JOINT
TRIAL EXHIBIT
975

EXHIBIT
KAVIV-103
AUG 14 [illegible]
Sandra Krawberg C.S.R., R.P.R.

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

JOHN W. GASTON, JR., P.E.
DIRECTOR

DIRK C. HOFMAN, P.E.
DEPUTY DIRECTOR

FEB 25 1986

Mr. Matthias D. Dileo
777 Westpark Avenue
P. O. Box 365
Oakhurst, New Jersey 07755

Re: HATCO CHEMICAL CORPORATION: NJPDES DGW PERMIT NJ0051551
Request for additional 2 week extension of comment period

Dear Mr. Dileo:

This letter confirms our telephone conversation of Friday, February 14, 1986. The additional two (2) week extension to the comment period is hereby granted. Written comments must be received by the Bureau of Ground Water Quality Management by March 1, 1986.

Enclosed please find results of soil samples and ground water analyses obtained from locations downgradient from the Hatco facility. This data is part of the ECRA submission. Information enclosed is only a minor fraction of the data contained in the file. To review the entire file, appropriate review procedures must be followed. As per telephone conversation between Steve Anderson of my staff and Richard Bindelglass of your firm, the contact person to initiate proper file review procedures is Lisa Swanger (609) 984-7610.

Enclosed also find a summary of ground water data obtained from the NJPDES file. Please contact Kathy Locane at (609) 292-5062 to schedule an appointment to review the complete NJPDES file.

If you have any questions on this matter please contact Steve Anderson at (609) 292-0424.

Sincerely,

Signed by
Arnold Schiffman

Arnold Schiffman, Administrator
Water Quality Management Element

WQM170

Enclosures

cc: John Dickinson, ORS
Paul Harvey, Central Enforcement

DR000328

New Jersey Is An Equal Opportunity Employer

679668

Table 1. Inventory of Monitoring Wells* Located on Tenneco Chemicals Property, Fords, New Jersey (well locations shown on Figure 1).

Well No.	Permit No.	Year Completed	Depth (feet below land surface)	Casing Diameter (inches)	Screen Setting (feet below land surface)
B 1	-	1979	25	1.5	8 - 25
B 2S	-	1979	15	1.5	10 - 15
B 2D	-	1979	35	4.0	20 - 35
B 3	-	1979	23	1.5	13 - 23
B 4	-	1979	25	1.5	16 - 25
B 5S	-	1979	15	3.0	10 - 15
B 5D	-	1979	36	4.0	28 - 36
B 6S	-	1979	13	3.0	4 - 13
B 6D	-	1979	24	1.5	16 - 24
B 7S	-	1979	15	1.5	8.5 - 15
B 7D	-	1979	39	4.0	20 - 39
B 8S	-	1979	15	3.0	10 - 15
B 8D	-	1979	42	4.0	24 - 42
B 9	-	1979	25	4.0	5 - 25
B10A	-	1979	29	4.0	19 - 29
B11	-	1979	17	4.0	7 - 17
B12	26-4875	1980	25	3.0	15 - 25
B13	26-4874	1980	30	3.0	20 - 30
B14	26-4876	1980	34	3.0	24 - 34
B15	26-4877	1980	45	3.0	35 - 45
16A	26-5393	1981	30.5	1.5	20.5 - 30.5
16B	26-5394	1981	13	1.5	3 - 13
17A	26-5395	1981	31	1.5	21 - 31
17B	26-5396	1981	15	1.5	5 - 15
18A	26-5397	1981	25.5	1.5	20 - 25.5
18B	26-5398	1981	13	1.5	3 - 13
18C	26-5448	1981	40	1.5	30 - 40
19A	26-5399	1981	30	1.5	20 - 30
19B	26-5400	1981	15	1.5	5 - 15
20A	26-5401	1981	30.5	1.5	20.5 - 30.5
20B	26-5402	1981	13	1.5	3 - 13
21A	26-5403	1982	21.5	1.5	11.5 - 21.5
21B	26-5404	1982	7	1.5	2 - 7
22A	26-5405	1982	23	1.5	13 - 23
22B	26-5406	1982	8	1.5	3 - 8
23	26-5573	1982	15	1.5	5 - 15

* All observation wells on Tenneco property tap the Farrington Sand member of the Raritan Formation.

Table 4. Analytical Results of Ground-water Samples Collected in 1982.

Well No.	Date Sampled	Benzene (ug/L)	Toluene (ug/L)	Carbon tetrachloride (ug/L)	Chlorobenzene (ug/L)	Chloroform (ug/L)	1,1-Dichloroethylene (ug/L)	1,2-Dichloroethane (ug/L)
B1	1-19-82	•	•	•	•	•	•	•
B2S	1-20-82	510	130	•	•	•	•	•
B2D	1-20-82	680	76	•	•	•	•	•
B3	1-21-82	•	•	•	•	•	•	•
B4	1-19-82	490	4,700	•	800	•	•	•
B5S	1-21-82	10	66	•	45	•	•	•
B5D	1-21-82	•	•	•	•	•	•	•
B6S	1-22-82	•	•	•	•	•	•	•
B6D	-	-	-	-	-	-	-	-
B7S	1-19-82	200	11,000	650	1,100	4,500	17	•
B7D	1-19-82	250	16,000	820	1,900	8,400	•	•
B8S	6-25-82	•	19	•	•	•	•	•
B8D	6-25-82	•	•	•	21	•	•	•
B9D	1-19-82	•	320	•	•	•	•	•
B10A	1-19-82	•	•	•	•	•	•	•
B11	1-19-82	•	•	•	•	•	•	•
B12-Part 1	1-25-82	•	•	•	15	•	•	•
B12-Part 2	1-21-82	•	•	•	14	•	•	•
B12-Part 3	1-21-82	•	•	•	16	•	•	•
B12-Part 4	1-21-82	•	•	•	10	•	•	•
B13	1-19-82	16	•	•	•	•	•	•
B14	1-21-82	•	•	•	•	•	•	•
B15	6-25-82	•	52	•	•	•	•	•

• Below detection limit (see last page of Table 4).

Table 4. (Continued)

Well No.	Date Sampled	Benzene (ug/L)	Toluene (ug/L)	Carbon tetrachloride (ug/L)	Chlorobenzene (ug/L)	Chloroform (ug/L)	1,1-Dichloroethylene (ug/L)	1,2-Dichloroethane (ug/L)
16A	1-20-82	•	•	•	•	•	•	•
	4-22-82	•	•	•	•	•	•	•
16B	1-20-82	•	•	•	•	•	•	•
	4-22-82	•	•	•	•	•	•	•
17A	1-20-82	200	2,500	•	600	120	•	•
	4-22-82	160	1,300	•	880	23	•	•
17B	1-20-82	36	180	•	15	•	•	•
	4-22-82	21	86	•	•	•	•	•
18A	1-20-82	400	•	•	•	•	•	•
	4-22-82	280	•	•	•	•	•	•
18B	1-20-82	340	17	•	•	•	•	•
	4-22-82	240	15	•	•	•	•	•
18C	1-20-82	700	80	•	•	•	•	•
	4-22-82	680	82	•	•	•	•	•
19A	1-21-82	•	•	•	33	•	•	•
	4-22-82	•	•	•	•	•	•	•
19B	1-21-82	•	•	•	•	•	•	•
	4-22-82	•	•	•	•	•	•	•
20A	1-21-82	•	•	•	•	•	•	•
	4-22-82	•	•	•	•	•	•	•
20B	1-21-82	•	•	•	•	•	•	•
	4-22-82	•	•	•	•	•	•	•
21A	1-22-82	31	160	•	22	•	•	•
	4-22-82	80	1,700	•	67	•	•	•
21B	1-25-82	•	•	•	•	•	•	•
	4-22-82	•	•	•	•	•	•	•
22A	1-24-82	230	45	•	17	•	•	•
	4-22-82	380	360	•	54	•	•	•
22B	1-21-82	•	•	•	•	•	•	•
	4-22-82	•	•	•	•	•	•	•
23	4-21-82	-	-	-	-	-	-	-

• Below detection limit
- Not analyzed

Table 4. (Continued)

Well No.	Date Sampled	1,3-Dichloropropylene (ug/L)	Ethylbenzene (ug/L)	Methylene chloride (ug/L)	1,1,2,2-Tetrachloroethane (ug/L)	Tetrachloroethylene (ug/L)	Trichloroethylene (ug/L)	1,2-Trans-dichloroethylene (ug/L)
B1	1-19-82	•	•	•	•	•	•	•
B2S	1-20-82	•	•	•	•	•	34	10
B2D	1-20-82	•	•	•	•	•	13	•
B3	1-21-82	•	•	•	•	•	•	•
B4	1-19-82	•	•	•	•	•	•	•
B5S	1-21-82		45	•	•	•	•	•
B5D	1-21-82	•	•	•	•	•	•	•
B6S	1-22-82	•	•	•	•	•	•	•
B6D	-	-	-	-	-	-	-	-
B7S	1-19-82	12	12	92	28	23	20	•
B7D	1-19-82	•	•	150	23	13	10	12
B8S	6-25-82	•	•	•	•	•	•	•
B8D	6-25-82	•	•	•	•	•	•	•
B9	1-19-82	•	•	•	•	•	•	•
B10A	1-19-82	•	•	•	•	•	•	•
B11	1-19-82	•	•	•	•	•	•	•
B12-Part 1	1-21-82	•	•	•	•	•	•	•
B12-Part 2	1-21-82	•	•	•	•	•	•	•
B12-Part 3	1-21-82	•	•	•	•	•	•	•
B12-Part 4	1-21-82	•	•	•	•	•	•	•
B13	1-19-82	•	•	•	•	•	•	•
B14	1-21-82	•	•	•	•	•	•	•
B15	6-25-82	•	•	•	•	•	•	•

• Below detection limit
- Not analyzed

Table 4. (Continued)

Well No.	Date Sampled	1,3-Dichloropropylene (ug/L)	Ethylbenzene (ug/L)	Methylene chloride (ug/L)	1,1,2,2-Tetrachloroethane (ug/L)	Tetrachloroethylene (ug/L)	Trichloroethylene (ug/L)	1,2-Transdichloroethylene (ug/L)
16A	1-20-82	•	•	•	•	•	•	•
	4-22-82	•	•	•	•	•	•	•
16B	1-20-82	•	•	•	•	•	•	•
	4-22-82	•	•	22	•	•	•	•
17A	1-20-82	•	14	38	•	•	22	26
	4-22-82	•	•	15	•	•	13	15
17B	1-20-82	•	•	•	•	•	•	12
	4-22-82	•	•	73	•	•	•	10
18A	1-20-82	•	•	•	•	•	•	•
	4-22-82	•	•	14	•	•	•	•
18B	1-20-82	•	•	•	•	•	•	•
	4-22-82	•	•	25	•	•	•	•
18C	1-20-82	•	•	•	•	•	•	•
	4-22-82	•	•	•	•	•	•	•
19A	1-21-82	•	•	•	•	•	•	•
	4-22-82	•	•	•	•	•	•	•
19B	1-21-82	•	•	•	•	•	•	•
	4-22-82	•	•	•	•	•	•	•
20A	1-21-82	•	•	•	•	•	•	•
	4-22-82	•	•	•	•	•	•	•
20B	1-21-82	•	•	•	•	•	•	•
	4-22-82	•	•	16	•	•	•	•
21A	1-22-82	•	29	•	•	•	•	•
	4-22-82	•	150	34	•	•	•	•
21B	1-25-82	•	•	•	•	•	•	•
	4-22-82	•	•	11	•	•	•	•
22A	1-24-82	•	140	•	•	•	•	•
	4-22-82	•	500	12	•	•	•	•
22B	1-21-82	•	•	•	•	•	•	•
	4-22-82	•	•	10	•	•	•	•
23	4-21-82	-	-	-	-	-	-	-

• Below detection limit
- Not analyzed

Geraghty & Miller, Inc.

Table 4. (Continued)

Well No.	Date Sampled	Phenol (ug/L)	2,4-Di-chloro-phenol (ug/L)	2,4,6-Tri-chloro-phenol (ug/L)	p-chloro-m-cresol (ug/L)	2,4-Di-methyl-phenol (ug/L)	2-chloro-phenol (ug/L)	PCBs (ug/L)
B1	1-19-82	•	•	•	•	•	•	•
B2S	1-20-82	•	•	•	•	•	•	•
B2D	1-20-82	•	•	•	•	•	•	-
B3	1-21-82	•	•	•	•	•	•	•
B4	1-19-82	•	•	•	37	•	•	31.7
B5S	1-21-82	•	•	•	•	•	•	•
B5D	1-21-82	•	•	•	•	•	•	•
B6S	1-22-82	•	•	•	•	•	•	-
B6D	-	-	-	-	-	-	-	-
B7S	1-19-82	•	•	•	•	•	•	•
B7D	1-19-82	47	45 60	110 140	•	•	•	•
B8S	6-25-82	•	•	•	•	•	•	•
B8D	6-25-82	•	•	•	•	•	•	•
B9	1-19-82	•	•	•	•	•	•	•
B10A	1-19-82	•	•	•	•	•	•	•
B11	1-19-82	•	•	•	•	•	•	•
B12-Part 1	1-25-82	•	•	•	•	35	•	•
B12-Part 2	1-21-82	•	•	•	•	38	•	•
B12-Part 3	1-21-82	•	•	•	•	28	•	•
B12-Part 4	1-21-82	•	•	•	•	•	•	•
B13	1-19-82	•	•	•	•	•	•	•
B14	1-21-82	•	•	•	•	•	•	•
B15	6-25-82	•	•	•	•	•	•	•

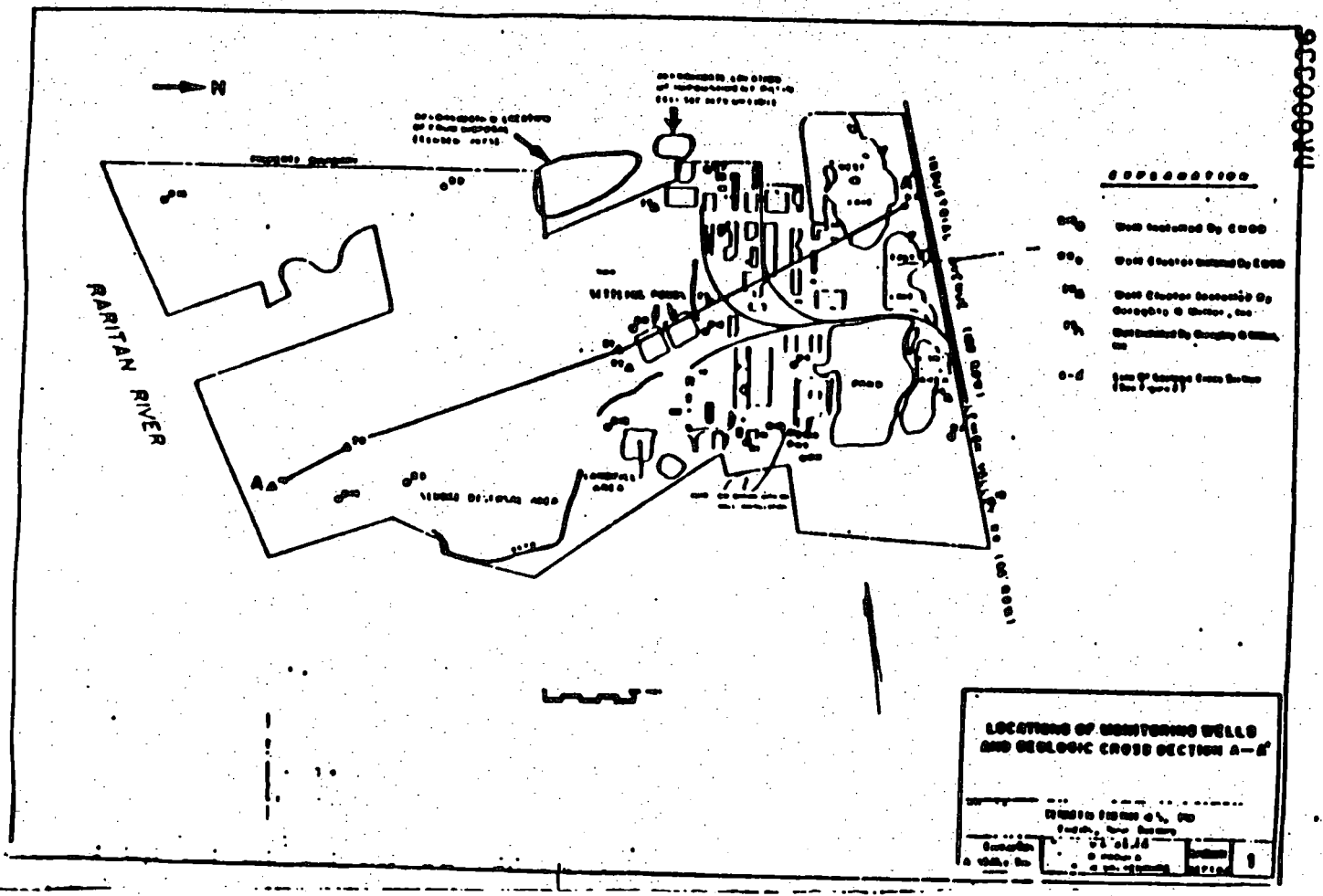
• Below detection limit.
- Not analyzed

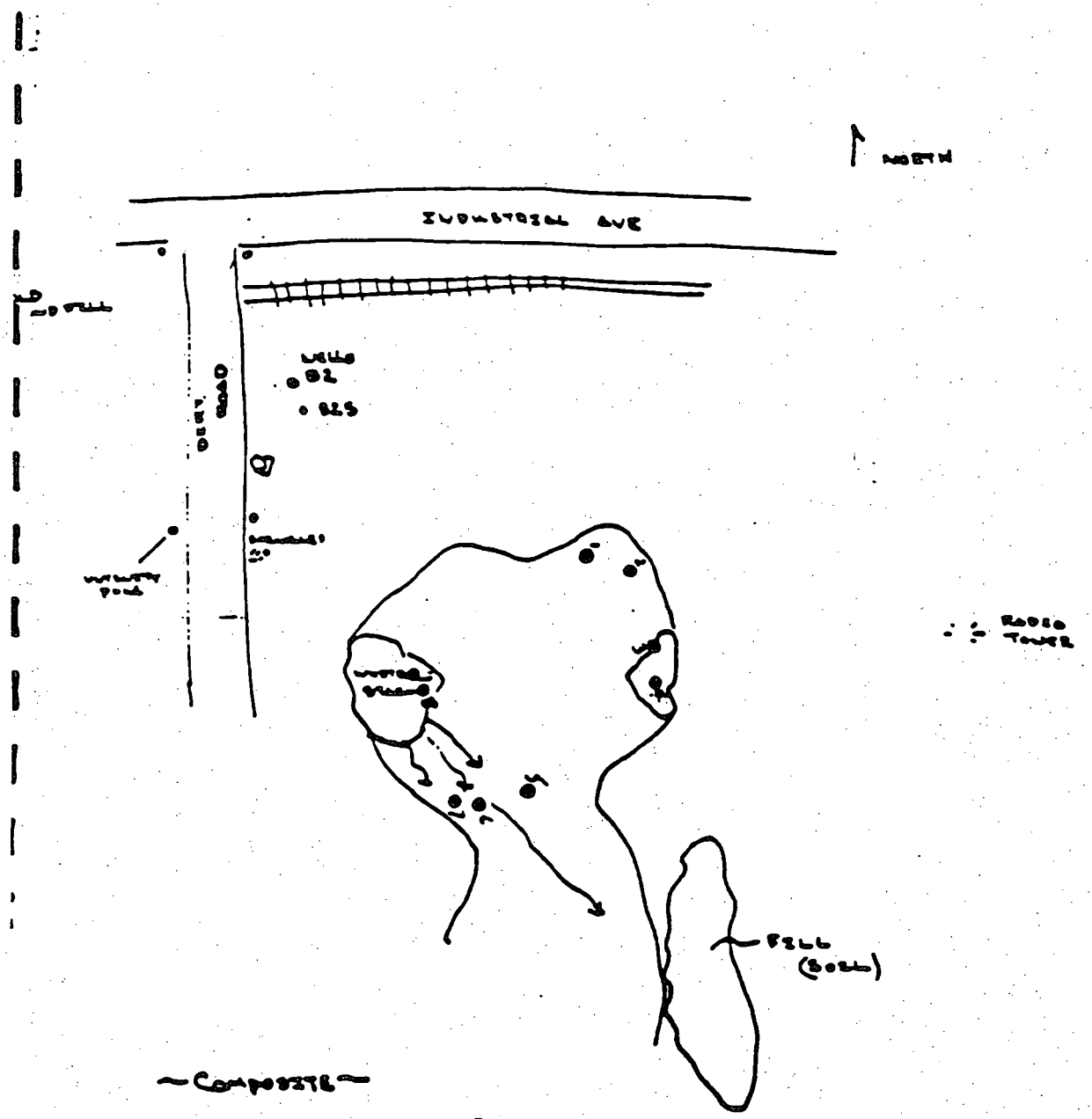
DR000334

Table 4. (Continued)

Well No.	Date Sampled	Phenol (ug/L)	2,4-Di-chloro-phenol (ug/L)	2,4,6-Tri-chloro-phenol (ug/L)	p-chloro-m-cresol (ug/L)	2,4-Di-methyl-phenol (ug/L)	2-chloro-phenol (ug/L)	PCBs (ug/L)
16A	1-20-82	•	•	•	•	•	•	•
	4-22-82	-	-	-	-	-	-	-
16B	1-20-82	•	•	•	•	•	•	•
	4-22-82	-	-	-	-	-	-	-
17A	1-20-82	3,500	300	30	46	9,900	140	•
	4-22-82	-	-	-	-	-	-	-
17B	1-20-82	•	•	•	•	•	•	•
	4-22-82	-	-	-	-	-	-	-
18A	1-20-82	•	•	•	•	•	•	•
	4-22-82	-	-	-	-	-	-	-
18B	1-20-82	•	•	•	•	•	•	•
	4-22-82	-	-	-	-	-	-	-
18C	1-20-82	•	•	•	•	•	•	•
	4-22-82	-	-	-	-	-	-	-
19A	1-21-82	•	•	•	•	•	•	•
	4-22-82	-	-	-	-	-	-	-
19B	1-21-82	•	•	•	•	•	•	•
	4-22-82	-	-	-	-	-	-	-
20A	1-21-82	•	•	•	•	•	•	-
	4-22-82	-	-	-	-	-	-	-
20B	1-21-82	•	•	•	•	•	•	22.9
	4-22-82	-	-	-	-	-	-	-
21A	1-22-82	•	•	•	•	•	•	5.69
	4-22-82	-	-	-	-	-	-	-
21B	1-25-82	•	•	•	•	•	•	-
	4-22-82	-	-	-	-	-	-	-
22A	1-28-82	•	•	•	•	26	•	5.07
	4-22-82	-	-	-	-	-	-	-
22B	1-21-82	•	•	•	•	•	•	-
	4-22-82	-	-	-	-	-	-	-
23	4-21-82	-	-	-	-	-	-	-

• Below detection limit
- Not analyzed


N
RARITAN RIVER
A
A'
LOCATIONS OF MONITORING WELLS
AND GEOLOGIC CROSS SECTION A—A'



~COMPOSITE~

SURFACE TO 4" DEEP

AT 9 LOCATIONS

DR000337

ETC ENVIRONMENTAL TESTING AND CERTIFICATION

Technical Report

for

NUODEX INC

INDUSTRIAL AVE.

FORDS, NJ 08863

Chain of Custody Data Required for ETC Data Management Summary Reports

ETC Sample No	Company	Facility	Sample Point	Date	Time	Elapsed Hours
64465	NUODEX INC	NUOFDR	SWELLB-2	841220		

James M. Bowes

Denis C K. Lin, Ph.D

Vice President
Research and Operations

DR000338

384 RARITAN CENTER PARKWAY • EDISON, NJ 08837 (201) 225 5400

Introduction

This report contains the analytical results on your soil sample. SWELLB-2 [illegible] designed to include comprehensive data from the entire analytical process in order to satisfy the needs of various levels of review.

The results obtained from your sample are presented in tabular format immediately following this introduction. Quality assurance data is tabulated along with the appropriate sample results for verification. Depending on the analyses ordered, the quality assurance data may include results from blank, spiked blank, spiked sample (i.e. matrix spike) and replicate samples as well as results from surrogate compound analyses. Quality assurance data for verification of proper instrument performance is also included where appropriate. The report additionally includes the chain of custody record for your sample and, where appropriate, the gas chromatograms and mass spectra.

The procedures used in the analysis of the sample are described in this report's methodology section. All analytical procedures within our laboratory are performed within a strictly enforced Quality Assurance Protocol. A description of this Protocol is included in the report.

Results

Sample results, and associated quality assurance data, are always tabulated in one or more of this report's Quantitative Results Tables. The format of each table varies with the class of analysis.

Priority Pollutants

The priority pollutant compounds and elements are listed with their NPDES (National Pollutant Discharge Elimination System) numbers, and the Method Detection Limit (MDL) published in the Federal Register, December 3, 1979. When a compound or element is present below its published MDL it is reported as BMDL (Below Method Detection Limit). When a compound or element is not present at any detectable concentrations it is reported as ND (Not Detected). Matrix spike and replicate analyses, where included, were performed on samples randomly chosen within each quality assurance batch and are therefore not necessarily spikes and replicates of this report's sample. Surrogate compound recovery data and instrument calibration data are included in the Method Performance Data Tables.

ETC ENVIRONMENTAL TESTING and CERTIFICATION

DR000340

JAN 19, 1985

TABLE 1: QUANTITATIVE RESULTS and QUALITY ASSURANCE DATA

Volatile Compounds – GC/MS Analysis Data (QR01)

Chain of Custody Data Required for ETC Data Management Summary Reports

ETC Sample No.	Company	Facility	Sample Point	Date	Time	Elapsed Hours
G4465	NUGDEX INC	NUGFDR	SWELLB-2	041220		

NPDES Number	Compound	Results: Sample Concen. ug/kg	Results: MDL ug/kg	GC Replicate: First ug/kg	GC Replicate: Second ug/kg	GC Blank and Spiked Blank: Blank Data ug/kg	GC Blank and Spiked Blank: Concen. Added ug/kg	GC Blank and Spiked Blank: % Recov	GC Matrix Spike: Unspiked Sample ug/kg	GC Matrix Spike: Concen. Added ug/kg	GC Matrix Spike: % Recov
1V	Acrolein	ND	500	ND	ND	ND	0000	90	ND	0000	113
2V	Acrylonitrile	ND	500	ND	ND	ND	000	105	49	000	126
3V	Benzene	2150	50	ND	ND	ND	100	101	ND	100	93
4V	bis(Chloromethyl)ether	ND	50	ND	ND	ND	0	-	ND	0	-
5V	Bromoform	ND	50	ND	ND	ND	100	105	43	100	233
6V	Carbon tetrachloride	ND	50	ND	ND	ND	100	102	ND	100	93
7V	Chlorobenzene	BMDL	50	35	46	ND	100	89	41	100	87
8V	Chlorodibromomethane	ND	50	ND	ND	ND	100	85	ND	100	99
9V	Chloroethane	ND	50	ND	ND	ND	100	88	ND	100	95
10V	2-Chloroethylvinyl ether	ND	50	ND	ND	ND	100	104	ND	100	109
11V	Chloroform	ND	50	ND	ND	ND	100	89	ND	100	80
12V	Dichlorobromomethane	ND	50	ND	ND	ND	100	98	ND	100	96
13V	Dichlorodifluoromethane	ND	50	ND	ND	ND	100	111	ND	100	100
14V	1,1-Dichloroethane	ND	50	ND	ND	ND	100	104	ND	100	90
15V	1,2-Dichloroethane	ND	50	ND	ND	ND	100	115	ND	100	104
16V	1,1-Dichloroethylene	ND	50	ND	ND	ND	100	102	ND	100	92
17V	1,2-Dichloropropane	ND	50	ND	ND	ND	100	101	ND	100	94
18V	cis-1,3-Dichloropropylene	ND	50	ND	ND	ND	100	93	ND	100	98
19V	Ethylbenzene	ND	50	ND	ND	ND	100	95	ND	100	95
20V	Methyl bromide	ND	50	ND	ND	ND	100	105	ND	100	97
21V	Methyl chloride	ND	50	ND	ND	ND	100	96	ND	100	99
22V	Methylene chloride	1360	50	92	205	BMDL	100	88	174	100	96
23V	1,1,2,2-Tetrachloroethane	ND	50	ND	ND	ND	100	109	28	100	83
24V	Tetrachloroethylene	ND	50	ND	ND	ND	100	94	ND	100	96
25V	Toluene	130	50	43	51	BMDL	100	82	40	100	90
26V	1,2-Trans-dichlorbethylene	ND	50	ND	ND	ND	100	104	ND	100	87
27V	1,1,1-Trichloroethane	ND	50	ND	ND	BMDL	100	79	ND	100	87
28V	1,1,2-Trichloroethane	ND	50	ND	ND	ND	100	91	8	100	98
29V	Trichloroethylene	BMDL	50	ND	ND	ND	100	98	11	100	91
30V	Trichlorofluoromethane	ND	50	ND	ND	ND	100	103	ND	100	92
31V	Vinyl chloride	ND	50	ND	ND	ND	100	94	ND	100	95
10V	trans-1,3 Dichloropropylene	ND	50	ND	ND	ND	100	104	ND	100	100

[illegible]

[illegible]

ETC ENVIRONMENTAL TESTING and CERTIFICATION

JAN 11 1985

DR000347

TABLE 1: QUANTITATIVE RESULTS and QUALITY ASSURANCE DATA

Acid Compounds – GC/MS Analysis Data (QR02)

Chain of Custody Data Required for ETC Data Management Summary Reports

ETC Sample No.	Company	Facility	Sample Point	Date	Time	Elapsed Hours
G4465	NUODEX INC	NUOFDR	SWELLB-2	841220		

NPDES Number	Compound	Results: Sample Concen. ug/kg	Results: MDL ug/kg	QC Replicate: First ug/kg	QC Replicate: Second ug/kg	QC Blank and Spiked Blank: Blank Data ug/kg	QC Blank and Spiked Blank: Concen. Added ug/kg	QC Blank and Spiked Blank: % Recov *	QC Matrix Spike: Unspiked Sample ug/kg	QC Matrix Spike: Concen. Added ug/kg	QC Matrix Spike: % Recov
1A	2-Chlorophenol	ND	4125	ND	ND	ND	0	-	ND	4000	91
2A	2,4-Dichlorophenol	ND	4125	ND	ND	ND	0	-	ND	4000	100
3A	2,4-Dimethylphenol	ND	4125	ND	ND	ND	0	-	ND	4000	64
4A	4,6-Dinitro-o-cresol	ND	41250	ND	ND	ND	0	-	ND	8133	69
5A	2,4-Dinitrophenol	ND	41250	ND	ND	ND	0	-	ND	8133	50
6A	2-Nitrophenol	ND	4125	ND	ND	ND	0	-	ND	4000	91
7A	4-Nitrophenol	ND	4125	ND	ND	ND	0	-	ND	4000	40
8A	p-Chloro-m-cresol	ND	4125	ND	ND	ND	0	-	ND	4000	97
9A	Pentachlorophenol	ND	4125	ND	ND	ND	0	-	ND	4000	86
10A	Phenol	ND	4125	ND	ND	ND	0	-	ND	4000	88
11A	2,4,6-Trichlorophenol	ND	4125	ND	ND	ND	0	-	ND	4000	96

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ETC ENVIRONMENTAL TESTING and CERTIFICATION

JAN 5, 1985

DR000312

TABLE 1: QUANTITATIVE RESULTS and QUALITY ASSURANCE DATA

BASE/NEUTRAL COMPOUNDS – GC/MS ANALYSIS DATA (QR03)

Chain of Custody Data Required for ETC Data Management Summary Reports

ETC Sample No.	Company	Facility	Sample Point	Date	Time	Elapsed Hours
G4465	NUDDEX INC	NUDFDR	SWELLB-2	841220		

HPDES Number	Compound	Results: Sample Concen. ug/kg	Results: MDL ug/kg	QC Replicate: First ug/kg	QC Replicate: Second ug/kg	QC Blank and Spiked Blank: Blank Data ug/kg	QC Blank and Spiked Blank: Concen. Added ug/kg	QC Blank and Spiked Blank: % Recov *	QC Matrix Spike: Unspiked Sample ug/kg	QC Matrix Spike: Concen. Added ug/kg	QC Matrix Spike: % Recov *
1B	Acenaphthene	ND	1670	ND	ND	ND	0	-	ND	3253	53
2B	Acenaphthylene	ND	1670	ND	ND	ND	0	-	ND	3253	50
3B	Anthracene	ND	1670	ND	ND	ND	0	-	ND	3253	50
4B	Benzidine	ND	1670	ND	ND	ND	0	-	ND	3253	1
5B	Benzo(a)anthracene	ND	1670	ND	ND	ND	0	-	ND	3253	39
6B	Benzo(a)pyrene	ND	1670	ND	ND	ND	0	-	ND	3253	44
7B	Benzo(b)fluoranthene	ND	1670	ND	ND	ND	0	-	ND	3253	46
8B	Benzo(phi)perylene	ND	1670	ND	ND	ND	0	-	ND	0	-
9B	Benzo(k)fluoranthene	ND	1670	ND	ND	ND	0	-	ND	3253	35
10B	bis(2-Chloroethoxy)methane	ND	1670	ND	ND	ND	0	-	ND	3253	56
11B	bis(2-Chloroethyl) ether	ND	1670	ND	ND	ND	0	-	ND	3253	50
12B	bis(2-Chloroisopropyl)ether	ND	1670	ND	ND	ND	0	-	ND	3253	53
13B	bis(2-Ethylhexyl)phthalate	2.25E+05	1670	46	ND	ND	0	-	ND	3253	34
14B	4-Bromophenyl phenyl ether	ND	1670	ND	ND	ND	0	-	ND	3253	55
15B	Butyl benzyl phthalate	15700	1670	ND	ND	ND	0	-	ND	3253	40
16B	2-Chloronaphthalene	ND	1670	ND	ND	ND	0	-	ND	3253	50
17B	4-Chlorophenyl phenyl ether	ND	1670	ND	ND	ND	0	-	ND	3253	55
18B	Chrysene	ND	1670	ND	ND	ND	0	-	ND	3253	45
19B	Dibenzo(a,h)anthracene	ND	1670	ND	ND	ND	0	-	ND	0	-
20B	1,2-Dichlorobenzene	ND	1670	ND	ND	ND	0	-	ND	3253	47
21B	1,3-Dichlorobenzene	ND	1670	ND	ND	ND	0	-	ND	3253	50
22B	1,4-Dichlorobenzene	ND	1670	ND	ND	ND	0	-	ND	3253	52
23B	3,3'-Dichlorobenzidine	ND	1670	ND	ND	ND	0	-	ND	3253	24
24B	Diethyl phthalate	ND	1670	ND	ND	ND	0	-	ND	3253	55
25B	Dimethyl phthalate	ND	1670	ND	ND	ND	0	-	ND	3253	60
26B	Di-n-butyl phthalate	21400	1670	160	182	ND	0	-	ND	3253	66
27B	2,4-Dinitrotoluene	ND	1670	ND	ND	ND	0	-	ND	3253	40
28B	2,6-Dinitrotoluene	ND	1670	ND	ND	ND	0	-	ND	3253	57
29B	Di-n-octyl phthalate	17700	1670	ND	ND	ND	0	-	ND	3253	31
30B	1,2-Diphenylhydrazine	ND	1670	ND	ND	ND	0	-	ND	3253	59
31B	Fluoranthene	ND	1670	ND	ND	ND	0	-	ND	3253	47
32B	Fluorene	ND	1670	ND	ND	ND	0	-	ND	3253	52

ETC ENVIRONMENTAL TESTING and CERTIFICATION

JAN 1985

DR000343

TABLE 1: QUANTITATIVE RESULTS and QUALITY ASSURANCE DATA

BASE/NEUTRAL COMPOUNDS – GC/MS ANALYSIS DATA (QR03)

Chain of Custody Data Required for ETC Data Management Summary Reports

ETC Sample No.	Company	Facility	Sample Point	Date	Time	Signed Chain
84465	HARDEN INC	HANFORD	SHELLB-2	841220		

NPDES Number	Compound	Results: Sample Concen. ug/kg	Results: MDL ug/kg	GC Replicate: First ug/kg	GC Replicate: Second ug/kg	GC Blank and Spiked Blank: Blank Data ug/kg	GC Blank and Spiked Blank: Concen. Added ug/kg	GC Blank and Spiked Blank: % Recov	GC Matrix Spike: Unspiked Sample ug/kg	GC Matrix Spike: Concen. Added ug/kg	GC Matrix Spike: % Recov
33B	Hexachlorobenzene	ND	1670	ND	ND	ND	0	-	ND	3253	52
34B	Hexachlorobutadiene	ND	1670	ND	ND	ND	0	-	ND	3253	52
35B	Hexachlorocyclopentadiene	ND	1670	ND	ND	ND	0	-	ND	0	-
36B	Hexachloroethane	ND	1670	ND	ND	ND	0	-	ND	3253	54
37B	Indeno(1,2,3-c,d)pyrene	ND	1670	ND	ND	ND	0	-	ND	0	-
38B	Isophorone	ND	1670	ND	ND	ND	0	-	ND	3253	54
39B	Naphthalene	8400	1670	ND	ND	ND	0	-	ND	3253	49
40B	Nitrobenzene	ND	1670	ND	ND	ND	0	-	ND	3253	51
41B	N-Nitrosodimethylamine	ND	1670	ND	ND	ND	0	-	ND	0	-
42B	N-Nitrosodi-n-propylamine	ND	1670	ND	ND	ND	0	-	ND	3253	54
43B	N-Nitrosodiphenylamine	ND	1670	ND	ND	ND	0	-	ND	3253	62
44B	Phenanthrene	4510	1670	ND	ND	ND	0	-	ND	3253	59
45B	Pyrene	14400	1670	ND	ND	ND	0	-	ND	3253	50
46B	1,2,4-Trichlorobenzene	ND	1670	ND	ND	ND	0	-	ND	3253	51

ETC ENVIRONMENTAL TESTING and CERTIFICATION

JAN 5, 1985

DR000344

TABLE 1: QUANTITATIVE RESULTS and QUALITY ASSURANCE DATA

Pesticide/PCB Compounds – GC/MS Analysis Data (QR04)

Chain of Custody Data Required for ETC Data Management Summary Reports

ETC Sample No.	Company	Facility	Sample Point	Date	Time	Elapsed Hours
G4465	NUODEX INC	NUOFDR	SWELLB-2	041220		

NPDES Number	Compound	Results: Sample Concen. ug/kg	Results: MDL ug/kg	QC Replicate: First ug/kg	QC Replicate: Second ug/kg	QC Blank and Spiked Blank: Blank Data ug/kg	QC Blank and Spiked Blank: Concen. Added ug/kg	QC Blank and Spiked Blank: % Recov *	QC Matrix Spike: Unspiked Sample ug/kg	QC Matrix Spike: Concen. Added ug/kg	QC Matrix Spike: % Recov *
1P	Aldrin	ND	1670	ND	ND	ND	0	-	ND	3253	46
2P	Alpha-BHC	ND	1670	ND	ND	ND	0	-	ND	3253	46
3P	Beta-BHC	ND	1670	ND	ND	ND	0	-	ND	3253	45
4P	Gamma-BHC	ND	1670	ND	ND	ND	0	-	ND	3253	50
5P	Delta-BHC	ND	1670	ND	ND	ND	0	-	ND	3253	45
6P	Chlordane	ND	1670	ND	ND	ND	0	-	ND	6506	61
7P	4,4'-DDT	ND	1670	ND	ND	ND	0	-	ND	3253	39
8P	4,4'-DDE	ND	1670	ND	ND	ND	0	-	ND	3253	46
9P	4,4'-DDD	ND	1670	ND	ND	ND	0	-	ND	3253	39
10P	Dieldrin	ND	1670	ND	ND	ND	0	-	ND	3253	45
11P	Endosulfan I	ND	1670	ND	ND	ND	0	-	ND	3253	60
12P	Endosulfan II	ND	1670	ND	ND	ND	0	-	ND	3253	29
13P	Endosulfan sulfate	ND	1670	ND	ND	ND	0	-	ND	3253	40
14P	Endrin	ND	1670	ND	ND	ND	0	-	ND	3253	25
15P	Endrin aldehyde	ND	1670	ND	ND	ND	0	-	ND	3253	50
16P	Heptachlor	ND	1670	ND	ND	ND	0	-	ND	3253	49
17P	Heptachlor epoxide	ND	1670	ND	ND	ND	0	-	ND	3253	47
18P	PCB-1242	ND	1670	ND	ND	ND	0	-	ND	0	-
19P	PCB-1254	ND	1670	ND	ND	ND	0	-	ND	0	-
20P	PCB-1221	ND	1670	ND	ND	ND	0	-	ND	0	-
21P	PCB-1232	ND	1670	ND	ND	ND	0	-	ND	0	-
22P	PCB-1248	ND	1670	ND	ND	ND	0	-	ND	0	-
23P	PCB-1260	ND	1670	ND	ND	ND	0	-	ND	3253	39
24P	PCB-1016	ND	1670	ND	ND	ND	0	-	ND	0	-
25P	Toxaphene	ND	1670	ND	ND	ND	0	-	ND	0	-

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ETC ENVIRONMENTAL TESTING and CERTIFICATION

January 19, 1988

DR000345

TABLE 2: METHOD PERFORMANCE DATA

Surrogate Recovery Soil- GC/MS Data (QR20)

Chain of Custody Data Required for ETC Data Management Summary Reports

G4465

ETC Sample No.	Company	Facility	Sample Point	Date	Time	Standard Hours

Compound	Amount Added ug	% Recovery	Control Limits *	
			Lower	Upper
VOLATILE FRACTION				
Toluene-D8	250	96	50	160
Bromofluorobenzene	250	74	50	160
1,2-Dichloroethane-D4	250	93	50	160
ACID FRACTION				
Phenol-D5	100	56	20	140
2-Fluorophenol	100	73	20	140
2,4,6-Tribromophenol	100	53	10	140
BASE/NEUTRAL FRACTION				
Nitrobenzene-D5	50	58	20	140
2-Fluorobiphenyl	50	71	20	140
Terphenyl-D14	50	120	20	150

* 99.9% Confidence Limits

Summary of ground water data from NJPDES file
All results in ppb

June 6, 1984

Well 2A
- Benzene 591
- Toluene 25

Well 2B
- Benzene 329
- TCE 28
- Vinyl Chloride 12

Well 16A
- ND

Well 16B
- 1,1 dichloroethene 97
- 1,1,1 trichloroethane 69

Well 18A
- Benzene 23

Well 18B
- Benzene 109

Well 18C
- Benzene 580

September 26, 1984

Well 2A
- Benzene 300
- Vinyl Chloride 11

Well 2B
- Benzene 529
- Toluene 20

Well 16A
- ND

Well 16B
- 1,1 dichloroethene 210
- Methylene Chloride 15
- Chloroethane 1070

Well 18A
- ND

Well 18B
- Benzene 67

Well 18C
- Benzene 664

January 16, 1985

Well 2S
- Benzene 292
- Trichloroethane 16

Well 2B
- Benzene 573

Well 16A
- ND

Well 16B
- 1,1 dichloroethane 65
- Chloroethane 356

Cluster 18 destroyed

March 27, 1985

Well 2A
- Benzene 213
- Methylene Chloride 4.7
- Trichloroethane 12.7

Well 2B
- Benzene 482
- Methlylene Chloride 8.9
- Trichloroethane 4.4

Well 16A
- ND

Well 16B
- 1,1 dichloroethene 155
- 1,1,1 Trichloroethane 77

DR0003-16