER	VALUE	
Acrylonitrile	UG/L	34215	0	K
Benzene	UG/L	34030	0	K
Bromoform	UG/L	32104	0	K
Carbon Tetrachloride	UG/L	32102	0	K
Chlorobenzene	UG/L	34301	0	K
Chlorodibromoethane	UG/L	34306	0	K
Chloroform	UG/L	32106	0	K
1, 1 - Dichloroethane	UG/L	34496	0	K
1, 2 - Dichloroethane	UG/L	34531	0	K
1, 1 - Dichloroethylene	UG/L	34501	0	K
1, 2 - Dichloropropane	UG/L	34541	0	K
Ethylbenzene	UG/L	34371	0	F
Methylene Chloride	UG/L	34423	2.46	F
1, 1, 2, 2 - Tetrachloroethane	UG/L	34516	0	F
Tetrachloroethylene	UG/L	34475	0	F
Toluene	UG/L	34012	0	F
1, 1, 1 - Trichloroethane	UG/L	34506	0	F
1, 1, 2 - Trichloroethane	UG/L	34511	0	F
Trichloroethylene	UG/L	39180	0	F
Vinyl Chloride	UG/L	39175	0	F
Acrolein	UG/L	34210	0	
Chloroethane	UG/L	34311	0	
2 - Chloroethylvinyl Ether	UG/L	34576	0	
Dichlorobromomethane	UG/L	32105	0	
1, 3 - Dichloropropylene	UG/L	34699	0	
Methyl Bromide	UG/L	34413	0	
Methyl Chloride	UG/L	34418	0	
1, 2 - trans - Dichloroethylene	UG/L	34546	0	
1, 2 Dichlorobenzene	UG/L	34536	0	
1, 3 Dichlorobenzene	UG/L	34566	0	
1, 4 Dichlorobenzene	UG/L	34571	0	

VALUE CODING RULES AND
REMARK CODES ON REVERSE

29 42 55 66 | 33 34 46 47 59 60 72 73 | 4 5 6 7

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Form VWX-015 A
4/83

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES

WATER QUALITY MANAGEMENT ELEMENT

GROUND WATER ANALYSIS – MONITORING WELL REPORT

PLEASE TYPE OR PRINT WITH BALLPOINT PEN

FACILITY NAME: American Cyanamid Company - Carteret Landfill
SW ID NO.:

LAB NAME: Environmental Testing and Certification

R	NJPDES NO.	WELL PERMIT NO.	SAMPLE DATE YR. MO. DAY	NJ LAB CERT. NO.	WQM USE
1	NJ 0061611 (2–8)	29 10392 6 (9–16)	88 01 19 (17–22)	12257 (23–27)	(28)

CRT4D

THE SCHEDULE INDICATED BELOW IS TO BE OBSERVED FROM 01 88 (MO. YR.) TO 03 88 (MO. YR.)

SUBMIT WITH SIGNED T-VWX-014

Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	ANALYSIS	UNITS	PARAMETER	VALUE	REMARKS
X			X			X			X			Elevation of top of well casing with cap off (as specified in well completion report)	feet MSL: to nearest .01		12.65	
X			X			X			X			Elevation of original ground level (as specified in well completion report)	feet MSL: to nearest .01		10.02	
X			X			X			X			Depth to water table from top of casing prior to sampling with cap off	feet: to nearest .01	82546	11.80	
X			X			X			X			Depth to water table from original ground level prior to sampling	feet: to nearest .01	72019	9.17	
X												Arsenic, Dissolved	UG/L as As	01000	1.6	K
X												Barium, Dissolved	UG/L as Ba	01005	62	
X			X			X			X			Biochemical Oxygen Demand - 5 Day	MG/L	00310	8	
X												Cadmium, Dissolved	UG/L as Cd	01025	0	K
X			X			X			X			Chloride, Dissolved	UG/L as Cl	82295	11300	
												Chromium, Dissolved	UG/L as Cr	01030		
X												Chromium, Dissolved, Hexavalent	UG/L as Cr	01220	1.0	K
X			X			X			X			Chemical Oxygen Demand (COD), Dissolved	MG/L	00341	-	H
X												Coliform Group	N/100 ML	74056	120	
X			X			X			X			Color	Pt - Co	00080		
X			X			X			X			Copper, Dissolved	UG/L as Cu	01040	2.6	K
X												Cyanide, Total	MG/L as CN	00720	0.535	
												Endrin, Total	UG/L	39390		
X												Fluoride, Dissolved	MG/L as F	00950	.5	
												Gross Alpha, Dissolved	Pc/L	01503		
												Gross Beta, Dissolved	Pc/L	03503		
X												Hardness, Total as $CaCO_3$	MG/L	00900		
X			X			X			X			Iron, Dissolved	UG/L as Fe	01046	200	
X			X			X			X			Lead, Dissolved	UG/L as Pb	01049	0	K
												Lindane, Total	UG/L	39782		
X												Manganese, Dissolved	UG/L	01056	140	
X												Mercury, Dissolved	UG/L	71890	0	K

VALUE CODING RULES AND REMARK CODES ON REVERSE

29 42 55 68 | 33 34 46 47 59 60 72 73 | 40 41 53 54 66 67 79 80

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Form VWX-015 B
4/83

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES
WATER QUALITY MANAGEMENT ELEMENT

GROUND WATER ANALYSIS – MONITORING WELL REPORT

PLEASE TYPE OR PRINT WITH BALLPOINT PEN

FACILITY NAME: American Cyanamid Sanitary Landfill - Carteret
SW ID NO.:
LAB NAME:

S	NJPDES NO.	WELL PERMIT NO.	SAMPLE DATE YR. MO. DAY	NJ LAB CERT. NO.	WQM USE
	NJ 0006161	27-1039 2-6 CRT4D	88 01 19	12257	

THE SCHEDULE INDICATED BELOW IS TO BE OBSERVED FROM 01 88 (MO. YR.) TO 03 88 (MO. YR.)

SUBMIT WITH SIGNED T-VWX-014

SAMPLING MONTHS	ANALYSIS	UNITS	PARAMETER	VALUE
	Methoxychlor, Total	UG/L	39480	
X X X X	Methylene Blue Active Substances	MG/L	38260	0.06
X X X X	Nitrogen, Ammonia, Dissolved $NH_3 + NH_4$ as N	MG/L as N	00608	9.0
X X X X	Nitrogen, Nitrate Dissolved	MG/L as N	00618	0.1
X X X X	Odor	T.O.N.	00085	
X X X X	pH	Standard Units	00400	6.48
X X X X	Phenols, Total Recoverable	UG/L	32730	
	Radium 226, Dissolved	Pc/L	09503	
	Radium 228, Dissolved	Pc/L	81366	
X	Selenium, Dissolved	UG/L	01145	10
X	Silver, Dissolved	UG/L	01075	3L
X X X X	Sodium, Dissolved	MG/L	00930	41L
X X X X	Sulfate, Dissolved (as SO_4)	MG/L	00946	109
X X X X	Total Dissolved Solids (TDS)	PPM	70300	2201
X X X X	Total Organic Carbon (TOC)	PPM	00680	8.8
X X X X	Total Organic Halogen (TOX)	UG/L	70353	23.3
	Toxaphene	UG/L	39400	
X	Turbidity	NTU	00076	
X X X X	Zinc, Dissolved	UG/L	01090	4.5
	2, 4–D, Total	UG/L	39370	
	2, 4, 5–TP, Total	UG/L	39045	
	Total Organic Carbon	PPM		9.3
	Total Organic Halogen (TOX)	UG/L		321
				453

Form VWX-016

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES
WATER QUALITY MANAGEMENT ELEMENT

GROUND WATER ANALYSIS – VOLATILE ORGANICS REPORT

PLEASE TYPE OR PRINT WITH BALLPOINT PEN

FACILITY NAME: American Cyanamid Sanitary Landfill - Carteret
SW ID NO.:

LAB NAME: Environmental Testing and Certification

NJPDES NO.	WELL PERMIT NO.	SAMPLE DATE YR. MO. DAY	NJ LAB CERT. NO.	WQM USE
T NJ 0 0 6 1 6 1 1	2 4 - 1 0 3 9 2 - 6 (CRT4D)	8 8 0 1 19	1 2 2 5 7	

THE SCHEDULE INDICATED BELOW IS TO BE OBSERVED FROM 01/88 (MO. YR.) TO 03/88 (MO. YR.)

SUBMIT WITH SIGNED T-VWX-014

SAMPLING MONTHS (Jan. Feb. Mar. Apr. May June July Aug. Sept. Oct. Nov. Dec.)	ANALYSIS	UNITS	PARAMETER	VALUE	
X	Acrylonitrile	UG/L	34215	0	K
X	Benzene	UG/L	34030	0	K
X	Bromoform	UG/L	32104	0	K
X	Carbon Tetrachloride	UG/L	32102	0	K
X	Chlorobenzene	UG/L	34301	0	K
X	Chlorodibromoethane	UG/L	34306	0	K
X	Chloroform	UG/L	32106	0	K
X	1, 1 - Dichloroethane	UG/L	34496	0	K
X	1, 2 - Dichloroethane	UG/L	34531	0	K
X	1, 1 - Dichloroethylene	UG/L	34501	0	K
X	1, 2 - Dichloropropane	UG/L	34541	0	K
X	Ethylbenzene	UG/L	34371	0	K
X	Methylene Chloride	UG/L	34423	0	K
X	1, 1, 2, 2 - Tetrachloroethane	UG/L	34516	0	K
X	Tetrachloroethylene	UG/L	34475	0	K
X	Toluene	UG/L	34012	4.26	K
X	1, 1, 1 - Trichloroethane	UG/L	34506	0	K
X	1, 1, 2 - Trichloroethane	UG/L	34511	0	K
X	Trichloroethylene	UG/L	39180	0	K
X	Vinyl Chloride	UG/L	39175	0	K
X	Acrolein	UG/L	34210	0	K
X	Chloroethane	UG/L	34311	0	K
X	2 - Chloroethylvinyl Ether	UG/L	34576	0	K
X	Dichlorobromomethane	UG/L	32105	0	K
X	1, 3 - Dichloropropylene	UG/L	34699	0	K
X	Methyl Bromide	UG/L	34413	0	K
X	Methyl Chloride	UG/L	34418	0	K
X	1, 2 - trans - Dichloroethylene	UG/L	34546	0	K
X	1, 2 Dichlorobenzene	UG/L	34536	0	K
X	1, 3 Dichlorobenzene	UG/L	34566	0	K
X	1, 4 Dichlorobenzene	UG/L	34571	0	K

VALUE CODING RULES AND REMARK CODES ON REVERSE

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Form VWX-015 A
4/83

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES

WATER QUALITY MANAGEMENT ELEMENT

GROUND WATER ANALYSIS – MONITORING WELL REPORT

PLEASE TYPE OR PRINT WITH BALLPOINT PEN

FACILITY NAME: American Cyanamid Company - Carteret Landfill

SW ID NO.:

LAB NAME: Environmental Testing and Certification

	NJPDES NO.	WELL PERMIT NO.	SAMPLE DATE YR. MO. DAY	NJ LAB CERT. NO.	WQM USE
R	NJ 0061611	24-10395-1 CRT5S	88 01 19	12257	
1	2 8	9 16	17 22	23 27	28

THE SCHEDULE INDICATED BELOW IS TO BE OBSERVED FROM 01 88 (MO. YR.) TO 03 88 (MO. YR.)

SUBMIT WITH SIGNED T-VWX-014

SAMPLING MONTHS

Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	ANALYSIS	UNITS	PARAMETER	VALUE	REMARKS
x			x			x			x			Elevation of top of well casing with cap off (as specified in well completion report)	feet MSL: to nearest .01		8.08	
x			x			x			x			Elevation of original ground level (as specified in well completion report)	feet MSL: to nearest .01		5.22	
x			x			x			x			Depth to water table from top of casing prior to sampling with cap off	feet: to nearest .01	82546	5.55	
x			x			x			x			Depth to water table from original ground level prior to sampling	feet: to nearest .01	72019	2.69	
x												Arsenic, Dissolved	UG/L as As	01000	8.8	K
x												Barium, Dissolved	UG/L as Ba	01005	260	
x			x			x			x			Biochemical Oxygen Demand - 5 Day	MG/L	00310	260	
x												Cadmium, Dissolved	UG/L as Cd	01025	0	K
x			x			x			x			Chloride, Dissolved	UG/L as Cl	82295	14900000	
												Chromium, Dissolved	UG/L as Cr	01030		
x												Chromium, Dissolved, Hexavalent	UG/L as Cr	01220	10	K
x			x			x			x			Chemical Oxygen Demand (COD), Dissolved	MG/L	00341	—	H
x												Coliform Group	N/100 ML	74056	4200	
x			x			x			x			Color	Pt - Co	00080		
x			x			x			x			Copper, Dissolved	UG/L as Cu	01040	3.8	K
x												Cyanide, Total	MG/L as CN	00720	6.10	
												Endrin, Total	UG/L	39390		
x												Fluoride, Dissolved	MG/L as F	00950	0.3	
												Gross Alpha, Dissolved	Pc/L	01503		
												Gross Beta, Dissolved	Pc/L	03503		
x												Hardness, Total as $CaCO_3$	MG/L	00900		
x			x			x			x			Iron, Dissolved	UG/L as Fe	01046	1500	
x			x			x			x			Lead, Dissolved	UG/L as Pb	01049	0.44	K
												Lindane, Total	UG/L	39782		
x												Manganese, Dissolved	UG/L	01056	33	
x												Mercury, Dissolved	UG/L	71890	0	K

29 33 34 40 4
42 46 47 53 5
55 59 60 66 6
68 72 73 79 8

VALUE CODING RULES AND
REMARK CODES ON REVERSE

U55

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES
WATER QUALITY MANAGEMENT ELEMENT

GROUND WATER ANALYSIS – MONITORING WELL REPORT

PLEASE TYPE OR PRINT WITH BALLPOINT PEN

FACILITY NAME: American Cyanamid Sanitary Landfill - Carteret
SW ID NO.:
LAB NAME: Environmental Testing and Certification

	NJPDES NO.	WELL PERMIT NO.	SAMPLE DATE YR. MO. DAY	NJ LAB CERT. NO.	WQM USE
S	NJ 0 0 6 1 6 1 1	2 4 - 1 0 3 9 5 - 1 CRT5S	8 8 0 1 1 9	1 2 2 5 7	

THE SCHEDULE INDICATED BELOW IS TO BE OBSERVED FROM 0 1 / 8 8 (MO. YR.) TO 0 3 / 8 8 (MO. YR.)

SUBMIT WITH SIGNED T-VWX-014

Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	ANALYSIS	UNITS	PARAMETER	VALUE
												Methoxychlor, Total	UG/L	39480	
X			X			X			X			Methylene Blue Active Substances	MG/L	38260	0.2 K
X			X			X			X			Nitrogen, Ammonia, Dissolved $NH_3 + NH_4$ as N	MG/L as N	00608	30
X			X			X			X			Nitrogen, Nitrate Dissolved	MG/L as N	00618	0.2 K
X			X			X			X			Odor	T.O.N.	00085	
X			X			X			X			pH	Standard Units	00400	6.75
X			X			X			X			Phenols, Total Recoverable	UG/L	32730	- 1 J
												Radium 226, Dissolved	Pc/L	09503	
												Radium 228, Dissolved	Pc/L	81366	
X												Selenium, Dissolved	UG/L	01145	3.8 K
X												Silver, Dissolved	UG/L	01075	1.6 K
X			X			X			X			Sodium, Dissolved	MG/L	00930	7130
X			X			X			X			Sulfate, Dissolved (as SO_4)	MG/L	00946	250
X			X			X			X			Total Dissolved Solids (TDS)	PPM	70300	23900
X			X			X			X			Total Organic Carbon (TOC)	PPM	00680	30.7
X			X			X			X			Total Organic Halogen (TOX)	UG/L	70353	217 0
												Toxaphene	UG/L	39400	
X												Turbidity	NTU	00076	
X			X			X			X			Zinc, Dissolved	UG/L	01090	15
												2, 4–D, Total	UG/L	39370	
												2, 4, 5–TP, Total	UG/L	39045	
												Total Organic Carbon	PPM		31.1
												Total Organic Halogen (TOX)	UG/L		6280

VALUE CODING RULES AND

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4/83

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES
WATER QUALITY MANAGEMENT ELEMENT

GROUND WATER ANALYSIS – VOLATILE ORGANICS REPORT

PLEASE TYPE OR PRINT WITH BALLPOINT PEN

FACILITY NAME: American Cyanamid Sanitary Landfill - Carteret
SW ID NO.:
LAB NAME: Environmental Testing and Certification

NJPDES NO.: T NJ 0 0 6 1 6 1 1 (1–8)
WELL PERMIT NO.: 2 4 - 1 0 3 9 5 - 1 (9–16)
SAMPLE DATE YR. | MO. | DAY: 8 8 | 0 1 | 1 9 (17–22)
NJ LAB CERT. NO.: 1 2 3 5 7 (23–27)
WQM USE: (28)

CRT5S

THE SCHEDULE INDICATED BELOW IS TO BE OBSERVED FROM 0 1 | 8 8 (MO. YR.) TO 0 3 | 8 8 (MO. YR.)

SUBMIT WITH SIGNED T-VWX-014

SAMPLING MONTHS												ANALYSIS	UNITS	PARAMETER	VALUE	
Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.					
X												Acrylonitrile	UG/L	34215	0	K
X												Benzene	UG/L	34030	0	F
X												Bromoform	UG/L	32104	0	F
X												Carbon Tetrachloride	UG/L	32102	0	F
X												Chlorobenzene	UG/L	34301	0	K
X												Chlorodibromoethane	UG/L	34306	0	F
X												Chloroform	UG/L	32106	0	F
X												1, 1 - Dichloroethane	UG/L	34496	0	F
X												1, 2 - Dichloroethane	UG/L	34531	0	F
X												1, 1 - Dichloroethylene	UG/L	34501	0	F
X												1, 2 - Dichloropropane	UG/L	34541	0	F
X												Ethylbenzene	UG/L	34371	0	F
X												Methylene Chloride	UG/L	34423	0	F
X												1, 1, 2, 2 - Tetrachloroethane	UG/L	34516	0	F
X												Tetrachloroethylene	UG/L	34475	0	F
X												Toluene	UG/L	34010	0	F
X												1, 1, 1 - Trichloroethane	UG/L	34506	0	F
X												1, 1, 2 - Trichloroethane	UG/L	34511	0	F
X												Trichloroethylene	UG/L	39180	0	F
X												Vinyl Chloride	UG/L	39175	0	F
X												Acrolein	UG/L	34210	0	F
X												Chloroethane	UG/L	34311	0	F
X												2 - Chloroethylvinyl Ether	UG/L	34576	0	F
X												Dichlorobromomethane	UG/L	32105	0	F
X												1, 3 - Dichloropropylene	UG/L	34699	0	F
X												Methyl Bromide	UG/L	34413	0	F
X												Methyl Chloride	UG/L	34418	0	F
X												1, 2 - trans - Dichloroethylene	UG/L	34546	0	F
X												1, 2 Dichlorobenzene	UG/L	34536	0	F
X												1, 3 Dichlorobenzene	UG/L	34566	0	F
X												1, 4 Dichlorobenzene	UG/L	34571	0	F

29 33 34
43 46 47
58 59 60
68 72 73

VALUE CODING RULES AND
REMARK CODES ON REVERSE

Form VWX-015 A
4/83

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES
WATER QUALITY MANAGEMENT ELEMENT

GROUND WATER ANALYSIS – MONITORING WELL REPORT

PLEASE TYPE OR PRINT WITH BALLPOINT PEN

FACILITY NAME: American Cyanamid Company - Carteret Landfill | SW ID NO.:

LAB NAME: Environmental Testing and Certification

NJPDES NO.	WELL PERMIT NO.	SAMPLE DATE YR. | MO. | DAY	NJ LAB CERT. NO.	WQM USE
R NJ 0061611	24-10394-2	88 | 01 | 19	12257	
1 2–8	9–16	17–22	23–27	28

CRT5D

THE SCHEDULE INDICATED BELOW IS TO BE OBSERVED FROM 01 / 88 (MO. YR.) TO 03 / 88 (MO. YR.)

SUBMIT WITH SIGNED T-VWX-014

SAMPLING MONTHS: Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	ANALYSIS	UNITS	PARAMETER	VALUE	REMARKS
X			X			X			X			Elevation of top of well casing with cap off (as specified in well completion report)	feet MSL: to nearest .01		8.07	
X			X			X			X			Elevation of original ground level (as specified in well completion report)	feet MSL: to nearest .01		5.23	
X			X			X			X			Depth to water table from top of casing prior to sampling with cap off	feet: to nearest .01	82546	5.58	
X			X			X			X			Depth to water table from original ground level prior to sampling	feet: to nearest .01	72019	2.74	
X												Arsenic, Dissolved	UG/L as As	01000	2.7	K
X												Barium, Dissolved	UG/L as Ba	01005	270	
X			X			X			X			Biochemical Oxygen Demand - 5 Day	MG/L	00310	2.1	
X												Cadmium, Dissolved	UG/L as Cd	01025	0	K
X			X			X			X			Chloride, Dissolved	UG/L as Cl	82295	912000	
												Chromium, Dissolved	UG/L as Cr	01030		
X												Chromium, Dissolved, Hexavalent	UG/L as Cr	01220	1.0	K
X			X			X			X			Chemical Oxygen Demand (COD), Dissolved	MG/L	00341	-	H
X												Coliform Group	N/100 ML	74056	120	
X			X			X			X			Color	Pt - Co	00080		
X			X			X			X			Copper, Dissolved	UG/L as Cu	01040	2.2	K
X												Cyanide, Total	MG/L as CN	00720	10.6	
												Endrin, Total	UG/L	39390		
X												Fluoride, Dissolved	MG/L as F	00950	1.4	
												Gross Alpha, Dissolved	Pc/L	01503		
												Gross Beta, Dissolved	Pc/L	03503		
X												Hardness, Total as $CaCO_3$	MG/L	00900		
X			X			X			X			Iron, Dissolved	UG/L as Fe	01046	240	
X			X			X			X			Lead, Dissolved	UG/L as Pb	01049	0	K
												Lindane, Total	UG/L	39782		
X												Manganese, Dissolved	UG/L	01056	60	
X												Mercury, Dissolved	UG/L	71890	0.13	

VALUE CODING RULES AND REMARK CODES ON REVERSE

29 42 55 68 | 33 34 46 47 59 60 72 73 | 40 41 53 54 66 67 79 80

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NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES
WATER QUALITY MANAGEMENT ELEMENT

GROUND WATER ANALYSIS – MONITORING WELL REPORT

PLEASE TYPE OR PRINT WITH BALLPOINT PEN

FACILITY NAME: American Cyanamid Sanitary Landfill - Carteret | SW ID NO.:

LAB NAME: Environmental Testing and Certification

S | NJPDES NO.: NJ 0 0 6 1 6 1 1 | WELL PERMIT NO.: 2 4 - 1 0 3 9 4 - 2 CRT5D | SAMPLE DATE TR. MO. DAY: 8 8 0 1 1 9 | NJ LAB CERT. NO.: 1 2 2 5 7 | WQM USE

THE SCHEDULE INDICATED BELOW IS TO BE OBSERVED FROM 0 1 8 8 (MO. YR.) TO 0 3 8 8 (MO. YR.)

SUBMIT WITH SIGNED T-VWX-014

SAMPLING MONTHS: Jan. Feb. Mar. Apr. May June July Aug. Sept. Oct. Nov. Dec.

SAMPLING MONTHS	ANALYSIS	UNITS	PARAMETER	VALUE
	Methoxychlor, Total	UG/L	39480	
X X X X	Methylene Blue Active Substances	MG/L	38260	0.11
X X X X	Nitrogen, Ammonia, Dissolved $NH_3 + NH_4$ as N	MG/L as N	00608	9.9
X X X X	Nitrogen, Nitrate Dissolved	MG/L as N	00618	0.12
X X X X	Odor	T.O.N.	00085	
X X X X	pH	Standard Units	00400	7.01
X X X X	Phenols, Total Recoverable	UG/L	32730	
	Radium 226, Dissolved	Pc/L	09503	
	Radium 228, Dissolved	Pc/L	81366	
X	Selenium, Dissolved	UG/L	01145	10
X	Silver, Dissolved	UG/L	01075	1.6
X X X X	Sodium, Dissolved	MG/L	00930	50.0
X X X X	Sulfate, Dissolved (as SO_4)	MG/L	00946	14.0
X X X X	Total Dissolved Solids (TDS)	PPM	70300	174.0
X X X X	Total Organic Carbon (TOC)	PPM	00680	2.4
X X X X	Total Organic Halogen (TOX)	UG/L	70353	18.6
	Toxaphene	UG/L	39400	
X	Turbidity	NTU	00076	
X X X	Zinc, Dissolved	UG/L	01090	1.4
	2, 4–D, Total	UG/L	39370	
	2, 4, 5–TP, Total	UG/L	39045	
	Total Organic Carbon	PPM		25.4
	Total Organic Halogen (TOX)	UG/L		29.7

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4/83

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES
WATER QUALITY MANAGEMENT ELEMENT

GROUND WATER ANALYSIS -- VOLATILE ORGANICS REPORT

PLEASE TYPE OR PRINT WITH BALLPOINT PEN

FACILITY NAME: American Cyanamid Sanitary Landfill - Carteret
SW ID NO.:
LAB NAME: Environmental Testing and Certification

NJPDES NO.: T NJ 0 0 0 6 1 6 1 1 (1–8)
WELL PERMIT NO.: 2 4 - 1 0 3 9 4 - 2 (9–16)
CRT5D
SAMPLE DATE YR. MO. DAY: 8 8 0 1 1 9 (17–22)
NJ LAB CERT. NO.: 1 2 2 5 7 (23–27)
WQM USE: (28)

THE SCHEDULE INDICATED BELOW IS TO BE OBSERVED FROM 0 1 8 8 (MO. YR.) TO 0 3 8 8 (MO. YR.)

SUBMIT WITH SIGNED T-VWX-014

SAMPLING MONTHS												ANALYSIS	UNITS	PARAMETER	VALUE	
Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.					
X												Acrylonitrile	UG/L	34215	0	K
X												Benzene	UG/L	34030	0	K
X												Bromoform	UG/L	32104	0	K
X												Carbon Tetrachloride	UG/L	32102	0	K
X												Chlorobenzene	UG/L	34301	0	K
X												Chlorodibromoethane	UG/L	34306	0	K
X												Chloroform	UG/L	32106	0	K
X												1, 1 - Dichloroethane	UG/L	34496	0	K
X												1, 2 - Dichloroethane	UG/L	34531	0	K
X												1, 1 - Dichloroethylene	UG/L	34501	0	K
X												1, 2 - Dichloropropane	UG/L	34541	0	K
X												Ethylbenzene	UG/L	34371	70 . 4	
X												Methylene Chloride	UG/L	34423	0	K
X												1, 1, 2, 2 - Tetrachloroethane	UG/L	34516	0	K
X												Tetrachloroethylene	UG/L	34475	0	K
X												Toluene	UG/L	34012	21 . 4	
X												1, 1, 1 - Trichloroethane	UG/L	34506		0K
X												1, 1, 2 - Trichloroethane	UG/L	34511		0K
X												Trichloroethylene	UG/L	39180		0K
X												Vinyl Chloride	UG/L	39175		0K
X												Acrolein	UG/L	34210		0K
X												Chloroethane	UG/L	34311		0K
X												2 - Chloroethylvinyl Ether	UG/L	34576		0K
X												Dichlorobromomethane	UG/L	32105		0K
X												1, 3 - Dichloropropylene	UG/L	34699		0K
X												Methyl Bromide	UG/L	34413		0K
X												Methyl Chloride	UG/L	34418		0K
X												1, 2 - trans - Dichloroethylene	UG/L	34546		0K
X												1, 2 Dichlorobenzene	UG/L	34536		0K
X												1, 3 Dichlorobenzene	UG/L	34566		0K
X												1, 4 Dichlorobenzene	UG/L	34571		0K

VALUE CODING RULES AND
REMARK CODES ON REVERSE

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NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES
WATER QUALITY MANAGEMENT ELEMENT

GROUND WATER ANALYSIS – MONITORING WELL REPORT

ACID, BASE/NEUTRAL ORGANIC COMPOUNDS

PLEASE TYPE OR PRINT WITH BALLPOINT PEN

FACILITY NAME American Cyanamid Co - Control Landfill | SW ID NO.

LAB NAME Environmental Testing and Certification

NJPDES NO. U NJ | WELL PERMIT NO. 24-10370-0 | SAMPLE DATE YR. 80 MO. 01 DAY 19 | NJ LAB CERT. NO. 12127 | WQM USE

THE SCHEDULE INDICATED BELOW IS TO BE OBSERVED FROM MO. YR. TO MO. YR.

SUBMIT WITH SIGNED T-VWX-014

SAMPLING MONTHS	ANALYSIS	UNITS	PARAMETER	VALUE	REMARKS
X	Chrysene	ug/l	34320	9.6	U
	Dibenzanthracene	ug/l	34556	10	U
	1,2-Dichlorobenzene	ug/l	34536	5.0	U
	1,3-Dichlorobenzene	ug/l	34566	5.0	U
	1,4-Dichlorobenzene	ug/l	34571	4.6	U
	3,3'-Dichlorobenzidine	ug/l	34631	10	U
	Diethyl Phthalate	ug/l	34336	10	U
	Dimethyl Phthalate	ug/l	34341	10	U
	Di-n-butyl Phthalate	ug/l	39110	10	U
	2,4-Dinitrotolulene	ug/l	34611	50	U
	2,6-Dinitrotolulene	ug/l	34626	50	U
	Di-n-octyl Phthalate	ug/l	34596	10	U
	1,2-Diphenylhydrazine	ug/l	34346	10	U
	Fluoranthene	ug/l	34376	9.2	U
	Fluorene	ug/l	34381	10	U
	Hexachlorobenzene	ug/l	39700	10	U
	Hexachlorobutadiene	ug/l	34391	5.0	U
	Hexachlorocyclopentadiene	ug/l	34386	10	U
	Hexachloroethane	ug/l	34396	10	U
	Indenopyrene	ug/l	34403	4.6	U
	Isophorone	ug/l	34408	20	U
	Naphthalene	ug/l	34696	10	U
	Nitrobenzene	ug/l	34447	10	U
	N-Nitrosodimentlyamine	ug/l	34438	10	U
	N-Nitrosodi-n-propylamine	ug/l	34428	10	U
	N-Nitrosodiphenylamine	ug/l	34433	10	U
	Phenanthrene	ug/l	34461	5.0	U
	Pyrene	ug/l	34469	10	U
X	1,2,4-Trichlorobenzene	ug/l	34551	10	U

VALUE CODING RULES AND REMARK CODES ON REVERSE

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4/83

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NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES
WATER QUALITY MANAGEMENT ELEMENT

GROUND WATER ANALYSIS – MONITORING WELL REPORT

PESTICIDES & PCBs

EASE TYPE OR PRINT WITH BALLPOINT PEN

ACILITY NAME [illegible] | SW ID NO.

LAB NAME Environmental Testing and Certification

	NJPDES NO.	WELL PERMIT NO.	SAMPLE DATE YR. MO. DAY	NJ LAB CERT. NO.	WQM USE
U	NJ 0061611	24-10390-0	88 01 19	12257	
1	2 8	9 16	17 22	23 27	28

3D

THE SCHEDULE INDICATED BELOW IS TO BE OBSERVED FROM 01 88 (MO. YR.) TO 03 88 (MO. YR.)

SUBMIT WITH SIGNED T-VWX-014

SAMPLING MONTHS

Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	ANALYSIS	UNITS	PARAMETER	VALUE	REMARKS
												Aldrin	ug/1	39330	1.9	K
												alpha-BHC	ug/1	39337	10	K
												beta-BHC	ug/1	39338	4.5	K
												gamma-BHC (Lindane)	ug/1	39340	10	K
												delta-BHC	ug/1	34259	3.2	K
												Chlordane	ug/1	39350	10	K
												4,4'-DDT	ug/1	39370	2.9	K
												4,4'-DDE	ug/1	39365	5.7	K
												4,4'-DDD	ug/1		4.8	K
												Dieldrin	ug/1	39380	2.6	K
												alpha-Endosulfan	ug/1	34361	10	K
												beta-Endosulfan	ug/1	34356	10	K
												Endosulfan Sulfate	ug/1	34351	5.7	K
												Endrin	ug/1	39390	10	K
												Endrin Aldehyde	ug/1	34366	10	K
												Heptachlor	ug/1	39410	1.9	K
												Heptachlor Epoxide	ug/1	39420	2.2	K
												PCB-1242	ug/1	39496	37	K
												PCB-1254	ug/1	39504	37	K
												PCB-1221	ug/1	39488	37	K
												PCB-1232	ug/1	39492	37	K
												PCB-1248	ug/1	39500	37	K
												PCB-1260	ug/1	39508	37	K
												PCB-1016	ug/1	34671	37	K
												Toxaphene	ug/1	39400	10	K

VALUE CODING RULES AND

29 42 33 34 46 47 40 41 53 54

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4/83

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES
WATER QUALITY MANAGEMENT ELEMENT

GROUND WATER ANALYSIS – VOLATILE ORGANICS REPORT

PLEASE TYPE OR PRINT WITH BALLPOINT PEN

FACILITY NAME: American Cyanamid Co. Cedar Lake Landfill
SW ID NO.:
LAB NAME: Test Lab

	NJPDES NO.	WELL PERMIT NO.	SAMPLE DATE YR. MO. DAY	NJ LAB CERT. NO.	WQM USE
T (1)	NJ 0 0 4 1 6 1 (2–8)	2 4 - 1 0 3 9 3 - 4 (9–16) 4S	8 8 0 1 1 9 (17–22)	1 (23–27)	(28)

THE SCHEDULE INDICATED BELOW IS TO BE OBSERVED FROM 01 88 (MO. YR.) TO 03 88 (MO. YR.)

SUBMIT WITH SIGNED T-VWX-014

SAMPLING MONTHS

Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	ANALYSIS	UNITS	PARAMETER	VALUE	REMARKS
X											Acrylonitrile	UG/L	34215	1 7	K
											Benzene	UG/L	34030	2	J
											Bromoform	UG/L	32104	5	K
											Carbon Tetrachloride	UG/L	32102	5	K
											Chlorobenzene	UG/L	34301	5	K
											Chlorodibromoethane	UG/L	34306		
											Chloroform	UG/L	32106	5	K
											1, 1 - Dichloroethane	UG/L	34496	5	K
											1, 2 - Dichloroethane	UG/L	34531	5	K
											1, 1 - Dichloroethylene	UG/L	34501	5	K
											1, 2 - Dichloropropane	UG/L	34541	5	K
											Ethylbenzene	UG/L	34371	5	K
											Methylene Chloride	UG/L	34423	5	K
											1, 1, 2, 2 - Tetrachloroethane	UG/L	34516	5	K
											Tetrachloroethylene	UG/L	34475	5	K
											Toluene	UG/L	34012	5	K
											1, 1, 1 - Trichloroethane	UG/L	34506	5	K
											1, 1, 2 - Trichloroethane	UG/L	34511	5	K
											Trichloroethylene	UG/L	39180	5	K
											Vinyl Chloride	UG/L	39175	10	K
											Acrolein	UG/L	34210	1 2	K
											Chloroethane	UG/L	34311	10	K
											2 - Chloroethylvinyl Ether	UG/L	34576	5	K
											Dichlorobromomethane	UG/L	32105	5	K
											1, 3 - Dichloropropylene	UG/L	34699	5	K
											Methyl Bromide	UG/L	34413	10	K
											Methyl Chloride	UG/L	34418	10	K
											1, 2 - trans - Dichloroethylene	UG/L	34546	5	K
											1, 2 Dichlorobenzene (o and p isomers)	UG/L	34536	10	K
											1, 3 Dichlorobenzene	UG/L	34566	5	K
↓											1, 4 Dichlorobenzene (see above)	UG/L	34571		

29 33 34 40 41
42 46 47 53 54
55 59 60 66 67
68 72 73 79 80

VALUE CODING RULES AND
REMARK CODES ON REVERSE

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P1

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES
WATER QUALITY MANAGEMENT ELEMENT

GROUND WATER ANALYSIS – MONITORING WELL REPORT
ACID, BASE/NEUTRAL ORGANIC COMPOUNDS

PLEASE TYPE OR PRINT WITH BALLPOINT PEN

FACILITY NAME: American Cyanamid Co - Pedrick Landfill | SW ID NO.

LAB NAME: Environmental Testing and Certification

NJPDES NO. NJ | WELL PERMIT NO. 24-10351-4 | SAMPLE DATE YR. 85 MO. 11 DAY 17 | NJ LAB CERT. NO. 12547 | WQM USE

45

THE SCHEDULE INDICATED BELOW IS TO BE OBSERVED FROM 12 85 (MO. YR.) TO 12 88 (MO. YR.)

SUBMIT WITH SIGNED T-VWX-014

SAMPLING MONTHS	ANALYSIS	UNITS	PARAMETER	VALUE	REMARKS
X	2-Chlorophenol	ug/l	34586	3.4	K
	2,4-Dichlorophenol	ug/l	34601	2.4	K
	2,4-Dimethylphenol	ug/l	34606	2.4	K
	2,6-Dinitro-o-cresol	ug/l	77603	2.4	K
	2,4-Dinitrophenol	ug/l	34616	.43	K
	2-Nitrophenol	ug/l	34591	3.4	K
	4-Nitrophenol	ug/l	34649	2.4	K
	p-Chloro-m-cresol	ug/l	34452	3.5	K
	Pentachlorophenol	ug/l	39032	3.4	K
	Phenol	ug/l	34695	62.5	
	2,4,6-Trichlorophenol	ug/l	34621	2.4	K
	Acenaphthene	ug/l	34205	1.41	K
	Acenaphthylene	ug/l	34200	3.6	K
	Anthracene	ug/l	34220	1.4	K
	Benzidine	ug/l	39120	.45	K
	Benzanthracene	ug/l	34526	7.4	K
	Benzopyrene	ug/l	34247	2.5	K
	3,4-Benzofluoranthene	ug/l	34230	.43	K
	Benzoperylene	ug/l	34521	4.2	K
	Benzofluoranthene	ug/l	34242	3.6	K
	Bis(2-chloroethoxy)methane	ug/l	34278	5.4	K
	Bis(2-chloroethyl) Ether	ug/l	34273	5.8	K
	Bis(2-chlroisopropyl) Ether	ug/l	34283	5.5	K
	Bis(2-ethylhexyl) Phthalate	ug/l	39100	.43	K
	4-Bromophenyl Ether	ug/l	34636	.41	K
	Butylbenzyl Phthalate	ug/l	34292	.43	K
	2-Chloronaphthalene	ug/l	34581	.4	K
	4-Chlorophenyl Phenyl Ether	ug/l	34641	4.3	K

39 | 33 34 | 40 41

Form VWX-017
4/83

P2

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES
WATER QUALITY MANAGEMENT ELEMENT

GROUND WATER ANALYSIS – MONITORING WELL REPORT

ACID, BASE/NEUTRAL ORGANIC COMPOUNDS

PLEASE TYPE OR PRINT WITH BALLPOINT PEN

FACILITY NAME	American Cyanamid Co - Carteret Landfill	SW ID NO.
LAB NAME	Environmental Testing and Certification	

	NJPDES NO.	WELL PERMIT NO.	SAMPLE DATE YR. MO. DAY	NJ LAB CERT. NO.	WQM USE
U	NJ 0061611	24-10393-4	88 01 19	12257	
1	2 8	9 16	17 22	23 27	28

45

THE SCHEDULE INDICATED BELOW IS TO BE OBSERVED FROM 01 88 (MO. YR.) TO 03 88 (MO. YR.)

SUBMIT WITH SIGNED T-VWX-014

SAMPLING MONTHS

Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	ANALYSIS	UNITS	PARAMETER	VALUE	REMARKS
X												Chrysene	ug/1	34320	2.5	K
												Dibenzanthracene	ug/1	34556	10	K
												1,2-Dichlorobenzene	ug/1	34536	1.9	K
												1,3-Dichlorobenzene	ug/1	34566	1.9	K
												1,4-Dichlorobenzene	ug/1	34571	4.5	K
												3,3'-Dichlorobenzidine	ug/1	34631	17	K
												Diethyl Phthalate	ug/1	34336	10	K
												Dimethyl Phthalate	ug/1	34341	10	K
												Di-n-butyl Phthalate	ug/1	39110	10	K
												2,4-Dinitrotolulene	ug/1	34611	5.8	K
												2,6-Dinitrotolulene	ug/1	34626	9	K
												Di-n-octyl Phthalate	ug/1	34596	10	K
												1,2-Diphenylhydrazine	ug/1	34346	10	K
												Fluoranthene	ug/1	34376	2.2	K
												Fluorene	ug/1	34381	1.9	K
												Hexachlorobenzene	ug/1	39700	1.9	K
												Hexachlorobutadiene	ug/1	34391	0.91	K
												Hexachlorocyclopentadiene	ug/1	34386	10	K
												Hexachloroethane	ug/1	34396	1.6	K
												Indenopyrene	ug/1	34403	4.3	K
												Isophorone	ug/1	34408	2.2	K
												Naphthalene	ug/1	34696	1.6	K
												Nitrobenzene	ug/1	34447	1.9	K
												N-Nitrosodimentlyamine	ug/1	34438	10	K
												N-Nitrosodi-n-propylamine	ug/1	34428	10	K
												N-Nitrosodiphenylamine	ug/1	34433	1.9	K
												Phenanthrene	ug/1	34461	5.5	K
												Pyrene	ug/1	34469	1.1	K
												1,2,4-Trichlorobenzene	ug/1	34551	1.1	K

VALUE CODING RULES AND
REMARK CODES ON REVERSE

29 33 34 40 41
42 46 47 53 54
55 59 60 66 67
68 72 73 79 80

U65

Form VWX-017
4/83

P3

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES
WATER QUALITY MANAGEMENT ELEMENT

GROUND WATER ANALYSIS – MONITORING WELL REPORT

PESTICIDES & PCBs

EASE TYPE OR PRINT WITH BALLPOINT PEN

ACILITY NAME [illegible]	SW ID NO.
LAB NAME [illegible]	

	NJPDES NO.	WELL PERMIT NO.	SAMPLE DATE YR. MO. DAY	NJ LAB CERT. NO.	WQM USE
U	NJ [illegible]	24-10393-4	8 8 [illegible] 1 1 9	1 2 3 5 7	
1	2 8	9 16	17 22	23 27	28

4S

THE SCHEDULE INDICATED BELOW IS TO BE OBSERVED FROM ___ MO. YR. TO ___ MO. YR.

SUBMIT WITH SIGNED T-VWX-014

SAMPLING MONTHS

Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	ANALYSIS	UNITS	PARAMETER	VALUE	REMARKS
												Aldrin	ug/l	39330	[illegible]	K
												alpha-BHC	ug/l	39337	[illegible]	K
												beta-BHC	ug/l	39338	4 [illegible]	K
												gamma-BHC (Lindane)	ug/l	39340	[illegible]	K
												delta-BHC	ug/l	34259	3 [illegible]	K
												Chlordane	ug/l	39350	[illegible]	K
												4,4'-DDT	ug/l	39370	2 [illegible]	[illegible]
												4,4'-DDE	ug/l	39365	5 [illegible]	K
												4,4'-DDD	ug/l		4 [illegible]	K
												Dieldrin	ug/l	39380	2 [illegible]	K
												alpha-Endosulfan	ug/l	34361	[illegible]	K
												beta-Endosulfan	ug/l	34356	[illegible]	K
												Endosulfan Sulfate	ug/l	34351	5 [illegible]	K
												Endrin	ug/l	39390	[illegible]	K
												Endrin Aldehyde	ug/l	34366	[illegible]	K
												Heptachlor	ug/l	39410	1 [illegible]	K
												Heptachlor Epoxide	ug/l	39420	2 [illegible]	K
												PCB-1242	ug/l	39496	[illegible]	K
												PCB-1254	ug/l	39504	[illegible]	K
												PCB-1221	ug/l	39488	[illegible]	K
												PCB-1232	ug/l	39492	[illegible]	K
												PCB-1248	ug/l	39500	[illegible]	K
												PCB-1260	ug/l	39508	[illegible]	K
												PCB-1016	ug/l	34671	[illegible]	K
												Toxaphene	ug/l	39400	[illegible]	K

VALUE CODING RULES AND

29 42 33 34 46 47 40 41 53 54

Form VWX-016
4/83

NEW . EY DEPARTMENT OF ENVIRONMENTAL PROT ON
DIVISION OF WATER RESOURCES
WATER QUALITY MANAGEMENT ELEMENT

GROUND WATER ANALYSIS – VOLATILE ORGANICS REPORT

PLEASE TYPE OR PRINT WITH BALLPOINT PEN

FACILITY NAME: American Cyanamid Co - Carteret Land fill
SW ID NO.:

LAB NAME: York Labs (Environmental Testing and Certification

	NJPDES NO.	WELL PERMIT NO.	SAMPLE DATE YR. MO. DAY	NJ LAB CERT. NO.	WQM USE
T	NJ 0061611	24-10392-6	88 01 19		
1	2 8	9 16	17 22	23 27	28
		4D		12257	

THE SCHEDULE INDICATED BELOW IS TO BE OBSERVED FROM 0188 (MO. YR.) TO 0388 (MO. YR.)

SUBMIT WITH SIGNED T-VWX-014

SAMPLING MONTHS

Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	ANALYSIS	UNITS	PARAMETER	VALUE	REMARKS
X											Acrylonitrile	UG/L	34215	1.7	K
											Benzene	UG/L	34030	5	K
											Bromoform	UG/L	32104	5	K
											Carbon Tetrachloride	UG/L	32102	5	K
											Chlorobenzene	UG/L	34301	5	K
											Chlorodibromoethane	UG/L	34306		
											Chloroform	UG/L	32106	5	K
											1, 1 - Dichloroethane	UG/L	34496	5	K
											1, 2 - Dichloroethane	UG/L	34531	5	K
											1, 1 - Dichloroethylene	UG/L	34501	5	K
											1, 2 - Dichloropropane	UG/L	34541	5	K
											Ethylbenzene	UG/L	34371	5	K
											Methylene Chloride	UG/L	34423	11	
											1, 1, 2, 2 - Tetrachloroethane	UG/L	34516	5	K
											Tetrachloroethylene	UG/L	34475	1	J
											Toluene	UG/L	34012	1	J
											1, 1, 1 - Trichloroethane	UG/L	34506	5	K
											1, 1, 2 - Trichloroethane	UG/L	34511	5	K
											Trichloroethylene	UG/L	39180	5	K
											Vinyl Chloride	UG/L	39175	10	K
											Acrolein	UG/L	34210	1.2	K
											Chloroethane	UG/L	34311	10	K
											2 - Chloroethylvinyl Ether	UG/L	34576	5	K
											Dichlorobromomethane	UG/L	32105	5	K
											1, 3 - Dichloropropylene	UG/L	34699	5	K
											Methyl Bromide	UG/L	34413	10	K
											Methyl Chloride	UG/L	34418	10	K
											1, 2 - trans - Dichloroethylene	UG/L	34546	5	K
											1, 2 Dichlorobenzene (o & p isomers)	UG/L	34536	10	K
											1, 3 Dichlorobenzene	UG/L	34566	5	K
✓											1, 4 Dichlorobenzene (see above)	UG/L	34571		

RECEIVED
MAY 02 1988
DEPT. ENVIRON PROTECTION
Division Water Resources
Bureau of Permits Admin.

VALUE CODING RULES AND
REMARK CODES ON REVERSE

29 42 55 68 — 33 34 46 47 59 60 72 73 — 40 41 53 54 66 67 79 80

467

For VWX-017
1/85

P1

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES
WATER QUALITY MANAGEMENT ELEMENT

GROUND WATER ANALYSIS – MONITORING WELL REPORT
ACID, BASE/NEUTRAL ORGANIC COMPOUNDS

PLEASE TYPE OR PRINT WITH BALLPOINT PEN

FACILITY NAME American Cyanamid Co - Carteret Landfill | SW ID NO.

LAB NAME Environmental Testing and Certification

	NJPDES NO.	WELL PERMIT NO.	SAMPLE DATE YR. MO. DAY	NJ LAB CERT. NO.	WQM USE
U	NJ 0061611	24-10392-6	88 01 19	12257	

THE SCHEDULE INDICATED BELOW IS TO BE OBSERVED FROM 01 88 (MO. YR.) TO 03 88 (MO. YR.)

SUBMIT WITH SIGNED T-VWX-014

SAMPLING MONTHS

Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	ANALYSIS	UNITS	PARAMETER	VALUE	REMARKS
X												2-Chlorophenol	ug/l	34586	3.3	K
												2,4-Dichlorophenol	ug/l	34601	2.7	K
												2,4-Dimethylphenol	ug/l	34606	2.7	K
												2,6-Dinitro-o-cresol	ug/l	77603	24	K
												2,4-Dinitrophenol	ug/l	34616	42	K
												2-Nitrophenol	ug/l	34591	3.6	K
												4-Nitrophenol	ug/l	34649	2.4	K
												p-Chloro-m-cresol	ug/l	34452	3.0	K
												Pentachlorophenol	ug/l	39032	3.6	K
												Phenol	ug/l	34695	1.5	K
												2,4,6-Trichlorophenol	ug/l	34621	2.7	K
												Acenaphthene	ug/l	34205	1.9	K
												Acenaphthylene	ug/l	34200	3.5	K
												Anthracene	ug/l	34220	1.9	K
												Benzidine	ug/l	39120	44	K
												Benzanthracene	ug/l	34526	7.8	K
												Benzopyrene	ug/l	34247	2.5	K
												3,4-Benzofluoranthene	ug/l	34230	10	K
												Benzoperylene	ug/l	34521	4.1	K
												Benzofluoranthene	ug/l	34242	3.5	K
												Bis(2-chloroethoxy)methane	ug/l	34278	5.3	K
												Bis(2-chloroethyl) Ether	ug/l	34273	5.7	K
												Bis(2-chlroisopropyl) Ether	ug/l	34283	5.7	K
												Bis(2-ethylhexyl) Phthalate	ug/l	39100	10	K
												4-Bromophenyl Ether	ug/l	34636	1.9	K
												Butylbenzyl Phthalate	ug/l	34292	10	K
												2-Chloronaphthalene	ug/l	34581	1.9	K
												4-Chlorophenyl Phenyl Ether	ug/l	34641	4.2	K

Form VWX-017
4/83 P2

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES
WATER QUALITY MANAGEMENT ELEMENT

GROUND WATER ANALYSIS – MONITORING WELL REPORT

ACID, BASE/NEUTRAL ORGANIC COMPOUNDS

PLEASE TYPE OR PRINT WITH BALLPOINT PEN

FACILITY NAME: American Cyanamid Co - Carteret Landfill | SW ID NO.:

LAB NAME: Environmental Testing and Certification

NJPDES NO.	WELL PERMIT NO.	SAMPLE DATE YR. MO. DAY	NJ LAB CERT. NO.	WQM USE
U NJ 0 0 6 1 6 1 1	2 4 - 1 0 3 9 2 - 6	8 8 0 1 1 9	1 2 2 5 7	

40

THE SCHEDULE INDICATED BELOW IS TO BE OBSERVED FROM 0 1 8 8 (MO. YR.) TO 0 3 8 8 (MO. YR.)

SUBMIT WITH SIGNED T-VWX-014

SAMPLING MONTHS	ANALYSIS	UNITS	PARAMETER	VALUE	REMARKS
X	Chrysene	ug/1	34320	2.5	K
	Dibenzanthracene	ug/1	34556	1.0	K
	1,2-Dichlorobenzene	ug/1	34536	1.9	K
	1,3-Dichlorobenzene	ug/1	34566	1.9	K
	1,4-Dichlorobenzene	ug/1	34571	4.4	K
	3,3'-Dichlorobenzidine	ug/1	34631	1.7	K
	Diethyl Phthalate	ug/1	34336	1.0	K
	Dimethyl Phthalate	ug/1	34341	1.0	K
	Di-n-butyl Phthalate	ug/1	39110	1.0	K
	2,4-Dinitrotolulene	ug/1	34611	5.7	K
	2,6-Dinitrotolulene	ug/1	34626	1.9	K
	Di-n-octyl Phthalate	ug/1	34596	1.0	K
	1,2-Diphenylhydrazine	ug/1	34346	1.0	K
	Fluoranthene	ug/1	34376	2.2	K
	Fluorene	ug/1	34381	1.9	K
	Hexachlorobenzene	ug/1	39700	1.9	K
	Hexachlorobutadiene	ug/1	34391	0.90	K
	Hexachlorocyclopentadiene	ug/1	34386	1.0	K
	Hexachloroethane	ug/1	34396	1.6	K
	Indenopyrene	ug/1	34403	4.7	K
	Isophorone	ug/1	34408	2.2	K
	Naphthalene	ug/1	34696	1.6	K
	Nitrobenzene	ug/1	34447	1.9	K
	N-Nitrosodimentlyamine	ug/1	34438	1.0	K
	N-Nitrosodi-n-propylamine	ug/1	34428	1.0	K
	N-Nitrosodiphenylamine	ug/1	34433	1.9	K
	Phenanthrene	ug/1	34461	5.4	K
	Pyrene	ug/1	34469	1.9	K
X	1,2,4-Trichlorobenzene	ug/1	34551	1.9	K

VALUE CODING RULES AND REMARK CODES ON REVERSE

29 42 55 | 33 34 46 47 59 60 | 40 41 53 54 65 67

469

Form VWX-017
4/83

P3

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES
WATER QUALITY MANAGEMENT ELEMENT

GROUND WATER ANALYSIS – MONITORING WELL REPORT

PESTICIDES & PCBs

EASE TYPE OR PRINT WITH BALLPOINT PEN

ACILITY NAME: American Cyanamid Co - Carteret Landfill

SW ID NO.:

LAB NAME: Environmental Testing and Certification

	NJPDES NO.	WELL PERMIT NO.	SAMPLE DATE YR. MO. DAY	NJ LAB CERT. NO.	WQM USE
U	NJ 0061611	24-10392-6	88 01 19	12257	

THE SCHEDULE INDICATED BELOW IS TO BE OBSERVED FROM 01 88 (MO. YR.) TO 03 89 (MO. YR.)

SUBMIT WITH SIGNED T-VWX-014

SAMPLING MONTHS

Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	ANALYSIS	UNITS	PARAMETER	VALUE	REMARKS
												Aldrin	ug/l	39330	1.9	K
												alpha-BHC	ug/l	39337	10	K
												beta-BHC	ug/l	39338	4 4	K
												gamma-BHC (Lindane)	ug/l	39340	10	K
												delta-BHC	ug/l	34259	3.1	K
												Chlordane	ug/l	39350	10	K
												4,4'-DDT	ug/l	39370	2.8	K
												4,4'-DDE	ug/l	39365	5.6	K
												4,4'-DDD	ug/l		4.7	K
												Dieldrin	ug/l	39380	2.5	K
												alpha-Endosulfan	ug/l	34361	10	K
												beta-Endosulfan	ug/l	34356	10	K
												Endosulfan Sulfate	ug/l	34351	5.6	K
												Endrin	ug/l	39390	10	K
												Endrin Aldehyde	ug/l	34366	10	K
												Heptachlor	ug/l	39410	1 9	K
												Heptachlor Epoxide	ug/l	39420	2.2	K
												PCB-1242	ug/l	39496	36	K
												PCB-1254	ug/l	39504	36	K
												PCB-1221	ug/l	39488	36	K
												PCB-1232	ug/l	39492	36	K
												PCB-1248	ug/l	39500	36	K
												PCB-1260	ug/l	39508	36	K
												PCB-1016	ug/l	34671	36	K
												Toxaphene	ug/l	39400	10	K

VALUE CODING RULES AND

29 33 34 40 41
42 46 47 53 54

U 69

F[redacted]m VWX-016
4[redacted]

NEW. ;EY DEPARTMENT OF ENVIRONMENTAL PROT ON
DIVISION OF WATER RESOURCES
WATER QUALITY MANAGEMENT ELEMENT

GROUND WATER ANALYSIS – VOLATILE ORGANICS REPORT

PLEASE TYPE OR PRINT WITH BALLPOINT PEN

[redacted]CILITY NAME American Cyanamid Co - Carteret Landfill | SW ID NO.

[redacted]B NAME York Labs / Environmental Testing and Certification

	NJPDES NO.	WELL PERMIT NO.	SAMPLE DATE YR. MO. DAY	NJ LAB CERT. NO.	WQM USE
T	NJ 0061611	24-10395-1	88 01 19	12257	
1	2 8	9 16	17 22	23 27	28

5S

THE SCHEDULE INDICATED BELOW IS TO BE OBSERVED FROM 01 88 (MO. YR.) TO 03 88 (MO. YR.)

SUBMIT WITH SIGNED T-VWX-014

SAMPLING MONTHS

	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	ANALYSIS	UNITS	PARAMETER	VALUE	REMARKS
X												Acrylonitrile	UG/L	34215	1.7	K
												Benzene	UG/L	34030	5	K
												Bromoform	UG/L	32104	5	K
												Carbon Tetrachloride	UG/L	32102	5	K
												Chlorobenzene	UG/L	34301	5	K
												Chlorodibromoethane	UG/L	34306		
												Chloroform	UG/L	32106	5	K
												1, 1 - Dichloroethane	UG/L	34496	5	K
												1, 2 - Dichloroethane	UG/L	34531	5	K
												1, 1 - Dichloroethylene	UG/L	34501	5	K
												1, 2 - Dichloropropane	UG/L	34541	5	K
												Ethylbenzene	UG/L	34371	5	K
												Methylene Chloride	UG/L	34423	10	
												1, 1, 2, 2 - Tetrachloroethane	UG/L	34516	5	K
												Tetrachloroethylene	UG/L	34475	5	K
												Toluene	UG/L	34012	1	J
												1, 1, 1 - Trichloroethane	UG/L	34506	5	K
												1, 1, 2 - Trichloroethane	UG/L	34511	5	K
												Trichloroethylene	UG/L	39180	5	K
												Vinyl Chloride	UG/L	39175	10	K
												Acrolein	UG/L	34210	1.2	K
												Chloroethane	UG/L	34311	10	K
												2 - Chloroethylvinyl Ether	UG/L	34576	5	K
												Dichlorobromomethane	UG/L	32105	5	K
												1, 3 - Dichloropropylene	UG/L	34699	5	K
												Methyl Bromide	UG/L	34413	10	K
												Methyl Chloride	UG/L	34418	10	K
												1, 2 - trans - Dichloroethylene	UG/L	34546	5	K
												1, 2 Dichlorobenzene (o & p isomers)	UG/L	34536	10	K
												1, 3 Dichlorobenzene	UG/L	34566	5	K
X												1, 4 Dichlorobenzene (see above)	UG/L	34571		

29 42 55 68 | 33 34 46 47 59 60 72 73 | 40 41 53 54 66 67 79 80

VALUE CODING RULES AND
REMARK CODES ON REVERSE

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Form VWX-017
P1

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES
WATER QUALITY MANAGEMENT ELEMENT

GROUND WATER ANALYSIS – MONITORING WELL REPORT
ACID, BASE/NEUTRAL ORGANIC COMPOUNDS

PLEASE TYPE OR PRINT WITH BALLPOINT PEN

FACILITY NAME: American Cyanamid Co - Carteret Landfill | SW ID NO.

LAB NAME: Environmental Testing and Certification

NJPDES NO.: NJ 0 0 6 1 6 1 1 (1–9)

WELL PERMIT NO.: 2 4 - 1 0 3 9 5 - 1 (9–16)

SAMPLE DATE: YR. 8 8 | MO. 0 1 | DAY 1 9 (17–22)

NJ LAB CERT. NO.: 1 2 2 5 7 (23–27)

WQM USE: (28)

THE SCHEDULE INDICATED BELOW IS TO BE OBSERVED FROM 0 1 8 8 (MO. YR.) TO 0 3 8 8 (MO. YR.)

SUBMIT WITH SIGNED T-VWX-014

SAMPLING MONTHS: JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC

	ANALYSIS	UNITS	PARAMETER	VALUE	REMARKS
X	2-Chlorophenol	ug/l	34586	3.3	K
	2,4-Dichlorophenol	ug/l	34601	2.7	K
	2,4-Dimethylphenol	ug/l	34606	2.7	K
	2,6-Dinitro-o-cresol	ug/l	77603	24	K
	2,4-Dinitrophenol	ug/l	34616	42	K
	2-Nitrophenol	ug/l	34591	3.6	K
	4-Nitrophenol	ug/l	34649	2.4	K
	p-Chloro-m-cresol	ug/l	34452	3.0	K
	Pentachlorophenol	ug/l	39032	3.6	K
	Phenol	ug/l	34695	1.5	K
	2,4,6-Trichlorophenol	ug/l	34621	2.7	K
	Acenaphthene	ug/l	34205	1.9	K
	Acenaphthylene	ug/l	34200	3.5	K
	Anthracene	ug/l	34220	1.9	K
	Benzidine	ug/l	39120	44	K
	Benzanthracene	ug/l	34526	7.8	K
	Benzopyrene	ug/l	34247	2.5	K
	3,4-Benzofluoranthene	ug/l	34230	1.0	K
	Benzoperylene	ug/l	34521	4.1	K
	Benzofluoranthene	ug/l	34242	3.5	K
	Bis(2-chloroethoxy)methane	ug/l	34278	5.3	K
	Bis(2-chloroethyl) Ether	ug/l	34273	5.7	K
	Bis(2-chlroisopropyl) Ether	ug/l	34283	5.7	K
	Bis(2-ethylhexyl) Phthalate	ug/l	39100	1.0	K
	4-Bromophenyl Ether	ug/l	34636	1.9	K
	Butylbenzyl Phthalate	ug/l	34292	1.0	K
	2-Chloronaphthalene	ug/l	34581	1.9	K
	4-Chlorophenyl Phenyl Ether	ug/l	34641	4.2	K

39 | 40 41

Form VWX-017
4/83 P2

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES
WATER QUALITY MANAGEMENT ELEMENT

GROUND WATER ANALYSIS – MONITORING WELL REPORT

ACID, BASE/NEUTRAL ORGANIC COMPOUNDS

PLEASE TYPE OR PRINT WITH BALLPOINT PEN

FACILITY NAME: American Cyanamid Co - Carteret Landfill | SW ID NO.:

LAB NAME: Environmental Testing and Certification

NJPDES NO.	WELL PERMIT NO.	SAMPLE DATE YR. MO. DAY	NJ LAB CERT. NO.	WQM USE
U NJ 0 0 6 1 6 1 1	2 4 - 1 0 3 9 5 - 1	8 8 0 1 1 9	1 2 2 5 7	

THE SCHEDULE INDICATED BELOW IS TO BE OBSERVED FROM 0 1 8 8 (MO. YR.) TO 0 3 8 8 (MO. YR.)

SUBMIT WITH SIGNED T-VWX-014

SAMPLING MONTHS (Jan Feb Mar Apr May June July Aug Sept Oct Nov Dec)	ANALYSIS	UNITS	PARAMETER	VALUE	REMARKS
X	Chrysene	ug/1	34320	2.5	K
	Dibenzanthracene	ug/1	34556	1.0	K
	1,2-Dichlorobenzene	ug/1	34536	1.9	K
	1,3-Dichlorobenzene	ug/1	34566	1.9	K
	1,4-Dichlorobenzene	ug/1	34571	4.4	K
	3,3'-Dichlorobenzidine	ug/1	34631	1.1	K
	Diethyl Phthalate	ug/1	34336	1.0	K
	Dimethyl Phthalate	ug/1	34341	1.0	K
	Di-n-butyl Phthalate	ug/1	39110	1.0	K
	2,4-Dinitrotolulene	ug/1	34611	5.7	K
	2,6-Dinitrotolulene	ug/1	34626	1.9	K
	Di-n-octyl Phthalate	ug/1	34596	1.0	K
	1,2-Diphenylhydrazine	ug/1	34346	1.0	K
	Fluoranthene	ug/1	34376	2.2	K
	Fluorene	ug/1	34381	1.9	K
	Hexachlorobenzene	ug/1	39700	1.9	K
	Hexachlorobutadiene	ug/1	34391	0.9	K
	Hexachlorocyclopentadiene	ug/1	34386	1.0	K
	Hexachloroethane	ug/1	34396	1.6	K
	Indenopyrene	ug/1	34403	4.7	K
	Isophorone	ug/1	34408	2.2	K
	Naphthalene	ug/1	34696	1.6	K
	Nitrobenzene	ug/1	34447	1.8	K
	N-Nitrosodimentlyamine	ug/1	34438	1.0	K
	N-Nitrosodi-n-propylamine	ug/1	34428	1.0	K
	N-Nitrosodiphenylamine	ug/1	34433	1.9	K
	Phenanthrene	ug/1	34461	5.4	K
	Pyrene	ug/1	34469	1.9	K
✓	1,2,4-Trichlorobenzene	ug/1	34551	1.9	K

VALUE CODING RULES AND REMARK CODES ON REVERSE

U72

Form VWX-017
4/83

P3

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES
WATER QUALITY MANAGEMENT ELEMENT

GROUND WATER ANALYSIS – MONITORING WELL REPORT

PESTICIDES & PCBs

PLEASE TYPE OR PRINT WITH BALLPOINT PEN

FACILITY NAME: American Cyanamid Co - Carteret Landfill | SW ID NO.:

LAB NAME: Environmental Testing and Certification

NJPDES NO.	WELL PERMIT NO.	SAMPLE DATE (YR. MO. DAY)	NJ LAB CERT. NO.	WQM USE
U NJ 0 0 0 1 6 1 1	2 4 - 1 0 3 9 5 - 1	8 8 0 1 1 9	1 2 2 5 7	

THE SCHEDULE INDICATED BELOW IS TO BE OBSERVED FROM 0 1 8 8 (MO. YR.) TO P 3 8 8 (MO. YR.)

SUBMIT WITH SIGNED T-VWX-014

SAMPLING MONTHS: Jan. Feb. Mar. Apr. May June July Aug. Sept. Oct. Nov. Dec.

ANALYSIS	UNITS	PARAMETER	VALUE	REMARKS
Aldrin	ug/l	39330	1.9	K
alpha-BHC	ug/l	39337	.10	K
beta-BHC	ug/l	39338	4.4	K
gamma-BHC (Lindane)	ug/l	39340	.10	K
delta-BHC	ug/l	34259	3.1	K
Chlordane	ug/l	39350	1.0	K
4,4'-DDT	ug/l	39370	2.8	K
4,4'-DDE	ug/l	39365	5.6	K
4,4'-DDD	ug/l		4.7	K
Dieldrin	ug/l	39380	2.5	K
alpha-Endosulfan	ug/l	34361	.10	K
beta-Endosulfan	ug/l	34356	.10	K
Endosulfan Sulfate	ug/l	34351	5.6	K
Endrin	ug/l	39390	.10	K
Endrin Aldehyde	ug/l	34366	.10	K
Heptachlor	ug/l	39410	1.9	K
Heptachlor Epoxide	ug/l	39420	2.2	K
PCB-1242	ug/l	39496	3.6	K
PCB-1254	ug/l	39504	3.6	K
PCB-1221	ug/l	39488	3.6	K
PCB-1232	ug/l	39492	3.6	K
PCB-1248	ug/l	39500	3.6	K
PCB-1260	ug/l	39508	3.6	K
PCB-1016	ug/l	34671	3.6	K
Toxaphene	ug/l	39400	.10	K

U73

20 33 34 40 41 53 54

rm VWX-016
83

NEW J EY DEPARTMENT OF ENVIRONMENTAL PROTE ON
DIVISION OF WATER RESOURCES
WATER QUALITY MANAGEMENT ELEMENT

GROUND WATER ANALYSIS – VOLATILE ORGANICS REPORT

PLEASE TYPE OR PRINT WITH BALLPOINT PEN

FACILITY NAME American Cyanamid Co - Carteret Landfill | SW ID NO.

LAB NAME York Labs / Environmental Testing and Certification

	NJPDES NO.	WELL PERMIT NO.	SAMPLE DATE YR. MO. DAY	NJ LAB CERT. NO.	WQM USE
	T NJ 0006116	24-10394-2 5D	880119	12259	
	1 2 8	9 16	17 22	23 27	28

THE SCHEDULE INDICATED BELOW IS TO BE OBSERVED FROM 01 88 (MO. YR.) TO 03 88 (MO. YR.)

SUBMIT WITH SIGNED T-VWX-014

SAMPLING MONTHS	ANALYSIS	UNITS	PARAMETER	VALUE	REMARKS
Jan. X	Acrylonitrile	UG/L	34215	1.7	K
	Benzene	UG/L	34030	2	U
	Bromoform	UG/L	32104	5	K
	Carbon Tetrachloride	UG/L	32102	5	K
	Chlorobenzene	UG/L	34301	5	K
	Chlorodibromoethane	UG/L	34306		
	Chloroform	UG/L	32106	5	K
	1, 1 - Dichloroethane	UG/L	34496	5	K
	1, 2 - Dichloroethane	UG/L	34531	5	K
	1, 1 - Dichloroethylene	UG/L	34501	5	K
	1, 2 - Dichloropropane	UG/L	34541	5	K
	Ethylbenzene	UG/L	34371	70.4	
	Methylene Chloride	UG/L	34423	5	K
	1, 1, 2, 2 - Tetrachloroethane	UG/L	34516	5	K
	Tetrachloroethylene	UG/L	34475	5	K
	Toluene	UG/L	34012	21.4	
	1, 1, 1 - Trichloroethane	UG/L	34506	5	K
	1, 1, 2 - Trichloroethane	UG/L	34511	5	K
	Trichloroethylene	UG/L	39180	5	K
	Vinyl Chloride	UG/L	39175	10	K
	Acrolein	UG/L	34210	1.2	K
	Chloroethane	UG/L	34311	10	K
	2 - Chloroethylvinyl Ether	UG/L	34576	5	K
	Dichlorobromomethane	UG/L	32105	5	K
	1, 3 - Dichloropropylene	UG/L	34699	5	K
	Methyl Bromide	UG/L	34413	10	K
	Methyl Chloride	UG/L	34418	10	K
	1, 2 - trans - Dichloroethylene	UG/L	34546	5	K
	1, 2 Dichlorobenzene (o and p isomers	UG/L	34536	10	K
	1, 3 Dichlorobenzene	UG/L	34566	5	K
	1, 4 Dichlorobenzene (See above)	UG/L	34571		K

RECEIVED
MAY 02 1988
DEPT. ENVIRON. PROTECTION
Division Water Resources
Bureau of Permits Admin.

VALUE CODING RULES AND REMARK CODES ON REVERSE

29 42 55 68 | 33 34 46 47 59 60 72 73 | 40 41 53 54 66 67 79 80

4/4

Form VWX-017

P1

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES
WATER QUALITY MANAGEMENT ELEMENT

GROUND WATER ANALYSIS – MONITORING WELL REPORT
ACID, BASE/NEUTRAL ORGANIC COMPOUNDS

PLEASE TYPE OR PRINT WITH BALLPOINT PEN

FACILITY NAME: American Cyanamid Co - Carteret Landfill

SW ID NO.:

LAB NAME: Environmental Testing and Certification

	NJPDES NO.	WELL PERMIT NO.	SAMPLE DATE YR. MO. DAY	NJ LAB CERT. NO.	WQM USE
U	NJ 0061611	24-10394-2	88 01 19	12257	

THE SCHEDULE INDICATED BELOW IS TO BE OBSERVED FROM 01 88 (MO. YR.) TO 03 88 (MO. YR.)

SUBMIT WITH SIGNED T-VWX-014

SAMPLING MONTHS

Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	ANALYSIS	UNITS	PARAMETER	VALUE	REMARKS
X												2-Chlorophenol	ug/l	34586	3.3	K
												2,4-Dichlorophenol	ug/l	34601	2.7	K
												2,4-Dimethylphenol	ug/l	34606	2.7	K
												2,6-Dinitro-o-cresol	ug/l	77603	24	K
												2,4-Dinitrophenol	ug/l	34616	42	K
												2-Nitrophenol	ug/l	34591	3.6	K
												4-Nitrophenol	ug/l	34649	2.4	K
												p-Chloro-m-cresol	ug/l	34452	3.0	K
												Pentachlorophenol	ug/l	39032	3.6	K
												Phenol	ug/l	34695	1.5	K
												2,4,6-Trichlorophenol	ug/l	34621	2.7	K
												Acenaphthene	ug/l	34205	1.9	K
												Acenaphthylene	ug/l	34200	3.5	K
												Anthracene	ug/l	34220	1.9	K
												Benzidine	ug/l	39120	44	K
												Benzanthracene	ug/l	34526	7.3	K
												Benzopyrene	ug/l	34247	2.5	K
												3,4-Benzofluoranthene	ug/l	34230	10	K
												Benzoperylene	ug/l	34521	4.1	K
												Benzofluoranthene	ug/l	34242	3.5	K
												Bis(2-chloroethoxy)methane	ug/l	34278	5.3	K
												Bis(2-chloroethyl) Ether	ug/l	34273	5.7	K
												Bis(2-chlroisopropyl) Ether	ug/l	34283	5.7	K
												Bis(2-ethylhexyl) Phthalate	ug/l	39100	10	K
												4-Bromophenyl Ether	ug/l	34636	1.9	K
												Butylbenzyl Phthalate	ug/l	34292	10	K
												2-Chloronaphthalene	ug/l	34581	1.9	K
												4-Chlorophenyl Phenyl Ether	ug/l	34641	4.2	K

Form VWX-017
4/83 P2

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES
WATER QUALITY MANAGEMENT ELEMENT

GROUND WATER ANALYSIS – MONITORING WELL REPORT

ACID, BASE/NEUTRAL ORGANIC COMPOUNDS

PLEASE TYPE OR PRINT WITH BALLPOINT PEN

FACILITY NAME: American Cyanamid Co - Carteret Landfill | SW ID NO.:

LAB NAME: Environmental Testing and Certification

NJPDES NO.	WELL PERMIT NO.	SAMPLE DATE YR. MO. DAY	NJ LAB CERT. NO.	WQM USE
U NJ 0 0 4 1 6 1 1	2 4 - 1 0 3 9 4 - 2	8 8 0 1 1 9	1 2 2 5 7	

THE SCHEDULE INDICATED BELOW IS TO BE OBSERVED FROM 0 1 8 8 (MO. YR.) TO 0 3 8 8 (MO. YR.)

SUBMIT WITH SIGNED T-VWX-014

SAMPLING MONTHS: Jan. Feb. Mar. Apr. May June July Aug. Sept. Oct. Nov. Dec.

ANALYSIS	UNITS	PARAMETER	VALUE	REMARKS
Chrysene	ug/1	34320	2.5	K
Dibenzanthracene	ug/1	34556	1.0	K
1,2-Dichlorobenzene	ug/1	34536	1.9	K
1,3-Dichlorobenzene	ug/1	34566	1.9	K
1,4-Dichlorobenzene	ug/1	34571	4.4	K
3,3'-Dichlorobenzidine	ug/1	34631	1.7	K
Diethyl Phthalate	ug/1	34336	1.0	K
Dimethyl Phthalate	ug/1	34341	1.0	K
Di-n-butyl Phthalate	ug/1	39110	1.0	K
2,4-Dinitrotolulene	ug/1	34611	5.7	K
2,6-Dinitrotolulene	ug/1	34626	1.9	K
Di-n-octyl Phthalate	ug/1	34596	1.0	K
1,2-Diphenylhydrazine	ug/1	34346	1.0	K
Fluoranthene	ug/1	34376	2	K
Fluorene	ug/1	34381	1.9	K
Hexachlorobenzene	ug/1	39700	1.9	K
Hexachlorobutadiene	ug/1	34391	0.90	K
Hexachlorocyclopentadiene	ug/1	34386	1.0	K
Hexachloroethane	ug/1	34396	1.6	K
Indenopyrene	ug/1	34403	4.7	K
Isophorone	ug/1	34408	2.2	K
Naphthalene	ug/1	34696	5.37	
Nitrobenzene	ug/1	34447	1.9	K
N-Nitrosodimentlyamine	ug/1	34438	1.0	K
N-Nitrosodi-n-propylamine	ug/1	34428	1.0	K
N-Nitrosodiphenylamine	ug/1	34433	1.9	K
Phenanthrene	ug/1	34461	5.4	K
Pyrene	ug/1	34469	1.9	K
1,2,4-Trichlorobenzene	ug/1	34551	1.9	K

VALUE CODING RULES AND REMARK CODES ON REVERSE

20 42 55 | 33 34 46 47 59 60 | 40 41 53 54 66 67

U76

Form VWX-017
83
P3

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES
WATER QUALITY MANAGEMENT ELEMENT

GROUND WATER ANALYSIS – MONITORING WELL REPORT

PESTICIDES & PCBs

PLEASE TYPE OR PRINT WITH BALLPOINT PEN

FACILITY NAME: American Cyanamid Co - Carteret Landfill | SW ID NO.:

LAB NAME: Environmental Testing and Certification

	NJPDES NO.	WELL PERMIT NO.	SAMPLE DATE YR. MO. DAY	NJ LAB CERT. NO.	WQM USE
	NJ 0 0 6 1 6 1 1	2 4 - 1 0 3 9 4 - 2	8 8 0 1 1 9	1 2 2 5 7	
	1 2 8	9 16	17 22	23 27	28

THE SCHEDULE INDICATED BELOW IS TO BE OBSERVED FROM 0 1 8 8 (MO. YR.) TO 1 2 8 8 (MO. YR.)

SUBMIT WITH SIGNED T-VWX-014

SAMPLING MONTHS: Jan. Feb. Mar. Apr. May June July Aug. Sept. Oct. Nov. Dec.

ANALYSIS	UNITS	PARAMETER	VALUE	REMARKS
Aldrin	ug/l	39330	1.9	K
alpha-BHC	ug/l	39337	.10	K
beta-BHC	ug/l	39338	4.4	K
gamma-BHC (Lindane)	ug/l	39340	.10	K
delta-BHC	ug/l	34259	3.1	K
Chlordane	ug/l	39350	.10	K
4,4'-DDT	ug/l	39370	2.8	K
4,4'-DDE	ug/l	39365	5.6	K
4,4'-DDD	ug/l		4.7	K
Dieldrin	ug/l	39380	2.5	K
alpha-Endosulfan	ug/l	34361	.10	K
beta-Endosulfan	ug/l	34356	.10	K
Endosulfan Sulfate	ug/l	34351	5.6	K
Endrin	ug/l	39390	.10	K
Endrin Aldehyde	ug/l	34366	.10	K
Heptachlor	ug/l	39410	1.9	K
Heptachlor Epoxide	ug/l	39420	2.2	K
PCB-1242	ug/l	39496	.36	K
PCB-1254	ug/l	39504	.36	K
PCB-1221	ug/l	39488	.36	K
PCB-1232	ug/l	39492	.36	K
PCB-1248	ug/l	39500	.36	K
PCB-1260	ug/l	39508	.36	K
PCB-1016	ug/l	34671	.36	K
Toxaphene	ug/l	39400	.10	K

89 33 34 40 41

Form VWX-015 A
4/83

DIVISION OF WATER RESOURCES
WATER QUALITY MANAGEMENT ELEMENT

GROUND WATER ANALYSIS – MONITORING WELL REPORT

PLEASE TYPE OR PRINT WITH BALLPOINT PEN

FACILITY NAME: AMERICAN CYANAMID COMPANY - CARTERET LANDFILL — SWID NO.:

LAB NAME: ENVIRONMENTAL TESTING AND CERTIFICATION

NJPDES NO.	WELL PERMIT NO.	SAMPLE DATE YR. MO. DAY	NJ LAB CERT. NO.	WQM USE
R NJ 0061611 (cols 1–8)	24-10387-0 (cols 9–16)	890110 (cols 17–22)	12257 (cols 23–27)	(col 28)

15

THE SCHEDULE INDICATED BELOW IS TO BE OBSERVED FROM 01 89 (MO. YR.) TO 03 89 (MO. YR.)

RECEIVED
SEP 01 1989
DEPT. ENVIRON. PROT.

SUBMIT WITH SIGNED T-VWX-014

SAMPLING MONTHS (Jan. Feb. Mar. Apr. May June July Aug. Sept. Oct. Nov. Dec.)	ANALYSIS	UNITS	PARAMETER	VALUE	REMARKS
X X X	Elevation of top of well casing with cap off (as specified in well completion report)	feet MSL: to nearest .01		52.00	
	Elevation of original ground level (as specified in well completion report)	feet MSL: to nearest .01		50.55	
X X X	Depth to water table from top of casing prior to sampling with cap off	feet: to nearest .01	82546	7.70	
X X X	Depth to water table from original ground level prior to sampling	feet: to nearest .01	72019	4.75	
	Arsenic, Dissolved	UG/L as As	01000	20	K
X	Barium, Dissolved	UG/L as Ba	01005	470	
X X X	Biochemical Oxygen Demand - 5 Day	MG/L	00310	2500	
X	Cadmium, Dissolved	UG/L as Cd	01025	2	K
X X X	Chloride, Dissolved	UG/L as Cl	82295	18000	
X	Chromium, Dissolved	UG/L as Cr	01030	10	K
X	Chromium, Dissolved, Hexavalent	UG/L as Cr	01220	10	K
X X X	Chemical Oxygen Demand (COD), Dissolved	MG/L	00341	200 MG	
X	Coliform Group	N/100 ML	74056	10	K
	Color	Pt - Co	00080		
X X X	Copper, Dissolved	UG/L as Cu	01040	12	J
X	Cyanide, Total	MG/L as CN	00720	279	
	Endrin, Total	UG/L	39390		
X	Fluoride, Dissolved	MG/L as F	00950	1.4	
	Gross Alpha, Dissolved	Pc/L	01503		
	Gross Beta, Dissolved	Pc/L	03503		
	Hardness, Total as $CaCO_3$	MG/L	00900		
X X X	Iron, Dissolved	UG/L as Fe	01046	15000	
X X X	Lead, Dissolved	UG/L as Pb	01049	17	J
	Lindane, Total	UG/L	39782		
X X X	Manganese, Dissolved	UG/L	01056	2900	
X X X	Mercury, Dissolved	UG/L	71890	0.4	J

VALUE CODING RULES AND REMARK CODES ON REVERSE

29 33 34 40
42 46 47 52
55 59 60
68 72 73

U78

Form VWX-015 B
4-88

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES
WATER QUALITY MANAGEMENT ELEMENT

GROUND WATER ANALYSIS – MONITORING WELL REPORT

PLEASE TYPE OR PRINT WITH BALLPOINT PEN

FACILITY NAME: AMERICAN CYANAMID COMPANY - CARTERET LANDFILL
SW ID NO.:

LAB NAME: ENVIRONMENTAL TESTING AND CERTIFICATION

	NJPDES NO.	WELL PERMIT NO.	SAMPLE DATE YR. MO. DAY	NJ LAB CERT. NO.	WQM USE
S	NJ 0061611	24-[illegible]-[illegible]	89 01 10	12257	
1	2–8	9–16	17–22	23–27	28

15

THE SCHEDULE INDICATED BELOW IS TO BE OBSERVED FROM 01 89 (MO. YR.) TO 03 89 (MO. YR.)

SUBMIT WITH SIGNED T-VWX-014

SAMPLING MONTHS

Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	ANALYSIS	UNITS	PARAMETER	VALUE	REMARKS
												Methoxychlor, Total	UG/L	39480		
X			X			X			X			Methylene Blue Active Substances	MG/L	38260	0.12	
			X			X			X			Nitrogen, Ammonia, Dissolved $NH_3 + NH_4$ as N	MG/L as N	00608	9.0	
X			X			X			X			Nitrogen, Nitrate, Dissolved	MG/L as N	00618	1.0	J
												Odor	T.O.N.	00085		
			X			X			X			pH	Standard Units	00400	5.97	
X			X			X			X			Phenols, Total Recoverable	UG/L	32730	403	
												Radium 226, Dissolved	Pc/L	09503		
												Radium 228, Dissolved	Pc/L	81366		
X												Selenium, Dissolved	UG/L	01145	5	K
												Silver, Dissolved	UG/L	01075	10	K
X			X			X			X			Sodium, Dissolved	MG/L	00930	2620	
X			X			X			X			Sulfate, Dissolved (as SO_4)	MG/L	00946	420	
X			X			X			X			Total Dissolved Solids (TDS)	PPM	70300	10500	
X			X			X			X			Total Organic Carbon (TOC)	PPM	00680	694.6	
X			X			X			X			Total Organic Halogen (TOX)	UG/L	70353	2165	
												Toxaphene	UG/L	39400		
												Turbidity	NTU	00076		
X			X			X			X			Zinc, Dissolved	UG/L	01090	94	
												2, 4–D, Total	UG/L	39370		
												2, 4, 5–TP, Total	UG/L	39045		
X			X			X			X			Specific Conductance	UMHO/CM		12000	
X												Antimony	ug/L		60	K
												Beryllium	ug/L		5.5	
												Nickel	ug/L		23	
												Thallium	ug/L		10	K
												Total organic Halide	ug/L		2265	
												Total Organic Carbon	mg/L		675.8	
												Free Cyanide	mg/L		0.05	K

VALUE CODING RULES AND REMARK CODES ON REVERSE

29 42 55 68 | 33 34 46 47 59 60 72 73 | 40 41 53 54 66 67 79 80

U79

rm VWX-016
3

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES
WATER QUALITY MANAGEMENT ELEMENT

GROUND WATER ANALYSIS – VOLATILE ORGANICS REPORT

PLEASE TYPE OR PRINT WITH BALLPOINT PEN

FACILITY NAME: AMERICAN CYANAMID COMPANY - CARTERET LANDFILL
SW ID NO.:

LAB NAME: ENVIRONMENTAL TESTING AND CERTIFICATION

	NJPDES NO.	WELL PERMIT NO.	SAMPLE DATE YR. MO. DAY	NJ LAB CERT. NO.	WQM USE
T	NJ 0 0 6 1 6 1 1	24-12357-1	8 9 0 1 1 0	1 2 2 5 7	
1	2 8	9 16	17 22	23 27	28

THE SCHEDULE INDICATED BELOW IS TO BE OBSERVED FROM 0 1 8 9 (MO. YR.) TO 0 3 8 9 (MO. YR.)

SUBMIT WITH SIGNED T-VWX-014

SAMPLING MONTHS

Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	ANALYSIS	UNITS	PARAMETER	VALUE	REMARKS
X												Acrylonitrile	UG/L	34215	1000	K
X												Benzene	UG/L	34030	176	
X												Bromoform	UG/L	32104	47	K
X												Carbon Tetrachloride	UG/L	32102	28	K
X												Chlorobenzene	UG/L	34301	21.6	J
X												Chlorodibromomethane	UG/L	34306	31	K
X												Chloroform	UG/L	32106	16	K
X												1, 1 - Dichloroethane	UG/L	34496	62	
X												1, 2 - Dichloroethane	UG/L	34531	28	K
X												1, 1 - Dichloroethylene	UG/L	34501	28	K
X												1, 2 - Dichloropropane	UG/L	34541	60	K
X												Ethylbenzene	UG/L	34371	72	K
X												Methylene Chloride	UG/L	34423	40.7	
X												1, 1, 2, 2 - Tetrachloroethane	UG/L	34516	69	K
X												Tetrachloroethylene	UG/L	34475	41	K
X												Toluene	UG/L	34012	3240	
X												1, 1, 1 - Trichloroethane	UG/L	34506	38	K
X												1, 1, 2 - Trichloroethane	UG/L	34511	50	K
X												Trichloroethylene	UG/L	39180	45.5	
X												Vinyl Chloride	UG/L	39175	100	K
X												Acrolein	UG/L	34210	50	K
X												Chloroethane	UG/L	34311	100	K
X												2 - Chloroethylvinyl Ether	UG/L	34576	100	K
X												Dichlorobromomethane	UG/L	32105	22	K
X												1, 3 - Dichloropropylene	UG/L	34699	50	K
X												Methyl Bromide	UG/L	34413	100	K
X												Methyl Chloride	UG/L	34418	100	K
X												1, 2 - trans - Dichloroethylene	UG/L	34546	27.5	
X												1, 2 Dichlorobenzene	UG/L	34536		
X												1, 3 Dichlorobenzene	UG/L	34566		
X												1, 4 Dichlorobenzene	UG/L	34571		

VALUE CODING RULES AND
REMARK CODES ON REVERSE

29 42 55 68 | 33 34 46 47 59 60 72 73 | 40 41 53 54 66 67 79 80

U80

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES
WATER QUALITY MANAGEMENT ELEMENT

P1

GROUND WATER ANALYSIS – MONITORING WELL REPORT
ACID, BASE/NEUTRAL ORGANIC COMPOUNDS

TYPE OR PRINT WITH BALLPOINT PEN

FACILITY NAME: AMERICAN CYANAMID COMPANY - CARTERET LANDFILL
SW ID NO.:
NAME: ENVIRONMENTAL TESTING AND CERTIFICATION

NJPDES NO.: NJ 0 0 6 1 6 1 1
WELL PERMIT NO.: [illegible]
SAMPLE DATE: YR. | MO. | DAY
NJ LAB CERT. NO.: 1 2 2 5 7
WQM USE:

THE SCHEDULE INDICATED BELOW IS TO BE OBSERVED FROM MO. YR. TO MO. YR.

RECEIVED
APR 04 1989
DEPT. ENVIRON. PROTECTION
DIVISION Water Resources

SUBMIT WITH SIGNED T-WWX-016

SAMPLING MONTHS	ANALYSIS	UNITS	PARAMETER	VALUE	REMARKS
	2-Chlorophenol	ug/l	34586	170	K
	2,4-Dichlorophenol	ug/l	34601	140	K
	2,4-Dimethylphenol	ug/l	34606	140	K
	2,6-Dinitro-o-cresol	ug/l	77603	100	K
	2,4-Dinitrophenol	ug/l	34616	1400	K
	2-Nitrophenol	ug/l	34591	140	K
	4-Nitrophenol	ug/l	34649	350	K
	p-Chloro-m-cresol	ug/l	34452	350	K
	Pentachlorophenol	ug/l	39032	490	K
	Phenol	ug/l	34695	70	K
	2,4,6-Trichlorophenol	ug/l	34621	140	K
	Acenaphthene	ug/l	34205	70	K
	Acenaphthylene	ug/l	34200	140	K
	Anthracene	ug/l	34220	70	K
	Benzidine	ug/l	39120	2200	K
	Benzanthracene	ug/l	34526	490	K
	Benzopyrene	ug/l	34247	130	K
	3,4-Benzofluoranthene	ug/l	34230	240	K
	Benzoperylene	ug/l	34521	210	K
	Benzofluoranthene	ug/l	34242	130	K
	Bis(2-chloroethoxy)methane	ug/l	34278	270	K
	Bis(2-chloroethyl) Ether	ug/l	34273	90	K
	Bis(2-chlroisopropyl) Ether	ug/l	34283	910	K
	Bis(2-ethylhexyl) Phthalate	ug/l	39100	510	K
	4-Bromophenyl Ether	ug/l	34636	97	K
	Butylbenzyl Phthalate	ug/l	34292	5[illegible]	K
	2-Chloronaphthalene	ug/l	34581	97	K
	4-Chlorophenyl Phenyl Ether	ug/l	34641	210	K

U81

Form VWX-017
4/83

P2

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES
WATER QUALITY MANAGEMENT ELEMENT

GROUND WATER ANALYSIS – MONITORING WELL REPORT

ACID, BASE/NEUTRAL ORGANIC COMPOUNDS

PLEASE TYPE OR PRINT WITH BALLPOINT PEN

FACILITY NAME: AMERICAN CYANAMID COMPANY - CARTERET LANDFILL

SW ID NO.:

LAB NAME: ENVIRONMENTAL TESTING AND CERTIFICATION

	NJPDES NO.	WELL PERMIT NO.	SAMPLE DATE YR. MO. DAY	NJ LAB CERT. NO.	WQM USE
U	NJ 0061611	44-16657-6 (15)	89 01 10	12257	

THE SCHEDULE INDICATED BELOW IS TO BE OBSERVED FROM 01 89 (MO. YR.) TO 03 89 (MO. YR.)

SUBMIT WITH SIGNED T-VWX-014

SAMPLING MONTHS

Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	ANALYSIS	UNITS	PARAMETER	VALUE	REMARKS
X												Chrysene	ug/l	34320	130	K
X												Dibenzanthracene	ug/l	34556	510	K
X												1,2-Dichlorobenzene	ug/l	34536	97	K
X												1,3-Dichlorobenzene	ug/l	34566	97	K
X												1,4-Dichlorobenzene	ug/l	34571	220	K
X												3,3'-Dichlorobenzidine	ug/l	34631	840	K
X												Diethyl Phthalate	ug/l	34336	510	K
X												Dimethyl Phthalate	ug/l	34341	510	K
X												Di-n-butyl Phthalate	ug/l	39110	510	K
X												2,4-Dinitrotolulene	ug/l	34611	290	K
X												2,6-Dinitrotolulene	ug/l	34626	97	K
X												Di-n-octyl Phthalate	ug/l	34596	510	K
X												1,2-Diphenylhydrazine	ug/l	34346	510	K
X												Fluoranthene	ug/l	34376	110	K
X												Fluorene	ug/l	34381	97	K
X												Hexachlorobenzene	ug/l	39700	97	K
X												Hexachlorobutadiene	ug/l	34391	46	K
X												Hexachlorocyclopentadiene	ug/l	34386	510	K
X												Hexachloroethane	ug/l	34396	82	K
X												Indenopyrene	ug/l	34403	240	K
X												Isophorone	ug/l	34408	561	
X												Naphthalene	ug/l	34696	82	K
X												Nitrobenzene	ug/l	34447	97	K
X												N-Nitrosodimentlyamine	ug/l	34438	510	K
X												N-Nitrosodi-n-propylamine	ug/l	34428	510	K
X												N-Nitrosodiphenylamine	ug/l	34433	97	K
X												Phenanthrene	ug/l	34461	280	K
X												Pyrene	ug/l	34469	97	K
X												1,2,4-Trichlorobenzene	ug/l	34551	91	K

VALUE CODING RULES AND
REMARK CODES ON REVERSE

U82

Form VWX-017
4/83

P3

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES
WATER QUALITY MANAGEMENT ELEMENT

GROUND WATER ANALYSIS – MONITORING WELL REPORT

PESTICIDES & PCBs

PLEASE TYPE OR PRINT WITH BALLPOINT PEN

FACILITY NAME: AMERICAN CYANAMID COMPANY - CARTERET LANDFILL

SW ID NO.:

LAB NAME: ENVIRONMENTAL TESTING AND CERTIFICATION

	NJPDES NO.	WELL PERMIT NO.	SAMPLE DATE YR. MO. DAY	NJ LAB CERT. NO.	WQM USE
U	NJ 0061611	24-16387-C	89 01 10	12257	

15

THE SCHEDULE INDICATED BELOW IS TO BE OBSERVED FROM 01 89 (MO. YR.) TO 03 89 (MO. YR.)

SUBMIT WITH SIGNED T-VWX-014

SAMPLING MONTHS

Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	ANALYSIS	UNITS	PARAMETER	VALUE	REMARKS
X												Aldrin	ug/l	39330	97	K
												alpha-BHC	ug/l	39337	510	K
X												beta-BHC	ug/l	39338	210	K
												gamma-BHC (Lindane)	ug/l	39340	510	K
X												delta-BHC	ug/l	34259	160	K
X												Chlordane	ug/l	39350	510	K
												4,4'-DDT	ug/l	39370	140	K
X												4,4'-DDE	ug/l	39365	270	K
												4,4'-DDD	ug/l		240	K
												Dieldrin	ug/l	39380	130	K
X												alpha-Endosulfan	ug/l	34361	510	K
												beta-Endosulfan	ug/l	34356	510	K
X												Endosulfan Sulfate	ug/l	34351	290	K
X												Endrin	ug/l	39390	510	K
												Endrin Aldehyde	ug/l	34366	510	K
X												Heptachlor	ug/l	39410	97	K
X												Heptachlor Epoxide	ug/l	39420	110	K
X												PCB-1242	ug/l	39496	1800	K
X												PCB-1254	ug/l	39504	1800	K
X												PCB-1221	ug/l	39488	1800	K
X												PCB-1232	ug/l	39492	1800	K
X												PCB-1248	ug/l	39500	1800	K
X												PCB-1260	ug/l	39508	1800	K
X												PCB-1016	ug/l	34671	1800	K
X												Toxaphene	ug/l	39400	510	K

VALUE CODING RULES AND

29 42 55 33 34 46 47 59 60 40 41 53 54 66 67

U83

4/83

DIVISION OF WATER RESOURCES

WATER QUALITY MANAGEMENT ELEMENT

GROUND WATER ANALYSIS – MONITORING WELL REPORT

PLEASE TYPE OR PRINT WITH BALLPOINT PEN

FACILITY NAME: AMERICAN CYANAMID COMPANY - CARTERET LANDFILL | SW ID NO.:

LAB NAME: ENVIRONMENTAL TESTING AND CERTIFICATION

NJPDES NO.: R (1) NJ 0 0 6 1 6 1 1 (2–8)

WELL PERMIT NO.: 3 4 - 1 2 3 6 - 1 (9–16) 1D

SAMPLE DATE YR. MO. DAY: 8 9 0 1 1 0 (17–22)

NJ LAB CERT. NO.: 1 2 2 5 7 (23–27)

WQM USE (28)

RECEIVED APR 04 1989

THE SCHEDULE INDICATED BELOW IS TO BE OBSERVED FROM 0 1 8 9 (MO. YR.) TO 0 3 8 9 (MO. YR.)

SUBMIT WITH SIGNED T-VWX-014

DEPT. ENVIRON. PROTECTION
Division Water Resources
Bureau of Permits Admin.

SAMPLING MONTHS												ANALYSIS	UNITS	PARAMETER	VALUE	REMARKS
Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.					
X			X			X			X			Elevation of top of well casing with cap off (as specified in well completion report)	feet MSL: to nearest .01		8.16	
												Elevation of original ground level (as specified in well completion report)	feet MSL: to nearest .01		8.11	
X			X			X			X			Depth to water table from top of casing prior to sampling with cap off	feet: to nearest .01	82546	7.15	
X			X			X			X			Depth to water table from original ground level prior to sampling	feet: to nearest .01	72019	4.10	
X												Arsenic, Dissolved	UG/L as As	01000	1 0	K
X												Barium, Dissolved	UG/L as Ba	01005	53	
X			X			X			X			Biochemical Oxygen Demand - 5 Day	MG/L	00310	30	
X												Cadmium, Dissolved	UG/L as Cd	01025	2.0	K
X			X			X			X			Chloride, Dissolved	UG/L as Cl	82295	100000	
X												Chromium, Dissolved	UG/L as Cr	01030	10	K
X												Chromium, Dissolved, Hexavalent	UG/L as Cr	01220	10	K
X			X			X			X			Chemical Oxygen Demand (COD), Dissolved	MG/L	00341	14	
X												Coliform Group	N/100 ML	74056	30	
												Color	Pt - Co	00080		
X			X			X			X			Copper, Dissolved	UG/L as Cu	01040	1.9	K
X												Cyanide, Total	MG/L as CN	00720	0.05	K
												Endrin, Total	UG/L	39390		
X												Fluoride, Dissolved	MG/L as F	00950	0.1	K
												Gross Alpha, Dissolved	Pc/L	01503		
												Gross Beta, Dissolved	Pc/L	03503		
												Hardness, Total as $CaCO_3$	MG/L	00900		
X			X			X			X			Iron, Dissolved	UG/L as Fe	01046	9040	
X			X			X			X			Lead, Dissolved	UG/L as Pb	01049	15	K
												Lindane, Total	UG/L	39782		
X			X			X			X			Manganese, Dissolved	UG/L	01056	5530	
X			X			X			X			Mercury, Dissolved	UG/L	71890	0.2	K

VALUE CODING RULES AND REMARK CODES ON REVERSE

29 42 55 68 | 33 34 46 47 59 60 72 73 | 40 41 53 54 66 67 79 80

U84

Form VWX-015 B
4-83

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES
WATER QUALITY MANAGEMENT ELEMENT

GROUND WATER ANALYSIS – MONITORING WELL REPORT

PLEASE TYPE OR PRINT WITH BALLPOINT PEN

FACILITY NAME: AMERICAN CYANAMID COMPANY - CARTERET LANDFILL
SW ID NO.:

LAB NAME: ENVIRONMENTAL TESTING AND CERTIFICATION

	NJPDES NO.	WELL PERMIT NO.	SAMPLE DATE YR. MO. DAY	NJ LAB CERT. NO.	WQM USE
	S NJ 0 0 6 1 6 1 1	2 4 - 1 6 3 8 6 - 1	8 9 0 1 1 0	1 2 2 5 7	
	1 2–8	9–18	17–22	23–27	28

1D

THE SCHEDULE INDICATED BELOW IS TO BE OBSERVED FROM 0 1 8 9 (MO. YR.) TO 0 3 8 9 (MO. YR.)

SUBMIT WITH SIGNED T-VWX-014

SAMPLING MONTHS

Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	ANALYSIS	UNITS	PARAMETER	VALUE	REMARKS
												Methoxychlor, Total	UG/L	39480		
X			X			X			X			Methylene Blue Active Substances	MG/L	38260	0.05	J
X			X			X			X			Nitrogen, Ammonia, Dissolved $NH_3 + NH_4$ as N	MG/L as N	00608	1.1	
X			X			X			X			Nitrogen, Nitrate, Dissolved	MG/L as N	00618	1.0	J
												Odor	T.O.N.	00085		
X			X			X			X			pH	Standard Units	00400	7.48	
X			X			X			X			Phenols, Total Recoverable	UG/L	32730	50	K
												Radium 226, Dissolved	Pc/L	09503		
												Radium 228, Dissolved	Pc/L	81366		
X												Selenium, Dissolved	UG/L	01145	25	K
X												Silver, Dissolved	UG/L	01075	10	K
X			X			X			X			Sodium, Dissolved	MG/L	00930	3060	
X			X			X			X			Sulfate, Dissolved (as SO_4)	MG/L	00946	38C	
X			X			X			X			Total Dissolved Solids (TDS)	PPM	70300	200C	
X			X			X			X			Total Organic Carbon (TOC)	PPM	00680	4.5	
X			X			X			X			Total Organic Halogen (TOX)	UG/L	70353	1065	
												Toxaphene	UG/L	39400		
												Turbidity	NTU	00076		
X			X			X			X			Zinc, Dissolved	UG/L	01090	57	
												2, 4–D, Total	UG/L	39370		
												2, 4, 5–TP, Total	UG/L	39045		
X			X			X			X			Specific Conductance	UMHO/CM		2000C	
												Antimony	ug/L		60	K
												Beryllium	ug/L		1.0	R
												Nickel	ug/L		20	K
												Thallium	ug/L		20	K
												Total Organic Halide	ug/L		1095	
												Total Organic Carbon	mg/L		4.7	
												Cyanide, Free	mg/L		28.05	

29 33 34 40 41
42 46 47 53 54
55 59 60 66 67
68 72 73 79 80

VALUE CODING RULES AND REMARK CODES ON REVERSE

U85

Form VWX-016
4[illegible]3

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES
WATER QUALITY MANAGEMENT ELEMENT

GROUND WATER ANALYSIS – VOLATILE ORGANICS REPORT

PLEASE TYPE OR PRINT WITH BALLPOINT PEN

FACILITY NAME: AMERICAN CYANAMID COMPANY - CARTERET LANDFILL

SW ID NO.:

LAB NAME: ENVIRONMENTAL TESTING AND CERTIFICATION

	NJPDES NO.	WELL PERMIT NO.	SAMPLE DATE YR. MO. DAY	NJ LAB CERT. NO.	WQM USE
T	NJ 0061611	24-15356-1	89 01 10	12257	
1	2 8	9 16	17 22	23 27	28

THE SCHEDULE INDICATED BELOW IS TO BE OBSERVED FROM 01 89 (MO. YR.) TO 03 89 (MO. YR.)

SUBMIT WITH SIGNED T-VWX-014

SAMPLING MONTHS

Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	ANALYSIS	UNITS	PARAMETER	VALUE	REMARKS
X												Acrylonitrile	UG/L	34215	20	K
X												Benzene	UG/L	34030	0.88	K
X												Bromoform	UG/L	32104	0.94	K
X												Carbon Tetrachloride	UG/L	32102	0.56	K
X												Chlorobenzene	UG/L	34301	1.2	K
X												Chlorodibromoethane	UG/L	34306	0.62	K
X												Chloroform	UG/L	32106	0.32	K
X												1, 1 - Dichloroethane	UG/L	34496	0.94	K
X												1, 2 - Dichloroethane	UG/L	34531	0.56	K
X												1, 1 - Dichloroethylene	UG/L	34501	0.56	K
X												1, 2 - Dichloropropane	UG/L	34541	1.2	K
X												Ethylbenzene	UG/L	34371	1.4	K
X												Methylene Chloride	UG/L	34423	0.258	J
X												1, 1, 2, 2 - Tetrachloroethane	UG/L	34516	1.4	K
X												Tetrachloroethylene	UG/L	34475	0.82	K
X												Toluene	UG/L	34012	3.89	
X												1, 1, 1 - Trichloroethane	UG/L	34506	0.76	K
X												1, 1, 2 - Trichloroethane	UG/L	34511	1.0	K
X												Trichloroethylene	UG/L	39180	0.38	K
X												Vinyl Chloride	UG/L	39175	2.0	K
X												Acrolein	UG/L	34210	20	K
X												Chloroethane	UG/L	34311	2.0	K
X												2 - Chloroethylvinyl Ether	UG/L	34576	2.0	K
X												Dichlorobromomethane	UG/L	32105	0.44	K
X												1, 3 - Dichloropropylene	UG/L	34699	1.0	K
X												Methyl Bromide	UG/L	34413	2.0	K
X												Methyl Chloride	UG/L	34418	2.0	K
X												1, 2 - trans - Dichloroethylene	UG/L	34546	0.32	K
X												1, 2 Dichlorobenzene	UG/L	34536		
X												1, 3 Dichlorobenzene	UG/L	34566		
X												1, 4 Dichlorobenzene	UG/L	34571		

29 42 55 68 — 33 34 46 47 59 60 72 73 — 40 41 53 54 66 67 79 80

VALUE CODING RULES AND
REMARK CODES ON REVERSE

486

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES
WATER QUALITY MANAGEMENT ELEMENT

P1

GROUND WATER ANALYSIS – MONITORING WELL REPORT
ACID, BASE/NEUTRAL ORGANIC COMPOUNDS

PLEASE TYPE OR PRINT WITH BALLPOINT PEN

FACILITY NAME: AMERICAN CYANAMID COMPANY - CARTERET LANDFILL | SW ID NO.:

LAB NAME: ENVIRONMENTAL TESTING AND CERTIFICATION

NJPDES NO.: NJ0061611 | WELL PERMIT NO.: [illegible] | SAMPLE DATE YR. 89 MO. 10 DAY | NJ LAB CERT. NO.: 12257 | WQM USE:

THE SCHEDULE INDICATED BELOW IS TO BE OBSERVED FROM P1 8 9 MO. YR. TO P3 8 9 MO. YR.

SUBMIT WITH SIGNED T-VWX-014

SAMPLING MONTHS	ANALYSIS	UNITS	PARAMETER	VALUE	REMARKS
X	2-Chlorophenol	ug/l	34586	3.4	K
X	2,4-Dichlorophenol	ug/l	34601	2.8	K
X	2,4-Dimethylphenol	ug/l	34606	2.8	K
X	2,6-Dinitro-o-cresol	ug/l	77603	.25	K
X	2,4-Dinitrophenol	ug/l	34616	.43	K
X	2-Nitrophenol	ug/l	34591	2.7	K
X	4-Nitrophenol	ug/l	34649	2.5	K
	p-Chloro-m-cresol	ug/l	34452	3.1	K
X	Pentachlorophenol	ug/l	39032	3.7	K
X	Phenol	ug/l	34695	1.5	K
	2,4,6-Trichlorophenol	ug/l	34621	2.8	K
X					
	Acenaphthene	ug/l	34205	2.0	K
	Acenaphthylene	ug/l	34200	3.6	K
X	Anthracene	ug/l	34220	2.0	K
	Benzidine	ug/l	39120	.45	K
X	Benzanthracene	ug/l	34526	8.0	K
X	Benzopyrene	ug/l	34247	2.6	K
	3,4-Benzofluoranthene	ug/l	34230	4.9	K
X	Benzoperylene	ug/l	34521	4.2	K
	Benzofluoranthene	ug/l	34242	2.6	K
X	Bis(2-chloroethoxy)methane	ug/l	34278	5.5	K
X	Bis(2-chloroethyl) Ether	ug/l	34273	5.9	K
X	Bis(2-chloroisopropyl) Ether	ug/l	34283	5.9	K
X	Bis(2-ethylhexyl) Phthalate	ug/l	39100	.10	K
X	4-Bromophenyl Ether	ug/l	34636	2.0	K
X	Butylbenzyl Phthalate	ug/l	34292	.10	K
X	2-Chloronaphthalene	ug/l	34581	2.0	K
X	4-Chlorophenyl Phenyl Ether	ug/l	34641	4.3	K

U87

Form VWX-017
4/83 P2

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES
WATER QUALITY MANAGEMENT ELEMENT

GROUND WATER ANALYSIS – MONITORING WELL REPORT

ACID, BASE/NEUTRAL ORGANIC COMPOUNDS

PLEASE TYPE OR PRINT WITH BALLPOINT PEN

FACILITY NAME	AMERICAN CYANAMID COMPANY - CARTERET LANDFILL	SW ID NO.
LAB NAME	ENVIRONMENTAL TESTING AND CERTIFICATION	

U NJPDES NO. NJ 0 0 6 1 6 1 1 WELL PERMIT NO. [illegible] ID SAMPLE DATE YR. 8 9 MO. 0 1 DAY 1 0 NJ LAB CERT. NO. 1 2 2 5 7 WQM USE

THE SCHEDULE INDICATED BELOW IS TO BE OBSERVED FROM 01 89 MO. YR. TO 03 89 MO. YR.

RECEIVED
APR 04 1989
DEPT. ENVIRON. PROTECTION
Division Water Resources

SUBMIT WITH SIGNED T-VWX-014

SAMPLING MONTHS	ANALYSIS	UNITS	PARAMETER CODE	VALUE	REMARKS
X	Chrysene	ug/1	34320	2.6	K
X	Dibenzanthracene	ug/1	34556	1.0	K
X	1,2-Dichlorobenzene	ug/1	34536	2.0	K
X	1,3-Dichlorobenzene	ug/1	34566	2.0	K
X	1,4-Dichlorobenzene	ug/1	34571	4.5	K
X	3,3'-Dichlorobenzidine	ug/1	34631	1.7	K
X	Diethyl Phthalate	ug/1	34336	1.0	K
X	Dimethyl Phthalate	ug/1	34341	1.0	K
X	Di-n-butyl Phthalate	ug/1	39110	1.0	K
X	2,4-Dinitrotolulene	ug/1	34611	5.9	K
X	2,6-Dinitrotolulene	ug/1	34626	2.0	K
X	Di-n-octyl Phthalate	ug/1	34596	1.0	K
X	1,2-Diphenylhydrazine	ug/1	34346	1.0	K
X	Fluoranthene	ug/1	34376	2.3	K
X	Fluorene	ug/1	34381	2.0	K
X	Hexachlorobenzene	ug/1	39700	2.0	K
X	Hexachlorobutadiene	ug/1	34391	0.93	K
X	Hexachlorocyclopentadiene	ug/1	34386	1.0	K
X	Hexachloroethane	ug/1	34396	1.6	K
X	Indenopyrene	ug/1	34403	4.8	K
X	Isophorone	ug/1	34408	2.3	K
X	Naphthalene	ug/1	34696	1.6	K
X	Nitrobenzene	ug/1	34447	2.0	K
X	N-Nitrosodimentlyamine	ug/1	34438	1.6	K
X	N-Nitrosodi-n-propylamine	ug/1	34428	1.0	K
X	N-Nitrosodiphenylamine	ug/1	34433	2.0	K
X	Phenanthrene	ug/1	34461	5.6	K
X	Pyrene	ug/1	34469	2.0	K
X	1,2,4-Trichlorobenzene	ug/1	34551	2.0	K

VALUE CODING RULES AND REMARK CODES ON REVERSE

U88

Form VWX-017
4/83

P3

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES
WATER QUALITY MANAGEMENT ELEMENT

GROUND WATER ANALYSIS – MONITORING WELL REPORT

PESTICIDES & PCBs

PLEASE TYPE OR PRINT WITH BALLPOINT PEN

FACILITY NAME: AMERICAN CYANAMID COMPANY - CARTERET LANDFILL | SW ID NO.:

LAB NAME: ENVIRONMENTAL TESTING AND CERTIFICATION

	NJPDES NO.	WELL PERMIT NO.	SAMPLE DATE YR. MO. DAY	NJ LAB CERT. NO.	WQM USE
U	NJ 0 0 6 1 6 1 1	1 4 - 1 0 3 8 6 - 1 D	8 9 0 1 1 0	1 2 2 5 7	

THE SCHEDULE INDICATED BELOW IS TO BE OBSERVED FROM 0 1 8 9 (MO. YR.) TO 0 3 8 9 (MO. YR.)

SUBMIT WITH SIGNED T-VWX-014

SAMPLING MONTHS (Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec)	ANALYSIS	UNITS	PARAMETER	VALUE	REMARKS
X	Aldrin	ug/1	39330	.02	K
X	alpha-BHC	ug/1	39337	.10	K
X	beta-BHC	ug/1	39338	.43	K
X	gamma-BHC (Lindane)	ug/1	39340	.10	K
X	delta-BHC	ug/1	34259	.32	K
X	Chlordane	ug/1	39350	.10	K
X	4,4'-DDT	ug/1	39370	.29	K
X	4,4'-DDE	ug/1	39365	.58	K
X	4,4'-DDD	ug/1		.48	K
X	Dieldrin	ug/1	39380	.26	K
X	alpha-Endosulfan	ug/1	34361	.10	K
X	beta-Endosulfan	ug/1	34356	.10	K
X	Endosulfan Sulfate	ug/1	34351	.58	K
X	Endrin	ug/1	39390	.10	K
X	Endrin Aldehyde	ug/1	34366	.10	K
X	Heptachlor	ug/1	39410	.20	K
X	Heptachlor Epoxide	ug/1	39420	.23	K
X	PCB-1242	ug/1	39496	.37	K
X	PCB-1254	ug/1	39504	.37	K
X	PCB-1221	ug/1	39488	.37	K
X	PCB-1232	ug/1	39492	.37	K
X	PCB-1248	ug/1	39500	.37	K
X	PCB-1260	ug/1	39508	.37	K
X	PCB-1016	ug/1	34671	.37	K
X	Toxaphene	ug/1	39400	.10	K

VALUE CODING RULES AND

Y89

Form VWX-015 A
4/83

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES
WATER QUALITY MANAGEMENT ELEMENT

GROUND WATER ANALYSIS – MONITORING WELL REPORT

PLEASE TYPE OR PRINT WITH BALLPOINT PEN

FACILITY NAME: AMERICAN CYANAMID COMPANY - CARTERET LANDFILL
SW ID NO.:

LAB NAME: ENVIRONMENTAL TESTING AND CERTIFICATION

	NJPDES NO.	WELL PERMIT NO.	SAMPLE DATE YR. / MO. / DAY	NJ LAB CERT. NO.	WQM USE
R	NJ 0061611	24-16389-6	890110	12257	
1	2 – 8	9 – 16	17 – 22	23 – 27	28

25

THE SCHEDULE INDICATED BELOW IS TO BE OBSERVED FROM 0189 (MO. YR.) TO 0389 (MO. YR.)

SUBMIT WITH SIGNED T-VWX-014

SAMPLING MONTHS

Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	ANALYSIS	UNITS	PARAMETER	VALUE	REMARKS
			X			X			X			Elevation of top of well casing with cap off (as specified in well completion report)	feet MSL: to nearest .01		8.86	
												Elevation of original ground level (as specified in well completion report)	feet MSL: to nearest .01		6.32	
			X			X			X			Depth to water table from top of casing prior to sampling with cap off	feet: to nearest .01	82546	7.56	
X			X			X			X			Depth to water table from original ground level prior to sampling	feet: to nearest .01	72019	5.02	
X												Arsenic, Dissolved	UG/L as As	01000	50	K
X												Barium, Dissolved	UG/L as Ba	01005	20	K
X			X			X			X			Biochemical Oxygen Demand - 5 Day	MG/L	00310	75	
X												Cadmium, Dissolved	UG/L as Cd	01025	2.0	K
X			X			X			X			Chloride, Dissolved	UG/L as Cl	82295	7990000	
X												Chromium, Dissolved	UG/L as Cr	01030	10	K
X												Chromium, Dissolved, Hexavalent	UG/L as Cr	01220	10	K
X			X			X			X			Chemical Oxygen Demand (COD), Dissolved	MG/L	00341	338	
X												Coliform Group	N/100 ML	74056	10	
												Color	Pt - Co	00080		
X			X			X			X			Copper, Dissolved	UG/L as Cu	01040	2.3	J
X												Cyanide, Total	MG/L as CN	00720	34.7	
												Endrin, Total	UG/L	39390		
X												Fluoride, Dissolved	MG/L as F	00950	10.6	
												Gross Alpha, Dissolved	Pc/L	01503		
												Gross Beta, Dissolved	Pc/L	03503		
												Hardness, Total as $CaCO_3$	MG/L	00900		
X			X			X			X			Iron, Dissolved	UG/L as Fe	01046	3500	
X			X			X			X			Lead, Dissolved	UG/L as Pb	01049	75	K
												Lindane, Total	UG/L	39782		
X			X			X			X			Manganese, Dissolved	UG/L	01056	26	
X			X			X			X			Mercury, Dissolved	UG/L	71890	0.20	K

VALUE CODING RULES AND REMARK CODES ON REVERSE

29 33 34 40 41
42 46 47 53 54
55 59 60 66 67
68 72 73 79 80

U90

Form VWX-015-3
4/83

DIVISION OF WATER RESOURCES
WATER QUALITY MANAGEMENT ELEMENT

GROUND WATER ANALYSIS – MONITORING WELL REPORT

PLEASE TYPE OR PRINT WITH BALLPOINT PEN

FACILITY NAME: AMERICAN CYANAMID COMPANY - CARTERET LANDFILL
SW ID NO.:

LAB NAME: ENVIRONMENTAL TESTING AND CERTIFICATION

	NJPDES NO.	WELL PERMIT NO.	SAMPLE DATE YR. MO. DAY	NJ LAB CERT. NO.	WQM USE
	S NJ 0 0 6 1 6 1 1 (2–8)	2 4 - 1 0 3 8 9 - 6 (9–16) 25	8 9 0 1 1 0 (17–22)	1 2 2 5 7 (23–27)	(29)

THE SCHEDULE INDICATED BELOW IS TO BE OBSERVED FROM 0 1 8 9 (MO. YR.) TO 0 3 8 9 (MO. YR.)

RECEIVED
APR 04 1989
DEPT. ENVIRON. PROTECTION
Division Water Resources

SUBMIT WITH SIGNED T-VWX-014

SAMPLING MONTHS (Jan. Feb. Mar. Apr. May June July Aug. Sept. Oct. Nov. Dec.)	ANALYSIS	UNITS	PARAMETER	VALUE	REMARKS
	Methoxychlor, Total	UG/L	39480		
X X X X X	Methylene Blue Active Substances	MG/L	38260	0.5	J
X X X	Nitrogen, Ammonia, Dissolved $NH_3 + NH_4$ as N	MG/L as N	00608	200	
X X X	Nitrogen, Nitrate, Dissolved	MG/L as N	00618	1.0	J
	Odor	T.O.N.	00085		
X X X	pH	Standard Units	00400	8.0	
X X X X	Phenols, Total Recoverable	UG/L	32730	25	J
	Radium 226, Dissolved	Pc/L	09503		
	Radium 228, Dissolved	Pc/L	81366		
X	Selenium, Dissolved	UG/L	01145	2	K
	Silver, Dissolved	UG/L	01075	10	K
X X X X	Sodium, Dissolved	MG/L	00930	459	
X X X X	Sulfate, Dissolved (as SO_4)	MG/L	00946	300	
X X X	Total Dissolved Solids (TDS)	PPM	70300	1600	
X X X X	Total Organic Carbon (TOC)	PPM	00680	14	
X X X	Total Organic Halogen (TOX)	UG/L	70353	9	
	Toxaphene	UG/L	39400		
	Turbidity	NTU	00076		
X X X	Zinc, Dissolved	UG/L	01090	20	K
	2, 4–D, Total	UG/L	39370		
	2, 4, 5–TP, Total	UG/L	39045		
X X X X	Specific Conductance	UMHO/CM		195	
	Antimony	ug/L		60	K
	Beryllium	ug/L		1.0	K
	Nickel	ug/L		20	K
	Thallium	ug/L		10	K
	Total Organic Halogen	ug/L		946	3
	Total Organic Carbon	mg/L		16	.6
	Cyanide, Free	mg/L		0.09	

VALUE CODING RULES AND REMARK CODES ON REVERSE

U91

Form VWX-016
783

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES
WATER QUALITY MANAGEMENT ELEMENT

GROUND WATER ANALYSIS – VOLATILE ORGANICS REPORT

PLEASE TYPE OR PRINT WITH BALLPOINT PEN

FACILITY NAME: AMERICAN CYANAMID COMPANY - CARTERET LANDFILL
SW ID NO.:

LAB NAME: ENVIRONMENTAL TESTING AND CERTIFICATION

	NJPDES NO.	WELL PERMIT NO.	SAMPLE DATE YR. MO. DAY	NJ LAB CERT. NO.	WQM USE
	T NJ0061611	24-A13317-6	79 01 09	12257	
	1 2 8	9 16	17 22	23 27	28

25

THE SCHEDULE INDICATED BELOW IS TO BE OBSERVED FROM 01 89 (MO. YR.) TO 03 89 (MO. YR.)

SUBMIT WITH SIGNED T-VWX-014

SAMPLING MONTHS												ANALYSIS	UNITS	PARAMETER	VALUE	REMARKS
Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.					
X												Acrylonitrile	UG/L	34215	20	K
X												Benzene	UG/L	34030	3	J
X												Bromoform	UG/L	32104	0.94	K
X												Carbon Tetrachloride	UG/L	32102	0.51	K
X												Chlorobenzene	UG/L	34301	1.2	K
X												Chlorodibromoethane	UG/L	34306	0.62	K
X												Chloroform	UG/L	32106	0.32	K
X												1, 1 - Dichloroethane	UG/L	34496	0.94	K
X												1, 2 - Dichloroethane	UG/L	34531	0.56	K
X												1, 1 - Dichloroethylene	UG/L	34501	5.6	K
X												1, 2 - Dichloropropane	UG/L	34541	1.2	K
X												Ethylbenzene	UG/L	34371	1	K
X												Methylene Chloride	UG/L	34423	2.3	
X												1, 1, 2, 2 - Tetrachloroethane	UG/L	34516	1.4	K
X												Tetrachloroethylene	UG/L	34475	2.8	K
X												Toluene	UG/L	34012	1.3	
X												1, 1, 1 - Trichloroethane	UG/L	34506	0.76	K
X												1, 1, 2 - Trichloroethane	UG/L	34511	1.0	K
X												Trichloroethylene	UG/L	39180	0.9	K
X												Vinyl Chloride	UG/L	39175	2.6	K
X												Acrolein	UG/L	34210	20	K
X												Chloroethane	UG/L	34311	2.6	K
X												2 - Chloroethylvinyl Ether	UG/L	34576	2.6	K
X												Dichlorobromomethane	UG/L	32105	0.4	K
X												1, 3 - Dichloropropylene	UG/L	34699	1.6	K
X												Methyl Bromide	UG/L	34413	2.6	K
X												Methyl Chloride	UG/L	34418	2.6	K
X												1, 2 - trans - Dichloroethylene	UG/L	34546	2.8	K
X												1, 2 Dichlorobenzene	UG/L	34536		
X												1, 3 Dichlorobenzene	UG/L	34566		
X												1, 4 Dichlorobenzene	UG/L	34571		

29 33 34 40 41
42 46 47 53 54
55 59 60 66 67
68 72 73 79 80

VALUE CODING RULES AND
REMARK CODES ON REVERSE

U92

FORM VWX-017

P1

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES
WATER QUALITY MANAGEMENT ELEMENT

GROUND WATER ANALYSIS – MONITORING WELL REPORT
ACID, BASE/NEUTRAL ORGANIC COMPOUNDS

PLEASE TYPE OR PRINT WITH BALLPOINT PEN

FACILITY NAME: AMERICAN CYANAMID COMPANY - CARTERET LANDFILL | SW ID NO.

LAB NAME: ENVIRONMENTAL TESTING AND CERTIFICATION

U | NJPDES NO. NJ 0 0 6 1 6 1 1 | WELL PERMIT NO. 2 4 - 1 6 5 6 7 - 6 (25) | SAMPLE DATE YR. | MO. | DAY | NJ LAB CERT. NO. 1 2 2 5 7 | WQM USE

THE SCHEDULE INDICATED BELOW IS TO BE OBSERVED FROM 0 1 8 0 (MO. YR.) TO 0 3 8 9 (MO. YR.)

SUBMIT WITH SIGNED T-VWX-016

SAMPLING MONTHS	ANALYSIS	UNITS	PARAMETER	VALUE	REMARKS
X	2-Chlorophenol	ug/l	34586		K
	2,4-Dichlorophenol	ug/l	34601		K
	2,4-Dimethylphenol	ug/l	34606		K
X	2,6-Dinitro-o-cresol	ug/l	77603		K
	2,4-Dinitrophenol	ug/l	34616		K
X	2-Nitrophenol	ug/l	34591		K
X	4-Nitrophenol	ug/l	34649		K
X	p-Chloro-m-cresol	ug/l	34452		K
X	Pentachlorophenol	ug/l	39032		K
X	Phenol	ug/l	34695		K
X	2,4,6-Trichlorophenol	ug/l	34621		K
X					
X	Acenaphthene	ug/l	34205		K
X	Acenaphthylene	ug/l	34200		K
X	Anthracene	ug/l	34220		K
X	Benzidine	ug/l	39120		K
X	Benzanthracene	ug/l	34526		K
X	Benzopyrene	ug/l	34247		K
X	3,4-Benzofluoranthene	ug/l	34230		K
X	Benzoperylene	ug/l	34521		K
X	Benzofluoranthene	ug/l	34242		K
X	Bis(2-chloroethoxy)methane	ug/l	34278		K
X	Bis(2-chloroethyl) Ether	ug/l	34273		K
X	Bis(2-chlroisopropyl) Ether	ug/l	34283		K
X	Bis(2-ethylhexyl) Phthalate	ug/l	39100	J	J
X	4-Bromophenyl Ether	ug/l	34636		K
X	Butylbenzyl Phthalate	ug/l	34292		K
X	2-Chloronaphthalene	ug/l	34581		K
X	4-Chlorophenyl Phenyl Ether	ug/l	34641		K

U93

Form VWX-017
4/83 P2

NEW . .SEY DEPARTMENT OF ENVIRONMENTAL PROT..TION
DIVISION OF WATER RESOURCES
WATER QUALITY MANAGEMENT ELEMENT

GROUND WATER ANALYSIS – MONITORING WELL REPORT

ACID, BASE/NEUTRAL ORGANIC COMPOUNDS

PLEASE TYPE OR PRINT WITH BALLPOINT PEN

FACILITY NAME	AMERICAN CYANAMID COMPANY - CARTERET LANDFILL	SW ID NO.
LAB NAME	ENVIRONMENTAL TESTING AND CERTIFICATION	

NJPDES NO. NJ 0 0 6 1 6 1 1 (cols 3–9)

WELL PERMIT NO. [illegible] (cols 9–16)

SAMPLE DATE YR. | MO. | DAY: [illegible] (cols 17–22)

NJ LAB CERT. NO. 1 2 2 5 7 (cols 23–27)

WQM USE (col 28)

THE SCHEDULE INDICATED BELOW IS TO BE OBSERVED FROM [illegible] MO. YR. TO [illegible] MO. YR.

SUBMIT WITH SIGNED T-VWX-014

SAMPLING MONTHS	ANALYSIS	UNITS	PARAMETER	VALUE	REMARKS
X	Chrysene	ug/1	34320	[illegible]	K
X	Dibenzanthracene	ug/1	34556	[illegible]	K
X	1,2-Dichlorobenzene	ug/1	34536	[illegible]	K
X	1,3-Dichlorobenzene	ug/1	34566	[illegible]	K
X	1,4-Dichlorobenzene	ug/1	34571	[illegible]	K
X	3,3'-Dichlorobenzidine	ug/1	34631	[illegible]	K
X	Diethyl Phthalate	ug/1	34336	[illegible]	K
X	Dimethyl Phthalate	ug/1	34341	[illegible]	K
X	Di-n-butyl Phthalate	ug/1	39110	[illegible]	K
X	2,4-Dinitrotolulene	ug/1	34611	[illegible]	K
X	2,6-Dinitrotolulene	ug/1	34626	[illegible]	K
X	Di-n-octyl Phthalate	ug/1	34596	[illegible]	K
X	1,2-Diphenylhydrazine	ug/1	34346	[illegible]	K
X	Fluoranthene	ug/1	34376	[illegible]	K
X	Fluorene	ug/1	34381	[illegible]	K
X	Hexachlorobenzene	ug/1	39700	[illegible]	K
X	Hexachlorobutadiene	ug/1	34391	[illegible]	K
X	Hexachlorocyclopentadiene	ug/1	34386	[illegible]	K
X	Hexachloroethane	ug/1	34396	[illegible]	K
X	Indenopyrene	ug/1	34403	[illegible]	K
X	Isophorone	ug/1	34408	[illegible]	K
X	Naphthalene	ug/1	34696	[illegible]	K
X	Nitrobenzene	ug/1	34447	[illegible]	K
X	N-Nitrosodimentlyamine	ug/1	34438	[illegible]	K
X	N-Nitrosodi-n-propylamine	ug/1	34428	[illegible]	K
X	N-Nitrosodiphenylamine	ug/1	34433	[illegible]	K
X	Phenanthrene	ug/1	34461	[illegible]	K
X	Pyrene	ug/1	34469	[illegible]	K
X	1,2,4-Trichlorobenzene	ug/1	34551	[illegible]	K

VALUE CODING RULES AND REMARK CODES ON REVERSE

Column ranges: 39 / 42 / 43 / 46 / 33 34 / 46 47 / 50 60 / 72 78 / 40 41 / 53 54 / 66 67 / 79 80

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Form VWX-017
4/83

P3

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES
WATER QUALITY MANAGEMENT ELEMENT

GROUND WATER ANALYSIS – MONITORING WELL REPORT

PESTICIDES & PCBs

PLEASE TYPE OR PRINT WITH BALLPOINT PEN

FACILITY NAME: AMERICAN CYANAMID COMPANY - CARTERET LANDFILL

SW ID NO.:

LAB NAME: ENVIRONMENTAL TESTING AND CERTIFICATION

	NJPDES NO.	WELL PERMIT NO.	SAMPLE DATE YR. MO. DAY	NJ LAB CERT. NO.	WQM USE
U	NJ 0061611	24-16389-6	89 01 10	12257	

25

THE SCHEDULE INDICATED BELOW IS TO BE OBSERVED FROM 01 89 (MO. YR.) TO 03 89 (MO. YR.)

RECEIVED
APR 04 1989
DEPT. ENVIRON. PROTECTION

SUBMIT WITH SIGNED T-VWX-014

SAMPLING MONTHS

Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	ANALYSIS	UNITS	PARAMETER	VALUE	REMARKS
X												Aldrin	ug/l	39330	2.1	K
X												alpha-BHC	ug/l	39337	11	K
X												beta-BHC	ug/l	39338	3.7	K
X												gamma-BHC (Lindane)	ug/l	39340	11	K
X												delta-BHC	ug/l	34259	3.4	K
X												Chlordane	ug/l	39350	11	K
X												4,4'-DDT	ug/l	39370	3.1	K
X												4,4'-DDE	ug/l	39365	6.2	K
X												4,4'-DDD	ug/l		5.2	K
X												Dieldrin	ug/l	39380	2.8	K
X												alpha-Endosulfan	ug/l	34361	11	K
X												beta-Endosulfan	ug/l	34356	11	K
X												Endosulfan Sulfate	ug/l	34351	6.2	K
X												Endrin	ug/l	39390	11	K
X												Endrin Aldehyde	ug/l	34366	11	K
X												Heptachlor	ug/l	39410	2.1	K
X												Heptachlor Epoxide	ug/l	39420	2.4	K
X												PCB-1242	ug/l	39496	40	K
X												PCB-1254	ug/l	39504	40	K
X												PCB-1221	ug/l	39488	40	K
X												PCB-1232	ug/l	39492	40	K
X												PCB-1248	ug/l	39500	40	K
X												PCB-1260	ug/l	39508	40	K
X												PCB-1016	ug/l	34671	40	K
X												Toxaphene	ug/l	39400	11	K

VALUE CODING RULES AND

29 42 55 33 34 46 47 59 60 40 41 53 54 66 67

U95

Form VWX-01[illegible]
4/83

DIVISION OF WATER RESOURCES
WATER QUALITY MANAGEMENT ELEMENT

GROUND WATER ANALYSIS – MONITORING WELL REPORT

PLEASE TYPE OR PRINT WITH BALLPOINT PEN

FACILITY NAME: AMERICAN CYANAMID COMPANY - CARTERET LANDFILL
SW ID NO.:

LAB NAME: ENVIRONMENTAL TESTING AND CERTIFICATION

	NJPDES NO.	WELL PERMIT NO.	SAMPLE DATE YR. MO. DAY	NJ LAB CERT. NO.	WQM USE
R	NJ 0061611	24-[illegible]-8	890110	12257	
1	2–8	9–16	17–22	23–27	28

2D

THE SCHEDULE INDICATED BELOW IS TO BE OBSERVED FROM 0189 (MO. YR.) TO 0389 (MO. YR.)

SUBMIT WITH SIGNED T-VWX-014

SAMPLING MONTHS

Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	ANALYSIS	UNITS	PARAMETER	VALUE	REMARKS
X			X			X			X			Elevation of top of well casing with cap off (as specified in well completion report)	feet MSL: to nearest .01		8.84	
												Elevation of original ground level (as specified in well completion report)	feet MSL: to nearest .01		6.28	
X			X			X			X			Depth to water table from top of casing prior to sampling with cap off	feet: to nearest .01	82546	7.36	
X			X			X			X			Depth to water table from original ground level prior to sampling	feet: to nearest .01	72019	4.80	
X												Arsenic, Dissolved	UG/L as As	01000	20	K
X												Barium, Dissolved	UG/L as Ba	01005	49	
X			X			X			X			Biochemical Oxygen Demand - 5 Day	MG/L	00310	95	
X												Cadmium, Dissolved	UG/L as Cd	01025	2.0	K
X			X			X			X			Chloride, Dissolved	UG/L as Cl	82295	8530000	
X												Chromium, Dissolved	UG/L as Cr	01030	10	K
X												Chromium, Dissolved, Hexavalent	UG/L as Cr	01220	10	K
X			X			X			X			Chemical Oxygen Demand (COD), Dissolved	MG/L	00341	242	
X												Coliform Group	N/100 ML	74056	10	K
												Color	Pt - Co	00080		
X			X			X			X			Copper, Dissolved	UG/L as Cu	01040	3.8	[illegible]
X												Cyanide, Total	MG/L as CN	00720	8.58	
												Endrin, Total	UG/L	39390		
X												Fluoride, Dissolved	MG/L as F	00950	2.7	
												Gross Alpha, Dissolved	Pc/L	01503		
												Gross Beta, Dissolved	Pc/L	03503		
												Hardness, Total as $CaCO_3$	MG/L	00900		
X			X			X			X			Iron, Dissolved	UG/L as Fe	01046	610	
X			X			X			X			Lead, Dissolved	UG/L as Pb	01049	95	
												Lindane, Total	UG/L	39782		
X			X			X			X			Manganese, Dissolved	UG/L	01056	2290	
X			X			X			X			Mercury, Dissolved	UG/L	71890	0.20	

29 33 34 40 4
42 46 47 53 5
55 59 60 66 6
68 72 73 79 8

VALUE CODING RULES AND
REMARK CODES ON REVERSE

96

Form VWX-015 B
4-83

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES
WATER QUALITY MANAGEMENT ELEMENT

GROUND WATER ANALYSIS – MONITORING WELL REPORT

PLEASE TYPE OR PRINT WITH BALLPOINT PEN

FACILITY NAME: AMERICAN CYANAMID COMPANY - CARTERET LANDFILL

SW ID NO.:

LAB NAME: ENVIRONMENTAL TESTING AND CERTIFICATION

	NJPDES NO.	WELL PERMIT NO.	SAMPLE DATE YR. MO. DAY	NJ LAB CERT. NO.	WQM USE
S	NJ 0061611	24-10382-2	89 01 10	12257	
1	2–8	9–16	17–22	23–27	28

2D

THE SCHEDULE INDICATED BELOW IS TO BE OBSERVED FROM 01 89 (MO. YR.) TO 03 89 (MO. YR.)

SUBMIT WITH SIGNED T-VWX-014

SAMPLING MONTHS

Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	ANALYSIS	UNITS	PARAMETER	VALUE	REMARKS
												Methoxychlor, Total	UG/L	39480		
X			X			X			X			Methylene Blue Active Substances	MG/L	38260	0.5	J
			X			X			X			Nitrogen, Ammonia, Dissolved $NH_3 + NH_4$ as N	MG/L as N	00608	70	
X			X			X			X			Nitrogen, Nitrate, Dissolved	MG/L as N	00618	1.0	J
												Odor	T.O.N.	00085		
			X			X			X			pH	Standard Units	00400	6.87	
X			X			X			X			Phenols, Total Recoverable	UG/L	32730	50	J
												Radium 226, Dissolved	Pc/L	09503		
												Radium 228, Dissolved	Pc/L	81366		
X												Selenium, Dissolved	UG/L	01145	25	K
X												Silver, Dissolved	UG/L	01075	10	K
X			X			X			X			Sodium, Dissolved	MG/L	00930	4440	
X			X			X			X			Sulfate, Dissolved (as SO_4)	MG/L	00946	1360	
X			X			X			X			Total Dissolved Solids (TDS)	PPM	70300	17800	
X			X			X			X			Total Organic Carbon (TOC)	PPM	00680	13.0	
X			X			X			X			Total Organic Halogen (TOX)	UG/L	70353	620	
												Toxaphene	UG/L	39400		
												Turbidity	NTU	00076		
X			X			X			X			Zinc, Dissolved	UG/L	01090	22	
												2, 4–D, Total	UG/L	39370		
												2, 4, 5–TP, Total	UG/L	39045		
X			X			X			X			Specific Conductance	UMHO/CM		20000	
												Antimony	ug/L		60	K
												Beryllium	ug/L		1.0	K
												Nickel	ug/L		25	K
												Thallium	ug/L		10	K
												Total Organic Halogen	ug/L		660	
												Total Organic Carbon	mg/L		13.3	
												Free Cyanide			<0.05	

VALUE CODING RULES AND REMARK CODES ON REVERSE

29 33 34 40 41
42 46 47 53 54
55 59 60 66 67
68 72 73 79 80

497

Form VWX-016
/83

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES
WATER QUALITY MANAGEMENT ELEMENT

GROUND WATER ANALYSIS – VOLATILE ORGANICS REPORT

PLEASE TYPE OR PRINT WITH BALLPOINT PEN

FACILITY NAME: AMERICAN CYANAMID COMPANY - CARTERET LANDFILL — SW ID NO.

LAB NAME: ENVIRONMENTAL TESTING AND CERTIFICATION

	NJPDES NO.	WELL PERMIT NO.	SAMPLE DATE YR. MO. DAY	NJ LAB CERT. NO.	WQM USE
T	NJ 0 0 6 1 6 1 1	2 W - 1 6 3 1 6 - 2D	8 9 0 1 1 0	1 2 2 5 7	
1	2 – 8	9 – 16	17 – 22	23 – 27	28

THE SCHEDULE INDICATED BELOW IS TO BE OBSERVED FROM 0189 (MO. YR.) TO 0389 (MO. YR.)

SUBMIT WITH SIGNED T-VWX-014

SAMPLING MONTHS	ANALYSIS	UNITS	PARAMETER	VALUE	REMARKS
Jan. Feb. Mar. Apr. May June July Aug. Sept. Oct. Nov. Dec.					
X	Acrylonitrile	UG/L	34215	2.5	K
X	Benzene	UG/L	34030	0.38	K
X	Bromoform	UG/L	32104	0.99	K
X	Carbon Tetrachloride	UG/L	32102	0.56	K
X	Chlorobenzene	UG/L	34301	1.2	K
X	Chlorodibromoethane	UG/L	34306	0.62	K
X	Chloroform	UG/L	32106	0.32	K
X	1, 1 - Dichloroethane	UG/L	34496	0.94	K
X	1, 2 - Dichloroethane	UG/L	34531	0.56	K
X	1, 1 - Dichloroethylene	UG/L	34501	0.56	K
X	1, 2 - Dichloropropane	UG/L	34541	1.2	K
X	Ethylbenzene	UG/L	34371	1.4	K
X	Methylene Chloride	UG/L	34423	0.486	J
X	1, 1, 2, 2 - Tetrachloroethane	UG/L	34516	1.4	K
X	Tetrachloroethylene	UG/L	34475	0.82	K
X	Toluene	UG/L	34012	1.2	K
X	1, 1, 1 - Trichloroethane	UG/L	34506	0.76	K
X	1, 1, 2 - Trichloroethane	UG/L	34511	1.0	K
X	Trichloroethylene	UG/L	39180	0.38	K
X	Vinyl Chloride	UG/L	39175	2.0	K
X	Acrolein	UG/L	34210	10	K
X	Chloroethane	UG/L	34311	2.0	K
X	2 - Chloroethylvinyl Ether	UG/L	34576	2.0	K
X	Dichlorobromomethane	UG/L	32105	0.44	K
X	1, 3 - Dichloropropylene	UG/L	34699	1.0	K
X	Methyl Bromide	UG/L	34413	2.0	K
X	Methyl Chloride	UG/L	34418	2.0	K
X	1, 2 - trans - Dichloroethylene	UG/L	34546	0.32	K
X	1, 2 Dichlorobenzene	UG/L	34536		
X	1, 3 Dichlorobenzene	UG/L	34566		
X	1, 4 Dichlorobenzene	UG/L	34571		

29 33 34 40 41
42 46 47 53 54
55 59 60 66 67
68 72 73 79 80

VALUE CODING RULES AND
REMARK CODES ON REVERSE

U98

F[illegible] VWX-017
4[illegible]

P1

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES
WATER QUALITY MANAGEMENT ELEMENT

GROUND WATER ANALYSIS – MONITORING WELL REPORT
ACID, BASE/NEUTRAL ORGANIC COMPOUNDS

PLEASE TYPE OR PRINT WITH BALLPOINT PEN

FACILITY NAME: AMERICAN CYANAMID COMPANY - CARTERET LANDFILL
SW ID NO.:
[illegible]B NAME: ENVIRONMENTAL TESTING AND CERTIFICATION

	NJPDES NO.	WELL PERMIT NO.	SAMPLE DATE YR. MO. DAY	NJ LAB CERT. NO.	WQM USE
U	NJ 0061611	24-[illegible]-[illegible] 2D	89 01 10	12257	

THE SCHEDULE INDICATED BELOW IS TO BE OBSERVED FROM 01 89 (MO. YR.) TO 03 89 (MO. YR.)

SUBMIT WITH SIGNED T-VWX-014

SAMPLING MONTHS

	ANALYSIS	UNITS	PARAMETER	VALUE	REMARKS
X	2-Chlorophenol	ug/l	34586	3.4	K
X	2,4-Dichlorophenol	ug/l	34601	2.8	K
X	2,4-Dimethylphenol	ug/l	34606	2.8	K
X	2,6-Dinitro-o-cresol	ug/l	77603	25	K
X	2,4-Dinitrophenol	ug/l	34616	43	K
X	2-Nitrophenol	ug/l	34591	3.7	K
X	4-Nitrophenol	ug/l	34649	2.5	K
X	p-Chloro-m-cresol	ug/l	34452	3.1	K
X	Pentachlorophenol	ug/l	39032	3.7	K
X	Phenol	ug/l	34695	1.5	K
X	2,4,6-Trichlorophenol	ug/l	34621	2.8	K
X					
X	Acenaphthene	ug/l	34205	2.0	K
X	Acenaphthylene	ug/l	34200	3.6	K
X	Anthracene	ug/l	34220	2.0	K
X	Benzidine	ug/l	39120	45	K
X	Benzanthracene	ug/l	34526	8.0	K
X	Benzopyrene	ug/l	34247	2.6	K
X	3,4-Benzofluoranthene	ug/l	34230	4.9	K
X	Benzoperylene	ug/l	34521	4.2	K
X	Benzofluoranthene	ug/l	34242	2.6	K
X	Bis(2-chloroethoxy)methane	ug/l	34278	5.5	K
X	Bis(2-chloroethyl) Ether	ug/l	34273	5.9	K
X	Bis(2-chlroisopropyl) Ether	ug/l	34283	5.9	K
X	Bis(2-ethylhexyl) Phthalate	ug/l	39100	10	K
X	4-Bromophenyl Ether	ug/l	34636	2.0	K
X	Butylbenzyl Phthalate	ug/l	34292	10	K
X	2-Chloronaphthalene	ug/l	34581	2.0	K
X	4-Chlorophenyl Phenyl Ether	ug/l	34641	4.3	K

499

Form VWX-017
4/83 P2

NEW ..SEY DEPARTMENT OF ENVIRONMENTAL PROT..TION
DIVISION OF WATER RESOURCES
WATER QUALITY MANAGEMENT ELEMENT

GROUND WATER ANALYSIS – MONITORING WELL REPORT

ACID, BASE/NEUTRAL ORGANIC COMPOUNDS

PLEASE TYPE OR PRINT WITH BALLPOINT PEN

FACILITY NAME: AMERICAN CYANAMID COMPANY - CARTERET LANDFILL | SW ID NO.

LAB NAME: ENVIRONMENTAL TESTING AND CERTIFICATION

U | NJPDES NO.: NJ 0 0 6 1 6 1 1 | WELL PERMIT NO.: [illegible] | SAMPLE DATE YR. MO. DAY: 8 9 0 1 1 0 | NJ LAB CERT. NO.: 1 2 2 5 7 | WQM USE

THE SCHEDULE INDICATED BELOW IS TO BE OBSERVED FROM 0 1 8 7 (MO. YR.) TO 0 3 8 7 (MO. YR.)

SUBMIT WITH SIGNED T-VWX-014

SAMPLING MONTHS	ANALYSIS	UNITS	PARAMETER	VALUE	REMARKS
X	Chrysene	ug/1	34320	2.6	K
X	Dibenzanthracene	ug/1	34556	10	K
X	1,2-Dichlorobenzene	ug/1	34536	[illegible]	K
X	1,3-Dichlorobenzene	ug/1	34566	[illegible]	K
X	1,4-Dichlorobenzene	ug/1	34571	[illegible]	K
X	3,3'-Dichlorobenzidine	ug/1	34631	17	K
X	Diethyl Phthalate	ug/1	34336	10	K
X	Dimethyl Phthalate	ug/1	34341	10	K
X	Di-n-butyl Phthalate	ug/1	39110	10	K
X	2,4-Dinitrotolulene	ug/1	34611	5.9	K
X	2,6-Dinitrotolulene	ug/1	34626	2.0	K
X	Di-n-octyl Phthalate	ug/1	34596	10	K
X	1,2-Diphenylhydrazine	ug/1	34346	10	K
X	Fluoranthene	ug/1	34376	2.3	K
X	Fluorene	ug/1	34381	2.0	K
X	Hexachlorobenzene	ug/1	39700	2.0	K
X	Hexachlorobutadiene	ug/1	34391	[illegible]	K
X	Hexachlorocyclopentadiene	ug/1	34386	10	K
X	Hexachloroethane	ug/1	34396	1.6	K
X	Indenopyrene	ug/1	34403	4.8	K
X	Isophorone	ug/1	34408	[illegible]	K
X	Naphthalene	ug/1	34696	1.6	K
X	Nitrobenzene	ug/1	34447	[illegible]	K
X	N-Nitrosodimentlyamine	ug/1	34438	[illegible]	K
X	N-Nitrosodi-n-propylamine	ug/1	34428	[illegible]	K
X	N-Nitrosodiphenylamine	ug/1	34433	[illegible]	K
X	Phenanthrene	ug/1	34461	5.4	K
X	Pyrene	ug/1	34469	[illegible]	K
X	1,2,4-Trichlorobenzene	ug/1	34551	[illegible]	K

VALUE CODING RULES AND REMARK CODES ON REVERSE

4100

Form VWX-017
4/83

P3

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES
WATER QUALITY MANAGEMENT ELEMENT

GROUND WATER ANALYSIS – MONITORING WELL REPORT

PESTICIDES & PCBs

PLEASE TYPE OR PRINT WITH BALLPOINT PEN

FACILITY NAME: AMERICAN CYANAMID COMPANY - CARTERET LANDFILL

SW ID NO.:

LAB NAME: ENVIRONMENTAL TESTING AND CERTIFICATION

	NJPDES NO.	WELL PERMIT NO.	SAMPLE DATE YR. MO. DAY	NJ LAB CERT. NO.	WQM USE
U	NJ 0061611	24-16322-1	890110	12257	

2D

THE SCHEDULE INDICATED BELOW IS TO BE OBSERVED FROM 0189 (MO. YR.) TO 9389 (MO. YR.)

RECEIVED
APR 04 1989
DEPT. ENVIRON. PROTECTION
Division Water Resources
Bureau of Engineering Analysis

SUBMIT WITH SIGNED T-VWX-014

SAMPLING MONTHS

Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	ANALYSIS	UNITS	PARAMETER	VALUE	REMARKS
X												Aldrin	ug/l	39330	2.0	K
X												alpha-BHC	ug/l	39337	10	K
X												beta-BHC	ug/l	39338	4.3	K
X												gamma-BHC (Lindane)	ug/l	39340	10	K
X												delta-BHC	ug/l	34259	3.2	K
X												Chlordane	ug/l	39350	10	K
X												4,4'-DDT	ug/l	39370	2.9	K
X												4,4'-DDE	ug/l	39365	5.8	K
X												4,4'-DDD	ug/l		4.8	K
X												Dieldrin	ug/l	39380	2.6	K
X												alpha-Endosulfan	ug/l	34361	10	K
X												beta-Endosulfan	ug/l	34356	10	K
X												Endosulfan Sulfate	ug/l	34351	5.8	K
X												Endrin	ug/l	39390	10	K
X												Endrin Aldehyde	ug/l	34366	10	K
X												Heptachlor	ug/l	39410	2.0	K
X												Heptachlor Epoxide	ug/l	39420	2.3	K
X												PCB-1242	ug/l	39496	37	K
X												PCB-1254	ug/l	39504	37	K
X												PCB-1221	ug/l	39488	37	K
X												PCB-1232	ug/l	39492	37	K
X												PCB-1248	ug/l	39500	37	K
X												PCB-1260	ug/l	39508	37	K
X												PCB-1016	ug/l	34671	37	K
X												Toxaphene	ug/l	39400	10	K

VALUE CODING RULES AND

U101

Form VWX-015 A

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES
WATER QUALITY MANAGEMENT ELEMENT

GROUND WATER ANALYSIS – MONITORING WELL REPORT

PLEASE TYPE OR PRINT WITH BALLPOINT PEN

FACILITY NAME: AMERICAN CYANAMID COMPANY - CARTERET LANDFILL
SW ID NO.:
LAB NAME: ENVIRONMENTAL TESTING AND CERTIFICATION

	NJPDES NO.	WELL PERMIT NO.	SAMPLE DATE YR. MO. DAY	NJ LAB CERT. NO.	WQM USE
R	NJ 0061611	24-16391-1	89 01 10	12257	
1	2 – 8	9 – 35 – 16	17 – 22	23 – 27	28

THE SCHEDULE INDICATED BELOW IS TO BE OBSERVED FROM 01 89 (MO. YR.) TO 03 89 (MO. YR.)

SUBMIT WITH SIGNED T-VWX-014

Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	ANALYSIS	UNITS	PARAMETER	VALUE	REMARKS
X			X			X			X			Elevation of top of well casing with cap off (as specified in well completion report)	feet MSL: to nearest .01		12.73	
												Elevation of original ground level (as specified in well completion report)	feet MSL: to nearest .01		9.33	
X			X			X			X			Depth to water table from top of casing prior to sampling with cap off	feet: to nearest .01	82546	12.25	
X			X			X			X			Depth to water table from original ground level prior to sampling	feet: to nearest .01	72019	8.85	
X												Arsenic, Dissolved	UG/L as As	01000	10	K
X												Barium, Dissolved	UG/L as Ba	01005	20	K
X			X			X			X			Biochemical Oxygen Demand - 5 Day	MG/L	00310	130	
X												Cadmium, Dissolved	UG/L as Cd	01025	2.0	K
X			X			X			X			Chloride, Dissolved	UG/L as Cl	82295	11290000	
X												Chromium, Dissolved	UG/L as Cr	01030	10	K
X												Chromium, Dissolved, Hexavalent	UG/L as Cr	01220	10	K
X			X			X			X			Chemical Oxygen Demand (COD), Dissolved	MG/L	00341	374	
X												Coliform Group	N/100 ML	74056	40	
												Color	Pt - Co	00080		
X			X			X			X			Copper, Dissolved	UG/L as Cu	01040	2.3	J
X												Cyanide, Total	MG/L as CN	00720	0.353	
												Endrin, Total	UG/L	39390		
X												Fluoride, Dissolved	MG/L as F	00950	0.32	
												Gross Alpha, Dissolved	Pc/L	01503		
												Gross Beta, Dissolved	Pc/L	03503		
												Hardness, Total as $CaCO_3$	MG/L	00900		
X			X			X			X			Iron, Dissolved	UG/L as Fe	01046	86	J
X			X			X			X			Lead, Dissolved	UG/L as Pb	01049	15	K
												Lindane, Total	UG/L	39782		
X			X			X			X			Manganese, Dissolved	UG/L	01056	116	
X			X			X			X			Mercury, Dissolved	UG/L	71890	0.10	J

VALUE CODING RULES AND REMARK CODES ON REVERSE

29 33 34 40 41
42 46 47 53 54
55 59 60 66 67
68 72 73 79 80

U102

Form VWX-013 B
4/83

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES
WATER QUALITY MANAGEMENT ELEMENT

GROUND WATER ANALYSIS – MONITORING WELL REPORT

PLEASE TYPE OR PRINT WITH BALLPOINT PEN

FACILITY NAME: AMERICAN CYANAMID COMPANY - CARTERET LANDFILL
SW ID NO.:

LAB NAME: ENVIRONMENTAL TESTING AND CERTIFICATION

	NJPDES NO.	WELL PERMIT NO.	SAMPLE DATE YR. MO. DAY	NJ LAB CERT. NO.	WQM USE
	S NJ 0006161	24-16391-8 35	89 01 10	12257	
	1 2 8	9 16	17 22	23 27	28

THE SCHEDULE INDICATED BELOW IS TO BE OBSERVED FROM 01 89 (MO. YR.) TO 03 89 (MO. YR.)

SUBMIT WITH SIGNED T-VWX-014

SAMPLING MONTHS: Jan. Feb. Mar. Apr. May June July Aug. Sept. Oct. Nov. Dec.

Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	ANALYSIS	UNITS	PARAMETER	VALUE	REMARKS
												Methoxychlor, Total	UG/L	39480		
X			X			X			X			Methylene Blue Active Substances	MG/L	38260	0.5	J
			X			X			X			Nitrogen, Ammonia, Dissolved $NH_3 + NH_4$ as N	MG/L as N	00608	3.3	
X			X			X			X			Nitrogen, Nitrate, Dissolved	MG/L as N	00618	1.0	J
												Odor	T.O.N.	00085		
			X			X			X			pH	Standard Units	00400	6.52	
X			X			X			X			Phenols, Total Recoverable	UG/L	32730	250	J
												Radium 226, Dissolved	Pc/L	09503		
												Radium 228, Dissolved	Pc/L	81366		
X												Selenium, Dissolved	UG/L	01145	2.5	K
												Silver, Dissolved	UG/L	01075	1.0	K
X			X			X			X			Sodium, Dissolved	MG/L	00930	64.00	
X			X			X			X			Sulfate, Dissolved (as SO_4)	MG/L	00946	190	
			X			X			X			Total Dissolved Solids (TDS)	PPM	70300	251.00	
X			X			X			X			Total Organic Carbon (TOC)	PPM	00680	143.5	
			X			X			X			Total Organic Halogen (TOX)	UG/L	70353	26.45	
												Toxaphene	UG/L	39400		
												Turbidity	NTU	00076		
X			X			X			X			Zinc, Dissolved	UG/L	01090	19	J
												2, 4–D, Total	UG/L	39370		
												2, 4, 5–TP, Total	UG/L	39045		
X			X			X			X			Specific Conductance	UMHO/CM		2500.00	
												Antimony	ug/l		6.0	K
												Beryllium	ug/l		1.0	K
												Nickel	ug/l		20	K
												Thallium	ug/l		5.0	K
												Total Organic Halogen	ug/l		27.30	
												Total Organic Carbon	mg/l		1451.3	

VALUE CODING RULES AND REMARK CODES ON REVERSE

Free Cyanide <0.05

29 33 34 40 41
42 46 47 53 54
55 59 60 66 67
68 72 73 79 80

U103

Form VWX-016
4/

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES
WATER QUALITY MANAGEMENT ELEMENT

GROUND WATER ANALYSIS – VOLATILE ORGANICS REPORT

PLEASE TYPE OR PRINT WITH BALLPOINT PEN

FACILITY NAME: AMERICAN CYANAMID COMPANY - CARTERET LANDFILL
SW ID NO.:

LAB NAME: ENVIRONMENTAL TESTING AND CERTIFICATION

	NJPDES NO.	WELL PERMIT NO.	SAMPLE DATE YR. MO. DAY	NJ LAB CERT. NO.	WQM USE
T	NJ 0061611	24-10391-8	89 01 10	12257	
1	2–8	9–16	17–22	23–27	28

35

THE SCHEDULE INDICATED BELOW IS TO BE OBSERVED FROM 01 89 (MO. YR.) TO 03 89 (MO. YR.)

SUBMIT WITH SIGNED T-VWX-014

SAMPLING MONTHS

Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	ANALYSIS	UNITS	PARAMETER	VALUE	REMARKS
X											Acrylonitrile	UG/L	34215	10	K
X											Benzene	UG/L	34030	0.88	K
											Bromoform	UG/L	32104	0.94	K
X											Carbon Tetrachloride	UG/L	32102	0.56	K
X											Chlorobenzene	UG/L	34301	1.2	K
											Chlorodibromomethane	UG/L	34306	0.62	K
X											Chloroform	UG/L	32106	0.32	K
X											1, 1 - Dichloroethane	UG/L	34496	0.94	K
											1, 2 - Dichloroethane	UG/L	34531	0.56	K
X											1, 1 - Dichloroethylene	UG/L	34501	0.56	K
X											1, 2 - Dichloropropane	UG/L	34541	1.2	K
X											Ethylbenzene	UG/L	34371	1.4	K
X											Methylene Chloride	UG/L	34423	0.56	K
X											1, 1, 2, 2 - Tetrachloroethane	UG/L	34516	1.4	K
X											Tetrachloroethylene	UG/L	34475	0.82	K
X											Toluene	UG/L	34012	0.370	J
X											1, 1, 1 - Trichloroethane	UG/L	34506	0.76	K
X											1, 1, 2 - Trichloroethane	UG/L	34511	1.0	K
X											Trichloroethylene	UG/L	39180	0.35	K
X											Vinyl Chloride	UG/L	39175	2.0	K
X											Acrolein	UG/L	34210	20	K
X											Chloroethane	UG/L	34311	2.0	K
X											2 - Chloroethylvinyl Ether	UG/L	34576	2.0	K
X											Dichlorobromomethane	UG/L	32105	0.44	K
X											1, 3 - Dichloropropylene	UG/L	34699	1.0	K
X											Methyl Bromide	UG/L	34413	2.0	K
X											Methyl Chloride	UG/L	34418	2.0	K
X											1, 2 - trans - Dichloroethylene	UG/L	34546	0.32	K
X											1, 2 Dichlorobenzene	UG/L	34536		
X											1, 3 Dichlorobenzene	UG/L	34566		
X											1, 4 Dichlorobenzene	UG/L	34571		

29 42 55 68 — 33 34 46 47 59 60 72 73 — 40 41 53 54 66 67 79 80

VALUE CODING RULES AND
REMARK CODES ON REVERSE

4104

[redacted]WX-017

P1

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES
WATER QUALITY MANAGEMENT ELEMENT

GROUND WATER ANALYSIS — MONITORING WELL REPORT
ACID, BASE/NEUTRAL ORGANIC COMPOUNDS

LEASE TYPE OR PRINT WITH BALLPOINT PEN

FACILITY NAME: AMERICAN CYANAMID COMPANY - CARTERET LANDFILL

SW ID NO.:

LAB NAME: ENVIRONMENTAL TESTING AND CERTIFICATION

	NJPDES NO.	WELL PERMIT NO.	SAMPLE DATE YR. MO. DAY	NJ LAB CERT. NO.	WQM USE
U	NJ 0061611	24-10391-8	[illegible]	12257	

35

THE SCHEDULE INDICATED BELOW IS TO BE OBSERVED FROM 01 89 (MO. YR.) TO 03 89 (MO. YR.)

SUBMIT WITH SIGNED T-VWX-014

SAMPLING MONTHS

Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	ANALYSIS	UNITS	PARAMETER	VALUE	REMARKS
X												2-Chlorophenol	ug/l	34586	17	K
X												2,4-Dichlorophenol	ug/l	34601	14	K
X												2,4-Dimethylphenol	ug/l	34606	14	K
X												2,6-Dinitro-o-cresol	ug/l	77603	[illegible]	K
X												2,4-Dinitrophenol	ug/l	34616	[illegible]	K
X												2-Nitrophenol	ug/l	34591	[illegible]	K
X												4-Nitrophenol	ug/l	34649	[illegible]	K
X												p-Chloro-m-cresol	ug/l	34452	15	K
X												Pentachlorophenol	ug/l	39032	18	K
												Phenol	ug/l	34695	[illegible]	K
												2,4,6-Trichlorophenol	ug/l	34621	14	K
X																
												Acenaphthene	ug/l	34205	[illegible]	K
X												Acenaphthylene	ug/l	34200	18	K
												Anthracene	ug/l	34220	[illegible]	K
												Benzidine	ug/l	39120	[illegible]	K
X												Benzanthracene	ug/l	34526	[illegible]	K
												Benzopyrene	ug/l	34247	13	K
X												3,4-Benzofluoranthene	ug/l	34230	24	K
												Benzoperylene	ug/l	34521	[illegible]	K
												Benzofluoranthene	ug/l	34242	13	K
X												Bis(2-chloroethoxy)methane	ug/l	34278	[illegible]	K
X												Bis(2-chloroethyl) Ether	ug/l	34273	[illegible]	K
X												Bis(2-chlroisopropyl) Ether	ug/l	34283	[illegible]	K
X												Bis(2-ethylhexyl) Phthalate	ug/l	39100	51	K
X												4-Bromophenyl Ether	ug/l	34636	[illegible]	K
X												Butylbenzyl Phthalate	ug/l	34292	51	K
X												2-Chloronaphthalene	ug/l	34581	[illegible]	K
X												4-Chlorophenyl Phenyl Ether	ug/l	34641	[illegible]	K

29 42 33 34 46 47 40 41 53 54 55 56

11105

Form VWX-017
4/83

P2

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES
WATER QUALITY MANAGEMENT ELEMENT

GROUND WATER ANALYSIS – MONITORING WELL REPORT

ACID, BASE/NEUTRAL ORGANIC COMPOUNDS

PLEASE TYPE OR PRINT WITH BALLPOINT PEN

FACILITY NAME: AMERICAN CYANAMID COMPANY - CARTERET LANDFILL	SW ID NO.
LAB NAME: ENVIRONMENTAL TESTING AND CERTIFICATION	

	NJPDES NO.	WELL PERMIT NO.	SAMPLE DATE YR. MO. DAY	NJ LAB CERT. NO.	WQM USE
U	NJ 0061611	24-16391-8	89 01 10	12257	

BS

THE SCHEDULE INDICATED BELOW IS TO BE OBSERVED FROM 01 89 (MO. YR.) TO 03 89 (MO. YR.)

SUBMIT WITH SIGNED T-VWX-014

SAMPLING MONTHS

Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	ANALYSIS	UNITS	PARAMETER	VALUE	REMARKS
X												Chrysene	ug/l	34320	[illegible]	K
X												Dibenzanthracene	ug/l	34556	51	K
X												1,2-Dichlorobenzene	ug/l	34536	9.6	K
X												1,3-Dichlorobenzene	ug/l	34566	9.6	K
X												1,4-Dichlorobenzene	ug/l	34571	22	K
X												3,3'-Dichlorobenzidine	ug/l	34631	83	K
X												Diethyl Phthalate	ug/l	34336	51	K
X												Dimethyl Phthalate	ug/l	34341	51	K
X												Di-n-butyl Phthalate	ug/l	39110	51	K
X												2,4-Dinitrotolulene	ug/l	34611	29	K
X												2,6-Dinitrotolulene	ug/l	34626	9.6	K
X												Di-n-octyl Phthalate	ug/l	34596	51	K
X												1,2-Diphenylhydrazine	ug/l	34346	51	K
X												Fluoranthene	ug/l	34376	11	K
X												Fluorene	ug/l	34381	9.6	K
X												Hexachlorobenzene	ug/l	39700	9.6	K
X												Hexachlorobutadiene	ug/l	34391	[illegible]	K
X												Hexachlorocyclopentadiene	ug/l	34386	51	K
X												Hexachloroethane	ug/l	34396	9.1	K
X												Indenopyrene	ug/l	34403	24	K
X												Isophorone	ug/l	34408	11	K
X												Naphthalene	ug/l	34696	9.1	K
X												Nitrobenzene	ug/l	34447	[illegible]	K
X												N-Nitrosodimentlyamine	ug/l	34438	51	K
X												N-Nitrosodi-n-propylamine	ug/l	34428	51	K
X												N-Nitrosodiphenylamine	ug/l	34433	9.6	K
X												Phenanthrene	ug/l	34461	29	K
X												Pyrene	ug/l	34469	9.6	K
X												1,2,4-Trichlorobenzene	ug/l	34551	9.6	K

VALUE CODING RULES AND
REMARK CODES ON REVERSE

29 33 34 40 41
42 46 47 53 54
55 59 60 66 67
68 72 73 79 80

U106

n VWX-017

P3

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES
WATER QUALITY MANAGEMENT ELEMENT

GROUND WATER ANALYSIS – MONITORING WELL REPORT

PESTICIDES & PCBs

LEASE TYPE OR PRINT WITH BALLPOINT PEN

FACILITY NAME	AMERICAN CYANAMID COMPANY - CARTERET LANDFILL	SW ID NO.
LAB NAME	ENVIRONMENTAL TESTING AND CERTIFICATION	

	NJPDES NO.	WELL PERMIT NO.	SAMPLE DATE YR. MO. DAY	NJ LAB CERT. NO.	WQM USE
U	NJ 0061611	24-16391-8	8 [illegible]	12257	

35

THE SCHEDULE INDICATED BELOW IS TO BE OBSERVED FROM 01 89 (MO. YR.) TO 03 89 (MO. YR.)

SUBMIT WITH SIGNED T-VWX-014

SAMPLING MONTHS

Jan.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	ANALYSIS	UNITS	PARAMETER	VALUE	REMARKS
X											Aldrin	ug/l	39330	9.6	K
X											alpha-BHC	ug/l	39337	51	K
X											beta-BHC	ug/l	39338	21	K
X											gamma-BHC (Lindane)	ug/l	39340	51	K
X											delta-BHC	ug/l	34259	16	K
X											Chlordane	ug/l	39350	51	K
X											4,4'-DDT	ug/l	39370	14	K
X											4,4'-DDE	ug/l	39365	23	K
X											4,4'-DDD	ug/l		24	K
X											Dieldrin	ug/l	39380	13	K
X											alpha-Endosulfan	ug/l	34361	51	K
X											beta-Endosulfan	ug/l	34356	51	K
X											Endosulfan Sulfate	ug/l	34351	28	K
X											Endrin	ug/l	39390	51	K
X											Endrin Aldehyde	ug/l	34366	51	K
X											Heptachlor	ug/l	39410	9.6	K
X											Heptachlor Epoxide	ug/l	39420	11	K
X											PCB-1242	ug/l	39496	180	K
											PCB-1254	ug/l	39504	180	K
											PCB-1221	ug/l	39488	180	K
											PCB-1232	ug/l	39492	180	K
											PCB-1248	ug/l	39500	180	K
											PCB-1260	ug/l	39508	30	K
											PCB-1016	ug/l	34671	30	K
											Toxaphene	ug/l	39400	51	K

VALUE CODING RULES AND

29 42 55 33 34 46 47 59 60 40 41 53 54 66 67

410

Form VWX-015 A
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NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES
WATER QUALITY MANAGEMENT ELEMENT

GROUND WATER ANALYSIS — MONITORING WELL REPORT

LEASE TYPE OR PRINT WITH BALLPOINT PEN

FACILITY NAME: AMERICAN CYANAMID COMPANY - CARTERET LANDFILL

SW ID NO.:

LAB NAME: ENVIRONMENTAL TESTING AND CERTIFICATION

	NJPDES NO.	WELL PERMIT NO.	SAMPLE DATE YR. MO. DAY	NJ LAB CERT. NO.	WQM USE
R	NJ 0061611	24-16396-0	890110	12257	
1	2 8	9 16	17 22	23 27	28

3D

THE SCHEDULE INDICATED BELOW IS TO BE OBSERVED FROM 0189 (MO. YR.) TO 0389 (MO. YR.)

SUBMIT WITH SIGNED T-VWX-014

SAMPLING MONTHS

Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	ANALYSIS	UNITS	PARAMETER	VALUE	REMARKS
X			X			X			X			Elevation of top of well casing with cap off (as specified in well completion report)	feet MSL: to nearest .01		12.88	
												Elevation of original ground level (as specified in well completion report)	feet MSL: to nearest .01		9.77	
X			X			X			X			Depth to water table from top of casing prior to sampling with cap off	feet: to nearest .01	82546	12.11	
X			X			X			X			Depth to water table from original ground level prior to sampling	feet: to nearest .01	72019	9.00	
X												Arsenic, Dissolved	UG/L as As	01000	20	K
X												Barium, Dissolved	UG/L as Ba	01005	130	
X			X			X			X			Biochemical Oxygen Demand - 5 Day	MG/L	00310	16	
X												Cadmium, Dissolved	UG/L as Cd	01025	2.0	K
X			X			X			X			Chloride, Dissolved	UG/L as Cl	82295	110100	
X												Chromium, Dissolved	UG/L as Cr	01030	10	K
X												Chromium, Dissolved, Hexavalent	UG/L as Cr	01220	10	K
X			X			X			X			Chemical Oxygen Demand (COD), Dissolved	MG/L	00341	134	
X												Coliform Group	N/100 ML	74056	50	
												Color	Pt - Co	00080		
X			X			X			X			Copper, Dissolved	UG/L as Cu	01040	3.0	J
X												Cyanide, Total	MG/L as CN	00720	1.49	
												Endrin, Total	UG/L	39390		
X												Fluoride, Dissolved	MG/L as F	00950	3.6	
												Gross Alpha, Dissolved	Pc/L	01503		
												Gross Beta, Dissolved	Pc/L	03503		
												Hardness, Total as $CaCO_3$	MG/L	00900		
X			X			X			X			Iron, Dissolved	UG/L as Fe	01046	860	
X			X			X			X			Lead, Dissolved	UG/L as Pb	01049	75	K
												Lindane, Total	UG/L	39782		
X			X			X			X			Manganese, Dissolved	UG/L	01056	2050	
X			X			X			X			Mercury, Dissolved	UG/L	71890	0.20	K

VALUE CODING RULES AND
REMARK CODES ON REVERSE

29 33 34 40 41
42 46 47 53 5
55 59 60 66 6
68 72 73 79 80

4108

Form VWX-015 B
4/8

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES
WATER QUALITY MANAGEMENT ELEMENT

GROUND WATER ANALYSIS – MONITORING WELL REPORT

PLEASE TYPE OR PRINT WITH BALLPOINT PEN

FACILITY NAME: AMERICAN CYANAMID COMPANY - CARTERET LANDFILL

SW ID NO.:

LAB NAME: ENVIRONMENTAL TESTING AND CERTIFICATION

	NJPDES NO.	WELL PERMIT NO.	SAMPLE DATE YR. MO. DAY	NJ LAB CERT. NO.	WQM USE
S	NJ 0061611	24-10396-0 3D	890110	12257	
1	2–8	9–16	17–22	23–27	28

THE SCHEDULE INDICATED BELOW IS TO BE OBSERVED FROM 0189 (MO. YR.) TO 0389 (MO. YR.)

SUBMIT WITH SIGNED T-VWX-014

SAMPLING MONTHS

Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	ANALYSIS	UNITS	PARAMETER	VALUE	REMARKS
											Methoxychlor, Total	UG/L	39480		
		X			X			X			Methylene Blue Active Substances	MG/L	38260	0.08	
		X			X			X			Nitrogen, Ammonia, Dissolved $NH_3 + NH_4$ as N	MG/L as N	00608	52	
		X			X			X			Nitrogen, Nitrate, Dissolved	MG/L as N	00618	1.0	J
											Odor	T.O.N.	00085		
		X			X			X			pH	Standard Units	00400	6.88	
		X			X			X			Phenols, Total Recoverable	UG/L	32730	500	J
											Radium 226, Dissolved	Pc/L	09503		
											Radium 228, Dissolved	Pc/L	81366		
											Selenium, Dissolved	UG/L	01145	25	K
											Silver, Dissolved	UG/L	01075	10	K
		X			X			X			Sodium, Dissolved	MG/L	00930	5690	
		X			X			X			Sulfate, Dissolved (as SO_4)	MG/L	00946	2000	
		X			X			X			Total Dissolved Solids (TDS)	PPM	70300	21500	
		X			X			X			Total Organic Carbon (TOC)	PPM	00680	55.9	
		X			X			X			Total Organic Halogen (TOX)	UG/L	70353	4360	
											Toxaphene	UG/L	39400		
											Turbidity	NTU	00076		
		X			X			X			Zinc, Dissolved	UG/L	01090	20	K
											2, 4–D, Total	UG/L	39370		
											2, 4, 5–TP, Total	UG/L	39045		
		X			X			X			Specific Conductance	UMHO/CM		26000	
											Antimony	ug/L		60	K
											Beryllium	ug/L		1.0	K
											Nickel	ug/L		20	K
											Thallium	ug/L		50	K
											Total Organic Halogen	ug/L		4525	
											Total Organic Carbon	mg/L		59.4	
											Free Cyanide			0.05	

VALUE CODING RULES AND REMARK CODES ON REVERSE

29 42 55 68 | 33 34 46 47 59 60 72 73 | 40 41 53 54 66 67 79 80

4109

Form VWX-016

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES
WATER QUALITY MANAGEMENT ELEMENT

GROUND WATER ANALYSIS – VOLATILE ORGANICS REPORT

PLEASE TYPE OR PRINT WITH BALLPOINT PEN

FACILITY NAME: AMERICAN CYANAMID COMPANY - CARTERET LANDFILL — SW ID NO.:

LAB NAME: ENVIRONMENTAL TESTING AND CERTIFICATION

	NJPDES NO.	WELL PERMIT NO.	SAMPLE DATE YR. MO. DAY	NJ LAB CERT. NO.	WQM USE
	T NJ 0 0 6 1 6 1 1	2 4 - 1 6 3 9 6 - C	8 9 0 1 1 0	1 2 2 5 7	
	(1) (2–8)	(9–16)	(17–22)	(23–27)	(28)

30

THE SCHEDULE INDICATED BELOW IS TO BE OBSERVED FROM 0 1 8 9 (MO. YR.) TO 0 3 8 9 (MO. YR.)

RECEIVED
APR 04 1989
DEPT. ENVIRON. PROTECTION
Division Water Resources
Permits Section

SUBMIT WITH SIGNED T-VWX-014

SAMPLING MONTHS												ANALYSIS	UNITS	PARAMETER	VALUE	REMARKS
Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.					
X												Acrylonitrile	UG/L	34215	10	K
X												Benzene	UG/L	34030	0.59	K
X												Bromoform	UG/L	32104	0.94	K
X												Carbon Tetrachloride	UG/L	32102	0.56	K
X												Chlorobenzene	UG/L	34301		K
X												Chlorodibromoethane	UG/L	34306	0.6	K
X												Chloroform	UG/L	32106	0.32	K
X												1, 1 - Dichloroethane	UG/L	34496	0.74	K
X												1, 2 - Dichloroethane	UG/L	34531	0.56	K
X												1, 1 - Dichloroethylene	UG/L	34501	0.56	K
X												1, 2 - Dichloropropane	UG/L	34541	1.3	K
X												Ethylbenzene	UG/L	34371	1	K
X												Methylene Chloride	UG/L	34423	0.56	K
X												1, 1, 2, 2 - Tetrachloroethane	UG/L	34516	1.4	K
X												Tetrachloroethylene	UG/L	34475	0.8	K
X												Toluene	UG/L	34010	0.397	J
X												1, 1, 1 - Trichloroethane	UG/L	34506	0.76	K
X												1, 1, 2 - Trichloroethane	UG/L	34511	1.0	K
X												Trichloroethylene	UG/L	39180	0.28	K
X												Vinyl Chloride	UG/L	39175	1.0	K
X												Acrolein	UG/L	34210	10	K
X												Chloroethane	UG/L	34311	2.0	K
X												2 - Chloroethylvinyl Ether	UG/L	34576	2.0	K
X												Dichlorobromomethane	UG/L	32105	0.44	K
X												1, 3 - Dichloropropylene	UG/L	34699	1.0	K
X												Methyl Bromide	UG/L	34413	2.0	K
X												Methyl Chloride	UG/L	34418	2.0	K
X												1, 2 - trans - Dichloroethylene	UG/L	34546	0.32	K
X												1, 2 Dichlorobenzene	UG/L	34536		
X												1, 3 Dichlorobenzene	UG/L	34566		
X												1, 4 Dichlorobenzene	UG/L	34571		

29 33 34 40 41
42 46 47 53 54
55 59 60 66 67
68 72 73 79 80

VALUE CODING RULES AND
REMARK CODES ON REVERSE

4110

Form VWX-017

P1

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES
WATER QUALITY MANAGEMENT ELEMENT

GROUND WATER ANALYSIS – MONITORING WELL REPORT
ACID, BASE/NEUTRAL ORGANIC COMPOUNDS

PLEASE TYPE OR PRINT WITH BALLPOINT PEN

FACILITY NAME	AMERICAN CYANAMID COMPANY - CARTERET LANDFILL	SW ID NO.
LAB NAME	ENVIRONMENTAL TESTING AND CERTIFICATION	

	NJPDES NO.	WELL PERMIT NO.	SAMPLE DATE YR. MO. DAY	NJ LAB CERT. NO.	WQM USE
U	NJ 0061611	24-10390-C	89 01 10	12257	

3D

THE SCHEDULE INDICATED BELOW IS TO BE OBSERVED FROM 01 89 (MO. YR.) TO 03 89 (MO. YR.)

SUBMIT WITH SIGNED T-VWX-014

SAMPLING MONTHS

	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	ANALYSIS	UNITS	PARAMETER	VALUE	REMARKS
X												2-Chlorophenol	ug/l	34586	[illegible]	K
X												2,4-Dichlorophenol	ug/l	34601	[illegible]	K
												2,4-Dimethylphenol	ug/l	34606	[illegible]	K
X												2,6-Dinitro-o-cresol	ug/l	77603	[illegible]	K
												2,4-Dinitrophenol	ug/l	34616	44	K
X												2-Nitrophenol	ug/l	34591	3.8	K
X												4-Nitrophenol	ug/l	34649	2.5	K
												p-Chloro-m-cresol	ug/l	34452	3.2	K
X												Pentachlorophenol	ug/l	39032	3.8	K
												Phenol	ug/l	34695	1.6	K
												2,4,6-Trichlorophenol	ug/l	34621	2.8	K
X																
												Acenaphthene	ug/l	34205	[illegible]	K
X												Acenaphthylene	ug/l	34200	3.0	K
X												Anthracene	ug/l	34220	[illegible]	K
X												Benzidine	ug/l	39120	46	K
X												Benzanthracene	ug/l	34526	7.[illegible]	K
X												Benzopyrene	ug/l	34247	2.6	K
X												3,4-Benzofluoranthene	ug/l	34230	5.1	K
X												Benzoperylene	ug/l	34521	4.3	K
X												Benzofluoranthene	ug/l	34242	2.6	K
X												Bis(2-chloroethoxy)methane	ug/l	34278	5.6	K
X												Bis(2-chloroethyl) Ether	ug/l	34273	[illegible]	K
X												Bis(2-chlroisopropyl) Ether	ug/l	34283	6.0	K
X												Bis(2-ethylhexyl) Phthalate	ug/l	39100	[illegible]	J
X												4-Bromophenyl Ether	ug/l	34636	[illegible]	K
X												Butylbenzyl Phthalate	ug/l	34292	11	K
X												2-Chloronaphthalene	ug/l	34581	[illegible]	K
X												4-Chlorophenyl Phenyl Ether	ug/l	34641	[illegible]	K

29 42 33 34 46 47 40 41 53 54

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NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES
WATER QUALITY MANAGEMENT ELEMENT

GROUND WATER ANALYSIS – MONITORING WELL REPORT

ACID, BASE/NEUTRAL ORGANIC COMPOUNDS

PLEASE TYPE OR PRINT WITH BALLPOINT PEN

FACILITY NAME	AMERICAN CYANAMID COMPANY - CARTERET LANDFILL	SW ID NO.
LAB NAME	ENVIRONMENTAL TESTING AND CERTIFICATION	

	NJPDES NO.	WELL PERMIT NO.	SAMPLE DATE YR. MO. DAY	NJ LAB CERT. NO.	WQM USE
U	NJ 0061611	24-10390-0	89 01 10	12257	

3P

THE SCHEDULE INDICATED BELOW IS TO BE OBSERVED FROM 01 89 (MO. YR.) TO 03 89 (MO. YR.)

SUBMIT WITH SIGNED T-VWX-014

SAMPLING MONTHS

Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	ANALYSIS	UNITS	PARAMETER	VALUE	REMARKS
X												Chrysene	ug/l	34320	2.6	K
X												Dibenzanthracene	ug/l	34556	11	K
X												1,2-Dichlorobenzene	ug/l	34536	2.0	K
X												1,3-Dichlorobenzene	ug/l	34566	2.0	K
X												1,4-Dichlorobenzene	ug/l	34571	[illegible]	K
X												3,3'-Dichlorobenzidine	ug/l	34631	17	K
X												Diethyl Phthalate	ug/l	34336	11	K
X												Dimethyl Phthalate	ug/l	34341	11	K
X												Di-n-butyl Phthalate	ug/l	39110	11	K
X												2,4-Dinitrotolulene	ug/l	34611	6.0	K
X												2,6-Dinitrotolulene	ug/l	34626	2.0	K
X												Di-n-octyl Phthalate	ug/l	34596	11	K
X												1,2-Diphenylhydrazine	ug/l	34346	11	K
X												Fluoranthene	ug/l	34376	2.3	K
X												Fluorene	ug/l	34381	2.0	K
X												Hexachlorobenzene	ug/l	39700	2.0	K
X												Hexachlorobutadiene	ug/l	34391	0.95	K
X												Hexachlorocyclopentadiene	ug/l	34386	11	K
X												Hexachloroethane	ug/l	34396	1.7	K
X												Indenopyrene	ug/l	34403	4.9	K
X												Isophorone	ug/l	34408	2.3	K
X												Naphthalene	ug/l	34696	1.7	K
X												Nitrobenzene	ug/l	34447	2.0	K
X												N-Nitrosodimentlyamine	ug/l	34438	11	K
X												N-Nitrosodi-n-propylamine	ug/l	34428	11	K
X												N-Nitrosodiphenylamine	ug/l	34433	2.0	K
X												Phenanthrene	ug/l	34461	5.0	K
X												Pyrene	ug/l	34469	2.0	K
X												1,2,4-Trichlorobenzene	ug/l	34551	2.0	K

VALUE CODING RULES AND
REMARK CODES ON REVERSE

29 33 34 40 41
42 46 47 53 54
55 59 60 66 67
68 72 73 79 80

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P3

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES
WATER QUALITY MANAGEMENT ELEMENT

GROUND WATER ANALYSIS -- MONITORING WELL REPORT

PESTICIDES & PCBs

PLEASE TYPE OR PRINT WITH BALLPOINT PEN

FACILITY NAME: AMERICAN CYANAMID COMPANY - CARTERET LANDFILL | SW ID NO.

LAB NAME: ENVIRONMENTAL TESTING AND CERTIFICATION

U (1) | NJPDES NO. (2-8): NJ0061611 | WELL PERMIT NO. (9-16): 24-1C390-0 | SAMPLE DATE YR. (17-18): 89 MO. (19-20): 01 DAY (21-22): 10 | NJ LAB CERT. NO. (23-27): 12257 | WQM USE (28):

SD

THE SCHEDULE INDICATED BELOW IS TO BE OBSERVED FROM 01 89 (MO. YR.) TO 03 89 (MO. YR.)

SUBMIT WITH SIGNED T-VWX-014

SAMPLING MONTHS (Jan Feb Mar Apr May June July Aug Sept Oct Nov Dec)	ANALYSIS	UNITS	PARAMETER	VALUE	REMARKS
X	Aldrin	ug/l	39330	.0	K
	alpha-BHC	ug/l	39337	1	K
X	beta-BHC	ug/l	39338	4.4	K
	gamma-BHC (Lindane)	ug/l	39340	1	K
X	delta-BHC	ug/l	34259	3.3	K
X	Chlordane	ug/l	39350	1	K
X	4,4'-DDT	ug/l	39370	.2	K
X	4,4'-DDE	ug/l	39365	.1	K
X	4,4'-DDD	ug/l		.9	K
X	Dieldrin	ug/l	39380	.6	K
X	alpha-Endosulfan	ug/l	34361	1	K
X	beta-Endosulfan	ug/l	34356	1	K
X	Endosulfan Sulfate	ug/l	34351	.9	K
X	Endrin	ug/l	39390	1	K
X	Endrin Aldehyde	ug/l	34366	1	K
X	Heptachlor	ug/l	39410	.0	K
X	Heptachlor Epoxide	ug/l	39420	.2	K
X	PCB-1242	ug/l	39496	3	K
X	PCB-1254	ug/l	39504	5	K
X	PCB-1221	ug/l	39488	5	K
X	PCB-1232	ug/l	39492	3	K
X	PCB-1248	ug/l	39500	3	K
X	PCB-1260	ug/l	39508	3	K
X	PCB-1016	ug/l	34671	3	K
X	Toxaphene	ug/l	39400	1	K

VALUE CODING RULES AND

U113

Form VWX-015 A
4[illegible]3

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES
WATER QUALITY MANAGEMENT ELEMENT

GROUND WATER ANALYSIS – MONITORING WELL REPORT

PLEASE TYPE OR PRINT WITH BALLPOINT PEN

FACILITY NAME: AMERICAN CYANAMID COMPANY - CARTERET LANDFILL | SW ID NO.:

LAB NAME: ENVIRONMENTAL TESTING AND CERTIFICATION

R (1) | NJPDES NO. (2–8): NJ 0 0 6 1 6 1 1 | WELL PERMIT NO. (9–16): 34-10393-4 45 | SAMPLE DATE YR. MO. DAY (17–22): 89 01 10 | NJ LAB CERT. NO. (23–27): 12257 | WQM USE (28):

THE SCHEDULE INDICATED BELOW IS TO BE OBSERVED FROM 01 89 (MO. YR.) TO 03 89 (MO. YR.)

SUBMIT WITH SIGNED T-VWX-014

Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	ANALYSIS	UNITS	PARAMETER	VALUE	REMARKS
X			X			X			X			Elevation of top of well casing with cap off (as specified in well completion report)	feet MSL: to nearest .01		13.65	
												Elevation of original ground level (as specified in well completion report)	feet MSL: to nearest .01		10.38	
X			X			X			X			Depth to water table from top of casing prior to sampling with cap off	feet: to nearest .01	82546	14.87	
X			X			X			X			Depth to water table from original ground level prior to sampling	feet: to nearest .01	72019	11.60	
X												Arsenic, Dissolved	UG/L as As	01000	20	K
X												Barium, Dissolved	UG/L as Ba	01005	31	
X			X			X			X			Biochemical Oxygen Demand - 5 Day	MG/L	00310	58	
X												Cadmium, Dissolved	UG/L as Cd	01025	2.0	K
X			X			X			X			Chloride, Dissolved	UG/L as Cl	82295	151100	
X												Chromium, Dissolved	UG/L as Cr	01030	10	K
X												Chromium, Dissolved, Hexavalent	UG/L as Cr	01220	10	K
X			X			X			X			Chemical Oxygen Demand (COD), Dissolved	MG/L	00341	790	
X												Coliform Group	N/100 ML	74056	10	
												Color	Pt - Co	00080		
X			X			X			X			Copper, Dissolved	UG/L as Cu	01040	3.8	J
X												Cyanide, Total	MG/L as CN	00720		
												Endrin, Total	UG/L	39390		
X												Fluoride, Dissolved	MG/L as F	00950		
												Gross Alpha, Dissolved	Pc/L	01503		
												Gross Beta, Dissolved	Pc/L	03503		
												Hardness, Total as $CaCO_3$	MG/L	00900		
X			X			X			X			Iron, Dissolved	UG/L as Fe	01046	12000	
X			X			X			X			Lead, Dissolved	UG/L as Pb	01049	15	K
												Lindane, Total	UG/L	39782		
X			X			X			X			Manganese, Dissolved	UG/L	01056	29	
X			X			X			X			Mercury, Dissolved	UG/L	71890	0.21	

VALUE CODING RULES AND REMARK CODES ON REVERSE

29 33 34 40 41
42 46 47 53 54
55 59 60 66 67
68 72 73 79 80

U114

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NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES
WATER QUALITY MANAGEMENT ELEMENT

GROUND WATER ANALYSIS – MONITORING WELL REPORT

PLEASE TYPE OR PRINT WITH BALLPOINT PEN

FACILITY NAME: AMERICAN CYANAMID COMPANY - CARTERET LANDFILL
SW ID NO.:
LAB NAME: ENVIRONMENTAL TESTING AND CERTIFICATION

NJPDES NO.	WELL PERMIT NO.	SAMPLE DATE YR. MO. DAY	NJ LAB CERT. NO.	WQM USE
S NJ 0061611	24-163943-4	89 01 10	12257	

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THE SCHEDULE INDICATED BELOW IS TO BE OBSERVED FROM 01 89 (MO. YR.) TO 03 89 (MO. YR.)

SUBMIT WITH SIGNED T-VWX-014

SAMPLING MONTHS: Jan. Feb. Mar. Apr. May June July Aug. Sept. Oct. Nov. Dec.

ANALYSIS	UNITS	PARAMETER	VALUE	REMARKS
Methoxychlor, Total	UG/L	39480		
Methylene Blue Active Substances	MG/L	38260	C.C7	
Nitrogen, Ammonia, Dissolved $NH_3 + NH_4$ as N	MG/L as N	00608	400	
Nitrogen, Nitrate, Dissolved	MG/L as N	00618	5.0	J
Odor	T.O.N.	00085		
pH	Standard Units	00400	9.03	
Phenols, Total Recoverable	UG/L	32730	250	J
Radium 226, Dissolved	Pc/L	09503		
Radium 228, Dissolved	Pc/L	81366		
Selenium, Dissolved	UG/L	01145	25	K
Silver, Dissolved	UG/L	01075	10	K
Sodium, Dissolved	MG/L	00930	86.80	
Sulfate, Dissolved (as SO_4)	MG/L	00946	338.0	
Total Dissolved Solids (TDS)	PPM	70300	2620.0	
Total Organic Carbon (TOC)	PPM	00680	14 11.4	
Total Organic Halogen (TOX)	UG/L	70353	441.0	
Toxaphene	UG/L	39400		
Turbidity	NTU	00076		
Zinc, Dissolved	UG/L	01090	13.0	J
2, 4–D, Total	UG/L	39370		
2, 4, 5–TP, Total	UG/L	39045		
Specific Conductance	UMHO/CM		3100.0	
Antimony	ug/L		60	K
Beryllium	ug/L		1.0	K
Nickel	ug/L		20	K
Thallium	ug/L		50	K
Total Organic Halogen	ug/L			
Total Organic Carbon	mg/L			
Free Cyanide	mg/L		0.30	

VALUE CODING RULES AND REMARK CODES ON REVERSE

U115

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NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES
WATER QUALITY MANAGEMENT ELEMENT

GROUND WATER ANALYSIS – VOLATILE ORGANICS REPORT

EASE TYPE OR PRINT WITH BALLPOINT PEN

FACILITY NAME: AMERICAN CYANAMID COMPANY - CARTERET LANDFILL
SW ID NO.:

LAB NAME: ENVIRONMENTAL TESTING AND CERTIFICATION

	NJPDES NO.	WELL PERMIT NO.	SAMPLE DATE YR. MO. DAY	NJ LAB CERT. NO.	WQM USE
T (1)	NJ 0 0 6 1 6 1 1 (2–8)	24-16393-4 (9–16) 45	8 9 0 1 1 0 (17–22)	1 2 2 5 7 (23–27)	(28)

THE SCHEDULE INDICATED BELOW IS TO BE OBSERVED FROM 01 89 (MO. YR.) TO 03 89 (MO. YR.)

SUBMIT WITH SIGNED T-VWX-014

SAMPLING MONTHS												ANALYSIS	UNITS	PARAMETER	VALUE	REMARKS
Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.					
X												Acrylonitrile	UG/L	34215	10	K
X												Benzene	UG/L	34030	11.05	
X												Bromoform	UG/L	32104	3.94	K
X												Carbon Tetrachloride	UG/L	32102	0.56	K
X												Chlorobenzene	UG/L	34301	1.3	K
X												Chlorodibromoethane	UG/L	34306	0.60	K
X												Chloroform	UG/L	32106	0.3E	K
X												1, 1 - Dichloroethane	UG/L	34496	0.04	K
X												1, 2 - Dichloroethane	UG/L	34531	0.56	K
X												1, 1 - Dichloroethylene	UG/L	34501	0.56	K
X												1, 2 - Dichloropropane	UG/L	34541	11.8	K
X												Ethylbenzene	UG/L	34371	11.4	K
X												Methylene Chloride	UG/L	34423	0.56	K
X												1, 1, 2, 2 - Tetrachloroethane	UG/L	34516	1.4	K
X												Tetrachloroethylene	UG/L	34475	0.8X	K
X												Toluene	UG/L	34012	0.3J19	J
X												1, 1, 1 - Trichloroethane	UG/L	34506	0.16	K
X												1, 1, 2 - Trichloroethane	UG/L	34511	1.0	K
X												Trichloroethylene	UG/L	39180	0.38	K
X												Vinyl Chloride	UG/L	39175	2.0	K
X												Acrolein	UG/L	34210	10	K
X												Chloroethane	UG/L	34311	2.0	K
X												2 - Chloroethylvinyl Ether	UG/L	34576	2.0	K
X												Dichlorobromomethane	UG/L	32105	0.44	K
X												1, 3 - Dichloropropylene	UG/L	34699	1.0	K
X												Methyl Bromide	UG/L	34413	2.0	K
X												Methyl Chloride	UG/L	34418	2.0	K
X												1, 2 - trans - Dichloroethylene	UG/L	34546	0.3X	K
X												1, 2 Dichlorobenzene	UG/L	34536		
X												1, 3 Dichlorobenzene	UG/L	34566		
X												1, 4 Dichlorobenzene	UG/L	34571		

VALUE CODING RULES AND
REMARK CODES ON REVERSE

29 33 34 40 41
42 46 47 53 54
55 59 60 66 67
68 72 73 79 80

U116

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P1

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES
WATER QUALITY MANAGEMENT ELEMENT

GROUND WATER ANALYSIS — MONITORING WELL REPORT

ACID, BASE/NEUTRAL ORGANIC COMPOUNDS

PLEASE TYPE OR PRINT WITH BALLPOINT PEN

FACILITY NAME	AMERICAN CYANAMID COMPANY - CARTERET LANDFILL	SW ID NO.
LAB NAME	ENVIRONMENTAL TESTING AND CERTIFICATION	

	NJPDES NO.	WELL PERMIT NO.	SAMPLE DATE YR. MO. DAY	NJ LAB CERT. NO.	WQM USE
U	NJ 0061611	24-10393-4	89 01 10	12257	

45

THE SCHEDULE INDICATED BELOW IS TO BE OBSERVED FROM 01 89 (MO. YR.) TO 03 89 (MO. YR.)

SUBMIT WITH SIGNED T-VWX-014

SAMPLING MONTHS

	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	ANALYSIS	UNITS	PARAMETER	VALUE	REMARKS
X												2-Chlorophenol	ug/l	34586	3.4	K
												2,4-Dichlorophenol	ug/l	34601	2.5	K
X												2,4-Dimethylphenol	ug/l	34606	2.7	K
X												2,6-Dinitro-o-cresol	ug/l	77603	.05	K
												2,4-Dinitrophenol	ug/l	34616	.43	K
X												2-Nitrophenol	ug/l	34591	2.7	K
												4-Nitrophenol	ug/l	34649	2.5	K
X												p-Chloro-m-cresol	ug/l	34452	3.1	K
X												Pentachlorophenol	ug/l	39032	3.7	K
X												Phenol	ug/l	34695	13.3	
X												2,4,6-Trichlorophenol	ug/l	34621	2.8	K
X																
X												Acenaphthene	ug/l	34205	2.0	K
X												Acenaphthylene	ug/l	34200	3.6	K
X												Anthracene	ug/l	34220	2.0	K
X												Benzidine	ug/l	39120	.45	K
X												Benzanthracene	ug/l	34526	5.0	K
X												Benzopyrene	ug/l	34247	2.6	K
X												3,4-Benzofluoranthene	ug/l	34230	4.9	K
X												Benzoperylene	ug/l	34521	4.2	K
X												Benzofluoranthene	ug/l	34242	2.6	K
X												Bis(2-chloroethoxy)methane	ug/l	34278	5.5	K
X												Bis(2-chloroethyl) Ether	ug/l	34273	5.9	K
X												Bis(2-chlroisopropyl) Ether	ug/l	34283	5.9	K
X												Bis(2-ethylhexyl) Phthalate	ug/l	39100	.10	K
X												4-Bromophenyl Ether	ug/l	34636	2.0	K
X												Butylbenzyl Phthalate	ug/l	34292	.10	K
X												2-Chloronaphthalene	ug/l	34581	2.0	K
X												4-Chlorophenyl Phenyl Ether	ug/l	34641	4.3	K

29 33 34 40 41
42 46 47 53 54

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4/83

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NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES
WATER QUALITY MANAGEMENT ELEMENT

GROUND WATER ANALYSIS – MONITORING WELL REPORT

ACID, BASE/NEUTRAL ORGANIC COMPOUNDS

PLEASE TYPE OR PRINT WITH BALLPOINT PEN

FACILITY NAME: AMERICAN CYANAMID COMPANY - CARTERET LANDFILL

SW ID NO.:

LAB NAME: ENVIRONMENTAL TESTING AND CERTIFICATION

	NJPDES NO.	WELL PERMIT NO.	SAMPLE DATE YR. MO. DAY	NJ LAB CERT. NO.	WQM USE
U	NJ 0061611	24-10393-4	8[illegible]	12257	

45

THE SCHEDULE INDICATED BELOW IS TO BE OBSERVED FROM 01 89 (MO. YR.) TO 03 89 (MO. YR.)

SUBMIT WITH SIGNED T-VWX-014

SAMPLING MONTHS

Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	ANALYSIS	UNITS	PARAMETER	VALUE	REMARKS
X												Chrysene	ug/l	34320		
X												Dibenzanthracene	ug/l	34556		
X												1,2-Dichlorobenzene	ug/l	34536		
X												1,3-Dichlorobenzene	ug/l	34566		
X												1,4-Dichlorobenzene	ug/l	34571		
X												3,3'-Dichlorobenzidine	ug/l	34631		
X												Diethyl Phthalate	ug/l	34336		
X												Dimethyl Phthalate	ug/l	34341		
X												Di-n-butyl Phthalate	ug/l	39110		
X												2,4-Dinitrotolulene	ug/l	34611		
X												2,6-Dinitrotolulene	ug/l	34626		
X												Di-n-octyl Phthalate	ug/l	34596		
X												1,2-Diphenylhydrazine	ug/l	34346		
X												Fluoranthene	ug/l	34376		
X												Fluorene	ug/l	34381		
X												Hexachlorobenzene	ug/l	39700		
X												Hexachlorobutadiene	ug/l	34391		
X												Hexachlorocyclopentadiene	ug/l	34386		
X												Hexachloroethane	ug/l	34396		
X												Indenopyrene	ug/l	34403		
X												Isophorone	ug/l	34408		
X												Naphthalene	ug/l	34696		
X												Nitrobenzene	ug/l	34447		
X												N-Nitrosodimentlyamine	ug/l	34438		
X												N-Nitrosodi-n-propylamine	ug/l	34428		
X												N-Nitrosodiphenylamine	ug/l	34433		
X												Phenanthrene	ug/l	34461		
X												Pyrene	ug/l	34469		
X												1,2,4-Trichlorobenzene	ug/l	34551		

VALUE CODING RULES AND
REMARK CODES ON REVERSE

29 33 34 40 41
42 46 47 53 54
55 59 60 66 67
68 72 73 79 80

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Form VWX-017
4/83

P3

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES
WATER QUALITY MANAGEMENT ELEMENT

GROUND WATER ANALYSIS – MONITORING WELL REPORT

PESTICIDES & PCBs

PLEASE TYPE OR PRINT WITH BALLPOINT PEN

FACILITY NAME	AMERICAN CYANAMID COMPANY - CARTERET LANDFILL	SW ID NO.
LAB NAME	ENVIRONMENTAL TESTING AND CERTIFICATION	

	NJPDES NO.	WELL PERMIT NO.	SAMPLE DATE YR. MO. DAY	NJ LAB CERT. NO.	WQM USE
U	NJ 0061611	24-10393-4	[illegible]	12257	
1	2 8	9 16	17 22	23 27	28

45

THE SCHEDULE INDICATED BELOW IS TO BE OBSERVED FROM 01 89 (MO. YR.) TO 03 89 (MO. YR.)

RECEIVED
APR 04 1989
DEPT. ENVIRON. PROTECTION
Division Water Resources

SUBMIT WITH SIGNED T-VWX-014

SAMPLING MONTHS

Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	ANALYSIS	UNITS	PARAMETER	VALUE	REMARKS
X												Aldrin	ug/l	39330	[illegible]	[illegible]
												alpha-BHC	ug/l	39337	10	[illegible]
X												beta-BHC	ug/l	39338	[illegible]	[illegible]
												gamma-BHC (Lindane)	ug/l	39340	10	[illegible]
X												delta-BHC	ug/l	34259	3.2	K
X												Chlordane	ug/l	39350	10	[illegible]
												4,4'-DDT	ug/l	39370	[illegible]	K
X												4,4'-DDE	ug/l	39365	5.5	K
												4,4'-DDD	ug/l		[illegible]	[illegible]
												Dieldrin	ug/l	39380	[illegible]	K
X												alpha-Endosulfan	ug/l	34361	10	K
												beta-Endosulfan	ug/l	34356	10	K
X												Endosulfan Sulfate	ug/l	34351	5.8	K
X												Endrin	ug/l	39390	10	K
												Endrin Aldehyde	ug/l	34366	10	K
X												Heptachlor	ug/l	39410	[illegible]	K
												Heptachlor Epoxide	ug/l	39420	[illegible]	K
X												PCB-1242	ug/l	39496	37	K
X												PCB-1254	ug/l	39504	37	K
												PCB-1221	ug/l	39488	[illegible]	K
X												PCB-1232	ug/l	39492	[illegible]	K
X												PCB-1248	ug/l	39500	37	K
X												PCB-1260	ug/l	39508	37	K
X												PCB-1016	ug/l	34671	37	K
X												Toxaphene	ug/l	39400	[illegible]	K

VALUE CODING RULES AND

29 33 34 40 41
42 46 47 53 54
55 59 60 66 67

U119

Form VWX-015 A
4/

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES
WATER QUALITY MANAGEMENT ELEMENT

GROUND WATER ANALYSIS – MONITORING WELL REPORT

PLEASE TYPE OR PRINT WITH BALLPOINT PEN

FACILITY NAME: AMERICAN CYANAMID COMPANY - CARTERET LANDFILL
SW ID NO.:
LAB NAME: ENVIRONMENTAL TESTING AND CERTIFICATION

	NJPDES NO.	WELL PERMIT NO.	SAMPLE DATE YR. MO. DAY	NJ LAB CERT. NO.	WQM USE
R	NJ 0061611	24-10392-6 (4D)	89 01 10	12257	
1	2–8	9–16	17–22	23–27	28

THE SCHEDULE INDICATED BELOW IS TO BE OBSERVED FROM 01 89 (MO. YR.) TO 03 89 (MO. YR.)

SUBMIT WITH SIGNED T-VWX-014

SAMPLING MONTHS

Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	ANALYSIS	UNITS	PARAMETER	VALUE	REMARKS
			X			X			X			Elevation of top of well casing with cap off (as specified in well completion report)	feet MSL: to nearest .01		12.65	
												Elevation of original ground level (as specified in well completion report)	feet MSL: to nearest .01		10.07	
X			X			X			X			Depth to water table from top of casing prior to sampling with cap off	feet: to nearest .01	82546	14.38	
			X			X			X			Depth to water table from original ground level prior to sampling	feet: to nearest .01	72019	11.80	
X												Arsenic, Dissolved	UG/L as As	01000	10	K
X												Barium, Dissolved	UG/L as Ba	01005	61	
			X			X			X			Biochemical Oxygen Demand - 5 Day	MG/L	00310	56	
X												Cadmium, Dissolved	UG/L as Cd	01025	2.0	K
			X			X			X			Chloride, Dissolved	UG/L as Cl	82295	1159000	
X												Chromium, Dissolved	UG/L as Cr	01030	10	K
X												Chromium, Dissolved, Hexavalent	UG/L as Cr	01220	10	K
			X			X			X			Chemical Oxygen Demand (COD), Dissolved	MG/L	00341	160	
X												Coliform Group	N/100 ML	74056	15	
												Color	Pt - Co	00080		
X			X			X			X			Copper, Dissolved	UG/L as Cu	01040	12	
X												Cyanide, Total	MG/L as CN	00720	0.697	
												Endrin, Total	UG/L	39390		
X												Fluoride, Dissolved	MG/L as F	00950	0.1	
												Gross Alpha, Dissolved	Pc/L	01503		
												Gross Beta, Dissolved	Pc/L	03503		
												Hardness, Total as $CaCO_3$	MG/L	00900		
X			X			X			X			Iron, Dissolved	UG/L as Fe	01046	[illegible]	
X			X			X			X			Lead, Dissolved	UG/L as Pb	01049	95	K
												Lindane, Total	UG/L	39782		
X			X			X			X			Manganese, Dissolved	UG/L	01056	[illegible]	
X			X			X			X			Mercury, Dissolved	UG/L	71890	0.20	K

VALUE CODING RULES AND
REMARK CODES ON REVERSE

29 33 34 40 41
42 46 47 53 54
55 59 60 66 67
68 72 73 79 80

4120

Form VWX-015 B
4/83

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES
WATER QUALITY MANAGEMENT ELEMENT

GROUND WATER ANALYSIS – MONITORING WELL REPORT

PLEASE TYPE OR PRINT WITH BALLPOINT PEN

FACILITY NAME: AMERICAN CYANAMID COMPANY - CARTERET LANDFILL
SW ID NO.:

LAB NAME: ENVIRONMENTAL TESTING AND CERTIFICATION

	NJPDES NO.	WELL PERMIT NO.	SAMPLE DATE YR. MO. DAY	NJ LAB CERT. NO.	WQM USE
S	NJ 0061611	24-16392-6 (4D)	89 01 10	12257	
1	2–8	9–16	17–22	23–27	28

THE SCHEDULE INDICATED BELOW IS TO BE OBSERVED FROM 01 89 (MO. YR.) TO 03 89 (MO. YR.)

SUBMIT WITH SIGNED T-VWX-014

SAMPLING MONTHS

Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	ANALYSIS	UNITS	PARAMETER	VALUE	REMARKS
												Methoxychlor, Total	UG/L	39480		
X			X			X			X			Methylene Blue Active Substances	MG/L	38260	0.07	
			X			X			X			Nitrogen, Ammonia, Dissolved $NH_3 + NH_4$ as N	MG/L as N	00608	9.1	
X			X			X			X			Nitrogen, Nitrate, Dissolved	MG/L as N	00618	1.0	J
												Odor	T.O.N.	00085		
			X			X			X			pH	Standard Units	00400	6.78	
X			X			X			X			Phenols, Total Recoverable	UG/L	32730	250	J
												Radium 226, Dissolved	Pc/L	09503		
												Radium 228, Dissolved	Pc/L	81366		
X												Selenium, Dissolved	UG/L	01145	25	R
												Silver, Dissolved	UG/L	01075	10	K
X			X			X			X			Sodium, Dissolved	MG/L	00930	4840	
X			X			X			X			Sulfate, Dissolved (as SO_4)	MG/L	00946	1060	
			X			X			X			Total Dissolved Solids (TDS)	PPM	70300	22800	
X			X			X			X			Total Organic Carbon (TOC)	PPM	00680	5.8	
			X			X			X			Total Organic Halogen (TOX)	UG/L	70353	460	
												Toxaphene	UG/L	39400		
												Turbidity	NTU	00076		
X			X			X			X			Zinc, Dissolved	UG/L	01090	40	
												2, 4–D, Total	UG/L	39370		
												2, 4, 5–TP, Total	UG/L	39045		
X			X			X			X			Specific Conductance	UMHO/CM		24500	
												Antimony	ug/L		60	K
												Beryllium	ug/L		1.0	K
												Nickel	ug/L		20	K
												Thallium	ug/L		50	K
												Total Organic Halogen	ug/L		460	
												Total Organic Carbon	mg/L		6.1	
												Free Cyanide	mg/L		<0.05	

VALUE CODING RULES AND REMARK CODES ON REVERSE

29 42 55 68 — 33 34 46 47 59 60 72 73 — 40 41 53 54 66 67 79 80

U121

Form VWX-016
4/

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES
WATER QUALITY MANAGEMENT ELEMENT

GROUND WATER ANALYSIS – VOLATILE ORGANICS REPORT

PLEASE TYPE OR PRINT WITH BALLPOINT PEN

FACILITY NAME: AMERICAN CYANAMID COMPANY - CARTERET LANDFILL — SW ID NO.:

LAB NAME: ENVIRONMENTAL TESTING AND CERTIFICATION

T (1)

NJPDES NO. (2–8): NJ 0 0 6 1 6 1 1

WELL PERMIT NO. (9–16): 24-16392-6

SAMPLE DATE YR. MO. DAY (17–22): 89 01 10

NJ LAB CERT. NO. (23–27): 12257

WQM USE (28):

THE SCHEDULE INDICATED BELOW IS TO BE OBSERVED FROM 01 89 (MO. YR.) TO 03 89 (MO. YR.)

SUBMIT WITH SIGNED T-VWX-014

SAMPLING MONTHS												ANALYSIS	UNITS	PARAMETER	VALUE	REMARKS
Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.						
X												Acrylonitrile	UG/L	34215		
X												Benzene	UG/L	34030		
X												Bromoform	UG/L	32104		
X												Carbon Tetrachloride	UG/L	32102		
X												Chlorobenzene	UG/L	34301		
X												Chlorodibromoethane	UG/L	34306		
X												Chloroform	UG/L	32106		
X												1, 1 - Dichloroethane	UG/L	34496		
X												1, 2 - Dichloroethane	UG/L	34531		
X												1, 1 - Dichloroethylene	UG/L	34501		
X												1, 2 - Dichloropropane	UG/L	34541		
X												Ethylbenzene	UG/L	34371		
X												Methylene Chloride	UG/L	34423		
X												1, 1, 2, 2 - Tetrachloroethane	UG/L	34516		
X												Tetrachloroethylene	UG/L	34475		
X												Toluene	UG/L	34012		
X												1, 1, 1 - Trichloroethane	UG/L	34506		
X												1, 1, 2 - Trichloroethane	UG/L	34511		
X												Trichloroethylene	UG/L	39180		
X												Vinyl Chloride	UG/L	39175		
X												Acrolein	UG/L	34210		
X												Chloroethane	UG/L	34311		
X												2 - Chloroethylvinyl Ether	UG/L	34576		
X												Dichlorobromomethane	UG/L	32105		
X												1, 3 - Dichloropropylene	UG/L	34699		
X												Methyl Bromide	UG/L	34413		
X												Methyl Chloride	UG/L	34418		
X												1, 2 - trans - Dichloroethylene	UG/L	34546		
X												1, 2 Dichlorobenzene	UG/L	34536		
X												1, 3 Dichlorobenzene	UG/L	34566		
X												1, 4 Dichlorobenzene	UG/L	34571		

29 33 34 40 41
42 46 47 53 54
55 59 60 66 67
68 72 73 79 80

VALUE CODING RULES AND
REMARK CODES ON REVERSE

U122

VWX-017

P1

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES
WATER QUALITY MANAGEMENT ELEMENT

GROUND WATER ANALYSIS – MONITORING WELL REPORT
ACID, BASE/NEUTRAL ORGANIC COMPOUNDS

PLEASE TYPE OR PRINT WITH BALLPOINT PEN

FACILITY NAME: AMERICAN CYANAMID COMPANY - CARTERET LANDFILL | SW ID NO.

LAB NAME: ENVIRONMENTAL TESTING AND CERTIFICATION

NJPDES NO.	WELL PERMIT NO.	SAMPLE DATE YR. MO. DAY	NJ LAB CERT. NO.	WQM USE
NJ0061611	24-138926		12257	

THE SCHEDULE INDICATED BELOW IS TO BE OBSERVED FROM 01 81 TO 03 89 (MO. YR.)

SUBMIT WITH SIGNED T-VWX-014

SAMPLING MONTHS	ANALYSES	UNITS	PARAMETER	VALUE	REMARKS
X	2-Chlorophenol	ug/l	34586		
X	2,4-Dichlorophenol	ug/l	34601		
	2,4-Dimethylphenol	ug/l	34606		
X	2,6-Dinitro-o-cresol	ug/l	77603		
	2,4-Dinitrophenol	ug/l	34616		
	2-Nitrophenol	ug/l	34591		
X	4-Nitrophenol	ug/l	34649		
	p-Chloro-m-cresol	ug/l	34452		
X	Pentachlorophenol	ug/l	39032		
	Phenol	ug/l	34695		
X	2,4,6-Trichlorophenol	ug/l	34621		
X					
X	Acenaphthene	ug/l	34205		
X	Acenaphthylene	ug/l	34200		
X	Anthracene	ug/l	34220		
X	Benzidine	ug/l	39120		
X	Benzanthracene	ug/l	34526		
X	Benzopyrene	ug/l	34247		
X	3,4-Benzofluoranthene	ug/l	34230		
X	Benzoperylene	ug/l	34521		
X	Benzofluoranthene	ug/l	34242		
X	Bis(2-chloroethoxy)methane	ug/l	34278		
X	Bis(2-chloroethyl) Ether	ug/l	34273		
X	Bis(2-chlroisopropyl) Ether	ug/l	34283		
X	Bis(2-ethylhexyl) Phthalate	ug/l	39100		
X	4-Bromophenyl Ether	ug/l	34636		
X	Butylbenzyl Phthalate	ug/l	34292		
X	2-Chloronaphthalene	ug/l	34581		
X	4-Chlorophenyl Phenyl Ether	ug/l	34641		

U123

Form VWX-017
4/83

P2

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES
WATER QUALITY MANAGEMENT ELEMENT

GROUND WATER ANALYSIS – MONITORING WELL REPORT

ACID, BASE/NEUTRAL ORGANIC COMPOUNDS

PLEASE TYPE OR PRINT WITH BALLPOINT PEN

FACILITY NAME: AMERICAN CYANAMID COMPANY - CARTERET LANDFILL

SW ID NO.:

LAB NAME: ENVIRONMENTAL TESTING AND CERTIFICATION

	NJPDES NO.	WELL PERMIT NO.	SAMPLE DATE YR. MO. DAY	NJ LAB CERT. NO.	WQM USE
U	NJ 0061611	24-10392-6		12257	

4D

THE SCHEDULE INDICATED BELOW IS TO BE OBSERVED FROM 01 89 (MO. YR.) TO 03 89 (MO. YR.)

APR 04 1989

DEPT. ENVIRON. PROTECTION
Division of Water Resources
Bureau of Permits Limits

SUBMIT WITH SIGNED T-VWX-014

SAMPLING MONTHS

Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	ANALYSIS	UNITS	PARAMETER	VALUE	REMARKS
X												Chrysene	ug/l	34320		
X												Dibenzanthracene	ug/l	34556		
X												1,2-Dichlorobenzene	ug/l	34536		
X												1,3-Dichlorobenzene	ug/l	34566		
X												1,4-Dichlorobenzene	ug/l	34571		
X												3,3'-Dichlorobenzidine	ug/l	34631		
X												Diethyl Phthalate	ug/l	34336		
X												Dimethyl Phthalate	ug/l	34341		
X												Di-n-butyl Phthalate	ug/l	39110		
X												2,4-Dinitrotolulene	ug/l	34611		
X												2,6-Dinitrotolulene	ug/l	34626		
X												Di-n-octyl Phthalate	ug/l	34596		
X												1,2-Diphenylhydrazine	ug/l	34346		
X												Fluoranthene	ug/l	34376		
X												Fluorene	ug/l	34381		
X												Hexachlorobenzene	ug/l	39700		
X												Hexachlorobutadiene	ug/l	34391		
X												Hexachlorocyclopentadiene	ug/l	34386		
X												Hexachloroethane	ug/l	34396		
X												Indenopyrene	ug/l	34403		
X												Isophorone	ug/l	34408		
X												Naphthalene	ug/l	34696		
X												Nitrobenzene	ug/l	34447		
X												N-Nitrosodimentlyamine	ug/l	34438		
X												N-Nitrosodi-n-propylamine	ug/l	34428		
X												N-Nitrosodiphenylamine	ug/l	34433		
X												Phenanthrene	ug/l	34461		
X												Pyrene	ug/l	34469		
X												1,2,4-Trichlorobenzene	ug/l	34551		

VALUE CODING RULES AND
REMARK CODES ON REVERSE

29 33 34 40 41
42 46 47 53 54
55 59 60 66 67
68 72 73 79 80

U124

F[redacted]n VWX-017
4/83

P3

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES
WATER QUALITY MANAGEMENT ELEMENT

GROUND WATER ANALYSIS – MONITORING WELL REPORT

PESTICIDES & PCBs

PLEASE TYPE OR PRINT WITH BALLPOINT PEN

[redacted]CILITY NAME	AMERICAN CYANAMID COMPANY - CARTERET LANDFILL	SW ID NO.
[redacted]B NAME	ENVIRONMENTAL TESTING AND CERTIFICATION	

	NJPDES NO.	WELL PERMIT NO.	SAMPLE DATE YR. MO. DAY	NJ LAB CERT. NO.	WQM USE
U	NJ 0 0 6 1 6 1 1	24-10392-6		1 2 2 5 7	
1	2 8	9 16	17 22	23 27	28

9D

THE SCHEDULE INDICATED BELOW IS TO BE OBSERVED FROM 0189 (MO. YR.) TO 0389 (MO. YR.)

SUBMIT WITH SIGNED T-VWX-014

SAMPLING MONTHS

Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	ANALYSIS	UNITS	PARAMETER	VALUE	REMARKS
X												Aldrin	ug/l	39330	[illegible]	K
[redacted]												alpha-BHC	ug/l	39337	11	K
X												beta-BHC	ug/l	39338	4.5	K
[redacted]												gamma-BHC (Lindane)	ug/l	39340	11	K
[redacted]												delta-BHC	ug/l	34259	[illegible]	K
X												Chlordane	ug/l	39350	11	K
[redacted]												4,4'-DDT	ug/l	39370	[illegible]	K
X												4,4'-DDE	ug/l	39365	[illegible]	K
X												4,4'-DDD	ug/l		[illegible]	K
[redacted]												Dieldrin	ug/l	39380	[illegible]	K
X												alpha-Endosulfan	ug/l	34361	[illegible]	[illegible]
[redacted]												beta-Endosulfan	ug/l	34356	11	[illegible]
X												Endosulfan Sulfate	ug/l	34351	[illegible]	K
X												Endrin	ug/l	39390	11	[illegible]
X												Endrin Aldehyde	ug/l	34366		[illegible]
X												Heptachlor	ug/l	39410	[illegible]	K
X												Heptachlor Epoxide	ug/l	39420	[illegible]	K
X												PCB-1242	ug/l	39496	[illegible]	[illegible]
X												PCB-1254	ug/l	39504	[illegible]	K
X												PCB-1221	ug/l	39488	[illegible]	[illegible]
X												PCB-1232	ug/l	39492	[illegible]	
X												PCB-1248	ug/l	39500	[illegible]	K
X												PCB-1260	ug/l	39508	[illegible]	[illegible]
X												PCB-1016	ug/l	34671	[illegible]	K
X												Toxaphene	ug/l	39400	[illegible]	[illegible]

VALUE CODING RULES AND

29 42 55 33 34 46 47 59 60 40 41 53 54 66 67

U125

Form VWX-015 A
4/

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES
WATER QUALITY MANAGEMENT ELEMENT

GROUND WATER ANALYSIS – MONITORING WELL REPORT

PLEASE TYPE OR PRINT WITH BALLPOINT PEN

FACILITY NAME: AMERICAN CYANAMID COMPANY - CARTERET LANDFILL | SW ID NO.:

LAB NAME: ENVIRONMENTAL TESTING AND CERTIFICATION

	NJPDES NO.	WELL PERMIT NO.	SAMPLE DATE YR. MO. DAY	NJ LAB CERT. NO.	WQM USE
	R (1) NJ 0 0 6 1 6 1 1 (2–8)	2 4 - 1 6 3 9 5 - 1 (9–16) 59	8 7 0 1 1 0 (17–22)	1 2 2 5 7 (23–27)	(28)

THE SCHEDULE INDICATED BELOW IS TO BE OBSERVED FROM 0 1 8 9 (MO. YR.) TO 0 3 8 9 (MO. YR.)

SUBMIT WITH SIGNED T-VWX-014

Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	ANALYSIS	UNITS	PARAMETER	VALUE	REMARKS
X			X			X			X			Elevation of top of well casing with cap off (as specified in well completion report)	feet MSL: to nearest .01		5.66	
												Elevation of original ground level (as specified in well completion report)	feet MSL: to nearest .01		52	
X			X			X			X			Depth to water table from top of casing prior to sampling with cap off	feet: to nearest .01	82546	6.66	
X			X			X			X			Depth to water table from original ground level prior to sampling	feet: to nearest .01	72019	1.20	
X												Arsenic, Dissolved	UG/L as As	01000	10	K
X												Barium, Dissolved	UG/L as Ba	01005	210	
X			X			X			X			Biochemical Oxygen Demand - 5 Day	MG/L	00310	150	
X												Cadmium, Dissolved	UG/L as Cd	01025	2.5	K
X			X			X			X			Chloride, Dissolved	UG/L as Cl	82295	12400	
X												Chromium, Dissolved	UG/L as Cr	01030	10	K
X												Chromium, Dissolved, Hexavalent	UG/L as Cr	01220		
X			X			X			X			Chemical Oxygen Demand (COD), Dissolved	MG/L	00341	413	
X												Coliform Group	N/100 ML	74056	10	K
												Color	Pt - Co	00080	10	K
X			X			X			X			Copper, Dissolved	UG/L as Cu	01040	12	
X												Cyanide, Total	MG/L as CN	00720	2.36	
												Endrin, Total	UG/L	39390		
X												Fluoride, Dissolved	MG/L as F	00950	1.7	
												Gross Alpha, Dissolved	Pc/L	01503		
												Gross Beta, Dissolved	Pc/L	03503		
												Hardness, Total as $CaCO_3$	MG/L	00900		
X			X			X			X			Iron, Dissolved	UG/L as Fe	01046	49	
X			X			X			X			Lead, Dissolved	UG/L as Pb	01049	7	K
												Lindane, Total	UG/L	39782		
X			X			X			X			Manganese, Dissolved	UG/L	01056	15	
X			X			X			X			Mercury, Dissolved	UG/L	71890	0.1	

VALUE CODING RULES AND REMARK CODES ON REVERSE

29 33 34 40 41
42 46 47 53 54
55 59 60 66 67
68 72 73 79 80

U126

Form VWX-015 B
4.

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES
ATER QUALITY MANAGEMENT ELEMENT

GROUND WATER ANALYSIS – MONITORING WELL REPORT

P ASE TYPE OR PRINT WITH BALLPOINT PEN

FACILITY NAME: AMERICAN CYANAMID COMPANY - CARTERET LANDFILL

SW ID NO.:

B NAME: ENVIRONMENTAL TESTING AND CERTIFICATION

	NJPDES NO.	WELL PERMIT NO.	SAMPLE DATE YR. MO. DAY	NJ LAB CERT. NO.	WQM USE
S	NJ 0061611	24-10395-1	54 01 10	12257	
1	2 – 8	9 – 16	17 – 22	23 – 27	28

55

THE SCHEDULE INDICATED BELOW IS TO BE OBSERVED FROM 01 89 (MO. YR.) TO 03 89 (MO. YR.)

SUBMIT WITH SIGNED T-VWX-014

SAMPLING MONTHS

Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	ANALYSIS	UNITS	PARAMETER	VALUE	REMARKS
												Methoxychlor, Total	UG/L	39480		
X			X			X			X			Methylene Blue Active Substances	MG/L	38260	0.5	J
			X			X			X			Nitrogen, Ammonia, Dissolved $NH_3 + NH_4$ as N	MG/L as N	00608	22	
X			X			X			X			Nitrogen, Nitrate, Dissolved	MG/L as N	00618	1.0	J
												Odor	T.O.N.	00085		
			X			X			X			pH	Standard Units	00400	7.01	
X			X			X			X			Phenols, Total Recoverable	UG/L	32730	250	J
												Radium 226, Dissolved	Pc/L	09503		
												Radium 228, Dissolved	Pc/L	81366		
X												Selenium, Dissolved	UG/L	01145	25	K
												Silver, Dissolved	UG/L	01075	10	K
X			X			X			X			Sodium, Dissolved	MG/L	00930	6980	
			X			X			X			Sulfate, Dissolved (as SO_4)	MG/L	00946	170	
X			X			X			X			Total Dissolved Solids (TDS)	PPM	70300	22800	
X			X			X			X			Total Organic Carbon (TOC)	PPM	00680	15.7	
			X			X			X			Total Organic Halogen (TOX)	UG/L	70353	1955	
												Toxaphene	UG/L	39400		
												Turbidity	NTU	00076		
X			X			X			X			Zinc, Dissolved	UG/L	01090	19	J
												2, 4–D, Total	UG/L	39370		
												2, 4, 5–TP, Total	UG/L	39045		
X			X			X			X			Specific Conductance	UMHO/CM		29000	
												Antimony	ug/L		60	K
												Beryllium	ug/L		1.0	K
												Nickel	ug/L		20	K
												Thallium	ug/L		50	K
												Total Organic Halogen	ug/L		2140	
												Total Organic Carbon	mg/L		16.5	
												Free Cyanide	mg/L		<0.05	

VALUE CODING RULES AND REMARK CODES ON REVERSE

29 42 55 68 — 33 34 46 47 59 60 72 73 — 40 41 53 54 66 67 79 80

U127

Form VWX-016
4 3

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES
WATER QUALITY MANAGEMENT ELEMENT

GROUND WATER ANALYSIS – VOLATILE ORGANICS REPORT

PLEASE TYPE OR PRINT WITH BALLPOINT PEN

FACILITY NAME: AMERICAN CYANAMID COMPANY - CARTERET LANDFILL
SW ID NO.:

LAB NAME: ENVIRONMENTAL TESTING AND CERTIFICATION

	NJPDES NO.	WELL PERMIT NO.	SAMPLE DATE YR. MO. DAY	NJ LAB CERT. NO.	WQM USE
T	NJ 0061611	24-16395-1	89 01 10	12257	
1	2 – 8	9 – 16	17 – 22	23 – 27	28

55

THE SCHEDULE INDICATED BELOW IS TO BE OBSERVED FROM 01 89 (MO. YR.) TO 03 89 (MO. YR.)

SUBMIT WITH SIGNED T-VWX-014

SAMPLING MONTHS

Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	ANALYSIS	UNITS	PARAMETER	VALUE	REMARKS
X												Acrylonitrile	UG/L	34215	10	K
X												Benzene	UG/L	34030	0.88	K
X												Bromoform	UG/L	32104	0.94	K
X												Carbon Tetrachloride	UG/L	32102	0.56	K
X												Chlorobenzene	UG/L	34301	1.2	K
X												Chlorodibromomethane	UG/L	34306	0.62	K
X												Chloroform	UG/L	32106	0.32	K
X												1, 1 - Dichloroethane	UG/L	34496	0.94	K
X												1, 2 - Dichloroethane	UG/L	34531	0.56	K
X												1, 1 - Dichloroethylene	UG/L	34501	0.56	K
X												1, 2 - Dichloropropane	UG/L	34541	1.2	K
X												Ethylbenzene	UG/L	34371	1.4	K
X												Methylene Chloride	UG/L	34423	0.56	K
X												1, 1, 2, 2 - Tetrachloroethane	UG/L	34516	1.4	K
X												Tetrachloroethylene	UG/L	34475	0.82	K
X												Toluene	UG/L	34012	0.99	K
X												1, 1, 1 - Trichloroethane	UG/L	34506	0.76	K
X												1, 1, 2 - Trichloroethane	UG/L	34511	1.0	K
X												Trichloroethylene	UG/L	39180	0.38	K
X												Vinyl Chloride	UG/L	39175	2.0	K
X												Acrolein	UG/L	34210	10	K
X												Chloroethane	UG/L	34311	2.0	K
X												2 - Chloroethylvinyl Ether	UG/L	34576	2.0	K
X												Dichlorobromomethane	UG/L	32105	0.45	K
X												1, 3 - Dichloropropylene	UG/L	34699	1.0	K
X												Methyl Bromide	UG/L	34413	2.0	K
X												Methyl Chloride	UG/L	34418	2.0	K
X												1, 2 - trans - Dichloroethylene	UG/L	34546	0.32	K
X												1, 2 Dichlorobenzene	UG/L	34536		
X												1, 3 Dichlorobenzene	UG/L	34566		
X												1, 4 Dichlorobenzene	UG/L	34571		

29 33 34 40 41
42 46 47 53 54
55 59 60 66 67
68 72 73 79 80

VALUE CODING RULES AND
REMARK CODES ON REVERSE

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VWX-017

P1

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES
WATER QUALITY MANAGEMENT ELEMENT

GROUND WATER ANALYSIS – MONITORING WELL REPORT
ACID, BASE/NEUTRAL ORGANIC COMPOUNDS

PLEASE TYPE OR PRINT WITH BALLPOINT PEN

FACILITY NAME: AMERICAN CYANAMID COMPANY - CARTERET LANDFILL

SW ID NO.:

LAB NAME: ENVIRONMENTAL TESTING AND CERTIFICATION

	NJPDES NO.	WELL PERMIT NO.	SAMPLE DATE YR. MO. DAY	NJ LAB CERT. NO.	WQM USE
U	NJ 0061611	24-10395-1 (55)	[illegible]	12257	

THE SCHEDULE INDICATED BELOW IS TO BE OBSERVED FROM 01 89 (MO. YR.) TO 03 89 (MO. YR.)

SUBMIT WITH SIGNED T-VWX-014

SAMPLING MONTHS

	ANALYSIS	UNITS	PARAMETER	VALUE	REMARKS
X	2-Chlorophenol	ug/l	34586		K
X	2,4-Dichlorophenol	ug/l	34601		K
	2,4-Dimethylphenol	ug/l	34606		K
X	2,6-Dinitro-o-cresol	ug/l	77603		K
	2,4-Dinitrophenol	ug/l	34616		K
X	2-Nitrophenol	ug/l	34591		K
X	4-Nitrophenol	ug/l	34649		K
	p-Chloro-m-cresol	ug/l	34452		K
X	Pentachlorophenol	ug/l	39032		K
	Phenol	ug/l	34695		K
	2,4,6-Trichlorophenol	ug/l	34621		K
X					
X	Acenaphthene	ug/l	34205		
X	Acenaphthylene	ug/l	34200		K
X	Anthracene	ug/l	34220		K
X	Benzidine	ug/l	39120		K
X	Benzanthracene	ug/l	34526		K
X	Benzopyrene	ug/l	34247		K
X	3,4-Benzofluoranthene	ug/l	34230		K
X	Benzoperylene	ug/l	34521		K
X	Benzofluoranthene	ug/l	34242		K
X	Bis(2-chloroethoxy)methane	ug/l	34278		K
X	Bis(2-chloroethyl) Ether	ug/l	34273		K
X	Bis(2-chlroisopropyl) Ether	ug/l	34283		K
X	Bis(2-ethylhexyl) Phthalate	ug/l	39100		K
X	4-Bromophenyl Ether	ug/l	34636		K
X	Butylbenzyl Phthalate	ug/l	34292		K
X	2-Chloronaphthalene	ug/l	34581		K
X	4-Chlorophenyl Phenyl Ether	ug/l	34641		K

U129

Form VWX-017
4/83 P2

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES
WATER QUALITY MANAGEMENT ELEMENT

GROUND WATER ANALYSIS – MONITORING WELL REPORT

ACID, BASE/NEUTRAL ORGANIC COMPOUNDS

PLEASE TYPE OR PRINT WITH BALLPOINT PEN

FACILITY NAME	AMERICAN CYANAMID COMPANY - CARTERET LANDFILL	SW ID NO.
LAB NAME	ENVIRONMENTAL TESTING AND CERTIFICATION	

U (1) NJPDES NO. NJ 0 0 6 1 6 1 1 (2–9) WELL PERMIT NO. 2 4 - 1 5 3 9 5 - 1 (9–16) SAMPLE DATE YR. | MO. | DAY 8 7 0 1 1 0 (17–22) NJ LAB CERT. NO. 1 2 2 5 7 (23–27) WQM USE (28)

55

THE SCHEDULE INDICATED BELOW IS TO BE OBSERVED FROM 0 1 / 8 9 MO. YR. TO 0 3 / 8 9 MO. YR.

SUBMIT WITH SIGNED T-FWX-014

SAMPLING MONTHS	ANALYSIS	UNITS	PARAMETER	VALUE	REMARKS
X	Chrysene	ug/1	34320	.6	K
X	Dibenzanthracene	ug/1	34556	10	K
X	1,2-Dichlorobenzene	ug/1	34536	.1	K
X	1,3-Dichlorobenzene	ug/1	34566	.1	K
X	1,4-Dichlorobenzene	ug/1	34571	.5	K
X	3,3'-Dichlorobenzidine	ug/1	34631	1	K
X	Diethyl Phthalate	ug/1	34336	1	K
X	Dimethyl Phthalate	ug/1	34341	10	K
X	Di-n-butyl Phthalate	ug/1	39110	10	K
X	2,4-Dinitrotolulene	ug/1	34611	.5	K
X	2,6-Dinitrotolulene	ug/1	34626	.1	K
X	Di-n-octyl Phthalate	ug/1	34596	10	K
X	1,2-Diphenylhydrazine	ug/1	34346	10	K
X	Fluoranthene	ug/1	34376	.2	K
X	Fluorene	ug/1	34381	1	K
X	Hexachlorobenzene	ug/1	39700	.9	K
X	Hexachlorobutadiene	ug/1	34391	.07	K
X	Hexachlorocyclopentadiene	ug/1	34386	10	K
X	Hexachloroethane	ug/1	34396	.6	K
X	Indenopyrene	ug/1	34403	.5	K
X	Isophorone	ug/1	34408	.1	K
X	Naphthalene	ug/1	34696	1	K
X	Nitrobenzene	ug/1	34447	.1	K
X	N-Nitrosodimentlyamine	ug/1	34438	10	K
X	N-Nitrosodi-n-propylamine	ug/1	34428	10	K
X	N-Nitrosodiphenylamine	ug/1	34433	.1	K
X	Phenanthrene	ug/1	34461	.5	K
X	Pyrene	ug/1	34469	.1	K
X	1,2,4-Trichlorobenzene	ug/1	34551	.1	K

VALUE CODING RULES AND REMARK CODES ON REVERSE

29 42 55 68 | 33 34 46 47 59 60 72 73 | 40 41 53 54 66 67 79 80

U130

Form VWX-017
4/83

P3

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES
WATER QUALITY MANAGEMENT ELEMENT

GROUND WATER ANALYSIS – MONITORING WELL REPORT

PESTICIDES & PCBs

PLEASE TYPE OR PRINT WITH BALLPOINT PEN

FACILITY NAME: AMERICAN CYANAMID COMPANY - CARTERET LANDFILL | SW ID NO.

LAB NAME: ENVIRONMENTAL TESTING AND CERTIFICATION

	NJPDES NO.	WELL PERMIT NO.	SAMPLE DATE YR. MO. DAY	NJ LAB CERT. NO.	WQM USE
U	NJ 0061611	24-10395-1 (55)	[illegible]	12257	

THE SCHEDULE INDICATED BELOW IS TO BE OBSERVED FROM 0187 (MO. YR.) TO 0389 (MO. YR.)

SUBMIT WITH SIGNED T-VWX-014

SAMPLING MONTHS

Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	ANALYSIS	UNITS	PARAMETER	VALUE	REMARKS
												Aldrin	ug/l	39330	1.9	K
X												alpha-BHC	ug/l	39337	10	K
X												beta-BHC	ug/l	39338	4.3	K
												gamma-BHC (Lindane)	ug/l	39340	10	K
X												delta-BHC	ug/l	34259	3.2	K
X												Chlordane	ug/l	39350	10	K
												4,4'-DDT	ug/l	39370	2.9	K
X												4,4'-DDE	ug/l	39365	3.7	K
X												4,4'-DDD	ug/l		4.3	K
X												Dieldrin	ug/l	39380	2.6	K
X												alpha-Endosulfan	ug/l	34361	10	K
X												beta-Endosulfan	ug/l	34356	10	K
X												Endosulfan Sulfate	ug/l	34351	5.7	K
X												Endrin	ug/l	39390	10	K
X												Endrin Aldehyde	ug/l	34366	10	K
X												Heptachlor	ug/l	39410	1.9	K
X												Heptachlor Epoxide	ug/l	39420	2.3	K
X												PCB-1242	ug/l	39496	37	K
X												PCB-1254	ug/l	39504	37	K
X												PCB-1221	ug/l	39488	31	K
X												PCB-1232	ug/l	39492	31	K
X												PCB-1248	ug/l	39500	37	K
X												PCB-1260	ug/l	39508	37	K
X												PCB-1016	ug/l	34671	37	K
X												Toxaphene	ug/l	39400	10	K

VALUE CODING RULES AND

29 42 55 | 33 34 46 47 59 60 | 40 41 53 54 66 67

U131

Form VWX-015 A

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES
WATER QUALITY MANAGEMENT ELEMENT

GROUND WATER ANALYSIS – MONITORING WELL REPORT

PLEASE TYPE OR PRINT WITH BALLPOINT PEN

FACILITY NAME: AMERICAN CYANAMID COMPANY - CARTERET LANDFILL
SW ID NO.:

LAB NAME: ENVIRONMENTAL TESTING AND CERTIFICATION

R (1)
NJPDES NO. NJ 0061611 (2–8)
WELL PERMIT NO. 24-16394-2 (9–16)
5D
SAMPLE DATE YR. 89 MO. 01 DAY 10 (17–22)
NJ LAB CERT. NO. 12257 (23–27)
WQM USE (28)

RECEIVED
APR 04 1989
DEPT. ENVIRON. PROTECTION

THE SCHEDULE INDICATED BELOW IS TO BE OBSERVED FROM 01 89 (MO. YR.) TO 93 89 (MO. YR.)

SUBMIT WITH SIGNED T-VWX-014

Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	ANALYSIS	UNITS	PARAMETER	VALUE	REMARKS
			X			X			X			Elevation of top of well casing with cap off (as specified in well completion report)	feet MSL: to nearest .01	*	81.07	
												Elevation of original ground level (as specified in well completion report)	feet MSL: to nearest .01		52.3	
X			X			X			X			Depth to water table from top of casing prior to sampling with cap off	feet: to nearest .01	82546	7.29	
			X			X			X			Depth to water table from original ground level prior to sampling	feet: to nearest .01	72019	4.45	
X												Arsenic, Dissolved	UG/L as As	01000	43	
X												Barium, Dissolved	UG/L as Ba	01005	180	
			X			X			X			Biochemical Oxygen Demand - 5 Day	MG/L	00311	25	
X												Cadmium, Dissolved	UG/L as Cd	01025	2.0	K
			X			X			X			Chloride, Dissolved	UG/L as Cl	82295	56500000	
X												Chromium, Dissolved	UG/L as Cr	01030	10	K
X												Chromium, Dissolved, Hexavalent	UG/L as Cr	01220	10	K
			X			X			X			Chemical Oxygen Demand (COD), Dissolved	MG/L	00341	148	
X												Coliform Group	N/100 ML	74056	200	
												Color	Pt - Co	00080		
X			X			X			X			Copper, Dissolved	UG/L as Cu	01040	71.1	J
X												Cyanide, Total	MG/L as CN	00720	7.80	
												Endrin, Total	UG/L	39390		
X												Fluoride, Dissolved	MG/L as F	00950	0.38	
												Gross Alpha, Dissolved	Pc/L	01503		
												Gross Beta, Dissolved	Pc/L	03503		
												Hardness, Total as $CaCO_3$	MG/L	00900		
X			X			X			X			Iron, Dissolved	UG/L as Fe	01046	1800	
X			X			X			X			Lead, Dissolved	UG/L as Pb	01049	7.5	K
												Lindane, Total	UG/L	39782		
X			X			X			X			Manganese, Dissolved	UG/L	01056	113	
X			X			X			X			Mercury, Dissolved	UG/L	71890	10	K

VALUE CODING RULES AND REMARK CODES ON REVERSE

29 33 34 40 41
42 46 47 53 54
55 59 60 66 67
68 72 73 79 80

U32

Form VWX-015 B
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NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES
WATER QUALITY MANAGEMENT ELEMENT

GROUND WATER ANALYSIS – MONITORING WELL REPORT

PLEASE TYPE OR PRINT WITH BALLPOINT PEN

FACILITY NAME: AMERICAN CYANAMID COMPANY - CARTERET LANDFILL

SW ID NO.:

LAB NAME: ENVIRONMENTAL TESTING AND CERTIFICATION

	NJPDES NO.	WELL PERMIT NO.	SAMPLE DATE YR. MO. DAY	NJ LAB CERT. NO.	WQM USE
S	NJ 0061611	24-10394-2	89 01 10	12257	
1	2–8	9–16	17–22	23–27	28

5D

THE SCHEDULE INDICATED BELOW IS TO BE OBSERVED FROM 01 89 (MO. YR.) TO 03 89 (MO. YR.)

SUBMIT WITH SIGNED T-VWX-014

SAMPLING MONTHS

Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	ANALYSIS	UNITS	PARAMETER	VALUE	REMARKS
												Methoxychlor, Total	UG/L	39480		
X			X			X			X			Methylene Blue Active Substances	MG/L	38260	0.09	
X			X			X			X			Nitrogen, Ammonia, Dissolved $NH_3 + NH_4$ as N	MG/L as N	00608	6.3	
X			X			X			X			Nitrogen, Nitrate, Dissolved	MG/L as N	00618	1.0	J
												Odor	T.O.N.	00085		
X			X			X			X			pH	Standard Units	00400	7.77	
X			X			X			X			Phenols, Total Recoverable	UG/L	32730	250	J
												Radium 226, Dissolved	Pc/L	09503		
												Radium 228, Dissolved	Pc/L	81366		
X												Selenium, Dissolved	UG/L	01145	25	K
X												Silver, Dissolved	UG/L	01075	10	K
X			X			X			X			Sodium, Dissolved	MG/L	00930	3290	
X			X			X			X			Sulfate, Dissolved (as SO_4)	MG/L	00946	1170	
X			X			X			X			Total Dissolved Solids (TDS)	PPM	70300	12500	
X			X			X			X			Total Organic Carbon (TOC)	PPM	00680	35.5	
X			X			X			X			Total Organic Halogen (TOX)	UG/L	70353	1450	
												Toxaphene	UG/L	39400		
												Turbidity	NTU	00076		
X			X			X			X			Zinc, Dissolved	UG/L	01090	12	J
												2, 4–D, Total	UG/L	39370		
												2, 4, 5–TP, Total	UG/L	39045		
X			X			X			X			Specific Conductance	UMHO/CM		13000	
												Antimony	ug/L		60	K
												Beryllium	ug/L		1.0	K
												Nickel	ug/L		20	K
												Thallium	ug/L		10	K
												Total Organic Halogen	ug/L		1515	
												Total Organic Carbon	mg/L		35.7	
												Free Cyanide	mg/L		40.05	

VALUE CODING RULES AND REMARK CODES ON REVERSE

29 42 55 68 | 33 34 46 47 59 60 72 73 | 40 41 53 54 66 67 79 80

U133

Form VWX-016
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NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES
WATER QUALITY MANAGEMENT ELEMENT

GROUND WATER ANALYSIS – VOLATILE ORGANICS REPORT

PLEASE TYPE OR PRINT WITH BALLPOINT PEN

FACILITY NAME: AMERICAN CYANAMID COMPANY - CARTERET LANDFILL
SW ID NO.:

LAB NAME: ENVIRONMENTAL TESTING AND CERTIFICATION

	NJPDES NO.	WELL PERMIT NO.	SAMPLE DATE YR. MO. DAY	NJ LAB CERT. NO.	WQM USE
	T (1)	NJ 0 0 6 1 6 1 1 (2–8)	24-163944-2 (9–16)	8 4 0 1 1 0 (17–22)	1 2 2 5 7 (23–27)	(28)

5D

THE SCHEDULE INDICATED BELOW IS TO BE OBSERVED FROM 0 1 8 9 (MO. YR.) TO 0 3 8 9 (MO. YR.)

SUBMIT WITH SIGNED T-VWX-014

SAMPLING MONTHS (Jan. Feb. Mar. Apr. May June July Aug. Sept. Oct. Nov. Dec.)	ANALYSIS	UNITS	PARAMETER	VALUE	REMARKS
X	Acrylonitrile	UG/L	34215	10	K
X	Benzene	UG/L	34030	3.01	
X	Bromoform	UG/L	32104	0.94	K
X	Carbon Tetrachloride	UG/L	32102	0.56	K
X	Chlorobenzene	UG/L	34301	1.2	K
X	Chlorodibromoethane	UG/L	34306	0.62	K
X	Chloroform	UG/L	32106	0.32	K
X	1, 1 - Dichloroethane	UG/L	34496	0.40	J
X	1, 2 - Dichloroethane	UG/L	34531	0.56	K
X	1, 1 - Dichloroethylene	UG/L	34501	0.56	K
X	1, 2 - Dichloropropane	UG/L	34541	1.2	K
X	Ethylbenzene	UG/L	34371	6.3	C
X	Methylene Chloride	UG/L	34423	11.0	3
X	1, 1, 2, 2 - Tetrachloroethane	UG/L	34516	1.4	K
X	Tetrachloroethylene	UG/L	34475	0.5	K
X	Toluene	UG/L	34012	43.6	
X	1, 1, 1 - Trichloroethane	UG/L	34506	0.76	K
X	1, 1, 2 - Trichloroethane	UG/L	34511	1.0	K
X	Trichloroethylene	UG/L	39180	0.38	K
X	Vinyl Chloride	UG/L	39175	2.0	K
X	Acrolein	UG/L	34210	10	K
X	Chloroethane	UG/L	34311	2.55	
X	2 - Chloroethylvinyl Ether	UG/L	34576	2.0	K
X	Dichlorobromomethane	UG/L	32105	0.41	K
X	1, 3 - Dichloropropylene	UG/L	34699	1.0	K
X	Methyl Bromide	UG/L	34413	2.0	K
X	Methyl Chloride	UG/L	34418	2.0	K
X	1, 2 - trans - Dichloroethylene	UG/L	34546	0.32	K
X	1, 2 Dichlorobenzene	UG/L	34536		
X	1, 3 Dichlorobenzene	UG/L	34566		
X	1, 4 Dichlorobenzene	UG/L	34571		

29 33 34 40 41
42 46 47 53 54
55 59 60 66 67
68 72 73 79 80

VALUE CODING RULES AND
REMARK CODES ON REVERSE

U134

Form VWX-017

P1

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES
WATER QUALITY MANAGEMENT ELEMENT

GROUND WATER ANALYSIS – MONITORING WELL REPORT
ACID, BASE/NEUTRAL ORGANIC COMPOUNDS

PLEASE TYPE OR PRINT WITH BALLPOINT PEN

FACILITY NAME: AMERICAN CYANAMID COMPANY - CARTERET LANDFILL

SW ID NO.:

LAB NAME: ENVIRONMENTAL TESTING AND CERTIFICATION

	NJPDES NO.	WELL PERMIT NO.	SAMPLE DATE YR. MO. DAY	NJ LAB CERT. NO.	WQM USE
U	NJ 0061611	24-10394-2 5D	[illegible]	12257	

THE SCHEDULE INDICATED BELOW IS TO BE OBSERVED FROM 01 89 (MO. YR.) TO 03 89 (MO. YR.)

SUBMIT WITH SIGNED T-VWX-014

SAMPLING MONTHS

	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	ANALYSIS	UNITS	PARAMETER	VALUE	REMARKS
												2-Chlorophenol	ug/l	34586	2.5	K
X												2,4-Dichlorophenol	ug/l	34601	2.8	K
												2,4-Dimethylphenol	ug/l	34606	2.5	K
X												2,6-Dinitro-o-cresol	ug/l	77603	25	K
												2,4-Dinitrophenol	ug/l	34616	44	K
												2-Nitrophenol	ug/l	34591	3.8	K
X												4-Nitrophenol	ug/l	34649	2.5	K
												p-Chloro-m-cresol	ug/l	34452	3.2	K
X												Pentachlorophenol	ug/l	39032	3.8	K
X												Phenol	ug/l	34695	1.6	K
												2,4,6-Trichlorophenol	ug/l	34621	2.8	K
X																
X												Acenaphthene	ug/l	34205	2.0	K
X												Acenaphthylene	ug/l	34200	3.7	K
X												Anthracene	ug/l	34220	2.0	K
X												Benzidine	ug/l	39120	46	K
X												Benzanthracene	ug/l	34526	8.2	K
X												Benzopyrene	ug/l	34247	2.6	K
X												3,4-Benzofluoranthene	ug/l	34230	5.1	K
X												Benzoperylene	ug/l	34521	4.2	K
X												Benzofluoranthene	ug/l	34242	2.6	K
X												Bis(2-chloroethoxy)methane	ug/l	34278	5.6	K
X												Bis(2-chloroethyl) Ether	ug/l	34273	6.0	K
X												Bis(2-chlroisopropyl) Ether	ug/l	34283	6.0	K
X												Bis(2-ethylhexyl) Phthalate	ug/l	39100	2.85	J
X												4-Bromophenyl Ether	ug/l	34636	2.0	K
X												Butylbenzyl Phthalate	ug/l	34292	11	K
X												2-Chloronaphthalene	ug/l	34581	2.0	K
X												4-Chlorophenyl Phenyl Ether	ug/l	34641	4.7	K

U135

Form WWX-017
4/83 P2

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES
WATER QUALITY MANAGEMENT ELEMENT

GROUND WATER ANALYSIS – MONITORING WELL REPORT

ACID, BASE/NEUTRAL ORGANIC COMPOUNDS

PLEASE TYPE OR PRINT WITH BALLPOINT PEN

FACILITY NAME	AMERICAN CYANAMID COMPANY - CARTERET LANDFILL	SW ID NO.
LAB NAME	ENVIRONMENTAL TESTING AND CERTIFICATION	

U | NJPDES NO. NJ 0 0 6 1 6 1 1 | WELL PERMIT NO. 2 4 - 1 6 3 9 4 - 2 | SAMPLE DATE YR. 8 9 MO. 1 1 DAY 0 | NJ LAB CERT. NO. 1 2 2 5 7 | WQM USE

5D

THE SCHEDULE INDICATED BELOW IS TO BE OBSERVED FROM 0 1 / 8 9 (MO. YR.) TO 0 3 / 8 9 (MO. YR.)

SUBMIT WITH SIGNED T-WWX-014

SAMPLING MONTHS												ANALYSES	UNITS	PARAMETER	VALUE	REMARKS
X												Chrysene	ug/l	34320		K
X												Dibenzanthracene	ug/l	34556		K
X												1,2-Dichlorobenzene	ug/l	34536		K
X												1,3-Dichlorobenzene	ug/l	34566		K
X												1,4-Dichlorobenzene	ug/l	34571		K
X												3,3'-Dichlorobenzidine	ug/l	34631		K
X												Diethyl Phthalate	ug/l	34336		K
X												Dimethyl Phthalate	ug/l	34341		K
X												Di-n-butyl Phthalate	ug/l	39110		K
X												2,4-Dinitrotolulene	ug/l	34611		K
X												2,6-Dinitrotolulene	ug/l	34626		K
X												Di-n-octyl Phthalate	ug/l	34596		K
X												1,2-Diphenylhydrazine	ug/l	34346		K
X												Fluoranthene	ug/l	34376		K
X												Fluorene	ug/l	34381		J
X												Hexachlorobenzene	ug/l	39700		K
X												Hexachlorobutadiene	ug/l	34391		K
X												Hexachlorocyclopentadiene	ug/l	34386		K
X												Hexachloroethane	ug/l	34396		K
X												Indenopyrene	ug/l	34403		K
X												Isophorone	ug/l	34408		K
X												Naphthalene	ug/l	34696		
X												Nitrobenzene	ug/l	34447		K
X												N-Nitrosodimentlyamine	ug/l	34438		K
X												N-Nitrosodi-n-propylamine	ug/l	34428		K
X												N-Nitrosodiphenylamine	ug/l	34433		K
X												Phenanthrene	ug/l	34461		K
X												Pyrene	ug/l	34469		K
X												1,2,4-Trichlorobenzene	ug/l	34551		K

VALUE CODING RULES AND REMARK CODES ON REVERSE

20 / 42 / 55 / 68 | 33 34 / 46 47 / 59 60 / 72 73 | 40 41 / 53 54 / 66 67 / 79 80

4136

m VWX-017

P3

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES
WATER QUALITY MANAGEMENT ELEMENT

GROUND WATER ANALYSIS – MONITORING WELL REPORT

PESTICIDES & PCBs

ASE TYPE OR PRINT WITH BALLPOINT PEN

ACILITY NAME: AMERICAN CYANAMID COMPANY - CARTERET LANDFILL

SW ID NO.

B NAME: ENVIRONMENTAL TESTING AND CERTIFICATION

	NJPDES NO.	WELL PERMIT NO.	SAMPLE DATE YR. MO. DAY	NJ LAB CERT. NO.	WQM USE
U	NJ 0061611	24-10394-2	89 01 10	12257	
1	2 8	9 16	17 22	23 27	28

5 P

SCHEDULE INDICATED BELOW IS TO BE OBSERVED FROM 01 89 (MO. YR.) TO 03 89 (MO. YR.)

SUBMIT WITH SIGNED T-VWX-014

SAMPLING MONTHS

Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	ANALYSIS	UNITS	PARAMETER	VALUE	REMARKS
										Aldrin	ug/l	39330	2.0	K
										alpha-BHC	ug/l	39337	11	K
										beta-BHC	ug/l	39338	4.4	K
										gamma-BHC (Lindane)	ug/l	39340	11	K
										delta-BHC	ug/l	34259	3.3	K
										Chlordane	ug/l	39350	11	K
										4,4'-DDT	ug/l	39370	2.9	K
										4,4'-DDE	ug/l	39365	5.9	K
										4,4'-DDD	ug/l		4.9	K
										Dieldrin	ug/l	39380	2.[illegible]	K
										alpha-Endosulfan	ug/l	34361	11	K
										beta-Endosulfan	ug/l	34356	11	K
										Endosulfan Sulfate	ug/l	34351	5.9	K
										Endrin	ug/l	39390	11	K
										Endrin Aldehyde	ug/l	34366	11	K
										Heptachlor	ug/l	39410	2.0	K
										Heptachlor Epoxide	ug/l	39420	2.3	K
										PCB-1242	ug/l	39496	38	K
										PCB-1254	ug/l	39504	38	K
										PCB-1221	ug/l	39488	38	K
										PCB-1232	ug/l	39492	38	K
										PCB-1248	ug/l	39500	38	K
										PCB-1260	ug/l	39508	38	K
										PCB-1016	ug/l	34671	38	K
										Toxaphene	ug/l	39400	11	K

UE CODING RULES AND

29 42 55 33 34 46 47 40 41 53 54

U13

Form VWX-015 A
4/83

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES
WATER QUALITY MANAGEMENT ELEMENT

GROUND WATER ANALYSIS – MONITORING WELL REPORT

PLEASE TYPE OR PRINT WITH BALLPOINT PEN

FACILITY NAME: AMERICAN CYANAMID COMPANY - CARTERET LANDFILL
SWIO NO.:
LAB NAME: ENVIRONMENTAL TESTING AND CERTIFICATION

R (1) NJPDES NO. NJ 0 0 6 1 6 1 1 (2–8)
WELL PERMIT NO. 2 4 - 1 6 5 7 - 6 (9–16) IS
SAMPLE DATE YR. | MO. | DAY: 9 0 6 | 1 | 1 6 (17–22)
NJ LAB CERT. NO.: 1 2 2 5 7 (23–27)
WQM USE (28)

THE SCHEDULE INDICATED BELOW IS TO BE OBSERVED FROM MO. YR. TO MO. YR.

RECEIVED
APR 0 3 1990
DEPT OF ENVIRON. PROTECTION
Division of Water Resources
Bureau of Information Systems

SUBMIT WITH SIGNED T-VWX-014

Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	ANALYSIS	UNITS	PARAMETER	VALUE	REMARKS
X			X			X			X			Elevation of top of well casing with cap off (as specified in well completion report)	feet MSL: to nearest .01		8.05	
												Elevation of original ground level (as specified in well completion report)	feet MSL: to nearest .01		5.05	
X			X			X			X			Depth to water table from top of casing prior to sampling with cap off	feet: to nearest .01	82546	5	
X			X			X			X			Depth to water table from original ground level prior to sampling	feet: to nearest .01	72019	2	
X												Arsenic, Dissolved	UG/L as As	01000	10	J
X												Barium, Dissolved	UG/L as Ba	01005	950	
X			X			X			X			Biochemical Oxygen Demand - 5 Day	MG/L	00310	2.0	
X												Cadmium, Dissolved	UG/L as Cd	01025	4.1	
X			X			X			X			Chloride, Dissolved	UG/L as Cl	82295	65500000	
X												Chromium, Dissolved	UG/L as Cr	01030	6.4	J
X												Chromium, Dissolved, Hexavalent	UG/L as Cr	01220	5.0	J
X			X			X			X			Chemical Oxygen Demand (COD), Dissolved	MG/L	00341	150.0	
X												Coliform Group	N/100 ML	74056	1.0	J
												Color	Pt - Co	00080	1	
X			X			X			X			Copper, Dissolved	UG/L as Cu	01040	3.0	
X												Cyanide, Total	MG/L as CN	00720	.0068	
												Endrin, Total	UG/L	39390		
X												Fluoride, Dissolved	MG/L as F	00950	2.6	
												Gross Alpha, Dissolved	Pc/L	01503		
												Gross Beta, Dissolved	Pc/L	03503		
												Hardness, Total as $CaCO_3$	MG/L	00900		
X			X			X			X			Iron, Dissolved	UG/L as Fe	01046	56400000	
X			X			X			X			Lead, Dissolved	UG/L as Pb	01049	7.5	k
												Lindane, Total	UG/L	39782		
X			X			X			X			Manganese, Dissolved	UG/L	01056	1320.0	
X			X			X			X			Mercury, Dissolved	UG/L	71890		0

VALUE CODING RULES AND REMARK CODES ON REVERSE

U138

Form VWX-015 B
4/83

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES
WATER QUALITY MANAGEMENT ELEMENT

GROUND WATER ANALYSIS — MONITORING WELL REPORT

PLEASE TYPE OR PRINT WITH BALLPOINT PEN

FACILITY NAME: AMERICAN CYANAMID COMPANY - CARTERET LANDFILL

SW ID NO.:

LAB NAME: ENVIRONMENTAL TESTING AND CERTIFICATION

	NJPDES NO.	WELL PERMIT NO.	SAMPLE DATE YR. MO. DAY	NJ LAB CERT. NO.	WQM USE
S	NJ 0061611	24-16387-C	90 01 16	12257	
1	2–8	9–16	17–22	23–27	28

15

THE SCHEDULE INDICATED BELOW IS TO BE OBSERVED FROM ___ MO. YR. TO ___ MO. YR.

SUBMIT WITH SIGNED T-VWX-014

SAMPLING MONTHS

Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	ANALYSIS	UNITS	PARAMETER	VALUE	REMARKS
												Methoxychlor, Total	UG/L	39480		
X			X			X			X			Methylene Blue Active Substances	MG/L	38260	.57	
X			X			X			X			Nitrogen, Ammonia, Dissolved $NH_3 + NH_4$ as N	MG/L as N	00608	7.2	
X			X			X			X			Nitrogen, Nitrate Dissolved	MG/L as N	00618	.2	J
												Odor	T.O.N.	00085		
X			X			X			X			pH	Standard Units	00400	5.58	
X			X			X			X			Phenols, Total Recoverable	UG/L	32730	.59	
												Radium 226, Dissolved	Pc/L	09503		
												Radium 228, Dissolved	Pc/L	81366		
X												Selenium, Dissolved	UG/L	01145	100	K
X												Silver, Dissolved	UG/L	01075	25	
X			X			X			X			Sodium, Dissolved	MG/L	00930	4310	
X			X			X			X			Sulfate, Dissolved (as SO_4)	MG/L	00946	132	
X			X			X			X			Total Dissolved Solids (TDS)	PPM	70300	11100	
X			X			X			X			Total Organic Carbon (TOC)	PPM	00680	572	
X			X			X			X			Total Organic Halogen (TOX)	UG/L	70353	3300	
												Toxaphene	UG/L	39400		
												Turbidity	NTU	00076		
X			X			X			X			Zinc, Dissolved	UG/L	01090	43	
												2, 4—D, Total	UG/L	39370		
												2, 4, 5—TP, Total	UG/L	39045		
X			X			X			X			Specific Conductance	UMHO/CM		17500	

VALUE CODING RULES AND
REMARK CODES ON REVERSE

29 33 34 40 41
42 46 47 53 54
55 59 60 66 67
68 72 73 79

U139

Form VWX-016
4/83

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES
WATER QUALITY MANAGEMENT ELEMENT

GROUND WATER ANALYSIS -- VOLATILE ORGANICS REPORT

PLEASE TYPE OR PRINT WITH BALLPOINT PEN

FACILITY NAME: AMERICAN CYANAMID COMPANY - CARTERET LANDFILL
SW IO NO.:

LAB NAME: ENVIRONMENTAL TESTING AND CERTIFICATION

	NJPDES NO.	WELL PERMIT NO.	SAMPLE DATE YR. MO. DAY	NJ LAB CERT. NO.	WQM USE
T	NJ 0061611	24-10387-0	90 11 16	12257	
1	2 8	9 16	17 22	23 27	28

IS

THE SCHEDULE INDICATED BELOW IS TO BE OBSERVED FROM ___ ___ MO. YR. TO ___ ___ MO. YR.

SUBMIT WITH SIGNED T-VWX-014

SAMPLING MONTHS	ANALYSIS	UNITS	PARAMETER	VALUE	REMARKS
Jan. Feb. Mar. Apr. May June July Aug. Sept. Oct. Nov. Dec.					
X	Acrylonitrile	UG/L	34215	5	K
X	Benzene	UG/L	34030	375	J
X	Bromoform	UG/L	32104	470	K
X	Carbon Tetrachloride	UG/L	32102	280	K
X	Chlorobenzene	UG/L	34301	600	K
X	Chlorodibromoethane	UG/L	34306	310	K
X	Chloroform	UG/L	32106	160	K
X	1, 1 - Dichloroethane	UG/L	34496	470	K
X	1, 2 - Dichloroethane	UG/L	34531	280	K
X	1, 1 - Dichloroethylene	UG/L	34501	280	K
X	1, 2 - Dichloropropane	UG/L	34541	600	K
X	Ethylbenzene	UG/L	34371	720	K
X	Methylene Chloride	UG/L	34423	280	K
X	1, 1, 2, 2 - Tetrachloroethane	UG/L	34516	690	K
X	Tetrachloroethylene	UG/L	34475	410	K
X	Toluene	UG/L	34012	6490	
X	1, 1, 1 - Trichloroethane	UG/L	34506	380	K
X	1, 1, 2 - Trichloroethane	UG/L	34511	500	K
X	Trichloroethylene	UG/L	39180	190	K
X	Vinyl Chloride	UG/L	39175	1000	K
X	Acrolein	UG/L	34210	5	K
X	Chloroethane	UG/L	34311	1000	K
X	2 - Chloroethylvinyl Ether	UG/L	34576	1000	K
X	Dichlorobromomethane	UG/L	32105	230	K
X	1, 3 - Dichloropropylene	UG/L	34699	1000	K
X	Methyl Bromide	UG/L	34413	1000	K
X	Methyl Chloride	UG/L	34418	1000	K
X	1, 2 - trans - Dichloroethylene	UG/L	34546	160	K
X	1, 2 Dichlorobenzene	UG/L	34536	100	K
X	1, 3 Dichlorobenzene	UG/L	34566	100	K
X	1, 4 Dichlorobenzene	UG/L	34571	410	K

29 33 34 40 41
42 46 47 53 54
55 59 60 66 67
68 72 73 79 80

VALUE CODING RULES AND
REMARK CODES ON REVERSE

U140

Form VWX-017

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES
WATER QUALITY MANAGEMENT ELEMENT

P1

GROUND WATER ANALYSIS – MONITORING WELL REPORT
ACID, BASE/NEUTRAL ORGANIC COMPOUNDS

PLEASE TYPE OR PRINT WITH BALLPOINT PEN

FACILITY NAME: AMERICAN CYANAMID COMPANY - CARTERET LANDFILL | SW ID NO.

LAB NAME: ENVIRONMENTAL TESTING AND CERTIFICATION

U

NJPDES NO.: NJ 0 0 6 1 6 1 1 (1–9)

WELL PERMIT NO.: 34-163817-0 (10–18)

15

SAMPLE DATE: YR. 19 | MO. 01 | DAY 16 (27–32)

NJ LAB CERT. NO.: 12257 (33–37)

WQM USE: (38)

THE SCHEDULE INDICATED BELOW IS TO BE OBSERVED FROM ___ MO. ___ YR. TO ___ MO. ___ YR.

SUBMIT WITH SIGNED T-VWX-014

SAMPLING MONTHS	ANALYSES	UNITS	PARAMETER	VALUE	REMARKS
	2-Chlorophenol	ug/l	34586	180	K
X	2,4-Dichlorophenol	ug/l	34601	150	K
	2,4-Dimethylphenol	ug/l	34606	56	J
X	2,6-Dinitro-o-cresol	ug/l	77603	1300	K
X	2,4-Dinitrophenol	ug/l	34616	2300	K
	2-Nitrophenol	ug/l	34591	200	K
X	4-Nitrophenol	ug/l	34649	130	K
	p-Chloro-m-cresol	ug/l	34452	160	K
	Pentachlorophenol	ug/l	39032	200	K
X	Phenol	ug/l	34695	82	K
	2,4,6-Trichlorophenol	ug/l	34621	150	K
X					
X	Acenaphthene	ug/l	34205	100	K
	Acenaphthylene	ug/l	34200	190	K
X	Anthracene	ug/l	34220	400	K
	Benzidine	ug/l	39120	2400	K
X	Benzanthracene	ug/l	34526	430	K
X	Benzopyrene	ug/l	34247	140	K
X	3,4-Benzofluoranthene	ug/l	34230	260	K
X	Benzoperylene	ug/l	34521	230	K
X	Benzofluoranthene	ug/l	34242	140	K
X	Bis(2-chloroethoxy)methane	ug/l	34278	290	K
X	Bis(2-chloroethyl) Ether	ug/l	34273	310	K
X	Bis(2-chlroisopropyl) Ether	ug/l	34283	310	K
X	Bis(2-ethylhexyl) Phthalate	ug/l	39100	550	K
X	4-Bromophenyl Ether	ug/l	34636	100	K
X	Butylbenzyl Phthalate	ug/l	34292	550	K
X	2-Chloronaphthalene	ug/l	34581	160	K
X	4-Chlorophenyl Phenyl Ether	ug/l	34641	230	K

20 | 53 54 | 11 141 | 40 41 53 54

Form VWX-017
4/83 P2

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES
WATER QUALITY MANAGEMENT ELEMENT

GROUND WATER ANALYSIS – MONITORING WELL REPORT

ACID, BASE/NEUTRAL ORGANIC COMPOUNDS

PLEASE TYPE OR PRINT WITH BALLPOINT PEN

FACILITY NAME: AMERICAN CYANAMID COMPANY - CARTERET LANDFILL | SW ID NO.:

LAB NAME: ENVIRONMENTAL TESTING AND CERTIFICATION

U | NJPDES NO.: NJ0061611 | WELL PERMIT NO.: 24-14387-0 | SAMPLE DATE YR. 90 MO. 01 DAY 16 | NJ LAB CERT. NO.: 12257 | WQM USE:

IS

THE SCHEDULE INDICATED BELOW IS TO BE OBSERVED FROM ___ MO. ___ YR. TO ___ MO. ___ YR.

RECEIVED
APR 03 1990
DEPT OF ENVIRON PROTECTION
Division Water Resources
Bureau of Information Systems

SUBMIT WITH SIGNED T-VWX-014

SAMPLING MONTHS	ANALYSIS	UNITS	PARAMETER	VALUE	REMARKS
X	Chrysene	ug/1	34520	140	K
X	Dibenzanthracene	ug/1	34556	550	K
X	1,2-Dichlorobenzene	ug/1	34536	100	K
X	1,3-Dichlorobenzene	ug/1	34566	100	K
X	1,4-Dichlorobenzene	ug/1	34571	240	K
X	3,3'-Dichlorobenzidine	ug/1	34631	910	K
X	Diethyl Phthalate	ug/1	34336	550	K
X	Dimethyl Phthalate	ug/1	34341	550	K
X	Di-n-butyl Phthalate	ug/1	39110	550	K
X	2,4-Dinitrotolulene	ug/1	34611	310	K
X	2,6-Dinitrotolulene	ug/1	34626	100	K
X	Di-n-octyl Phthalate	ug/1	34596	550	K
X	1,2-Diphenylhydrazine	ug/1	34346	550	K
X	Fluoranthene	ug/1	34376	120	K
X	Fluorene	ug/1	34381	100	K
X	Hexachlorobenzene	ug/1	39700	100	K
X	Hexachlorobutadiene	ug/1	34391	49	K
X	Hexachlorocyclopentadiene	ug/1	34386	550	K
X	Hexachloroethane	ug/1	34396	88	K
X	Indenopyrene	ug/1	34403	260	K
X	Isophorone	ug/1	34408	107	C
X	Naphthalene	ug/1	34696	88	K
X	Nitrobenzene	ug/1	34447	100	K
X	N-Nitrosodimentlysmine	ug/1	34438	550	K
X	N-Nitrosodi-n-propylamine	ug/1	34428	550	K
X	N-Nitrosodiphenylamine	ug/1	34433	100	K
X	Phenanthrene	ug/1	34461	300	K
X	Pyrene	ug/1	34469	100	K
X	1,2,4-Trichlorobenzene	ug/1	34551	100	K

VALUE CODING RULES AND REMARK CODES ON REVERSE

U142

Form VWX-017
P3

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES
WATER QUALITY MANAGEMENT ELEMENT

GROUND WATER ANALYSIS – MONITORING WELL REPORT

PESTICIDES & PCBs

PLEASE TYPE OR PRINT WITH BALLPOINT PEN

FACILITY NAME: AMERICAN CYANAMID COMPANY - CARTERET LANDFILL
SW ID NO.:
LAB NAME: ENVIRONMENTAL TESTING AND CERTIFICATION

	NJPDES NO.	WELL PERMIT NO.	SAMPLE DATE YR. MO. DAY	NJ LAB CERT. NO.	WQM USE
U	NJ 0061611	24-16387-C	900116	12257	

15

THE SCHEDULE INDICATED BELOW IS TO BE OBSERVED FROM ___ MO. YR. TO ___ MO. YR.

SUBMIT WITH SIGNED T-VWX-014

SAMPLING MONTHS

Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	ANALYSIS	UNITS	PARAMETER	VALUE	REMARKS
X												Aldrin	ug/l	39330	100	K
X												alpha-BHC	ug/l	39337	550	K
X												beta-BHC	ug/l	39338	230	K
X												gamma-BHC (Lindane)	ug/l	39340	550	K
X												delta-BHC	ug/l	34259	170	K
X												Chlordane	ug/l	39350	550	K
X												4,4'-DDT	ug/l	39370	150	K
X												4,4'-DDE	ug/l	39365	310	K
X												4,4'-DDD	ug/l		260	K
X												Dieldrin	ug/l	39380	140	K
X												alpha-Endosulfan	ug/l	34361	550	K
X												beta-Endosulfan	ug/l	34356	550	K
X												Endosulfan Sulfate	ug/l	34351	310	K
X												Endrin	ug/l	39390	550	K
X												Endrin Aldehyde	ug/l	34366	550	K
X												Heptachlor	ug/l	39410	100	K
X												Heptachlor Epoxide	ug/l	39420	120	K
X												PCB-1242	ug/l	39496	2000	K
X												PCB-1254	ug/l	39504	2000	K
X												PCB-1221	ug/l	39488	2000	K
X												PCB-1232	ug/l	39492	2000	K
X												PCB-1248	ug/l	39500	2000	K
X												PCB-1260	ug/l	39508	2000	K
X												PCB-1016	ug/l	34671	2000	K
X												Toxaphene	ug/l	39400	550	K

VALUE CODING RULES AND

U 143

Form VWX-015 A
4/83

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES

WATER QUALITY MANAGEMENT ELEMENT

GROUND WATER ANALYSIS – MONITORING WELL REPORT

PLEASE TYPE OR PRINT WITH BALLPOINT PEN

FACILITY NAME: AMERICAN CYANAMID COMPANY - CARTERET LANDFILL

SW ID NO.:

LAB NAME: ENVIRONMENTAL TESTING AND CERTIFICATION

	NJPDES NO.	WELL PERMIT NO.	SAMPLE DATE YR. / MO. / DAY	NJ LAB CERT. NO.	WQM USE
R	NJ 0061611	24-10386-1	900110	12257	
1	2 – 8	9 – 16	17 – 22	23 – 27	28

1D

THE SCHEDULE INDICATED BELOW IS TO BE OBSERVED FROM ___ MO. YR. TO ___ MO. YR.

RECEIVED
APR 03 1990
DEPT OF ENVIRON. PROTECTION
Division Water Resources
Bureau of Information Systems

SUBMIT WITH SIGNED T-VWX-014

SAMPLING MONTHS

Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	ANALYSIS	UNITS	PARAMETER	VALUE	REMARKS
X			X			X			X			Elevation of top of well casing with cap off (as specified in well completion report)	feet MSL: to nearest .01		8.01	
												Elevation of original ground level (as specified in well completion report)	feet MSL: to nearest .01		5.11	
X			X			X			X			Depth to water table from top of casing prior to sampling with cap off	feet: to nearest .01	82546	4.30	
X			X			X			X			Depth to water table from original ground level prior to sampling	feet: to nearest .01	72019	1.4	
X												Arsenic, Dissolved	UG/L as As	01000	10	K
X												Barium, Dissolved	UG/L as Ba	01005	41	
X			X			X			X			Biochemical Oxygen Demand - 5 Day	MG/L	00310	5	
X												Cadmium, Dissolved	UG/L as Cd	01025	22	
X			X			X			X			Chloride, Dissolved	UG/L as Cl	82295	10000000	
X												Chromium, Dissolved	UG/L as Cr	01030	6.6	J
X												Chromium, Dissolved, Hexavalent	UG/L as Cr	01220	50	J
X			X			X			X			Chemical Oxygen Demand (COD), Dissolved	MG/L	00341	91	
X												Coliform Group	N/100 ML	74056	10	J
												Color	Pt - Co	00080		
X			X			X			X			Copper, Dissolved	UG/L as Cu	01040	32	
X												Cyanide, Total	MG/L as CN	00720	.025	J
												Endrin, Total	UG/L	39390		
X												Fluoride, Dissolved	MG/L as F	00950	.1	J
												Gross Alpha, Dissolved	Pc/L	01503		
												Gross Beta, Dissolved	Pc/L	03503		
												Hardness, Total as $CaCO_3$	MG/L	00900		
X			X			X			X			Iron, Dissolved	UG/L as Fe	01046	39500	
X			X			X			X			Lead, Dissolved	UG/L as Pb	01049	75	K
												Lindane, Total	UG/L	39782		
X			X			X			X			Manganese, Dissolved	UG/L	01058	516	
X			X			X			X			Mercury, Dissolved	UG/L	71890		

29 42 55 68 — 33 34 46 47 59 60 72 73

VALUE CODING RULES AND
REMARK CODES ON REVERSE

1144

Form VWX-015 B
4/83

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES
WATER QUALITY MANAGEMENT ELEMENT

GROUND WATER ANALYSIS – MONITORING WELL REPORT

PLEASE TYPE OR PRINT WITH BALLPOINT PEN

FACILITY NAME: AMERICAN CYANAMID COMPANY - CARTERET LANDFILL

SW ID NO.:

LAB NAME: ENVIRONMENTAL TESTING AND CERTIFICATION

	NJPDES NO.	WELL PERMIT NO.	SAMPLE DATE YR. MO. DAY	NJ LAB CERT. NO.	WQM USE
S	NJ 0061611	24-10386-1	90 01 16	12257	
1	2 8	9 16	17 22	23 27	28

1D

THE SCHEDULE INDICATED BELOW IS TO BE OBSERVED FROM MO. YR. TO MO. YR.

SUBMIT WITH SIGNED T-VWX-014

SAMPLING MONTHS

Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	ANALYSIS	UNITS	PARAMETER	VALUE	REMARKS
												Methoxychlor, Total	UG/L	39480		
X			X			X			X			Methylene Blue Active Substances	MG/L	38260	.23	
X			X			X			X			Nitrogen, Ammonia, Dissolved $NH_3 + NH_4$ as N	MG/L as N	00608	1.1	
X			X			X			X			Nitrogen, Nitrate Dissolved	MG/L as N	00618	.7	
												Odor	T.O.N.	00085		
X			X			X			X			pH	Standard Units	00400	6.31	
X			X			X			X			Phenols, Total Recoverable	UG/L	32730	.1	J
												Radium 226, Dissolved	Pc/L	09503		
												Radium 228, Dissolved	Pc/L	81366		
X												Selenium, Dissolved	UG/L	01145	50	K
X												Silver, Dissolved	UG/L	01075	31	
X			X			X			X			Sodium, Dissolved	MG/L	00930	3180	
X			X			X			X			Sulfate, Dissolved (as SO_4)	MG/L	00946	864	
X			X			X			X			Total Dissolved Solids (TDS)	PPM	70300	19400	
X			X			X			X			Total Organic Carbon (TOC)	PPM	00680	3.6	
X			X			X			X			Total Organic Halogen (TOX)	UG/L	70353	5500	
												Toxaphene	UG/L	39400		
												Turbidity	NTU	00076		
X			X			X			X			Zinc, Dissolved	UG/L	01090	12	J
												2, 4–D, Total	UG/L	39370		
												2, 4, 5–TP, Total	UG/L	39045		
X			X			X			X			Specific Conductance	UMHO/CM		15000	

VALUE CODING RULES AND
REMARK CODES ON REVERSE

29 33 34
42 46 47
55 59 60
68 72 73

U145

Form VWX-016
4/83

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES
WATER QUALITY MANAGEMENT ELEMENT

GROUND WATER ANALYSIS – VOLATILE ORGANICS REPORT

PLEASE TYPE OR PRINT WITH BALLPOINT PEN

FACILITY NAME: AMERICAN CYANAMID COMPANY - CARTERET LANDFILL — SW ID NO.

LAB NAME: ENVIRONMENTAL TESTING AND CERTIFICATION

T (1)	NJPDES NO. (2–8)	WELL PERMIT NO. (9–16)	SAMPLE DATE YR. MO. DAY (17–22)	NJ LAB CERT. NO. (23–27)	WQM USE (28)
	NJ00611611	24-1035-1 (1D)	901116	12257	

THE SCHEDULE INDICATED BELOW IS TO BE OBSERVED FROM ____ (MO. YR.) TO ____ (MO. YR.)

SUBMIT WITH SIGNED T-VWX-014

SAMPLING MONTHS (Jan. Feb. Mar. Apr. May June July Aug. Sept. Oct. Nov. Dec.)	ANALYSIS	UNITS	PARAMETER	VALUE	REMARKS
X	Acrylonitrile	UG/L	34215	5	K
X	Benzene	UG/L	34030	.818	K
X	Bromoform	UG/L	32104	.194	K
X	Carbon Tetrachloride	UG/L	32102	.156	K
X	Chlorobenzene	UG/L	34301	1.2	K
X	Chlorodibromoethane	UG/L	34306	.62	K
X	Chloroform	UG/L	32106	.312	K
X	1, 1 - Dichloroethane	UG/L	34496	.914	K
X	1, 2 - Dichloroethane	UG/L	34531	.56	K
X	1, 1 - Dichloroethylene	UG/L	34501	.56	K
X	1, 2 - Dichloropropane	UG/L	34541	1.2	K
X	Ethylbenzene	UG/L	34371	1.14	K
X	Methylene Chloride	UG/L	34423	.56	K
X	1, 1, 2, 2 - Tetrachloroethane	UG/L	34516	1.4	K
X	Tetrachloroethylene	UG/L	34475	.82	K
X	Toluene	UG/L	34012	1.2	K
X	1, 1, 1 - Trichloroethane	UG/L	34506	.176	K
X	1, 1, 2 - Trichloroethane	UG/L	34511	1	K
X	Trichloroethylene	UG/L	39180	.99.1	
X	Vinyl Chloride	UG/L	39175	2	K
X	Acrolein	UG/L	34210	5	K
X	Chloroethane	UG/L	34311	2	K
X	2 - Chloroethylvinyl Ether	UG/L	34576	2	K
X	Dichlorobromomethane	UG/L	32105	.44	K
X	1, 3 - Dichloropropylene	UG/L	34699	2	K
X	Methyl Bromide	UG/L	34413	2	K
X	Methyl Chloride	UG/L	34418	2	K
X	1, 2 - trans - Dichloroethylene	UG/L	34546	.32	K
X	1, 2 Dichlorobenzene	UG/L	34536	2.1	K
X	1, 3 Dichlorobenzene	UG/L	34568	2.1	K
X	1, 4 Dichlorobenzene	UG/L	34571	4	

29 33 34
42 46 47
56 59 60
68 72 73

VALUE CODING RULES AND
REMARK CODES ON REVERSE

U14

Form VWX-017
P1

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES
WATER QUALITY MANAGEMENT ELEMENT

GROUND WATER ANALYSIS – MONITORING WELL REPORT

ACID, BASE/NEUTRAL ORGANIC COMPOUNDS

PLEASE TYPE OR PRINT WITH BALLPOINT PEN

FACILITY NAME: AMERICAN CYANAMID COMPANY - CARTERET LANDFILL

SW ID NO.:

LAB NAME: ENVIRONMENTAL TESTING AND CERTIFICATION

	NJPDES NO.	WELL PERMIT NO.	SAMPLE DATE YR. MO. DAY	NJ LAB CERT. NO.	WQM USE
U	NJ 0061611	24-12386-1 (1D)	900116	12257	

THE SCHEDULE INDICATED BELOW IS TO BE OBSERVED FROM ___ MO. YR. TO ___ MO. YR.

SUBMIT WITH SIGNED T-VWX-014

SAMPLING MONTHS

ANALYSIS	UNITS	PARAMETER	VALUE	REMARKS
2-Chlorophenol	ug/l	34586	3.6	K
2,4-Dichlorophenol	ug/l	34601	3	K
2,4-Dimethylphenol	ug/l	34606	3	K
2,6-Dinitro-o-cresol	ug/l	77603	26	K
2,4-Dinitrophenol	ug/l	34616	46	K
2-Nitrophenol	ug/l	34591	4	K
4-Nitrophenol	ug/l	34649	2.6	K
p-Chloro-m-cresol	ug/l	34452	3.3	K
Pentachlorophenol	ug/l	39032	4	K
Phenol	ug/l	34695	1.6	K
2,4,6-Trichlorophenol	ug/l	34621	3	K
Acenaphthene	ug/l	34205	2.1	K
Acenaphthylene	ug/l	34200	3.8	K
Anthracene	ug/l	34220	2.1	K
Benzidine	ug/l	39120	48	K
Benzanthracene	ug/l	34526	8.6	K
Benzopyrene	ug/l	34247	2.7	K
3,4-Benzofluoranthene	ug/l	34230	5.3	K
Benzoperylene	ug/l	34521	4.5	K
Benzofluoranthene	ug/l	34242	2.7	K
Bis(2-chloroethoxy)methane	ug/l	34278	5.8	K
Bis(2-chloroethyl) Ether	ug/l	34273	6.3	K
Bis(2-chlroisopropyl) Ether	ug/l	34283	6.3	K
Bis(2-ethylhexyl) Phthalate	ug/l	39100	3.71	J
4-Bromophenyl Ether	ug/l	34636	2.1	
Butylbenzyl Phthalate	ug/l	34292		
2-Chloronaphthalene	ug/l	34581		
4-Chlorophenyl Phenyl Ether	ug/l	34641		

U14

Form VWX-017
4/83 P2

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES
WATER QUALITY MANAGEMENT ELEMENT

GROUND WATER ANALYSIS – MONITORING WELL REPORT

ACID, BASE/NEUTRAL ORGANIC COMPOUNDS

PLEASE TYPE OR PRINT WITH BALLPOINT PEN

FACILITY NAME: AMERICAN CYANAMID COMPANY - CARTERET LANDFILL | SW ID NO.

LAB NAME: ENVIRONMENTAL TESTING AND CERTIFICATION

	NJPDES NO.	WELL PERMIT NO.	SAMPLE DATE YR. MO. DAY	NJ LAB CERT. NO.	WQM USE
U	NJ 0061611	24-10386-1	900116	12257	

1D

THE SCHEDULE INDICATED BELOW IS TO BE OBSERVED FROM ___ MO. YR. TO ___ MO. YR.

SUBMIT WITH SIGNED T-VWX-014

SAMPLING MONTHS

Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	ANALYSIS	UNITS	PARAMETER	VALUE	REMARKS
X												Chrysene	ug/l	34320	2.7	K
X												Dibenzanthracene	ug/l	34556	11	K
X												1,2-Dichlorobenzene	ug/l	34536	2.1	K
X												1,3-Dichlorobenzene	ug/l	34566	2.1	K
X												1,4-Dichlorobenzene	ug/l	34571	4.8	K
X												3,3'-Dichlorobenzidine	ug/l	34631	18	K
X												Diethyl Phthalate	ug/l	34336	11	K
X												Dimethyl Phthalate	ug/l	34341	11	K
X												Di-n-butyl Phthalate	ug/l	39110	11	K
X												2,4-Dinitrotolulene	ug/l	34611	6.3	K
X												2,6-Dinitrotolulene	ug/l	34626	2.1	K
X												Di-n-octyl Phthalate	ug/l	34596	11	K
X												1,2-Diphenylhydrazine	ug/l	34346	11	K
X												Fluoranthene	ug/l	34376	2.4	K
X												Fluorene	ug/l	34381	2.1	K
X												Hexachlorobenzene	ug/l	39700	2.1	K
X												Hexachlorobutadiene	ug/l	34391	.99	K
X												Hexachlorocyclopentadiene	ug/l	34386	11	K
X												Hexachloroethane	ug/l	34396	1.8	K
X												Indenopyrene	ug/l	34403	5.2	K
X												Isophorone	ug/l	34408	2.4	K
X												Naphthalene	ug/l	34696	1.8	K
X												Nitrobenzene	ug/l	34447	2.1	K
X												N-Nitrosodimentlyamine	ug/l	34438	11	K
X												N-Nitrosodi-n-propylamine	ug/l	34428	11	K
X												N-Nitrosodiphenylamine	ug/l	34433	2.1	
X												Phenanthrene	ug/l	34461	5.	
X												Pyrene	ug/l	34469		
X												1,2,4-Trichlorobenzene	ug/l	34551		

VALUE CODING RULES AND
REMARK CODES ON REVERSE

Form VWX-017
4/83
P3

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES
WATER QUALITY MANAGEMENT ELEMENT

GROUND WATER ANALYSIS — MONITORING WELL REPORT

PESTICIDES & PCBs

PLEASE TYPE OR PRINT WITH BALLPOINT PEN

FACILITY NAME	AMERICAN CYANAMID COMPANY - CARTERET LANDFILL	SW ID NO.
LAB NAME	ENVIRONMENTAL TESTING AND CERTIFICATION	

	NJPDES NO.	WELL PERMIT NO.	SAMPLE DATE YR. MO. DAY	NJ LAB CERT. NO.	WQM USE
U	NJ 0061611	24-10386-1 (1D)	90 01 16	12257	

THE SCHEDULE INDICATED BELOW IS TO BE OBSERVED FROM ___ MO. YR. TO ___ MO. YR.

SUBMIT WITH SIGNED T-VWX-014

SAMPLING MONTHS

Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	ANALYSIS	UNITS	PARAMETER	VALUE	REMARKS
X												Aldrin	ug/l	39330	2.1	K
X												alpha-BHC	ug/l	39337	11	K
X												beta-BHC	ug/l	39338	4.6	K
X												gamma-BHC (Lindane)	ug/l	39340	11	K
X												delta-BHC	ug/l	34259	3.4	K
X												Chlordane	ug/l	39350	11	K
X												4,4'-DDT	ug/l	39370	3.1	K
X												4,4'-DDE	ug/l	39365	6.2	K
X												4,4'-DDD	ug/l		5.2	K
X												Dieldrin	ug/l	39380	2.7	K
X												alpha-Endosulfan	ug/l	34361	11	K
X												beta-Endosulfan	ug/l	34356	11	K
X												Endosulfan Sulfate	ug/l	34351	6.2	K
X												Endrin	ug/l	39390	11	K
X												Endrin Aldehyde	ug/l	34366	11	K
X												Heptachlor	ug/l	39410	2.1	K
X												Heptachlor Epoxide	ug/l	39420	2.4	K
X												PCB-1242	ug/l	39496	40	K
X												PCB-1254	ug/l	39504	40	K
X												PCB-1221	ug/l	39488	40	K
X												PCB-1232	ug/l	39492	40	K
X												PCB-1248	ug/l	39500	40	K
X												PCB-1260	ug/l	39508	40	K
X												PCB-1016	ug/l	34671	40	K
X												Toxaphene	ug/l	39400	11	K

Form VWX-015 A
4/83

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES
WATER QUALITY MANAGEMENT ELEMENT

GROUND WATER ANALYSIS – MONITORING WELL REPORT

PLEASE TYPE OR PRINT WITH BALLPOINT PEN

FACILITY NAME: AMERICAN CYANAMID COMPANY - CARTERET LANDFILL — SW ID NO.

LAB NAME: ENVIRONMENTAL TESTING AND CERTIFICATION

R (1)	NJPDES NO. (2–8)	WELL PERMIT NO. (9–16)	SAMPLE DATE YR. MO. DAY (17–22)	NJ LAB CERT. NO. (23–27)	WQM USE (28)
	NJ 0 0 6 1 6 1 1	2 4 - 1 5 3 1 7 - 6 (75)	9 0 0 1 1 0	1 2 2 5 7	

THE SCHEDULE INDICATED BELOW IS TO BE OBSERVED FROM ___ (MO. YR.) TO ___ (MO. YR.)

SUBMIT WITH SIGNED T-VWX-014

Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	ANALYSIS	UNITS	PARAMETER	VALUE	REMARKS
X			X			X			X			Elevation of top of well casing with cap off (as specified in well completion report)	feet MSL: to nearest .01		8.88	
												Elevation of original ground level (as specified in well completion report)	feet MSL: to nearest .01		6.32	
X			X			X			X			Depth to water table from top of casing prior to sampling with cap off	feet: to nearest .01	82546	5.12	
X			X			X			X			Depth to water table from original ground level prior to sampling	feet: to nearest .01	72019	2.64	
X												Arsenic, Dissolved	UG/L as As	01000	7.4	J
X												Barium, Dissolved	UG/L as Ba	01005	1.3	J
X			X			X			X			Biochemical Oxygen Demand - 5 Day	MG/L	00311 0	9.1	
X												Cadmium, Dissolved	UG/L as Cd	01025	1.5	
X			X			X			X			Chloride, Dissolved	UG/L as Cl	82295	77500	
X												Chromium, Dissolved	UG/L as Cr	01030	5.9	J
X												Chromium, Dissolved, Hexavalent	UG/L as Cr	01220	2.0	J
X			X			X			X			Chemical Oxygen Demand (COD), Dissolved	MG/L	00341	19.9	
X												Coliform Group	N/100 ML	74056	14	J
												Color	Pt - Co	00080		
X			X			X			X			Copper, Dissolved	UG/L as Cu	01040	.121	
X												Cyanide, Total	MG/L as CN	00720	.116	
												Endrin, Total	UG/L	39390		
X												Fluoride, Dissolved	MG/L as F	00950	8.2	
												Gross Alpha, Dissolved	Pc/L	01503		
												Gross Beta, Dissolved	Pc/L	03503		
												Hardness, Total as $CaCO_3$	MG/L	00900		
X			X			X			X			Iron, Dissolved	UG/L as Fe	01046	2900	
X			X			X			X			Lead, Dissolved	UG/L as Pb	01049	75	K
												Lindane, Total	UG/L	39782		
X			X			X			X			Manganese, Dissolved	UG/L	01056	33	
X			X			X			X			Mercury, Dissolved	UG/L	71890	.4	K

29 33 34 40 4
42 46 47 53 5
55 59 60 66 6
68 72 73 79 8

VALUE CODING RULES AND
REMARK CODES ON REVERSE

11150

Form VWX-015 B
4/83

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES
WATER QUALITY MANAGEMENT ELEMENT

GROUND WATER ANALYSIS – MONITORING WELL REPORT

PLEASE TYPE OR PRINT WITH BALLPOINT PEN

FACILITY NAME: AMERICAN CYANAMID COMPANY - CARTERET LANDFILL
SW ID NO.:

LAB NAME: ENVIRONMENTAL TESTING AND CERTIFICATION

	NJPDES NO.	WELL PERMIT NO.	SAMPLE DATE YR. MO. DAY	NJ LAB CERT. NO.	WQM USE
S	NJ 0061611	24-10389-6	90 01 16	12257	
1	2 8	9 16	17 22	23 27	28

25

THE SCHEDULE INDICATED BELOW IS TO BE OBSERVED FROM ___ MO. YR. TO ___ MO. YR.

SUBMIT WITH SIGNED T-VWX-014

SAMPLING MONTHS

Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	ANALYSIS	UNITS	PARAMETER	VALUE	REMARKS
												Methoxychlor, Total	UG/L	39480		
X			X			X			X			Methylene Blue Active Substances	MG/L	38260	2	
X			X			X			X			Nitrogen, Ammonia, Dissolved $NH_3 + NH_4$ as N	MG/L as N	00608	180	
X			X			X			X			Nitrogen, Nitrate Dissolved	MG/L as N	00618	.2	J
												Odor	T.O.N.	00085		
X			X			X			X			pH	Standard Units	00400	8.23	
X			X			X			X			Phenols, Total Recoverable	UG/L	32730	100	J
												Radium 226, Dissolved	Pc/L	09503		
												Radium 228, Dissolved	Pc/L	81366		
X												Selenium, Dissolved	UG/L	01145	25	K
X												Silver, Dissolved	UG/L	01075	21	
X			X			X			X			Sodium, Dissolved	MG/L	00930	4160	
X			X			X			X			Sulfate, Dissolved (as SO_4)	MG/L	00946	3650	
X			X			X			X			Total Dissolved Solids (TDS)	PPM	70300	17300	
X			X			X			X			Total Organic Carbon (TOC)	PPM	00680	12	
X			X			X			X			Total Organic Halogen (TOX)	UG/L	70353	2100	
												Toxaphene	UG/L	39400		
												Turbidity	NTU	00076		
X			X			X			X			Zinc, Dissolved	UG/L	01090	20	K
												2, 4—D, Total	UG/L	39370		
												2, 4, 6—TP, Total	UG/L	39045		
X			X			X			X			Specific Conductance	UMHO/CM		16000	

VALUE CODING RULES AND
REMARK CODES ON REVERSE

29 33 34 40 41
42 46 47 53 54
56 59 60 66 67
68 72 73 79 80

11151

Form VWX-016
4/83

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES
WATER QUALITY MANAGEMENT ELEMENT

GROUND WATER ANALYSIS – VOLATILE ORGANICS REPORT

PLEASE TYPE OR PRINT WITH BALLPOINT PEN

FACILITY NAME: AMERICAN CYANAMID COMPANY - CARTERET LANDFILL — SW ID NO.

LAB NAME: ENVIRONMENTAL TESTING AND CERTIFICATION

T (1) | NJPDES NO. (2–8): NJ 0 0 6 1 6 1 1 | WELL PERMIT NO. (9–16): 2 4 - A C 3 8 7 - 6 2S | SAMPLE DATE YR. MO. DAY (17–22): 9 0 0 1 1 6 | NJ LAB CERT. NO. (23–27): 1 2 2 5 7 | WQM USE (28):

THE SCHEDULE INDICATED BELOW IS TO BE OBSERVED FROM MO. YR. TO MO. YR.

SUBMIT WITH SIGNED T-VWX-014

SAMPLING MONTHS												ANALYSIS	UNITS	PARAMETER	VALUE	REMARKS
Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.					
X												Acrylonitrile	UG/L	34215	5	K
X												Benzene	UG/L	34030	.498	J
X												Bromoform	UG/L	32104	.194	K
X												Carbon Tetrachloride	UG/L	32102	.56	K
X												Chlorobenzene	UG/L	34301	1.2	K
X												Chlorodibromoethane	UG/L	34306	.062	K
X												Chloroform	UG/L	32106	.32	K
X												1, 1 - Dichloroethane	UG/L	34496	.494	K
X												1, 2 - Dichloroethane	UG/L	34531	.56	K
X												1, 1 - Dichloroethylene	UG/L	34501	.56	K
X												1, 2 - Dichloropropane	UG/L	34541	1.2	K
X												Ethylbenzene	UG/L	34371	1.4	K
X												Methylene Chloride	UG/L	34423	2.22	
X												1, 1, 2, 2 - Tetrachloroethane	UG/L	34516	1.4	K
X												Tetrachloroethylene	UG/L	34475	.82	K
X												Toluene	UG/L	34012	1.2	J
X												1, 1, 1 - Trichloroethane	UG/L	34506	.76	K
X												1, 1, 2 - Trichloroethane	UG/L	34511	1	K
X												Trichloroethylene	UG/L	39180	.38	K
X												Vinyl Chloride	UG/L	39175	2	K
X												Acrolein	UG/L	34210	5	K
X												Chloroethane	UG/L	34311	2	K
X												2 - Chloroethylvinyl Ether	UG/L	34576	12	K
X												Dichlorobromomethane	UG/L	32105	.44	K
X												1, 3 - Dichloropropylene	UG/L	34699	2	K
X												Methyl Bromide	UG/L	34411	2	K
X												Methyl Chloride	UG/L	34418	2	K
X												1, 2 - trans - Dichloroethylene	UG/L	34546	.32	K
X												1, 2 Dichlorobenzene	UG/L	34536	1.7	K
X												1, 3 Dichlorobenzene	UG/L	34566	9.7	K
X												1, 4 Dichlorobenzene	UG/L	34571	21	K

29 42 55 68 — 33 34 46 47 59 60 72 73 — 40 41 53 54 66 67 79 80

VALUE CODING RULES AND
REMARK CODES ON REVERSE

Form VWX-017
4/83

P1

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES
WATER QUALITY MANAGEMENT ELEMENT

GROUND WATER ANALYSIS – MONITORING WELL REPORT

ACID, BASE/NEUTRAL ORGANIC COMPOUNDS

PLEASE TYPE OR PRINT WITH BALLPOINT PEN

FACILITY NAME	AMERICAN CYANAMID COMPANY - CARTERET LANDFILL	SW ID NO.
LAB NAME	ENVIRONMENTAL TESTING AND CERTIFICATION	

	NJPDES NO.	WELL PERMIT NO.	SAMPLE DATE YR. MO. DAY	NJ LAB CERT. NO.	WQM USE
U	NJ 0061611	24-10369-6 25	96 01 16	12257	

THE SCHEDULE INDICATED BELOW IS TO BE OBSERVED FROM ___ MO. YR. TO ___ MO. YR.

SUBMIT WITH SIGNED T-VWX-014

SAMPLING MONTHS

Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	ANALYSIS	UNITS	PARAMETER	VALUE	REMARKS
X												2-Chlorophenol	ug/l	34586	17	K
X												2,4-Dichlorophenol	ug/l	34601	14	K
X												2,4-Dimethylphenol	ug/l	34606	14	K
X												2,6-Dinitro-o-cresol	ug/l	77603	120	K
X												2,4-Dinitrophenol	ug/l	34616	210	K
X												2-Nitrophenol	ug/l	34591	18	K
X												4-Nitrophenol	ug/l	34649	12	K
X												p-Chloro-m-cresol	ug/l	34452	15	K
X												Pentachlorophenol	ug/l	39032	18	K
X												Phenol	ug/l	34695	7.7	K
X												2,4,6-Trichlorophenol	ug/l	34621	14	K
X																
X												Acenaphthene	ug/l	34205	9.7	K
X												Acenaphthylene	ug/l	34200	18	K
X												Anthracene	ug/l	34220	9.7	K
X												Benzidine	ug/l	39120	220	K
X												Benzanthracene	ug/l	34526	40	K
X												Benzopyrene	ug/l	34247	13	K
X												3,4-Benzofluoranthene	ug/l	34230	24	K
X												Benzoperylene	ug/l	34521	21	K
X												Benzofluoranthene	ug/l	34242	13	K
X												Bis(2-chloroethoxy)methane	ug/l	34278	27	K
X												Bis(2-chloroethyl) Ether	ug/l	34273	29	K
X												Bis(2-chlroisopropyl) Ether	ug/l	34283	29	K
X												Bis(2-ethylhexyl) Phthalate	ug/l	39100	51	K
X												4-Bromophenyl Ether	ug/l	34636	9.7	K
X												Butylbenzyl Phthalate	ug/l	34292	51	K
X												2-Chloronaphthalene	ug/l	34581	9.7	K
X												4-Chlorophenyl Phenyl Ether	ug/l	34641	21	K

Form VWX-017
4/83 P2

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES
WATER QUALITY MANAGEMENT ELEMENT

GROUND WATER ANALYSIS — MONITORING WELL REPORT

ACID, BASE/NEUTRAL ORGANIC COMPOUNDS

PLEASE TYPE OR PRINT WITH BALLPOINT PEN

FACILITY NAME	AMERICAN CYANAMID COMPANY - CARTERET LANDFILL	SW ID NO.
LAB NAME	ENVIRONMENTAL TESTING AND CERTIFICATION	

	NJPDES NO.	WELL PERMIT NO.	SAMPLE DATE YR. MO. DAY	NJ LAB CERT. NO.	WQM USE
U	NJ 0061611	24-10387-6	900116	12257	

25

THE SCHEDULE INDICATED BELOW IS TO BE OBSERVED FROM ___ MO. YR. TO ___ MO. YR.

SUBMIT WITH SIGNED T-VWX-014

SAMPLING MONTHS

Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	ANALYSIS	UNITS	PARAMETER	VALUE	REMARKS
X												Chrysene	ug/l	34320	13	K
X												Dibenzanthracene	ug/l	34556	51	K
X												1,2-Dichlorobenzene	ug/l	34536	9.7	K
X												1,3-Dichlorobenzene	ug/l	34566	9.7	K
X												1,4-Dichlorobenzene	ug/l	34571	22	K
X												3,3'-Dichlorobenzidine	ug/l	34631	84	K
X												Diethyl Phthalate	ug/l	34336	51	K
X												Dimethyl Phthalate	ug/l	34341	51	K
X												Di-n-butyl Phthalate	ug/l	39110	51	K
X												2,4-Dinitrotolulene	ug/l	34611	29	K
X												2,6-Dinitrotolulene	ug/l	34626	9.7	K
X												Di-n-octyl Phthalate	ug/l	34596	51	K
X												1,2-Diphenylhydrazine	ug/l	34346	51	K
X												Fluoranthene	ug/l	34376	11	K
X												Fluorene	ug/l	34381	9.7	K
X												Hexachlorobenzene	ug/l	39700	9.7	K
X												Hexachlorobutadiene	ug/l	34391	4.6	K
X												Hexachlorocyclopentadiene	ug/l	34386	51	K
X												Hexachloroethane	ug/l	34396	8.2	K
X												Indenopyrene	ug/l	34403	24	K
X												Isophorone	ug/l	34408	11	K
X												Naphthalene	ug/l	34696	8.2	K
X												Nitrobenzene	ug/l	34447	9.7	K
X												N-Nitrosodimentlyamine	ug/l	34438	51	K
X												N-Nitrosodi-n-propylamine	ug/l	34428	51	K
X												N-Nitrosodiphenylamine	ug/l	34433	9.7	K
X												Phenanthrene	ug/l	34461	28	K
X												Pyrene	ug/l	34469	9.7	K
X												1,2,4-Trichlorobenzene	ug/l	34551	9.7	K

VALUE CODING RULES AND
REMARK CODES ON REVERSE

1,154

Form VWX-017
4/80

P3

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES
WATER QUALITY MANAGEMENT ELEMENT

GROUND WATER ANALYSIS – MONITORING WELL REPORT

PESTICIDES & PCBs

PLEASE TYPE OR PRINT WITH BALLPOINT PEN

FACILITY NAME	AMERICAN CYANAMID COMPANY - CARTERET LANDFILL	SW ID NO.
LAB NAME	ENVIRONMENTAL TESTING AND CERTIFICATION	

	NJPDES NO.	WELL PERMIT NO.	SAMPLE DATE YR. MO. DAY	NJ LAB CERT. NO.	WQM USE
U	NJ 0061611	24-16389-6	90 01 16	12257	

2S

THE SCHEDULE INDICATED BELOW IS TO BE OBSERVED FROM ___ MO. YR. TO ___ MO. YR.

RECEIVED
APR 03 1990
DEPT OF ENVIRON. PROTECTION
Division Water Resources
Bureau of Information Systems

SUBMIT WITH SIGNED T-VWX-014

SAMPLING MONTHS

Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	ANALYSIS	UNITS	PARAMETER	VALUE	REMARKS
X												Aldrin	ug/l	39330	9.7	K
X												alpha-BHC	ug/l	39337	51	K
X												beta-BHC	ug/l	39338	21	K
X												gamma-BHC (Lindane)	ug/l	39340	51	K
X												delta-BHC	ug/l	34259	16	K
X												Chlordane	ug/l	39350	51	K
X												4,4'-DDT	ug/l	39370	14	K
X												4,4'-DDE	ug/l	39365	29	K
X												4,4'-DDD	ug/l		24	K
X												Dieldrin	ug/l	39380	13	K
X												alpha-Endosulfan	ug/l	34361	51	K
X												beta-Endosulfan	ug/l	34356	51	K
X												Endosulfan Sulfate	ug/l	34351	29	K
X												Endrin	ug/l	39390	51	K
X												Endrin Aldehyde	ug/l	34366	51	K
X												Heptachlor	ug/l	39410	9.7	K
X												Heptachlor Epoxide	ug/l	39420	11	K
X												PCB-1242	ug/l	39496	180	K
X												PCB-1254	ug/l	39504	180	K
X												PCB-1221	ug/l	39488	180	K
X												PCB-1232	ug/l	39492	180	K
X												PCB-1248	ug/l	39500	180	K
X												PCB-1260	ug/l	39508	180	K
X												PCB-1016	ug/l	34671	180	K
X												Toxaphene	ug/l	39400	51	K

VALUE CODING RULES AND

29 48 33 34 46 47 11155 40 41 52 54

Form VWX-015 A
4/83

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES

WATER QUALITY MANAGEMENT ELEMENT

GROUND WATER ANALYSIS — MONITORING WELL REPORT

PLEASE TYPE OR PRINT WITH BALLPOINT PEN

FACILITY NAME: AMERICAN CYANAMID COMPANY - CARTERET LANDFILL

SW ID NO.:

LAB NAME: ENVIRONMENTAL TESTING AND CERTIFICATION

	NJPDES NO.	WELL PERMIT NO.	SAMPLE DATE YR. / MO. / DAY	NJ LAB CERT. NO.	WQM USE
R	NJ 0061611	24-10388-8	900116	12257	
1	2 8	9 16	17 22	23 27	28

2D

THE SCHEDULE INDICATED BELOW IS TO BE OBSERVED FROM ___ MO. ___ YR. TO ___ MO. ___ YR.

SUBMIT WITH SIGNED T-VWX-014

SAMPLING MONTHS

Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	ANALYSIS	UNITS	PARAMETER	VALUE
X			X			X			X			Elevation of top of well casing with cap off (as specified in well completion report)	feet MSL: to nearest .01		8.82
												Elevation of original ground level (as specified in well completion report)	feet MSL: to nearest .01		6.28
X			X			X			X			Depth to water table from top of casing prior to sampling with cap off	feet: to nearest .01	82546	4.95
X			X			X			X			Depth to water table from original ground level prior to sampling	feet: to nearest .01	72019	2.41
X												Arsenic, Dissolved	UG/L as As	01000	20
X												Barium, Dissolved	UG/L as Ba	01005	40
X			X			X			X			Biochemical Oxygen Demand - 5 Day	MG/L	00310	85
X												Cadmium, Dissolved	UG/L as Cd	01025	17
X			X			X			X			Chloride, Dissolved	UG/L as Cl	82295	66400000
X												Chromium, Dissolved	UG/L as Cr	01030	4.9
X												Chromium, Dissolved, Hexavalent	UG/L as Cr	01220	50
X			X			X			X			Chemical Oxygen Demand (COD), Dissolved	MG/L	00341	154
X												Coliform Group	N/100 ML	74056	10
												Color	Pt - Co	00080	
X			X			X			X			Copper, Dissolved	UG/L as Cu	01040	22
X												Cyanide, Total	MG/L as CN	00720	3.4
												Endrin, Total	UG/L	39390	
X												Fluoride, Dissolved	MG/L as F	00950	2.9
												Gross Alpha, Dissolved	Pc/L	01503	
												Gross Beta, Dissolved	Pc/L	03503	
												Hardness, Total as $CaCO_3$	MG/L	00900	
X			X			X			X			Iron, Dissolved	UG/L as Fe	01046	9600
X			X			X			X			Lead, Dissolved	UG/L as Pb	01049	75
												Lindane, Total	UG/L	39782	
X			X			X			X			Manganese, Dissolved	UG/L	01056	1020
X			X			X			X			Mercury, Dissolved	UG/L	71890	.4

VALUE CODING RULES AND
REMARK CODES ON REVERSE

29 33 34 40
42 46 47 53
55 59 60 66
68 72 73 79

1156

Form VWX-015 B
4/83

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES
WATER QUALITY MANAGEMENT ELEMENT

GROUND WATER ANALYSIS – MONITORING WELL REPORT

PLEASE TYPE OR PRINT WITH BALLPOINT PEN

FACILITY NAME: AMERICAN CYANAMID COMPANY - CARTERET LANDFILL
SW ID NO.:
LAB NAME: ENVIRONMENTAL TESTING AND CERTIFICATION

	NJPDES NO.	WELL PERMIT NO.	SAMPLE DATE YR. MO. DAY	NJ LAB CERT. NO.	WQM USE
S	NJ 0061611	24-10382-2 (2D)	900116	12257	
1	2–8	9–16	17–22	23–27	28

THE SCHEDULE INDICATED BELOW IS TO BE OBSERVED FROM MO. YR. TO MO. YR.

SUBMIT WITH SIGNED T-VWX-014

SAMPLING MONTHS

Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	ANALYSIS	UNITS	PARAMETER	VALUE	REMARKS
												Methoxychlor, Total	UG/L	39480		
X			X			X			X			Methylene Blue Active Substances	MG/L	38260	.59	
X			X			X			X			Nitrogen, Ammonia, Dissolved $NH_3 + NH_4$ as N	MG/L as N	00608	48	
X			X			X			X			Nitrogen, Nitrate, Dissolved	MG/L as N	00618	.5	J
												Odor	T.O.N.	00085		
X			X			X			X			pH	Standard Units	00400	6.33	
X			X			X			X			Phenols, Total Recoverable	UG/L	32730	.1	J
												Radium 226, Dissolved	Pc/L	09503		
												Radium 228, Dissolved	Pc/L	81366		
X												Selenium, Dissolved	UG/L	01145	25	K
X												Silver, Dissolved	UG/L	01075	22	
X			X			X			X			Sodium, Dissolved	MG/L	00930	5410	
X			X			X			X			Sulfate, Dissolved (as SO_4)	MG/L	00946	1490	
X			X			X			X			Total Dissolved Solids (TDS)	PPM	70300	16700	
X			X			X			X			Total Organic Carbon (TOC)	PPM	00680	11.2	
X			X			X			X			Total Organic Halogen (TOX)	UG/L	70353	4800	
												Toxaphene	UG/L	39400		
												Turbidity	NTU	00076		
X			X			X			X			Zinc, Dissolved	UG/L	01090	9.9	J
												2, 4–D, Total	UG/L	39370		
												2, 4, 5–TP, Total	UG/L	39045		
X			X			X			X			Specific Conductance	UMHO/CM		19000	

VALUE CODING RULES AND
REMARK CODES ON REVERSE

29 33 34 40 41
42 46 47 53 54
55 59 60 66 67
68 72 73 79 80

1157

Form VWX-016
4/83

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES
WATER QUALITY MANAGEMENT ELEMENT

GROUND WATER ANALYSIS – VOLATILE ORGANICS REPORT

PLEASE TYPE OR PRINT WITH BALLPOINT PEN

FACILITY NAME: AMERICAN CYANAMID COMPANY - CARTERET LANDFILL
SW ID NO.:

LAB NAME: ENVIRONMENTAL TESTING AND CERTIFICATION

	NJPDES NO.	WELL PERMIT NO.	SAMPLE DATE YR. MO. DAY	NJ LAB CERT. NO.	WQM USE
T	NJ 0061611	24-12322-2	900116	12257	
1	2 8	9 16	17 22	23 27	28

2D

THE SCHEDULE INDICATED BELOW IS TO BE OBSERVED FROM ___ MO. YR. TO ___ MO. YR.

SUBMIT WITH SIGNED T-VWX-014

SAMPLING MONTHS

Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	ANALYSIS	UNITS	PARAMETER	VALUE	REMARKS
X												Acrylonitrile	UG/L	34215	5	K
X												Benzene	UG/L	34030	.88	K
X												Bromoform	UG/L	32104	.94	K
X												Carbon Tetrachloride	UG/L	32102	.56	K
X												Chlorobenzene	UG/L	34301	1.2	K
X												Chlorodibromoethane	UG/L	34306	.62	K
X												Chloroform	UG/L	32106	.32	K
X												1, 1 - Dichloroethane	UG/L	34496	.94	K
X												1, 2 - Dichloroethane	UG/L	34531	.56	K
X												1, 1 - Dichloroethylene	UG/L	34501	.56	K
X												1, 2 - Dichloropropane	UG/L	34541	1.2	K
X												Ethylbenzene	UG/L	34371	1.4	K
X												Methylene Chloride	UG/L	34423	.56	K
X												1, 1, 2, 2 - Tetrachloroethane	UG/L	34516	1.4	K
X												Tetrachloroethylene	UG/L	34475	.82	K
X												Toluene	UG/L	34012	1.2	K
X												1, 1, 1 - Trichloroethane	UG/L	34506	.76	K
X												1, 1, 2 - Trichloroethane	UG/L	34511	1	K
X												Trichloroethylene	UG/L	39180	.38	K
X												Vinyl Chloride	UG/L	39175	2	K
X												Acrolein	UG/L	34210	5	K
X												Chloroethane	UG/L	34311	2	K
X												2 - Chloroethylvinyl Ether	UG/L	34576	2	K
X												Dichlorobromomethane	UG/L	32105	.44	K
X												1, 3 - Dichloropropylene	UG/L	34699	2	K
X												Methyl Bromide	UG/L	34413	2	K
X												Methyl Chloride	UG/L	34418	2	K
X												1, 2 - trans - Dichloroethylene	UG/L	34546	.32	K
X												1, 2 Dichlorobenzene	UG/L	34536	9.5	K
X												1, 3 Dichlorobenzene	UG/L	34566	9.5	K
X												1, 4 Dichlorobenzene	UG/L	34571	22	K

29 42 55 68 — 33 34 46 47 59 60 72 73 — 40 41 53 54 66 67 79 80

VALUE CODING RULES AND
REMARK CODES ON REVERSE

U158

Form VWX-017
4/83

P1

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES
WATER QUALITY MANAGEMENT ELEMENT

GROUND WATER ANALYSIS – MONITORING WELL REPORT
ACID, BASE/NEUTRAL ORGANIC COMPOUNDS

PLEASE TYPE OR PRINT WITH BALLPOINT PEN

FACILITY NAME	AMERICAN CYANAMID COMPANY - CARTERET LANDFILL	SW ID NO.
LAB NAME	ENVIRONMENTAL TESTING AND CERTIFICATION	

	NJPDES NO.	WELL PERMIT NO.	SAMPLE DATE YR. MO. DAY	NJ LAB CERT. NO.	WQM USE
U	NJ 0061611	24-[illegible]-[illegible] 2D	00 01 16	12257	

THE SCHEDULE INDICATED BELOW IS TO BE OBSERVED FROM ___ MO. YR. TO ___ MO. YR.

SUBMIT WITH SIGNED T-VWX-014

SAMPLING MONTHS

Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	ANALYSIS	UNITS	PARAMETER	VALUE	REMARKS
X												2-Chlorophenol	ug/l	34586	17	K
X												2,4-Dichlorophenol	ug/l	34601	14	K
X												2,4-Dimethylphenol	ug/l	34606	14	K
X												2,6-Dinitro-o-cresol	ug/l	77603	120	K
X												2,4-Dinitrophenol	ug/l	34616	210	K
X												2-Nitrophenol	ug/l	34591	18	K
X												4-Nitrophenol	ug/l	34649	12	K
X												p-Chloro-m-cresol	ug/l	34452	15	K
X												Pentachlorophenol	ug/l	39032	18	K
X												Phenol	ug/l	34695	7.5	K
X												2,4,6-Trichlorophenol	ug/l	34621	14	K
X																
X												Acenaphthene	ug/l	34205	9.5	K
X												Acenaphthylene	ug/l	34200	18	K
X												Anthracene	ug/l	34220	9.5	K
X												Benzidine	ug/l	39120	220	K
X												Benzanthracene	ug/l	34526	39	K
X												Benzopyrene	ug/l	34247	13	K
X												3,4-Benzofluoranthene	ug/l	34230	24	K
X												Benzoperylene	ug/l	34521	21	K
X												Benzofluoranthene	ug/l	34242	13	K
X												Bis(2-chloroethoxy)methane	ug/l	34278	27	K
X												Bis(2-chloroethyl) Ether	ug/l	34273	29	K
X												Bis(2-chlroisopropyl) Ether	ug/l	34283	29	K
X												Bis(2-ethylhexyl) Phthalate	ug/l	39100	50	K
X												4-Bromophenyl Ether	ug/l	34636	9.5	K
X												Butylbenzyl Phthalate	ug/l	34292	50	K
X												2-Chloronaphthalene	ug/l	34581	9.5	K
X												4-Chlorophenyl Phenyl Ether	ug/l	34641	21	K

Form VWX-017
4/83 P2

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES
WATER QUALITY MANAGEMENT ELEMENT

GROUND WATER ANALYSIS – MONITORING WELL REPORT

ACID, BASE/NEUTRAL ORGANIC COMPOUNDS

PLEASE TYPE OR PRINT WITH BALLPOINT PEN

FACILITY NAME	AMERICAN CYANAMID COMPANY - CARTERET LANDFILL	SW ID NO.
LAB NAME	ENVIRONMENTAL TESTING AND CERTIFICATION	

U | NJPDES NO. NJ0061611 | WELL PERMIT NO. [illegible] 2D | SAMPLE DATE YR. 90 MO. 01 DAY 06 | NJ LAB CERT. NO. 12257 | WQM USE

THE SCHEDULE INDICATED BELOW IS TO BE OBSERVED FROM ___ MO. ___ YR. TO ___ MO. ___ YR.

RECEIVED
APR 03 1990
DEPT OF ENVIRON. PROTECTION
Division Water Resources

SUBMIT WITH SIGNED T-VWX-014

SAMPLING MONTHS	ANALYSES	UNITS	PARAMETER	VALUE	REMARKS
X	Chrysene	ug/l	34320	13	K
X	Dibenzanthracene	ug/l	34556	50	K
X	1,2-Dichlorobenzene	ug/l	34536	4.5	K
X	1,3-Dichlorobenzene	ug/l	34566	4.5	K
X	1,4-Dichlorobenzene	ug/l	34571	22	K
X	3,3'-Dichlorobenzidine	ug/l	34631	83	K
X	Diethyl Phthalate	ug/l	34336	50	K
X	Dimethyl Phthalate	ug/l	34341	50	K
X	Di-n-butyl Phthalate	ug/l	39110	50	K
X	2,4-Dinitrotolulene	ug/l	34611	29	K
X	2,6-Dinitrotolulene	ug/l	34626	4.5	K
X	Di-n-octyl Phthalate	ug/l	34596	50	K
X	1,2-Diphenylhydrazine	ug/l	34346	50	K
X	Fluoranthene	ug/l	34376	11	K
X	Fluorene	ug/l	34381	4.5	K
X	Hexachlorobenzene	ug/l	39700	4.5	K
X	Hexachlorobutadiene	ug/l	34391	4.5	K
X	Hexachlorocyclopentadiene	ug/l	34386	50	K
X	Hexachloroethane	ug/l	34396	8	K
X	Indenopyrene	ug/l	34403	24	K
X	Isophorone	ug/l	34408	11	K
X	Naphthalene	ug/l	34696	8	K
X	Nitrobenzene	ug/l	34447	4.5	K
X	N-Nitrosodimentlyamine	ug/l	34438	50	K
X	N-Nitrosodi-n-propylamine	ug/l	34428	50	K
X	N-Nitrosodiphenylamine	ug/l	34433	4.5	K
X	Phenanthrene	ug/l	34461	27	K
X	Pyrene	ug/l	34469	4.5	K
X	1,2,4-Trichlorobenzene	ug/l	34551	4.5	K

VALUE CODING RULES AND REMARK CODES ON REVERSE

1160

Form VWX-017
4/83

P3

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES
WATER QUALITY MANAGEMENT ELEMENT

GROUND WATER ANALYSIS – MONITORING WELL REPORT

PESTICIDES & PCBs

PLEASE TYPE OR PRINT WITH BALLPOINT PEN

FACILITY NAME	AMERICAN CYANAMID COMPANY - CARTERET LANDFILL	SW ID NO.
LAB NAME	ENVIRONMENTAL TESTING AND CERTIFICATION	

U (1)

NJPDES NO. (2–8): NJ0061611

WELL PERMIT NO. (9–16): 24-163258-1

2D

SAMPLE DATE YR. | MO. | DAY (17–22): 90 11 16

NJ LAB CERT. NO. (23–27): 12257

WQM USE (28)

THE SCHEDULE INDICATED BELOW IS TO BE OBSERVED FROM ___ ___ (MO. YR.) TO ___ ___ (MO. YR.)

SUBMIT WITH SIGNED T-VWX-014

SAMPLING MONTHS (Jan. Feb. Mar. Apr. May June July Aug. Sept. Oct. Nov. Dec.)	ANALYSIS	UNITS	PARAMETER	VALUE	REMARKS
X	Aldrin	ug/l	39330	9.5	K
X	alpha-BHC	ug/l	39337	50	K
X	beta-BHC	ug/l	39338	21	K
X	gamma-BHC (Lindane)	ug/l	39340	50	K
X	delta-BHC	ug/l	34259	16	K
X	Chlordane	ug/l	39350	50	K
X	4,4'-DDT	ug/l	39370	14	K
X	4,4'-DDE	ug/l	39365	28	K
X	4,4'-DDD	ug/l		24	K
X	Dieldrin	ug/l	39380	13	K
X	alpha-Endosulfan	ug/l	34361	50	K
X	beta-Endosulfan	ug/l	34356	50	K
X	Endosulfan Sulfate	ug/l	34351	28	K
X	Endrin	ug/l	39390	50	K
X	Endrin Aldehyde	ug/l	34366	50	K
X	Heptachlor	ug/l	39410	9.5	K
X	Heptachlor Epoxide	ug/l	39420	11	K
X	PCB-1242	ug/l	39496	180	K
X	PCB-1254	ug/l	39504	180	K
X	PCB-1221	ug/l	39488	180	K
X	PCB-1232	ug/l	39492	180	K
X	PCB-1248	ug/l	39500	180	K
X	PCB-1260	ug/l	39508	180	K
X	PCB-1016	ug/l	34671	180	K
X	Toxaphene	ug/l	39400	500	K

39 40 41

Form VWX-015 A
4/83

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES
WATER QUALITY MANAGEMENT ELEMENT

GROUND WATER ANALYSIS – MONITORING WELL REPORT

PLEASE TYPE OR PRINT WITH BALLPOINT PEN

FACILITY NAME: AMERICAN CYANAMID COMPANY - CARTERET LANDFILL | SW ID NO.:

LAB NAME: ENVIRONMENTAL TESTING AND CERTIFICATION

R (1) | NJPDES NO. NJ 0061611 (2–8) | WELL PERMIT NO. 24-10391-8 (9–16) | SAMPLE DATE YR. 90 MO. 01 DAY 16 (17–22) | NJ LAB CERT. NO. 12257 (23–27) | WQM USE (28)

35

THE SCHEDULE INDICATED BELOW IS TO BE OBSERVED FROM ___ MO. ___ YR. TO ___ MO. ___ YR.

SUBMIT WITH SIGNED T-VWX-014

SAMPLING MONTHS												ANALYSIS	UNITS	PARAMETER	VALUE	REMARKS
Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.					
X			X			X			X			Elevation of top of well casing with cap off (as specified in well completion report)	feet MSL: to nearest .01		11.77	
												Elevation of original ground level (as specified in well completion report)	feet MSL: to nearest .01		4,33	
X			X			X			X			Depth to water table from top of casing prior to sampling with cap off	feet: to nearest .01	82546	8.9	
X			X			X			X			Depth to water table from original ground level prior to sampling	feet: to nearest .01	72019	6.46	
X												Arsenic, Dissolved	UG/L as As	01000	10	K
X												Barium, Dissolved	UG/L as Ba	01005	170	
X			X			X			X			Biochemical Oxygen Demand - 5 Day	MG/L	00310	230	
X												Cadmium, Dissolved	UG/L as Cd	01025	1.8	
X			X			X			X			Chloride, Dissolved	UG/L as Cl	82295	16920000	
X												Chromium, Dissolved	UG/L as Cr	01030	8.1	J
X												Chromium, Dissolved, Hexavalent	UG/L as Cr	01220	5.0	J
X			X			X			X			Chemical Oxygen Demand (COD), Dissolved	MG/L	00341	3c2	
X												Coliform Group	N/100 ML	74056	10	J
												Color	Pt - Co	00080		
X			X			X			X			Copper, Dissolved	UG/L as Cu	01040	17	
X												Cyanide, Total	MG/L as CN	00720	.214	
												Endrin, Total	UG/L	39390		
X												Fluoride, Dissolved	MG/L as F	00950	.5	
												Gross Alpha, Dissolved	Pc/L	01503		
												Gross Beta, Dissolved	Pc/L	03503		
												Hardness, Total as $CaCO_3$	MG/L	00900		
X			X			X			X			Iron, Dissolved	UG/L as Fe	01046	770	
X			X			X			X			Lead, Dissolved	UG/L as Pb	01049	75	
												Lindane, Total	UG/L	39782		
X			X			X			X			Manganese, Dissolved	UG/L	01056	47	
X			X			X			X			Mercury, Dissolved	UG/L	71890		

VALUE CODING RULES AND
REMARK CODES ON REVERSE

29 33 34 40
42 46 47 53
55 59 60 66
68 72 73 79

11162

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES
WATER QUALITY MANAGEMENT ELEMENT

GROUND WATER ANALYSIS – MONITORING WELL REPORT

PLEASE TYPE OR PRINT WITH BALLPOINT PEN

FACILITY NAME: AMERICAN CYANAMID COMPANY - CARTERET LANDFILL
SW ID NO.:
LAB NAME: ENVIRONMENTAL TESTING AND CERTIFICATION

S	NJPDES NO.	WELL PERMIT NO.	SAMPLE DATE YR. MO. DAY	NJ LAB CERT. NO.	WQM USE
1	NJ 0061611 (2–8)	24-Ac391-8 (9–16) 35	90 01 16 (17–22)	12257 (23–27)	(28)

THE SCHEDULE INDICATED BELOW IS TO BE OBSERVED FROM MO. YR. TO MO. YR.

SUBMIT WITH SIGNED T-VWX-014

SAMPLING MONTHS (Jan. Feb. Mar. Apr. May June July Aug. Sept. Oct. Nov. Dec.)	ANALYSIS	UNITS	PARAMETER	VALUE	REMARKS
	Methoxychlor, Total	UG/L	39480		
X X X X X	Methylene Blue Active Substances	MG/L	38260	.3	
X X X X X	Nitrogen, Ammonia, Dissolved $NH_3 + NH_4$ as N	MG/L as N	00608	.34	
X X X X X	Nitrogen, Nitrate, Dissolved	MG/L as N	00618	.3	
	Odor	T.O.N.	00085		
X X X X X	pH	Standard Units	00400	6.65	
X X X X X	Phenols, Total Recoverable	UG/L	32730	710	
	Radium 226, Dissolved	Pc/L	09503		
	Radium 228, Dissolved	Pc/L	81366		
X	Selenium, Dissolved	UG/L	01145	10	K
X	Silver, Dissolved	UG/L	01075	15	
X X X X X	Sodium, Dissolved	MG/L	00930	549	C
X X X X X	Sulfate, Dissolved (as SO_4)	MG/L	00946	213	
X X X X X	Total Dissolved Solids (TDS)	PPM	70300	2110	
X X X X X	Total Organic Carbon (TOC)	PPM	00680	41.7	
X X X X X	Total Organic Halogen (TOX)	UG/L	70353	1450	
	Toxaphene	UG/L	39400		
	Turbidity	NTU	00076		
X X X X X	Zinc, Dissolved	UG/L	01090	52	
	2, 4–D, Total	UG/L	39370		
	2, 4, 5–TP, Total	UG/L	39045		
X X X X X	Specific Conductance	UMHO/CM		2000	6

VALUE CODING RULES AND
REMARK CODES ON REVERSE

29 33 34 40 41
42 46 47 53 54
55 59 60 66 67
68 72 73 79 80

11163

Form VWX-016
4/83

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES
WATER QUALITY MANAGEMENT ELEMENT

GROUND WATER ANALYSIS – VOLATILE ORGANICS REPORT

PLEASE TYPE OR PRINT WITH BALLPOINT PEN

FACILITY NAME: AMERICAN CYANAMID COMPANY - CARTERET LANDFILL
SW ID NO.:
LAB NAME: ENVIRONMENTAL TESTING AND CERTIFICATION

T (1)	NJPDES NO. (2–8)	WELL PERMIT NO. (9–16)	SAMPLE DATE YR. MO. DAY (17–22)	NJ LAB CERT. NO. (23–27)	WQM USE (28)
	NJ 0061611	24-103918	901116	12257	

35

THE SCHEDULE INDICATED BELOW IS TO BE OBSERVED FROM MO. YR. TO MO. YR.

RECEIVED
APR 03 1990
DEPT OF ENVIRON. PROTECTION
Division Water Resources
Bureau of Information Systems

SUBMIT WITH SIGNED T-VWX-014

SAMPLING MONTHS (Jan. Feb. Mar. Apr. May June July Aug. Sept. Oct. Nov. Dec.)	ANALYSIS	UNITS	PARAMETER	VALUE	REMARKS
X	Acrylonitrile	UG/L	34215	5	K
X	Benzene	UG/L	34030	.88	K
X	Bromoform	UG/L	32104	.94	K
X	Carbon Tetrachloride	UG/L	32102	.56	K
X	Chlorobenzene	UG/L	34301	1.2	K
X	Chlorodibromoethane	UG/L	34306	.62	K
X	Chloroform	UG/L	32106	.32	K
X	1, 1 - Dichloroethane	UG/L	34496	.94	K
X	1, 2 - Dichloroethane	UG/L	34531	.56	K
X	1, 1 - Dichloroethylene	UG/L	34501	.56	K
X	1, 2 - Dichloropropane	UG/L	34541	1.2	K
X	Ethylbenzene	UG/L	34371	1.4	K
X	Methylene Chloride	UG/L	34423	.56	K
X	1, 1, 2, 2 - Tetrachloroethane	UG/L	34511	1.4	K
X	Tetrachloroethylene	UG/L	34475	.82	K
X	Toluene	UG/L	34012	1.2	K
X	1, 1, 1 - Trichloroethane	UG/L	34506	.76	K
X	1, 1, 2 - Trichloroethane	UG/L	34511	1	K
X	Trichloroethylene	UG/L	39180	.38	K
X	Vinyl Chloride	UG/L	39175	2	K
X	Acrolein	UG/L	34210	5	K
X	Chloroethane	UG/L	34311	2	K
X	2 - Chloroethylvinyl Ether	UG/L	34576	2	K
X	Dichlorobromomethane	UG/L	32105	.44	K
X	1, 3 - Dichloropropylene	UG/L	34699	2	K
X	Methyl Bromide	UG/L	34413	2	K
X	Methyl Chloride	UG/L	34418	2	K
X	1, 2 - trans - Dichloroethylene	UG/L	34546	.32	K
X	1, 2 Dichlorobenzene	UG/L	34536	4	K
X	1, 3 Dichlorobenzene	UG/L	34566	4	K
X	1, 4 Dichlorobenzene	UG/L	34571	2	K

VALUE CODING RULES AND
REMARK CODES ON REVERSE

1164

Form VWX-017
USE

P1

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES
WATER QUALITY MANAGEMENT ELEMENT

GROUND WATER ANALYSIS — MONITORING WELL REPORT

ACID, BASE/NEUTRAL ORGANIC COMPOUNDS

PLEASE TYPE OR PRINT WITH BALLPOINT PEN

FACILITY NAME: AMERICAN CYANAMID COMPANY - CARTERET LANDFILL

SW ID NO.:

LAB NAME: ENVIRONMENTAL TESTING AND CERTIFICATION

	NJPDES NO.	WELL PERMIT NO.	SAMPLE DATE YR. MO. DAY	NJ LAB CERT. NO.	WQM USE
U	NJ 0061611	24-10391-8	90 01 16	12257	

35

THE SCHEDULE INDICATED BELOW IS TO BE OBSERVED FROM ___ MO. YR. TO ___ MO. YR.

SUBMIT WITH SIGNED T-VWX-014

SAMPLING MONTHS

Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	ANALYSIS	UNITS	PARAMETER	VALUE	REMARKS
X												2-Chlorophenol	ug/l	34586	16	K
X												2,4-Dichlorophenol	ug/l	34601	13	K
X												2,4-Dimethylphenol	ug/l	34606	13	K
X												2,6-Dinitro-o-cresol	ug/l	77603	120	K
X												2,4-Dinitrophenol	ug/l	34616	210	K
X												2-Nitrophenol	ug/l	34591	18	K
X												4-Nitrophenol	ug/l	34649	12	K
X												p-Chloro-m-cresol	ug/l	34452	15	K
X												Pentachlorophenol	ug/l	39032	18	K
X												Phenol	ug/l	34695	7.4	K
X												2,4,6-Trichlorophenol	ug/l	34621	13	K
X																
X												Acenaphthene	ug/l	34205	9.3	K
X												Acenaphthylene	ug/l	34200	17	K
X												Anthracene	ug/l	34220	9.3	K
X												Benzidine	ug/l	39120	220	K
X												Benzanthracene	ug/l	34526	38	K
X												Benzopyrene	ug/l	34247	12	K
X												3,4-Benzofluoranthene	ug/l	34230	24	K
X												Benzoperylene	ug/l	34521	20	K
X												Benzofluoranthene	ug/l	34242	12	K
X												Bis(2-chloroethoxy)methane	ug/l	34278	26	K
X												Bis(2-chloroethyl) Ether	ug/l	34273	28	K
X												Bis(2-chlroisopropyl) Ether	ug/l	34283	28	K
X												Bis(2-ethylhexyl) Phthalate	ug/l	39100	49	K
X												4-Bromophenyl Ether	ug/l	34636	9.3	K
X												Butylbenzyl Phthalate	ug/l	34292	49	K
X												2-Chloronaphthalene	ug/l	34581	9.3	K
X												4-Chlorophenyl Phenyl Ether	ug/l	34641	21	K

Form VWX-017
4/83 P2

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES
WATER QUALITY MANAGEMENT ELEMENT

GROUND WATER ANALYSIS – MONITORING WELL REPORT

= ACID, BASE/NEUTRAL ORGANIC COMPOUNDS

PLEASE TYPE OR PRINT WITH BALLPOINT PEN

FACILITY NAME	AMERICAN CYANAMID COMPANY - CARTERET LANDFILL	SW ID NO.
LAB NAME	ENVIRONMENTAL TESTING AND CERTIFICATION	

U | NJPDES NO. NJ 0 0 6 1 6 1 1 | WELL PERMIT NO. 24-10391-8 | SAMPLE DATE YR. 90 MO. 11 DAY 10 | NJ LAB CERT. NO. 12257 | WQM USE

35

THE SCHEDULE INDICATED BELOW IS TO BE OBSERVED FROM MO. YR. TO MO. YR.

SUBMIT WITH SIGNED T-VWX-014

SAMPLING MONTHS	ANALYSIS	UNITS	PARAMETER	VALUE	REMARKS
X	Chrysene	ug/1	34320	12	K
X	Dibenzanthracene	ug/1	34556	49	K
X	1,2-Dichlorobenzene	ug/1	34536	9.3	K
X	1,3-Dichlorobenzene	ug/1	34566	9.3	K
X	1,4-Dichlorobenzene	ug/1	34571	22	K
X	3,3'-Dichlorobenzidine	ug/1	34631	81	K
X	Diethyl Phthalate	ug/1	34336	49	K
X	Dimethyl Phthalate	ug/1	34341	49	K
X	Di-n-butyl Phthalate	ug/1	39110	49	K
X	2,4-Dinitrotolulene	ug/1	34611	28	K
X	2,6-Dinitrotolulene	ug/1	34626	9.3	K
X	Di-n-octyl Phthalate	ug/1	34596	49	K
X	1,2-Diphenylhydrazine	ug/1	34346	49	K
X	Fluoranthene	ug/1	34376	11	K
X	Fluorene	ug/1	34381	9.3	K
X	Hexachlorobenzene	ug/1	39700	9.3	K
X	Hexachlorobutadiene	ug/1	34391	4.4	K
X	Hexachlorocyclopentadiene	ug/1	34386	49	K
X	Hexachloroethane	ug/1	34396	7.8	K
X	Indenopyrene	ug/1	34403	23	K
X	Isophorone	ug/1	34408	11	K
X	Naphthalene	ug/1	34696	7.8	K
X	Nitrobenzene	ug/1	34447	9.3	K
X	N-Nitrosodimentlyamine	ug/1	34438	49	K
X	N-Nitrosodi-n-propylamine	ug/1	34428	49	K
X	N-Nitrosodiphenylamine	ug/1	34433	9.3	K
X	Phenanthrene	ug/1	34461	26	K
X	Pyrene	ug/1	34469	9.3	K
X	1,2,4-Trichlorobenzene	ug/1	34551	9.3	K

VALUE CODING RULES AND

1106

Form VWX-017
4/83

P3

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES
WATER QUALITY MANAGEMENT ELEMENT

GROUND WATER ANALYSIS – MONITORING WELL REPORT

PESTICIDES & PCBs

PLEASE TYPE OR PRINT WITH BALLPOINT PEN

FACILITY NAME	AMERICAN CYANAMID COMPANY - CARTERET LANDFILL	SW ID NO.
LAB NAME	ENVIRONMENTAL TESTING AND CERTIFICATION	

U (1)

NJPDES NO. NJ0061611 (2–8)

WELL PERMIT NO. 24-16391-8 (9–16)

35

SAMPLE DATE YR. | MO. | DAY: 90 01 16 (17–23)

NJ LAB CERT. NO.: 12257 (25–29)

WQM USE (31)

THE SCHEDULE INDICATED BELOW IS TO BE OBSERVED FROM MO. YR. TO MO. YR.

SUBMIT WITH SIGNED T-VWX-014

SAMPLING MONTHS	ANALYSIS	UNITS	PARAMETER	VALUE	REMARKS
X	Aldrin	ug/l	39330	9.3	K
X	alpha-BHC	ug/l	39337	49	K
X	beta-BHC	ug/l	39338	21	K
X	gamma-BHC (Lindane)	ug/l	39340	49	K
X	delta-BHC	ug/l	34259	15	K
X	Chlordane	ug/l	39350	44	K
X	4,4'-DDT	ug/l	39370	14	K
X	4,4'-DDE	ug/l	39365	27	K
X	4,4'-DDD	ug/l		23	K
X	Dieldrin	ug/l	39380	12	K
X	alpha-Endosulfan	ug/l	34361	49	K
X	beta-Endosulfan	ug/l	34356	49	K
X	Endosulfan Sulfate	ug/l	34351	27	K
X	Endrin	ug/l	39390	49	K
X	Endrin Aldehyde	ug/l	34366	49	K
X	Heptachlor	ug/l	39410	9.3	K
X	Heptachlor Epoxide	ug/l	39420	11	K
X	PCB-1242	ug/l	39496	180	K
X	PCB-1254	ug/l	39504	180	K
X	PCB-1221	ug/l	39488	180	K
X	PCB-1232	ug/l	39492	180	K
X	PCB-1248	ug/l	39500	180	K
X	PCB-1260	ug/l	39508	180	K
X	PCB-1016	ug/l	34671	180	K
X	Toxaphene	ug/l	39400	49	K

VALUE CODING RULES AND

30 31 32 33 34 35 36 37 38 39 40 41

Form VWX-015 A
4/83

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES
WATER QUALITY MANAGEMENT ELEMENT

GROUND WATER ANALYSIS – MONITORING WELL REPORT

PLEASE TYPE OR PRINT WITH BALLPOINT PEN

FACILITY NAME: AMERICAN CYANAMID COMPANY - CARTERET LANDFILL — SW ID NO.:

LAB NAME: ENVIRONMENTAL TESTING AND CERTIFICATION

R (1) — NJPDES NO. (2–8): NJ 0 0 6 1 6 1 1

WELL PERMIT NO. (9–16): 2 4 - 1 C 3 9 C - C

SAMPLE DATE YR. MO. DAY (17–22): 9 0 0 1 1 0

NJ LAB CERT. NO. (23–27): 1 2 2 5 7

WQM USE (28):

30

THE SCHEDULE INDICATED BELOW IS TO BE OBSERVED FROM ___ ___ (MO. YR.) TO ___ ___ (MO. YR.)

SUBMIT WITH SIGNED T-VWX-014

Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	ANALYSIS	UNITS	PARAMETER	VALUE	REMARKS
X			X			X			X			Elevation of top of well casing with cap off (as specified in well completion report)	feet MSL: to nearest .01		12.05	
												Elevation of original ground level (as specified in well completion report)	feet MSL: to nearest .01		9.77	
X			X			X			X			Depth to water table from top of casing prior to sampling with cap off	feet: to nearest .01	82546	10.10	
X			X			X			X			Depth to water table from original ground level prior to sampling	feet: to nearest .01	72019	7.82	
X												Arsenic, Dissolved	UG/L as As	01000	10	
X												Barium, Dissolved	UG/L as Ba	01005	52	
X			X			X			X			Biochemical Oxygen Demand - 5 Day	MG/L	00311	10	
X												Cadmium, Dissolved	UG/L as Cd	01025	24	
X			X			X			X			Chloride, Dissolved	UG/L as Cl	82295	132000000	
X												Chromium, Dissolved	UG/L as Cr	01030	6.16	
X												Chromium, Dissolved, Hexavalent	UG/L as Cr	01220	20	
X			X			X			X			Chemical Oxygen Demand (COD), Dissolved	MG/L	00341	140	
X												Coliform Group	N/100 ML	74056	4	
												Color	Pt - Co	00080		
X			X			X			X			Copper, Dissolved	UG/L as Cu	01040	31	
X												Cyanide, Total	MG/L as CN	00720	.016	
												Endrin, Total	UG/L	39390		
X												Fluoride, Dissolved	MG/L as F	00950	.18	
												Gross Alpha, Dissolved	Pc/L	01503		
												Gross Beta, Dissolved	Pc/L	03503		
												Hardness, Total as $CaCO_3$	MG/L	00900		
X			X			X			X			Iron, Dissolved	UG/L as Fe	01046	12006	
X			X			X			X			Lead, Dissolved	UG/L as Pb	01049	75	
												Lindane, Total	UG/L	39782		
X			X			X			X			Manganese, Dissolved	UG/L	01056	691	
X			X			X			X			Mercury, Dissolved	UG/L	71890	.19	

VALUE CODING RULES AND REMARK CODES ON REVERSE

29 42 55 68 — 33 34 46 47 59 60 72 73 — 40 53 66 79

U168

Form VWX-015 B
4/83

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES
WATER QUALITY MANAGEMENT ELEMENT

GROUND WATER ANALYSIS – MONITORING WELL REPORT

PLEASE TYPE OR PRINT WITH BALLPOINT PEN

FACILITY NAME: AMERICAN CYANAMID COMPANY - CARTERET LANDFILL

SW ID NO.:

LAB NAME: ENVIRONMENTAL TESTING AND CERTIFICATION

	NJPDES NO.	WELL PERMIT NO.	SAMPLE DATE YR. MO. DAY	NJ LAB CERT. NO.	WQM USE
S	NJ 0061611	24-10390-0	90 01 16	12257	
1	2 – 8	9 – 16	17 – 22	23 – 27	28

3D

THE SCHEDULE INDICATED BELOW IS TO BE OBSERVED FROM ___ MO. ___ YR. TO ___ MO. ___ YR.

SUBMIT WITH SIGNED T-VWX-014

SAMPLING MONTHS

Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	ANALYSIS	UNITS	PARAMETER	VALUE	REMARKS
												Methoxychlor, Total	UG/L	39480		
X			X			X			X			Methylene Blue Active Substances	MG/L	38260	.29	
X			X			X			X			Nitrogen, Ammonia, Dissolved $NH_3 + NH_4$ as N	MG/L as N	00608	16	
X			X			X			X			Nitrogen, Nitrate, Dissolved	MG/L as N	00618	.2	J
												Odor	T.O.N.	00085		
X			X			X			X			pH	Standard Units	00400	6.75	
X			X			X			X			Phenols, Total Recoverable	UG/L	32730	250	J
												Radium 226, Dissolved	Pc/L	09503		
												Radium 228, Dissolved	Pc/L	81366		
X												Selenium, Dissolved	UG/L	01145	50	K
X												Silver, Dissolved	UG/L	01075	33	
X			X			X			X			Sodium, Dissolved	MG/L	00930	5160	
X			X			X			X			Sulfate, Dissolved (as SO_4)	MG/L	00946	1400	
X			X			X			X			Total Dissolved Solids (TDS)	PPM	70300	23900	
X			X			X			X			Total Organic Carbon (TOC)	PPM	00680	18	
X			X			X			X			Total Organic Halogen (TOX)	UG/L	70353	1350	
												Toxaphene	UG/L	39400		
												Turbidity	NTU	00076		
X			X			X			X			Zinc, Dissolved	UG/L	01090	63	
												2, 4—D, Total	UG/L	39370		
												2, 4, 5—TP, Total	UG/L	39045		
X			X			X			X			Specific Conductance	UMHO/CM		20500	

VALUE CODING RULES AND
REMARK CODES ON REVERSE

29 33 34 40 41
42 46 47 53 54
55 59 60 66 67
68 72 73 79 80

1,169

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4/83

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES
WATER QUALITY MANAGEMENT ELEMENT

GROUND WATER ANALYSIS – VOLATILE ORGANICS REPORT

PLEASE TYPE OR PRINT WITH BALLPOINT PEN

FACILITY NAME: AMERICAN CYANAMID COMPANY - CARTERET LANDFILL
SW ID NO.:
LAB NAME: ENVIRONMENTAL TESTING AND CERTIFICATION

	NJPDES NO.	WELL PERMIT NO.	SAMPLE DATE YR. MO. DAY	NJ LAB CERT. NO.	WQM USE
	T NJ0061611	24-163900 3D	901116	12257	
	1 2–8	9–16	17–22	23–27	28

THE SCHEDULE INDICATED BELOW IS TO BE OBSERVED FROM MO. YR. TO MO. YR.

SUBMIT WITH SIGNED T-VWX-014

SAMPLING MONTHS												ANALYSIS	UNITS	PARAMETER	VALUE	REMARKS
Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.					
X												Acrylonitrile	UG/L	34215	5	K
X												Benzene	UG/L	34030	.58	K
X												Bromoform	UG/L	32104	.94	K
X												Carbon Tetrachloride	UG/L	32102	.56	K
X												Chlorobenzene	UG/L	34301	1.2	K
X												Chlorodibromoethane	UG/L	34306	.62	K
X												Chloroform	UG/L	32106	.32	K
X												1, 1 - Dichloroethane	UG/L	34496	.94	K
X												1, 2 - Dichloroethane	UG/L	34531	.56	K
X												1, 1 - Dichloroethylene	UG/L	34501	.56	K
X												1, 2 - Dichloropropane	UG/L	34541	1.2	K
X												Ethylbenzene	UG/L	34371	1.4	K
X												Methylene Chloride	UG/L	34423	.56	K
X												1, 1, 2, 2 - Tetrachloroethane	UG/L	34516	1.4	K
X												Tetrachloroethylene	UG/L	34475	.82	K
X												Toluene	UG/L	34012	1.2	K
X												1, 1, 1 - Trichloroethane	UG/L	34506	.76	K
X												1, 1, 2 - Trichloroethane	UG/L	34511	1	K
X												Trichloroethylene	UG/L	39180	.38	K
X												Vinyl Chloride	UG/L	39175	2	K
X												Acrolein	UG/L	34210	5	K
X												Chloroethane	UG/L	34311	2	K
X												2 - Chloroethylvinyl Ether	UG/L	34576	2	K
X												Dichlorobromomethane	UG/L	32105	.44	K
X												1, 3 - Dichloropropylene	UG/L	34699	2	K
X												Methyl Bromide	UG/L	34413	2	K
X												Methyl Chloride	UG/L	34418	2	K
X												1, 2 - trans - Dichloroethylene	UG/L	34546	.32	K
X												1, 2 Dichlorobenzene	UG/L	34536	2	K
X												1, 3 Dichlorobenzene	UG/L	34566	2	K
X												1, 4 Dichlorobenzene	UG/L	34571	4.6	K

29 33 34 40 41
42 46 47 53 54
55 59 60 66 67
68 72 73 79 80

VALUE CODING RULES AND
REMARK CODES ON REVERSE

U170

Form VWX-017
4/83

P1

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES
WATER QUALITY MANAGEMENT ELEMENT

GROUND WATER ANALYSIS – MONITORING WELL REPORT
ACID, BASE/NEUTRAL ORGANIC COMPOUNDS

PLEASE TYPE OR PRINT WITH BALLPOINT PEN

FACILITY NAME	AMERICAN CYANAMID COMPANY - CARTERET LANDFILL	SW ID NO.
LAB NAME	ENVIRONMENTAL TESTING AND CERTIFICATION	

U

NJPDES NO. NJ 0 0 6 1 6 1 1 1

WELL PERMIT NO. 2 4 - 1 0 3 9 0 - C
3D

SAMPLE DATE YR. | MO. | DAY: 9 0 0 1 1 6

NJ LAB CERT. NO.: 1 2 2 5 7

WQM USE

THE SCHEDULE INDICATED BELOW IS TO BE OBSERVED FROM MO. YR. TO MO. YR.

SUBMIT WITH SIGNED T-VWX-014

SAMPLING MONTHS	ANALYSIS	UNITS	PARAMETER	VALUE	REMARKS
X	2-Chlorophenol	ug/l	34586	3.4	K
X	2,4-Dichlorophenol	ug/l	34601	2.8	K
X	2,4-Dimethylphenol	ug/l	34606	2.8	K
X	2,6-Dinitro-o-cresol	ug/l	77603	25	K
X	2,4-Dinitrophenol	ug/l	34616	44	K
X	2-Nitrophenol	ug/l	34591	3.8	K
X	4-Nitrophenol	ug/l	34649	2.5	K
X	p-Chloro-m-cresol	ug/l	34452	3.1	K
X	Pentachlorophenol	ug/l	39032	3.8	K
X	Phenol	ug/l	34695	1.6	K
X	2,4,6-Trichlorophenol	ug/l	34621	2.8	K
X					
X	Acenaphthene	ug/l	34205	2	K
X	Acenaphthylene	ug/l	34200	3.6	K
X	Anthracene	ug/l	34220	2	K
X	Benzidine	ug/l	39120	46	K
X	Benzanthracene	ug/l	34526	8.1	K
X	Benzopyrene	ug/l	34247	2.6	K
X	3,4-Benzofluoranthene	ug/l	34230	5	K
X	Benzoperylene	ug/l	34521	4.3	K
X	Benzofluoranthene	ug/l	34242	2.6	K
X	Bis(2-chloroethoxy)methane	ug/l	34278	5.5	K
X	Bis(2-chloroethyl) Ether	ug/l	34273	5.9	K
X	Bis(2-chloroisopropyl) Ether	ug/l	34283	5.9	K
X	Bis(2-ethylhexyl) Phthalate	ug/l	39100	6.16	J
X	4-Bromophenyl Ether	ug/l	34636	2	K
X	Butylbenzyl Phthalate	ug/l	34292	10	K
X	2-Chloronaphthalene	ug/l	34581	2	K
X	4-Chlorophenyl Phenyl Ether	ug/l	34641	4.4	K

Form VWX-017
4/83 P2

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES
WATER QUALITY MANAGEMENT ELEMENT

GROUND WATER ANALYSIS – MONITORING WELL REPORT

= ACID, BASE/NEUTRAL ORGANIC COMPOUNDS

PLEASE TYPE OR PRINT WITH BALLPOINT PEN

FACILITY NAME	AMERICAN CYANAMID COMPANY - CARTERET LANDFILL	SW ID NO.
LAB NAME	ENVIRONMENTAL TESTING AND CERTIFICATION	

	NJPDES NO.	WELL PERMIT NO.	SAMPLE DATE YR. | MO. | DAY	NJ LAB CERT. NO.	WQM USE
	NJ 0 0 6 1 6 1 1	2 4 - 1 0 3 9 0 - 0	8 0 0 1 1 6	1 2 2 5 7	
		3D			

THE SCHEDULE INDICATED BELOW IS TO BE OBSERVED FROM ___ ___ MO. YR. TO ___ ___ MO. YR.

SUBMIT WITH SIGNED T-VWX-014

SAMPLING MONTHS	ANALYSIS	UNITS	PARAMETER	VALUE	REMARKS
X	Chrysene	ug/1	34320	2.6	K
X	Dibenzanthracene	ug/1	34556	10	K
X	1,2-Dichlorobenzene	ug/1	34536	2	K
X	1,3-Dichlorobenzene	ug/1	34566	2	K
X	1,4-Dichlorobenzene	ug/1	34571	4.6	K
X	3,3'-Dichlorobenzidine	ug/1	34631	17	K
X	Diethyl Phthalate	ug/1	34336	10	K
X	Dimethyl Phthalate	ug/1	34341	10	K
X	Di-n-butyl Phthalate	ug/1	39110	10	K
X	2,4-Dinitrotolulene	ug/1	34611	5.9	K
X	2,6-Dinitrotolulene	ug/1	34626	2	K
X	Di-n-octyl Phthalate	ug/1	34596	10	K
X	1,2-Diphenylhydrazine	ug/1	34346	10	K
X	Fluoranthene	ug/1	34376	2.3	K
X	Fluorene	ug/1	34381	2	K
X	Hexachlorobenzene	ug/1	39700	2	K
X	Hexachlorobutadiene	ug/1	34391	.94	K
X	Hexachlorocyclopentadiene	ug/1	34386	10	K
X	Hexachloroethane	ug/1	34396	1.7	K
X	Indenopyrene	ug/1	34403	4.9	K
X	Isophorone	ug/1	34408	2.3	K
X	Naphthalene	ug/1	34696	1.7	K
X	Nitrobenzene	ug/1	34447	2	K
X	N-Nitrosodimentlyamine	ug/1	34438	10	K
X	N-Nitrosodi-n-propylamine	ug/1	34428	10	K
X	N-Nitrosodiphenylamine	ug/1	34433	2	K
X	Phenanthrene	ug/1	34461	5.6	K
X	Pyrene	ug/1	34469	2	K
X	1,2,4-Trichlorobenzene	ug/1	34551	2	K

VALUE CODING RULES AND REMARK CODES ON REVERSE

1172

Form VWX-017
4/83
P3

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES
WATER QUALITY MANAGEMENT ELEMENT

GROUND WATER ANALYSIS – MONITORING WELL REPORT

PESTICIDES & PCBs

PLEASE TYPE OR PRINT WITH BALLPOINT PEN

FACILITY NAME	AMERICAN CYANAMID COMPANY - CARTERET LANDFILL	SW ID NO.
LAB NAME	ENVIRONMENTAL TESTING AND CERTIFICATION	

	NJPDES NO.	WELL PERMIT NO.	SAMPLE DATE YR. MO. DAY	NJ LAB CERT. NO.	WQM USE
U	NJ 0061611	24-10390-0 3D	90 01 16	12257	

THE SCHEDULE INDICATED BELOW IS TO BE OBSERVED FROM ___ MO. YR. TO ___ MO. YR.

SUBMIT WITH SIGNED T-VWX-014

SAMPLING MONTHS

Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	ANALYSIS	UNITS	PARAMETER	VALUE	REMARKS
X												Aldrin	ug/l	39330	2	K
X												alpha-BHC	ug/l	39337	10	K
X												beta-BHC	ug/l	39338	4.4	K
X												gamma-BHC (Lindane)	ug/l	39340	10	K
X												delta-BHC	ug/l	34259	3.2	K
X												Chlordane	ug/l	39350	10	K
X												4,4'-DDT	ug/l	39370	2.9	K
X												4,4'-DDE	ug/l	39365	5.8	K
X												4,4'-DDD	ug/l		4.9	K
X												Dieldrin	ug/l	39380	2.6	K
X												alpha-Endosulfan	ug/l	34361	10	K
X												beta-Endosulfan	ug/l	34356	10	K
X												Endosulfan Sulfate	ug/l	34351	5.8	K
X												Endrin	ug/l	39390	10	K
X												Endrin Aldehyde	ug/l	34366	10	K
X												Heptachlor	ug/l	39410	2	K
X												Heptachlor Epoxide	ug/l	39420	2.3	K
X												PCB-1242	ug/l	39496	38	K
X												PCB-1254	ug/l	39504	38	K
X												PCB-1221	ug/l	39488	38	K
X												PCB-1232	ug/l	39492	38	K
X												PCB-1248	ug/l	39500	38	K
X												PCB-1260	ug/l	39508	38	K
X												PCB-1016	ug/l	34671	38	K
X												Toxaphene	ug/l	39400	10	K

Form VWX-015 A
4/83

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES

WATER QUALITY MANAGEMENT ELEMENT

GROUND WATER ANALYSIS – MONITORING WELL REPORT

PLEASE TYPE OR PRINT WITH BALLPOINT PEN

FACILITY NAME: AMERICAN CYANAMID COMPANY - CARTERET LANDFILL

SW ID NO.:

LAB NAME: ENVIRONMENTAL TESTING AND CERTIFICATION

	NJPDES NO.	WELL PERMIT NO.	SAMPLE DATE YR. MO. DAY	NJ LAB CERT. NO.	WQM USE
R	NJ 0061611	24-10393-4	900116	12257	
1	2–8	9–16	17–22	23–27	28

45

THE SCHEDULE INDICATED BELOW IS TO BE OBSERVED FROM ___ MO. YR. TO ___ MO. YR.

SUBMIT WITH SIGNED T-VWX-014

SAMPLING MONTHS

Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	ANALYSIS	UNITS	PARAMETER	VALUE	REMARKS
X			X			X			X			Elevation of top of well casing with cap off (as specified in well completion report)	feet MSL: to nearest .01		13.14	
												Elevation of original ground level (as specified in well completion report)	feet MSL: to nearest .01		10.38	
X			X			X			X			Depth to water table from top of casing prior to sampling with cap off	feet: to nearest .01	82546	9.75	
X			X			X			X			Depth to water table from original ground level prior to sampling	feet: to nearest .01	72019	6.94	
X												Arsenic, Dissolved	UG/L as As	01000	100	K
X												Barium, Dissolved	UG/L as Ba	01005	21	
X			X			X			X			Biochemical Oxygen Demand - 5 Day	MG/L	00310	80	
X												Cadmium, Dissolved	UG/L as Cd	01025	11	
X			X			X			X			Chloride, Dissolved	UG/L as Cl	82295	14500000	
X												Chromium, Dissolved	UG/L as Cr	01030	13	
X												Chromium, Dissolved, Hexavalent	UG/L as Cr	01220	10	J
X			X			X			X			Chemical Oxygen Demand (COD), Dissolved	MG/L	00341	739	
X												Coliform Group	N/100 ML	74056	880	
												Color	Pt - Co	00080		
X			X			X			X			Copper, Dissolved	UG/L as Cu	01040	20	
X												Cyanide, Total	MG/L as CN	00720	69.4	
												Endrin, Total	UG/L	39390		
X												Fluoride, Dissolved	MG/L as F	00950	5.9	
												Gross Alpha, Dissolved	Pc/L	01503		
												Gross Beta, Dissolved	Pc/L	03503		
												Hardness, Total as $CaCO_3$	MG/L	00900		
X			X			X			X			Iron, Dissolved	UG/L as Fe	01046	13000	
X			X			X			X			Lead, Dissolved	UG/L as Pb	01049	75	K
												Lindane, Total	UG/L	39782		
X			X			X			X			Manganese, Dissolved	UG/L	01056	14	
X			X			X			X			Mercury, Dissolved	UG/L	71890	.4	K

29 33 34 40 41
42 46 47 53 54
55 59 60 66 67
68 72 73 79 80

VALUE CODING RULES AND
REMARK CODES ON REVERSE

U174

Form VWX-015 B
4/83

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES
WATER QUALITY MANAGEMENT ELEMENT

GROUND WATER ANALYSIS — MONITORING WELL REPORT

PLEASE TYPE OR PRINT WITH BALLPOINT PEN

FACILITY NAME: AMERICAN CYANAMID COMPANY - CARTERET LANDFILL
SW ID NO.:
LAB NAME: ENVIRONMENTAL TESTING AND CERTIFICATION

	NJPDES NO.	WELL PERMIT NO.	SAMPLE DATE YR. MO. DAY	NJ LAB CERT. NO.	WQM USE
S	NJ 0061611	24-10393-4	90 01 16	12257	
1	2–8	9–16	17–22	23–27	28

4S

THE SCHEDULE INDICATED BELOW IS TO BE OBSERVED FROM MO. YR. TO MO. YR.

SUBMIT WITH SIGNED T-VWX-014

SAMPLING MONTHS

Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	ANALYSIS	UNITS	PARAMETER	VALUE	REMARKS
												Methoxychlor, Total	UG/L	39480		
X			X			X			X			Methylene Blue Active Substances	MG/L	38260	.68	
X			X			X			X			Nitrogen, Ammonia, Dissolved $NH_3 + NH_4$ as N	MG/L as N	00608	390	
X			X			X			X			Nitrogen, Nitrate Dissolved	MG/L as N	00618	.2	J
												Odor	T.O.N.	00085		
X			X			X			X			pH	Standard Units	00400	9	
X			X			X			X			Phenols, Total Recoverable	UG/L	32730	250	J
												Radium 226, Dissolved	Pc/L	09503		
												Radium 228, Dissolved	Pc/L	81366		
X												Selenium, Dissolved	UG/L	01145	50	K
X												Silver, Dissolved	UG/L	01075	20	
X			X			X			X			Sodium, Dissolved	MG/L	00930	7950	
X			X			X			X			Sulfate, Dissolved (as SO_4)	MG/L	00946	3580	
X			X			X			X			Total Dissolved Solids (TDS)	PPM	70300	26800	
X			X			X			X			Total Organic Carbon (TOC)	PPM	00680	177	
X			X			X			X			Total Organic Halogen (TOX)	UG/L	70353	12000	
												Toxaphene	UG/L	39400		
												Turbidity	NTU	00076		
X			X			X			X			Zinc, Dissolved	UG/L	01090	20	K
												2, 4—D, Total	UG/L	39370		
												2, 4, 5—TP, Total	UG/L	39045		
X			X			X			X			Specific Conductance	UMHO/CM		25000	

29 33 34 40 41
42 46 47 53 54
55 59 60 66 67
68 72 73 79 80

VALUE CODING RULES AND
REMARK CODES ON REVERSE

4175

Form VWX-016
4/83

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES
WATER QUALITY MANAGEMENT ELEMENT

GROUND WATER ANALYSIS – VOLATILE ORGANICS REPORT

PLEASE TYPE OR PRINT WITH BALLPOINT PEN

FACILITY NAME: AMERICAN CYANAMID COMPANY - CARTERET LANDFILL
SW ID NO.:

LAB NAME: ENVIRONMENTAL TESTING AND CERTIFICATION

T (1)	NJPDES NO. (2–8)	WELL PERMIT NO. (9–16)	SAMPLE DATE YR. MO. DAY (17–22)	NJ LAB CERT. NO. (23–27)	WQM USE (28)
	NJ 0061611	24-103934	90 01 16	12257	

45

THE SCHEDULE INDICATED BELOW IS TO BE OBSERVED FROM ____ ____ (MO. YR.) TO ____ ____ (MO. YR.)

SUBMIT WITH SIGNED T-VWX-014

Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	ANALYSIS	UNITS	PARAMETER	VALUE	REMARKS
X												Acrylonitrile	UG/L	34215	5	K
X												Benzene	UG/L	34030	.8514	J
X												Bromoform	UG/L	32104	.914	K
X												Carbon Tetrachloride	UG/L	32102	.156	K
X												Chlorobenzene	UG/L	34301	1.2	K
X												Chlorodibromoethane	UG/L	34306	.062	K
X												Chloroform	UG/L	32106	.312	K
X												1, 1 - Dichloroethane	UG/L	34496	.14	K
X												1, 2 - Dichloroethane	UG/L	34531	.56	K
X												1, 1 - Dichloroethylene	UG/L	34501	.56	K
X												1, 2 - Dichloropropane	UG/L	34541	1.2	K
X												Ethylbenzene	UG/L	34371	1.4	K
X												Methylene Chloride	UG/L	34423	4.14	
X												1, 1, 2, 2 - Tetrachloroethane	UG/L	34516	1.4	K
X												Tetrachloroethylene	UG/L	34475	.82	K
X												Toluene	UG/L	34012	.416	J
X												1, 1, 1 - Trichloroethane	UG/L	34506	.76	K
X												1, 1, 2 - Trichloroethane	UG/L	34511	1	K
X												Trichloroethylene	UG/L	39180	.318	K
X												Vinyl Chloride	UG/L	39175	2	K
X												Acrolein	UG/L	34210	5	K
X												Chloroethane	UG/L	34311	2	K
X												2 - Chloroethylvinyl Ether	UG/L	34576	2	K
X												Dichlorobromomethane	UG/L	32105	.414	K
X												1, 3 - Dichloropropylene	UG/L	34699	2	K
X												Methyl Bromide	UG/L	34413	2	K
X												Methyl Chloride	UG/L	34418	2	
X												1, 2 - trans - Dichloroethylene	UG/L	34546	.32	K
X												1, 2 Dichlorobenzene	UG/L	34536	2.1	K
X												1, 3 Dichlorobenzene	UG/L	34566	2.1	K
X												1, 4 Dichlorobenzene	UG/L	34571	4.1	K

29 42 55 68 | 33 34 46 47 59 60 72 73 | 40 41 53 54 66 67 79 80

VALUE CODING RULES AND
REMARK CODES ON REVERSE

4176

Form VWX-017
UEB

P1

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES
WATER QUALITY MANAGEMENT ELEMENT

GROUND WATER ANALYSIS – MONITORING WELL REPORT
ACID, BASE/NEUTRAL ORGANIC COMPOUNDS

PLEASE TYPE OR PRINT WITH BALLPOINT PEN

FACILITY NAME: AMERICAN CYANAMID COMPANY - CARTERET LANDFILL | SW ID NO.:

LAB NAME: ENVIRONMENTAL TESTING AND CERTIFICATION

U | NJPDES NO.: NJ 0 0 6 1 6 1 1 | WELL PERMIT NO.: 24-1C393-45 | SAMPLE DATE YR. | MO. | DAY: 90 01 16 | NJ LAB CERT. NO.: 12257 | WQM USE

THE SCHEDULE INDICATED BELOW IS TO BE OBSERVED FROM MO. YR. TO MO. YR.

SUBMIT WITH SIGNED T-VWX-014

SAMPLING MONTHS	ANALYSIS	UNITS	PARAMETER	VALUE	REMARKS
X	2-Chlorophenol	ug/l	34586	3.6	K
X	2,4-Dichlorophenol	ug/l	34601	3	K
X	2,4-Dimethylphenol	ug/l	34606	3	K
X	2,6-Dinitro-o-cresol	ug/l	77603	26	K
X	2,4-Dinitrophenol	ug/l	34616	46	K
X	2-Nitrophenol	ug/l	34591	4	K
X	4-Nitrophenol	ug/l	34649	2.6	K
X	p-Chloro-m-cresol	ug/l	34452	3.3	K
X	Pentachlorophenol	ug/l	39032	4	K
X	Phenol	ug/l	34695	1.6	K
X	2,4,6-Trichlorophenol	ug/l	34621	3	K
X					
X	Acenaphthene	ug/l	34205	2.1	K
X	Acenaphthylene	ug/l	34200	3.8	K
X	Anthracene	ug/l	34220	2.1	K
X	Benzidine	ug/l	39120	48	K
X	Benzanthracene	ug/l	34526	8.6	K
X	Benzopyrene	ug/l	34247	2.7	K
X	3,4-Benzofluoranthene	ug/l	34230	5.3	K
X	Benzoperylene	ug/l	34521	4.5	K
X	Benzofluoranthene	ug/l	34242	2.7	K
X	Bis(2-chloroethoxy)methane	ug/l	34278	5.8	K
X	Bis(2-chloroethyl) Ether	ug/l	34273	6.3	K
X	Bis(2-chloroisopropyl) Ether	ug/l	34283	4.3	K
X	Bis(2-ethylhexyl) Phthalate	ug/l	39100	1	K
X	4-Bromophenyl Ether	ug/l	34636	2.1	K
X	Butylbenzyl Phthalate	ug/l	34292	1	K
X	2-Chloronaphthalene	ug/l	34581	2.1	K
X	4-Chlorophenyl Phenyl Ether	ug/l	34641	4.6	K

Form VWX-017
4/83 P2

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES
WATER QUALITY MANAGEMENT ELEMENT

GROUND WATER ANALYSIS — MONITORING WELL REPORT

= ACID, BASE/NEUTRAL ORGANIC COMPOUNDS

PLEASE TYPE OR PRINT WITH BALLPOINT PEN

FACILITY NAME	AMERICAN CYANAMID COMPANY - CARTERET LANDFILL	SW ID NO.
LAB NAME	ENVIRONMENTAL TESTING AND CERTIFICATION	

	NJPDES NO.	WELL PERMIT NO.	SAMPLE DATE YR. MO. DAY	NJ LAB CERT. NO.	WQM USE
U	NJ 0061611	24-10393-4	900116	12257	

4S

THE SCHEDULE INDICATED BELOW IS TO BE OBSERVED FROM ___ MO. YR. TO ___ MO. YR.

SUBMIT WITH SIGNED T-VWX-014

SAMPLING MONTHS

Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	ANALYSIS	UNITS	PARAMETER	VALUE	REMARKS
X												Chrysene	ug/l	34320	2.7	K
X												Dibenzanthracene	ug/l	34556	11	K
X												1,2-Dichlorobenzene	ug/l	34536	2.1	K
X												1,3-Dichlorobenzene	ug/l	34566	2.1	K
X												1,4-Dichlorobenzene	ug/l	34571	4.8	K
X												3,3'-Dichlorobenzidine	ug/l	34631	18	K
X												Diethyl Phthalate	ug/l	34336	11	K
X												Dimethyl Phthalate	ug/l	34341	11	K
X												Di-n-butyl Phthalate	ug/l	39110	11	K
X												2,4-Dinitrotolulene	ug/l	34611	6.3	K
X												2,6-Dinitrotolulene	ug/l	34626	2.1	K
X												Di-n-octyl Phthalate	ug/l	34596	11	K
X												1,2-Diphenylhydrazine	ug/l	34346	11	K
X												Fluoranthene	ug/l	34376	2.4	K
X												Fluorene	ug/l	34381	2.1	K
X												Hexachlorobenzene	ug/l	39700	2.1	K
X												Hexachlorobutadiene	ug/l	34391	.99	K
X												Hexachlorocyclopentadiene	ug/l	34386	11	K
X												Hexachloroethane	ug/l	34396	1.8	K
X												Indenopyrene	ug/l	34403	5.2	K
X												Isophorone	ug/l	34408	2.4	K
X												Naphthalene	ug/l	34696	1.8	K
X												Nitrobenzene	ug/l	34447	2.1	K
X												N-Nitrosodimentlyamine	ug/l	34438	11	K
X												N-Nitrosodi-n-propylamine	ug/l	34428	11	K
X												N-Nitrosodiphenylamine	ug/l	34433	2.1	K
X												Phenanthrene	ug/l	34461	5.9	K
X												Pyrene	ug/l	34469	2.1	K
X												1,2,4-Trichlorobenzene	ug/l	34551	2.1	K

VALUE CODING RULES AND
REMARK CODES ON REVERSE

11178

Form VWX-017
4/83
P3

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES
WATER QUALITY MANAGEMENT ELEMENT

GROUND WATER ANALYSIS – MONITORING WELL REPORT

PESTICIDES & PCBs

PLEASE TYPE OR PRINT WITH BALLPOINT PEN

FACILITY NAME	AMERICAN CYANAMID COMPANY - CARTERET LANDFILL
LAB NAME	ENVIRONMENTAL TESTING AND CERTIFICATION

SW ID NO.

U (1) NJPDES NO. NJ 0 0 6 1 6 1 1 (2–9)

WELL PERMIT NO. 2 4 - 1 0 3 9 3 - 4 (9–16)

SAMPLE DATE YR. | MO. | DAY: 9 0 0 1 1 0 (17–22)

NJ LAB CERT. NO. 1 2 2 5 7 (23–27)

WQM USE (28)

45

THE SCHEDULE INDICATED BELOW IS TO BE OBSERVED FROM MO. YR. TO MO. YR.

SUBMIT WITH SIGNED T-VWX-014

SAMPLING MONTHS													ANALYSIS	UNITS	PARAMETER	VALUE	REMARKS
Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.						
X													Aldrin	ug/1	39330	2.1	K
X													alpha-BHC	ug/1	39337	1.1	K
X													beta-BHC	ug/1	39338	4.6	K
X													gamma-BHC (Lindane)	ug/1	39340	1.1	K
X													delta-BHC	ug/1	34259	3.4	K
X													Chlordane	ug/1	39350	1.1	K
X													4,4'-DDT	ug/1	39370	3.1	K
X													4,4'-DDE	ug/1	39365	6.2	K
X													4,4'-DDD	ug/1		5.2	K
X													Dieldrin	ug/1	39380	2.7	K
X													alpha-Endosulfan	ug/1	34361	1.1	K
X													beta-Endosulfan	ug/1	34356	1.1	K
X													Endosulfan Sulfate	ug/1	34351	6.2	K
X													Endrin	ug/1	39390	1.1	K
X													Endrin Aldehyde	ug/1	34366	1.1	K
X													Heptachlor	ug/1	39410	2.1	K
X													Heptachlor Epoxide	ug/1	39420	2.4	K
X													PCB-1242	ug/1	39496	40	K
X													PCB-1254	ug/1	39504	40	K
X													PCB-1221	ug/1	39488	40	K
X													PCB-1232	ug/1	39492	40	K
X													PCB-1248	ug/1	39500	40	K
X													PCB-1260	ug/1	39508	40	K
X													PCB-1016	ug/1	34671	40	K
X													Toxaphene	ug/1	39400	11	K

23 24 79 80 81

Form VWX-015 A
4/83

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES
WATER QUALITY MANAGEMENT ELEMENT

GROUND WATER ANALYSIS – MONITORING WELL REPORT

PLEASE TYPE OR PRINT WITH BALLPOINT PEN

FACILITY NAME: AMERICAN CYANAMID COMPANY - CARTERET LANDFILL | SW ID NO.:

LAB NAME: ENVIRONMENTAL TESTING AND CERTIFICATION

R	NJPDES NO.	WELL PERMIT NO.	SAMPLE DATE YR. MO. DAY	NJ LAB CERT. NO.	WQM USE
1	NJ 0061611 (2–8)	24-10392-6 (9–16) 4D	90 01 16 (17–22)	12257 (23–27)	(28)

THE SCHEDULE INDICATED BELOW IS TO BE OBSERVED FROM MO. YR. TO MO. YR.

SUBMIT WITH SIGNED T-VWX-014

Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	ANALYSIS	UNITS	PARAMETER	VALUE	REMARKS
X			X			X			X			Elevation of top of well casing with cap off (as specified in well completion report)	feet MSL: to nearest .01		12.13	
												Elevation of original ground level (as specified in well completion report)	feet MSL: to nearest .01		10.07	
X			X			X			X			Depth to water table from top of casing prior to sampling with cap off	feet: to nearest .01	82546	10.15	
X			X			X			X			Depth to water table from original ground level prior to sampling	feet: to nearest .01	72019	8.44	
X												Arsenic, Dissolved	UG/L as As	01000	10	K
X												Barium, Dissolved	UG/L as Ba	01005	39	
X			X			X			X			Biochemical Oxygen Demand - 5 Day	MG/L	00310	8	
X												Cadmium, Dissolved	UG/L as Cd	01025	22	
X			X			X			X			Chloride, Dissolved	UG/L as Cl	82295	124000	
X												Chromium, Dissolved	UG/L as Cr	01030	4.1	D
X												Chromium, Dissolved, Hexavalent	UG/L as Cr	01220	50	J
X			X			X			X			Chemical Oxygen Demand (COD), Dissolved	MG/L	00341	3910	
X												Coliform Group	N/100 ML	74056	25	
												Color	Pt - Co	00080	1	
X			X			X			X			Copper, Dissolved	UG/L as Cu	01040	30	
X												Cyanide, Total	MG/L as CN	00720	1.4	
												Endrin, Total	UG/L	39390		
X												Fluoride, Dissolved	MG/L as F	00950	.1	
												Gross Alpha, Dissolved	Pc/L	01503		
												Gross Beta, Dissolved	Pc/L	03503		
												Hardness, Total as $CaCO_3$	MG/L	00900		
X			X			X			X			Iron, Dissolved	UG/L as Fe	01046	2220	
X			X			X			X			Lead, Dissolved	UG/L as Pb	01049	75	
												Lindane, Total	UG/L	39782		
X			X			X			X			Manganese, Dissolved	UG/L	01056	1739	
X			X			X			X			Mercury, Dissolved	UG/L	71890	.14	

VALUE CODING RULES AND
REMARK CODES ON REVERSE

29 42 55 68 | 33 34 46 47 59 60 72 73 | 40 53 66 79

U180

GROUND WATER ANALYSIS – MONITORING WELL REPORT

PLEASE TYPE OR PRINT WITH BALLPOINT PEN

FACILITY NAME: AMERICAN CYANAMID COMPANY - CARTERET LANDFILL
SW ID NO.:
LAB NAME: ENVIRONMENTAL TESTING AND CERTIFICATION

	NJPDES NO.	WELL PERMIT NO.	SAMPLE DATE YR. MO. DAY	NJ LAB CERT. NO.	WQM USE
	S NJ 0 0 6 1 6 1 1	24-163962-6 4D	9 0 0 1 1 6	1 2 2 5 7	
	1 2 8	9 16	17 22	23 27	28

THE SCHEDULE INDICATED BELOW IS TO BE OBSERVED FROM MO. YR. TO MO. YR.

SUBMIT WITH SIGNED T-VWX-014

SAMPLING MONTHS												ANALYSIS	UNITS	PARAMETER	VALUE	REMARKS
Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.					
												Methoxychlor, Total	UG/L	39480		
X			X			X			X			Methylene Blue Active Substances	MG/L	38260	.27	
X			X			X			X			Nitrogen, Ammonia, Dissolved $NH_3 + NH_4$ as N	MG/L as N	00608	5.4	
X			X			X			X			Nitrogen, Nitrate Dissolved	MG/L as N	00618	.1	J
												Odor	T.O.N.	00085		
X			X			X			X			pH	Standard Units	00400	6.32	
X			X			X			X			Phenols, Total Recoverable	UG/L	32730	250	J
												Radium 226, Dissolved	Pc/L	09503		
												Radium 228, Dissolved	Pc/L	81366		
X												Selenium, Dissolved	UG/L	01145	50	K
X												Silver, Dissolved	UG/L	01075	29	
X			X			X			X			Sodium, Dissolved	MG/L	00930	4600	
X			X			X			X			Sulfate, Dissolved (as SO_4)	MG/L	00946	112	0
X			X			X			X			Total Dissolved Solids (TDS)	PPM	70300	2380	0
X			X			X			X			Total Organic Carbon (TOC)	PPM	00680	9.8	
X			X			X			X			Total Organic Halogen (TOX)	UG/L	70353	6000	
												Toxaphene	UG/L	39400		
												Turbidity	NTU	00076		
X			X			X			X			Zinc, Dissolved	UG/L	01090	25	
												2, 4–D, Total	UG/L	39370		
												2, 4, 5–TP, Total	UG/L	39045		
X			X			X			X			Specific Conductance	UMHO/CM		2000	6

25 33 34 40 41
42 46 47 53 54
58 59 60 66 67
68 72 73 79 80

VALUE CODING RULES AND
REMARK CODES ON REVERSE

11181

Form VWX-016
4/83

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES
WATER QUALITY MANAGEMENT ELEMENT

GROUND WATER ANALYSIS – VOLATILE ORGANICS REPORT

PLEASE TYPE OR PRINT WITH BALLPOINT PEN

FACILITY NAME: AMERICAN CYANAMID COMPANY - CARTERET LANDFILL
SW ID NO.:

LAB NAME: ENVIRONMENTAL TESTING AND CERTIFICATION

NJPDES NO.	WELL PERMIT NO.	SAMPLE DATE YR. MO. DAY	NJ LAB CERT. NO.	WQM USE
T NJ0061611	24-103926	90 01 16	12257	
	4D			

THE SCHEDULE INDICATED BELOW IS TO BE OBSERVED FROM ____ (MO. YR.) TO ____ (MO. YR.)

SUBMIT WITH SIGNED T-VWX-014

SAMPLING MONTHS (Jan. Feb. Mar. Apr. May June July Aug. Sept. Oct. Nov. Dec.)	ANALYSIS	UNITS	PARAMETER	VALUE	REMARKS
X	Acrylonitrile	UG/L	34215	5	K
X	Benzene	UG/L	34030	.88	K
X	Bromoform	UG/L	32104	.94	K
X	Carbon Tetrachloride	UG/L	32102	.56	K
X	Chlorobenzene	UG/L	34301	1.2	K
X	Chlorodibromoethane	UG/L	34306	.62	K
X	Chloroform	UG/L	32106	.32	K
X	1, 1 - Dichloroethane	UG/L	34496	.94	K
X	1, 2 - Dichloroethane	UG/L	34531	.56	K
X	1, 1 - Dichloroethylene	UG/L	34501	.56	K
X	1, 2 - Dichloropropane	UG/L	34541	1.2	K
X	Ethylbenzene	UG/L	34371	1.4	K
X	Methylene Chloride	UG/L	34423	.56	K
X	1, 1, 2, 2 - Tetrachloroethane	UG/L	34516	1.4	K
X	Tetrachloroethylene	UG/L	34475	.82	K
X	Toluene	UG/L	34012	1.2	K
X	1, 1, 1 - Trichloroethane	UG/L	34506	.76	K
X	1, 1, 2 - Trichloroethane	UG/L	34511	1	K
X	Trichloroethylene	UG/L	39180	.38	K
X	Vinyl Chloride	UG/L	39175	2	N
X	Acrolein	UG/L	34210	5	K
X	Chloroethane	UG/L	34311	2	K
X	2 - Chloroethylvinyl Ether	UG/L	34576	2	K
X	Dichlorobromomethane	UG/L	32105	.74	K
X	1, 3 - Dichloropropylene	UG/L	34699	2	K
X	Methyl Bromide	UG/L	34413	2	K
X	Methyl Chloride	UG/L	34418	2	K
X	1, 2 - trans - Dichloroethylene	UG/L	34546	.32	K
X	1, 2 Dichlorobenzene	UG/L	34536	1.4	K
X	1, 3 Dichlorobenzene	UG/L	34566	1.4	K
X	1, 4 Dichlorobenzene	UG/L	34571	1.4	K

VALUE CODING RULES AND
REMARK CODES ON REVERSE

11182

Form VWX-017
VES

P1

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES
WATER QUALITY MANAGEMENT ELEMENT

GROUND WATER ANALYSIS – MONITORING WELL REPORT
ACID, BASE/NEUTRAL ORGANIC COMPOUNDS

PLEASE TYPE OR PRINT WITH BALLPOINT PEN

FACILITY NAME: AMERICAN CYANAMID COMPANY - CARTERET LANDFILL | SW ID NO.

LAB NAME: ENVIRONMENTAL TESTING AND CERTIFICATION

U | NJPDES NO.: NJ 0 0 6 1 6 1 1 | WELL PERMIT NO.: 24-163982-6 (4D) | SAMPLE DATE YR. MO. DAY: 90 01 16 | NJ LAB CERT. NO.: 12257 | WQM USE

THE SCHEDULE INDICATED BELOW IS TO BE OBSERVED FROM ___ ___ (MO. YR.) TO ___ ___ (MO. YR.)

SUBMIT WITH SIGNED T-VWX-014

SAMPLING MONTHS	ANALYSIS	UNITS	PARAMETER	VALUE	REMARKS
X	2-Chlorophenol	ug/l	34586	3.3	K
X	2,4-Dichlorophenol	ug/l	34601	2.7	K
X	2,4-Dimethylphenol	ug/l	34606	2.7	K
X	2,6-Dinitro-o-cresol	ug/l	77603	24	K
X	2,4-Dinitrophenol	ug/l	34616	42	K
X	2-Nitrophenol	ug/l	34591	3.6	K
X	4-Nitrophenol	ug/l	34649	2.4	K
X	p-Chloro-m-cresol	ug/l	34452	3	K
X	Pentachlorophenol	ug/l	39032	3.6	K
X	Phenol	ug/l	34695	1.5	K
X	2,4,6-Trichlorophenol	ug/l	34621	2.7	K
X					
X	Acenaphthene	ug/l	34205	1.9	K
X	Acenaphthylene	ug/l	34200	3.5	K
X	Anthracene	ug/l	34220	1.9	K
X	Benzidine	ug/l	39120	.44	K
X	Benzanthracene	ug/l	34526	7.8	K
X	Benzopyrene	ug/l	34247	2.5	K
X	3,4-Benzofluoranthene	ug/l	34230	4.8	K
X	Benzoperylene	ug/l	34521	4.1	K
X	Benzofluoranthene	ug/l	34242	2.5	K
X	Bis(2-chloroethoxy)methane	ug/l	34278	5.3	K
X	Bis(2-chloroethyl) Ether	ug/l	34273	5.7	K
X	Bis(2-chlroisopropyl) Ether	ug/l	34283	5.7	K
X	Bis(2-ethylhexyl) Phthalate	ug/l	39100	2.2	6 J
X	4-Bromophenyl Ether	ug/l	34636	1.9	K
X	Butylbenzyl Phthalate	ug/l	34292	10	K
X	2-Chloronaphthalene	ug/l	34581	1.9	K
X	4-Chlorophenyl Phenyl Ether	ug/l	34641	4.2	K

Form VWX-017
4/83 P2

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES
WATER QUALITY MANAGEMENT ELEMENT

GROUND WATER ANALYSIS – MONITORING WELL REPORT

= ACID, BASE/NEUTRAL ORGANIC COMPOUNDS

PLEASE TYPE OR PRINT WITH BALLPOINT PEN

FACILITY NAME	AMERICAN CYANAMID COMPANY - CARTERET LANDFILL	SW ID NO.
LAB NAME	ENVIRONMENTAL TESTING AND CERTIFICATION	

U | NJPDES NO. NJ 0061611 | WELL PERMIT NO. 24-10392-4D | SAMPLE DATE YR. 90 MO. 11 DAY 16 | NJ LAB CERT. NO. 12257 | WQM USE

THE SCHEDULE INDICATED BELOW IS TO BE OBSERVED FROM MO. YR. TO MO. YR.

SUBMIT WITH SIGNED T-VWX-014

SAMPLING MONTHS	ANALYSIS	UNITS	PARAMETER	VALUE	REMARKS
X	Chrysene	ug/1	34320	2.5	K
X	Dibenzanthracene	ug/1	34556	10	K
X	1,2-Dichlorobenzene	ug/1	34536	1.9	K
X	1,3-Dichlorobenzene	ug/1	34566	1.9	K
X	1,4-Dichlorobenzene	ug/1	34571	4.4	K
X	3,3'-Dichlorobenzidine	ug/1	34631	17	K
X	Diethyl Phthalate	ug/1	34336	10	K
X	Dimethyl Phthalate	ug/1	34341	10	K
X	Di-n-butyl Phthalate	ug/1	39110	10	K
X	2,4-Dinitrotolulene	ug/1	34611	5.7	K
X	2,6-Dinitrotolulene	ug/1	34626	1.9	K
X	Di-n-octyl Phthalate	ug/1	34596	10	K
X	1,2-Diphenylhydrazine	ug/1	34346	10	K
X	Fluoranthene	ug/1	34376	2.2	K
X	Fluorene	ug/1	34381	1.9	K
X	Hexachlorobenzene	ug/1	39700	1.9	K
X	Hexachlorobutadiene	ug/1	34391	.9	K
X	Hexachlorocyclopentadiene	ug/1	34386	10	K
X	Hexachloroethane	ug/1	34396	1.6	K
X	Indenopyrene	ug/1	34403	4.7	K
X	Isophorone	ug/1	34408	2.2	K
X	Naphthalene	ug/1	34696	1.6	K
X	Nitrobenzene	ug/1	34447	1.9	K
X	N-Nitrosodimentlyamine	ug/1	34438	10	K
X	N-Nitrosodi-n-propylamine	ug/1	34428	10	K
X	N-Nitrosodiphenylamine	ug/1	34433	1.9	K
X	Phenanthrene	ug/1	34461	5.4	K
X	Pyrene	ug/1	34469	1.9	K
X	1,2,4-Trichlorobenzene	ug/1	34551	1.9	K

VALUE CODING RULES AND

1184

Form VWX-017
4/83
P3

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES
WATER QUALITY MANAGEMENT ELEMENT

GROUND WATER ANALYSIS – MONITORING WELL REPORT

PESTICIDES & PCBs

PLEASE TYPE OR PRINT WITH BALLPOINT PEN

FACILITY NAME	AMERICAN CYANAMID COMPANY - CARTERET LANDFILL	SW ID NO.
LAB NAME	ENVIRONMENTAL TESTING AND CERTIFICATION	

	NJPDES NO.	WELL PERMIT NO.	SAMPLE DATE YR. MO. DAY	NJ LAB CERT. NO.	WQM USE
U	NJ 0061611	24-10392-6	90 01 16	12257	

4D

THE SCHEDULE INDICATED BELOW IS TO BE OBSERVED FROM ___ MO. YR. TO ___ MO. YR.

RECEIVED
APR 03 1990
DEPT OF ENVIRON. PROTECTION
Division of Water Resources
Bureau of Information Systems

SUBMIT WITH SIGNED T-VWX-014

SAMPLING MONTHS

Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	ANALYSIS	UNITS	PARAMETER	VALUE	REMARKS
X												Aldrin	ug/l	39330	1.9	K
X												alpha-BHC	ug/l	39337	10	K
X												beta-BHC	ug/l	39338	4.2	K
X												gamma-BHC (Lindane)	ug/l	39340	10	K
X												delta-BHC	ug/l	34259	3.1	K
X												Chlordane	ug/l	39350	10	K
X												4,4'-DDT	ug/l	39370	2.8	K
X												4,4'-DDE	ug/l	39365	5.6	K
X												4,4'-DDD	ug/l		4.7	K
X												Dieldrin	ug/l	39380	2.5	K
X												alpha-Endosulfan	ug/l	34361	10	K
X												beta-Endosulfan	ug/l	34356	10	K
X												Endosulfan Sulfate	ug/l	34351	5.6	K
X												Endrin	ug/l	39390	10	K
X												Endrin Aldehyde	ug/l	34366	10	K
X												Heptachlor	ug/l	39410	1.9	K
X												Heptachlor Epoxide	ug/l	39420	2.2	K
X												PCB-1242	ug/l	39496	36	K
X												PCB-1254	ug/l	39504	36	K
X												PCB-1221	ug/l	39488	36	K
X												PCB-1232	ug/l	39492	36	K
X												PCB-1248	ug/l	39500	36	K
X												PCB-1260	ug/l	39508	36	K
X												PCB-1016	ug/l	34671	36	K
X												Toxaphene	ug/l	39400	10	K

1185

Form VWX-015 A
4/83

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES
WATER QUALITY MANAGEMENT ELEMENT

GROUND WATER ANALYSIS – MONITORING WELL REPORT

PLEASE TYPE OR PRINT WITH BALLPOINT PEN

FACILITY NAME: AMERICAN CYANAMID COMPANY - CARTERET LANDFILL | SW ID NO.:

LAB NAME: ENVIRONMENTAL TESTING AND CERTIFICATION

R (1) | NJPDES NO. (2–8): NJ 0061611 | WELL PERMIT NO. (9–16): 24-10395-1 (5S) | SAMPLE DATE YR. MO. DAY (17–22): 900116 | NJ LAB CERT. NO. (23–27): 12257 | WQM USE (28):

THE SCHEDULE INDICATED BELOW IS TO BE OBSERVED FROM MO. YR. TO MO. YR.

SUBMIT WITH SIGNED T-VWX-014

SAMPLING MONTHS: Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	ANALYSIS	UNITS	PARAMETER	VALUE	REMARKS
X			X			X			X			Elevation of top of well casing with cap off (as specified in well completion report)	feet MSL: to nearest .01		6.9C	
												Elevation of original ground level (as specified in well completion report)	feet MSL: to nearest .01		5.22	
X			X			X			X			Depth to water table from top of casing prior to sampling with cap off	feet: to nearest .01	82546	3.9	
X			X			X			X			Depth to water table from original ground level prior to sampling	feet: to nearest .01	72019	2.22	
X												Arsenic, Dissolved	UG/L as As	01000	2.3	J
X												Barium, Dissolved	UG/L as Ba	01005	210	
X			X			X			X			Biochemical Oxygen Demand - 5 Day	MG/L	00311	1510	
X												Cadmium, Dissolved	UG/L as Cd	01025	21	
X			X			X			X			Chloride, Dissolved	UG/L as Cl	82295	142000	
X												Chromium, Dissolved	UG/L as Cr	01030	7.7	J
X												Chromium, Dissolved, Hexavalent	UG/L as Cr	01220	10	J
X			X			X			X			Chemical Oxygen Demand (COD), Dissolved	MG/L	00341	245	
X												Coliform Group	N/100 ML	74056	4	
												Color	Pt - Co	00080		
X			X			X			X			Copper, Dissolved	UG/L as Cu	01040	19	
X												Cyanide, Total	MG/L as CN	00720	.575	
												Endrin, Total	UG/L	39390		
X												Fluoride, Dissolved	MG/L as F	00950	.6	
												Gross Alpha, Dissolved	Pc/L	01503		
												Gross Beta, Dissolved	Pc/L	03503		
												Hardness, Total as $CaCO_3$	MG/L	00900		
X			X			X			X			Iron, Dissolved	UG/L as Fe	01046	440	
X			X			X			X			Lead, Dissolved	UG/L as Pb	01049	75	K
												Lindane, Total	UG/L	39782		
X			X			X			X			Manganese, Dissolved	UG/L	01056	219	
X			X			X			X			Mercury, Dissolved	UG/L	71890	.14	K

29 33 34 40 41
42 46 47 53 54
55 59 60 66 67
68 72 73 79 80

VALUE CODING RULES AND
REMARK CODES ON REVERSE

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NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES
WATER QUALITY MANAGEMENT ELEMENT

GROUND WATER ANALYSIS – MONITORING WELL REPORT

PLEASE TYPE OR PRINT WITH BALLPOINT PEN

FACILITY NAME: AMERICAN CYANAMID COMPANY - CARTERET LANDFILL
SW ID NO.:

LAB NAME: ENVIRONMENTAL TESTING AND CERTIFICATION

NJPDES NO.	WELL PERMIT NO.	SAMPLE DATE YR. MO. DAY	NJ LAB CERT. NO.	WQM USE
S NJ 0061611	24-103951-1 5S	90 11 16	12257	

THE SCHEDULE INDICATED BELOW IS TO BE OBSERVED FROM MO. YR. TO MO. YR.

SUBMIT WITH SIGNED T-VWX-014

SAMPLING MONTHS												ANALYSIS	UNITS	PARAMETER	VALUE	REMARKS
Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.					
												Methoxychlor, Total	UG/L	39480		
X			X			X			X			Methylene Blue Active Substances	MG/L	38260	.86	
X			X			X			X			Nitrogen, Ammonia, Dissolved $NH_3 + NH_4$ as N	MG/L as N	00608	23	
X			X			X			X			Nitrogen, Nitrate Dissolved	MG/L as N	00618	<.2	J
												Odor	T.O.N.	00085		
X			X			X			X			pH	Standard Units	00400	6.8	
X			X			X			X			Phenols, Total Recoverable	UG/L	32730	5.00	J
												Radium 226, Dissolved	Pc/L	09503		
												Radium 228, Dissolved	Pc/L	81366		
X												Selenium, Dissolved	UG/L	01145	25	K
X												Silver, Dissolved	UG/L	01075	19	
X			X			X			X			Sodium, Dissolved	MG/L	00930	76.0	
X			X			X			X			Sulfate, Dissolved (as SO_4)	MG/L	00946	125	
X			X			X			X			Total Dissolved Solids (TDS)	PPM	70300	2460	
X			X			X			X			Total Organic Carbon (TOC)	PPM	00680	36.8	
X			X			X			X			Total Organic Halogen (TOX)	UG/L	70353	69.0	
												Toxaphene	UG/L	39400		
												Turbidity	NTU	00076		
X			X			X			X			Zinc, Dissolved	UG/L	01090	16	J
												2, 4—D, Total	UG/L	39370		
												2, 4, 5—TP, Total	UG/L	39045		
X			X			X			X			Specific Conductance	UMHO/CM		2000	

29 33 34 40 41
42 46 47 53 54
55 59 60 66 67
68 72 73 79 80

VALUE CODING RULES AND
REMARK CODES ON REVERSE

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Form VWX-016
4/83

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES
WATER QUALITY MANAGEMENT ELEMENT

GROUND WATER ANALYSIS – VOLATILE ORGANICS REPORT

PLEASE TYPE OR PRINT WITH BALLPOINT PEN

FACILITY NAME: AMERICAN CYANAMID COMPANY - CARTERET LANDFILL
SW ID NO.:
LAB NAME: ENVIRONMENTAL TESTING AND CERTIFICATION

	NJPDES NO.	WELL PERMIT NO.	SAMPLE DATE YR. MO. DAY	NJ LAB CERT. NO.	WQM USE
	T NJ0061611	24-1e395-1 5S	90 01 16	12257	
	1 2 8	9 16	17 22	23 27	28

THE SCHEDULE INDICATED BELOW IS TO BE OBSERVED FROM ___ ___ (MO. YR.) TO ___ ___ (MO. YR.)

SUBMIT WITH SIGNED T-VWX-014

SAMPLING MONTHS												ANALYSIS	UNITS	PARAMETER	VALUE	REMARKS
Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.					
X												Acrylonitrile	UG/L	34215	5	K
X												Benzene	UG/L	34030	.58	K
X												Bromoform	UG/L	32104	.94	K
X												Carbon Tetrachloride	UG/L	32102	.56	K
X												Chlorobenzene	UG/L	34301	1.2	K
X												Chlorodibromoethane	UG/L	34306	.62	K
X												Chloroform	UG/L	32106	.32	K
X												1, 1 - Dichloroethane	UG/L	34496	.94	K
X												1, 2 - Dichloroethane	UG/L	34531	.56	K
X												1, 1 - Dichloroethylene	UG/L	34501	.56	K
X												1, 2 - Dichloropropane	UG/L	34541	1.2	K
X												Ethylbenzene	UG/L	34371	1.4	K
X												Methylene Chloride	UG/L	34423	.56	K
X												1, 1, 2, 2 - Tetrachloroethane	UG/L	34516	1.4	K
X												Tetrachloroethylene	UG/L	34475	.82	K
X												Toluene	UG/L	34012	11.8	
X												1, 1, 1 - Trichloroethane	UG/L	34506	.76	K
X												1, 1, 2 - Trichloroethane	UG/L	34511	1	K
X												Trichloroethylene	UG/L	39180	2.33	
X												Vinyl Chloride	UG/L	39175	2	K
X												Acrolein	UG/L	34210	5	K
X												Chloroethane	UG/L	34311	2	K
X												2 - Chloroethylvinyl Ether	UG/L	34576	2	K
X												Dichlorobromomethane	UG/L	32105	.44	K
X												1, 3 - Dichloropropylene	UG/L	34699	2	K
X												Methyl Bromide	UG/L	34413	2	K
X												Methyl Chloride	UG/L	34418	2	K
X												1, 2 - trans - Dichloroethylene	UG/L	34546	.32	K
X												1, 2 Dichlorobenzene	UG/L	34536	2.0	K
X												1, 3 Dichlorobenzene	UG/L	34566	2.0	K
X												1, 4 Dichlorobenzene	UG/L	34571	4.0	K

29 33 34 40 41
42 46 47 53 54
58 59 60 66 67
68 72 73 79 80

VALUE CODING RULES AND
REMARK CODES ON REVERSE

11188

Form VWX-017
P1

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES
WATER QUALITY MANAGEMENT ELEMENT

GROUND WATER ANALYSIS – MONITORING WELL REPORT
ACID, BASE/NEUTRAL ORGANIC COMPOUNDS

PLEASE TYPE OR PRINT WITH BALLPOINT PEN

FACILITY NAME: AMERICAN CYANAMID COMPANY - CARTERET LANDFILL
SW ID NO.:
LAB NAME: ENVIRONMENTAL TESTING AND CERTIFICATION

	NJPDES NO.	WELL PERMIT NO.	SAMPLE DATE YR. MO. DAY	NJ LAB CERT. NO.	WQM USE
U	NJ 0061611	24-10395-1 (5S)	900116	12257	

THE SCHEDULE INDICATED BELOW IS TO BE OBSERVED FROM ___ MO. YR. TO ___ MO. YR.

SUBMIT WITH SIGNED T-VWX-014

SAMPLING MONTHS

Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	ANALYSIS	UNITS	PARAMETER	VALUE	REMARKS
X												2-Chlorophenol	ug/l	34586	34	K
X												2,4-Dichlorophenol	ug/l	34601	28	K
X												2,4-Dimethylphenol	ug/l	34606	28	K
X												2,6-Dinitro-o-cresol	ug/l	77603	250	K
X												2,4-Dinitrophenol	ug/l	34616	440	K
X												2-Nitrophenol	ug/l	34591	38	K
X												4-Nitrophenol	ug/l	34649	25	K
X												p-Chloro-m-cresol	ug/l	34452	31	K
X												Pentachlorophenol	ug/l	39032	38	K
X												Phenol	ug/l	34695	16	K
X												2,4,6-Trichlorophenol	ug/l	34621	28	K
X																
X												Acenaphthene	ug/l	34205	20	K
X												Acenaphthylene	ug/l	34200	36	K
X												Anthracene	ug/l	34220	20	K
X												Benzidine	ug/l	39120	460	K
X												Benzanthracene	ug/l	34526	81	K
X												Benzopyrene	ug/l	34247	26	K
X												3,4-Benzofluoranthene	ug/l	34230	50	K
X												Benzoperylene	ug/l	34521	43	K
X												Benzofluoranthene	ug/l	34242	26	K
X												Bis(2-chloroethoxy)methane	ug/l	34278	55	K
X												Bis(2-chloroethyl) Ether	ug/l	34273	59	K
X												Bis(2-chlroisopropyl) Ether	ug/l	34283	59	K
X												Bis(2-ethylhexyl) Phthalate	ug/l	39100	100	K
X												4-Bromophenyl Ether	ug/l	34636	20	K
X												Butylbenzyl Phthalate	ug/l	34292	100	K
X												2-Chloronaphthalene	ug/l	34581	20	K
X												4-Chlorophenyl Phenyl Ether	ug/l	34641	44	K

Form VWX-017
4/83
P3

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES
WATER QUALITY MANAGEMENT ELEMENT

GROUND WATER ANALYSIS -- MONITORING WELL REPORT

PESTICIDES & PCBs

PLEASE TYPE OR PRINT WITH BALLPOINT PEN

FACILITY NAME: AMERICAN CYANAMID COMPANY - CARTERET LANDFILL | SW ID NO.:

LAB NAME: ENVIRONMENTAL TESTING AND CERTIFICATION

NJPDES NO.	WELL PERMIT NO.	SAMPLE DATE YR. MO. DAY	NJ LAB CERT. NO.	WQM USE
U NJ0006161	24-163955-1	90 01 16	12257	

55

THE SCHEDULE INDICATED BELOW IS TO BE OBSERVED FROM MO. YR. TO MO. YR.

SUBMIT WITH SIGNED T-VWX-014

SAMPLING MONTHS													ANALYSIS	UNITS	PARAMETER	VALUE	REMARKS
Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.						
X													Aldrin	ug/l	39330	20	K
X													alpha-BHC	ug/l	39337	100	K
X													beta-BHC	ug/l	39338	44	K
X													gamma-BHC (Lindane)	ug/l	39340	100	K
X													delta-BHC	ug/l	34259	32	K
X													Chlordane	ug/l	39350	100	K
X													4,4'-DDT	ug/l	39370	29	K
X													4,4'-DDE	ug/l	39365	58	K
X													4,4'-DDD	ug/l		49	K
X													Dieldrin	ug/l	39380	26	K
X													alpha-Endosulfan	ug/l	34361	100	K
X													beta-Endosulfan	ug/l	34356	100	K
X													Endosulfan Sulfate	ug/l	34351	58	K
X													Endrin	ug/l	39390	100	K
X													Endrin Aldehyde	ug/l	34366	100	K
X													Heptachlor	ug/l	39410	20	K
X													Heptachlor Epoxide	ug/l	39420	23	K
X													PCB-1242	ug/l	39496	380	K
X													PCB-1254	ug/l	39504	380	K
X													PCB-1221	ug/l	39488	380	K
X													PCB-1232	ug/l	39492	380	K
X													PCB-1248	ug/l	39500	380	K
X													PCB-1260	ug/l	39508	380	K
X													PCB-1016	ug/l	34671	380	K
X													Toxaphene	ug/l	39400	100	K

20 | 33 34 | 40 41

Form VWX-017
4/83 P2

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES
WATER QUALITY MANAGEMENT ELEMENT

GROUND WATER ANALYSIS – MONITORING WELL REPORT

ACID, BASE/NEUTRAL ORGANIC COMPOUNDS

PLEASE TYPE OR PRINT WITH BALLPOINT PEN

FACILITY NAME	AMERICAN CYANAMID COMPANY - CARTERET LANDFILL	SW ID NO.
LAB NAME	ENVIRONMENTAL TESTING AND CERTIFICATION	

	NJPDES NO.	WELL PERMIT NO.	SAMPLE DATE YR. MO. DAY	NJ LAB CERT. NO.	WQM USE
U	NJ 0061611	24-10395-1	90 01 16	12257	

5S

THE SCHEDULE INDICATED BELOW IS TO BE OBSERVED FROM ___ MO. ___ YR. TO ___ MO. ___ YR.

SUBMIT WITH SIGNED T-VWX-014

SAMPLING MONTHS

Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	ANALYSIS	UNITS	PARAMETER	VALUE	REMARKS
X												Chrysene	ug/l	34320	26	K
X												Dibenzanthracene	ug/l	34556	100	K
X												1,2-Dichlorobenzene	ug/l	34536	20	K
X												1,3-Dichlorobenzene	ug/l	34566	20	K
X												1,4-Dichlorobenzene	ug/l	34571	46	K
X												3,3'-Dichlorobenzidine	ug/l	34631	170	K
X												Diethyl Phthalate	ug/l	34336	100	K
X												Dimethyl Phthalate	ug/l	34341	100	K
X												Di-n-butyl Phthalate	ug/l	39110	100	K
X												2,4-Dinitrotolulene	ug/l	34611	59	K
X												2,6-Dinitrotolulene	ug/l	34626	20	K
X												Di-n-octyl Phthalate	ug/l	34596	100	K
X												1,2-Diphenylhydrazine	ug/l	34346	100	K
X												Fluoranthene	ug/l	34376	23	K
X												Fluorene	ug/l	34381	20	K
X												Hexachlorobenzene	ug/l	39700	20	K
X												Hexachlorobutadiene	ug/l	34391	9.4	K
X												Hexachlorocyclopentadiene	ug/l	34386	100	K
X												Hexachloroethane	ug/l	34396	17	K
X												Indenopyrene	ug/l	34403	49	K
X												Isophorone	ug/l	34408	23	K
X												Naphthalene	ug/l	34696	17	K
X												Nitrobenzene	ug/l	34447	20	K
X												N-Nitrosodimentlyamine	ug/l	34438	100	K
X												N-Nitrosodi-n-propylamine	ug/l	34428	100	K
X												N-Nitrosodiphenylamine	ug/l	34433	20	K
X												Phenanthrene	ug/l	34461	56	K
X												Pyrene	ug/l	34469	20	K
X												1,2,4-Trichlorobenzene	ug/l	34551	20	K

VALUE CODING RULES AND
REMARK CODES ON REVERSE

1191

Form VWX-015 A
4/83

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES
WATER QUALITY MANAGEMENT ELEMENT

GROUND WATER ANALYSIS – MONITORING WELL REPORT

PLEASE TYPE OR PRINT WITH BALLPOINT PEN

FACILITY NAME: AMERICAN CYANAMID COMPANY - CARTERET LANDFILL | SW ID NO.:

LAB NAME: ENVIRONMENTAL TESTING AND CERTIFICATION

	NJPDES NO.	WELL PERMIT NO.	SAMPLE DATE YR. MO. DAY	NJ LAB CERT. NO.	WQM USE
	R NJ 0061611	24-1039 4-2 (5D)	90 01 16	12257	
	1 2–8	9–16	17–22	23–27	28

THE SCHEDULE INDICATED BELOW IS TO BE OBSERVED FROM ___ ___ (MO. YR.) TO ___ ___ (MO. YR.)

SUBMIT WITH SIGNED T-VWX-014

SAMPLING MONTHS	ANALYSIS	UNITS	PARAMETER	VALUE	REMARKS
Jan. Feb. Mar. Apr. May June July Aug. Sept. Oct. Nov. Dec.					
X X X X	Elevation of top of well casing with cap off (as specified in well completion report)	feet MSL: to nearest .01		7.29	
	Elevation of original ground level (as specified in well completion report)	feet MSL: to nearest .01		5.23	
X X X X	Depth to water table from top of casing prior to sampling with cap off	feet: to nearest .01	82546	4.13	
X X X X	Depth to water table from original ground level prior to sampling	feet: to nearest .01	72019	2.24	
X	Arsenic, Dissolved	UG/L as As	01000	6.9	J
X	Barium, Dissolved	UG/L as Ba	01005	170	
X X X X	Biochemical Oxygen Demand - 5 Day	MG/L	00311	19.8	
X	Cadmium, Dissolved	UG/L as Cd	01025	1.8	
X X X X	Chloride, Dissolved	UG/L as Cl	82295	94100000	
X	Chromium, Dissolved	UG/L as Cr	01030	5.7	J
X	Chromium, Dissolved, Hexavalent	UG/L as Cr	01220	2.0	J
X X X X	Chemical Oxygen Demand (COD), Dissolved	MG/L	00341	12.7	
X	Coliform Group	N/100 ML	74056	1.0	J
	Color	Pt - Co	00080		
X X X X	Copper, Dissolved	UG/L as Cu	01040	1.9	
X	Cyanide, Total	MG/L as CN	00720	12.3	
	Endrin, Total	UG/L	39390		
X	Fluoride, Dissolved	MG/L as F	00950	1.3	
	Gross Alpha, Dissolved	Pc/L	01503		
	Gross Beta, Dissolved	Pc/L	03503		
	Hardness, Total as $CaCO_3$	MG/L	00900		
X X X X	Iron, Dissolved	UG/L as Fe	01046	2200	
X X X X	Lead, Dissolved	UG/L as Pb	01049	75	A
	Lindane, Total	UG/L	39782		
X X X X	Manganese, Dissolved	UG/L	01056	350	
X X X X	Mercury, Dissolved	UG/L	71890	1.4	

VALUE CODING RULES AND REMARK CODES ON REVERSE

29 33 34 40
42 46 47 53
55 59 60 66
68 72 73 79

(1192

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES
WATER QUALITY MANAGEMENT ELEMENT

GROUND WATER ANALYSIS – MONITORING WELL REPORT

PLEASE TYPE OR PRINT WITH BALLPOINT PEN

FACILITY NAME: AMERICAN CYANAMID COMPANY - CARTERET LANDFILL
SW ID NO.:
LAB NAME: ENVIRONMENTAL TESTING AND CERTIFICATION

S | NJPDES NO.: NJ 0061611 | WELL PERMIT NO.: 24-103947-2 5D | SAMPLE DATE YR. MO. DAY: 90 01 16 | NJ LAB CERT. NO.: 12257 | WQM USE:

THE SCHEDULE INDICATED BELOW IS TO BE OBSERVED FROM MO. YR. TO MO. YR.

SUBMIT WITH SIGNED T-VWX-014

SAMPLING MONTHS (Jan. Feb. Mar. Apr. May June July Aug. Sept. Oct. Nov. Dec.)	ANALYSIS	UNITS	PARAMETER	VALUE	REMARKS
	Methoxychlor, Total	UG/L	39480		
X X X X X	Methylene Blue Active Substances	MG/L	38260	<.71	
X X X X X	Nitrogen, Ammonia, Dissolved $NH_3 + NH_4$ as N	MG/L as N	00608	6.5	
X X X X X	Nitrogen, Nitrate, Dissolved	MG/L as N	00618	.2	J
	Odor	T.O.N.	00085		
X X X X X	pH	Standard Units	00400	7.67	
X X X X X	Phenols, Total Recoverable	UG/L	32730	250	J
	Radium 226, Dissolved	Pc/L	09503		
	Radium 228, Dissolved	Pc/L	81366		
X	Selenium, Dissolved	UG/L	01145	50	K
X	Silver, Dissolved	UG/L	01075	20	
X X X X X	Sodium, Dissolved	MG/L	00930	49110	
X X X X X	Sulfate, Dissolved (as SO_4)	MG/L	00946	1330	
X X X X X	Total Dissolved Solids (TDS)	PPM	70300	190100	
X X X X X	Total Organic Carbon (TOC)	PPM	00680	35.9	
X X X X X	Total Organic Halogen (TOX)	UG/L	70353	2360	
	Toxaphene	UG/L	39400		
	Turbidity	NTU	00076		
X X X X X	Zinc, Dissolved	UG/L	01090	13	J
	2, 4—D, Total	UG/L	39370		
	2, 4, 5—TP, Total	UG/L	39045		
X X X X X	Specific Conductance	UMHO/CM		1950 0	

VALUE CODING RULES AND
REMARK CODES ON REVERSE

29 33 34 40 41
42 46 47 53 54
58 59 60 66 67
68 72 73 79 80

1 1 193

Form VWX-016
4/83

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES
WATER QUALITY MANAGEMENT ELEMENT

GROUND WATER ANALYSIS – VOLATILE ORGANICS REPORT

PLEASE TYPE OR PRINT WITH BALLPOINT PEN

FACILITY NAME: AMERICAN CYANAMID COMPANY - CARTERET LANDFILL
SW ID NO.:
LAB NAME: ENVIRONMENTAL TESTING AND CERTIFICATION

	NJPDES NO.	WELL PERMIT NO.	SAMPLE DATE YR. MO. DAY	NJ LAB CERT. NO.	WQM USE
T	NJ 0061611	24-10394-2	900116	12257	
1	2 – 8	9 – 16	17 – 22	23 – 27	28

5D

THE SCHEDULE INDICATED BELOW IS TO BE OBSERVED FROM ___ MO. YR. TO ___ MO. YR.

SUBMIT WITH SIGNED T-VWX-014

SAMPLING MONTHS

Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	ANALYSIS	UNITS	PARAMETER	VALUE	REMARKS
X												Acrylonitrile	UG/L	34215	5	K
X												Benzene	UG/L	34030	6.12	
X												Bromoform	UG/L	32104	.94	K
X												Carbon Tetrachloride	UG/L	32102	.56	K
X												Chlorobenzene	UG/L	34301	1.2	K
X												Chlorodibromoethane	UG/L	34306	.62	K
X												Chloroform	UG/L	32106	.32	K
X												1, 1 - Dichloroethane	UG/L	34496	.94	K
X												1, 2 - Dichloroethane	UG/L	34531	.56	K
X												1, 1 - Dichloroethylene	UG/L	34501	.56	K
X												1, 2 - Dichloropropane	UG/L	34541	1.2	K
X												Ethylbenzene	UG/L	34371	6.25	
X												Methylene Chloride	UG/L	34423	.56	K
X												1, 1, 2, 2 - Tetrachloroethane	UG/L	34516	1.4	K
X												Tetrachloroethylene	UG/L	34475	.82	K
X												Toluene	UG/L	34012	7.43	
X												1, 1, 1 - Trichloroethane	UG/L	34506	.76	K
X												1, 1, 2 - Trichloroethane	UG/L	34511	1	K
X												Trichloroethylene	UG/L	39180	.38	K
X												Vinyl Chloride	UG/L	39175	2	K
X												Acrolein	UG/L	34210	5	K
X												Chloroethane	UG/L	34311	2	K
X												2 - Chloroethylvinyl Ether	UG/L	34576	2	K
X												Dichlorobromomethane	UG/L	32105	.44	K
X												1, 3 - Dichloropropylene	UG/L	34699	2	K
X												Methyl Bromide	UG/L	34413	2	K
X												Methyl Chloride	UG/L	34418	2	K
X												1, 2 - trans - Dichloroethylene	UG/L	34546	.32	K
X												1, 2 Dichlorobenzene	UG/L	34536	1.8	K
X												1, 3 Dichlorobenzene	UG/L	34566	1.8	K
X												1, 4 Dichlorobenzene	UG/L	34571	4.2	K

29 42 55 68 — 33 34 46 47 59 60 72 73 — 40 41 53 54 66 67 79 80

VALUE CODING RULES AND
REMARK CODES ON REVERSE

U194

Form VWX-017
P1

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES
WATER QUALITY MANAGEMENT ELEMENT

GROUND WATER ANALYSIS – MONITORING WELL REPORT
ACID, BASE/NEUTRAL ORGANIC COMPOUNDS

PLEASE TYPE OR PRINT WITH BALLPOINT PEN

FACILITY NAME: AMERICAN CYANAMID COMPANY - CARTERET LANDFILL | SW ID NO.

LAB NAME: ENVIRONMENTAL TESTING AND CERTIFICATION

U | NJPDES NO. NJ 0 0 6 1 6 1 1 | WELL PERMIT NO. 2 4 - 1 0 3 9 4 - 2 | SAMPLE DATE YR. 9 0 | MO. 1 1 | DAY 1 6 | NJ LAB CERT. NO. 1 2 2 5 7 | WQM USE

5D

THE SCHEDULE INDICATED BELOW IS TO BE OBSERVED FROM ___ MO. ___ YR. TO ___ MO. ___ YR.

SUBMIT WITH SIGNED T-VWX-014

SAMPLING MONTHS	ANALYSIS	UNITS	PARAMETER	VALUE	REMARKS
X	2-Chlorophenol	ug/l	34586	3.2	K
X	2,4-Dichlorophenol	ug/l	34601	2.6	K
X	2,4-Dimethylphenol	ug/l	34606	2.6	K
X	2,6-Dinitro-o-cresol	ug/l	77603	23	K
X	2,4-Dinitrophenol	ug/l	34616	40	K
X	2-Nitrophenol	ug/l	34591	3.5	K
X	4-Nitrophenol	ug/l	34649	2.3	K
X	p-Chloro-m-cresol	ug/l	34452	2.9	K
X	Pentachlorophenol	ug/l	39032	3.5	K
X	Phenol	ug/l	34695	1.4	K
X	2,4,6-Trichlorophenol	ug/l	34621	2.6	K
X					
X	Acenaphthene	ug/l	34205	2.05	
X	Acenaphthylene	ug/l	34200	3.4	K
X	Anthracene	ug/l	34220	1.8	K
X	Benzidine	ug/l	39120	42	K
X	Benzanthracene	ug/l	34526	7.5	K
X	Benzopyrene	ug/l	34247	2.4	K
X	3,4-Benzofluoranthene	ug/l	34230	4.6	K
X	Benzoperylene	ug/l	34521	3.9	K
X	Benzofluoranthene	ug/l	34242	2.4	K
X	Bis(2-chloroethoxy)methane	ug/l	34278	5.1	K
X	Bis(2-chloroethyl) Ether	ug/l	34273	5.5	K
X	Bis(2-chlroisopropyl) Ether	ug/l	34283	5.5	K
X	Bis(2-ethylhexyl) Phthalate	ug/l	39100	9.6	K
X	4-Bromophenyl Ether	ug/l	34636	1.8	K
X	Butylbenzyl Phthalate	ug/l	34292	9.6	K
X	2-Chloronaphthalene	ug/l	34581	1.8	K
X	4-Chlorophenyl Phenyl Ether	ug/l	34641		4K

Form VWX-017
4/83 P2

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES
WATER QUALITY MANAGEMENT ELEMENT

GROUND WATER ANALYSIS – MONITORING WELL REPORT

= ACID, BASE/NEUTRAL ORGANIC COMPOUNDS

PLEASE TYPE OR PRINT WITH BALLPOINT PEN

FACILITY NAME	AMERICAN CYANAMID COMPANY - CARTERET LANDFILL	SW ID NO.
LAB NAME	ENVIRONMENTAL TESTING AND CERTIFICATION	

NJPDES NO. NJ 0 0 6 1 6 1 1 1

WELL PERMIT NO. 2 4 - 1 0 3 9 4 - 2 5D

SAMPLE DATE YR. 9 0 MO. 1 1 DAY 1 6

NJ LAB CERT. NO. 1 2 2 5 7

WQM USE

THE SCHEDULE INDICATED BELOW IS TO BE OBSERVED FROM MO. YR. TO MO. YR.

SUBMIT WITH SIGNED T-VWX-014

SAMPLING MONTHS												ANALYSIS	UNITS	PARAMETER	VALUE	REMARKS
Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec					
X												Chrysene	ug/l	34320	2.4	K
X												Dibenzanthracene	ug/l	34556	9.6	K
X												1,2-Dichlorobenzene	ug/l	34536	1.8	K
X												1,3-Dichlorobenzene	ug/l	34566	1.8	K
X												1,4-Dichlorobenzene	ug/l	34571	4.2	K
X												3,3'-Dichlorobenzidine	ug/l	34631	16	K
X												Diethyl Phthalate	ug/l	34336	9.6	K
X												Dimethyl Phthalate	ug/l	34341	9.6	K
X												Di-n-butyl Phthalate	ug/l	39110	9.6	K
X												2,4-Dinitrotolulene	ug/l	34611	5.5	K
X												2,6-Dinitrotolulene	ug/l	34626	1.5	K
X												Di-n-octyl Phthalate	ug/l	34596	9.6	K
X												1,2-Diphenylhydrazine	ug/l	34346	9.6	K
X												Fluoranthene	ug/l	34376	2.1	K
X												Fluorene	ug/l	34381	2.2	
X												Hexachlorobenzene	ug/l	39700	1.8	K
X												Hexachlorobutadiene	ug/l	34391	.57	K
X												Hexachlorocyclopentadiene	ug/l	34386	9.6	K
X												Hexachloroethane	ug/l	34396	1.5	K
X												Indenopyrene	ug/l	34403	4.5	K
X												Isophorone	ug/l	34408	2.1	K
X												Naphthalene	ug/l	34696	7.3	
X												Nitrobenzene	ug/l	34447	1.8	K
X												N-Nitrosodimentlyamine	ug/l	34438	9.6	K
X												N-Nitrosodi-n-propylamine	ug/l	34428	9.6	K
X												N-Nitrosodiphenylamine	ug/l	34433	1.8	K
X												Phenanthrene	ug/l	34461	2.38	J
X												Pyrene	ug/l	34469	1.8	K
X												1,2,4-Trichlorobenzene	ug/l	34551	1.8	K

VALUE CODING RULES AND
REMARK CODES ON REVERSE

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Form VWX-017
/83

P3

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES
WATER QUALITY MANAGEMENT ELEMENT

GROUND WATER ANALYSIS – MONITORING WELL REPORT

PESTICIDES & PCBs

PLEASE TYPE OR PRINT WITH BALLPOINT PEN

FACILITY NAME: AMERICAN CYANAMID COMPANY - CARTERET LANDFILL

SW ID NO.:

LAB NAME: ENVIRONMENTAL TESTING AND CERTIFICATION

	NJPDES NO.	WELL PERMIT NO.	SAMPLE DATE YR. MO. DAY	NJ LAB CERT. NO.	WQM USE
U	NJ 0061611	24-10394-2 5D	900116	12257	

THE SCHEDULE INDICATED BELOW IS TO BE OBSERVED FROM ___ MO. YR. TO ___ MO. YR.

SUBMIT WITH SIGNED T-VWX-014

SAMPLING MONTHS

Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	ANALYSIS	UNITS	PARAMETER	VALUE	REMARKS
X												Aldrin	ug/l	39330	1.8	K
X												alpha-BHC	ug/l	39337	9.6	K
X												beta-BHC	ug/l	39338	4	K
X												gamma-BHC (Lindane)	ug/l	39340	9.6	K
X												delta-BHC	ug/l	34259	3	K
X												Chlordane	ug/l	39350	9.6	K
X												4,4'-DDT	ug/l	39370	2.7	K
X												4,4'-DDE	ug/l	39365	5.4	K
X												4,4'-DDD	ug/l		4.5	K
X												Dieldrin	ug/l	39380	2.4	K
X												alpha-Endosulfan	ug/l	34361	9.6	K
X												beta-Endosulfan	ug/l	34356	9.6	K
X												Endosulfan Sulfate	ug/l	34351	5.4	K
X												Endrin	ug/l	39390	9.6	K
X												Endrin Aldehyde	ug/l	34366	9.6	K
X												Heptachlor	ug/l	39410	1.8	K
X												Heptachlor Epoxide	ug/l	39420	2.1	K
X												PCB-1242	ug/l	39496	35	K
X												PCB-1254	ug/l	39504	35	K
X												PCB-1221	ug/l	39488	35	K
X												PCB-1232	ug/l	39492	35	K
X												PCB-1248	ug/l	39500	35	K
X												PCB-1260	ug/l	39508	35	K
X												PCB-1016	ug/l	34671	35	K
X												Toxaphene	ug/l	39400	9.6	K

ATTACHMENT V

MAY 26 1992

State of New Jersey
Department of Environmental Protection and Energy
Division of Publicly Funded Site Remediation
CN 413
Trenton, NJ 08625-0413
Tel. # 609-984-2902
Fax. # 609-633-2360

Scott A. Weiner
Commissioner

Anthony J. Farro
Director

MAY 2 1 1992

M E M O R A N D U M

TO: Frank Sorce, Technical Coordinator
Bureau of Site Assessment

THROUGH: Greg Toffoli, Acting Section Chief GT 5/21/92
Dorothy Lin, Hazardous Site Mitigation Specialist I DL 5-21-92
Quality Assurance Section
Bureau of Environmental Measurements and Quality Assurance

FROM: Atiya Wahab, Hazardous Site Mitigation Specialist II AW 5-21-92
Quality Assurance Section
Bureau of Environmental Measurements and Quality Assurance

SUBJECT: The Quality Assurance Review of samples collected from the **American Cyanamid-Cartaret site;** CLP deliverables; Analyses done by Nytest Environmental Inc..

Field ID#	Lab. ID#	Sample Date	Matrix
S-1	1018601	14/24/91	nonaqueous
S-2	1018602	14/24/91	nonaqueous
S-3	1018605	14/24/91	nonaqueous
S-5	1018606	14/24/91	nonaqueous
S-6	1018607	14/24/91	nonaqueous
S-7	1018608	14/24/91	nonaqueous
S-8	1018609	14/24/91	nonaqueous
S-9	10186010	14/24/91	nonaqueous
S-10	10186011	14/24/91	nonaqueous
S-11	10186012	14/24/91	nonaqueous
S-12	10186013	14/24/91	nonaqueous
Field Blank	10186014	14/24/91	aqueous

The Quality Assurance Section, Bureau of Environmental Measurements and Quality Assurance, Division of Publicly Funded Site Remediation has reviewed the above mentioned samples for volatile and semivolatile organics, pesticides/PCBs and inorganics under the latest Statement of Works, SOW OLMO1.8 and SOW ILMO2.1. The data are acceptable with the

exception of the QC deficiencies noted below. Please refer to the Target and Non-target Analyte Summary for additional information. A detailed data validation report is available for your review.

VOLATILES:

Methylene chloride result in sample S-2 is negated because the result was lower than three times the result in the associated method blank.

Methylene chloride results in samples S-5, S-6, S-7RE, S-8, S-9, S-10, S-11 and S-12RE are estimated because the results were greater than three times the result in their associated method blank.

Methylene Chloride results for samples S-7 and S-12 are estimated because the percent recoveries of a system monitoring compound, 1,2-Dichloroethane-d4, were lower than the QC limit in both the initial analyses and reanalyses. A possible matrix effect may be demonstrated for these samples and the results may be biased low.

SEMIVOLATILES:

All soil sample results are rejected because the samples were not subjected to mandatory GPC cleanup. However, the data may be usable because all other QC requirements were met.

PESTICIDES/PCB:

All sample results are rejected because the samples were not subjected to mandatory GPC cleanup. However, the data may be usable because all other QC requirements were met.

For sample S-12, surrogate recoveries were below the advisory QC limit in both primary and confirmatory columns (both less than 10%). Although no action is taken, data may be biased low.

INORGANICs:

"Non-detected" results for Selenium in all soil samples were rejected because the spike recovery for the analyte was zero percent.

Several analytes were qualified because they were outside the quality control limits for the following criteria: CRDL standard, preparation blank, sample spike, duplicate, ICP serial dilution, GFAA (post spike). Please refer to the Target Analyte Summary List for the specific qualifications.

If you have any questions concerning this review, please do not hesitate to contact this office at 3-0752.

V2

cc: William Lowry
Joseph Sanguiliano

$\sqrt{3}$

Target and Non Target Compound Summary List

Site Name: **American Cyanamide-Cartaret** Sampling Date: 10/24/91

Sample Analyte	Method Blank Conc.	Lab Report Conc.	QAS Report Conc.	QAS Decision	Footnotes
Sample S-1					
VOLATILES(ug/kg):					
Targets:					
methylene chloride	U	8J	8J	qualify	3
acetone	U	20	20		
carbon disulfide	U	1J	1J	qualify	3
toluene	U	1J	1J	qualify	3
Non-targets: None detected					
SEMIVOLATILES(ug/kg):					
Data are contractually rejected.					
PESTICIDES/PCBS(ug/kg):					
Data are contractually rejected.					
INORGANICS(MG/KG):					
aluminum	U	16400	16400		
antimony	U	3.1J	3.1J	qualify	11
arsenic	U	8.0J	8.0J	qualify	18,31,36
barium	U	113	113		
beryllium	U	1.2	1.2J	qualify	11
cadmium	U	.41U	.41U		
calcium	U	8690	8690		
chromium	U	24.7J	24.7J	qualify	14,18
cobalt	U	13.1	13.1		
copper	U	127J	127J	qualify	18
iron	U	18200J	18200J	qualify	32
lead	2.92J	174JB	174JB	qualify	6,14
magnesium	U	4320	4320		
manganese	U	260	260		
mercury	U	0.19J	0.19J	qualify	31
nickel	U	27.5	27.5		
potassium	U	2920	2920		
selenium	U	0.59U	---	reject	21
silver	-.986J	0.54U	0.54UJ	qualify	16
sodium	U	1980	1980		
thallium	U	0.59U	0.59U		
vanadium	U	29.6J	29.6J	qualify	18
zinc	U	914J	914J	qualify	31,32
cyanide	U	3.9J	3.9J	qualify	17
Sample S-2					
VOLATILES(ug/kg):					
Targets:					
methylene chloride	3J	6JB	6JB	negate	5
Non-targets: None detected					
SEMIVOLATILES(ug/kg):					
Data are contractually rejected.					

4

Sample	Analyte	Method Blank conc.	Lab Report Conc.	QAS Report Conc.	QAS Decision	Footnotes
	PESTICIDES/PCBS(ug/kg):					
	Data are contractually rejected.					
	INORGANICS(MG/KG):					
	aluminum	U	27700	27700		
	antimony	U	3.8J	3.8J	qualify	11
	arsenic	U	8.9J	8.9J	qualify	18,31,35
	barium	U	61.4	61.4		
	beryllium	U	0.94	0.94		
	cadmium	U	0.60U	0.60U		
	calcium	U	167000	167000		
	chromium	U	27.1J	27.1J	qualify	14,18
	cobalt	U	4.4J	4.4J	qualify	11
	copper	U	3.2J	3.2J	qualify	11,18
	iron	U	10700	10700J	qualify	32
	lead	2.92J	44.6JB	44.6JB	qualify	6,14
	magnesium	U	13900	13900		
	manganese	U	310	310		
	mercury	U	0.69J	0.69J	qualify	31
	nickel	U	4.0J	4.0J	qualify	11
	potassium	U	474J	474J	qualify	11
	selenium	U	8.6UJ	---	reject	21
	silver	-.99J	0.79U	0.79UJ	qualify	16
	sodium	U	2340	2340		
	thallium	U	0.86U	0.86U		
	vanadium	U	38.3J	38.3J	qualify	18
	zinc	U	38.5J	38.5J	qualify	31,32
	cyanide	U	337J	337J	qualify	17
Sample S-3						
	VOLATILES(ug/kg):					
	Targets/Non-targets: None detected					
	SEMIVOLATILES(ug/kg):					
	Data are contractually rejected.					
	PESTICIDES/PCBS(ug/kg):					
	Data are contractually rejected.					
	INORGANICS(MG/KG):					
	aluminum	U	25800	25800		
	antimony	U	4.0U	4.0U		
	arsenic	U	3.0J	3.0J	qualify	18,31
	barium	U	49.4	49.4	qualify	11
	beryllium	U	.56J	.56J	qualify	11
	cadmium	U	.64U	.64U		
	calcium	U	195000	195000		
	chromium	U	26.1J	26.1J	qualify	14,18
	cobalt	U	2.4J	2.4J	qualify	11
	copper	U	10.7J	10.7J	qualify	18
	iron	U	9060J	9060J	qualify	32
	lead	2.92J	32.3JB	32.3JB	qualify	6,14
	magnesium	U	15700	15700		
	manganese	U	269	269		
	mercury	U	0.36J	0.36J	qualify	31
	nickel	U	6.6J	6.6J	qualify	11

V5

Sample Analyte	Method Blank conc.	Lab Report Conc.	QAS Report Conc.	QAS Decision	Footnotes
potassium	U	176U	176U		
selenium	U	9.1UJ	---	reject	21
silver	-.99J	.84U	.84UJ	qualify	16
sodium	U	3600	3600		
thallium	U	.91U	.91U		
vanadium	U	30.0J	30.0J	qualify	18
zinc	U	29.4J	29.4J	qualify	31,32
cyanide	U	472J	472J	qualify	17
Sample S-5					
VOLATILES(ug/kg):					
Targets:					
methylene chloride	3J	18JB	18JB	qualify	6
Non-targets: None detected					
SEMIVOLATILES(ug/kg):					
Data are contracually rejected.					
PESTICIDES/PCBS(ug/kg):					
Data are contracually rejected.					
INORGANICS(MG/KG):					
aluminum	U	27200	27200		
antimony	U	4.5U	4.5U		
arsenic	U	3.5J	3.5J	qualify	18,31
barium	U	59.2	59.2		
beryllium	U	1.0J	1.0J	qualify	11
cadmium	U	0.71U	0.71U		
calcium	U	208000	208000		
chromium	U	25.0J	25.0J	qualify	14,18
cobalt	U	6.3J	6.3J	qualify	11
copper	U	15.5J	15.5J	qualify	18
iron	U	10400J	10400J	qualify	32
lead	2.92J	40.9JB	40.9JB	qualify	6,14
magnesium	U	12300	12300		
manganese	U	296	296		
mercury	U	0.19UJ	0.19U		
nickel	U	13.3	13.3		
potassium	U	774J	774J	qualify	11
selenium	U	10UJ	---	reject	21
silver	-.99J	0.94U	0.94UJ	qualify	16
sodium	U	2750	2750		
thallium	U	1.0U	1.0U		
vanadium	U	30.2J	30.2J	qualify	18
zinc	U	32.0J	32.0J	qualify	31,32
cyanide	U	768J	768J	qualify	17
Sample S-6					
VOLATILES(ug/kg):					
Targets:					
methylene chloride	3J	17JB	17JB	qualify	6
Non-targets: None detected					
SEMIVOLATILES(ug/kg):					
Data are contracually rejected.					
PESTICIDES/PCBS(ug/kg):					

Sample Analyte	Method Blank conc.	Lab Report Conc.	QAS Report Conc.	QAS Decision	Footnotes
Data are contracually rejected.					
INORGANICS(MG/KG):					
aluminum	U	21400	21400		
antimony	U	9.9J	9.9J	qualify	11
arsenic	U	3.5J	3.5J	qualify	18,31
barium	U	41.1J	41.1J	qualify	11
beryllium	U	0.81J	0.81J	qualify	11
cadmium	U	0.78U	0.78U		
calcium	U	219000	219000		
chromium	U	18.8J	18.8J	qualify	14,18
cobalt	U	4.8J	4.8J	qualify	11
copper	U	.44UJ	.44UJ	qualify	20
iron	U	8850	8850	qualify	32
lead	2.92J	28.9	28.9JB	qualify	6,14
magnesium	U	31500	31500		
manganese	U	281	281		
mercury	U	0.22UJ	0.22UJ	qualify	31
nickel	U	4.9U	4.9U		
potassium	U	473J	473J	qualify	11
selenium	U	11UJ	---	reject	21
silver	-.99J	1.0U	1.0UJ	qualify	16
sodium	U	11300	11300		
thallium	U	1.1U	1.0U		
vanadium	U	31.5J	31.5J	qualify	18
zinc	U	15.6J	15.6J	qualify	31,32
cyanide	U	153J	153J	qualify	17
Sample S-7					
VOLATILES(ug/kg):					
Targets:					
methylene chloride	U	2J	2J	qualify	3
Non-targets: one compound was detected. QAS agrees with the laboratory's identification.					
VOLATILES(ug/kg): **Sample S-7RE**					
Targets:					
methylene chloride	3J	17JB	17JB	qualify	6
Non-targets: None detected.					
SEMIVOLATILES(ug/kg):					
Data are contractually rejected.					
PESTICIDES/PCBS(ug/kg):					
Data are contractually rejected.					
INORGANICS(MG/KG):					
aluminum	U	10400	10400		
antimony	U	4.1U	4.1U		
arsenic	U	0.94UJ	0.94UJ	qualify	20
barium	U	78.1	78.1		
beryllium	U	0.57J	0.57J	qualify	11
cadmium	U	0.66U	0.66U		
calcium	U	247000	247000		
chromium	U	12.9J	12.9J	qualify	14,18

Sample	Analyte	Method Blank conc.	Lab Report Conc.	QAS Report Conc.	QAS Decision	Footnotes
	cobalt	U	1.6U	1.6U		
	copper	U	2.2J	2.2J	qualify	11,18
	iron	U	742J	742J	qualify	32
	lead	2.92J	18.3	18.3JB	qualify	6,14
	magnesium	U	752J	752J	qualify	11
	manganese	U	11.4	11.4		
	mercury	U	0.17UJ	0.17U		
	nickel	U	7.2J	7.2J	qualify	11
	potassium	U	348J	348J	qualify	11
	selenium	U	9.4UJ	---	reject	21
	silver	-.99J	.86U	.86UJ	qualify	16
	sodium	U	2110	2110		
	thallium	U	.94UJ	.94UJ	qualify	35
	vanadium	U	12.3J	12.3J	qualify	18
	zinc	U	3.4J	3.4J	qualify	11,31,32
	cyanide	U	9.7	9.7J	qualify	17
Sample S-8						
	VOLATILES(ug/kg):					
	Targets:					
	methylene chloride	3J	22JB	22JB	qualify	6
	Non-targets: None detected					
	SEMIVOLATILES(ug/kg):					
	Data are contractually rejected.					
	PESTICIDES/PCBS(ug/kg):					
	Data are contractually rejected.					
	INORGANICS(MG/KG):					
	aluminum	U	4450	4450		
	antimony	U	5.9J	5.9J	qualify	11
	arsenic	U	0.98UJ	0.98UJ	qualify	20
	barium	U	45.0	45.0		
	beryllium	U	0.36J	0.36J	qualify	11
	cadmium	U	0.69U	0.69U		
	calcium	U	194000	194000		
	chromium	U	6.7J	6.7J	qualify	14,18
	cobalt	U	1.6U	1.6U		
	copper	U	.39UJ	.39UJ	qualify	20
	iron	U	1360J	1360J	qualify	32
	lead (AA)	U	10.7	10.7		
	magnesium	U	1650	1650		
	manganese	U	38.8	38.8		
	mercury	U	.20UJ	.20U		
	nickel	U	4.3U	4.3U		
	potassium	U	189U	189U		
	selenium	U	9.8UJ	---	reject	21
	silver	-.99J	.90U	.90UJ	qualify	16
	sodium	U	5210	5210		
	thallium	U	.98U	.98U		
	vanadium	U	9.9J	9.9J	qualify	18
	zinc	U	.75UJ	.75UJ	qualify	32
	cyanide	U	403J	403J	qualify	17
Sample S-9						

Sample Analyte	Method Blank conc.	Lab Report Conc.	QAS Report Conc.	QAS Decision	Footnotes
VOLATILES(ug/kg):					
Targets:					
methylene chloride	3J	19JB	19JB	qualify	6
Non-targets: None detected					
SEMIVOLATILES(ug/kg):					
Data are contractually rejected.					
PESTICIDES/PCBS(ug/kg):					
Data are contractually rejected.					
INORGANICS(MG/KG):					
aluminum	U	6260	6260		
antimony	U	4.2U	4.2U		
arsenic	U	.95UJ	.95UJ	qualify	20
barium	U	105	105		
beryllium	U	.70J	.70J	qualify	11
cadmium	U	.67U	.67U		
calcium	U	233000	233000		
chromium	U	12J	12J	qualify	14,18
cobalt	U	4J	4J	qualify	11
copper	U	4.9J	4.9J	qualify	18
iron	U	3070J	3070J	qualify	32
lead	2.92J	21.4	21.4JB	qualify	6,14
magnesium	U	3270	3270		
manganese	U	53.1	53.1		
mercury	U	.19UJ	.19U		
nickel	U	6.7J	6.7J	qualify	11
potassium	U	412J	412J	qualify	11
selenium	U	9.5UJ	---	reject	21
silver	-.99J	.88U	.88UJ	qualify	16
sodium	U	12100	12100		
thallium	U	.95U	.95U		
vanadium	U	17.4J	17.4J	qualify	18
zinc	U	10.5J	10.5J	qualify	31,32
cyanide	U	972J	972J	qualify	17
Sample S-10					
VOLATILES(ug/kg):					
Targets:					
methylene chloride	3J	29JB	29JB	qualify	6
Non-targets: None detected					
SEMIVOLATILES(ug/kg):					
Data are contractually rejected.					
PESTICIDES/PCBS(ug/kg):					
Data are contractually rejected.					
INORGANICS(MG/KG):					
aluminum	U	15900	15900		
antimony	U	8.8J	8.8J	qualify	11
arsenic	U	2.2J	2.2J	qualify	18,31
barium	U	40.7J	40.7J	qualify	11
beryllium	U	1.2	1.2		
cadmium	U	.76U	.76U		

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Sample Analyte	Method Blank conc.	Lab Report Conc.	QAS Report Conc.	QAS Decision	Footnotes
calcium	U	264000	264000		
chromium	U	25.1J	25.1J	qualify	14,18
cobalt	U	5.5J	5.5J	qualify	11
copper	U	11.1J	11.1J	qualify	18
iron	U	5880J	5880J	qualify	32
lead	2.92J	25.9	25.9JB	qualify	6,14
magnesium	U	12600	12600		
manganese	U	253	253		
mercury	U	.22UJ	.22U		
nickel	U	6.7J	6.7J	qualify	11
potassium	U	300J	300J	qualify	11
selenium	U	11UJ	---	reject	21
silver	-.99J	.99U	.99UJ	qualify	16
sodium	U	1740	1740		
thallium	U	1.1UJ	1.1UJ	qualify	35
vanadium	U	31.3J	31.3J	qualify	18
zinc	U	22.4J	22.4J	qualify	31,32
cyanide	U	1020J	1020J	qualify	17
Sample S-11					
VOLATILES(ug/kg):					
Targets:					
methylene chloride	3J	26JB	26JB	qualify	6
Non-targets: None detected					
SEMIVOLATILES(ug/kg):					
Data are contractually rejected.					
PESTICIDES/PCBS(ug/kg):					
Data are contractually rejected.					
INORGANICS(MG/KG):					
aluminum	U	11700	11700		
antimony	U	4.5U	4.5U		
arsenic	U	1.2J	1.2J	qualify	11,18,31
barium	U	21.9J	21.9J	qualify	11
beryllium	U	.79J	.79J	qualify	11
cadmium	U	.72U	.72U		
calcium	U	218000	218000		
chromium	U	16.4J	16.4J	qualify	14,18
cobalt	U	2.3J	2.3J	qualify	11
copper	U	1.5J	1.5J	qualify	11,18
iron	U	2780J	2780J	qualify	32
lead	U	12.6	12.6		
magnesium	U	2570	2570		
manganese	U	55.3	55.3		
mercury	U	.21UJ	.21U		
nickel	U	4.5U	4.5U		
potassium	U	198U	198U		
selenium	U	1.0UJ	---	reject	21
silver	-.99J	.95U	.95UJ	qualify	16
sodium	U	1200	1200		
thallium	U	1.0U	1.0U		
vanadium	U	19.6J	19.6J	qualify	18
zinc	U	2.5J	2.5J	qualify	11,31,32
cyanide	U	68.7J	68.7J	qualify	17

V10

Sample	Analyte	Method Blank conc.	Lab Report Conc.	QAS Report Conc.	QAS Decision	Footnotes
Sample S-12						
VOLATILES(ug/kg):						
Targets/Non-targets: None detected						
VOLATILES(ug/kg): **Sample S-12RE**						
Targets:						
	methylene chloride	3J	17JB	17JB	qualify	6
Non-targets: None detected						
SEMIVOLATILES(ug/kg):						
Data are contractually rejected.						
PESTICIDES/PCBS(ug/kg):						
Data are contractually rejected.						
INORGANICS(MG/KG):						
	aluminum	U	8870	8870		
	antimony	U	4.3U	4.3U		
	arsenic	U	1.6J	1.6J	qualify	11,18,31
	barium	U	64.5	64.5		
	beryllium	U	.99	.99		
	cadmium	U	.68U	.68U		
	calcium	U	264000	264000		
	chromium	U	16.7J	16.7J	qualify	14,18
	cobalt	U	3.3J	3.3J	qualify	11
	copper	U	11.7J	11.7J	qualify	8,18
	iron	U	3930J	3930J	qualify	32
	lead	2.92J	30.4	30.4JB	qualify	6,14
	magnesium	U	4390	4390		
	manganese	U	97.7	97.7		
	mercury	U	.89UJ	.89U		
	nickel	U	6.5J	6.5J	qualify	11
	potassium	U	469J	469J	qualify	11
	selenium	U	9.7UJ	---	reject	21
	silver	-.99J	.89U	.89UJ	qualify	16
	sodium	U	11800	11800		
	thallium	U	.97U	.97U		
	vanadium	U	30J	30J	qualify	18
	zinc	U	25.9J	25.9J	qualify	31,32
	cyanide	U	103J	103J	qualify	17
FB (field blank)						
VOLATILES(ug/L):						
Targets/Non-targets: None detected						
SEMIVOLATILES(ug/L):						
Targets: None detected						
Non-targets: Six unknown compounds were detected. QAS agrees with the laboratory's identification.						
PESTICIDES/PCBS(ug/L):						
Targets: None detected.						

V11

Sample	Analyte	Method Blank conc.	Lab Report Conc.	QAS Report Conc.	QAS Decision	Footnotes
INORGANICS (ug/L):						
	copper	-	2.5J	2.5J	qualify	11
	thallium	-	5U	5U		

V12

Target and non Target Compound Summary List

FOOTNOTES:

1. The reported concentration is quantitatively qualified due to calibration deficiencies.

2. The %RSD and/or %Difference for one or more surrogates were above the control limit, therefore, all of the positive results for the fraction are qualified.

3. The reported concentration is quantitatively qualified because the concentration is below the CRQL or MDL.

4. The sample holding time to extraction and/or analysis was exceeded. The results including the tentatively identified compounds are highly qualified.

5. The value reported in the sample is less than 3x the value in the method blank/prep blank. It is the policy of NJDEPE-DPFSR to negate the reported value due to probable contamination unrelated to the actual sample.

6. The value reported is greater than three (3) times the value in the method blank/prep blank and is considered "real". However, the reported value must be quantitatively qualified "J" due to the method blank/prep blank contamination. The "B" qualifier alerts the end-user to the presence of this analyte in the method blank/prep blank.

7. The value reported is less than 3x the value in the trip/field blank. It is the policy of NJDEPE-DPFSR to negate the reported value as due to probable contamination unrelated to the actual sample. The end-user, however, is alerted that a reportable quantity of the analyte was detected.

8. The value reported is greater than 3x the value in the trip/field blank and is considered "real". However, the reported value must be quantitatively qualified "J" due to trip/field blank contamination.

9. The reported concentration is quantitatively qualified due to poor surrogate recovery.

10. The reported metal value was qualified because the Initial/Continuing Verification Standard was not within the recovery range (90-110 percent).

11. The reported concentration was quantitatively qualified because the concentration was below the CRDL but greater than the IDL. The concentration is considered estimated since the value obtained is at the low end of the instrument performance.

12. This non-detected metal detection limit is qualified (UJ) because the CRDL standard was less than 80% but greater than or equal to 30%.

13. This metal value is qualified because the CRDL is not within the

V13

FOOTNOTES:

recovery range of 80% - 120% but within the ranges of 30 to 79% . The result could be biased low..

14. This metal value is qualified because the CRDL is not within the recovery range of 80% - 120% but within the ranges of 121 to 175% . The result could be biased high.

15. The result is rejected because the value is less than or equal to ten times the CRDL, and the CRDL standard recovery is greater than 175%.

16. The result is estimated because the preparation blank analysis indicated a negative instrumental drift for the analyte. The result may be biased low.

17. The reported metal value is qualified because the spike recovery was greater than 125 percent. The result may be biased high.

18. The reported metal value is qualified because the spike recovery was between 30 and 74 percent. The result may be biased low.

19. The reported metal value was qualified because the spike recovery was less than 30 percent, and the reported value actually indicated the minimum concentration at which the metal was present.

20. The non-detected metal detection limit is qualified (UJ) because the spike recovery is between 30 and 74 percent. The detection limit for this metal could be elevated because of spike recovery.

21. The non-detected metal value was rejected because the concentration was less than the IDL and the spike recovery was less than 30.0 percent.

22. This analyte is rejected because there was no post digestion spike sample analysis performed.

23. The reported metal value was rejected because the concentration was less than the IDL and the post-digestion spike recovery was less than 30 percent.

24. The reported metal analyte is quantitatively qualified because the post-digestion spike analysis result was outside the QC limits.

25. The reported metal value was qualified because the ICP Interference Check Sample was outside the recovery range (80-120 percent) but within the ranges of 120 to 150%. The result could be biased high.

26. The non-detect metal value was qualified because the ICP Interference Check Sample was within the range of 50 and 79% hence a possibility of false negatives exists and therefore, is flagged estimated "UJ".

27. This non-detected metal analyte had Laboratory Control Sample recovery that fell within the range of 60-79%. The end-user should be aware that the reported detection limit may be biased low and therefore, is flagged as estimated (UJ).

28. The reported metal value was qualified because the Laboratory Control

V14

FOOTNOTES:

Sample recovery fell within the range of 60-79 %. The end-user should be aware of results that may be biased low.

29. The reported metal value was qualified because Laboratory Control Sample recovery was greater than 120%. The end-user should be aware of results that may be biased high.

30. This metal analyte is rejected because the Laboratory Control Sample recovery was less than 60%.

31. In the duplicate sample analysis for metals, the analyte fell outside the control limits of ± 20 percent or ± CRDL. Therefore, the result for the metal is qualified.

32. The reported metal value is qualified because the Serial Dilution is not within ten percent (10%) of sample concentration.

33. This analyte is rejected because the laboratory exceeded the holding time for analysis.

34. The post- digestion spike recovery for the preparation blank was outside of the control limits of 85-115%. Since the laboratory did not reanalyze the preparation blank as required, the blank is rejected. In addition all associated samples are rejected.

35. The post digestion spike recovery for the analyte during the GFAA analysis is outside the QC limits. The positive results of the sample are qualified (W).

36. The result for this metal is qualified due to the correlation coeffiecient (r) being less than 0.990 on initial MSA analysis and repeat MSA analysis.

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V15