UNION CARBIDE CORPORATION
SILICONES AND URETHANE INTERMEDIATES
P. O. BOX 180, SISTERSVILLE, WEST VIRGINIA 26175

25 YEARS OF DISCOVERY AND PROGRESS
UNION CARBIDE
SISTERSVILLE SILICONES PLANT
1955 - 1980

July 18, 1980

MEMORANDUM TO: Mrs. D. T. Marsh

Copies To: A. W. Boyd
R. T. Kramer
D. G. Moshier

Subject: Buried Waste -
Test Well Analyses

Dear Deb:

Enclosed is a copy of the long awaited analytical reports on the second series of water samples from CompuChem.

As you can see from the cover letter, they lost some data relating to the volatile impurities so we have an incomplete picture of these particular asterisked impurities in the Sugar Camp Run, Site II, Well No. 5 and Site I, Well No. 2 samples.

In view of the results we saw on the previous samples I doubt that this lack changes the picture very much - they probably were BDL anyway.

I'm pleased that the check sample on Site II, Well 2A for Pesticides and PCB's agrees with the earlier analyses, both reporting BDL for these pollutants.

I find the larger reported amounts of Arsenic, Beryllium, Chromium, Copper, Nickel and Zinc in Well No. 4 at Site I to be puzzling, if not disturbing. I'd appreciate your comments on this point.

The 0.54 copper in Sugar Camp Run is probably to be expected because of the proximity of the spent Cu-Si mass pile and we can reasonably expect this to drop appreciably when this waste is eventually properly disposed of.

We intend to resample and reanalyze at least some of these sites in the near future in order to bolster our confidence in the results. Your comments on this aspect of the project are invited also.

Very truly yours,

Clem S.

C.F.Schubert/k

Attachment

COMPUCHEM™
a Mead Service

REPORT

MPM0002285

EPA003575

COMPU/CHEM
Post Office Box 12652
Research Triangle Park, NC 27709

Telephone: 919-549-8264
800-334-8525

Mead Technology Laboratories

16 July 1980

Mr. Clem Schubert
Union Carbide
Post Office Box 180
Sistersville, West Virginia 26175

Dear Mr. Schubert:

Enclosed are five COMPU/CHEM data reports on Union Carbide samples. I understand that Mr. Kent Fulton, our Marketing Operations manager, informed you of the unavoidable loss of magnetic data on the volatile organics fraction for three of your samples. We were able to provide the volatile chromatogram for the "Sistersville 82-4" sample. We will gladly provide technical assistance if you have questions about the chromatogram.

To repeat the offer made by Mr. Fulton, we will welcome the opportunity to re-analyze for these volatile organic fractions at no charge to you if you wish to resubmit samples. Further, you will not be billed for that portion of the analysis on the samples we were unable to complete.

I am further informed by Mr. Fulton that you have been extremely patient about the delay in getting reports. Our marketing effort has been very successful and the uniqueness of our laboratory has allowed us to offer better than competitive prices. The combination of these factors generated a temporary backlog of customer samples. COMPU/CHEM remains committed to rapid turn-around time and we have increased our staff and instituted multi-shift operation to eliminate the backlog.

We highly value the account we have with Union Carbide and look forward to repeat business with you. Your confidence in our service is appreciated and we will do whatever is necessary to maintain it.

Sincerely,

T. L. Loucks
President

Enclosures

cc: Kent Fulton

Reports	Unknown	-	0628	check on 74-1 Site II Well 2A
	Sistersville 82-4	-	0684	Site I Well #4
	Sistersville 82-2	-	0685	Site I Well # 2
	Sistersville 81-5	-	0671	Site II Well #5 -4-29-80
	Sistersville 81-6	-	0670	24 Hr Composite Sugar Camp Run 4-31-80

MPM0002286

EPA003576

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REPORT OF DATA

CUSTOMER PURCHASE NUMBER: 380-506326-4

SAMPLE IDENTIFIER: UNKNOWN

COMPU/CHEM SAMPLE NUMBER: 0628

SUBMITTED TO:

MR. CLEM SCHUBERT
UNION CARBIDE
POST OFFICE BOX 180
ROUTE 2
SISTERSVILLE, WV 26175

SUBMITTED BY:

R. L. MYERS, PH. D.

7/15/86
DATE

MPM0002287

EPA003577

SAMPLE IDENTIFIER: UNKNOWN
COMPU/CHEM SAMPLE NUMBER: 0628

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1. ANALYTICAL METHODOLOGY

THE SAMPLES WERE PREPARED AND ANALYZED ACCORDING TO TWO (2) GENERAL PROCEDURES: (1) "SAMPLING AND ANALYSIS PROCEDURES FOR SCREENING OF INDUSTRIAL EFFLUENTS FOR PRIORITY POLLUTANTS," REVISED MARCH 1977, US-EPA, AND (2) EPA METHOD 624, "ORGANICS BY PURGE AND TRAP," AND METHOD 625, "BASE/NEUTRALS, ACIDS, AND PESTICIDES," US-EPA, REVISED DECEMBER 3, 1979, FEDERAL REGISTER (GUIDELINES ESTABLISHED TEST PROCEDURES FOR THE ANALYSIS OF POLLUTANTS). REQUIREMENTS OF BOTH PROTOCOLS WERE MET AND ANALYTICAL CONDITIONS SET BY METHOD 624 AND 625. QUALITY ASSURANCE, SAMPLE CUSTODY, AND DOCUMENT CONTROL PROCEDURES WERE FOLLOWED WHICH MEET OR EXCEED EPA REQUIREMENTS.

2. SAMPLE RECORD	DATE
A. RECEIVED/REFRIGERATED	4/25/80
B. ORGANICS	
1. EXTRACTED	5/20/80
2. ANALYZED	
VOLATILES	
BASE/NEUTRALS	
ACIDS	
PESTICIDES/PCBS	7/14/80
ACROLEIN, ACRYLONITRILE	
C. METALS	
1. DIGESTED	
2. ANALYZED	

MPM0002288

EPA003578

SAMPLE IDENTIFIER: UNKNOWN
COMPU/CHEM SAMPLE NUMBER: 0628

COMPUCHEM™ a Mead Service

3. PRIORITY POLLUTANT ANALYSIS REPORT

	COMPOUNDS	CONCENTRATION (UG/L)	DETECTION LIMIT (UG/L)
89.	ALDRIN	BDL	10
90.	DIELDRIN	BDL	10
91.	CHLORDANE	BDL	10
92.	4,4'-DDT	BDL	10
93.	4,4'-DDE	BDL	10
94.	4,4'-DDD	BDL	10
95.	ENDOSULFAN-ALPHA	BDL	10
96.	ENDOSULFAN-BETA	BDL	10
97.	ENDOSULFAN-SULFATE	BDL	10
98.	ENDRIN	BDL	10
99.	ENDRIN ALDEHYDE	BDL	10
100.	HEPTACHLOR	BDL	10
101.	HEPTACHLOR EPOXIDE	BDL	10
102.	BHC-ALPHA	BDL	10
103.	BHC-BETA	BDL	10
104.	BHC-GAMMA	BDL	10
105.	BHC-DELTA	BDL	10
106.	PCB-1242	BDL	10
107.	PCB-1254	BDL	10
108.	PCB-1221	BDL	10
109.	PCB-1232	BDL	10
110.	PCB-1248	BDL	10
111.	PCB-1260	BDL	10
112.	PCB-1016	BDL	10
113.	TOXAPHENE	BDL	10

BDL= BELOW DETECTION LIMIT

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a Mead Service

REPORT OF DATA

CUSTOMER PURCHASE NUMBER: 380-506-326-4

SAMPLE IDENTIFIER: SISTERSVILLE-82-4

COMPU/CHEM SAMPLE NUMBER: 0684

SUBMITTED TO:

MR. CLEM SCHUBERT
UNION CARBIDE
POST OFFICE BOX 180
ROUTE 2
SISTERSVILLE, WV 26175

SUBMITTED BY:

R. C. MYERS, PH. D.

7/15/86
DATE

MPM0002290

EPA003580

COMPUCHEM™
a Mead Service

SAMPLE IDENTIFIER: SISTERSVILLE-82-4
COMPU/CHEM SAMPLE NUMBER: 0684

1. ANALYTICAL METHODOLOGY

THE SAMPLES WERE PREPARED AND ANALYZED ACCORDING TO TWO (2) GENERAL PROCEDURES: (1) "SAMPLING AND ANALYSIS PROCEDURES FOR SCREENING OF INDUSTRIAL EFFLUENTS FOR PRIORITY POLLUTANTS," REVISED MARCH 1977, US-EPA, AND (2) EPA METHOD 624, "ORGANICS BY PURGE AND TRAP," AND METHOD 625, "BASE/NEUTRALS, ACIDS, AND PESTICIDES," US-EPA, REVISED DECEMBER 3, 1979, FEDERAL REGISTER (GUIDELINES ESTABLISHED TEST PROCEDURES FOR THE ANALYSIS OF POLLUTANTS). REQUIREMENTS OF BOTH PROTOCOLS WERE MET AND ANALYTICAL CONDITIONS SET BY METHOD 624 AND 625. QUALITY ASSURANCE, SAMPLE CUSTODY, AND DOCUMENT CONTROL PROCEDURES WERE FOLLOWED WHICH MEET OR EXCEED EPA REQUIREMENTS.

2. SAMPLE RECORD	DATE
A. RECEIVED/REFRIGERATED	5/08/80
B. ORGANICS	
1. EXTRACTED	5/20/80
2. ANALYZED	
VOLATILES	5/20/80
BASE/NEUTRALS	6/24/80
ACIDS	6/05/80
PESTICIDES/PCBS	6/03/80
ACROLEIN, ACRYLONITRILE	5/13/80
C. METALS	
1. DIGESTED	
2. ANALYZED	6/06/80

SAMPLE IDENTIFIER: SISTERSVILLE-82-4
COMPU/CHEM SAMPLE NUMBER: 0684

3. PRIORITY POLLUTANT ANALYSIS REPORT

COMPUCHEM™
COMPOUNDS a Mead Service

	COMPOUNDS	CONCENTRATION (UG/L)	DETECTION LIMIT (UG/L)
1.	ACENAPHTHENE	BDL	10
2.	ACROLEIN	BDL	100
3.	ACRYLONITRILE	BDL	100
4.	BENZENE	*	10
5.	BENZIDENE	BDL	10
6.	CARBON TETRACHLORIDE	*	10
7.	CHLOROBENZENE	*	10
8.	1, 2, 4-TRICHLOROBENZENE	BDL	10
9.	HEXACHLOROBENZENE	*	10
10.	1, 2-DICHLOROETHANE	*	10
11.	1, 1, 1-TRICHLORETHANE	*	10
12.	HEXACHLOROETHANE	*	10
13.	1, 1-DICHLOROETHANE	*	10
14.	1, 1, 2-TRICHLORETHANE	*	10
15.	1, 1, 2, 2-TETRACHLOROETHANE	*	10
16.	CHLOROETHANE	*	10
17.	BIS (CHLOROMETHYL) ETHER	BDL	10
18.	BIS (2-CHLOROETHYL) ETHER	BDL	10
19.	2-CHLOROETHYLVINYL ETHER	*	10
20.	2-CHLORONAPHTHALENE	*	10
21.	2, 4, 6-TRICHLOROPHENOL	BDL	25
22.	4-CHLORO-3-METHYLPHENOL	BDL	25
23.	CHLOROFORM	*	10
24.	2-CHLOROPHENOL	BDL	25
25.	1, 2-DICHLOROBENZENE	BDL	10
26.	1, 3-DICHLOROBENZENE	BDL	10
27.	1, 4-DICHLOROBENZENE	BDL	10
28.	3, 3'-DICHLOROBENZIDINE	BDL	10
29.	1, 1-DICHLOROETHENE	*	10
30.	TRANS-1, 2-DICHLOROETHENE	*	10
31.	2, 4-DICHLOROPHENOL	BDL	25
32.	1, 2-DICHLOROPROPANE	*	10
33.	CIS-1, 3-DICHLOROPROPENE	*	10
34.	TRANS-1, 3-DICHLOROPROPENE	*	10
35.	2, 4-DIMETHYLPHENOL	BDL	25
36.	2, 4-DINITROTOLUENE	BDL	10
37.	2, 6-DINITROTOLUENE	BDL	10
38.	1, 2-DIPHENYLHYDRAZINE	BDL	10
39.	ETHYLBENZENE	*	10
40.	FLUORANTHENE	BDL	10
41.	4-CHLOROPHENYL PHENYL ETHER	BDL	10
42.	4-BROMOPHENYL PHENYL ETHER	BDL	10
43.	BIS (2-CHLOROISOPROPYL) ETHER	*	10
44.	BIS (2-CHLOROETHYOXY) METHANE	*	10
45.	METHYLENE CHLORIDE	*	10

BDL= BELOW DETECTION LIMIT
*Lab Accident

SAMPLE IDENTIFIER: SISTERSVILLE-82-4
COMPU/CHEM SAMPLE NUMBER: 0684

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COMPOUNDS	CONCENTRATION (UG/L)	DETECTION LIMIT (UG/L)
46. CHLOROMETHANE	*	10
47. BROMOMETHANE	BDL	10
48. BROMOFORM	*	10
49. BROMODICHLOROMETHANE	*	10
50. TRICHLOROFLOUROMETHANE	BDL	10
51. DIBROMOCHLOROMETHANE	*	10
52. HEXACHLOROBUTADIENE	BDL	10
53. HEXACHLOROCYCLOPENTADIENE	BDL	10
54. ISOPHORONE	BDL	10
55. NAPTHALENE	BDL	10
56. NITROBENZENE	BDL	10
57. 2-NITROPHENOL	BDL	25
58. 4-NITROPHENOL	BDL	25
59. 2, 4-DINITROPHENOL	BDL	250
60. 2-METHYL-4, 6-DINITROPHENOL	BDL	250
61. N-NITROSODIMETHYLAMINE	BDL	10
62. N-NITROSODIPHENYLAMINE	BDL	10
63. N-NITROSODI-N-PROYLAMINE	BDL	10
64. PENTACHLOROPHENOL	BDL	25
65. PHENOL	BDL	25
66. BIS (2-ETHYLHEXYL) PHTHALATE	BDL	10
67. BUTYL BENZYL PHTHALATE	BDL	10
68. DI-N-BUTYLPHTHALATE	BDL	10
69. DIOCTYLPHTHALATE	BDL	10
70. DIETHYLPHTHALATE	BDL	10
71. DIMETHYLPHTHALATE	BDL	10
72. BENZO(A) ANTHRACENE	BDL	10
73. BENZO(A) PYRENE	BDL	10
74. BENZO(B) FLUORANTHENE	BDL	10
75. BENZO(K) FLUORANTHENE	BDL	10
76. CHRYSENE	BDL	10
77. ACENAPHTHYLENE	BDL	10
78. ANTHRACENE	BDL	10
79. BENZO(G,H,I) PERYLENE	BDL	25
80. FLUORENE	BDL	10
81. PHENANTHRENE	BDL	10
82. DIBENZO(A,H) ANTHRACENE	BDL	25
83. INDENO(1,2,3-C,D) PYRENE	BDL	25
84. PYRENE	BDL	10
85. TETRACHLOROETHENE	*	10
86. TOLUENE	*	10
87. TRICHLOROETHENE	*	10
88. VINYL CHLORIDE	*	10
89. ALDRIN	BDL	10
90. DIELDRIN	BDL	10

BDL= BELOW DETECTION LIMIT
*Lab Accident

SAMPLE IDENTIFIER: SISTERSVILLE-82-4
COMPU/CHEM SAMPLE NUMBER: 0684

COMPUCHEM™ a Mead Service

COMPOUNDS	CONCENTRATION (UG/L)	DETECTION LIMIT (UG/L)
91. CHLORDANE	BDL	10
92. 4,4'-DDT	BDL	10
93. 4,4'-DDE	BDL	10
94. 4,4'-DDD	BDL	10
95. ENDOSULFAN-ALPHA	BDL	10
96. ENDOSULFAN-BETA	BDL	10
97. ENDOSULFAN-SULFATE	BDL	10
98. ENDRIN	BDL	10
99. ENDRIN ALDEHYDE	BDL	10
100. HEPTACHLOR	BDL	10
101. HEPTACHLOR EPOXIDE	BDL	10
102. BHC-ALPHA	BDL	10
103. BHC-BETA	BDL	10
104. BHC-GAMMA	BDL	10
105. BHC-DELTA	BDL	10
106. PCB-1242	BDL	10
107. PCB-1254	BDL	10
108. PCB-1221	BDL	10
109. PCB-1232	BDL	10
110. PCB-1248	BDL	10
111. PCB-1260	BDL	10
112. PCB-1016	BDL	10
113. TOXAPHENE	BDL	10

METALS	CONCENTRATION (MG/L)	DETECTION LIMIT (MG/L)
114. ANTIMONY	BDL	0.5
115. ARSENIC	0.66	0.05
116. BERYLLIUM	0.05	0.025
117. CADMIUM	BDL	0.025
118. CHROMIUM	.57	0.1
119. COPPER	0.92	0.1
120. LEAD	BDL	0.5
121. MERCURY	BDL	0.0002
122. NICKEL	0.8	0.15
123. SELENIUM	BDL	0.05
124. SILVER	BDL	0.06
125. THALLIUM	BDL	0.05
126. ZINC	2.05	0.02

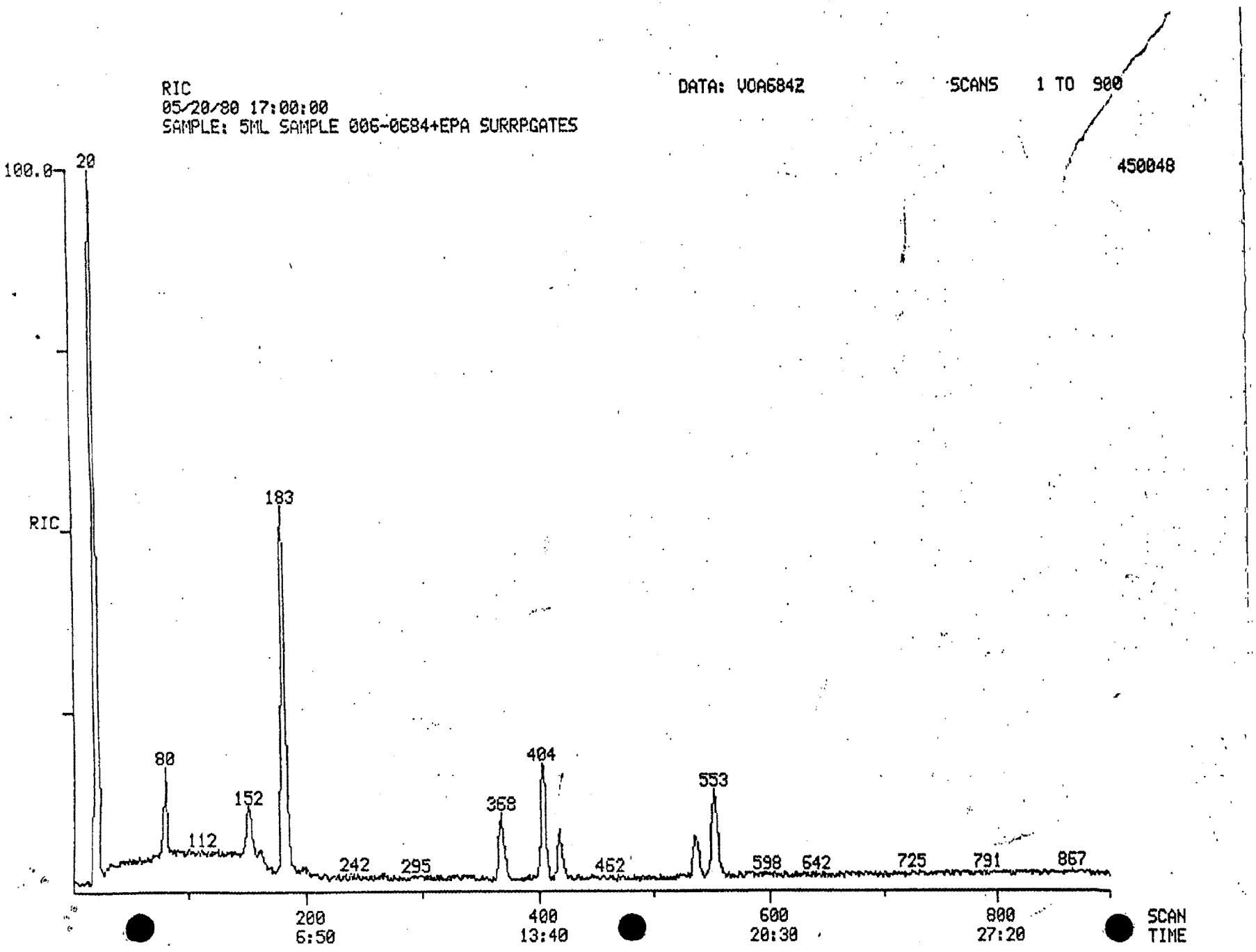
SAMPLE IDENTIFIER: SISTERSVILLE 82-4

COMPUCHEM™ a Mead Service

4. SPECIAL ANALYSIS

COMPOUNDS	CONCENTRATION	DETECTION LIMIT
1. CYANIDES	BDL	10 UG/L
2. PHENOLS	BDL	10 UG/L

NOTE: The volatiles analysis was incomplete as a result of a disk crash which resulted in an inability to quantitate the data. For sample 0684, a chromatogram was obtained which is attached.



MPM0002296

EPA003586

COMPUCHEM™
a Mead Service

REPORT OF DATA

CUSTOMER PURCHASE NUMBER: 380-506-326-4

SAMPLE IDENTIFIER: SISTERVILLE 82-2

COMPU/CHEM SAMPLE NUMBER: 0685

SUBMITTED TO:

MR. CLEM SCHUBERT
UNION CARBIDE
POST OFFICE BOX 180
ROUTE 2
SISTERSVILLE, WV 26175

SUBMITTED BY:

R. L. MYERS, PH. D.

7/15/86
DATE

MPM0002297

EPA003587

COMPUCHEM™
a Mead Service

SAMPLE IDENTIFIER: SISTERVILLE 82-2
COMPU/CHEM SAMPLE NUMBER: 0685

1. ANALYTICAL METHODOLOGY

THE SAMPLES WERE PREPARED AND ANALYZED ACCORDING TO TWO (2) GENERAL PROCEDURES: (1) "SAMPLING AND ANALYSIS PROCEDURES FOR SCREENING OF INDUSTRIAL EFFLUENTS FOR PRIORITY POLLUTANTS," REVISED MARCH 1977, US-EPA, AND (2) EPA METHOD 624, "ORGANICS BY PURGE AND TRAP," AND METHOD 625, "BASE/NEUTRALS, ACIDS, AND PESTICIDES," US-EPA, REVISED DECEMBER 3, 1979, FEDERAL REGISTER (GUIDELINES ESTABLISHED TEST PROCEDURES FOR THE ANALYSIS OF POLLUTANTS). REQUIREMENTS OF BOTH PROTOCOLS WERE MET AND ANALYTICAL CONDITIONS SET BY METHOD 624 AND 625. QUALITY ASSURANCE, SAMPLE CUSTODY, AND DOCUMENT CONTROL PROCEDURES WERE FOLLOWED WHICH MEET OR EXCEED EPA REQUIREMENTS.

2. SAMPLE RECORD	DATE
A. RECEIVED/REFRIGERATED	5/08/80
B. ORGANICS	
1. EXTRACTED	5/20/80
2. ANALYZED	
VOLATILES	5/20/80
BASE/NEUTRALS	6/24/80
ACIDS	6/05/80
PESTICIDES/PCBS	6/03/80
ACROLEIN, ACRYLONITRILE	5/13/80
C. METALS	
1. DIGESTED	
2. ANALYZED	6/06/80

SAMPLE IDENTIFIER: SISTERVILLE 82-2
COMPU/CHEM SAMPLE NUMBER: 0685

COMPUCHEM™ aMeadService

3. PRIORITY POLLUTANT ANALYSIS REPORT

	COMPOUNDS	CONCENTRATION (UG/L)	DETECTION LIMIT (UG/L)
1.	ACENAPHTHENE	BDL	10
2.	ACROLEIN	BDL	100
3.	ACRYLONITRILE	BDL	100
4.	BENZENE	*	10
5.	BENZIDENE	BDL	10
6.	CARBON TETRACHLORIDE	*	10
7.	CHLOROBENZENE	*	10
8.	1, 2, 4-TRICHLOROBENZENE	BDL	10
9.	HEXACHLOROBENZENE	*	10
10.	1, 2-DICHLOROETHANE	*	10
11.	1, 1, 1-TRICHLORETHANE	*	10
12.	HEXACHLOROETHANE	*	10
13.	1, 1-DICHLOROETHANE	*	10
14.	1, 1, 2-TRICHLORETHANE	*	10
15.	1, 1, 2, 2-TETRACHLOROETHANE	*	10
16.	CHLOROETHANE	*	10
17.	BIS (CHLOROMETHYL) ETHER	BDL	10
18.	BIS (2-CHLOROETHYL) ETHER	BDL	10
19.	2-CHLOROETHYLVINYL ETHER	*	10
20.	2-CHLORONAPHTHALENE	*	10
21.	2, 4, 6-TRICHLOROPHENOL	BDL	25
22.	4-CHLORO-3-METHYLPHENOL	BDL	25
23.	CHLOROFORM	*	10
24.	2-CHLOROPHENOL	BDL	25
25.	1, 2-DICHLOROBENZENE	BDL	10
26.	1, 3-DICHLOROBENZENE	BDL	10
27.	1, 4-DICHLOROBENZENE	BDL	10
28.	3, 3'-DICHLOROBENZIDINE	BDL	10
29.	1, 1-DICHLOROETHENE	*	10
30.	TRANS-1, 2-DICHLOROETHENE	*	10
31.	2, 4-DICHLOROPHENOL	BDL	25
32.	1, 2-DICHLOROPROPANE	*	10
33.	CIS-1, 3-DICHLOROPROPENE	*	10
34.	TRANS-1, 3-DICHLOROPROPENE	*	10
35.	2, 4-DIMETHYLPHENOL	BDL	25
36.	2, 4-DINITROTOLUENE	BDL	10
37.	2, 6-DINITROTOLUENE	BDL	10
38.	1, 2-DIPHENYLHYDRAZINE	BDL	10
39.	ETHYLBENZENE	*	10
40.	FLUORANTHENE	BDL	10
41.	4-CHLOROPHENYL PHENYL ETHER	BDL	10
42.	4-BROMOPHENYL PHENYL ETHER	BDL	10
43.	BIS (2-CHLOROISOPROPYL) ETHER	*	10
44.	BIS (2-CHLOROETHYOXY) METHANE	*	10
45.	METHYLENE CHLORIDE	*	10

BDL= BELOW DETECTION LIMIT
*Lab Accident

SAMPLE IDENTIFIER: SISTERVILLE S2-2
COMPU/CHEM SAMPLE NUMBER: 0685

COMPUCHEM™
a Mead Service

	COMPOUNDS	CONCENTRATION (UG/L)	DETECTION LIMIT (UG/L)
91.	CHLORDANE	BDL	10
92.	4,4'-DDT	BDL	10
93.	4,4'-DDE	BDL	10
94.	4,4'-DDD	BDL	10
95.	ENDOSULFAN-ALPHA	BDL	10
96.	ENDOSULFAN-BETA	BDL	10
97.	ENDOSULFAN-SULFATE	BDL	10
98.	ENDRIN	BDL	10
99.	ENDRIN ALDEHYDE	BDL	10
100.	HEPTACHLOR	BDL	10
101.	HEPTACHLOR EPOXIDE	BDL	10
102.	BHC-ALPHA	BDL	10
103.	BHC-BETA	BDL	10
104.	BHC-GAMMA	BDL	10
105.	BHC-DELTA	BDL	10
106.	PCB-1242	BDL	10
107.	PCB-1254	BDL	10
108.	PCB-1221	BDL	10
109.	PCB-1232	BDL	10
110.	PCB-1248	BDL	10
111.	PCB-1260	BDL	10
112.	PCB-1016	BDL	10
113.	TOXAPHENE	BDL	10

	METALS	CONCENTRATION (MG/L)	DETECTION LIMIT (MG/L)
114.	ANTIMONY	BDL	0.5
115.	ARSENIC	BDL	0.05
116.	BERYLLIUM	BDL	0.025
117.	CADMIUM	BDL	0.025
118.	CHROMIUM	BDL	0.1
119.	COPPER	BDL	0.1
120.	LEAD	0.05	0.5
121.	MERCURY	0.0003	0.0002
122.	NICKEL	BDL	0.15
123.	SELENIUM	BDL	0.05
124.	SILVER	BDL	0.06
125.	THALLIUM	BDL	0.05
126.	ZINC	BDL	0.02

SAMPLE IDENTIFIER: SISTERSVILLE 82-2

COMPUCHEM™ a Mead Service

4. SPECIAL ANALYSIS

COMPOUNDS	CONCENTRATION	DETECTION LIMIT
1. CYANIDES	BDL	10 UG/L
2. PHENOLS	27	10 UG/L

COMPUCHEM™
a Mead Service

REPORT OF DATA

CUSTOMER PURCHASE NUMBER:

SAMPLE IDENTIFIER: SISTERSVILLE-81-6

COMPU/CHEM SAMPLE NUMBER: 0670

SUBMITTED TO:

MR. CLEM SCHUBERT
UNION CARBIDE
POST OFFICE BOX 180
ROUTE 2
SISTERSVILLE, WV 26175

SUBMITTED BY:

R. L. MYERS, PH. D.

7/15/80
DATE

MPM0002302

EPA003592

SAMPLE IDENTIFIER: SISTERSVILLE-81-6
COMPU/CHEM SAMPLE NUMBER: 0670

COMPUCHEM™
a Mead Service

1. ANALYTICAL METHODOLOGY

THE SAMPLES WERE PREPARED AND ANALYZED ACCORDING TO TWO (2) GENERAL PROCEDURES: (1) "SAMPLING AND ANALYSIS PROCEDURES FOR SCREENING OF INDUSTRIAL EFFLUENTS FOR PRIORITY POLLUTANTS," REVISED MARCH 1977, US-EPA, AND (2) EPA METHOD 624, "ORGANICS BY PURGE AND TRAP," AND METHOD 625, "BASE/NEUTRALS, ACIDS, AND PESTICIDES," US-EPA, REVISED DECEMBER 3, 1979, FEDERAL REGISTER (GUIDELINES ESTABLISHED TEST PROCEDURES FOR THE ANALYSIS OF POLLUTANTS). REQUIREMENTS OF BOTH PROTOCOLS WERE MET AND ANALYTICAL CONDITIONS SET BY METHOD 624 AND 625. QUALITY ASSURANCE, SAMPLE CUSTODY, AND DOCUMENT CONTROL PROCEDURES WERE FOLLOWED WHICH MEET OR EXCEED EPA REQUIREMENTS.

		DATE
2.	SAMPLE RECORD	
A.	RECEIVED/REFRIGERATED	5/2/80
B.	ORGANICS	
	1. EXTRACTED	5/7/80
	2. ANALYZED	
	VOLATILES	5/14/80
	BASE/NEUTRALS	6/16/80
	ACIDS	6/4/80
	PESTICIDES/PCBS	6/5/80
	ACROLEIN, ACRYLONITRILE	5/13/80
C.	METALS	
	1. DIGESTED	5/20/80
	2. ANALYZED	5/21/80

SAMPLE IDENTIFIER: SISTERSVILLE-81-6
COMPU/CHEM SAMPLE NUMBER: 0670

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3. PRIORITY POLLUTANT ANALYSIS REPORT

	COMPOUNDS	CONCENTRATION (UG/L)	DETECTION LIMIT (UG/L)
1.	ACENAPHTHENE	BDL	10
2.	ACROLEIN	BDL	100
3.	ACRYLONITRILE	BDL	100
4.	BENZENE	BDL	10
5.	BENZIDENE	BDL	10
6.	CARBON TETRACHLORIDE	BDL	10
7.	CHLOROBENZENE	BDL	10
8.	1, 2, 4-TRICHLOROBENZENE	BDL	10
9.	HEXACHLOROBENZENE	BDL	10
10.	1, 2-DICHLOROETHANE	BDL	10
11.	1, 1, 1-TRICHLORETHANE	BDL	10
12.	HEXACHLOROETHANE	BDL	10
13.	1, 1-DICHLOROETHANE	BDL	10
14.	1, 1, 2-TRICHLORETHANE	BDL	10
15.	1, 1, 2, 2-TETRACHLOROETHANE	BDL	10
16.	CHLOROETHANE	BDL	10
17.	BIS (CHLOROMETHYL) ETHER	BDL	10
18.	BIS (2-CHLOROETHYL) ETHER	BDL	10
19.	2-CHLOROETHYLVINYL ETHER	BDL	10
20.	2-CHLORONAPHTHALENE	BDL	10
21.	2, 4, 6-TRICHLOROPHENOL	BDL	25
22.	4-CHLORO-3-METHYLPHENOL	BDL	25
23.	CHLOROFORM	BDL	10
24.	2-CHLOROPHENOL	BDL	25
25.	1, 2-DICHLOROBENZENE	BDL	10
26.	1, 3-DICHLOROBENZENE	BDL	10
27.	1, 4-DICHLOROBENZENE	BDL	10
28.	3, 3'-DICHLOROBENZIDINE	BDL	10
29.	1, 1-DICHLOROETHENE	BDL	10
30.	TRANS-1, 2-DICHLOROETHENE	BDL	10
31.	2, 4-DICHLOROPHENOL	BDL	25
32.	1, 2-DICHLOROPROPANE	BDL	10
33.	CIS-1, 3-DICHLOROPROPENE	BDL	10
34.	TRANS-1, 3-DICHLOROPROPENE	BDL	10
35.	2, 4-DIMETHYLPHENOL	BDL	25
36.	2, 4-DINITROTOLUENE	BDL	10
37.	2, 6-DINITROTOLUENE	BDL	10
38.	1, 2-DIPHENYLHYDRAZINE	BDL	10
39.	ETHYLBENZENE	BDL	10
40.	FLUORANTHENE	BDL	10
41.	4-CHLOROPHENYL PHENYL ETHER	BDL	10
42.	4-BROMOPHENYL PHENYL ETHER	BDL	10
43.	BIS (2-CHLOROISOPROPYL) ETHER	BDL	10
44.	BIS (2-CHLOROETHYOXY) METHANE	BDL	10
45.	METHYLENE CHLORIDE	33.0	10

BDL= BELOW DETECTION LIMIT

SAMPLE IDENTIFIER: SISTERSVILLE-81-6
COMPU/CHEM SAMPLE NUMBER: 0670

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	COMPOUNDS	CONCENTRATION (UG/L)	DETECTION LIMIT (UG/L)
46.	CHLOROMETHANE	BDL	10
47.	BROMOMETHANE	BDL	10
48.	BROMOFORM	BDL	10
49.	BROMODICHLOROMETHANE	BDL	10
50.	TRICHLOROFLOUROMETHANE	BDL	10
51.	DIBROMOCHLOROMETHANE	BDL	10
52.	HEXACHLOROBUTADIENE	BDL	10
53.	HEXACHLOROCYCLOPENTADIENE	BDL	10
54.	ISOPHORONE	BDL	10
55.	NAPTHALENE	BDL	10
56.	NITROBENZENE	BDL	10
57.	2-NITROPHENOL	BDL	25
58.	4-NITROPHENOL	BDL	25
59.	2, 4-DINITROPHENOL	BDL	250
60.	2-METHYL-4, 6-DINITROPHENOL	BDL	250
61.	N-NITROSODIMETHYLAMINE	BDL	10
62.	N-NITROSODIPHENYLAMINE	BDL	10
63.	N-NITROSODI-N-PROYLAMINE	BDL	10
64.	PENTACHLOROPHENOL	BDL	25
65.	PHENOL	BDL	25
66.	BIS (2-ETHYLHEXYL) PHTHALATE	15.0	10
67.	BUTYL BENZYL PHTHALATE	BDL	10
68.	DI-N-BUTYLPHTHALATE	BDL	10
69.	DIOCTYLPHTHALATE	BDL	10
70.	DIETHYLPHTHALATE	BDL	10
71.	DIMETHYLPHTHALATE	BDL	10
72.	BENZO(A) ANTHRACENE	BDL	10
73.	BENZO(A) PYRENE	BDL	10
74.	BENZO(B) FLUORANTHENE	BDL	10
75.	BENZO(K) FLUORANTHENE	BDL	10
76.	CHRYSENE	BDL	10
77.	ACENAPHTHYLENE	BDL	10
78.	ANTHRACENE	BDL	10
79.	BENZO(G,H,I) PERYLENE	BDL	25
80.	FLUORENE	BDL	10
81.	PHENANTHRENE	BDL	10
82.	DIBENZO(A,H) ANTHRACENE	BDL	25
83.	INDENO(1,2,3-C,D) PYRENE	BDL	25
84.	PYRENE	BDL	10
85.	TETRACHLOROETHENE	BDL	10
86.	TOLUENE	BDL	10
87.	TRICHLOROETHENE	BDL	10
88.	VINYL CHLORIDE	BDL	10
89.	ALDRIN	BDL	10
90.	DIELDRIN	BDL	10

BDL= BELOW DETECTION LIMIT

SAMPLE IDENTIFIER: SISTERSVILLE-81-6
COMPU/CHEM SAMPLE NUMBER: 0670

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	COMPOUNDS	CONCENTRATION (UG/L)	DETECTION LIMIT (UG/L)
91.	CHLORDANE	BDL	10
92.	4,4'-DDT	BDL	10
93.	4,4'-DDE	BDL	10
94.	4,4'-DDD	BDL	10
95.	ENDOSULFAN-ALPHA	BDL	10
96.	ENDOSULFAN-BETA	BDL	10
97.	ENDOSULFAN-SULFATE	BDL	10
98.	ENDRIN	BDL	10
99.	ENDRIN ALDEHYDE	BDL	10
100.	HEPTACHLOR	BDL	10
101.	HEPTACHLOR EPOXIDE	BDL	10
102.	BHC-ALPHA	BDL	10
103.	BHC-BETA	BDL	10
104.	BHC-GAMMA	BDL	10
105.	BHC-DELTA	BDL	10
106.	PCB-1242	BDL	10
107.	PCB-1254	BDL	10
108.	PCB-1221	BDL	10
109.	PCB-1232	BDL	10
110.	PCB-1248	BDL	10
111.	PCB-1260	BDL	10
112.	PCB-1016	BDL	10
113.	TOXAPHENE	BDL	10

	METALS	CONCENTRATION (MG/L)	DETECTION LIMIT (MG/L)
114.	ANTIMONY	BDL	0.5
115.	ARSENIC	BDL	0.05
116.	BERYLLIUM	BDL	0.025
117.	CADMIUM	BDL	0.025
118.	CHROMIUM	0.1	0.1
119.	COPPER	0.54	0.1
120.	LEAD	BDL	0.5
121.	MERCURY	BDL	0.0002
122.	NICKEL	BDL	0.15
123.	SELENIUM	BDL	0.05
124.	SILVER	BDL	0.06
125.	THALLIUM	BDL	0.05
126.	ZINC	BDL	0.02

SAMPLE IDENTIFIER: SISTERSVILLE B1-6

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4. SPECIAL ANALYSIS

COMPOUNDS	CONCENTRATION	DETECTION LIMIT
1. CYANIDES	BDL	10 UG/L
2. PHENOLS	BDL	10 UG/L

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REPORT OF DATA

CUSTOMER PURCHASE NUMBER: 380-506-326-4

SAMPLE IDENTIFIER: SISTERVILLE 81-5

COMPU/CHEM SAMPLE NUMBER: 0671

SUBMITTED TO:

MR. CLEM SCHUBERT
UNION CARBIDE
POST OFFICE BOX 180
ROUTE 2
SISTERSVILLE, WV 26175

SUBMITTED BY:

R. L. MYERS, PH. D.

2/15/81
DATE

MPM0002308

EPA003598

SAMPLE IDENTIFIER: SISTERVILLE 81-5
COMPU/CHEM SAMPLE NUMBER: 0671

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1. ANALYTICAL METHODOLOGY

THE SAMPLES WERE PREPARED AND ANALYZED ACCORDING TO TWO (2) GENERAL PROCEDURES: (1) "SAMPLING AND ANALYSIS PROCEDURES FOR SCREENING OF INDUSTRIAL EFFLUENTS FOR PRIORITY POLLUTANTS," REVISED MARCH 1977, US-EPA, AND (2) EPA METHOD 624, "ORGANICS BY PURGE AND TRAP," AND METHOD 625, "BASE/NEUTRALS, ACIDS, AND PESTICIDES," US-EPA, REVISED DECEMBER 3, 1979, FEDERAL REGISTER (GUIDELINES ESTABLISHED TEST PROCEDURES FOR THE ANALYSIS OF POLLUTANTS). REQUIREMENTS OF BOTH PROTOCOLS WERE MET AND ANALYTICAL CONDITIONS SET BY METHOD 624 AND 625. QUALITY ASSURANCE, SAMPLE CUSTODY, AND DOCUMENT CONTROL PROCEDURES WERE FOLLOWED WHICH MEET OR EXCEED EPA REQUIREMENTS.

2. SAMPLE RECORD	DATE
A. RECEIVED/REFRIGERATED	5/02/80
B. ORGANICS	
1. EXTRACTED	5/07/80
2. ANALYZED	
VOLATILES	5/14/80
BASE/NEUTRALS	6/16/80
ACIDS	6/04/80
PESTICIDES/PCBS	6/05/80
ACROLEIN, ACRYLONITRILE	5/13/80
C. METALS	
1. DIGESTED	5/20/80
2. ANALYZED	5/21/80

SAMPLE IDENTIFIER: SISTERVILLE 81-5
COMPU/CHEM SAMPLE NUMBER: 0671

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3. PRIORITY POLLUTANT ANALYSIS REPORT

COMPOUNDS	CONCENTRATION (UG/L)	DETECTION LIMIT (UG/L)
1. ACENAPHTHENE	BDL	10
2. ACROLEIN	BDL	100
3. ACRYLONITRILE	BDL	100
4. BENZENE	*	10
5. BENZIDENE	BDL	10
6. CARBON TETRACHLORIDE	*	10
7. CHLOROBENZENE	*	10
8. 1, 2, 4-TRICHLOROBENZENE	BDL	10
9. HEXACHLOROBENZENE	*	10
10. 1, 2-DICHLOROETHANE	*	10
11. 1, 1, 1-TRICHLORETHANE	*	10
12. HEXACHLOROETHANE	*	10
13. 1, 1-DICHLOROETHANE	*	10
14. 1, 1, 2-TRICHLORETHANE	*	10
15. 1, 1, 2, 2-TETRACHLOROETHANE	*	10
16. CHLOROETHANE	*	10
17. BIS (CHLOROMETHYL) ETHER	BDL	10
18. BIS (2-CHLOROETHYL) ETHER	BDL	10
19. 2-CHLOROETHYLVINYL ETHER	*	10
20. 2-CHLORONAPHTHALENE	*	10
21. 2, 4, 6-TRICHLOROPHENOL	BDL	25
22. 4-CHLORO-3-METHYLPHENOL	BDL	25
23. CHLOROFORM	*	10
24. 2-CHLOROPHENOL	BDL	25
25. 1, 2-DICHLOROBENZENE	BDL	10
26. 1, 3-DICHLOROBENZENE	BDL	10
27. 1, 4-DICHLOROBENZENE	BDL	10
28. 3, 3'-DICHLOROBENZIDINE	BDL	10
29. 1, 1-DICHLOROETHENE	*	10
30. TRANS-1, 2-DICHLOROETHENE	*	10
31. 2, 4-DICHLOROPHENOL	BDL	25
32. 1, 2-DICHLOROPROPANE	*	10
33. CIS-1, 3-DICHLOROPROPENE	*	10
34. TRANS-1, 3-DICHLOROPROPENE	*	10
35. 2, 4-DIMETHYLPHENOL	BDL	25
36. 2, 4-DINITROTOLUENE	BDL	10
37. 2, 6-DINITROTOLUENE	BDL	10
38. 1, 2-DIPHENYLHYDRAZINE	BDL	10
39. ETHYLBENZENE	*	10
40. FLUORANTHENE	BDL	10
41. 4-CHLOROPHENYL PHENYL ETHER	BDL	10
42. 4-BROMOPHENYL PHENYL ETHER	BDL	10
43. BIS (2-CHLOROISOPROPYL) ETHER	*	10
44. BIS (2-CHLOROETHYOXY) METHANE	*	10
45. METHYLENE CHLORIDE	*	10

BDL= BELOW DETECTION LIMIT
*Lab Accident

SAMPLE IDENTIFIER: SISTERVILLE 81-5
COMPU/CHEM SAMPLE NUMBER: 0671

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	COMPOUNDS	CONCENTRATION (UG/L)	DETECTION LIMIT (UG/L)
46.	CHLOROMETHANE	*	10
47.	BROMOMETHANE	BDL	10
48.	BROMOFORM	*	10
49.	BROMODICHLOROMETHANE	*	10
50.	TRICHLOROFLOUROMETHANE	BDL	10
51.	DIBROMOCHLOROMETHANE	*	10
52.	HEXACHLOROBUTADIENE	BDL	10
53.	HEXACHLOROCYCLOPENTADIENE	BDL	10
54.	ISOPHORONE	BDL	10
55.	NAPTHALENE	BDL	10
56.	NITROBENZENE	BDL	10
57.	2-NITROPHENOL	BDL	25
58.	4-NITROPHENOL	BDL	25
59.	2, 4-DINITROPHENOL	BDL	250
60.	2-METHYL-4, 6-DINITROPHENOL	BDL	250
61.	N-NITROSODIMETHYLAMINE	BDL	10
62.	N-NITROSODIPHENYLAMINE	BDL	10
63.	N-NITROSODI-N-PROYLAMINE	BDL	10
64.	PENTACHLOROPHENOL	BDL	25
65.	PHENOL	BDL	25
66.	BIS (2-ETHYLHEXYL) PHTHALATE	13.0	10
67.	BUTYL BENZYL PHTHALATE	BDL	10
68.	DI-N-BUTYLPHTHALATE	BDL	10
69.	DIOCTYLPHTHALATE	BDL	10
70.	DIETHYLPHTHALATE	BDL	10
71.	DIMETHYLPHTHALATE	BDL	10
72.	BENZO(A) ANTHRACENE	BDL	10
73.	BENZO(A) PYRENE	BDL	10
74.	BENZO(B) FLUORANTHENE	BDL	10
75.	BENZO(K) FLUORANTHENE	BDL	10
76.	CHRYSENE	BDL	10
77.	ACENAPHTHYLENE	BDL	10
78.	ANTHRACENE	BDL	10
79.	BENZO(G,H,I) PERYLENE	BDL	25
80.	FLUORENE	BDL	10
81.	PHENANTHRENE	BDL	10
82.	DIBENZO(A,H) ANTHRACENE	BDL	25
83.	INDENO(1,2,3-C,D) PYRENE	BDL	25
84.	PYRENE	BDL	10
85.	TETRACHLOROETHENE	*	10
86.	TOLUENE	*	10
87.	TRICHLOROETHENE	*	10
88.	VINYL CHLORIDE	*	10
89.	ALDRIN	BDL	10
90.	DIELDRIN	BDL	10

BDL= BELOW DETECTION LIMIT
*Lab Accident

SAMPLE IDENTIFIER: SISTERVILLE 81-5
COMPU/CHEM SAMPLE NUMBER: 0671

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COMPOUNDS	CONCENTRATION (UG/L)	DETECTION LIMIT (UG/L)
91. CHLORDANE	BDL	10
92. 4,4'-DDT	BDL	10
93. 4,4'-DDE	BDL	10
94. 4,4'-DDD	BDL	10
95. ENDOSULFAN-ALPHA	BDL	10
96. ENDOSULFAN-BETA	BDL	10
97. ENDOSULFAN-SULFATE	BDL	10
98. ENDRIN	BDL	10
99. ENDRIN ALDEHYDE	BDL	10
100. HEPTACHLOR	BDL	10
101. HEPTACHLOR EPOXIDE	BDL	10
102. BHC-ALPHA	BDL	10
103. BHC-BETA	BDL	10
104. BHC-GAMMA	BDL	10
105. BHC-DELTA	BDL	10
106. PCB-1242	BDL	10
107. PCB-1254	BDL	10
108. PCB-1221	BDL	10
109. PCB-1232	BDL	10
110. PCB-1248	BDL	10
111. PCB-1260	BDL	10
112. PCB-1016	BDL	10
113. TOXAPHENE	BDL	10

METALS	CONCENTRATION (MG/L)	DETECTION LIMIT (MG/L)
114. ANTIMONY	BDL	0.5
115. ARSENIC	BDL	0.05
116. BERYLLIUM	BDL	0.025
117. CADMIUM	BDL	0.025
118. CHROMIUM	BDL	0.1
119. COPPER	BDL	0.1
120. LEAD	BDL	0.5
121. MERCURY	BDL	0.0002
122. NICKEL	BDL	0.15
123. SELENIUM	BDL	0.05
124. SILVER	BDL	0.06
125. THALLIUM	BDL	0.05
126. ZINC	0.02	0.02

SAMPLE IDENTIFIER: SISTERSVILLE B1-5
COMPU/CHEM SAMPLE NUMBER: 0671

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4. SPECIAL ANALYSIS

COMPOUNDS	CONCENTRATION	DETECTION LIMIT
1. CYANIDES	BDL	10 UG/L
2. PHENOLS	18	10 UG/L

MPM0002313

EPA003603