SAMPLING TRIP REPORT

BAYONNE BARREL AND DRUM SITE

NEWARK, ESSEX COUNTY, NEW JERSEY

Document #: TAT-02-F-07383

Prepared for:

United States Environmental Protection Agency
Region II - Removal Action Branch
Edison, New Jersey

Prepared by:

Roy F. Weston, Inc.
Major Prgrams Division
Region II - Technical Assistance Team
Edison, New Jersey

301268

SAMPLING TRIP REPORT
BAYONNE BARREL AND DRUM SITE
NEWARK, ESSEX COUNTY, NEW JERSEY

The Bayonne Barrel and Drum Site (BB&D) is a former drum reconditioning facility occupying approximately 15 acres off Raymond Boulevard in the Ironbound section of Newark, New Jersey. The facility operated as an unlicensed Treatment, Storage, and Disposal (TSD) facility from the early 1940's until the early 1980's when the company filed for bankruptcy under Chapter 11. The site is bordered to the north and west by Routes 1 and 9, to the east by the New Jersey Turnpike and to the south by a movie theater.

Operations by Bayonne Barrel and Drum included incineration of open-head drums as a part of the reconditioning process. The drums, after incineration, were either sold or stored in the southwest end of the site. It is estimated that approximately 45,000 of these "RCRA empty" drums are currently located on-site. However, during the removal of these drums, it has been determined that most of the drums are not RCRA empty, but in fact still contain various unknown liquid products. In addition, the otherwise empty drums have been subjected to weather conditions for approximately twelve years, resulting in oxidized drums and the infiltration of rainwater into many of the drums through their bung holes or rusted parts.

On 29 November 1994, six (6) discrete sludge/solid matrix grab samples and seven (7) discrete liquid/aqueous matrix grab samples were collected from thirteen (13) drums formerly located within the drum piles located at the southwest corner of the site. All samples were biased judgmental samples since only single phase drums with known generator hazardous waste labels and sufficient residual product for laboratory specified analytical volume were sampled. Sample aliquots were collected utilizing disposable glass drum thieves and disposable plastic trowels/scoops. The volumes taken, as requested by the laboratory, included (1) 8 oz. glass jar, with all samples submitted for full Target Compound List (TCL) analysis; including volatile (VOA), semi-volatile (BNA), and polychlorinated biphenol (PCB)/pesticide fractions. Triple volume was collected from predetermined drums to include matrix spike and matrix spike duplication for TCL analysis. Additionally, double volume was collected at a predetermined sampling location to include a blind duplicate for TCL analysis to ensure proper QA/QC protocol. Decontamination of sampling apparatus between drum samples was unnecessary since individual liquid/aqueous or sludge/solid samples were drawn using disposable sampling equipment. All sampling was conducted in level C PPE, including tyvek coveralls, disposable sampling gloves and booties, and an air purifying respirator.

Additionally, seven (7) discrete judgmental soil matrix grab samples were collected at surface and subsurface soil locations throughout the pre-shredded drum pile area (see Figure 1). Sample locations were biased since known hot spots were sampled including areas with standing product or leaking drums. Due to time constraints, TAT could not delineate staked sampling points for reproducibility until the following day when points were to be triangulated in from two fixed locations. Sample locations are approximations and cannot be reproduced. The remediation contractor removed the stakes at the sampling locations as they impeded drum removal operations.

Each boring was excavated utilizing stainless steel trowels to a depth of three inches and covering a one foot square area around the sampling point. The borings were mixed in a stainless steel bowl, and a composite sample was taken from the resulting mixed volume for TCL laboratory analysis. The volumes taken included (2) 120 ml. vials for the VOA fraction, and (1) 8 oz. glass jar for BNA/PCB/PEST fractions. The VOA sample was taken prior to any homogenization. Triple volume was collected from predetermined sampling locations to include matrix spike and matrix spike duplication for TCL analysis. Additionally, double volume was collected at a predetermined sampling location to include a blind duplicate for TCL analysis to ensure proper QA/QC protocol. Decontamination of sampling apparatus occurred between sampling locations and upon the completion of the sampling event. Decontamination procedures in the field consisted of the following: wash and scrub with low phosphate detergent; deionized water rinse; methanol followed by hexane rinse; deionized water rinse; air dry; and wrapped in aluminum foil, shiny side out, for transport. All sampling was conducted in level C PPE, including tyvek coveralls, disposable sampling gloves and booties, and an air purifying respirator.

The objective of this project is to obtain the analytical data necessary to characterize potential responsible party (PRP) drums and soil conditions under the "RCRA Empty" drum piles. The following laboratory was awarded this assignment:

Accredited Laboratories Inc.
Foot of Pershing Avenue
P.O. Box 369
Carteret, New Jersey 07008-0369
Attn: Mrs. April Hobby
(908) 541-4276
Purchase Order Number: 16-3693
Work Order Number: 06300-041-002-0412

CHAIN OF CUSTODY RECORD

REGION II EPA ROY F. WESTON, INC.
TECHINICAL ASSISTANCE TEAM
1090 KING GEORGES POST RD.
SUITE 201 - EDISON, NJ 08837 PHONE NO.: (908) 225-6116

TAT PM: Mark Anthony Denno

PCS # 0412
P.O. # 16-3693

Sample Number	Number of Containers	Description of Samples
BB-FB-01	6	2 x 40ml vials for TCL-VOA fraction; 4 x 1L amber bottles for TCL-BNA/PCB/Pesticide fractions; all aqueous; low concentration.
BB-SS-01	9	6 x 120ml vials for TCL-VOA fraction; 3 x 8oz. glass jars for TCL-BNA/PCB/Pesticide fractions; all soil; low/med. concentration; all include MS and MSD.
BB-SS-02	3	2 x 120ml vials for TCL-VOA fraction; 1 x 8oz. glass jar for TCL-BNA/PCB/Pesticide fractions; all soil; low/med. concentration.
BB-SS-03	3	Same as Above
BB-SS-04	3	Same as Above
BB-SS-05	3	Same as Above
BB-SS-06	3	Same as Above
BB-SS-07	3	Same as Above
BB SS-08	3	Same as Above

Person Assuming Responsibility for Sample:	Time	Date
Mark Anthony Denno	1700	11/29/94

Sample Number	Relinquished By:	Received By:	Time	Date	Reason for Change of Custody
All	Mark A. Denno	[illegible]	18:10	11/29/94	Lab Analysis
Sample Number	Relinquished By:	Received By:	Time	Date	Reason for Change of Custody
Sample Number	Relinquished By:	Received By:	Time	Date	Reason for Change of Custody
Sample Number	Relinquished By:	Received By:	Time	Date	Reason for Change of Custody

The laboratory samples will be subjected to the following analyses:

Sample Parameter/ Fraction	Matrix	Analytical Method Reference	Holding Time (Days)	Volume	Preservation
TCL					
VOLATILES (VOA)	Soil	8240	10	2 X 120ml	Cool to 4C
	Aqueous	624	10	2 X 40ml	pH<2 HCL
	Liquid	8240	10	incl. w/extr.	none
SEMI-VOLATILES (BNA)	Soil	8250	10	1 X 8 oz.	none
	Aqueous	625	5	4 X 1 L Amber	Cool to 4C
	Liquid	8250	10	1 X 8 oz.	none
PCB/PEST	Soil	8080	10	incl. w/extr.	none
	Aqueous	608	5	incl. w/extr.	Cool to 4C
	Liquid	8080	10	incl. W/extr.	none

NOTE: 1. Sample preparation methods for TCL fractions; SW-5030 (VOA) and SW-3510/3540 (BNA/PEST/PCB)

The data generated from this sampling and analyses project will be used to determine if hazardous wastes or hazardous substances were disposed of at the site. Further, the data will be used to determine if the material found in the drums has contributed to contamination (soil and ash) of the site. Additionally, chemical compounds identified will be used to evaluate PRP attributability for site remediation cost recovery.

Prior to sample submittal to the laboratory, samples were labeled in the following format: date and time of collection; sample identification number; type of sample; analysis requested; and type of sample preservation. The EPA chain-of-custody record was completed and maintained throughout the entire sampling activity as per TAT Standard Operating Procedures (SOP) on sample handling, sample container contract specifications, and EPA Laboratories SOP. The chain-of-custody form used lists the following information: sample identification number; number, volume, and description of sample containers; sample matrix; general concentration of samples; identity of person collecting the sample; date and time of sample collection; date and time of custody transfer to laboratory; identity of person accepting custody and the identity of the laboratory performing the analysis (see chain-of-custody pp.5-7). All samples analyzed for TCL will be conducted using quality assurance level 2 (QA-2). The requirements for QA level 2 are: sample documentation; chain-of-custody; sample holding times; field and rinsate blanks; 10% Matrix Spike/Matrix Spike Duplicate; confirmation analysis; initial and continuing instrument calibration; detection limits; and data validation. Verbal results will be in three weeks from submittal of the samples (12/20/94), while written results will be in four weeks (12/27/94).

CHAIN OF CUSTODY RECORD

REGION II EPA ROY F. WESTON, INC.
TECHINICAL ASSISTANCE TEAM
1090 KING GEORGES POST RD.
SUITE 201 - EDISON, NJ 08837 PHONE NO.: (908) 225-6116

TAT PM: Mark Anthony Denno

PCS # 0412
P.O. # 16-3693

Sample Number	Number of Containers	Description of Samples
BB-DS-01	3	3x8oz glass jars for Full TCL, all sludge; high concentration, all include MS and MSD
BB-DS-02	1	1x8oz glass jar for Full TCL, all solid; high concentration
BB-DS-03	1	1x8oz glass jar for Full TCL, all sludge, high concentration
BB-DS-04	1	same as above
BB-DS-05	1	same as above
BB-DS-06	1	same as above
BB-DS-07	1	1x8oz glass jar for Full TCL, all solid, high concentration
BB-DL-01	1	1x8oz glass jar for Full TCL, liquid, high concentration
BB-DL-02	1	same as above
BB-DL-03	3	3x8oz glass jars for Full TCL, liquid, high concentration, includes MS and MSD

Person Assuming Responsibility for Sample: Mark Anthony Denno — Time: 1700 — Date: 11/29/94

Sample Number	Relinquished By:	Received By:	Time	Date	Reason for Change of Custody
All	Mark A. Denno	[illegible]	18:12	11/29	Lab Analysis

CHAIN OF CUSTODY RECORD

REGION II EPA ROY F. WESTON, INC.
TECHINICAL ASSISTANCE TEAM
1090 KING GEORGES POST RD.
SUITE 201 - EDISON, NJ 08837
PHONE NO.: (908) 225-6116

TAT PM: Mark Anthony Denno

PCS # 0412
P.O. # 16-3693

Sample Number	Number of Containers	Description of Samples
BB-DL-04	1	1x8oz glass jar for Full TCL, liquid matrix, high concentration
BB-DL-05	1	same as above
BB-DL-06	1	same as above
BB-DL-08	1	same as above
BB-DL-07	1	same as above
BB-RB-01	6	2x40 mL vials for TCL-VOA; 4x1L amber bottles for TCL-BNA, Pest, PCB fractions, all aqueous, low concentration.

Person Assuming Responsibility for Sample: Mark Anthony Denno

Time: 1700 Date: 11/29/94

Sample Number	Relinquished By:	Received By:	Time	Date	Reason for Change of Custody
All	Mark A. Denno	[illegible]	1812	11/29	Lab Analysis

The laboratory samples will be subjected to the following analyses:

Sample Parameter/ Fraction	Matrix	Analytical Method Reference	Holding Time (Days)	Volume	Preservation
TCL					
VOLATILES (VOA)	Soil	8240	10	2 X 120ml	Cool to 4C
	Aqueous	624	10	2 X 40ml	pH<2 HCL
	Liquid	8240	10	incl. w/extr.	none
SEMI-VOLATILES (BNA)	Soil	8250	10	1 X 8 oz.	none
	Aqueous	625	5	4 X 1 L Amber	Cool to 4C
	Liquid	8250	10	1 X 8 oz.	none
PCB/PEST	Soil	8080	10	incl. w/extr.	none
	Aqueous	608	5	incl. w/extr.	Cool to 4C
	Liquid	8080	10	incl. W/extr.	none

NOTE: 1. Sample preparation methods for TCL fractions; SW-5030 (VOA) and SW-3510/3540 (BNA/PEST/PCB)

The data generated from this sampling and analyses project will be used to determine if hazardous wastes or hazardous substances were disposed of at the site. Further, the data will be used to determine if the material found in the drums has contributed to contamination (soil and ash) of the site. Additionally, chemical compounds identified will be used to evaluate PRP attributability for site remediation cost recovery.

Prior to sample submittal to the laboratory, samples were labeled in the following format: date and time of collection; sample identification number; type of sample; analysis requested; and type of sample preservation. The EPA chain-of-custody record was completed and maintained throughout the entire sampling activity as per TAT Standard Operating Procedures (SOP) on sample handling, sample container contract specifications, and EPA Laboratories SOP. The chain-of-custody form used lists the following information: sample identification number; number, volume, and description of sample containers; sample matrix; general concentration of samples; identity of person collecting the sample; date and time of sample collection; date and time of custody transfer to laboratory; identity of person accepting custody and the identity of the laboratory performing the analysis (see chain-of-custody pp.5-7). All samples analyzed for TCL will be conducted using quality assurance level 2 (QA-2). The requirements for QA level 2 are: sample documentation; chain-of-custody; sample holding times; field and rinsate blanks; 10% Matrix Spike/Matrix Spike Duplicate; confirmation analysis; initial and continuing instrument calibration; detection limits; and data validation. Verbal results will be in three weeks from submittal of the samples (12/20/94), while written results will be in four weeks (12/27/94).

Bayonne Barrel and Drum
Field and Rinsate Blanks

Volatile Organic Compounds (ug/L)	BB-FB-1	BB-RB-1
Acetone	-	-
Benzene	-	-
Bromodichloromethane	-	-
Bromoform	-	-
Bromomethane	-	-
2-Butanone (Methyl Ethyl Ketone)	-	-
Carbon Disulfide	-	-
Carbon Tetrachloride	-	-
Chlorobenzene	-	-
Chloroethane	-	-
Chloroform	-	-
Chloromethane	-	-
Dibromochloromethane	-	-
1,1 Dichloroethane	-	-
1,1 Dichloroethene (trans)	-	-
1,2 Dichloroethane	-	-
1,2 Dichloroethene(cis)	-	-
1,2-Dichloropropane	-	-
cis-1,3-Dichloropropene	-	-
trans-1,3-Dichloropropene	-	-
Ethyl benzene	-	-
2-Hexanone	-	-
Methylene chloride	5 BW	94 BW
4-Methyl-2-Pentanone	-	-
M,p-xylene	-	-
O-xylene	-	-
Xylenes (total)	-	-
Styrene	-	-
1,1,2,2-Tetrachloroethane	-	-
1,1,1-Trichloroethane	-	-
1,1,2-Trichloroethane	-	-
Tetrachloroethene	-	-
Trichlorofluoromethane	-	-
Trichloroethene	-	-
Toluene	-	-
Vinyl Acetate	-	-
Vinyl Chloride	-	-

Sampling Date: 11/29/94

Bayonne Barrel and Drum
Field and Rinsate Blanks

Semivolatile Organics (ug/L)	BB-FB-1	BB-RB-1
Phenol	-	-
bis(2-Chloroethyl)ether	-	-
2,2'-oxybis(1-Chloropropane)	-	-
2-Chlorophenol	-	-
1,2-Dichlorobenzene	-	-
1,3-Dichlorobenzene	-	-
1,4-Dichlorobenzene	-	-
2-Methylphenol	-	-
3&4-Methylphenols	-	-
n-Nitroso-di-n-propylamine	-	-
Hexachloroethane	-	-
Nitrobenzene	-	-
Isophorone	-	-
2-Nitrophenol	-	-
2,4-Dichlorophenol	-	-
Benzyl Alcohol	-	-
Benzoic Acid	-	-
1,2,4-Trichlorobenzene	-	-
Naphthalene	-	-
4-Chloroaniline	-	-
Hexachlorobutadiene	-	-
4-Chloro-3-methylphenol	-	-
2-Methylnaphthalene	-	-
Hexachlorocyclopentadiene	-	-
2,4,6-Trichlorophenol	-	-
2,4,5-Trichlorophenol	-	-
2-Chloronaphthalene	-	-
2-Nitroaniline	-	-
Dimethylphthalate	-	-
Acenaphthylene	-	-
2,6-Dinitrotoluene	-	-
3-Nitroaniline	-	-

Sampling Date: 11/29/94

Bayonne Barrel and Drum
Field and Rinsate Blanks

Semivolatile Organics (ug/L) (continued)	BB-FB-1	BB-RB-1
Acenaphthene		
2,4-Dinitrophenol	-	-
4-Nitrophenol	-	-
Dibenzofuran	-	-
2,4-Dinitrotoluene	-	-
Diethylphtalate	-	-
4-Chlorophenyl-phenylether	-	-
Fluorene	-	-
4-Nitroaniline	-	-
4,6-Dinitro-2-methlyphenol	-	-
N-Nitrosodiphenylamine	-	-
4-Bromophenyl-phenylether	-	-
Hexachlorobenzene	-	-
Pentachlorophenol	-	-
Phenanthrene	-	-
Anthracene	-	-
Di-n-butylphtalate	-	-
Fluoranthene	-	-
Pyrene	-	-
Butylbenzylphthalate	-	-
3,3'-Dichlorobenzidine	-	-
Benzo[a]anthracene	-	-
Chrysene	-	-
bis(2-Ethylhexyl)phthalate	-	-
Di-n-octylphthalate	-	-
Benzo[b]fluoranthene	-	-
Benzo[k]fluoranthene	-	-
Benzo[a]pyrene	-	-
Indeno[1,2,3-cd]pyrene	-	-
Dibenz[a,h]anthracene	-	-
Benzo[g,h,i]perylene	-	-

Sampling Date: 11/29/94

Bayonne Barrel and Drum
Field and Rinsate Blanks

Pesticides (ug/L)	BB-FB-01	BB-RB-01
A-BHC	-	-
B-BHC	-	-
Lindane	-	-
D-BHC	-	-
Heptachlor	-	-
Aldrin	-	-
Heptachlor Epoxide	-	-
Endosulfan I	-	-
A-Chlordane	-	-
G-Chlordane	-	-
Dieldrin	-	0.006 J
4,4'-DDE	-	-
Endrin	-	-
Endosulfan II	-	-
4,4'-DDD	-	-
Endrin Aldehyde	-	-
Endosulfan Sulfate	-	-
4,4'-DDT	-	-
Endrin Ketone	-	-
Methoxychlor	-	-
Toxaphene	-	-

PCB Organics (ug/L)	BB-FB-01	BB-RB-01
Aroclor-1016	-	-
Aroclor-1221	-	-
Aroclor-1232	-	-
Aroclor-1242	-	-
Aroclor-1248	-	-
Aroclor-1254	-	-
Aroclor-1260	-	-

Sampling Date: 11/29/94

Bayonne Barrel and Drum
PRP Drum Residual Sampling (Solids/Sludges)

Volatile Organic Compounds (mg/kg)	BB-DS-01	BB-DS-02	BB-DS-03	BB-DS-04	BB-DS-05	BB-DS-06	BB-DS-07
Acetone	-	-	-	-	-	-	-
Benzene	-	-	-	-	-	-	1.2 J
Bromodichloromethane	-	-	-	-	-	-	-
Bromoform	-	-	-	-	-	-	-
Bromomethane	-	-	-	-	-	-	-
2-Butanone (Methyl Ethyl Ketone)	8.0	4.7	-	-	11000	-	-
Carbon Disulfide	-	-	-	-	-	-	-
Carbon Tetrachloride	-	-	-	-	-	-	-
Chlorobenzene	-	-	0.45 J	-	-	-	-
Chloroethane	-	-	-	-	-	-	-
Chloroform	-	-	-	-	-	-	-
Chloromethane	-	-	-	-	-	-	-
Dibromochloromethane	-	-	-	-	-	-	-
1,1 Dichloroethane	-	-	-	-	-	-	-
1,1 Dichloroethene (trans)	-	-	-	-	-	-	-
1,2 Dichloroethane	-	-	-	-	-	-	-
1,2 Dichloroethene(cis)	-	-	-	-	-	-	-
1,2-Dichloropropane	-	-	-	-	-	-	-
cis-1,3-Dichloropropene	-	-	-	-	-	-	-
trans-1,3-Dichloropropene	-	-	-	-	-	-	-
Ethyl benzene	2.2	2.4	110.0	-	6.6	4100 J	-
2-Hexanone	690.0	140.0	24.0	-	-	14000	19
Methylene chloride	-	0.83 B	-	1.10 B	68 B	-	-
4-Methyl-2-Pentanone	-	-	-	-	-	-	-
M,p-xylene	28.0	13.0	600.0	0.20 J	42	15000	4.1
O-xylene	5.0	6.0	560.0	-	14	7700	-
Xylenes (total)	33.0	19.0	1160.0	0.20 J	56	22700	4.1
Styrene	-	-	-	-	9.0	-	-
1,1,2,2-Tetrachloroethane	-	-	-	-	-	-	-
1,1,1-Trichloroethane	-	-	-	-	-	-	-
1,1,2-Trichloroethane	-	-	-	-	-	-	-
Tetrachloroethene	-	-	1.50	-	-	-	-
Trichlorofluoromethane	-	-	-	-	-	-	-
Trichloroethene	-	-	-	-	-	-	-
Toluene	2.0	2.4	53.0	-	0.66 J	79000	5.9
Vinyl Acetate	-	-	-	-	-	-	-
Vinyl Chloride	-	-	-	-	-	-	-

Sampling Date: 11/29/94

Bayonne Barrel and Drum
PRP Drum Residual Sampling (Solids/Sludges)

Semivolatile Organics (ug/L)	BB-DS-01	BB-DS-02	BB-DS-03	BB-DS-04	BB-DS-05	BB-DS-06	BB-DS-07
Phenol	-	-	-	-	-		
bis(2-Chloroethyl)ether	-	-	-	-	-	-	-
2,2'-oxybis(1-Chloropropane)	-	-	-	-	-	-	-
2-Chlorophenol	-	-	-	-	-	-	-
1,2-Dichlorobenzene	-	-	-	-	-	-	-
1,3-Dichlorobenzene	-	-	-	-	-	-	-
1,4-Dichlorobenzene	-	-	-	-	-	-	-
2-Methylphenol	-	-	-	-	-	-	-
3&4-Methylphenols	1.2 J	-	-	-	-	-	-
n-Nitroso-di-n-propylamine	-	-	-	-	-	-	-
Hexachloroethane	-	-	-	-	-	-	-
Nitrobenzene	-	-	-	-	-	-	-
Isophorone	-	-	1900.0	-	17.0	560	-
2-Nitrophenol	-	-	-	-	-	-	-
2,4-Dichlorophenol	-	-	-	-	-	-	-
Benzyl Alcohol	-	-	-	-	-	-	-
Benzoic Acid	-	-	-	5.6 J	-	-	-
1,2,4-Trichlorobenzene	-	-	-	-	-	-	-
Naphthalene	0.44 J	0.57 J	1100.0	-	4.9 J	3300	0.46 J
4-Chloroaniline	-	-	-	-	-	-	-
Hexachlorobutadiene	-	-	-	-	-	-	-
4-Chloro-3-methylphenol	-	-	-	-	-	-	-
2-Methylnaphthalene	0.4 J	-	730.0	-	-	-	-
Hexachlorocyclopentadiene	-	-	-	-	-	-	-
2,4,6-Trichlorophenol	-	-	-	-	-	-	-
2,4,5-Trichlorophenol	-	-	-	-	-	-	-
2-Chloronaphthalene	-	-	-	-	-	-	-
2-Nitroaniline	-	-	-	-	-	-	-
Dimethylphthalate	-	-	-	-	-	-	-
Acenaphthylene	-	-	-	-	-	-	-
2,6-Dinitrotoluene	-	-	-	-	-	-	-
3-Nitroaniline	-	-	-	-	-	-	-

Sampling Date: 11/29/94

Bayonne Barrel and Drum
PRP Drum Residual Sampling (Solids/Sludges)

Semivolatile Organics (ug/L) (continued)	BB-DS-01	BB-DS-02	BB-DS-03	BB-DS-04	BB-DS-05	BB-DS-06	BB-DS-07
Acenaphthene	-	-	-	-	-	-	-
2,4-Dinitrophenol	-	-	-	-	-	-	-
4-Nitrophenol	-	-	-	-	-	-	-
Dibenzofuran	-	-	-	-	-	-	-
2,4-Dinitrotoluene	-	-	-	-	-	-	-
Diethylphtalate	-	-	-	-	-	-	-
4-Chlorophenyl-phenylether	-	-	-	-	-	-	-
Fluorene	-	-	-	-	-	-	-
4-Nitroaniline	-	-	-	-	-	-	-
4,6-Dinitro-2-methlyphenol	-	-	-	-	-	-	-
N-Nitrosodiphenylamine	-	-	-	-	-	-	-
4-Bromophenyl-phenylether	-	-	-	-	-	-	-
Hexachlorobenzene	-	-	-	-	-	-	-
Pentachlorophenol	-	-	-	-	-	-	-
Phenanthrene	-	-	-	-	-	-	-
Anthracene	-	-	-	-	-	-	1.5 J
Di-n-butylphtalate	23.0	29.0	-	-	-	-	-
Fluoranthene	-	-	-	-	-	-	-
Pyrene	-	-	-	-	-	-	0.48 J
Butylbenzylphthalate	-	50.0	-	3.5 J	110.0	46	7.9
3,3'-Dichlorobenzidine	-	-	-	-	-	-	-
Benzo[a]anthracene	-	-	-	-	-	-	-
Chrysene	-	-	-	-	-	-	-
bis(2-Ethylhexyl)phthalate	41.0	650.0	2400.0	3.7 J	97.0	7100	22.0
Di-n-octylphthalate	6.6	-	27.0	-	1.6 J	6.8	-
Benzo[b]fluoranthene	-	-	-	-	-	-	-
Benzo[k]fluoranthene	-	-	-	-	-	-	-
Benzo[a]pyrene	0.68 J	-	-	-	-	-	-
Indeno[1,2,3-cd]pyrene	-	-	-	-	-	-	-
Dibenz[a,h]anthracene	-	-	-	-	-	-	-
Benzo[g,h,i]perylene	-	-	-	-	-	-	-

Sampling Date: 11/29/94

Bayonne Barrel and Drum
PRP Drum Residual Sampling (Solids/Sludges)

Pesticides (mg/kg)	BB-DS-01	BB-DS-02	BB-DS-03	BB-DS-04	BB-DS-05	BB-DS-06	BB-DS-07
A-BHC	-	-	-	-	-	0.417	-
B-BHC	-	-	-	-	-	-	-
Lindane	-	-	-	-	-	0.125	-
D-BHC	-	-	-	-	-	-	-
Heptachlor	-	-	-	0.189	-	0.0122 J	-
Aldrin	-	-	-	-	-	-	-
Heptachlor Epoxide	-	-	0.109	0.112	-	0.259	-
Endosulfan I	-	-	-	-	-	-	-
A-Chlordane	-	-	-	-	0.012 J	-	-
G-Chlordane	-	-	-	-	0.0164 J	-	-
Dieldrin	-	-	0.262	-	-	-	-
4,4'-DDE	-	-	-	0.154	-	0.136	-
Endrin	-	-	-	-	-	-	-
Endosulfan II	-	-	-	-	-	-	-
4,4'-DDD	-	-	0.0939	0.266	-	1.170	-
Endrin Aldehyde	-	-	-	-	-	-	-
Endosulfan Sulfate	-	-	-	-	-	-	-
4,4'-DDT	-	-	0.410	0.251	-	0.987	-
Endrin Ketone	-	-	-	-	-	-	-
Methoxychlor	-	-	-	-	-	-	-
Toxaphene	-	-	-	-	-	-	-

PCB Organics (mg/kg)	BB-DS-01	BB-DS-02	BB-DS-03	BB-DS-04	BB-DS-05	BB-DS-06	BB-DS-07
Aroclor-1016	-	-	-	-	-	-	-
Aroclor-1221	-	-	-	-	-	-	-
Aroclor-1232	-	-	-	-	-	-	-
Aroclor-1242	-	-	-	-	-	-	-
Aroclor-1248	-	-	-	-	-	-	-
Aroclor-1254	-	-	-	-	-	-	0.0778
Aroclor-1260	-	-	-	-	-	-	-

Sampling Date: 11/29/94

Bayonne Barrel and Drum
PRP Drum Residual Sampling (Liquids)

Volatile Organic Compounds (mg/kg)	BB-DL-01	BB-DL-02	BB-DL-03	BB-DL-04	BB-DL-05	BB-DL-06	BB-DL-07	BB-DL-08
Acetone	-	-	-	-	-	-	-	-
Benzene	-	-	-	-	-	-	-	-
Bromodichloromethane	-	-	-	-	-	-	-	-
Bromoform	-	-	-	-	-	-	-	-
Bromomethane	-	-	-	-	-	-	-	-
2-Butanone (Methyl Ethyl Ketone)	-	-	-	-	93000	-	-	-
Carbon Disulfide	-	-	-	-	-	-	-	-
Carbon Tetrachloride	-	-	-	-	-	-	-	-
Chlorobenzene	-	-	-	-	-	-	-	-
Chloroethane	-	-	-	-	-	-	-	-
Chloroform	-	-	-	-	-	-	-	-
Chloromethane	-	-	-	-	-	-	-	-
Dibromochloromethane	-	-	-	-	-	-	-	-
1,1 Dichloroethane	-	-	-	-	-	-	-	-
1,1 Dichloroethene (trans)	-	-	-	-	-	-	-	-
1,2 Dichloroethane	-	-	-	-	-	-	-	-
1,2 Dichloroethene(cis)	-	-	-	-	-	-	-	-
1,2-Dichloropropane	-	-	-	-	-	-	-	-
cis-1,3-Dichloropropene	-	-	-	-	-	-	-	-
trans-1,3-Dichloropropene	-	-	-	-	-	-	-	-
Ethyl benzene	-	-	-	-	36000	-	-	0.44 J
2-Hexanone	20.0	-	-	0.29 J	120000	-	-	0.63 J
Methylene chloride	2.3 B	1.2 B	0.65 B	1.2 B	44000 B	0.69 B	0.6 B	1.1 B
4-Methyl-2-Pentanone	-	-	-	-	-	-	-	-
M,p-xylene	-	-	-	-	130000	-	-	2.0
O-xylene	-	-	-	-	36000	-	-	1.7
Xylenes (total)	-	-	-	-	166000	-	-	3.7
Styrene	-	-	-	-	-	-	-	-
1,1,2,2-Tetrachloroethane	-	-	-	-	-	-	-	-
1,1,1-Trichloroethane	-	-	-	-	-	-	-	-
1,1,2-Trichloroethane	-	-	-	-	-	-	-	-
Tetrachloroethene	-	-	-	-	-	-	-	-
Trichlorofluoromethane	-	-	-	-	-	-	-	-
Trichloroethene	-	-	-	-	-	-	-	-
Toluene	-	-	-	-	13000	-	-	-
Vinyl Acetate	-	-	-	-	-	-	-	-
Vinyl Chloride	-	-	-	-	-	-	-	-

Sampling Date: 11/29/94

Bayonne Barrel and Drum
PRP Drum Residual Sampling (Liquids)

Semivolatile Organics (mg/L)	BB-DL-01	BB-DL-02	BB-DL-03	BB-DL-04	BB-DL-05	BB-DL-06	BB-DL-07	BB-DL-08
Phenol	-	-			-			
bis(2-Chloroethyl)ether	-	-	-	-	-	-	-	-
2,2'-oxybis(1-Chloropropane)	-	-	-	-	-	-	-	-
2-Chlorophenol	-	-	-	-	-	-	-	-
1,2-Dichlorobenzene	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	-	-	-	-	-	-	-	-
1,4-Dichlorobenzene	-	-	-	-	-	-	-	-
2-Methylphenol	-	-	-	-	-	-	-	-
3&4-Methylphenols	-	-	-	-	-	-	-	-
n-Nitroso-di-n-propylamine	-	-	-	-	-	-	-	-
Hexachloroethane	-	-	-	-	-	-	-	-
Nitrobenzene	-	-	-	-	-	-	-	-
Isophorone	-	-	-	-	-	-	-	-
2-Nitrophenol	-	-	-	-	-	-	-	-
2,4-Dichlorophenol	-	-	-	-	-	-	-	-
Benzyl Alcohol	-	-	-	-	-	-	-	-
Benzoic Acid	-	-	-	-	-	-	-	-
1,2,4-Trichlorobenzene	-	-	-	-	-	-	-	-
Naphthalene	-	-	-	-	-	-	-	-
4-Chloroaniline	-	-	-	-	-	-	-	-
Hexachlorobutadiene	-	-	-	-	-	-	-	-
4-Chloro-3-methylphenol	-	-	-	-	-	-	-	-
2-Methylnaphthalene	-	-	-	-	-	-	-	-
Hexachlorocyclopentadiene	-	-	-	-	-	-	-	-
2,4,6-Trichlorophenol	-	-	-	-	-	-	-	-
2,4,5-Trichlorophenol	-	-	-	-	-	-	-	-
2-Chloronaphthalene	-	-	-	-	-	-	-	-
2-Nitroaniline	-	-	-	-	-	-	-	-
Dimethylphthalate	-	-	-	-	-	-	-	-
Acenaphthylene	-	-	-	-	-	-	-	-
2,6-Dinitrotoluene	-	-	-	-	-	-	-	-
3-Nitroaniline	-	-	-	-	-	-	-	-

Sampling Date: 11/29/94

Bayonne Barrel and Drum
PRP Drum Residual Sampling (Liquids)

Semivolatile Organics (mg/L) (continued)	BB-DL-01	BB-DL-02	BB-DL-03	BB-DL-04	BB-DL-05	BB-DL-06	BB-DL-07	BB-DL-08
Acenaphthene	-	-	-	-	-	-	-	-
2,4-Dinitrophenol	-	-	-	-	-	-	-	-
4-Nitrophenol	-	-	-	-	-	-	-	-
Dibenzofuran	-	-	-	-	-	-	-	-
2,4-Dinitrotoluene	-	-	-	-	-	-	-	-
Diethylphtalate	-	-	-	-	-	-	-	-
4-Chlorophenyl-phenylether	-	-	-	-	-	-	-	-
Fluorene	-	-	-	-	-	-	-	-
4-Nitroaniline	-	-	-	-	-	-	-	-
4,6-Dinitro-2-methlyphenol	-	-	-	-	-	-	-	-
N-Nitrosodiphenylamine	-	-	-	-	-	-	-	-
4-Bromophenyl-phenylether	-	-	-	-	-	-	-	-
Hexachlorobenzene	-	-	-	-	-	-	-	-
Pentachlorophenol	-	-	-	-	-	-	-	-
Phenanthrene	-	-	-	-	-	-	-	-
Anthracene	-	-	-	-	-	-	-	-
Di-n-butylphtalate	-	-	-	-	-	-	-	-
Fluoranthene	-	-	-	-	-	-	-	-
Pyrene	-	-	-	-	-	-	-	-
Butylbenzylphthalate	-	-	-	-	14	-	-	-
3,3'-Dichlorobenzidine	-	-	-	-	-	-	-	-
Benzo[a]anthracene	-	-	-	-	-	-	-	-
Chrysene	-	-	-	-	-	-	-	-
bis(2-Ethylhexyl)phthalate	0.78 J	-	-	-	190	-	-	-
Di-n-octylphthalate	-	-	-	-	-	-	-	-
Benzo[b]fluoranthene	-	-	-	-	-	-	-	-
Benzo[k]fluoranthene	-	-	-	-	-	-	-	-
Benzo[a]pyrene	-	-	-	-	-	-	-	-
Indeno[1,2,3-cd]pyrene	-	-	-	-	-	-	-	-
Dibenz[a,h]anthracene	-	-	-	-	-	-	-	-
Benzo[g,h,i]perylene	-	-	-	-	-	-	-	-

Sampling Date: 11/29/94

Bayonne Barrel and Drum
PRP Drum Residual Sampling (Liquids)

Pesticides (mg/kg)	BB-DL-01	BB-DL-02	BB-DL-03	BB-DL-04	BB-DL-05	BB-DL-06	BB-DL-07	BB-DL-08
A-BHC	-	-	-	-	-	-	-	-
B-BHC	-	-	-	-	-	-	-	-
Lindane	-	-	-	-	0.027 J	-	-	-
D-BHC	-	-	-	-	-	-	-	-
Heptachlor	-	-	-	-	-	-	-	-
Aldrin	-	-	-	-	-	-	-	-
Heptachlor Epoxide	-	-	-	-	-	-	-	-
Endosulfan I	-	-	-	-	-	-	-	-
A-Chlordane	-	-	-	-	-	-	-	-
G-Chlordane	-	-	-	-	-	-	-	-
Dieldrin	-	-	-	-	-	-	-	-
4,4'-DDE	-	-	-	-	-	-	-	-
Endrin	-	-	-	-	-	-	-	-
Endosulfan II	-	-	-	-	-	-	-	-
4,4'-DDD	-	-	-	-	-	-	-	-
Endrin Aldehyde	-	-	-	-	-	-	-	-
Endosulfan Sulfate	-	-	-	-	-	-	-	-
4,4'-DDT	-	-	-	-	-	-	-	-
Endrin Ketone	-	-	-	-	-	-	-	-
Methoxychlor	-	-	-	-	-	-	-	-
Toxaphene	-	-	-	-	-	-	-	-

PCB Organics (ug/L)	BB-DL-01	BB-DL-02	BB-DL-03	BB-DL-04	BB-DL-05	BB-DL-06	BB-DL-07	BB-DL-08
Aroclor-1016	-	-	-	-	-	-	-	-
Aroclor-1221	-	-	-	-	-	-	-	-
Aroclor-1232	-	-	-	-	-	-	-	-
Aroclor-1242	-	-	-	-	-	-	-	-
Aroclor-1248	-	-	-	-	-	-	-	-
Aroclor-1254	-	-	-	-	-	-	-	-
Aroclor-1260	-	-	-	-	-	-	-	-

Sampling Date: 11/29/94

Bayonne Barrel and Drum
Soil Sampling

Volatile Organic Compounds (mg/kg)	BB-SS-01	BB-SS-02	BB-SS-03	BB-SS-04	BB-SS-05	BB-SS-06	BB-SS-07	BB-SS-08
Acetone	-	0.072	-	-	-	-	-	-
Benzene	-	-	-	-	-	-	-	-
Bromodichloromethane	-	-	-	-	-	-	-	-
Bromoform	-	-	-	-	-	-	-	-
Bromomethane	-	-	-	-	-	-	-	-
2-Butanone (Methyl Ethyl Ketone)	-	-	-	-	-	-	-	-
Carbon Disulfide	-	-	-	-	-	-	-	-
Carbon Tetrachloride	-	-	-	-	-	-	-	-
Chlorobenzene	-	-	-	-	-	-	-	-
Chloroethane	-	-	-	-	-	-	-	-
Chloroform	-	-	-	0.007	-	-	-	-
Chloromethane	-	-	-	-	-	-	-	-
Dibromochloromethane	-	-	-	-	-	-	-	-
1,1 Dichloroethane	-	-	-	-	-	-	-	-
1,1 Dichloroethene (trans)	-	-	-	-	-	-	-	-
1,2 Dichloroethane	-	-	-	-	-	-	-	-
1,2 Dichloroethene(cis)	-	-	-	-	-	-	-	-
1,2-Dichloropropane	-	-	-	-	-	-	-	-
cis-1,3-Dichloropropene	-	-	-	-	-	-	-	-
trans-1,3-Dichloropropene	-	-	-	-	-	-	-	-
Ethyl benzene	-	-	-	-	-	-	-	-
2-Hexanone	-	-	-	-	-	-	-	-
Methylene chloride	0.006 B	-	0.039 B	0.017 B	0.015 B	0.006 B	0.019 B	0.015 B
4-Methyl-2-Pentanone	-	-	-	-	-	-	-	-
M,p-xylene	-	-	-	-	-	-	-	-
O-xylene	-	-	-	-	-	-	-	-
Xylenes (total)	-	-	-	-	-	-	-	-
Styrene	-	-	-	-	-	-	-	-
1,1,2,2-Tetrachloroethane	-	-	-	-	-	-	-	-
1,1,1-Trichloroethane	-	-	-	-	-	-	-	-
1,1,2-Trichloroethane	-	-	-	-	-	-	-	-
Tetrachloroethene	-	-	-	-	-	-	-	-
Trichlorofluoromethane	-	-	0.007 J	0.004 J	-	0.009 J	-	-
Trichloroethene	-	-	-	-	-	-	-	-
Toluene	-	-	-	-	-	-	-	-
Vinyl Acetate	-	-	-	-	-	-	-	-
Vinyl Chloride	-	-	-	-	-	-	-	-

Sampling Date: 11/29/94

Bayonne Barrel and Drum
Soil Sampling

Semivolatile Organics (mg/kg)	BB-SS-01	BB-SS-02	BB-SS-03	BB-SS-04	BB-SS-05	BB-SS-06	BB-SS-07	BB-SS-08
Phenol	-	-	-	-	-	-	-	-
bis(2-Chloroethyl)ether	-	-	-	-	-	-	-	-
2,2'-oxybis(1-Chloropropane)	-	-	-	-	-	-	-	-
2-Chlorophenol	-	-	-	-	-	-	-	-
1,2-Dichlorobenzene	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	-	-	-	-	-	-	-	-
1,4-Dichlorobenzene	-	-	-	-	-	-	-	-
2-Methylphenol	-	-	-	-	1.1	-	-	-
3&4-Methylphenols	-	-	0.18 J	-	3.0	-	-	-
n-Nitroso-di-n-propylamine	-	-	-	-	-	-	-	-
Hexachloroethane	-	-	-	-	-	-	-	-
Nitrobenzene	-	-	-	-	-	-	-	-
Isophorone	2.0 J	2.9	2.4	6.3	3.5	0.9	3.9	2.2
2-Nitrophenol	-	-	-	-	-	-	-	-
2,4-Dichlorophenol	-	-	-	-	-	-	-	-
Benzyl Alcohol	-	-	-	-	-	-	-	-
Benzoic Acid	-	-	-	-	-	-	-	-
1,2,4-Trichlorobenzene	-	-	-	-	-	-	-	-
Naphthalene	-	0.55 J	0.88	1.4	0.62	-	0.81 J	0.61 J
4-Chloroaniline	-	-	-	-	-	-	-	-
Hexachlorobutadiene	-	-	-	-	-	-	-	-
4-Chloro-3-methylphenol	-	-	-	-	-	-	-	-
2-Methylnaphthalene	-	-	-	-	0.63	-	-	-
Hexachlorocyclopentadiene	-	-	-	-	-	-	-	-
2,4,6-Trichlorophenol	-	-	-	-	-	-	-	-
2,4,5-Trichlorophenol	-	-	-	-	-	-	-	-
2-Chloronaphthalene	-	-	-	-	-	-	-	-
2-Nitroaniline	-	-	-	-	-	-	-	-
Dimethylphthalate	-	-	-	-	-	-	-	-
Acenaphthylene	1.5 J	0.8 J	0.54	1.4	-	-	4.1	4.0
2,6-Dinitrotoluene	-	-	-	-	-	-	-	-
3-Nitroaniline	-	-	-	-	-	-	-	-

Sampling Date: 11/29/94

Bayonne Barrel and Drum
Soil Sampling

Semivolatile Organics (mg/kg) (continued)	BB-SS-01	BB-SS-02	BB-SS-03	BB-SS-04	BB-SS-05	BB-SS-06	BB-SS-07	BB-SS-08
Acenaphthene	2.1 J	1.3	0.12 J	0.18 J	-	-	-	-
2,4-Dinitrophenol	-	-	-	-	-	-	-	-
4-Nitrophenol	-	-	-	-	-	-	-	-
Dibenzofuran	-	-	-	-	-	-	-	-
2,4-Dinitrotoluene	-	-	-	-	-	-	-	-
Diethylphtalate	-	-	0.093 J	0.18 J	-	-	-	-
4-Chlorophenyl-phenylether	-	-	-	-	-	-	-	-
Fluorene	-	-	0.23 J	0.75 J	-	-	0.28 J	0.37 J
4-Nitroaniline	-	-	-	-	-	-	-	-
4,6-Dinitro-2-methlyphenol	-	-	-	-	-	-	-	-
N-Nitrosodiphenylamine	-	-	-	-	-	-	-	-
4-Bromophenyl-phenylether	-	-	-	-	-	-	-	-
Hexachlorobenzene	-	-	-	-	-	-	-	-
Pentachlorophenol	-	-	-	-	-	-	-	-
Phenanthrene	2.7	1.6	1.9	4.2	0.66	-	2.4	0.91
Anthracene	2.5	1.8	0.57	1.2	0.48	-	1.2 J	1.1
Di-n-butylphtalate	12.0	5.7	6.1	-	4.0	1.9	6.6	4.0
Fluoranthene	1.2 J	0.59 J	0.57	1.2	0.59	1.6	2.4	0.48 J
Pyrene	11.0	5.2	0.29 J	0.25 J	0.15 J	0.03 J	25.0	1.4
Butylbenzylphthalate	10.0	0.54 J	0.51	0.4 J	-	-	-	-
3,3'-Dichlorobenzidine	-	-	-	-	-	-	-	-
Benzo[a]anthracene	1.7 JR	1.1 R	0.07 J	0.12 J	0.9	-	5.4 I	5.0 I
Chrysene	2.2	1.3	0.11 J	0.17 J	0.16 J	-	7.3	-
bis(2-Ethylhexyl)phthalate	21.0	13.0	1.1	3.0	0.3 J	0.04 J	27.0	5.4
Di-n-octylphthalate	0.56 J	0.33 J	0.15 J	0.49 J	0.23 J	-	2.8	0.54 J
Benzo[b]fluoranthene	3.1 R	-	-	-	-	-	-	-
Benzo[k]fluoranthene	-	-	-	-	-	-	-	-
Benzo[a]pyrene	1.9 JI	1.1 I	-	-	-	-	8.5 I	3.6 I
Indeno[1,2,3-cd]pyrene	-	-	-	-	-	-	3.2 R	0.59 J
Dibenz[a,h]anthracene	-	-	-	-	-	-	9.4 I	-
Benzo[g,h,i]perylene	3.4	2.2	-	-	-	-	-	14.0

Sampling Date: 11/29/94

Bayonne Barrel and Drum
Soil Sampling

Pesticides (mg/kg)	BB-SS-01	BB-SS-02	BB-SS-03	BB-SS-04	BB-SS-05	BB-SS-06	BB-SS-07	BB-SS-08
A-BHC	-	-	-	-	-	-	-	-
B-BHC	-	-	-	-	-	-	-	-
Lindane	-	-	-	-	-	-	-	-
D-BHC	-	-	-	-	-	-	-	-
Heptachlor	-	-	-	-	-	-	-	-
Aldrin	-	-	-	-	-	-	-	-
Heptachlor Epoxide	-	-	-	-	-	-	-	-
Endosulfan I	-	-	-	-	-	-	-	-
A-Chlordane	-	-	-	-	-	-	-	-
G-Chlordane	-	-	-	-	-	-	-	-
Dieldrin	-	-	-	-	-	-	-	-
4,4'-DDE	-	-	-	-	-	-	-	-
Endrin	-	-	-	-	-	-	-	-
Endosulfan II	-	-	-	-	-	-	-	-
4,4'-DDD	-	-	-	-	-	-	-	-
Endrin Aldehyde	-	2.37	-	-	-	-	-	-
Endosulfan Sulfate	-	-	-	-	-	-	-	-
4,4'-DDT	-	-	-	-	-	-	-	-
Endrin Ketone	-	-	-	-	-	-	-	-
Methoxychlor	-	-	-	-	-	-	-	-
Toxaphene	-	-	-	-	-	-	-	-

PCB Organics (mg/kg)	BB-SS-01	BB-SS-02	BB-SS-03	BB-SS-04	BB-SS-05	BB-SS-06	BB-SS-07	BB-SS-08
Aroclor-1016	-	-	-	-	-	-	-	-
Aroclor-1221	-	-	-	-	-	-	-	-
Aroclor-1232	-	-	-	-	-	-	-	-
Aroclor-1242	-	-	-	-	-	-	-	-
Aroclor-1248	-	-	-	-	-	-	-	-
Aroclor-1254	96.7 I	81.5 I	502.0 I	329.0 I	74.0 I	26.5 I	86.1 I	98.5 I
Aroclor-1260	-	-	-	-	-	-	-	-

Sampling Date: 11/29/94