PRIORITY POLLUTANT SCREENING

(All concentrations reported are ppb)

Site: Wyandotte Sample Location: Sites 4+5

COMPONENTS	Sample Codes
Well Number	Drum
Well Type	Pad
Sample Type	Soil
Sample Number	10457
Analysis By	Buc
Bis-(2-chloroisopropyl)-ether	nd[e]
Hexachlorobenzene	nd[e]
PCB-1242	
Polychlorinated Biphenyls	
Pesticides	
Phenol	
2,4-Dimethylphenol	
p-Chloro-m-cresol	
Nitrosoamines	

US EPA RECORDS CENTER REGION 5
1004613

PRIORITY POLLUTANT SCREENING

METALS (All concentrations reported are ppm)

Site: Wyandotte Sample Location: Site 4+5

COMPONENTS	Sample Codes	
Well Number	BW16A	BW17B
Well Type	Bkgd	Invest
Sample Type	Water	Water
Sample Number	10543	10539
Analysis by	BWC b	BWC b
Antimony		
Arsenic		
Beryllium		
Cadmium	<0.05	<0.05
Chromium	0.3	0.2
Copper	0.12	<0.05
Lead	0.3	<0.1
Mercury (TOTAL)		
Nickel		
Selenium		
Silver		
Thallium		
Zinc	14.7	4.7
Mercury (ORGANIC)		
Mercury (INORGANIC)		
Cyanide		
Phenols		

b) Dissolved and suspended metals.

PRIORITY POLLUTANT SCREENING

(All concentrations reported are ppb)

Site: Wyandotte Sample Location: Sites 4+5

COMPONEN	Sample Codes			
Well Number				
Well Type				
Sample Type				
Sample Number				
Analysis By				
Bis-(2-chloroisopropyl)-ether				
Hexachlorobenzene				
PCB-1242				
Polychlorinated Biphenyls				
Pesticides				
Phenol				
2,4-Dimethylphenol				
p-Chloro-m-cresol				
Nitrosoamines				

PRIORITY POLLUTANT SCREENING

METALS (All concentrations reported are ppm)

Site: Wyandotte Sample Location: Site 4+5

COMPONENTS	Sample Codes		
Well Number	BW18C		
Well Type	Invest		
Sample Type	Water		
Sample Number	10525/10526		
Analysis by	BWC[b]		
Antimony			
Arsenic			
Beryllium			
Cadmium	<0.05/<0.05		
Chromium	<0.05/<0.05		
Copper	0.34/0.07		
Lead	0.3/<0.1		
Mercury (TOTAL)			
Nickel			
Selenium			
Silver			
Thallium			
Zinc	6.3/6.2		
Mercury (ORGANIC)			
Mercury (INORGANIC)			
Cyanide			
Phenols			

b) Dissolved and suspended metals

PRIORITY POLLUTANT SCREENING

(All concentrations reported are ppb)

Site: Wyandotte Sample Location: Sites #5

COMPONENTS	Sample Codes	
Well Number	Emergency	Drum
Well Type	Containment Pond	Pad
Sample Type	Sediment	Soil
Sample Number	10587	10457
Analysis By	BWC	BWC
Non-Priority Pollutants		
xylenes		
Thiophene		
Methylthiophene		
Indene		
Indane		
Benzofuran		
Isopropyl benzene		
dimethylethylbenzene		
Pyridine	nd[a]	
Ethylpyridine	nd[a]	
Aniline	nd[a]	
Methylnaphthalene	nd[a]	
dimethyl biphenyl	nd[a]	
Di(2-ethylhexyl)adipate	nd[a]	
TMSN	nd[a]	
Nonylphenol	nd[a]	
p-cresol	nd[a]	
dimethylphenols	nd[a]	
Decanoic Acid	nd[a]	
Benzoic Acid	nd[a]	
Phenylacetic Acid	nd[a]	
BASALIN	nd(<3900)	32,600
Trifluoralin	nd(<3900)	nd(<700)

a) Detection Limit ~1600 ppb.

PRIORITY POLLUTANT SCREENING

(All concentrations reported are ppb)

Site: Wyandotte Sample Location: Sites 4+5

COMPONENTS	Sample Codes	
Well Number	Emergency	Drum
Well Type	Containment Pond	Pad
Sample Type	Sediment	Soil
Sample Number	10587	10457
Analysis By	BWC	BWC
Benzene		
Toluene		
Ethylbenzene		
Methylene Chloride		
1,2-Dichloroethane		
1,2,4-Trichlorobenzene	2,500	nd[e]
Acenaphthylene	nd[a]	nd[e]
Naphthalene	15,100	nd[e]
Acenaphthene	4,600	nd[e]
Fluorene	nd[a]	nd[e]
Phenanthrene	6,100	nd[e]
Anthracene	nd[a]	nd[e]
Pyrene	5,800	nd[e]
Fluoranthene	nd[a]	nd[e]
Chrysene	11,000	nd[e]
Benzo(a)anthracene	nd[a]	nd[e]
Benzo(b)fluoranthene	nd[a]	nd[e]
Benzo(k)fluoranthene	nd[a]	nd[e]
Benzo(a)pyrene	nd[a]	nd[e]
Diethylphthalate	9,400	nd[e]
Bis-(2-ethylhexyl)-phthalate	nd[a]	nd[e]
Di-n-butylphthalate	nd[a]	nd[e]

a) detection Limit ~ 1600 ppb

e) detection Limit ~ 300 ppb

PRIORITY POLLUTANT SCREENING

(All concentrations reported are ppb)

Site: Wyandotte Sample Location: Sites #5

COMPONENTS	Sample Codes		
Well Number			
Well Type			
Sample Type			
Sample Number			
Analysis By			
Non-Priority Pollutants			
xylenes			
Thiophene			
Methylthiophene			
Indene			
Indane			
Benzofuran			
Isopropyl benzene			
dimethylethylbenzene			
Pyridine			
Ethylpyridine			
Aniline			
Methylnaphthalene			
dimethyl biphenyl			
Di(2-ethylhexyl)adipate			
TMSN			
Nonylphenol			
p-cresol			
dimethylphenols			
Decanoic Acid			
Benzoic Acid			
Phenylacetic Acid			
BASALIN			
Trifluoralin			

PRIORITY POLLUTANT SCREENING

(All concentrations reported are ppb)

Site: Wyandotte Sample Location: Sites #5

COMPONENTS	Sample Codes	
Well Number	BW18B	BW18C
Well Type	Invest	Invest
Sample Type	Soil	Water
Sample Number	10517	10521/10523
Analysis By	BWC	BWC
Non-Priority Pollutants		
xylenes		342
Thiophene		64
Methylthiophene		67
Indene		1305
Indane		124
Benzofuran		343
Isopropyl benzene		nd
dimethylethylbenzene		nd
Pyridine	nd [a]	nd
Ethylpyridine	nd [a]	nd
Aniline	nd [a]	16
Methyl naphthalene	1070	nd
dimethyl biphenyl	nd [a]	nd
Di(2-ethylhexyl)adipate	nd [a]	624
TMSN	nd [a]	nd
Nonylphenol	nd [a]	nd
p-cresol	nd [a]	259
dimethylphenols	nd [a]	71
Decanoic Acid	nd [a]	nd
Benzoic Acid	nd [a]	nd
Phenylacetic Acid	nd [a]	nd
BASALIN		
Trifluoralin		

a) Detection Limit ~100 ppb

PRIORITY POLLUTANT SCREENING

(All concentrations reported are ppb)

Site: Wyandotte Sample Location: Sites 4+5

COMPONEN..	Sample Codes	
Well Number		
Well Type		
Sample Type		
Sample Number		
Analysis By		
Benzene		
Toluene		
Ethylbenzene		
Methylene Chloride		
1,2-Dichloroethane		
1,2,4-Trichlorobenzene		
Acenaphthylene		
Naphthalene		
Acenaphthene		
Fluorene		
Phenanthrene		
Anthracene		
Pyrene		
Fluoranthene		
Chrysene		
Benzo(a)anthracene		
Benzo(b)fluoranthene		
Benzo(k)fluoranthene		
Benzo(a)pyrene		
Diethylphthalate		
Bis-(2-ethylhexyl)-phthalate		
Di-n-butylphthalate		

PRIORITY POLLUTANT SCREENING

(All concentrations reported are ppb)

Site: Wyandotte Sample Location: Sites 4+5

COMPONENTS	Sample Codes	
Well Number	BW 18B	BW 18C
Well Type	Invest	Invest
Sample Type	Soil	Water
Sample Number	10517	10521/10523
Analysis By	BWC	BWC
Bis-(2-chloroisopropyl)-ether	nd[a]	nd
Hexachlorobenzene	nd[a]	nd
PCB-1242		
Polychlorinated Biphenyls		
Pesticides		
Phenol	nd[a]	
2,4-Dimethylphenol	nd[a]	
p-Chloro-m-cresol	nd[a]	
Nitrosoamines		

a Detection Limit ~ 100ppb

PRIORITY POLLUTANT SCREENING

(All concentrations reported are ppb)

Site: Wyandotte Sample Location: Sites 4+5

COMPONENTS	Sample Codes		
Well Number	BW 18B	BW18C	
Well Type	Invest	Invest	
Sample Type	Soil	Water	
Sample Number	10517	10521/10523	
Analysis By	BWC	BWC	
Benzene		1143	
Toluene		530	
Ethylbenzene		35	
Methylene Chloride		nd	
1,2-Dichloroethane		nd	
1,2,4-Trichlorobenzene	nd[a]	nd	
Acenaphthylene	1340	nd	
Naphthalene	5590	2170	
Acenaphthene	nd[a]	nd	
Fluorene	1120	31	
Phenanthrene	nd[a]	nd	
Anthracene	3930	nd	
Pyrene	2010	nd	
Fluoranthene	2790	nd	
Chrysene	nd[a]	nd	
Benzo(a)anthracene	nd[a]	nd	
Benzo(b)fluoranthene	2780	nd	
Benzo(k)fluoranthene		nd	
Benzo(a)pyrene	nd[a]	nd	
Diethylphthalate	nd[a]	nd	
Bis-(2-ethylhexyl)-phthalate	99	459	
Di-n-butylphthalate	nd[a]	nd	

a) Detection Limit ~ 100 ppb

PRIORITY POLLUTANT SCREENING

(All concentrations reported are ppb)

Site: Wyandotte Sample Location: Sites #5

COMPONENTS	Sample Codes
Well Number	BW17B
Well Type	Invest
Sample Type	Water
Sample Number	10535/10536
Analysis By	BWC
Non-Priority Pollutants	
xylenes	1838
Thiophene	nd
Methylthiophene	nd
Indene	nd
Indane	nd
Benzofuran	nd
Isopropyl benzene	328
dimethylethylbenzene	40
Pyridine	1328
Ethylpyridine	811
Aniline	nd
Methyl naphthalene	nd
dimethyl biphenyl	nd
Di(2-ethylhexyl)adipate	nd
TMSN	nd
Nonylphenol	nd
p-cresol	253
dimethylphenols	nd
Decanoic Acid	nd
Benzoic Acid	238
Phenylacetic Acid	555
BASALIN	
Trifluoralin	

PRIORITY POLLUTANT SCREENING

(All concentrations reported are ppb)

Site: Wilmington. Sample Location: Sites 4+5

COMPONENTS	Sample Codes
Well Number	BW17B
Well Type	Invest
Sample Type	Water
Sample Number	10535/10536
Analysis By	BWC
Benzene	2190 ①
Toluene	1111 ①
Ethylbenzene	289 ①
Methylene Chloride	nd
1,2-Dichloroethane	nd
1,2,4-Trichlorobenzene	nd
Acenaphthylene	nd
Naphthalene	1497
Acenaphthene	nd
Fluorene	nd
Phenanthrene	nd
Anthracene	nd
Pyrene	nd
Fluoranthene	nd
Chrysene	nd
Benzo(a)anthracene	nd
Benzo(b)fluoranthene	nd
Benzo(k)fluoranthene	nd
Benzo(a)pyrene	nd
Diethylphthalate	nd
Bis-(2-ethylhexyl)-phthalate	nd
Di-n-butylphthalate	nd

① Report dilution of 1:1 (50% conc)

PRIORITY POLLUTANT SCREENING

(All concentrations reported are ppb)

Site: Wyandotte Sample Location: Sites 4+5

COMPONENTS	Sample Codes
Well Number	BW17B
Well Type	Invest
Sample Type	Water
Sample Number	10535/10536
Analysis By	BWC
Bis-(2-chloroisopropyl)-ether	nd
Hexachlorobenzene	nd
PCB-1242	
Polychlorinated Biphenyls	
Pesticides	
Phenol	39
2,4-Dimethylphenol	nd
p-Chloro-m-cresol	nd
Nitrosoamines	

PRIORITY POLLUTANT SCREENING

(All concentrations reported are ppb)

Site: Wyandotte Sample Location: Sites #5

COMPONENTS	Sample Codes			
Well Number	BW 16A			BW17A
Well Type	Bkgd			Invest
Sample Type	Water			Soil
Sample Number	10540			10533
Analysis By	BWC			BWC
Non-Priority Pollutants				
xylenes	nd			
Thiophene	nd			
Methylthiophene	nd			
Indene	nd			
Indane	nd			
Benzofuran	nd			
Isopropyl benzene	nd			
dimethylethylbenzene	nd			
Pyridine	nd			nd[a]
Ethylpyridine				nd[a]
Aniline				nd[a]
Methylnaphthalene				nd[a]
dimethyl biphenyl				1050
Di(2-ethylhexyl)adipate				nd[a]
TMSN				nd[a]
Nonylphenol				nd[a]
p-cresol				nd[a]
dimethylphenols				nd[a]
Decanoic Acid				nd[a]
Benzoic Acid				nd[a]
Phenylacetic Acid				nd[a]
BASALIN				
Trifluoralin				

[a] Detection Limit ~300 ppb

PRIORITY POLLUTANT SCREENING

(All concentrations reported are ppb)

Site: Wyandotte Sample Location: Sites 4+5

COMPONENTS	Sample Codes	
Well Number	BW16A	BW17A
Well Type	Bkgd	Invest
Sample Type	Water	Soil
Sample Number	10540	10533
Analysis By	BWC	BWC
Bis-(2-chloroisopropyl)-ether		nd[a]
Hexachlorobenzene		nd[a]
PCB-1242		
Polychlorinated Biphenyls		
Pesticides		
Phenol		nd[a]
2,4-Dimethylphenol		nd[a]
p-Chloro-m-cresol		nd[a]
Nitrosoamines		

[a] Detection Limit ~ 300 ppb

PRIORITY POLLUTANT SCREENING

(All concentrations reported are ppb)

Site: Wyandotte Sample Location: Sites 4+5

COMPONENTS	Sample Codes		
Well Number	BW16A		BW17A
Well Type	Bkgd		Invest
Sample Type	Water		Soil
Sample Number	10540		10533
Analysis By	BWC		BWC
Benzene	18		
Toluene	22		
Ethylbenzene	nd		
Methylene Chloride	nd		
1,2-Dichloroethane	nd		
1,2,4-Trichlorobenzene			nd[a]
Acenaphthylene			nd[a]
Naphthalene			8240
Acenaphthene			nd[a]
Fluorene			3300
Phenanthrene			nd[a]
Anthracene			2100
Pyrene			2820
Fluoranthene			3150
Chrysene			nd[a]
Benzo(a)anthracene			nd[a]
Benzo(b)fluoranthene			2010
Benzo(k)fluoranthene			3570
Benzo(a)pyrene			nd[a]
Diethylphthalate			nd[a]
Bis-(2-ethylhexyl)-phthalate			nd[a]
Di-n-butylphthalate			nd[a]

Detection Limit ~ 300 ppb

PRIORITY POLLUTANT SCREENING

METALS (All concentrations reported are ppm)

Site: Wyandotte Sample Location: Site 3

COMPONENT	Sample Codes		
Well Number	BW12DM	BW102	
Well Type	blank	Invest	
Sample Type	water	Water	
Sample Number	10483	N-01-102	
Analysis by	BWC[b]	BWC	
Antimony			
Arsenic			
Beryllium			
Cadmium	<0.05		
Chromium	<0.05		
Copper	<0.05		
Lead	<0.1		
Mercury (TOTAL)			
Nickel			
Selenium			
Silver			
Thallium			
Zinc	0.39		
Mercury (ORGANIC)			
Mercury (INORGANIC)			
Cyanide			
Phenols		0.007	

b) Dissolved and ~~tot~~ suspended metals

PRIORITY POLLUTANT SCREENING

METALS (All concentrations reported are ppm)

Site: Wyandotte Sample Location: Site 3

COMPON	Sample Codes
Well Number	BW11D
Well Type	Invest
Sample Type	Water
Sample Number	N-01-11D
Analysis by	BWC
Antimony	
Arsenic	
Beryllium	
Cadmium	
Chromium	
Copper	
Lead	
Mercury (TOTAL)	
Nickel	
Selenium	
Silver	
Thallium	
Zinc	
Mercury (ORGANIC)	
Mercury (INORGANIC)	
Cyanide	
Phenols	0.789

PRIORITY POLLUTANT SCREENING

METALS (All concentrations reported are ppm)

Site: Wyandotte Sample Location: Site 3

COMPONENTS	Sample Codes
Well Number	BW 11C
Well Type	Invest
Sample Type	Water
Sample Number	10513/10514
Analysis by	BWC[b]
Antimony	
Arsenic	
Beryllium	
Cadmium	0.12/0.10
Chromium	0.2/0.05
Copper	0.34/0.26
Lead	0.7/0.2
Mercury (TOTAL)	
Nickel	
Selenium	
Silver	
Thallium	
Zinc	13.3/5.4
Mercury (ORGANIC)	
Mercury (INORGANIC)	
Cyanide	
Phenols	

b) Dissolved and total metals.

PRIORITY POLLUTANT SCREENING

(All concentrations reported are ppb)

Site: Wyandotte Sample Location: Site 3

COMPONENTS	Sample Codes
Well Number	BW11C
Well Type	Invest
Sample Type	Water
Sample Number	10510/10511
Analysis By	BWC
Methylene Chloride	nd
Chloroform	54
1,2-Dichloropropane	301
Benzene	10
Toluene	163
Bis-(2-chloroisopropyl)-ether	204
Naphthalene	105
Pyrene	309
Phenol	88
2,4-Dimethylphenol	153
p-Chloro-m-cresol	18
2,4-Dichlorophenol	24
2-Nitrophenol	nd
4-Nitrophenol	nd
PCB-1254	
Polychlorinated Biphenyls	
Pesticides	
Diethylphthalate	nd

PRIORITY POLLUTANT SCREENING

(All concentrations reported are ppb)

Site: Wyandotte Sample Location: Site 3

COMPONENTS	Sample Codes	
Well Number	BW 11B	BW 11C
Well Type	Invest	Invest
Sample Type	Soil	Water
Sample Number	10505	10507
Analysis By	BWC	BWC
Methylene Chloride		
Chloroform		
1,2-Dichloropropane		
Benzene		
Toluene		
Bis-(2-chloroisopropyl)-ether	110	324
Naphthalene	nd[a]	nd
Pyrene	nd[a]	927
Phenol	nd[a]	49
2,4-Dimethylphenol	nd[a]	nd
p-Chloro-m-cresol	nd[a]	nd
2,4-Dichlorophenol	nd[a]	nd
2-Nitrophenol	nd[a]	nd
4-Nitrophenol	nd[a]	nd
PCB-1254		
Polychlorinated Biphenyls		
Pesticides		
Diethylphthalate	nd[a]	nd

[a] Detection Limit ~100 ppb.

PRIORITY POLLUTANT SCREENING

(All concentrations reported are ppb)

Site: Wyandotte Sample Location: Site 3

COMPONENTS	Sample Codes	
Well Number	BW 11B	BW 11C
Well Type	Invest	Invest
Sample Type	Soil	Water
Sample Number	10505	10507
Analysis By	BWC	BWC
Non-Priority Pollutants		
Aniline	nd[a]	nd
Benzoic Acid	nd[a]	126
1,3-Dichloropropane	nd[a]	
hexadecanoic acid	nd[a]	nd
Octachloropentene	nd[a]	nd

a Detection Limit ~100 ppb

PRIORITY POLLUTANT SCREENING

(All concentrations reported are ppb)

Site: Wyandotte Sample Location: Site 3

COMPONENTS	Sample Codes	
Well Number		
Well Type		
Sample Type		
Sample Number		
Analysis By		
Methylene Chloride		
Chloroform		
1,2-Dichloropropane		
Benzene		
Toluene		
Bis-(2-chloroisopropyl)-ether		
Naphthalene		
Pyrene		
Phenol		
2,4-Dimethylphenol		
p-Chloro-m-cresol		
2,4-Dichlorophenol		
2-Nitrophenol		
4-Nitrophenol		
PCB-1254		
Polychlorinated Biphenyls		
Pesticides		
Diethylphthalate		

PRIORITY POLLUTANT SCREENING

(All concentrations reported are ppb)

Site: Wyandotte

Sample Location: Site 3

COMPONENTS	Sample Codes	
Well Number		
Well Type		
Sample Type		
Sample Number		
Analysis By		
Non-Priority Pollutants		
Aniline		
Benzoic Acid		
1,3-Dichloropropane		
hexadecanoic acid		
Octachloropentene		

PRIORITY POLLUTANT SCREENING

(All concentrations reported are ppb)

Site: Wyandotte Sample Location: Site 3

COMPONENTS	Sample Codes
Well Number	BW11C
Well Type	Invest
Sample Type	Water
Sample Number	10510/10511
Analysis By	BWC
Non-Priority Pollutants	
Aniline	142
Benzoic Acid	nd
1,3-Dichloropropane	nd
hexadecanoic acid	nd
Octachloropentene	nd

PRIORITY POLLUTANT SCREENING

METALS (All concentrations reported are ppm)

Site: Wyandotte Sample Location: Site 3

COMPONENTS	Sample Codes
Well Number	BW 12D
Well Type	Invest
Sample Type	Water
Sample Number	10480/10482
Analysis by	BWC[b]
Antimony	
Arsenic	
Beryllium	
Cadmium	<0.05/<0.05
Chromium	<0.05/<0.05
Copper	2d/0.34
Lead	<0.1/<0.1
Mercury (TOTAL)	
Nickel	
Selenium	
Silver	
Thallium	
Zinc	1.7/0.67
Mercury (ORGANIC)	
Mercury (INORGANIC)	
Cyanide	
Phenols	

b) Dissolved and suspended metals.

PRIORITY POLLUTANT SCREENING

(All concentrations reported are ppb)

Site: Wyandotte Sample Location: Site 3

COMPONENTS	Sample Codes	
Well Number	BW12D	
Well Type	Invest	
Sample Type	Water	
Sample Number	10478/10484	
Analysis By	BWC	
Methylene Chloride	39	
Chloroform	nd	
1,2-Dichloropropane	79	
Benzene	<10	
Toluene	271	
Bis-(2-chloroisopropyl)-ether	nd	
Naphthalene	nd	
Pyrene	nd	
Phenol	<10	
2,4-Dimethylphenol	nd	
p-Chloro-m-cresol	nd	
2,4-Dichlorophenol	nd	
2-Nitrophenol	nd	
4-Nitrophenol	nd	
PCB-1254		
Polychlorinated Biphenyls		
Pesticides		
Diethylphthalate	nd	

PRIORITY POLLUTANT SCREENING

(All concentrations reported are ppb)

Site: Wyandotte Sample Location: Site 3

COMPONENTS	Sample Codes	
Well Number	BW12D	
Well Type	Invert	
Sample Type	Water	
Sample Number	10478/10484	
Analysis By	BWC	
Non-Priority Pollutants		
Aniline	nd	
Benzoic Acid	nd	
1,3-Dichloropropane	38	
hexadecanoic acid	nd	
Octachloropentene	nd	

PRIORITY POLLUTANT SCREENING

METALS (All concentrations reported are ppm)

Site: Wyandotte Sample Location: Site 2

COMPONENTS	Sample Codes
Well Number	BW 6D
Well Type	Invest
Sample Type	Water
Sample Number	N-01-6C
Analysis by	BWC
Antimony	
Arsenic	
Beryllium	
Cadmium	
Chromium	
Copper	
Lead	
Mercury (TOTAL)	
Nickel	
Selenium	
Silver	
Thallium	
Zinc	
Mercury (ORGANIC)	
Mercury (INORGANIC)	
Cyanide	
Phenols	0.042

PRIORITY POLLUTANT SCREENING

METALS (All concentrations reported are ppm)

Site: Wyandotte Sample Location: Site 2

COMPO		Sample Codes	
Well Number		BW7C	
Well Type		Invest	
Sample Type		Water	
Sample Number		N-01-7C	
Analysis by		BWC	
Antimony			
Arsenic			
Beryllium			
Cadmium			
Chromium			
Copper			
Lead			
Mercury (TOTAL)			
Nickel			
Selenium			
Silver			
Thallium			
Zinc			
Mercury (ORGANIC)			
Mercury (INORGANIC)			
Cyanide			
Phenols	0.240	0.407	

PRIORITY POLLUTANT SCREENING

METALS (All concentrations reported are ppm)

Site: Wyandotte Sample Location: Site 2

COMPONENTS	Sample Codes		
Well Number	DW2A		BW 6C
Well Type	Bkgd		Invest
Sample Type	Water		Water
Sample Number	10586		10490/10491
Analysis by	BWC[b]		BWC[b]
Antimony			
Arsenic			
Beryllium			
Cadmium	<0.05	<	<0.05/<0.05
Chromium	<0.05	<	0.27/0.27
Copper	<0.05	<	0.05/0.02
Lead	<0.1	<	0.30/0.46
Mercury (TOTAL)		<	
Nickel		<	
Selenium			
Silver			
Thallium			
Zinc	10.4		5.4/4.6
Mercury (ORGANIC)			
Mercury (INORGANIC)			
Cyanide			
Phenols			

b) Dissolved and suspended metals.

PRIORITY POLLUTANT SCREENING

(All concentrations reported are ppb)

Site: Wyandotte Sample Location: Site 2

COMPONENTS	Sample Codes		
Well Number	BW7A		
Well Type	Invest		
Sample Type	Soil		
Sample Number	10502		
Analysis By	BWC		
Non-Priority Pollutants			
Styrene			
Xylenes			
Trimethylbenzene			
Indane			
methyl naphthalenes	14,200		
dimethyl naphthalenes	16,800		
tetrachlorobutadiene	2180		
benzoic acid	nd[a]		

a detection limit ~ 100 ppb

PRIORITY POLLUTANT SCREENING

(All concentrations reported are ppb)

Site: Wyandotte Sample Location: Site 2

COMPONE	Sample Codes			
Well Number	BW7A			
Well Type	Invest			
Sample Type	Soil			
Sample Number	10502			
Analysis By	BWC			
Methylene Chloride				
Benzene				
Toluene				
Ethylbenzene				
Hexachlorobenzene	nd[a]			
Naphthalene	10,220			
Acenaphthene	nd			
Fluorene	nd			
Phenanthrene	nd			
Anthracene	nd			
Pyrene	nd			
Benzo(a)pyrene	nd			
Bis-(2-ethylhexyl)-phthalate	nd			
Phenol	nd			
2,4-Dimethylphenol	nd			
Polychlorinated Biphenyls				
Pesticides				
Hexachlorobutadiene	360			
Benzo(b)fluoranthene	7380			
Benzo(k)fluoranthene	nd			
Fluoranthene	nd			
Chrysene	4410			
benzo(a) anthracene	nd			

[a] Detection Limit ~ 100 ppb

PRIORITY POLLUTANT SCREENING

(All concentrations reported are ppb)

Site: Wyandotte Sample Location: Site 2

COMPONENTS	Sample Codes	
Well Number	BW 6C	BW 6C
Well Type	Invest	Invest
Sample Type	Water	Water
Sample Number	10487/10488	10491
Analysis By	BWC	BWC
Non-Priority Pollutants		
Styrene	20	nd
Xylenes	nd	nd
Trimethylbenzene	200	nd
Indane	160	153
methyl naphthalenes	nd	nd
dimethyl naphthalenes	nd	nd
tetrachlorobutadiene	nd	nd
benzoic acid	<10	nd

PRIORITY POLLUTANT SCREENING

(All concentrations reported are ppb)

Site: Wyandotte Sample Location: Site 2

COMPONENTS	Sample Codes	
Well Number	BW 6C	BW 6C
Well Type	Invest	Invest
Sample Type	Water	Water
Sample Number	10487/10488	10491
Analysis By	BWC	BWC
Methylene Chloride	nd	42
Benzene	19	19
Toluene	nd	nd
Ethylbenzene	nd	nd
Hexachlorobenzene	nd	nd
Naphthalene	131	nd
Acenaphthene	22	22
Fluorene	23	18
Phenanthrene	nd	20
Anthracene	75	nd
Pyrene	93	nd
Benzo(a)pyrene	nd	nd
Bis-(2-ethylhexyl)-phthalate	nd	23
Phenol	nd	nd
2,4-Dimethylphenol	nd	nd
Polychlorinated Biphenyls		
Pesticides		
Hexachlorobutadiene	nd	nd
Benzo(b)fluoranthene	nd	nd
Benzo(k)fluoranthene	nd	nd
Fluoranthene	nd	nd
Chrysene	nd	nd
benzo(a) anthracene	nd	nd

PRIORITY POLLUTANT SCREENING

(All concentrations reported are ppb)

Site: Wyandotte Sample Location: Site 2

COMPONE...	Sample Codes	
Well Number	BW 2 A	BW 6B [a]
Well Type	Bkgd	Invest
Sample Type	Water	Soil
Sample Number	10586	10486
Analysis By	BWC	BWC
Non-Priority Pollutants		
Styrene	nd	nd
Xylenes	nd	2600
Trimethylbenzene	nd	nd
Indane	nd	36,680
methyl naphthalenes	nd	
dimethyl naphthalenes	nd	
tetrachlorobutadiene	nd	
benzoic acid	nd	

a detection limit ~ 400 ppb

PRIORITY POLLUTANT SCREENING

(All concentrations reported are ppb)

Site: Wyandotte Sample Location: Site 2

COMPONENTS	Sample Codes	
Well Number	BW 2A	BW 6B[a]
Well Type	Bkgd	Invest
Sample Type	Water	Soil
Sample Number	10586	10486
Analysis By	BWC	BWC
Methylene Chloride	nd	2600
Benzene	nd	560
Toluene	nd	760
Ethylbenzene	nd	1160
Hexachlorobenzene	nd	
Naphthalene	nd	
Acenaphthene	nd	
Fluorene	nd	
Phenanthrene	nd	
Anthracene	nd	
Pyrene	nd	
Benzo(a)pyrene	nd	
Bis-(2-ethylhexyl)-phthalate	<10	
Phenol	nd	
2,4-Dimethylphenol	<10	
Polychlorinated Biphenyls		
Pesticides		
Hexachlorobutadiene	nd	
Benzo(b)fluoranthene	nd	
Benzo(k)fluoranthene	nd	
Fluoranthene	nd	
Chrysene	nd	
benzo(a) anthracene	nd	

[a] Detection Limit ~ 400 ppb

PRIORITY POLLUTANT SCREENING

METALS (All concentrations reported are ppm)

Site: Wyandotte Sample Location: Site 1

COMPONENTS	Sample Codes		
Well Number	BW3F		
Well Type	Invest		
Sample Type	Water		
Sample Number	10466		
Analysis by	BWC [b]		
Antimony			
Arsenic			
Beryllium			
Cadmium	<0.05		
Chromium	<0.05		
Copper	<0.05		
Lead	<0.1		
Mercury (TOTAL)			
Nickel			
Selenium			
Silver			
Thallium			
Zinc	9.7		
Mercury (ORGANIC)			
Mercury (INORGANIC)			
Cyanide			
Phenols			

b) Dissolved and suspended metals.

PRIORITY POLLUTANT SCREENING

METALS (All concentrations reported are ppm)

Site: Wyandotte Sample Location: Site 1

COMPONL...	Sample Codes
Well Number	BW1A
Well Type	Bkgd
Sample Type	water
Sample Number	10515
Analysis by	BWC b
Antimony	
Arsenic	
Beryllium	
Cadmium	<0.05
Chromium	<0.05
Copper	0.12
Lead	<0.1
Mercury (TOTAL)	
Nickel	
Selenium	
Silver	
Thallium	
Zinc	7.1
Mercury (ORGANIC)	
Mercury (INORGANIC)	
Cyanide	
Phenols	

b) Dissolved and suspended metals.

PRIORITY POLLUTANT SCREENING

METALS (All concentrations reported are ppm)

Site: Wyandotte Sample Location: Site 1

COMPONENTS	Sample Codes		
Well Number	BW101	BW3B	
Well Type		Invest	
Sample Type	Water	Water	
Sample Number	10585	10462	
Analysis by	BWC[b]	BWC[b]	
Antimony			
Arsenic			
Beryllium			
Cadmium	<0.05	<0.05	
Chromium	<0.05	<0.05	
Copper	<0.05	<0.05	
Lead	<0.1	<0.1	
Mercury (TOTAL)			
Nickel			
Selenium			
Silver			
Thallium			
Zinc	0.89	1.4	
Mercury (ORGANIC)			
Mercury (INORGANIC)			
Cyanide			
Phenols			

b) Dissolved and suspended metals.

PRIORITY POLLUTANT SCREENING

(All concentrations reported are ppb)

Site: Wyandotte Sample Location: Site 1

COMPONENTS	Sample Codes		
Number	#2		
Well Type	Invest		
Sample Type	Water		
Sample Number	10455		
Analysis By	BWC		
Non-Priority Pollutants			
Styrene	nd		
Xylenes	nd		
Isopropyl benzene	nd		
Methyl phenyl acetylene			
Benzofuran	nd		
Indene	nd		
Methyl Naphthalenes			
Dimethyl Naphthalenes			
Xanthene			
Thiophene	nd		
2-Methyl Thiophene	nd		
Aniline			
Methylaniline			
Toluenediamine			
Dimethyl phenols			
Cresols			
Phenyl acetic acid			
TMSN			
pyridine			

PRIORITY POLLUTANT SCREENING

(All concentrations reported are ppb)

Site: Wyandotte

Sample Location: Site 1 Surface Water

COMPONENTS	Sample Codes		
Number	#2		
Well Type	Invest		
Sample Type	Water		
Sample Number	10455		
Analysis By	BWC		
Methylene Chloride	51		
Chloroform	nd		
1,2-Dichloropropane	nd		
Benzene	nd		
Toluene	nd		
Ethylbenzene	nd		
Naphthalene			
Phenanthrene			
Anthracene			
Pyrene			
Benzo(a)pyrene			
Bis-(2-ethylhexyl)-phthalate			
Phenol			
2,4-Dimethylphenol			
Polychlorinated Biphenyls			

PRIORITY POLLUTANT SCREENING

(All concentrations reported are ppb)

Site: Wyandotte

Sample Location: Site 1 Surface Water

COMPO:	Sample Codes	
Number	#1	#4
Well Type	Invest	Invest
Sample Type	Soil	water
Sample Number	10454	10459
Analysis By	BWC	BWC
Non-Priority Pollutants		
Styrene	nd[a]	nd
Xylenes	nd	nd
Isopropyl benzene	nd	nd
Methyl phenyl acetylene		nd
Benzofuran	nd	nd
Indene	nd	nd
Methyl Naphthalenes		nd
Dimethyl Naphthalenes		nd
Xanthene		nd
Thiophene	nd	nd
2-Methyl Thiophene	nd	nd
Aniline		nd
Methylaniline		nd
Toluenediamine		nd
Dimethyl phenols		nd
Cresols		nd
Phenyl acetic acid		nd
TMSN		156
pyridine		nd

a Detection limit ~ 400ppb

PRIORITY POLLUTANT SCREENING

(All concentrations reported are ppb)

Site: Wyandotte

Sample Location: Site 1 Surface Water

COMPONENTS	Sample Codes	
Number	#1	#4
Well Type	Invest	Invest
Sample Type	Soil	water
Sample Number	10454	10459
Analysis By	BWC	BWC
Methylene Chloride	nd[a]	nd
Chloroform	nd	nd
1,2-Dichloropropane	nd	nd
Benzene	nd	nd
Toluene	nd	19
Ethylbenzene	nd	nd
Naphthalene		nd
Phenanthrene		12
Anthracene		nd
Pyrene		nd
Benzo(a)pyrene		nd
Bis-(2-ethylhexyl)-phthalate		nd
Phenol		nd
2,4-Dimethylphenol		nd
Polychlorinated Biphenyls		

PRIORITY POLLUTANT SCREENING

(All concentrations reported are ppb)

Site: Wyandotte Sample Location: Site 1

COMPONENTS		Sample Codes
Well Number	BW4	
Well Type	Invest	
Sample Type	Water	
Sample Number	10460	
Analysis By	BWC	
Methylene Chloride		
Chloroform		
1,2-Dichloropropane		
Benzene	1006	
Toluene	1312	
Ethylbenzene	36	
Naphthalene	12	
Phenanthrene	nd	
Anthracene	nd	
Pyrene	nd	
Benzo(a)pyrene	nd	
Bis-(2-ethylhexyl)-phthalate	12	
Phenol	19	
2,4-Dimethylphenol	68	
Polychlorinated Biphenyls		

PRIORITY POLLUTANT SCREENING

(All concentrations reported are ppb)

Site: Wyandotte Sample Location: Site 1

CO

Sample Codes

Well Number	BW4		
Well Type	Invest		
Sample Type	Water		
Sample Number	10460		
Analysis By	BWC		
Non-Priority Pollutants			
Styrene	nd		
Xylenes	124		
Isopropyl benzene	nd		
Methyl phenyl acetylene	12		
Benzofuran	103		
Indene	nd		
Methyl Naphthalenes	nd		
Dimethyl Naphthalenes	nd		
Xanthene	nd		
Thiophene	59		
2-Methyl Thiophene	45		
Aniline	27		
Methylaniline	40		
Toluenediamine	nd		
Dimethyl phenols	173		
Cresols	92		
Phenyl acetic acid	53		
TMSN	19		
pyridine	nd		

PRIORITY POLLUTANT SCREENING

(All concentrations reported are ppb)

Site: Wyandotte Sample Location: Site 1

COMPONENTS	Sample Codes			
Well Number	BW 3 D/E			BW 4
Well Type	Invest			Invest
Sample Type	Water			water
Sample Number	10464/10465			10456/10458
Analysis By	BWC			BWC
Methylene Chloride	nd			nd/50
Chloroform	nd			nd/nd
1,2-Dichloropropane	28			nd/nd
Benzene	257			908/987
Toluene	1382			1184/1274
Ethylbenzene	61			42/40
Naphthalene	nd			
Phenanthrene	nd			
Anthracene	nd			
Pyrene	nd			
Benzo(a)pyrene	nd			
Bis-(2-ethylhexyl)-phthalate	11			
Phenol	25			
2,4-Dimethylphenol	54			
Polychlorinated Biphenyls				

PRIORITY POLLUTANT SCREENING

(All concentrations reported are ppb)

Site: Wyandotte Sample Location: Site 1

COMPONENTS	Sample Codes	
Well Number	BW 3D/E	BW 4
Well Type	Invest	Invest
Sample Type	Water	Water
Sample Number	10464/10465	10456/10458
Analysis By	BWC	BWC
Non-Priority Pollutants		
Styrene	537	nd/nd
Xylenes	nd	135/137
Isopropyl benzene	nd	nd/nd
Methyl phenyl acetylene	nd	
Benzofuran	nd	112/112
Indene	nd	104/158
Methyl Naphthalenes	nd	
Dimethyl Naphthalenes	nd	
Xanthene	nd	
Thiophene	nd	68/67
2-Methyl Thiophene	nd	49/53
Aniline	19	
Methylaniline	44	
Toluenediamine	42	
Dimethyl phenols	nd	
Cresols	72	
Phenyl acetic acid	125	
TMSN	19	
pyridine	nd	

PRIORITY POLLUTANT SCREENING

(All concentrations reported are ppb)

Site: Wyandotte Sample Location: Site 1

COMPONENT	Sample Codes	
Well Number	BW101	BW3A
Well Type		Invest
Sample Type	water	Soil
Sample Number	10585	10467
Analysis By	BWC	BWC
Methylene Chloride	nd	
Chloroform	18	
1,2-Dichloropropane	nd	
Benzene	nd	
Toluene	nd	
Ethylbenzene	nd	
Naphthalene	nd	653
Phenanthrene	nd	nd
Anthracene	nd	422
Pyrene	nd	874
Benzo(a)pyrene	nd	633
Bis-(2-ethylhexyl)-phthalate	<10	nd
Phenol	nd	nd
2,4-Dimethylphenol	nd	nd
Polychlorinated Biphenyls		
Pesticides		

PRIORITY POLLUTANT SCREENING

(All concentrations reported are ppb)

Site: Wyandotte _ Sample Location: Site 1

COMPONENTS	Sample Codes	
Well Number	BW101	BW3A
Well Type		Invest
Sample Type	water	Soil
Sample Number	10585	10467
Analysis By	BWC	BWC
Non-Priority Pollutants		
Styrene	nd	
Xylenes	nd	
Isopropyl benzene	nd	311
Methyl phenyl acetylene	nd	
Benzofuran	nd	
Indene	nd	nd
Methyl Naphthalenes	nd	975
Dimethyl Naphthalenes	nd	884
Xanthene	nd	382
Thiophene	nd	
2-Methyl Thiophene	nd	
Aniline	nd	
Methylaniline	nd	
Toluenediamine	nd	nd
Dimethyl phenols	nd	nd
Cresols	nd	nd
Phenyl acetic acid	nd	nd
TMSN	nd	nd
pyridine	nd	

PRIORITY POLLUTANT SCREENING

(All concentrations reported are ppb)

Site: Wyandotte Sample Location: Site 1

COMPONENTS	Sample Codes	
Well Number	DNR Tank	BW 1A
Well Type	Bkgd	Bkgd
Sample Type	Water	Water
Sample Number	10461	10515
Analysis By	BWC	BWC
Non-Priority Pollutants		
Styrene	nd	nd
Xylenes	nd	nd
Isopropyl benzene	nd	nd
Methyl phenyl acetylene	nd	nd
Benzofuran	nd	nd
Indene	nd	nd
Methyl Naphthalenes	nd	nd
Dimethyl Naphthalenes	nd	nd
Xanthene	nd	nd
Thiophene	nd	nd
2-Methyl Thiophene	nd	nd
Aniline	nd	nd
Methylaniline	nd	nd
Toluenediamine	nd	nd
Dimethyl phenols	nd	nd
Cresols	nd	nd
Phenyl acetic acid	nd	nd
TMSN	nd	nd
pyridine	nd	nd

PRIORITY POLLUTANT SCREENING

(All concentrations reported are ppb)

Site: Wyandotte Sample Location: Site 1

COMPONENTS	Sample Codes	
Well Number	DNR Tank	BW1A
Well Type	Bkgd	Bkgd
Sample Type	Water	Water
Sample Number	10461	10515
Analysis By	BWC	BWC
Methylene Chloride	53	nd
Chloroform	nd	nd
1,2-Dichloropropane	nd	nd
Benzene	nd	nd
Toluene	16	nd
Ethylbenzene	nd	nd
1,2-Dichloroethane	nd	nd
Naphthalene	nd	nd
Phenanthrene	nd	nd
Anthracene	nd	nd
Pyrene	nd	nd
Benzo(a)pyrene	nd	nd
Bis-(2-ethylhexyl)-phthalate	28	15
Phenol	nd	nd
2,4-Dimethylphenol	nd	nd
Polychlorinated Biphenyls		

ITEM 1.2

three new result sets added
- sites 4+5 6/8/82

1/13/82

MDNR Groundwater Survey Results

Attached are the data tables for this survey. BWC and DNR results are available for most of the background wells and BWC, EPA and DNR results are available for most of the investigation wells. A brief overview is also attached.

Both BWC and the EPA followed USEPA ~~Meth~~ GC/MS Methods 624 and 625 for the water samples. The extracts from soil and sediment samples were also analyzed by GC/MS by BWC and the EPA. The MDNR did not do Priority Pollutant scans on the samples. They analyzed for selected groups of compounds. These groups (scans) are shown in Table I and the scans done for each

sample are shown on the data tables.

The detection limits for purgeable organic compounds are ca 10 ppb and for extractable organic compounds are ca 20 ppb in water samples. For soil and sediment samples the detection limits are higher and shown on the data tables.

Only the Priority Pollutants detected in at least one sample from a site are listed on the data tables. No entry means the analysis was not done for that sample. Selected non-Priority Pollutants are also shown on the data tables. The concentration values given for most of these compounds are approximate (the xylenes and styrene are the exceptions).

Brief Overview

Most of this discussion is directed towards organic compounds since high metal (mercury) values were measured only at sites 6 and 8. (South Work
MDNR maps and the Investigation site table are attached.

Site #1

Well	BW1A	clean
Well	BW 3	some aromatics (up to 1 ppm)
Well	BW 4	Benzene, Toluene up to 2 ppm EPA shows large amount of dimethylphenol
Surface	Water	clean

Site #2

Well	BW2A	clean
Well	BW 6	
	soil	up to 3> ppm aromatics by BWC trace aromatics by DNR
	water	up to 0.1 ppm aromatics

Well BW7 soil up to 10 ppm aromatics

Site #3

Well BW 11

soil up to 0.1 ppm bis(chloroisopropyl)ethe

water up to 0.4 ppm Dichloropropane
up to 1.8 ppm bis(chloroisopropyl)ether
up to 0.9 ppm pyrene
up to 0.1 ppm phenol

Soil near BW 11 140 ppb PCB-1254 by DNR

Well BW 12

Soil no extractable detected by EPA

Water up to 0.6 ppm toluene
up to 0.3 ppm bis(chloroisopropyl)ether

Sites # 4 and 5

BW 16 nearly clean

BW 17

soil up to 8 ppm aromatics

water DNR, EPA show ca 200 ppm benzene, 50 ppm toluene (BWC lower)
up to 1.5 ppm naphthalene

BW 18

soil up to 5.6 ppm aromatics

water ca 1 ppm benzene

Soil near Drum Pad

	BWC	EPA
Aromatics	<0.3 ppm	up to 47 ppm
BASALIN	32.6 ppm	940 ppm

Emergency Containment Pond Sediment

Aromatics	up to 15 ppm	<10 ppm
DOP	<1.6 ppm	12 ppm
Di butyl phthalate	<1.6 ppm	93 ppm
bis(chloroisopropyl)ether	<1.6 ppm	99 ppm

Table I

MDNR Scan Parameters

Scan 1 Purgeable Halocarbons

Bromoform
Bromodichloromethane
Chlorodibromomethane
Chloroform
Carbon tetrachloride
Dichloromethane
1,1-Dichloroethane
1,2-Dichloroethane
1,1-Dichloroethene
1,2-Dichloroethene
1,1,1-Trichloroethane
1,1,2-Trichloroethane
Trichloroethene (TCE)
1,1,2,2-Tetrachloroethane
Tetrachloroethene (PCE)
1-Bromo-3-chloropropane
1,2-Dichloropropane
Chlorobenzene

Scan 2 Purgeable Aromatic Hydrocarbons

Benzene
Toluene
o-Xylene
m-Xylene
p-Xylene
Ethylbenzene
Styrene

Scan 3 Chlorinated Hydrocarbons

Hexachlorobutadiene (HCBD)
Hexachlorocyclopentadiene (HCP)
Hexachlorobenzene (HCB)
Octachloropentene (OCP)
Pentachloronitrobenzene (PCNB)

Scan 4 Polychlorinated biphenyls and organochlorine pesticides

Aroclor 1016
Aroclor 1221
Aroclor 1232
" 1242
" 1248
" 1254
" 1260
" 1262
DDE
DDD
DDT
Heptachlor
Heptachlor epoxide
Endrin
Toxaphene
Chlordane
Lindane
Mirex
Endosulfan A & B
Methoxychlor
Aldrin
Dieldrin

Scan 7 **Polynuclear Aromatic Hydrocarbons—**

Acenaphthene _____
Acenaphthylene _____
Anthracene _____
Benzo(a)anthracene _____
Benzo(a)pyrene _____
Benzo(b)fluoranthene _____
Benzo(ghi)perylene _____
Benzo(k)fluoranthene _____
Chrysene _____
Dibenzo(a,h)anthracene _____
Fluoranthene _____
Fluorene _____
Indeno(1,2,3-cd)pyrene _____
Naphthalene _____
Phenanthrene _____
Pyrene _____

Scan 8 Chlorophenols

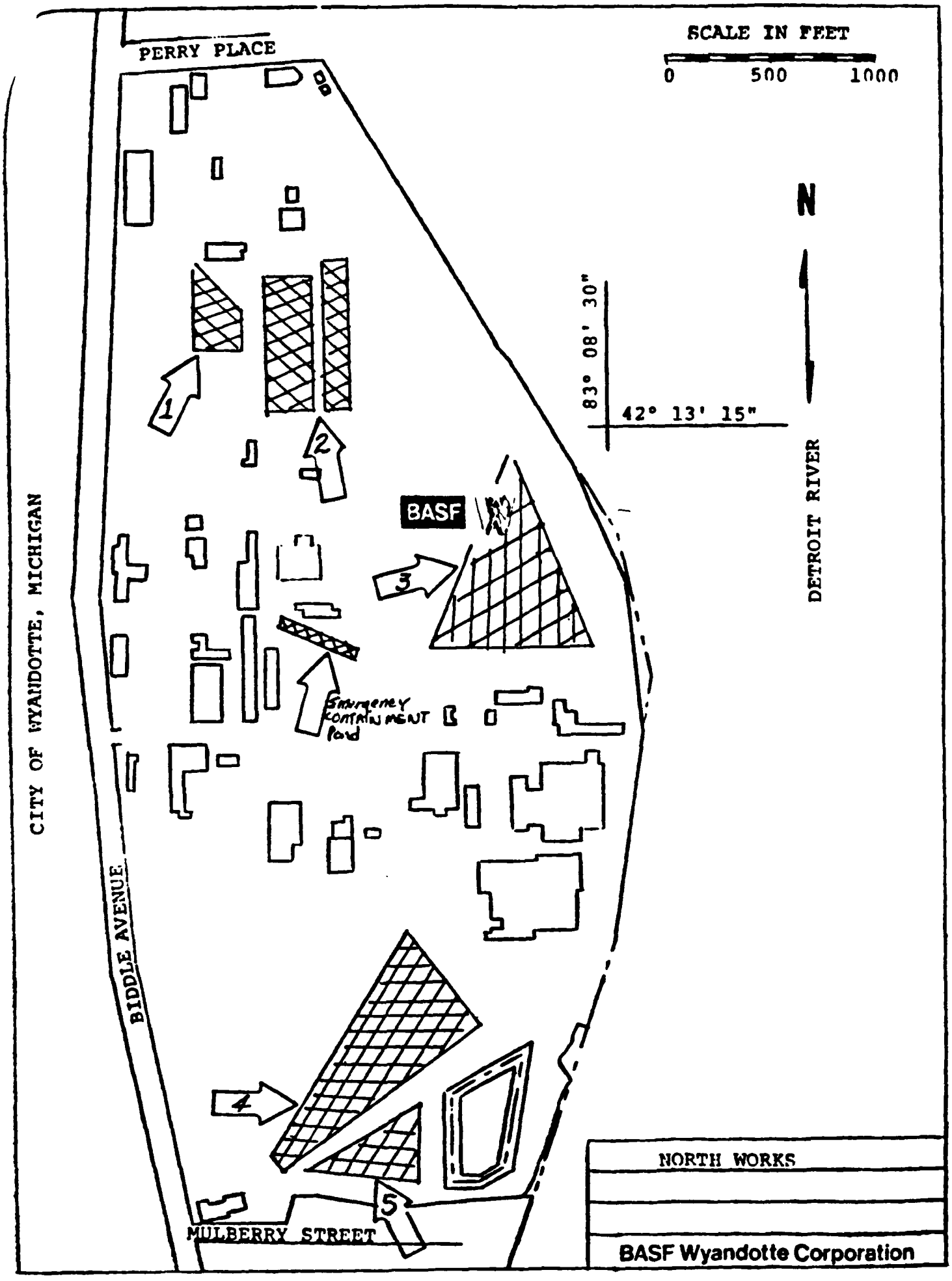
4-Chloro-3-methylphenol _____
2-Chlorophenol _____
2,4-Dichlorophenol _____
Pentachlorophenol _____
2,4,6-Trichlorophenol _____

Site *	Well Number ~~Sample Code~~
1	DNR Tank
	BW1A
	BW101
	BW 3
	BW 4
	#1
	#2
	#4
2	BW 2
	BW 6
	BW 7
3	BW11
	BW12
4 & 5	BW16
	BW17
	BW 18
	Emergency Containment Pond
	Drum Pad

TABLE 1

NORTH WORKS

Site #	Description	Investigation Wells	Background Wells	Soil Borings
1	S.W. of Polyol Plant	2 (#3 & 4)	2 (#1 &2)	3
2	Coke Products	3 (#5, 6, 7)	1 (#2)	3
3	Polyol filter cake	3 (#11, 12, 13)	1 (#8)	3
4 & 5	Demolition material - South end	2 (#17 & 18)	1 (#16)	4
-	Drum storage Pad	0	1 (#8)	2 (#9)
-	West of Pilot Plant	0	0	2 (#10)
-	Emergency Stor. Pond	2 (#17 & 18)	0	0


SCALE IN FEET
0
500
1000
N
PERRY PLACE
CITY OF WYANDOTTE, MICHIGAN
BIDDLE AVENUE
MULBERRY STREET
DETROIT RIVER
83° 08' 30"
42° 13' 15"
BASF
Emergency Containment Pond
1
2
3
4
5
NORTH WORKS
BASF Wyandotte Corporation

MICROFILM
☐ Yes ☐ No

BASF Wyandotte Corporation

SERVICE REQUISITION TO ANALYTICAL RESEARCH LABORATORIES

Information Requested: GC/MS Priority Pollutants Screen Extractables

Description, Source, and History of Material: Wyandotte EPA #5 BW 4 Site #1 DNR-Survey

Special Considerations or Priorities: 7-12-81

Hazards:

Copies To: Ed Panek

JUN 18 1981

SAMPLE IDENTIFICATION: 10460
REQUESTOR: Ed Panek
DEPT.: Anal Chem
EXT.: 6236
DATE: 6-15-81
INTERFACE: Ed Panek
PROJ. NO.: 46-1
ANALY. PAG. NO.: A 98925

ANALYTICAL REPORT — E.Y. WEISSMAN

GC/MS

* Quantified against internal standard DeAnthracene assuming response factor of 1.0
† = Uncertain I.D. due to small signal peaks & improper mass intensities.

10460 BN.

Priority Pollutants. found;

Bis (2-Ethylhexyl) Phthalate — 12 ppm*
Naphtholene = 12 ppm (Against DeNaphtholene int. std.).
† Bis (2-chloroisopropyl) Ether = possible = uncertain I.D. = 5 ppm* at most.

Some Other Compounds found.

Aniline = 27* ppm
Methylaniline = 40* ppm
Tetramethylsuccinonitrile = 19* ppm
Benzofuran — 10* ppm
Methylphenylacetylene — 12* ppm
+ Polyol(s).

10460 Acid.

Priority Pollutants.

Phenol — 19* ppm
2,4 dimethylphenol 68* ppm

Others;

x,y dimethylphenol — 173* ppm
Cresol — 92* ppm
phenylacetic acid — 53* ppm

Joel R. Sibul 7/10/81.
Analytical Research Date

F 7352 REV. 10/79 Printed in U.S.A.

MICROFILM
☐ Yes ☐ No

BASF Wyandotte Corporation

SERVICE REQUISITION TO ANALYTICAL RESEARCH LABORATORIES

Information Requested: GC/MS P.P. scan opt org

Description, Source, and History of Material: Wyandotte BW 3-A Site #1 DNR-Survey

Special Considerations or Priorities: expires 8-22-81

Hazards:

Copies To: Ed Panek

AUG 7 1981
E.Y. WEISSMAN

SAMPLE IDENTIFICATION: 10467
REQUESTOR: Ed Panek
DEPT.: Anal Chem
EXT.: 6236
DATE: 8-7-81
INTERFACE: Ed Panek
PROJ. NO.: 46-1
ANALY. PAG. NO.: A 99334

GC/MS ANALYTICAL REPORT

10467 B/N. Aliphatic hydrocarbons (unspecific).

also ← PNA's

Naphthalene	= 65 ppm	vs. Dibenzanthracene (1:1 R.F.).	①
Isopropylbenzene (Cumene)	= 31 ppm	vs. " " " "	
Methylnaphthalene	= 94 ppm	vs " " " "	
Dimethylnaphthalene	= 88 ppm	vs. " " " "	
Xanthene	= 38 ppm	vs. " " " "	
Anthracene	= 42 ppm	vs. " " " "	
Pyrene	= 87 ppm	vs " " " "	
Diphenyl Sulphone	= 110 ppm	vs " " " "	
benzo (a) pyrene	= 63 ppm	vs " " " "	②

10467 Acid.

No P.P.s found.

Joel K. Sibul 9/8/81.
Analytical Research Date

F 7352 REV. 10/79 Printed in U.S.A.

WORK SHEET

Sample I.D. No. 10467 Project No. 46-1

Date Collected 6-1-81

Origin of Sample Wyandotte BW3-A site 1
NE corner DNR - Survey

Type of Sample soil

Work Done 4. Base Neutral & Acid Extracts

PP Scan

Sample I.D. #	Initial vol (ml)		Inital pH		Final pH		Final vol (ml)		ppm-Std.	
	BN	AC	BN	AC	BN	AC	BN	AC	BN	AC
10467	99.52		S		≥11	≤2	1.0	1.0	dis 200 dis 20	dis 60
Blank	1000 ml		S		≥11	≤2				

Sludge or other:

dry weight = 69.8%

Pagination # 99334 Extractor M. Dexheimer

Date Extracted 7-22-81 Notebook # 13286-2 pg 30

Expiration Date 8-22-81

a. GC/MS

Date Work Done 9/8/81 Analyst Sibul

b. Other

Notes

Date Work Done _____ Analyst _____

MICROFILM
☐ Yes ☑ No

BASF Wyandotte Corporation

SERVICE REQUISITION TO ANALYTICAL RESEARCH LABORATORIES

Information Requested: GC/MS Priority Pollutants Screen Extractables

Description, Source, and History of Material: Wyandotte Sample # 11 BW3-D DNR-Survey

Special Considerations or Priorities: 7-12-81

Hazards:

Copies To: Ed Panek

JUN 18 1981

SAMPLE IDENTIFICATION: 10464

REQUESTOR: Ed Panek

DEPT.: Anal Chem

EXT.: 6236

DATE: 6-15-81

INTERFACE: Ed Panek

PROJ. NO.: 16-1

ANALY. PAG. NO.: A 98924

GC/MS

ANALYTICAL REPORT

E.Y. WEISSMAN

* Concentrations calculated from internal std. using response factor of 1.0.

10464BN.

Priority Pollutants found.

Bis (2-Ethylhexyl) Phthalate — 5*ppm. (1)

Some Other Compounds found:

Aniline — 9*ppm (2)
Methylaniline — 21*ppm
THSN — 9*ppm
Styrene — 40*ppm.
TDA — 20*ppm.
+ Polyol(s).

10464 Acid.

Priority Pollutants.

Phenol — 24ppm. (3)
Dimethylphenol — 51ppm. (4)

Others. Cresol — 68ppm. (5)
phenylacetic acid — 119ppm.
phenylethyl acetate — 100ppm

Joel K. Liebel 7/9/81.

Analytical Research Date

F 7352 REV. 10/79 Printed in U.S.A.

WORK SHEET

Sample I.D. No. 10464 Project No. 461

Date Collected 6-4-81

Origin of Sample Wyandotte B413-D Site #1

Type of Sample H_2O

TYPE OF ANALYSIS

Work Done

☐ 1. Volatile Organics (Purge & Trap)

Pagination No. _____

Expiration Date _____

Date Work Done _____

Analyst _____

☐ 2. Base Neutral & Acid Extracts

Waste Water Book # 10666-3 Page # 72

Sample I.D. #	Initial vol(ml)		Initial pH		Final pH		Final vol(ml)		ppm-d-	
	BN	AC	BN	AC	BN	AC	BN	AC	BN	AC
10464	950 ml		10		≥11	≤2	2.0	1.0	dx 20 / dx 200	dx 20 / [illegible]

Sludge or other:

Pagination # 98924

Date Extracted 6/12/81

Extractor [illegible]

MICROFILM
☐ Yes ☐ No

BASF Wyandotte Corporation

SERVICE REQUISITION TO ANALYTICAL RESEARCH LABORATORIES

SAMPLE IDENTIFICATION 10465

REQUESTOR Ed Panek DEPT. Anal Chem EXT. 6236 DATE 6-11-81 INTERFACE Ed Panek

PROJ. NO. 46-2 ANALY. PAG. NO. A 78861

ormation Requested Purgeables Priority Pollutant Screen

scription, Source, and History of Material Wyandotte Sample # 12 Well BW 3-E Site #1 DNR

pecial Considerations or Priorities expires June 18, 81

lazards

Copies To Ed Panek JUN 12 1981

E.Y. WEISSMAN

ANALYTICAL REPORT

1,2-dichloropropane	28 ppb	1
benzene	257 ppb	2
toluene	1382 ppb	3
ethylbenzene	61 ppb	
styrene	537 ppb	

J. Chang 6/24/81
Analytical Research Date

Russell D. Perry 6/26/81

F 7352 REV. 10/79 Printed in U.S.A.

WORK SHEET

Sample I.D. No. 10465 Project No. 46-1

Date Collected 6-4-81

Origin of Sample Wyandotte #12 BW 3-E Site #1 ONR

Type of Sample H2O

TYPE OF ANALYSIS

Work Done

☑ 1. Volatile Organics (Purge & Trap)

priority pollutants

Pagination No. 98861

Expiration Date ~~6-81~~ 6-18-81

Date Work Done 6-24-81

Analyst J. Cheung

☐ 2. Base Neutral & Acid Extracts

Waste Water

Sample I.D. #	Initial vol(ml)		Initial pH		Final pH		Final vol(ml)		ppm-d-1	
	BN	AC	BN	AC	BN	AC	BN	AC	BN	AC

Sludge or other:

Pagination # _____ Extractor _____

Date Extracted _____

MICROFILM
☑ Yes ☐ No

BASF Wyandotte Corporation

SERVICE REQUISITION TO ANALYTICAL RESEARCH LABORATORIES

Information Requested: Metals ~~Pb, Cd, Cr, Cu, Zn~~

Description, Source, and History of Material: Wyandotte
BW 3B site #1
BW 3F DNR Survey

Special Considerations or Priorities: expires 12-4-81

Hazards:

Copies To: Ed Panek

SAMPLE IDENTIFICATION: 10462 & 10466
REQUESTOR: Ed Panek
DEPT.: Anal Chem
EXT.: 6236
PROJ. NO.: 46-1
DATE: 7-14-81
ANALY. PAG. NO.: A 99/9
INTERFACE: Panek

ANALYTICAL REPORT

JUL 21 1981
E.Y. WEISSMAN

all concentrations in ppm

	10462	10466
Pb	<0.1	<0.1
Cd	<0.05	<0.05
Cr	<0.05	<0.05
Cu	<0.05	<0.05
Zn	1.4	9.7

PM Beckworth 8/17/81

MICROFILM
☐ Yes ☐ No

BASF Wyandotte Corporation

SERVICE REQUISITION TO ANALYTICAL RESEARCH LABORATORIES

Information Requested GC/MS Ext. Organics P.P. Scan

Description, Source, and History of Material Wyandotte
BWIA
DNR-Survey

Special Considerations or Priorities expires 7-19-81

Hazards

Copies To Ed Parek

JUL 30 1981
E.Y. WEISSMAN

SAMPLE IDENTIFICATION 10515
REQUESTOR Ed Parek
DEPT. Anal Chem
EXT. 6236
DATE
PROJ. NO. 461
ANALY. PAG. NO. A ~~48460~~ 1231
INTERFACE Ed Parek

ANALYTICAL REPORT

GC/MS Results.

BN.

Bis(2-Ethylhexyl) Phthalate ① — 15 ppm (Against Dio Anthracene Intl. std R.F. = 1.0)

Acid.

No priority pollutants found;

Joel K. Sibul 7/22/81.
Analytical Research Date

F 7352 REV. 10/79 Printed in U.S.A.

WORK SHEET

Sample I.D. No. 10515 Project No. 46

Date Collected 6-17-81

Origin of Sample Wyandotte BW1-A 8'
DNR-Survey

Type of Sample H_2O

TYPE OF ANALYSIS

Work Done

☑ 1. Volatile Organics (Purge & Trap)
priority pollutant scan

Pagination No. 98960
Expiration Date 7-1-81
Date Work Done 6-30-81
Analyst J. Cheung & D Huntsinger

☐ 2. Base Neutral & Acid Extracts
P.P. Scan

notebook # 10666-3 pg 72

Waste Water

Sample I.D. #	Initial vol (ml)		Initial pH		Final pH		Final vol (ml)		ppm-d-1	
	BN	AC	BN	AC	BN	AC	BN	AC	BN	AC
10515	990 ml	-	~7	-	2	1	1.0	1.0	200 / 20	200 / 20

Sludge or other:

Pagination # ~~98960~~ 99257

Date Extracted 6/19/81
expires 7-19-81

Extractor [signature]

MICROFILM
☐ Yes ☐ No

BASF Wyandotte Corporation

SERVICE REQUISITION TO ANALYTICAL RESEARCH LABORATORIES

Information Requested: Purgeable Priority Pollutants Screen

Description, Source, and History of Material: Wyandotte BWIA DNR Survey

Special Considerations or Priorities: expires ~~7-2-81~~ 7-1-81

Hazards:

Copies To: Ed Panek

JUN 22 1981
E.Y. WEISSMAN

SAMPLE IDENTIFICATION: 10515
REQUESTOR: Ed Panek
DEPT.: Anal Chem
EXT.: 6236
DATE: 6-19-81
INTERFACE: Ed Panek
PROJ. NO.: 416-1
ANALY. PAG. NO.: A 93960

ANALYTICAL REPORT

No priority pollutants was detected (<10 ppb)

For std, see #10510

Analytical Research: 6/30/81
Date: 6/30/81

F 7352 REV. 10/79 Printed in U.S.A.

MICROFILM
☐ Yes ☐ No

BASF Wyandotte Corporation

SERVICE REQUISITION TO ANALYTICAL RESEARCH LABORATORIES

Information Requested: Metals ~~Pb~~, Cd, Cu, ~~Zn~~, ~~Cr~~

Description, Source, and History of Material: Wyandotte BWI-A DNR Survey

Special Considerations or Priorities:

Hazards:

Copies To: Ed Panek

JUN 22 1981

ANALYTICAL REPORT

E.Y. WEISSMAN

Pb = <0.05
Co = <0.05
Cr = <0.05
Cu = 0.12
Zn = 7.1

7/10/81 ESP

Analytical Research Date

F 7352 REV. 10/79 Printed in U.S.A.

SAMPLE IDENTIFICATION: 10 315
REQUESTOR: Ed Panek
DEPT.: Anal Chem
EXT.: 6236
DATE: 6-19-81
INTERFACE: Ed Panek
PROJ. NO.: 461
ANALY. PAG. NO.: A 93945

MICROFILM
☐ Yes ☐ No

BASF Wyandotte Corporation

SERVICE REQUISITION TO ANALYTICAL RESEARCH LABORATORIES

Information Requested: Purgeable Priority Pollutant Screen

Description, Source, and History of Material: Wyandotte
Polyol Pond Sample #1 Site #1 DNR

Special Considerations or Priorities:

Hazards:

Copies To: Ed Panck

SAMPLE IDENTIFICATION: 10454

REQUESTOR: Ed Panck DEPT.: Anal Chem EXT.: 6236 DATE: 6-11-81 INTERFACE: Ed Panck

PROJ. NO.: 46-2 ANALY. PAG. NO.: A 98860

ANALYTICAL REPORT

JUN 12 1981

E.Y. WEISSMAN

No priority pollutant was detected. (<10ppb)
Sediment 1g/40mL

J. Cheney 6/24/81
Analytical Research Date
Russell D. Rim 6/26/81

F 7352 REV. 10/79 Printed in U.S.A.

MICROFILM
☐ Yes ☐ No

BASF Wyandotte Corporation

SERVICE REQUISITION TO ANALYTICAL RESEARCH LABORATORIES

Information Requested GC/MS Purgeable Priority pollutants

Description, Source, and History of Material Wyandotte Sample #2
N. end of Site #1 DNR
Polyol Pond

Special Considerations or Priorities expires June 18-81

Hazards

Copies To Ed Panek

JUN 12 1981
E.Y. WEISSMAN

ANALYTICAL REPORT

CH_2Cl_2 51 ppb

Tentative ident.
2-ethylhexanal ~100 ppb RRF = internal standard

SAMPLE IDENTIFICATION 10455
REQUESTOR Ed Panek DEPT. Anal Chem EXT. 6236 DATE 6-11-81 INTERFACE Ed Panek
PROJ. NO. 462 ANALY. PAG. NO. A 78854

Del W. Huntanger
J Cheng 6/24/81
Analytical Research Date
Russell Ring 6/26/81

F 7352 REV. 10/79 Printed in U.S.A.

MICROFILM
☐ Yes ☐ No

BASF Wyandotte Corporation

SERVICE REQUISITION TO ANALYTICAL RESEARCH LABORATORIES

SAMPLE IDENTIFICATION 10454

REQUESTOR Ed Panek DEPT. Anal Chem EXT. 6236 DATE 6-11-81 INTERFACE Ed Panek

PROJ. NO. 462 ANALY. PAG. NO. A 78857

Information Requested GC/MS Purgeable styrene acrylonitrile

Description, Source, and History of Material Wyandotte Sample 4 Polyol Pond Site # 1 EPA

Special Considerations or Priorities Expires June 18, 81

Hazards

Copies To Ed Panek

JUN 12 1981

ANALYTICAL REPORT E.Y. WEISSMAN

acrylonitrile not detected (<1 ppm)
styrene not detected (<10 ppb)
toluene 19 ppb

(small amt. of C-C-C-C-C(C)-C≡N is present)

For std. see #10455
#10458 (for acrylonitrile)

[signature] 6/25/81
Analytical Research Date
[signature] 6/26/81

F 7352 REV. 10/79 Printed in U.S.A.

MICROFILM
☐ Yes ☐ No

BASF Wyandotte Corporation

SERVICE REQUISITION TO ANALYTICAL RESEARCH LABORATORIES

Information Requested GC/MS Priority Pollutant Screen
Extractables

Description, Source, and History of Material Wyandotte - Sample #4
Polyol Pond Site #1
DNR - Survey

Special Considerations or Priorities expires July 12-81

Hazards

Copies To Ed Panek

JUN 18 1981

ANALYTICAL REPORT

E.Y. WEISSMAN

GC/MS.

10459BN.

Priority pollutants;

Phenanthrene — 4ppm (Compared to Dio Anthracene Intl. std.)

Others.

Tetramethylsuccinonitrile — 52ppm " " " "

P.O. Polyols

Acids.

No priority pollutants found.

Other; P.O. Polyols.

J.K. Sibul 9/21/81.
Analytical Research Date

F 7352 REV. 10/79 Printed in U.S.A.

SAMPLE IDENTIFICATION 10459 PROJ. NO. 46-1 ANALY. PAG. NO. A 98922

REQUESTOR Ed Panek DEPT. Anal Chem EXT. 6236 DATE 6-15-81 INTERFACE Ed Panek

WORK SHEET

Sample I.D. No. 10459 Project No. 451

Date Collected 6-4-81

Origin of Sample Wyandotte #4 Polyol Pond Site #1 EPA

Type of Sample H_2O

TYPE OF ANALYSIS

Work Done

☑ 1. Volatile Organics (Purge & Trap)
styrene, acrylonitrile

Pagination No. 98857
Expiration Date 6-15-81
Date Work Done 6-25-81
Analyst J Cheung

☐ 2. Base Neutral & Acid Extracts
priority pollutant Screen

Waste Water Book # 10666-3 page # 72

Sample I.D. #	Initial vol(ml)		Initial pH		Final pH		Final vol(ml)		ppm-d-1	
	BN	AC	BN	AC	BN	AC	BN	AC	BN	AC
10459	1000 ml		6		≥11	≤2	~~1.0~~ ml 3.0	2.0	200 / 20	200 / 20

Sludge or other:

Pagination # ~~98922~~ 98722 / ~~98857~~

Date Extracted 6/12/81

date expires 7-12-81

Extractor [signature]

MICROFILM
☐ Yes ☐ No

BASF Wyandotte Corporation

SERVICE REQUISITION TO ANALYTICAL RESEARCH LABORATORIES

Information Requested GC/MS Priority Pollutants Screen Extractables

Description, Source, and History of Material Wyandotte ~~Rig~~ Drilling Rig Tank DNR-Survey

Special Considerations or Priorities 7-12-81

Hazards

Copies To Ed Panek

JUN 18 1981

E.Y. WEISSMAN

SAMPLE IDENTIFICATION 10461

REQUESTOR Ed Panek

DEPT. Anal Chem

EXT. 6236

DATE 6-15-81

INTERFACE Ed Panek

PROJ. NO. 46-1

ANALY. PAG. NO. A 98923

GC/MS

ANALYTICAL REPORT

* Quantitated against Dioxanthracene intl. std. assuming response factor = 1.00

10461 B/N

Priority pollutants:

Bis (2-Ethylhexyl) Phthalate — 27 ppm*

Acid.

No Priority Pollutants found.

Other Compounds

P.O. Polyols

J.R. Hibel 9/21/81

Analytical Research Date

F 7352 REV. 10/79 Printed in U.S.A.

WORK SHEET

Sample I.D. No. 10461 Project No. 151

Date Collected 6-4-81

Origin of Sample Wyandotte drilling rig

Type of Sample H_2O

TYPE OF ANALYSIS

Work Done

☑ 1. Volatile Organics (Purge & Trap)

priority pollutants

Pagination No. 98859

Expiration Date 6-18-81

Date Work Done 6-18-81

Analyst J. Cheung

☐ 2. Base Neutral & Acid Extracts

P.P. Scan

Waste Water Book # 10666-3 page #72

Sample I.D. #	Initial vol(ml)		Initial pH		Final pH		Final vol(ml)		ppm-d-1	
	BN	AC	BN	AC	BN	AC	BN	AC	BN	AC
10461	990 ml		5		≥11	≤2	1.0 ml	1.0	200 ds / 20 c10	200 / 20

Sludge or other:

Pagination # 98923

Date Extracted 6/13/81

Extractor [signature]

MICROFILM
☐ Yes ☐ No

BASF Wyandotte Corporation

SERVICE REQUISITION TO ANALYTICAL RESEARCH LABORATORIES

SAMPLE IDENTIFICATION 10461 PROJ. NO. 46-2 ANALY. PAG. NO. A 78859

REQUESTOR Ed Panek DEPT. Anal Chem EXT. 6236 DATE 6-11-81 INTERFACE Ed Panek

Information Requested Purgeable Priority pollutant screen

Description, Source, and History of Material Wyandotte drilling rig Tank DNR

Special Considerations or Priorities expires June 18, 81

Hazards

Copies To Ed Panek

JUN 12 1981

E.Y. WEISSMAN

ANALYTICAL REPORT

CH_2Cl_2 53 ppb

16 ppb

Tentative ident

2-ethylhexanal ~ 50 ppb RRF = internal std.

For std, see 10455

Analytical Research Chemy 6/18/81 Date

Russell D. Ring 6/26/81

F 7352 REV. 10/79 Printed in U.S.A.

MICROFILM
☐ Yes ☐ No

BASF Wyandotte Corporation

SERVICE REQUISITION TO ANALYTICAL RESEARCH LABORATORIES

Information Requested: GC/MS PP. Scan of Ext. ORG

Description, Source, and History of Material: Wyandotte BW101 PNR Survey

Special Considerations or Priorities: expires 7-26-81

Hazards:

Copies To: Ed Parek

JUN 29 1981
E.Y. WEISSMAN

SAMPLE IDENTIFICATION: 10585
REQUESTOR: Ed Parek
DEPT.: Anal Chem
EXT.: 6236
DATE: 6-26-81
PROJ. NO.: 46-1
INTERFACE: Ed Parek
ANALY. PAG. NO.: A 94023

GC/MS.

ANALYTICAL REPORT

*Quantified against Di. Anthracene Int. Std. assuming R.F = 1.0

Bis (2-Ethylhexyl) Phthalate. = 5 ppm*.

Other Compounds;

P.O. polyols.

Acid.

No priority pollutants found.

Joel K. Siegel 7/22/81.
Analytical Research Date

F 7352 REV. 10/79 Printed in U.S.A.

WORK SHEET

Sample I.D. No. 10385 Project No. 46-1

Date Collected 6-25-81

Origin of Sample Wyandotte B4101 Site #1 DNR-Survey

Type of Sample H.O

TYPE OF ANALYSIS

Work Done

☑ 1. Volatile Organics (Purge & Trap)

P.P. Scan

Pagination No. 99026

Expiration Date 7-9-81

Date Work Done 7-6-81

Analyst J Cheung & D Huntsinger

☐ 2. Base Neutral & Acid Extracts

PP. Scan

Waste Water Book # 13286-2 page 6

Sample I.D. #	Initial vol(ml)		Initial pH		Final pH		Final vol(ml)		ppm-d-1	
	BN	AC	BN	AC	BN	AC	BN	AC	BN	AC
10585	940 ml	–	N 6	–	≥11	≤2	1.0	1.0	20/20	20/20

Sludge or other:

Pagination # 99023

Date Extracted 6/30/81

Extractor [illegible]

MICROFILM
☐ Yes ☐ No

BASF Wyandotte Corporation

SERVICE REQUISITION TO ANALYTICAL RESEARCH LABORATORIES

Information Requested: Purgeable Priority Pollutant Scan

Description, Source, and History of Material: Wyandotte BW101
Site #1
DNR - Survey

Special Considerations or Priorities: expires ~~7-8~~ 7-9-81

Hazards:

Copies To: Ed Parek

SAMPLE IDENTIFICATION: 10585

REQUESTOR: Ed Parek DEPT.: Anal Chem EXT.: 6236 DATE: 6-26-81 INTERFACE: Ed Parek

PROJ. NO.: 4/6-1 ANALY. PAG. NO.: A 94026

ANALYTICAL REPORT

JUN 29 1981
E.Y. WEISSMAN

Chloroform 18 ppb (1)

No other priority pollutant was detected (<10 ppb)

For 5th, see 10593

[signature] 7/6/81
Analytical Research Date
Russell D. King 7/6/81

F 7352 REV. 10/79 Printed in U.S.A.

MICROFILM
☐ Yes ☐ No

BASF Wyandotte Corporation

SERVICE REQUISITION TO ANALYTICAL RESEARCH LABORATORIES

Information Requested: GC/MS Extractables Priority Pollutants Screen

Description, Source, and History of Material: Wyandotte EPA #18 BW6-C DNR-Survey

Special Considerations or Priorities: expires 7-12-81

Hazards:

Copies To: Ed Panek

JUN 18 1981

ANALYTICAL REPORT

E.Y. WEISSMAN

GC/MS

10488 BN Priority Pollutants.

Naphthalene = 131 ppm (compared to D_8-Naphthalene Intl. std.) ①
Anthracene = 75 ppm (compared to D_{10}-Anthracene Intl. std.)
Acenaphthene = 22 ppm " " " " "
Fluorene = 23 ppm " " " " " . ②
Pyrene = 93 ppm " " " " "

10488 Acid.

No priority pollutants except Anthracene = 7 ppm (vs. D_{10}-Anthracene)

Others.

Benzoic Acid = 1 ppm (vs. D_{10}-Anthracene Intl. Std.)

J. K. [illegible] 8/23/81.
Analytical Research Date

SAMPLE IDENTIFICATION 10488
REQUESTOR Ed Panek
DEPT. Anal Chem
EXT. 6236
DATE 6-15-81
PROJ. NO. 416-1
ANALY. PAG. NO. A 98420
INTERFACE Ed Panek

7352 REV. 10/79 Printed in U.S.A.

WORK SHEET

Sample I.D. No. 10491 Project No. 461

Date Collected 6-11-81

Origin of Sample Wyandotte BW6-6

Type of Sample H_2O

TYPE OF ANALYSIS

Work Done

☑ 1. Volatile Organics (Purge & Trap)

priority pollutants

Pagination No. 98865

Expiration Date June 25, 81

Date Work Done 6-26-81

Analyst J. Cheung + D. Huntsinger

☑ 2. Base Neutral & Acid Extracts

Waste Water Book #10666-3 page #72

Sample I.D. #	Initial vol(ml)		Initial pH		Final pH		Final vol(ml)		ppm-d-1	
	BN	AC	BN	AC	BN	AC	BN	AC	BN	AC
10491	975 ml		6		211	52	1.0	1.0	20 / 200	200 / [illegible]

Sludge or other:

Pagination # 98919

Date Extracted 6/12/81

expiration date 7-12-81

Extractor [signature]

MICROFILM
☐ Yes ☐ No

BASF Wyandotte Corporation

SERVICE REQUISITION TO ANALYTICAL RESEARCH LABORATORIES

SAMPLE IDENTIFICATION 10486

REQUESTOR Ed Panek DEPT. Anal Chem EXT. 6236 DATE 6-12-81 INTERFACE Ed Panek

PROJ. NO. 461 ANALY. PAG. NO. A 98868

Information Requested Purgeable Priority Pollutants

Description, Source, and History of Material Wyandotte Sediment 7.9'
BW6-B site #2

Special Considerations or Priorities expires June 25-81

Hazards

Copies To Ed Panek

JUN 15 1981
E.Y. WEISSMAN

ANALYTICAL REPORT

		actually in sample (1g/40ml)
CH_2Cl_2	65 ppb	2600
benzene	14 ppb	560
toluene	19 ppb	760
ethylbenzene	29 ppb	1160
(xylenes	65 ppb*)	2600
(benzofuran	53 ppb△)	2120
(2,3-dihydroindene or O-methylstyrene	917 ppb△)	36,680

not priority pollutants

For std, see #10478

* assuming the RF is the same as that of ethylbenzene.

△ assuming the RRF = 1

[signature] J. Cheung 6/25/81
Analytical Research Date

Russell D. Ring 6/26/81

F 7352 REV. 10/79 Printed in U.S.A.

MICROFILM
☐ Yes ~~☐ No~~

BASF Wyandotte Corporation

SERVICE REQUISITION TO ANALYTICAL RESEARCH LABORATORIES

Information Requested: GC/MS Extractables Priority Pollutants Screen

Description, Source, and History of Material: Wyandotte BW6-C DNR Survey

Special Considerations or Priorities: expires 7-12-81

Hazards:

Copies To: Ed Panek

JUN 18 1981

E.Y. WEISSMAN

SAMPLE IDENTIFICATION: 10491

REQUESTOR: Ed Panek

DEPT.: Anal Chem

EXT.: 6236

DATE: 6-15-81

INTERFACE: Ed Panek

PROJ. NO.: 116-1

ANALY. PAG. NO.: A 98919

GC/MS

ANALYTICAL REPORT

* Quantifeted against Dibenzanthracene Intl. Std. (Assuming Response factor of 1.0.

† Compound in the right retention time window and correct mass fragments but with improper mass abundances. (relative abundances.).

10491 BN

Priority Pollutants found:

Bis (2-Ethylhexyl) Phthalate — 22*ppm (5)

Fluorene — 18ppm (4)

Phenanthrene — 20ppm.

† Acenophthene — 21ppm.

10491 Acid.

No acid priority pollutants found.

J.K. Hibel 7/11/81.

Analytical Research Date

F 7352 REV. 10/79 Printed in U.S.A.

WORK SHEET

Sample I.D. No. 10488 Project No. 461

Date Collected

Origin of Sample

Type of Sample H_2O

TYPE OF ANALYSIS

Work Done

☐ 1. Volatile Organics (Purge & Trap)

Pagination No.

Expiration Date

Date Work Done

Analyst

☐ 2. Base Neutral & Acid Extracts

P.P. scan

Waste Water Book #10666-3 page #72

Sample I.D. #	Initial vol (ml)		Initial pH		Final pH		Final vol (ml)		ppm-d-1	
	BN	AC	BN	AC	BN	AC	BN	AC	BN	AC
10488	1000ml		6		≥11		1.0	1.0	200 / 20	200 / 20
BLANK	1000ml									

Sludge or other:

Pagination # 98920 Extractor

Date Extracted 6/12/81

expiration date 7-12-81

MICROFILM
☐ Yes ☐ No

BASF Wyandotte Corporation

SERVICE REQUISITION TO ANALYTICAL RESEARCH LABORATORIES

SAMPLE IDENTIFICATION 10484

REQUESTOR Ed Panek DEPT. Anal Chem EXT. 6236 DATE 6-11-81 PROJ. NO. 46-2 ANALY. PAG. NO. A 48864 INTERFACE Ed Panek

Information Requested Purgeable Priority Pollutant Screen

Description, Source, and History of Material Wyandotte Sample #11' EPA #17 BW6-C

Special Considerations or Priorities expires June 25-81

Hazards

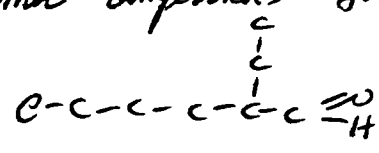
Copies To Ed Panek

JUN 12 1981

ANALYTICAL REPORT E.Y. WEISSMAN

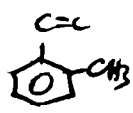
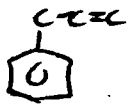
benzene 19 ppb

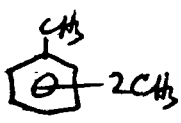
(Other compounds found in the sample are



34 ppb *

Xylenes 20 ppb *

indane,  or  160 ppb *

 or 200 ppb *

* assuming RRF = 1

For std, see #10478

Sal W. Huntsinger
J. Cheung 6/26/81
Analytical Research Date
Russell D. Ring 6/29/81

F 7352 REV. 10/79 Printed in U.S.A.

MICROFILM
☐ Yes ☐ No

BASF Wyandotte Corporation

SERVICE REQUISITION TO ANALYTICAL RESEARCH LABORATORIES

Information Requested: Metals: Pb, Cd, Cr, Cu, Zn

Description, Source, and History of Material: Wyandotte EPA #20 BW 6-C

Special Considerations or Priorities:

Hazards:

Copies To: Ed Panek

SAMPLE IDENTIFICATION: 10490

REQUESTOR: Ed Panek

DEPT.: Anal Chem

EXT.: 6236

DATE: 6-15-81

PROJ. NO.: 4161

INTERFACE: Ed Panek

ANALY. PAG. NO.: A 48883

ANALYTICAL REPORT

all concentrations in ppm

Pb = 0.30 (6)
Cr = 0.27 (6)
Cu = 0.05
Zn = 5.4
Co = <.05

6/18/81

Analytical Research — Date

F 7352 REV. 10/79 Printed in U.S.A.

MICROFILM
☐ Yes ☐ No

BASF Wyandotte Corporation

SERVICE REQUISITION TO ANALYTICAL RESEARCH LABORATORIES

Information Requested: Metals Pb, Cu, Cd, Cr, Zn

Description, Source, and History of Material: Wyandotte Water 11' BW-6-C DNR

Special Considerations or Priorities:

Hazards:

Copies To: Ed Panek

SAMPLE IDENTIFICATION: 10491

REQUESTOR: Ed Panek

DEPT.: Anal Chem

EXT.: 6236

DATE: 6-15-81

INTERFACE: Ed Panek

PROJ. NO.: 461

ANALY. PAG. NO.: A 98884

ANALYTICAL REPORT

All concentrations in ppm

Pb = 0.46
Cd = <.05
Zn = 4.6
Cr = 0.27
Cu = 0.02

5a

E Smith 6/15/81

Analytical Research Date

F 7352 REV. 10/79 Printed in U.S.A.

MICROFILM
☐ Yes ☐ No

BASF Wyandotte Corporation

SERVICE REQUISITION TO ANALYTICAL RESEARCH LABORATORIES

Information Requested: Purgeable Priority Pollutants

Description, Source, and History of Material: Wyandotte
BW6-C DNR

Special Considerations or Priorities: expires June 25, 81

Hazards:

Copies To: Ed Panek

JUN 12 1981

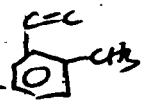
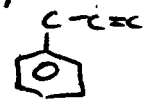
E.Y. WEISSMAN

SAMPLE IDENTIFICATION: 10491
REQUESTOR: Ed Panek
DEPT.: Anal Chem
EXT.: 6236
DATE: 6-11-81
INTERFACE: Ed Panek
PROJ. NO.: 616.2
ANALY. PAG. NO.: A 78865

ANALYTICAL REPORT

CH_2Cl_2 42 ppb

benzene 19 ppb

(indane  or  153 ppb*)

* assuming RRF = 1

For std, see #10478

D.W. Huntsinger
J. Henry 6/26/81
Analytical Research Date

Russell D. Ring 6/29/81

F 7352 REV. 10/79 Printed in U.S.A.

MICROFILM
☐ Yes ☐ No

BASF Wyandotte Corporation

SERVICE REQUISITION TO ANALYTICAL RESEARCH LABORATORIES

rmation Requested GC/MS Ext. Org. PP Scan

cription, Source, and History of Material Wyandotte BW2A DNR-Survey

cial Considerations or Priorities expires 7-26-81

ards

ies To Ed Parek

JUN 29 1981

GC/MS

ANALYTICAL REPORT

E.Y. WEISSMAN

*Quantitated against Dr. Anthracene Intl. Std. (Assuming Response factor = 1.0).

10586BN

Priority Pollutants:

Bis(2-Ethylhexyl)Phthalate — 8.6* ppm (1)

10586 Acid.

2,4-dimethylphenol = 3* ppm (2)

J.K. Sibul 7/15/81.

SAMPLE IDENTIFICATION 10586

REQUESTOR Ed Parek DEPT. Anal Chem EXT. 6236 DATE 6-26-81 INTERFACE Ed Parek

PROJ. NO. 46-1 ANALY. PAG. NO. A 9906

WORK SHEET

Sample I.D. No. 10586 Project No. 46-1

Date Collected 6-25-81

Origin of Sample Wyandotte BW 2A Site #1

Type of Sample H2O, Grab

TYPE OF ANALYSIS

Work Done

☑ 1. Volatile Organics (Purge & Trap)

P.P. Scan

Pagination No. 99025

Expiration Date 7-9-81

Date Work Done 7-6-81

Analyst J. Cheung + D. Huntsinger

☐ 2. Base Neutral & Acid Extracts

P.P. Scan

Waste Water Book # 13296-2 page 1

Sample I.D. #	Initial vol(ml)		Initial pH		Final pH		Final vol(ml)		ppm-d-1	
	BN	AC	BN	AC	BN	AC	BN	AC	BN	AC
10586	970 ml	—	~7		≥11	<2	1.0	1.0	200 dB/dm 20	200 dB/dm 20

Sludge or other:

Pagination # 99022

Date Extracted 6/30/81

Extractor [signature]

MICROFILM
☐ Yes ☐ No

BASF Wyandotte Corporation

SERVICE REQUISITION TO ANALYTICAL RESEARCH LABORATORIES

Information Requested: Purgeable Priority Pollutant Scan

Description, Source, and History of Material: Wyandotte BW2A Site #1 DNR-Survey

Special Considerations or Priorities: expires 7-9-81

Hazards:

Copies To: Ed Parek

JUN 29 1981

E.Y. WEISSMAN

ANALYTICAL REPORT

No priority pollutant was detected (< 10 ppb).

For std, see 10593

Del W. Huntsinger 9/6/81
J. Chang
Russell D. King 7/6/81

Analytical Research Date

F 7352 REV. 10/79 Printed in U.S.A.

SAMPLE IDENTIFICATION 10586
REQUESTOR Ed Parek
DEPT. Anal Chem
EXT. 6236
DATE 6-26-81
PROJ. NO. 46-1
ANALY. PAG. NO. A 49025
INTERFACE Ed Parek

MICROFILM
☐ Yes ☐ No

BASF Wyandotte Corporation

SERVICE REQUISITION TO ANALYTICAL RESEARCH LABORATORIES

Information Requested: Metals Pb, Zn, Cr, Cu, Cd

Description, Source, and History of Material: Wyandotte

Site 8 BW 22 A (584)

Site 1 BW 101 (585) PNR-Survey

Site 1 BW 2-A (586

Special Considerations or Priorities:

Hazards:

Copies To: Ed Panek

JUN 29 1981

E.Y. WEISSMAN

ANALYTICAL REPORT

	10584	10585	10586
ppm - Pb =	<0.1	<0.1	<0.1
" Cd =	<0.05	<0.05	<0.05
" Cr =	<0.05	<0.05	<0.05
" Cu =	<0.05	<0.05	<0.05
" Zn =	1.7	0.89	10.4

EJP

7/10/81

Analytical Research Date

F 7352 REV. 10/79 Printed in U.S.A.

REQUESTOR Ed Panek DEPT. Ag Chem EXT. 6236 DATE 6-26-81 INTERFACE Ed Panek PROJ. NO. 10-1 ANALY. PAG. NO. A 49021

MICROFILM
☐ Yes ☐ No

BASF Wyandotte Corporation

SERVICE REQUISITION TO ANALYTICAL RESEARCH LABORATORIES

SAMPLE IDENTIFICATION 10502

REQUESTOR Ed Pasek DEPT. Anal Chem EXT. 6236 DATE 8-7-81 INTERFACE Ed Pasek

PROJ. NO. 46-1 ANALY. PAG. NO. A 99335

Information Requested GC/MS P.P. scan ext. org.

Description, Source, and History of Material Wyandotte BW-7-A site #2 DNR-Survey

Special Considerations or Priorities expires 8-23-81

Hazards

Copies To Ed Pasek

AUG 7 1981
E.Y. WEISSMAN

ANALYTICAL REPORT

GC/MS.

~~(Highly Halogenated species) Bromochlorodifluoropropane (m.w. 190) Tentative structure = 110 ppm~~

Tetrachlorobutadiene (m.w. 190) — 110 ppm vs. D8 Naphth.

Priority Pollutants found;

B/N

(1) Hexachlorobutadiene (m.w. 258) — 18 ppm vs. D8 Naphth.

Naphthalene = 141 ppm (2) vs. D8 Naphthalene (R.F. = 1.0)

Methylnaphthalene = 190 ppm " " " "

Dimethylnaphthalene = 197 ppm " " " "

benzo (b) fluoranthene = 373 ppm (3) " " " "

chrysene = 223 ppm (4) " " " "

Acid extractables. No acid species found.

Naphthalene = 188 ppm vs. D8 Naphthalene (R.F. = 1.)

Methylnaphthalene = 267 ppm " " " "

Dimethylnaphthalene = 326 ppm " " "

Joel K. Sibul 9/8/81.
Analytical Research Date

7352 REV. 10/79 Printed in U.S.A.

WORK SHEET

Sample I.D. No. 10502 Project No. 46-1

Date Collected 6-16-81

Origin of Sample Wyandotte

BW 7-A Site #2 DNR-Survey

Type of Sample Sediment

Work Done 4. Base Neutral & Acid Extracts

☐ P.P. Scan

Sample I.D. #	Initial vol (ml)		Inital pH		Final pH		Final vol (ml)		ppm-Std.	
	BN	AC	BN	AC	BN	AC	BN	AC	BN	AC

Sludge or other:

	wt (gm)	initial pH	adjusted pH BN	adjusted pH Ac	final vol (ml) BN	final vol (ml) Ac	ISTD BN	ISTD Ac
10502	101.13	5	≥11	≤2	20	1.0	d_8 200 d_{10} 20	d_{10}-60

Pagination # 99333 Extractor M. Dexheimer

Date Extracted 7-23-81 Notebook # 13286-2 pg 30

Expiration Date 8-23-81

a. GC/MS

Date Work Done 9/8/81 Analyst S. Gu

b. Other

dry wt 72.8%

13286-2-32

Notes

Date Work Done _____ Analyst _____

MICROFILM ☐ Yes ☐ No

SERVICE REQUISITION TO ANALYTICAL RESEARCH LABORATORIES

Information Requested GC/MS Extractables Priority Pollutants Screen

Description, Source, and History of Material Wyandotte EPA # 13 BW 12-D DNR - Survey

Special Considerations or Priorities 7-12-81 expires

Hazards

Copies To Ed Panek

JUN 18 1981

SAMPLE IDENTIFICATION 10484

REQUESTOR Ed Panek DEPT. Naul Chem EXT. 6236 DATE 6-15-81 INTERFACE Ed Panek

PROJ. NO. 46-1 ANALY. PAG. NO. A 98921

GC/MS Report. ANALYTICAL REPORT E.Y. WEISSMAN

* Quantitated against Dio-Anthracene Int. Std. (Response factor = 1.0).

10484 BN

No priority pollutants found.

Some Other Compounds found. ①

Toluene = 139 ppm

Lots of P.O. Polyols.

10484 Acid.

Priority = Phenol = 6.0* ppm. ②

Joel K. Sibul 9/9/81.

Analytical Research Date

F 7352 REV. 10/79 Printed in U.S.A.

WORK SHEET

Sample I.D. No. 10484 Project No. 401

Date Collected 6-10-81

Origin of Sample Wyandotte Well BW-12
Site # 3 EPA # 13

Type of Sample H_2O

TYPE OF ANALYSIS

Work Done

☐ 1. Volatile Organics (Purge & Trap)

Pagination No. _____

Expiration Date _____

Date Work Done _____

Analyst _____

☐ 2. Base Neutral & Acid Extracts

Waste Water Book # 10666-3 page # 72

Sample I.D. #	Initial vol (ml)		Initial pH		Final pH		Final vol (ml)		ppm-d-1	
	BN	AC	BN	AC	BN	AC	BN	AC	BN	AC
0484	1000 ml		≥11		≥11	≤2	4.0	1.0	20 do / 200 di	20 do / 200 di

Sludge or other:

ination # 98921 Extractor W. Gilchrist

e Extracted 6/12/81

Requested Metals : Pb, Cd, Zn, Cr, Cu

, Source, and History of Material Wyandotte

etals Blank + 4 ml HNO_3 (1:1)

BW 12 - DM

Considerations or Priorities

To Ed Panek

ANALYTICAL REPORT

All concentrations in ppm

Pb = <0.1
Cd = <.05
Zn = 0.39
Cr = <.05
Cu = <.05

E. Smith 6/18/81

Analytical Research Date

7352 REV. 10/79 Printed in U.S.A.

ITIFICATION 10483 PROJ. NO. 46-1 ANALY. PAG. NO. A 98836

Ed Panek DEPT. Drul Chem EXT. 6236 DATE 6-15-81 INTERFACE Ed Panek

MICROFILM
☐ Yes ☐ No

BASF Wyandotte Corporation

SERVICE REQUISITION TO ANALYTICAL RESEARCH LABORATORIES

Information Requested: Metals: Pb, Cd, Zn, Cr, Cu

Description, Source, and History of Material: Wyandotte BW D-D (4ml HNO3 (1:1))

Special Considerations or Priorities:

Hazards:

Copies To: Ed Panek

SAMPLE IDENTIFICATION: [illegible]

REQUESTOR: Ed Panek DEPT. Anal Chem EXT. 636

PROJ. NO. 4661 DATE 6-15-81

ANALY. PAG. NO. A9887 INTERFACE Ed Panek

ANALYTICAL REPORT

all concentrations in ppm

Pb = <0.1
Cd = <.05
Zn = 0.67
Cr = <.05
Cu = 0.34

E. Smith 6/18/81

Analytical Research Date

F 7352 REV. 10/79 Printed in U.S.A.

MICROFILM
☐ Yes ☐ No

DAP Wyandotte Corporation

SERVICE REQUISITION TO ANALYTICAL RESEARCH LABORATORIES

Information Requested: Metals ~~Pb, Cd, Zn, Cr, Cu~~

Description, Source, and History of Material: Wyandotte EPA #16
BW 12-D Sample 14' Site 3

Special Considerations or Priorities:

Hazards:

Copies To: Ed Panek

ANALYTICAL REPORT

all concentrations in ppm

Pb: <0.1
Cd: <.05
Zn: 1.7
Cr: <.05
Cu: 2.1

E Smith 6/18/81
Analytical Research Date

SAMPLE IDENTIFICATION 10480
REQUESTOR Ed Panek DEPT. Anal Chem EXT. 6236 DATE 6-15-81 INTERFACE Ed Panek
PROJ. NO. 76-1 ANALY. PAG. NO. A 18500

F 7352 REV. 10/79 Printed in U.S.A.

MICROFILM
☐ Yes ☐ No

BASF Wyandotte Corporation

SERVICE REQUISITION TO ANALYTICAL RESEARCH LABORATORIES

Information Requested: Purgeable Priority Pollutant Screen

Description, Source, and History of Material: Wyandotte Sample #14 Site #3 BW 12-D EPA #14

Special Considerations or Priorities: expires June 24, 81

Hazards:

Copies To: Ed Panek

SAMPLE IDENTIFICATION: 10478

REQUESTOR: Ed Panek

DEPT.: Anal Chem

EXT.: 6236

DATE: 6-11-81

INTERFACE: Ed Panek

PROJ. NO.: 46-2

ANALY. PAG. NO.: A 98863

JUN 12 1981

E.Y. WEISSMAN

ANALYTICAL REPORT

CH_2Cl_2	39 ppb	
1,3-dichloropropane	38 ppb	(3)
1,2-dichloropropane	79 ppb	(3)
benzene	8 ppb	(4)
toluene	271 ppb	(5)

J. Huntzinger 6/25/81
Analytical Research Date

Russell D. Ring 6/29/81

F 7352 REV. 10/79 Printed in U.S.A.

MICROFILM
☐ Yes ☐ No

BASF Wyandotte Corporation

SERVICE REQUISITION TO ANALYTICAL RESEARCH LABORATORIES

Information Requested: GC/MS P.P. Scan extrg.

Description, Source, and History of Material: Wyandotte BW 11-B Site #3 DNP-Survey

Special Considerations or Priorities: expires 8-24-81

Hazards:

Copies To: Ed Parek

AUG 7 1981
E.Y. WEISSMAN

SAMPLE IDENTIFICATION: 10505
REQUESTOR: Ed Parek
DEPT.: Anal Chem
EXT.: 6236
DATE: 8-7-81
INTERFACE: Ed Parek
PROJ. NO.: 46-1
ANALY. PAG. NO.: A 99332

GC/MS

ANALYTICAL REPORT

10505 B/N.

(1)

bis(2-chloroisopropyl) ether = 11 ppm vs. D8 Naphthalene std. (R.F. = 1.0).
(Mostly P.O. Polyols) otherwise.

C45 108-60-1

10505 Acid.

No acid extractable priority pollutants found.

Joel K. Sibul 9/2/81
Analytical Research Date

F 7352 REV. 10/79 Printed in U.S.A.

WORK SHEET

Sample I.D. No. 10505 Project No. 46-1

Date Collected 6-16-81

Origin of Sample Wyandotte

BW11-B Site #3 DNR-Survey

Type of Sample Sediment

Work Done 4. Base Neutral & Acid Extracts

P.P. Scan

Sample I.D. #	Initial vol (ml)		Inital pH		Final pH		Final vol (ml)		ppm-Std.	
	BN	AC	BN	AC	BN	AC	BN	AC	BN	AC

Sludge or other:

	wt (gm)	initial pH	adjusted pH BN	adjusted pH Ac	final vol (ml) BN	final vol (ml) Ac	Istd BN	Istd AC
10505	100.04	>11	≥11	≤2	1.0	1.0	d_8 200 d_{10} 20	d_{10} 60

Pagination # 99332 Extractor M. Dexheimer

Date Extracted 7-24-81 Notebook # 13286-2 pg 30

Expiration Date 8-24-81

a. GC/MS

Date Work Done 9/2/81 Analyst Sibul

b. Other

dry weight — 31.4%

13286-2-32

Notes

Date Work Done _____ Analyst _____

MICROFILM
☐ Yes ☐ No

BASF Wyandotte Corporation

SERVICE REQUISITION TO ANALYTICAL RESEARCH LABORATORIES

Information Requested: GC/MS B/N & Ac Extracts Priority Pollutant Screen

Description, Source, and History of Material: Wyandotte BW11-C EPA #20 DNP Survey

Special Considerations or Priorities: expires 7-17-81

Hazards:

Copies To: Ed Panck

JUN 18 1981

E.Y. WEISSMAN

SAMPLE IDENTIFICATION: 10507

REQUESTOR: Ed Panck

DEPT.: Paul Chan

EXT.: 6236

DATE: 6-17-81

INTERFACE: Ed Panck

PROJ. NO.: 41-41

ANALY. PAG. NO.: A 98411

ANALYTICAL REPORT

GC/MS.

Priority Pollutants. B/N

bis(2-chloroisopropyl) ether = 36 ppm (compared to D8 Naphthalene Intl. Std.) ①

pyrene = 103 ppm " " " "

Acid.

Phenol = 49 ppm (v.s. D8 Naphthalene assuming R.F. = 1). ②

Acenaphthylene = 91 ppm (v.s. D10 Anthracene assuming R.F. = 1).

Other.

Benzoic acid = 126 ppm (" " " ")

Joel K. Sibul 7/22/81

Analytical Research Date

F 7352 REV. 10/79 Printed in U.S.A.

ID# 10507

WORK SHEET

2. (Cont'd.)

Base Neutral & Acid Extracts

a. GC/MS

priority pollutant screen

Date Work Done _____ Analyst J Sibul

b. Other BN 7/22/81 Acid 7/31/81

Notes

Date Work Done _____ Analyst _____

3. Metals

Pagination # _____

Date Work Done _____ Analyst _____

4. Other

Notes:

notebook# _____ pg _____

Pagination # _____

Date Work Done _____ Analyst _____

WORK SHEET

Sample I.D. No. 10507 Project No. 46-1

Date Collected 6-16-81

Origin of Sample Wyandotte EPA #20 BW 11-C

Type of Sample H_2O

TYPE OF ANALYSIS

Work Done

☐ 1. Volatile Organics (Purge & Trap)

Pagination No. _____

Expiration Date _____

Date Work Done _____

Analyst _____

☐ 2. Base Neutral & Acid Extracts

notebook # 10666-3 pg 72

Waste Water

Sample I.D. #	Initial vol(ml)		Initial pH		Final pH		Final vol(ml)		ppm-d-1	
	BN	AC	BN	AC	BN	AC	BN	AC	BN	AC
10507	1000 ml	—	~11	—	≥11	≤2	9.0	1.0	200 ds	200 ds
Blank	1000 ml	—	~4	—	≥11	≤2			20 ds	20 ds

Sludge or other:

Pagination # 98911

Date Extracted 6/17/81

Extractor [signature]

MICROFILM
☐ Yes ☑ No

BASF Wyandotte Corporation

SERVICE REQUISITION TO ANALYTICAL RESEARCH LABORATORIES

Information Requested: GC/MS Priority Pollutant Screen

Description, Source, and History of Material: Wyandotte BW 11-C DNR Survey

Special Considerations or Priorities: expires 7-17-81

Hazards:

Copies To: Ed Panek

SAMPLE IDENTIFICATION: 10511
REQUESTOR: Ed Panek
DEPT.: Anal Chem
EXT.: 6216
DATE: 6-17-81
INTERFACE: Ed Panek
PROJ. NO.: 161
ANALY. PAG. NO.: A 98909

GC/MS

ANALYTICAL REPORT

JUN 18 1981
E.Y. WEISSMAN

* Quantitated against D8-Naphthalene assuming 1.00 response factor.

~~Identity questionable due to poor intensities (Retention-time window acceptable).~~

Priority Pollutants. 10511 BN

Pyrene = 50*ppm, Naphthalene = 17*ppm
bis(2-chloroisopropyl) ether = 33 ppm (run against D8 Naphthalene)

Other Compounds.

Aniline = 23*ppm (3)

10511 Acid.

Phenol = 85*ppm (4)
dichlorophenol = 23*ppm (5)
2,4 dimethylphenol = 148*ppm (6)
p-chloro-m-cresol = 19*ppm (7)

J.R. Hibul 9/9/81
Analytical Research Date

F 7352 REV. 10/79 Printed in U.S.A.

10511

WORK SHEET

2. (Cont'd.)

Base Neutral & Acid Extracts

a. GC/MS

priority pollutant screen

Date Work Done 7/9 & 7/11/81 Analyst J Sibul

b. Other

Notes

Date Work Done _____ Analyst _____

3. Metals

Pagination # _____

Date Work Done _____ Analyst _____

4. Other

Notes:

notebook # _____ pg _____

Pagination # _____

Date Work Done _____ Analyst _____

WORK SHEET

Sample I.D. No. 10511 Project No. 46-1

Date Collected 6-16-81

Origin of Sample Wyandotte BW 11-C Site #3

Type of Sample H_2O

TYPE OF ANALYSIS

Work Done

☐ 1. Volatile Organics (Purge & Trap)

Pagination No. _____

Expiration Date _____

Date Work Done _____

Analyst _____

☐ 2. Base Neutral & Acid Extracts

Waste Water notebook # 10666-3 pg 72

Sample I.D. #	Initial vol(ml)		Initial pH		Final pH		Final vol(ml)		ppm-d-1	
	BN	AC	BN	AC	BN	AC	BN	AC	BN	AC
10511	970 ml	—	~11	—	≥ 11	≤ 2	60	1.0	20 dis / 200 ds	20 / 200

Sludge or other:

Pagination # 98909

Date Extracted 6/17/81

expiration date _____

Extractor [signature]

MICROFILM
☐ Yes ☐ No

BASF Wyandotte Corporation

SERVICE REQUISITION TO ANALYTICAL RESEARCH LABORATORIES

Information Requested: Purgeable Priority Pollutant Screen

Description, Source, and History of Material: Wyandotte BW11-C EPA # 22 DNR-Survey

Special Considerations or Priorities: expires 6-30-81

Hazards:

Copies To: Ed Panek

JUN 18 1981

E.Y. WEISSMAN

ANALYTICAL REPORT

~~1,3-dichloropropane~~	~~89 ppb~~	
chloroform	54 ppb	(8)
1,2-dichloropropane	301 ppb	(9)
benzene	10 ppb	(10)
toluene	163 ppb	(11)

SAMPLE IDENTIFICATION: 15510

REQUESTOR: Ed Panek DEPT.: Anal Chem EXT.: 6236 DATE: 6-16-17-81 INTERFACE: Ed Panek

PROJ. NO.: 46 ANALY. PAG. NO.: A 98414

Dal W. Huntinger
J. Cheung 6/30/81
Analytical Research Date
Russell D. Ring 6/30/81

F 7352 REV. 10/79 Printed in U.S.A.

MICROFILM
☐ Yes ☐ No

BASF Wyandotte Corporation

SERVICE REQUISITION TO ANALYTICAL RESEARCH LABORATORIES

Information Requested: Metals: Pb, Cd, Cr, Cu, Zn

Description, Source, and History of Material: Wyandotte BW-C
DNR Survey BW 11C

Special Considerations or Priorities:

Hazards:

Copies To: Ed Panek

JUN 18 1981

E.Y. WEISSMAN

ANALYTICAL REPORT

	ppm	
Pb =	0.7	(12)
Cd =	0.12	(13)
Cu =	0.34	
Cr =	0.2	(14)
Zn =	13.3	

7/10/81 ESP

Analytical Research Date

SAMPLE IDENTIFICATION: 10 513
REQUESTOR: Ed Panek
DEPT.: Anal Chem
EXT.: 6136
DATE: 6-17-81
INTERFACE: Ed Panek
PROJ. NO.: 416-1
ANALY. PAG. NO.: A 43908

F 7352 REV. 10/79 Printed in U.S.A.

MICROFILM
☐ Yes ☐ No

BASF Wyandotte Corporation

SERVICE REQUISITION TO ANALYTICAL RESEARCH LABORATORIES

Information Requested: Metals: Pb, Cd, Cr, Cu, Zn

Description, Source, and History of Material: Wyandotte BWIIC EPA #24 DNR-Survey

Special Considerations or Priorities:

Hazards:

Copies To: Ed Panek

JUN 18 1981
E.Y. WEISSMAN

SAMPLE IDENTIFICATION: 10514
REQUESTOR: Ed Panek
DEPT.: Anal Chem
EXT.: 62 36
DATE: 6-17-81
PROJ. NO.: 46-1
ANALY. PAG. NO.: A 98907
INTERFACE: Ed Panek

ANALYTICAL REPORT

ppm

Pb = 0.2

Cd = 0.1

Cu = 0.26

Cr = <0.05

Zn = 5.4

ESP

7/10/81

Analytical Research — Date

7352 REV. 10/79 Printed in U.S.A.

MICROFILM
☐ Yes ☐ No

BASF Wyandotte Corporation

SERVICE REQUISITION TO ANALYTICAL RESEARCH LABORATORIES

Information Requested: GC/MS Basalin & Trifluralin

Description, Source, and History of Material: Wyandotte
Sample #3 near pilot plant
drum Pad NW of Pilot plant

Special Considerations or Priorities: 8-9-81 would like as soon as possible

Hazards:

Copies To: Ed Panek

JUL 16 1981

SAMPLE IDENTIFICATION: 10457
REQUESTOR: Ed Panek
DEPT.: Anal Chem
EXT.: 6236
DATE: 7-15-81
INTERFACE: Ed Panek
PROJ. NO.: 6-1
ANALY. PAG. NO.: A 99166

ANALYTICAL REPORT

E.Y. WEISSMAN

GC/MS

Basalin. 50ppm of Basalin was run against 20ppm Dio Anthracene intl. std. The basalin result had to be multiplied by 8.3 to obtain the correct result when compared to Dio Anthracene directly. (151)

10457 Basalin = 132ppm if compared directly against Dio Anth.
= 132 x 8.3 = 1100ppm if corrected to the response factor.

workup 13286-2-20

Joel L. Hibel 7/29/81.
Analytical Research Date

F 7352 REV. 10/79 Printed in U.S.A.

BASF Wyandotte Corporation BASF

copy

Subject: DNR-Survey
Basalin + trifluralin
10457 - Sediment

Notebook No. 13286-2 ~~105~~

Project No. 46-1

Work continued from Book No. Page No. Date

7-9-81

101.[illegible] gm of sample total were weighed into 4 centrifuge tubes (250 ml) 75 ml of dest. H_2O was added to each c. tube. The samples were homogenized for 30 sec & their pH adjusted to >11 with 25% NaOH. ~~The~~ 40 ml of $MeCl_2$ was added to each c. tube. The samples were then homogenized for 30 sec, centrifuged for 30 min at 4°C, 30, 3000 rpm. This was repeat [illegible]. The extracts were withdrawn and seperated from the samples using a seperatory funnel. The [illegible] were combined together dried [illegible]

dry % wt.
filter 1.6591 g
filter + soil (wet) 4.06208 gm

dry wt. 3.73884
% dry wt $\frac{2.07474}{2.40294} \times 100$

Sample	initial pH	adjusted pH	final vol (ml)	S/L
10457	6	>11	3.0	200 / 20

Work continued in Book No. 13286-2 Page No. 38

F 3112-D

Work carried out by Marilyn Scott Dexheimer Date 7-9-81

Read and Understood by Ed Panek Date 7/30/81

MICROFILM
☐ Yes ☐ No

BASF Wyandotte Corporation

SERVICE REQUISITION TO ANALYTICAL RESEARCH LABORATORIES

Information Requested: GC/MS extractable org
P.P. Scan + Basalin + trifluralin

Description, Source, and History of Material: Wyandotte Emergency Containment Pond
DNR-Survey

Special Considerations or Priorities: sediment

Hazards:

Copies To: Ed Panek

SAMPLE IDENTIFICATION: 10587
REQUESTOR: Ed Panek
DEPT.: Drul Chong
EXT.: 6236
DATE: 6-30-81
INTERFACE: Ed Panek
PROJ. NO.: 46-1
ANALY. PAG. NO.: A 94059

GC/MS

ANALYTICAL REPORT

JUL 01 1981
E.Y. WEISSMAN

* Quantitated against Dio Anthracene Intl. Std. Assuming R.F. = 1.0

† Identity probable but ~~the~~ absences of correct ion intensities.

10587 BN.

Priority Pollutants found;

Trichlorobenzene — 16*ppm
Naphthalene — 96*ppm ①
Bis(2-chloroisopropyl) Ether ② — 70ppm
Acenaphthene — 29*ppm
Phenanthrene — 39*ppm
† Diethylphthalate — 60*ppm ③
Pyrene — 37*ppm
† Chrysene — 70*ppm ④

Other Compounds

TMSN — 61*ppm
Nonylphenol = 6553*ppm

No Basalin and No trifluralin found.
(Detection limit 25ppm.)

10587 Acid.

p-chloro-m-cresol — 37*ppm ⑤

no Basalin & no Trifluralin (detection limit 25ppm).

Joel K. Sibel — 9/[illegible]/81.
Analytical Research — Date

WORK SHEET

Sample I.D. No. 10587 Project No. 46-1

Date Collected 6-25-81

Origin of Sample Wyandotte

Emergency Containment Pond ONR-Survey

Type of Sample sediment

Work Done 4. Base Neutral & Acid Extracts

☐ P.P. Scan + Basalin & Trifluralin

Sample I.D. #	Initial vol (ml)		Inital pH		Final pH		Final vol (ml)		ppm-Std.	
	BN	AC	BN	AC	BN	AC	BN	AC	BN	AC

Sludge or other:

Sample ID	wt	initial pH	final pH BN	final pH Ac	final vol (ml) BN	final vol (ml) Ac	int std BN	int std Ac
10587	101.77gm	7	>11	<2	16	7.0	d_8 200 d_{10} 20	d_8 200 d_{10} 20

Pagination # 99059 Extractor M. Darheimer

Date Extracted 7-8-81 Notebook # 13286-2 pg 18

Expiration Date 8-8-81

a. GC/MS

Date Work Done 7/9/81 Analyst J Sibul

b. Other

Notes

Date Work Done _____ Analyst _____

MICROFILM
☐ Yes ☐ No

BASF Wyandotte Corporation

SERVICE REQUISITION TO ANALYTICAL RESEARCH LABORATORIES

Information Requested: GC/MS Ext Org. Priority Pollutants

Description, Source, and History of Material: Wyandotte BW 16-A DNR Survey

Special Considerations or Priorities: expires 7-18-81

Hazards:

Copies To: Ed Parek

SAMPLE IDENTIFICATION: 10542

REQUESTOR: Ed Parek DEPT.: Anal EXT.: 6236 DATE: 6-19-81 INTERFACE: Ed Parek

PROJ. NO.: 46-1 ANALY. PAG. NO.: A 98940

GC/MS

ANALYTICAL REPORT

JUN 22 1981
E.Y. WEISSMAN

* Quantitated against D8-Naphthalene Intl. Std. (Response factor = 1.0).

10542 BN

Naphthalene = 2* ppm.

Bis(2-E.H.) phthalate = 23 ppm (1) (Against D10 Anthracene).

Other: P.O. Polyol(s).

Acid.

Phenol = 4 ppm (1) (vs. D8 Naphthalene assuming R.F. = 1.)

2,4 dimethylphenol = 6 ppm (2) " " ").

J.K. Sibul 7/22/81.
Analytical Research Date

.2 REV. 10/79 Printed in U.S.A.

WORK SHEET

Sample I.D. No. 10543 / 10542 Project No. 46-1

Date Collected 6-18-81

Origin of Sample Wyandotte BW16-A
DNR-Survey

Type of Sample H_2O

TYPE OF ANALYSIS

Work Done

☐ 1. Volatile Organics (Purge & Trap)

Pagination No. _____

Expiration Date _____

Date Work Done _____

Analyst _____

10542

☑ 2. Base Neutral & Acid Extracts

notebook # 10666-3 pg 72

Waste Water

Sample I.D. #	Initial vol(ml)		Initial pH		Final pH		Final vol(ml)		ppm-d-1	
	BN	AC	BN	AC	BN	AC	BN	AC	BN	AC
10542	980	980	~10		>11	<2	1.0	1.0	200 ds / 20 dio	200 / 20

Sludge or other:

Pagination # 98940 Extractor Gilchrist

Date Extracted 6/19/81

MICROFILM
☐ Yes ☐ No

BASF Wyandotte Corporation

SERVICE REQUISITION TO ANALYTICAL RESEARCH LABORATORIES

Information Requested: Purgeable: Priority Pollutant Screen

Description, Source, and History of Material: Wyandotte BW 16A
DNR Survey

Special Considerations or Priorities: expires 7-2-81

Hazards:

Copies To: Ed Panek

JUN 22 1981

~~E.Y. WEISSMAN~~

SAMPLE IDENTIFICATION: 10540

REQUESTOR: Ed Panek

DEPT.: Anal Chem

EXT.: 6236

DATE: 6-19-81

INTERFACE: Ed Panek

PROJ. NO.: 16-1

ANALY. PAG. NO.: A 98956

ANALYTICAL REPORT

benzene 18 ppb

toluene 22 ppb

None of the other priority pollutants was detected (<10 ppb).

For Std, see #10510

6/30/81

MICROFILM
☐ Yes ☐ No

BASF Wyandotte Corporation

SERVICE REQUISITION TO ANALYTICAL RESEARCH LABORATORIES

Information Requested: Metals: Pb, Cd, Zn, Cr, Cu

Description, Source, and History of Material: Wyandotte BW16A
DNR - Survey

Special Considerations or Priorities:

Hazards:

Copies To: Ed Panek

JUN 22 1981
E.Y. WEISSMAN

ANALYTICAL REPORT

	ppm
Pb =	0.3
Cd =	<0.05
Cu =	0.12
Cr =	0.3
Zn =	14.7

ESP

7/10/81

Analytical Research Date

F 7352 REV. 10/79 Printed in U.S.A.

SAMPLE IDENTIFICATION 10543
REQUESTOR Ed Panek DEPT. Anal Chem EXT. 6236 DATE 6-19-81 INTERFACE Ed Panek
PROJ. NO. 46-1 ANALY. PAG. NO. A 98946

MICROFILM
☐ Yes ☐ No

BASF Wyandotte Corporation

SERVICE REQUISITION TO ANALYTICAL RESEARCH LABORATORIES

Information Requested: Metals: Pb, Cd, Cu, Cr, Zn

Description, Source, and History of Material: Wyandotte BW17-B
DNR-Survey

Special Considerations or Priorities:

Hazards:

Copies To: Ed Panek

JUN 29 1981

E.Y. WEISSMAN

ANALYTICAL REPORT

Pb

Pb = <0.1
Cd = <0.05
Cu = <0.05
Cr = 0.2
Zn = 4.7

7/10/81 ESP

Analytical Research Date

SAMPLE IDENTIFICATION: 10539
REQUESTOR: Ed Panek
DEPT.: Paul Chaney
EXT.: 6236
DATE: 6-19-81
INTERFACE: Ed Panek
PROJ. NO.: 46-1
ANALY. PAG. NO.: A 98947

F 7352 REV. 10/79 Printed in U.S.A.

WORK SHEET

Sample I.D. No. 10539 Project No. 46-1

Date Collected 6-18-81

Origin of Sample Wyandotte BW17-B Site #4 DNR-Survey

Type of Sample H_2O

TYPE OF ANALYSIS

Work Done

☐ 1. Volatile Organics (Purge & Trap)

Pagination No. _____

Expiration Date _____

Date Work Done _____

Analyst _____

☐ 2. Base Neutral & Acid Extracts

notebook # _____ pg _____

Waste Water

Sample I.D. #	Initial vol(ml)		Initial pH		Final pH		Final vol(ml)		ppm-d-1	
	BN	AC	BN	AC	BN	AC	BN	AC	BN	AC

Sludge or other:

Pagination # _____ Extractor _____

Date Extracted _____

MICROFILM
☐ Yes ☐ No

BASF Wyandotte Corporation

SERVICE REQUISITION TO ANALYTICAL RESEARCH LABORATORIES

Information Requested: Purgeable, Priority Pollutant Screen

Description, Source, and History of Material: Wyandotte BW 17-B DDR-Survey

Special Considerations or Priorities: expires 7-2-81

Hazards:

Copies To: Ed Panek

JUN 22 1981

E.Y. WEISSMAN

ANALYTICAL REPORT

benzene 2190 ppb ①

toluene 1111 ppb ② priority pollutants

ethylbenzene 289 ppb

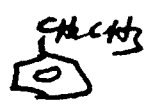
pyridine 156 ppb△ ③

isopropylbenzene 328 ppb*

Xylenes 1838 ppb*

1,2-dimethylethylbenzene 40 ppb*

* assuming RF is the same as $C_{H_2CH_3}$



△ assuming RF is the same as

for std, see #10510

Del W. Huntsinger 6/30/81

SAMPLE IDENTIFICATION 16535

REQUESTOR Ed Panek DEPT. Anal Chem EXT. 6236 DATE 6-19-81 INTERFACE Ed Panek

PROJ. NO. 46-1 ANALY. PAG. NO. A 9845

WORK SHEET

Sample I.D. No. 10535 Project No. 46-1

Date Collected 6-18-81

Origin of Sample Wyandotte BW17-B Site #4

Type of Sample H_2O

TYPE OF ANALYSIS

Work Done

☑ 1. Volatile Organics (Purge & Trap)
priority pollutant scan

Pagination No. 98952

Expiration Date 7-2-81

Date Work Done 6-30-81

Analyst J. Cheung, + D. Huntsinger

☐ 2. Base Neutral & Acid Extracts

notebook # pg

Waste Water

Sample I.D. #	Initial vol(ml)		Initial pH		Final pH		Final vol(ml)		ppm-d-1	
	BN	AC	BN	AC	BN	AC	BN	AC	BN	AC

Sludge or other:

Pagination # _____ Extractor _____

Date Extracted _____

MICROFILM
☐ Yes ☐ No

BASF Wyandotte Corporation

SERVICE REQUISITION TO ANALYTICAL RESEARCH LABORATORIES

Information Requested: GC/MS Ext. Org. Priority Pollutants screen

Description, Source, and History of Material: Wyandotte BW17B DNR-Survey

Special Considerations or Priorities: expires 7-18-81

Hazards:

Copies To: Ed Panek

JUN 22 1981

E.Y. WEISSMAN

SAMPLE IDENTIFICATION: 10536

REQUESTOR: Ed Panek

DEPT.: Dual

EXT.: 636

DATE: 6-19-81

INTERFACE: Ed Panek

PROJ. NO.: 461

ANALY. PAG. NO.: A 98941

GC/MS

ANALYTICAL REPORT

10536 BN

* Quantitated against D_8-Naphthalene Intl. Std. (Assuming Response factor of 1.00)

Priority pollutants found; Naphthalene (Compared to D_8 Naphthalene Intl. Std.).

Naphthalene → 711*ppm

Other Compounds found;

Pyridine — 631*ppm (4)

Xylene — 513*ppm

Ethylpyridine — 385*ppm

Cumene (Isopropylbenzene) — 690*ppm

Acid.

Phenol = 37 ppm vs (5) (D_{10} Anth. = R.F. = 1.0)

Phenanthrene = 54 ppm vs (D_{10} Anth = " ")

Decanoic acid = 150 ppm vs " " " "

p-cresol = 240 ppm vs (6) " " "

Benzoic acid = 226 ppm vs " " "

Phenylacetic acid = 527 ppm vs " " "

Joel K. Sibul 7/9/81

Analytical Research Date

F 7352 REV. 10/79 Printed in U.S.A.

WORK SHEET

Sample I.D. No. 10536

Project No. 46-1

Date Collected 6-18-81

Origin of Sample Wyandotte Bull 7-B Site 4 DNR Survey

Type of Sample H_2O

TYPE OF ANALYSIS

Work Done

☐ 1. Volatile Organics (Purge & Trap)

Pagination No. _____

Expiration Date _____

Date Work Done _____

Analyst _____

☐ 2. Base Neutral & Acid Extracts

P.P. Scan

notebook # 10666-3 pg 72

Waste Water

Sample I.D. #	Initial vol (ml)		Initial pH		Final pH		Final vol (ml)		ppm-d-1	
	BN	AC	BN	AC	BN	AC	BN	AC	BN	AC
10536	950 ml	—	~9	—	≥11	≤2	2.0	1.0	200 / 20	2.0 / 2

Sludge or other:

Pagination # 98941

Date Extracted 6/19/81

expiration

Extractor [signature]

MICROFILM
☐ Yes ☐ No

BASF Wyandotte Corporation

SERVICE REQUISITION TO ANALYTICAL RESEARCH LABORATORIES

Information Requested: GC/MS P.P. Scan Ext Org

Description, Source, and History of Material: Wyandotte BW 17-A Site #4 PNR Survey

Special Considerations or Priorities: expires 8-28-81

Hazards:

Copies To: Ed Parek

AUG 7 1981
E.Y. WEISSMAN

SAMPLE IDENTIFICATION: 10533
REQUESTOR: Ed Parek
DEPT.: Analytical
EXT.: 6236
DATE: 8-7-81
PROJ. NO.: 46-1
INTERFACE: Ed Parek
ANALY. PAG. NO.: 99330

GC/MS ANALYTICAL REPORT

B/N.

Priority Pollutants found:

Naphthalene — 275 ppm vs. D8 Naphthalene R.F. = 1.00 (1)
Fluorene — 110 ppm " " " " (2)
Anthracene — 70 ppm vs. D10 Anthracene R.F. = 1.00
Fluoranthene — 105 ppm " " " " (3)
Pyrene — 94 ppm " " " "
benzo (b) fluoranthene — 67 ppm " " " " (4)
benzo (k) fluoranthene — 119 ppm " " " "

Some Non Priority ~~PNA~~ Aromatics. **B/N**

dimethyl biphenyl m.w. 182 — 35 ppm " " " "
1,2-dimethyl-4-benzylbenzene m.w. 196 — 203 ppm " " "
3-amino-9-ethylcarbazole m.w. 210 — 240 ppm " "
2,5-dimethyl-6-methoxybenzofuran m.w. 232 — 90 ppm " "

ACID No P.P. found.

Joel K. Sibul 9/
Analytical Research Date

F 7352 REV. 10/79 Printed in U.S.A.

WORK SHEET

Sample I.D. No. 10533 Project No. 46-1

Date Collected 6-18-81

Origin of Sample Wyandotte

BW 17-A Site #4 DNR-Survey

Type of Sample Sediment

Work Done 4. Base Neutral & Acid Extracts

☐ P.P. Scan

Sample I.D. #	Initial vol (ml)		Inital pH		Final pH		Final vol (ml)		ppm-Std.	
	BN	AC	BN	AC	BN	AC	BN	AC	BN	AC

Sludge or other:

	wt (gm)	initial pH	adjusted pH BN	adjusted pH Ac	final vol (ml) BN	final vol (ml) Ac	ISTD BN	ISTD AC
10583	100.12	>11	>11	≤2	3.0	1.0	dn 200 dn 30	dn 60

Pagination # 99330 Extractor M. Dexheimer

Date Extracted 7·28·81 Notebook # 13286-2 pg 30

Expiration Date 8·28·81

a. GC/MS

Date Work Done 9/81 Analyst Sibul

b. Other

dry weight — 68.1%

13286-2-44

Notes

Date Work Done _____ Analyst _____

MICROFILM
☐ Yes ☐ No

BASF Wyandotte Corporation

SERVICE REQUISITION TO ANALYTICAL RESEARCH LABORATORIES

Information Requested: GC/MS P.P. scan extrac.

Description, Source, and History of Material: Wyandotte BW 18-B site #5

DNR Survey

Special Considerations or Priorities: expires 8-27-81

Hazards:

Copies To: Ed Parek

AUG 7 1981

E.Y. WEISSMAN

SAMPLE IDENTIFICATION: 10517

REQUESTOR: Ed Parek

DEPT.: Paul Chen

EXT.: 6236

DATE: 8-7-81

PROJ. NO.: 46-1

ANALY. PAG. NO.: A 29331

INTERFACE: Ed Parek

GC/MS. ANALYTICAL REPORT

B/N. *Priority Pollutants.

* Naphthalene	—	564 ppm	vs. D_8 Naphthalene	R.F. = 1.00		(1)
methylnaphthalene	—	108 ppm	"	"	"	"
* acenaphthylene	—	135 ppm	"	"	"	"
* Fluorene	—	113 ppm	"	"	"	" (2)
* Anthracene	—	396 ppm	vs. D_{10} Anthracene	"	= 1.00	
* DOP	—	10 ppm	"	"	"	"
* Fluoranthene	—	281 ppm	"	"	"	" (3)
* Pyrene	—	203 ppm	"	"	"	"
benzo(b) & benzo(k) fluoranthenes		280 ppm	"	"	"	" (4)

Also Dibenzofuran

Acid. No acid extractable P.P. found.

J.K. Libel 9/3/81.

Analytical Research Date

7352 REV. 10/79 Printed in U.S.A.

WORK SHEET

Sample I.D. No. 10517 Project No. 46-1

Date Collected 6-17-81

Origin of Sample Wyandotte

BW 18-B E. end of Site 5 DNR Survey

Type of Sample Sediment

Work Done 4. Base Neutral & Acid Extracts

☐ P.P. Scan

Sample I.D. #	Initial vol (ml)		Inital pH		Final pH		Final vol (ml)		ppm-Std.	
	BN	AC	BN	AC	BN	AC	BN	AC	BN	AC

Sludge or other:

	wt (gm)	initial pH	adjusted pH BN	adjusted pH AC	final vol (ml) BN	final vol (ml) AC	ISTD BN	ISTD AC
10517	100.84	8	≥11	≤2	1.0	1.0	d_5 200 d_{10} 20	d_{10} 60

Pagination # 99331 Extractor M. Dershimer

Date Extracted 7-27-81 Notebook # 13286 pg 30

Expiration Date 8-27-81

a. GC/MS

Date Work Done 9/3/81 Analyst Sibul

b. Other

dry weight — 79.2%

13286-2-32

Notes

Date Work Done _____ Analyst _____

MICROFILM
☐ Yes ☐ No

BASF Wyandotte Corporation

SERVICE REQUISITION TO ANALYTICAL RESEARCH LABORATORIES

Information Requested: Metals. Pb, Cd, Cr, Cu, Zn

Description, Source, and History of Material: Wyandotte BW 18-C
DMP - Survey

Special Considerations or Priorities:

Hazards:

Copies To: Ed Panek

JUN 22 1981

ANALYTICAL REPORT

E.Y. WEISSMAN

ppm

Pb = 0.3

Cd = <.05

Cr = <.05

Cu = ~~0.0~~ 0.34

Zn = 6.3

ESP

7/10/81

Analytical Research Date

SAMPLE IDENTIFICATION

REQUESTOR

DEPT.

EXT.

DATE

INTERFACE

PROJ. NO.

ANALY. PAG. NO. A

F 7352 REV. 10/79 Printed in U.S.A.

MICROFILM
☐ Yes ☑ No

BASF Wyandotte Corporation

SERVICE REQUISITION TO ANALYTICAL RESEARCH LABORATORIES

Information Requested: Metals: Pb, Cd, Cr, Cu, Zn

Description, Source, and History of Material: Wyandotte BW 18-C DNR-Survey

Special Considerations or Priorities:

Hazards:

Copies To: Ed Panek

SAMPLE IDENTIFICATION: 10526

REQUESTOR: Ed Panek

DEPT.: Anal Chem

EXT.: 226

DATE: 6-19-81

PROJ. NO.: 461

ANALY. PAG. NO.: A 9394

INTERFACE: Ed Panek

ANALYTICAL REPORT

JUN 22 1981

E.Y. WEISSMAN

	ppm
Pb =	<0.1
Cd =	<0.05
Cr =	<0.05
Cu =	0.07
Zn =	6.2

EJP

7/10/81

Analytical Research Date

F 7352 REV. 10/79 Printed in U.S.A.

MICROFILM
☐ Yes ☐ No

BASF Wyandotte Corporation

SERVICE REQUISITION TO ANALYTICAL RESEARCH LABORATORIES

SAMPLE IDENTIFICATION 10521

REQUESTOR Ed Panok DEPT. Anal Chem EXT. 6236 DATE 6-19-81 INTERFACE Ed Panok

PROJ. NO. 761 ANALY. PAG. NO. A 98459

Information Requested Purgeable Priority Pollutants Screen

Description, Source, and History of Material Wyandotte BW 18-C EPA #27 DRP-Survey

Special Considerations or Priorities expires ~~7-2-81~~ 7-1-81

Hazards

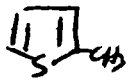
Copies To Ed Panok

JUN 22 1981

E.Y. WEISSMAN

ANALYTICAL REPORT

benzene	1143 ppb	① ② priority pollutants
toluene	530 ppb	
ethylbenzene	34 ppb	
xylenes	342 ppb △	
thiophene	64 ppb *	
2-methylthiophene	67 ppb *	
benzofuran	343 ppb *	
indane	124 ppb *	
indene	1305 ppb *	



* assuming RRF = 1

△ assuming RF is the same as CH_2CH_3

For std, see #10510

J. Cheung 6/30/81

Analytical Research Date

Russell D. Ring 6/30/81

F 7352 REV. 10/79 Printed in U.S.A.

MICROFILM
☐ Yes ☐ No

BASF Wyandotte Corporation

SERVICE REQUISITION TO ANALYTICAL RESEARCH LABORATORIES

Information Requested: GC/MS: Extractable Organics priority pollutant Screen

Description, Source, and History of Material: Wyandotte BW 18-C DNR-Survey

Special Considerations or Priorities: expires 7-17-81

Hazards:

Copies To: Ed Panek

JUN 29 1981

SAMPLE IDENTIFICATION: 10523

REQUESTOR: Ed Panek

DEPT.: Anal

EXT.: 6236

DATE: 6-19-81

PROJ. NO.: 416-1

INTERFACE: Ed Panek

ANALY. PAG. NO.: A 98944

ANALYTICAL REPORT

E.Y. WEISSMAN

GC/MS

Priority Pollutants; B/N

Naphthalene = 2127 ppm (3) (Compared to D8 Naphthalene Intl. Std.).
Fluorene = 30 ppm (4) " " " " "
Bis(2E.H.)Phthalate = 450 ppm (5) (Compared to D10-Anthracene Intl. Std.).

Other Compounds;

Bis(2E.H.)Adipate. = 612 ppm " " " " " "
Aniline = 16 ppm (6) " " " " " " .

Acid.

Naphthalene = 553 ppm (7) (vs. D8 Naphthalene intl. std. assuming R.F. = 1).
Phenol = 213 ppm (8) " " " " "
2,4 dimethylphenol = 119 ppm " (9) " " " "
ethylphenol or x,y dimethylphenol = 50 ppm " " " " "
Methylphenylacetylene = 121 ppm " " " " "
p-Cresol = 254 ppm " (10) " " " "

Joel K. Sibul 7/22/81.
Analytical Research Date

F 7352 REV. 10/79 Printed in U.S.A.

WORK SHEET

Sample I.D. No. 10523 Project No. 46-1

Date Collected 6-17-81

Origin of Sample Wyandotte BW 18-C
Site S DNR - Survey

Type of Sample H_2O

TYPE OF ANALYSIS

Work Done

☐ 1. Volatile Organics (Purge & Trap)

Pagination No. _____

Expiration Date _____

Date Work Done _____

Analyst _____

☐ 2. Base Neutral & Acid Extracts

notebook # 10666-3 pg 72

Waste Water

Sample I.D. #	Initial vol (ml)		Initial pH		Final pH		Final vol (ml)		ppm-d-1	
	BN	AC	BN	AC	BN	AC	BN	AC	BN	AC
10523	980 mls	—	[illegible]	[illegible]	≥11	≤2	1.0	1.0	200 ds / 80 dw	200 / 2[illegible]

Sludge or other:

Pagination # 98944

Date Extracted 6/19/81

expiration date 7-17-81

Extractor [signature]

GROUNDWATER EXTRACTION WELLS
NORTH WORKS

1987

Date	Sample	mg/l			
		$MeCl_2$	$CHCl_3$	EDC	PDC
1-8-87	Feed to #1 Absorber S	3	29	40	6302
1-8-87	Feed to #2 Absorber N	<1	0	<1	16
1-8-87	Disc. to Sewer	<1	0	0	<1
1-12-87	Feed to #1 Absorber S	1	23	25	3206
1-12-87	Feed to #2 Absorber N	<1	0	<1	8
1-12-87	Disc. to Sewer	<1	0	0	<1
1-13-87	Feed to #1 Absorber S	1	4	5	1167
1-13-87	Feed to #2 Absorber N	<1	0	<1	14
1-13-87	Disc. to Sewer	0	0	0	<1
1-15-87	Feed to #1 Absorber S	1	16	10	2169
1-15-87	Feed to #2 Absorber N	<1	<1	<1	16
1-15-87	Disc. to Sewer	0	0	0	1
1-16-87	Feed to #1 Absorber S	1	34	42	5559
1-16-87	Feed to #2 Absorber N	<1	<1	<1	3
1-16-87	Disc. to Sewer	<1	0	0	0
1-19-87	Feed to #1 Absorber S				
1-19-87	Feed to #2 Absorber N	0	2	2	30
1-19-87	Disc. to Sewer	0	0	0	0
1-20-87	Feed to #1 Absorber S	1	53	72	17,530
1-20-87	Feed to #2 Absorber N	0	4	13	109
1-20-87	Disc. to Sewer	0	0	0	0

GROUNDWATER EXTRACTION WELLS
NORTH WORKS

Date	Sample	mg/l			
		$MeCl_2$	$CHCl_3$	EDC	PDC
1-21-87	Feed to #1 Absorber S				
1-21-87	Feed to #2 Absorber N	<1	25	42	527
1-21-87	Disc. to Sewer	0	0	0	0
1-22-87	Feed to #1 Absorber S	4	82	76	12557
1-22-87	Feed to #2 Absorber N	<1	16	30	875
1-22-87	Disc. to Sewer	0	0	0	<1
1-23-87	Feed to #1 Absorber S	4	14	10	4539
1-23-87	Feed to #2 Absorber N	1	12	10	1806
1-23-87	Disc. to Sewer	0	0	0	<1
	New Carbon Charged To South Absorber 1-27-87				
1-29-87	Feed to #1 Absorber N	1	7	4	1560
1-29-87	Feed to #2 Absorber S	0	<1	<1	36
1-29-87	Disc. to Sewer	0	0	0	<1
1-30-87	Feed to #1 Absorber N	1	29	29	13907
1-30-87	Feed to #2 Absorber S	<1	<1	<1	18
1-30-87	Disc. to Sewer	0	0	0	<1
2-2-87	Feed to #1 Absorber N	1	14	8	3594
2-2-87	Feed to #2 Absorber S	<1	<1	<1	16
2-2-87	Disc. to Sewer	0	0	0	9
2-3-87	Feed to #1 Absorber N	1	50	133	8035
2-3-87	Feed to #2 Absorber S	<1	<1	<1	17
2-3-87	Disc. to Sewer	0	0	0	1

GROUNDWATER EXTRACTION WELLS
NORTH WORKS

Date	Sample	mg/l			
		$MeCl_2$	$CHCl_3$	EDC	PDC
2-4-87	Feed to #1 Absorber N	1	65	312	8251
2-4-87	Feed to #2 Absorber S	<1	0	<1	8
2-4-87	Disc. to Sewer	0	0	0	1
2-5-87	Feed to #1 Absorber N				
2-5-87	Feed to #2 Absorber S	0	0	<1	12
2-5-87	Disc. to Sewer				
2-6-87	Feed to #1 Absorber N	3	63	183	7378
2-6-87	Feed to #2 Absorber S	0	0	<1	3
2-6-87	Disc. to Sewer	0	0	0	<1
2-9-87	Feed to #1 Absorber N	4	89	243	16982
2-9-87	Feed to #2 Absorber S	0	2	1	1433
2-9-87	Disc. to Sewer	0	0	0	7
2-10-87	Feed to #1 Absorber N	4	101	63	10208
2-10-87	Feed to #2 Absorber S	2	3	3	713
2-10-87	Disc. to Sewer	0	0	<1	1
2-11-87	Feed to #1 Absorber N	3	70	31	7869
2-11-87	Feed to #2 Absorber S	1	6	3	321
2-11-87	Disc. to Sewer	0	0	<1	4
2-12-87	Feed to #1 Absorber N	3	101	69	8241
2-12-87	Feed to #2 Absorber S	1	9	7	780
	Disc. to Sewer				

New Carbon Charged To North Absorber 2-12-87

GROUNDWATER EXTRACTION WELLS
NORTH WORKS

New Carbon Charged To North Absor. 2-12-87

Date	Sample	$MeCl_2$ (mg/l)	$CHCl_3$ (mg/l)	EDC (mg/l)	PDC (mg/l)
2-13-87	Feed to #1 Absorber S	3	54	47	7238
2-13-87	Feed to #2 Absorber N	0	0	<1	71
2-13-87	Disc. to Sewer	0	0	<1	37 *
* Feed Ground Water Valve To North Absor. Might leak, or Feed Ground water Valve To Sewer Might leak.					
2-16-87	Feed to #1 Absorber S	3	85	55	3786
2-16-87	Feed to #2 Absorber N	0	0	0	4
2-16-87	Disc. to Sewer	0	<1	<1	19 *
2-17-87	Feed to #1 Absorber S	0	46	20	1123
2-17-87	Feed to #2 Absorber N	0	0	<1	1
2-17-87	Disc. to Sewer	0	<1	<1	4
Switched Absor. Flows. (South discharging To sewer) *					
	Feed to #1 Absorber				
	Feed to #2 Absorber S				
2-17-87	Disc. to Sewer *	0	<1	<1	5
Absor. Flows - Feed To South - South To North - North To Sewer					
2-18-87	Feed to #1 Absorber S	0	46	26	415
2-18-87	Feed to #2 Absorber N	0	0	<1	1
2-18-87	Disc. to Sewer	0	0	<1	1
2-19-87	Feed to #1 Absorber S	0	21	29	310
2-19-87	Feed to #2 Absorber N	0	0	<1	1
2-19-87	Disc. to Sewer	0	0	<1	1
2-20-87	Feed to #1 Absorber S	0	32	38	520
2-20-87	Feed to #2 Absorber N	0	0	<1	2
2-20-87	Disc. to Sewer	0	0	<1	2

GROUNDWATER EXTRACTION WELLS
NORTH WORKS

Date	Sample	mg/l			
		$MeCl_2$	$CHCl_3$	EDC	PDC
2-23-87	Feed to #1 Absorber S	0	21	34	366
2-23-87	Feed to #2 Absorber N	0	0	<1	2
2-23-87	Disc. to Sewer	0	0	<1	1
2-24-87	Feed to #1 Absorber S	6	21	40	750
2-24-87	Feed to #2 Absorber N	<1	<1	<1	4
2-24-87	Disc. to Sewer	0	0	<1	1
2-25-87	Feed to #1 Absorber S	<1	21	11	670
2-25-87	Feed to #2 Absorber N	0	<1	<1	4
2-25-87	Disc. to Sewer	0	0	0	1
2-26-87	Feed to #1 Absorber S	<1	14	19	396
2-26-87	Feed to #2 Absorber N	<1	2	1	12
2-26-87	Disc. to Sewer	0	<1	<1	3
2-27-87	Feed to #1 Absorber S	<1	72	125	15748
2-27-87	Feed to #2 Absorber N	<1	4	7	37[illegible]
2-27-87	Disc. to Sewer	<1	<1	<1	34
3-2-87	Feed to #1 Absorber S	27	72	94	1321
3-2-87	Feed to #2 Absorber N	11	29	53	569
3-2-87	Disc. to Sewer	<1	<1	<1	4
3-3-87	Feed to #1 Absorber S	14	36	78	1372
3-3-87	Feed to #2 Absorber N	11	29	62	701
3-3-87	Disc. to Sewer	0	0	<1	2

GROUNDWATER EXTRACTION WELLS
NORTH WORKS

Date	Sample	mg/l			
		$MeCl_2$	$CHCl_3$	EDC	PDC
3-4-87	Feed to #1 Absorber S	54	36	62	1092
3-4-87	Feed to #2 Absorber N	22	29	59	650
3-4-87	Disc. to Sewer	0	0	<1	2
3-5-87	Feed to #1 Absorber S	48	72	78	1676
3-5-87	Feed to #2 Absorber N	7	42	60	807
3-5-87	Disc. to Sewer	0	0	1	2
New Carbon Charged To South Absor. 3-6-87					
3-9-87	Feed to #1 Absorber N	0	28	36	3376
3-9-87	Feed to #2 Absorber S	0	<1	<1	25
3-9-87	Disc. to Sewer	0	<1	<1	21
3-10-87	Feed to #1 Absorber N	125	50	101	6049
3-10-87	Feed to #2 Absorber S	0	<1	<1	26
3-10-87	Disc. to Sewer	0	<1	<1	23
3-11-87	Feed to #1 Absorber N	96	46	69	7258
3-11-87	Feed to #2 Absorber S	0	<1	<1	20
3-11-87	Disc. to Sewer	0	<1	<1	24
3-12-87	Feed to #1 Absorber N	332	69	79	7517
3-12-87	Feed to #2 Absorber S	0	0	<1	18
3-12-87	Disc. to Sewer	0	<1	<1	18
3-13-87	Feed to #1 Absorber N	201	46	88	7582
3-13-87	Feed to #2 Absorber S	0	0	<1	19
3-13-87	Disc. to Sewer	0	0	<1	15

GROUNDWATER EXTRACTION WELLS
NORTH WORKS

Date	Sample	mg/l			
		$MeCl_2$	$CHCl_3$	EDC	PDC
3-16-87	Feed to #1 Absorber N	2	42	88	6418
3-16-87	Feed to #2 Absorber S	0	0	<1	7
3-16-87	Disc. to Sewer	0	0	<1	9
3-17-87	Feed to #1 Absorber N	46	7	30	2187
3-17-87	Feed to #2 Absorber S	0	0	<1	8
3-17-87	Disc. to Sewer	0	0	<1	10
3-18-87	Feed to #1 Absorber N	51	56	122	11246
3-18-87	Feed to #2 Absorber S	0	0	<1	12
3-18-87	Disc. to Sewer	0	0	<1	15
3-19-87	Feed to #1 Absorber N	76	56	96	7040
3-19-87	Feed to #2 Absorber S	0	0	<1	9
3-19-87	Disc. to Sewer	0	<1	<1	22
3-20-87	Feed to #1 Absorber N	43	42	64	7075
3-20-87	Feed to #2 Absorber S	0	0	<1	7
3-20-87	Disc. to Sewer	0	0	<1	14
3-23-87	Feed to #1 Absorber N	2	42	68	7357
3-23-87	Feed to #2 Absorber S	<1	1	2	14
3-23-87	Disc. to Sewer	0	0	<1	4
3-24-87	Feed to #1 Absorber N	14	70	72	7427
3-24-87	Feed to #2 Absorber S	1	17	52	132
3-24-87	Disc. to Sewer	0	0	<1	8

GROUNDWATER EXTRACTION WELLS
NORTH WORKS

3-26-87 Replaced Valves (Absor.)
3-27-87 New Carbon Charged To North Absor.

Date	Sample	$MeCl_2$ (mg/l)	$CHCl_3$ (mg/l)	EDC (mg/l)	PDC (mg/l)
3-30-87	Feed to #1 Absorber S	2	28	28	3643
3-30-87	Feed to #2 Absorber N	0	<1	<1	11
3-30-87	Disc. to Sewer	0	<1	<1	4
3-31-87	Feed to #1 Absorber S	10	37	54	2843
3-31-87	Feed to #2 Absorber N	0	<1	<1	21
3-31-87	Disc. to Sewer	<1	<1	<1	3
4-1-87	Feed to #1 Absorber S	48	39	56	3155
4-1-87	Feed to #2 Absorber N	<1	<1	<1	17
4-1-87	Disc. to Sewer	0	<1	<1	2
4-2-87	Feed to #1 Absorber S	11	34	49	2805
4-2-87	Feed to #2 Absorber N	<1	<1	<1	13
4-2-87	Disc. to Sewer	0	<1	<1	1
4-3-87	Feed to #1 Absorber S	2	38	54	3184
4-3-87	Feed to #2 Absorber N	0	<1	<1	20
4-3-87	Disc. to Sewer	0	<1	<1	1
4-6-87	Feed to #1 Absorber S	<1	35	46	2486
4-6-87	Feed to #2 Absorber N	0	<1	<1	11
4-6-87	Disc. to Sewer	0	0	<1	1
4-7-87	Feed to #1 Absorber S	0	40	49	3184
4-7-87	Feed to #2 Absorber N	0	<1	<1	13
4-7-87	Disc. to Sewer	0	<1	<1	1

GROUNDWATER EXTRACTION WELLS
NORTH WORKS

Date	Sample	mg/l			
		$MeCl_2$	$CHCl_3$	EDC	PDC
4-8-87	Feed to #1 Absorber S	0	34	54	2810
4-8-87	Feed to #2 Absorber N	0	<1	<1	16
4-8-87	Disc. to Sewer	0	<1	<1	1
4-9-87	Feed to #1 Absorber S	0	36	57	3464
4-9-87	Feed to #2 Absorber N	0	<1	<1	11
4-9-87	Disc. to Sewer	0	<1	<1	1
4-10-87	Feed to #1 Absorber S	0	32	49	2580
4-10-87	Feed to #2 Absorber N	0	<1	<1	12
4-10-87	Disc. to Sewer	0	<1	<1	1
4-13-87	Feed to #1 Absorber S	2	41	60	2943
4-13-87	Feed to #2 Absorber N	0	<1	<1	8
4-13-87	Disc. to Sewer	0	<1	<1	1
4-14-87	Feed to #1 Absorber S	0	37	59	3067
4-14-87	Feed to #2 Absorber N	0	<1	<1	13
4-14-87	Disc. to Sewer	0	<1	<1	1
4-15-87	Feed to #1 Absorber S	3	43	66	3233
4-15-87	Feed to #2 Absorber N	0	<1	<1	16
4-15-87	Disc. to Sewer	0	<1	<1	1
4-16-87	Feed to #1 Absorber S	2	46	63	3497
4-16-87	Feed to #2 Absorber N	<1	<1	<1	20
4-16-87	Disc. to Sewer	0	<1	<1	1

GROUNDWATER EXTRACTION WELLS
NORTH WORKS

Date	Sample	mg/l			
		$MeCl_2$	$CHCl_3$	EDC	PDC
4-17-87	Feed to #1 Absorber S	2	43	58	3311
4-17-87	Feed to #2 Absorber N	<1	<1	<1	15
4-17-87	Disc. to Sewer	0	<1	<1	1
				4-20-87	284,225 Gals.
4-20-87	Feed to #1 Absorber S	2	33	54	3147
4-20-87	Feed to #2 Absorber N	1	36	65	248
4-20-87	Disc. to Sewer	0	<1	<1	1
		4-21-87		289,049 Total Gals.	
4-21-87	Feed to #1 Absorber S	2	38	66	3710
4-21-87	Feed to #2 Absorber N	1	44	78	547
4-21-87	Disc. to Sewer	<1	<1	<1	1
		4-22-87		293,643 Total Gals.	
4-22-87	Feed to #1 Absorber S	2	40	64	4234
4-22-87	Feed to #2 Absorber N	1	49	85	982
4-22-87	Disc. to Sewer	0	<1	<1	1
		4-23-87		297,996 Total Gals.	
4-23-87	Feed to #1 Absorber S	3	60	85	6166
4-23-87	Feed to #2 Absorber N	1	53	95	1091
4-23-87	Disc. to Sewer	0	<1	<1	1
4-24-87 New Carbon Charged To South Absor.					
4-27-87	Feed to #1 Absorber N	1	56	70	4817
4-27-87	Feed to #2 Absorber S	0	1	1	27
4-27-87	Disc. to Sewer	0	<1	<1	3
		4-27-87-16,604 Total Gals.			
4-28-87	Feed to #1 Absorber N	1	41	59	3652
4-28-87	Feed to #2 Absorber S	0	<1	<1	9
4-28-87	Disc. to Sewer	0	<1	<1	3
		4-28-87- 23,028 Total Gals.			

GROUNDWATER EXTRACTION WELLS
NORTH WORKS

Date	Sample	mg/l $MeCl_2$	$CHCl_3$	EDC	PDC
4-29-87	Feed to #1 Absorber N	1	51	58	4124
4-29-87	Feed to #2 Absorber S	0	<1	<1	8
4-29-87	Disc. to Sewer	0	<1	<1	1
Through New Carbon		4-29-87	38,992 Total Gals.		
4-30-87	Feed to #1 Absorber N	1	55	63	4340
4-30-87	Feed to #2 Absorber S	0	<1	<1	4
4-30-87	Disc. to Sewer	0	<1	<1	1
Through New Carbon		4-30-87	53,996 Total Gals.		
5-1-87	Feed to #1 Absorber N	1	49	66	4912
5-1-87	Feed to #2 Absorber S	0	<1	<1	5
5-1-87	Disc. to Sewer	0	<1	<1	1
Through New Carbon		5-1-87	68,907 Total Gals.		
5-4-87	Feed to #1 Absorber N	<1	53	63	4295
5-4-87	Feed to #2 Absorber S	0	<1	<1	4
5-4-87	Disc. to Sewer	0	<1	<1	1
Through New Carbon		5-4-87	94,412 Total Gals.		
5-5-87	Feed to #1 Absorber N	3	48	63	4218
5-5-87	Feed to #2 Absorber S	0	<1	<1	3
5-5-87	Disc. to Sewer	0	<1	<1	1
Through New Carbon		5-5-87	104,285 Total Gals.		
5-8-87	Feed to #1 Absorber N	9	41	55	3348
5-8-87	Feed to #2 Absorber S	<1	<1	<1	3
5-8-87	Disc. to Sewer	<1	<1	<1	1
Through New Carbon		(5-8-87) 132,109 Total Gals.			
5-11-87	Feed to #1 Absorber N	6	12	19	1488
5-11-87	Feed to #2 Absorber S	<1	3	8	13
5-11-87	Disc. to Sewer	<1	<1	<1	1
Through New Carbon		5-11-87	190,597 Total Gals.		

GROUNDWATER EXTRACTION WELLS
NORTH WORKS

Date	Sample	mg/l $MeCl_2$	$CHCl_3$	EDC	PDC
5-12-87	Feed to #1 Absorber N.	5	9	13	1012
5-12-87	Feed to #2 Absorber S	0.743	5	6	77
5-12-87	Disc. to Sewer	0.003	0.151	0.201	2
5-12-87	Total Gals. Through New Carbon	207,940			
5-13-87	Feed to #1 Absorber N	5	10	17	563
5-13-87	Feed to #2 Absorber S	1.180 / 1.126	72 / 67	99 / 97	517 / 520
5-13-87	Disc. to Sewer	0.012	0.017	0.031	0.900
5-13-87	Total Gals. Through New Carbon	224,169			
5-14-87	Feed to #1 Absorber N	1.132	4	10	356
5-14-87	Feed to #2 Absorber S	1.129	81	110	966
5-14-87	Disc. to Sewer	0.005	0.023	0.044	1.011
5-14-87	Total Gals. Through New Carbon			243,586 / 240,131	
	Feed to #1 Absorber	System Down @ 4 pm 5-16-87.			
	Feed to #2 Absorber	Carbon Plugged Discharge Line.			
	Disc. to Sewer	North Absor. Had 2 Nozzles Missing and several loose Nozzles.			
5-15-87	Charged New Carbon To North Absorber.				
5-16-87	Total Gals. Through New Carbon	16,715			
5-25-87	Feed to #1 Absorber S	0.212	5	7	324
5-25-87	Feed to #2 Absorber N	0.006	0.586	0.294	13
5-25-87	Disc. to Sewer	0.000	0.003	0.001	0.041
5-22-87	Charged New Carbon To North Absorber.				
5-25-87	Total Gals. Through New Carbon	56,077			
5-26-87	Feed to #1 Absorber S	0.696	2	6	230
5-26-87	Feed to #2 Absorber N	0.003	0.250	0.210	10
5-26-87	Disc. to Sewer	0.001	0.000	0.000	0.026
5-26-87	Total Gals. Through New Carbon	76,579			
5-27-87	Feed to #1 Absorber S	0.695	2	8	178
5-27-87	Feed to #2 Absorber N	0.005	0.139	0.190	7
5-27-87	Disc. to Sewer	0.000	0.000	0.001	0.024
5-27-87	Total Gals. Through New Carbon	96,263			

GROUNDWATER EXTRACTION WELLS
NORTH WORKS

Date	Sample	mg/l			
		$MeCl_2$	$CHCl_3$	EDC	PDC
5-28-87	Feed to #1 Absorber S	0.675	2	3	151
5-28-87	Feed to #2 Absorber N	0.004	0.046	0.068	3
5-28-87	Disc. to Sewer	0.000	0.000	0.001	0.009
5-28-87	Total Gals. Through New Carbon	114,319			
5-29-87	Feed to #1 Absorber S	0.376	1	3	134
5-29-87	Feed to #2 Absorber N	0.000	0.036	0.054	3
5-29-87	Disc. to Sewer	0.000	0.000	0.000	0.008
5-29-87	Total Gals. Through New Carbon	133,179			
6-1-87	Feed to #1 Absorber S	0.447	2	3	179
6-1-87	Feed to #2 Absorber N	0.003	0.044	0.049	3
6-1-87	Disc. to Sewer	0.000	0.000	0.001	0.011
6-1-87	Total Gals. Through New Carbon	187,631			
6-2-87	Feed to #1 Absorber S	0.484	2	3	140
6-2-87	Feed to #2 Absorber N	0.003	0.019	0.034	2
6-2-87	Disc. to Sewer	0.000	0.000	0.000	0.005
6-2-87	Total Gals. Through New Carbon	205,261			
6-3-87	Feed to #1 Absorber S	3	1	7	119
6-3-87	Feed to #2 Absorber N	0.009	0.015	0.033	3
6-3-87	Disc. to Sewer	0.013	0.003	0.003	0.004
6-3-87	Total Gals. Through New Carbon	223,306			
6-4-87	Feed to #1 Absorber S	2	1	3	120
6-4-87	Feed to #2 Absorber N	0.004	0.009	0.027	2
6-4-87	Disc. to Sewer	0.002	0.000	0.000	0.006
6-4-87	Total Gals. Through New Carbon	241,307			
6-5-87	Feed to #1 Absorber S	0.631	2	4	170
6-5-87	Feed to #2 Absorber N	0.003	0.009	0.027	2
6-5-87	Disc. to Sewer	0.002	0.000	0.000	0.006
6-5-87	Total Gals. Through New Carbon	258,203			

GROUNDWATER EXTRACTION WELLS
NORTH WORKS

Date	Sample	mg/l			
		$MeCl_2$	$CHCl_3$	EDC	PDC
6-8-87	Feed to #1 Absorber S	0.502	2	3	162
6-8-87	Feed to #2 Absorber N	0.003	0.015	0.023	1
6-8-87	Disc. to Sewer	0.001	0.000	0.000	0.005
6-8-87	Total Gals. Through New Carbon 308,060				
6-9-87	Feed to #1 Absorber S	0.568	2	7	162
6-9-87	Feed to #2 Absorber N	0.001	0.066	0.018	0.909
6-9-87	Disc. to Sewer	0.000	0.000	0.000	0.003
6-9-87	Total Gals. Through New Carbon 325,200				
6-10-87	Feed to #1 Absorber S	0.574	2	9	172
6-10-87	Feed to #2 Absorber N	0.002	0.009	0.019	0.812
6-10-87	Disc. to Sewer	0.000	0.000	0.000	0.003
6-10-87	Total Gals. Through New Carbon 342,462				
6-11-87	Feed to #1 Absorber S	0.492	2	7	183
6-11-87	Feed to #2 Absorber N	0.000	0.007	0.024	2
6-11-87	Disc. to Sewer	0.000	0.000	0.000	0.008
6-11-87	Total Gals. Through New Carbon 359,304				
6-12-87	Feed to #1 Absorber S	0.454	2	7	136
6-12-87	Feed to #2 Absorber N	0.002	0.008	0.020	1
6-12-87	Disc. to Sewer	0.000	0.000	0.000	0.003
6-12-87	Total Gals. Through New Carbon 377,152				
6-15-87	Feed to #1 Absorber S	0.538	2	7	157
6-15-87	Feed to #2 Absorber N	0.001	0.008	0.017	1
6-15-87	Disc. to Sewer	0.002	0.003	0.002	0.004
6-15-87	Total Gals Through New Carbon 395,030				
6-22-87	Feed to #1 Absorber N	0.280	1	4	113
6-22-87	Feed to #2 Absorber S	0.004	.008	0.006	0.679
6-22-87	Disc. to Sewer	0.000	0.000	0.001	0.196

6-19-87 New Carbon Charged To South Absor.

6-22-87 Total Gals. Through New Carbon 45,963

6-22-87 Total Gals. 45,963

GROUNDWATER EXTRACTION WELLS
NORTH WORKS

Date	Sample	mg/l MeCl2	CHCl3	EDC	PDC
6-23-87	Feed to #1 Absorber N.	0.710	8	21	670
6-23-87	Feed to #2 Absorber S	0.000	0.002	0.002	0.379
6-23-87	Disc. to Sewer	0.000	0.012	0.005	0.199
6-23-87	Total Gals. Through New Carbon 60,146				
6-24-87	Feed to #1 Absorber N	0.520	5	18	431
6-24-87	Feed to #2 Absorber S	0.000	0.002	0.003	0.324
6-24-87	Disc. to Sewer	0.002	0.004	0.004	0.173
6-24-87	Total Gals. Through New Carbon 72,874				
6-25-87	Feed to #1 Absorber N	1.3	31	67	1085
6-25-87	Feed to #2 Absorber S	0.003	0.004	0.005	0.196
6-25-87	Disc. to Sewer	0.000	0.000	0.001	0.156
6-25-87	Total Gals. Through New Carbon 86,129				
6-26-87	Feed to #1 Absorber N	.718	19	40	960
6-26-87	Feed to #2 Absorber S	0.000	0.012	0.031	1.8
6-26-87	Disc. to Sewer	0.000	0.000	0.003	0.168
6-26-87	Total Gals. Through New Carbon 108,366				
6-29-87	Feed to #1 Absorber N	.804	25	50	1118
6-29-87	Feed to #2 Absorber S	0.008	0.005	0.006	0.439
6-29-87	Disc. to Sewer	0.000	0.004	0.008	0.536
6-29-87	Tot. Gals. Through New Carbon 181,388				
6-30-87	Feed to #1 Absorber N	0.000	1.65	4	198
6-30-87	Feed to #2 Absorber S	0.000	0.001	0.002	0.263
6-30-87	Disc. to Sewer	0.000	0.000	0.002	0.326
6-30-87	Tot. Gals. Through New Carbon 192,835				
7-1-87	Feed to #1 Absorber N	0.677	15	35	1315
7-1-87	Feed to #2 Absorber S	0.006	0.003	0.003	0.140
7-1-87	Disc. to Sewer	0.000	0.000	0.001	0.083

7-1-87 Tot. Gals. Through New Carbon 213,599

7-1-87 Tot. Gals. 213,599

GROUNDWATER EXTRACTION WELLS
NORTH WORKS

Date	Sample	mg/l			
		$MeCl_2$	$CHCl_3$	EDC	PDC
7-2-87	Feed to #1 Absorber N	1	15	38	1504
7-2-87	Feed to #2 Absorber S	0.006	0.002	0.004	0.122
7-2-87	Disc. to Sewer	0.001	0.000	0.001	0.088
7-2-87	Total Gals. Through New Carbon 232,744				
7-3-87	Feed to #1 Absorber N	5	17	48	1871
7-3-87	Feed to #2 Absorber S	0.062	0.097	0.931	0.658
7-3-87	Disc. to Sewer	0.008	0.000	0.003	0.093
7-3-87	Total Gals. Through New Carbon 252,440				
7-6-87	Feed to #1 Absorber N	2	19	50	2172
7-6-87	Feed to #2 Absorber S	1	13	47	754
7-6-87	Disc. to Sewer	0.002	0.001	0.005	0.153
7-6-87	Total Gals. Through New Carbon 293516				
7-7-87	Feed to #1 Absorber N	1	20	46	1929
7-7-87	Feed to #2 Absorber S	1	17	47	1184
7-7-87	Disc. to Sewer	0.000	0.000	0.002	0.181
7-7-87	Total Gals. Through New Carbon 313,629				
7-8-87	Feed to #1 Absorber N	2	21	50	2005
7-8-87	Feed to #2 Absorber S	2	20	53	1514
7-8-87	Disc. to Sewer	0.009	0.005	0.005	0.145
7-8-87	Tot. Gals Through New Carbon 333563				
7-13-87	Feed to #1 Absorber S	0.963	20	39	1568
7-13-87	Feed to #2 Absorber N	0.017	0.041	0.114	7
7-13-87	Disc. to Sewer	0.003	0.011	0.021	1.137
7-9-87	New Carbon Charged to N Absorber				
7-13-87	Tot. Gals. Through New Carbon 82457				
7-14-87	Feed to #1 Absorber S	2	24	40	1608
7-14-87	Feed to #2 Absorber N	0.018	0.025	0.090	5.6
7-14-87	Disc. to Sewer	0.015	0.013	0.017	0.819

7-14-87 Tot. Gals Through New Carbon 109325

7-14-87 Gals through Carbon 109 325

GROUNDWATER EXTRACTION WELLS
NORTH WORKS

Date	Sample	mg/l			
		$MeCl_2$	$CHCl_3$	EDC	PDC
7-15-87	Feed to #1 Absorber S	0.903	15	29	1407
7-15-87	Feed to #2 Absorber N	0.022	0.014	0.074	5.1
7-15-87	Disc. to Sewer	0.001	0.006	0.009	0.641
7-15-87	Tot. Gals. Through New Carbon 136419				
7-16-87	Feed to #1 Absorber S	0.908	17	33	1582
7-16-87	Feed to #2 Absorber N	0.009	0.013	0.043	3.9
7-16-87	Disc. to Sewer	0.003	0.007	0.011	0.572
7-16-87	Tot. Gals. Through New Carbon 160584				
7-17-87	Feed to #1 Absorber S	0.725	18	33	1590
7-17-87	Feed to #2 Absorber N	0.011	0.014	0.040	4.3
7-17-87	Disc. to Sewer	0.004	0.008	0.011	0.544
7-17-87	Tot. Gals. Through New Carbon 188923				
7-20-87	Feed to #1 Absorber S	.401	22	36	1825
7-20-87	Feed to #2 Absorber N	0.003	0.006	0.019	2.3
7-20-87	Disc. to Sewer	0.004	0.008	0.010	0.521
7-20-87	Tot. Gals Through New Carbon 257602				
7-21-87	Feed to #1 Absorber X	System	shut Down @		8 30 AM
7-21-87	Feed to #2 Absorber X	7-20-87	(Manifold Repairs)		
7-21-87	Disc. to Sewer	System Back on @ 0730 7-24-87			
7-21-87	Total Gals. Through New Carbon 258,499				
7-27-87	Feed to #1 Absorber S	4	12	32	1246
7-27-87	Feed to #2 Absorber N	0.802	2	5	40
7-27-87	Disc. to Sewer	0.000	0.004	0.007	0.413
7-27-87	Total Gals. Through New Carbon 344,173				
7-28-87	Feed to #1 Absorber S	4	6	9	2253
7-28-87	Feed to #2 Absorber N	2	15	32	400
7-28-87	Disc. to Sewer	0.000	0.005	0.006	0.406

7-28-87 Total Gals. Through New Carbon 371,875

7-28-87 Tot. Gals. Through Carbon 371,85

GROUNDWATER EXTRACTION WELLS
NORTH WORKS

Date	Sample	mg/l			
		$MeCl_2$	$CHCl_3$	EDC	PDC
7-29-87	Feed to #1 Absorber S	0.000	2	5	1002
7-29-87	Feed to #2 Absorber N	2	18	41	607
7-29-87	Disc. to Sewer	0.001	0.005	0.007	0.361
7-29-87	Total Gals. Through New Carbon 399,502				
8-3-87	Feed to #1 Absorber N	2	4	11	831
8-3-87	Feed to #2 Absorber S	0.008	0.052	0.120	4.3
8-3-87	Disc. to Sewer	0.006	0.005	0.011	0.295
7-31-87	New Carbon Charged To South Absor.				
8-3-87	Total Gals. Through New Carbon 54003				
8-4-87	Feed to #1 Absorber	0	5	9	510
8-4-87	Feed to #2 Absorber	0.007	0.034	0.063	3.1
8-4-87	Disc. to Sewer	0.004	0.005	0.006	0.210
8-4-87	Tot. Gal. Through New Carbon 69691				
8-5-87	Feed to #1 Absorber	0.740	2	8	234
8-5-87	Feed to #2 Absorber	0.002	0.020	0.031	1.7
8-5-87	Disc. to Sewer	0.004	0.005	0.007	0.294
8-5-87	Tot. Gals. Through New Carbon 85894				
8-6-87	Feed to #1 Absorber	0.666	4	14	907
8-6-87	Feed to #2 Absorber	0	0.016	0.024	1.3
8-6-87	Disc. to Sewer	0.005	0.006	0.011	0.449
8-6-87	Tot. Gals Through New Carbon 103855				
8-7-87	Feed to #1 Absorber	0.729	4	19	638
8-7-87	Feed to #2 Absorber	0.005	0.018	0.022	1.4
8-7-87	Disc. to Sewer	0.002	0.012	0.005	0.588
8-7-87	Tot. Gals Through New Carbon 124570				
8-10-87	Feed to #1 Absorber	1.2	2	15	719
8-10-87	Feed to #2 Absorber	0.003	0.005	0.014	0.830
8-10-87	Disc. to Sewer	0	0	0.002	0.203
8-10-87	Tot. Gals. Through New Carbon [redacted] 188745				

8-10-87 Tot. Gals Through New Carbon 188724

GROUNDWATER EXTRACTION WELLS
NORTH WORKS

Date	Sample	mg/l			
		$MeCl_2$	$CHCl_3$	EDC	PDC
8-11-87	Feed to #1 Absorber N	1.1	2	14	770
8-11-87	Feed to #2 Absorber S	0.003	0.006	0.014	0.956
8-11-87	Disc. to Sewer	0	0	0.002	0.266
8-11-87	Tot. Gals. Through New Carbon 208056				
8-12-87	Feed to #1 Absorber N	1.3	4	13	513
8-12-87	Feed to #2 Absorber S	0.003	0.005	0.015	1.0
8-12-87	Disc. to Sewer	0.001	0	0.001	0.094
8-12-87	Tot. Gals Through New Carbon 226432				
8-13-87	Feed to #1 Absorber N	0.503	4	10	133
8-13-87	Feed to #2 Absorber S	0.001	0.006	0.011	0.811
8-13-87	Disc. to Sewer	0	0	0.002	0.201
8-13-87	Tot. Gals. Through New Carbon 242161				
8-14-87	Feed to #1 Absorber N	0.742	4	13	262
8-14-87	Feed to #2 Absorber S	0.001	0.007	0.010	0.783
8-14-87	Disc. to Sewer	0	0	0.002	0.162
8-14-87	Tot. Gals Through New Carbon 261294				
8-17-87	Feed to #1 Absorber N	0.315	1.8	8	71
8-17-87	Feed to #2 Absorber S	0.004	0.006	0.009	0.337
8-17-87	Disc. to Sewer	0.000	0.000	0.001	0.137
8-17-87	Tot. Gals Through New Carbon 332,223				
8-18-87	Feed to #1 Absorber N	0.531	1.3	11	86
8-18-87	Feed to #2 Absorber S	0	0	0.013	0.360
8-18-87	Disc. to Sewer	0	0	0.002	0.192
8-18-87	Total Gals. Through New Carbon 359,721				
8-19-87	Feed to #1 Absorber N	4	2	7	58
8-19-87	Feed to #2 Absorber S	0.013	0.004	0.007	0.364
8-19-87	Disc. to Sewer	0.027	0	0.001	0.152

8-19-87 Total Gals. Through New Carbon 389,733

389,733

GROUNDWATER EXTRACTION WELLS
NORTH WORKS

Date	Sample	mg/l			
		$MeCl_2$	$CHCl_3$	EDC	PDC
8-20-87	Feed to #1 Absorber N	3	3	18	146
8-20-87	Feed to #2 Absorber S	0.003	0.005	0.007	0.377
8-20-87	Disc. to Sewer	0.003	0	0.003	0.181
8-20-87	Total Gals. Through New Carbon 414127				
8-21-87	Feed to #1 Absorber N				
8-21-87	Feed to #2 Absorber S				
8-21-87	Disc. to Sewer				
8-21-87	Total Gals. Through New Carbon 434,919				
8-24-87	Feed to #1 Absorber N	0.000	1.392	10	65
8-24-87	Feed to #2 Absorber S	0.000	0.003	0.006	0.357
8-24-87	Disc. to Sewer	0.000	0.000	0.002	0.246
8-24-87	Total Gals. Through New Carbon 499971				
8-25-87	Feed to #1 Absorber N	0.000	6	17	631
8-25-87	Feed to #2 Absorber S	0.000	0.003	0.005	0.320
8-25-87	Disc. to Sewer	0.000	0.000	0.001	0.238
8-25-87	Total Gals. Through New Carbon 511,906				
8-26-87	Feed to #1 Absorber N	6	9	25	1238
8-26-87	Feed to #2 Absorber S	0.091	0.005	0.007	0.389
8-26-87	Disc. to Sewer	0.066	0.000	0.001	0.082
8-26-87	Total Gals. Through New Carbon 518,079				
8-27-87	Feed to #1 Absorber N	13	14	29	1642
8-27-87	Feed to #2 Absorber S	0.013	0.003	0.003	0.357
8-27-87	Disc. to Sewer	0.003	0.000	0.001	0.188
8-27-87	Total Gals. Through New Carbon 526,870				
	Feed to #1 Absorber N				
8-28-87	Feed to #2 Absorber S	0.002	0.004	0.004	0.348
8-28-87	Disc. to Sewer	0.002	0	0.001	0.018

8-28-87 Total Gals. Through New Carbon 534592

8-28-81 532594

GROUNDWATER EXTRACTION WELLS
NORTH WORKS

Date	Sample	mg/l MeCl2	CHCl3	EDC	PDC
8-31-87	Feed to #1 Absorber N.	3	17	38	1803
8-31-87	Feed to #2 Absorber S	0.008	0.009	0.007	0.337
8-31-87	Disc. to Sewer	0.000	0.000	0.001	0.309
8-31-87	Total Gals. Through New Carbon 556,827				
9-1-87	Feed to #1 Absorber N	3	22	36	2153
9-1-87	Feed to #2 Absorber S	0.081	0.063	0.358	0.479
9-1-87	Disc. to Sewer	0.003	0.006	0.004	0.213
9-1-87	Total Gals. Through New Carbon 560,038				
9-2-87	Feed to #1 Absorber N	4	13	37	1438
9-2-87	Feed to #2 Absorber S	0.180	0.193	1.134	1.015
9-2-87	Disc. to Sewer	0.004	0.002	0.004	0.284
9-2-87	Total Gals. Through New Carbon 560,703				
9-3-87	Feed to #1 Absorber N	3	10	24	1084
9-3-87	Feed to #2 Absorber S	0.724	2	6	45
9-3-87	Disc. to Sewer	0.005	0.000	0.001	0.093
	Total Gals. Through New Carbon 563,867				
9-4-87	Feed to #1 Absorber N	3	11	26	1182
9-4-87	Feed to #2 Absorber S	1	3	11	159
9-4-87	Disc. to Sewer	0.004	0.003	0.004	0.150
9-4-87	Total Gals. Through New Carbon 566,340				
9-7-87	Feed to #1 Absorber N	2	16	30	1488
9-7-87	Feed to #2 Absorber S	2	9	28	691
9-7-87	Disc. to Sewer	0.004	0.003	0.004	0.168
9-7-87	Total Gals. Through New Carbon 570,853				
9-8-87	Feed to #1 Absorber N	2	17	47	1628
9-8-87	Feed to #2 Absorber S	2	12	40	887
9-8-87	Disc. to Sewer	0.000	0.004	0.003	0.302
9-8-87	Total Gals. Through New Carbon 571072	17.0	89.0	200	8973

571 072

GROUNDWATER EXTRACTION WELLS
NORTH WORKS

Date	Sample	mg/l MeCl2	CHCl3	EDC	PDC
9-9-87	Feed to #1 Absorber N	3	19	52	2184
9-9-87	Feed to #2 Absorber S	2	8	35	833
9-9-87	Disc. to Sewer	0.004	0.003	0.004	0.471
9-9-87	Total Gals. Through New Carbon 581,072				
9-10-87	Feed to #1 Absorber				
9-10-87	Feed to #2 Absorber	Recharged Carbon To N-Absor.			
9-10-87	Disc. to Sewer	9-11-87			
9-10-87					
	Feed to #1 Absorber S				
	Feed to #2 Absorber N				
	Disc. to Sewer				
9-21-87	Total Gals. Through New Carbon 30,000				
9-21-87	Feed to #1 Absorber S	0.004	0.199	0.270	20.4
9-21-87	Feed to #2 Absorber N	0.007	0.016	0.025	0.858
9-21-87	Disc. to Sewer	0.458	3.44	3.50	244
9-21-87	TOTAL GALS. THROUGH NEW CARBON 30,000				
9-21-87	Feed to #1 Absorber S	0.458	3.44	3.50	244
9-21-87	Feed to #2 Absorber N	0.004	0.199	0.270	0.858
9-21-87	Disc. to Sewer	0.007	0.016	0.025	0.858
9-22-87	TOTAL GALS. THROUGH NEW CARBON: 40,000				
9-22-87	Feed to #1 Absorber S	0.235	1.67	3.29	110
9-22-87	Feed to #2 Absorber N	0	0.044	0.064	6.43
9-22-87	Disc. to Sewer	0.001	0	0.009	0.420
9-23-87	TOTAL GALS. THROUGH NEW CARBON 42,000				
9-23-87	Feed to #1 Absorber S	0.306	2.43	4.69	300
9-23-87	Feed to #2 Absorber N	0	0.058	0.066	6.26
9-23-87	Disc. to Sewer	0.004	0.003	0.011	0.291
		4.0	26.7	63.8	2858

GROUNDWATER EXTRACTION WELLS
NORTH WORKS

Date	Sample	$MeCl_2$	$CHCl_3$	EDC	PDC
		mg/l			42,000
9-24-87	Feed to #1 Absorber	0.305	1.21	2.71	72.2
9-24-87	Feed to #2 Absorber	0.004	0.038	0.056	6.43
9-24-87	Disc. to Sewer	0.001	0.001	0.012	0.487
9-24-87	TOTAL GALLONS THROUGH NEW CARBON: 43,694				
9-25-87	Feed to #1 Absorber	0.553	1.44	2.18	101
9-25-87	Feed to #2 Absorber	0.005	0.016	0.027	3.84
9-25-87	Disc. to Sewer	0	0.001	0.006	0.254
9-25-87	TOTAL GALLONS THROUGH NEW CARBON: 44,694				
9-28-87	Feed to #1 Absorber	0.307	0.710	0.345	31.0
9-28-87	Feed to #2 Absorber	0.002	0.013	0.014	2.58
9-28-87	Disc. to Sewer	0	0	0.001	0.063
9-28-87	TOTAL GALLONS THROUGH NEW CARBON: 149,323				
9-29-87	Feed to #1 Absorber S	0.312	0.525	0.701	40
9-29-87	Feed to #2 Absorber N	0.000	0.005	0.006	1.231
9-29-87	Disc. to Sewer	0.004	0.003	0.005	0.069
9-29-87	TOTAL GALLONS THROUGH NEW CARBON: 160,529				
9-30-87	Feed to #1 Absorber S	2.12	2.94	8.91	43.5
9-30-87	Feed to #2 Absorber N	~~0.014~~ 0.005	~~0.003~~ 0.003	~~0.004~~ 0.005	1.09 ~~0.053~~
9-30-87	Disc. to Sewer	0.014	0.003	0.004	0.053
		3.5	6.7	14.8	297
9-30-87	TOTAL GALLONS THROUGH NEW CARBON: 191,245				
10-1-87	Feed to #1 Absorber S	3.07	19.2	44.2	1860
10-1-87	Feed to #2 Absorber N	0.037	0.006	0.002	0.530
10-1-87	Disc. to Sewer	0.004	0	0.003	0.137
10-1-87	TOTAL GALLONS THROUGH NEW CARBON: 191,720				
10-2-87	Feed to #1 Absorber S	3.73	16.8	45.5	1920
10-2-87	Feed to #2 Absorber N	0.006	0.006	0.007	1.12
10-2-87	Disc. to Sewer	0.006	0	0.002	0.107

Total Gals. Through New Carbon 199,552

GROUNDWATER EXTRACTION WELLS
NORTH WORKS

mg/l 199,552

Date	Sample	$MeCl_2$	$CHCl_3$	EDC	PDC
10-5-87	Feed to #1 Absorber S	2.13	22.4	57.9	2370
10-5-87	Feed to #2 Absorber N	0	0.001	0.002	0.574
10-5-87	Disc. to Sewer	0.004	0.002	0.005	0.103
10-5-87	TOTAL GALLONS THROUGH NEW CARBON: 199,582				
10-6-87	Feed to #1 Absorber S	2.20	23.3	59.2	2577
10-6-87	Feed to #2 Absorber N	0	0	0.002	0.615
10-6-87	Disc. to Sewer	0.005	0.002	0.004	0.065
10-6-87	TOTAL GALLONS THROUGH NEW CARBON: 199,582				
10-7-87	Feed to #1 Absorber S	1.97	19.4	49.1	2124
10-7-87	Feed to #2 Absorber N	0	0	0.001	0.455
10-7-87	Disc. to Sewer	0	0	0.001	0.054
10-7-87	TOTAL GALLONS THROUGH NEW CARBON: 199,627				
10-8-87	Feed to #1 Absorber S	3.36	23.3	62.0	2575
10-8-87	Feed to #2 Absorber N	0.004	0.007	0.006	0.222
10-8-87	Disc. to Sewer	0	0	0.002	0.061
10-8-87	TOTAL GALLONS THROUGH NEW CARBON: 206,469				
10-9-87	Feed to #1 Absorber S	2.81	16.4	44.2	1871
10-9-87	Feed to #2 Absorber N	0.004	0	0.002	0.426
10-9-87	Disc. to Sewer	0	0	0.001	0.083
10-9-87	TOTAL GALLONS THROUGH NEW CARBON: 217,937				
10-12-87	Feed to #1 Absorber S	1.90	21.8	50.7	2370
10-12-87	Feed to #2 Absorber N	0.004	0.003	0.004	0.228
10-12-87	Disc. to Sewer	0	0	0.001	0.057
10-12-87	TOTAL GALLONS THROUGH NEW CARBON: 256,652				
10-13-87	Feed to #1 Absorber S	1.99	19.2	51.0	2080
10-13-87	Feed to #2 Absorber N	0.004	0	0.001	0.096
10-13-87	Disc. to Sewer	0	0	0.001	0.059
10-13-87	TOTAL GALLONS THROUGH NEW CARBON: 270,949				

GROUNDWATER EXTRACTION WELLS
NORTH WORKS

Total Gals = 270,949

Date	Sample	mg/l MeCl2	CHCl3	EDC	PDC
10-14-87	Feed to #1 Absorber S	1.95	24.1	53.0	2300
10-14-87	Feed to #2 Absorber N	0.003	0	0.002	0.163
10-14-87	Disc. to Sewer	0	0	0.001	0.041
10-14-87	Total Gals. Through New Carbon = 285,259				
10-15-87	Feed to #1 Absorber S	1.85	13.8	30.5	1543
10-15-87	Feed to #2 Absorber N	0.132	0.064	0.260	0.100
10-15-87	Disc. to Sewer	0	0	0.001	0.031
10-15-87	Total Gals. Through New Carbon = 334,604				
10-16-87	Feed to #1 Absorber S	1.66	30.5	306	1691
10-16-87	Feed to #2 Absorber N	0.530	13.2	29.0	78.4
10-16-87	Disc. to Sewer	0	0.002	0.031	0.112
10-16-87	Total Gals. Through New Carbon = 383,965				
10-19-87	Feed to #1 Absorber S	1.069	15	32	1497
10-19-87	Feed to #2 Absorber N	0.913	20	47	1504
10-19-87	Disc. to Sewer	0.003	0.003	0.004	0.040
10-19-87	TOTAL GALS. THROUGH NEW CARBON = 531,358				
10-20-87	Feed to #1 Absorber S	0.972	16	29	1494
10-20-87	Feed to #2 Absorber N	1.239	19	48	1642
10-20-87	Disc. to Sewer	0.002	0.000	0.001	0.053
10-20-87	Total Gals Through New Carbon = 571,887				
10-21-87	Feed to #1 Absorber S	0.920	13	22	1781
10-21-87	Feed to #2 Absorber N	1.137	16	44	1456
10-21-87	Disc. to Sewer	0.000	0.000	0.008	0.391
10-21-87	Total Gals. Through New Carbon = 573,507				
10-22-87	Feed to #1 Absorber S	4.606	31	47	2639
10-22-87	Feed to #2 Absorber N	4.852	22	52	1955
10-22-87	Disc. to Sewer	0.009	0.003	0.004	0.056

Total Gals. Through New Carbon = 606,567

GROUNDWATER EXTRACTION WELLS
NORTH WORKS

Total Gals. 606,567

Date	Sample	mg/l			
		$MeCl_2$	$CHCl_3$	EDC	PDC
10-23-87	Feed to #1 Absorber S	3.698	2	10	242
10-23-87	Feed to #2 Absorber N	4.245	24	53	2152
10-23-87	Disc. to Sewer	0.044	0.000	0.001	0.066
10-23-87	Total Gals. Through New Carbon = 641,658				
10-26-87	Feed to #1 Absorber S	1.794	0.758	7	114
10-26-87	Feed to #2 Absorber N	1.974	13	30	1402
10-26-87	Disc. to Sewer	0.003	0.000	0.005	0.063
10-26-87	Total Gals. Through New Carbon = 749,375				
10-27-87	Feed to #1 Absorber S	1.304	0.899	8	125
10-27-87	Feed to #2 Absorber N	1.460	8	21	1034
10-27-87	Disc. to Sewer	0.004	0.003	0.005	0.448
10-27-87	Total Gals. Through New Carbon = 787,361				
10-28-87	Feed to #1 Absorber S	2.003	3	10	339
10-28-87	Feed to #2 Absorber N	2.282	6	16	842
10-28-87	Disc. to Sewer	0.003	0.000	0.001	0.043
10-28-87	Total Gals. Through New Carbon = 825,641				
10-29-87	Feed to #1 Absorber S	1.967	1	6	93
10-29-87	Feed to #2 Absorber N	2.259	6	15	1006
10-29-87	Disc. to Sewer	0.000	0.000	0.001	0.044
10-29-87	Total Gals. Through New Carbon = 863,153				
10-30-87	Feed to #1 Absorber S	1.772	0.686	5	82
10-30-87	Feed to #2 Absorber N	2.063	5	14	781
10-30-87	Disc. to Sewer	0.001	0.000	0.000	0.041
10-30-87	Total Gals. Through New Carbon = 896,778				
11-2-87	Feed to #1 Absorber S	1.081	0.793	8	116
11-2-87	Feed to #2 Absorber N	1.102	5	13	648
11-2-87	Disc. to Sewer	0.003	0.003	0.005	0.048
11-2-87	Total Gals. Through New Carbon = 987,164				

Total Gals 987,164

GROUNDWATER EXTRACTION WELLS
NORTH WORKS

Date	Sample	mg/l			
		$MeCl_2$	$CHCl_3$	EDC	PDC
11-3-87	Feed to #1 Absorber S	1.084	0.772	6	76
11-3-87	Feed to #2 Absorber N	1.109	4	12	622
11-3-87	Disc. to Sewer	0.001	0.000	0.001	0.049
11-3-87	Total Gals. Through New Carbon = 1,019,009				
11-4-87	Feed to #1 Absorber S	1.085	0.856	8	95
11-4-87	Feed to #2 Absorber N	1.087	4	11	543
11-4-87	Disc. to Sewer	0.000	0.000	0.001	0.046
11-4-87	Total Gals. Through New Carbon = 1,051,324				
	Feed to #1 Absorber	Recharged	New Carbon To		North
	Feed to #2 Absorber	and South Absor.			
	Disc. to Sewer	11-17-87	Back in service @ 1 PM		
11-5-87	Total Gals. Through New Carbon = 1,058,504				
11-18-87	Feed to #1 Absorber S	0.615	1	8	74
11-18-87	Feed to #2 Absorber N	0.001	0.023	0.025	6
11-18-87	Disc. to Sewer	0.003	0.004	0.003	0.007
11-18-87	Total Gals. Through New Carbon = 19,396				
11-19-87	Feed to #1 Absorber S	1.321	0.871	7	84
11-19-87	Feed to #2 Absorber N	0.001	0.008	0.011	5
11-19-87	Disc. to Sewer	0.003	0.002	0.003	0.008
11-19-87	Total Gals. Through New Carbon = 40,523				
11-20-87	Feed to #1 Absorber S	1.252	0.773	6	80
11-20-87	Feed to #2 Absorber N	0.000	0.003	0.004	2
11-20-87	Disc. to Sewer	0.003	0.003	0.003	0.008
11-20-87	Total Gals. Through New Carbon = 71,540				
11-23-87	Feed to #1 Absorber S	1.128	0.994	9	108
11-23-87	Feed to #2 Absorber N	0.001	0.005	0.004	3
11-23-87	Disc. to Sewer	0.004	0.003	0.003	0.011
11-23-87	Total Gals. Through New Carbon = 162,997				

162,997

GROUNDWATER EXTRACTION WELLS
NORTH WORKS

Date	Sample	mg/l			
		$MeCl_2$	$CHCl_3$	EDC	PDC
11-24-87	Feed to #1 Absorber S	0.995	0.725	7	81
11-24-87	Feed to #2 Absorber N	0.000	0.002	0.002	1
11-24-87	Disc. to Sewer	0.000	0.000	0.000	0.008
11-24-87	Total Gals. Through New Carbon = 191,420				
11-25-87	Feed to #1 Absorber S	0.410	0.881	9	119
11-25-87	Feed to #2 Absorber N	0.000	0.002	0.002	1
11-25-87	Disc. to Sewer	0.003	0.002	0.003	0.013
11-25-87	Total Gals. Through New Carbon = 223,076				
11-26-87	Feed to #1 Absorber S	0.205	0.818	7	87
11-26-87	Feed to #2 Absorber N	0.000	0.002	0.001	0.862
11-26-87	Disc. to Sewer	0.003	0.002	0.003	0.014
11-26-87	Total Gals. Through New Carbon = 255,148				
11-27-87	Feed to #1 Absorber S	0.526	0.689	7	84
11-27-87	Feed to #2 Absorber N	0.000	0.000	0.001	0.432
11-27-87	Disc. to Sewer	0.003	0.002	0.004	0.013
11-27-87	Total Gals. Through New Carbon = 287,626				
11-30-87	Feed to #1 Absorber S	—	—	—	—
11-30-87	Feed to #2 Absorber N	—	—	—	—
11-30-87	Disc. to Sewer	—	—	—	—
11-30-87	Total Gals. Through New Carbon = 377660				
12-1-87	Feed to #1 Absorber S	0.155	0.637	3	56
12-1-87	Feed to #2 Absorber N	0.001	0.000	0.001	0.598
12-1-87	Disc. to Sewer	0.003	0.002	0.002	0.012
12-1-87	Total Gals. Through New Carbon = 407,668				
12-2-87	Feed to #1 Absorber S	0.157	0.839	5	79
12-2-87	Feed to #2 Absorber N	0.000	0.000	0.001	0.336
12-2-87	Disc. to Sewer	0.004	0.003	0.004	0.013
12-2-87	Total Gals. Through New Carbon = 436,570				

436,570

GROUNDWATER EXTRACTION WELLS
NORTH WORKS

Date	Sample	mg/l $MeCl_2$	$CHCl_3$	EDC	PDC
12-3-87	Feed to #1 Absorber S	0.259	0.613	7	70
12-3-87	Feed to #2 Absorber N	0.000	0.000	0.000	0.198
12-3-87	Disc. to Sewer	0.000	0.000	0.000	0.007
12-3-87	Total Gals. Through New Carbon = 467,661				
12-4-87	Feed to #1 Absorber S	0.246	0.652	8	70
12-4-87	Feed to #2 Absorber N	0.000	0.000	0.000	0.129
12-4-87	Disc. to Sewer	0.000	0.000	0.000	0.007
12-4-87	Total Gals. Through New Carbon = 498,815				
12-7-87	Feed to #1 Absorber S	0.475	1.515	15	200
12-7-87	Feed to #2 Absorber N	0.000	0.000	0.000	0.150
12-7-87	Disc. to Sewer	0.000	0.000	0.000	0.010
12-7-87	Total Gals. Through New Carbon = 516,230				
12-8-87	Feed to #1 Absorber S	0.207	0.511	7	62
12-8-87	Feed to #2 Absorber N	0.000	0.000	0.000	0.301
12-8-87	Disc. to Sewer	0.000	0.000	0.000	0.009
12-8-87	Total Gals. Through New Carbon = 570,654				
12-9-87	Feed to #1 Absorber S	0.000	0.638	7	64
12-9-87	Feed to #2 Absorber N	0.000	0.000	0.000	0.174
12-9-87	Disc. to Sewer	0.000	0.000	0.000	0.009
12-9-87	Total Gals. Through New Carbon = 593,671				
12-10-87	Feed to #1 Absorber S	0.318	0.632	8	84
12-10-87	Feed to #2 Absorber N	0.000	0.000	0.000	0.065
12-10-87	Disc. to Sewer	0.000	0.000	0.000	0.007
12-10-87	Total Gals. Through New Carbon = 615,105				
12-11-87	Feed to #1 Absorber S	0.000	0.397	6	60
12-11-87	Feed to #2 Absorber N	0.000	0.000	0.000	0.050
12-11-87	Disc. to Sewer	0.003	0.000	0.000	0.008

12-11-87 Total Gals Through New Carbon = 635,404

GROUNDWATER EXTRACTION WELLS
NORTH WORKS

635,404

Date	Sample	mg/l $MeCl_2$	$CHCl_3$	EDC	PDC
12-14-87	Feed to #1 Absorber S	0.229	0.573	7	68
12-14-87	Feed to #2 Absorber N	0.000	0.000	0.000	0.061
12-14-87	Disc. to Sewer	0.000	0.000	0.000	0.009
12-14-87	Total Gals. Through New Carbon = 694,441				
12-15-87	Feed to #1 Absorber S	0.147	0.486	6	63
12-15-87	Feed to #2 Absorber N	0.000	0.001	0.000	0.053
12-15-87	Disc. to Sewer	0.000	0.000	0.000	0.008
12-15-87	Total Gals. Through New Carbon = 714,214				
12-16-87	Feed to #1 Absorber S	0.168	0.592	6	69
12-16-87	Feed to #2 Absorber N	0.000	0.000	0.000	0.026
12-16-87	Disc. to Sewer	0.000	0.000	0.000	0.007
12-16-87	Total Gals. Through New Carbon = 734,865				
12-17-87	Feed to #1 Absorber S	0.167	0.558	6	66
12-17-87	Feed to #2 Absorber N	0.000	0.000	0.000	0.033
12-17-87	Disc. to Sewer	0.000	0.000	0.000	0.010
12-17-87	Total Gals. Through New Carbon = 758,663				
12-18-87	Feed to #1 Absorber S	0.000	0.494	6	64
12-18-87	Feed to #2 Absorber N	0.000	0.000	0.000	0.021
12-18-87	Disc. to Sewer	0.000	0.000	0.000	0.006
12-18-87	Total Gals. Through New Carbon = 780,747				
12-21-87	Feed to #1 Absorber S	0.741	20	37	2177
12-21-87	Feed to #2 Absorber N	0.000	0.000	0.000	0.028
12-21 87	Disc. to Sewer	0.000	0.000	0.000	0.007
12-21-87	Total Gals. Through New Carbon = 860,831				
12-22-87	Feed to #1 Absorber S	1.114	30	63	3046
12-22-87	Feed to #2 Absorber N	0.000	0.000	0.000	0.033
12-22-87	Disc. to Sewer	0.000	0.000	0.000	0.015

Total Gals, Through New Carbon = 873,091

GROUNDWATER EXTRACTION WELLS
NORTH WORKS

873,091

Date	Sample	mg/l MeCl2	CHCl3	EDC	PDC
12-23-87	Feed to #1 Absorber S	0.000	39	68	3723
12-23-87	Feed to #2 Absorber N	0.000	0.000	0.000	0.026
12-23-87	Disc. to Sewer	0.000	0.000	0.000	0.019
12-23-87	Total Gals. Through New Carbon = 876,456				
12-24-87	Feed to #1 Absorber S	1.099	40	73	5167
12-24-87	Feed to #2 Absorber N	0.000	0.000	0.000	0.022
12-24-87	Disc. to Sewer	0.000	0.000	0.000	0.014
12-24-87	Total Gals. Through New Carbon = 878,401				
12-28-87	Feed to #1 Absorber S	1.193	37	67	3983
12-28-87	Feed to #2 Absorber N	0.000	0.000	0.000	0.026
12-28-87	Disc. to Sewer	0.000	0.000	0.000	0.013
12-28-87	Total Gals. Through New Carbon = 887,747				
12-29-87	Feed to #1 Absorber S	0.800	20	46	2478
12-29-87	Feed to #2 Absorber N	0.000	0.000	0.000	0.011
12-29-87	Disc. to Sewer	0.000	0.000	0.000	0.008
12-29-87	Total Gals. Through New Carbon = 909,756				
12-30-87	Feed to #1 Absorber S	0.340	1	7	158
12-30-87	Feed to #2 Absorber N	0.020	0.140	0.604	0.700
12-30-87	Disc. to Sewer	0.000	0.000	0.000	0.005
12-30-87	Total Gals. Through New Carbon = 931,351				
12-31-87	Feed to #1 Absorber S	0.000	1.044	7	145
12-31-87	Feed to #2 Absorber N	0.079	1.721	6	38
12-31-87	Disc. to Sewer	0.000	0.000	0.000	0.008
12-31-87	Total Gals. Through New Carbon = 949,820				
1-1-88	Feed to #1 Absorber S	0.440	1.277	7	211
1-1-88	Feed to #2 Absorber N	0.093	1.729	6	59
1-1-88	Disc. to Sewer	0.002	0.000	0.000	0.011
1-1-88	Total Gals. Throug New Carbon = 968,424				

GROUNDWATER EXTRACTION WELLS
NORTH WORKS

1988

968, 42T

Date	Sample	mg/l MeCl2	CHCl3	EDC	PDC
1-4-88	Feed to #1 Absorber S	0.691	0.915	8	146
1-4-88	Feed to #2 Absorber N	0.169	2.225	10	198
1-4-88	Disc. to Sewer	0.000	0.000	0.000	0.015
1-4-88	Total Gals. Through New Carbon = 1,004,119				
1-5-88	Feed to #1 Absorber S	Sample	Line Froze		
1-5-88	Feed to #2 Absorber N	0.244	2.527	11	261
1-5-88	Disc. to Sewer	0.000	0.000	0.000	0.008
1-5-88	Total Gals. Through New Carbon = 1,007,888				
1-6-88	Feed to #1 Absorber S	0.287	1.680	7	307
1-6-88	Feed to #2 Absorber N	0.219	1.068	8	182
1-6-88	Disc. to Sewer	0.000	0.000	0.005	0.186
1-6-88	Total Gals. Through New Carbon = 1,009,707				
1-7-88	Feed to #1 Absorber S	0.226	0.775	6	130
1-7-88	Feed to #2 Absorber N	0.250	1.865	12	371
1-7-88	Disc. to Sewer	0.000	0.000	0.000	0.0
1-7-88	Total Gals. Through New Carbon = 1,024,881				
1-8-88	Feed to #1 Absorber S	0.228	0.746	4	
1-8-88	Feed to #2 Absorber N	0.303	1.703	12	
1-8-88	Disc. to Sewer	0.000	0.000	0.000	
1-8-88	Total Gals. Through New Carbon = 1,025				
1-11-88	Feed to #1 Absorber S	0.265	0.551	7	
1-11-88	Feed to #2 Absorber N	0.403	1.335	1	
1-11-88	Disc. to Sewer	0.000	0.000		
1-11-88	Total Gals. Through New Carbon =				
1-12-88	Feed to #1 Absorber S	0.193	0.469		
1-12-88	Feed to #2 Absorber N	0.372	1.18		
1-12-88	Disc. to Sewer	0.000	0.0		
1-12-88	Total Gals. Through New Carbon =				

1,074,236

GROUNDWATER EXTRACTION WELLS
NORTH WORKS

Date	Sample	mg/l MeCl2	CHCl3	EDC	PDC
1-13-88	Feed to #1 Absorber S	0.226	0.652	6	73
1-13-88	Feed to #2 Absorber N	0.322	0.985	12	434
1-13-88	Disc. to Sewer	0.000	0.000	0.000	0.008
1-13-88	Total Gals. Through New Carbon = 1,089,095				
1-14-88	Feed to #1 Absorber				
	Feed to #2 Absorber	Recharged New Carbon To South Absorber. System shut OFF @			
	Disc. to Sewer	0745. Back in Service @			1430.
1-14-88	Total Gals. Through New Carbon = 1,103,410				
1-15-88	Feed to #1 Absorber N	0.186	1.427	7	309
1-15-88	Feed to #2 Absorber S	0.000	0.000	0.004	0.218
1-15-88	Disc. to Sewer	0.031	0.192	1.168	44
1-15-88	Total Gals. Through New Carbon = 1,144				
1-18-88	Feed to #1 Absorber N	0.202	0.514	6	115
1-18-88	Feed to #2 Absorber S	0.000	0.005	0.003	0.292
1-18-88	Disc. to Sewer	0.002	0.000	0.028	1.508
1-18-88	Total Gals. Through New Carbon = 14,823				
1-19-88	Feed to #1 Absorber N	0.276	0.744	8	127
1-19-88	Feed to #2 Absorber S	0.000	0.000	0.000	0.009
1-19-88	Disc. to Sewer	0.000	0.000	0.003	0.154
1-19-88	Total Gals. Through New Carbon = 31,009				
1-20-88	Feed to #1 Absorber N	0.212	0.481	6	74
1-20-88	Feed to #2 Absorber S	0.000	0.000	0.000	0.009
1-20-88	Disc. to Sewer	0.000	0.000	0.002	0.119
1-20-88	Total Gals. Through New Carbon = 55,025				
1-21-88	Feed to #1 Absorber N	0.172	0.794	9	94
1-21-88	Feed to #2 Absorber S	0.000	0.000	0.002	0.036
1-21-88	Disc. to Sewer	0.000	0.000	0.001	0.084
1-21-88	Total Gals. Through New Carbon = 77,545				

GROUNDWATER EXTRACTION WELLS
NORTH WORKS

77,545

Date	Sample	mg/l MeCl2	CHCl3	EDC	PDC
1-22-88	Feed to #1 Absorber N	0.144	0.911	8	100
1-22-88	Feed to #2 Absorber S	0.000	0.000	0.000	0.008
1-22-88	Disc. to Sewer	0.000	0.000	0.002	0.105
1-22-88	Total Gals. Through New Carbon = 99,782				
1-25-88	Feed to #1 Absorber N	0.339	1.233	8	108
1-25-88	Feed to #2 Absorber S	0.000	0.000	0.000	0.020
1-25-88	Disc. to Sewer	0.000	0.000	0.000	0.086
1-25-88	Total Gals. Through New Carbon = 165,214				
1-26-88	Feed to #1 Absorber N	0.345	1.150	8	104
1-26-88	Feed to #2 Absorber S	0.000	0.000	0.000	0.006
1-26-88	Disc. to Sewer	0.000	0.000	0.000	0.159
1-26-88	Total Gals. Through New Carbon = 185,272				
1-27-88	Feed to #1 Absorber N	0.183	1.098	8	104
1-27-88	Feed to #2 Absorber S	0.000	0.000	0.000	0.003
1-27-88	Disc. to Sewer	0.000	0.002	0.000	0.082
1-27-88	Total Gals. Through New Carbon = 199,635				
1-28-88	Feed to #1 Absorber N	0.161	0.593	9	101
1-28-88	Feed to #2 Absorber S	0.000	0.000	0.000	0.000
1-28-88	Disc. to Sewer	0.000	0.000	0.031	0.285
1-28-88	Total Gals. Through New Carbon = 214,126				
1-29-88	Feed to #1 Absorber N	0.198	1.172	8	96
1-29-88	Feed to #2 Absorber S	0.000	0.000	0.000	0.000
1-29-88	Disc. to Sewer	0.000	0.000	0.001	0.080
1-29-88	Total Gals. Through New Carbon = 230,991				
2-1-88	Feed to #1 Absorber N	0.625	3.429	8	92
2-1-88	Feed to #2 Absorber S	0.000	0.000	0.000	0.008
2-1-88	Disc. to Sewer	0.003	0.002	0.004	0.087
2-1-88	Total Gals. Through New Carbon = 286,800				

GROUNDWATER EXTRACTION WELLS
NORTH WORKS

286,800

Date	Sample	mg/l			
		$MeCl_2$	$CHCl_3$	EDC	PDC
2-2-88	Feed to #1 Absorber N	0.343	1.465	8	94
2-2-88	Feed to #2 Absorber S	0.000	0.000	0.000	0.005
2-2-88	Disc. to Sewer	0.002	0.006	0.007	0.099
2-2-88	Total Gals. Through New Carbon = 305,595				
2-3-88	Feed to #1 Absorber N	0.599	1.431	9	114
2-3-88	Feed to #2 Absorber S	0.017	0.014	0.006	0.015
2-3-88	Disc. to Sewer	0.000	0.000	0.017	0.074
2-3-88	Total Gals. Through New Carbon = 323,132				
2-4-88	Feed to #1 Absorber N	1.141	27	43	2116
2-4-88	Feed to #2 Absorber S	0.000	0.000	0.000	0.008
2-4-88	Disc. to Sewer	0.000	0.000	0.000	0.081
2-4-88	Total Gals. Through New Carbon = 343,164				
2-5-88	Feed to #1 Absorber N	0.743	28	48	2327
2-5-88	Feed to #2 Absorber S	0.000	0.000	0.000	0.009
2-5-88	Disc. to Sewer	0.000	0.000	0.001	0.057
2-5-88	Total Gals. Through New Carbon = 357,095				
2-8-88	Feed to #1 Absorber N	System Went Down @ 12:00 Noon			
2-8-88	Feed to #2 Absorber S	1-6-88. Both Nash's stopped.			
2-8-88	Disc. to Sewer				
2-8-88	Total Gals. Through New Carbon = 382,260				
2-9-88	Feed to #1 Absorber N	0.560	18	33	1798
2-9-88	Feed to #2 Absorber S	0.003	0.004	0.033	0.325
2-9-88	Disc. to Sewer	0.000	0.000	0.002	0.075
2-9-88	Total Gals. Through New Carbon = 407,025				
2-10-88	Feed to #1 Absorber N	0.805	22	41	2227
2-10-88	Feed to #2 Absorber S	0.022	0.071	0.448	5
2-10-88	Disc. to Sewer	0.000	0.000	0.002	0.079

2-10-88 Total Gals. Through New Carbon = 429,356

GROUNDWATER EXTRACTION WELLS
NORTH WORKS

429,356

Date	Sample	mg/l MeCl2	CHCl3	EDC	PDC
2-11-88	Feed to #1 Absorber N	0.836	22	40	2421
2-11-88	Feed to #2 Absorber S	0.072	0.402	2.221	37
2-11-88	Disc. to Sewer	Sample Line Froze			
2-11-88	Total Gals. Through New Carbon = 452,785				
2-12-88	Feed to #1 Absorber N	0.821	26	45	2631
2-12-88	Feed to #2 Absorber S	0.094	0.512	3.237	77
2-12-88	Disc. to Sewer	0.000	0.000	0.002	0.074
2-12-88	Total Gals. Through New Carbon = 475,157				
2-15-88	Feed to #1 Absorber K	0.683	25	40	2599
2-15-88	Feed to #2 Absorber S	0.305	2.739	12	354
2-15-88	Disc. to Sewer	0.000	0.000	0.007	0.086
2-15-88	Total Gals. Through New Carbon = 533,876				
2-16-88	Feed to #1 Absorber N	0.771	25	44	2671
2-16-88	Feed to #2 Absorber S	0.385	3.187	17	521
2-16-88	Disc. to Sewer	0.000	0.000	0.003	0.118
2-16-88	Total Gals. Through New Carbon = 555,379				
2-17-88	Feed to #1 Absorber N	0.735	22	38	2361
2-17-88	Feed to #2 Absorber S	0.616	4.939	22	734
2-17-88	Disc. to Sewer	0.000	0.000	0.002	0.096
2-17-88	Total Gals. Through New Carbon = 578,130				
2-18-88	Feed to #1 Absorber N	0.735	24	41	2473
2-18-88	Feed to #2 Absorber S	0.622	7	26	934
2-18-88	Disc. to Sewer	0.000	0.000	0.004	0.180
2-18-88	Total Gals. Through New Carbon = 594,240				
	Feed to #1 Absorber	North Absorber - Wash Water			
2-18-88	Feed to #2 Absorber 1st Wash	0.398	4	14	552
2-18-88	Disc. to Sewer 2nd Wash	0.006	0.087	0.158	11.912

Filled N-Absorber with Water.

GROUNDWATER EXTRACTION WELLS
NORTH WORKS

Date	Sample	mg/l $MeCl_2$	$CHCl_3$	EDC	PDC
2-19-88	Feed to #1 Absorber S	0.771	22	40	2401
	Feed to #2 Absorber	Out of	Service		
2-19-88	Disc. to Sewer	0.000	0.000	0.002	0.109
2-19-88	Total Gals. Through New Carbon = 16,738				
	Feed to #1 Absorber	Replaced	Carbon	For	
2-19-88	Feed to #2 Absorber	North	Absorber		
	Disc. to Sewer	Back To	Two Absorber operation		
		@ 0930.			
2-22-88	Feed to #1 Absorber S	0.951	22	42	2487
2-22-88	Feed to #2 Absorber N	0.000	0.000	0.006	0.239
2-22-88	Disc. to Sewer	0.000	0.000	0.003	0.167
2-22-88	Total Gals. Through New Carbon = 90,777				
2-23-88	Feed to #1 Absorber S	0.751	22	44	2465
2-23-88	Feed to #2 Absorber N	0.000	0.000	0.003	0.108
2-23-88	Disc. to Sewer	0.000	0.000	0.002	0.114
2-23-88	Total Gals. Through New Carbon = 119,750				
2-24-88	Feed to #1 Absorber S	1.034	33	65	3221
2-24-88	Feed to #2 Absorber N	0.000	0.000	0.002	0.108
2-24-88	Disc. to Sewer	0.000	0.000	0.003	0.187
2-24-88	Total Gals. Through New Carbon = 140,707				
	Feed to #1 Absorber	Sample	From Bottom	of	Cone
	Feed to #2 Absorber	North	Absorber.	(Heal	Sample Line)
2-24-88	Disc. to Sewer	0.002	0.026	0.060	4.097
2-25-88		0.002	0.023	0.062	3.835
2-25-88	Feed to #1 Absorber S	0.768	24	45	2664
2-25-88	Feed to #2 Absorber N	0.000	0.000	0.002	0.075
2-25-88	Disc. to Sewer	0.000	0.000	0.001	0.078
2-25-88	Total Gals. Through New Carbon = 165,259				

GROUNDWATER EXTRACTION WELLS * North Absorber - Heal Sample line. 165,259
NORTH WORKS

Date	Sample	mg/l $MeCl_2$	$CHCl_3$	EDC	PDC
2-26-88	Feed to #1 Absorber S	0.678	19	37	2056
2-26-88	Feed to #2 Absorber N	0.000	0.000	0.002	0.089
2-26-88	Disc. to Sewer	0.000	0.000	0.001	0.097
2-26-88	Total Gals. Through New Carbon = 189,808				
2-26-88	~~Feed to #1 Absorber~~ *	0.002	0.022	0.060	3.701
2-29-88	~~Feed to #2 Absorber~~ *	0.001	0.022	0.068	3.924
	Disc. to Sewer				
2-29-88	Feed to #1 Absorber S	0.706	20	41	2202
2-29-88	Feed to #2 Absorber N	0.000	0.000	0.005	0.129
2-29-88	Disc. to Sewer	0.000	0.000	0.001	0.069
2-29-88	Total Gals. Through New Carbon = 275,974				
3-1-88	Feed to #1 Absorber S	0.444	21	45	2342
3-1-88	Feed to #2 Absorber N	0.000	0.000	0.007	0.217
3-1-88	Disc. to Sewer	0.000	0.000	0.001	0.044
3-1-88	Total Gals. Through New Carbon = 303,778				
3-2-88	Feed to #1 Absorber S	0.460	21	45	2379
3-2-88	Feed to #2 Absorber N	0.000	0.000	0.005	0.199
3-2-88	Disc. to Sewer	0.000	0.000	0.001	0.047
3-2-88	Total Gals. Through New Carbon = 302,714				
3-3-88	Feed to #1 Absorber S	0.753	19	36	2184
3-3-88	Feed to #2 Absorber N	0.000	0.000	0.003	0.368
3-3-88	Disc. to Sewer	0.000	0.000	0.001	0.043
3-3-88	Total Gals. Through New Carbon = 327,443				
3-4-88	Feed to #1 Absorber S	0.678	19	38	2257
3-4-88	Feed to #2 Absorber N	0.000	0.000	0.002	0.143
3-4-88	Disc. to Sewer	0.000	0.000	0.001	0.040
3-4-88	Total Gals. Through New Carbon = 350,550				

350,550

GROUNDWATER EXTRACTION WELLS
NORTH WORKS

Date	Sample	mg/l MeCl2	CHCl3	EDC	PDC
3-7-88	Feed to #1 Absorber S	1.041	23	42	2719
3-7-88	Feed to #2 Absorber N	0.236	2.361	8.212	12.510
3-7-88	Disc. to Sewer	0.000	0.003	0.018	0.085
3-7-88	Total Gals. Through New Carbon = 419,998				
3-8-88	Feed to #1 Absorber S	0.630	22	38	2569
3-8-88	Feed to #2 Absorber N	0.348	8	24	136
3-8-88	Disc. to Sewer	0.000	0.000	0.001	0.047
3-8-88	Total Gals. Through New Carbon = 437,356				
3-9-88	Feed to #1 Absorber S	0.641	19	36	2308
3-9-88	Feed to #2 Absorber N	0.455	11	29	381
3-9-88	Disc. to Sewer	0.000	0.000	0.001	0.037
3-9-88	Total Gals. Through New Carbon = 463,029				
	Feed to #1 Absorber	3-9-88	System	Shut Down	
	Feed to #2 Absorber	@0730.	Removed	Carbon From	South
	Disc. to Sewer	Absor.	Washing	South Absorber.	
		North Absor.	Back in	Run @ 1400.	
3-10-88	Feed to #1 Absorber N	0.630	20	36	2361
	Feed to #2 Absorber				
3-10-88	Disc. to Sewer	0.000	0.000	0.000	0.031
3-10-88	Total Gals. Through New Carbon = 19,795				
3-11-88	Feed to #1 Absorber N	0.689	23	41	2682
	Feed to #2 Absorber				
3-11-88	Disc. to Sewer	0.000	0.000	0.000	0.026
3-11-88	Total Gals. Through New Carbon = 45,022				
	Feed to #1 Absorber	Charged	New	Carbon To	South
3-11-88	Feed to #2 Absorber	Absorber.	Back	To Two	Absorber
	Disc. to Sewer	operation	@ 9-15	Am.	

GROUNDWATER EXTRACTION WELLS
NORTH WORKS

45,022

Date	Sample	mg/l			
		$MeCl_2$	$CHCl_3$	EDC	PDC
3-14-88	Feed to #1 Absorber N	0.715	24	43	2824
3-14-88	Feed to #2 Absorber S	0.004	0.056	0.104	2.350
3-14-88	Disc. to Sewer	0.000	0.001	0.004	0.109
3-14-88	Total Gals. Through New Carbon = 112,800				
3-15-88	Feed to #1 Absorber N	0.706	21	41	2565
3-15-88	Feed to #2 Absorber S	0.002	0.010	0.026	0.890
3-15-88	Disc. to Sewer	0.001	0.002	0.007	0.189
3-15-88	Total Gals. Through New Carbon = 116,228				
3-16-88	Feed to #1 Absorber N	0.728	21	41	2434
3-16-88	Feed to #2 Absorber S	0.000	0.035	0.077	2.109
3-16-88	Disc. to Sewer	0.000	0.003	0.008	0.259
3-16-88	Total Gals. Through New Carbon = 141,134				
3-17-88	Feed to #1 Absorber N	0.544	20	34	2277
3-17-88	Feed to #2 Absorber S	0.001	0.015	0.031	1.042
3-17-88	Disc. to Sewer	0.000	0.000	0.002	0.064
3-17-88	Total Gals. Through New Carbon = 164,022				
3-18-88	Feed to #1 Absorber N	0.217	0.770	6	142
3-18-88	Feed to #2 Absorber S	0.000	0.006	0.011	0.453
3-18-88	Disc. to Sewer	0.000	0.000	0.001	0.052
3-18-88	Total Gals. Through New Carbon = 184,515				
3-21-88	Feed to #1 Absorber N	0.360	0.932	4	55
3-21-88	Feed to #2 Absorber S	0.000	0.009	0.013	0.650
3-21-88	Disc. to Sewer	0.000	0.000	0.001	0.047
3-21-88	Total Gals. Through New Carbon = 239,990				
3-22-88	Feed to #1 Absorber N	0.249	0.520	5	74
3-22-88	Feed to #2 Absorber S	0.000	0.003	0.005	0.298
3-22-88	Disc. to Sewer	0.000	0.000	0.001	0.030
3-22-88	Total Gals. Through New Carbon = 258,247				

258,247

GROUNDWATER EXTRACTION WELLS
NORTH WORKS

Date	Sample	mg/l $MeCl_2$	$CHCl_3$	EDC	PDC
3-23-88	Feed to #1 Absorber N	0.234	0.982	4	63
3-23-88	Feed to #2 Absorber S	0.000	0.003	0.001	0.266
3-23-88	Disc. to Sewer	0.000	0.000	0.001	0.038
3-23-88	Total Gals. Through New Carbon = 275,024				
3-24-88	Feed to #1 Absorber N	0.158	0.398	4	56
3-24-88	Feed to #2 Absorber S	0.000	0.002	0.003	0.258
3-24-88	Disc. to Sewer	0.000	0.000	0.001	0.027
3-24-88	Total Gals. Through New Carbon = 297,628				
3-25-88	Feed to #1 Absorber N	0.211	0.375	4	58
3-25-88	Feed to #2 Absorber S	0.000	0.002	0.002	0.172
3-25-88	Disc. to Sewer	0.000	0.000	0.001	0.029
3-25-88	Total Gals. Through New Carbon = 318,895				
3-28-88	Feed to #1 Absorber N	0.304	0.735	4	55
3-28-88	Feed to #2 Absorber S	0.000	0.002	0.002	0.227
3-28-88	Disc. to Sewer	0.000	0.000	0.001	0.030
3-28-88	Total Gals. Through New Carbon = 373,805				
3-29-88	Feed to #1 Absorber N	0.219	0.343	3.644	52
3-29-88	Feed to #2 Absorber S	0.000	0.000	0.001	0.188
3-29-88	Disc. to Sewer	0.000	0.000	0.001	0.028
3-29-88	Total Gals. Through New Carbon = 393,825				
3-30-88	Feed to #1 Absorber N	0.159	0.313	3.760	53
3-30-88	Feed to #2 Absorber S	0.000	0.001	0.001	0.166
3-30-88	Disc. to Sewer	0.000	0.000	0.001	0.027
3-30-88	Total Gals. Through New Carbon = 405,467				
3-31-88	Feed to #1 Absorber N	0.283	1.813	4.239	62
3-31-88	Feed to #2 Absorber S	0.000	0.000	0.000	0.084
3-31-88	Disc. to Sewer	0.000	0.000	0.001	0.022
3-31-88	Total Gals. Through New Carbon = 422,834				

GROUNDWATER EXTRACTION WELLS
NORTH WORKS

422,834

Date	Sample	mg/l $MeCl_2$	$CHCl_3$	EDC	PDC
4-1-88	Feed to #1 Absorber N.	0.783	15	31	1932
4-1-88	Feed to #2 Absorber S	0.000	0.000	0.001	0.087
4-1-88	Disc. to Sewer	0.000	0.000	0.000	0.022
4-1-88	Total Gals. Through New Carbon = 442,228				
4-4-88	Feed to #1 Absorber N	0.578	21	39	2321
4-4-88	Feed to #2 Absorber S	0.008	0.139	0.105	1.759
4-4-88	Disc. to Sewer	0.000	0.000	0.000	0.019
4-4-88	Total Gals. Through New Carbon = 496,183				
4-5-88	Feed to #1 Absorber N	0.812	18	39	2271
4-5-88	Feed to #2 Absorber S	0.087	1.128	0.830	38
4-5-88	Disc. to Sewer	0.000	0.000	0.002	0.022
4-5-88	Total Gals. Through New Carbon = 515,443				
4-6-88	Feed to #1 Absorber N	0.613	19	40	2190
4-6-88	Feed to #2 Absorber S	0.062	1.901	1.928	131
4-6-88	Disc. to Sewer	0.000	0.000	0.001	0.017
4-6-88	Total Gals. Through New Carbon = 534,496				
	~~Feed to #1 Absorber~~	4-6-88 Shut Flow To Absers. off @ 8 30 AM.			
	~~Feed to #2 Absorber~~	Replacing Carbon in North Absor.			
	~~Disc. to Sewer~~	Back To Single Absor. operation @ 10 30 AM (South)			
		4-8-88 Replaced Carbon in North Absor.			
		Back To 2 Absor. operation @ 9 50 AM			
4-7-88	Feed to #1 Absorber S	0.609	19	38	2156
	~~Feed to #2 Absorber~~				
4-7-88	Disc. to Sewer	0.000	0.000	0.000	0.017
4-7-88	Total Gals. [redacted] Through New Carbon = 18,077				
4-8-88	Feed to #1 Absorber S	0.449	7	26	1073
	~~Feed to #2 Absorber~~				
4-8-88	Disc. to Sewer	0.000	0.000	0.001	0.021
4-8-88	Total Gals. Through New Carbon = 34,119				

GROUNDWATER EXTRACTION WELLS
NORTH WORKS

34,119

Date	Sample	mg/l $MeCl_2$	$CHCl_3$	EDC	PDC
4-11-88	Feed to #1 Absorber S	0.868	21	45	2658
4-11-88	Feed to #2 Absorber N	0.000	0.012	0.009	0.954
4-11-88	Disc. to Sewer	0.000	0.000	0.000	0.023
4-11-88	Total Gals. Through New Carbon = 89,051				
4-12-88	Feed to #1 Absorber S	0.626	19	39	2506
4-12-88	Feed to #2 Absorber N	0.000	0.003	0.003	0.395
4-12-88	Disc. to Sewer	0.000	0.000	0.000	0.017
4-12-88	Total Gals. Through New Carbon = 105,225				
4-13-88	Feed to #1 Absorber S	0.629	20	41	2638
4-13-88	Feed to #2 Absorber N	0.000	0.005	0.003	0.279
4-13-88	Disc. to Sewer	0.000	0.000	0.000	0.015
4-13-88	Total Gals. Through New Carbon = 123,601				
4-14-88	Feed to #1 Absorber S	0.403	4	12	466
4-14-88	Feed to #2 Absorber N	0.000	0.002	0.002	0.224
4-14-88	Disc. to Sewer	0.000	0.000	0.000	0.020
4-14-88	Total Gals. Through New Carbon = 141,114				
4-15-88	Feed to #1 Absorber S	0.000	4	23	1214
4-15-88	Feed to #2 Absorber N	0.000	0.000	0.001	0.125
4-15-88	Disc. to Sewer	0.000	0.000	0.000	0.027
4-15-88	Total Gals. Through New Carbon = 155,643				
4-18-88	Feed to #1 Absorber S	0.000	0.287	0.855	60
4-18-88	Feed to #2 Absorber N	0.000	0.000	0.001	0.172
4-18-88	Disc. to Sewer	0.000	0.000	0.001	0.027
4-18-88	Total Gals. Through New Carbon = 195,014				
4-19-88	Feed to #1 Absorber S	0.000	0.343	1.545	54
4-19-88	Feed to #2 Absorber N	0.000	0.000	0.001	0.086
4-19-88	Disc. to Sewer	0.000	0.000	0.000	0.014
4-19-88	Total Gals. Through New Carbon = 211,473				

GROUNDWATER EXTRACTION WELLS
NORTH WORKS

211,014

Date	Sample	mg/l $MeCl_2$	$CHCl_3$	EDC	PDC
4-20-88	Feed to #1 Absorber S	0.000	0.574	1.327	57
4-20-88	Feed to #2 Absorber N	0.000	0.000	0.001	0.102
4-20-88	Disc. to Sewer	0.000	0.000	0.000	0.015
4-20-88	Total Gals. Through New Carbon = 225,422				
4-21-88	Feed to #1 Absorber S	0.000	0.391	1.519	44
4-21-88	Feed to #2 Absorber N	0.000	0.000	0.000	0.053
4-21-88	Disc. to Sewer	0.000	0.000	0.000	0.014
4-21-88	Total Gals. Through New Carbon = 239,204				
4-22-88	Feed to #1 Absorber S	0.000	0.498	3.117	50
4-22-88	Feed to #2 Absorber N	0.000	0.000	0.001	0.084
4-22-88	Disc. to Sewer	0.000	0.000	0.000	0.023
4-22-88	Total Gals. Through New Carbon = 246,410				
4-25-88	Feed to #1 Absorber S	0.000	0.330	1.326	40
4-25-88	Feed to #2 Absorber N	0.000	0.000	0.002	0.081
4-25-88	Disc. to Sewer	0.000	0.000	0.000	0.015
4-25-88	Total Gals. Through New Carbon = 287,483				
4-26-88	Feed to #1 Absorber S	0.511	12	29	1685
4-26-88	Feed to #2 Absorber N	0.000	0.000	0.001	0.051
4-26-88	Disc. to Sewer	0.000	0.000	0.001	0.020
4-26-88	Total Gals. Through New Carbon = 298,777				
4-27-88	Feed to #1 Absorber S	0.952	23	43	2612
4-27-88	Feed to #2 Absorber N	0.000	0.000	0.002	0.040
4-27-88	Disc. to Sewer	0.000	0.000	0.000	0.012
4-27-88	Total Gals. Through New Carbon = 314,215				
4-28-88	Feed to #1 Absorber S	0.980	24	46	2655
4-28-88	Feed to #2 Absorber N	0.000	0.000	0.000	0.028
4-28-88	Disc. to Sewer	0.000	0.000	0.000	0.009
4-28-88	Total Gals. Through New Carbon = 328,135				

GROUNDWATER EXTRACTION WELLS
NORTH WORKS

328,135

Date	Sample	mg/l $MeCl_2$	$CHCl_3$	EDC	PDC
4-29-88	Feed to #1 Absorber S	0.937	24	46	2640
4-29-88	Feed to #2 Absorber N	0.000	0.000	0.000	0.024
4-29-88	Disc. to Sewer	0.000	0.000	0.000	0.014
4-29-88	Total Gals. Through New Carbon = 341,802				
5-2-88	Feed to #1 Absorber S	0.968	24	46	2660
5-2-88	Feed to #2 Absorber N	0.018	0.119	0.286	1.182
5-2-88	Disc. to Sewer	0.000	0.000	0.000	0.011
5-2-88	Total Gals. Through New Carbon = 385,147				
5-3-88	Feed to #1 Absorber S	1.783	26	45	2622
5-3-88	Feed to #2 Absorber N	0.090	3	6	65
5-3-88	Disc. to Sewer	0.000	0.000	0.000	0.010
5-3-88	Total Gals. Through New Carbon = 399,097				
5-4-88	Feed to #1 Absorber S	1.010	22	42	2386
5-4-88	Feed to #2 Absorber N	0.317	4	9	223
5-4-88	Disc. to Sewer	0.000	0.000	0.000	0.009
5-4-88	Total Gals. Through New Carbon = 414,510				
5-5-88	Feed to #1 Absorber S	0.909	21	42	2320
5-5-88	Feed to #2 Absorber N	0.394	5	11	375
5-5-88	Disc. to Sewer	0.000	0.000	0.000	0.007
5-5-88	Total Gals. Through New Carbon = 429,512				
5-6-88	Feed to #1 Absorber S	0.953	24	47	2712
5-6-88	Feed to #2 Absorber N	0.000	7	15	607
5-6-88	Disc. to Sewer	0.000	0.000	0.000	0.009
5-6-88	Total Gals. Through New Carbon = 444,736				
5-9-88	Feed to #1 Absorber S	0.824	24	49	2696
5-9-88	Feed to #2 Absorber N	0.588	10	24	1174
5-9-88	Disc. to Sewer	0.000	0.000	0.000	0.011
5-9-88	Total Gals. Through New Carbon = 487,979				

GROUNDWATER EXTRACTION WELLS
NORTH WORKS

Date	Sample	mg/l $MeCl_2$	$CHCl_3$	EDC	PDC
	Feed to #1 Absorber	(5-9-88)	Shut off	Feed To	Absorbers.
	Feed to #2 Absorber	Removed	Carbon	in South	Absorber.
	Disc. to Sewer	Back To (Washing	one Absorber operation @ 10 10 AM South Absorber.)		
5-11-88	Recharged New Carbon To South Absorber. Went back To Two (2) Absorber operation @ 9 15 AM.				
5-10-88	Feed to #1 Absorber N	1.831	17	42	2298
5-10-88	Feed to #2 Absorber				
5-10-88	Disc. to Sewer	0.006	0.000	0.000	0.013
5-10-88	Total Gals. Through New Carbon = 13,585				
5-11-88	Feed to #1 Absorber N	1.473	0.880	1.645	119
5-11-88	Feed to #2 Absorber				
5-11-88	Disc. to Sewer	0.000	0.000	0.000	0.022
5-11-88	Total Gals. Through New Carbon = 27,097				
5-12-88	Feed to #1 Absorber N	0.755	0.288	0.630	40
5-12-88	Feed to #2 Absorber S	0.009	0.003	0.021	1.435
5-12-88	Disc. to Sewer	0.006	0.000	0.006	0.310
5-12-88	Total Gals. Through New Carbon = 38,036				
5-13-88	Feed to #1 Absorber N	1.659	15	40	1982
5-13-88	Feed to #2 Absorber S	0.008	0.012	0.037	2.342
5-13-88	Disc. to Sewer	0.005	0.000	0.004	0.225
5-13-88	Total Gals. Through New Carbon = 52,752				
5-16-88	Feed to #1 Absorber N	0.832	0.618	1.021	59
5-16-88	Feed to #2 Absorber S	0.009	0.000	0.020	1.276
5-16-88	Disc. to Sewer	0.006	0.000	0.002	0.127
5-16-88	Total Gals. Through New Carbon = 91,160				
5-17-88	Feed to #1 Absorber N	1.241	0.626	2.287	72
5-17-88	Feed to #2 Absorber S	0.028	0.000	0.019	1.496
5-17-88	Disc. to Sewer	0.014	0.000	0.002	0.153
5-17-88	Total Gals. Through New Carbon = 103,922				

GROUNDWATER EXTRACTION WELLS
NORTH WORKS

103,922

Date	Sample	mg/l			
		$MeCl_2$	$CHCl_3$	EDC	PDC
5-18-88	Feed to #1 Absorber N	2.303	9	28	1428
5-18-88	Feed to #2 Absorber S	0.009	0.003	0.028	2.107
5-18-88	Disc. to Sewer	0.004	0.000	0.001	0.067
5-18-88	Total Gals. Through New Carbon = 114,704				
5-19-88	Feed to #1 Absorber N	1.379	10	25	1408
5-19-88	Feed to #2 Absorber S	0.007	0.003	0.017	1.363
5-19-88	Disc. to Sewer	0.000	0.000	0.002	0.168
5-19-88	Total Gals. Through New Carbon = 124,415				
5-20-88	Feed to #1 Absorber N	1.321	12	28	1561
5-20-88	Feed to #2 Absorber S	0.005	0.000	0.016	1.304
5-20-88	Disc. to Sewer	0.000	0.000	0.002	0.159
5-20-88	Total Gals. Through New Carbon = 132,415				
5-23-88	Feed to #1 Absorber N	1.883	12	27	1409
5-23-88	Feed to #2 Absorber S	0.006	0.002	0.023	1.795
5-23-88	Disc. to Sewer	0.000	0.000	0.002	0.104
5-23-88	Total Gals. Through New Carbon = 155,142				
5-24-88	Feed to #1 Absorber N	1.176	12	27	1502
5-24-88	Feed to #2 Absorber S	0.006	0.003	0.022	1.672
5-24-88	Disc. to Sewer	0.000	0.000	0.001	0.089
5-24-88	Total Gals. Through New Carbon = 163,123				
5-25-88	Feed to #1 Absorber N	1.077	13	25	1371
5-25-88	Feed to #2 Absorber S	0.008	0.000	0.021	1.724
5-25-88	Disc. to Sewer	0.000	0.000	0.001	0.092
5-25-88	Total Gals. Through New Carbon = 171,136				
5-26-88	Feed to #1 Absorber N	1.112	11	24	1397
5-26-88	Feed to #2 Absorber S	0.007	0.002	0.023	1.849
5-26-88	Disc. to Sewer	0.004	0.000	0.001	0.075
5-26-88	Total Gals. Through New Carbon = 179,031				

179,031

GROUNDWATER EXTRACTION WELLS
NORTH WORKS

Date	Sample	mg/l			
		$MeCl_2$	$CHCl_3$	EDC	PDC
5-27-88	Feed to #1 Absorber N	1.176	12	26	1452
5-27-88	Feed to #2 Absorber S	0.007	0.002	0.026	2.040
5-27-88	Disc. to Sewer	0.002	0.000	0.001	0.074
5-27-88	Total Gals. Through New Carbon = 187,120				
5-30-88	Feed to #1 Absorber N	0.985	12	26	1385
5-30-88	Feed to #2 Absorber S	0.005	0.002	0.013	0.889
5-30-88	Disc. to Sewer	0.001	0.000	0.001	0.103
5-30-88	Total Gals. Through New Carbon = ???				Flow Meter Shut off
5-31-88	Feed to #1 Absorber N	0.869	11	23	1183
5-31-88	Feed to #2 Absorber S	0.005	0.004	0.015	0.937
5-31-88	Disc. to Sewer	0.003	0.000	0.001	0.121
5-31-88	Total Gals. Through New Carbon = ???				Flow Meter Shut off
6-1-88	Feed to #1 Absorber N	0.736	11	23	1363
6-1-88	Feed to #2 Absorber S	0.006	0.002	0.020	1.566
6-1-88	Disc. to Sewer	0.000	0.000	0.001	0.103
6-1-88	Total Gals. Through New Carbon = 197,849				
6-2-88	Feed to #1 Absorber N	0.814	8	20	760
6-2-88	Feed to #2 Absorber S	0.005	0.000	0.010	0.528
6-2-88	Disc. to Sewer	0.000	0.000	0.001	0.072
6-2-88	Total Gals. Through New Carbon = 206,351				
6-3-88	Feed to #1 Absorber N	0.699	7	18	603
6-3-88	Feed to #2 Absorber S	0.000	0.003	0.007	0.325
6-3-88	Disc. to Sewer	0.000	0.000	0.001	0.042
6-3-88	Total Gals. Through New Carbon = 213,671				
6-6-88	Feed to #1 Absorber N	0.871	9	23	769
6-6-88	Feed to #2 Absorber S	0.004	0.001	0.010	0.797
6-6-88	Disc. to Sewer	0.001	0.000	0.001	0.030
6-6-88	Total Gals. Through New Carbon = 238,850				

* River Water was shut off, Heavy Muds were Pumped To Absorbers Causing upset.

GROUNDWATER EXTRACTION WELLS
NORTH WORKS

238,850

Date	Sample	mg/l			
		$MeCl_2$	$CHCl_3$	EDC	PDC
6-7-88	Feed to #1 Absorber N	0.586	10	25	862
6-7-88	Feed to #2 Absorber S	0.002	0.005	0.015	1.082
6-7-88	Disc. to Sewer	0.000	0.000	0.001	0.040
6-7-88	Total Gals. Through New Carbon = 245,581				
6-8-88	Feed to #1 Absorber N	1.421	77	83	4112 *
6-8-88	Feed to #2 Absorber S	0.000	0.007	0.017	1.573*
6-8-88	Disc. to Sewer	0.007	0.004	0.094	3.152*
6-8-88	Total Gals. Through New Carbon = 248,051				
6-9-88	Feed to #1 Absorber N	0.610	10	20	769
6-9-88	Feed to #2 Absorber S	0.000	0.000	0.001	0.176
6-9-88	Disc. to Sewer	0.000	0.000	0.001	0.041
6-9-88	Total Gals. Through New Carbon = 256,484				
6-10-88	Feed to #1 Absorber N	1.336	10	21	755
6-10-88	Feed to #2 Absorber S	0.000	0.003	0.004	0.287
6-10-88	Disc. to Sewer	0.000	0.000	0.001	0.034
6-10-88	Total Gals. Through New Carbon = 264,403				
6-13-88	Feed to #1 Absorber N	0.603	9	20	768
6-13-88	Feed to #2 Absorber S	0.000	0.000	0.003	0.494
6-13-88	Disc. to Sewer	0.000	0.000	0.001	0.059
6-13-88	Total Gals. Through New Carbon = 288,206				
6-14-88	Feed to #1 Absorber N	0.643	10	24	826
6-14-88	Feed to #2 Absorber S	0.000	0.000	0.004	0.508
6-14-88	Disc. to Sewer	0.000	0.000	0.001	0.031
6-14-88	Total Gals. Through New Carbon = 296,120				
6-15-88	Feed to #1 Absorber N	0.801	10	27	847
6-15-88	Feed to #2 Absorber S	0.000	0.000	0.002	0.302
6-15-88	Disc. to Sewer	0.000	0.000	0.001	0.036
6-15-88	Total Gals. Through New Carbon = 304,314				

GROUNDWATER EXTRACTION WELLS
NORTH WORKS

304, 314

Date	Sample	mg/l $MeCl_2$	$CHCl_3$	EDC	PDC
6-16-88	Feed to #1 Absorber N	.798	8	25	748
6-16-88	Feed to #2 Absorber S	0.000	0.002	0.004	0.264
6-16-88	Disc. to Sewer	0.003	0.000	0.001	0.038
6-16-88	Total Gals. Through New Carbon = 311 652				
6-17-88	Feed to #1 Absorber N	1.113	9	24	764
6-17-88	Feed to #2 Absorber S	0.000	0.000	0.001	0.169
6-17-88	Disc. to Sewer	0.000	0.000	0.001	0.028
6-17-88	Total Gals. Through New Carbon = 320774				
6-20-88	Feed to #1 Absorber N		No Sample		
6-20-88	Feed to #2 Absorber S	0.000	0.004	0.002	0.286
6-20-88	Disc. to Sewer	0.000	0.000	0.001	0.058
6-20-88	Total Gals. Through New Carbon = 341,647				
6-21-88	Feed to #1 Absorber N	No tests.			
6-21-88	Feed to #2 Absorber S	G.C. Down, no electricity			
6-21-88	Disc. to Sewer				
6-21-88	Total Gals. Through New Carbon = 351,359				
6-22-88	Feed to #1 Absorber				
6-22-88	Feed to #2 Absorber				
6-22-88	Disc. to Sewer				
6-22-88	Total Gals Through New Carbon = 365 847				
6-23-88	~~Feed to #1 Absorber~~ Total Gals Through New Carbon				378 755
6-24-88	~~Feed to #2 Absorber~~ Total Gals Through New Carbon				392 045
	Disc. to Sewer				
6-27-88	Feed to #1 Absorber N				
6-27-88	Feed to #2 Absorber S	0.000	0.000	2.754	5.798
6-27-88	Disc. to Sewer	0.000	0.000	0.000	0.114
6-27-88	Total Gals Through New Carbon = 415061				

415061

GROUNDWATER EXTRACTION WELLS
NORTH WORKS

Date	Sample	mg/l			
		$MeCl_2$	$CHCl_3$	EDC	PDC
6-28-88	Feed to #1 Absorber N	0.504	6.17	15	718
6-28-88	Feed to #2 Absorber S	0.039	0.005	0.979	13
6-28-88	Disc. to Sewer	0.000	0.004	0.003	0.028
6-28-88	Total Gals Through New Carbon = 425,524				
6-29-88	Feed to #1 Absorber N	1.063	12	27	1234
6-29-88	Feed to #2 Absorber S	0.055	0.003	1.107	16
6-29-88	Disc. to Sewer	0.003	0.000	0.002	0.078
6-29-88	Total Gals Through New Carbon = 430,532				
6-30-88	Feed to #1 Absorber N	0.291	0.380	1.63	80
6-30-88	Feed to #2 Absorber S	0.103	0.000	1.21	17
6-30-88	Disc. to Sewer	0.000	0.000	0.001	0.063
6-30-88	Total Gals Throug New Carbon = 434,224				
7-1-88	Feed to #1 Absorber N	1.76	18	56	1137
7-1-88	Feed to #2 Absorber S	0.147	0.000	1.99	19
7-1-88	Disc. to Sewer	0.000	0.000	0.000	0.028
7-1-88	Total Gals. Through New Carbon = 448135				
7-4-88	Feed to #1 Absorber N	1.71	26	74	1824
7-4-88	Feed to #2 Absorber S	0.409	0.000	30	103
7-4-88	Disc. to Sewer	0.004	0.000	0.000	0.021
7-4-88	Tot. Gals. Through New Carbon = 492810				
7-5-88	Feed to #1 Absorber N	No	Sample		
7-5-88	Feed to #2 Absorber S	0.363	0.000	35	111
7-5-88	Disc. to Sewer	0.000	0.000	0.001	0.036
7-5-88	Tot. Gals. Through New Carbon = [redacted] 506,322				
	Feed to #1 Absorber				
	Feed to #2 Absorber				
	Disc. to Sewer				

GROUNDWATER EXTRACTION WELLS
NORTH WORKS

Changed Carbon 7-5-88

Date	Sample	mg/l $MeCl_2$	$CHCl_3$	EDC	PDC
7-6-88	Feed to #1 Absorber S	0.868	21	57	1562
7-6-88	Feed to #2 Absorber N	0.000	0.000	0.009	0.328
7-6-88	Disc. to Sewer	No Sample - #1 Abs. discharged to Sewer			
7-6-88	Total Gals Through New Carbon = 2351				
7-7-88	Feed to #1 Absorber S	2.2	19	57	1364
7-7-88	Feed to #2 Absorber N	0.002	0.000	0.030	0.504
7-7-88	Disc. to Sewer	0.000	0.000	0.005	0.092
7-7-88	Total Gals Through New Carbon = 16523				
7-11-88	Feed to #1 Absorber S	2.53	43	55	2021
7-11-88	Feed to #2 Absorber N	0.003	0.000	0.003	0.098
7-11-88	Disc. to Sewer	0.002	0.000	0.002	0.030
7-11-88	Total Gals. Through New Carbon = 71285				
7-13-88	Feed to #1 Absorber	5.84	38	48	1113
7-13-88	Feed to #2 Absorber	0.000	0.000	0.002	0.085
7-13-88	Disc. to Sewer	0.005	0.005	0.006	0.031
7-13-88	Total Gals Through New Carbon = 98635				
7-14-88	Feed to #1 Absorber	2.88	32	53	1223
7-14-88	Feed to #2 Absorber	0.005	0.000	0.002	0.059
7-14-88	Disc. to Sewer	0.006	0.005	0.006	0.031
7-14-88	Total Gals Through New Carbon = 112,233				
7-15-88	Feed to #1 Absorber	2.58	25	53	1268
7-15-88	Feed to #2 Absorber	0.002	0.002	0.002	0.234
7-15-88	Disc. to Sewer	0.002	0.000	0.001	0.014
7-15-88	Total Gals Through New Carbon = 125573				
7-18-88	Feed to #1 Absorber S	2.83	23	53	1284
7-18-88	Feed to #2 Absorber N	0.002	0.000	0.001	0.049
7-18-88	Disc. to Sewer	0.003	0.000	0.002	0.016

Total Gals. Through New Carbon = 165,057

165,057

GROUNDWATER EXTRACTION WELLS
NORTH WORKS

Date	Sample	mg/l			
		$MeCl_2$	$CHCl_3$	EDC	PDC
7-19-88	Feed to #1 Absorber S	1.043	13	44	903
7-19-88	Feed to #2 Absorber N	0.002	0.000	0.002	0.078
7-19-88	Disc. to Sewer	0.000	0.000	0.001	0.012
7-19-88	Total Gals Through New Carbon = 178,787				
7-20-88	Feed to #1 Absorber S	1.40	23	59	1398
7-20-88	Feed to #2 Absorber N	0.008	0.009	0.009	0.074
7-20-88	Disc. to Sewer	0.003	0.000	0.001	0.009
7-20-88	Total Gals. Through New Carbon = 192,430				
7-21-88	Feed to #1 Absorber S	1.174	15	44	976
7-21-88	Feed to #2 Absorber N	0.002	0.002	0.007	0.224
7-21-88	Disc. to Sewer	0.000	0.000	0.001	0.007
7-21-88	Total Gals. Through New Carbon = 205,872				
7-22-88	Feed to #1 Absorber S	1.44	23	63	1436
7-22-88	Feed to #2 Absorber N	0.003	0.000	0.002	0.085
7-22-88	Disc. to Sewer	0.003	0.000	0.001	0.030
7-22-88	Total Gals. Through New Carbon = 218,890				
7-25-88	Feed to #1 Absorber S	1.25	20	51	1279
7-25-88	Feed to #2 Absorber N	0.002	0.000	0.001	0.041
7-25-88	Disc. to Sewer	0.005	0.006	0.006	0.061
7-25-88	Total Gals. Through New Carbon = 257,045				
7-26-88	Feed to #1 Absorber S	2.18	17	44	1090
7-26-88	Feed to #2 Absorber N	0.008	0.000	0.001	0.060
7-26-88	Disc. to Sewer	0.007	0.000	0.000	0.011
7-26-88	Total Gals. Through New Carbon = 266,604				
7-27-88	Feed to #1 Absorber S	1.48	12	36	807
7-27-88	Feed to #2 Absorber N	0.000	0.000	0.001	0.059
7-27-88	Disc. to Sewer	0.007	0.000	0.000	0.009
7-27-88	Total Gals. Through New Carbon = 279,534				

GROUNDWATER EXTRACTION WELLS
NORTH WORKS

279,534

Date	Sample	mg/l $MeCl_2$	$CHCl_3$	EDC	PDC
7-28-88	Feed to #1 Absorber S	1.92	19	48	1183
7-28-88	Feed to #2 Absorber N	0.018	0.006	0.015	0.514
7-28-88	Disc. to Sewer	0.003	0.000	0.000	0.012
7-28-88	Total Gals. Through New Carbon = 292,909				
7-29-88	Feed to #1 Absorber S	1.45	23	58	1443
7-29-88	Feed to #2 Absorber N	0.175	0.263	0.391	3.55
7-29-88	Disc. to Sewer	0.005	0.005	0.004	0.014
7-29-88	Total Gals Through New Carbon = 306,174				
8-1-88	Feed to #1 Absorber S	1.97	19	59	1185
8-1-88	Feed to #2 Absorber N	0.648	2.10	24.6	41.8
8-1-88	Disc. to Sewer	0.000	0.000	0.004	0.014
8-1-88	Total Gals. Through New Carbon = 343816				
8-2-88	Feed to #1 Absorber S	2.10	23	73	1560
8-2-88	Feed to #2 Absorber N	0.586	2.72	25.7	52.9
8-2-88	Disc. to Sewer	0.001	0.000	0.001	0.015
8-2-88	Total Gals. Through New Carbon = 354545				
	Feed to #1 Absorber				
	Feed to #2 Absorber				
	Disc. to Sewer				
8-2-88	South Abs. Isolated, preparing for Carbon Change				
	Feed to #1 Absorber				
	Feed to #2 Absorber				
	Disc. to Sewer				
	Feed to #1 Absorber				
	Feed to #2 Absorber				
	Disc. to Sewer				

GROUNDWATER EXTRACTION WELLS
NORTH WORKS

Date	Sample	mg/l			
		$MeCl_2$	$CHCl_3$	EDC	PDC
8-3-88	Feed to #1 Absorber N.	1.58	20	53	1999
8-3-88	Feed to #2 Absorber S	South Abs. bypassed for Carbon Change			
8-3-88	Disc. to Sewer	0.002	0.000	0.000	0.012
8-3-88	Total Gals Through New Carbon 10908				
8-4-88	Feed to #1 Absorber N	System down for Carbon Change			
8-4-88	Feed to #2 Absorber S				
8-4-88	Disc. to Sewer	0.006	0.005	0.005	0.034
8-4-88	Total Gals. Through New Carbon 21903				
8-5-88	Feed to #1 Absorber N	1.50	20	54	1144
8-5-88	Feed to #2 Absorber S	S. Abs. down - Carbon Changed			
8-5-88	Disc. to Sewer	0.000	0.000	0.001	0.014
8-5-88	Total Gals Through New Carbon 32630				
6-8-88	Feed to #1 Absorber N	1.65	15	44	990
8-8-88	Feed to #2 Absorber S	0.004	0.004	0.030	0.451
8-8-88	Disc. to Sewer	0.010	0.000	0.008	0.149
8-8-88	Total Gals Through New Carbon 65879				
8-9-88	Feed to #1 Absorber N	2.01	18	53	1168
8-9-88	Feed to #2 Absorber S	0.003	0.001	0.013	0.297
8-9-88	Disc. to Sewer	0.000	0.000	0.004	0.103
8-9-88	Total Gals. Through New Carbon = 76517				
8-10-88	Feed to #1 Absorber N	1.89	19	55	1209
8-10-88	Feed to #2 Absorber S	0.006	0.004	0.013	0.309
8-10-88	Disc. to Sewer	0.007	0.000	0.003	0.089
8-10-88	Total Gals. Through New Carbon = 87059				
8-11-88	Feed to #1 Absorber N	1.78	18	55	1145
8-11-88	Feed to #2 Absorber S	0.004	0.000	0.008	0.319
8-11-88	Disc. to Sewer	0.002	0.000	0.002	0.068
8-11-88	Total Gals Through New Carbon = 97508				

97508

GROUNDWATER EXTRACTION WELLS
NORTH WORKS

Date	Sample	mg/l $MeCl_2$	$CHCl_3$	EDC	PDC
8-12-88	Feed to #1 Absorber N.	1.61	21	63	1439
8-12-88	Feed to #2 Absorber S	0.004	0.000	0.008	0.277
8-12-88	Disc. to Sewer	0.000	0.000	0.002	0.062
8-12-88	Total Gals Through New Carbon = 107863				
8-15-88	Feed to #1 Absorber N	1.051	10	35	693
8-15-88	Feed to #2 Absorber S	0.000	0.002	0.011	0.352
8-15-88	Disc. to Sewer	0.002	0.000	0.002	0.069
8-15-88	Total Gals Through New Carbon = 138,417				
8-16-88	Feed to #1 Absorber N	1.054	12	37	737
8-16-88	Feed to #2 Absorber S	0.002	0.000	0.003	0.132
8-16-88	Disc. to Sewer	0.002	0.000	0.001	0.041
8-16-88	Total Gals Through New Carbon = 148,492				
8-17-88	Feed to #1 Absorber N	0.0	9.448	32.880	612.361
8-17-88	Feed to #2 Absorber S	0.003	0.001	0.004	0.125
8-17-88	Disc. to Sewer NP	0.000	0.000	0.001	0.037
8-17-88	Total Gals. Through New Carbon = 158,495				
8-18-88	Feed to #1 Absorber N	1.457	13.889 ~~0.00~~	41.343	863.147
8-18-88	Feed to #2 Absorber S	0.002	0.000	0.002	0.079
8-18-88	Disc. to Sewer	0.000	0.000	0.001	0.027
8-18-88	TOTAL GALS. THROUGH NEW CARBON = 168430				
8-19-88	Feed to #1 Absorber N	1.334	14.07	41.088	903.864
8-19-88	Feed to #2 Absorber S	0.002	0.000	0.003	0.105
8-19-88	Disc. to Sewer	0=0.000	0.000	0.001	0.028
8-19-88	TOTAL GALS THROUGH NEW CARBON = 178,410				
8-22-88	Feed to #1 Absorber N	1.268	15.433	42.444	956.131
8-22-88	Feed to #2 Absorber S	0.003	0.000	0.003	0.093
8-22-88	Disc. to Sewer	0.002	0.000	0.001	0.021

Total Gals. Through New Carbon = 199911

GROUNDWATER EXTRACTION WELLS
NORTH WORKS

199,911

Date	Sample	mg/l MeCl2	CHCl3	EDC	PDC
8-23-88	Feed to #1 Absorber N	1.456	19	52	1138
8-23-88	Feed to #2 Absorber S	0.000	0.000	0.004	0.121
8-23-88	Disc. to Sewer	0.000	0.000	0.001	0.019
8-23-88	TOTAL GALS. THROUGH NEW CARBON = 209,688				
8-24-88	Feed to #1 Absorber N	1.397	18	49	1129
8-24-88	Feed to #2 Absorber S	0.003	0.000	0.002	0.073
8-24-88	Disc. to Sewer	0.000	0.000	0.001	0.015
8-24-88	TOTAL GALS. THROUGH NEW CARBON = 219,590				
8-25-88	Feed to #1 Absorber N	1.403	13.259	43.572	919.033
8-25-88	Feed to #2 Absorber S	0.000	0.001	0.003	0.126
8-25-88	Disc. to Sewer	0.000	0.000	0.001	0.018
8-25-88	TOTAL GALS. THROUGH NEW CARBON = 229,321				
8-26-88	Feed to #1 Absorber N	1.571	12	41	845
8-26-88	Feed to #2 Absorber S	0.003	0.000	0.003	0.195
8-26-88	Disc. to Sewer	0.000	0.000	0.000	0.016
8-26-88	TOTAL GALS. THROUGH NEW CARBON = 239,009				
8-29-88	Feed to #1 Absorber N	(NEW	CARBON)		
8-29-88	Feed to #2 Absorber S				
8-29-88	Disc. to Sewer				
8-29-88	Total Gals. Through New Carbon = 239,009				
8-30-88	Feed to #1 Absorber S	1.551	16.318	47.738	1039.667
8-30-88	Feed to #2 Absorber N	CHANGED CARBON			
8-30-88	Disc. to Sewer	0.003	0.000	0.002	0.039
8-30-88	TOTAL GALS. THROUGH NEW CARBON = 9968				
8-31-88	Feed to #1 Absorber S	1.122	11.299	36.350	796.120
8-31-88	Feed to #2 Absorber N	0.001	0.000	0.001	0.024
8-31-88	Disc. to Sewer	0.002	0.000	0.001	0.018
8-31-88	TOTAL GALS. THROUGH NEW CARBON = 20,547				

GROUNDWATER EXTRACTION WELLS
NORTH WORKS

20,547

Date	Sample	mg/l			
		$MeCl_2$	$CHCl_3$	EDC	PDC
9-1-88	Feed to #1 Absorber S.	1.648	22.641	61.644	1471.938
9-1-88	Feed to #2 Absorber N	0.000	0.000	0.001	0.019
9-1-88	Disc. to Sewer	0.000	0.000	0.0004	0.009
9-1-88	TOTAL GALS. THROUGH NEW CARBON = 30,992				
9-2-88	Feed to #1 Absorber S	0.791	3.576	12.555	350.297
9-2-88	Feed to #2 Absorber N	0.002	0.000	0.003	0.063
9-2-88	Disc. to Sewer	0.002	0.000	0.0004	0.010
9-2-88	TOTAL GALS. THROUGH NEW CARBON = 35,951				
9-6-88	Feed to #1 Absorber S	1.708	17.033	47.617	1243.267
9-6-88	Feed to #2 Absorber N	0.002	0.000	0.001	0.039
9-6-88	Disc. to Sewer	0.001	0.000	0.000	0.005
9-6-88	TOTAL GALS THROUGH NEW CARBON = 80,459				
9-7-88	Feed to #1 Absorber S	1.457	18.630	52.680	1349.56
9-7-88	Feed to #2 Absorber N	0.003	0.000	0.001	0.035
9-7-88	Disc. to Sewer	0.000	0.000	0.000	0.003
9-7-88	TOTAL GALS. THROUGH NEW CARBON = 91,042				
9-8-88	Feed to #1 Absorber S	0.627	1.412	2.183	110.17
9-8-88	Feed to #2 Absorber N	0.003	0.000	0.001	0.040
9-8-88	Disc. to Sewer	0.001	0.000	0.001	0.007
9-8-88	TOTAL GALS. THROUGH NEW CARBON = 95,912				
9-9-88	Feed to #1 Absorber S	0.936	3.175	17.65	331.6
9-9-88	Feed to #2 Absorber N	0.003	0.000	0.001	0.038
9-9-88	Disc. to Sewer	0.000	0.000	0.000	0.005
9-9-88	TOTAL GALS. THROUGH NEW CARBON = 102,375				
9-12-88	Feed to #1 Absorber S	0.67	0.4	1.28	18.04
9-12-88	Feed to #2 Absorber N	0.000	0.000	0.001	0.04
9-12-88	Disc. to Sewer	0.001	0.000	0.000	0.005
9-12-88	TOTAL GALS. THROUGH NEW CARBON = 113,421				

GROUNDWATER EXTRACTION WELLS
NORTH WORKS

113,421

Date	Sample	mg/l			
		$MeCl_2$	$CHCl_3$	EDC	PDC
9-13-88	Feed to #1 Absorber S	0.71	2.87	8.61	140.3
9-13-88	Feed to #2 Absorber N	0.000	0.000	0.001	0.03
9-13-88	Disc. to Sewer	0.000	0.000	0.000	0.004
9-13-88	TOTAL GALS. THROUGH NEW CARBON = 118,864				
9-14-88	Feed to #1 Absorber S	1.35	33.49	64.01	2984.24
9-14-88	Feed to #2 Absorber N	0.000	0.000	0.001	0.021
9-14-88	Disc. to Sewer	0.001	0.000	0.000	0.007
9-14-88	TOTAL GALS. THROUGH NEW CARBON = 123,273				
9-15-88	Feed to #1 Absorber S	1.36	13.50	41.56	1011.8
9-15-88	Feed to #2 Absorber N	0.000	0.000	0.000	0.021
9-15-88	Disc. to Sewer	0.000	0.000	0.000	0.002
9-15-88	TOTAL GALS. THROUGH NEW CARBON = 133,033				
9-16-88	Feed to #1 Absorber S	1.23	15.09	44.32	1058.8
9-16-88	Feed to #2 Absorber N	0.002	0.000	0.001	0.06
9-16-88	Disc. to Sewer	0.000	0.000	0.000	0.003
9-16-88	TOTAL GALS. THROUGH NEW CARBON = 140,209				
9-19-88	Feed to #1 Absorber S	1.183	14	41	1075
9-19-88	Feed to #2 Absorber N	0.000	0.002	0.004	0.166
9-19-88	Disc. to Sewer	0.000	0.000	0.000	0.003
9-19-88	TOTAL GALS. THROUGH NEW CARBON = 175,085				
9-20-88	Feed to #1 Absorber S	1.053	12	38	925
9-20-88	Feed to #2 Absorber N	0.000	0.000	0.001	0.021
9-20-88	Disc. to Sewer	0.000	0.000	0.000	0.003
9-20-88	Total Gals. Through New Carbon = 181,907				
9-21-88	Feed to #1 Absorber S	1.245	20	51	1623
9-21-88	Feed to #2 Absorber N	0.003	0.000	0.002	0.096
9-21-88	Disc. to Sewer	0.000	0.000	0.000	0.004
9-21-88	Total Gals. Through New Carbon = 189,893				

GROUNDWATER EXTRACTION WELLS
NORTH WORKS

189,893

Date	Sample	mg/l			
		$MeCl_2$	$CHCl_3$	EDC	PDC
9-22-88	Feed to #1 Absorber S	1.251	13	36	1027
9-22-88	Feed to #2 Absorber N	0.002	0.000	0.001	0.057
9-22-88	Disc. to Sewer	0.003	0.000	0.000	0.003
9-22-88	Total Gals. Through New Carbon = 201,345				
9-23-88	Feed to #1 Absorber S	0.989	9	28	680
9-23-88	Feed to #2 Absorber N	0.002	0.001	0.005	0.141
9-23-88	Disc. to Sewer	0.000	0.000	0.000	0.002
9-23-88	Total Gals. Through New Carbon = 215,118				
9-26-88	Feed to #1 Absorber S	1.066	9	27	629
9-26-88	Feed to #2 Absorber N	0.003	0.002	0.008	0.203
9-26-88	Disc. to Sewer	0.000	0.000	0.000	0.002
9-26-88	Total Gals. Through New Carbon = 246,531				
9-27-88	Feed to #1 Absorber S	0.946	7	23	527
9-27-88	Feed to #2 Absorber N	0.006	0.001	0.004	0.100
9-27-88	Disc. to Sewer	0.000	0.000	0.000	0.003
9-27-88	Total Gals. Through New Carbon = 253,632				
9-28-88	Feed to #1 Absorber S	1.308	17	56	1341
9-28-88	Feed to #2 Absorber N	0.021	0.006	0.110	0.384
9-28-88	Disc. to Sewer	0.000	0.000	0.000	0.001
9-28-88	Total Gals. Through New Carbon = 264,384				
9-29-88	Feed to #1 Absorber S	1.169	16	48	1199
9-29-88	Feed to #2 Absorber N	0.029	0.057	0.834	0.187
9-29-88	Disc. to Sewer	0.002	0.000	0.000	0.002
9-29-88	Total Gals. Through New Carbon = 274,676				
9-30-88	Feed to #1 Absorber S	1.116	15	48	1113
9-30-88	Feed to #2 Absorber N	0.032	0.143	1.161	1.563
9-30-88	Disc. to Sewer	0.000	0.000	0.000	0.002
9-30-88	Total Gals. Through New Carbon = 284,530				

GROUNDWATER EXTRACTION WELLS
NORTH WORKS

284,530

Date	Sample	mg/l MeCl2	CHCl3	EDC	PDC
10-3-88	Feed to #1 Absorber N	1.595	22	62	1542
10-3-88	Feed to #2 Absorber S				
10-3-88	Disc. to Sewer	0.000	0.000	0.002	0.060
10-3-88	Total Gals. Through New Carbon. = 312,099				
	Feed to #1 Absorber	10-3-88	Removed Carbon From		
	Feed to #2 Absorber	South Absorber and Washed Same,			
	Disc. to Sewer	10-4-88	Recharged New	Carbon	
		To South Absorber. Back To 2 Absor, operation @ 9:00 AM.			
10-4-88	Feed to #1 Absorber N	1.064	14	46	1123
10-4-88	Feed to #2 Absorber				
10-4-88	Disc. to Sewer	0.000	0.000	0.000	0.002
10-4-88	Total Gals. Through New Carbon = 8,233				
10-5-88	Feed to #1 Absorber N	1.256	16	50	1133
10-5-88	Feed to #2 Absorber S	0.000	0.000	0.003	0.030
10-5-88	Disc. to Sewer	0.001	0.000	0.001	0.029
10-5-88	Total Gals. Through New Carbon = 16,755				
10-6-88	Feed to #1 Absorber N	1.329	18	58	1394
10-6-88	Feed to #2 Absorber S	0.000	0.000	0.001	0.009
10-6-88	Disc. to Sewer	0.000	0.000	0.001	0.015
10-6-88	Total Gals. Through New Carbon = 25,525				
10-7-88	Feed to #1 Absorber N	1.421	18	56	1393
10-7-88	Feed to #2 Absorber S	0.000	0.002	0.006	0.174
10-7-88	Disc. to Sewer	0.000	0.000	0.000	0.013
10-7-88	Total Gals. Through New Carbon = 34,375				
	Feed to #1 Absorber				
	Feed to #2 Absorber				
	Disc. to Sewer				

BASF CHEMICAL CORPORATION, WYANDOTTE SITE

NORTH WORKS GROUNDWATER EXTRACTION WELLS

DATE	SAMPLE	METHYLENE CHLORIDE	CHLOROFORM	ETHYLENE DICHLORIDE	PROPYLENE DICHLORIDE
10-10-88	FEED TO #1 ABS.N	1.239	19	58	1420
10-10-88	FEED TO #2 ABS.S	0.002	0.005	0.017	0.502
10-10-88	DISC. TO SEWER	0.000	0.000	0.000	0.010
10-10-88	TOTAL GALLONS THROUGH NEW CARBON = 57,548				
10-11-88	FEED TO #1 ABS.N	1.172	18	59	1388
10-11-88	FEED TO #2 ABS.S	0.002	0.000	0.003	0.075
10-11-88	DISC. TO SEWER	0.000	0.000	0.000	0.009
10-11-88	TOTAL GALLONS THROUGH NEW CARBON = 65,166				
10-12-88	FEED TO #1 ABS.N	1.581	24	70	1626
10-12-88	FEED TO #2 ABS.S	0.003	0.001	0.003	0.118
10-12-88	DISC. TO SEWER	0.000	0.000	0.000	0.012
10-12-88	TOTAL GALLONS THROUGH NEW CARBON = 72,213				
10-13-88	FEED TO #1 ABS.N	1.369	22	64	1751
10-13-88	FEED TO #2 ABS.S	0.003	0.007	0.013	0.567
10-13-88	DISC. TO SEWER	0.000	0.000	0.000	0.008
10-13-88	TOTAL GALLONS THROUGH NEW CARBON = 79,621				
10-14-88	FEED TO #1 ABS.N	1.076	20	61	1461
10-14-88	FEED TO #2 ABS.S	0.000	0.000	0.002	0.067
10-14-88	DISC. TO SEWER	0.000	0.000	0.000	0.011
10-14-88	TOTAL GALLONS THROUGH NEW CARBON = 86,960				
10-17-88	FEED TO #1 ABS.N	0.860	14	45	997
10-17-88	FEED TO #2 ABS.S	0.000	0.000	0.002	0.072
10-17-88	DISC. TO SEWER	0.000	0.000	0.000	0.009
10-17-88	TOTAL GALLONS THROUGH NEW CARBON = 108,503				

9/29/88

BASF CHEMICAL CORPORATION, WYANDOTTE SITE

108,503

NORTH WORKS GROUNDWATER EXTRACTION WELLS

DATE	SAMPLE	METHYLENE CHLORIDE	CHLOROFORM	ETHYLENE DICHLORIDE	PROPYLENE DICHLORIDE
10-18-88	FEED TO #1 ABS.N	1.395	11	40	811
10-18-88	FEED TO #2 ABS.S	0.000	0.002	0.004	0.101
10-18-88	DISC. TO SEWER	0.000	0.000	0.000	0.006
10-18-88	TOTAL GALLONS THROUGH NEW CARBON = 117,635				
10-19-88	FEED TO #1 ABS.N	1.308	8	32	589
10-19-88	FEED TO #2 ABS.S	0.000	0.001	0.003	0.087
10-19-88	DISC. TO SEWER	0.000	0.000	0.000	0.008
10-19-88	TOTAL GALLONS THROUGH NEW CARBON = 125,926				
10-20-88	FEED TO #1 ABS.N	1.123	14	50	1030
10-20-88	FEED TO #2 ABS.S	0.000	0.000	0.001	0.038
10-20-88	DISC. TO SEWER	0.000	0.000	0.000	0.007
10-20-88	TOTAL GALLONS THROUGH NEW CARBON = 135,319				
10-21-88	FEED TO #1 ABS.N	1.010	13	43	841
10-21-88	FEED TO #2 ABS.S	0.000	0.003	0.006	0.188
10-21-88	DISC. TO SEWER	0.000	0.000	0.000	0.006
10-21-88	TOTAL GALLONS THROUGH NEW CARBON = 144,648				
10-24-88	FEED TO #1 ABS.N	0.924	14	45	993
10-24-88	FEED TO #2 ABS.S	0.000	0.000	0.002	0.062
10-24-88	DISC. TO SEWER	0.000	0.000	0.000	0.005
10-24-88	TOTAL GALLONS THROUGH NEW CARBON = 170,551				
10-25-88	FEED TO #1 ABS.N	1.132	17	53	1210
10-25-88	FEED TO #2 ABS.S	0.001	0.001	0.002	0.090
10-25-88	DISC. TO SEWER	0.000	0.000	0.000	0.004
10-25-88	TOTAL GALLONS THROUGH NEW CARBON = 179,065				

9/29/88

BASF CHEMICAL CORPORATION, WYANDOTTE SITE

179,065

NORTH WORKS GROUNDWATER EXTRACTION WELLS

DATE	SAMPLE	METHYLENE CHLORIDE	CHLOROFORM	ETHYLENE DICHLORIDE	PROPYLENE DICHLORIDE
10-26-88	FEED TO #1 ABS.N	1.133	17	53	1213
10-26-88	FEED TO #2 ABS.S	0.000	0.000	0.001	0.035
10-26-88	DISC. TO SEWER	0.000	0.000	0.000	0.005
10-26-88	TOTAL GALLONS THROUGH NEW CARBON = 187,607				
10-27-88	FEED TO #1 ABS.N	0.939	15	47	1142
10-27-88	FEED TO #2 ABS.S	0.002	0.004	0.011	0.392
10-27-88	DISC. TO SEWER	0.000	0.000	0.000	0.006
10-27-88	TOTAL GALLONS THROUGH NEW CARBON = 196,074				
10-28-88	FEED TO #1 ABS.N	1.214	18	54	1258
10-28-88	FEED TO #2 ABS.S	0.000	0.001	0.003	0.122
10-28-88	DISC. TO SEWER	0.000	0.000	0.000	0.008
10-28-88	TOTAL GALLONS THROUGH NEW CARBON = 204,410				
10-31-88	FEED TO #1 ABS.N	0.671	4	18	391
10-31-88	FEED TO #2 ABS.S	0.000	0.000	0.002	0.077
10-31-88	DISC. TO SEWER	0.000	0.000	0.001	0.016
10-31-88	TOTAL GALLONS THROUGH NEW CARBON = 217,674				
11-1-88	FEED TO #1 ABS.N	1.219	20	61	1433
11-1-88	FEED TO #2 ABS.S	0.002	0.010	0.021	0.755
11-1-88	DISC. TO SEWER	0.000	0.000	0.000	0.011
11-1-88	TOTAL GALLONS THROUGH NEW CARBON = 227,279				
11-2-88	FEED TO #1 ABS.N	1.598	19	58	1241
11-2-88	FEED TO #2 ABS.S	0.000	0.002	0.005	0.159
11-2-88	DISC. TO SEWER	0.000	0.000	0.000	0.009
11-2-88	TOTAL GALLONS THROUGH NEW CARBON = 236,983				

9/29/88

BASF CHEMICAL CORPORATION, WYANDOTTE SITE 236,983

NORTH WORKS GROUNDWATER EXTRACTION WELLS

DATE	SAMPLE	METHYLENE CHLORIDE	CHLOROFORM	ETHYLENE DICHLORIDE	PROPYLENE DICHLORIDE
11-3-88	FEED TO #1 ABS.N	1.591	14	49	976
11-3-88	FEED TO #2 ABS.S	0.000	0.002	0.004	0.136
11-3-88	DISC. TO SEWER	0.000	0.000	0.000	0.010
11-3-88	TOTAL GALLONS THROUGH NEW CARBON = 246,796				
11-4-88	FEED TO #1 ABS.N	—	—	—	—
11-4-88	FEED TO #2 ABS.S	—	—	—	—
11-4-88	DISC. TO SEWER	—	—	—	—
11-4-88	TOTAL GALLONS THROUGH NEW CARBON = 255,739				
11-7-88	FEED TO #1 ABS.N	0.788	10	39	817
11-7-88	FEED TO #2 ABS.S	0.002	0.008	0.022	0.682
11-7-88	DISC. TO SEWER	0.000	0.000	0.001	0.009
11-7-88	TOTAL GALLONS THROUGH NEW CARBON = 281,915				
11-8-88	FEED TO #1 ABS.N	0.792	11	38	809
11-8-88	FEED TO #2 ABS.S	0.000	0.002	0.004	0.138
11-8-88	DISC. TO SEWER	0.000	0.000	0.000	0.008
11-8-88	TOTAL GALLONS THROUGH NEW CARBON = 290,210				
11-9-88	FEED TO #1 ABS.N	0.820	11	42	874
11-9-88	FEED TO #2 ABS.S	0.001	0.000	0.002	0.061
11-9-88	DISC. TO SEWER	0.000	0.000	0.000	0.008
11-9-88	TOTAL GALLONS THROUGH NEW CARBON = 298,165				
11-10-88	FEED TO #1 ABS.N	System	shut	Down	For Acid Washing
11-10-88	FEED TO #2 ABS.S				
11-10-88	DISC. TO SEWER				
11-10-88	TOTAL GALLONS THROUGH NEW CARBON = 305,723				

9/29/88

BASF CHEMICAL CORPORATION, WYANDOTTE SITE 305,723

NORTH WORKS GROUNDWATER EXTRACTION WELLS

DATE	SAMPLE	METHYLENE CHLORIDE	CHLOROFORM	ETHYLENE DICHLORIDE	PROPYLENE DICHLORIDE
11-11-88	FEED TO #1 ABS.N	System	Put back	in Service	
11-11-88	FEED TO #2 ABS.S	@ 7 30 AM.	System	was down	For
11-11-88	DISC. TO SEWER		Acid	washing.	
11-11-88	TOTAL GALLONS THROUGH NEW CARBON = 305,723				
11-14-88	FEED TO #1 ABS.N	0.914	12	45	979
11-14-88	FEED TO #2 ABS.S	0.002	0.006	0.018	0.582
11-14-88	DISC. TO SEWER	0.000	0.000	0.000	0.008
11-14-88	TOTAL GALLONS THROUGH NEW CARBON = 338,328				
11-15-88	FEED TO #1 ABS.N	0.835	11	41	895
11-15-88	FEED TO #2 ABS.S	0.000	0.002	0.004	0.149
11-15-88	DISC. TO SEWER	0.000	0.000	0.000	0.011
11-15-88	TOTAL GALLONS THROUGH NEW CARBON = 348,018				
11-16-88	FEED TO #1 ABS.N	Shut System	off @	6 40 AM.	Removed Carbon
11-16-88	FEED TO #2 ABS.S	From North	Absor.	Back To one @ 2 30 PM	Absor. operation
11-16-88	DISC. TO SEWER	11-17-88 - New	Nozzles and	Carbon Charged	To North Absor.
11-16-88	TOTAL GALLONS THROUGH NEW CARBON = 356,957				
11-17-88	FEED TO #1 ABS.S	1.784	14	49	1155
11-17-88	FEED TO #2 ABS.	Back To 2	Absorber operation @ 3 30 PM.		
11-17-88	DISC. TO SEWER	0.010	0.000	0.001	0.010
11-17-88	TOTAL GALLONS THROUGH NEW CARBON = 7,151				
11-18-88	FEED TO #1 ABS.S	1.783	11	42	958
11-18-88	FEED TO #2 ABS.N	0.005	0.002	0.006	0.181
11-18-88	DISC. TO SEWER	0.006	0.000	0.000	0.005
11-18-88	TOTAL GALLONS THROUGH NEW CARBON = 11,662				

9/29/88

BASF CHEMICAL CORPORATION, WYANDOTTE SITE 11,662

NORTH WORKS GROUNDWATER EXTRACTION WELLS

DATE	SAMPLE	METHYLENE CHLORIDE	CHLOROFORM	ETHYLENE DICHLORIDE	PROPYLENE DICHLORIDE	
11-21-88	FEED TO #1 ABS.S	0.872	10	36	805	
11-21-88	FEED TO #2 ABS.N	0.001	0.002	0.006	0.226	
11-21-88	DISC. TO SEWER	0.000	0.000	0.000	0.003	
11-21-88	TOTAL GALLONS THROUGH NEW CARBON = 39,774					Toluene
11-22-88	FEED TO #1 ABS.S	0.853	8	31	627	.054
11-22-88	FEED TO #2 ABS.N	0.000	0.001	0.003	0.091	
11-22-88	DISC. TO SEWER	0.000	0.000	0.000	0.005	
11-22-88	TOTAL GALLONS THROUGH NEW CARBON = 49,345					Toluene
11-23-88	FEED TO #1 ABS.S	0.718	6	50	526	.137
11-23-88	FEED TO #2 ABS.N	0.000	0.001	0.003	0.106	
11-23-88	DISC. TO SEWER	0.000	0.000	0.000	0.006	
11-23-88	TOTAL GALLONS THROUGH NEW CARBON = 63,346					Toluene
11-24-88	FEED TO #1 ABS.S	0.644	8	42	633	.280
11-24-88	FEED TO #2 ABS.N	0.000	0.005	0.020	0.390	.000
11-24-88	DISC. TO SEWER	0.000	0.000	0.000	0.005	.000
11-24-88	TOTAL GALLONS THROUGH NEW CARBON = 78,328					Toluene
11-25-88	FEED TO #1 ABS.S	0.480	6	33	493	.199
11-25-88	FEED TO #2 ABS.N	0.000	0.000	0.002	0.046	.000
11-25-88	DISC. TO SEWER	0.000	0.000	0.000	0.006	.000
11-25-88	TOTAL GALLONS THROUGH NEW CARBON = 92,987					Toluene
11-28-88	FEED TO #1 ABS.S	0.638	8	39	622	.214
11-28-88	FEED TO #2 ABS.N	0.002	0.000	0.001	0.032	.000
11-28-88	DISC. TO SEWER	0.000	0.000	0.000	0.003	.000
11-28-88	TOTAL GALLONS THROUGH NEW CARBON = 136,797					

9/29/88

BASF CHEMICAL CORPORATION, WYANDOTTE SITE

136,797

NORTH WORKS GROUNDWATER EXTRACTION WELLS

DATE	SAMPLE	METHYLENE CHLORIDE	CHLOROFORM	ETHYLENE DICHLORIDE	PROPYLENE DICHLORIDE	Toluene
11-29-88	FEED TO #1 ABS.S	0.678	8	38	605	.151
11-29-88	FEED TO #2 ABS.N	0.000	0.000	0.001	0.019	.000
11-29-88	DISC. TO SEWER	0.000	0.000	0.000	0.004	.000
11-29-88	TOTAL GALLONS THROUGH NEW CARBON = 150,693					Toluene
11-30-88	FEED TO #1 ABS.S	0.775	8	35	654	.114
11-30-88	FEED TO #2 ABS.N	0.000	0.003	0.010	0.282	.000
11-30-88	DISC. TO SEWER	0.000	0.000	0.000	0.006	.000
11-30-88	TOTAL GALLONS THROUGH NEW CARBON = 165,400					Toluene
12-1-88	FEED TO #1 ABS.S	0.614	6	34	484	.131
12-1-88	FEED TO #2 ABS.N	0.000	0.002	0.009	0.174	.000
12-1-88	DISC. TO SEWER	0.000	0.000	0.000	0.004	.000
12-1-88	TOTAL GALLONS THROUGH NEW CARBON = 180,108					Toluene
12-2-88	FEED TO #1 ABS.S	0.280	2	9	123	.057
12-2-88	FEED TO #2 ABS.N	0.000	0.000	0.002	0.048	.000
12-2-88	DISC. TO SEWER	0.000	0.000	0.000	0.005	.000
12-2-88	TOTAL GALLONS THROUGH NEW CARBON = 189,342					Toluene
12-5-88	FEED TO #1 ABS.S	0.468	6	27	362	.095
12-5-88	FEED TO #2 ABS.N	0.000	0.000	0.009	0.166	.000
12-5-88	DISC. TO SEWER	0.000	0.000	0.000	0.005	.000
12-5-88	TOTAL GALLONS THROUGH NEW CARBON = 227,485					Toluene
12-6-88	FEED TO #1 ABS.S	0.439	6	28	394	.120
12-6-88	FEED TO #2 ABS.N	0.000	0.003	0.011	0.213	.000
12-6-88	DISC. TO SEWER	0.000	0.000	0.000	0.005	.000
12-6-88	TOTAL GALLONS THROUGH NEW CARBON = 239,400					

9/29/88

BASF CHEMICAL CORPORATION, WYANDOTTE SITE 239,400

NORTH WORKS GROUNDWATER EXTRACTION WELLS

DATE	SAMPLE	METHYLENE CHLORIDE	CHLOROFORM	ETHYLENE DICHLORIDE	PROPYLENE DICHLORIDE	Toluene
12-7-88	FEED TO #1 ABS.S	0.412	6	27	403	.095
12-7-88	FEED TO #2 ABS.N	0.000	0.000	0.002	0.042	.000
12-7-88	DISC. TO SEWER	0.000	0.000	0.000	0.009	.000
12-7-88	TOTAL GALLONS THROUGH NEW CARBON = 250,200					Toluene
12-8-88	FEED TO #1 ABS.S	0.513	6	28	411	.076
12-8-88	FEED TO #2 ABS.N	0.000	0.002	0.006	0.123	.000
12-8-88	DISC. TO SEWER	0.000	0.000	0.000	0.020	.000
12-8-88	TOTAL GALLONS THROUGH NEW CARBON = 258,575					Toluene
12-9-88	FEED TO #1 ABS.S	0.669	10	45	792	.146
12-9-88	FEED TO #2 ABS.N	0.000	0.007	0.020	0.507	.000
12-9-88	DISC. TO SEWER	0.000	0.000	0.000	0.001	.000
12-9-88	TOTAL GALLONS THROUGH NEW CARBON = 271,218					Toluene
12-12-88	FEED TO #1 ABS.S	0.648	10	43	800	.136
12-12-88	FEED TO #2 ABS.N	0.001	0.002	0.005	0.125	.000
12-12-88	DISC. TO SEWER	0.000	0.000	0.000	0.001	0.000
12-12-88	TOTAL GALLONS THROUGH NEW CARBON = 307,208					Toluene
12-13-88	FEED TO #1 ABS.S	0.602	8	38	647	.114
12-13-88	FEED TO #2 ABS.N	0.000	0.003	0.013	0.314	.000
12-13-88	DISC. TO SEWER	0.000	0.000	0.000	0.001	.000
12-13-88	TOTAL GALLONS THROUGH NEW CARBON = 319,167					Toluene
12-14-88	FEED TO #1 ABS.S	0.448	5	23	361	.067
12-14-88	FEED TO #2 ABS.N	0.001	0.007	0.021	0.469	.000
12-14-88	DISC. TO SEWER	0.000	0.000	0.000	0.001	.000
12-14-88	TOTAL GALLONS THROUGH NEW CARBON = 328,984					

9/29/88

BASF CHEMICAL CORPORATION, WYANDOTTE SITE

NORTH WORKS GROUNDWATER EXTRACTION WELLS 328,984

DATE	SAMPLE	METHYLENE CHLORIDE	CHLOROFORM	ETHYLENE DICHLORIDE	PROPYLENE DICHLORIDE	Toluene
12-15-88	FEED TO #1 ABS.S	0.454	5.21	23	353	0.064
12-15-88	FEED TO #2 ABS.N	0.000	0.001	0.003	0.08	0.000
12-15-88	DISC. TO SEWER	0.000	0.000	0.000	0.001	0.000
12-15-88	TOTAL GALLONS THROUGH NEW CARBON = 338,728					
						Toluene
12-16-88	FEED TO #1 ABS.	0.550	8.18	35	641	0.093
12-16-88	FEED TO #2 ABS.	0.000	0.008	0.024	0.65	0.000
12-16-88	DISC. TO SEWER	0.000	0.000	0.000	0.004	0.000
12-16-88	TOTAL GALLONS THROUGH NEW CARBON = 349,893					
						Toluene
12-19-88	FEED TO #1 ABS.	0.000	1.55	8.52	137	0.41
19-88	FEED TO #2 ABS.	0.000	0.000	0.001	0.019	0.0003
12-19-88	DISC. TO SEWER	0.000	0.000	0.000	0.001	0.0002
12-19-88	TOTAL GALLONS THROUGH NEW CARBON = 360,163					
						Toluene
12-20-88	FEED TO #1 ABS.	0.99	22.8	74	1577	0.105
12-20-88	FEED TO #2 ABS.	0.000	0.000	0.000	0.02	0.0002
12-20-88	DISC. TO SEWER	0.000	0.000	0.000	0.000	0.0004
12-20-88	TOTAL GALLONS THROUGH NEW CARBON = 371,063					
						Toluene
12-21-88	FEED TO #1 ABS.	0.16	2.99	10.83	375	0.033
12-21-88	FEED TO #2 ABS.	0.000	0.002	0.004	0.24	0.0003
12-21-88	DISC. TO SEWER	0.000	0.000	0.000	0.001	0.0002
12-21-88	TOTAL GALLONS THROUGH NEW CARBON = 376,065					
						Toluene
12-22-88	FEED TO #1 ABS.	1.20	20.69	58.3	1465	0.17
12-22-88	FEED TO #2 ABS.	0.000	0.010	0.013	0.733	0.0003
-22-88	DISC. TO SEWER	0.000	0.000	0.000	0.001	0.0002
12-22-88	TOTAL GALLONS THROUGH NEW CARBON = 387,667					

9/29/88

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387.667

BASF CHEMICAL CORPORATION, WYANDOTTE SITE

NORTH WORKS GROUNDWATER EXTRACTION WELLS

DATE	SAMPLE	METHYLENE CHLORIDE	CHLOROFORM	ETHYLENE DICHLORIDE	PROPYLENE DICHLORIDE	Tolu
12-27-88	FEED TO #1 ABS.S	1.07	22.15	64.73	1509	0.58
12-27-88	FEED TO #2 ABS.N	0.002	0.007	0.009	0.56	0.000
12-27-88	DISC. TO SEWER	0.000	0.000	0.000	0.002	0.000
12-27-88	TOTAL GALLONS THROUGH NEW CARBON = 432,549					Tolvene
12-28-88	FEED TO #1 ABS.S	0.740	14	48	1171	.074
12-28-88	FEED TO #2 ABS.N	0.000	0.012	0.014	0.999	.000
12-28-88	DISC. TO SEWER	0.000	0.000	0.000	0.001	.000
12-28-88	TOTAL GALLONS THROUGH NEW CARBON = 443,573					Tolvene
12-29-88	FEED TO #1 ABS.S	0.859	13	51	1014	.155
12-29-88	FEED TO #2 ABS.N	0.043	0.017	0.047	1.236	.000
12-29-88	DISC. TO SEWER	0.000	0.000	0.000	0.000	.000
12-29-88	TOTAL GALLONS THROUGH NEW CARBON = 454,851					Tolvene
12-30-88	FEED TO #1 ABS.S	1.163	12	51	1013	.170
12-30-88	FEED TO #2 ABS.N	0.489	0.136	2.985	1.536	.000
12-30-88	DISC. TO SEWER	0.000	0.000	0.000	0.000	.000
12-30-88	TOTAL GALLONS THROUGH NEW CARBON = 466,151					Tolvene
1-2-89	FEED TO #1 ABS.S	0.698	12	50	1036	.098
1-2-89	FEED TO #2 ABS.N	0.517	5	26	152	.000
1-2-89	DISC. TO SEWER	0.000	0.000	0.000	0.001	.000
1-2-89	TOTAL GALLONS THROUGH NEW CARBON = 497,529					Tolvene
1-3-89	FEED TO #1 ABS.S	0.924	19	65	1445	.154
1-3-89	FEED TO #2 ABS.N	0.604	6	27	238	.000
1-3-89	DISC. TO SEWER	0.000	0.000	0.000	0.001	.000
1-3-89	TOTAL GALLONS THROUGH NEW CARBON = 507,200					

9/29/88

BASF CHEMICAL CORPORATION, WYANDOTTE SITE

NORTH WORKS GROUNDWATER EXTRACTION WELLS 507,200

DATE	SAMPLE	METHYLENE CHLORIDE	CHLOROFORM	ETHYLENE DICHLORIDE	PROPYLENE DICHLORIDE	Toluene
1-4-89	FEED TO #1 ABS.S	0.691	14	47	1106	.124
1-4-89	FEED TO #2 ABS.N	0.729	7	36	360	.000
1-4-89	DISC. TO SEWER	0.000	0.000	0.000	0.001	.000
1-4-89	TOTAL GALLONS THROUGH NEW CARBON = 519,041					Toluene
	FEED TO #1 ABS.	1-4-89 Shut System off @ 7 AM		Removed Carbon From		
	FEED TO #2 ABS.	South Absorber. Washed		South Absor. Calgon		
		Will Replace Nozzles		1-5-89		
	DISC. TO SEWER	Went back To 1 Absor. operation @		2 PM.		
	TOTAL GALLONS THROUGH NEW CARBON =					Toluene
1-5-89	FEED TO #1 ABS.N	1.112	20	70	1604	.165
	FEED TO #2 ABS.	—	—	—	—	
1-5-89	DISC. TO SEWER	0.000	0.000	0.000	0.002	.000
1-5-89	TOTAL GALLONS THROUGH NEW CARBON = 10,074					Toluene
	FEED TO #1 ABS.	1-5-89 Shut system off @ 8 AM.		Calgon Replacing		
	FEED TO #2 ABS.	Spray Nozzles. (South Absorber)				
		Went Back To one Absorber operation		@ 5 PM		
	DISC. TO SEWER	1-6-89 Recharged New Carbon To South		Absorber.		
		Went To 2 Absorber operation @		10 AM.		
	TOTAL GALLONS THROUGH NEW CARBON =					Toluene
1-6-89	FEED TO #1 ABS.N	1.014	20	70	1636	.193
	FEED TO #2 ABS.	—	—	—	—	
1-6-89	DISC. TO SEWER	0.000	0.000	0.000	0.000	.000
1-6-89	TOTAL GALLONS THROUGH NEW CARBON = 16,928					Toluene
1-9-89	FEED TO #1 ABS.N	1.018	19	71	1575	.150
1-9-89	FEED TO #2 ABS.S	0.005	0.085	0.277	5.395	.000
1-9-89	DISC. TO SEWER	0.000	0.000	0.003	0.028	.000
1-9-89	TOTAL GALLONS THROUGH NEW CARBON = 51,288					

9/29/88

BASF CHEMICAL CORPORATION, WYANDOTTE SITE

NORTH WORKS GROUNDWATER EXTRACTION WELLS

51,288

DATE	SAMPLE	METHYLENE CHLORIDE	CHLOROFORM	ETHYLENE DICHLORIDE	PROPYLENE DICHLORIDE	Toluene
1-10-89	FEED TO #1 ABS.N	0.867	16	62	1302	.168
1-10-89	FEED TO #2 ABS.S	0.002	0.033	0.125	2.462	.000
1-10-89	DISC. TO SEWER	0.000	0.000	0.001	0.014	.000
1-10-89	TOTAL GALLONS THROUGH NEW CARBON = 64,407					Toluene
1-11-89	FEED TO #1 ABS.N	0.766	14	19	1086	.101
1-11-89	FEED TO #2 ABS.S	0.002	0.025	0.091	2.116	.000
1-11-89	DISC. TO SEWER	0.000	0.000	0.001	0.018	.000
1-11-89	TOTAL GALLONS THROUGH NEW CARBON = 80,089					Toluene
1-12-89	FEED TO #1 ABS.N	1.094	20	68	1506	.145
1-12-89	FEED TO #2 ABS.S	0.003	0.041	0.090	2.912	.000
1-12-89	DISC. TO SEWER	0.000	0.000	0.001	0.022	.000
1-12-89	TOTAL GALLONS THROUGH NEW CARBON = 93,788					Toluene
1-13-89	FEED TO #1 ABS.N	0.927	17	58	1315	.118
1-13-89	FEED TO #2 ABS.S	0.002	0.034	0.075	2.574	.000
1-13-89	DISC. TO SEWER	0.000	0.000	0.001	0.017	.000
1-13-89	TOTAL GALLONS THROUGH NEW CARBON = 106,251					Toluene
1-16-89	FEED TO #1 ABS.N	0.880	17	57	1368	.122
1-16-89	FEED TO #2 ABS.S	0.002	0.036	0.069	2.617	.000
1-16-89	DISC. TO SEWER	0.000	0.000	0.001	0.015	.000
1-16-89	TOTAL GALLONS THROUGH NEW CARBON = 142,602					Toluene
1-17-89	FEED TO #1 ABS.N	0.991	19	62	1470	.114
1-17-89	FEED TO #2 ABS.S	0.002	0.039	0.079	2.748	.000
1-17-89	DISC. TO SEWER	0.000	0.000	0.002	0.048	.000
1-17-89	TOTAL GALLONS THROUGH NEW CARBON = 154,447					

9/29/88

BASF CHEMICAL CORPORATION, WYANDOTTE SITE

NORTH WORKS GROUNDWATER EXTRACTION WELLS

154, 447

DATE	SAMPLE	METHYLENE CHLORIDE	CHLOROFORM	ETHYLENE DICHLORIDE	PROPYLENE DICHLORIDE	Toluene
1-18-89	FEED TO #1 ABS.N	0.946	17	59	1307	.119
1-18-89	FEED TO #2 ABS.S	0.001	0.013	0.033	1.098	.000
1-18-89	DISC. TO SEWER	0.000	0.000	0.001	0.014	.000
1-18-89	TOTAL GALLONS THROUGH NEW CARBON = 166,553					Toluene
1-19-89	FEED TO #1 ABS.N	0.282	2	8	154	.041
1-19-89	FEED TO #2 ABS.S	0.002	0.011	0.024	0.702	.000
1-19-89	DISC. TO SEWER	0.000	0.000	0.002	0.034	.000
1-19-89	TOTAL GALLONS THROUGH NEW CARBON = 172,799					Toluene
1-20-89	FEED TO #1 ABS.N	1.175	20	68	1570	.123
1-20-89	FEED TO #2 ABS.S	0.000	0.000	0.000	0.031	.000
1-20-89	DISC. TO SEWER	0.000	0.000	0.001	0.015	.000
1-20-89	TOTAL GALLONS THROUGH NEW CARBON = 185,952					Toluene
1-23-89	FEED TO #1 ABS.N	1.071	19	66	1596	.151
1-23-89	FEED TO #2 ABS.S	0.003	0.015	0.096	3.427	.000
1-23-89	DISC. TO SEWER	0.000	0.000	0.001	0.011	.000
1-23-89	TOTAL GALLONS THROUGH NEW CARBON = 221,507					Toluene
1-24-89	FEED TO #1 ABS.N	0.883	17	49	1183	.062
1-24-89	FEED TO #2 ABS.S	0.003	0.043	0.075	2.868	.000
1-24-89	DISC. TO SEWER	0.000	0.000	0.001	0.012	.000
1-24-89	TOTAL GALLONS THROUGH NEW CARBON = 234,689					Toluene
1-25-89	FEED TO #1 ABS.N	0.735	11	38	812	0.253
1-25-89	FEED TO #2 ABS.S	0.003	0.028	0.052	1.935	.000
1-25-89	DISC. TO SEWER	0.000	0.000	0.001	0.011	.000
1-25-89	TOTAL GALLONS THROUGH NEW CARBON = 247,587					

9/29/88

BASF CHEMICAL CORPORATION, WYANDOTTE SITE 217,587

NORTH WORKS GROUNDWATER EXTRACTION WELLS

DATE	SAMPLE	METHYLENE CHLORIDE	CHLOROFORM	ETHYLENE DICHLORIDE	PROPYLENE DICHLORIDE	Toluene
1-26-89	FEED TO #1 ABS.N	1.129	10	37	720	.017
1-26-89	FEED TO #2 ABS.S	0.004	0.037	0.076	2.423	.000
1-26-89	DISC. TO SEWER	0.000	0.000	0.000	0.007	.000
1-26-89	TOTAL GALLONS THROUGH NEW CARBON = 260,577					Toluene
1-27-89	FEED TO #1 ABS.N	0.878	15	47	1049	.019
1-27-89	FEED TO #2 ABS.S	0.003	0.040	0.072	2.536	.000
1-27-89	DISC. TO SEWER	0.000	0.000	0.001	0.010	.000
1-27-89	TOTAL GALLONS THROUGH NEW CARBON = 273,487					Toluene
1-30-89	FEED TO #1 ABS.N	0.551	3	19	321	.032
1-30-89	FEED TO #2 ABS.S	0.000	0.005	0.018	0.512	.000
1-30-89	DISC. TO SEWER	0.000	0.000	0.000	0.010	.000
1-30-89	TOTAL GALLONS THROUGH NEW CARBON = 311,436					Toluene
1-31-89	FEED TO #1 ABS.N	0.546	3	18	317	.029
1-31-89	FEED TO #2 ABS.S	0.002	0.004	0.016	0.454	.000
1-31-89	DISC. TO SEWER	0.000	0.000	0.001	0.009	.000
1-31-89	TOTAL GALLONS THROUGH NEW CARBON = 322,777					Toluene
2-1-89	FEED TO #1 ABS.N	0.958	17	53	1316	.050
2-1-89	FEED TO #2 ABS.S	0.004	0.050	0.088	3.562	.000
2-1-89	DISC. TO SEWER	0.000	0.000	0.001	0.010	.000
2-1-89	TOTAL GALLONS THROUGH NEW CARBON = 335,095					Toluene
2-2-89	FEED TO #1 ABS.N	0.933	18	52	1400	.054
2-2-89	FEED TO #2 ABS.S	0.002	0.024	0.040	1.855	.000
2-2-89	DISC. TO SEWER	0.000	0.000	0.000	0.007	.000
2-2-89	TOTAL GALLONS THROUGH NEW CARBON = 347,412					

9/29/88

BASF CHEMICAL CORPORATION, WYANDOTTE SITE

NORTH WORKS GROUNDWATER EXTRACTION WELLS

347, 412

DATE	SAMPLE	METHYLENE CHLORIDE	CHLOROFORM	ETHYLENE DICHLORIDE	PROPYLENE DICHLORIDE	Toluene
2-3-89	FEED TO #1 ABS.N	0.989	20	58	1550	.061
2-3-89	FEED TO #2 ABS.S	0.002	0.015	0.024	1.158	.000
2-3-89	DISC. TO SEWER	0.000	0.000	0.001	0.014	.000
2-3-89	TOTAL GALLONS THROUGH NEW CARBON = 358,832					Toluene
2-6-89	FEED TO #1 ABS.N	Sample	Line	Freze		
2-6-89	FEED TO #2 ABS.S	0.000	0.000	0.001	0.022	.000
2-6-89	DISC. TO SEWER	0.000	0.000	0.000	0.008	.000
2-6-89	TOTAL GALLONS THROUGH NEW CARBON = 384,891					Toluene
2-7-89	FEED TO #1 ABS.N	0.993	20	58	1631	.074
2-7-89	FEED TO #2 ABS.S	0.000	0.036	0.055	2.723	.000
2-7-89	DISC. TO SEWER	0.000	0.000	0.000	0.007	.000
2-7-89	TOTAL GALLONS THROUGH NEW CARBON = 398,702					Toluene
2-8-89	FEED TO #1 ABS.N	0.930	12	36	869	.039
2-8-89	FEED TO #2 ABS.S	0.024	0.016	0.027	1.149	.000
2-8-89	DISC. TO SEWER	0.000	0.000	0.000	0.010	.000
2-8-89	TOTAL GALLONS THROUGH NEW CARBON = 410,552					Toluene
2-9-89	FEED TO #1 ABS.N	1.610	20	55	1399	.017
2-9-89	FEED TO #2 ABS.S	0.223	0.033	0.509	1.040	.000
2-9-89	DISC. TO SEWER	0.000	0.000	0.000	0.007	.000
2-9-89	TOTAL GALLONS THROUGH NEW CARBON = 422,608					Toluene
2-10-89	FEED TO #1 ABS.N	1.483	24	67	1619	.051
2-10-89	FEED TO #2 ABS.S	0.770	2.231	18.930	3.726	.000
2-10-89	DISC. TO SEWER	0.000	0.000	0.001	0.007	.000
2-10-89	TOTAL GALLONS THROUGH NEW CARBON = 434,238					

9/29/88

BASF CHEMICAL CORPORATION, WYANDOTTE SITE

NORTH WORKS GROUNDWATER EXTRACTION WELLS

434,238

DATE	SAMPLE	METHYLENE CHLORIDE	CHLOROFORM	ETHYLENE DICHLORIDE	PROPYLENE DICHLORIDE	Toluene
2-13-89	FEED TO #1 ABS. N	0.929	10	36	702	.033
2-13-89	FEED TO #2 ABS. S	1.164	13	68	216	.000
2-13-89	DISC. TO SEWER	0.000	0.000	0.004	0.024	.000
2-13-89	TOTAL GALLONS THROUGH NEW CARBON = 464,147					Toluene
2-14-89	FEED TO #1 ABS. N	1.083	22	66	1708	.062
2-14-89	FEED TO #2 ABS. S	1.192	11	54	365	.000
2-14-89	DISC. TO SEWER	0.000	0.000	0.002	0.020	.000
2-14-89	TOTAL GALLONS THROUGH NEW CARBON = 476,991					Toluene
2-15-89	FEED TO #1 ABS. N	1.082	20	61	1519	.015
2-15-89	FEED TO #2 ABS. S	1.323	10	53	423	.000
2-15-89	DISC. TO SEWER	0.000	0.000	0.001	0.018	.000
2-15-89	TOTAL GALLONS THROUGH NEW CARBON = 488,968					Toluene
	FEED TO #1 ABS.	2-15-89 Shut System Down @ 0710 - Removed Carbon From North Absor. Back To one Absorber operation @ 10 00 Am. Washed North Absorber. 2-17-89 - Charged New Carbon into North Absor. Back To 2 Absor. operation @ 8 40 AM.				
	FEED TO #2 ABS.					
	DISC. TO SEWER					
	TOTAL GALLONS THROUGH NEW CARBON =					Toluene
2-16-89	FEED TO #1 ABS. S	0.802	15	49	1325	.054
	FEED TO #2 ABS.	—	—	—	—	—
2-16-89	DISC. TO SEWER	0.000	0.000	0.000	0.004	.000
2-16-89	TOTAL GALLONS THROUGH NEW CARBON = 12,472					Toluene
2-17-89	FEED TO #1 ABS. S	1.356	28	72	1657	.091
	FEED TO #2 ABS.	—	—	—	—	—
2-17-89	DISC. TO SEWER	0.000	0.000	0.000	0.008	.000
2-17-89	TOTAL GALLONS THROUGH NEW CARBON = 24,888					

9/29/88

BASF CHEMICAL CORPORATION, WYANDOTTE SITE

NORTH WORKS GROUNDWATER EXTRACTION WELLS 24,888

DATE	SAMPLE	METHYLENE CHLORIDE	CHLOROFORM	ETHYLENE DICHLORIDE	PROPYLENE DICHLORIDE	Toluene
2-20-89	FEED TO #1 ABS.S	0.867	17	63	1531	.127
2-20-89	FEED TO #2 ABS.N	0.005	0.058	0.233	3.057	.000
2-20-89	DISC. TO SEWER	0.000	0.000	0.007	0.073	.000
2-20-89	TOTAL GALLONS THROUGH NEW CARBON = 68,458					Toluene
2-21-89	FEED TO #1 ABS.S	0.789	15	55	1281	.108
2-21-89	FEED TO #2 ABS.N	0.003	0.056	0.173	4.112	.000
2-21-89	DISC. TO SEWER	0.000	0.000	0.006	0.072	.000
2-21-89	TOTAL GALLONS THROUGH NEW CARBON = 83,004					Toluene
2-22-89	FEED TO #1 ABS.S	0.790	15	57	1319	.103
2-22-89	FEED TO #2 ABS.N	0.003	0.013	0.150	3.316	.000
2-22-89	DISC. TO SEWER	0.000	0.000	0.005	0.062	.000
2-22-89	TOTAL GALLONS THROUGH NEW CARBON = 97,020					Toluene
2-23-89	FEED TO #1 ABS.S	0.000	14	51	1240	.111
2-23-89	FEED TO #2 ABS.N	0.000	0.023	0.077	1.841	.000
2-23-89	DISC. TO SEWER	0.000	0.000	0.005	0.064	.000
2-23-89	TOTAL GALLONS THROUGH NEW CARBON = 110,862					Toluene
2-24-89	FEED TO #1 ABS.S	0.422	3	13	250	.026
2-24-89	FEED TO #2 ABS.N	0.000	0.010	0.047	0.626	.000
2-24-89	DISC. TO SEWER	0.000	0.002	0.017	0.209	.000
2-24-89	TOTAL GALLONS THROUGH NEW CARBON = 120,539					Toluene
2-27-89	FEED TO #1 ABS.S	0.872	15	58	1325	.120
2-27-89	FEED TO #2 ABS.N	0.003	0.018	0.115	3.428	.000
2-27-89	DISC. TO SEWER	0.000	0.000	0.002	0.036	.000
2-27-89	TOTAL GALLONS THROUGH NEW CARBON = 165,860					

9/29/88

BASF CHEMICAL CORPORATION, WYANDOTTE SITE

NORTH WORKS GROUNDWATER EXTRACTION WELLS

165, 860

DATE	SAMPLE	METHYLENE CHLORIDE	CHLOROFORM	ETHYLENE DICHLORIDE	PROPYLENE DICHLORIDE	Toluene
2-28-89	FEED TO #1 ABS.S	0.819	15	56	1328	.084
2-28-89	FEED TO #2 ABS.N	0.000	0.000	0.001	0.019	.000
2-28-89	DISC. TO SEWER	0.000	0.000	0.002	0.033	.000
2-28-89	TOTAL GALLONS THROUGH NEW CARBON = 180,250					
						Toluene
3-1-89	FEED TO #1 ABS.S	0.820	15	54	1304	.075
3-1-89	FEED TO #2 ABS.N	0.000	0.000	0.000	0.006	.000
3-1-89	DISC. TO SEWER	0.000	0.000	0.002	0.027	.000
3-1-89	TOTAL GALLONS THROUGH NEW CARBON = 194,285					
						Toluene
3-2-89	FEED TO #1 ABS.S	0.749	14	56	1271	.093
3-2-89	FEED TO #2 ABS.N	0.000	0.000	0.001	0.053	.000
3-2-89	DISC. TO SEWER	0.000	0.000	0.002	0.029	.000
3-2-89	TOTAL GALLONS THROUGH NEW CARBON = 208,038					
						Toluene
3-3-89	FEED TO #1 ABS.S	0.764	12	48	1011	.077
3-3-89	FEED TO #2 ABS.N	0.000	0.001	0.003	0.110	.000
3-3-89	DISC. TO SEWER	0.000	0.000	0.002	0.037	.000
3-3-89	TOTAL GALLONS THROUGH NEW CARBON = 221,147					
						Toluene
3-6-89	FEED TO #1 ABS.S	0.724	16	55	1393	.093
3-6-89	FEED TO #2 ABS.N	0.000	0.000	0.001	0.032	.000
3-6-89	DISC. TO SEWER	0.000	0.000	0.001	0.024	.000
3-6-89	TOTAL GALLONS THROUGH NEW CARBON = 258,365					
						Toluene
3-7-89	FEED TO #1 ABS.S	0.813	15	51	1270	.092
3-7-89	FEED TO #2 ABS.N	0.000	0.000	0.000	0.019	.000
3-7-89	DISC. TO SEWER	0.000	0.000	0.001	0.023	.000
3-7-89	TOTAL GALLONS THROUGH NEW CARBON = 270,826					

9/29/88

BASF CHEMICAL CORPORATION, WYANDOTTE SITE

NORTH WORKS GROUNDWATER EXTRACTION WELLS 270,826

DATE	SAMPLE	METHYLENE CHLORIDE	CHLOROFORM	ETHYLENE DICHLORIDE	PROPYLENE DICHLORIDE	Toluene
3-8-89	FEED TO #1 ABS.S	0.932	16	60	1394	.107
3-8-89	FEED TO #2 ABS.N	0.000	0.000	0.000	0.017	.000
3-8-89	DISC. TO SEWER	0.000	0.000	0.001	0.018	.000
3-8-89	TOTAL GALLONS THROUGH NEW CARBON = 283,026					
3-9-89	FEED TO #1 ABS.S	0.779	14	48	1246	.010
3-9-89	FEED TO #2 ABS.N	0.000	0.001	0.002	0.121	.000
3-9-89	DISC. TO SEWER	0.000	0.000	0.001	0.020	.000
3-9-89	TOTAL GALLONS THROUGH NEW CARBON = 295,286					
3-10-89	FEED TO #1 ABS.S	0.814	16	53	1426	.018
3-10-89	FEED TO #2 ABS.N	0.000	0.000	0.001	0.051	.000
3-10-89	DISC. TO SEWER	0.000	0.000	0.001	0.020	.000
3-10-89	TOTAL GALLONS THROUGH NEW CARBON = 306,954					
3-13-89	FEED TO #1 ABS.S	0.761	14	49	1255	.017
3-13-89	FEED TO #2 ABS.N	0.000	0.000	0.002	0.090	.000
3-13-89	DISC. TO SEWER	0.000	0.000	0.001	0.017	.000
3-13-89	TOTAL GALLONS THROUGH NEW CARBON = 342,310					
3-14-89	FEED TO #1 ABS.S	0.916	14	50	1264	.013
3-14-89	FEED TO #2 ABS.N	0.000	0.002	0.003	0.140	.001
3-14-89	DISC. TO SEWER	0.000	0.000	0.001	0.017	.000
3-14-89	TOTAL GALLONS THROUGH NEW CARBON = 352,304					
3-15-89	FEED TO #1 ABS.S	1.069	21	74	1988	.078
3-15-89	FEED TO #2 ABS.N	0.000	0.000	0.001	0.015	.000
3-15-89	DISC. TO SEWER	0.000	0.000	0.002	0.012	.000
3-15-89	TOTAL GALLONS THROUGH NEW CARBON = 359,342					

9/29/88

BASF CHEMICAL CORPORATION, WYANDOTTE SITE

NORTH WORKS GROUNDWATER EXTRACTION WELLS

359,342

DATE	SAMPLE	METHYLENE CHLORIDE	CHLOROFORM	ETHYLENE DICHLORIDE	PROPYLENE DICHLORIDE	Toluene
3-16-89	FEED TO #1 ABS.S	0.824	13	54	1230	.094
3-16-89	FEED TO #2 ABS.N	0.000	0.000	0.001	0.026	.000
3-16-89	DISC. TO SEWER	0.000	0.000	0.001	0.018	.000
3-16-89	TOTAL GALLONS THROUGH NEW CARBON = 369,999					Toluene
3-17-89	FEED TO #1 ABS.S	0.705	10	46	1017	.083
3-17-89	FEED TO #2 ABS.N	0.000	0.000	0.001	0.032	.000
3-17-89	DISC. TO SEWER	0.000	0.000	0.000	0.008	.000
3-17-89	TOTAL GALLONS THROUGH NEW CARBON = 383,033					Toluene
3-20-89	FEED TO #1 ABS.S	0.980	5	38	601	.071
3-20-89	FEED TO #2 ABS.N	0.000	0.000	0.000	0.013	.000
3-20-89	DISC. TO SEWER	0.000	0.000	0.002	0.038	.000
3-20-89	TOTAL GALLONS THROUGH NEW CARBON = 416,036					Toluene
3-21-89	FEED TO #1 ABS.S	0.659	10	41	992	.062
3-21-89	FEED TO #2 ABS.N	0.000	0.000	0.001	0.033	.000
3-21-89	DISC. TO SEWER	0.000	0.000	0.001	0.012	.000
3-21-89	TOTAL GALLONS THROUGH NEW CARBON = 428,783					Toluene
3-22-89	FEED TO #1 ABS.S	0.701	10	41	1036	.079
3-22-89	FEED TO #2 ABS.N	0.000	0.000	0.000	0.010	.000
3-22-89	DISC. TO SEWER	0.000	0.000	0.000	0.009	.000
3-22-89	TOTAL GALLONS THROUGH NEW CARBON = 440,650					Toluene
3-23-89	FEED TO #1 ABS.S	0.706	9	37	881	.050
3-23-89	FEED TO #2 ABS.N	0.050	0.000	0.002	0.025	.000
3-23-89	DISC. TO SEWER	0.000	0.000	0.000	0.010	.000
3-23-89	TOTAL GALLONS THROUGH NEW CARBON = 453,113					

9/29/88

BASF CHEMICAL CORPORATION, WYANDOTTE SITE

NORTH WORKS GROUNDWATER EXTRACTION WELLS

453,113

DATE	SAMPLE	METHYLENE CHLORIDE	CHLOROFORM	ETHYLENE DICHLORIDE	PROPYLENE DICHLORIDE	Toluene
3-21-89	FEED TO #1 ABS.S	1.156	8	35	890	.016
3-21-89	FEED TO #2 ABS.N	0.323	0.019	0.894	0.032	.000
3-21-89	DISC. TO SEWER	0.000	0.000	0.000	0.009	.000
3-21-89	TOTAL GALLONS THROUGH NEW CARBON = 464,747					
						Toluene
3-27-89	FEED TO #1 ABS.S	0.574	9	34	889	.016
3-27-89	FEED TO #2 ABS.N	0.767	4	28	18	.005
3-27-89	DISC. TO SEWER	0.000	0.000	0.001	0.008	.000
3-27-89	TOTAL GALLONS THROUGH NEW CARBON = 496,197					
						Toluene
	FEED TO #1 ABS.	3-27-89 — 1:00 PM South Absorber Taken out of				
	FEED TO #2 ABS.	Service. Feed To North Absorber.				
	DISC. TO SEWER					
	TOTAL GALLONS THROUGH NEW CARBON =					
						Toluene
3-28-89	FEED TO #1 ABS.N	0.62	9.07	35.12	934	0.04
	FEED TO #2 ABS.	—	—	—	—	—
3-28-89	DISC. TO SEWER	0.000	0.000	0.000	0.005	0.000
3-28-89	TOTAL GALLONS THROUGH NEW CARBON = 505,905					
						Toluene
3-29-89	FEED TO #1 ABS.	Shut System off @ 7:00 AM. Removed Carbon From				
	FEED TO #2 ABS.	South Absorber. Washed South Absorber. Back To				
		one Absorber operation @ 2:30 PM				
3-29-89	DISC. TO SEWER					
3-29-89	TOTAL GALLONS THROUGH NEW CARBON = 8,938					
						Toluene
3-30-89	FEED TO #1 ABS.N	0.532	8	34	884	.011
3-30-89	FEED TO #2 ABS.	—	—	—	—	—
3-30-89	DISC. TO SEWER	0.000	0.000	0.001	0.022	.000
3-30-89	TOTAL GALLONS THROUGH NEW CARBON = 18,071					

9/29/88

BASF CHEMICAL CORPORATION, WYANDOTTE SITE

NORTH WORKS GROUNDWATER EXTRACTION WELLS

DATE	SAMPLE	METHYLENE CHLORIDE	CHLOROFORM	ETHYLENE DICHLORIDE	PROPYLENE DICHLORIDE	
	FEED TO #1 ABS.	3-31-89 Recharged New Carbon To South				
	FEED TO #2 ABS.	Absorber.	Went back	To 2 Absorber		
	DISC. TO SEWER	operation @ 8 40 AM				
	TOTAL GALLONS THROUGH NEW CARBON =					Toluene
3-31-89	FEED TO #1 ABS.N	0.511	5	25	567	.035
3-31-89	FEED TO #2 ABS.	—	—	—	—	—
3-31-89	DISC. TO SEWER	0.000	0.000	0.001	0.011	.000
3-31-89	TOTAL GALLONS THROUGH NEW CARBON = 27,727					Toluene
4-3-89	FEED TO #1 ABS.N	0.407	0.927	13	147	.030
4-3-89	FEED TO #2 ABS.S	0.003	0.009	0.060	1.147	.000
4-3-89	DISC. TO SEWER	0.000	0.000	0.008	0.059	.000
4-3-89	TOTAL GALLONS THROUGH NEW CARBON = 58,399					Toluene
4-4-89	FEED TO #1 ABS.N	0.630	10	39	1045	.052
4-4-89	FEED TO #2 ABS.S	0.000	0.003	0.022	0.704	.000
4-4-89	DISC. TO SEWER	0.000	0.000	0.004	0.028	.000
4-4-89	TOTAL GALLONS THROUGH NEW CARBON = 69,008					Toluene
4-5-89	FEED TO #1 ABS.N	0.684	11	37	974	.015
4-5-89	FEED TO #2 ABS.S	0.000	0.000	0.014	0.618	.000
4-5-89	DISC. TO SEWER	0.000	0.000	0.004	0.024	.000
4-5-89	TOTAL GALLONS THROUGH NEW CARBON = 77,972					Toluene
4-6-89	FEED TO #1 ABS.N	0.760	7	31	694	.062
4-6-89	FEED TO #2 ABS.S	0.000	0.002	0.020	.575	.000
4-6-89	DISC. TO SEWER	0.000	0.001	0.012	0.115	.001
4-6-89	TOTAL GALLONS THROUGH NEW CARBON = 84,124					

9/29/88

BASF CHEMICAL CORPORATION, WYANDOTTE SITE

84,124

NORTH WORKS GROUNDWATER EXTRACTION WELLS

DATE	SAMPLE	METHYLENE CHLORIDE	CHLOROFORM	ETHYLENE DICHLORIDE	PROPYLENE DICHLORIDE	Toluene
4-7-89	FEED TO #1 ABS.N	0.544	9	36	906	.053
4-7-89	FEED TO #2 ABS.S	0.000	0.000	0.007	0.388	.000
4-7-89	DISC. TO SEWER	0.000	0.000	0.002	0.015	.000
4-7-89	TOTAL GALLONS THROUGH NEW CARBON = 95,883					
						Toluene
4-10-89	FEED TO #1 ABS.N	0.567	9	36	915	.050
4-10-89	FEED TO #2 ABS.S	0.000	0.000	0.003	0.087	.000
4-10-89	DISC. TO SEWER	0.000	0.000	0.001	0.011	.000
4-10-89	TOTAL GALLONS THROUGH NEW CARBON = 130,108					
						Toluene
4-11-89	FEED TO #1 ABS.N	0.579	9	37	891	.054
4-11-89	FEED TO #2 ABS.S	0.000	0.000	0.002	0.072	.000
4-11-89	DISC. TO SEWER	0.000	0.000	0.001	0.011	.000
4-11-89	TOTAL GALLONS THROUGH NEW CARBON = 141,170					
						Toluene
4-12-89	FEED TO #1 ABS.N	0.634	8	35	849	.060
4-12-89	FEED TO #2 ABS.S	0.000	0.002	0.006	0.174	.001
4-12-89	DISC. TO SEWER	0.000	0.000	0.001	0.010	.000
4-12-89	TOTAL GALLONS THROUGH NEW CARBON = 151,966					
						Toluene
4-13-89	FEED TO #1 ABS.N	0.625	8	33	808	.073
4-13-89	FEED TO #2 ABS.S	0.000	0.001	0.008	0.341	.000
4-13-89	DISC. TO SEWER	0.000	0.000	0.000	0.011	.000
4-13-89	TOTAL GALLONS THROUGH NEW CARBON = 162,092					
						Toluene
4-14-89	FEED TO #1 ABS.N	0.621	8	37	909	.052
4-14-89	FEED TO #2 ABS.S	0.000	0.000	0.004	0.124	.001
4-14-89	DISC. TO SEWER	0.000	0.000	0.002	0.014	.000
4-14-89	TOTAL GALLONS THROUGH NEW CARBON = 171,064					

9/29/88

BASF CHEMICAL CORPORATION, WYANDOTTE SITE 171,064

NORTH WORKS GROUNDWATER EXTRACTION WELLS

DATE	SAMPLE	METHYLENE CHLORIDE	CHLOROFORM	ETHYLENE DICHLORIDE	PROPYLENE DICHLORIDE	Toluene
4-17-89	FEED TO #1 ABS.N	0.539	9	37	956	.066
4-17-89	FEED TO #2 ABS.S	0.000	0.000	0.004	0.124	.000
4-17-89	DISC. TO SEWER	0.000	0.000	0.001	0.012	.000
4-17-89	TOTAL GALLONS THROUGH NEW CARBON = 195,121					Toluene
4-18-89	FEED TO #1 ABS.N	0.620	10	40	1019	.060
4-18-89	FEED TO #2 ABS.S	0.000	0.000	0.002	0.060	.000
4-18-89	DISC. TO SEWER	0.000	0.000	0.002	0.015	.000
4-18-89	TOTAL GALLONS THROUGH NEW CARBON = 201,744					Toluene
4-19-89	FEED TO #1 ABS.N	0.129	8	33	825	.046
4-19-89	FEED TO #2 ABS.S	0.000	0.000	0.002	0.052	.000
4-19-89	DISC. TO SEWER	0.000	0.000	0.001	0.009	.000
4-19-89	TOTAL GALLONS THROUGH NEW CARBON = 208,489					Toluene
4-20-89	FEED TO #1 ABS.N	0.576	8	34	815	.051
4-20-89	FEED TO #2 ABS.S	0.000	0.000	0.002	0.079	.000
4-20-89	DISC. TO SEWER	0.000	0.000	0.001	0.010	.000
4-20-89	TOTAL GALLONS THROUGH NEW CARBON = 214,283					Toluene
4-21-89	FEED TO #1 ABS.N	0.517	8	33	838	.015
4-21-89	FEED TO #2 ABS.S	0.000	0.000	0.001	0.014	.000
4-21-89	DISC. TO SEWER	0.000	0.000	0.001	0.005	.000
4-21-89	TOTAL GALLONS THROUGH NEW CARBON = 220,348					Toluene
4-24-89	FEED TO #1 ABS.N	1.615	18	62	1717	.112
4-24-89	FEED TO #2 ABS.S	0.000	0.001	0.008	0.236	.000
4-24-89	DISC. TO SEWER	0.000	0.000	0.002	0.022	.000
4-24-89	TOTAL GALLONS THROUGH NEW CARBON = 230,300					

9/29/88

BASF CHEMICAL CORPORATION, WYANDOTTE SITE 230,300

NORTH WORKS GROUNDWATER EXTRACTION WELLS

DATE	SAMPLE	METHYLENE CHLORIDE	CHLOROFORM	ETHYLENE DICHLORIDE	PROPYLENE DICHLORIDE	Toluene
4-25-89	FEED TO #1 ABS.N	* 0.338	1.458	14	192	.066
4-25-89	FEED TO #2 ABS.S	0.000	0.000	0.001	0.015	.000
4-25-89	DISC. TO SEWER	0.000	0.000	0.001	0.008	.000
4-25-89	TOTAL GALLONS THROUGH NEW CARBON = 238,250				* #10 Well out of Service.	Toluene
4-26-89	FEED TO #1 ABS.N	0.582	9	34	926	.059
4-26-89	FEED TO #2 ABS.S	0.004	0.003	0.032	0.100	.000
4-26-89	DISC. TO SEWER	0.000	0.000	0.001	0.004	.000
4-26-89	TOTAL GALLONS THROUGH NEW CARBON = 246,649					Toluene
4-27-89	FEED TO #1 ABS.N	0.614	10	39	1020	.052
4-27-89	FEED TO #2 ABS.S	0.033	0.195	1.105	0.795	.000
4-27-89	DISC. TO SEWER	0.000	0.000	0.001	0.007	.000
4-27-89	TOTAL GALLONS THROUGH NEW CARBON = 253,788					Toluene
4-28-89	FEED TO #1 ABS.N	0.754	7	36	750	.050
4-28-89	FEED TO #2 ABS.S	0.037	0.437	2.005	6.389	.000
4-28-89	DISC. TO SEWER	0.000	0.000	0.000	0.004	.000
4-28-89	TOTAL GALLONS THROUGH NEW CARBON = 262,453					Toluene
5-1-89	FEED TO #1 ABS.N	0.541	6	29	649	.032
5-1-89	FEED TO #2 ABS.S	0.053	0.702	3.047	22	.000
5-1-89	DISC. TO SEWER	0.000	0.000	0.000	0.002	.000
5-1-89	TOTAL GALLONS THROUGH NEW CARBON = 284,484					Toluene
5-2-89	FEED TO #1 ABS.N	0.626	11	41	971	.038
5-2-89	FEED TO #2 ABS.S	0.015	0.182	2.182	22	.003
5-2-89	DISC. TO SEWER	0.000	0.000	0.001	0.005	.000
5-2-89	TOTAL GALLONS THROUGH NEW CARBON = 290,797					

9/29/88

BASF CHEMICAL CORPORATION, WYANDOTTE SITE

NORTH WORKS GROUNDWATER EXTRACTION WELLS

290,797

DATE	SAMPLE	METHYLENE CHLORIDE	CHLOROFORM	ETHYLENE DICHLORIDE	PROPYLENE DICHLORIDE	Toluene
5-3-89	FEED TO #1 ABS.N	0.597	11	43	970	.329
5-3-89	FEED TO #2 ABS.S	—	—	—	—	—
5-3-89	DISC. TO SEWER	0.000	0.000	0.001	0.023	.000
5-3-89	TOTAL GALLONS THROUGH NEW CARBON = 297,139					
						Toluene
	FEED TO #1 ABS.	5-3-89 - Shut Down @ 7 AM. Removed Carbon From North Absorber & Went back To one Absorber operation @ 9 AM.				
	FEED TO #2 ABS.					
	DISC. TO SEWER	5-5-89 - Charged New Carbon into North Absorber. Back To Two Absor. operation @ 9 AM.				
	TOTAL GALLONS THROUGH NEW CARBON =					
						Toluene
5-4-89	FEED TO #1 ABS.S	0.395	5	27	513	.012
	FEED TO #2 ABS.	—	—	—	—	—
5-4-89	DISC. TO SEWER	0.000	0.000	0.000	0.003	.000
5-4-89	TOTAL GALLONS THROUGH NEW CARBON = 6481					
						Toluene
5-5-89	FEED TO #1 ABS.S	0.546	6	39	720	.038
	FEED TO #2 ABS.	—	—	—	—	—
5-5-89	DISC. TO SEWER	0.000	0.000	0.000	0.004	.000
5-5-89	TOTAL GALLONS THROUGH NEW CARBON = 19,744					
						Toluene
5-8-89	FEED TO #1 ABS.S	0.476	6	33	714	.037
5-8-89	FEED TO #2 ABS.N	0.000	0.000	0.003	0.014	.000
5-8-89	DISC. TO SEWER	0.000	0.000	0.001	0.011	.000
5-8-89	TOTAL GALLONS THROUGH NEW CARBON = 60,355					
						Toluene
5-9-89	FEED TO #1 ABS.S	0.426	5	28	573	.025
5-9-89	FEED TO #2 ABS.N	0.000	0.000	0.001	0.021	.000
5-9-89	DISC. TO SEWER	0.000	0.000	0.001	0.012	.000
5-9-89	TOTAL GALLONS THROUGH NEW CARBON = 73,572					

9/29/88

BASF CHEMICAL CORPORATION, WYANDOTTE SITE

NORTH WORKS GROUNDWATER EXTRACTION WELLS 73,572

DATE	SAMPLE	METHYLENE CHLORIDE	CHLOROFORM	ETHYLENE DICHLORIDE	PROPYLENE DICHLORIDE	Toluene
5-10-89	FEED TO #1 ABS.S	0.348	4	26	470	.036
5-10-89	FEED TO #2 ABS.N	0.000	0.000	0.001	0.017	.000
5-10-89	DISC. TO SEWER	0.000	0.000	0.003	0.011	.000
5-10-89	TOTAL GALLONS THROUGH NEW CARBON = 86,464					
						Toluene
5-11-89	FEED TO #1 ABS.S	0.466	5	29	530	.022
5-11-89	FEED TO #2 ABS.N	0.000	0.000	0.001	0.009	.000
5-11-89	DISC. TO SEWER	0.000	0.000	0.000	0.004	.000
5-11-89	TOTAL GALLONS THROUGH NEW CARBON = 99,276					
						Toluene
5-12-89	FEED TO #1 ABS.S	0.500	6	31	590	.039
5-12-89	FEED TO #2 ABS.N	0.000	0.000	0.001	0.010	.000
5-12-89	DISC. TO SEWER	0.000	0.000	0.000	0.006	.000
5-12-89	TOTAL GALLONS THROUGH NEW CARBON = 111,756					
						Toluene
5-15-89	FEED TO #1 ABS.S	0.356	4	27	469	.034
5-15-89	FEED TO #2 ABS.N	0.000	0.000	0.001	0.011	.000
5-15-89	DISC. TO SEWER	0.000	0.000	0.001	0.007	.000
5-15-89	TOTAL GALLONS THROUGH NEW CARBON = 147,019					
						Toluene
5-16-89	FEED TO #1 ABS.S	—	—	—	—	—
5-16-89	FEED TO #2 ABS.N	—	—	—	—	—
5-16-89	DISC. TO SEWER	—	—	—	—	—
5-16-89	TOTAL GALLONS THROUGH NEW CARBON = 159,273					
						Toluene
5-17-89	FEED TO #1 ABS.S	.462	5	28	537	.056
5-17-89	FEED TO #2 ABS.N	0.000	0.000	0.001	0.010	.001
5-17-89	DISC. TO SEWER	0.000	0.000	0.000	0.004	.000
5-17-89	TOTAL GALLONS THROUGH NEW CARBON = 171,887					

9/29/88

BASF CHEMICAL CORPORATION, WYANDOTTE SITE 171,887

NORTH WORKS GROUNDWATER EXTRACTION WELLS

DATE	SAMPLE	METHYLENE CHLORIDE	CHLOROFORM	ETHYLENE DICHLORIDE	PROPYLENE DICHLORIDE	TOLUENE
5-18-89	FEED TO #1 ABS.S	0.454	5.00	28	489	0.043
5-18-89	FEED TO #2 ABS.N	0.000	0.000	0.000	0.009	.000
5-18-89	DISC. TO SEWER	0.000	0.000	0.000	0.004	.000
5-18-89	TOTAL GALLONS THROUGH NEW CARBON = 184,132					
5-19-89	FEED TO #1 ABS.S	0.478	4	27	442	.035
5-19-89	FEED TO #2 ABS.N	0.000	0.000	0.000	0.010	.000
5-19-89	DISC. TO SEWER	0.000	0.000	0.000	0.007	.000
5-19-89	TOTAL GALLONS THROUGH NEW CARBON = 196,240					
5-22-89	FEED TO #1 ABS.S	0.436	4	25	415	.000
5-22-89	FEED TO #2 ABS.N	0.000	0.000	0.001	0.011	.000
5-22-89	DISC. TO SEWER	0.000	0.000	0.000	0.005	.000
5-22-89	TOTAL GALLONS THROUGH NEW CARBON = 231,667					
5-23-89	FEED TO #1 ABS.S	0.828	12	45	838	.000
5-23-89	FEED TO #2 ABS.N	0.000	0.000	0.001	0.025	.000
5-23-89	DISC. TO SEWER	0.000	0.000	0.000	0.004	.000
5-23-89	TOTAL GALLONS THROUGH NEW CARBON = 243,401					
5-24-89	FEED TO #1 ABS.S	0.429	6	30	562	.038
5-24-89	FEED TO #2 ABS.N	0.000	0.000	0.001	0.019	.000
5-24-89	DISC. TO SEWER	0.000	0.000	0.000	0.004	.000
5-24-89	TOTAL GALLONS THROUGH NEW CARBON = 256,434					
5-25-89	FEED TO #1 ABS.S	0.522	6	30	591	.033
5-25-89	FEED TO #2 ABS.N	0.000	0.000	0.000	0.011	.000
5-25-89	DISC. TO SEWER	0.000	0.000	0.000	0.004	.000
5-25-89	TOTAL GALLONS THROUGH NEW CARBON = 269,303					

9/29/88

BASF CHEMICAL CORPORATION, WYANDOTTE SITE 269,303

NORTH WORKS GROUNDWATER EXTRACTION WELLS

DATE	SAMPLE	METHYLENE CHLORIDE	CHLOROFORM	ETHYLENE DICHLORIDE	PROPYLENE DICHLORIDE	Toluene
5-26-89	FEED TO #1 ABS.S	[redacted].370	4	25	452	.021
5-26-89	FEED TO #2 ABS.N	.000	.000	.000	.007	.000
5-26-89	DISC. TO SEWER	.000	.000	.000	.003	.000
5-26-89	TOTAL GALLONS THROUGH NEW CARBON = 282,047					
5-30-89	FEED TO #1 ABS.S	.499	5	30	528	.069
5-30-89	FEED TO #2 ABS.N	.000	.000	.000	.010	.000
5-30-89	DISC. TO SEWER	.000	.000	.000	.003	.000
5-30-89	TOTAL GALLONS THROUGH NEW CARBON = 331,472					
5-31-89	FEED TO #1 ABS.S	.462	5	27	490	.022
5-31-89	FEED TO #2 ABS.N	.000	.000	.000	.012	.001
5-31-89	DISC. TO SEWER	.000	.000	.000	.004	.001
5-31-89	TOTAL GALLONS THROUGH NEW CARBON = 343,337					
6-1-89	FEED TO #1 ABS.S	.523	6	34	618	.064
6-1-89	FEED TO #2 ABS.N	.000	.000	.000	.008	.000
6-1-89	DISC. TO SEWER	.000	.000	.000	.001	.000
6-1-89	TOTAL GALLONS THROUGH NEW CARBON = 355,579					
6-2-89	FEED TO #1 ABS.S	.489	5	30	537	.052
6-2-89	FEED TO #2 ABS.N	.000	.000	.000	.010	.000
6-2-89	DISC. TO SEWER	.000	.000	.000	.002	.000
6-2-89	TOTAL GALLONS THROUGH NEW CARBON = 369,066					
6-5-89	FEED TO #1 ABS.S	.435	6	31	599	.052
6-5-89	FEED TO #2 ABS.N	.000	.000	.000	.005	.000
6-5-89	DISC. TO SEWER	.000	.000	.000	.009	.000
6-5-89	TOTAL GALLONS THROUGH NEW CARBON = 408,735					

9/29/88

BASF CHEMICAL CORPORATION, WYANDOTTE SITE 408,735

NORTH WORKS GROUNDWATER EXTRACTION WELLS

DATE	SAMPLE	METHYLENE CHLORIDE	CHLOROFORM	ETHYLENE DICHLORIDE	PROPYLENE DICHLORIDE	TOLUENE
6-6-89	FEED TO #1 ABS.S	.476	5	28	490	.041
6-6-89	FEED TO #2 ABS.N	.000	.000	.000	.005	.000
6-6-89	DISC. TO SEWER	.000	.000	.000	.002	.000
6-6-89	TOTAL GALLONS THROUGH NEW CARBON = 421,996					
6-7-89	FEED TO #1 ABS.S	0.410	6	31	596	.053
6-7-89	FEED TO #2 ABS.N	0.000	0.000	0.000	0.017	.000
6-7-89	DISC. TO SEWER	0.000	0.000	0.000	0.002	.000
6-7-89	TOTAL GALLONS THROUGH NEW CARBON = 435,237					
6-8-89	FEED TO #1 ABS.S	.406	5	29	519	.041
6-8-89	FEED TO #2 ABS.N	.000	.000	.000	.011	.001
6-8-89	DISC. TO SEWER	.000	.000	.000	.001	.000
6-8-89	TOTAL GALLONS THROUGH NEW CARBON = 448,101					
6-9-89	FEED TO #1 ABS.S	0.396	5	30	603	.000
6-9-89	FEED TO #2 ABS.N	0.000	0.000	0.000	0.004	.000
6-9-89	DISC. TO SEWER	0.000	0.000	0.000	0.002	.000
6-9-89	TOTAL GALLONS THROUGH NEW CARBON = 460,507					
6-12-89	FEED TO #1 ABS.S	.443	5	29	527	.035
6-12-89	FEED TO #2 ABS.N	.000	.000	.000	.007	.000
6-12-89	DISC. TO SEWER	.000	.000	.000	.002	.000
6-12-89	TOTAL GALLONS THROUGH NEW CARBON = 497,581					
6-13-89	FEED TO #1 ABS.	.442	5	28	527	.033
6-13-89	FEED TO #2 ABS.	.000	.000	.001	.026	.000
6-13-89	DISC. TO SEWER	.000	.000	.000	.002	.000
6-13-89	TOTAL GALLONS THROUGH NEW CARBON = 510,057					

9/29/88

BASF CHEMICAL CORPORATION, WYANDOTTE SITE

510,057

NORTH WORKS GROUNDWATER EXTRACTION WELLS

DATE	SAMPLE	METHYLENE CHLORIDE	CHLOROFORM	ETHYLENE DICHLORIDE	PROPYLENE DICHLORIDE	TOLUENE
6-14-89	FEED TO #1 ABS.S	.424	6	30	570	.043
6-14-89	FEED TO #2 ABS.N	.000	.000	.001	.021	.000
6-14-89	DISC. TO SEWER	.000	.000	.000	.002	.000
6-14-89	TOTAL GALLONS THROUGH NEW CARBON = 522,205					
6-15-89	FEED TO #1 ABS.S	0.443	5	31	558	.013
6-15-89	FEED TO #2 ABS.N	0.000	0.000	0.000	0.005	.000
6-15-89	DISC. TO SEWER	0.000	0.000	0.000	0.002	.000
6-15-89	TOTAL GALLONS THROUGH NEW CARBON = 534,585					
-16-89	FEED TO #1 ABS.S	0.443	5	30	559	.028
6-16-89	FEED TO #2 ABS.N	0.000	0.000	0.000	0.005	0.000
6-16-89	DISC. TO SEWER	0.000	0.000	0.000	0.001	0.000
6-16-89	TOTAL GALLONS THROUGH NEW CARBON = 547,038					
6-19-89	FEED TO #1 ABS.S	0.391	5	28	495	0.040
6-19-89	FEED TO #2 ABS.N	.000	.000	0.001	0.027	.000
6-19-89	DISC. TO SEWER	.000	.000	.000	.001	.000
6-19-89	TOTAL GALLONS THROUGH NEW CARBON = 574,798					
6-20-89	FEED TO #1 ABS.	0.387	5	26	469	.028
6-20-89	FEED TO #2 ABS.	.000	.000	.000	.014	.000
6-20-89	DISC. TO SEWER	.000	.000	.000	.001	.000
6-20-89	TOTAL GALLONS THROUGH NEW CARBON = 587,575					
6-21-89	FEED TO #1 ABS.	0.460	6	27	537	.029
6-21-89	FEED TO #2 ABS.	.000	.000	.002	.006	.000
6-21-89	DISC. TO SEWER	.000	.000	.000	.001	.000
6-21-89	TOTAL GALLONS THROUGH NEW CARBON = 600,566					

9/29/88

BASF CHEMICAL CORPORATION, WYANDOTTE SITE

NORTH WORKS GROUNDWATER EXTRACTION WELLS

600,566

DATE	SAMPLE	METHYLENE CHLORIDE	CHLOROFORM	ETHYLENE DICHLORIDE	PROPYLENE DICHLORIDE	TOLUENE
6-22-89	FEED TO #1 ABS.S	0.557	5	27	477	.033
6-22-89	FEED TO #2 ABS.N	0.149	0.003	0.162	0.012	.000
6-22-89	DISC. TO SEWER	0.000	0.000	0.000	0.005	0.000
6-22-89	TOTAL GALLONS THROUGH NEW CARBON = 613,309					
6-23-89	FEED TO #1 ABS.S	0.527	5	29	523	.032
6-23-89	FEED TO #2 ABS.N	0.252	0.035	6.573	0.020	.000
6-23-89	DISC. TO SEWER	0.000	0.000	0.000	0.002	.000
6-23-89	TOTAL GALLONS THROUGH NEW CARBON = 626,205					
6-26-89	FEED TO #1 ABS.S	8.173	6	33	576	.034
6-26-89	FEED TO #2 ABS.N	0.845	0.934	18	14	.000
6-26-89	DISC. TO SEWER	0.000	0.000	0.000	0.002	.000
6-26-89	TOTAL GALLONS THROUGH NEW CARBON = 664,164					
6-27-89	FEED TO #1 ABS.S	3.734	6	32	577	.034
6-27-89	FEED TO #2 ABS.N	1.721	0.917	22	23	.002
6-27-89	DISC. TO SEWER	0.022	0.000	0.000	0.001	.000
6-27-89	TOTAL GALLONS THROUGH NEW CARBON = 676,617					
6-28-89	FEED TO #1 ABS.S	4.401	4	25	431	.025
6-28-89	FEED TO #2 ABS.N	—	—	—	—	—
6-28-89	DISC. TO SEWER	0.010	0.000	0.000	0.002	.000
6-28-89	TOTAL GALLONS THROUGH NEW CARBON = 688,915					
	FEED TO #1 ABS.	6-28-89 Shut System Down @ 7:00 AM Removed				
	FEED TO #2 ABS.	Carbon From South Absorber Went To One				
	DISC. TO SEWER	Absorber operation @ 11:00 AM				
	TOTAL GALLONS THROUGH NEW CARBON = 699,287					

9/29/88

BASF CHEMICAL CORPORATION, WYANDOTTE SITE

NORTH WORKS GROUNDWATER EXTRACTION WELLS 688,915

DATE	SAMPLE	METHYLENE CHLORIDE	CHLOROFORM	ETHYLENE DICHLORIDE	PROPYLENE DICHLORIDE	Toluene
6-29-89	FEED TO #1 ABS.[N]	4.126	5	24	520	.032
6-29-89	FEED TO #2 ABS.	—	—	—	—	
6-29-89	DISC. TO SEWER	0.010	0.000	0.000	0.002	.000
6-29-89	TOTAL GALLONS THROUGH NEW CARBON = [redacted] 10,372					
	FEED TO #1 ABS.	6-30-89	Charged New Carbon		into	
	FEED TO #2 ABS.	South Absorber. Back		To 2 Absorber operation		
	DISC. TO SEWER	@				
	TOTAL GALLONS THROUGH NEW CARBON =					
						Toluene
6-30-89	FEED TO #1 ABS.[N]	4	8	31	706	.036
6-30-89	FEED TO #2 ABS.	—	—	—	—	
6-30-89	DISC. TO SEWER	0	0	0	.002	.000
6-30-89	TOTAL GALLONS THROUGH NEW CARBON = 20,154					
7-3-89	FEED TO #1 ABS.[N]	2	5	25	483	.035
7-3-89	FEED TO #2 ABS.[S]	.003	.001	.016	.034	.000
7-3-89	DISC. TO SEWER	.000	.000	.003	.015	.000
7-3-89	TOTAL GALLONS THROUGH NEW CARBON = 55,416					
7-4-89	FEED TO #1 ABS.	2	5	26	499	.038
7-4-89	FEED TO #2 ABS.	.000	.000	.004	.011	.000
7-4-89	DISC. TO SEWER	.000	.000	.003	.014	.00
7-4-89	TOTAL GALLONS THROUGH NEW CARBON = 66,709					
7-5-89	FEED TO #1 ABS.	1.432	3	22	334	.026
7-5-89	FEED TO #2 ABS.	.000	.000	.004	.011	.000
7-5-89	DISC. TO SEWER	.000	.000	.002	.011	.000
7-5-89	TOTAL GALLONS THROUGH NEW CARBON = 77,471					

BASF CHEMICAL CORPORATION, WYANDOTTE SITE 77,471

NORTH WORKS GROUNDWATER EXTRACTION WELLS

DATE	SAMPLE	METHYLENE CHLORIDE	CHLOROFORM	ETHYLENE DICHLORIDE	PROPYLENE DICHLORIDE	TOTAL
7-6-89	FEED TO #1 ABS.	0.791	4	23	387	.029
7-6-89	FEED TO #2 ABS.	.000	.000	0.002	0.013	.000
7-6-89	DISC. TO SEWER	.000	.000	0.002	0.010	.000
7-6-89	TOTAL GALLONS THROUGH NEW CARBON = 89,499					
7-7-89	FEED TO #1 ABS.	0.899	4	24	416	.025
7-7-89	FEED TO #2 ABS.	.000	.000	.003	.013	.000
7-7-89	DISC. TO SEWER	.000	.000	.001	.006	.000
7-7-89	TOTAL GALLONS THROUGH NEW CARBON = 101,448					
7-10-89	FEED TO #1 ABS.	1.165	2	30	236	.047
7-10-89	FEED TO #2 ABS.	.000	.000	.003	.010	.000
7-10-89	DISC. TO SEWER	.000	.000	.002	.010	.000
7-10-89	TOTAL GALLONS THROUGH NEW CARBON = 125,438					
7-11-89	FEED TO #1 ABS.	0.603	2	18	239	.034
7-11-89	FEED TO #2 ABS.	.000	.000	.002	.010	.000
7-11-89	DISC. TO SEWER	.000	.000	.001	.004	.000
7-11-89	TOTAL GALLONS THROUGH NEW CARBON = 137,848					
7-12-89	FEED TO #1 ABS.	0.489	3	19	280	.009
7-12-89	FEED TO #2 ABS.	.000	.000	.002	.015	.000
7-12-89	DISC. TO SEWER	.000	.000	.001	.006	.000
7-12-89	TOTAL GALLONS THROUGH NEW CARBON = 149,459					
7-13-89	FEED TO #1 ABS.	0.609	4	25	432	0.082
7-13-89	FEED TO #2 ABS.	0.000	0.000	0.001	0.008	0.001
7-13-89	DISC. TO SEWER	0.000	0.000	0.001	0.005	0.006
7-13-89	TOTAL GALLONS THROUGH NEW CARBON = 161,367					

9/29/88

BASF CHEMICAL CORPORATION, WYANDOTTE SITE 161,367

NORTH WORKS GROUNDWATER EXTRACTION WELLS

DATE	SAMPLE	METHYLENE CHLORIDE	CHLOROFORM	ETHYLENE DICHLORIDE	PROPYLENE DICHLORIDE	TOLUENE
7-14-89	FEED TO #1 ABS.N	0.595	6	32	584	.000
—	FEED TO #2 ABS.S	0.000	.000	.002	.011	.000
—	DISC. TO SEWER	.000	.000	.001	.005	.000
—	TOTAL GALLONS THROUGH NEW CARBON = 170,234					
7-17-89	FEED TO #1 ABS.N	0.434	7	35	734	.045
—	FEED TO #2 ABS.S	0.000	0.000	0.001	0.021	.000
—	DISC. TO SEWER	0.000	0.000	0.001	0.007	.000
—	TOTAL GALLONS THROUGH NEW CARBON = 185,831					
7-18-89	FEED TO #1 ABS.N	0.596	8	38	819	.028
—	FEED TO #2 ABS.S	0.000	0.000	0.001	0.013	.000
—	DISC. TO SEWER	0.000	0.000	0.001	0.006	.000
—	TOTAL GALLONS THROUGH NEW CARBON = 190,674					
7-19-89	FEED TO #1 ABS.N	0.482	8	38	807	.035
—	FEED TO #2 ABS.S	0.000	0.000	0.001	0.011	.000
—	DISC. TO SEWER	0.000	0.000	0.001	0.006	.000
—	TOTAL GALLONS THROUGH NEW CARBON = 195,023					
7-20-89	FEED TO #1 ABS.N	0.000	3	18	335	.028
—	FEED TO #2 ABS.S	0.000	0.000	0.001	0.010	.000
—	DISC. TO SEWER	0.000	0.000	0.002	0.009	.000
—	TOTAL GALLONS THROUGH NEW CARBON = 203,611					
7-21-89	FEED TO #1 ABS.N	0.386	5	25	353	0.033
—	FEED TO #2 ABS.S	0.000	0.000	0.001	0.012	0.000
—	DISC. TO SEWER	0.000	0.000	0.001	0.005	0.000
—	TOTAL GALLONS THROUGH NEW CARBON = 212,404					

9/29/88

BASF CHEMICAL CORPORATION, WYANDOTTE SITE 212,404

NORTH WORKS GROUNDWATER EXTRACTION WELLS

DATE	SAMPLE	METHYLENE CHLORIDE	CHLOROFORM	ETHYLENE DICHLORIDE	PROPYLENE DICHLORIDE	Toluene
7-24-89	FEED TO #1 ABS.N	2.519	5	23	488	.014
—	FEED TO #2 ABS.S	0.000	0.000	0.001	0.013	.000
—	DISC. TO SEWER	0.000	0.000	0.001	0.005	.000
—	TOTAL GALLONS THROUGH NEW CARBON = 251,696					
7-25-89	FEED TO #1 ABS.N	0.490	3	24	375	.025
—	FEED TO #2 ABS.S	0.000	0.000	0.001	0.006	.000
—	DISC. TO SEWER	0.000	0.000	0.001	0.004	.000
—	TOTAL GALLONS THROUGH NEW CARBON = 265,380					
7-26-89	FEED TO #1 ABS.N	0.583	3	24	355	.031
—	FEED TO #2 ABS.S	0.000	0.000	0.001	0.008	.000
—	DISC. TO SEWER	0.000	0.000	0.001	0.004	.000
—	TOTAL GALLONS THROUGH NEW CARBON = 278,606					
7-27-89	FEED TO #1 ABS.N	0.000	4	29	439	.027
—	FEED TO #2 ABS.S	0.000	0.000	0.001	0.018	.000
—	DISC. TO SEWER	0.000	0.000	0.001	0.002	.000
—	TOTAL GALLONS THROUGH NEW CARBON = 292,384					
7-28-89	FEED TO #1 ABS.N	0.544	4	29	470	.020
—	FEED TO #2 ABS.S	0.000	0.000	0.000	0.002	.000
—	DISC. TO SEWER	0.000	0.000	0.001	0.002	.000
—	TOTAL GALLONS THROUGH NEW CARBON = 306,177					
7-31-89	FEED TO #1 ABS.N	0.536	4	28	465	.000
—	FEED TO #2 ABS.S	0.000	0.000	0.000	0.002	.000
—	DISC. TO SEWER	0.000	0.000	0.001	0.002	0.001
—	TOTAL GALLONS THROUGH NEW CARBON = 350,439					

9/29/88

BASF CHEMICAL CORPORATION, WYANDOTTE SITE 350,438

NORTH WORKS GROUNDWATER EXTRACTION WELLS

DATE	SAMPLE	METHYLENE CHLORIDE	CHLOROFORM	ETHYLENE DICHLORIDE	PROPYLENE DICHLORIDE	TOLUENE
8-1-89	FEED TO #1 ABS.	0.446	4	25	399	0.026
—	FEED TO #2 ABS.	0.000	0.000	0.000	.002	.000
—	DISC. TO SEWER	0.000	0.000	0.000	.002	.000
—	TOTAL GALLONS THROUGH NEW CARBON = 365,143					
8-2-89	FEED TO #1 ABS.	0.652	3	25	386	0.024
—	FEED TO #2 ABS.	0.000	0.000	0.000	.006	.000
—	DISC. TO SEWER	0.000	0.000	0.001	0.003	.000
—	TOTAL GALLONS THROUGH NEW CARBON = 381,968					
8-3-89	FEED TO #1 ABS.	0.491	3	29	406	.000
—	FEED TO #2 ABS.	0.000	0.000	0.000	0.002	.000
—	DISC. TO SEWER	0.000	0.000	0.000	0.002	.000
—	TOTAL GALLONS THROUGH NEW CARBON = 395,408					
8-4-89	FEED TO #1 ABS.	0.000	4	25	388	.080
—	FEED TO #2 ABS.	0.000	0.000	0.000	0.005	.000
—	DISC. TO SEWER	0.000	0.000	0.000	0.002	.000
—	TOTAL GALLONS THROUGH NEW CARBON = 407,666					
8-7-89	FEED TO #1 ABS.	0.487	5	26	493	.000
—	FEED TO #2 ABS.	0.000	0.000	0.000	0.000	.000
—	DISC. TO SEWER	0.000	0.000	0.000	0.002	.000
—	TOTAL GALLONS THROUGH NEW CARBON = 445,894					
8-8-89	FEED TO #1 ABS.	0.459	4	25	424	.000
—	FEED TO #2 ABS.	0.000	0.000	0.000	0.000	.000
—	DISC. TO SEWER	0.000	0.000	0.000	.002	.000
—	TOTAL GALLONS THROUGH NEW CARBON = 459,569					

9/29/88

BASF CHEMICAL CORPORATION, WYANDOTTE SITE 459,569

NORTH WORKS GROUNDWATER EXTRACTION WELLS

DATE	SAMPLE	METHYLENE CHLORIDE	CHLOROFORM	ETHYLENE DICHLORIDE	PROPYLENE DICHLORIDE	TOLUENE
8-9-89	FEED TO #1 ABS.N	—	—	—	—	—
—	FEED TO #2 ABS.S	—	—	—	—	—
—	DISC. TO SEWER	—	—	—	—	—
—	TOTAL GALLONS THROUGH NEW CARBON = 472,396					
8-10-89	FEED TO #1 ABS.	0.662	4	24	419	.038
—	FEED TO #2 ABS.	0.000	0.000	0.000	0.002	.000
—	DISC. TO SEWER	0.000	0.000	0.000	0.002	.000
—	TOTAL GALLONS THROUGH NEW CARBON = 485,870					
8-11-89	FEED TO #1 ABS.	0.421	4	26	424	.030
—	FEED TO #2 ABS.	0.000	0.000	0.000	0.002	.000
—	DISC. TO SEWER	0.000	0.000	0.000	0.002	.000
—	TOTAL GALLONS THROUGH NEW CARBON = 498,973					
8-14-89	FEED TO #1 ABS.	0.712	5	30	559	.024
—	FEED TO #2 ABS.	0.000	0.000	0.000	0.003	.000
—	DISC. TO SEWER	0.000	0.000	0.000	0.002	.000
—	TOTAL GALLONS THROUGH NEW CARBON = 537,787					
8-15-89	FEED TO #1 ABS.N	0.481	3	24	356	.000
—	FEED TO #2 ABS.S	0.000	0.000	0.000	0.004	.000
—	DISC. TO SEWER	0.000	0.000	0.000	0.002	.000
—	TOTAL GALLONS THROUGH NEW CARBON = 550,528					
8-16-89	FEED TO #1 ABS.N	0.000	4	29	461	.000
—	FEED TO #2 ABS.S	0.000	0.000	0.000	0.007	.000
—	DISC. TO SEWER	0.000	0.000	0.000	0.001	.000
—	TOTAL GALLONS THROUGH NEW CARBON = 562,525					

9/29/88

BASF CHEMICAL CORPORATION, WYANDOTTE SITE 562,525

NORTH WORKS GROUNDWATER EXTRACTION WELLS

DATE	SAMPLE	METHYLENE CHLORIDE	CHLOROFORM	ETHYLENE DICHLORIDE	PROPYLENE DICHLORIDE	Toluene
8-17-89	FEED TO #1 ABS.N	0.777	3	21	331	.018
"	FEED TO #2 ABS.S	0.080	0.000	0.013	0.002	.000
"	DISC. TO SEWER	0.000	0.000	0.000	0.002	.000
"	TOTAL GALLONS THROUGH NEW CARBON = 574,945					
8-18-89	FEED TO #1 ABS.N	0.000	3	25	341	.000
"	FEED TO #2 ABS.S	0.140	0.000	0.133	0.007	.000
"	DISC. TO SEWER	0.000	0.000	0.000	0.002	.000
"	TOTAL GALLONS THROUGH NEW CARBON = 587,077					
8-21-89	FEED TO #1 ABS.N	1.038	5	28	469	.023
"	FEED TO #2 ABS.S	0.524	0.017	5.575	1.312	.000
"	DISC. TO SEWER	0.000	0.000	0.000	0.001	.000
"	TOTAL GALLONS THROUGH NEW CARBON = 623,149					
8-22-89	FEED TO #1 ABS.N	0.597	4	27	464	.000
"	FEED TO #2 ABS.S	0.692	0.110	11.614	7.061	.000
"	DISC. TO SEWER	0.000	0.000	0.000	0.001	.000
"	TOTAL GALLONS THROUGH NEW CARBON = 635,085					
8-23-89	FEED TO #1 ABS.N	0.431	3.273	23.576	386	.024
"	FEED TO #2 ABS.S	0.669	0.124	13.915	14.904	.000
"	DISC. TO SEWER	0.000	0.000	0.000	0.001	.000
"	TOTAL GALLONS THROUGH NEW CARBON = 646,509					
8-24-89	FEED TO #1 ABS.	0.000	5	27	505	.024
"	FEED TO #2 ABS.	1.006	0.184	21	34	.006
"	DISC. TO SEWER	0.000	0.000	0.000	0.001	.000
"	TOTAL GALLONS THROUGH NEW CARBON = 657,719					

9/29/88

657,719

BASF CHEMICAL CORPORATION, WYANDOTTE SITE

NORTH WORKS GROUNDWATER EXTRACTION WELLS

DATE	SAMPLE	METHYLENE CHLORIDE	CHLOROFORM	ETHYLENE DICHLORIDE	PROPYLENE DICHLORIDE	Toluene
8-25-89	FEED TO #1 ABS. N	0.000	3	24	417	.000
"	FEED TO #2 ABS. S	1.036	0.236	26	59	.000
"	DISC. TO SEWER	0.000	0.000	0.000	0.001	0.000
"	TOTAL GALLONS THROUGH NEW CARBON = 668,934					
8-28-89	FEED TO #1 ABS.	0.494	4	25	455	.000
"	FEED TO #2 ABS.	1.340	0.468	41	162	.000
"	DISC. TO SEWER	0.000	0.000	0.000	0.001	.000
"	TOTAL GALLONS THROUGH NEW CARBON = 702,072					
—	FEED TO #1 ABS.	8-28-89 Shut System Down @ 7 AM. Removed Carbon From North Absorber. Went back To 1-Absorber operation @ 4 PM.				
—	FEED TO #2 ABS.	8-29-89 Shut System Down @ 7 30 AM. Filling up North Absorber with Water. Went back To 1-Absorber operation @ 1 30 PM				
—	DISC. TO SEWER					
—	TOTAL GALLONS THROUGH NEW CARBON =					
8-29-89	FEED TO #1 ABS. S	0.546	6	30	626	.020
"	FEED TO #2 ABS.	—	—	—	—	—
"	DISC. TO SEWER	0.000	0.000	0.000	0.002	.000
"	TOTAL GALLONS THROUGH NEW CARBON = 6379					
	FEED TO #1 ABS.	8-30-89 Charged New Carbon into North Absorber Went To 2-Absorber operation @ 10 00 AM				
	FEED TO #2 ABS.					
	DISC. TO SEWER					
	TOTAL GALLONS THROUGH NEW CARBON =					
8-30-89	FEED TO #1 ABS. S	0.180	4	23	471	.025
	FEED TO #2 ABS.	—	—	—	—	—
8-30-89	DISC. TO SEWER	0.000	0.000	0.002	0.013	.000
8-30-89	TOTAL GALLONS THROUGH NEW CARBON = 13,396					

9/29/88

BASF CHEMICAL CORPORATION, WYANDOTTE SITE 13,396

NORTH WORKS GROUNDWATER EXTRACTION WELLS

DATE	SAMPLE	METHYLENE CHLORIDE	CHLOROFORM	ETHYLENE DICHLORIDE	PROPYLENE DICHLORIDE	Toluene
8-31-89	FEED TO #1 ABS. S	0.000	4	29	597	.000
8-31-89	FEED TO #2 ABS. N	0.002	0.002	0.041	0.360	.001
8-31-89	DISC. TO SEWER	0.792	3	26	457	.000
8-31-89	TOTAL GALLONS THROUGH NEW CARBON = 22,370					
9-1-89	FEED TO #1 ABS. S	0.000	6	27	596	.000
9-1-89	FEED TO #2 ABS. N	0.000	0.000	0.006	0.093	.000
9-1-89	DISC. TO SEWER	0.000	2	18	312	.000
9-1-89	TOTAL GALLONS THROUGH NEW CARBON = 30,987					
9-4-89	FEED TO #1 ABS. S	0.575	5	28	533	.000
9-4-89	FEED TO #2 ABS. N	0.000	0.000	0.005	0.117	.000
9-4-89	DISC. TO SEWER	0.346	1	12	190	.000
9-4-89	TOTAL GALLONS THROUGH NEW CARBON = 62,395					
			1st sample			
9-5-89	FEED TO #1 ABS. S	0.438	2	20	291	.000
9-5-89	FEED TO #2 ABS. N	0.000	0.000	0.003	0.042	.000
9-5-89	DISC. TO SEWER	0.358	0.845	11	170	.000
9-5-89	TOTAL GALLONS THROUGH NEW CARBON = 73,073					
			2nd sample			
9-5-89	FEED TO #1 ABS. S	0.000	3	24	360	.000
9-5-89	FEED TO #2 ABS. N	0.000	0.000	0.001	0.011	.000
9-5-89	DISC. TO SEWER	0.000	0.985	12	176	.000
9-5-89	TOTAL GALLONS THROUGH NEW CARBON = switched Flows From S To N To N To S					
9-6-89	FEED TO #1 ABS. N	0.367	2	19	289	.000
9-6-89	FEED TO #2 ABS. N S	0.294	0.765	11	153	.000
9-6-89	DISC. TO SEWER	0.000	0.000	0.016	0.261	.000
9-6-89	TOTAL GALLONS THROUGH NEW CARBON = 83,811					

9/29/88

83,811

BASF CHEMICAL CORPORATION, WYANDOTTE SITE

NORTH WORKS GROUNDWATER EXTRACTION WELLS

DATE	SAMPLE	METHYLENE CHLORIDE	CHLOROFORM	ETHYLENE DICHLORIDE	PROPYLENE DICHLORIDE
9-7-89	FEED TO #1 ABS.N	0.392	3	20	308
9-7-89	FEED TO #2 ABS.S	0.211	0.764	9	142
9-7-89	DISC. TO SEWER	0.000	0.000	0.012	0.225
9-7-89	TOTAL GALLONS THROUGH NEW CARBON = 94,738				
9-8-89	FEED TO #1 ABS.N	0.421	4	26	455
9-8-89	FEED TO #2 ABS.S	0.214	0.625	9	134
9-8-89	DISC. TO SEWER	0.000	0.000	0.010	0.165
9-8-89	TOTAL GALLONS THROUGH NEW CARBON = 105,796				
9-11-89	FEED TO #1 ABS.N	.421	2.1	18	~~76~~ 276
9-11-89	FEED TO #2 ABS.S	0.17	0.50	6.7	96
9-11-89	DISC. TO SEWER	0	0	0.004	0.08
9-11-89	TOTAL GALLONS THROUGH NEW CARBON = 138,236				
9-12-89	FEED TO #1 ABS.N	.437	4	24	447
	FEED TO #2 ABS.S	.248	.302	4	114
	DISC. TO SEWER	0	0	.002	.081
	TOTAL GALLONS THROUGH NEW CARBON = 147,804				
9-13-89	FEED TO #1 ABS.	0	4	22	432
	FEED TO #2 ABS.	.198	.560	7	111
	DISC. TO SEWER	0	0	.002	.034
	TOTAL GALLONS THROUGH NEW CARBON = 156,650				
9-14-89	FEED TO #1 ABS.	.390	5	26	574
	FEED TO #2 ABS.	.23[illegible]	.2[illegible]2	5	75
	DISC. TO SEWER	0	.003	.001	.02[illegible]
	TOTAL GALLONS THROUGH NEW CARBON = 164,760				

9/29/88

164,760

BASF CHEMICAL CORPORATION, WYANDOTTE SITE

NORTH WORKS GROUNDWATER EXTRACTION WELLS

DATE	SAMPLE	METHYLENE CHLORIDE	CHLOROFORM	ETHYLENE DICHLORIDE	PROPYLENE DICHLORIDE
9-15-89	FEED TO #1 ABS.N	0	2.3	21	309
	FEED TO #2 ABS.S	0	.356	6	103
	DISC. TO SEWER	0	0	.001	.018
	TOTAL GALLONS THROUGH NEW CARBON = 172,556				
9-18-89	FEED TO #1 ABS.N	0.000	0.590	9	75
	FEED TO #2 ABS.S	0.000	0.291	4	77
	DISC. TO SEWER	0.000	0.000	0.001	0.014
	TOTAL GALLONS THROUGH NEW CARBON = 199,899				
9-19-89	FEED TO #1 ABS.N	0.000	0.559	9	78
"	FEED TO #2 ABS.S	0.143	0.303	5	79
"	DISC. TO SEWER	0.000	0.000	0.001	0.021
"	TOTAL GALLONS THROUGH NEW CARBON = 212,395				
9-20-89	FEED TO #1 ABS.N	0.000	0.668	10	91
"	FEED TO #2 ABS.S	0.000	0.279	4	67
"	DISC. TO SEWER	0.000	0.000	0.001	0.016
"	TOTAL GALLONS THROUGH NEW CARBON = 222,390				
9-21-89	FEED TO #1 ABS.N	0.467	6	27	567
"	FEED TO #2 ABS.S	0.000	0.286	4	70
"	DISC. TO SEWER	0.000	0.000	0.001	0.015
"	TOTAL GALLONS THROUGH NEW CARBON = 231,380				
9-22-89	FEED TO #1 ABS.N	0.369	4	23	426
"	FEED TO #2 ABS.S	0.107	0.242	3	59
"	DISC. TO SEWER	0.000	0.000	0.001	0.020
"	TOTAL GALLONS THROUGH NEW CARBON = 239,806				

239,806

BASF CORPORATION, CHEMICALS DIVISION, WYANDOTTE SITE

NORTH WORKS GROUNDWATER EXTRACTION WELLS

DATE	SAMPLE	METHYLENE CHLORIDE	CHLOROFORM	DICHLORO ETHANE	PROPYLENE DICHLORIDE
9-25-89	FEED TO #1 ABS.N	0.360	8	31	710
"	FEED TO #2 ABS.S	0.090	0.223	3	63
"	DISC. TO SEWER	0.000	0.000	0.001	0.016
"	TOTAL GALLONS THROUGH NEW CARBON = 266,479				
9-26-89	FEED TO #1 ABS.N	Shut System Down @ 7 10 AM - Removed			
"	FEED TO #2 ABS.S	Carbon From North Absorber. Had a hard			
"	DISC. TO SEWER	Time removing Carbon - Low Water Flow			
"	TOTAL GALLONS THROUGH NEW CARBON = 274,093				
9-29-89	FEED TO #1 ABS.	Recharged New Carbon into			
	FEED TO #2 ABS.	North Absorber.			
	DISC. TO SEWER	System Back on @ 9 15 AM.			
	TOTAL GALLONS THROUGH NEW CARBON =				
10-2-89	FEED TO #1 ABS.S	0.371	5	25	516
"	FEED TO #2 ABS.N	0.000	0.000	0.004	0.122
"	DISC. TO SEWER	0.000	0.000	0.003	0.070
"	TOTAL GALLONS THROUGH NEW CARBON = 23,976				
10-3-89	FEED TO #1 ABS.S	0.442	5	27	552
"	FEED TO #2 ABS.N	0.000	0.000	0.002	0.082
"	DISC. TO SEWER	0.000	0.000	0.002	0.049
"	TOTAL GALLONS THROUGH NEW CARBON = 32,897				
10-4-89	FEED TO #1 ABS.S	0.493	6	32	654
"	FEED TO #2 ABS.N	0.000	0.000	0.002	0.065
"	DISC. TO SEWER	0.000	0.000	0.002	0.051
"	TOTAL GALLONS THROUGH NEW CARBON = 42,535				

04/04/89

BASF CORPORATION, CHEMICALS DIVISION, WYANDOTTE SITE

NORTH WORKS GROUNDWATER EXTRACTION WELLS 12,535

DATE	SAMPLE	METHYLENE CHLORIDE	CHLOROFORM	DICHLORO ETHANE	PROPYLENE DICHLORIDE
10-5-89	FEED TO #1 ABS.S	0.408	5	29	579
"	FEED TO #2 ABS.N	0.000	0.000	0.001	0.009
"	DISC. TO SEWER	0.000	0.000	0.002	0.043
"	TOTAL GALLONS THROUGH NEW CARBON = 51,060				
10-6-89	FEED TO #1 ABS.S	0.369	5	26	516
"	FEED TO #2 ABS.N	0.000	0.000	0.002	0.066
"	DISC. TO SEWER	0.000	0.000	0.002	0.043
"	TOTAL GALLONS THROUGH NEW CARBON = 59,718				
10-9-89	FEED TO #1 ABS.S	0.407	6	30	586
"	FEED TO #2 ABS.N	0.000	0.000	0.002	0.065
"	DISC. TO SEWER	0.000	0.000	0.001	0.031
"	TOTAL GALLONS THROUGH NEW CARBON = 85,141				
10-10-89	FEED TO #1 ABS.S	0.329	5	30	511
10-10-89	FEED TO #2 ABS.N	0.000	0.000	0.001	0.011
"	DISC. TO SEWER	0.000	0.000	0.002	0.045
"	TOTAL GALLONS THROUGH NEW CARBON = 94,860				
10-11-89	FEED TO #1 ABS.S	0.478	5	29	498
"	FEED TO #2 ABS.N	0.000	0.000	0.001	0.012
"	DISC. TO SEWER	0.000	0.000	0.001	0.026
"	TOTAL GALLONS THROUGH NEW CARBON = 105,268				
10-12-89	FEED TO #1 ABS.S	0.319	0.422	12	75
"	FEED TO #2 ABS.N	0.000	0.000	0.001	0.007
"	DISC. TO SEWER	0.000	0.000	0.001	0.030
"	TOTAL GALLONS THROUGH NEW CARBON = 114,677				

04/04/89

BASF CORPORATION, CHEMICALS DIVISION, WYANDOTTE SITE 114,677

NORTH WORKS GROUNDWATER EXTRACTION WELLS

DATE	SAMPLE	METHYLENE CHLORIDE	CHLOROFORM	DICHLORO ETHANE	PROPYLENE DICHLORIDE
10-13-89	FEED TO #1 ABS.S	0.719	5	33	572
"	FEED TO #2 ABS.N	0.000	0.000	0.004	0.071
"	DISC. TO SEWER	0.000	0.000	0.002	0.026
"	TOTAL GALLONS THROUGH NEW CARBON = 125,083				
10-16-89	FEED TO #1 ABS.S	G C	out of	Service	
"	FEED TO #2 ABS.N				
"	DISC. TO SEWER				
"	TOTAL GALLONS THROUGH NEW CARBON = 157,779				
10-17-89	FEED TO #1 ABS.S	G C	out of	Service	
"	FEED TO #2 ABS.N				
"	DISC. TO SEWER				
"	TOTAL GALLONS THROUGH NEW CARBON = 168,659				
10-18-89	FEED TO #1 ABS.S	G C	out of	Service	
"	FEED TO #2 ABS.N				
"	DISC. TO SEWER				
"	TOTAL GALLONS THROUGH NEW CARBON = 179,758				
10-19-89	FEED TO #1 ABS.S	0.000	4	7	323
"	FEED TO #2 ABS.N	0.000	0.000	0.000	0.014
"	DISC. TO SEWER	0.000	0.000	0.000	0.029
"	TOTAL GALLONS THROUGH NEW CARBON = 190,825				
10-20-89	FEED TO #1 ABS.S	0.122	1	4	386
"	FEED TO #2 ABS.N	0.000	0.000	0.000	0.032
"	DISC. TO SEWER	0.000	0.000	0.000	0.022
"	TOTAL GALLONS THROUGH NEW CARBON = 200,389				

04/04/89

BASF CORPORATION, CHEMICALS DIVISION, WYANDOTTE SITE

NORTH WORKS GROUNDWATER EXTRACTION WELLS 200,389

DATE	SAMPLE	METHYLENE CHLORIDE	CHLOROFORM	DICHLORO ETHANE	PROPYLENE DICHLORIDE
10-23-89	FEED TO #1 ABS.S	0.000	2	4	308
"	FEED TO #2 ABS.N	0.000	0.000	0.000	0.022
"	DISC. TO SEWER	0.000	0.000	0.000	0.018
"	TOTAL GALLONS THROUGH NEW CARBON = 224,079				
10-24-89	FEED TO #1 ABS.S	0.000	2	6	484
"	FEED TO #2 ABS.N	0.000	0.000	0.000	0.026
"	DISC. TO SEWER	0.000	0.000	0.000	0.015
"	TOTAL GALLONS THROUGH NEW CARBON = 233,689				
10-25-89	FEED TO #1 ABS.S	—	—	3	442
"	FEED TO #2 ABS.N	0.000	0.000	0.000	0.075
"	DISC. TO SEWER	0.000	0.000	0.000	0.014
"	TOTAL GALLONS THROUGH NEW CARBON = 242,186				
10-26-89	FEED TO #1 ABS.S	0.000	3	3	426
"	FEED TO #2 ABS.N	0.000	0.000	0.000	0.044
"	DISC. TO SEWER	0.000	0.000	0.000	0.013
"	TOTAL GALLONS THROUGH NEW CARBON = 249,422				
10-27-89	FEED TO #1 ABS.S	0.000	3	5	474
"	FEED TO #2 ABS.N	0.000	0.000	0.000	0.020
"	DISC. TO SEWER	0.000	0.000	0.000	0.013
"	TOTAL GALLONS THROUGH NEW CARBON = 257,872				
10-30-89	FEED TO #1 ABS.S	0.814	1.385	18	76
"	FEED TO #2 ABS.N	0.000	0.000	0.000	0.004
"	DISC. TO SEWER	0.000	0.000	0.000	0.013
"	TOTAL GALLONS THROUGH NEW CARBON = 278,105				

04/04/89

BASF CORPORATION, CHEMICALS DIVISION, WYANDOTTE SITE

NORTH WORKS GROUNDWATER EXTRACTION WELLS 278,105

DATE	SAMPLE	METHYLENE CHLORIDE	CHLOROFORM	DICHLORO ETHANE	PROPYLENE DICHLORIDE
10-31-89	FEED TO #1 ABS.S	System	shut Down	- Installing	New
"	FEED TO #2 ABS.N	Water	line.		
"	DISC. TO SEWER				
"	TOTAL GALLONS THROUGH NEW CARBON = 278,839				
11-6-89	FEED TO #1 ABS.S	0.984	12	38	629
"	FEED TO #2 ABS.N	0.000	0.000	0.002	0.048
"	DISC. TO SEWER	0.003	0.000	0.004	0.021
"	TOTAL GALLONS THROUGH NEW CARBON = 301,416				
11-7-89	FEED TO #1 ABS.S	1.345	15	51	707
"	FEED TO #2 ABS.N	0.000	0.000	0.002	0.023
"	DISC. TO SEWER	0.000	0.000	0.001	0.018
"	TOTAL GALLONS THROUGH NEW CARBON = 307,344				
11-8-89	FEED TO #1 ABS.S	1.000	15	53	971
"	FEED TO #2 ABS.N	0.000	0.000	0.001	0.020
"	DISC. TO SEWER	0.000	0.000	0.001	0.017
"	TOTAL GALLONS THROUGH NEW CARBON = 313,393				
11-9-89	FEED TO #1 ABS.S	1.116	5	29	336
"	FEED TO #2 ABS.N	0.000	0.000	0.001	0.023
"	DISC. TO SEWER	0.000	0.000	0.001	0.019
"	TOTAL GALLONS THROUGH NEW CARBON = 319,560				
11-10-89	FEED TO #1 ABS.S	0.871	2	21	158
"	FEED TO #2 ABS.N	0.000	0.000	0.000	0.017
"	DISC. TO SEWER	0.000	0.000	0.000	0.015
"	TOTAL GALLONS THROUGH NEW CARBON = 327,631				

04/04/89

BASF CORPORATION, CHEMICALS DIVISION, WYANDOTTE SITE

NORTH WORKS GROUNDWATER EXTRACTION WELLS 327,631

DATE	SAMPLE	METHYLENE CHLORIDE	CHLOROFORM	DICHLORO ETHANE	PROPYLENE DICHLORIDE
11-13-89	FEED TO #1 ABS.S	1.085	13	48	865
"	FEED TO #2 ABS.N	0.000	0.000	0.002	0.019
"	DISC. TO SEWER	0.000	0.000	0.000	0.018
"	TOTAL GALLONS THROUGH NEW CARBON = 347,777				
11-14-89	FEED TO #1 ABS.S	1.011	12	48	756
"	FEED TO #2 ABS.N	0.000	0.000	0.002	0.051
"	DISC. TO SEWER	0.000	0.000	0.001	0.017
"	TOTAL GALLONS THROUGH NEW CARBON = 355,459				
11-15-89	FEED TO #1 ABS.S	1.036	13	48	852
"	FEED TO #2 ABS.N	0.000	0.000	0.000	0.010
"	DISC. TO SEWER	0.000	0.000	0.001	0.019
"	TOTAL GALLONS THROUGH NEW CARBON = 361,706				
11-16-89	FEED TO #1 ABS.S	0.909	7	28	445
"	FEED TO #2 ABS.N	0.000	0.000	0.000	0.013
"	DISC. TO SEWER	0.000	0.000	0.000	0.015
"	TOTAL GALLONS THROUGH NEW CARBON = 367,804				
11-17-89	FEED TO #1 ABS.S	11-16-89	System Shut Down		@ 2 30 PM
"	FEED TO #2 ABS.N	Bad Seal	on West Gould Pump.		
"	DISC. TO SEWER				
"	TOTAL GALLONS THROUGH NEW CARBON = 369,997				
11-20-89	FEED TO #1 ABS.S	1.133	6	30	380
"	FEED TO #2 ABS.N	0.000	0.000	0.002	0.044
"	DISC. TO SEWER	0.000	0.000	0.006	0.031
"	TOTAL GALLONS THROUGH NEW CARBON = 383,535				

04/04/89

BASF CORPORATION, CHEMICALS DIVISION, WYANDOTTE SITE

NORTH WORKS GROUNDWATER EXTRACTION WELLS

383,535

DATE	SAMPLE	METHYLENE CHLORIDE	CHLOROFORM	DICHLORO ETHANE	PROPYLENE DICHLORIDE
11-21-89	FEED TO #1 ABS.S	1.177	15	49	921
"	FEED TO #2 ABS.N	0.000	0.000	0.002	0.072
"	DISC. TO SEWER	0.000	0.000	0.000	0.013
"	TOTAL GALLONS THROUGH NEW CARBON = 390,654				
11-22-89	FEED TO #1 ABS.S	1.038	14	45	896
"	FEED TO #2 ABS.N	0.000	0.000	0.000	0.016
"	DISC. TO SEWER	0.000	0.000	0.000	0.013
"	TOTAL GALLONS THROUGH NEW CARBON = 397,228				
11-23-89	FEED TO #1 ABS.S	1.238	12	43	823
"	FEED TO #2 ABS.N	0.000	0.000	0.002	0.052
"	DISC. TO SEWER	0.000	0.000	0.000	0.014
"	TOTAL GALLONS THROUGH NEW CARBON = 403,813				
11-24-89	FEED TO #1 ABS.S	1.256	13	44	796
"	FEED TO #2 ABS.N	0.000	0.000	0.000	0.019
"	DISC. TO SEWER	0.000	0.000	0.000	0.013
"	TOTAL GALLONS THROUGH NEW CARBON = 410,466				
11-27-89	FEED TO #1 ABS.S	1.812	16	55	974
"	FEED TO #2 ABS.N	0.000	0.000	0.000	0.014
"	DISC. TO SEWER	0.000	0.000	0.000	0.017
"	TOTAL GALLONS THROUGH NEW CARBON = 427,416				
11-28-89	FEED TO #1 ABS.S	1.014	2	18	177
"	FEED TO #2 ABS.N	0.000	0.000	0.000	0.003
"	DISC. TO SEWER	0.000	0.000	0.000	0.008
"	TOTAL GALLONS THROUGH NEW CARBON = 433,985				

04/04/89

BASF CORPORATION, CHEMICALS DIVISION, WYANDOTTE SITE

NORTH WORKS GROUNDWATER EXTRACTION WELLS 433,985

DATE	SAMPLE	METHYLENE CHLORIDE	CHLOROFORM	DICHLORO ETHANE	PROPYLENE DICHLORIDE
11-29-89	FEED TO #1 ABS.S	1.081	12	47	848
"	FEED TO #2 ABS.N	0.000	0.000	0.000	0.020
"	DISC. TO SEWER	0.000	0.000	0.000	0.009
"	TOTAL GALLONS THROUGH NEW CARBON = 440,518				
11-30-89	FEED TO #1 ABS.S	0.861	15	47	1011
"	FEED TO #2 ABS.N	0.000	0.000	0.000	0.026
"	DISC. TO SEWER	0.000	0.000	0.000	0.007
"	TOTAL GALLONS THROUGH NEW CARBON = 445,725				
12-1-89	FEED TO #1 ABS.S	0.882	16	50	1001
"	FEED TO #2 ABS.N	0.000	0.000	0.001	0.032
"	DISC. TO SEWER	0.000	0.000	0.000	0.007
"	TOTAL GALLONS THROUGH NEW CARBON = 450,831				
12-4-89	FEED TO #1 ABS.S	0.648	0.472	2	29
"	FEED TO #2 ABS.N	0.000	0.000	0.000	0.005
"	DISC. TO SEWER	0.000	0.000	0.000	0.009
"	TOTAL GALLONS THROUGH NEW CARBON = 462,853				
12-5-89	FEED TO #1 ABS.S	0.000	0.000	1	15
"	FEED TO #2 ABS.N	0.000	0.000	0.000	0.001
"	DISC. TO SEWER	0.000	0.000	0.000	0.010
"	TOTAL GALLONS THROUGH NEW CARBON = 466,169				
12-6-89	FEED TO #1 ABS.S	0.927	2	19	174
"	FEED TO #2 ABS.N	0.000	0.000	0.001	0.016
"	DISC. TO SEWER	0.000	0.000	0.000	0.020
"	TOTAL GALLONS THROUGH NEW CARBON = 469,573				

04/04/89

BASF CORPORATION, CHEMICALS DIVISION, WYANDOTTE SITE

NORTH WORKS GROUNDWATER EXTRACTION WELLS 469,573

DATE	SAMPLE	METHYLENE CHLORIDE	CHLOROFORM	DICHLORO ETHANE	PROPYLENE DICHLORIDE
12-7-89	FEED TO #1 ABS.S	0.526	0.932	12	81
"	FEED TO #2 ABS.N	0.000	0.000	0.000	0.005
"	DISC. TO SEWER	0.000	0.000	0.000	0.013
"	TOTAL GALLONS THROUGH NEW CARBON = 473,621				
12-8-89	FEED TO #1 ABS.S	0.747	0.731	12	61
"	FEED TO #2 ABS.N	0.000	0.000	0.000	0.002
"	DISC. TO SEWER	0.000	0.000	0.000	0.017
"	TOTAL GALLONS THROUGH NEW CARBON = 477,125				
12-11-89	FEED TO #1 ABS.S	0.514	0.568	12	58
"	FEED TO #2 ABS.N	0.000	0.000	0.000	0.003
"	DISC. TO SEWER	0.000	0.000	0.000	0.017
"	TOTAL GALLONS THROUGH NEW CARBON = 486,121				
12-12-89	FEED TO #1 ABS.S	0.558	0.483	12	58
"	FEED TO #2 ABS.N	0.000	0.000	0.000	0.002
"	DISC. TO SEWER	0.000	0.000	0.000	0.016
"	TOTAL GALLONS THROUGH NEW CARBON = 489,804				
12-13-89	FEED TO #1 ABS.S	0.760	20	56	1212
"	FEED TO #2 ABS.N	0.000	0.000	0.001	0.052
"	DISC. TO SEWER	0.000	0.000	0.000	0.014
"	TOTAL GALLONS THROUGH NEW CARBON = 494,939				
12-14-89	FEED TO #1 ABS.S	0.774	21	60	1310
12-14-89	FEED TO #2 ABS.N	0.000	0.000	0.002	0.059
"	DISC. TO SEWER	0.000	0.000	0.000	0.010
"	TOTAL GALLONS THROUGH NEW CARBON = 499,672				

04/04/89

BASF CORPORATION, CHEMICALS DIVISION, WYANDOTTE SITE

NORTH WORKS GROUNDWATER EXTRACTION WELLS 499,672

DATE	SAMPLE	METHYLENE CHLORIDE	CHLOROFORM	DICHLORO ETHANE	PROPYLENE DICHLORIDE
12-15-89	FEED TO #1 ABS.S	1.062	15	48	963
"	FEED TO #2 ABS.N	0.050	0.000	0.016	0.043
"	DISC. TO SEWER	0.000	0.000	0.000	0.004
"	TOTAL GALLONS THROUGH NEW CARBON = 504,993				
12-18-89	FEED TO #1 ABS.S	1.532	.770	11	87
"	FEED TO #2 ABS.N	.109	0.00	.185	.090
"	DISC. TO SEWER	— No	Sample	—	—
"	TOTAL GALLONS THROUGH NEW CARBON =				
" 19-89	FEED TO #1 ABS.	1.72	21	62	1308
	FEED TO #2 ABS.	.258	0	8.650	.031
	DISC. TO SEWER	0	0	0	.005
	TOTAL GALLONS THROUGH NEW CARBON =				
12-28-89	FEED TO #1 ABS.S	1.065	17	61	1074
"	FEED TO #2 ABS.N	0.876	0.756	32	32
"	DISC. TO SEWER	0.000	0.000	0.000	0.006
"	TOTAL GALLONS THROUGH NEW CARBON = 575,497				
12-29-89	FEED TO #1 ABS.S	1.265	18	66	1164
"	FEED TO #2 ABS.N	1.257	1.800	64	95
"	DISC. TO SEWER	0.000	0.000	0.000	0.006
"	TOTAL GALLONS THROUGH NEW CARBON = 581,339				
1-1-90	FEED TO #1 ABS.S	1.283	21	69	1294
"	FEED TO #2 ABS.N	1.597	2.410	82	208
"	DISC. TO SEWER	0.000	0.000	0.000	0.005
"	TOTAL GALLONS THROUGH NEW CARBON = 598,311				

04/04/89

1990

BASF CORPORATION, CHEMICALS DIVISION, WYANDOTTE SITE

NORTH WORKS GROUNDWATER EXTRACTION WELLS 598,311

DATE	SAMPLE	METHYLENE CHLORIDE	CHLOROFORM	DICHLORO ETHANE	PROPYLENE DICHLORIDE
1-2-90	FEED TO #1 ABS.S	1.168	21	70	1303
"	FEED TO #2 ABS.N	1.926	2.658	84	249
"	DISC. TO SEWER	0.000	0.000	0.000	0.005
"	TOTAL GALLONS THROUGH NEW CARBON = 603,881				
1-3-90	FEED TO #1 ABS.S	0.934	17	56	1012
1-3-90	FEED TO #2 ABS.N	1.643	3.112	83	356
"	DISC. TO SEWER	0.000	0.000	0.000	0.003
"	TOTAL GALLONS THROUGH NEW CARBON = 611,953				
1-4-90	FEED TO #1 ABS.S	1.104	17	56	1012
"	FEED TO #2 ABS.N	1.644	3.943	96	439
"	DISC. TO SEWER	0.000	0.000	0.000	0.010
"	TOTAL GALLONS THROUGH NEW CARBON = 620,610				
1-5-90	FEED TO #1 ABS.S	1.092	18	61	1098
1-5-90	FEED TO #2 ABS.N	1.641	4.428	105	546
1-5-90	DISC. TO SEWER	0.000	0.000	0.000	0.004
1-5-90	TOTAL GALLONS THROUGH NEW CARBON = 628,869				
1-8-90	FEED TO #1 ABS.S	1-8-90 Shut System Down @ 7 15 AM - Removed Carbon			
1-8-90	FEED TO #2 ABS.N	From South Absor. Washing South Absor.			
1-8-90	DISC. TO SEWER	Went To 1 Absor. operation @ 4 20 PM			
1-8-90	TOTAL GALLONS THROUGH NEW CARBON = 653,438				
1-9-90	FEED TO #1 ABS.N	1.168	17	60	1061
	FEED TO #2 ABS.	—	—	—	—
1-9-90	DISC. TO SEWER	0.000	0.000	0.000	0.007
1-9-90	TOTAL GALLONS THROUGH NEW CARBON = 5141				

04/04/89

BASF CORPORATION, CHEMICALS DIVISION, WYANDOTTE SITE

NORTH WORKS GROUNDWATER EXTRACTION WELLS 5141

DATE	SAMPLE	METHYLENE CHLORIDE	CHLOROFORM	DICHLORO ETHANE	PROPYLENE DICHLORIDE
1-10-90	FEED TO #1 ABS.N	0.774	15	51	938
1-10-90	FEED TO #2 ABS.S	—	—	—	—
1-10-90	DISC. TO SEWER	0.000	0.000	0.000	0.002
1-10-90	TOTAL GALLONS THROUGH NEW CARBON = 12,288				
	FEED TO #1 ABS.	1-10-90	Charged New Carbon		into
	FEED TO #2 ABS.		South Absorber.		
	DISC. TO SEWER		Went To Two Absorber operation @ 915 AM.		
	TOTAL GALLONS THROUGH NEW CARBON =				
1-11-90	FEED TO #1 ABS.N	0.843	16	57	1016
"	FEED TO #2 ABS.S	0.000	0.003	0.057	0.626
"	DISC. TO SEWER	0.000	0.000	0.020	0.127
"	TOTAL GALLONS THROUGH NEW CARBON = 19,627				
1-12-90	FEED TO #1 ABS.N	1.099	19	62	1132
"	FEED TO #2 ABS.S	0.002	0.000	0.062	0.921
"	DISC. TO SEWER	0.000	0.000	0.015	0.090
"	TOTAL GALLONS THROUGH NEW CARBON = 25,894				
1-15-90	FEED TO #1 ABS.N	0.952	15	64	975
"	FEED TO #2 ABS.S	0.000	0.000	0.029	0.375
"	DISC. TO SEWER	0.000	0.000	0.007	0.013
"	TOTAL GALLONS THROUGH NEW CARBON = 49,292				
1-16-90	FEED TO #1 ABS.N	0.940	13	50	806
"	FEED TO #2 ABS.S	0.000	0.000	0.032	0.523
"	DISC. TO SEWER	0.000	0.000	0.006	0.032
"	TOTAL GALLONS THROUGH NEW CARBON = 59,163				

04/04/89

BASF CORPORATION, CHEMICALS DIVISION, WYANDOTTE SITE

NORTH WORKS GROUNDWATER EXTRACTION WELLS 59,163

DATE	SAMPLE	METHYLENE CHLORIDE	CHLOROFORM	DICHLORO ETHANE	PROPYLENE DICHLORIDE
1-17-90	FEED TO #1 ABS.N	0.754	12	48	736
"	FEED TO #2 ABS.S	0.000	0.000	0.020	0.332
"	DISC. TO SEWER	0.000	0.000	0.003	0.020
"	TOTAL GALLONS THROUGH NEW CARBON = 69,824				
1-18-90	FEED TO #1 ABS.N	0.881	14	49	773
"	FEED TO #2 ABS.S	0.000	0.000	0.008	0.145
"	DISC. TO SEWER	0.000	0.000	0.004	0.028
"	TOTAL GALLONS THROUGH NEW CARBON = 80,416				
1-19-90	FEED TO #1 ABS.N	0.792	12	46	719
"	FEED TO #2 ABS.S	0.000	0.000	0.011	0.179
"	DISC. TO SEWER	0.000	0.000	0.003	0.019
"	TOTAL GALLONS THROUGH NEW CARBON = 91,348				
1-22-90	FEED TO #1 ABS.N	0.770	12	45	729
"	FEED TO #2 ABS.S	0.000	0.000	0.009	0.177
"	DISC. TO SEWER	0.000	0.000	0.002	0.014
"	TOTAL GALLONS THROUGH NEW CARBON = 125,074				
1-23-90	FEED TO #1 ABS.N	0.823	12	45	717
"	FEED TO #2 ABS.S	0.000	0.000	0.009	0.169
"	DISC. TO SEWER	0.000	0.000	0.003	0.015
"	TOTAL GALLONS THROUGH NEW CARBON = 136,324				
1-24-90	FEED TO #1 ABS.N	0.641	9	38	581
"	FEED TO #2 ABS.S	0.000	0.000	0.006	0.144
"	DISC. TO SEWER	0.000	0.000	0.002	0.013
"	TOTAL GALLONS THROUGH NEW CARBON = 147,557				

04/04/89

BASF CORPORATION, CHEMICALS DIVISION, WYANDOTTE SITE

NORTH WORKS GROUNDWATER EXTRACTION WELLS 147,557

DATE	SAMPLE	METHYLENE CHLORIDE	CHLOROFORM	DICHLORO ETHANE	PROPYLENE DICHLORIDE
1-25-90	FEED TO #1 ABS.N	.724	11	42	659
"	FEED TO #2 ABS.S	0	0	.004	.113
"	DISC. TO SEWER	0	0	.002	.011
"	TOTAL GALLONS THROUGH NEW CARBON = 158,877				
1-30-90	FEED TO #1 ABS.N	0.705	12	44	706
"	FEED TO #2 ABS.S	0.000	0.000	0.002	0.072
"	DISC. TO SEWER	0.000	0.000	0.002	0.011
"	TOTAL GALLONS THROUGH NEW CARBON = 216,876				
1-31-90	FEED TO #1 ABS.N	0.881	11	42	673
"	FEED TO #2 ABS.S	0.000	0.000	0.003	0.115
"	DISC. TO SEWER	0.000	0.000	0.002	0.009
"	TOTAL GALLONS THROUGH NEW CARBON = 228,628				
2-1-90	FEED TO #1 ABS.N	0.824	11	42	669
"	FEED TO #2 ABS.S	0.000	0.000	0.002	0.082
"	DISC. TO SEWER	0.000	0.000	0.001	0.010
"	TOTAL GALLONS THROUGH NEW CARBON = 240,262				
2-2-90	FEED TO #1 ABS.N	0.633	12	42	685
"	FEED TO #2 ABS.S	0.000	0.000	0.001	0.068
"	DISC. TO SEWER	0.000	0.000	0.001	0.008
"	TOTAL GALLONS THROUGH NEW CARBON = 252,020				
2-5-90	FEED TO #1 ABS.N	0.931	12	44	697
"	FEED TO #2 ABS.S	0.000	0.000	0.001	0.031
"	DISC. TO SEWER	0.000	0.000	0.000	0.007
"	TOTAL GALLONS THROUGH NEW CARBON = 287,838				

04/04/89

BASF CORPORATION, CHEMICALS DIVISION, WYANDOTTE SITE

NORTH WORKS GROUNDWATER EXTRACTION WELLS 287,838

DATE	SAMPLE	METHYLENE CHLORIDE	CHLOROFORM	DICHLORO ETHANE	PROPYLENE DICHLORIDE
2-6-90	FEED TO #1 ABS.N	0.970	12	46	718
"	FEED TO #2 ABS.S	0.000	0.000	0.002	0.017
"	DISC. TO SEWER	0.000	0.000	0.001	0.008
"	TOTAL GALLONS THROUGH NEW CARBON = 299,676				
2-7-90	FEED TO #1 ABS.N	0.802	8	38	516
"	FEED TO #2 ABS.S	0.000	0.000	0.003	0.072
"	DISC. TO SEWER	0.000	0.000	0.001	0.007
"	TOTAL GALLONS THROUGH NEW CARBON = 311,499				
2-8-90	FEED TO #1 ABS.N	0.997	13	47	737
"	FEED TO #2 ABS.S	0.000	0.000	0.001	0.031
"	DISC. TO SEWER	0.000	0.000	0.001	0.009
"	TOTAL GALLONS THROUGH NEW CARBON = 323,435				
2-9-90	FEED TO #1 ABS.N	0.876	9	42	672
"	FEED TO #2 ABS.S	0.000	0.000	0.003	0.073
"	DISC. TO SEWER	0.000	0.000	0.001	0.007
"	TOTAL GALLONS THROUGH NEW CARBON = 335,894				
2-12-90	FEED TO #1 ABS.N	0.930	12	42	696
"	FEED TO #2 ABS.S	0.000	0.000	0.002	0.046
"	DISC. TO SEWER	0.000	0.000	0.000	0.005
"	TOTAL GALLONS THROUGH NEW CARBON = 370,389				
2-13-90	FEED TO #1 ABS.N	—	—	—	—
"	FEED TO #2 ABS.S	—	—	—	—
"	DISC. TO SEWER	—	—	—	—
"	TOTAL GALLONS THROUGH NEW CARBON = 381,604				

04/04/89

BASF CORPORATION, CHEMICALS DIVISION, WYANDOTTE SITE

NORTH WORKS GROUNDWATER EXTRACTION WELLS 381,604

DATE	SAMPLE	METHYLENE CHLORIDE	CHLOROFORM	DICHLORO ETHANE	PROPYLENE DICHLORIDE
2-14-90	FEED TO #1 ABS.N	0.713	11	39	644
"	FEED TO #2 ABS.S	0.000	0.000	0.000	0.030
"	DISC. TO SEWER	0.000	0.000	0.000	0.007
"	TOTAL GALLONS THROUGH NEW CARBON = 392,792				
2-15-90	FEED TO #1 ABS.N	0.715	11	10	650
"	FEED TO #2 ABS.S	0.000	0.000	0.003	0.052
"	DISC. TO SEWER	0.000	0.000	0.000	0.004
"	TOTAL GALLONS THROUGH NEW CARBON = 403,966				
2-16-90	FEED TO #1 ABS.N	0.611	10	36	573
"	FEED TO #2 ABS.S	0.000	0.000	0.002	0.013
"	DISC. TO SEWER	0.000	0.000	0.001	0.004
"	TOTAL GALLONS THROUGH NEW CARBON = 415,037				
2-19-90	FEED TO #1 ABS.N	0.653	12	39	653
"	FEED TO #2 ABS.S	0.000	0.000	0.000	0.012
"	DISC. TO SEWER	0.000	0.000	0.000	0.003
"	TOTAL GALLONS THROUGH NEW CARBON = 448,583				
2-20-90	FEED TO #1 ABS.N	0.625	11	33	600
"	FEED TO #2 ABS.S	0.000	0.000	0.001	0.037
"	DISC. TO SEWER	0.000	0.000	0.000	0.004
"	TOTAL GALLONS THROUGH NEW CARBON = 459,029				
2-21-90	FEED TO #1 ABS.N	0.584	11	31	610
"	FEED TO #2 ABS.S	0.000	0.000	0.001	0.044
"	DISC. TO SEWER	0.000	0.000	0.000	0.004
"	TOTAL GALLONS THROUGH NEW CARBON = 468,551				

04/04/89

BASF CORPORATION, CHEMICALS DIVISION, WYANDOTTE SITE

NORTH WORKS GROUNDWATER EXTRACTION WELLS 468,551

DATE	SAMPLE	METHYLENE CHLORIDE	CHLOROFORM	DICHLORO ETHANE	PROPYLENE DICHLORIDE
2-22-90	FEED TO #1 ABS.N	0.755	2	17	118
"	FEED TO #2 ABS.S	0.000	0.000	0.000	0.012
"	DISC. TO SEWER	0.000	0.000	0.000	0.004
"	TOTAL GALLONS THROUGH NEW CARBON = 479,287				
2-23-90	FEED TO #1 ABS.N	1.065	12	42	672
"	FEED TO #2 ABS.S	0.000	0.000	0.002	0.041
"	DISC. TO SEWER	0.000	0.000	0.000	0.004
"	TOTAL GALLONS THROUGH NEW CARBON = 491,020				
2-26-90	FEED TO #1 ABS.N	1.016	13	38	710
"	FEED TO #2 ABS.S	0.075	0.012	0.009	0.014
"	DISC. TO SEWER	0.000	0.000	0.001	0.005
"	TOTAL GALLONS THROUGH NEW CARBON = 518,490				
2-27-90	FEED TO #1 ABS.N	1.158	10	32	556
"	FEED TO #2 ABS.S	0.227	0.000	0.737	0.008
"	DISC. TO SEWER	0.000	0.000	0.000	0.003
"	TOTAL GALLONS THROUGH NEW CARBON = 529,403				
2-28-90	FEED TO #1 ABS.N	1.329	14	36	569
"	FEED TO #2 ABS.S	0.363	0.077	4.028	0.016
"	DISC. TO SEWER	0.000	0.000	0.000	0.002
"	TOTAL GALLONS THROUGH NEW CARBON = 539,387				
3-1-90	FEED TO #1 ABS.N	1.363	10	40	535
"	FEED TO #2 ABS.S	0.679	1.175	23	0.918
"	DISC. TO SEWER	0.000	0.000	0.000	0.003
"	TOTAL GALLONS THROUGH NEW CARBON = 551,213				

04/04/89

BASF CORPORATION, CHEMICALS DIVISION, WYANDOTTE SITE

NORTH WORKS GROUNDWATER EXTRACTION WELLS 551,213

DATE	SAMPLE	METHYLENE CHLORIDE	CHLOROFORM	DICHLORO ETHANE	PROPYLENE DICHLORIDE
3-2-90	FEED TO #1 ABS. N	0.957	11	39	604
"	FEED TO #2 ABS. S	0.781	3	38	10
"	DISC. TO SEWER	0.000	0.000	0.001	0.003
"	TOTAL GALLONS THROUGH NEW CARBON = 563,369				
3-5-90	FEED TO #1 ABS. N	0.774	10	35	569
"	FEED TO #2 ABS. S	0.781	6	43	131
"	DISC. TO SEWER	0.000	0.000	0.001	0.004
"	TOTAL GALLONS THROUGH NEW CARBON = 598,196				
3-6-90	FEED TO #1 ABS. N	3-6-90 Shut Down @ 7 15 AM - Removed Carbon From			
"	FEED TO #2 ABS. S	North Absorber. Drain Line To Sewer Has a			
"	DISC. TO SEWER	Weak. Maint Repairing Same. Went To 1-Absor- operation @ 4 00 PM - Won't Run - Wash Absor.			
"	TOTAL GALLONS THROUGH NEW CARBON = 608,124				
[redacted]	FEED TO #1 ABS. S	Vac. Pumps are Froze - Steam Tracing Froze			
"	FEED TO #2 ABS.	—	—	—	—
"	DISC. TO SEWER	3-9-90 Recharged New Carbon into			
"	TOTAL GALLONS THROUGH NEW CARBON = North Absorber.				
	FEED TO #1 ABS.	Put System back on @			11 00 AM
	FEED TO #2 ABS.				
	DISC. TO SEWER				
	TOTAL GALLONS THROUGH NEW CARBON =				
3-12-90	FEED TO #1 ABS. S	0.492	3	12	83
"	FEED TO #2 ABS. N	0.000	0.000	0.016	0.088
"	DISC. TO SEWER	0.000	0.000	0.001	0.005
"	TOTAL GALLONS THROUGH NEW CARBON = 23,731				

04/04/89

BASF CORPORATION, CHEMICALS DIVISION, WYANDOTTE SITE

NORTH WORKS GROUNDWATER EXTRACTION WELLS

23,731

DATE	SAMPLE	METHYLENE CHLORIDE	CHLOROFORM	DICHLORO ETHANE	PROPYLENE DICHLORIDE
3-13-90	FEED TO #1 ABS.S	0.689	14	41	699
"	FEED TO #2 ABS.N	0.000	0.000	0.009	0.109
"	DISC. TO SEWER	0.000	0.000	0.001	0.004
"	TOTAL GALLONS THROUGH NEW CARBON = 33,994				
3-14-90	FEED TO #1 ABS.S	0.765	10	35	579
"	FEED TO #2 ABS.N	0.000	0.000	0.005	0.067
"	DISC. TO SEWER	0.000	0.000	0.002	0.003
"	TOTAL GALLONS THROUGH NEW CARBON = 45,224				
3-15-90	FEED TO #1 ABS.S	0.693	9	32	501
"	FEED TO #2 ABS.N	0.000	0.000	0.002	0.028
"	DISC. TO SEWER	0.000	0.000	0.000	0.003
"	TOTAL GALLONS THROUGH NEW CARBON = 56,968				
3-16-90	FEED TO #1 ABS.S	0.839	10	36	591
"	FEED TO #2 ABS.N	0.000	0.000	0.002	0.048
"	DISC. TO SEWER	0.000	0.000	0.000	0.003
"	TOTAL GALLONS THROUGH NEW CARBON = 68,246				
3-19-90	FEED TO #1 ABS.S	0.558	6	35	677
"	FEED TO #2 ABS.N	0.000	0.000	0.004	0.075
"	DISC. TO SEWER	0.000	0.000	0.000	0.002
"	TOTAL GALLONS THROUGH NEW CARBON = 97,894				
3-20-90	FEED TO #1 ABS.S	0.662	6	37	652
"	FEED TO #2 ABS.N	0.000	0.000	0.003	0.043
"	DISC. TO SEWER	0.000	0.000	0.000	0.002
"	TOTAL GALLONS THROUGH NEW CARBON = 108,532				

04/04/89

BASF CORPORATION, CHEMICALS DIVISION, WYANDOTTE SITE

NORTH WORKS GROUNDWATER EXTRACTION WELLS 108,532

DATE	SAMPLE	METHYLENE CHLORIDE	CHLOROFORM	DICHLORO ETHANE	PROPYLENE DICHLORIDE
3-21-90	FEED TO #1 ABS.S	0.595	5	32	591
"	FEED TO #2 ABS.N	0.000	0.000	0.003	0.021
"	DISC. TO SEWER	0.000	0.000	0.000	0.002
"	TOTAL GALLONS THROUGH NEW CARBON = 121,138				
3-22-90	FEED TO #1 ABS.S	0.455	6	27	488
"	FEED TO #2 ABS.N	0.000	0.000	0.002	0.029
"	DISC. TO SEWER	0.000	0.000	0.000	0.002
"	TOTAL GALLONS THROUGH NEW CARBON = 130,815				
3-23-90	FEED TO #1 ABS.S	0.598	8	40	831
"	FEED TO #2 ABS.N	0.000	0.000	0.004	0.097
"	DISC. TO SEWER	0.000	0.000	0.000	0.002
"	TOTAL GALLONS THROUGH NEW CARBON = 140,197				
3-26-90	FEED TO #1 ABS.S	0.624	3	18	225
"	FEED TO #2 ABS.N	0.000	0.000	0.002	0.019
"	DISC. TO SEWER	0.000	0.000	0.000	0.003
"	TOTAL GALLONS THROUGH NEW CARBON = 165,623				
3-27-90	FEED TO #1 ABS.S	0.635	6	34	592
"	FEED TO #2 ABS.N	0.000	0.000	0.002	0.028
"	DISC. TO SEWER	0.000	0.000	0.000	0.002
"	TOTAL GALLONS THROUGH NEW CARBON = 177,187				
3-28-90	FEED TO #1 ABS.S	0.570	5	28	525
"	FEED TO #2 ABS.N	0.000	0.000	0.001	0.023
"	DISC. TO SEWER	0.000	0.000	0.000	0.003
"	TOTAL GALLONS THROUGH NEW CARBON = 187,836				

04/04/89

BASF CORPORATION, CHEMICALS DIVISION, WYANDOTTE SITE

NORTH WORKS GROUNDWATER EXTRACTION WELLS 187, 836

DATE	SAMPLE	METHYLENE CHLORIDE	CHLOROFORM	DICHLORO ETHANE	PROPYLENE DICHLORIDE
3-29-90	FEED TO #1 ABS.S	0.568	5	31	571
"	FEED TO #2 ABS.N	0.000	0.000	0.000	0.010
"	DISC. TO SEWER	0.000	0.000	0.000	0.002
"	TOTAL GALLONS THROUGH NEW CARBON = 198,302				
3-30-90	FEED TO #1 ABS.S	0.674	4	20	290
"	FEED TO #2 ABS.N	0.000	0.000	0.001	0.009
"	DISC. TO SEWER	0.000	0.000	0.000	0.002
"	TOTAL GALLONS THROUGH NEW CARBON = 216,176				
4-2-90	FEED TO #1 ABS.S	0.591	5	31	568
"	FEED TO #2 ABS.N	0.000	0.000	0.001	0.032
"	DISC. TO SEWER	0.000	0.000	0.000	0.002
"	TOTAL GALLONS THROUGH NEW CARBON = 246,975				
4-3-90	FEED TO #1 ABS.S	0.686	6	33	629
"	FEED TO #2 ABS.N	0.000	0.000	0.000	0.007
"	DISC. TO SEWER	0.000	0.000	0.000	0.002
"	TOTAL GALLONS THROUGH NEW CARBON = 256,986				
4-4-90	FEED TO #1 ABS.S	0.385	5	26	590
"	FEED TO #2 ABS.N	0.000	0.000	0.002	0.051
"	DISC. TO SEWER	0.000	0.000	0.001	0.004
"	TOTAL GALLONS THROUGH NEW CARBON = 273,283				
4-5-90	FEED TO #1 ABS.S	0.316	5	25	588
"	FEED TO #2 ABS.N	0.000	0.000	0.002	0.056
"	DISC. TO SEWER	0.000	0.000	0.000	0.002
"	TOTAL GALLONS THROUGH NEW CARBON = 281,824				

04/04/89

BASF CHEMICAL CORPORATION, WYANDOTTE SITE

NORTH WORKS GROUNDWATER EXTRACTION WELLS 281,824

DATE	SAMPLE	METHYLENE CHLORIDE	CHLOROFORM	ETHYLENE DICHLORIDE	PROPYLENE DICHLORIDE
4-6-90	FEED TO #1 ABS.S	0.451	6	28	675
"	FEED TO #2 ABS.N	0.000	0.000	0.001	0.036
"	DISC. TO SEWER	0.000	0.000	0.000	0.002
"	TOTAL GALLONS THROUGH NEW CARBON = 298,436				
4-9-90	FEED TO #1 ABS.S	0.311	0.446	3	38
"	FEED TO #2 ABS.N	0.000	0.000	0.001	0.006
"	DISC. TO SEWER	0.000	0.000	0.001	0.003
"	TOTAL GALLONS THROUGH NEW CARBON = 311,570				
4-10-90	FEED TO #1 ABS.S	0.638	7	33	836
"	FEED TO #2 ABS.N	0.000	0.000	0.001	0.014
"	DISC. TO SEWER	0.000	0.000	0.000	0.003
"	TOTAL GALLONS THROUGH NEW CARBON = 319,856				
4-11-90	FEED TO #1 ABS.S	0.670	8	35	908
"	FEED TO #2 ABS.N	0.000	0.000	0.001	0.019
"	DISC. TO SEWER	0.000	0.000	0.000	0.002
"	TOTAL GALLONS THROUGH NEW CARBON = 326,810				
4-12-90	FEED TO #1 ABS.S	0.312	0.640	12	142
"	FEED TO #2 ABS.N	0.000	0.000	0.000	0.006
"	DISC. TO SEWER	0.000	0.000	0.000	0.002
"	TOTAL GALLONS THROUGH NEW CARBON = 333,763				
4-13-90	FEED TO #1 ABS.S	0.801	7	36	778
"	FEED TO #2 ABS.N	0.000	0.000	0.001	0.026
"	DISC. TO SEWER	0.000	0.000	0.000	0.002
"	TOTAL GALLONS THROUGH NEW CARBON = 342,871				

9/29/88

BASF CORPORATION, CHEMICALS DIVISION, WYANDOTTE SITE

NORTH WORKS GROUNDWATER EXTRACTION WELLS 342,871

DATE	SAMPLE	METHYLENE CHLORIDE	CHLOROFORM	DICHLORO ETHANE	PROPYLENE DICHLORIDE
4-16-90	FEED TO #1 ABS.S	0.787	6	33	726
"	FEED TO #2 ABS.N	0.000	0.000	0.000	0.017
"	DISC. TO SEWER	0.000	0.000	0.000	0.001
"	TOTAL GALLONS THROUGH NEW CARBON = 369,203				
4-17-90	FEED TO #1 ABS.S	.65	4.8	28	563
"	FEED TO #2 ABS.N	0	0	.005	.120
"	DISC. TO SEWER	Bad	Run.		
"	TOTAL GALLONS THROUGH NEW CARBON = 379,561				
4-18-90	FEED TO #1 ABS.S				
	FEED TO #2 ABS.N				
	DISC. TO SEWER	0	0	0	.010
	TOTAL GALLONS THROUGH NEW CARBON = 389,810				
4-19-90	FEED TO #1 ABS.S	.62	4.1	19.5	382
"	FEED TO #2 ABS.N	0	0	0.002	0.027
"	DISC. TO SEWER	0	0	.001	.025
"	TOTAL GALLONS THROUGH NEW CARBON = 398,980				
4-20-90	FEED TO #1 ABS.S	0.552	3	15	278
"	FEED TO #2 ABS.N	0.000	0.000	0.001	0.029
"	DISC. TO SEWER	0.000	0.000	0.000	0.001
"	TOTAL GALLONS THROUGH NEW CARBON = 406,954				
4-23-90	FEED TO #1 ABS.S	0.873	12	44	1208
"	FEED TO #2 ABS.N	0.012	0.007	0.123	0.166
"	DISC. TO SEWER	0.000	0.000	0.000	0.002
"	TOTAL GALLONS THROUGH NEW CARBON = 434,685				

04/04/89

BASF CORPORATION, CHEMICALS DIVISION, WYANDOTTE SITE

NORTH WORKS GROUNDWATER EXTRACTION WELLS 434,685

DATE	SAMPLE	METHYLENE CHLORIDE	CHLOROFORM	DICHLORO ETHANE	PROPYLENE DICHLORIDE
4-24-90	FEED TO #1 ABS.S	0.937	6	32	727
"	FEED TO #2 ABS.N	0.073	0.109	2.572	1.892
"	DISC. TO SEWER	0.000	0.000	0.000	0.000
"	TOTAL GALLONS THROUGH NEW CARBON = 443,931				
4-25-90	FEED TO #1 ABS.S	0.715	5	28	623
"	FEED TO #2 ABS.N	0.178	0.310	7	17
"	DISC. TO SEWER	0.000	0.000	0.000	0.001
"	TOTAL GALLONS THROUGH NEW CARBON = 453,349				
4-26-90	FEED TO #1 ABS.S	0.744	6	29	673
"	FEED TO #2 ABS.N	0.299	0.592	11	41
"	DISC. TO SEWER	0.000	0.000	0.000	0.001
"	TOTAL GALLONS THROUGH NEW CARBON = 462,760				
4-27-90	FEED TO #1 ABS.S	0.624	6	30	668
"	FEED TO #2 ABS.N	0.211	0.580	11	60
"	DISC. TO SEWER	0.000	0.000	0.000	0.001
"	TOTAL GALLONS THROUGH NEW CARBON = 472,399				
4-30-90	FEED TO #1 ABS.S	0.603	5	28	633
"	FEED TO #2 ABS.N	0.264	1.359	11	129
"	DISC. TO SEWER	0.000	0.000	0.000	0.002
"	TOTAL GALLONS THROUGH NEW CARBON = 500,721				
5-1-90	FEED TO #1 ABS.S	0.459	5	25	565
"	FEED TO #2 ABS.N	0.363	0.834	15	147
"	DISC. TO SEWER	0.000	0.000	0.000	0.001
"	TOTAL GALLONS THROUGH NEW CARBON = 510,092				

04/04/89

BASF CORPORATION, CHEMICALS DIVISION, WYANDOTTE SITE

NORTH WORKS GROUNDWATER EXTRACTION WELLS 510,092

DATE	SAMPLE	METHYLENE CHLORIDE	CHLOROFORM	DICHLORO ETHANE	PROPYLENE DICHLORIDE
5-2-90	FEED TO #1 ABS.S	0.484	5	29	595
"	FEED TO #2 ABS.N	0.212	0.939	17	159
"	DISC. TO SEWER	0.000	0.000	0.000	0.002
"	TOTAL GALLONS THROUGH NEW CARBON = 519,389				
5-3-90	FEED TO #1 ABS.S	0.607	6	31	621
"	FEED TO #2 ABS.N	0.417	0.607	21	212
"	DISC. TO SEWER	0.000	0.000	0.000	0.000
"	TOTAL GALLONS THROUGH NEW CARBON = 528,731				
5-4-90	FEED TO #1 ABS.S	0.621	6	33	651
"	FEED TO #2 ABS.N	0.482	1.145	19	222
"	DISC. TO SEWER	0.000	0.000	0.000	0.002
"	TOTAL GALLONS THROUGH NEW CARBON = 538,097				
5-7-90	FEED TO #1 ABS.S	0.517	2.698	17	252
"	FEED TO #2 ABS.N	0.248	0.460	10	90
"	DISC. TO SEWER	0.000	0.000	0.000	0.002
"	TOTAL GALLONS THROUGH NEW CARBON = 565,896				
5-8-90	FEED TO #1 ABS.S	0.493	5	29	499
"	FEED TO #2 ABS.N	0.415	1.281	21	352
"	DISC. TO SEWER	0.000	0.000	0.000	0.001
"	TOTAL GALLONS THROUGH NEW CARBON = 575,487				
5-9-90	FEED TO #1 ABS.S	Shut System down @	7 AM - Removed Carbon		
"	FEED TO #2 ABS.N	From South Absorber. Went To 1 Absor.			
"	DISC. TO SEWER	operation @ 11:40 AM			
"	TOTAL GALLONS THROUGH NEW CARBON = 584,440				

04/04/89

BASF CORPORATION, CHEMICALS DIVISION, WYANDOTTE SITE

NORTH WORKS GROUNDWATER EXTRACTION WELLS

[redacted]

DATE	SAMPLE	METHYLENE CHLORIDE	CHLOROFORM	DICHLORO ETHANE	PROPYLENE DICHLORIDE
5-10-90	FEED TO #1 ABS.N	5.061	5.211	27	540
"	FEED TO #2 ABS.	—	—	—	—
"	DISC. TO SEWER	0.000	0.000	0.000	0.016
"	TOTAL GALLONS THROUGH NEW CARBON = 8,388				
5-11-90	FEED TO #1 ABS.	@ 9:50 AM	Back to	2 absorber	operation
"	FEED TO #2 ABS.	—	—	—	—
"	DISC. TO SEWER	recharged	carbon [redacted] New Carbon	[redacted]	to South Absorber
"	TOTAL GALLONS THROUGH NEW CARBON = —				
5-11-90	FEED TO #1 ABS.N	0.474	5	27	539
"	FEED TO #2 ABS.	—	—	—	—
"	DISC. TO SEWER	0.000	0.000	0.000	0.002
"	TOTAL GALLONS THROUGH NEW CARBON = 17,264				
5-14-90	FEED TO #1 ABS.N	0.373	2	16	224
"	FEED TO #2 ABS.S	0.000	0.006	0.067	1.055
"	DISC. TO SEWER	0.000	0.000	0.007	0.105
"	TOTAL GALLONS THROUGH NEW CARBON = 46,224				
5-15-90	FEED TO #1 ABS.	0.308	2	12	153
"	FEED TO #2 ABS.	0.000	0.000	0.019	0.293
"	DISC. TO SEWER	0.000	0.000	0.003	0.036
"	TOTAL GALLONS THROUGH NEW CARBON = 55,411				
5-16-90	FEED TO #1 ABS.	0.315	4	27	482
"	FEED TO #2 ABS.	0.000	0.000	0.007	0.106
"	DISC. TO SEWER	0.000	0.000	0.002	0.021
"	TOTAL GALLONS THROUGH NEW CARBON = 65,819				

04/04/89

BASF CORPORATION, CHEMICALS DIVISION, WYANDOTTE SITE

NORTH WORKS GROUNDWATER EXTRACTION WELLS

5-16-90-65,819

DATE	SAMPLE	METHYLENE CHLORIDE	CHLOROFORM	DICHLORO ETHANE	PROPYLENE DICHLORIDE
5-17-90	FEED TO #1 ABS.N	0.451	2	13	154
"	FEED TO #2 ABS.S	0.000	0.000	0.008	0.129
"	DISC. TO SEWER	0.000	0.000	0.002	0.026
"	TOTAL GALLONS THROUGH NEW CARBON = 74,102				
5-18-90	FEED TO #1 ABS.N	0.469	4	29	488
"	FEED TO #2 ABS.S	0.000	0.000	0.004	0.074
"	DISC. TO SEWER	0.000	0.000	0.002	0.018
"	TOTAL GALLONS THROUGH NEW CARBON = 84,483				
5-21-90	FEED TO #1 ABS.N	1.190	5	27	550
"	FEED TO #2 ABS.S	0.000	0.004	0.016	0.692
"	DISC. TO SEWER	0.000	0.000	0.001	0.016
"	TOTAL GALLONS THROUGH NEW CARBON = 105,684				
5-22-90	FEED TO #1 ABS.N	0.533	5	30	556
"	FEED TO #2 ABS.S	0.000	0.000	0.003	0.044
"	DISC. TO SEWER	0.000	0.000	0.001	0.011
"	TOTAL GALLONS THROUGH NEW CARBON = 116,479				
5-23-90	FEED TO #1 ABS.N	0.567	5	31	587
"	FEED TO #2 ABS.S	0.000	0.000	0.002	0.038
"	DISC. TO SEWER	0.000	0.000	0.002	0.014
"	TOTAL GALLONS THROUGH NEW CARBON = 125,184				
5-24-90	FEED TO #1 ABS.N	0.729	4	24	416
"	FEED TO #2 ABS.S	0.000	0.000	0.002	0.036
"	DISC. TO SEWER	0.000	0.000	0.001	0.006
"	TOTAL GALLONS THROUGH NEW CARBON = 135,264				

04/04/89

BASF CORPORATION, CHEMICALS DIVISION, WYANDOTTE SITE

NORTH WORKS GROUNDWATER EXTRACTION WELLS 135,264

DATE	SAMPLE	METHYLENE CHLORIDE	CHLOROFORM	DICHLORO ETHANE	PROPYLENE DICHLORIDE
5-25-90	FEED TO #1 ABS.N	0.521	5	26	503
"	FEED TO #2 ABS.S	0.000	0.000	0.002	0.036
"	DISC. TO SEWER	0.000	0.000	0.001	0.010
"	TOTAL GALLONS THROUGH NEW CARBON = 145,063				
5-28-90	FEED TO #1 ABS.N	0.656	5	34	541
"	FEED TO #2 ABS.S	0.000	0.000	0.003	0.053
"	DISC. TO SEWER	0.000	0.000	0.001	0.008
"	TOTAL GALLONS THROUGH NEW CARBON = 174,077				
5-29-90	FEED TO #1 ABS.N	—	—	—	—
"	FEED TO #2 ABS.S	—	—	—	—
"	DISC. TO SEWER	—	—	—	—
"	TOTAL GALLONS THROUGH NEW CARBON = 183,591				
5-30-90	FEED TO #1 ABS.N	0.587	5	37	603
"	FEED TO #2 ABS.S	0.000	0.000	0.001	0.023
"	DISC. TO SEWER	0.000	0.000	0.000	0.005
"	TOTAL GALLONS THROUGH NEW CARBON = 193,127				
5-31-90	FEED TO #1 ABS.N	0.383	2	11	188
"	FEED TO #2 ABS.S	0.000	0.000	0.000	0.013
"	DISC. TO SEWER	0.000	0.000	0.000	0.007
"	TOTAL GALLONS THROUGH NEW CARBON = 200,409				
6-1-90	FEED TO #1 ABS.N	0.501	5	32	595
6-1-90	FEED TO #2 ABS.S	0.000	0.000	0.002	0.052
"	DISC. TO SEWER	0.000	0.000	0.000	0.006
"	TOTAL GALLONS THROUGH NEW CARBON = 209,595				

04/04/89

BASF CORPORATION, CHEMICALS DIVISION, WYANDOTTE SITE

NORTH WORKS GROUNDWATER EXTRACTION WELLS

209,595

DATE	SAMPLE	METHYLENE CHLORIDE	CHLOROFORM	DICHLORO ETHANE	PROPYLENE DICHLORIDE
6-4-90	FEED TO #1 ABS.N	0.516	4	24	386
"	FEED TO #2 ABS.S	0.000	0.000	0.001	0.013
"	DISC. TO SEWER	0.000	0.000	0.000	0.003
"	TOTAL GALLONS THROUGH NEW CARBON = 237,379				
6-5-90	FEED TO #1 ABS.N	—	—	—	—
"	FEED TO #2 ABS.S	—	—	—	—
"	DISC. TO SEWER	—	—	—	—
"	TOTAL GALLONS THROUGH NEW CARBON = 249,041				
6-6-90	FEED TO #1 ABS.N	3	4	31	499
"	FEED TO #2 ABS.S	0.000	0.000	0.002	0.025
"	DISC. TO SEWER	0.000	0.000	0.000	0.005
"	TOTAL GALLONS THROUGH NEW CARBON = 260,500				
6-7-90	FEED TO #1 ABS.N	0.555	5	32	514
"	FEED TO #2 ABS.S	0.000	0.000	0.000	0.013
"	DISC. TO SEWER	0.002	0.000	0.002	0.006
"	TOTAL GALLONS THROUGH NEW CARBON = 271,850				
6-8-90	FEED TO #1 ABS.N	0.551	5	31	508
"	FEED TO #2 ABS.S	0.000	0.000	0.001	0.028
"	DISC. TO SEWER	0.000	0.000	0.000	0.004
"	TOTAL GALLONS THROUGH NEW CARBON = 283,171				
6-11-90	FEED TO #1 ABS.N	0.581	5	32	523
"	FEED TO #2 ABS.S	0.000	0.000	0.001	0.020
"	DISC. TO SEWER	0.000	0.000	0.000	0.005
"	TOTAL GALLONS THROUGH NEW CARBON = 315,815				

04/04/89

BASF CORPORATION, CHEMICALS DIVISION, WYANDOTTE SITE

NORTH WORKS GROUNDWATER EXTRACTION WELLS 315,815

DATE	SAMPLE	METHYLENE CHLORIDE	CHLOROFORM	DICHLORO ETHANE	PROPYLENE DICHLORIDE
6-12-90	FEED TO #1 ABS.N	—	—	—	—
"	FEED TO #2 ABS.S	—	—	—	—
"	DISC. TO SEWER	—	—	—	—
"	TOTAL GALLONS THROUGH NEW CARBON = 315,815				
6-13-90	FEED TO #1 ABS.N	0.595	5	38	595
"	FEED TO #2 ABS.S	0.000	0.000	0.001	0.026
"	DISC. TO SEWER	0.000	0.000	0.000	0.005
"	TOTAL GALLONS THROUGH NEW CARBON = 325,075				
6-14-90	FEED TO #1 ABS.N	0.596	5	36	554
"	FEED TO #2 ABS.S	0.000	0.000	0.001	0.029
"	DISC. TO SEWER	0.000	0.000	0.000	0.005
"	TOTAL GALLONS THROUGH NEW CARBON = 333,946				
6-15-90	FEED TO #1 ABS.N	0.748	5	35	554
"	FEED TO #2 ABS.S	0.000	0.000	0.001	0.023
"	DISC. TO SEWER	0.000	0.000	0.000	0.005
"	TOTAL GALLONS THROUGH NEW CARBON = 342,948				
6-18-90	FEED TO #1 ABS.N	0.894	3	24	372
"	FEED TO #2 ABS.S	0.000	0.000	0.001	0.023
"	DISC. TO SEWER	0.000	0.000	0.000	0.005
"	TOTAL GALLONS THROUGH NEW CARBON = 369,551				
6-19-90	FEED TO #1 ABS.	0.609	4	29	435
"	FEED TO #2 ABS.	0.000	0.000	0.000	0.015
"	DISC. TO SEWER	0.000	0.000	0.000	0.004
"	TOTAL GALLONS THROUGH NEW CARBON = 378,624				

04/04/89

BASF CORPORATION, CHEMICALS DIVISION, WYANDOTTE SITE

NORTH WORKS GROUNDWATER EXTRACTION WELLS

378,624

DATE	SAMPLE	METHYLENE CHLORIDE	CHLOROFORM	DICHLORO ETHANE	PROPYLENE DICHLORIDE
6-20-90	FEED TO #1 ABS.N	0.485	4	30	460
"	FEED TO #2 ABS.S	0.000	0.000	0.001	0.024
"	DISC. TO SEWER	0.000	0.000	0.000	0.004
"	TOTAL GALLONS THROUGH NEW CARBON = 387,948				
6-21-90	FEED TO #1 ABS.N	0.541	4	31	558
"	FEED TO #2 ABS.S	0.000	0.000	0.001	0.023
"	DISC. TO SEWER	0.000	0.000	0.000	0.005
"	TOTAL GALLONS THROUGH NEW CARBON = 396,972				
6-22-90	FEED TO #1 ABS.N	0.498	4	30	467
"	FEED TO #2 ABS.S	0.000	0.000	0.000	0.014
"	DISC. TO SEWER	0.000	0.000	0.000	0.004
"	TOTAL GALLONS THROUGH NEW CARBON = 406,011				
6-25-90	FEED TO #1 ABS.N	0.483	4	31	470
"	FEED TO #2 ABS.S	0.000	0.000	0.000	0.018
"	DISC. TO SEWER	0.000	0.000	0.000	0.004
"	TOTAL GALLONS THROUGH NEW CARBON = 433,060				
6-26-90	FEED TO #1 ABS.N	0.571	4	32	468
"	FEED TO #2 ABS.S	0.000	0.000	0.000	0.013
"	DISC. TO SEWER	0.000	0.000	0.000	0.004
"	TOTAL GALLONS THROUGH NEW CARBON = 442,104				
6-27-90	FEED TO #1 ABS.	0.479	4	30	43
"	FEED TO #2 ABS.	0.000	0.000	0.001	0.019
"	DISC. TO SEWER	0.000	0.000	0.000	0.004
"	TOTAL GALLONS THROUGH NEW CARBON = 451,123				

04/04/89

BASF CORPORATION, CHEMICALS DIVISION, WYANDOTTE SITE

NORTH WORKS GROUNDWATER EXTRACTION WELLS 451,123

DATE	SAMPLE	METHYLENE CHLORIDE	CHLOROFORM	DICHLORO ETHANE	PROPYLENE DICHLORIDE
6-28-90	FEED TO #1 ABS.N	0.162	5	32	513
"	FEED TO #2 ABS.S	0.000	0.000	0.000	0.008
"	DISC. TO SEWER	0.000	0.000	0.000	0.003
"	TOTAL GALLONS THROUGH NEW CARBON = 460,212				
6-29-90	FEED TO #1 ABS.N	0.510	5	34	527
"	FEED TO #2 ABS.S	0.000	0.000	0.000	0.014
"	DISC. TO SEWER	0.000	0.000	0.000	0.003
"	TOTAL GALLONS THROUGH NEW CARBON = 469,367				
7-2-90	FEED TO #1 ABS.N	0.469	4	31	441
"	FEED TO #2 ABS.S	0.000	0.000	0.000	0.023
"	DISC. TO SEWER	0.000	0.000	0.000	0.003
"	TOTAL GALLONS THROUGH NEW CARBON = 496,830				
7-3-90	FEED TO #1 ABS.	0.000	0.000	15	156
"	FEED TO #2 ABS.	0.006	0.000	0.000	0.016
"	DISC. TO SEWER	0.000	0.000	0.000	0.003
"	TOTAL GALLONS THROUGH NEW CARBON = 506,013				
7-4-90	FEED TO #1 ABS.	G.C.	DOWN		
"	FEED TO #2 ABS.				
"	DISC. TO SEWER				
"	TOTAL GALLONS THROUGH NEW CARBON = 515,196				
7-5-90	FEED TO #1 ABS.	0.668	4	41	586
"	FEED TO #2 ABS.	0.000	0.000	0.002	0.039
"	DISC. TO SEWER	0.000	0.000	0.000	0.007
"	TOTAL GALLONS THROUGH NEW CARBON = 524,312				

04/04/89

BASF CORPORATION, CHEMICALS DIVISION, WYANDOTTE SITE

NORTH WORKS GROUNDWATER EXTRACTION WELLS

524,312

DATE	SAMPLE	METHYLENE CHLORIDE	CHLOROFORM	DICHLORO ETHANE	PROPYLENE DICHLORIDE
7-6-90	FEED TO #1 ABS.	0.661	5	43	664
"	FEED TO #2 ABS.	0.000	0.000	0.000	0.016
"	DISC. TO SEWER	0.000	0.000	0.000	0.004
"	TOTAL GALLONS THROUGH NEW CARBON = 533,617				
7-9-90	FEED TO #1 ABS.	0.766	4	41	619
"	FEED TO #2 ABS.	0.000	0.000	0.002	0.024
"	DISC. TO SEWER	0.000	0.000	0.001	0.011
"	TOTAL GALLONS THROUGH NEW CARBON = 561,541				
7-10-90	FEED TO #1 ABS.	0.701	4	40	576
	FEED TO #2 ABS.	0.000	0.000	0.002	0.022
"	DISC. TO SEWER	0.000	0.000	0.000	0.003
"	TOTAL GALLONS THROUGH NEW CARBON = 570,896				
7-11-90	FEED TO #1 ABS.				
"	FEED TO #2 ABS.				
"	DISC. TO SEWER				
"	TOTAL GALLONS THROUGH NEW CARBON = 580,164				
7-12-90	FEED TO #1 ABS.	0.564	4	40	581
"	FEED TO #2 ABS.	0	0	0	0.018
"	DISC. TO SEWER	0	0	0	0.003
"	TOTAL GALLONS THROUGH NEW CARBON = 589,579				
7-13-90	FEED TO #1 ABS.	0.718	4	39	584
"	FEED TO #2 ABS.	0.051	0	0.022	0.020
"	DISC. TO SEWER	0	0	0	0.004
"	TOTAL GALLONS THROUGH NEW CARBON = 598,894				

04/04/89

BASF CORPORATION, CHEMICALS DIVISION, WYANDOTTE SITE

NORTH WORKS GROUNDWATER EXTRACTION WELLS

598,894

DATE	SAMPLE	METHYLENE CHLORIDE	CHLOROFORM	DICHLORO ETHANE	PROPYLENE DICHLORIDE
7-16-90	FEED TO #1 ABS.N	0.831	5	44	699
"	FEED TO #2 ABS.S	0.761	0.000	11	0.277
"	DISC. TO SEWER	0.000	0.000	0.000	0.004
"	TOTAL GALLONS THROUGH NEW CARBON = 626,770				
7-17-90	FEED TO #1 ABS.N	0.631	5	46	688
"	FEED TO #2 ABS.S	0.725	0.000	23	3.345
"	DISC. TO SEWER	0.000	0.000	0.006	0.004
"	TOTAL GALLONS THROUGH NEW CARBON = 635,995				
7-18-90	FEED TO #1 ABS.N	0.573	5	41	641
"	FEED TO #2 ABS.S	0.932	0.000	35	17
"	DISC. TO SEWER	0.000	0.000	0.002	0.004
"	TOTAL GALLONS THROUGH NEW CARBON = 645,370				
7-19-90	FEED TO #1 ABS.N	0.846	5	47	744
"	FEED TO #2 ABS.S	1.252	0.124	44	41
"	DISC. TO SEWER	0.000	0.000	0.000	0.004
"	TOTAL GALLONS THROUGH NEW CARBON = 653,858				
7-20-90	FEED TO #1 ABS.N	0.738	5	42	673
"	FEED TO #2 ABS.S	1.770	0.283	43	47
"	DISC. TO SEWER	0.000	0.000	0.000	0.003
"	TOTAL GALLONS THROUGH NEW CARBON = 662,773				
7-23-90	FEED TO #1 ABS.N	0.912	7	58	967
"	FEED TO #2 ABS.S	1.383	0.236	87	179
"	DISC. TO SEWER	0.000	0.000	0.000	0.002
"	TOTAL GALLONS THROUGH NEW CARBON = 690,006				

04/04/89

BASF CORPORATION, CHEMICALS DIVISION, WYANDOTTE SITE

NORTH WORKS GROUNDWATER EXTRACTION WELLS 690,006

DATE	SAMPLE	METHYLENE CHLORIDE	CHLOROFORM	DICHLORO ETHANE	PROPYLENE DICHLORIDE
7-21-90	FEED TO #1 ABS.N	0.613	2	26	305
"	FEED TO #2 ABS.S	1.231	0.236	74	184
"	DISC. TO SEWER	0.000	0.000	0.000	0.002
"	TOTAL GALLONS THROUGH NEW CARBON = 698,516				
7-25-90	FEED TO #1 ABS.	Shut down @ 7 15 Am - Removed Carbon			North Absor.
"	FEED TO #2 ABS.	Went To one Absorber		operation @	10 25 Am,
"	DISC. TO SEWER	Washing North Absorber.			
"	TOTAL GALLONS THROUGH NEW CARBON = 707,118				
7-26-90	FEED TO #1 ABS.S	0.836	1	24	193
"	FEED TO #2 ABS.	—	—	—	—
"	DISC. TO SEWER	0.000	0.000	0.001	0.005
"	TOTAL GALLONS THROUGH NEW CARBON = 7,285				
7-27-90	FEED TO #1 ABS.S	0.944	5	48	720
"	FEED TO #2 ABS.	—	—	—	—
"	DISC. TO SEWER	0.000	0.000	0.001	0.005
"	TOTAL GALLONS THROUGH NEW CARBON = 15,513				
7-27-90	FEED TO #1 ABS.	Recharged	New Carbon into		North
"	FEED TO #2 ABS.	Absorber.	Went To	2 Absorber	
"	DISC. TO SEWER	operation @ 10 00 Am			
"	TOTAL GALLONS THROUGH NEW CARBON =				
7-30-90	FEED TO #1 ABS.S	0.887	4	45	625
"	FEED TO #2 ABS.N	0.000	0.000	0.023	0.100
"	DISC. TO SEWER	0.000	0.000	0.010	0.029
"	TOTAL GALLONS THROUGH NEW CARBON = 41,138				

04/04/89

BASF CORPORATION, CHEMICALS DIVISION, WYANDOTTE SITE

NORTH WORKS GROUNDWATER EXTRACTION WELLS 41,139

DATE	SAMPLE	METHYLENE CHLORIDE	CHLOROFORM	DICHLORO ETHANE	PROPYLENE DICHLORIDE
7-31-90	FEED TO #1 ABS.S	0.812	5	47	735
"	FEED TO #2 ABS.N	0.000	0.000	0.007	0.047
"	DISC. TO SEWER	0.000	0.000	0.004	0.016
"	TOTAL GALLONS THROUGH NEW CARBON = 46,872				
8-1-90	FEED TO #1 ABS.S	0.880	6	45	798
"	FEED TO #2 ABS.N	0.000	0.000	0.005	0.027
"	DISC. TO SEWER	0.000	0.000	0.003	0.011
"	TOTAL GALLONS THROUGH NEW CARBON = 55,949				
8-2-90	FEED TO #1 ABS.	0.509	4	28	535
"	FEED TO #2 ABS.	0.000	0.000	0.012	0.041
"	DISC. TO SEWER	0.000	0.000	0.002	0.009
"	TOTAL GALLONS THROUGH NEW CARBON = 67,018				
8-3-90	FEED TO #1 ABS.	0.563	0.913	7	86
"	FEED TO #2 ABS.	0	0	0.012	0.053
"	DISC. TO SEWER	0	0	0.003	0.009
"	TOTAL GALLONS THROUGH NEW CARBON = 77,600				
8-6-90	FEED TO #1 ABS.	1	3	22	447
"	FEED TO #2 ABS.	0	0	0.011	0.047
"	DISC. TO SEWER	0	0	0.002	0.008
"	TOTAL GALLONS THROUGH NEW CARBON = 109,233				
8-7-90	FEED TO #1 ABS.	—	—	—	—
"	FEED TO #2 ABS.	—	—	—	—
"	DISC. TO SEWER	—	—	—	—
"	TOTAL GALLONS THROUGH NEW CARBON = 120,238				

04/04/89

BASF CORPORATION, CHEMICALS DIVISION, WYANDOTTE SITE

NORTH WORKS GROUNDWATER EXTRACTION WELLS # 120,238

DATE	SAMPLE	METHYLENE CHLORIDE	CHLOROFORM	DICHLORO ETHANE	PROPYLENE DICHLORIDE
8-8-90	FEED TO #1 ABS.S	1.38	3	22	483
"	FEED TO #2 ABS.N	0	0	0.013	0.042
"	DISC. TO SEWER	0	0	0.001	0.005
"	TOTAL GALLONS THROUGH NEW CARBON = 134,243				
8-9-90	FEED TO #1 ABS.S	0.885	2	20	273
"	FEED TO #2 ABS.N	0	0	0.007	0.043
"	DISC. TO SEWER	0	0	0.002	0.008
"	TOTAL GALLONS THROUGH NEW CARBON = 145,081				
8-10-90	FEED TO #1 ABS.S	0.765	4	28	56
"	FEED TO #2 ABS.N	0	0	0.004	0.028
"	DISC. TO SEWER	0	0	0.001	0.004
"	TOTAL GALLONS THROUGH NEW CARBON = 158,840				
8-13-90	FEED TO #1 ABS.S	—	—	—	—
"	FEED TO #2 ABS.N	—	—	—	—
"	DISC. TO SEWER	—	—	—	—
"	TOTAL GALLONS THROUGH NEW CARBON = 201,723				
8-14-90	FEED TO #1 ABS.S	0.888	5	36	605
"	FEED TO #2 ABS.N	0.000	0.000	0.007	0.045
"	DISC. TO SEWER	0.000	0.000	0.001	0.005
"	TOTAL GALLONS THROUGH NEW CARBON = 214,841				
8-15-90	FEED TO #1 ABS.S	0.835	3	25	357
"	FEED TO #2 ABS.N	0.000	0.000	0.001	0.010
"	DISC. TO SEWER	0.000	0.000	0.002	0.004
"	TOTAL GALLONS THROUGH NEW CARBON = 229,353				

04/04/89

BASF CORPORATION, CHEMICALS DIVISION, WYANDOTTE SITE

NORTH WORKS GROUNDWATER EXTRACTION WELLS 229,353

DATE	SAMPLE	METHYLENE CHLORIDE	CHLOROFORM	DICHLORO ETHANE	PROPYLENE DICHLORIDE
8-16-90	FEED TO #1 ABS.	0.875	3	23	393
"	FEED TO #2 ABS.	0.000	0.000	0.002	0.021
"	DISC. TO SEWER	0.000	0.000	0.000	0.003
"	TOTAL GALLONS THROUGH NEW CARBON = 243,713				
8-17-90	FEED TO #1 ABS.	0.902	3	23	387
"	FEED TO #2 ABS.	0.000	0.000	0.002	0.016
"	DISC. TO SEWER	0.000	0.000	0.001	0.003
"	TOTAL GALLONS THROUGH NEW CARBON = 257,451				
8-20-90	FEED TO #1 ABS.	0.857	3	25	433
"	FEED TO #2 ABS.	0.000	0.000	0.002	0.026
"	DISC. TO SEWER	0.000	0.000	0.000	0.003
"	TOTAL GALLONS THROUGH NEW CARBON = 297,418				
8-21-90	FEED TO #1 ABS.	0.806	3	24	395
"	FEED TO #2 ABS.	0.000	0.000	0.002	0.031
"	DISC. TO SEWER	0.000	0.000	0.001	0.004
"	TOTAL GALLONS THROUGH NEW CARBON = 311,138				
8-22-90	FEED TO #1 ABS.	0.619	3	21	345
"	FEED TO #2 ABS.	0.000	0.000	0.001	0.012
"	DISC. TO SEWER	0.000	0.000	0.000	0.002
"	TOTAL GALLONS THROUGH NEW CARBON = 324,685				
8-23-90	FEED TO #1 ABS.	0.513	3	21	365
"	FEED TO #2 ABS.	0.000	0.000	0.002	0.014
"	DISC. TO SEWER	0.000	0.000	0.000	0.004
"	TOTAL GALLONS THROUGH NEW CARBON = 338,622				

04/04/89

BASF CORPORATION, CHEMICALS DIVISION, WYANDOTTE SITE

NORTH WORKS GROUNDWATER EXTRACTION WELLS 338,622

DATE	SAMPLE	METHYLENE CHLORIDE	CHLOROFORM	DICHLORO ETHANE	PROPYLENE DICHLORIDE
8-21-90	FEED TO #1 ABS.S	0.555	3	21	349
"	FEED TO #2 ABS.N	0.000	0.000	0.001	0.014
"	DISC. TO SEWER	0.000	0.000	0.001	0.002
"	TOTAL GALLONS THROUGH NEW CARBON = 352,749				
8-27-90	FEED TO #1 ABS.S	0.675	3	24	400
"	FEED TO #2 ABS.N	0.000	0.000	0.001	0.012
"	DISC. TO SEWER	0.000	0.000	0.000	0.003
"	TOTAL GALLONS THROUGH NEW CARBON = 392897				
8-28-90	FEED TO #1 ABS.S	0.754	3	24	383
"	FEED TO #2 ABS.N	0.000	0.000	0.001	0.022
"	DISC. TO SEWER	0.000	0.000	0.000	0.003
"	TOTAL GALLONS THROUGH NEW CARBON = 406,527				
8-29-90	FEED TO #1 ABS.S	0.566	3	22	364
"	FEED TO #2 ABS.N	0.000	0.000	0.001	0.014
"	DISC. TO SEWER	0.000	0.000	0.000	0.003
"	TOTAL GALLONS THROUGH NEW CARBON = 420,753				
8-30-90	FEED TO #1 ABS.S	0.634	3	20	346
"	FEED TO #2 ABS.N	0.000	0.000	0.001	0.030
"	DISC. TO SEWER	0.000	0.000	0.000	0.002
"	TOTAL GALLONS THROUGH NEW CARBON = 434,910				
8-31-90	FEED TO #1 ABS.S	0.691	4	28	493
"	FEED TO #2 ABS.N	0.000	0.000	0.001	0.030
"	DISC. TO SEWER	0.000	0.000	0.000	0.004
"	TOTAL GALLONS THROUGH NEW CARBON = 448,430				

04/04/89

BASF CORPORATION, CHEMICALS DIVISION, WYANDOTTE SITE

NORTH WORKS GROUNDWATER EXTRACTION WELLS

448,430

DATE	SAMPLE	METHYLENE CHLORIDE	CHLOROFORM	DICHLORO ETHANE	PROPYLENE DICHLORIDE
9-3-90	FEED TO #1 ABS.S	0.514	4	24	340
"	FEED TO #2 ABS.N	0.000	0.000	0.002	0.031
"	DISC. TO SEWER	0.000	0.000	0.000	0.002
"	TOTAL GALLONS THROUGH NEW CARBON = 489,168				
9-4-90	FEED TO #1 ABS.S	0.503	3.105	23	312
"	FEED TO #2 ABS.N	0.000	0.000	0.003	0.049
"	DISC. TO SEWER	0.000	0.000	0.000	0.002
"	TOTAL GALLONS THROUGH NEW CARBON = 503,876				
9-5-90	FEED TO #1 ABS.S	0.474	3.371	24	344
"	FEED TO #2 ABS.N	0.000	0.000	0.001	0.018
"	DISC. TO SEWER	0.000	0.000	0.000	0.002
"	TOTAL GALLONS THROUGH NEW CARBON = 519,220				
9-6-90	FEED TO #1 ABS.S	0.482	3.824	27	392
"	FEED TO #2 ABS.N	0.000	0.000	0.004	0.065
"	DISC. TO SEWER	0.000	0.000	0.000	0.002
"	TOTAL GALLONS THROUGH NEW CARBON = 533,909				
6-7-90	FEED TO #1 ABS.S	0.545	4.365	31	454
"	FEED TO #2 ABS.N	0.000	0.000	0.004	0.055
"	DISC. TO SEWER	0.000	0.000	0.000	0.002
"	TOTAL GALLONS THROUGH NEW CARBON = 548,772				
9-10-90	FEED TO #1 ABS.S	0.448	3.649	29	389
"	FEED TO #2 ABS.N	0.000	0.000	0.005	0.068
"	DISC. TO SEWER	0.000	0.000	0.000	0.002
"	TOTAL GALLONS THROUGH NEW CARBON = 588,464				

04/04/89

BASF CORPORATION, CHEMICALS DIVISION, WYANDOTTE SITE

NORTH WORKS GROUNDWATER EXTRACTION WELLS 588, 464

DATE	SAMPLE	METHYLENE CHLORIDE	CHLOROFORM	DICHLORO ETHANE	PROPYLENE DICHLORIDE
9-11-90	FEED TO #1 ABS.S	0.342	2.966	30	306
"	FEED TO #2 ABS.N	0.000	0.000	0.003	0.025
"	DISC. TO SEWER	0.000	0.000	0.000	0.001
"	TOTAL GALLONS THROUGH NEW CARBON = 603,522				
9-12-90	FEED TO #1 ABS.S	0.392	3.731	28	386
"	FEED TO #2 ABS.N	0.000	0.000	0.002	0.032
"	DISC. TO SEWER	0.000	0.000	0.001	0.001
"	TOTAL GALLONS THROUGH NEW CARBON = 618,926				
9-13-90	FEED TO #1 ABS.S	0.267	2.200	15	223
"	FEED TO #2 ABS.N	0.000	0.000	0.002	0.010
"	DISC. TO SEWER	0.000	0.000	0.000	0.001
"	TOTAL GALLONS THROUGH NEW CARBON = 637,959				
9-14-90	FEED TO #1 ABS.S	0.271	2.367	16	238
"	FEED TO #2 ABS.N	0.000	0.000	0.001	0.019
"	DISC. TO SEWER	0.000	0.000	0.000	0.002
"	TOTAL GALLONS THROUGH NEW CARBON = 656,136				
9-17-90	FEED TO #1 ABS.S	0.296	2.784	18	277
"	FEED TO #2 ABS.N	0.000	0.000	0.001	0.028
"	DISC. TO SEWER	0.000	0.000	0.000	0.001
"	TOTAL GALLONS THROUGH NEW CARBON = 699,312				
9-18-90	FEED TO #1 ABS.S	0.338	2.870	18	275
"	FEED TO #2 ABS.N	0.000	0.000	0.001	0.015
"	DISC. TO SEWER	0.000	0.000	0.000	0.001
"	TOTAL GALLONS THROUGH NEW CARBON = 719,281				

BASF CORPORATION, CHEMICALS DIVISION, WYANDOTTE SITE

NORTH WORKS GROUNDWATER EXTRACTION WELLS 719,281

DATE	SAMPLE	METHYLENE CHLORIDE	CHLOROFORM	DICHLORO ETHANE	PROPYLENE DICHLORIDE
9-19-90	FEED TO #1 ABS.S	0.560	3.895	28	383
"	FEED TO #2 ABS.N	0.000	0.000	0.001	0.030
"	DISC. TO SEWER	0.000	0.000	0.000	0.002
"	TOTAL GALLONS THROUGH NEW CARBON = 739,619				
9-20-90	FEED TO #1 ABS.S	0.469	3.716	25	364
"	FEED TO #2 ABS.N	0.000	0.000	0.001	0.018
"	DISC. TO SEWER	0.000	0.000	0.000	0.001
"	TOTAL GALLONS THROUGH NEW CARBON = 757,054				
9-21-90	FEED TO #1 ABS.S	0.543	3.769	27	369
"	FEED TO #2 ABS.N	0.000	0.000	0.000	0.005
"	DISC. TO SEWER	0.000	0.000	0.000	0.001
"	TOTAL GALLONS THROUGH NEW CARBON = 771,273				
9-24-90	FEED TO #1 ABS.S	0.488	4.070	27	394
"	FEED TO #2 ABS.N	0.000	0.000	0.001	0.030
"	DISC. TO SEWER	0.000	0.000	0.000	0.001
"	TOTAL GALLONS THROUGH NEW CARBON = 813,973				
9-25-90	FEED TO #1 ABS.S	0.467	3.828	27	377
"	FEED TO #2 ABS.N	0.000	0.000	0.000	0.002
"	DISC. TO SEWER	0.000	0.000	0.000	0.001
"	TOTAL GALLONS THROUGH NEW CARBON = 828,122				
9-26-90	FEED TO #1 ABS.S	0.529	3.995	27	393
"	FEED TO #2 ABS.N	0.000	0.000	0.002	0.009
"	DISC. TO SEWER	0.000	0.000	0.000	0.001
"	TOTAL GALLONS THROUGH NEW CARBON = 841,942				

04/04/89

BASF CORPORATION, CHEMICALS DIVISION, WYANDOTTE SITE

NORTH WORKS GROUNDWATER EXTRACTION WELLS 841, 942

DATE	SAMPLE	METHYLENE CHLORIDE	CHLOROFORM	DICHLORO ETHANE	PROPYLENE DICHLORIDE
9-27-90	FEED TO #1 ABS.S	0.507	4.063	29	411
"	FEED TO #2 ABS.N	0.000	0.000	0.001	0.016
"	DISC. TO SEWER	0.000	0.000	0.000	0.001
"	TOTAL GALLONS THROUGH NEW CARBON = 854,286				
9-28-90	FEED TO #1 ABS.S	0.435	3.971	33	438
"	FEED TO #2 ABS.N	0.000	0.000	0.003	0.064
"	DISC. TO SEWER	0.000	0.000	0.000	0.004
"	TOTAL GALLONS THROUGH NEW CARBON = 863,223				
10-1-90	FEED TO #1 ABS.S	0.515	1.314	10	151
"	FEED TO #2 ABS.N	0.000	0.000	0.000	0.007
"	DISC. TO SEWER	0.000	0.000	0.000	0.001
"	TOTAL GALLONS THROUGH NEW CARBON = 884,650				
10-2-90	FEED TO #1 ABS.S	0.524	2.740	31	531
"	FEED TO #2 ABS.N	0.000	0.000	0.001	0.026
"	DISC. TO SEWER	0.000	0.000	0.000	0.000
"	TOTAL GALLONS THROUGH NEW CARBON = 893,138				
10-3-90	FEED TO #1 ABS.S	0.532	4.033	31	519
"	FEED TO #2 ABS.N	0.000	0.000	0.001	0.047
"	DISC. TO SEWER	0.000	0.000	0.000	0.001
"	TOTAL GALLONS THROUGH NEW CARBON = 901,321				
10-4-90	FEED TO #1 ABS.S	0.231	0.933	6	107
"	FEED TO #2 ABS.N	0.000	0.000	0.003	0.013
"	DISC. TO SEWER	0.000	0.000	0.000	0.001
"	TOTAL GALLONS THROUGH NEW CARBON = 907,711				

04/04/89

BASF CORPORATION, CHEMICALS DIVISION, WYANDOTTE SITE

NORTH WORKS GROUNDWATER EXTRACTION WELLS 907,711

DATE	SAMPLE	METHYLENE CHLORIDE	CHLOROFORM	DICHLORO ETHANE	PROPYLENE DICHLORIDE
10-5-90	FEED TO #1 ABS.S	0.228	0.882	7	116
"	FEED TO #2 ABS.N	0.021	0.000	0.050	0.008
"	DISC. TO SEWER	0.000	0.000	0.000	0.001
"	TOTAL GALLONS THROUGH NEW CARBON = 915,910				
10-8-90	FEED TO #1 ABS.S	0.619	4.383	32	591
"	FEED TO #2 ABS.N	0.147	0.000	2.637	1.139
"	DISC. TO SEWER	0.000	0.000	0.000	0.001
"	TOTAL GALLONS THROUGH NEW CARBON = 940,652				
10-9-90	FEED TO #1 ABS.S	0.262	1.203	7	119
"	FEED TO #2 ABS.N	0.154	0.000	2.184	1.558
"	DISC. TO SEWER	0.000	0.000	0.000	0.001
"	TOTAL GALLONS THROUGH NEW CARBON = 947,410				
10-10-90	FEED TO #1 ABS.S	0.450	4.269	30	571
"	FEED TO #2 ABS.N	0.259	0.000	4.388	4.600
"	DISC. TO SEWER	0.000	0.000	0.000	0.000
"	TOTAL GALLONS THROUGH NEW CARBON = 957,120				
10-11-90	FEED TO #1 ABS.S	0.465	4.220	30	562
"	FEED TO #2 ABS.N	0.166	0.000	7.357	7.901
"	DISC. TO SEWER	0.000	0.000	0.000	0.001
"	TOTAL GALLONS THROUGH NEW CARBON = 967,361				
10-12-90	FEED TO #1 ABS.S	0.453	4.127	29	554
"	FEED TO #2 ABS.N	0.670	0.000	13	15
"	DISC. TO SEWER	0.000	0.000	0.000	0.001
"	TOTAL GALLONS THROUGH NEW CARBON = 976,957				

04/04/89

BASF CORPORATION, CHEMICALS DIVISION, WYANDOTTE SITE

NORTH WORKS GROUNDWATER EXTRACTION WELLS 976,957

DATE	SAMPLE	METHYLENE CHLORIDE	CHLOROFORM	DICHLORO ETHANE	PROPYLENE DICHLORIDE
10-15-90	FEED TO #1 ABS.S	0.253	1.450	12	154
"	FEED TO #2 ABS.N	1.112	0.000	42	60
"	DISC. TO SEWER	0.000	0.000	0.000	0.001
"	TOTAL GALLONS THROUGH NEW CARBON = 1,000,307				
10-16-90	FEED TO #1 ABS.S	Shut down @ 7AM - Removed Carbon From South Absorb.			
"	FEED TO #2 ABS.N	Went back To 1 Absorber operation			
"	DISC. TO SEWER	@ 11 30 AM			
"	TOTAL GALLONS THROUGH NEW CARBON = 1,008,926				
10-17-90	FEED TO #1 ABS.N	0.603	5.183	40	709
"	FEED TO #2 ABS.S	—	—	—	—
"	DISC. TO SEWER	0.000	0.000	0.000	0.004
"	TOTAL GALLONS THROUGH NEW CARBON = 6,625				
10-18-90	FEED TO #1 ABS.N	0.548	4.076	32	560
"	FEED TO #2 ABS.S	—	—	—	—
"	DISC. TO SEWER	0.000	0.000	0.000	0.002
"	TOTAL GALLONS THROUGH NEW CARBON = 14,745				
10-19-90	FEED TO #1 ABS.N	0.478	4.983	26	627
"	FEED TO #2 ABS.S	—	—	—	—
"	DISC. TO SEWER	0.000	0.000	0.000	0.001
"	TOTAL GALLONS THROUGH NEW CARBON = 22,577				
	FEED TO #1 ABS.	Charged	New Carbon into		South
	FEED TO #2 ABS.	Absorber.	Went	To 2 Absor.	
	DISC. TO SEWER	operation @ 9 30 AM.			
	TOTAL GALLONS THROUGH NEW CARBON =				

04/04/89

BASF CORPORATION, CHEMICALS DIVISION, WYANDOTTE SITE

NORTH WORKS GROUNDWATER EXTRACTION WELLS 22,577

DATE	SAMPLE	METHYLENE CHLORIDE	CHLOROFORM	DICHLORO ETHANE	PROPYLENE DICHLORIDE
10-22-90	FEED TO #1 ABS.N	0.304	1.214	9	133
"	FEED TO #2 ABS.S	0.000	0.000	0.003	0.024
"	DISC. TO SEWER	0.000	0.000	0.002	0.008
"	TOTAL GALLONS THROUGH NEW CARBON = 40,796				
10-23-90	FEED TO #1 ABS.N	0.522	4.110	29	594
"	FEED TO #2 ABS.S	0.000	0.000	0.002	0.039
"	DISC. TO SEWER	0.000	0.000	0.002	0.007
"	TOTAL GALLONS THROUGH NEW CARBON = 49,760				
10-24-90	FEED TO #1 ABS.N	0.505	2.219	28	528
"	FEED TO #2 ABS.S	0.000	0.000	0.002	0.019
"	DISC. TO SEWER	0.000	0.000	0.001	0.004
"	TOTAL GALLONS THROUGH NEW CARBON = 59,111				
10-25-90	FEED TO #1 ABS.N	0.503	4.736	31	621
"	FEED TO #2 ABS.S	0.000	0.000	0.001	0.026
"	DISC. TO SEWER	0.000	0.000	0.000	0.003
"	TOTAL GALLONS THROUGH NEW CARBON = 68,635				
10-26-90	FEED TO #1 ABS.N	.629	4.945	31	639
"	FEED TO #2 ABS.S	0	0	.001	.019
"	DISC. TO SEWER	0	0	.001	.005
"	TOTAL GALLONS THROUGH NEW CARBON = 78,243				
10-29-90	FEED TO #1 ABS.N	0.467	4.516	29	587
"	FEED TO #2 ABS.S	0.000	0.000	0.001	0.019
"	DISC. TO SEWER	0.000	0.000	0.000	0.002
"	TOTAL GALLONS THROUGH NEW CARBON = 106,899				

04/04/89

BASF CORPORATION, CHEMICALS DIVISION, WYANDOTTE SITE

NORTH WORKS GROUNDWATER EXTRACTION WELLS 106,899

DATE	SAMPLE	METHYLENE CHLORIDE	CHLOROFORM	DICHLORO ETHANE	PROPYLENE DICHLORIDE
10-30-90	FEED TO #1 ABS.N	0.527	4.811	30	616
"	FEED TO #2 ABS.S	0.000	0.000	0.001	0.050
"	DISC. TO SEWER	0.000	0.000	0.000	0.004
"	TOTAL GALLONS THROUGH NEW CARBON = 115,853				
10-31-90	FEED TO #1 ABS.N	0.598	5.144	33	667
"	FEED TO #2 ABS.S	0.000	0.000	0.002	0.090
"	DISC. TO SEWER	0.000	0.000	0.000	0.002
"	TOTAL GALLONS THROUGH NEW CARBON = 124,789				
11-1-90	FEED TO #1 ABS.N	0.507	4.951	32	634
"	FEED TO #2 ABS.S	0.000	0.000	0.002	0.081
"	DISC. TO SEWER	0.000	0.000	0.000	0.000
"	TOTAL GALLONS THROUGH NEW CARBON = 133,566				
11-2-90	FEED TO #1 ABS.N	0.509	4.807	31	618
"	FEED TO #2 ABS.S	0.000	0.000	0.002	0.064
"	DISC. TO SEWER	0.000	0.000	0.000	0.002
"	TOTAL GALLONS THROUGH NEW CARBON = 142,243				
11-5-90	FEED TO #1 ABS.N	0.376	2.402	12	184
"	FEED TO #2 ABS.S	0.000	0.000	0.001	0.019
"	DISC. TO SEWER	0.000	0.000	0.000	0.002
"	TOTAL GALLONS THROUGH NEW CARBON = 164,387				
11-6-90	FEED TO #1 ABS.N	0.763	7.355	49	1009
"	FEED TO #2 ABS.S	0.000	0.000	0.001	0.018
"	DISC. TO SEWER	0.000	0.000	0.000	0.001
"	TOTAL GALLONS THROUGH NEW CARBON = 172,852				

04/04/89

BASF CORPORATION, CHEMICALS DIVISION, WYANDOTTE SITE

NORTH WORKS GROUNDWATER EXTRACTION WELLS 172,852

DATE	SAMPLE	METHYLENE CHLORIDE	CHLOROFORM	DICHLORO ETHANE	PROPYLENE DICHLORIDE
11-7-90	FEED TO #1 ABS.N	0.745	7.483	47	967
"	FEED TO #2 ABS.S	0.000	0.000	0.000	0.012
"	DISC. TO SEWER	0.000	0.000	0.000	0.002
"	TOTAL GALLONS THROUGH NEW CARBON = 180,859				
11-8-90	FEED TO #1 ABS.N	0.654	6.714	42	876
"	FEED TO #2 ABS.S	0.000	0.000	0.001	0.018
"	DISC. TO SEWER	0.000	0.000	0.000	0.002
"	TOTAL GALLONS THROUGH NEW CARBON = 188,752				
11-9-90	FEED TO #1 ABS.N	No Time	To Run	Sample's	
"	FEED TO #2 ABS.S	Runing	Extra Sample's For		
"	DISC. TO SEWER	Polyol	Plant.		
"	TOTAL GALLONS THROUGH NEW CARBON = 196,589				
11-12-90	FEED TO #1 ABS.N	0.613	6.296	37	810
"	FEED TO #2 ABS.S	0.000	0.000	0.001	0.032
"	DISC. TO SEWER	0.000	0.000	0.000	0.001
"	TOTAL GALLONS THROUGH NEW CARBON = 220,414				
11-13-90	FEED TO #1 ABS.N	0.517	6.689	38	835
"	FEED TO #2 ABS.S	0.000	0.000	0.002	0.016
"	DISC. TO SEWER	0.000	0.000	0.000	0.007
"	TOTAL GALLONS THROUGH NEW CARBON = 228,005				
11-14-90	FEED TO #1 ABS.N	0.782	8.997	48	1119
"	FEED TO #2 ABS.S	0.000	0.000	0.000	0.013
"	DISC. TO SEWER	0.000	0.000	0.000	0.002
"	TOTAL GALLONS THROUGH NEW CARBON = 235,294				

04/04/89

BASF CORPORATION, CHEMICALS DIVISION, WYANDOTTE SITE

NORTH WORKS GROUNDWATER EXTRACTION WELLS 235,294

DATE	SAMPLE	METHYLENE CHLORIDE	CHLOROFORM	DICHLORO ETHANE	PROPYLENE DICHLORIDE
11-15-90	FEED TO #1 ABS.N	0.572	2.440	16	253
"	FEED TO #2 ABS.S	0.000	0.000	0.001	0.039
"	DISC. TO SEWER	0.000	0.000	0.000	0.002
"	TOTAL GALLONS THROUGH NEW CARBON = 242,600				
11-16-90	FEED TO #1 ABS.N	0.531	6.599	35	827
"	FEED TO #2 ABS.S	0.000	0.000	0.001	0.038
"	DISC. TO SEWER	0.000	0.000	0.000	0.002
"	TOTAL GALLONS THROUGH NEW CARBON = 249,945				
11-19-90	FEED TO #1 ABS.N	Purge	and Trap	NOT	
"	FEED TO #2 ABS.S	Working			
"	DISC. TO SEWER				
"	TOTAL GALLONS THROUGH NEW CARBON = 272,890				
11-20-90	FEED TO #1 ABS.N	2.121	8.699	46	993
"	FEED TO #2 ABS.S	0.000	0.000	0.002	0.052
"	DISC. TO SEWER	0.000	0.000	0.000	0.001
"	TOTAL GALLONS THROUGH NEW CARBON = 280,628				
11-21-90	FEED TO #1 ABS.N	1.108	8.000	46	949
"	FEED TO #2 ABS.S	0.000	0.000	0.001	0.038
"	DISC. TO SEWER	0.000	0.000	0.000	0.001
"	TOTAL GALLONS THROUGH NEW CARBON = 288,434				
11-22-90	FEED TO #1 ABS.N	0.829	7.965	46	949
"	FEED TO #2 ABS.S	0.000	0.000	0.002	0.068
"	DISC. TO SEWER	0.000	0.000	0.000	0.009
"	TOTAL GALLONS THROUGH NEW CARBON = 296,204				

04/04/89

BASF CORPORATION, CHEMICALS DIVISION, WYANDOTTE SITE

NORTH WORKS GROUNDWATER EXTRACTION WELLS 296,204

DATE	SAMPLE	METHYLENE CHLORIDE	CHLOROFORM	DICHLORO ETHANE	PROPYLENE DICHLORIDE
11-23-90	FEED TO #1 ABS.N	0.801	7.819	45	918
"	FEED TO #2 ABS.S	0.000	0.000	0.003	0.100
"	DISC. TO SEWER	0.000	0.000	0.000	0.001
"	TOTAL GALLONS THROUGH NEW CARBON = 304,028				
11-26-90	FEED TO #1 ABS.N	0.514	5.514	31	663
"	FEED TO #2 ABS.S	0.000	0.000	0.001	0.015
"	DISC. TO SEWER	0.000	0.000	0.000	0.001
"	TOTAL GALLONS THROUGH NEW CARBON = 327,158				
11-27-90	FEED TO #1 ABS.N	0.823	8.256	44	994
"	FEED TO #2 ABS.S	0.000	0.000	0.001	0.046
"	DISC. TO SEWER	0.000	0.000	0.000	0.001
"	TOTAL GALLONS THROUGH NEW CARBON = 334,544				
11-28-90	FEED TO #1 ABS.N	2.256	8.246	45	929
"	FEED TO #2 ABS.S	0.000	0.000	0.000	0.093
"	DISC. TO SEWER	0.000	0.000	0.000	0.018
"	TOTAL GALLONS THROUGH NEW CARBON = 342,226				
11-29-90	FEED TO #1 ABS.N	1.008	8.330	45	945
"	FEED TO #2 ABS.S	0.000	0.000	0.002	0.017
"	DISC. TO SEWER	0.000	0.000	0.000	0.001
"	TOTAL GALLONS THROUGH NEW CARBON = 349,926				
11-30-90	FEED TO #1 ABS.N	1.781	8.175	43	950
"	FEED TO #2 ABS.S	0.000	0.000	0.000	0.006
"	DISC. TO SEWER	0.000	0.000	0.000	0.000
"	TOTAL GALLONS THROUGH NEW CARBON = 357,540				

04/04/89

BASF CORPORATION, CHEMICALS DIVISION, WYANDOTTE SITE

NORTH WORKS GROUNDWATER EXTRACTION WELLS 357,540

DATE	SAMPLE	METHYLENE CHLORIDE	CHLOROFORM	DICHLORO ETHANE	PROPYLENE DICHLORIDE
12-3-90	FEED TO #1 ABS.N	0.894	8.588	43	984
"	FEED TO #2 ABS.S	0.000	0.000	0.003	0.073
"	DISC. TO SEWER	0.000	0.000	0.000	0.000
"	TOTAL GALLONS THROUGH NEW CARBON = 379,555				
12-4-90	FEED TO #1 ABS.N	0.754	8.416	43	977
"	FEED TO #2 ABS.S	0.000	0.000	0.001	0.031
"	DISC. TO SEWER	0.000	0.000	0.000	0.000
"	TOTAL GALLONS THROUGH NEW CARBON = 386,843				
12-5-90	FEED TO #1 ABS.N	1.112	8.936	47	983
"	FEED TO #2 ABS.S	0.000	0.000	0.000	0.014
"	DISC. TO SEWER	0.000	0.000	0.000	0.000
"	TOTAL GALLONS THROUGH NEW CARBON = 394,601				
12-6-90	FEED TO #1 ABS.N	0.960	9.665	49	1040
"	FEED TO #2 ABS.S	0.000	0.000	0.000	0.008
"	DISC. TO SEWER	0.000	0.000	0.000	0.001
"	TOTAL GALLONS THROUGH NEW CARBON = 402,364				
12-7-90	FEED TO #1 ABS.N	0.698	9.537	48	1052
"	FEED TO #2 ABS.S	0.000	0.000	0.000	0.017
"	DISC. TO SEWER	0.000	0.000	0.000	0.000
"	TOTAL GALLONS THROUGH NEW CARBON = 410,279				
12-10-90	FEED TO #1 ABS.N	0.778	8.743	46	971
"	FEED TO #2 ABS.S	0.000	0.000	0.002	0.077
"	DISC. TO SEWER	0.000	0.000	0.000	0.000
"	TOTAL GALLONS THROUGH NEW CARBON = 434,214				

04/04/89

BASF CORPORATION, CHEMICALS DIVISION, WYANDOTTE SITE

NORTH WORKS GROUNDWATER EXTRACTION WELLS 434,214

DATE	SAMPLE	METHYLENE CHLORIDE	CHLOROFORM	DICHLORO ETHANE	PROPYLENE DICHLORIDE
12-11-90	FEED TO #1 ABS.N	0.617	6.186	32	696
"	FEED TO #2 ABS.S	0.000	0.000	0.001	0.023
"	DISC. TO SEWER	0.000	0.000	0.000	0.000
"	TOTAL GALLONS THROUGH NEW CARBON = 442,125				
12-12-90	FEED TO #1 ABS.N	0.642	9.241	47	1014
"	FEED TO #2 ABS.S	0.000	0.000	0.002	0.019
"	DISC. TO SEWER	0.000	0.000	0.000	0.000
"	TOTAL GALLONS THROUGH NEW CARBON = 449,839				
12-13-90	FEED TO #1 ABS.N	0.519	6.771	35	751
"	FEED TO #2 ABS.S	0.000	0.000	0.000	0.003
"	DISC. TO SEWER	0.000	0.000	0.000	0.000
"	TOTAL GALLONS THROUGH NEW CARBON = 458,023				
12-14-90	FEED TO #1 ABS.N	0.448	2.572	15	246
"	FEED TO #2 ABS.S	0.000	0.000	0.000	0.011
"	DISC. TO SEWER	0.000	0.000	0.000	0.000
"	TOTAL GALLONS THROUGH NEW CARBON = 464,729				
12-17-90	FEED TO #1 ABS.N	0.483	1.878	10	167
"	FEED TO #2 ABS.S	0.000	0.000	0.000	0.005
"	DISC. TO SEWER	0.000	0.000	0.000	0.003
"	TOTAL GALLONS THROUGH NEW CARBON = 487,935				
12-18-90	FEED TO #1 ABS.N	0.679	7.150	40	830
"	FEED TO #2 ABS.S	0.000	0.000	0.002	0.048
"	DISC. TO SEWER	0.000	0.000	0.000	0.000
"	TOTAL GALLONS THROUGH NEW CARBON = 496,402				

04/04/89

BASF CORPORATION, CHEMICALS DIVISION, WYANDOTTE SITE

NORTH WORKS GROUNDWATER EXTRACTION WELLS 496, 402

DATE	SAMPLE	METHYLENE CHLORIDE	CHLOROFORM	DICHLORO ETHANE	PROPYLENE DICHLORIDE
12-19-90	FEED TO #1 ABS.N	0.714	5.512	27	604
"	FEED TO #2 ABS.S	0.000	0.000	0.001	0.057
"	DISC. TO SEWER	0.000	0.000	0.000	0.000
"	TOTAL GALLONS THROUGH NEW CARBON = 504,965				
12-20-90	FEED TO #1 ABS.N	.761	7.98	37	807
"	FEED TO #2 ABS.S	.000	.000	.001	.007
"	DISC. TO SEWER	.000	.000	.000	.001
"	TOTAL GALLONS THROUGH NEW CARBON = 510,782				
	FEED TO #1 ABS.	Total Gal thru Carbon 12-21-90			
	FEED TO #2 ABS.				
	DISC. TO SEWER				
	TOTAL GALLONS THROUGH NEW CARBON =				
12-26-90	FEED TO #1 ABS.	0.562	6.894	35	748
"	FEED TO #2 ABS.	0.000	0.003	13	10
"	DISC. TO SEWER	—	—	—	—
"	TOTAL GALLONS THROUGH NEW CARBON = 545,202				
12-27-90	FEED TO #1 ABS.	0.857	6.223	35	682
"	FEED TO #2 ABS.	0.532	0.000	18	19
"	DISC. TO SEWER	.000	.000	.000	.000
"	TOTAL GALLONS THROUGH NEW CARBON = 550,902				
12-28-90	FEED TO #1 ABS.				
"	FEED TO #2 ABS.				
"	DISC. TO SEWER				
"	TOTAL GALLONS THROUGH NEW CARBON = 556,571				

04/04/89

1991

BASF CORPORATION, CHEMICALS DIVISION, WYANDOTTE SITE

NORTH WORKS GROUNDWATER EXTRACTION WELLS

566,571

DATE	SAMPLE	METHYLENE CHLORIDE	CHLOROFORM	DICHLORO ETHANE	PROPYLENE DICHLORIDE
1-1-91	FEED TO #1 ABS.N	—	—	—	—
"	FEED TO #2 ABS.S	—	—	—	—
"	DISC. TO SEWER	—	—	—	—
"	TOTAL GALLONS THROUGH NEW CARBON = 601,445				
1-2-91	FEED TO #1 ABS.N	0.716	7.572	39	841
"	FEED TO #2 ABS.S	1.490	0.383	78	281
"	DISC. TO SEWER	0.000	0.000	0.000	0.001
"	TOTAL GALLONS THROUGH NEW CARBON = 609,289				
1-3-91	FEED TO #1 ABS.N	0.795	8.349	42	927
"	FEED TO #2 ABS.S	1.718	0.563	85	396
"	DISC. TO SEWER	0.000	0.000	0.000	0.000
"	TOTAL GALLONS THROUGH NEW CARBON = 617,630				
1-4-91	FEED TO #1 ABS.N	0.820	8.433	44	958
"	FEED TO #2 ABS.S	1.731	0.745	92	520
"	DISC. TO SEWER	0.000	0.000	0.000	0.000
"	TOTAL GALLONS THROUGH NEW CARBON = 625,912				
1-7-91	FEED TO #1 ABS.N	1.586	4.627	24	434
"	FEED TO #2 ABS.S	1.925	1.182	92	826
"	DISC. TO SEWER	0.000	0.000	0.000	0.001
"	TOTAL GALLONS THROUGH NEW CARBON = 646,560				
1-8-91	FEED TO #1 ABS.N	0.641	6.513	34	750
"	FEED TO #2 ABS.S	1.501	1.170	84	776
"	DISC. TO SEWER	0.000	0.000	0.000	0.000
"	TOTAL GALLONS THROUGH NEW CARBON = 654,435				

04/04/89

BASF CORPORATION, CHEMICALS DIVISION, WYANDOTTE SITE

NORTH WORKS GROUNDWATER EXTRACTION WELLS 654,435

DATE	SAMPLE	METHYLENE CHLORIDE	CHLOROFORM	DICHLORO ETHANE	PROPYLENE DICHLORIDE
1-9-91	FEED TO #1 ABS. N	0.469	2.119	12	217
"	FEED TO #2 ABS. S	1.718	0.922	75	602
"	DISC. TO SEWER	0.000	0.000	0.000	0.001
"	TOTAL GALLONS THROUGH NEW CARBON = 660,078				
1-10-91	FEED TO #1 ABS. N	0.593	6.598	36	797
"	FEED TO #2 ABS. S	1.175	1.274	70	833
"	DISC. TO SEWER	0.000	0.000	0.000	0.001
"	TOTAL GALLONS THROUGH NEW CARBON = 668,067				
1-11-91	FEED TO #1 ABS. N	0.641	6.989	35	819
"	FEED TO #2 ABS. S	1.601	1.450	73	869
"	DISC. TO SEWER	.000	.000	0.000	0.002
"	TOTAL GALLONS THROUGH NEW CARBON = 675,451				
1-14-91	FEED TO #1 ABS. N	0.510	6.360	34	783
1-14-91	FEED TO #2 ABS. S	1.590	1.759	75	924
"	DISC. TO SEWER	0.000	0.000	0.000	0.002
"	TOTAL GALLONS THROUGH NEW CARBON = 697,989				
1-15-91	FEED TO #1 ABS. N	0.575	7.345	38	875
"	FEED TO #2 ABS. S	1.494	1.976	71	953
"	DISC. TO SEWER	0.000	0.000	0.000	0.002
"	TOTAL GALLONS THROUGH NEW CARBON = 705,219				
1-16-91	FEED TO #1 ABS. N	Shut Down	@ 7 15 AM.	Removed	Carbon From
"	FEED TO #2 ABS. S	North	Absorber.	Went	To 1-Absorber
"	DISC. TO SEWER	Operation	@ 10 30 AM		
"	TOTAL GALLONS THROUGH NEW CARBON = 712,341				

04/04/89

BASF CORPORATION, CHEMICALS DIVISION, WYANDOTTE SITE

NORTH WORKS GROUNDWATER EXTRACTION WELLS

DATE	SAMPLE	METHYLENE CHLORIDE	CHLOROFORM	DICHLORO ETHANE	PROPYLENE DICHLORIDE
1-17-91	FEED TO #1 ABS.S	0.699	8.384	42	982
"	FEED TO #2 ABS.	—	—	—	—
"	DISC. TO SEWER	0.000	0.000	0.000	0.001
"	TOTAL GALLONS THROUGH NEW CARBON = 6368				
1-18-91	FEED TO #1 ABS.S	0.695	7.773	40	927
"	FEED TO #2 ABS.	—	—	—	—
"	DISC. TO SEWER	0.000	0.000	0.000	0.000
"	TOTAL GALLONS THROUGH NEW CARBON = 12,968				
	FEED TO #1 ABS.	1-18-91 Loaded New Carbon into			North
	FEED TO #2 ABS.	Absorber - Went To 2 Absor.			operation
	DISC. TO SEWER	@ stayed @ 1-Absor operation - Have bad Manifold leak			
	TOTAL GALLONS THROUGH NEW CARBON =				
1-21-91	FEED TO #1 ABS.S	0.548	6.867	30	787
"	FEED TO #2 ABS.N	—	—	—	—
"	DISC. TO SEWER	0.000	0.000	0.000	0.000
"	TOTAL GALLONS THROUGH NEW CARBON = 32,690				
1-22-91	FEED TO #1 ABS.S	0.608	7.221	36	825
"	FEED TO #2 ABS.N	—	—	—	—
"	DISC. TO SEWER	0.000	0.000	0.000	0.000
"	TOTAL GALLONS THROUGH NEW CARBON = 39,453				
1-23-91	FEED TO #1 ABS.S	0.613	7.057	38	862
"	FEED TO #2 ABS.N	—	—	—	—
"	DISC. TO SEWER	0.000	0.000	0.000	0.000
"	TOTAL GALLONS THROUGH NEW CARBON = 46,137				

BASF CORPORATION, CHEMICALS DIVISION, WYANDOTTE SITE

NORTH WORKS GROUNDWATER EXTRACTION WELLS 46,137

DATE	SAMPLE	METHYLENE CHLORIDE	CHLOROFORM	DICHLORO ETHANE	PROPYLENE DICHLORIDE
1-24-91	FEED TO #1 ABS.S	0.599	7.147	36	819
"	FEED TO #2 ABS.N	—	—	—	—
"	DISC. TO SEWER	0.000	0.000	0.000	0.000
"	TOTAL GALLONS THROUGH NEW CARBON = 52,723				
1-24-91	FEED TO #1 ABS.S	1-24-91 Maint. Completed Repairs on			Manifold
	FEED TO #2 ABS.N	Went To	2 Absor.	operation	@ 2 00 PM
	DISC. TO SEWER				
	TOTAL GALLONS THROUGH NEW CARBON =				
1-25-91	FEED TO #1 ABS.S	0.132	7.233	35	818
"	FEED TO #2 ABS.N	0.000	0.005	0.097	2.466
"	DISC. TO SEWER	0.000	0.000	0.010	0.108
"	TOTAL GALLONS THROUGH NEW CARBON = 59,330				
1-28-91	FEED TO #1 ABS.S	0.765	8.766	40	981
"	FEED TO #2 ABS.N	0.000	0.000	0.052	1.300
"	DISC. TO SEWER	0.000	0.000	0.005	0.046
"	TOTAL GALLONS THROUGH NEW CARBON = 78,774				
1-29-91	FEED TO #1 ABS.S	Absorbers Pressured up. Drain line Plugged.			
"	FEED TO #2 ABS.N	Shut Down @ 1215 PM - Maint. Water Blasted			
	DISC. TO SEWER	Drain line. Put system Back			
"		@ 4 00 PM.			
"	TOTAL GALLONS THROUGH NEW CARBON = 85,196				
1-30-91	FEED TO #1 ABS.S	0.760	6.546	32	739
"	FEED TO #2 ABS.N	0.000	0.000	0.020	0.527
"	DISC. TO SEWER	0.000	0.000	0.003	0.030
"	TOTAL GALLONS THROUGH NEW CARBON = 92,138				

04/04/89

BASF CORPORATION, CHEMICALS DIVISION, WYANDOTTE SITE

NORTH WORKS GROUNDWATER EXTRACTION WELLS

92,138

DATE	SAMPLE	METHYLENE CHLORIDE	CHLOROFORM	DICHLORO ETHANE	PROPYLENE DICHLORIDE
1-31-91	FEED TO #1 ABS.S	0.460	2.036	10	183
"	FEED TO #2 ABS.N	0.000	0.000	0.007	0.146
"	DISC. TO SEWER	0.000	0.000	0.004	0.037
"	TOTAL GALLONS THROUGH NEW CARBON = 99,179				
2-1-91	FEED TO #1 ABS.S	0.473	6.110	30	695
"	FEED TO #2 ABS.N	0.000	0.000	0.006	0.148
"	DISC. TO SEWER	0.000	0.000	0.002	0.020
"	TOTAL GALLONS THROUGH NEW CARBON = 107,206				
2-4-91	FEED TO #1 ABS.S	0.158	5.961	30	629
"	FEED TO #2 ABS.N	0.000	0.000	0.014	0.298
"	DISC. TO SEWER	0.000	0.000	0.003	0.026
"	TOTAL GALLONS THROUGH NEW CARBON = 130,007				
2-5-91	FEED TO #1 ABS.S	0.550	6.394	37	710
"	FEED TO #2 ABS.N	0.000	0.000	0.007	0.174
"	DISC. TO SEWER	0.000	0.000	0.003	0.021
"	TOTAL GALLONS THROUGH NEW CARBON = 137,886				
2-6-91	FEED TO #1 ABS.S	0.526	6.517	37	710
"	FEED TO #2 ABS.N	0.000	0.000	0.005	0.125
"	DISC. TO SEWER	0.000	0.000	0.003	0.022
"	TOTAL GALLONS THROUGH NEW CARBON = 145,544				
2-7-91	FEED TO #1 ABS.S	0.503	6.170	35	667
"	FEED TO #2 ABS.N	0.000	0.000	0.005	0.137
"	DISC. TO SEWER	0.000	0.000	0.003	0.019
"	TOTAL GALLONS THROUGH NEW CARBON = 153,226				

BASF CORPORATION, CHEMICALS DIVISION, WYANDOTTE SITE

NORTH WORKS GROUNDWATER EXTRACTION WELLS 153,226

DATE	SAMPLE	METHYLENE CHLORIDE	CHLOROFORM	DICHLORO ETHANE	PROPYLENE DICHLORIDE
2-8-91	FEED TO #1 ABS.S	0.566	7.435	42	808
"	FEED TO #2 ABS.N	0.000	0.000	0.004	0.105
"	DISC. TO SEWER	0.000	0.000	0.003	0.022
"	TOTAL GALLONS THROUGH NEW CARBON = 160,477				
2-11-91	FEED TO #1 ABS.S	0.609	7.435	40	804
"	FEED TO #2 ABS.N	0.000	0.000	0.005	0.122
"	DISC. TO SEWER	0.000	0.000	0.003	0.023
"	TOTAL GALLONS THROUGH NEW CARBON = 182,099				
2-12-91	FEED TO #1 ABS.S	0.579	6.922	42	776
"	FEED TO #2 ABS.N	0.000	0.000	0.004	0.098
"	DISC. TO SEWER	0.000	0.000	0.002	0.016
"	TOTAL GALLONS THROUGH NEW CARBON = 189,212				
2-13-91	FEED TO #1 ABS.S	0.495	6.333	36	713
"	FEED TO #2 ABS.N	0.000	0.000	0.004	0.097
"	DISC. TO SEWER	0.000	0.000	0.003	0.022
"	TOTAL GALLONS THROUGH NEW CARBON = 196,289				
2-14-91	FEED TO #1 ABS.S	0.000	6.926	38	734
"	FEED TO #2 ABS.N	0.000	0.000	0.001	0.039
"	DISC. TO SEWER	0.000	0.000	0.002	0.017
"	TOTAL GALLONS THROUGH NEW CARBON = 203,378				
2-15-91	FEED TO #1 ABS.S	1-14-91	System	shut down	@ 3:00 PM.
"	FEED TO #2 ABS.N	Maint. Was	Digging	a Trench	and
"	DISC. TO SEWER	Broke	Water	Line.	
"	TOTAL GALLONS THROUGH NEW CARBON = 205,205				

04/04/89

BASF CORPORATION, CHEMICALS DIVISION, WYANDOTTE SITE

NORTH WORKS GROUNDWATER EXTRACTION WELLS 205,205

DATE	SAMPLE	METHYLENE CHLORIDE	CHLOROFORM	DICHLORO ETHANE	PROPYLENE DICHLORIDE
2-18-91	FEED TO #1 ABS.S	System Down - Maint.		Working on	Broken
"	FEED TO #2 ABS.N	Water Line.	System	Back on @	9:00 AM
"	DISC. TO SEWER				
"	TOTAL GALLONS THROUGH NEW CARBON = 205,205				
2-19-91	FEED TO #1 ABS.S	0.508	6.823	43	792
"	FEED TO #2 ABS.N	0.000	0.000	0.005	0.163
"	DISC. TO SEWER	0.000	0.000	0.002	0.016
"	TOTAL GALLONS THROUGH NEW CARBON = 212,278				
2-20-91	FEED TO #1 ABS.S	0.522	5.939	36	674
"	FEED TO #2 ABS.N	0.000	0.000	0.002	0.101
"	DISC. TO SEWER	0.000	0.000	0.001	0.013
"	TOTAL GALLONS THROUGH NEW CARBON = 220,270				
2-21-91	FEED TO #1 ABS.S	0.543	6.208	37	706
"	FEED TO #2 ABS.N	0.000	0.000	0.004	0.154
"	DISC. TO SEWER	0.000	0.000	0.002	0.015
"	TOTAL GALLONS THROUGH NEW CARBON = 227,815				
2-22-91	FEED TO #1 ABS.S	0.486	6.220	37	695
"	FEED TO #2 ABS.N	0.000	0.000	0.002	0.113
"	DISC. TO SEWER	0.000	0.000	0.000	0.015
"	TOTAL GALLONS THROUGH NEW CARBON = 235,299				
2-25-91	FEED TO #1 ABS.S	0.606	7	39	778
"	FEED TO #2 ABS.N	0.000	0.000	0.002	0.091
"	DISC. TO SEWER	0.000	0.000	0.001	0.011
"	TOTAL GALLONS THROUGH NEW CARBON = 257,631				

BASF CORPORATION, CHEMICALS DIVISION, WYANDOTTE SITE

NORTH WORKS GROUNDWATER EXTRACTION WELLS 257,631

DATE	SAMPLE	METHYLENE CHLORIDE	CHLOROFORM	DICHLORO ETHANE	PROPYLENE DICHLORIDE
2-26-91	FEED TO #1 ABS.S	0.554	7	39	740
"	FEED TO #2 ABS.N	0.000	0.000	0.002	0.116
"	DISC. TO SEWER	0.000	0.000	0.001	0.009
"	TOTAL GALLONS THROUGH NEW CARBON = 265,103				
2-27-91	FEED TO #1 ABS.S	0.372	7	39	777
"	FEED TO #2 ABS.N	0.000	0.000	0.001	0.101
"	DISC. TO SEWER	0.000	0.000	0.001	0.009
"	TOTAL GALLONS THROUGH NEW CARBON = 272,472				
2-28-91	FEED TO #1 ABS.S	0.505	6	38	722
"	FEED TO #2 ABS.N	0.000	0.000	0.001	0.058
"	DISC. TO SEWER	0.000	0.000	0.001	0.009
"	TOTAL GALLONS THROUGH NEW CARBON = 280,024				
3-1-91	FEED TO #1 ABS.S	0.568	6	37	719
"	FEED TO #2 ABS.N	0.000	0.000	0.003	0.124
"	DISC. TO SEWER	0.000	0.000	0.001	0.008
"	TOTAL GALLONS THROUGH NEW CARBON = 287,590				
3-4-91	FEED TO #1 ABS.S	0.555	7	38	757
"	FEED TO #2 ABS.N	0.000	0.000	0.002	0.059
"	DISC. TO SEWER	0.000	0.000	0.001	0.011
"	TOTAL GALLONS THROUGH NEW CARBON = 310,319				
3-5-91	FEED TO #1 ABS.S	0.636 ~~0.000~~	7	42	820
	FEED TO #2 ABS.N	0.000	0.000	0.001	0.049
	DISC. TO SEWER	0.000	0.000	0.001	0.011
	TOTAL GALLONS THROUGH NEW CARBON = 317,824				

04/04/89

BASF CORPORATION, CHEMICALS DIVISION, WYANDOTTE SITE

NORTH WORKS GROUNDWATER EXTRACTION WELLS

317,824

DATE	SAMPLE	METHYLENE CHLORIDE	CHLOROFORM	DICHLORO ETHANE	PROPYLENE DICHLORIDE
3-6-91	FEED TO #1 ABS.S	0.501	6	37	710
"	FEED TO #2 ABS.N	0.000	0.000	0.002	0.057
"	DISC. TO SEWER	0.000	0.000	0.001	0.010
"	TOTAL GALLONS THROUGH NEW CARBON = 325,384				
3-7-91	FEED TO #1 ABS.S	0.544	7	38	770
"	FEED TO #2 ABS.N	0.000	0.000	0.000	0.018
"	DISC. TO SEWER	0.000	0.000	0.001	0.009
"	TOTAL GALLONS THROUGH NEW CARBON = 332,807				
3-8-91	FEED TO #1 ABS.S	0.541	6	36	696
"	FEED TO #2 ABS.N	0.000	0.000	0.000	0.023
"	DISC. TO SEWER	0.000	0.000	0.001	0.008
"	TOTAL GALLONS THROUGH NEW CARBON = 340,390				
3-11-91	FEED TO #1 ABS.S	Baker	Hooking	up New	Gas
"	FEED TO #2 ABS.N	Lines	For G.C.		
"	DISC. TO SEWER				
"	TOTAL GALLONS THROUGH NEW CARBON = 362,957				
3-12-91	FEED TO #1 ABS.S	0.474	6	37	711
"	FEED TO #2 ABS.N	0.000	0.000	0.001	0.038
"	DISC. TO SEWER	0.000	0.000	0.000	0.007
"	TOTAL GALLONS THROUGH NEW CARBON = 370,376				
3-13-91	FEED TO #1 ABS.S	.53	7	39	790
"	FEED TO #2 ABS.N	0	0	.001	.038
"	DISC. TO SEWER	0	0	.001	.007
"	TOTAL GALLONS THROUGH NEW CARBON = 378,088				

04/04/89

BASF CORPORATION, CHEMICALS DIVISION, WYANDOTTE SITE

NORTH WORKS GROUNDWATER EXTRACTION WELLS

DATE	SAMPLE	METHYLENE CHLORIDE	CHLOROFORM	DICHLORO ETHANE	PROPYLENE DICHLORIDE
3-14-91	FEED TO #1 ABS.S	.562	8	41	851
"	FEED TO #2 ABS.N	0	0	.001	.018
"	DISC. TO SEWER	0	0	.001	.010
"	TOTAL GALLONS THROUGH NEW CARBON = 385,699				
3-15-91	FEED TO #1 ABS.S	0.389	4	26	478
"	FEED TO #2 ABS.N	0.000	0.000	0.000	0.012
"	DISC. TO SEWER	0.000	0.000	0.000	0.004
"	TOTAL GALLONS THROUGH NEW CARBON = 393,321				
3-18-91	FEED TO #1 ABS.S	0.479	5	29	566
"	FEED TO #2 ABS.N	0.000	0.000	0.000	0.011
"	DISC. TO SEWER	0.000	0.000	0.000	0.003
"	TOTAL GALLONS THROUGH NEW CARBON = 415,945				
3-19-91	FEED TO #1 ABS.S	0.488	5	29	538
"	FEED TO #2 ABS.N	0.000	0.000	0.001	0.032
"	DISC. TO SEWER	0.000	0.000	0.000	0.005
"	TOTAL GALLONS THROUGH NEW CARBON = 423,726				
3-20-91	FEED TO #1 ABS.S	0.540	7	39	688
"	FEED TO #2 ABS.N	0.000	0.000	0.000	0.011
"	DISC. TO SEWER	0.000	0.000	0.002	0.006
"	TOTAL GALLONS THROUGH NEW CARBON = 431,458				
3-21-91	FEED TO #1 ABS.S	0.627	7	41	738
"	FEED TO #2 ABS.N	0.003	0.000	0.001	0.035
"	DISC. TO SEWER	0.000	0.000	0.000	0.007
"	TOTAL GALLONS THROUGH NEW CARBON = 439,141				

BASF CORPORATION, CHEMICALS DIVISION, WYANDOTTE SITE

NORTH WORKS GROUNDWATER EXTRACTION WELLS 439,141

DATE	SAMPLE	METHYLENE CHLORIDE	CHLOROFORM	DICHLORO ETHANE	PROPYLENE DICHLORIDE
3-22-91	FEED TO #1 ABS.S	0.569	7	36	659
"	FEED TO #2 ABS.N	0.006	0.000	0.004	0.050
"	DISC. TO SEWER	0.000	0.000	0.000	0.006
"	TOTAL GALLONS THROUGH NEW CARBON = 447,234				
3-25-91	FEED TO #1 ABS.S	0.799	9	58	1008
"	FEED TO #2 ABS.N	0.026	0.010	0.958	1.501
"	DISC. TO SEWER	0.000	0.000	0.001	0.010
"	TOTAL GALLONS THROUGH NEW CARBON = 471,638				
3-26-91	FEED TO #1 ABS.S	0.810	9	52	933
"	FEED TO #2 ABS.N	0.052	0.000	1.582	3.064
"	DISC. TO SEWER	0.000	0.000	0.000	0.007
"	TOTAL GALLONS THROUGH NEW CARBON = 479,683				
3-27-91	FEED TO #1 ABS.S	0.851	9	58	1000
"	FEED TO #2 ABS.N	0.036	0.000	1.633	3.089
"	DISC. TO SEWER	0.000	0.000	0.000	0.006
"	TOTAL GALLONS THROUGH NEW CARBON = 487,745				
3-28-91	FEED TO #1 ABS.S	0.779	9	53	973
"	FEED TO #2 ABS.N	0.058	0.000	2.812	8.977
"	DISC. TO SEWER	0.000	0.000	0.000	0.008
"	TOTAL GALLONS THROUGH NEW CARBON = 495,978				
3-29-91	FEED TO #1 ABS.S	0.438	5	30	526
"	FEED TO #2 ABS.N	0.000	0.000	1.175	5.356
"	DISC. TO SEWER	0.000	0.000	0.000	0.008
"	TOTAL GALLONS THROUGH NEW CARBON = 503,937				

04/04/89

BASF CORPORATION, CHEMICALS DIVISION, WYANDOTTE SITE

NORTH WORKS GROUNDWATER EXTRACTION WELLS 503,937

DATE	SAMPLE	METHYLENE CHLORIDE	CHLOROFORM	DICHLORO ETHANE	PROPYLENE DICHLORIDE
4-1-91	FEED TO #1 ABS.S	0.651	8	46	793
"	FEED TO #2 ABS.N	0.232	0.049	6.108	12.673
"	DISC. TO SEWER	0.000	0.000	0.000	0.008
"	TOTAL GALLONS THROUGH NEW CARBON = 528,374				
4-2-91	FEED TO #1 ABS.S	0.773	8	51	851
"	FEED TO #2 ABS.N	0.404	0.100	12	21
"	DISC. TO SEWER	0.000	0.000	0.000	0.006
"	TOTAL GALLONS THROUGH NEW CARBON = 536,397				
4-3-91	FEED TO #1 ABS.S	0.851	8	49	848
4-3-91	FEED TO #2 ABS.N	0.632	0.152	17	24
"	DISC. TO SEWER	0.000	0.000	0.000	0.006
"	TOTAL GALLONS THROUGH NEW CARBON = 544,536				
4-4-91	FEED TO #1 ABS.S	0.428	2	14	192
"	FEED TO #2 ABS.N	0.673	0.000	20	26
"	DISC. TO SEWER	0.000	0.000	0.000	0.005
"	TOTAL GALLONS THROUGH NEW CARBON = [redacted] 550,341				
4-5-91	FEED TO #1 ABS.S	0.628	8	52	869
"	FEED TO #2 ABS.N	1.208	0.347	39	44
"	DISC. TO SEWER	0.000	0.000	0.001	0.008
"	TOTAL GALLONS THROUGH NEW CARBON = 558,704				
4-8-91	FEED TO #1 ABS.S	0.407	5	25	405
"	FEED TO #2 ABS.N	1.358	0.046	61	62
"	DISC. TO SEWER	0.000	0.000	0.000	0.003
"	TOTAL GALLONS THROUGH NEW CARBON = 581,485				

04/04/89

BASF CORPORATION, CHEMICALS DIVISION, WYANDOTTE SITE

NORTH WORKS GROUNDWATER EXTRACTION WELLS 581, 485

DATE	SAMPLE	METHYLENE CHLORIDE	CHLOROFORM	DICHLORO ETHANE	PROPYLENE DICHLORIDE
4-9-91	FEED TO #1 ABS.S	G.C.	Down	For	Repairs
"	FEED TO #2 ABS.N				
"	DISC. TO SEWER				
"	TOTAL GALLONS THROUGH NEW CARBON = 589,200				
	FEED TO #1 ABS.	4-10-91	Shut Down	@ 7 10 AM -	Removed
	FEED TO #2 ABS.	Carbon From	South	Absorber -	Went To
	DISC. TO SEWER	One Absorber -	operation	@ 9 30 AM	
	TOTAL GALLONS THROUGH NEW CARBON = 596,760				
4-11-91	FEED TO #1 ABS.N	0.559	8	52	854
"	FEED TO #2 ABS.S	—	—	—	—
"	DISC. TO SEWER	0.000	0.000	0.002	0.006
"	TOTAL GALLONS THROUGH NEW CARBON = 7,771				
	FEED TO #1 ABS.	4-11-91 Shut	System Down	@ 7 45 AM -	Maint
	FEED TO #2 ABS.	Replaced Drain	lines on	Bottom OF	Both Tanks,
	DISC. TO SEWER	Calgon inspecting	inside OF	South	Tank.
	TOTAL GALLONS THROUGH NEW CARBON = Went To 1 Absob. operation @ 2 30 AM				
	FEED TO #1 ABS.	4-12-91	Charged New	Carbon into	South
	FEED TO #2 ABS.	Absorber,	Went To 2	Absorber	operation
	DISC. TO SEWER	@ 11 30 AM,			
	TOTAL GALLONS THROUGH NEW CARBON =				
4-12-91	FEED TO #1 ABS.N	0.412	4	25	349
"	FEED TO #2 ABS.S	—	—	—	—
"	DISC. TO SEWER	0.000	0.000	0.001	0.006
"	TOTAL GALLONS THROUGH NEW CARBON = 14,078				

BASF CORPORATION, CHEMICALS DIVISION, WYANDOTTE SITE

NORTH WORKS GROUNDWATER EXTRACTION WELLS

14,078

DATE	SAMPLE	METHYLENE CHLORIDE	CHLOROFORM	DICHLORO ETHANE	PROPYLENE DICHLORIDE
4-15-91	FEED TO #1 ABS.N	0.323	3	26	326
"	FEED TO #2 ABS.S	0.000	0.000	0.040	0.092
"	DISC. TO SEWER	0.000	0.000	0.006	0.013
"	TOTAL GALLONS THROUGH NEW CARBON = 37,015				
4-16-91	FEED TO #1 ABS.N	0.610	2	15	204
"	FEED TO #2 ABS.S	0.000	0.000	0.024	0.075
"	DISC. TO SEWER	0.000	0.000	0.005	0.010
"	TOTAL GALLONS THROUGH NEW CARBON = 44,029				
4-17-91	FEED TO #1 ABS.N	0.000	1	7	77
"	FEED TO #2 ABS.S	0.000	0.000	0.008	0.025
"	DISC. TO SEWER	0.000	0.000	0.005	0.011
"	TOTAL GALLONS THROUGH NEW CARBON = 50,251				
4-18-91	FEED TO #1 ABS.N	0.516	7	46	726
"	FEED TO #2 ABS.S	0.000	0.000	0.006	0.030
"	DISC. TO SEWER	0.000	0.000	0.005	0.010
"	TOTAL GALLONS THROUGH NEW CARBON = 57,807				
4-19-91	FEED TO #1 ABS.N	0.577	6	41	658
"	FEED TO #2 ABS.S	0.000	0.000	0.005	0.026
"	DISC. TO SEWER	0.000	0.000	0.004	0.009
"	TOTAL GALLONS THROUGH NEW CARBON = 64,461				
4-22-91	FEED TO #1 ABS.N	0.000	1	10	146
"	FEED TO #2 ABS.S	0.000	0.000	0.008	0.041
"	DISC. TO SEWER	0.000	0.000	0.004	0.015
"	TOTAL GALLONS THROUGH NEW CARBON = 84,703				

04/04/89

BASF CORPORATION, CHEMICALS DIVISION, WYANDOTTE SITE

NORTH WORKS GROUNDWATER EXTRACTION WELLS

84,703

DATE	SAMPLE	METHYLENE CHLORIDE	CHLOROFORM	DICHLORO ETHANE	PROPYLENE DICHLORIDE
4-23-91	FEED TO #1 ABS.N	0.663	8	67	979
"	FEED TO #2 ABS.S	0.000	0.000	0.005	0.047
"	DISC. TO SEWER	0.000	0.000	0.003	0.010
"	TOTAL GALLONS THROUGH NEW CARBON = 92,514				
4-24-91	FEED TO #1 ABS.N	0.357	3	27	399
"	FEED TO #2 ABS.S	0.000	0.000	0.000	0.020
"	DISC. TO SEWER	0.000	0.000	0.000	0.006
"	TOTAL GALLONS THROUGH NEW CARBON = 100,181				
4-25-91	FEED TO #1 ABS.N	0.000	5	38	570
"	FEED TO #2 ABS.S	0.000	0.000	0.003	0.086
"	DISC. TO SEWER	0.000	0.000	0.002	0.008
"	TOTAL GALLONS THROUGH NEW CARBON = 107,284				
4-26-91	FEED TO #1 ABS.N	0.000	3	20	247
"	FEED TO #2 ABS.S	0.000	0.033	0.066	2.462
"	DISC. TO SEWER	0.000	0.000	0.009	0.018
"	TOTAL GALLONS THROUGH NEW CARBON = 111,359				
4-29-91	FEED TO #1 ABS.N	0.731	2	11	134
"	FEED TO #2 ABS.S	0.000	0.000	0.004	0.028
"	DISC. TO SEWER	0.000	0.000	0.002	0.008
"	TOTAL GALLONS THROUGH NEW CARBON = 129,891				
4-30-91	FEED TO #1 ABS.N	0.610	5	28	552
"	FEED TO #2 ABS.S	0.000	0.000	0.002	0.034
"	DISC. TO SEWER	0.000	0.000	0.000	0.002
"	TOTAL GALLONS THROUGH NEW CARBON = 138,094				

04/04/89

BASF CORPORATION, CHEMICALS DIVISION, WYANDOTTE SITE

NORTH WORKS GROUNDWATER EXTRACTION WELLS

138,094

DATE	SAMPLE	METHYLENE CHLORIDE	CHLOROFORM	DICHLORO ETHANE	PROPYLENE DICHLORIDE
5-1-91	FEED TO #1 ABS.N	0.359	3	19	347
"	FEED TO #2 ABS.S	0.000	0.000	0.001	0.017
"	DISC. TO SEWER	0.000	0.000	0.001	0.004
"	TOTAL GALLONS THROUGH NEW CARBON = 145,789				
5-2-91	FEED TO #1 ABS.N	0.000	1	6	132
"	FEED TO #2 ABS.S	0.000	0.000	0.001	0.016
"	DISC. TO SEWER	0.000	0.000	0.000	0.004
"	TOTAL GALLONS THROUGH NEW CARBON = 151,271				
5-3-91	FEED TO #1 ABS.N	0.000	0.374	8	56
"	FEED TO #2 ABS.S	0.000	0.000	0.001	0.023
"	DISC. TO SEWER	0.000	0.000	0.000	0.003
"	TOTAL GALLONS THROUGH NEW CARBON = 158,181				
5-6-91	FEED TO #1 ABS.N	0.673	5	43	702
"	FEED TO #2 ABS.S	0.000	0.000	0.005	0.067
"	DISC. TO SEWER	0.000	0.000	0.009	0.022
"	TOTAL GALLONS THROUGH NEW CARBON = 159,479				
5-7-91	FEED TO #1 ABS.N	0.923	9	56	1045
"	FEED TO #2 ABS.S	0.000	0.000	0.006	0.117
"	DISC. TO SEWER	0.000	0.000	0.006	0.017
"	TOTAL GALLONS THROUGH NEW CARBON = 162,079				
5-8-91	FEED TO #1 ABS.N	0.714	4	28	512
"	FEED TO #2 ABS.S	.000	.000	.002	.051
"	DISC. TO SEWER	.000	.000	.000	.002
"	TOTAL GALLONS THROUGH NEW CARBON = 171,063				

04/04/89

BASF CORPORATION, CHEMICALS DIVISION, WYANDOTTE SITE

NORTH WORKS GROUNDWATER EXTRACTION WELLS

171,063

DATE	SAMPLE	METHYLENE CHLORIDE	CHLOROFORM	DICHLORO ETHANE	PROPYLENE DICHLORIDE
5-9-91	FEED TO #1 ABS.N	0.602	3	31	474
"	FEED TO #2 ABS.S	0.000	0.000	0.000	0.013
"	DISC. TO SEWER	0.000	0.000	0.001	0.005
"	TOTAL GALLONS THROUGH NEW CARBON = 178189				
5-10-91	FEED TO #1 ABS.N	0.989	3	31	502
"	FEED TO #2 ABS.S	0.000	0.000	0.008	0.085
"	DISC. TO SEWER	0.000	0.000	0.000	0.002
"	TOTAL GALLONS THROUGH NEW CARBON = 185221				
5-13-91	FEED TO #1 ABS.N	0.786	0.857	5.94	80.8
"	FEED TO #2 ABS.S	0.000	0.000	0.001	0.017
"	DISC. TO SEWER	0.000	0.000	0.000	0.002
"	TOTAL GALLONS THROUGH NEW CARBON = 204476				
5-14-91	FEED TO #1 ABS.N	0.468	4	24	477
"	FEED TO #2 ABS.S	0.000	0.000	0.002	0.033
"	DISC. TO SEWER	0.000	0.000	0.000	0.002
"	TOTAL GALLONS THROUGH NEW CARBON = 213094				
5-15-91	FEED TO #1 ABS.N	0.464	2	17	295
"	FEED TO #2 ABS.S	0.000	0.000	0.001	0.020
"	DISC. TO SEWER	0.000	0.000	0.000	0.002
"	TOTAL GALLONS THROUGH NEW CARBON = 220,983				
5-16-91	FEED TO #1 ABS.N	.087	~~2~~ 0.9	9.3	141
	FEED TO #2 ABS.S	0.000	0.011	0.001	0.020
	DISC. TO SEWER	0.000	0.000	0.000	0.002
	TOTAL GALLONS THROUGH NEW CARBON = 228,563				

04/04/89

BASF CORPORATION, CHEMICALS DIVISION, WYANDOTTE SITE

NORTH WORKS GROUNDWATER EXTRACTION WELLS

228,593

DATE	SAMPLE	METHYLENE CHLORIDE	CHLOROFORM	DICHLORO ETHANE	PROPYLENE DICHLORIDE
5-17-91	FEED TO #1 ABS.N	0.515	0.28	16	320
"	FEED TO #2 ABS.S	0.00	0.00	0.00	0.006
"	DISC. TO SEWER	0.00	0.00	0.00	0.001
"	TOTAL GALLONS THROUGH NEW CARBON = 236,891				
5-20-91	FEED TO #1 ABS.N	1.25	1.24	3.54	48
"	FEED TO #2 ABS.S	0.00	0.00	0.002	0.044
"	DISC. TO SEWER	0.00	0.00	0.00	0.003
"	TOTAL GALLONS THROUGH NEW CARBON = 250,315				
5-21-91	FEED TO #1 ABS.N	0.00	2.3	21	274
"	FEED TO #2 ABS.S	0.00	0.00	0.00	0.008
"	DISC. TO SEWER	0.00	0.00	0.00	0.002
"	TOTAL GALLONS THROUGH NEW CARBON = 257,264				
5-22-91	FEED TO #1 ABS.N	0.23	1.2	14	153
"	FEED TO #2 ABS.S	0.00	0.00	0.00	0.014
"	DISC. TO SEWER	0.00	0.00	0.00	0.003
"	TOTAL GALLONS THROUGH NEW CARBON = 263,728				
5-23-91	FEED TO #1 ABS.N	0.00	0.00	10	79
"	FEED TO #2 ABS.S	0.00	0.00	0.001	0.009
"	DISC. TO SEWER	0.00	0.00	0.00	0.006
"	TOTAL GALLONS THROUGH NEW CARBON = 270,912				
5-24-91	FEED TO #1 ABS.N	0.00	0.00	9	66
"	FEED TO #2 ABS.S	0.00	0.00	0.001	0.021
"	DISC. TO SEWER	0.00	0.00	0.00	0.001
"	TOTAL GALLONS THROUGH NEW CARBON = 278,471				

04/04/89

BASF CORPORATION, CHEMICALS DIVISION, WYANDOTTE SITE

NORTH WORKS GROUNDWATER EXTRACTION WELLS 278,471

DATE	SAMPLE	METHYLENE CHLORIDE	CHLOROFORM	DICHLORO ETHANE	PROPYLENE DICHLORIDE
5-27-91	FEED TO #1 ABS.N	1.0	1.0	6.7	62
"	FEED TO #2 ABS.S	0.00	0.00	0.001	0.024
"	DISC. TO SEWER	0.00	0.00	0.00	0.003
"	TOTAL GALLONS THROUGH NEW CARBON = 301,155				
5-28-91	FEED TO #1 ABS.N	0.519	8	11	105
"	FEED TO #2 ABS.S	0.000	0.000	0.001	0.012
"	DISC. TO SEWER	0.000	0.000	0.000	0.000
"	TOTAL GALLONS THROUGH NEW CARBON = 307,845				
5-29-91	FEED TO #1 ABS.N	.256	.3	6.8	55
"	FEED TO #2 ABS.S	0.000	0.000	0.001	0.010
"	DISC. TO SEWER	0.000	0.000	0.000	0.001
"	TOTAL GALLONS THROUGH NEW CARBON = 315,101				
5-30-91	FEED TO #1 ABS.N	0.000	0.000	3.4	36
"	FEED TO #2 ABS.S	0.000	0.000	0.001	0.010 ~~0.010~~
"	DISC. TO SEWER	0.000	0.000	0.000	0.001
"	TOTAL GALLONS THROUGH NEW CARBON = 321638				
5-31-91	FEED TO #1 ABS.	0.000	0.000	3	16
"	FEED TO #2 ABS.	0.000	0.000	0.0003	0.009 ~~0.009~~
"	DISC. TO SEWER	0.000	0.000	0.000	0.003
"	TOTAL GALLONS THROUGH NEW CARBON = 328531				
6-3-91	FEED TO #1 ABS.N	1.4	1.3	11	78
"	FEED TO #2 ABS.S	0.00	0.00	0.0003	0.010
"	DISC. TO SEWER	0.00	0.00	0.00	0.002
"	TOTAL GALLONS THROUGH NEW CARBON = 351,486				

04/04/89

BASF CORPORATION, CHEMICALS DIVISION, WYANDOTTE SITE

NORTH WORKS GROUNDWATER EXTRACTION WELLS 351,486

DATE	SAMPLE	METHYLENE CHLORIDE	CHLOROFORM	DICHLORO ETHANE	PROPYLENE DICHLORIDE
6-1-91	FEED TO #1 ABS.N	System	Down -	Maint	is
"	FEED TO #2 ABS.S	Acid	Washing	lines.	
"	DISC. TO SEWER	6-5-91	system back on	@ 11:30 AM.	
"	TOTAL GALLONS THROUGH NEW CARBON = 351,486				
6-6-91	FEED TO #1 ABS.N	0.00	0.7	8	87
"	FEED TO #2 ABS.S	0.00	0.00	0.001	0.012
"	DISC. TO SEWER	0.00	0.00	0.00	0.002
"	TOTAL GALLONS THROUGH NEW CARBON = 358,151				
6-7-91	FEED TO #1 ABS.N	0.00	0.5	3	47
"	FEED TO #2 ABS.S	0.00	0.00	0.00	0.006
"	DISC. TO SEWER	0.00	0.00	0.00	0.003
"	TOTAL GALLONS THROUGH NEW CARBON = 364,400				
6-10-91	FEED TO #1 ABS.N	—	—	—	—
"	FEED TO #2 ABS.S	—	—	—	—
"	DISC. TO SEWER	—	—	—	—
"	TOTAL GALLONS THROUGH NEW CARBON = 386,549				
6-11-91	FEED TO #1 ABS.N	—	—	—	—
"	FEED TO #2 ABS.S	—	—	—	—
"	DISC. TO SEWER	—	—	—	—
"	TOTAL GALLONS THROUGH NEW CARBON = 391 777				
6-12-91	FEED TO #1 ABS.N	0.00	0.00	1.8	24
"	FEED TO #2 ABS.S	0.00	0.00	0.00	0.005
"	DISC. TO SEWER	0.00	0.00	0.00	0.001
"	TOTAL GALLONS THROUGH NEW CARBON = 397,268				

04/04/89

BASF CORPORATION, CHEMICALS DIVISION, WYANDOTTE SITE

NORTH WORKS GROUNDWATER EXTRACTION WELLS

397,268

DATE	SAMPLE	METHYLENE CHLORIDE	CHLOROFORM	DICHLORO ETHANE	PROPYLENE DICHLORIDE
6-13-91	FEED TO #1 ABS.N	0.00	0.00	1.9	28
"	FEED TO #2 ABS.S	0.00	0.00	0.00	0.010
"	DISC. TO SEWER	0.00	0.00	0.00	0.003
"	TOTAL GALLONS THROUGH NEW CARBON = 405,020				
6-14-91	FEED TO #1 ABS.N	0.00	0.824	3.4	68
"	FEED TO #2 ABS.S	0.00	0.00	0.007	0.279
"	DISC. TO SEWER	0.00	0.00	0.002	0.038
"	TOTAL GALLONS THROUGH NEW CARBON = 408,378				
	FEED TO #1 ABS.N	6-14-91	System Down - Replacing		Gould
	FEED TO #2 ABS.S	Pumps -	R. Disk.	North Absorber.	
	DISC. TO SEWER	6-19-91 System Back on @ 8:30 AM.			
	TOTAL GALLONS THROUGH NEW CARBON =				
6-20-91	FEED TO #1 ABS.N	5.9	0.00	8.1	29
"	FEED TO #2 ABS.S	0.010	0.004	0.144	1.334
"	DISC. TO SEWER	0.00	0.00	0.00	0.002
"	TOTAL GALLONS THROUGH NEW CARBON = 413,501				
6-21-91	FEED TO #1 ABS.N	0.00	0.00	7.9	25
"	FEED TO #2 ABS.S	0.009	0.003	0.144	1.2
"	DISC. TO SEWER	0.00	0.00	0.001	0.004
"	TOTAL GALLONS THROUGH NEW CARBON = 417,992				
6-24-91	FEED TO #1 ABS.N	0.87	3.8	27	429
"	FEED TO #2 ABS.S	0.013	0.00	0.203	1.5
"	DISC. TO SEWER	0.00	0.00	0.00	0.001
"	TOTAL GALLONS THROUGH NEW CARBON = 431,173				

BASF CORPORATION, CHEMICALS DIVISION, WYANDOTTE SITE

NORTH WORKS GROUNDWATER EXTRACTION WELLS 431,173

DATE	SAMPLE	METHYLENE CHLORIDE	CHLOROFORM	DICHLORO ETHANE	PROPYLENE DICHLORIDE
6-25-91	FEED TO #1 ABS.N	0.000	0.724	10	103
"	FEED TO #2 ABS.S	0.012	0.000	0.208	1.4
"	DISC. TO SEWER	0.000	0.000	0.000	0.001
"	TOTAL GALLONS THROUGH NEW CARBON = 435,678				
6-26-91	FEED TO #1 ABS.N	0.625	0.724	8.0	101
	FEED TO #2 ABS.S	0.012	0.000	0.847	2.0
	DISC. TO SEWER	0.00	0.00	0.00	0.00
	TOTAL GALLONS THROUGH NEW CARBON = 445,048				
6-27-91	FEED TO #1 ABS.N	0.467	0.560	5.0	70
"	FEED TO #2 ABS.S	0.010	0.000	0.205	1.4
"	DISC. TO SEWER	0.00	0.00	0.00	0.00
"	TOTAL GALLONS THROUGH NEW CARBON = 455,179				
6-28-91	FEED TO #1 ABS.N	0.426	0.811	11	119
"	FEED TO #2 ABS.S	0.010	0.000	0.267	2.094
"	DISC. TO SEWER	0.000	0.000	0.000	0.000
"	TOTAL GALLONS THROUGH NEW CARBON = 463,208				
7-1-91	FEED TO #1 ABS.N	instrument	malfunction	unable to	run sampler
"	FEED TO #2 ABS.S	through 7-4	+ 25545		
"	DISC. TO SEWER		+ 10094	53478	
			8492		
"	TOTAL GALLONS THROUGH NEW CARBON =		+ 9347	516686	
7-5-91	FEED TO #1 ABS.	0.000	0.444	4.9	63
"	FEED TO #2 ABS.	0.003	0.000	0.230	2.0
"	DISC. TO SEWER	0.000	0.000	0.000	0.000
"	TOTAL GALLONS THROUGH NEW CARBON = 528201				

04/04/89

BASF CORPORATION, CHEMICALS DIVISION, WYANDOTTE SITE

NORTH WORKS GROUNDWATER EXTRACTION WELLS 528201

DATE	SAMPLE	METHYLENE CHLORIDE	CHLOROFORM	DICHLORO ETHANE	PROPYLENE DICHLORIDE
7-8-91	FEED TO #1 ABS.N	0.00	0.383	5.0	55
"	FEED TO #2 ABS.S	0.00	0.00	0.258	2.3
"	DISC. TO SEWER	0.00	0.00	0.00	0.00
"	TOTAL GALLONS THROUGH NEW CARBON = 545 067				
7-9-91	FEED TO #1 ABS.N	0.104	0.609	8	88
7-9-91	FEED TO #2 ABS.S	0.003	0.000	0.211	2.038
"	DISC. TO SEWER	0.000	0.000	0.000	0.000
"	TOTAL GALLONS THROUGH NEW CARBON = 551,877				
7-10-91	FEED TO #1 ABS.N	0.132	0.597	10	91
"	FEED TO #2 ABS.S	0.002	0.000	0.220	1.8
"	DISC. TO SEWER	0.000	0.000	0.000	0.000
"	TOTAL GALLONS THROUGH NEW CARBON = 558,359				
7-11-91	FEED TO #1 ABS.N	0.109	0.533	8	84
"	FEED TO #2 ABS.S	0.003	0.000	0.192	1.5
"	DISC. TO SEWER	0.000	0.000	0.000	0.000
"	TOTAL GALLONS THROUGH NEW CARBON = 574,761				
7-12-91	FEED TO #1 ABS.N	0.000	0.481	6	74
"	FEED TO #2 ABS.S	0.002	0.000	0.213	1.9
"	DISC. TO SEWER	0.000	0.000	0.000	0.000
"	TOTAL GALLONS THROUGH NEW CARBON = 590,033				
7-15-91	FEED TO #1 ABS.N	0.662	1.2	14	82
"	FEED TO #2 ABS.S	0.005	0.000	0.149	1.1
"	DISC. TO SEWER	0.000	0.000	0.000	0.000
"	TOTAL GALLONS THROUGH NEW CARBON = 622,827				

04/04/89

BASF CORPORATION, CHEMICALS DIVISION, WYANDOTTE SITE

NORTH WORKS GROUNDWATER EXTRACTION WELLS 622,827

DATE	SAMPLE	METHYLENE CHLORIDE	CHLOROFORM	DICHLORO ETHANE	PROPYLENE DICHLORIDE
7-16-91	FEED TO #1 ABS.N	0.363	0.634	7.5	87
"	FEED TO #2 ABS.S	0.007	0.000	0.185	1.5
"	DISC. TO SEWER	0.000	0.000	0.000	0.000
"	TOTAL GALLONS THROUGH NEW CARBON = 629,921				
7-17-91	FEED TO #1 ABS.N	0.263	0.655	7.2	90
"	FEED TO #2 ABS.S	0.008	0.000	0.172	1.2
"	DISC. TO SEWER	0.000	0.000	0.000	0.000
"	TOTAL GALLONS THROUGH NEW CARBON = 637,282				
7-18-91	FEED TO #1 ABS.	0.269	0.689	7.3	96
"	FEED TO #2 ABS.	0.007	0.000	0.184	1.4
"	DISC. TO SEWER	0.000	0.000	0.000	0.000
"	TOTAL GALLONS THROUGH NEW CARBON = 644800				
7-19-91	FEED TO #1 ABS.	0.269	0.666	6.9	89
"	FEED TO #2 ABS.	0.008	0.000	0.580	1.3
"	DISC. TO SEWER	0.000	0.000	0.000	0.000
"	TOTAL GALLONS THROUGH NEW CARBON = 652,344				
7-22-91	FEED TO #1 ABS.	GC	Down		
"	FEED TO #2 ABS.				
"	DISC. TO SEWER				
"	TOTAL GALLONS THROUGH NEW CARBON = 675449				
7-23-91	FEED TO #1 ABS.	GC	Down		
"	FEED TO #2 ABS.				
"	DISC. TO SEWER				
"	TOTAL GALLONS THROUGH NEW CARBON = 686,747				

04/04/89

BASF CORPORATION, CHEMICALS DIVISION, WYANDOTTE SITE

NORTH WORKS GROUNDWATER EXTRACTION WELLS 686,717

DATE	SAMPLE	METHYLENE CHLORIDE	CHLOROFORM	DICHLORO ETHANE	PROPYLENE DICHLORIDE
7-24-91	FEED TO #1 ABS.N	0.297 ~~0.000~~	0.417 ~~0.000~~	6 ~~0.000~~	64 ~~0.000~~
"	FEED TO #2 ABS.S	0.013	0.000	0.163	1.2
"	DISC. TO SEWER	0.000	0.000	0.000	0.000
"	TOTAL GALLONS THROUGH NEW CARBON = 699,759				
7-25-91	FEED TO #1 ABS.N	0.000	0.216	2.3	31.3
"	FEED TO #2 ABS.S	0.020	0.000	0.170	1.2
"	DISC. TO SEWER	0.000	0.000	0.000	0.000
"	TOTAL GALLONS THROUGH NEW CARBON = 717,926				
7-26-91	FEED TO #1 ABS.N	0.000	0.266	2.9	37
"	FEED TO #2 ABS.S	0.016	0.000	0.152	1.0
"	DISC. TO SEWER	0.000	0.000	0.000	0.000
"	TOTAL GALLONS THROUGH NEW CARBON = 734,711				
7-29-91	FEED TO #1 ABS.N	Shut System	Down @ 7 40 AM	Removed Carbon	
"	FEED TO #2 ABS.S	From North	Absorber.	Went To 1-	Absorber
"	DISC. TO SEWER	operation	@ 10 45 AM		
"	TOTAL GALLONS THROUGH NEW CARBON = 768,117				
7-30-91	FEED TO #1 ABS.S	0.031	0.302	6.5	46
"	FEED TO #2 ABS.N	—	—	—	—
"	DISC. TO SEWER	0.000	0.000	0.000	0.001
"	TOTAL GALLONS THROUGH NEW CARBON = 6997				
	FEED TO #1 ABS.	7-30-91	Shut System	Down	@ 7 15 AM.
	FEED TO #2 ABS.	Repairs	To North	Absorber.	
	DISC. TO SEWER				
	TOTAL GALLONS THROUGH NEW CARBON =				

04/04/89

BASF CORPORATION, CHEMICALS DIVISION, WYANDOTTE SITE

NORTH WORKS GROUNDWATER EXTRACTION WELLS 6997

DATE	SAMPLE	METHYLENE CHLORIDE	CHLOROFORM	DICHLORO ETHANE	PROPYLENE DICHLORIDE
	FEED TO #1 ABS.S	North Absorber – Sand Blasted and Recoated. (Gene)			
	FEED TO #2 ABS.N	8-1-91 Went 1-Absorber operation			
	DISC. TO SEWER	@ 8:50 AM.			
	TOTAL GALLONS THROUGH NEW CARBON = 6997				
8-2-91	FEED TO #1 ABS.S	0.296	0.579	9	100
"	FEED TO #2 ABS.N				
"	DISC. TO SEWER	0.000	0.000	0.000	0.000
"	TOTAL GALLONS THROUGH NEW CARBON = 7689				
8-5-91	FEED TO #1 ABS.	.99	1.2	9.3	85
"	FEED TO #2 ABS.	0.000	0.000	0.000	0.001
"	DISC. TO SEWER	0.000	0.000	0.000	0.001
"	TOTAL GALLONS THROUGH NEW CARBON = 38452				
8-6-91	FEED TO #1 ABS.	0.000	0.229	3.0	33
"	FEED TO #2 ABS.	0.000	0.000	0.000	0.001
"	DISC. TO SEWER	0.000	0.000	0.000	0.000
"	TOTAL GALLONS THROUGH NEW CARBON = 59173				
8-7-91	FEED TO #1 ABS.	0.000	0.3	3.9	43
"	FEED TO #2 ABS.	0.000	0.000	0.000	0.000
"	DISC. TO SEWER	0.000	0.000	0.000	0.000
"	TOTAL GALLONS THROUGH NEW CARBON = 73398				
8-8-91	FEED TO #1 ABS.	0.000	0.159	1.9	23
"	FEED TO #2 ABS.	0.000	0.000	0.000	0.001
"	DISC. TO SEWER	0.000	0.000	0.000	0.000
"	TOTAL GALLONS THROUGH NEW CARBON = 91517				

04/04/89

BASF CORPORATION, CHEMICALS DIVISION, WYANDOTTE SITE

NORTH WORKS GROUNDWATER EXTRACTION WELLS

91517

DATE	SAMPLE	METHYLENE CHLORIDE	CHLOROFORM	DICHLORO ETHANE	PROPYLENE DICHLORIDE
8-9-91	FEED TO #1 ABS.	0.000	0.287	3.0	34
"	FEED TO #2 ABS.	0.000	0.000	0.000	0.0004
"	DISC. TO SEWER	0.000	0.000	0.000	0.000
"	TOTAL GALLONS THROUGH NEW CARBON = 111865				
8-12-91	FEED TO #1 ABS.	0.559	0.888	5.6	53
"	FEED TO #2 ABS.	0.000	0.000	0.000	0.001
"	DISC. TO SEWER	0.000	0.000	0.000	0.002
"	TOTAL GALLONS THROUGH NEW CARBON = 144011				
8-13-91	FEED TO #1 ABS.	0.000	0.338	4.8	48
"	FEED TO #2 ABS.	0.000	0.000	0.000	0.001
"	DISC. TO SEWER	0.000	0.000	0.000	0.001
"	TOTAL GALLONS THROUGH NEW CARBON = 157971				
8-14-91	FEED TO #1 ABS.	0.000	0.306	4.7	46
"	FEED TO #2 ABS.	0.000	0.000	0.000	0.001
"	DISC. TO SEWER	0.000	0.000	0.000	0.004
"	TOTAL GALLONS THROUGH NEW CARBON = 172651				
8-15-91	FEED TO #1 ABS.	No Samples	Taken		
"	FEED TO #2 ABS.				
"	DISC. TO SEWER				
8-16-91	TOTAL GALLONS THROUGH NEW CARBON = ~~208000~~ 186041				
"	FEED TO #1 ABS.	0.000	0.639	5	81
"	FEED TO #2 ABS.	0.000	0.000	0.000	0.001
"	DISC. TO SEWER	0.000	0.000	0.000	0.000
"	TOTAL GALLONS THROUGH NEW CARBON = 221397				

04/04/89

BASF CORPORATION, CHEMICALS DIVISION, WYANDOTTE SITE

NORTH WORKS GROUNDWATER EXTRACTION WELLS

221397

DATE	SAMPLE	METHYLENE CHLORIDE	CHLOROFORM	DICHLORO ETHANE	PROPYLENE DICHLORIDE
8-19-91	FEED TO #1 ABS.S	0.000	1.9	6.6	105
"	FEED TO #2 ABS.N	0.000	0.000	0.000	0.001
"	DISC. TO SEWER	0.000	0.000	0.000	0.001
"	TOTAL GALLONS THROUGH NEW CARBON = 336,462				
8-20-91	FEED TO #1 ABS.S	0.000	0.8	5.6	99
"	FEED TO #2 ABS.N	0.000	0.000	0.000	0.001
"	DISC. TO SEWER	0.000	0.000	0.000	0.001
"	TOTAL GALLONS THROUGH NEW CARBON = 375,462				
8-21-91	FEED TO #1 ABS.S	0.000	0.7	5.6	90
"	FEED TO #2 ABS.N	0.000	0.000	0.000	0.001
"	DISC. TO SEWER	0.000	0.000	0.000	0.001
"	TOTAL GALLONS THROUGH NEW CARBON = 414,432				
8-22-91	FEED TO #1 ABS.S	0.000	0.4	5.0	85
"	FEED TO #2 ABS.N	0.000	0.000	0.000	0.001
"	DISC. TO SEWER	0.000	0.000	0.000	0.001
"	TOTAL GALLONS THROUGH NEW CARBON = 453,441				
8-23-91	FEED TO #1 ABS.S	0.000	0.9	6.3	102
"	FEED TO #2 ABS.N	0.000	0.000	0.001	0.022
"	DISC. TO SEWER	0.000	0.000	0.000	0.000
"	TOTAL GALLONS THROUGH NEW CARBON = 490,306				
8-26-91	FEED TO #1 ABS.S	0.000	0.673	4.1	69
"	FEED TO #2 ABS.N	0.000	0.000	0.000	0.002
"	DISC. TO SEWER	0.000	0.000	0.000	0.000
"	TOTAL GALLONS THROUGH NEW CARBON = 597,914				

04/04/89

BASF CORPORATION, CHEMICALS DIVISION, WYANDOTTE SITE

NORTH WORKS GROUNDWATER EXTRACTION WELLS

597,914

DATE	SAMPLE	METHYLENE CHLORIDE	CHLOROFORM	DICHLORO ETHANE	PROPYLENE DICHLORIDE
8-27-91	FEED TO #1 ABS.S	0.134	0.724	4.0	68
"	FEED TO #2 ABS.N	0.000	0.000	0.000	0.007
"	DISC. TO SEWER	0.000	0.000	0.000	0.000
"	TOTAL GALLONS THROUGH NEW CARBON = 635,211				
8-28-91	FEED TO #1 ABS.S	0.147	1.015	6.0	102
"	FEED TO #2 ABS.N	0.000	0.000	0.000	0.005
"	DISC. TO SEWER	0.000	0.000	0.000	0.000
"	TOTAL GALLONS THROUGH NEW CARBON = 670,888				
8-29-91	FEED TO #1 ABS.S	0.245	1.885	11.8	182
"	FEED TO #2 ABS.N	0.000	0.000	0.000	0.006
"	DISC. TO SEWER	0.000	0.000	0.000	0.001
"	TOTAL GALLONS THROUGH NEW CARBON = 694,853				
8-30-91	FEED TO #1 ABS.S	0.000	1.836	7.5	119
"	FEED TO #2 ABS.N	0.000	0.000	0.001	0.015
"	DISC. TO SEWER	0.000	0.000	0.000	0.000
"	TOTAL GALLONS THROUGH NEW CARBON = 724,323				
9-2-91	FEED TO #1 ABS.S	0.424	1.688	11.3	186
"	FEED TO #2 ABS.N	0.000	0.000	0.000	0.001
"	DISC. TO SEWER	0.000	0.000	0.000	0.000
"	TOTAL GALLONS THROUGH NEW CARBON = 794,946				
9-3-91	FEED TO #1 ABS.S	0.180	0.840	6.2	71
"	FEED TO #2 ABS.N	0.000	0.000	0.000	0.005
"	DISC. TO SEWER	0.000	0.000	0.000	0.000
"	TOTAL GALLONS THROUGH NEW CARBON = 811,395				

04/04/89

BASF CORPORATION, CHEMICALS DIVISION, WYANDOTTE SITE

NORTH WORKS GROUNDWATER EXTRACTION WELLS 811,395

DATE	SAMPLE	METHYLENE CHLORIDE	CHLOROFORM	DICHLORO ETHANE	PROPYLENE DICHLORIDE
9-1-91	FEED TO #1 ABS.S	0.000	0.536	4.1	52
"	FEED TO #2 ABS.N	0.000	0.000	0.000	0.002
"	DISC. TO SEWER	0.000	0.000	0.000	0.000
"	TOTAL GALLONS THROUGH NEW CARBON = 822,490				
	FEED TO #1 ABS.	9-1-91 System Shut Down @ 9:30 AM,			
	FEED TO #2 ABS.	Maint Hooking up New Control system,			
	DISC. TO SEWER	9-12-91 System Back on. #10 Well is The only One Running			
	TOTAL GALLONS THROUGH NEW CARBON =				
9-13-91	FEED TO #1 ABS.S	0.622	7.707	55.2	947
"	FEED TO #2 ABS.N	0.000	0.000	0.002	0.036
"	DISC. TO SEWER	0.000	0.000	0.000	0.001
"	TOTAL GALLONS THROUGH NEW CARBON = 826,020				
9-16-91	FEED TO #1 ABS.S	0.233	1.934	14.6	244
"	FEED TO #2 ABS.N	0.000	0.000	0.001	0.020
"	DISC. TO SEWER	0.000	0.000	0.000	0.001
"	TOTAL GALLONS THROUGH NEW CARBON = 851,655				
9-17-91	FEED TO #1 ABS.S	Elect.	OuTage	-(Lab.)	
"	FEED TO #2 ABS.N				
"	DISC. TO SEWER				
"	TOTAL GALLONS THROUGH NEW CARBON = 861,315				
9-18-91	FEED TO #1 ABS.S	0.233	0.665	5.7	89
"	FEED TO #2 ABS.N	0.000	0.000	0.001	0.013
"	DISC. TO SEWER	0.000	0.000	0.000	0.001
"	TOTAL GALLONS THROUGH NEW CARBON = 868,477				

04/04/89

BASF CORPORATION, CHEMICALS DIVISION, WYANDOTTE SITE

NORTH WORKS GROUNDWATER EXTRACTION WELLS 868,477

DATE	SAMPLE	METHYLENE CHLORIDE	CHLOROFORM	DICHLORO ETHANE	PROPYLENE DICHLORIDE
9-19-91	FEED TO #1 ABS.S	Having Problems		With	
"	FEED TO #2 ABS.N		GC		
"	DISC. TO SEWER				
"	TOTAL GALLONS THROUGH NEW CARBON = 875,990				
9-20-91	FEED TO #1 ABS.S	—	—	—	—
"	FEED TO #2 ABS.N	—	—	—	—
"	DISC. TO SEWER	—	—	—	—
"	TOTAL GALLONS THROUGH NEW CARBON = 883,177				
9-23-91	FEED TO #1 ABS.S	0.374	1.094	7.6	132
"	FEED TO #2 ABS.N	0.000	0.000	0.001	0.008
"	DISC. TO SEWER	0.000	0.000	0.000	0.001
"	TOTAL GALLONS THROUGH NEW CARBON = 906,727				
9-24-91	FEED TO #1 ABS.S	0.227	0.658	4.0	85
"	FEED TO #2 ABS.N	0.000	0.000	0.000	0.003
"	DISC. TO SEWER	0.000	0.000	0.000	0.000
"	TOTAL GALLONS THROUGH NEW CARBON = 916,100				
9-25-91	FEED TO #1 ABS.S	0.396	0.711	6.1	94
"	FEED TO #2 ABS.N	0.000	0.000	0.000	0.008
"	DISC. TO SEWER	0.000	0.000	0.000	0.000
"	TOTAL GALLONS THROUGH NEW CARBON = 923,893				
9-26-91	FEED TO #1 ABS.S	0.249	0.882	7.2	119
"	FEED TO #2 ABS.N	0.000	0.000	0.000	0.003
"	DISC. TO SEWER	0.000	0.000	0.000	0.000
"	TOTAL GALLONS THROUGH NEW CARBON = 934,212				

04/04/89

BASF CORPORATION, CHEMICALS DIVISION, WYANDOTTE SITE

NORTH WORKS GROUNDWATER EXTRACTION WELLS 934,212

DATE	SAMPLE	METHYLENE CHLORIDE	CHLOROFORM	DICHLORO ETHANE	PROPYLENE DICHLORIDE
9-27-91	FEED TO #1 ABS.S	0.437	3.276	20.7	428
"	FEED TO #2 ABS.N	0.000	0.000	0.002	0.046
"	DISC. TO SEWER	0.000	0.000	0.000	0.000
"	TOTAL GALLONS THROUGH NEW CARBON = 945,606				
9-30-91	FEED TO #1 ABS.S	0.500	3.723	20.1	448
"	FEED TO #2 ABS.N	0.000	0.000	0.001	0.017
"	DISC. TO SEWER	0.000	0.000	0.000	0.000
"	TOTAL GALLONS THROUGH NEW CARBON = 983,989				
10-1-91	FEED TO #1 ABS.S	0.377	3.710	19.9	443
"	FEED TO #2 ABS.N	0.000	0.000	0.002	0.062
"	DISC. TO SEWER	0.000	0.000	0.000	0.000
"	TOTAL GALLONS THROUGH NEW CARBON = 991,728				
10-2-91	FEED TO #1 ABS.S	0.335	3.159	16.3	378
"	FEED TO #2 ABS.N	0.000	0.000	0.001	0.026
"	DISC. TO SEWER	0.000	0.000	0.000	0.000
"	TOTAL GALLONS THROUGH NEW CARBON = 1,000,780				
10-3-91	FEED TO #1 ABS.S	0.314	2.910	17.5	367
"	FEED TO #2 ABS.N	0.000	0.000	0.000	0.006
"	DISC. TO SEWER	0.000	0.000	0.000	0.000
"	TOTAL GALLONS THROUGH NEW CARBON = 1,007,890				
10-4-91	FEED TO #1 ABS.S	0.583	3.767	20.8	413
10-4-91	FEED TO #2 ABS.N	0.000	0.000	0.001	0.018
"	DISC. TO SEWER	0.000	0.000	0.000	0.000
"	TOTAL GALLONS THROUGH NEW CARBON = 1,011,413				

04/04/89

BASF CORPORATION, CHEMICALS DIVISION, WYANDOTTE SITE

NORTH WORKS GROUNDWATER EXTRACTION WELLS 1,011,413

DATE	SAMPLE	METHYLENE CHLORIDE	CHLOROFORM	DICHLORO ETHANE	PROPYLENE DICHLORIDE
10-7-91	FEED TO #1 ABS.S	0.235	4.969	26.1	605
"	FEED TO #2 ABS.N	0.000	0.000	0.001	0.007
"	DISC. TO SEWER	0.000	0.000	0.000	0.000
"	TOTAL GALLONS THROUGH NEW CARBON = 1,027,050				
10-8-91	FEED TO #1 ABS.S	0.122	4.848	27.0	606
"	FEED TO #2 ABS.N	0.000	0.000	0.001	0.016
"	DISC. TO SEWER	0.000	0.000	0.000	0.000
"	TOTAL GALLONS THROUGH NEW CARBON = 1,032,219				
10-9-91	FEED TO #1 ABS.S	0.344	4.548	25.9	587
"	FEED TO #2 ABS.N	0.000	0.000	0.001	0.024
"	DISC. TO SEWER	0.000	0.000	0.000	0.000
"	TOTAL GALLONS THROUGH NEW CARBON = 1,037,473				
10-10-91	FEED TO #1 ABS.S	0.623	12.632	56.8	1190
"	FEED TO #2 ABS.N	0.000	0.000	0.001	0.021
"	DISC. TO SEWER	0.000	0.000	0.000	0.000
"	TOTAL GALLONS THROUGH NEW CARBON = 1,043,869				
10-11-91	FEED TO #1 ABS.S	0.467	5.441	30.7	682
"	FEED TO #2 ABS.N	0.000	0.000	0.000	0.002
"	DISC. TO SEWER	0.000	0.000	0.000	0.000
"	TOTAL GALLONS THROUGH NEW CARBON = 1,049,321				
10-14-91	FEED TO #1 ABS.S	0.160	4.798	28.2	574
"	FEED TO #2 ABS.N	0.000	0.000	0.000	0.007
"	DISC. TO SEWER	0.000	0.000	0.000	0.002
"	TOTAL GALLONS THROUGH NEW CARBON = 1,064,820				

04/04/89

BASF CORPORATION, CHEMICALS DIVISION, WYANDOTTE SITE

NORTH WORKS GROUNDWATER EXTRACTION WELLS 1,162,099

DATE	SAMPLE	METHYLENE CHLORIDE	CHLOROFORM	DICHLORO ETHANE	PROPYLENE DICHLORIDE
11-1-91	FEED TO #1 ABS.S	System	was shut	Down - 10-	31-91.
"	FEED TO #2 ABS.N	When it	was Put	on @ 3:15 pm.	Gould
"	DISC. TO SEWER	Pumps	Were Not	Started	
"	TOTAL GALLONS THROUGH NEW CARBON = 1,162,351				
11-4-91	FEED TO #1 ABS.S	0.000	1.354	11.9	216
"	FEED TO #2 ABS.N	0.619	0.216	41.5	977
"	DISC. TO SEWER	0.000	0.000	0.000	0.000
"	TOTAL GALLONS THROUGH NEW CARBON = 1,174,670				
11-5-91	FEED TO #1 ABS.S	11-4-91 - Maint	shut system	Down.	Working on
"	FEED TO #2 ABS.N	Ground	Water-	Lines.	
"	DISC. TO SEWER	11-12-91	System	Back in	Service
"	TOTAL GALLONS THROUGH NEW CARBON = 1,174,670		@ 2:00 PM		
11-13-91	FEED TO #1 ABS.S	0.544	3.469	30.2	554
"	FEED TO #2 ABS.N	0.419	0.000	20.5	58.7
"	DISC. TO SEWER	0.000	0.000	0.000	0.003
"	TOTAL GALLONS THROUGH NEW CARBON = 1,181,204				
11-14-91	FEED TO #1 ABS.S	0.495	5.086	27.7	686
"	FEED TO #2 ABS.N	0.346	0.000	17.4	59.5
"	DISC. TO SEWER	0.000	0.000	0.000	0.003
"	TOTAL GALLONS THROUGH NEW CARBON = 1,188,021				
11-15-91	FEED TO #1 ABS.S	0.497	5.217	32.1	762
"	FEED TO #2 ABS.N	0.302	0.000	16.1	59
"	DISC. TO SEWER	0.000	0.000	0.000	0.001
"	TOTAL GALLONS THROUGH NEW CARBON = 1,194,080				

04/04/89

BASF CORPORATION, CHEMICALS DIVISION, WYANDOTTE SITE

NORTH WORKS GROUNDWATER EXTRACTION WELLS 1,093,842

DATE	SAMPLE	METHYLENE CHLORIDE	CHLOROFORM	DICHLORO ETHANE	PROPYLENE DICHLORIDE
10-21-91	FEED TO #1 ABS.S	0.470	2.866	25.2	375
"	FEED TO #2 ABS.N	0.010	0.000	0.004	0.017
"	DISC. TO SEWER	0.000	0.000	0.000	0.001
"	TOTAL GALLONS THROUGH NEW CARBON = 1,101,952				
10-25-91	FEED TO #1 ABS.S	0.380	2.767	23.1	365
"	FEED TO #2 ABS.N	0.032	0.000	0.162	0.037
"	DISC. TO SEWER	0.000	0.000	0.000	0.000
"	TOTAL GALLONS THROUGH NEW CARBON = 1,110,290				
10-28-91	FEED TO #1 ABS.S	0.024	2.286	17.3	318
"	FEED TO #2 ABS.N	0.091	0.016	3.290	0.873
"	DISC. TO SEWER	0.000	0.000	0.000	0.000
"	TOTAL GALLONS THROUGH NEW CARBON = 1,136,127				
10-29-91	FEED TO #1 ABS.S	0.420	2.370	18.5	333
"	FEED TO #2 ABS.N	0.105	0.047	6.222	3.561
"	DISC. TO SEWER	0.000	0.000	0.000	0.000
"	TOTAL GALLONS THROUGH NEW CARBON = 1,144,720				
10-30-91	FEED TO #1 ABS.S	0.467	2.543	18.7	318
"	FEED TO #2 ABS.N	0.141	0.081	7.918	8.147
"	DISC. TO SEWER	0.000	0.000	0.000	0.000
"	TOTAL GALLONS THROUGH NEW CARBON = 1,153,410				
10-31-91	FEED TO #1 ABS.S	0.125	2.760	20.9	376
"	FEED TO #2 ABS.N	0.158	0.131	9.7	18.7
"	DISC. TO SEWER	0.000	0.000	0.000	0.000
"	TOTAL GALLONS THROUGH NEW CARBON = 1,162,099				

04/04/89

BASF CORPORATION, CHEMICALS DIVISION, WYANDOTTE SITE

NORTH WORKS GROUNDWATER EXTRACTION WELLS 1,064,820

DATE	SAMPLE	METHYLENE CHLORIDE	CHLOROFORM	DICHLORO ETHANE	PROPYLENE DICHLORIDE
	FEED TO #1 ABS.S	10-14-91	System Shut Down		For Acid
	FEED TO #2 ABS.N	10-16-91	Washing System Back	on @ 3:00 PM	
	DISC. TO SEWER				
	TOTAL GALLONS THROUGH NEW CARBON =				
10-17-91	FEED TO #1 ABS.S	0.315	6.695	38.4	813
"	FEED TO #2 ABS.N	0.000	0.000	0.000	0.021
"	DISC. TO SEWER	0.000	0.000	0.000	0.000
"	TOTAL GALLONS THROUGH NEW CARBON = 1,069,404				
	FEED TO #1 ABS.S	10-17-91	System	Shut Down	Maint.
	FEED TO #2 ABS.N		Repairing	Leaks. (Well	Lines)
	DISC. TO SEWER	10-18-91	System back	on @ 3:00 PM.	
	TOTAL GALLONS THROUGH NEW CARBON =				
10-21-91	FEED TO #1 ABS.S	0.241	1.302	12.3	129
"	FEED TO #2 ABS.N	0.000	0.000	0.001	0.018
"	DISC. TO SEWER	0.000	0.000	0.000	0.000
"	TOTAL GALLONS THROUGH NEW CARBON = 1,077,376				
10-22-91	FEED TO #1 ABS.S	0.594	4.461	34.9	613
"	FEED TO #2 ABS.N	0.000	0.000	0.000	0.017
"	DISC. TO SEWER	0.000	0.000	0.000	0.000
"	TOTAL GALLONS THROUGH NEW CARBON = 1,085,617				
10-23-91	FEED TO #1 ABS.S	0.497	3.113	28.3	415
"	FEED TO #2 ABS.N	0.000	0.000	0.000	0.005
"	DISC. TO SEWER	0.000	0.000	0.000	0.000
"	TOTAL GALLONS THROUGH NEW CARBON = 1,093,842				

04/04/89

BASF CORPORATION, CHEMICALS DIVISION, WYANDOTTE SITE

NORTH WORKS GROUNDWATER EXTRACTION WELLS 1,194,080

DATE	SAMPLE	METHYLENE CHLORIDE	CHLOROFORM	DICHLORO ETHANE	PROPYLENE DICHLORIDE
11-18-91	FEED TO #1 ABS.S	0.708	4.3	29	517
"	FEED TO #2 ABS.N	0.398	0.000	22	142
"	DISC. TO SEWER	0.000	0.000	0.000	0.000
"	TOTAL GALLONS THROUGH NEW CARBON = 1,215,943				
11-19-91	FEED TO #1 ABS.	11-19-91 Shut System down @ 7 15 AM. For			
"	FEED TO #2 ABS.	Carbon Change. System back on @ 9 10 AM.			
"	DISC. TO SEWER	Calgon Canceled Truck.			
"	TOTAL GALLONS THROUGH NEW CARBON = 1,223,027				
	FEED TO #1 ABS.	11-20-91 Shut Down @ 7 10 AM. Removed			
	FEED TO #2 ABS.	Carbon From South Absorber. Went To			
	DISC. TO SEWER	1-Absorber operation @ 10 00 AM.			
	TOTAL GALLONS THROUGH NEW CARBON = 1,229,104				
11-21-91	FEED TO #1 ABS.N	0.472	1.7	16	261
"	FEED TO #2 ABS.	—	—	—	—
"	DISC. TO SEWER	0.000	0.000	0.000	0.000
"	TOTAL GALLONS THROUGH NEW CARBON = 6,937				
	FEED TO #1 ABS.	11-22-91	Charged New Carbon	into South	
	FEED TO #2 ABS.	Absorber.	Went To	2-Absorber	operation
	DISC. TO SEWER	@ 9 20 AM.			
	TOTAL GALLONS THROUGH NEW CARBON =				
11-22-91	FEED TO #1 ABS.N	0.598	3.9	31	582
"	FEED TO #2 ABS.	—	—	—	—
"	DISC. TO SEWER	0.000	0.000	0.000	0.000
"	TOTAL GALLONS THROUGH NEW CARBON = 13,958				

04/04/89

BASF CORPORATION, CHEMICALS DIVISION, WYANDOTTE SITE

NORTH WORKS GROUNDWATER EXTRACTION WELLS

13,958

DATE	SAMPLE	METHYLENE CHLORIDE	CHLOROFORM	DICHLORO ETHANE	PROPYLENE DICHLORIDE
11-25-91	FEED TO #1 ABS.N	0.348	3.5	23	526
"	FEED TO #2 ABS.S	0.000	0.000	0.038	0.364
"	DISC. TO SEWER	0.000	0.000	0.002	0.014
"	TOTAL GALLONS THROUGH NEW CARBON = 35,763				
11-26-91	FEED TO #1 ABS.N	0.546	3.3	24	453
"	FEED TO #2 ABS.S	0.000	0.000	0.013	0.138
"	DISC. TO SEWER	0.000	0.000	0.002	0.012
"	TOTAL GALLONS THROUGH NEW CARBON = 42,925				
11-27-91	FEED TO #1 ABS.N	0.559	4.2	26	549
"	FEED TO #2 ABS.S	0.000	0.000	0.006	0.055
"	DISC. TO SEWER	0.000	0.000	0.001	0.009
"	TOTAL GALLONS THROUGH NEW CARBON = 50,119				
11-28-91	FEED TO #1 ABS.N	0.490	3.4	23	452
"	FEED TO #2 ABS.S	0.000	0.000	0.007	0.090
"	DISC. TO SEWER	0.000	0.000	0.001	0.009
"	TOTAL GALLONS THROUGH NEW CARBON = 57,253				
11-29-91	FEED TO #1 ABS.N	0.551	3.5	22	424
"	FEED TO #2 ABS.S	0.000	0.000	0.004	0.007
"	DISC. TO SEWER	0.000	0.000	0.007	0.023
"	TOTAL GALLONS THROUGH NEW CARBON = 64,127				
12-2-91	FEED TO #1 ABS.N	0.426	0.000	32	654
"	FEED TO #2 ABS.S	0.003	0.000	0.010	0.139
"	DISC. TO SEWER	0.000	0.000	0.001	0.006
"	TOTAL GALLONS THROUGH NEW CARBON = 82,962				

04/04/89

BASF CORPORATION, CHEMICALS DIVISION, WYANDOTTE SITE

NORTH WORKS GROUNDWATER EXTRACTION WELLS

82,962

DATE	SAMPLE	METHYLENE CHLORIDE	CHLOROFORM	DICHLORO ETHANE	PROPYLENE DICHLORIDE
12-3-91	FEED TO #1 ABS.N	0.426	1.9	15	254
"	FEED TO #2 ABS.S	0.000	0.000	0.007	0.258
"	DISC. TO SEWER	0.000	0.000	0.001	0.010
"	TOTAL GALLONS THROUGH NEW CARBON = 88,929				
12-4-91	FEED TO #1 ABS.N	0.649	6.3	32	813
"	FEED TO #2 ABS.S	0.000	0.000	0.002	0.021
"	DISC. TO SEWER	0.000	0.000	0.001	0.006
"	TOTAL GALLONS THROUGH NEW CARBON = 95,501				
12-5-91	FEED TO #1 ABS.N	0.760	6.0	32	796
"	FEED TO #2 ABS.S	0.000	0.000	0.001	0.011
"	DISC. TO SEWER	0.000	0.000	0.005	0.008
"	TOTAL GALLONS THROUGH NEW CARBON = 101,707				
12-6-91	FEED TO #1 ABS.N	0.483	5.3	28	661
"	FEED TO #2 ABS.S	0.000	0.000	0.001	0.008
"	DISC. TO SEWER	0.000	0.000	0.001	0.005
"	TOTAL GALLONS THROUGH NEW CARBON = 107,892				
12-9-91	FEED TO #1 ABS.N	0.446	5.6	35	648
"	FEED TO #2 ABS.S	0.000	0.000	0.001	0.017
"	DISC. TO SEWER	0.000	0.000	0.000	0.003
"	TOTAL GALLONS THROUGH NEW CARBON = 125,830				
12-10-91	FEED TO #1 ABS.N	0.569	3.3	27	409
"	FEED TO #2 ABS.S	0.000	0.000	0.000	0.004
"	DISC. TO SEWER	0.000	0.000	0.000	0.003
"	TOTAL GALLONS THROUGH NEW CARBON = 132,960				

04/04/89

BASF CORPORATION, CHEMICALS DIVISION, WYANDOTTE SITE

NORTH WORKS GROUNDWATER EXTRACTION WELLS

132,960

DATE	SAMPLE	METHYLENE CHLORIDE	CHLOROFORM	DICHLORO ETHANE	PROPYLENE DICHLORIDE
12-11-91	FEED TO #1 ABS.N	0.620	4.7	33	572
"	FEED TO #2 ABS.S	0.000	0.000	0.000	0.011
"	DISC. TO SEWER	0.000	0.000	0.001	0.006
"	TOTAL GALLONS THROUGH NEW CARBON = 140,358				
12-12-91	FEED TO #1 ABS.N	0.584	4.3	31	522
"	FEED TO #2 ABS.S	0.000	0.000	0.000	0.027
"	DISC. TO SEWER	0.000	0.000	0.001	0.004
"	TOTAL GALLONS THROUGH NEW CARBON = 147,850				
12-13-91	FEED TO #1 ABS.N	0.553	4.0	29	484
"	FEED TO #2 ABS.S	0.000	0.000	0.001	0.009
"	DISC. TO SEWER	0.000	0.000	0.001	0.004
"	TOTAL GALLONS THROUGH NEW CARBON = 155,222				
12-16-91	FEED TO #1 ABS.N	.558	4.1	27	476
"	FEED TO #2 ABS.S	0.00	0.0	.001	.016
"	DISC. TO SEWER	0.0	0.0	.001	.008
"	TOTAL GALLONS THROUGH NEW CARBON = 175,912				
12-17-91	FEED TO #1 ABS.		183,271		
12-18-91	FEED TO #2 ABS.		190,522		
12-19-91	DISC. TO SEWER		~~197,870~~		
12-20-91	TOTAL GALLONS THROUGH NEW CARBON =				
12-23-91	FEED TO #1 ABS.	.345	2.7	16	264
"	FEED TO #2 ABS.	0.0	0.0	0.001	0.013
"	DISC. TO SEWER	0.0	0.0	0.002	0.098
"	TOTAL GALLONS THROUGH NEW CARBON = 215839				

04/04/89

SHRADER
Analytical and Consulting
LABORATORIES INC.

REPORT OF ANALYTICAL SERVICES

SUBMITTED TO:

BASF CORPORATION
1609 BIDDLE AVENUE
WYANDOTTE, MICHIGAN 48192

ATTN: MR. C. E. ANDERSON

We are pleased to provide the enclosed analytical results for the following sample(s). Should you have any questions regarding the methods and/or results, please feel free to write or call.

Customer sample	:	SAMPLE #2
Sample description	:	#10 E. WELL
SL #	:	B213
Analysis performed	:	GC/MS
Date received	:	August 26, 1992
Date completed	:	September 8, 1992
Report date	:	September 9, 1992

Approved _____ Analyst _____
G. Sudhakar Reddy, Ph.D. Akins G. Akintunde

Enclosure(s)

- Continued -

3814 VINEWOOD · DETROIT, MICHIGAN 48208 · (313) 894-4440 · FAX (313) 894-4489

A N A L Y T I C A L P R O C E D U R E :

Sample labelled #2 #10 E. WELL (SL #B21301) was analyzed by gas chromatography/mass spectrometry (GC/MS).

An aliquot of the sample was injected under split conditions onto a 6' GC column packed with 0.2% Carbowax 1500 on Carbopax C, temperature programmed from 50°C to 230°C at a rate of 12° per minute. Mass spectra were collected repetitively over a mass range of 30 - 300 amu. Bromofluorobenzene (BFB) was used as an internal standard to quantitate the sovlents detected.

R E S U L T S :

The sample contains the following solvents:

COMPOUND	SCAN #	APPROX. RELATIVE CONC (%)
Chloroform	195	0.5
1,2 Dichloroethane	219	8
1,2 Dichloropropane	332	72
1,2,3 Trichloropropane	495	1
2-methylpentenal	558	0.5
Di(B-chloroethyl)ether	622	6
Bis(2-chloroisopropyl)ether	795	9
Bis(3-chloropropyl)ether	831	3

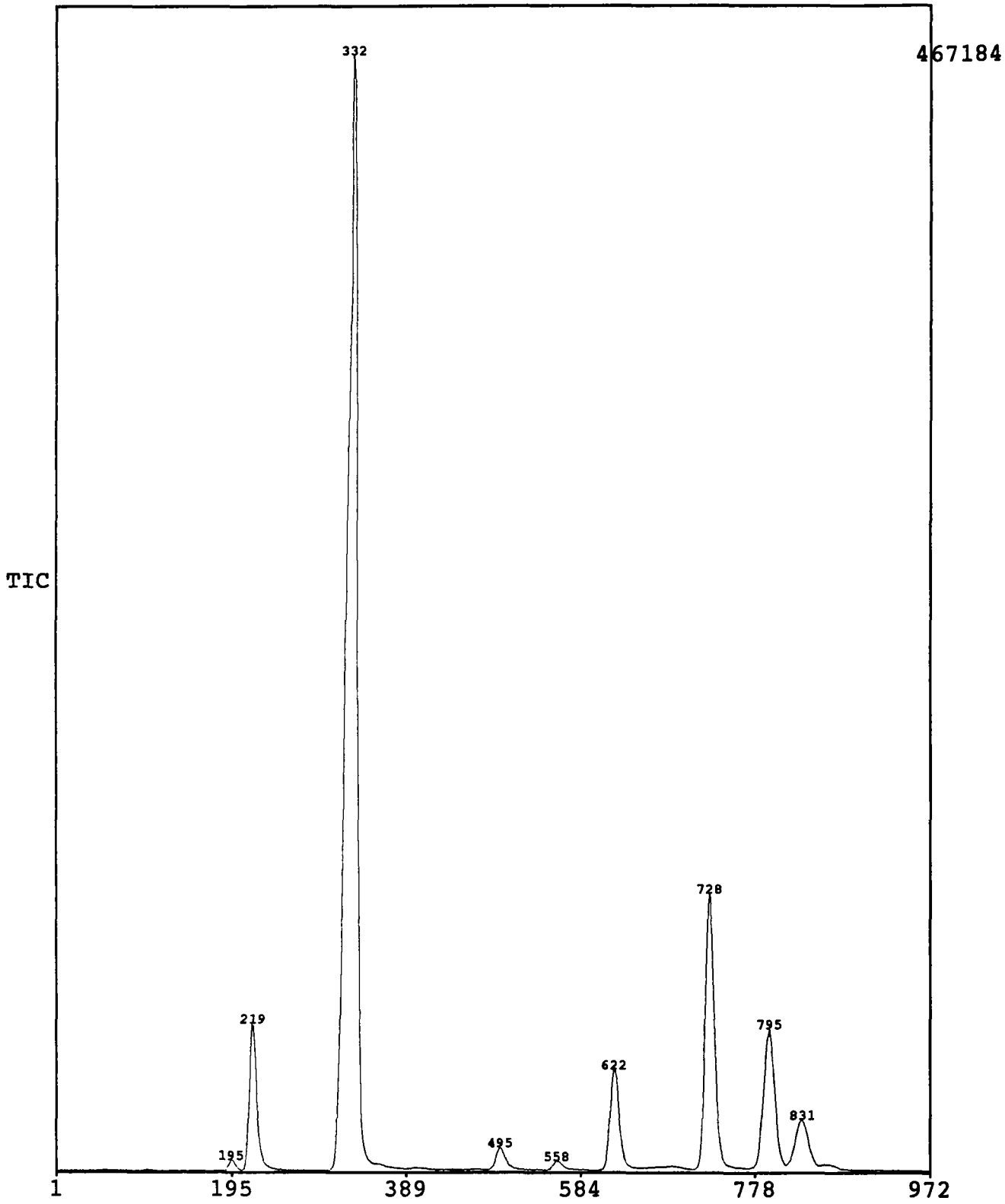
The total ion chromatograms generated are enclosed along with pertinent mass spectral plots.

AA

AGA/rac

SHRADER LABORATORIES, INC.
09-09-1992

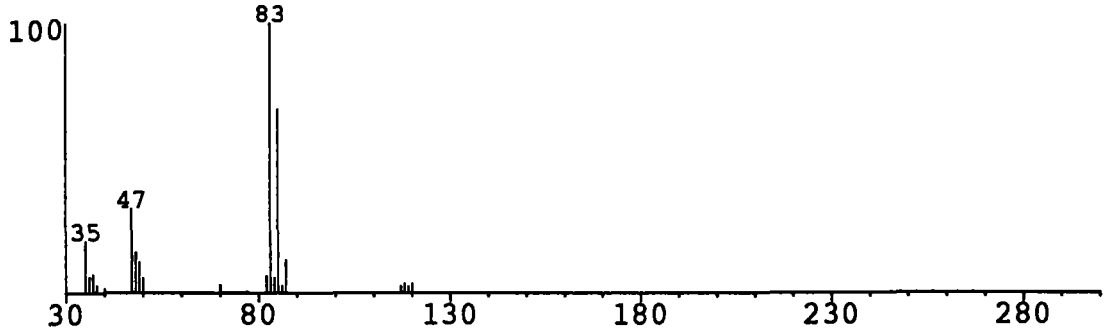
B21301AG SAMPLE 2, #10 E. WELL
Date run : 09-04-1992(12:44:08) Instr. : Q3* Operator : AKIA



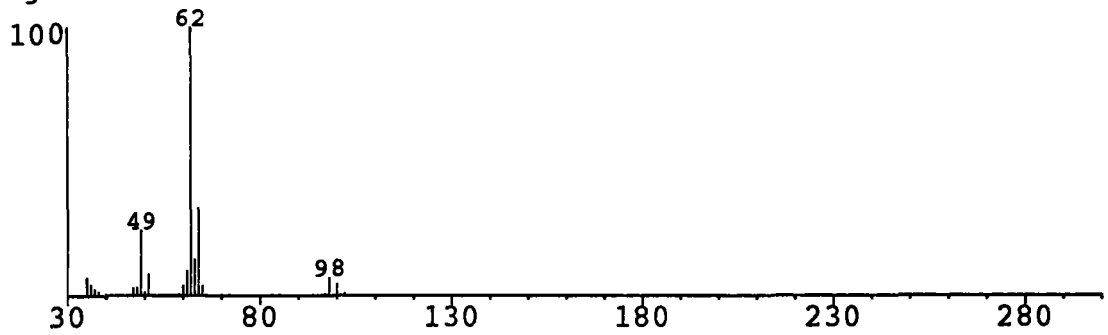
SHRADER LABORATORIES, INC.
09-09-1992

B21301AG SAMPLE 2, #10 E. WELL
Date run : 09-04-1992(12:44:08) Instr. : Q3* Operator : AKIA

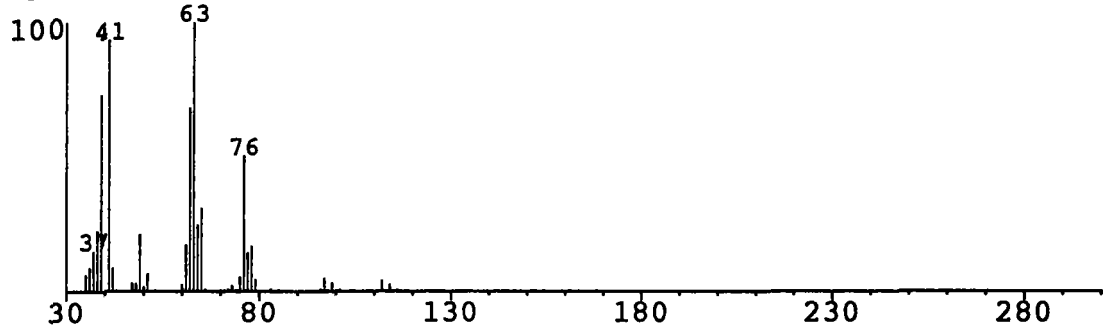
Scan 196 RT= 5: 0 No.ions= 22 Base= 4.5%F TIC= 4558
Bkg=Scans 156 - 159 subt'd CHLOROFORM



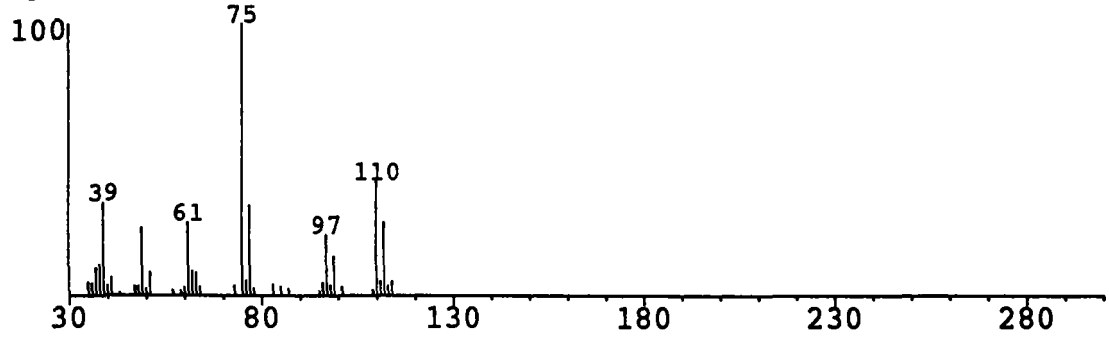
Scan 219 RT= 5:35 No.ions= 33 Base= 81.0%F TIC= 61323
Bkg=Scans 156 - 159 subt'd 1,2-DICHLOROETHANE



Scan 321 RT= 8:12 No.ions= 52 Base= 82.0%F TIC=166475
Bkg=Scans 156 - 159 subt'd 1,2-DICHLOROPROPANE



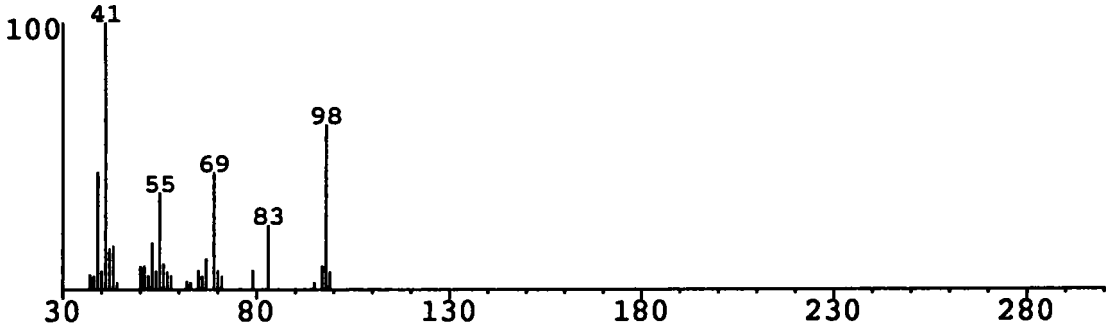
Scan 496 RT= 12:43 No.ions= 44 Base= 5.8%F TIC= 8778
Bkg=Scans 462 - 465 subt'd 1,2,3-TRICHLOROPROPANE



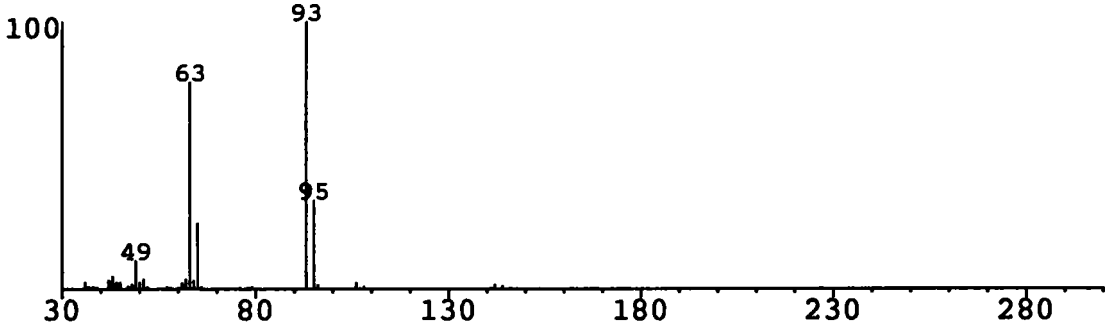
SHRADER LABORATORIES, INC.
10-09-1992

B21301AG SAMPLE 2, #10 E. WELL
Date run : 09-04-1992(12:44:08) Instr. : Q3* Operator : AKIA

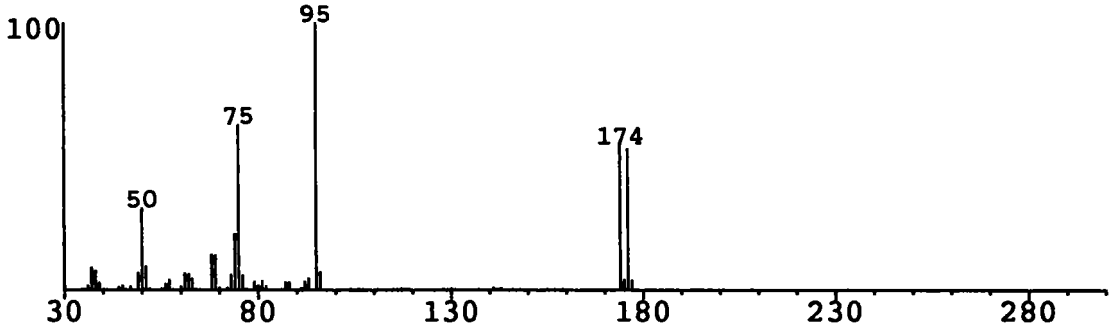
Scan 559 RT= 14:20 No.ions= 34 Base= 2.3%F TIC= 3662
Bkg=Scans 518 - 521 subt'd 2-METHYLPENTENAL



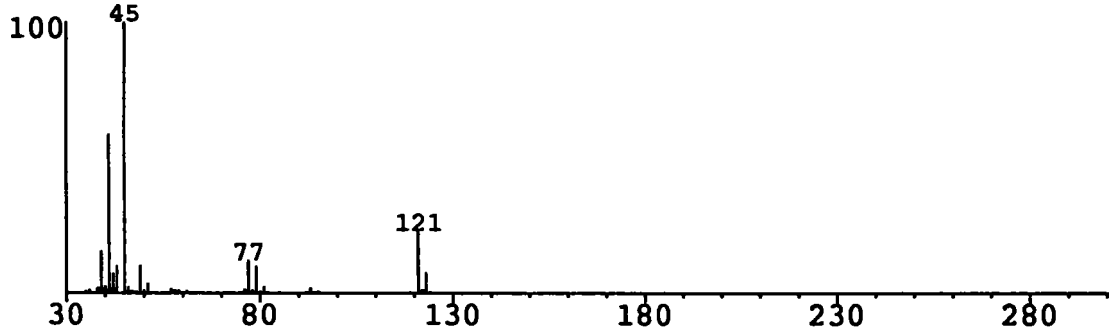
Scan 624 RT= 16: 1 No.ions= 42 Base= 42.4%F TIC= 40666
Bkg=Scans 518 - 521 subt'd DI(b-CHLOROETHYL)ETHER



Scan 728 RT= 18:42 No.ions= 83 Base= 74.5%F TIC=115162
Bkg=Scans 518 - 521 subt'd BFB (INTERNAL STANDARD)



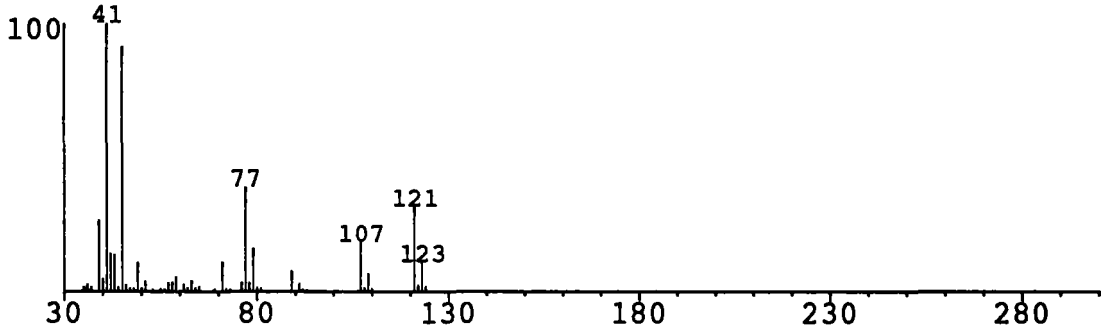
Scan 795 RT= 20:27 No.ions= 54 Base= 62.9%F TIC= 58355
Bkg=Scans 518 - 521 subt'd BIS(2-CHLOROISOPROPYL)ETHER



SHRADER LABORATORIES, INC.
09-09-1992

B21301AG SAMPLE 2, #10 E. WELL
Date run : 09-04-1992(12:44:08) Instr. : Q3* Operator : AKIA

Scan 831 RT= 21:24 No.ions= 51 Base= 13.2%F TIC= 19778
Bkg=Scans 686 - 689 subt'd BIS (3-CHLOROPROPYL)ETHER



Item 1.4

UNTREATED GROUNDWATER

ANALYTICAL REPORTS

- Date: May 21, 1992

  Description: Report of Soil Gas and Groundwater Survey conducted by Groundwater Technologies, Inc. (GTI) in the area of concern related to the Toluene Remediation Project. Groundwater and Soil Samples were taken from borings and were split for analysis. This report is the GTI split. This is the first phase of the Subsurface investigation necessary in determining the location of the temporary monitoring wells.

- Date: May 26, 1992

  Description: This report is the BASF, Research Services, groundwater and soil sample split from borings taken by Groundwater Technologies, Inc., during the Soil Gas and Groundwater Survey of the Toluene Remediation Project.

  A Soil Boring location map follows for samples taken on May 21 and May 26, 1992.

- Date: July 9, 1992

  Description: First round of groundwater sampling. Samples were taken from the temporary monitoring wells. This is the second phase of the subsurface investigation. The purpose is to establish static concentrations of the chemical contaminants of concern. A monitoring well location map is attached to this section.

- Date: September 24, 1992

  Description: Second round of groundwater sampling. Samples were taken from the temporary monitoring wells. This is the second phase of the subsurface investigation. The purpose is to establish static concentrations of the chemical contaminants of concern. A monitoring well location map is attached to this section.

bc: BBARKEL
JSCHWEICKART

Table 1
Portable Gas Chromatograph (GC)
Soil Analytical Results
BASF Corporation
Wyandotte, Michigan
May 21, 1992

Standard PQL's (Detection Limit)	µg/L						
	40	40	40	40	40	50	
Sample Identification	Benzene	Toluene	Ethyl benzene	Xylenes	Styrene	Vinyl Chloride	PQL Multiplier
SB-1 4-6	ND	410	ND	96	93	ND	1
14-16	ND	BDL (34)	ND	76	ND	ND	1
18-20	ND	ND	ND	ND	ND	ND	1
SB-2 0-2	ND	160	ND	92	ND	ND	1
4-6	ND	390	ND	82	ND	ND	1
14-16	ND	78	ND	BDL (35)	ND	ND	1
SB-3 0-2	ND	ND	ND	47	ND	ND	1
10-12	ND	ND	ND	ND	ND	ND	1
SB-4 0-2	ND	60	ND	80	ND	ND	1
4-6	65	120	ND	120	ND	ND	1
10-12	ND	BDL (34)	ND	61	ND	89	1
SB-5 0-2	ND	59	ND	250	ND	ND	1
4-6	ND	ND	ND	ND	ND	ND	1
10-12	ND	ND	ND	61	ND	ND	1
SB-6 0-2	ND	ND	ND	ND	ND	ND	10
2-4	4200	6800	1080	6800	960	ND	2
20-22	ND	190	ND	ND	ND	ND	1
SB-7 2-4	4500	3000	560	1300	ND	ND	1
8-10	140	ND	ND	41	ND	ND	1
12-14	ND	ND	ND	ND	ND	ND	1
SB-8 2-4	270	38,000	3900	1320	520	ND	1
10-12	ND	360	ND	ND	ND	ND	1
16-18	ND	89	ND	ND	ND	ND	1
SB-9 2-4	400	133,000	5000	360	2000	ND	2.5
16-18	59	2700	140	42	150	ND	1
20-22	ND	ND	ND	ND	ND	ND	1
SB-10 4-6	1,070,000	493,000	24,500	225,000	121,000	ND	50
10-12	17,000	213,000	377,000	ND	53,000	ND	4
22-24	490	2700	210	ND	ND	ND	2.5
SB-11 2-4	ND	86,660	22,700	ND	14,900	ND	20
12-14	ND	120	55	ND	ND	ND	1
16-18	72	110	ND	ND	ND	ND	1
SB-12 6-8	BDL (34)	650	1300	ND	23,700	ND	2
14-16	ND	4050	680	470	14,000	ND	5
20-22	150	120	ND	96	88	ND	1
SB-13 4-6	405,000	389,000	8300	549,000	116,000	ND	80*
10-12	700	530	140	1100	ND	ND	1
24-26	46	56	ND	130	ND	ND	1
SB-14 4-6	2000	23,800	BDL (300)	15,300	1600	ND	10*
8-10	2100	600	300	400	270	ND	1
24-26	ND	ND	ND	ND	ND	ND	1

Table 1 (Continued)
Portable Gas Chromatograph (GC)
Soil Analytical Results
BASF Corporation
Wyandotte, Michigan
May 21, 1992

Standard PQL's (Detection Limit)	µg/L						
	40	40	40	40	40	50	
Sample Identification	Benzene	Toluene	Ethyl benzene	Xylenes	Styrene	Vinyl Chloride	PQL Multiplier
SB-15 4-6	ND	1530	ND	ND	ND	ND	20
6-8	93	110	110	120	ND	ND	1*
14-16	190	ND	ND	50	ND	ND	1
SB-16 2-4	BDL (380)	160,000	560	930	420	ND	10
6-8	60	24,800	640	58	1220	ND	1
12-14	ND	1550	49	62	62	ND	1
SB-17 10-12	ND	3900	ND	ND	ND	ND	1
16-18	130	39,100	47	110	1340	ND	1
22-24	ND	3900	ND	ND	ND	ND	5*
SB-18 8-10	220	140	180	390	75	ND	1
18-20	160	160	ND	75	ND	ND	1
24-26	220	180	ND	56	ND	ND	1

* = Co-eluting compound – not representative of matrix effects.
ND = Not Detected
PQL = Practical Quantitation Limit
BDL = Below detection limit
( ) = detected below practical quantitation limit

dj:gwbasf1

Table 2
Portable Gas Chromatograph (GC)
Water Analytical Results
BASF Corporation
Wyandotte, Michigan
May 21, 1992

Standard PQL's (Detection Limit)	µg/L						
	2	2	2	2	2	2.5	
Sample Identification	Benzene	Toluene	Ethyl benzene	Xylenes	Styrene	Vinyl Chloride	PQL Multiplier
SB-1	18	11	ND	6.9	ND	ND	1
SB-2	130	1700	8.8	16	40	ND	1
SB-3	BDL (1.6)	2.6	ND	ND	BDL (1.9)	140	1
SB-4	ND	ND	ND	ND	ND	ND	1
SB-5	ND	ND	ND	ND	ND	ND	1
SB-6	320	220	45	200	50	ND	1
SB-7	120	13	32	130	ND	ND	1
SB-8	9.5	220	43	ND	15	ND	1
SB-9	670	14,700	180	33	70	ND	1
SB-10	35,000	53,700	31,400	ND	4500	ND	200
SB-11	BDL (2.0)	39,500	1280	ND	32,500	ND	200*
SB-12	ND	7100	23,400	ND	58,600	ND	100
SB-13	3200	820	130	1000	ND	ND	100
SB-14	640	98	ND	77	ND	ND	20*
SB-15	3200	210	4400	130	37	ND	5
SB-16	BDL (.68)	57,600	430	ND	740	3500	40
SB-17	8.6	40	ND	13	ND	ND	1
SB-18	20	15	ND	ND	2.6	ND	1

* = Co-eluting compound – not representative of matrix effects.
ND = Not Detected
PQL = Practical Quantitation Limit
BDL = Below detection limit
( ) = detected below practical quantitation limit

dj:gwhasft2

bc: BBACKEL
JSCHWEICKART
DSTRYBEL-GTI

BASF CORPORATION
POLYMERS DIVISION
RESEARCH SERVICES

BASF Restricted Document

ANALYTICAL REPORT

PAGINATION : 125385
PROJECT NO. : 5P1660

PAGINATION	:	125385
DESCRIPTION	:	WYANDOTTE SOIL BORING AND WATER
PROJECT NO.	:	5P1660
REQUESTOR/ID	:	MARTIN, MICHAEL J / 13283 Ext: 6878
COST CENTER	:	20270
COORDINATOR/ID	:	MARTIN, MICHAEL J / 13283 Ext: 6878
DATE ENTERED	:	05/26/92
DATE FINISHED	:	09/21/92
COPIES TO	:	ADAM BICKEL

INFORMATION/INSTRUCTIONS

REQUEST DESCRIPTION	DATE SAMPLED		SAMPLE#	ANALYSIS
WYANDOTTE SOIL BORING(SB) AND WATER(SB-1W-18W)				
SB-1W (3X40mL)	5/11/92		31563	VOLATILES
SB-2W (1X40mL)			31564	
SB-3W (2X40mL)	5/12/92		31565	VOLATILES
SB-4W (3X40mL)			31566	
SB-5W (4X40mL)			31567	
SB-6W (3X40mL)			31568	
SB-7W (3X40mL)	5/13/92		31569	VOLATILES
SB-8W (3X40mL)			31570	
SB-9W (3X40mL)			31571	
SB-10W (3X40mL)	5/14/92		31572	VOLATILES
SB-11W (3X40mL)			31573	
SB-12W (3X40mL)			31574	
SB-13W (3X40mL)	5/15/92		31575	VOLATILES
SB-14W (4X40mL)			31576	
SB-15W (3X40mL)			31577	
SB-16W (3X40mL)	5/18/92		31578	VOLATILES
SB-17W (4X40mL)			31579	
SB-18W (3X40mL)			31580	
SB-17 22-24'	5/18/92	METHANOL	31581	VOLATILES
SB-17 16-18'		EXTRACTS	31582	
SB-15 4-6'		"	31583	
SB-13 4-6'		"	31584	
SB-10 4-6'		"	31585	
SB-9 4-6'		"	31586	
SB-7 12-14'		"	31587	
SB-16 2-4'		"	31588	
SB-9 2-4'		"	31589	
SB-17 0-2'		"	31590	

APPROVAL: Michael J. Martin

BASF CORPORATION
POLYMERS DIVISION
RESEARCH SERVICES

ANALYTICAL REPORT

PAGINATION : 125385
PROJECT NO. : 5P1660

RESULTS

Priority Pollutant Volatiles - EPA Method 624 - S.C. Walkinshaw

These samples were analyzed by P & T GC/MS.

Compound:	Conc.(ppb) Sample # 31563	31564*	Blank
Chloromethane	ND	ND	ND
Vinyl Chloride	ND	ND	ND
Bromomethane	ND	ND	ND
Chloroethane	ND	ND	ND
Trichlorofluoromethane	ND	ND	ND
1,1-Dichloroethene	ND	ND	ND
Methylene Chloride	ND	9.4	ND
trans-1,2-Dichloroethene	ND	ND	ND
1,1-Dichloroethane	ND	ND	ND
Chloroform	ND	ND	ND
1,1,1-Trichloroethane	ND	ND	ND
1,2-Dichloroethane	ND	ND	ND
Benzene	ND	135	ND
Carbon Tetrachloride	ND	ND	ND
1,2-Dichloropropane	ND	ND	ND
2-Chloroethylvinyl ether	ND	ND	ND
Trichloroethene	ND	ND	ND
Bromodichloromethane	ND	ND	ND
trans-1,3-Dichloropropene	ND	18	ND
cis-1,3-Dichlorpropene	ND	ND	ND
Toluene	ND	900	ND
1,1,2-Trichloroethane	ND	ND	ND
Dibromochloromethane	ND	ND	ND
Tetrachloroethene	ND	ND	ND
Chlorobenzene	ND	ND	ND
Ethylbenzene	ND	6.3	ND
Bromoform	ND	ND	ND
1,1,2,2-Tetrachloroethane	ND	ND	ND

APPROVAL: Michael J. Martin

BASF CORPORATION
POLYMERS DIVISION
RESEARCH SERVICES

ANALYTICAL REPORT

PAGINATION : 125385
PROJECT NO. : 5P1660

Compound:	Conc. (ppb) Sample # 31565	31566	31567	31568*	Blank
Chloromethane	ND	ND	ND	ND	33
Vinyl Chloride	ND	ND	ND	ND	ND
Bromomethane	ND	ND	ND	ND	17
Chloroethane	ND	ND	ND	ND	ND
Trichlorofluoromethane	ND	ND	ND	ND	ND
1,1-Dichloroethene	ND	ND	ND	ND	ND
Methylene Chloride	ND	ND	ND	ND	ND
trans-1,2-Dichloroethene	ND	ND	ND	ND	ND
1,1-Dichloroethane	ND	ND	ND	ND	ND
Chloroform	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	ND	ND	ND	ND	ND
1,2-Dichloroethane	ND	ND	ND	ND	ND
Benzene	ND	ND	ND	280	ND
Carbon Tetrachloride	ND	ND	ND	ND	ND
1,2-Dichloropropane	ND	ND	ND	ND	ND
2-Chloroethylvinyl ether	ND	ND	ND	ND	ND
Trichloroethene	ND	ND	ND	ND	ND
Bromodichloromethane	ND	ND	ND	ND	ND
trans-1,3-Dichloropropene	ND	ND	ND	ND	ND
cis-1,3-Dichlorpropene	ND	ND	ND	ND	ND
Toluene	ND	ND	ND	180	ND
1,1,2-Trichloroethane	ND	ND	ND	ND	ND
Dibromochloromethane	10	ND	ND	ND	ND
Tetrachloroethene	ND	ND	ND	ND	ND
Chlorobenzene	ND	ND	ND	ND	ND
Ethylbenzene	ND	ND	ND	320	ND
Bromoform	ND	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	ND	ND	ND	ND	ND

Compound:	Conc. (ppb) Sample # 31569	31570	31571	Blank
Chloromethane	ND	ND	ND	ND
Vinyl Chloride	ND	ND	ND	ND
Bromomethane	ND	ND	ND	ND
Chloroethane	ND	ND	ND	ND
Trichlorofluoromethane	ND	ND	ND	ND
1,1-Dichloroethene	ND	ND	ND	ND
Methylene Chloride	ND	ND	ND	ND
trans-1,2-Dichloroethene	ND	ND	ND	ND
1,1-Dichloroethane	ND	ND	ND	ND
Chloroform	ND	ND	ND	ND
1,1,1-Trichloroethane	ND	ND	ND	ND
1,2-Dichloroethane	ND	ND	ND	ND

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ANALYTICAL REPORT

PAGINATION : 125385
PROJECT NO. : 5P1660

Compound:	Conc. (ppb) Sample # 31569	31570	31571	Blank
Benzene	100	ND	670	ND
Carbon Tetrachloride	ND	ND	ND	ND
1,2-Dichloropropane	ND	ND	ND	ND
2-Chloroethylvinyl ether	ND	ND	ND	ND
Trichloroethene	ND	ND	ND	ND
Bromodichloromethane	ND	ND	ND	ND
trans-1,3-Dichloropropene	ND	ND	ND	ND
cis-1,3-Dichlorpropene	ND	ND	ND	ND
Toluene	ND	290	4400	ND
1,1,2-Trichloroethane	ND	ND	ND	ND
Dibromochloromethane	ND	ND	ND	ND
Tetrachloroethene	ND	ND	ND	ND
Chlorobenzene	ND	ND	ND	ND
Ethylbenzene	ND	ND	190	ND
Bromoform	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	ND	ND	ND	ND

Compound:	Conc. (ppb) Sample # 31572	31573	31574	31575	Blank
Chloromethane	ND	ND	ND	ND	ND
Vinyl Chloride	ND	ND	ND	ND	ND
Bromomethane	ND	ND	ND	ND	ND
Chloroethane	ND	ND	ND	ND	ND
Trichlorofluoromethane	3800	ND	ND	ND	ND
1,1-Dichloroethene	ND	ND	ND	ND	ND
Methylene Chloride	ND	ND	ND	ND	54
trans-1,2-Dichloroethene	ND	ND	ND	ND	ND
1,1-Dichloroethane	ND	ND	ND	ND	ND
Chloroform	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	ND	ND	ND	ND	ND
1,2-Dichloroethane	140	ND	ND	ND	ND
Benzene	9100	150	ND	2400	ND
Carbon Tetrachloride	ND	ND	ND	ND	ND
1,2-Dichloropropane	ND	ND	ND	ND	ND
2-Chloroethylvinyl ether	ND	ND	ND	ND	ND
Trichloroethene	ND	ND	ND	ND	ND
Bromodichloromethane	ND	ND	ND	ND	ND
trans-1,3-Dichloropropene	ND	ND	ND	ND	ND
cis-1,3-Dichlorpropene	ND	ND	ND	ND	ND
Toluene	15000	9200	4000	590	ND
1,1,2-Trichloroethane	ND	ND	ND	ND	ND
Dibromochloromethane	ND	ND	ND	ND	ND
Tetrachloroethene	ND	ND	ND	ND	ND
Chlorobenzene	ND	ND	ND	ND	ND
Ethylbenzene	6000	1700	5400	770	ND
Bromoform	ND	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	ND	ND	ND	ND	ND

APPROVAL: Michael J. Martin

BASF CORPORATION
POLYMERS DIVISION
RESEARCH SERVICES

ANALYTICAL REPORT

PAGINATION : 125385
PROJECT NO. : 5P1660

Compound:	Conc. (ppb) Sample # 31576	31577	31578	31580	Blank	31579
Chloromethane	ND	ND	ND	ND	ND	See
Vinyl Chloride	ND	ND	ND	ND	ND	Note 2
Bromomethane	ND	ND	ND	ND	ND	
Chloroethane	ND	ND	ND	ND	ND	
Trichlorofluoromethane	ND	ND	ND	ND	ND	
1,1-Dichloroethene	ND	ND	ND	ND	ND	
Methylene Chloride	ND	ND	ND	ND	54	
trans-1,2-Dichloroethene	ND	ND	ND	ND	ND	
1,1-Dichloroethane	ND	ND	ND	ND	ND	
Chloroform	ND	ND	ND	ND	ND	
1,1,1-Trichloroethane	ND	ND	ND	ND	ND	
1,2-Dichloroethane	ND	ND	ND	ND	ND	
Benzene	705	2900	78	ND	ND	
Carbon Tetrachloride	ND	ND	ND	ND	ND	
1,2-Dichloropropane	ND	ND	ND	ND	ND	
2-Chloroethylvinyl ether	ND	ND	ND	ND	ND	
Trichloroethene	ND	ND	ND	ND	ND	
Bromodichloromethane	ND	ND	ND	ND	ND	
trans-1,3-Dichloropropene	ND	ND	ND	ND	ND	
cis-1,3-Dichlorpropene	ND	ND	ND	ND	ND	
Toluene	ND	ND	13000	ND	ND	
1,1,2-Trichloroethane	ND	ND	ND	ND	ND	
Dibromochloromethane	ND	ND	ND	ND	ND	
Tetrachloroethene	ND	ND	ND	ND	ND	
Chlorobenzene	ND	1200	ND	ND	ND	
Ethylbenzene	ND	150	780	ND	ND	
Bromoform	ND	ND	ND	ND	ND	
1,1,2,2-Tetrachloroethane	ND	ND	ND	ND	ND	

Note 1: ND = not detected, Detection limit for most compounds is 5ppb. Detection limit is X times higher in samples that were diluted than in samples that were not diluted, X = dilution factor.
Note 2: Sample 31579 was analyzed and the data file was lost after the sample had expired.

* = Xylenes also detected in these samples, 31564 at 50ppb, 31568 at 490ppb.

All volatiles raw data is filed with pagination 125298

APPROVAL: Michael J. Martin

BASF CORPORATION
POLYMERS DIVISION
RESEARCH SERVICES

ANALYTICAL REPORT

GC/MS ANALYSIS OF METHANOL EXTRACTS FROM SOIL BORINGS - S.C.WALKINSHAW

THESE SAMPLES WERE ANALYZED BY DIRECT INJECTION OF THE METHANOL EXTRACT INTO THE GC/MS. BECAUSE OF THE HIGH LEVEL OF CONTAMINANTS EXPECTED, AND FOUND BY FIELD ANALYSIS, THEY WERE NOT ANALYZED BY PURGE AND TRAP. SAMPLES WERE QUANTITATED ONLY FOR TOLUENE, OTHER COMPOUNDS FOUND ARE LISTED BELOW.

SOIL BORING	CONC. (ug/g) TOLUENE
SB-17 22-24	ND
SB-17 16-18	49
SB-15 4-6	ND
SB-13 4-6	210
SB-10 4-6	550
SB-9 4-6	580
SB-7 12-14	ND
SB-16 2-4	480
SB-9 2-4	390
SB-17 0-2	5.6

Detection Limit = ~2ug/g soil

ADDITIONAL COMPOUNDS FOUND:

SOIL BORING	SB-15 4-6	SB-13 4-6	SB-10 4-6	SB-9 4-6	SB-16 2-4	SB-9 2-4
ETHYLBENZENE				*		*
TOTAL XYLENES		*	*			
STYRENE				*		*
DICHLOROBENZENE	*					
DICHLOROBENZENE	*					
METHYL BIPHENYL	*					
PENTYLHEXYLBENZENE	*					
BUTYLHEPTYLBENZENE	*					
PROPYLOCTYLBENZENE	*					
ETHYLNONYLBENZENE	*					
PENTYLHEPTYLBENZENE	*					
BUTYLOCTYLBENZENE	*					
PROPYLNONYLBENZENE	*					
ETHYLDECYLBENZENE	*					
PYRIDINE		*	*			
METHYLPYRIDINE ISOMER		*	*			
DIMETHYLPYRIDINE ISOMER		*				
CYCLOOCTATETRAENE		*				
PHENOL		*				
ALKYL PHENOL DERV.		*				
ALKYL BENZENE DERV.		*	*			
POLYNUCLEAR AROMATICS		*	*	*		*
TETRACHLOROETHENE					*	

APPROVAL: Michael J. Martin

bc: BBARKEL
JSCHWEICKART
DSTRYBEL - GII

BASF CORPORATION
POLYMERS DIVISION
RESEARCH SERVICES

BASF Restricted Document

ANALYTICAL REPORT

PAGINATION : 125644
PROJECT NO. : 5P1660

PAGINATION	:	125644
DESCRIPTION	:	Wyandotte Water Samples, 7/9-7/10/92
PROJECT NO.	:	5P1660
REQUESTOR/ID	:	MARTIN, MICHAEL J / 13283 **Ext:** 6878
COST CENTER	:	20270
COORDINATOR/ID	:	MARTIN, MICHAEL J / 13283 **Ext:** 6878
DATE ENTERED	:	07/13/92
DATE FINISHED	:	09/23/92
COPIES TO	:	A. Bickel

INFORMATION/INSTRUCTIONS

REQUEST DESCRIPTION		SAMPLE#	ANALYSIS
WYANDOTTE WATER SAMPLES 7/9-7/10/92			
3X40mL vials TMW-1 1 jar TMW-1	7/9/92	31677	BTEX, Styrene, Vinyl Chloride pH
3X40mL vials TMW-2 1 jar TMW-2	7/10/92	31678	BTEX, Styrene, Vinyl Cholride pH
3X40ML vials TMW-3 1 jar TMW-3		31679	BTEX, Styrene, Vinyl Chloride pH
3X40mL vials TMW-4 1 jar TMW-4		31680	BTEX, Styrene, Vinyl Chloride pH
3X40mL vials TMW-5 1 jar TMW-5		31681	BTEX, Styrene, Vinyl Chloride pH
3X40mL vials PW-1 1 jar PW-1		31682	BTEX, Styrene, Vinyl Chloride pH
2X40mL vials HB-WATER 1 jar soil sample		31683 31684	BTEX, Styrene, Vinyl Chloride "

***For Jar Samples# 31677, 31678, 31679, 31680, 31681, and 31682 perform the following test: ICP SCAN
and check for the following ions: Cl^-, Sulfate, Phosphate, and Nitrate.

RESULTS

VOLATILES ANALYSIS -- L.J.Neubauer, S.C.Walkinshaw

APPROVAL: Michael J. Martin

These samples were analyzed by P & T GC/MS.

	Concentration in ppb			
	#31677	#31678	#31679	#31680
BENZENE	1800.*	1100.*	190.	110.
TOLUENE	2700.*	190.	1900.*	3100.*
ETHYLBENZENE	500.*+	N.D.	864.*+	110.
XYLENES	+	N.D.	+	N.D.
STYRENE	65.	N.D.	840.*	180.
VINYL CHLORIDE	N.D.	N.D.	N.D.	N.D.

	Concentration in ppb		
	#31681	#31682	#31683
BENZENE	30.	48.	954.*
TOLUENE	940.*	8700.*	510.*
ETHYLBENZENE	48.*	620.*+	17.*
XYLENES	N.D.	+	5.1
STYRENE	170.	1500.*	88.
VINYL CHLORIDE	N.D.	N.D.	N.D.

* indicates this is only an estimated value since it is higher than the highest calibration standard.

\+ indicates that the ethylbenzene and xylene peaks were not resolved, and the amount entered for ethylbenzene is the total ethylbenzene and xylenes.

N.D. means the analyte is not present at levels equal to or greater than the method dectection limit of 5 ppb.

Source of High pH in samples -- Comments by M. J. Martin

Four of the six submitted samples have pH > 11. You asked if we could determine the source of the high pH. It appears that the high pH is due to carbonate and hydroxide ions in some of the samples and bicarbonate in the others. The details are as follows. Our initial attempt was to make the samples acidic and look for carbonic acid effervesence. None was observed. We therfore did alkalinity titrations to determine the number of breaks and to determine approximate pKa's. This data follows this section. I interpret these titration curves as indicative of carbonate ion (and some hydroxide ion) based on the number of breaks and the location of the breaks. Two samples contained bicarbonate ion breaks.

Since phosphate ion and carbonate ion produce similar titration curves

APPROVAL: Michael J. Martin

Ion Chromatography was done to discriminate between the two ions. No phosphate was found as discussed in the Ion Chromatography section.

A metal analysis scan was done to determine if Na, K, or calcium ions were present. All of these ions can give a high pH to water samples. The other metals reported are obtained at no extra effort in the metal ion scan. These samples contain Ca at levels much higher than normal waters to this area (Ca=27 ppm, Mg= 7.3 ppm) and have Ca/Mg ratioes (Ca/Mg= 3.7) in excess of natural waters (except sample TMW-1). This finding is consistent with historical use of limestone ($CaCO_3$) at this site. Potassium and sodium in this water is expected from polyol production and from soda ash production.

I have summarized the pertinent data supporting the high pH in the Table below.

Client Samp No	RS Sample Number	pH	# of Breaks	Break Type	Na ppm	K ppm	Ca ppm	Mg ppm	Ca/Mg
TMW-1	31677	8.98	1	HCO3	145	19	83	28	3.0
TMW-2	31678	6.45	1	HCO3	140	33	190	34	5.6
TMW-3	31679	11.36	2	CO3/OH	1000	130	125	6.1	21
TMW-4	31680	11.57	2	CO3	175	110	265	27	9.8
TMW-5	31681	12.35	2	CO3/OH	360	64	875	14	63
PW-1	31682	11.44	2	CO3/OH	52	15	130	<0.5	260

FUNCTIONAL GROUP ANALYSIS...T.L.MCGAHEY

SAMPLE#	pH (AS IS)
31677	8.98
31678	6.45
31679	11.36
31680	11.57
31681	12.35
31682	11.44

SAMPLE	PH	.01N HCL	MEQ/G
31677	EP1/5.0	2.461	.002 HCO3
31678	EP1/5.0	27.60	.013 HCO3
31679	EP1/8.0	9.050	.0010 CO3
	EP2/4.9	11.80	.0024 OH

APPROVAL: Michael P. Martin

31680	EP1/8.3	8.44	.01052 CO3
	EP2/5.3	18.723	.001147 HCO3
31681	EP1/8.3	4.448	.0128 CO3
	EP2/5.0	6.514	.0148 OH
31682	EP1/8.4	4.212	.0014 CO3
	EP2/4.9	6.755	.0009 OH
NAHCO3	EP1/4.5	9.394	.0939 HCO3

WEIGHTS OF SAMPLES WERE ADDED TO DISTILLED WATER AND TITRATED POTENTIOMETRICALLY WITH .01N HCL.

SAMPLE 31679 HAD AN EXTREMELY OBSCURE 2ND ENDPOINT SO A PH OF 4.9 WAS USED AS THE END POINT SINCE THE OTHER SAMPLES 2ND ENDPOINT WAS AT PH=4.8 TO PH=5

SAMPLE 31680 THE PHENOLPHTHALEIN EP IS LESS THAN 1/2 OF THE METHYL ORANGE ENDPOINT WHICH INDICATES THE BASIC SPECIES AS HCO3 AND CO3, IF YOU ASSUME THAT THE ONLY SPECIES POSSIBLY PRESENT ARE OH, HCO3, AND CO3.

TITRATED .0953 MEQ OF NAHCO3 TO SEE IF THE BREAK WAS BETTER THAN THE 2ND BREAK OF THE SAMPLES. IT WAS A BETTER BREAK. RECOVERY = 98.5%

_____Metals Analysis--N. M. Less_____

These samples were prepared for analysis following EPA SW-846 (3rd Edition) Method 3010. The samples were analyzed using the following methods: flame atomic absorption spectroscopy (potassium); and inductively coupled plasma atomic emission spectroscopy (all other metals). Values which are less than the method detection limit (MDL) are reported as not detected (ND). Other values which are greater than the MDL but less than the practical quantification limit (PQL) are reported as "< PQL".

		RS #31677 TMW-1		RS #31678 TMW-2		RS #31679 TMW-3	
		Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2
Aluminum	(ppm)	<1.0	<1.0	1.1	1.4	<1.0	<1.0
Antimony	(ppm)	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Arsenic	(ppm)	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Barium	(ppm)	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Beryllium	(ppm)	ND	ND	ND	ND	ND	ND
Boron	(ppm)	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Cadmium	(ppm)	ND	ND	ND	ND	ND	ND
Calcium	(ppm)	83.	90.	190.	190.	120.	130.
Chromium	(ppm)	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5

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ANALYTICAL REPORT

PAGINATION : 125644
PROJECT NO. : 5P1660

Cobalt	(ppm)	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Copper	(ppm)	ND	ND	ND	ND	ND	ND
Iron	(ppm)	1.3	1.4	25.	26.	<0.5	<0.5
Lead	(ppm)	ND	ND	ND	ND	ND	ND
Lithium	(ppm)	<0.5	<0.5	ND	ND	<0.5	<0.5
Magnesium	(ppm)	28.	29.	34.	34.	5.8	6.4
Manganese	(ppm)	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Molybdenum	(ppm)	ND	ND	ND	ND	ND	ND
Nickel	(ppm)	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Phosphorous	(ppm)	<1.0	<1.0	<1.0	<1.0	ND	ND
Potassium	(ppm)	19.	20.	33.	33.	130.	130.
Selenium	(ppm)	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Silver	(ppm)	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Sodium	(ppm)	140.	150.	140.	140.	990.	1000.
Vanadium	(ppm)	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Zinc	(ppm)	ND	ND	ND	ND	4.4	4.8

		RS #31680 TMW-4		RS #31681 TMW-5		RS #31682 PW-1	
		Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2
Aluminum	(ppm)	11.	12.	5.0	5.2	<1.0	<1.0
Antimony	(ppm)	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Arsenic	(ppm)	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Barium	(ppm)	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Beryllium	(ppm)	ND	ND	ND	ND	ND	ND
Boron	(ppm)	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Cadmium	(ppm)	ND	ND	ND	ND	ND	ND
Calcium	(ppm)	260.	270.	880.	870.	130.	130.
Chromium	(ppm)	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Cobalt	(ppm)	<0.5	<0.5	ND	ND	ND	ND
Copper	(ppm)	ND	ND	ND	ND	ND	ND
Iron	(ppm)	11.	12.	4.1	4.5	<0.5	<0.5
Lead	(ppm)	ND	ND	<0.5	ND	ND	ND
Lithium	(ppm)	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Magnesium	(ppm)	26.	28.	14.	15.	<0.5	<0.5
Manganese	(ppm)	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Molybdenum	(ppm)	ND	ND	ND	ND	ND	ND
Nickel	(ppm)	<0.5	<0.5	ND	ND	ND	ND
Phosphorous	(ppm)	<1.0	<1.0	<1.0	<1.0	ND	ND
Potassium	(ppm	110.	110.	64.	64.	15.	15.
Selenium	(ppm)	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Silver	(ppm)	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Sodium	(ppm)	180.	170.	360.	360.	54.	51.
Vanadium	(ppm)	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Zinc	(ppm)	ND	ND	ND	ND	ND	ND

APPROVAL: Michael J. Martin

ANALYTICAL REPORT

		MDL
Aluminum	(ppm)	0.07
Antimony	(ppm)	0.05
Arsenic	(ppm)	0.02
Barium	(ppm)	0.006
Beryllium	(ppm)	0.006
Boron	(ppm)	0.01
Cadmium	(ppm)	0.006
Calcium	(ppm)	0.03
Chromium	(ppm)	0.01
Cobalt	(ppm)	0.01
Copper	(ppm)	0.006
Iron	(ppm)	0.02
Lead	(ppm)	0.10
Lithium	(ppm)	0.006
Magnesium	(ppm)	0.07
Manganese	(ppm)	0.006
Molybdenum	(ppm)	0.02
Nickel	(ppm)	0.03
Phosphorous	(ppm)	0.1
Potassium	(ppm)	0.02
Selenium	(ppm)	0.08
Silver	(ppm)	0.006
Sodium	(ppm)	0.3
Vanadium	(ppm)	0.01
Zinc	(ppm)	0.006

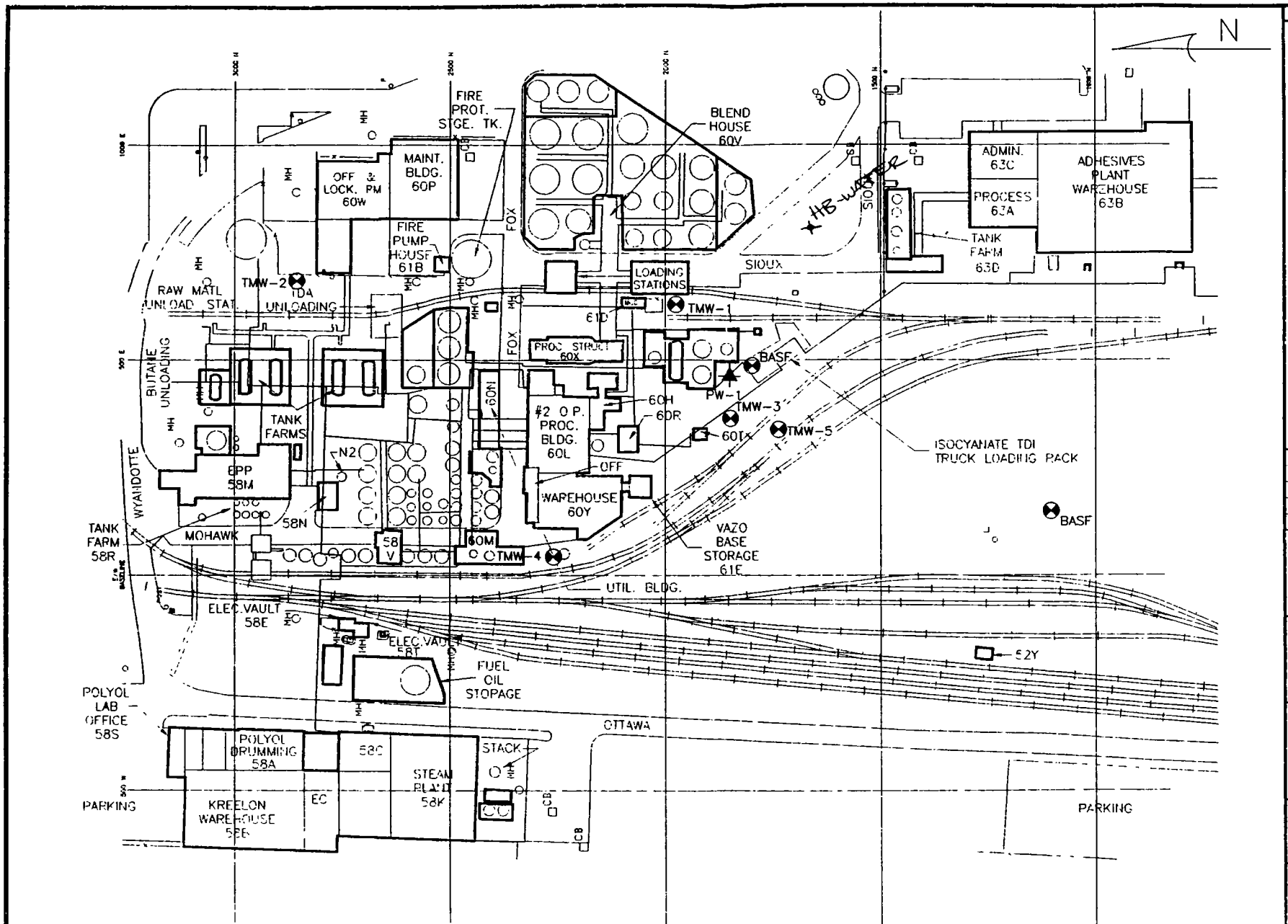
Ion Chromatography Analysis - W.A. Genaw/E.L. Yee

The samples were analyzed on a Dionex IonPac AS3 column with an eluant of 1.9 mM $NaHCO_3$ + 2.0 mM Na_2CO_3. The anions in the samples were detected by chemically suppressed conductivity with a Dionex AMMS-1 micromembrane suppressor unit. The following results were obtained by an external standard quantitation procedure.

Sample Number	ppm Chloride	ppm Sulfate
31677	120	270
31678	210	4
31679	1700	39
31680	260	110
31681	540	97
31682	42	160

No phosphate was detected in any of the samples. The detection limit for PO_4 under our conditions is ~1 ppm. A trace quantity of nitrate (<5 ppm) appears to be present in each sample.

APPROVAL: Michael J. Martin


N
FIRE PROT. STGE. TK.
BLEND HOUSE 60V
MAINT. BLDG. 60P
OFF & LOCK. PM 60W
FIRE PUMP HOUSE 61B
FOX
HB-WATER
SIOUX
ADMIN. 63C
PROCESS 63A
ADHESIVES PLANT WAREHOUSE 63B
TANK FARM 63D
LOADING STATIONS
TMW-2
TDA
RAW MATL UNLOAD STAT.
UNLOADING
TMW-1
61D
PROC. STRUCT. 60X
BASF
PW-1
TMW-3
60H
60R
60T
TMW-5
#2 O.P. PROC. BLDG. 60L
OFF
WAREHOUSE 60Y
ISOCYANATE TDI TRUCK LOADING RACK
BUTANE UNLOADING
TANK FARMS
EPP 58M
N2
58N
WYANDOTTE
TANK FARM 58R
MOHAWK
58 V
60M
TMW-4
VAZO BASE STORAGE 61E
UTIL. BLDG.
ELEC. VAULT 58E
ELEC. VAULT 58T
FUEL OIL STORAGE
52Y
POLYOL LAB OFFICE 58S
OTTAWA
POLYOL DRUMMING 58A
58C
STACK
STEAM PLANT 58K
KREELON WAREHOUSE 58B
EC
PARKING
PARKING
LEGEND
- PURGE WELL
- TEMPORARY GTI MONITORING WELL
- EXISTING BASF MONITORING WELL
SCALE IN FEET
GROUNDWATER TECHNOLOGY, INC.
23933 RESEARCH DRIVE FARMINGTON HILLS MI 48335
(313) 473-0720
PREPARED FOR:
BASF CORPORATION
1609 BIDDLE AVENUE WYANDOTTE, MICHIGAN
TITLE:
PURGE/MONITORING WELL LOCATION MAP
DESIGNED BY DS
DETAILED BY
CHECKED BY
DATE 8-23-92
FILE
PROJECT NO. 04001 0035
SCALE 1" = 50'
DRAWING 3
REVISION

bc: B BARKEL
P GREER
DAN STRYBE

BASF CORPORATION
POLYMERS DIVISION
RESEARCH SERVICES

BASF Restricted Document

ANALYTICAL REPORT

PAGINATION : 126083
PROJECT NO. : 5P1660

PAGINATION	:	126083
DESCRIPTION	:	WYANDOTTE WATERS
PROJECT NO.	:	5P1660
REQUESTOR/ID	:	MARTIN, MICHAEL J / 13283 **Ext:** 6878
COST CENTER	:	20270
COORDINATOR/ID	:	MARTIN, MICHAEL J / 13283 **Ext:** 6878
DATE ENTERED	:	09/24/92
DATE FINISHED	:	10/07/92
COPIES TO	:	A. BICKEL

INFORMATION/INSTRUCTIONS

SAMPLE	DESCRIPTION	SAMPLE #	ANALYSIS
TMW-1	3 40ml vials 1 liter jar	31853	BTEX, Styrene, Vinyl Chloride pH
TMW-2	3 40ml vials 1 liter jars	31854	BTEX, Styrene, Vinyl Chloride pH
TMW-3	3 40ml vials 1 liter jar	31855	BTEX, Styrene, Vinyl Chloride pH
TMW-4	3 40ml vials 1 liter jar	31856	BTEX, Styrene, Vinyl Chloride pH
TMW-5	3 40ml vials 1 liter jars	31857	BTEX, Styrene, Vinyl Chloride pH
TMW-6	3 40ml vials 1 liter jar	31858	BTEX, Styrene, Vinyl Chloride

RESULTS

SAMPLE	pH AS IS
31853	7.27
31854	6.45
31855	11.90
31856	11.12
31857	11.82
31858	8.33

APPROVAL: Michael J. Martin

BASF CORPORATION
POLYMERS DIVISION
RESEARCH SERVICES

ANALYTICAL REPORT

PAGINATION : 126083
PROJECT NO. : 5P1660

VOLATILES ANALYSIS -- L. J. Neubauer

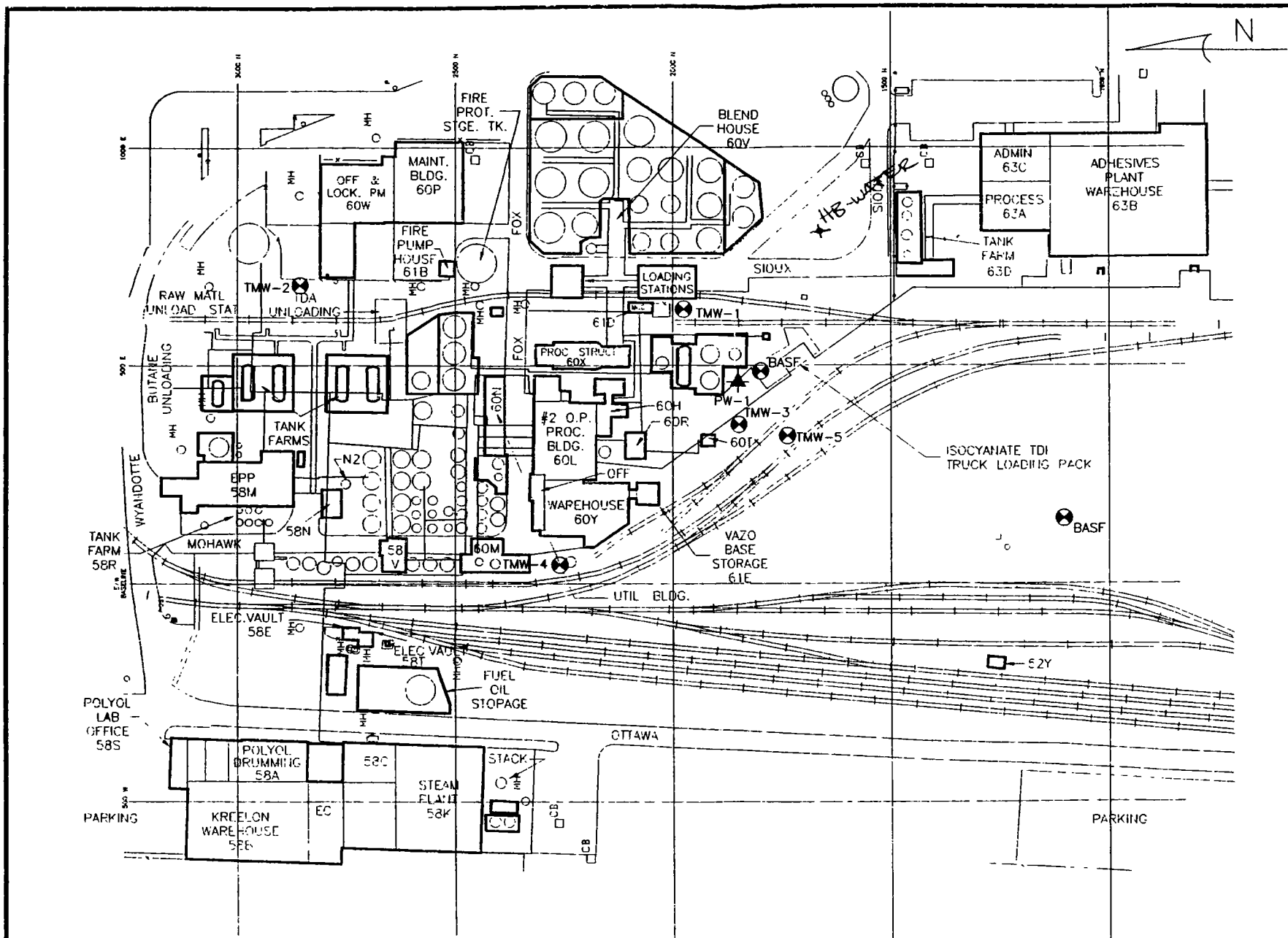
These samples were analyzed by P & T GC/MS in two sample sets. In the first set, the samples were diluted 1:100 to quantify analytes in the 500 to 15000 bbp range. The second set was undiluted and quantified analytes in the 5 to 150 ppb range.

	Concentration in ppb			
	#31853 TMW-1	#31854 TMW-2	#31855 TMW-3	#31856 TMW-4
BENZENE	14000.	640.	610.	290.*
TOLUENE	19000.	180.*	13000.	22000.*
ETHYLBENZENE	9100.	38.	8800.	500.
XYLENES	1600.	24.	<500.	36.
STYRENE	200.*	9.4	22000.*	8800.
VINYL CHLORIDE	5.6	<5.	<5.	8.6

	Concentration in ppb		
	#31857 TMW-5	#31858 TMW-6	BLANK
BENZENE	83.	80.	<5.
TOLUENE	5300.	21000.*	<5.
ETHYLBENZENE	540.	21000.*	<5.
XYLENES	31.	<500.	<5.
STYRENE	4100.	>20000.	<5.
VINYL CHLORIDE	<5.	<5.	<5.

* This is only an estimated value since it is higher than the highest calibration standard for this run. Historically, the standard calibration curve for this method remains linear in this range.

APPROVAL: Lorna J. Neubauer 10/7/92
MJM



NO	DATE	BY	REVISION

SIGNATURE	DATE
TERRITORY ENGR	
PROJECT ENGR	
PROJECT MGR	
CLIENT	

GROUNDWATER TECHNOLOGY, INC.

23933 RESEARCH DRIVE (313) 473-0720
FARMINGTON HILLS, MI 48335

PREPARED FOR:

BASF CORPORATION

1609 BIDDLE AVENUE
WYANDOTTE, MICHIGAN

TITLE:

PURGE/MONITORING WELL LOCATION MAP

DESIGNED BY	DETAILED BY	CHECKED BY
DS	HW	SP

DATE	FILE
6-23-97	6839NW

PROJECT NO.	SCALE
04001 0033	1" = 50'

DRAWING 3 REVISION

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THE DRAWING MODIFIED FROM BASF & WYANDOTTE PLOT PLAN (DRAWING NO. 4429)

BASF Wyandotte Corporation

ANALYTICAL REQUISITION – QUALITY AND POLLUTION CONTROL

File No. _____

Sample: North Plant Extraction Wells designated "E" wells in attached drawing

Laboratory No. _____

No. Samples _____ Project No. _____ Date: April 13, 1988

SAMPLE INFORMATION (WHERE FROM AND WHY)

All Results are in PPM

ANALYSIS REQUIRED:

SAMPLE IDENTIFICATION	RESULTS								
	$MeCl_2$	$CHCl_3$	EDC	PDC	Toluene	[redacted]	bis(2chloro-isopropyl) Ether		
#1									
#2									
#3									
#4									
4-14-88 #5	89	3,072	3,134	262,441	284		59,380		
4-14-88 #6	0	208	100	2,659	17		1,206		
4-14-88 #7	218	10	264	775	26		99		
4-14-88 #8	2	3	42	160	<1		6		
4-14-88 #9	131	6,844	4,940	425,819	214		201,867		

Requested By: H. D. Roush

Send Copies To: L. Anderson - Lab.

Analyst: F. Manore

Time Required _____

Date Completed _____

L. Anderson
CHIEF CHEMIST

F 875 REV. 2/76

BASF Wyandotte Corporation

File No. _____

ANALYTICAL REQUISITION – QUALITY AND POLLUTION CONTROL

Sample North Plant Extraction Wells. Laboratory No. _____

No. Samples _____ Project No. _____ Date April 13, 1988

SAMPLE INFORMATION (WHERE FROM AND WHY)

All Results are in PPM

ANALYSIS REQUIRED:

SAMPLE IDENTIFICATION	RESULTS								
	Me Cl_2	$CHCl_3$	EDC	PDC	Toluene	bis(2 chloro-isopropyl) Ether			
4-13-88 #10	164	9,659	16,668	409,309	160	161,852			
4-14-88 #11	1	5	6	259	<1	42			
4-14-88 #12	1	2	1	198	2	64			
4-14-88 #13	76	5,856	3,677	109,759	256	144,259			
#14									
#15									

Requested By H. D. Reush

Send Copies To L. Anderson - lab.

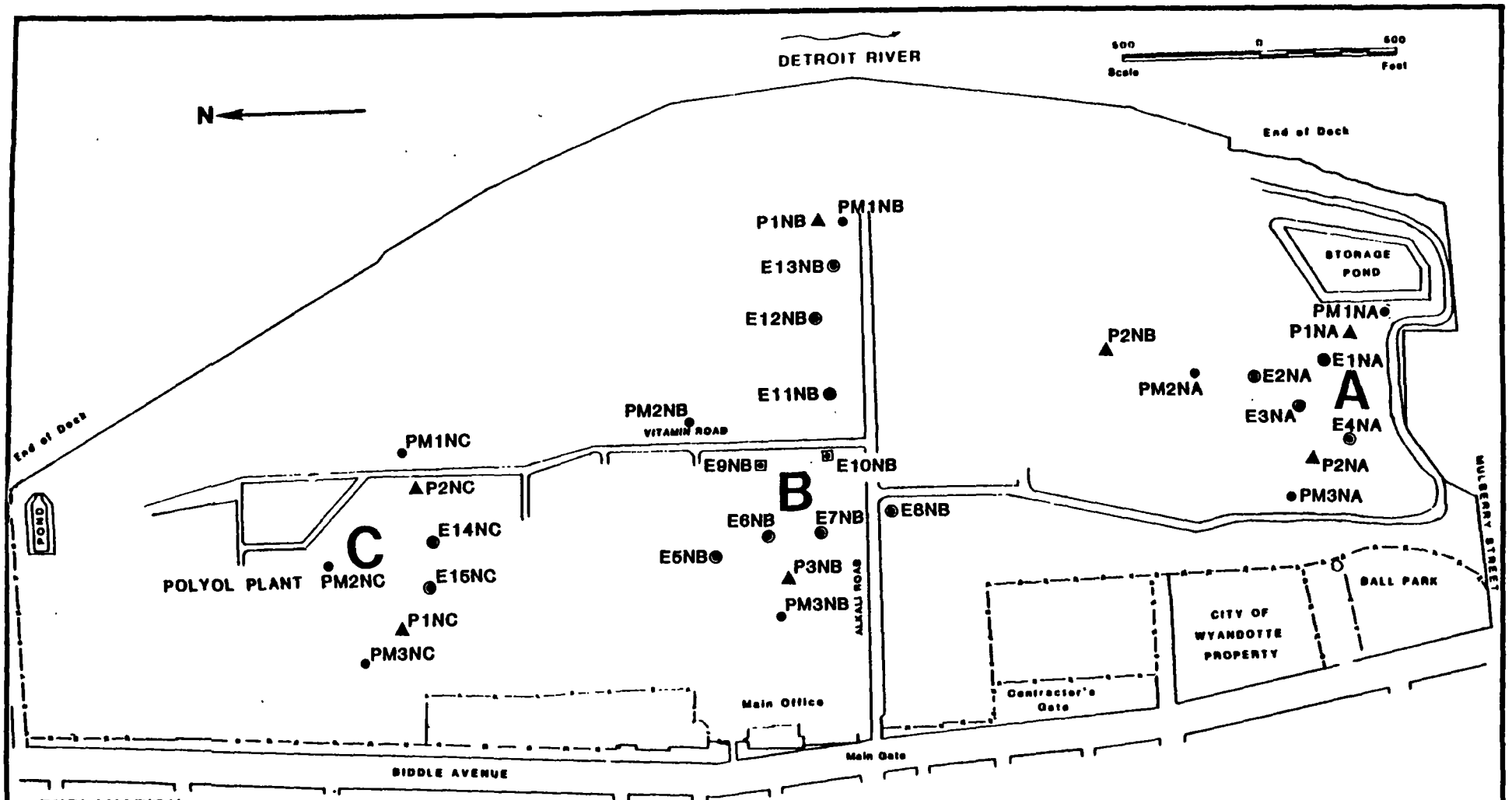
Analyst F. Manore

Time Required _____

Date Completed _____

L. Anderson
CHIEF CHEMIST

F 875 REV. 2/76



EXPLANATION

E10NB ⊞ Replaced extraction well and existing sump well

E14NC ● Replaced extraction well

PM1NC • Monitoring well

P1NC ▲ Piezometer

S. S. PAPADOPULOS & ASSOCIATES, INC.
CONSULTING GROUND WATER HYDROLOGISTS

LOCATION OF EXTRACTION WELLS, MONITORING WELLS AND PIEZOMETERS, NORTH WORKS

FIGURE 1

Inter-Office Memorandum

BASF Wyandotte Corporation HDR BASF

To C. W. Axce (4) → HDR

Date April 16, 1985

From B. M. Barkel

Subject Preliminary Report - PDC SOIL CONTAMINATION @ Wyandotte North Works

Copies

Reference

This preliminary report will serve to summarize the current status of the project, present the preliminary data on hand and suggest initial interpretations of this data as a guide to planning future work.

I. DRILLING WORK

To date, sixty-seven (67) core holes have been drilled. Twenty one (21) holes were drilled in the first phase of work and forty-six (46) were drilled in Phase II. The drilling activity may be summarized as follows:

Total Core Holes - 67
Holes Sunk to Gray Clay - 43
Area Covered by Drilling Pattern - Approx. 13.75 Acres

II. SAMPLING PROGRAM

To date, 349 core sections have been analyzed for PDC. Each sample analyzed represents a composite of a 3 ft. section of core. Results are reported as parts per million PDC based on the total weight of the sample (solid & liquid). Analysis is by gas chromatograph, using a head space method. The sampling activity may be summarized as follows:

Samples Analyzed - 349
Locations Analyzed - 67
Length of Core represented by Sample - 3 ft.
Composited sample size/core - 20 gms.
Minimum detection limit - 1 ppm as 1,2 PDC
Accuracy of method - ± 10%

Accuracy of analysis is effected by two factors - the volatility of PDC and the difficulty in uniformly compositing a sample containing liquids and various types of solids. Twelve core samples were rechecked for reproducability. In general, second readings were 40-50% lower than original, probably due to loss of volatile PDC during handling for the first sample. It is interesting to note, however, that for the samples which represented the same core hole

II. SAMPLING PROGRAM (Cont'd.)

(2 sections from the same hole for each of 5 holes), the results decrease IN RATIO within ± 10%. This indicates that volatile loss of PDC is a significant problem during handling and storage and that all results obtained are probably LOWER than true in situ values.

Compositing of liquids, both aqueous phases and free PDC, and solids consisting of stones, ciders, sand, organic deposits and clays is extremely difficult. This factor probably introduces significant error especially in sample containing free PDC and in those having radically different mixed solids.

It must be stressed that all results to date except the first 84 samples, represent PRELIMINARY DATA taken directly from the G.C. and not reviewed or audited. It, therefore, must be considered trend data, subject to review.

III. PRELIMINARY RESULTS

The preliminary results of area contamination based on the data on hand are shown on the attached computer generated contour map. To develop an appropriate scale factor for values ranging from 0-15,000, concentration was converted to a modified log factor - Value. This Value represents 100 log C - 100 which tends to dampen out minor concentration differences. On the plot, the ppm concentrations matching the contour lines have been indicated.

Also attached are contour maps of the top of the gray clay and the thickness of the sand layer over lying the clay for the area investigated. In addition computer generated "spacial maps" of concentration, clay elevation and sand thickness are presented.

Core logs for all holes were prepared and are presented indicating both strata encountered and PDC concentration at various depths for each of the core holes.

IV. DISCUSSION OF RESULTS

Preliminary analysis of the data indicates that the PDC has migrated from the original spillage area through the sand layer which overlays the gray clay. It would appear to be moving "down dip" along the clay with the highest migrating concentrations in the bottom half of the sand layer. In several locations shallower overlying clay layers were found, but these did not serve as effective confinement for the PDC. This would be expected for two reasons:

IV. DISCUSSION OF RESULTS (Cont'd.)

1. The shallower clay layers were found to be thin and in most cases contained silt and/or sand seams which makes the layer permeable.

2. The high PDC concentrations in the area of original spillage are not capped with the shallow clays. This allows leaching of the PDC to the lower sand bed and thus provides a route under any shallow clays.

Contour maps of concentration and clay elevation indicate a natural confinement of the PDC to the North, East and West which can be utilized for any containment plan.

V. CALCULATION OF PRESENT PDC CONTENT OF AREA

The amount of PDC in the ground was estimated based on the following assumptions:

1. All significant quantities of PDC are located in the bottom 1/2 of the sand layer.

2. Only areas showing > 100 ppm PDC were considered.

3. The sand was assumed to have a density of 125 lbs./ft.^{3}.

A contour map of PDC concentrations was superimposed on a contour map of sand layer thickness and areas defined which had the same thickness of sands and the same concentration of PDC. A 25' x 25' grid to the same scale as the contour maps was then used to determine the square feet in each area. The pounds of PDC in that area were then calculated by:

$$\text{lbs. PDC} = A \times \frac{t}{2} \times 125\#/\text{ft.}^3 \times \frac{C}{10^6}$$

t = sandbed thickness ft.
C = concentration of PDC

The various areas were then summed.

Approx. PDC content in ground = 358575 lbs.
≈ 179T
@ 1.16 Sp Gr ≈ 37,000 gal.

VI. UTILITY OBSTRUCTIONS IN AREA

Attached is a sketch showing utility obstructions in the involved area which might have an effect on a plan of corrective action.

VII. ADDITIONAL WORK

The following additional work is recommended if consistant with the requirements of the corrective plan.

1. Core drilling south of Alkali Rd. around Core Hole #48 to better define contours in this area.

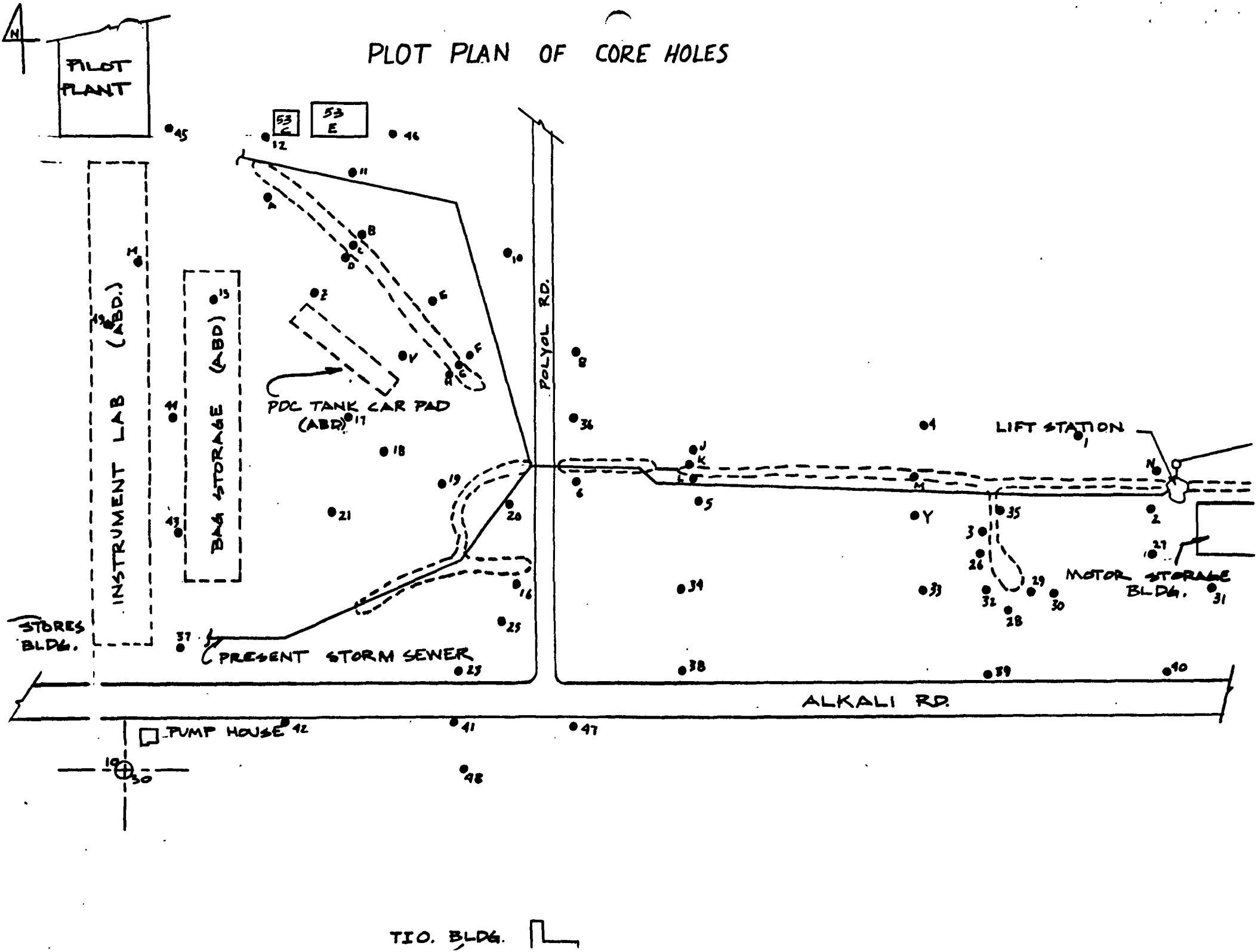
2. Deep core drilling at selected sites to establish the thickness of the gray clay.

It must be stressed again that this status report is based on preliminary data. Any significant changes which develop on receipt of final audited data will be reported as developed.

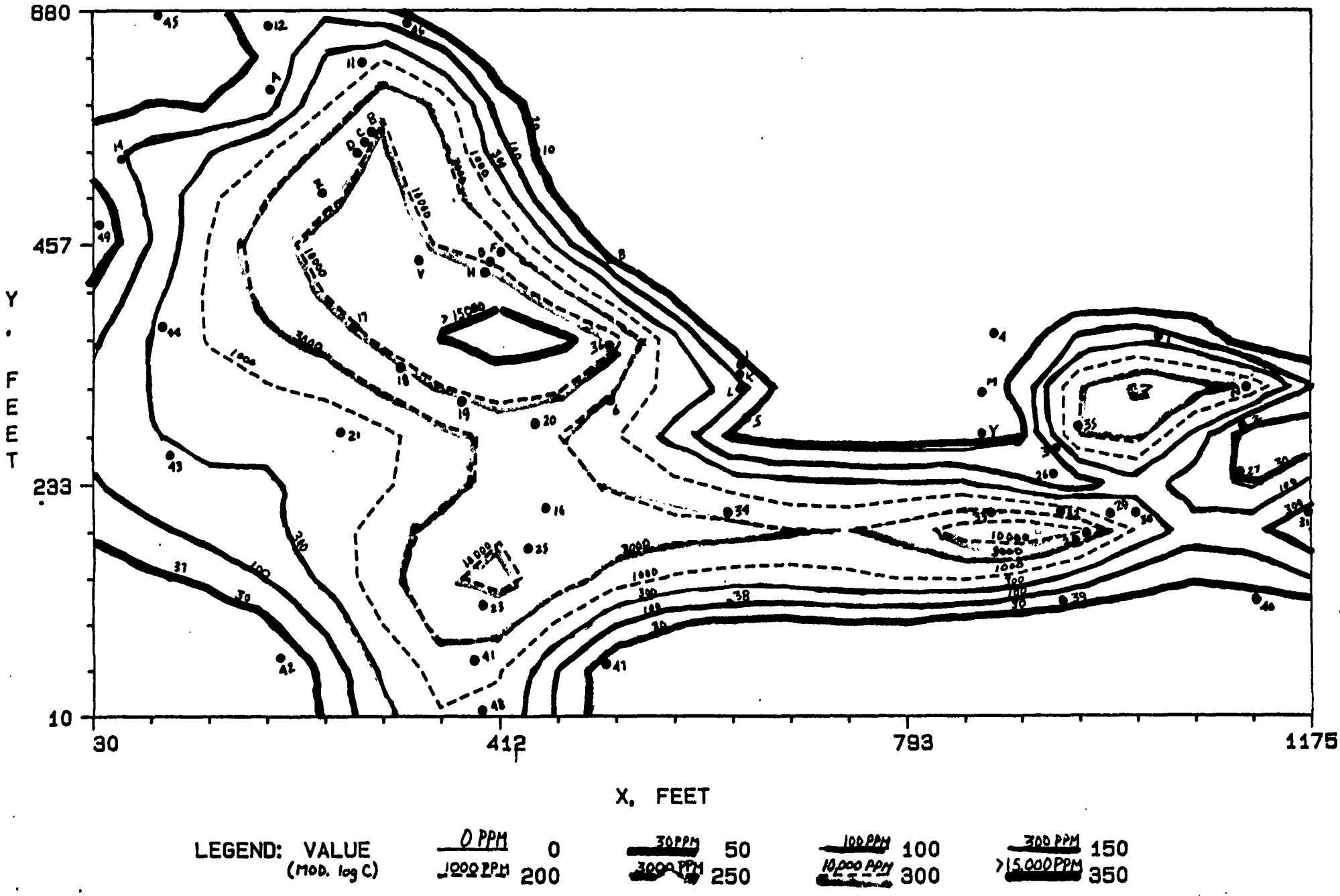
Barry M. Barkel

dr

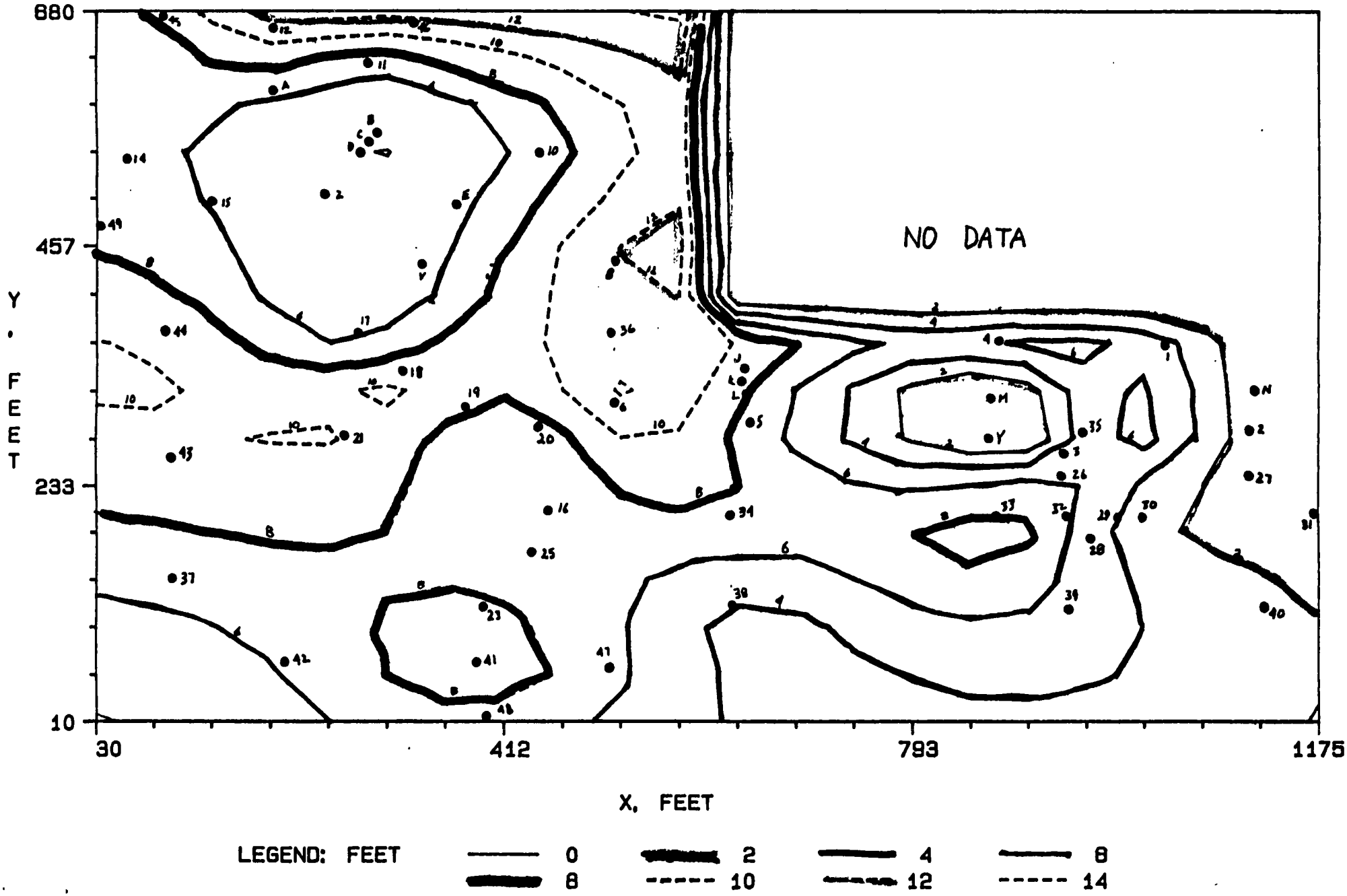
PLOT PLAN OF CORE HOLES



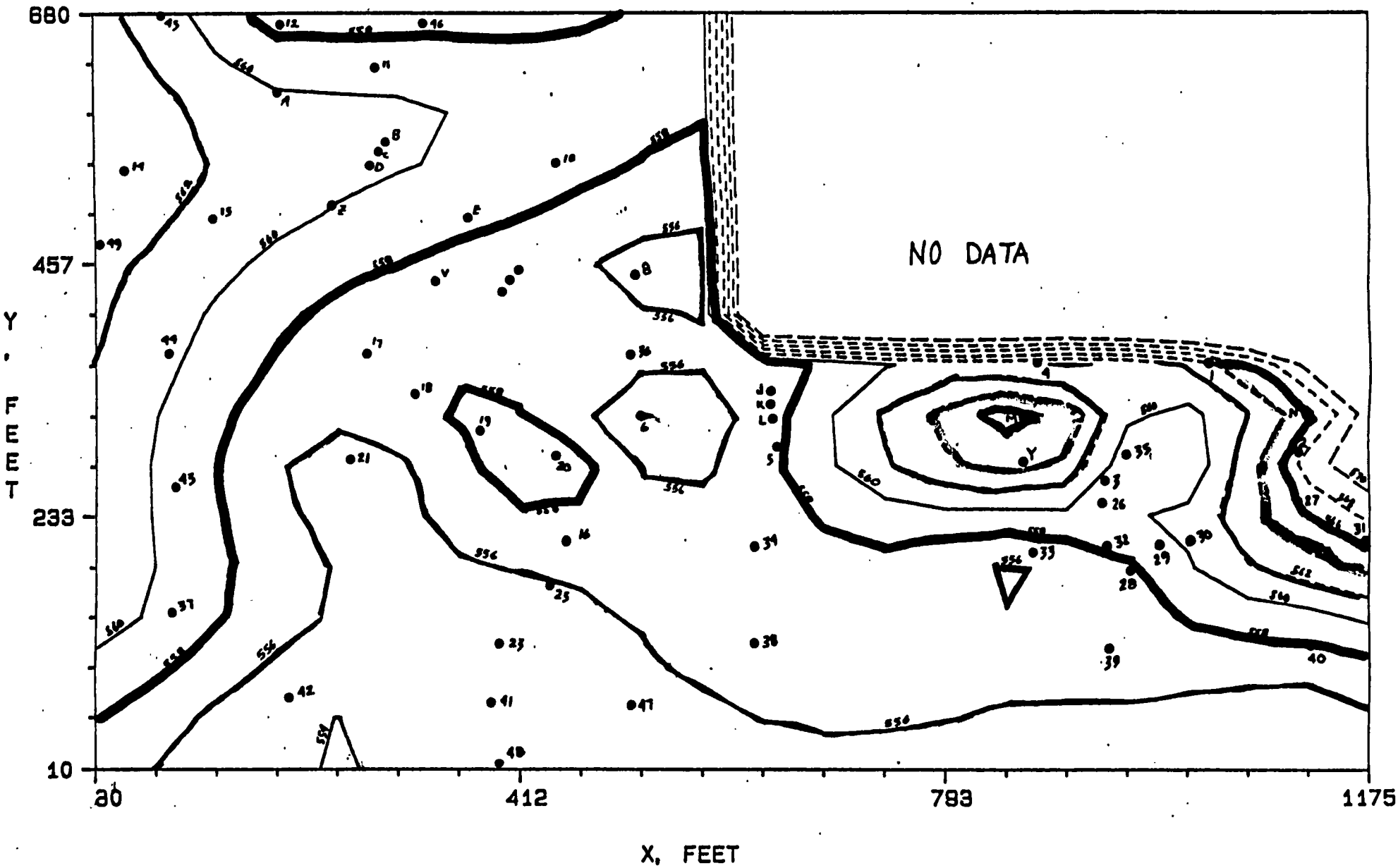
CONCENTRATION



SAND LAYER THICKNESS

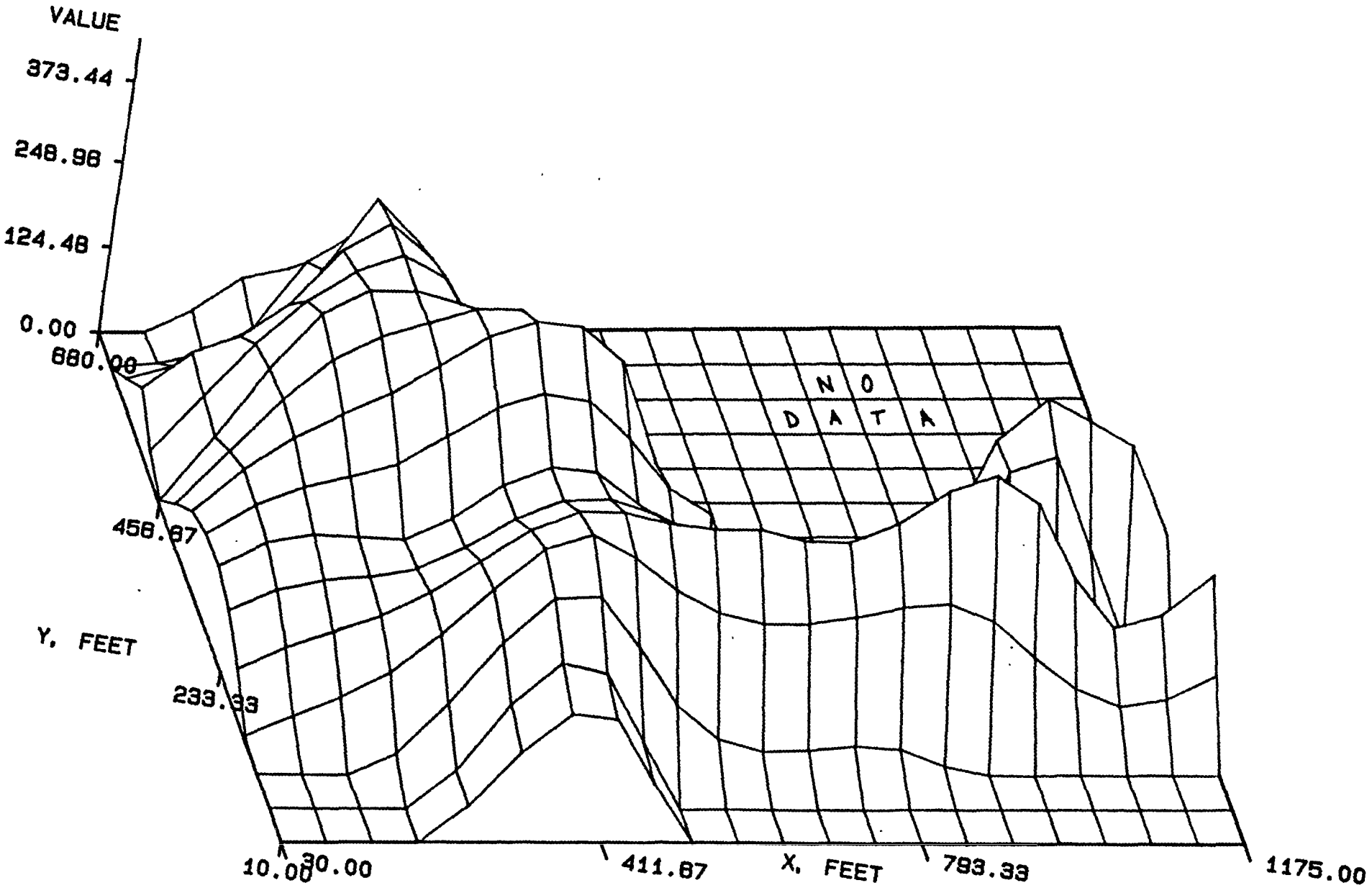


CLAY ELEVATION



LEGEND: FEET 554 556 558 560 562 564 566 568 570

CONCENTRATION



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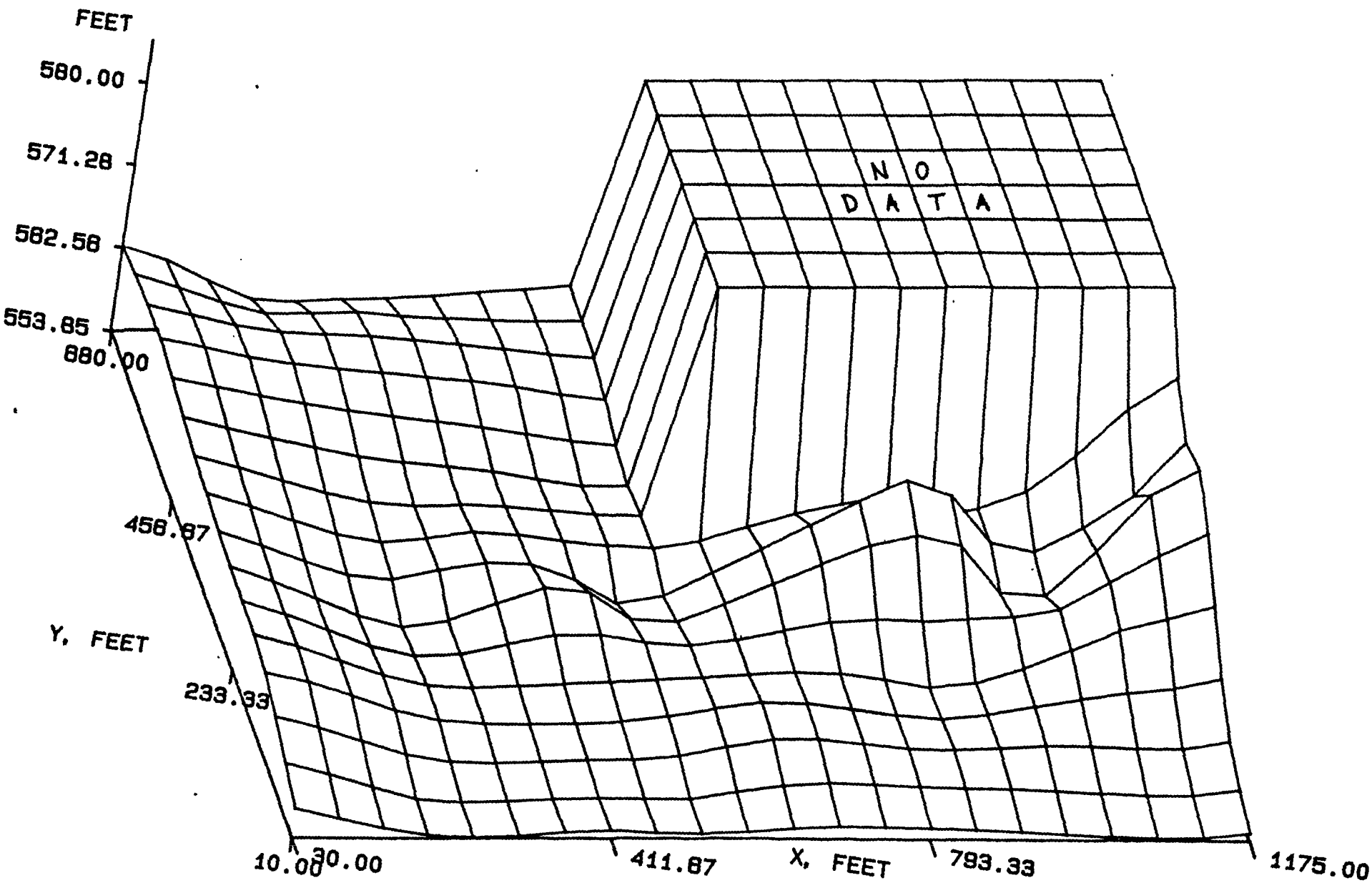
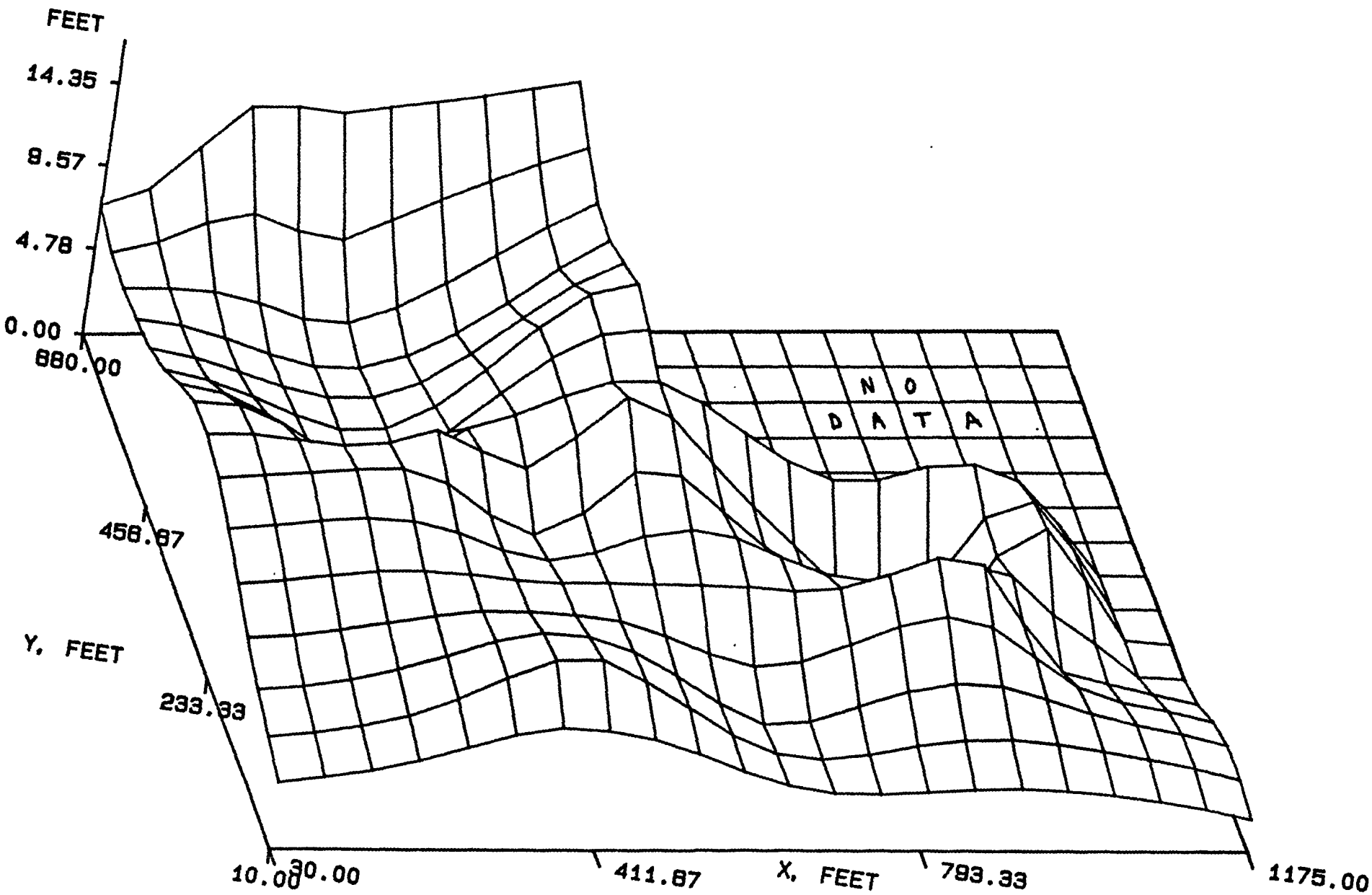
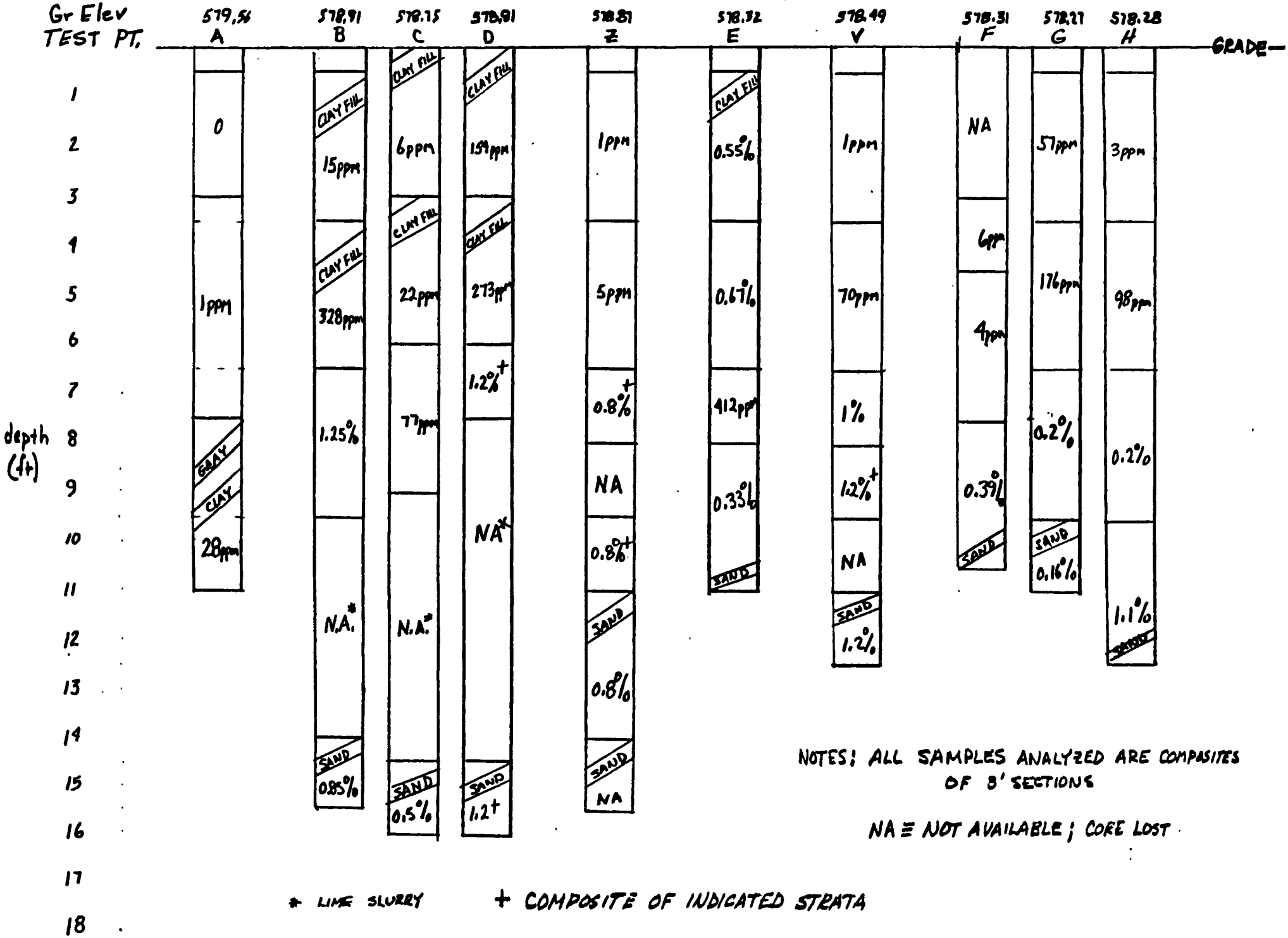


SAND LAYER THICKNESS



DEPTH VS PDC CONCENTRATION

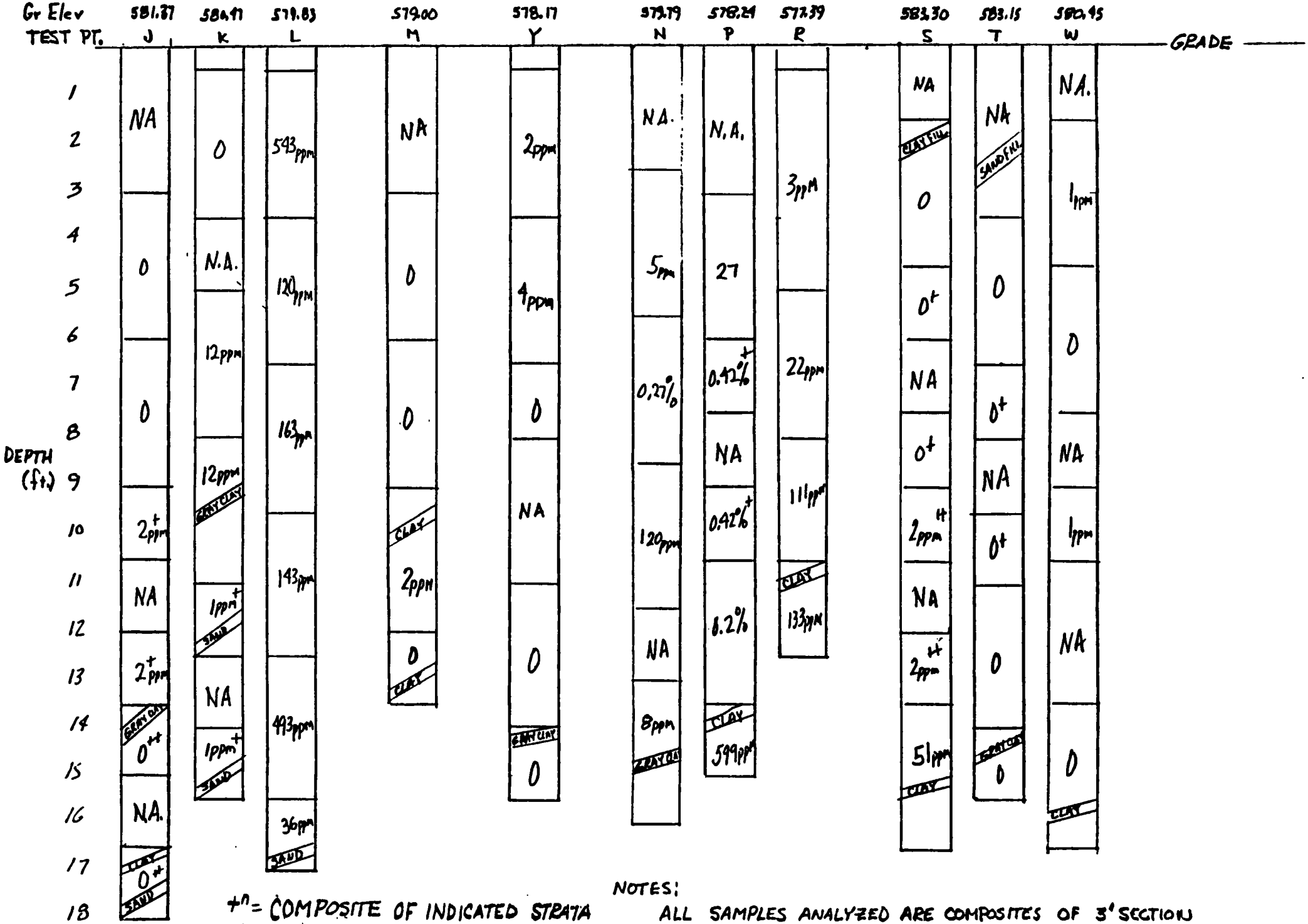


NOTES: ALL SAMPLES ANALYZED ARE COMPOSITES OF 8' SECTIONS

NA ≡ NOT AVAILABLE; CORE LOST

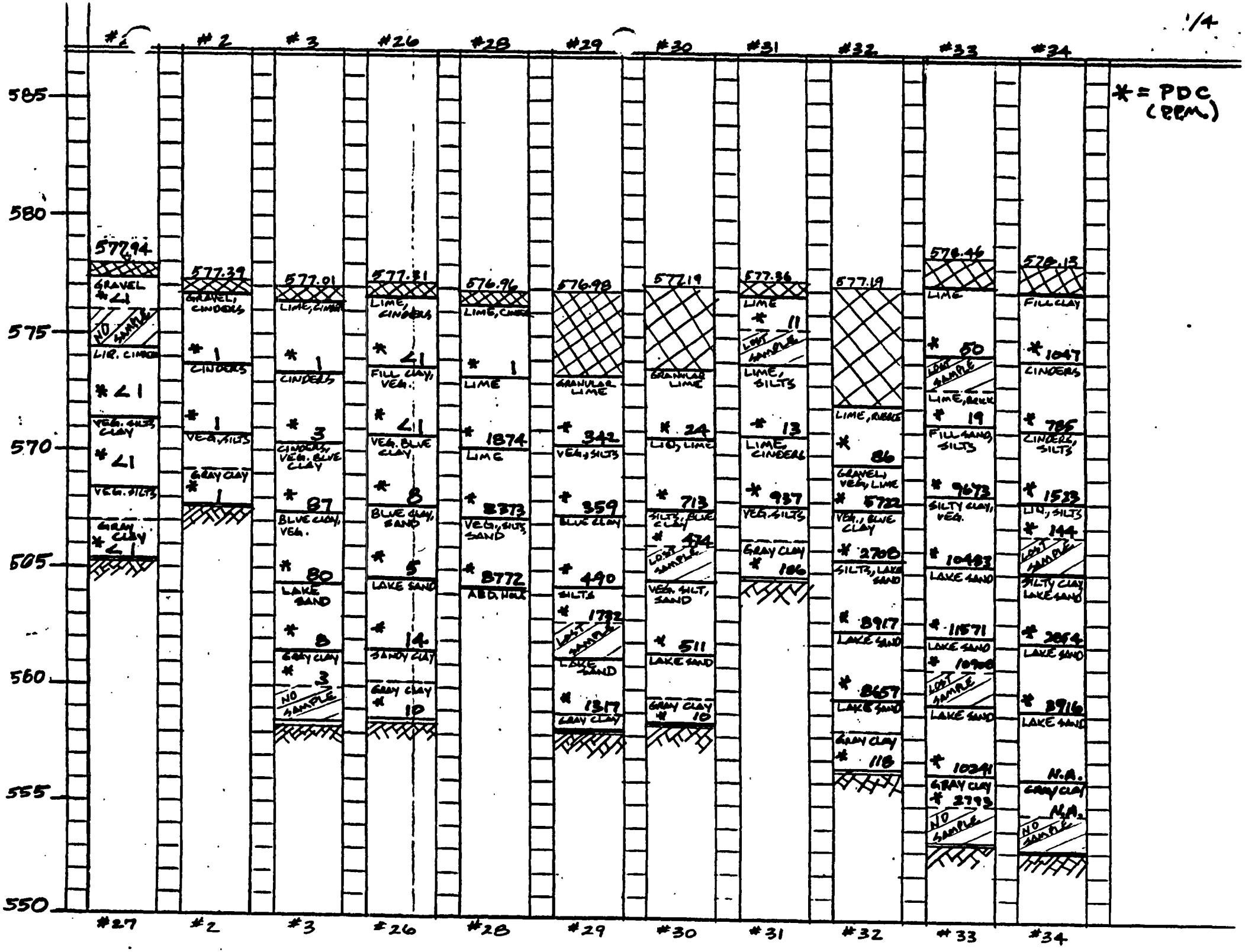
* LIME SLURRY + COMPOSITE OF INDICATED STRATA

DEPTH VS PDC CONCENTRATION



+n = COMPOSITE OF INDICATED STRATA
n = 1, 2' IE +, ++, +++, etc

NOTES:
ALL SAMPLES ANALYZED ARE COMPOSITES OF 3' SECTION
NA ≡ NOT AVAILABLE – CORE LOST ON RETRIEVAL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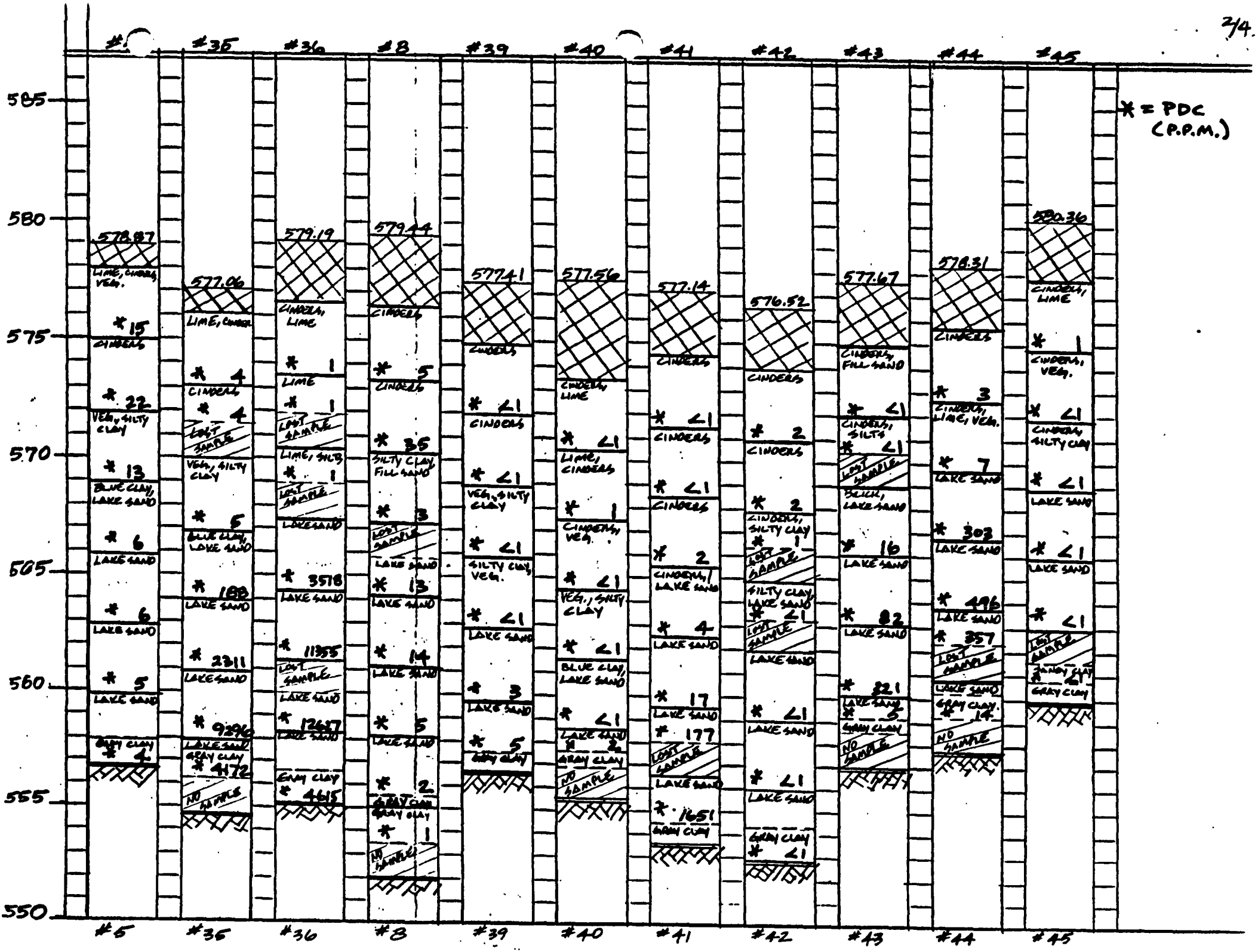
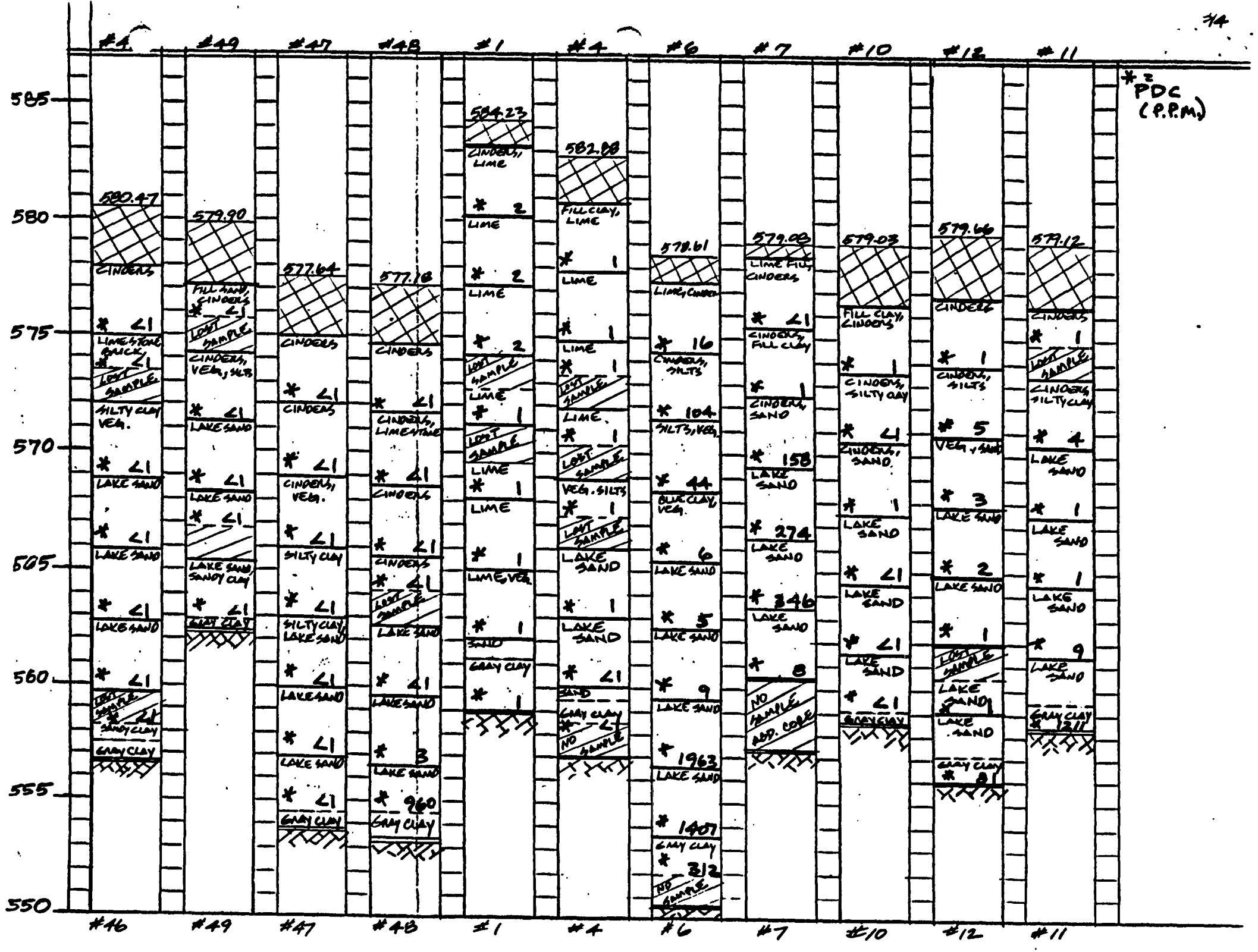
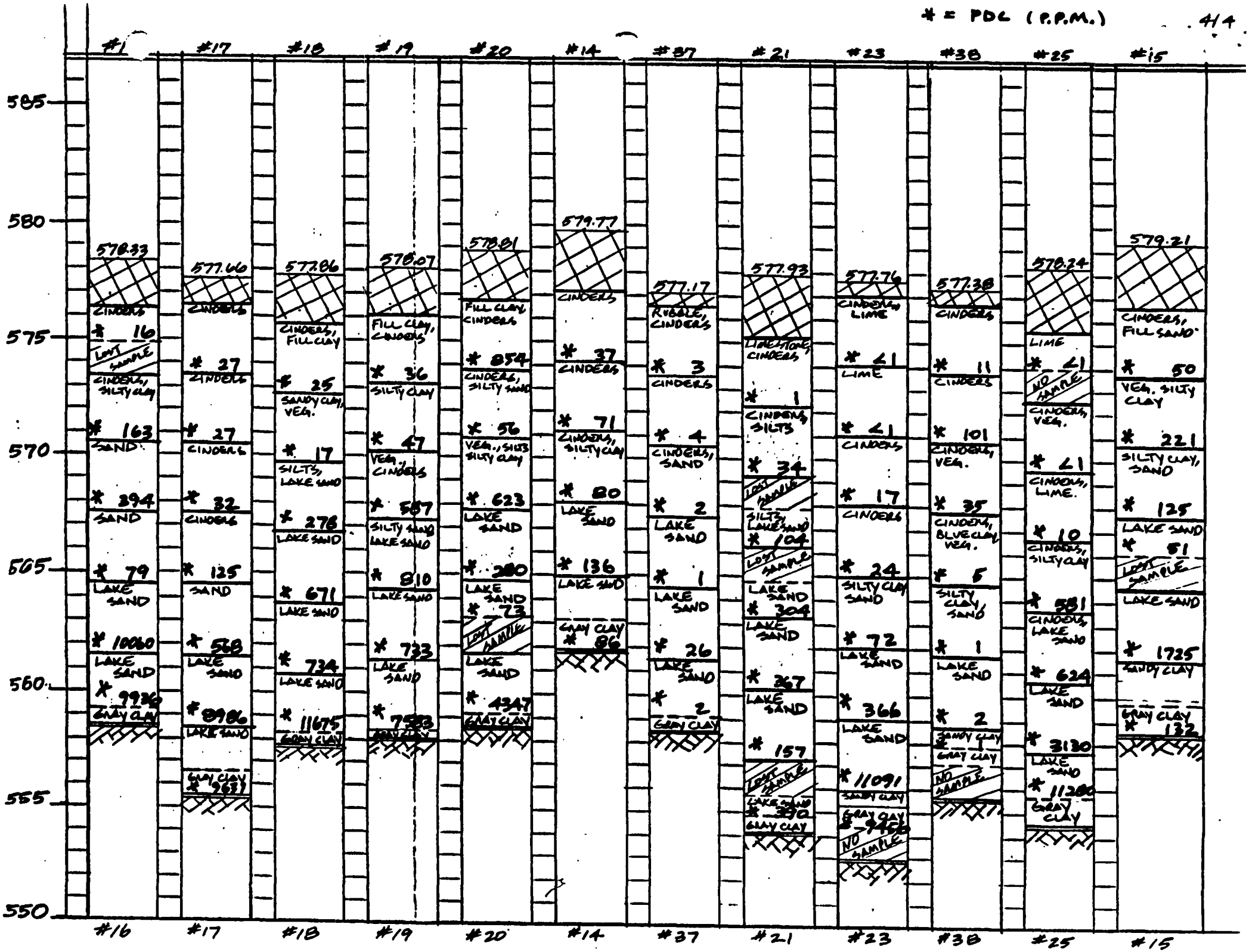
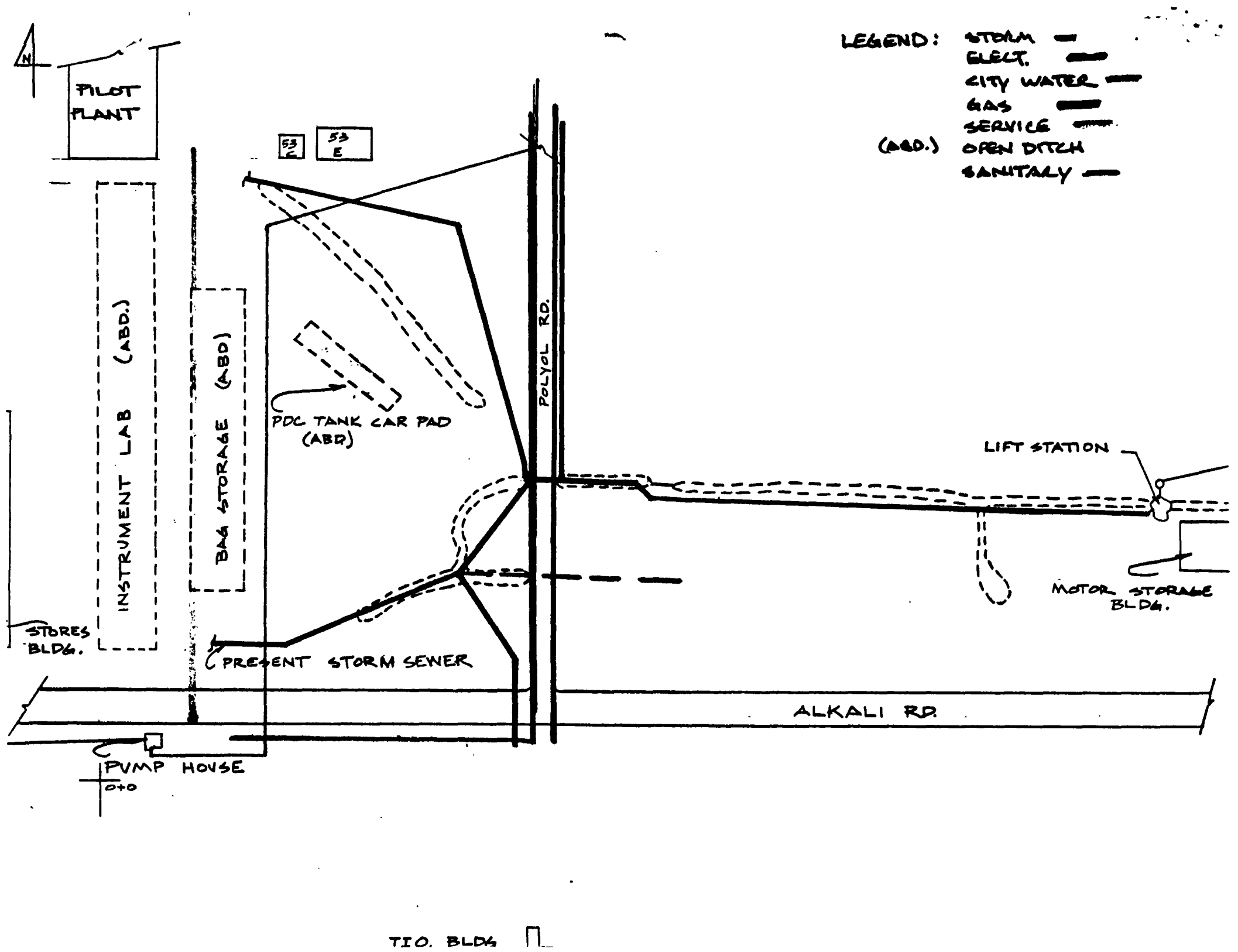
#2
#3
#26
#28
#29
#30
#31
#32
#33
#34
585
580
575
570
565
560
555
550
* = PDC (PPM)
577.94
GRAVEL
* 21
NO SAMPLE
LIR. CINDERS
* 21
VEG. SILTS, CLAY
* 21
VEG. SILTS
GRAY CLAY
* 21
577.39
GRAVEL, CINDERS
* 1
CINDERS
* 1
VEG. SILTS
GRAY CLAY
* 1
577.01
LIME, CINDERS
* 1
CINDERS
* 3
CINDERS, VEG. BLUE CLAY
* 87
BLUE CLAY, VEG.
* 80
LAKE SAND
* 8
GRAY CLAY
* 3
NO SAMPLE
577.31
LIME, CINDERS
* 21
FILL CLAY, VEG.
* 21
VEG. BLUE CLAY
* 8
BLUE CLAY, SAND
* 5
LAKE SAND
* 14
SANDY CLAY
GRAY CLAY
* 10
576.96
LIME, CINDERS
* 1
LIME
* 1874
LIME
* 8373
VEG., SILTS, SAND
* 8772
ABD. ROCK
576.98
GRANULAR LIME
* 342
VEG., SILTS
* 359
BLUE CLAY
* 490
SILTS
* 1792
LOST SAMPLE
LAKE SAND
* 1317
GRAY CLAY
577.19
GRANULAR LIME
* 24
LIQ. LIME
* 713
SILTS, BLUE CLAY
* 474
LOST SAMPLE
VEG. SILT, SAND
* 511
LAKE SAND
GRAY CLAY
* 10
577.36
LIME
* 11
LOST SAMPLE
LIME, SILTS
* 13
LIME, CINDERS
* 937
VEG. SILTS
GRAY CLAY
* 186
577.19
LIME, ROCK
* 86
GRAVEL, VEG., LIME
* 5722
VEG., BLUE CLAY
* 2708
SILTS, LAKE SAND
* 8917
LAKE SAND
* 8657
LAKE SAND
GRAY CLAY
* 118
576.46
LIME
* 50
LOST SAMPLE
LIME, ROCK
* 19
FILL SAND, SILTS
* 9673
SILTY CLAY, VEG.
* 10483
LAKE SAND
* 11571
LAKE SAND
* 10900
LOST SAMPLE
LAKE SAND
* 10241
GRAY CLAY
* 2793
NO SAMPLE
576.13
FILL CLAY
* 1047
CINDERS
* 785
CINDERS, SILTS
* 1533
LIQ., SILTS
* 144
LOST SAMPLE
SILTY CLAY LAKE SAND
* 2854
LAKE SAND
* 8916
LAKE SAND
N.A.
GRAY CLAY
N.A.
NO SAMPLE


#5
#35
#36
#8
#39
#40
#41
#42
#43
#44
#45
585
580
575
570
565
560
555
550
* = PDC (P.P.M.)
578.87
LIME, CINDERS, VEG.
* 15
CINDERS
* 22
VEG., SILTY CLAY
* 13
BLUE CLAY, LAKE SAND
* 6
LAKE SAND
* 6
LAKE SAND
* 5
LAKE SAND
GRAY CLAY
* 4
577.06
LIME, CINDERS
* 4
CINDERS
* 4
LOST SAMPLE
VEG., SILTY CLAY
* 5
BLUE CLAY, LAKE SAND
* 188
LAKE SAND
* 2311
LAKE SAND
* 9296
LAKE SAND
GRAY CLAY
* 4172
NO SAMPLE
579.19
CINDERS, LIME
* 1
LIME
* 1
LOST SAMPLE
LIME, SILTS
* 1
LOST SAMPLE
LAKE SAND
* 3518
LAKE SAND
* 11355
LOST SAMPLE
LAKE SAND
* 12647
LAKE SAND
GRAY CLAY
* 4615
579.44
CINDERS
* 5
CINDERS
* 35
SILTY CLAY, FILL SAND
* 3
LOST SAMPLE
LAKE SAND
* 13
LAKE SAND
* 14
LAKE SAND
* 5
LAKE SAND
* 2
GRAY CLAY
GRAY CLAY
* 1
NO SAMPLE
577.41
CINDERS
* <1
CINDERS
* <1
VEG., SILTY CLAY
* <1
SILTY CLAY, VEG.
* <1
LAKE SAND
* 3
LAKE SAND
* 5
GRAY CLAY
577.56
CINDERS, LIME
* <1
LIME, CINDERS
* 1
CINDERS, VEG.
* <1
VEG., SILTY CLAY
* <1
BLUE CLAY, LAKE SAND
* <1
LAKE SAND
* 2
GRAY CLAY
NO SAMPLE
577.14
CINDERS
* <1
CINDERS
* <1
CINDERS
* 2
CINDERS, LAKE SAND
* 4
LAKE SAND
* 17
LAKE SAND
* 177
LOST SAMPLE
LAKE SAND
* 1651
GRAY CLAY
576.52
CINDERS
* 2
CINDERS
* 2
CINDERS, SILTY CLAY
* 1
LOST SAMPLE
SILTY CLAY, LAKE SAND
* <1
LOST SAMPLE
LAKE SAND
* <1
LAKE SAND
* <1
LAKE SAND
GRAY CLAY
* <1
577.67
CINDERS, FILL SAND
* <1
CINDERS, SILTS
* <1
LOST SAMPLE
BLUE CLAY, LAKE SAND
* 16
LAKE SAND
* 82
LAKE SAND
* 221
LAKE SAND
* 5
GRAY CLAY
NO SAMPLE
578.31
CINDERS
* 3
CINDERS, LIME, VEG.
* 7
LAKE SAND
* 302
LAKE SAND
* 496
LAKE SAND
* 357
LOST SAMPLE
LAKE SAND
GRAY CLAY.
* 14
NO SAMPLE
580.36
CINDERS, LIME
* 1
CINDERS, VEG.
* <1
CINDERS, SILTY CLAY
* <1
LAKE SAND
* <1
LAKE SAND
* <1
LOST SAMPLE
SANDY CLAY
* <1
GRAY CLAY


#46
#49
#47
#48
#1
#4
#6
#7
#10
#12
#11
585
580
575
570
565
560
555
550
*2 PDC (P.P.M.)
580.47
CINDERS
* <1
LIMESTONE BRICK,
* <1
LOST SAMPLE
SILTY CLAY VEG.
* <1
LAKE SAND
* <1
LAKE SAND
* <1
LAKE SAND
* <1
LOST SAMPLE
* <1
SANDY CLAY
GRAY CLAY
579.90
FILL SAND, CINDERS
* <1
LOST SAMPLE
CINDERS, VEG., SILTS
* <1
LAKE SAND
* <1
LAKE SAND
* <1
LAKE SAND, SANDY CLAY
* <1
GRAY CLAY
577.64
CINDERS
* <1
CINDERS
* <1
CINDERS, VEG.
* <1
SILTY CLAY
* <1
SILTY CLAY, LAKE SAND
* <1
LAKE SAND
* <1
LAKE SAND
* <1
GRAY CLAY
577.18
CINDERS
* <1
CINDERS, LIMESTONE
* <1
CINDERS
* <1
CINDERS
* <1
LOST SAMPLE
LAKE SAND
* 3
LAKE SAND
* 960
GRAY CLAY
584.23
CINDERS, LIME
* 2
LIME
* 2
LIME
* 2
LOST SAMPLE
LIME
* 1
LOST SAMPLE
LIME
* 1
LIME
* 1
LIME, VEG.
* 1
SAND
GRAY CLAY
* 1
582.88
FILL CLAY, LIME
* 1
LIME
* 1
LIME
* 1
LOST SAMPLE
LIME
* 1
LOST SAMPLE
VEG., SILTS
* 1
LOST SAMPLE
LAKE SAND
* 1
LAKE SAND
* <1
SAND
GRAY CLAY
* <1
NO SAMPLE
578.61
LIME, CINDERS
* 16
CINDERS, SILTS
* 104
SILTS, VEG.
* 44
BLUE CLAY, VEG.
* 6
LAKE SAND
* 5
LAKE SAND
* 9
LAKE SAND
* 1963
LAKE SAND
* 1407
GRAY CLAY
* 312
NO SAMPLE
579.08
LIME FILL, CINDERS
* <1
CINDERS, FILL CLAY
* 1
CINDERS, SAND
* 158
LAKE SAND
* 274
LAKE SAND
* 346
LAKE SAND
* 8
NO SAMPLE ADD. CORE
579.03
FILL CLAY, CINDERS
* 1
CINDERS, SILTY CLAY
* <1
CINDERS, SAND
* 1
LAKE SAND
* <1
LAKE SAND
* <1
LAKE SAND
* <1
GREY CLAY
579.66
CINDERS
* 1
CINDERS, SILTS
* 5
VEG. + SAND
* 3
LAKE SAND
* 2
LAKE SAND
* 1
LOST SAMPLE
LAKE SAND
LAKE SAND
GRAY CLAY
* 8
579.12
CINDERS
* 1
LOST SAMPLE
CINDERS, SILTY CLAY
* 4
LAKE SAND
* 1
LAKE SAND
* 1
LAKE SAND
* 9
LAKE SAND
GRAY CLAY
* 1211


* = PDL (P.P.M.)
585
580
575
570
565
560
555
550
#1
578.33
CINDERS
* 16
LOST SAMPLE
CINDERS, SILTY CLAY
* 163
SAND
* 394
SAND
* 79
LAKE SAND
* 10060
LAKE SAND
* 9936
GRAY CLAY
#17
577.66
CINDERS
* 27
CINDERS
* 27
CINDERS
* 32
CINDERS
* 125
SAND
* 568
LAKE SAND
* 8986
LAKE SAND
GRAY CLAY
* 963
#18
577.86
CINDERS, FILL CLAY
* 25
SANDY CLAY, VEG.
* 17
SILTS, LAKE SAND
* 278
LAKE SAND
* 671
LAKE SAND
* 734
LAKE SAND
* 11675
GRAY CLAY
#19
578.07
FILL CLAY, CINDERS
* 36
SILTY CLAY
* 47
VEG., CINDERS
* 587
SILTY SAND, LAKE SAND
* 810
LAKE SAND
* 733
LAKE SAND
* 7583
GRAY CLAY
#20
578.81
FILL CLAY, CINDERS
* 854
CINDERS, SILTY SAND
* 56
VEG., SILTS, SILTY CLAY
* 623
LAKE SAND
* 280
LAKE SAND
* 73
LOST SAMPLE
LAKE SAND
* 4347
GRAY CLAY
#14
579.77
CINDERS
* 37
CINDERS
* 71
CINDERS, SILTY CLAY
* 80
LAKE SAND
* 136
LAKE SAND
GRAY CLAY
* 86
#37
577.17
RUBBLE, CINDERS
* 3
CINDERS
* 4
CINDERS, SAND
* 2
LAKE SAND
* 1
LAKE SAND
* 26
LAKE SAND
* 2
GRAY CLAY
#21
577.93
LIMESTONE, CINDERS
* 1
CINDERS, SILTS
* 34
LOST SAMPLE
SILTS, LAKE SAND
* 104
LOST SAMPLE
LAKE SAND
* 304
LAKE SAND
* 267
LAKE SAND
* 157
LOST SAMPLE
LAKE SAND
* 390
GRAY CLAY
#23
577.76
CINDERS, LIME
* 21
LIME
* 21
CINDERS
* 17
CINDERS
* 24
SILTY CLAY SAND
* 72
LAKE SAND
* 366
LAKE SAND
* 11091
SANDY CLAY
GRAY CLAY
* 9766
NO SAMPLE
#38
577.38
CINDERS
* 11
CINDERS
* 101
CINDERS, VEG.
* 35
CINDERS, BLUE CLAY, VEG.
* 5
SILTY CLAY, SAND
* 1
LAKE SAND
* 2
SANDY CLAY
GRAY CLAY
NO SAMPLE
#25
578.24
LIME
* 21
NO SAMPLE
CINDERS, VEG.
* 21
CINDERS, LIME.
* 10
CINDERS, SILTY CLAY
* 581
CINDERS, LAKE SAND
* 624
LAKE SAND
* 3130
LAKE SAND
* 11280
GRAY CLAY
#15
579.21
CINDERS, FILL SAND
* 50
VEG., SILTY CLAY
* 221
SILTY CLAY, SAND
* 125
LAKE SAND
* 51
LOST SAMPLE
LAKE SAND
* 1725
SANDY CLAY
GRAY CLAY
* 132


N
PILOT PLANT
53 C
53 E
INSTRUMENT LAB (ABD.)
BAG STORAGE (ABD)
PDC TANK CAR PAD (ABD)
POLYOL RD.
LIFT STATION
MOTOR STORAGE BLDG.
STORES BLDG.
PRESENT STORM SEWER
ALKALI RD.
PUMP HOUSE
0+0
LEGEND:
STORM
ELECT.
CITY WATER
GAS
SERVICE
(ABD.) OPEN DITCH
SANITARY
TIO. BLDG

ITEM 2.2

Environmental Resources Management, Inc.

Suite 200 • 3025 Boardwalk Drive • Ann Arbor, Michigan 48108 • (313) 769-6080 • Telefax (313) 769-6264

bc: B. BAEKEL
J. SCHWEICKERT

24 May 1990

Mr. H. Dale Roush
Manager Quality and Ecology Services
BASF Corporation
1609 Biddle Avenue
Wyandotte, Michigan 48192-3799

FILE: 160-25-00-01

Dear Mr. Roush:

Environmental Resources Management, Inc. (ERM) performed a preliminary environmental investigation at the BASF Corporation's North Works Facility in Wyandotte, Michigan during the week of 8 April 1990. The investigation covered an area of approximately 16 acres in the northern portion of the North Works site, involving one hundred eleven (111) sample locations. This letter report is the final task of this project in fulfillment of the 10 November 1989 proposal.

Background

BASF reported to ERM that toluene, styrene, and other volatile organic compounds had been detected in the surface water at various plant collection system points. Health and safety problems had also become a concern during routine maintenance and construction related excavations at the plant. The purpose of this investigation was to help identify source areas which were contributing to the shallow ground water degradation in a timely and cost-efficient manner. Results of the investigation could then be used to help focus a detailed program to locate the source areas.

ERM originally proposed the use of soil gas survey methods to help identify source areas which were contributing to shallow ground water degradation. However, because of saturated conditions in the shallow soils, the soil gas survey methods were determined to be inappropriate. To meet the objectives of the investigation, ERM proceeded with an alternate approach which entailed the headspace analysis of soil samples using the portable gas chromatograph (GC). The following text details the scope, procedures employed, and the results of the investigation.

MAY 29 1990

Scope

The scope of this investigation included the following:

- Collection of a soil sample from within the shallow (land surface to 3 feet below grade) saturated soil zone at 111 points;
- On-site analysis of the soil samples utilizing a portable GC; and
- Preparation of a letter report which includes a summary data table and maps detailing the distribution of the compounds detected and recommendations for areas of future investigation.

Method of Investigation

Grid Set-up

The investigation's objectives were first addressed by establishing sampling points in the northern portion of the North Works site. ERM personnel were assisted by a BASF staff engineer in locating the sample points depicted on Figure 1. BASF personnel established a grid block system on a plant base map (Polyol Plot Plan With Product Code/Tank Dedication, #42590) and each grid block was then divided into four sectors (denoted as A, B, C, or D). One sample point per grid block sector was then located as site conditions would allow. Plant features such as underground utilities or cement or asphalt covered areas precluded the sampling of several grid block sectors.

Sample Collection

Soil samples were collected by first advancing a gasoline powered 1-1/2 inch diameter steel auger through the surface material to an approximate depth of 2 feet below grade. The power auger was used to help speed up the penetration of compacted surface materials which proved difficult for standard hand-powered augers. The sample was collected by advancing a stainless-steel 1-inch diameter spoon sampler to an approximate depth of 3 feet below grade. In situations where auger refusal was encountered or inadequate soils were available, soils on the

sides of the original borehole were collected. Samples were collected from within the saturated soil zone throughout most of the site, however, soils encountered in some areas were not fully saturated.

Approximately 10 grams of soil were immediately placed into a 40 ml glass, screw-cap vial with a teflon-lined septum. The sample vials were taken to the environmental laboratory on site where a portable GC was set up.

In order to minimize the potential for cross contamination between sample locations, the soil sampling tools were decontaminated between locations using a detergent wash and a distilled water rinse.

Analytical Methods

The soil sample vials were taken directly to the on-site portable GC for analysis. The soil in the vial was covered with enough reagent water to allow for a volume of headspace above the soil/water/gas mixture equal to that of the working standard. The mixture was then shaken vigorously to break up the soil and develop the equilibrium partitioning of the analytes among the three phases. The samples were then allowed to stand at room temperature for at least 10 minutes before analysis.

A volume of the headspace from above the soil/water mixture was then extracted using a gas-tight syringe. The headspace sample was then injected onto the column of a Sentex Scentograph portable GC which was equipped with a 10 percent SP1000 column in an isothermal oven for separation of the volatile organic compounds. The Scentograph was also equipped with an Argon Ionization Detector (AID) which has a wide detection range capability.

The GC was calibrated using the headspace over a 500 µg/ml working standard for vinyl chloride, dichloroethylene, benzene, toluene, ethylbenzene, styrene, and xylene. Standards were analyzed at the beginning of each day, and more frequently, based upon the operator's discretion to help track varying ambient temperature affects.

Qualitative identification of compounds of interest in the samples was made by retention time comparisons of the sample chromatograms to those of the compounds in the standards. Quantitation was calculated based on a ratio of the response area of the compound identified in the sample to the response area of

that compound in the standard. A detailed description of the methods described above is presented in Attachment A.

Quality control measures incorporated for the portable GC analysis included the analysis of blanks and duplicate sample analysis. Blanks were prepared from organic free distilled water and were analyzed as necessary to allow determination of carry-over and syringe and instrument contamination. One duplicate sample was analyzed for approximately every 35 soil samples.

Investigation Results

The objective of the investigation was to help locate source areas which may be contributing to shallow ground water degradation at the site. The results of this preliminary investigation suggest potential source areas where further investigative efforts can be focused.

Soils encountered at the site were primarily sands or clay, which were saturated from land surface to the bottom of the boring. A black tar material was encountered in cuttings from borings in grid blocks 98 and 99. Some staining or discoloration was also noted in samples from grid block 87. Samples were collected and analyzed from 109 of the originally marked 111 sample points.

Several volatile organic compounds (VOC) were detected by the portable GC in the samples collected. Table 1 presents a summary of the analytical results as reported by the GC. Great care must be exercised in using the generated data quantitatively. The method employed assumes that all of the VOCs in the soil samples transfer from the solid to the liquid phase and then partition to the gas phase. For soils with a low organic carbon content, e.g., on the order of 1 to 2 percent, this is a reasonable assumption. The soils analyzed at the site do fall within this category, therefore, results can be relied on as semi-quantitatively accurate. In addition, the compound identifications have not been confirmed by mass spectral analysis or on a second GC column and, therefore, must be considered tentative. For purposes of identifying source areas versus non-source areas, the method is reliable.

The primary VOCs detected in the samples were toluene, styrene, vinyl chloride, and benzene. Ethylbenzene and total xylenes (m, p, and o isomers) were detected at lower concentrations in fewer locations (see Table 1). Concentrations

ranged from 0.01 parts per million (ppm) to 4000 ppm in samples analyzed. The following paragraphs discuss the concentration distribution of each compound separately with an accompanying map depicting the distribution.

Toluene

Toluene was detected in concentrations ranging from 0.04 ppm to 80 ppm. Figure 2 is a map showing the distribution of toluene at the site. Elevated concentrations of toluene were detected in three main areas. The first area is at the west side of grid block 99. This elevated value is most likely due to the tar pit which is buried directly beneath the stone cover in this area. Toluene is one constituent generally associated with coal tar. This area does not appear to represent a source area; however, further investigation must verify that higher concentrations of toluene area not leaching from the tar at depths below the sampling interval.

The second area is located at grid blocks 87, 76, and 77. These values exceed the levels in surrounding sample points by two to three orders of magnitude and therefore merit further investigation as a potential source area.

The third and largest area is centered at grid blocks 61 and 62 with elevated values detected in grid blocks 60, 75, 48, 49, 35, and 22. These values exceed the levels in surrounding sample points by two to three orders of magnitude and therefore merit further investigation. This is a larger area and may encompass more than one source.

Styrene

Styrene was detected in samples with concentrations ranging from 8 ppm to 4000 ppm. Figure 3 is a map which depicts the distribution of styrene at the site as detected during the investigation. Two areas are noted on Figure 3 as elevated above the surrounding sample points.

The styrene concentrations exceed the toluene concentrations detected by one to two orders of magnitude and are much more isolated. The first area is at grid blocks 77 and 65. This could represent a potential source area and merits further investigation. The second and largest area of styrene contamination is centered around grid block 62 where a greatly

elevated value of 4000 ppm was reported. Grid blocks 61, 74, 63, and 49 are also greatly affected and merit further investigation as a potential source area.

Vinyl Chloride

Vinyl chloride was detected in samples with concentrations ranging from 1 ppm to 1000 ppm. Elevated levels were detected primarily in two areas as depicted on Figure 4. A value of 300 ppm was reported in grid block 77 exceeding the levels in surrounding sample points by one to two orders of magnitude, which can be an indication of a source area and merits further investigation. Values of 900 ppm and 1000 ppm were centered in grid blocks 60, 61, and 62 with values of 300 ppm reported in grid blocks 74 and 48. The elevated concentrations in these grid blocks in close proximity to each other may represent another source area which merits further investigation.

Benzene

Benzene was detected in concentrations ranging from 0.05 ppm to 70 ppm. Figure 5 depicts the distribution of benzene at the site. Two primary areas of elevated benzene values can be seen on Figure 5. One is in grid block 99 where elevated toluene concentrations were detected and black tar was noted in the cuttings. Again, this benzene value is most likely the result of the tar pit; however, it must be investigated further to determine if the tar is leaching higher concentrations of benzene at depths below the sampling interval. The second area of elevated benzene concentrations is centered at grid blocks 74, 75, and 76. These concentrations exceed the levels in surrounding samples by one to two orders of magnitude. This second area may represent a source area and merits further investigation.

Summary

Several VOCs were detected in soil samples collected at the North Works site. The locations where values were reported generally had a central area with elevated concentrations between one and three orders of magnitude higher than surrounding sample points. These areas merit further investigation as potential source areas.

Certain overlaps of potential source areas can be seen from these figures presented. The vinyl chloride and toluene maps depict grid blocks 60, 61, and 62, and possibly grid block 77, as dual source areas. Benzene and toluene concentrations are both elevated in grid block 99. However, the obvious potential source area overlaps do not extend beyond these two areas. The results do indicate that soils and/or shallow ground water affected by VOCs are prevalent in the central portion of the study area. The results of this investigation can be used to help focus an investigative program designed to identify the sources of the shallow ground water degradation.

Sincerely,

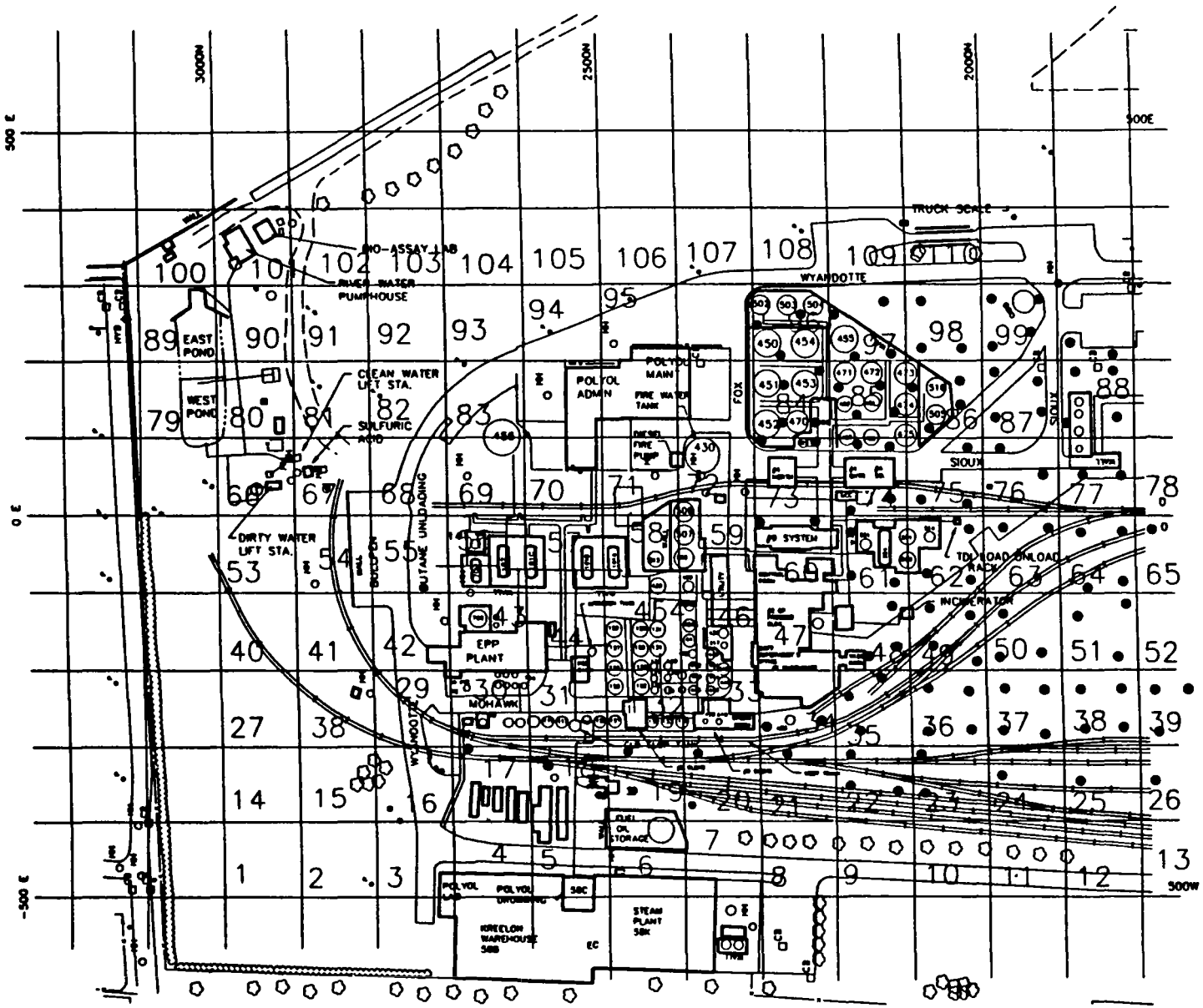
William L. Goldschmidt
Project Scientist

WLG/ms

Enclosures

cc: S. Pelowski, ERM
N. DeSalvo, ERM
K. Padar, BASF

Figure 1
Preliminary Soil Investigation Base Map
BASF Corporation - North Works
Wyandotte, Michigan



● Sample Locations

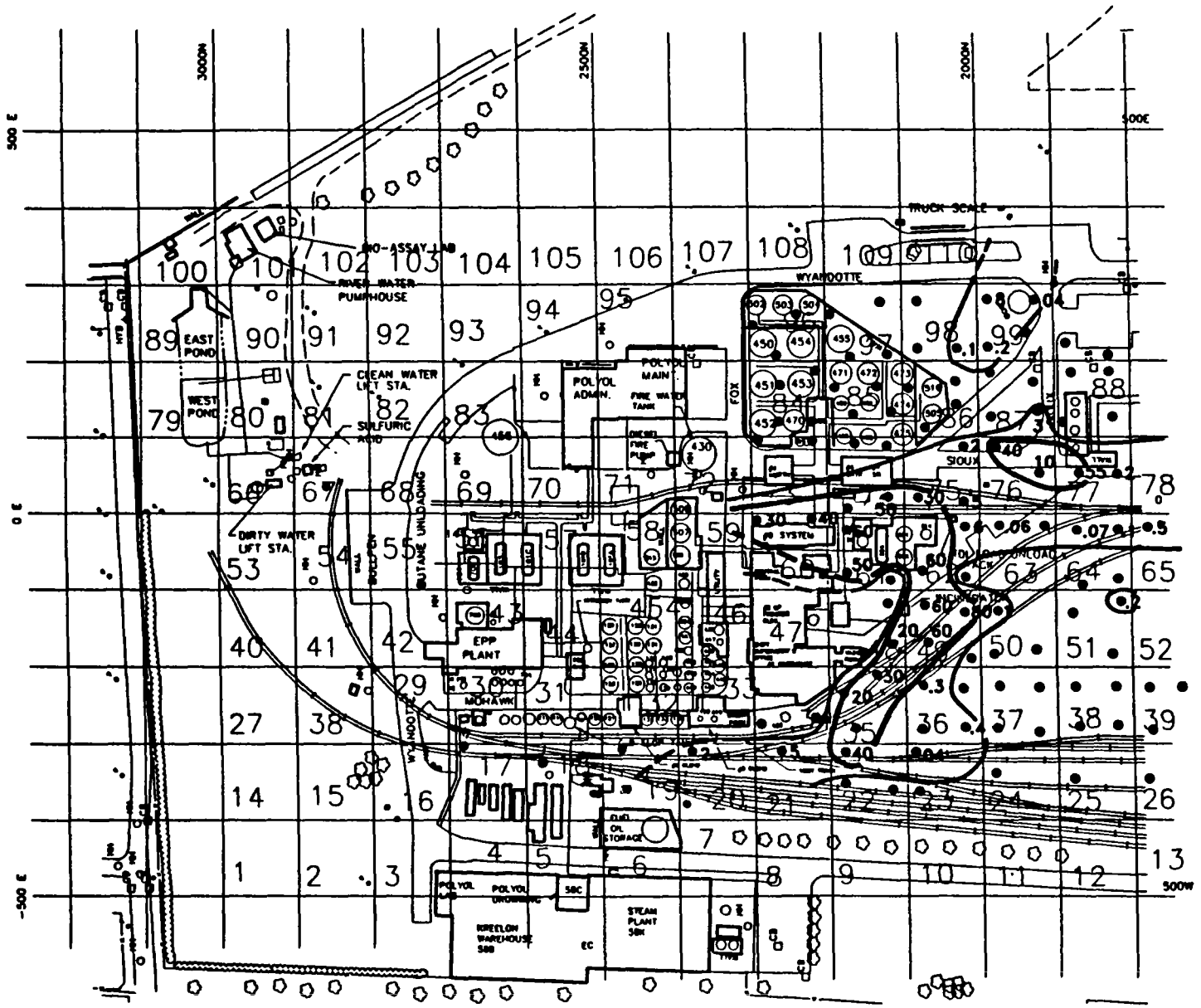
60 0 60 120
Scale in Feet

▲ Map Derived from BASF Corporation Polyol Plot Plan With Product Code/Tank Dedication, Drawing # 42590

00.01	Drawn by/Date: T. Stevens 5.18.90	Checked by/Date:
	Revised by/Date:	Checked by/Date:

The ERM Group

Figure 2
Preliminary Soil Investigation Toluene Concentrations (ppm)
BASF Corporation - North Works
Wyandotte, Michigan



● Sample Locations

Approximate Area

10 ppm

0.01 ppm

Dashed Line Indicates Inferred Contours

N

60 0 60 120
Scale in Feet

* Map Derived from BASF Corporation Polyol Plot Plan With Product Code/Tank Dedication, Drawing # 42590

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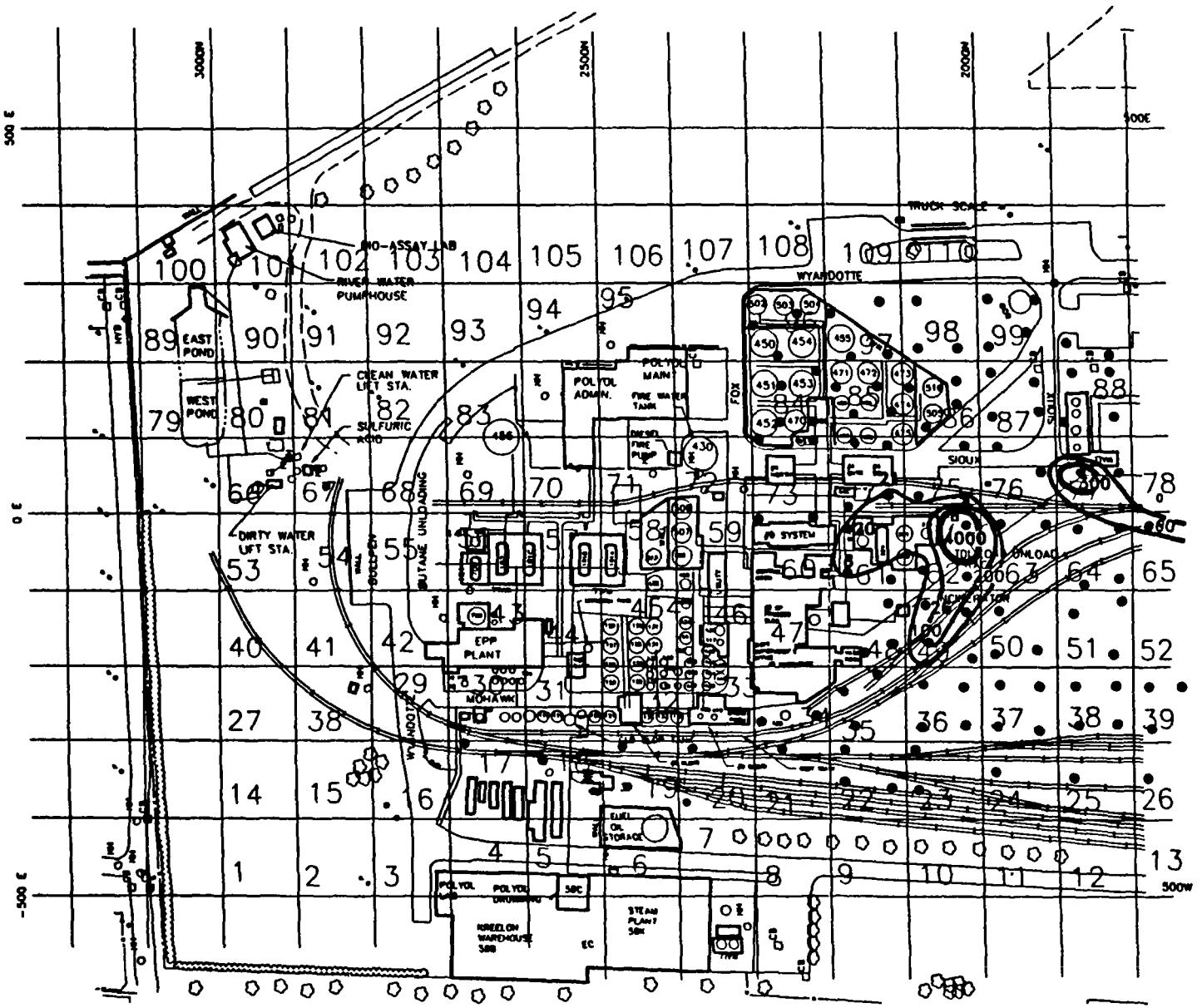
Figure 3
Preliminary Soil Investigation Styrene Concentrations (ppm)
BASF Corporation - North Works
Wyandotte, Michigan



- Sample Locations

Approximate Area
- 1000 ppm
- 100 ppm
- 1 ppm

N

60 0 60 120
Scale in Feet

* Map Derived from BASF Corporation Polyol Plot Plan With Product Code/Tank Dedication, Drawing # 42590

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	Revised by/Date:	Checked by/Date:

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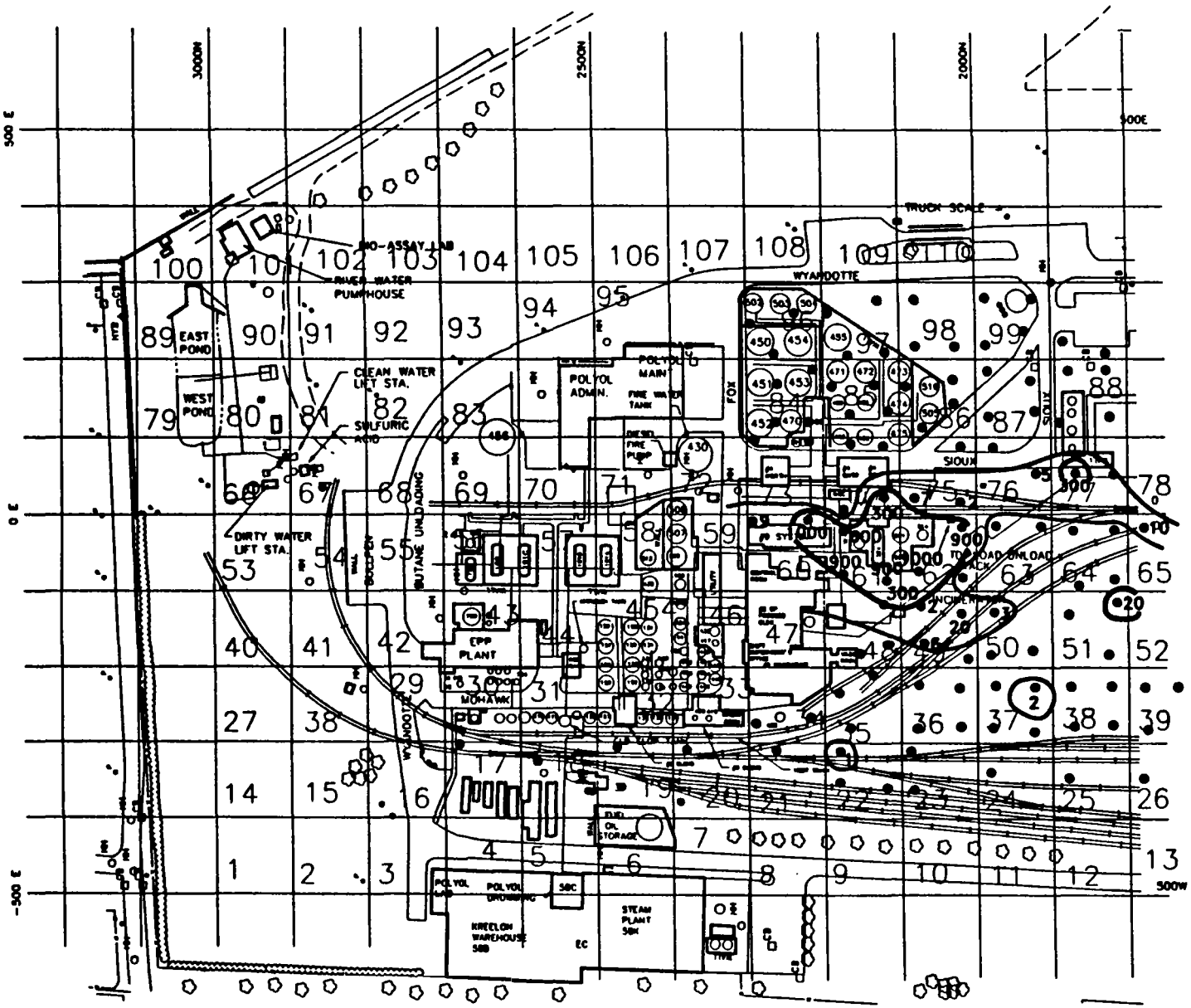
Figure 4
Preliminary Soil Investigation
Vinyl Chloride Concentrations (ppm
BASF Corporation - North Works
Wyandotte, Michigan



● Sample Locations

Approximate Area
100 ppm
1 ppm

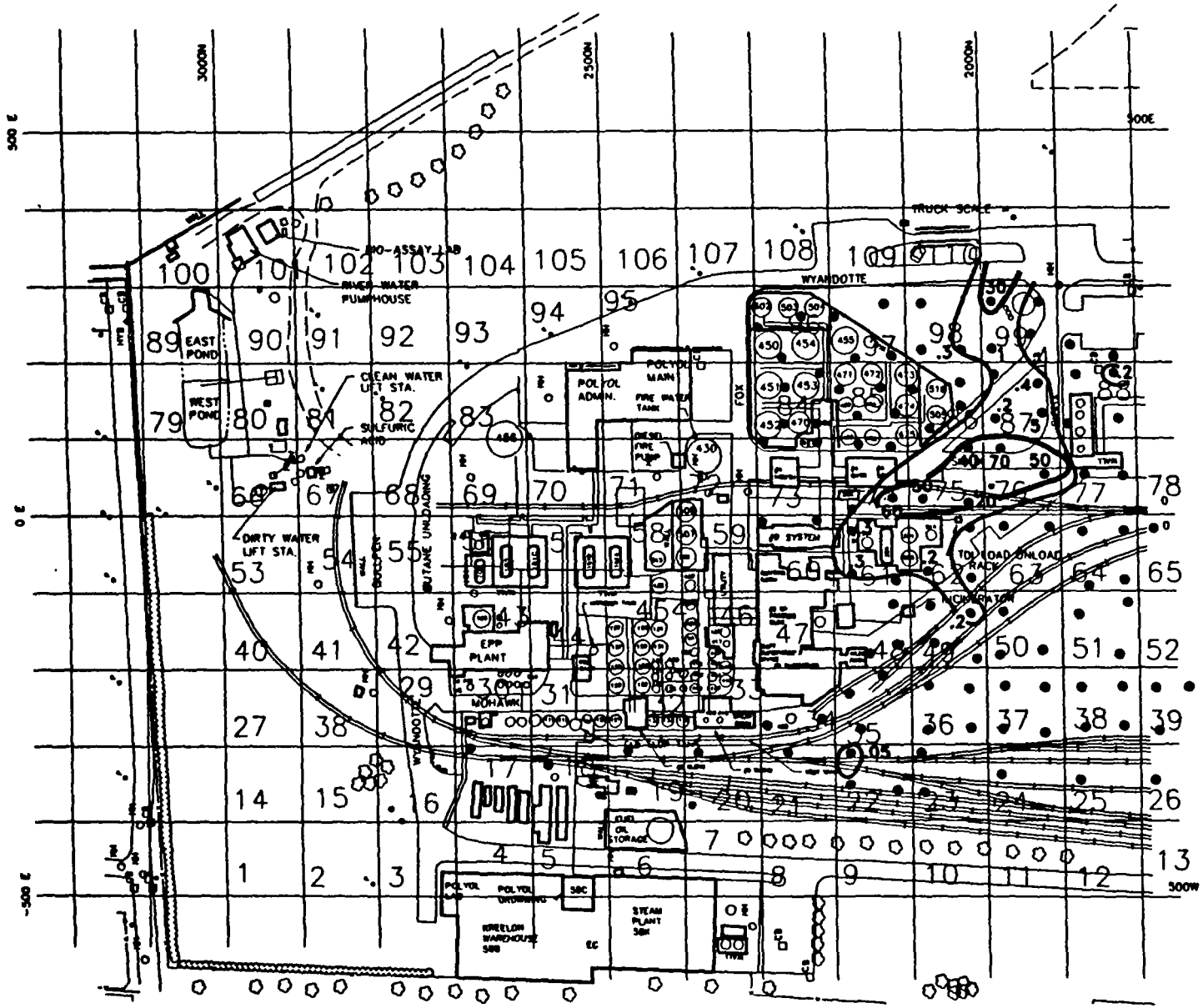
60 0 60 120
Scale in Feet

* Map Derived from BASF Corporation Polyol Plot Plan With Product Code/Tank Dedication, Drawing # 42590

.00.01	Drawn by/Date: T. Stevens 5.18.90	Checked by/Date:
	Revised by/Date:	Checked by/Date:

The ERM

Figure 5
Preliminary Soil Investigation Benzene Concentrations (ppm
BASF Corporation - North Works
Wyandotte, Michigan



● Sample Locations

Approximate Area
— 10 ppm
— 0.01 ppm

N

60 0 60 120
Scale in Feet

* Map Derived from BASF Corporation Polyol Plot Plan With Product Code/Tank Dedication, Drawing # 42590

5.00.01	Drawn by/Date: T. Stevens 5.18.90	Checked by/Date:
	Revised by/Date: C. Pomante 5.24.90	Checked by/Date:

The ERM Group

ATTACHMENT 1

PROCEDURES FOR ONSITE SOIL ANALYSIS USING A SENTEX SCENTOGRAPH GAS CHROMATOGRAPH

Preparation of Sentex Scentograph Gas Chromatograph

Gas Chromatograph Preparation

A Sentex Scentograph portable gas chromatograph (GC) will be used to survey soil-gas for benzene, toluene, ethylbenzene, vinyl chloride, dichloroethylene, and styrene. The GC method to be used employs isothermal GC analysis of a sample of headspace gas from above the subject soil. The chromatographic conditions employed will be as follows:

Column:	10% SP1000 on 100-120 Supelcoport
Carrier:	UHP Argon
Flow Rate:	26 psi column pressure
Detector:	Argon Ionization Detector (AID)
Temperature:	100 degrees Centigrade, isothermal
Injection:	Direct on-column

Principles of Field Operation

In order to estimate concentrations, it is necessary to model GC detector response. In the linear range, by definition

$$\text{Response} = K_1 M \qquad (1)$$

K_1 = Constant
M = Mass injected into GC

Since mass injected = CV (concentration x volume)

$$\text{Response} = K_1 CV \qquad (2)$$

A one point calibration can be used to arrive at a "field" estimate of K_i by injecting standard

i.e., $K_i = A_s/C_sV_s$ (3)
A_s = Peak area (i.e., response, MV-Sec)
C_s = Concentration of standard injected
V_s = Volume of standard injected

For the unknown (subscript u)

$$C_u = A_u/K_iV_u \quad (4)$$

Substituting 3 into 4 we have

$$C_u = \frac{A_u/K_iC_s}{A_sV_u} \quad (5)$$

The above is true for liquids and gases providing appropriate units are used. Since the headspace above a liquid standard is actually injected gas volumes and concentrations must be used instead of liquid volumes and concentrations. Providing the solution is dilute, Henry's Law applies and:

$$C_{u(GAS)} = HC_{u(LIQ)} \quad (6)$$

and assuming that

$H_s = H_u$ for the same chemical in the standard and the unknown, then,

for a liquid, combining EQS. 5 and 6 shows:

$$C_{u(LIQ)} = \frac{A_u \times V_{u(GAS)} \times C_{s(LIQ)}}{A_s \quad V_{u(GAS)}} \quad (7)$$

For a gas, the true concentration of each compound in the head space of the standard would be given by combining EQS. 6 and 7 and shows:

$$C_{u(Gas)} = \frac{A_u \times V_{u(GAS)} \times HC_{u(LIQ)}}{A_s \quad V_{u(GAS)}} \quad (8)$$

For a soil sample the derivation is somewhat more complex. At equilibrium, one method used by some involves placing a small quantity of soil in a 40 ml vial and adding distilled water to the vial until the headspace volume is the same as that of the standard. This procedure minimizes errors introduced because of varying amounts or mass transferred from the liquid to the gas phase. However, the validity of this procedure assumes all of the volatile organic chemical(s) transfers from the solid to the liquid phase. This is not always true.

However, for soils with a low organic carbon content, e.g., on the order of one to two percent, this is a reasonable assumption. In this case, the volume of liquid on the left hand side of EQ. 7 is the volume of distilled water added to the VOA vial. The concentration of VOC on the soil is found by:

$$C_{w(soil)} = \frac{C_{w(LIQ)}\ V_{w(LIQ)}}{W_{i(Soil)}} \qquad (9)$$

and combining EQS. 7 and 9 yields

$$C_{w(soil)} = \frac{A_s \times V_{s(GAS)} \times C_{s(LIQ)} \times V_{w(LIQ)}}{A_s \quad V_{w(GAS)} \quad W_{i(Soil)}} \qquad (10)$$

Field Calibration

The GC will be calibrated using the headspace over an appropriate level working standard for each volatile compound. Standards will be prepared by diluting 200 ug/ml (prepared in methanol) stock standards into 20 ml of organic free water contained in a 40 ml screw cap vial with a Teflon-lined septum. The following formula was used to calculate the required volume of stock standard to be diluted into the organic free water to obtain the working standard:

$$Vs\ \ Cs = Vw\ \ Cw \qquad (11)$$

where

Vs = Volume of stock reference standard (ml)
Cs = Concentration of stock reference standard (200 ppm)
Vw = Volume of working standard (20 ml)
Cw = Concentration of working standard (ppm)

Field Operation

Ambient temperatures during the course of each day will be recorded at the operator's discretion. Response area changes and/or retention time shifts due to large ambient temperature changes can occur with the Sentex Sentograph eventhough there is control over the column temperature.

Qualitative identification of the compounds of interest will be made by retention time matching of the sample chromatograms to those of the standard chromatograms. Quantitation will be performed using EQ. 7 for liquids, EQ. 8 for gases, and EQ. 10 for soils, as applicable.

Record Keeping

A field log will be kept detailing sample injection volumes, analysis run number, sample location and other pertinent details. Each chromatogram will be labeled with the project name, date, time, and sample location.

Quality control measures will be incorporated for the portable gas chromatography analyses and included analysis of blanks. Blanks will be prepared from organic-free distilled water and will be analyzed as necessary to allow determination of carry-over and syringe and instrument contamination.

Sample Preparation

Approximately 10 grams of soil are placed in a VOA vial. The soil is just covered with reagent water (volume added varies depending on moisture present in soil). The soil/water/gas mixture is shaken vigorously to break up the soil and develop the equilibrium portioning of the analytes among the three phases. The sample is allowed to stand at room temperature for at least 10 minutes before analysis.

Table 1
Preliminary Soil Investigation
Portable Gas Chromatograph Results (ppm)
BASF Corporation - North Works
Wyandotte, Michigan

Sample #	Vinyl Chloride	Benzene	Toluene	Ethylbenzene	Xylene	Styrene	Unknown
17-A	BDL	BDL	BDL	BDL	BDL	BDL	•
19-A	BDL	BDL	BDL	BDL	BDL	BDL	•
20-A	BDL	BDL	2.0	BDL	BDL	BDL	•
21-A	BDL	BDL	5.0	BDL	BDL	BDL	•
22-A	1.0	0.05	40.0	BDL	BDL	BDL	•
22-C	BDL	BDL	BDL	BDL	BDL	BDL	•
22-D	BDL	BDL	BDL	BDL	BDL	BDL	•
23-A	BDL	BDL	0.04	BDL	BDL	BDL	•
23-C	BDL	BDL	BDL	BDL	BDL	BDL	•
24-A	BDL	BDL	BDL	BDL	BDL	BDL	•
25-A	BDL	BDL	BDL	BDL	BDL	BDL	•
26-A	BDL	BDL	BDL	BDL	BDL	BDL	•
34-D	BDL	BDL	BDL	BDL	BDL	BDL	•
34-C	BDL	BDL	BDL	BDL	BDL	BDL	•
35-A	BDL	BDL	20.0	BDL	BDL	BDL	•
35-B	BDL	BDL	30.0	2.0	BDL	BDL	•
35-C	BDL	BDL	Trace	BDL	BDL	BDL	•
36-A	BDL	BDL	0.3	BDL	BDL	BDL	•
36-B	BDL	BDL	BDL	BDL	BDL	BDL	•
36-C	BDL	BDL	BDL	BDL	BDL	BDL	•
36-D	BDL	BDL	0.4	BDL	BDL	BDL	•
37-A	BDL	BDL	BDL	BDL	BDL	BDL	•
37-B	2.0	BDL	BDL	BDL	BDL	BDL	•
37-C	BDL	BDL	BDL	BDL	BDL	BDL	•
37-D	BDL	BDL	BDL	BDL	BDL	BDL	•
38-A	Trace	BDL	BDL	BDL	BDL	BDL	•
38-B	BDL	BDL	BDL	BDL	BDL	BDL	•
38-C	BDL	BDL	BDL	BDL	BDL	BDL	•
38-D	BDL	BDL	BDL	BDL	BDL	BDL	•
39-A	BDL	BDL	BDL	BDL	BDL	BDL	•
39-A DUP	BDL	BDL	BDL	BDL	BDL	BDL	•
39-B	BDL	BDL	BDL	BDL	BDL	BDL	•
39-B DUP	BDL	BDL	BDL	BDL	BDL	BDL	•
39-C	BDL	BDL	BDL	BDL	BDL	BDL	•
EQUIP BLANK	BDL	BDL	BDL	BDL	BDL	BDL	•
48-B	300.0	BDL	1.0	1.0	BDL	BDL	•
48-C	BDL	BDL	BDL	BDL	BDL	BDL	•
48-D	BDL	BDL	20.0	BDL	BDL	BDL	•
49-A	2.0	Trace	60.0	3.0	BDL	26.0	•
49-B	20.0	0.2	80.0	BDL	BDL	BDL	•
49-C	6.0	Trace	60.0	BDL	BDL	100.0	•
49-D	BDL	BDL	BDL	BDL	BDL	BDL	•
50-A	3.0	BDL	1.0	BDL	BDL	BDL	•
50-C	BDL	BDL	BDL	BDL	BDL	BDL	•
50-D	BDL	BDL	BDL	BDL	BDL	BDL	•
51-A	BDL	BDL	BDL	BDL	BDL	BDL	•
51-B	20.0	BDL	0.2	BDL	BDL	BDL	•
51-D	BDL	BDL	BDL	BDL	BDL	BDL	•
60-A	9.0	Trace	30.0	8.0	BDL	BDL	BDL
60-B	1000.0	Trace	40.0	BDL	BDL	BDL	•
61-A	600.0	0.3	60.0	4.0	BDL	20.0	•
61-C	900.0	0.3	50.0	2.0	BDL	8.0	•
61-D	900.0	BDL	BDL	1.0	BDL	BDL	0.5
62-B	900.0	BDL	6.0	2.0	BDL	4000.0	•
62-C	1000.0	0.2	60.0	80.0	BDL	200.0	•
62-D	BDL	BDL	BDL	BDL	BDL	BDL	•

Table 1
Preliminary Soil Investigation
Portable Gas Chromatograph Results (ppm)
BASF Corporation - North Works
Wyandotte, Michigan

Sample #	Vinyl Chloride	Benzene	Toluene	Ethylbenzene	Xylene	Styrene	Unknown
63-A	BDL	BDL	0.06	BDL	BDL	BDL	•
63-B	BDL	BDL	BDL	BDL	BDL	BDL	•
64-A	BDL	BDL	0.07	BDL	BDL	BDL	•
64-B	BDL	BDL	0.1	BDL	BDL	BDL	•
64-C	BDL	BDL	BDL	BDL	BDL	BDL	•
64-D	BDL	BDL	BDL	BDL	BDL	BDL	•
65-A	10.0	BDL	0.5	1.0	BDL	60.0	•
73-A	BDL	BDL	BDL	BDL	BDL	BDL	•
73-B	BDL	BDL	BDL	BDL	BDL	BDL	•
74-A	BDL	BDL	BDL	BDL	BDL	BDL	•
74-B	BDL	BDL	BDL	BDL	BDL	BDL	•
74-C	BDL	BDL	BDL	BDL	BDL	BDL	•
74-D	300.0	60.0	50.0	3.0	BDL	21.0	5.0
75-B	BDL	40.0	2.0	BDL	BDL	BDL	•
75-C	7.0	50.0	30.0	Trace	1.73	Trace	Trace
75-D	2.0	20.0	5.0	1.0	0.06	Trace	Trace
76-A	BDL	70.0	40.0	BDL	3.0	BDL	•
76-B	5.0	50.0	10.0	BDL	1.0	BDL	•
77-A	300.0	Trace	55.0	BDL	BDL	300.0	•
77-B	BDL	BDL	2.0	BDL	BDL	BDL	•
84-A+	BDL	BDL	BDL	BDL	BDL	BDL	•
84-B+	BDL	BDL	BDL	BDL	BDL	BDL	•
84-C+	BDL	BDL	BDL	BDL	BDL	BDL	•
84-D	BDL	BDL	BDL	BDL	BDL	BDL	•
85-A	BDL	BDL	BDL	BDL	BDL	BDL	•
85-B	BDL	BDL	BDL	BDL	BDL	BDL	•
85-C	BDL	BDL	BDL	BDL	BDL	BDL	•
85-D	BDL	BDL	BDL	BDL	BDL	BDL	•
86-A	BDL	BDL	BDL	BDL	BDL	BDL	•
86-B	BDL	BDL	BDL	BDL	BDL	BDL	•
86-C+	BDL	BDL	BDL	BDL	BDL	BDL	•
86-D	BDL	BDL	BDL	BDL	BDL	BDL	•
87-A	BDL	BDL	BDL	BDL	BDL	BDL	•
87-B	BDL	0.4	Trace	BDL	BDL	BDL	•
87-B DUP	BDL	0.01	BDL	BDL	BDL	BDL	•
87-C	BDL	0.2	BDL	BDL	BDL	BDL	•
87-D	BDL	5.0	0.3	BDL	BDL	BDL	•
88-A	BDL	BDL	BDL	BDL	BDL	BDL	•
88-B	BDL	0.2	BDL	BDL	BDL	BDL	•
88-C	BDL	BDL	BDL	BDL	BDL	BDL	•
88-D	BDL	BDL	BDL	BDL	BDL	BDL	•
96-A	BDL	BDL	BDL	BDL	BDL	BDL	•
96-B	BDL	BDL	BDL	BDL	BDL	BDL	•
96-C	BDL	BDL	BDL	BDL	BDL	BDL	•
97-A	BDL	BDL	BDL	BDL	BDL	BDL	•
97-B	BDL	BDL	BDL	BDL	BDL	BDL	•
97-C	BDL	BDL	BDL	BDL	BDL	BDL	•
97-D	BDL	BDL	BDL	BDL	BDL	BDL	•
98-A	BDL	BDL	BDL	BDL	BDL	BDL	•
98-C	BDL	BDL	BDL	BDL	BDL	BDL	•
98-D	BDL	0.3	0.1	BDL	BDL	BDL	•
99-A	BDL	30.0	8.0	BDL	BDL	BDL	•
99-B	BDL	0.1	0.04	BDL	BDL	BDL	•
99-C	BDL	1.0	0.2	BDL	BDL	BDL	•
99-D	BDL	BDL	BDL	BDL	BDL	BDL	•
111-C	BDL	BDL	BDL	BDL	BDL	BDL	•
111-D	BDL	BDL	Trace	BDL	BDL	BDL	•

+ - analysis data suspect due to lack of H2O peak response.
• - indicates none detected
BDL - indicates below detection limit
DUP - duplicate

1992

BASF CORPORATION, CHEMICALS DIVISION, WYANDOTTE SITE

NORTH WORKS GROUNDWATER EXTRACTION WELLS

244918

DATE	SAMPLE	METHYLENE CHLORIDE	CHLOROFORM	DICHLORO ETHANE	PROPYLENE DICHLORIDE
12-30-91	FEED TO #1 ABS.N	1.2	6.2	31	594
" 12-30	FEED TO #2 ABS.S	0.00	0.00	0.001	0.011
"	DISC. TO SEWER	0.00	0.00	0.001	0.008
"	TOTAL GALLONS THROUGH NEW CARBON = 264,999				
12-31-91	FEED TO #1 ABS.N	—	—	—	—
"	FEED TO #2 ABS.S	—	—	—	—
"	DISC. TO SEWER	—	—	—	—
"	TOTAL GALLONS THROUGH NEW CARBON = 271551				
1-1-92	FEED TO #1 ABS.N	0.560	5.7	33	661
"	FEED TO #2 ABS.S	0.000	0.000	0.002	0.070
"	DISC. TO SEWER	0.000	0.000	0.000	0.002
"	TOTAL GALLONS THROUGH NEW CARBON = 278,306				
1-2-92	FEED TO #1 ABS.N	0.368	4.9	28	553
"	FEED TO #2 ABS.S	0.000	0.000	0.000	0.040
"	DISC. TO SEWER	0.000	0.000	0.000	0.027
"	TOTAL GALLONS THROUGH NEW CARBON = 284,656				
1-3-92	FEED TO #1 ABS.N	0.513	5.1	33	616
"	FEED TO #2 ABS.S	0.000	0.000	0.000	0.002
"	DISC. TO SEWER	0.000	0.000	0.000	0.002
"	TOTAL GALLONS THROUGH NEW CARBON = 291,009				
1-6-92	FEED TO #1 ABS.N	0.493	5.8	29	581
"	FEED TO #2 ABS.S	0.000	0.000	0.000	0.004
"	DISC. TO SEWER	0.000	0.000	0.001	0.001
"	TOTAL GALLONS THROUGH NEW CARBON = 311,428				

04/04/89

BASF CORPORATION, CHEMICALS DIVISION, WYANDOTTE SITE

NORTH WORKS GROUNDWATER EXTRACTION WELLS 311,428

DATE	SAMPLE	METHYLENE CHLORIDE	CHLOROFORM	DICHLORO ETHANE	PROPYLENE DICHLORIDE
1-7-92	FEED TO #1 ABS.N	0.310	4.8	22	416
"	FEED TO #2 ABS.S	0.000	0.000	0.001	0.025
"	DISC. TO SEWER	0.000	0.000	0.000	0.001
"	TOTAL GALLONS THROUGH NEW CARBON = 318,005				
1-8-92	FEED TO #1 ABS.N	0.623	5.4	27	594
"	FEED TO #2 ABS.S	0.000	0.000	0.000	0.005
"	DISC. TO SEWER	0.000	0.000	0.000	0.002
"	TOTAL GALLONS THROUGH NEW CARBON = 324,347				
1-9-92	FEED TO #1 ABS.N	0.233	0.8	7	71
"	FEED TO #2 ABS.S	0.000	0.000	0.000	0.008
"	DISC. TO SEWER	0.000	0.000	0.000	0.002
"	TOTAL GALLONS THROUGH NEW CARBON = 330,369				
1-10-92	FEED TO #1 ABS.N	.264	3.3	17	358
"	FEED TO #2 ABS.S	0.000	0.000	0.000	0.004
"	DISC. TO SEWER	0.000	0.000	0.001	0.006
"	TOTAL GALLONS THROUGH NEW CARBON = 335,268				
1-13-92	FEED TO #1 ABS.N	0.000	5.7	30	622
"	FEED TO #2 ABS.S	0.000	0.000	0.000	0.008
"	DISC. TO SEWER	0.000	0.000	0.000	0.001
"	TOTAL GALLONS THROUGH NEW CARBON = 352,334				
1-14-92	FEED TO #1 ABS.N	0.662	5.9	35	672
"	FEED TO #2 ABS.S	0.000	0.000	0.003	0.089
"	DISC. TO SEWER	0.000	0.000	0.000	0.002
"	TOTAL GALLONS THROUGH NEW CARBON = 357,949				

04/04/89

BASF CORPORATION, CHEMICALS DIVISION, WYANDOTTE SITE

NORTH WORKS GROUNDWATER EXTRACTION WELLS 357,949

DATE	SAMPLE	METHYLENE CHLORIDE	CHLOROFORM	DICHLORO ETHANE	PROPYLENE DICHLORIDE
1-15-92	FEED TO #1 ABS.N	0.535	5.6	34	666
"	FEED TO #2 ABS.S	0.000	0.000	0.000	0.005
"	DISC. TO SEWER	0.000	0.000	0.000	0.002
"	TOTAL GALLONS THROUGH NEW CARBON = 363,519				
1-16-92	FEED TO #1 ABS.N	0.423	4.9	29	557
"	FEED TO #2 ABS.S	0.000	0.000	0.002	0.062
"	DISC. TO SEWER	0.000	0.000	0.000	0.001
"	TOTAL GALLONS THROUGH NEW CARBON = 369,122				
1-17-92	FEED TO #1 ABS.N	0.450	5.4	32	632
"	FEED TO #2 ABS.S	0.000	0.000	0.001	0.021
"	DISC. TO SEWER	0.000	0.000	0.000	0.001
"	TOTAL GALLONS THROUGH NEW CARBON = 375,130				
1-20-92	FEED TO #1 ABS.N	0.617	7.0	37	761
"	FEED TO #2 ABS.S	0.000	0.000	0.001	0.019
"	DISC. TO SEWER	0.000	0.000	0.000	0.001
"	TOTAL GALLONS THROUGH NEW CARBON = 392,055				
*1-21-92	FEED TO #1 ABS.N	0.499	5.1	33	598
"	FEED TO #2 ABS.S	0.000	0.000	0.002	0.043
"	DISC. TO SEWER	0.000	0.000	0.000	0.002
"	TOTAL GALLONS THROUGH NEW CARBON = 397,692				
1-22-92	FEED TO #1 ABS.N	0.594	6.5	37	739
	FEED TO #2 ABS.S	0.000	0.000	0.002	0.043
	DISC. TO SEWER	0.000	0.000	0.000	0.002
	TOTAL GALLONS THROUGH NEW CARBON = 403,021				

04/04/89

BASF CORPORATION, CHEMICALS DIVISION, WYANDOTTE SITE

NORTH WORKS GROUNDWATER EXTRACTION WELLS 403,021

DATE	SAMPLE	METHYLENE CHLORIDE	CHLOROFORM	DICHLORO ETHANE	PROPYLENE DICHLORIDE
1-23-92	FEED TO #1 ABS.N	0.570	5.4	32	620
"	FEED TO #2 ABS.S	0.000	0.000	0.001	0.035
"	DISC. TO SEWER	0.000	0.000	0.000	0.003
"	TOTAL GALLONS THROUGH NEW CARBON = 408,671				
1-24-92	FEED TO #1 ABS.N	0.656	6.9	38	801
"	FEED TO #2 ABS.S	0.000	0.000	0.015	0.002
"	DISC. TO SEWER	0.000	0.000	0.000	0.004
"	TOTAL GALLONS THROUGH NEW CARBON = 414,217				
1-27-92	FEED TO #1 ABS.N	0.766	7.0	40	826
"	FEED TO #2 ABS.S	0.180	0.032	4.5	1.2
"	DISC. TO SEWER	0.000	0.000	0.000	0.006
"	TOTAL GALLONS THROUGH NEW CARBON = 430,842				
1-28-92	FEED TO #1 ABS.N	0.623	7.3	39	844
"	FEED TO #2 ABS.S	0.240	0.193	7.824	3.911
"	DISC. TO SEWER	0.000	0.000	0.000	0.001
"	TOTAL GALLONS THROUGH NEW CARBON = 436,524				
1-29-92	FEED TO #1 ABS.N	0.454	5.3	39	671
"	FEED TO #2 ABS.S	0.336	0.120	17	13
"	DISC. TO SEWER	0.000	0.000	0.000	0.003
"	TOTAL GALLONS THROUGH NEW CARBON = 442,263				
1-30-92	FEED TO #1 ABS.N	0.714	7.0	43	826
"	FEED TO #2 ABS.S	0.370	0.636	21.6	25.6
"	DISC. TO SEWER	0.000	0.000	0.000	0.002
"	TOTAL GALLONS THROUGH NEW CARBON = 447,768				

04/04/89

BASF CORPORATION, CHEMICALS DIVISION, WYANDOTTE SITE

NORTH WORKS GROUNDWATER EXTRACTION WELLS 447,768

DATE	SAMPLE	METHYLENE CHLORIDE	CHLOROFORM	DICHLORO ETHANE	PROPYLENE DICHLORIDE
1-31-92	FEED TO #1 ABS.N	0.503	4.8	35	577
"	FEED TO #2 ABS.S	0.387	0.809	22	45
"	DISC. TO SEWER	0.000	0.000	0.000	0.003
"	TOTAL GALLONS THROUGH NEW CARBON = 454,813				
2-3-92	FEED TO #1 ABS.N	0.439	5.1	29	592
"	FEED TO #2 ABS.S	0.339	1.174	23.5	124
"	DISC. TO SEWER	0.000	0.000	0.000	0.007
"	TOTAL GALLONS THROUGH NEW CARBON = 475,651				
2-4-92	FEED TO #1 ABS.N	0.084	6.6	57	792
"	FEED TO #2 ABS.S	0.390	1.53	28	189
"	DISC. TO SEWER	0.000	0.000	0.000	0.006
"	TOTAL GALLONS THROUGH NEW CARBON = 481290				
2-6-92	FEED TO #1 ABS.N	0.546	5.1	32	611
"	FEED TO #2 ABS.S	0.440	1.709	29	235
"	DISC. TO SEWER	0.000	0.000	0.001	0.004
"	TOTAL GALLONS THROUGH NEW CARBON = 493,378				
2-7-92	FEED TO #1 ABS.N	0.632	5.6	38	702
"	FEED TO #2 ABS.S	0.477	2.037	32	284
"	DISC. TO SEWER	0.000	0.000	0.000	0.008
"	TOTAL GALLONS THROUGH NEW CARBON = 499,878				
2-10-92	FEED TO #1 ABS.N	0.565	5.6	33	658
"	FEED TO #2 ABS.S	0.621	2.392	36	364
"	DISC. TO SEWER	0.000	0.000	0.000	0.010
"	TOTAL GALLONS THROUGH NEW CARBON = 518,690				

04/04/89

Brick Wall

BASF CORPORATION, CHEMICALS DIVISION, WYANDOTTE SITE

NORTH WORKS GROUNDWATER EXTRACTION WELLS

518,690

DATE	SAMPLE	METHYLENE CHLORIDE	CHLOROFORM	DICHLORO ETHANE	PROPYLENE DICHLORIDE
2-11-92	FEED TO #1 ABS.N	0.488	5.6	36	688
"	FEED TO #2 ABS.S	0.543	2.616	39	427
"	DISC. TO SEWER	0.000	0.000	0.000	0.002
"	TOTAL GALLONS THROUGH NEW CARBON = 524,498				
2-12-92	FEED TO #1 ABS.	Shut Down @ 7 20 AM -		Removed	Carbon
"	FEED TO #2 ABS.	From North Absorber		Went To	1 Absor.
"	DISC. TO SEWER	operation @ 4 00 PM			
"	TOTAL GALLONS THROUGH NEW CARBON = 530,115				
2-13-92	FEED TO #1 ABS.S	0.634	7.2	46	881
"	FEED TO #2 ABS.	—	—	—	—
"	DISC. TO SEWER	0.000	0.000	0.10	0.110
"	TOTAL GALLONS THROUGH NEW CARBON = 4,053				
	FEED TO #1 ABS.	2-14-92	Changed New	Carbon	10 To
	FEED TO #2 ABS.	North Absorber - Went To 2-			Absorber
	DISC. TO SEWER	operation @ 9 15 AM			
	TOTAL GALLONS THROUGH NEW CARBON =				
2-14-92	FEED TO #1 ABS.S	0.696	6.2	39	741
"	FEED TO #2 ABS.N	—	—	—	—
"	DISC. TO SEWER	0.000	0.000	0.012	0.149
"	TOTAL GALLONS THROUGH NEW CARBON = 11,627				
2-17-92	FEED TO #1 ABS.S	0.630	6.0	32	651
"	FEED TO #2 ABS.N	0.000	0.000	0.019	0.276
"	DISC. TO SEWER	0.000	0.000	0.000	0.014
"	TOTAL GALLONS THROUGH NEW CARBON = 30,750				

04/04/89

BASF CORPORATION, CHEMICALS DIVISION, WYANDOTTE SITE

NORTH WORKS GROUNDWATER EXTRACTION WELLS

30,750

DATE	SAMPLE	METHYLENE CHLORIDE	CHLOROFORM	DICHLORO ETHANE	PROPYLENE DICHLORIDE
2-18-92	FEED TO #1 ABS.S	0.648	5.9	37	690
"	FEED TO #2 ABS.N	0.000	0.000	0.006	0.166
"	DISC. TO SEWER	0.000	0.000	0.000	0.008
"	TOTAL GALLONS THROUGH NEW CARBON = 36,590				
2-19-92	FEED TO #1 ABS.S	0.438	3.5	30	418
"	FEED TO #2 ABS.N	0.000	0.000	0.007	0.165
"	DISC. TO SEWER	0.000	0.000	0.000	0.005
"	TOTAL GALLONS THROUGH NEW CARBON = 44,329				
2-20-92	FEED TO #1 ABS.S	0.713	6.6	44	805
"	FEED TO #2 ABS.N	0.000	0.000	0.006	0.175
"	DISC. TO SEWER	0.000	0.000	0.000	0.003
"	TOTAL GALLONS THROUGH NEW CARBON = 51,139				
2-21-92	FEED TO #1 ABS.S	0.595	6.5	40	781
"	FEED TO #2 ABS.N	0.000	0.000	0.007	0.209
"	DISC. TO SEWER	0.000	0.000	0.000	0.006
"	TOTAL GALLONS THROUGH NEW CARBON = 56,986				
2-24-92	FEED TO #1 ABS.S	0.587	5.7	35	670
"	FEED TO #2 ABS.N	0.000	0.000	0.006	0.233
"	DISC. TO SEWER	0.000	0.000	0.000	0.011
"	TOTAL GALLONS THROUGH NEW CARBON = 73,371				
2-25-92	FEED TO #1 ABS.S	0.747	6.0	38	709
"	FEED TO #2 ABS.N	0.000	0.000	0.009	0.335
"	DISC. TO SEWER	0.000	0.000	0.000	0.002
"	TOTAL GALLONS THROUGH NEW CARBON = 79,280				

04/04/89

NORTH WORKS

79,280

Date	Sample	mg/l $MeCl_2$	$CHCl_3$	EDC	PDC
2-26-92	Feed to #1 Absorber S	0.609	5.2	34	637
"	Feed to #2 Absorber N	0.000	0.000	0.004	0.139
"	Disc. to Sewer	0.000	0.000	0.000	0.006
"	Total Gals. = 84,735				
2-27-92	Feed to #1 Absorber S	0.651	6.0	40	733
"	Feed to #2 Absorber N	0.000	0.000	0.005	0.155
"	Disc. to Sewer	0.000	0.000	0.000	0.002
"	Total Gals = 89,993				
2-28-92	Feed to #1 Absorber S	0.631	5.2	37	650
"	Feed to #2 Absorber N	0.000	0.000	0.007	0.214
"	Disc. to Sewer	0.000	0.000	0.000	0.004
"	Total Gals. = 95,394				
3-2-92	Feed to #1 Absorber S	0.459	4.9	32	588
"	Feed to #2 Absorber N	0.000	0.000	0.003	0.095
"	Disc. to Sewer	0.000	0.000	0.000	0.009
"	Total Gals = 108,487				
3-3-92	Feed to #1 Absorber S	0.550	4.2	28	501
"	Feed to #2 Absorber N	0.000	0.000	0.004	0.146
"	Disc. to Sewer	0.000	0.000	0.000	0.002
"	Total Gals = 113,798				
3-4-92	Feed to #1 Absorber S	0.509	3.9	29	486
"	Feed to #2 Absorber N	0.000	0.000	0.003	0.094
"	Disc. to Sewer	0.000	0.000	0.000	0.003
"	Total Gals. = 119,191				
3-5-92	Feed to #1 Absorber S	0.480	3.9	27	468
"	Feed to #2 Absorber N	0.000	0.000	0.003	0.105
"	Disc. to Sewer	0.000	0.000	0.000	0.002
"	Total Gals = 124,639				

BASF CORPORATION, CHEMICALS DIVISION, WYANDOTTE SITE

NORTH WORKS GROUNDWATER EXTRACTION WELLS 124,639

DATE	SAMPLE	METHYLENE CHLORIDE	CHLOROFORM	DICHLORO ETHANE	PROPYLENE DICHLORIDE
3-6-92	FEED TO #1 ABS.S	0.488	3.9	27	474
"	FEED TO #2 ABS.N	0.000	0.000	0.005	0.166
"	DISC. TO SEWER	0.000	0.000	0.000	0.003
"	TOTAL GALLONS THROUGH NEW CARBON = 130,070				
3-9-92	FEED TO #1 ABS.S	0.636	2.1	14.2	198
"	FEED TO #2 ABS.N	0.000	0.000	0.001	0.054
"	DISC. TO SEWER	0.000	0.000	0.000	0.004
"	TOTAL GALLONS THROUGH NEW CARBON = 180,083				
3-10-92	FEED TO #1 ABS.S	0.366	1.9	13	237
"	FEED TO #2 ABS.N	0.000	0.000	0.000	0.040
"	DISC. TO SEWER	0.000	0.000	0.000	0.001
"	TOTAL GALLONS THROUGH NEW CARBON = 196,962				
3-11-92	FEED TO #1 ABS.S	0.616	5.7	40	753
"	FEED TO #2 ABS.N	0.000	0.000	0.002	0.067
"	DISC. TO SEWER	0.000	0.000	0.000	0.003
"	TOTAL GALLONS THROUGH NEW CARBON = 206,290				
3-12-92	FEED TO #1 ABS.S	0.916	6.2	45	830
"	FEED TO #2 ABS.N	0.000	0.000	0.002	0.068
"	DISC. TO SEWER	0.000	0.000	0.000	0.001
"	TOTAL GALLONS THROUGH NEW CARBON = 211,476				
3-13-92	FEED TO #1 ABS.S	0.959	5.1	38	685
"	FEED TO #2 ABS.N	0.000	0.000	0.001	0.047
"	DISC. TO SEWER	0.000	0.000	0.000	0.003
"	TOTAL GALLONS THROUGH NEW CARBON = 216,760				

04/04/89

BASF CORPORATION, CHEMICALS DIVISION, WYANDOTTE SITE

NORTH WORKS GROUNDWATER EXTRACTION WELLS

216,760

DATE	SAMPLE	METHYLENE CHLORIDE	CHLOROFORM	DICHLORO ETHANE	PROPYLENE DICHLORIDE
3-16-92	FEED TO #1 ABS.S	0.547	4.0	23	463
"	FEED TO #2 ABS.N	0.000	0.000	0.000	0.020
"	DISC. TO SEWER	0.000	0.000	0.000	0.002
"	TOTAL GALLONS THROUGH NEW CARBON = 232,990				
3-17-92	FEED TO #1 ABS.S	0.486	5.2	26	536
"	FEED TO #2 ABS.N	0.000	0.000	0.000	0.024
"	DISC. TO SEWER	0.000	0.000	0.000	0.000
"	TOTAL GALLONS THROUGH NEW CARBON = 238,152				
3-18-92	FEED TO #1 ABS.S	0.528	4.4	26	534
3-18-92	FEED TO #2 ABS.N	0.000	0.000	0.000	0.029
"	DISC. TO SEWER	0.000	0.000	0.000	0.001
"	TOTAL GALLONS THROUGH NEW CARBON = 244,126				
3-19-92	FEED TO #1 ABS.S	0.511	2.9	20	364
"	FEED TO #2 ABS.N	0.000	0.000	0.001	0.045
"	DISC. TO SEWER	0.000	0.000	0.000	0.001
"	TOTAL GALLONS THROUGH NEW CARBON = 259,872				
3-20-92	FEED TO #1 ABS.S	0.170	1.3	6	149
"	FEED TO #2 ABS.N	0.000	0.000	0.000	0.009
"	DISC. TO SEWER	0.000	0.000	0.000	0.001
"	TOTAL GALLONS THROUGH NEW CARBON = 285,287				
3-23-92	FEED TO #1 ABS.S	0.747	4.6	27	552
"	FEED TO #2 ABS.N	0.000	0.000	0.000	0.016
"	DISC. TO SEWER	0.000	0.000	0.000	0.002
"	TOTAL GALLONS THROUGH NEW CARBON = 333,534				

04/04/89

BASF CORPORATION, CHEMICALS DIVISION, WYANDOTTE SITE

NORTH WORKS GROUNDWATER EXTRACTION WELLS 333,534

DATE	SAMPLE	METHYLENE CHLORIDE	CHLOROFORM	DICHLORO ETHANE	PROPYLENE DICHLORIDE
3-24-92	FEED TO #1 ABS.S	0.570	1.8	13	182
"	FEED TO #2 ABS.N	0.000	0.000	0.000	0.021
"	DISC. TO SEWER	0.000	0.000	0.000	0.000
"	TOTAL GALLONS THROUGH NEW CARBON = 340,907				
3-25-92	FEED TO #1 ABS.S	0.334	3.3	16	395
"	FEED TO #2 ABS.N	0.000	0.000	0.001	0.041
"	DISC. TO SEWER	0.000	0.000	0.000	0.002
"	TOTAL GALLONS THROUGH NEW CARBON = 357,775				
3-26-92	FEED TO #1 ABS.S	0.229	2.1	12	254
"	FEED TO #2 ABS.N	0.000	0.000	0.000	0.014
"	DISC. TO SEWER	0.000	0.000	0.000	0.000
"	TOTAL GALLONS THROUGH NEW CARBON = 376,115				
3-27-92	FEED TO #1 ABS.S	0.235	2.2	11	260
"	FEED TO #2 ABS.N	0.000	0.000	0.000	0.018
"	DISC. TO SEWER	0.000	0.000	0.000	0.003
"	TOTAL GALLONS THROUGH NEW CARBON = 394,361				
3-30-92	FEED TO #1 ABS.S	0.343	2.2	16	274
"	FEED TO #2 ABS.N	0.000	0.000	0.000	0.011
"	DISC. TO SEWER	0.000	0.000	0.000	0.007
"	TOTAL GALLONS THROUGH NEW CARBON = 453,597				
3-31-92	FEED TO #1 ABS.S	0.283	1.2	9	150
	FEED TO #2 ABS.N	0.000	0.000	0.000	0.017
	DISC. TO SEWER	0.000	0.000	0.000	0.001
	TOTAL GALLONS THROUGH NEW CARBON = 474,655				

04/04/89

BASF CORPORATION, CHEMICALS DIVISION, WYANDOTTE SITE

NORTH WORKS GROUNDWATER EXTRACTION WELLS

474,655

DATE	SAMPLE	METHYLENE CHLORIDE	CHLOROFORM	DICHLORO ETHANE	PROPYLENE DICHLORIDE
4-1-92	FEED TO #1 ABS.S	0.363	1.5	11	184
"	FEED TO #2 ABS.N	0.000	0.000	0.001	0.019
"	DISC. TO SEWER	0.000	0.000	0.000	0.014
"	TOTAL GALLONS THROUGH NEW CARBON = 497,031				
4-2-92	FEED TO #1 ABS.S	0.286	3.3	19	379
"	FEED TO #2 ABS.N	0.000	0.000	0.001	0.024
"	DISC. TO SEWER	0.000	0.000	0.000	0.000
"	TOTAL GALLONS THROUGH NEW CARBON = 517,722				
4-3-92	FEED TO #1 ABS.S	0.175	1.5	8	173
"	FEED TO #2 ABS.N	0.000	0.000	0.000	0.017
"	DISC. TO SEWER	0.000	0.000	0.000	0.003
"	TOTAL GALLONS THROUGH NEW CARBON = 537,958				
4-6-92	FEED TO #1 ABS.S	0.254	1.6	9	176
"	FEED TO #2 ABS.N	0.010	0.000	0.001	0.027
"	DISC. TO SEWER	0.000	0.000	0.000	0.002
"	TOTAL GALLONS THROUGH NEW CARBON = 600,453				
4-7-93	FEED TO #1 ABS.S	0.196	1.4	8	158
"	FEED TO #2 ABS.N	0.029	0.000	0.009	0.010
"	DISC. TO SEWER	0.000	0.000	0.000	0.000
"	TOTAL GALLONS THROUGH NEW CARBON = 619,915				
4-8-93	FEED TO #1 ABS.S	0.197	1.5	8	158
"	FEED TO #2 ABS.N	0.064	0.003	0.099	0.010
"	DISC. TO SEWER	0.000	0.000	0.000	0.006
"	TOTAL GALLONS THROUGH NEW CARBON = 641,826				

04/04/89

BASF CORPORATION, CHEMICALS DIVISION, WYANDOTTE SITE

NORTH WORKS GROUNDWATER EXTRACTION WELLS

641,826

DATE	SAMPLE	METHYLENE CHLORIDE	CHLOROFORM	DICHLORO ETHANE	PROPYLENE DICHLORIDE
4-9-92	FEED TO #1 ABS.S	0.000	0.436	5	53
"	FEED TO #2 ABS.N	0.090	0.089	1.444	0.026
"	DISC. TO SEWER	0.000	0.000	0.000	0.000
"	TOTAL GALLONS THROUGH NEW CARBON = 667,375				
4-10-92	FEED TO #1 ABS.S	0.000	0.707	4	58
"	FEED TO #2 ABS.N	0.127	0.688	5.514	2.498
"	DISC. TO SEWER	0.000	0.000	0.000	0.002
"	TOTAL GALLONS THROUGH NEW CARBON = 699,240				
4-13-92	FEED TO #1 ABS.S	0.000	0.991	5	107
"	FEED TO #2 ABS.N	0.084	0.659	4.805	17
"	DISC. TO SEWER	0.000	0.000	0.000	0.003
"	TOTAL GALLONS THROUGH NEW CARBON = 786,293				
4-14-92	FEED TO #1 ABS.S	0.113	0.386	2.5	32
"	FEED TO #2 ABS.N	0.095	0.686	4.938	18
"	DISC. TO SEWER	0.000	0.000	0.000	0.000
"	TOTAL GALLONS THROUGH NEW CARBON = 814,847				
4-15-92	FEED TO #1 ABS.S	4-14-92 S	hut Down @	9:30 AM Maint	Working
"	FEED TO #2 ABS.N	on sewer.	4-15-92	System	back on
"	DISC. TO SEWER	@ 7:50 AM.			
"	TOTAL GALLONS THROUGH NEW CARBON = 816,894				
4-16-92	FEED TO #1 ABS.S	0.089	0.599	4.7	63
"	FEED TO #2 ABS.N	0.051	0.554	4.122	18
"	DISC. TO SEWER	0.000	0.000	0.000	0.000
"	TOTAL GALLONS THROUGH NEW CARBON = 843,381				

04/04/89

BASF CORPORATION, CHEMICALS DIVISION, WYANDOTTE SITE

NORTH WORKS GROUNDWATER EXTRACTION WELLS

843,381

DATE	SAMPLE	METHYLENE CHLORIDE	CHLOROFORM	DICHLORO ETHANE	PROPYLENE DICHLORIDE
4-17-92	FEED TO #1 ABS.S	0.000	0.183	1.2	20
"	FEED TO #2 ABS.N	0.141	0.757	5.927	28
"	DISC. TO SEWER	0.000	0.000	0.000	0.003
"	TOTAL GALLONS THROUGH NEW CARBON = 860,173				
4-20-92	FEED TO #1 ABS.S	0.000	0.000	0.424	8
"	FEED TO #2 ABS.N	0.187	0.667	5.117	33
"	DISC. TO SEWER	0.000	0.000	0.000	0.005
"	TOTAL GALLONS THROUGH NEW CARBON = 940,373				
4-21-92	FEED TO #1 ABS.S	0.125	1.053	7.0	134
"	FEED TO #2 ABS.N	0.162	0.734	5.3	39
"	DISC. TO SEWER	0.000	0.000	0.000	0.000
"	TOTAL GALLONS THROUGH NEW CARBON = 973,138				
4-22-92	FEED TO #1 ABS.S	0.088	1.036	5.8	126
	FEED TO #2 ABS.N	0.152	0.624	4.8	33
	DISC. TO SEWER	0.000	0.000	0.000	0.002
	TOTAL GALLONS THROUGH NEW CARBON = 1,005,660				
4-23-92	FEED TO #1 ABS.S	0.118	1.204	6.6	140
"	FEED TO #2 ABS.N	0.119	0.602	4.4	32
"	DISC. TO SEWER	0.000	0.000	0.000	0.000
"	TOTAL GALLONS THROUGH NEW CARBON = 1,037,152				
4-24-92	FEED TO #1 ABS.S	0.149	1.412	8.8	183
"	FEED TO #2 ABS.N	0.142	0.816	6.6	46
"	DISC. TO SEWER	0.000	0.000	0.000	0.002
"	TOTAL GALLONS THROUGH NEW CARBON = 1,068,503				

04/04/89

BASF CORPORATION, CHEMICALS DIVISION, WYANDOTTE SITE

NORTH WORKS GROUNDWATER EXTRACTION WELLS

1,068,503

DATE	SAMPLE	METHYLENE CHLORIDE	CHLOROFORM	DICHLORO ETHANE	PROPYLENE DICHLORIDE
4-27-92	FEED TO #1 ABS.S	0.103	1.313	6.8	149
"	FEED TO #2 ABS.N	0.143	0.722	5.1	44
"	DISC. TO SEWER	0.000	0.000	0.000	0.011
"	TOTAL GALLONS THROUGH NEW CARBON = 1,159,377				
4-28-92	FEED TO #1 ABS.S	0.123	1.393	7.2	160
"	FEED TO #2 ABS.N	0.133	0.722	5.4	51
"	DISC. TO SEWER	0.000	0.000	0.000	0.000
"	TOTAL GALLONS THROUGH NEW CARBON = 1,187,203				
4-29-92	FEED TO #1 ABS.S	0.131	1.255	7.8	155
"	FEED TO #2 ABS.N	0.177	0.908	7.1	56
"	DISC. TO SEWER	0.000	0.000	0.000	0.004
"	TOTAL GALLONS THROUGH NEW CARBON = 1,217,140				
4-30-92	FEED TO #1 ABS.S	4-29-92	Shut Down @ 1:20 PM.		
"	FEED TO #2 ABS.N	Maint.	Acid Washing System		
"	DISC. TO SEWER	5-8-92	System Back on @ 3:45 PM		
"	TOTAL GALLONS THROUGH NEW CARBON = 1,223,524				
5-11-92	FEED TO #1 ABS.S	0.546	4.195	27.6	537
"	FEED TO #2 ABS.N	0.419	1.023	6.8	55
"	DISC. TO SEWER	0.000	0.000	0.001	0.012
"	TOTAL GALLONS THROUGH NEW CARBON = 1,240,356				
5-12-92	FEED TO #1 ABS.S	0.496	1.212	14.5	120
"	FEED TO #2 ABS.N	0.183	0.663	6.0	47
"	DISC. TO SEWER	0.000	0.000	0.000	0.001
"	TOTAL GALLONS THROUGH NEW CARBON = 1,249,035				

04/04/89

BASF CORPORATION, CHEMICALS DIVISION, WYANDOTTE SITE

NORTH WORKS GROUNDWATER EXTRACTION WELLS

1,249,035

DATE	SAMPLE	METHYLENE CHLORIDE	CHLOROFORM	DICHLORO ETHANE	PROPYLENE DICHLORIDE
5-13-92	FEED TO #1 ABS.S	0.160	3.105	23.0	392
"	FEED TO #2 ABS.N	0.205	0.885	7.6	65
"	DISC. TO SEWER	0.000	0.000	0.000	0.003
"	TOTAL GALLONS THROUGH NEW CARBON =			1,255,729	
5-14-92	FEED TO #1 ABS.S	0.375	3.166	21.4	388
"	FEED TO #2 ABS.N	0.194	0.751	6.8	56
"	DISC. TO SEWER	0.000	0	0	0.001
"	TOTAL GALLONS THROUGH NEW CARBON =		1261945		
5-15-92	FEED TO #1 ABS.S	0.265	1.736	16.4	209
"	FEED TO #2 ABS.N	0.232	0.961	6.4	64
"	DISC. TO SEWER	0.000	0.000	0.000	0.002
"	TOTAL GALLONS THROUGH NEW CARBON =		1,271,109		
5-18-92	FEED TO #1 ABS.S	0.324	2.099	19.0	256
"	FEED TO #2 ABS.N	0.241	0.914	8.6	76
"	DISC. TO SEWER	0.000	0.000	0.000	0.003
"	TOTAL GALLONS THROUGH NEW CARBON =		1,294,560		
5-19-92	FEED TO #1 ABS.S	0.291	1.305	9.9	113
"	FEED TO #2 ABS.N	0.233	1.233	10.7	11
"	DISC. TO SEWER	0.000	0.000	0.000	0.000
"	TOTAL GALLONS THROUGH NEW CARBON =		1,302,380		
5-20-92	FEED TO #1 ABS.S	0.382	2.669	19.6	302
"	FEED TO #2 ABS.N	0.470	1.314	11.9	104
"	DISC. TO SEWER	0	0	0	.005
"	TOTAL GALLONS THROUGH NEW CARBON =		~~1,302,149~~ 1,309969		

04/04/89

BASF CORPORATION, CHEMICALS DIVISION, WYANDOTTE SITE

NORTH WORKS GROUNDWATER EXTRACTION WELLS

1,309969

DATE	SAMPLE	METHYLENE CHLORIDE	CHLOROFORM	DICHLORO ETHANE	PROPYLENE DICHLORIDE
5-21-92	FEED TO #1 ABS. S	.345	1.579	11.2	134
	FEED TO #2 ABS. N	.307	1.559	14.3	146
	DISC. TO SEWER	0	0	0	0.001
	TOTAL GALLONS THROUGH NEW CARBON = 1,317128				
5-22-92	FEED TO #1 ABS. S	0.373	3.311	21.1	377
	FEED TO #2 ABS. N	0.338	1.606	16.6	128
	DISC. TO SEWER	0.000	0.000	0.000	0.001
	TOTAL GALLONS THROUGH NEW CARBON = 1,323,414				
5-25-92	FEED TO #1 ABS. S	0.414	3.989	26.0	502
	FEED TO #2 ABS. N	0.559	2.410	24.2	174
	DISC. TO SEWER	0.000	0.000	0.000	0.000
	TOTAL GALLONS THROUGH NEW CARBON = 1,340,174				
5-26-92	FEED TO #1 ABS. S	0.525	3.971	26.5	473
	FEED TO #2 ABS. N	0.601	2.515	27.8	192
	DISC. TO SEWER	0.000	0.000	0.000	0.000
	TOTAL GALLONS THROUGH NEW CARBON = 1,348,074				
5-27-92	FEED TO #1 ABS. S	0.421	3.830	25.2	454
	FEED TO #2 ABS. N	0.687	2.728	31.7	226
	DISC. TO SEWER	0.000	0.000	0.000	0.000
	TOTAL GALLONS THROUGH NEW CARBON = 1,355,703				
5-28-92	FEED TO #1 ABS. S	0.352	1.291	8.6	138
	FEED TO #2 ABS. N	0.724	2.876	33.4	277
	DISC. TO SEWER	0.000	0.000	0.000	0.000
	TOTAL GALLONS THROUGH NEW CARBON = 1,360,993				

04/04/89

BASF CORPORATION, CHEMICALS DIVISION, WYANDOTTE SITE

NORTH WORKS GROUNDWATER EXTRACTION WELLS 1,360,993

DATE	SAMPLE	METHYLENE CHLORIDE	CHLOROFORM	DICHLORO ETHANE	PROPYLENE DICHLORIDE
5-29-92	FEED TO #1 ABS.S	0.772	5.397	37.0	673
"	FEED TO #2 ABS.N	0.937	3.721	44.8	337
"	DISC. TO SEWER	0.000	0.000	0.000	0.000
"	TOTAL GALLONS THROUGH NEW CARBON = 1,367,139				
6-1-92	FEED TO #1 ABS.S	0.797	5.946	37.1	749
"	FEED TO #2 ABS.N	1.539	5.862	78.1	559
"	DISC. TO SEWER	0.000	0.000	0.000	0.000
"	TOTAL GALLONS THROUGH NEW CARBON = 1,384,401				
6-2-92	FEED TO #1 ABS.S	.556	1.817	14.3	212
-	FEED TO #2 ABS.N	1.331	5.754	~~71.3~~ 71.3	489
-	DISC. TO SEWER	.000	0.000	~~48~~ 0.000	.001
-	TOTAL GALLONS THROUGH NEW CARBON = 1,390,370				
6-3-92	FEED TO #1 ABS.S	0.750	1.381	8.2	120
	FEED TO #2 ABS.N	1.044	5.319	65.2	531
	DISC. TO SEWER	0.000	0.000	0.000	0.001
	TOTAL GALLONS THROUGH NEW CARBON = 1,396,441				
	FEED TO #1 ABS.	6-3-92 Shut System Down @ 07 15 am Maint.			
	FEED TO #2 ABS.	Repairing Sewer line. 6-5-92 System back			
	DISC. TO SEWER	on @ 10 30 am Main Drain Not! Complete.			
	TOTAL GALLONS THROUGH NEW CARBON = 1,415,341				
6-8-92	FEED TO #1 ABS.S	0.422	2.659	18.4	309
"	FEED TO #2 ABS.N	0.739	3.941	43.8	423
"	DISC. TO SEWER	0.000	0.000	0.000	0.001
"	TOTAL GALLONS THROUGH NEW CARBON = 1,415,341				

04/04/89

BASF CORPORATION, CHEMICALS DIVISION, WYANDOTTE SITE

NORTH WORKS GROUNDWATER EXTRACTION WELLS

1,415,341

DATE	SAMPLE	METHYLENE CHLORIDE	CHLOROFORM	DICHLORO ETHANE	PROPYLENE DICHLORIDE
6-9-92	FEED TO #1 ABS. S	0.560	4.544	27.6	507
"	FEED TO #2 ABS. N	0.770	3.941	43.8	423
"	DISC. TO SEWER	0.000	0.000	0.000	0.000
"	TOTAL GALLONS THROUGH NEW CARBON = 1,421,128				
	FEED TO #1 ABS.	6-9-92	Shut System	Down	@ 8:20 AM
	FEED TO #2 ABS.	Maint. Working on	Sewer Line.		
	DISC. TO SEWER	6-19-92 Charged New Carbon into South Absor. System Back on @ 12:30 PM			
	TOTAL GALLONS THROUGH NEW CARBON =				
6-22-92	FEED TO #1 ABS. N	1.043	5.623	41	769
"	FEED TO #2 ABS. S	0.000	0.000	0.011	0.223
"	DISC. TO SEWER	0.000	0.000	0.000	0.073
"	TOTAL GALLONS THROUGH NEW CARBON = 22,462				
6-23-92	FEED TO #1 ABS. N	1.257	6.100	51	891
"	FEED TO #2 ABS. S	0.000	0.000	0.012	0.121
"	DISC. TO SEWER	0.000	0.000	0.001	0.027
"	TOTAL GALLONS THROUGH NEW CARBON = 28,266				
6-24-92	FEED TO #1 ABS N	0.595	1.295	10	128
	FEED TO #2 ABS S	0.000	0.000	0.003	0.069
	DISC. TO SEWER	0.000	0.000	0.000	0.006
	TOTAL GALLONS THROUGH NEW CARBON = 34,774				
6-25-92	FEED TO #1 ABS N	0.559	1.046	10	117
"	FEED TO #2 ABS S	0.000	0.000	0.002	0.051
"	DISC. TO SEWER	0.000	0.000	0.000	0.008
"	TOTAL GALLONS THROUGH NEW CARBON = 41,852				

04/04/89

BASF CORPORATION, CHEMICALS DIVISION, WYANDOTTE SITE

NORTH WORKS GROUNDWATER EXTRACTION WELLS

41,852

DATE	SAMPLE	METHYLENE CHLORIDE	CHLOROFORM	DICHLORO ETHANE	PROPYLENE DICHLORIDE
6-26-92	FEED TO #1 ABS. N	0.439	1.064	10	116
"	FEED TO #2 ABS. S	0.000	0.000	0.002	0.040
"	DISC. TO SEWER	0.000	0.000	0.000	0.007
"	TOTAL GALLONS THROUGH NEW CARBON = 49,033				
6-29-92	FEED TO #1 ABS. N	0.899	6.860	43	850
"	FEED TO #2 ABS. S	0.000	0.000	0.006	0.164
"	DISC. TO SEWER	0.000	0.000	0.000	0.008
"	TOTAL GALLONS THROUGH NEW CARBON = 70,070				
6-30-92	FEED TO #1 ABS N	0.60	3.857	26.2	480
	FEED TO #2 ABS S	0.000	0.000	0.004	0.125
	DISC. TO SEWER	0.000	0.000	0.000	0.013
	TOTAL GALLONS THROUGH NEW CARBON = 76,621				
7-1-92	FEED TO #1 ABS N	0.023	4.058	27.2	495
	FEED TO #2 ABS S	0.000	0.000	0.003	0.098
	DISC. TO SEWER	0.000	0.000	0.000	0.003
	TOTAL GALLONS THROUGH NEW CARBON = ~~83,968~~ ~~83429~~ 83427				
7-2-92	FEED TO #1 ABS N	.613	4.539	25.0	513
	FEED TO #2 ABS S	0.000	0.000	.001	.046
	DISC. TO SEWER	0.000	0.000	.000	.002
	TOTAL GALLONS THROUGH NEW CARBON = 89702				
7-3-92	FEED TO #1 ABS.	0.542	5	29	595
	FEED TO #2 ABS.	0.000	0.000	0.001	0.027
	DISC. TO SEWER	0.000	0.000	0.000	0.002
	TOTAL GALLONS THROUGH NEW CARBON = 95297				

04/04/89

BASF CORPORATION, CHEMICALS DIVISION, WYANDOTTE SITE

NORTH WORKS GROUNDWATER EXTRACTION WELLS

95297

DATE	SAMPLE	METHYLENE CHLORIDE	CHLOROFORM	DICHLORO ETHANE	PROPYLENE DICHLORIDE
7-6-92	FEED TO #1 ABS N	0.260	1.990	12.3	231
	FEED TO #2 ABS S	0.000	0.000	0.001	0.045
	DISC. TO SEWER	0.000	0.000	0.000	0.002
	TOTAL GALLONS THROUGH NEW CARBON =			112833	
7-7-92	FEED TO #1 ABS N	0.294	0.673	4.77	63.8
	FEED TO #2 ABS S	0.000	0.000	0.000	0.016
	DISC. TO SEWER	0.000	0.000	0.000	0.001
	TOTAL GALLONS THROUGH NEW CARBON =			118340	
7-8-92	FEED TO #1 ABS N	0.346	1.250	9.33	104
	FEED TO #2 ABS S	0.000	0.000	0.002	0.075
	DISC. TO SEWER	0.000	0.000	0.000	0.001
	TOTAL GALLONS THROUGH NEW CARBON =			134,267	
7-9-92	FEED TO #1 ABS N	0.511	4.049	30.5	512
	FEED TO #2 ABS S	0.000	0.000	0.001	0.028
	DISC. TO SEWER	0.000	0.000	0.000	0.002
	TOTAL GALLONS THROUGH NEW CARBON =			140,956	
7-10-92	FEED TO #1 ABS N	1.208	5.628	33.8	581
	FEED TO #2 ABS S	0.000	0.000	0.001	0.064
	DISC. TO SEWER	0.000	0.000	0.000	0.000
	TOTAL GALLONS THROUGH NEW CARBON =			~~161,284~~ 147133	
7-13-92	FEED TO #1 ABS N	0.945	2.877	22.000	369
	FEED TO #2 ABS S	0.000	0.000	0.003	.061
	DISC. TO SEWER	0.000	0.000	0.000	0.002
	TOTAL GALLONS THROUGH NEW CARBON =			~~173,159~~ 167,561	

04/04/89

BASF CORPORATION, CHEMICALS DIVISION, WYANDOTTE SITE

NORTH WORKS GROUNDWATER EXTRACTION WELLS

DATE	SAMPLE	METHYLENE CHLORIDE	CHLOROFORM	DICHLORO ETHANE	PROPYLENE DICHLORIDE
7-14-92	FEED TO #1 ABS N	1.351	2.954	21.5	334
	FEED TO #2 ABS S	0.000	0.000	0.001	0.004
	DISC. TO SEWER	0.000	0.000	0.000	0.000
	TOTAL GALLONS THROUGH NEW CARBON = 174 454				
7-15-92	FEED TO #1 ABS N				
	FEED TO #2 ABS S				
	DISC. TO SEWER	0.000	0.000	0.000	0.008
	TOTAL GALLONS THROUGH NEW CARBON = 181152				
7-16-92	FEED TO #1 ABS N	0.519	2.256	17.4	262
	FEED TO #2 ABS S	0.000	0.000	0.001	0.056
	DISC. TO SEWER	0.000	0.000	0.000	0.001
	TOTAL GALLONS THROUGH NEW CARBON = 188002				
7-17-92	FEED TO #1 ABS.	0.720	1.658	15.6	248
	FEED TO #2 ABS.	0.000	0.000	0.001	0.042
	DISC. TO SEWER	0.000	0.000	0.000	0.001
	TOTAL GALLONS THROUGH NEW CARBON = 194870				
7-20-92	FEED TO #1 ABS.				
	FEED TO #2 ABS.	INSTRUMENT DOWN FOR MAINT			
	DISC. TO SEWER				
	TOTAL GALLONS THROUGH NEW CARBON =				
7-21-92	FEED TO #1 ABS N	.760	4.953	33.7	627
	FEED TO #2 ABS S	.000	.000	.000	.033 ~~.000~~
	DISC. TO SEWER	.000	.000	.000	0.001
	TOTAL GALLONS THROUGH NEW CARBON = 222123				

04/04/89

BASF CORPORATION, CHEMICALS DIVISION, WYANDOTTE SITE

NORTH WORKS GROUNDWATER EXTRACTION WELLS

222123

DATE	SAMPLE	METHYLENE CHLORIDE	CHLOROFORM	DICHLORO ETHANE	PROPYLENE DICHLORIDE
7-22-92	FEED TO #1 ABS N	0.465	1.222	8.35	132
	FEED TO #2 ABS S	0.000	0.000	0.000	0.055
	DISC. TO SEWER	0.000	0.000	0.000	0.001
	TOTAL GALLONS THROUGH NEW CARBON =			229115	
7-23-92	FEED TO #1 ABS.				
	FEED TO #2 ABS.	0.000	0.000	0.000	.016
	DISC. TO SEWER	0.000	0.000	0.000	.002
	TOTAL GALLONS THROUGH NEW CARBON =			237823	
7-24-92	FEED TO #1 ABS N	0.465	1.222	14.5	224
	FEED TO #2 ABS S	0.000	0.000	0.000	0.009
	DISC. TO SEWER	0.000	0.000	0.000	0.001
	TOTAL GALLONS THROUGH NEW CARBON =			267884	
7-27-92	FEED TO #1 ABS N	.242	1.906	10.4	186
	FEED TO #2 ABS S	0.000	0.000	0.000	0.005
	DISC. TO SEWER	0.000	0.000	0.000	0.000
	TOTAL GALLONS THROUGH NEW CARBON =		274129		
7-28-92	FEED TO #1 ABS N	0.457	3.421	23.9	404
	FEED TO #2 ABS S	0.000	0.000	0.000	0.005
	DISC. TO SEWER	0.000	0.000	0.000	0.001
	TOTAL GALLONS THROUGH NEW CARBON =		282170		
7-29-92	FEED TO #1 ABS N	0.702	2.805	21.8	338
	FEED TO #2 ABS S	0.000	0.000	0.000	0.005
	DISC. TO SEWER	0.000	0.000	0.000	0.001
	TOTAL GALLONS THROUGH NEW CARBON =		288652		

04/04/89

BASF CORPORATION, CHEMICALS DIVISION, WYANDOTTE SITE

NORTH WORKS GROUNDWATER EXTRACTION WELLS

288652

DATE	SAMPLE	METHYLENE CHLORIDE	CHLOROFORM	DICHLORO ETHANE	PROPYLENE DICHLORIDE
7-30-92	FEED TO #1 ABS.	0.487	2.230	23.1	270/151
	FEED TO #2 ABS.	0.000	0.000	0.000	0.005/0.000
	DISC. TO SEWER	0.000	0.000	0.000	0.001/0.034
	TOTAL GALLONS THROUGH NEW CARBON = 296629				
7-31-92	FEED TO #1 ABS N	0.451	2.749	26.4	348/134
	FEED TO #2 ABS S	0.000	0.000	0.000	0.005/0.0
	DISC. TO SEWER	0.000	0.000	0.000	0.000/.039
	TOTAL GALLONS THROUGH NEW CARBON = 319427				
8-3-92	FEED TO #1 ABS.	0.739	2.936	28.9	381/173
	FEED TO #2 ABS.	0.000	0.000	0.000	0.003/0.000
	DISC. TO SEWER	0.000	0.000	0.000	0.00/0.000
	TOTAL GALLONS THROUGH NEW CARBON = 327113				
8-4-92	FEED TO #1 ABS.	0.562	3.083	31.0	409/181.78
	FEED TO #2 ABS.	0.000	0.000	0.000	0.004 0
	DISC. TO SEWER	0.000	0.000	0.000	0.000 0
	TOTAL GALLONS THROUGH NEW CARBON = 334745				
8-5-92	FEED TO #1 ABS N	0.502	3.357	29.42	430.0/154
	FEED TO #2 ABS S	0.000	0.000	0.000	0.002 0
	DISC. TO SEWER	0.000	0.000	0.000	0.000 0
	TOTAL GALLONS THROUGH NEW CARBON = 341469				
8-6-92	FEED TO #1 ABS N	0.008	2.478	21.32	314.8/166.7
	FEED TO #2 ABS S	0.000	0.000	0.000	0.005/0.0
	DISC. TO SEWER	0.000	0.000	0.000	0.000/0.0
	TOTAL GALLONS THROUGH NEW CARBON =				

04/04/89

BASF CORPORATION, CHEMICALS DIVISION, WYANDOTTE SITE

NORTH WORKS GROUNDWATER EXTRACTION WELLS

DATE	SAMPLE	METHYLENE CHLORIDE	CHLOROFORM	DICHLORO ETHANE	PROPYLENE DICHLORIDE
8-7-92	FEED TO #1 ABS N	0.732	5.130	45.28	701.5/323.2
	FEED TO #2 ABS S	0.000	0.000	0.000	0.002/0
	DISC. TO SEWER	0.000	0.000	0.000	0.002/0
	TOTAL GALLONS THROUGH NEW CARBON = 348009				
8-10-92	FEED TO #1 ABS N	0.326	2.026	17.60	271.2/153.0
	FEED TO #2 ABS S	0.000	0.000	0.000	0.007/0.00
	DISC. TO SEWER	0.000	0.000	0.000	0.000/0.00
	TOTAL GALLONS THROUGH NEW CARBON = 367560				
8-11-92	FEED TO #1 ABS.	NO SAMPLE			
	FEED TO #2 ABS.	0.000	0.000	0.000	0.002/0.028
	DISC. TO SEWER	0.000	0.000	0.000	0.000/0.000
	TOTAL GALLONS THROUGH NEW CARBON = 374283				
8-12-92	FEED TO #1 ABS.	1.430	2.290	16.93	267.9/124.5
	FEED TO #2 ABS.	0.000	0.000	0.000	0.008/0.000
	DISC. TO SEWER	0.000	0.000	0.000	0.000/0.000
	TOTAL GALLONS THROUGH NEW CARBON = 381302				
8-13-92	FEED TO #1 ABS.	0.378	4.107	21.66	445.4/127.8
	FEED TO #2 ABS.	0.000	0.000	0.000	0.001-0.000
	DISC. TO SEWER	0.000	0.000	0.000	0.000-0.000
	TOTAL GALLONS THROUGH NEW CARBON = 388119				
8-14-92	FEED TO #1 ABS.	NO SAMPLE			
	FEED TO #2 ABS.	0.000	0.000	0.000	0.000-0.000
	DISC. TO SEWER	0.000	0.000	0.000	0.000-0.000
	TOTAL GALLONS THROUGH NEW CARBON = 395319				

04/04/89

BASF CORPORATION, CHEMICALS DIVISION, WYANDOTTE SITE

NORTH WORKS GROUNDWATER EXTRACTION WELLS

DATE	SAMPLE	METHYLENE CHLORIDE	CHLOROFORM	DICHLORO ETHANE	PROPYLENE DICHLORIDE
8-17-92	FEED TO #1 ABS.	0.246	3.368	16.21	358.2/109.0
	FEED TO #2 ABS.	0.000	0.000	0.000	0.001/0.00
	DISC. TO SEWER	0.000	0.000	0.000	0.000/0.000
	TOTAL GALLONS THROUGH NEW CARBON = 420467				
8-18-92	FEED TO #1 ABS.	0.119	1.983	14.69	245.4/99.19
	FEED TO #2 ABS.				
	DISC. TO SEWER	0.000	0.000	0.000	0.000/0.000
	TOTAL GALLONS THROUGH NEW CARBON = 426939				
8-20-92	FEED TO #1 ABS.	0.317	7.190	19.3	342/155
	FEED TO #2 ABS.				
	DISC. TO SEWER	0.000	0.000	0.000	0.001/0.0
	TOTAL GALLONS THROUGH NEW CARBON = 433,416				
8-23-92	FEED TO #1 ABS.	0.303	3.498	22.73	394.7/183.2
	FEED TO #2 ABS.	0.000	0.000	0.000	0.005/.010
	DISC. TO SEWER	0.000	0.000	0.001	0.007/0.008
	TOTAL GALLONS THROUGH NEW CARBON = 438590				
8-24-92	FEED TO #1 ABS.	~~1.868~~ 0.00	~~8.049~~ 1.808	~~157.9~~ 8.049	157.9/55.86
	FEED TO #2 ABS.	0.000	0.000	0.000	0.002/0.000
	DISC. TO SEWER	0.000	0.000	0.000	0.000/0.000
	TOTAL GALLONS THROUGH NEW CARBON = 462219				
8-25-92	FEED TO #1 ABS.	~~0.439~~ 0.439	~~1.768~~ 7.235	~~8.787~~ 33.26	786.5/241.2
	FEED TO #2 ABS.	0.000	0.000	0.000	0.002 - 0.000
	DISC. TO SEWER	0.000	0.000	0.000	0.000 - 0.000
	TOTAL GALLONS THROUGH NEW CARBON = 467388				

04/04/89

BASF CORPORATION, CHEMICALS DIVISION, WYANDOTTE SITE

NORTH WORKS GROUNDWATER EXTRACTION WELLS

DATE	SAMPLE	METHYLENE CHLORIDE	CHLOROFORM	DICHLORO ETHANE	PROPYLENE DICHLORIDE
8-26-92	FEED TO #1 ABS.	0.490	1.768	8.891	124.7 - 34.55
	FEED TO #2 ABS.	0.002	0.000	0.000	0.001 - 0.000
	DISC. TO SEWER	0.001	0.000	0.000	0.000 - 0.000
	TOTAL GALLONS THROUGH NEW CARBON = 471666				
8-27-92	FEED TO #1 ABS.	0.532	6.589	31.21	726.8 - 233.4
	FEED TO #2 ABS.	0.000	0.000	0.000	0.000 - 0.000
	DISC. TO SEWER	0.000	0.000	0.000	0.000 - 0.000
	TOTAL GALLONS THROUGH NEW CARBON = 476,541				
8-28-92	FEED TO #1 ABS.	1.084	9.667	55.07	1058.8 - 230.8
	FEED TO #2 ABS.	0.000	0.000	0.000	0.000 - 0.000
	DISC. TO SEWER	0.000	0.000	0.000	0.000 - 0000
	TOTAL GALLONS THROUGH NEW CARBON = 480,700				
8-31-92	FEED TO #1 ABS.	0.000	1.573	6.734	140.0 - 48.24
	FEED TO #2 ABS.	0.000	0.000	0.000	0.000 - 0.000
	DISC. TO SEWER	0.000	0.000	0.000	0.000 - 0.000
	TOTAL GALLONS THROUGH NEW CARBON = 492 762				
9-1-92	FEED TO #1 ABS.	No Run			
	FEED TO #2 ABS.	0.000	0.000	0.000	0.000
	DISC. TO SEWER	0.000	0.000	0.000	0.000
	TOTAL GALLONS THROUGH NEW CARBON = 498 244				
9-2-92	FEED TO #1 ABS.	.4501	1.787	10.10	118.2 / 165.0
	FEED TO #2 ABS.	0.000	0.000	0.000	0.000
	DISC. TO SEWER	0.000	0.000	0.000	0.000
	TOTAL GALLONS THROUGH NEW CARBON = 503723				

04/04/89

BASF CORPORATION, CHEMICALS DIVISION, WYANDOTTE SITE

NORTH WORKS GROUNDWATER EXTRACTION WELLS

DATE	SAMPLE	METHYLENE CHLORIDE	CHLOROFORM	DICHLORO ETHANE	PROPYLENE DICHLORIDE / BCIE
9-3-92	FEED TO #1 ABS. N				
	FEED TO #2 ABS. S	0 = 0.000	0 = 0.000	0 = 0.000	0 = 0.000 / 0 = 0.000
	DISC. TO SEWER	0 = 0.000	0 = 0.000	0 = 0.000	0 = 0.000 / 0 = 0.000
	TOTAL GALLONS THROUGH NEW CARBON = 510669				
9-4-92	FEED TO #1 ABS. N	2306 x 100 = 0.2770	6719 x 100 = 1.613	181243 x 100 = 10.88	2960893 x 100 = 198.0 / 320367 x 100 = 75.99
	FEED TO #2 ABS. S	0 = 0.000	0 = 0.000	0 = 0.000	0 = 0.000 / 0 = 0.000
	DISC. TO SEWER	0 = 0.000	0 = 0.000	0 = 0.000	0 = 0.000 / 0 = 0.000
	TOTAL GALLONS THROUGH NEW CARBON = 517595				
9-7-92	FEED TO #1 ABS.	.680	2.984	21.52	342.9
	FEED TO #2 ABS.	0.000	0.000	0.000	0.000
	DISC. TO SEWER	0.000	0.000	0.000	0.000
	TOTAL GALLONS THROUGH NEW CARBON = 544396				
9-8-92	FEED TO #1 ABS.	0.543	3.260	23.55	389.7
	FEED TO #2 ABS.	0.000	0.000	0.000	0.000
	DISC. TO SEWER	0.000	0.000	0.000	0.000
	TOTAL GALLONS THROUGH NEW CARBON = 551300				
9-9-92	FEED TO #1 ABS.	.448	3.027	19.42	357.4
	FEED TO #2 ABS.	0.000	0.000	0.000	0.000
	DISC. TO SEWER	0.000	0.000	0.000	0.000
	TOTAL GALLONS THROUGH NEW CARBON = 558841				
9-10-92	FEED TO #1 ABS.	.253	1.707	11.76	221.1
	FEED TO #2 ABS.	0.000	0.000	0.000	0.000
	DISC. TO SEWER	0.000	0.000	0.000	0.000
	TOTAL GALLONS THROUGH NEW CARBON = 566140				

04/04/89

BASF CORPORATION, CHEMICALS DIVISION, WYANDOTTE SITE

NORTH WORKS GROUNDWATER EXTRACTION WELLS

566140

DATE	SAMPLE	METHYLENE CHLORIDE	CHLOROFORM	DICHLORO ETHANE	PROPYLENE DICHLORIDE
9-11-92	FEED TO #1 ABS N	0.491	3.744	25.76	520.5
	FEED TO #2 ABS S	0.000	0.000	0.000	0.000
	DISC. TO SEWER	0.000	0.000	0.000	0.000
	TOTAL GALLONS THROUGH NEW CARBON =				
9-15-92	FEED TO #1 ABS.	0.4044	2.153	15.63	305.2
	FEED TO #2 ABS.	0.014	0.000	0.000	.010
	DISC. TO SEWER	0.000	0.000	0.000	0.000
	TOTAL GALLONS THROUGH NEW CARBON =				
9-16-92	FEED TO #1 ABS.	NO SAMPLE			
	FEED TO #2 ABS.	0.098	0	.050	.009
	DISC. TO SEWER	0.000	0.000	0.000	0.000
	TOTAL GALLONS THROUGH NEW CARBON = 598212				
9-17-92	FEED TO #1 ABS.	NO SAMPLE			
	FEED TO #2 ABS.	0.163	0.007	0.461	0.019
	DISC. TO SEWER	0.000	0.000	0.000	0.000
	TOTAL GALLONS THROUGH NEW CARBON =				
9-18-92	FEED TO #1 ABS.	0.000	0.234	2.442	38.23
	FEED TO #2 ABS.	0.264	0.010	2.285	0.008
	DISC. TO SEWER	0.000	0.000	0.000	0.001
	TOTAL GALLONS THROUGH NEW CARBON =				
9-21-92	FEED TO #1 ABS N	0.382	2.304	17.22	289.9
	FEED TO #2 ABS S	0.512	0.031	14.18	0.198
	DISC. TO SEWER	0.000	0.000	0.000	0.001
	TOTAL GALLONS THROUGH NEW CARBON =				

04/04/89

BASF CORPORATION, CHEMICALS DIVISION, WYANDOTTE SITE

NORTH WORKS GROUNDWATER EXTRACTION WELLS

DATE	SAMPLE	METHYLENE CHLORIDE	CHLOROFORM	DICHLORO ETHANE	PROPYLENE DICHLORIDE
9-23-92	FEED TO #1 ABS.	0.210	2.329	18.93	305.9
	FEED TO #2 ABS.	0.664	0.025	27.07	13.48
	DISC. TO SEWER	0	0	0	0
	TOTAL GALLONS THROUGH NEW CARBON =				
9-24-92	FEED TO #1 ABS.	0.275	2.047	14.59	265.9
	FEED TO #2 ABS.	0.600	0	29.36	18.35
	DISC. TO SEWER	0	0	0	0
	TOTAL GALLONS THROUGH NEW CARBON =				
9-25-92	FEED TO #1 ABS.	0.411	4.544	27.91	547.6
	FEED TO #2 ABS.	0.639	0	32.98	34.45
	DISC. TO SEWER	0	0	0	0
	TOTAL GALLONS THROUGH NEW CARBON =				
9-28-92	FEED TO #1 ABS.	0.309	3.077	20.04	366.7
	FEED TO #2 ABS.	0.601	0.107	37.69	72.11
	DISC. TO SEWER	0	0	0	0
	TOTAL GALLONS THROUGH NEW CARBON =				
9-29-92	FEED TO #1 ABS.	0.439	3.430	20.53	431.5
	FEED TO #2 ABS.	1.030	0	69.78	170.2
	DISC. TO SEWER	0	0	0	0
	TOTAL GALLONS THROUGH NEW CARBON =				
9-30-92	FEED TO #1 ABS.	0	~~3.118~~ 3.700	27.59	480.5
	FEED TO #2 ABS.	0.907	0.133	0.060	164.2
	DISC. TO SEWER	0	0	0	0
	TOTAL GALLONS THROUGH NEW CARBON =				

04/04/89

BASF CORPORATION, CHEMICALS DIVISION, WYANDOTTE SITE

NORTH WORKS GROUNDWATER EXTRACTION WELLS

DATE	SAMPLE	METHYLENE CHLORIDE	CHLOROFORM	DICHLORO ETHANE	PROPYLENE DICHLORIDE
10-1-92	FEED TO #1 ABS.	0	3.112	24.93	408.5
	FEED TO #2 ABS.	0.866	0.109	46.77	166.4
	DISC. TO SEWER	0	0	0	0
	TOTAL GALLONS THROUGH NEW CARBON =				
10-2-92	FEED TO #1 ABS.	NO SAMPLE			
	FEED TO #2 ABS.				
	DISC. TO SEWER				
	TOTAL GALLONS THROUGH NEW CARBON =				
10-5-92	FEED TO #1 ABS.				
	FEED TO #2 ABS.				
	DISC. TO SEWER	0	0	0	0
	TOTAL GALLONS THROUGH NEW CARBON =				
10-6-92	FEED TO #1 ABS.				
	FEED TO #2 ABS.				
	DISC. TO SEWER	0	0	0	0
	TOTAL GALLONS THROUGH NEW CARBON =				
10-7-92	FEED TO #1 ABS.				
	FEED TO #2 ABS.				
	DISC. TO SEWER	0	0	0	0
	TOTAL GALLONS THROUGH NEW CARBON =				
10-8-92	FEED TO #1 ABS.	0.368	4.123	24.85	472.0
	FEED TO #2 ABS.	0.850	0.909	61.18	518.6
	DISC. TO SEWER	0	0	0	0
	TOTAL GALLONS THROUGH NEW CARBON =				

04/04/89

BASF CORPORATION, CHEMICALS DIVISION, WYANDOTTE SITE

NORTH WORKS GROUNDWATER EXTRACTION WELLS

DATE	SAMPLE	METHYLENE CHLORIDE	CHLOROFORM	DICHLORO ETHANE	PROPYLENE DICHLORIDE
10-9-92	FEED TO #1 ABS.				
	FEED TO #2 ABS.				
	DISC. TO SEWER	0	0	0	0
	TOTAL GALLONS THROUGH NEW CARBON =				
10-12-92	FEED TO #1 ABS.	~~1.~~ 0.258	1.092	5.291	999.9
	FEED TO #2 ABS.	1.020 ~~0.258~~	1.108 ~~1.092~~	60.13 ~~5.291~~	600.5
	DISC. TO SEWER	0	0	0	0
	TOTAL GALLONS THROUGH NEW CARBON =				
10-13	FEED TO #1 ABS.	DOWN FOR ACID WASH			
	FEED TO #2 ABS.				
	DISC. TO SEWER				
	TOTAL GALLONS THROUGH NEW CARBON =				
10-19-92	FEED TO #1 ABS.				
	FEED TO #2 ABS.				
	DISC. TO SEWER	0.000	0.000	0.000	0.000
	TOTAL GALLONS THROUGH NEW CARBON =				
10-20-92	FEED TO #1 ABS.	.334	6.430	20.47	545.6
	FEED TO #2 ABS.	.486	.959	40.84	463.2
	DISC. TO SEWER	0.000	0.000	0.000	0.000
	TOTAL GALLONS THROUGH NEW CARBON =				
10-21-92	FEED TO #1 ABS.				
	FEED TO #2 ABS.				
	DISC. TO SEWER	0.000	0.000	0.000	0.000
	TOTAL GALLONS THROUGH NEW CARBON =				

04/04/89

BASF CORPORATION, CHEMICALS DIVISION, WYANDOTTE SITE

NORTH WORKS GROUNDWATER EXTRACTION WELLS

DATE	SAMPLE	METHYLENE CHLORIDE	CHLOROFORM	DICHLORO ETHANE	PROPYLENE DICHLORIDE
10-22-92	FEED TO #1 ABS.	0.973	5.551	25.17	594.6
	FEED TO #2 ABS.	.245	1.344	45.72	575.9
	DISC. TO SEWER	0.000	0.000	0.000	0.000
	TOTAL GALLONS THROUGH NEW CARBON =				
10-23-92	FEED TO #1 ABS.	0.181	5.889	23.07	581.0
	FEED TO #2 ABS.	0.633	1.328	42.66	589.0
	DISC. TO SEWER	0.000	0.000	0.000	0.000
	TOTAL GALLONS THROUGH NEW CARBON =				
10-26-92	FEED TO #1 ABS.	0.931	5.747	25.03	619.1
	FEED TO #2 ABS.	0.444	1.664	45.49	646.8
	DISC. TO SEWER	0.000	0.000	0.000	0.000
	TOTAL GALLONS THROUGH NEW CARBON =				
10-27-92	FEED TO #1 ABS.	0.305	7.297	29.00	736.9
	FEED TO #2 ABS.	0.883	2.008	40.21	655.6
	DISC. TO SEWER	0.000	0.000	0.000	0.000
	TOTAL GALLONS THROUGH NEW CARBON =				
10-28-92	FEED TO #1 ABS.	1.119			
	FEED TO #2 ABS.	0.4218	1.900	44.33	700.8
	DISC. TO SEWER	0.000	0.000	0.000	0.000
	TOTAL GALLONS THROUGH NEW CARBON =				
10-29-92	FEED TO #1 ABS.	1.119	5.432	25.70	606.3
	FEED TO #2 ABS.	0.4218	1.900	44.33	700.3
	DISC. TO SEWER	0.000	0.000	0.000	0.000
	TOTAL GALLONS THROUGH NEW CARBON =				

04/04/89

34.535 4681 W .456

BASF CORPORATION, CHEMICALS DIVISION, WYANDOTTE SITE

NORTH WORKS GROUNDWATER EXTRACTION WELLS

DATE	SAMPLE	METHYLENE CHLORIDE	CHLOROFORM	DICHLORO ETHANE	PROPYLENE DICHLORIDE
~~10-17~~ 10-30	FEED TO #1 ABS.	1.362	4.842	20.44	501.7
	FEED TO #2 ABS.	0.397	2.409	40.59	761.6
	DISC. TO SEWER	0	0	0	0
	TOTAL GALLONS THROUGH NEW CARBON =				
11-2-92	FEED TO #1 ABS.	0.146	3.530	16.60	401.2
	FEED TO #2 ABS.	0.316	2.065	38.10	715.0
	DISC. TO SEWER	N.D.	N.D.	N.D.	N.D.
	TOTAL GALLONS THROUGH NEW CARBON =				
11-3-92	FEED TO #1 ABS.	0.8761	5.538	2.499	590.6
	FEED TO #2 ABS.	0.1197	0.8112	26.70	518.7
	DISC. TO SEWER	N.D.	N.D.	N.D.	N.D.
	TOTAL GALLONS THROUGH NEW CARBON =				
11-4-92	FEED TO #1 ABS.				
	FEED TO #2 ABS.				
	DISC. TO SEWER	N.D.	N.D.	N.D.	N.D.
	TOTAL GALLONS THROUGH NEW CARBON =				
11-5-92	FEED TO #1 ABS.				
	FEED TO #2 ABS.				
	DISC. TO SEWER	N.D.	N.D.	N.D.	N.D
	TOTAL GALLONS THROUGH NEW CARBON =				
11-6-92	FEED TO #1 ABS.				
	FEED TO #2 ABS.				
	DISC. TO SEWER	N.D.	N.D.	N.D.	N.D.
	TOTAL GALLONS THROUGH NEW CARBON =				

04/04/89

BASF CORPORATION, CHEMICALS DIVISION, WYANDOTTE SITE

NORTH WORKS GROUNDWATER EXTRACTION WELLS

DATE	SAMPLE	METHYLENE CHLORIDE	CHLOROFORM	DICHLORO ETHANE	PROPYLENE DICHLORIDE
11-9-92	FEED TO #1 ABS.				
	FEED TO #2 ABS.				
	DISC. TO SEWER	N.D.	N.D.	N.D.	N.D.
	TOTAL GALLONS THROUGH NEW CARBON =				
11-10-92	FEED TO #1 ABS.				
	FEED TO #2 ABS.				
	DISC. TO SEWER	N.D.	N.D.	N.D.	N.D.
	TOTAL GALLONS THROUGH NEW CARBON =				
11-11-92	FEED TO #1 ABS.				
	FEED TO #2 ABS.	N.D.	1.848	24.48	518.2
	DISC. TO SEWER	N.D.	N.D.	N.D.	0.000
	TOTAL GALLONS THROUGH NEW CARBON =				
11-12-92	FEED TO #1 ABS.	0.4379	1.896	135.5	210.1
	FEED TO #2 ABS.	~~2.307~~ N.D.	2.307	22.42	509.1
	DISC. TO SEWER	N.D.	N.D.	N.D.	0.003
	TOTAL GALLONS THROUGH NEW CARBON =				
11-13-92	FEED TO #1 ABS.	0.2941	2.139	15.97	249.8
	FEED TO #2 ABS.	N.D.	2.710	21.99	541.4
	DISC. TO SEWER	N.D.	N.D.	N.D.	N.D.
	TOTAL GALLONS THROUGH NEW CARBON =				
11-16-92	FEED TO #1 ABS.				
	FEED TO #2 ABS.	N.D.	2.962	21.78	540.6
	DISC. TO SEWER	N.D.	N.D.	N.D.	N.D.
	TOTAL GALLONS THROUGH NEW CARBON =				

04/04/89

BASF CORPORATION, CHEMICALS DIVISION, WYANDOTTE SITE

NORTH WORKS GROUNDWATER EXTRACTION WELLS

DATE	SAMPLE	METHYLENE CHLORIDE	CHLOROFORM	DICHLORO ETHANE	PROPYLENE DICHLORIDE
11-17-92	FEED TO #1 ABS.	0.2110	3.311	23.68	372.6
	FEED TO #2 ABS.	N.D.	2.595	20.64	506.6
	DISC. TO SEWER	N.D.	N.D	N.D.	N.D.
	TOTAL GALLONS THROUGH NEW CARBON =				
11-18-92	FEED TO #1 ABS.	0.3958	2.520	17.04	266.5
	FEED TO #2 ABS.	0.3627	3.274	23.95	612.3
	DISC. TO SEWER	N.D.	N.D.	N.D.	N.D.
	TOTAL GALLONS THROUGH NEW CARBON =				
11-19-92	FEED TO #1 ABS.				
	FEED TO #2 ABS.	N.D.	3.073	23.48	611.2
	DISC. TO SEWER	N.D.	N.D.	N.D.	N.D.
	TOTAL GALLONS THROUGH NEW CARBON =				
11-20-92	FEED TO #1 ABS.	0.7751	3.105	17.75	353.4
	FEED TO #2 ABS.	N.D.	3.072	22.89	609.8
	DISC. TO SEWER	N.D.	N.D.	N.D.	N.D.
	TOTAL GALLONS THROUGH NEW CARBON =				
11-23-92	FEED TO #1 ABS.	0.2295	2.798	14.72	302.7
	FEED TO #2 ABS.	N.D.	2.871	21.84	570.3
	DISC. TO SEWER	N.D.	N.D.	N.D.	0.004
	TOTAL GALLONS THROUGH NEW CARBON =				
11-24-92	FEED TO #1 ABS.	0.3479	3.081	18.37	339.4
	FEED TO #2 ABS.	N.D.	3.047	21.94	585.7
	DISC. TO SEWER	N.D.	N.D.	N.D.	N.D.
	TOTAL GALLONS THROUGH NEW CARBON =				

04/04/89

BASF CORPORATION, CHEMICALS DIVISION, WYANDOTTE SITE

NORTH WORKS GROUNDWATER EXTRACTION WELLS

DATE	SAMPLE	METHYLENE CHLORIDE	CHLOROFORM	DICHLORO ETHANE	PROPYLENE DICHLORIDE
11-25-92	FEED TO #1 ABS.	1.113	2.843	19.21	317.4
	FEED TO #2 ABS.	N.D.	2.811	22.10	587.7
	DISC. TO SEWER	N.D.	N.D.	N.D.	N.D.
	TOTAL GALLONS THROUGH NEW CARBON =				
11-26-92	FEED TO #1 ABS.	0.9116	3.084	21.39	334.3
	FEED TO #2 ABS.	N.D.	2.985	20.46	543.4
	DISC. TO SEWER	N.D	N.D.	N.D.	N.D.
	TOTAL GALLONS THROUGH NEW CARBON =				
11-27-92	FEED TO #1 ABS.	0.4608	1.176	10.55	160.4
	FEED TO #2 ABS.	N.D.	3.416	21.71	586.1
	DISC. TO SEWER	N.D.	N.D.	N.D.	N.D.
	TOTAL GALLONS THROUGH NEW CARBON =				
11-30-92	FEED TO #1 ABS.	1.024 ~~N.D.~~	3.397	16.47	362.8
	FEED TO #2 ABS.	N.D.	2.714	19.53	485.7
	DISC. TO SEWER	N.D.	N.D.	N.D.	N.D.
	TOTAL GALLONS THROUGH NEW CARBON =				
12-1-92	FEED TO #1 ABS.				
	FEED TO #2 ABS.				
	DISC. TO SEWER	N.D	N.D.	N.D.	0.004
	TOTAL GALLONS THROUGH NEW CARBON = 7395				
12-4-92	FEED TO #1 ABS.	1.097	2.967	20.23	339.3
	FEED TO #2 ABS.	N.D	N.D.	0.015	0.446
	DISC. TO SEWER	N.D.	N.D.	N.D.	0.023
	TOTAL GALLONS THROUGH NEW CARBON = 7395				

04/04/89

BASF CORPORATION, CHEMICALS DIVISION, WYANDOTTE SITE

NORTH WORKS GROUNDWATER EXTRACTION WELLS

DATE	SAMPLE	METHYLENE CHLORIDE	CHLOROFORM	DICHLORO ETHANE	PROPYLENE DICHLORIDE
~~12-4-92~~	~~FEED TO #1 ABS.~~	~~1.097~~	~~2.967~~	~~20.23~~	~~339.3~~
	~~FEED TO #2 ABS.~~	~~N.D~~	~~N.D.~~	~~0.015~~	~~0.446~~
	~~DISC. TO SEWER~~	~~N.D.~~	~~N.D.~~	~~N.D.~~	~~0.023~~
	TOTAL GALLONS THROUGH NEW CARBON =				
12-4-92	FEED TO #1 ABS.	0.422	2.12	16.1	242
	FEED TO #2 ABS.	N.D.	N.D.	0.011	0.618
	DISC. TO SEWER	N.D.	N.D.	N.D.	005
	TOTAL GALLONS THROUGH NEW CARBON = 36285				
12-8-92	FEED TO #1 ABS.	.868	3.96	19.4	378.4
	FEED TO #2 ABS.	N.D.	N.D.	0.006	0.277
	DISC. TO SEWER	N.D.	N.D.	N.D.	0.006
	TOTAL GALLONS THROUGH NEW CARBON = 44746				
12-9-92	FEED TO #1 ABS.	.717	2.88	15.5	321
	FEED TO #2 ABS.	N.D.	N.D.	0.011	.686
	DISC. TO SEWER	N.D.	N.D.	N.D.	0.006
	TOTAL GALLONS THROUGH NEW CARBON = 52367				
12-10-92	FEED TO #1 ABS.	1.09	2.13	14.5	265
	FEED TO #2 ABS.	N.D.	N.D.	0.015	.937
	DISC. TO SEWER	N.D.	N.D.	N.D.	0.005
	TOTAL GALLONS THROUGH NEW CARBON = 58563				
12-11-92	FEED TO #1 ABS.	.978	2.70	23.2	241.0
	FEED TO #2 ABS.	N.D.	N.D.	005	0.351
	DISC. TO SEWER	N.D.	N.D.	N.D.	0.006
	TOTAL GALLONS THROUGH NEW CARBON = 65391				

04/04/89

Item 2.3

SOIL AND SEDIMENT

ANALYTICAL REPORTS

2.3.a Date: September 24, 1991

Description: Waste characterization of soils around the EPO Plant that may be excavated for a proposed plant expansion.
No characteristics detected, screening for App VIII at core.

2.3.b Date: December 18, 1991

Description: Waste characterization of excavated soil generated from the repair of piping. Excavation was located between extraction wells #2 and #3 in the southern portion of the North Works.

2.3.c Date: May 4, 1992

Description: Waste characterization of excavated soil generated from the repair of a storm sewer. Excavation was located southeast of the corner of Ottawa and Wyandotte.

2.3.d Date: September 28, 1992

Description: Waste characterization of groundwater & soil sediments associated with an excavation for the repair of a water line.

2.3.e Date: October 7, 1992

Description: Waste characterization of contaminated soil generated from drillings for soil borings associated with the Toluene Remediation Project. (see Item 1.4)

2.3.a.

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EXECUTIVE SUMMARY

The BASF Wyandotte Corporation's facility is located adjacent to the Detroit River in Wyandotte, Michigan. The site extends from the river on the east to Biddle Avenue on the west bordered on the north by Perry Place and on the south by Mulberry St.

The eastern portion of the site is reclaimed marshland and riverbottom and the majority of the sites landsurface is underlain by surficial materials consisting mostly of fill materials with some fluvial sand and peat.

The surficial material is underlain by lake clay approximately 40 to 70 feet thick.

This report presents the results of a site investigation conducted on September 19 and 20, 1991 by Analytic and Biological Laboratories at the BASF Wyandotte facility.

The purpose of the site investigation was to conduct exploratory borings in two areas at the EPO plant in order to characterize the soils that will be excavated for a proposed plant expansion. These areas are shown in Figure 1.

Split spoon soil samples were collected and analyzed for Reactivity, Corrosivity, Ignitability, TCLP metals and TCLP organics as requested by BASF Ecology services.

The results of these evaluations indicate that there is no evidence of any contaminants in the soil at concentrations that would cause it to be defined as regulated material by Federal or State agencies criteria.

Site Geology

Current information based on using geological and hydrogeological maps for the down river area indicate that the surficial back fill

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materials at the site are underlain by glacial and post-glacial deposits, consisting primarily of lake clay 40 to 70 feet in thickness. The lake clay is underlain by dolomite bedrock. The glacial lake clay has a very low permeability and forms a confining barrier separating the ground water within the surficial materials from confined groundwater in the underlying dolomite.

Because of this confining layer there would be very little vertical communication between the two ground waters. Borings from around the EPO plant indicate that backfill material ranges from 0-10 feet and consists of light brown to dark gray sand with gravel, wood fragments and broken concrete interdispersed.

The existence of these and other buried structures such as foundation structures sanitary sewers, water lines and storm sewers would make it difficult to determine the lateral direction of migration of contaminants into and out of the engineered backfill material in the EPO plant immediate vicinity.

Sampling Protocol

A random sampling plan as outlined by the Michigan Department of Natural Resources and referred to as "Verification of Soil Remediation", dated October 26, 1990, was used to randomly select samples to characterize two parcels of land: one on the East side of the EPO plant (East area) and one on the West side of the plant (West area) as shown in figure 1. This plan was proposed since the purpose of this investigation was to characterize the site and avoid declaring a site clean when it is not.

This document outlines a 3-dimensional random sampling strategy which is a method to randomize both the horizontal (boring) and vertical (sample collection) locations. Each area was divided into a minimum of four squares that was divided into 9 subcells. The

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boring locations were randomly selected amongst the 9 subcells. Thus, four borings were conducted in the East area and four borings in the West area. The vertical sampling locations were randomly selected by dividing five foot sections into ten six-inch increments and randomly selecting the increments. This gave two samples per boring.

Field Activities

Prior to the construction of exploratory borings, engineering drawings of the EPO plant vicinity were reviewed to assist in the final selection of the boring locations in order to avoid an extensive network of underground utilities and/or buried concrete structures.

During field activities in the East area borings number two and four were relocated because of auger refusal. Borings in this area were terminated at six feet. In the West area, boring number two was discontinued at 6' because of auger refusal. This depth was considered adequate for the purposes of this site investigation. The remainder of the borings, number 1, 3 and 4, were terminated at 10' depths. Two split spoon samples were collected from each boring. The boring locations are shown in figure 1.

Results

The site investigation indicated no contamination present in the boring locations, both vertically and horizontally in the two areas of proposed plant expansion that would result in having to classify the materials as hazardous. The boring logs are located in Appendix A and the laboratory results in Appendix B.

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CERTIFICATIONS
CREDENTIALS

Conclusions

The exploratory investigations conducted by A & B Laboratories indicate that there was no contamination present in the two areas being considered for the proposed EPO plant expansion at levels that would cause the backfill materials to be considered hazardous.

These results were based on using the MDNR's draft for the "Verification of Soil Remediation" dated October 25, 1990. The split spoon soil samples, sample collection, samples preservation methodologies and laboratory analysis were in accordance with EPA test Methods SW-846.

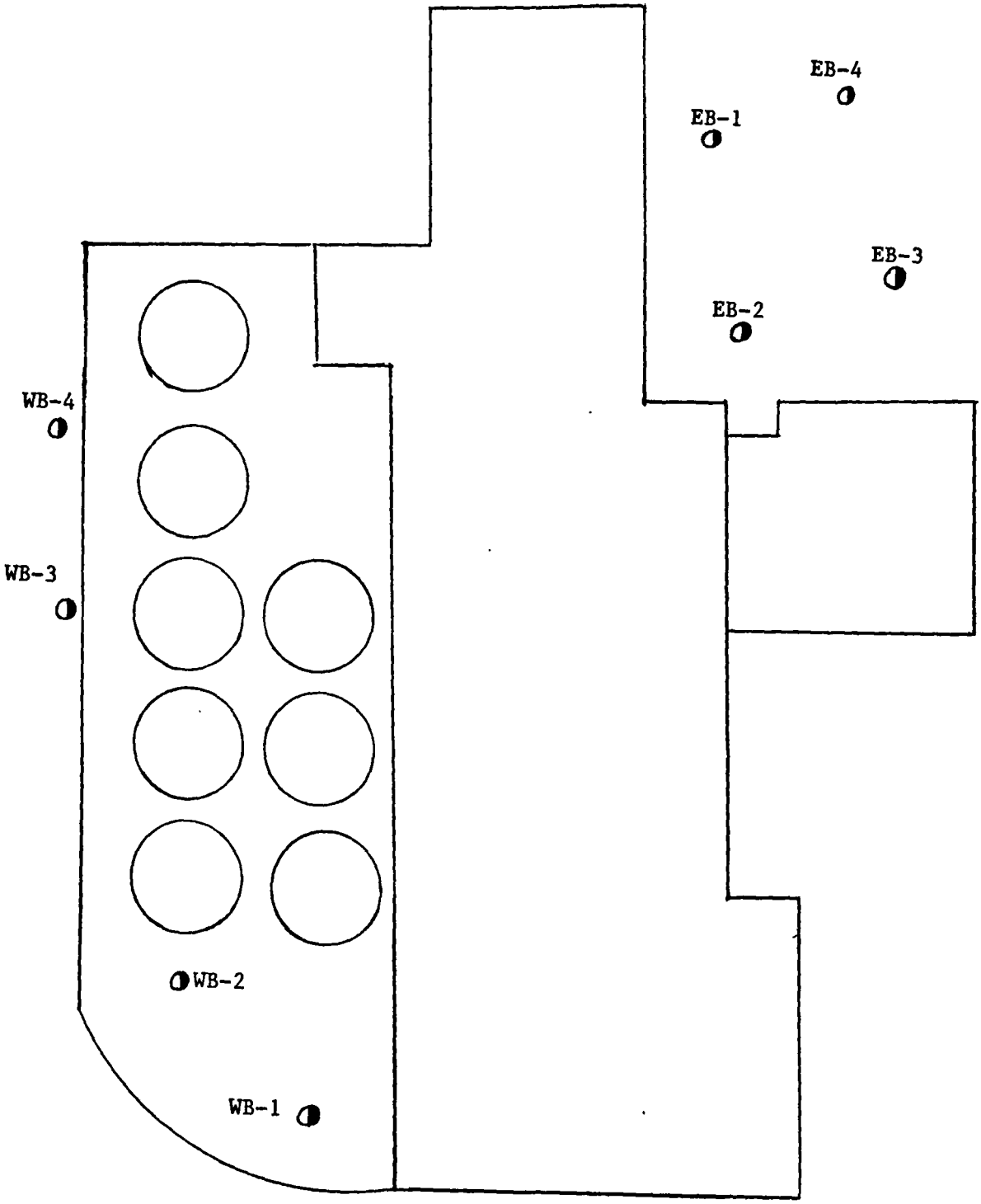

Figure 1 Boring Locations for Areas A and B

OCT. 3 1991
Page 1

BASF Corporation
1609 Biddle Avenue
Wyandotte, MI 48192-3799

Attention: Adam Bickel

Laboratory Sample Number: 91/09:1232
Matrix of Sample Logged : Soil
Date sample submitted : 910924

Information we received for the sample consisted of the following:

-BORING 3 2.5-4 EAST

The results obtained are as follows:

Description	Result	Units
Reactivity	NO	
Reactive Cyanide	<10	ppm
Reactive Sulfide	<10	ppm
Corrosivity	NO	
pH (units)	10.06	units
Flashpoint	>200	Deg. F
TCLP METALS:		
TCLP Arsenic	<0.053	mg/L
TCLP Barium	0.634	mg/L
TCLP Cadmium	<0.003	mg/L
TCLP Chromium	<0.007	mg/L
TCLP Copper	<0.005	mg/L
TCLP Lead	<0.042	mg/L
TCLP Mercury	<0.010	mg/L
TCLP Selenium	<0.075	mg/L
TCLP Silver	<0.050	mg/L
TCLP Zinc	<0.050	mg/L
TCLP VOLATILE ORGANICS:		
Benzene	<0.001	mg/L
Carbon Tetrachloride	<0.001	mg/L

Source: US EPA SW 846 Methodology
Note: "<" Denotes less than the Level of Detection
"N.D." Denotes None Detected

Martine Hurwitz / Janine Reagan
Project Managers

Francis B. McLaughlin, FAIC
Director of Laboratories

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BASF Corporation
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Wyandotte, MI 48192-3799

Attention: Adam Bickel

Laboratory Sample Number: 91/09:1232
Matrix of Sample Logged : Soil
Date sample submitted : 910924

Information we received for the sample consisted of the following:

-BORING 3 2.5-4 EAST

The results obtained are as follows:

Description	Result	Units
Chlorobenzene	<0.001	mg/L
Chloroform	0.0058	mg/L
1,4-Dichlorobenzene	<0.001	mg/L
1,2-Dichloroethane	<0.001	mg/L
1,1-Dichloroethylene	<0.001	mg/L
2-Butanone (MEK)	<0.001	mg/L
Tetrachloroethylene	<0.001	mg/L
Trichloroethylene	<0.001	mg/L
Vinyl Chloride	<0.001	mg/L
TCLP SEMI-VOLATILES:		
m + p Cresol	<0.010	mg/L
o-Cresol	<0.010	mg/L
2,4 - Dintrotoluene	<0.010	mg/L
Hexachlorobenzene	<0.010	mg/L
Hexachloro 1,3 butadiene	<0.010	mg/L
Hexachloroethane	<0.010	mg/L
Nitrobenzene	<0.010	mg/L
Pentachlorophenol	<0.010	mg/L
Pyridine	<0.010	mg/L
2,4,5 Trichlorophenol	<0.010	mg/L

Source: US EPA SW 846 Methodology
Note: "<" Denotes less than the Level of Detection
"N.D." Denotes None Detected

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Project Managers

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BASF Corporation
1609 Biddle Avenue
Wyandotte, MI 48192-3799

Attention: Adam Bickel

Laboratory Sample Number: 91/09:1232
Matrix of Sample Logged : Soil
Date sample submitted : 910924

Information we received for the sample consisted of the following:

-BORING 3 2.5-4 EAST

The results obtained are as follows:

Description	Result	Units
2,4,6 Trichlorophenol	<0.010	mg/L

Source: US EPA SW 846 Methodology
Note: "<" Denotes less than the Level of Detection
"N.D." Denotes None Detected

Martine Hurwitz / Janine Reagan
Project Managers

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OCT. 3 1991

BASF Corporation
1609 Biddle Avenue
Wyandotte, MI 48192-3799

Attention: Adam Bickel

Laboratory Sample Number: 91/09:1233
Matrix of Sample Logged : Soil
Date sample submitted : 910924

Information we received for the sample consisted of the following:

-BORING 3 4.5-6 EAST

The results obtained are as follows:

Description	Result	Units
Reactivity	NO	
Reactive Cyanide	<10	ppm
Reactive Sulfide	<10	ppm
Corrosivity	NO	
pH (units)	9.27	units
Flashpoint	>200	Deg. F
TCLP METALS:	.	
TCLP Arsenic	<0.053	mg/L
TCLP Barium	0.255	mg/L
TCLP Cadmium	0.009	mg/L
TCLP Chromium	<0.007	mg/L
TCLP Copper	<0.005	mg/L
TCLP Lead	<0.042	mg/L
TCLP Mercury	<0.010	mg/L
TCLP Selenium	<0.075	mg/L
TCLP Silver	<0.050	mg/L
TCLP Zinc	<0.050	mg/L
TCLP VOLATILE ORGANICS:	.	
Benzene	<0.001	mg/L
Carbon Tetrachloride	<0.001	mg/L

Source: US EPA SW 846 Methodology
Note: "<" Denotes less than the Level of Detection
"N.D." Denotes None Detected

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BASF Corporation
1609 Biddle Avenue
Wyandotte, MI 48192-3799

Attention: Adam Bickel

Laboratory Sample Number: 91/09:1233
Matrix of Sample Logged : Soil
Date sample submitted : 910924

Information we received for the sample consisted of the following:

-BORING 3 4.5-6 EAST

The results obtained are as follows:

Description	Result	Units
Chlorobenzene	<0.001	mg/L
Chloroform	0.0060	mg/L
1,4-Dichlorobenzene	<0.001	mg/L
1,2-Dichloroethane	<0.001	mg/L
1,1-Dichloroethylene	<0.001	mg/L
2-Butanone (MEK)	<0.010	mg/L
Tetrachloroethylene	<0.001	mg/L
Trichloroethylene	<0.001	mg/L
Vinyl Chloride	<0.005	mg/L
TCLP SEMI-VOLATILES:		
m + p Cresol	<0.010	mg/L
o-Cresol	<0.010	mg/L
2,4 - Dintrotoluene	<0.010	mg/L
Hexachlorobenzene	<0.010	mg/L
Hexachloro 1,3 butadiene	<0.010	mg/L
Hexachloroethane	<0.010	mg/L
Nitrobenzene	<0.010	mg/L
Pentachlorophenol	<0.010	mg/L
Pyridine	<0.010	mg/L
2,4,5 Trichlorophenol	<0.010	mg/L

Source: US EPA SW 846 Methodology
Note: "<" Denotes less than the Level of Detection
"N.D." Denotes None Detected

Martine Hurwitz / Janine Reagan
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BASF Corporation
1609 Biddle Avenue
Wyandotte, MI 48192-3799

Attention: Adam Bickel

Laboratory Sample Number: 91/09:1233
Matrix of Sample Logged : Soil
Date sample submitted : 910924

Information we received for the sample consisted of the following:

-BORING 3 4.5-6 EAST

The results obtained are as follows:

Description	Result	Units
2,4,6 Trichlorophenol	<0.010	mg/L

Source: US EPA SW 846 Methodology
Note: "<" Denotes less than the Level of Detection
"N.D." Denotes None Detected

Martine Hurwitz / Janine Reagan
Project Managers

Francis B. McLaughlin, FAIC
Director of Laboratories

OCT. 3 1991
Page 1

BASF Corporation
1609 Biddle Avenue
Wyandotte, MI 48192-3799

Attention: Adam Bickel

Laboratory Sample Number: 91/09:1234
Matrix of Sample Logged : Soil
Date sample submitted : 910924

Information we received for the sample consisted of the following:

-BORING 4 4.5-6 EAST

The results obtained are as follows:

Description	Result	Units
Reactivity	NO	
Reactive Cyanide	<10	ppm
Reactive Sulfide	<10	ppm
Corrosivity	NO	
pH (units)	8.89	units
Flashpoint	>200	Deg. F
TCLP METALS:		
TCLP Arsenic	<0.053	mg/L
TCLP Barium	0.131	mg/L
TCLP Cadmium	<0.003	mg/L
TCLP Chromium	<0.007	mg/L
TCLP Copper	<0.005	mg/L
TCLP Lead	<0.042	mg/L
TCLP Mercury	<0.010	mg/L
TCLP Selenium	<0.075	mg/L
TCLP Silver	<0.050	mg/L
TCLP Zinc	<0.050	mg/L
TCLP VOLATILE ORGANICS:		
Benzene	<0.001	mg/L
Carbon Tetrachloride	<0.001	mg/L

Source: US EPA SW 846 Methodology
Note: "<" Denotes less than the Level of Detection
"N.D." Denotes None Detected

Martine Hurwitz / Janine Reagan
Project Managers

Francis B. McLaughlin, FAIC
Director of Laboratories

Analytic & Biological Laboratories, Inc.
24350 INDOPLEX CIRCLE FARMINGTON HILLS, MICHIGAN 48335 (313) 477-6666 FAX (313) 477-4604

BASF Corporation
1609 Biddle Avenue
Wyandotte, MI 48192-3799

Attention: Adam Bickel

Laboratory Sample Number: 91/09:1234
Matrix of Sample Logged : Soil
Date sample submitted : 910924

Information we received for the sample consisted of the following:

-BORING 4 4.5-6 EAST

The results obtained are as follows:

Description	Result	Units
Chlorobenzene	<0.001	mg/L
Chloroform	0.0065	mg/L
1,4-Dichlorobenzene	<0.001	mg/L
1,2-Dichloroethane	<0.001	mg/L
1,1-Dichloroethylene	<0.001	mg/L
2-Butanone (MEK)	<0.010	mg/L
Tetrachloroethylene	<0.001	mg/L
Trichloroethylene	<0.001	mg/L
Vinyl Chloride	<0.005	mg/L
TCLP SEMI-VOLATILES:		
m + p Cresol	<0.010	mg/L
o-Cresol	<0.010	mg/L
2,4 - Dintrotoluene	<0.010	mg/L
Hexachlorobenzene	<0.010	mg/L
Hexachloro 1,3 butadiene	<0.010	mg/L
Hexachloroethane	<0.010	mg/L
Nitrobenzene	<0.010	mg/L
Pentachlorophenol	<0.010	mg/L
Pyridine	<0.010	mg/L
2,4,5 Trichlorophenol	<0.010	mg/L

Source: US EPA SW 846 Methodology
Note: "<" Denotes less than the Level of Detection
"N.D." Denotes None Detected

Martine Hurwitz / Janine Reagan
Project Managers

Francis B. McLaughlin, FAIC
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24350 INDOPLEX CIRCLE FARMINGTON HILLS, MICHIGAN 48335 (313) 477-6666 FAX (313) 477-4644

BASF Corporation
1609 Biddle Avenue
Wyandotte, MI 48192-3799

Attention: Adam Bickel

Laboratory Sample Number: 91/09:1234
Matrix of Sample Logged : Soil
Date sample submitted : 910924

Information we received for the sample consisted of the following:

-BORING 4 4.5-6 EAST

The results obtained are as follows:

Description	Result	Units
2,4,6 Trichlorophenol	<0.010	mg/L

Source: US EPA SW 846 Methodology
Note: "<" Denotes less than the Level of Detection
"N.D." Denotes None Detected

Martine Hurwitz / Janine Reagan
Project Managers

Francis B. McLaughlin, FAIC
Director of Laboratories

OCT. 3 1991
Page 1

BASF Corporation
1609 Biddle Avenue
Wyandotte, MI 48192-3799

Attention: Adam Bickel

Laboratory Sample Number: 91/09:1235
Matrix of Sample Logged : Soil
Date sample submitted : 910924

Information we received for the sample consisted of the following:

-BORING 3 4-5.5 WEST

The results obtained are as follows:

Description	Result	Units
Reactivity	NO	
Reactive Cyanide	<10	ppm
Reactive Sulfide	<10	ppm
Corrosivity	8.47	
pH (units)	>200	units
Flashpoint	>200	Deg. F
TCLP METALS:		
TCLP Arsenic	<0.053	mg/L
TCLP Barium	0.210	mg/L
TCLP Cadmium	<0.003	mg/L
TCLP Chromium	<0.007	mg/L
TCLP Copper	<0.005	mg/L
TCLP Lead	<0.042	mg/L
TCLP Mercury	<0.010	mg/L
TCLP Selenium	<0.075	mg/L
TCLP Silver	<0.050	mg/L
TCLP Zinc	<0.050	mg/L
TCLP VOLATILE ORGANICS:		
Benzene	<0.001	mg/L
Carbon Tetrachloride	<0.001	mg/L

Source: US EPA SW 846 Methodology
Note: "<" Denotes less than the Level of Detection
"N.D." Denotes None Detected

Martine Hurwitz / Janine Reagan
Project Managers

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24350 INDOPLEX CIRCLE FARMINGTON HILLS, MICHIGAN 48335 (313) 477-6666 FAX (313) 477-4604

BASF Corporation
1609 Biddle Avenue
Wyandotte, MI 48192-3799

Attention: Adam Bickel

Laboratory Sample Number: 91/09:1235
Matrix of Sample Logged : Soil
Date sample submitted : 910924

Information we received for the sample consisted of the following:

-BORING 3 4-5.5 WEST

The results obtained are as follows:

Description	Result	Units
Chlorobenzene	<0.001	mg/L
Chloroform	0.0080	mg/L
1,4-Dichlorobenzene	<0.001	mg/L
1,2-Dichloroethane	<0.001	mg/L
1,1-Dichloroethylene	<0.001	mg/L
2-Butanone (MEK)	<0.010	mg/L
Tetrachloroethylene	<0.001	mg/L
Trichloroethylene	<0.001	mg/L
Vinyl Chloride	<0.005	mg/L
TCLP SEMI-VOLATILES:		
m + p Cresol	<0.010	mg/L
o-Cresol	<0.010	mg/L
2,4 - Dintrotoluene	<0.010	mg/L
Hexachlorobenzene	<0.010	mg/L
Hexachloro 1,3 butadiene	<0.010	mg/L
Hexachloroethane	<0.010	mg/L
Nitrobenzene	<0.010	mg/L
Pentachlorophenol	<0.010	mg/L
Pyridine	<0.010	mg/L
2,4,5 Trichlorophenol	<0.010	mg/L

Source: US EPA SW 846 Methodology
Note: "<" Denotes less than the Level of Detection
"N.D." Denotes None Detected

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Project Managers

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OCT. 3 1991

BASF Corporation
1609 Biddle Avenue
Wyandotte, MI 48192-3799

Attention: Adam Bickel

Laboratory Sample Number: 91/09:1235
Matrix of Sample Logged : Soil
Date sample submitted : 910924

Information we received for the sample consisted of the following:

-BORING 3 4-5.5 WEST

The results obtained are as follows:

Description	Result	Units
2,4,6 Trichlorophenol	<0.010	mg/L

Source: US EPA SW 846 Methodology
Note: "<" Denotes less than the Level of Detection
"N.D." Denotes None Detected

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OCT. 3 1991

BASF Corporation
1609 Biddle Avenue
Wyandotte, MI 48192-3799

Attention: Adam Bickel

Laboratory Sample Number: 91/09:1236
Matrix of Sample Logged : Soil
Date sample submitted : 910924

Information we received for the sample consisted of the following:

-BORING 4 4-5.5 WEST

The results obtained are as follows:

Description	Result	Units
Reactivity	NO	
Reactive Cyanide	<10	ppm
Reactive Sulfide	<10	ppm
Corrosivity	NO	
pH (units)	10.71	units
Flashpoint	>200	Deg. F
TCLP METALS:	.	
TCLP Arsenic	<0.053	mg/L
TCLP Barium	0.061	mg/L
TCLP Cadmium	<0.003	mg/L
TCLP Chromium	<0.007	mg/L
TCLP Copper	0.011	mg/L
TCLP Lead	<0.042	mg/L
TCLP Mercury	<0.010	mg/L
TCLP Selenium	<0.075	mg/L
TCLP Silver	<0.050	mg/L
TCLP Zinc	<0.050	mg/L
TCLP VOLATILE ORGANICS:	.	
Benzene	0.0663	mg/L
Carbon Tetrachloride	<0.001	mg/L

Source: US EPA SW 846 Methodology
Note: "<" Denotes less than the Level of Detection
"N.D." Denotes None Detected

Martine Hurwitz / Janine Reagan
Project Managers

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BASF Corporation
1609 Biddle Avenue
Wyandotte, MI 48192-3799

Attention: Adam Bickel

Laboratory Sample Number: 91/09:1236
Matrix of Sample Logged : Soil
Date sample submitted : 910924

Information we received for the sample consisted of the following:

-BORING 4 4-5.5 WEST

The results obtained are as follows:

Description	Result	Units
Chlorobenzene	<0.001	mg/L
Chloroform	0.0066	mg/L
1,4-Dichlorobenzene	<0.001	mg/L
1,2-Dichloroethane	<0.001	mg/L
1,1-Dichloroethylene	<0.001	mg/L
2-Butanone (MEK)	<0.010	mg/L
Tetrachloroethylene	<0.001	mg/L
Trichloroethylene	<0.001	mg/L
Vinyl Chloride	<0.005	mg/L
TCLP SEMI-VOLATILES:		
m + p Cresol	<0.010	mg/L
o-Cresol	<0.010	mg/L
2,4 - Dintrotoluene	<0.010	mg/L
Hexachlorobenzene	0.0016	mg/L
Hexachloro 1,3 butadiene	<0.010	mg/L
Hexachloroethane	<0.010	mg/L
Nitrobenzene	<0.010	mg/L
Pentachlorophenol	0.0067	mg/L
Pyridine	<0.010	mg/L
2,4,5 Trichlorophenol	<0.010	mg/L

Source: US EPA SW 846 Methodology
Note: "<" Denotes less than the Level of Detection
"N.D." Denotes None Detected

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Attention: Adam Bickel

Laboratory Sample Number: 91/09:1236
Matrix of Sample Logged : Soil
Date sample submitted : 910924

Information we received for the sample consisted of the following:

-BORING 4 4-5.5 WEST

The results obtained are as follows:

Description	Result	Units
2,4,6 Trichlorophenol	<0.010	mg/L

Source: US EPA SW 846 Methodology
Note: "<" Denotes less than the Level of Detection
"N.D." Denotes None Detected

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Project Managers

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Page 1

BASF Corporation
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Attention: Adam Bickel

Laboratory Sample Number: 91/09:1237
Matrix of Sample Logged : Soil
Date sample submitted : 910924

Information we received for the sample consisted of the following:

-BORING 4 4-7 WEST

The results obtained are as follows:

Description	Result	Units
Reactivity	NO	
Reactive Cyanide	<10	ppm
Reactive Sulfide	<10	ppm
Corrosivity	NO	
pH (units)	9.43	units
Flashpoint	>200	Deg. F
TCLP METALS:		
TCLP Arsenic	<0.053	mg/L
TCLP Barium	0.073	mg/L
TCLP Cadmium	<0.003	mg/L
TCLP Chromium	<0.007	mg/L
TCLP Copper	<0.005	mg/L
TCLP Lead	<0.042	mg/L
TCLP Mercury	<0.010	mg/L
TCLP Selenium	<0.075	mg/L
TCLP Silver	<0.050	mg/L
TCLP Zinc	<0.050	mg/L
TCLP VOLATILE ORGANICS:		
Benzene	<0.001	mg/L
Carbon Tetrachloride	<0.001	mg/L

Source: US EPA SW 846 Methodology
Note: "<" Denotes less than the Level of Detection
"N.D." Denotes None Detected

Martine Hurwitz / Janine Reagan
Project Managers

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Attention: Adam Bickel

Laboratory Sample Number: 91/09:1237
Matrix of Sample Logged : Soil
Date sample submitted : 910924

Information we received for the sample consisted of the following:

-BORING 4 4-7 WEST

The results obtained are as follows:

Description	Result	Units
Chlorobenzene	<0.001	mg/L
Chloroform	0.0066	mg/L
1,4-Dichlorobenzene	<0.001	mg/L
1,2-Dichloroethane	<0.001	mg/L
1,1-Dichloroethylene	<0.001	mg/L
2-Butanone (MEK)	<0.010	mg/L
Tetrachloroethylene	<0.001	mg/L
Trichloroethylene	<0.001	mg/L
Vinyl Chloride	<0.005	mg/L
TCLP SEMI-VOLATILES:		
m + p Cresol	<0.010	mg/L
o-Cresol	<0.010	mg/L
2,4 - Dintrotoluene	<0.010	mg/L
Hexachlorobenzene	<0.010	mg/L
Hexachloro 1,3 butadiene	<0.010	mg/L
Hexachloroethane	<0.010	mg/L
Nitrobenzene	<0.010	mg/L
Pentachlorophenol	<0.010	mg/L
Pyridine	<0.010	mg/L
2,4,5 Trichlorophenol	<0.010	mg/L

Source: US EPA SW 846 Methodology
Note: "<" Denotes less than the Level of Detection
"N.D." Denotes None Detected

Martine Hurwitz / Janine Reagan
Project Managers

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Wyandotte, MI 48192-3799

Attention: Adam Bickel

Laboratory Sample Number: 91/09:1237
Matrix of Sample Logged : Soil
Date sample submitted : 910924

Information we received for the sample consisted of the following:

-BORING 4 4-7 WEST

The results obtained are as follows:

Description	Result	Units
2,4,6 Trichlorophenol	<0.010	mg/L

Source: US EPA SW 846 Methodology
Note: "<" Denotes less than the Level of Detection
"N.D." Denotes None Detected

Martine Hurwitz / Janine Reagan
Project Managers

Francis B. McLaughlin, FAIC
Director of Laboratories

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1609 BIDDLE AVE
WYANDOTTE MI 48192

2.3.b.

Analytical Services

SAMPLE IDENTIFICATION: 10009273

CUSTOMER IDENTIFICATION: A633

REPORT NUMBER: 1893
DATE SAMPLED: 12/13/91
TYPE OF MATERIAL: SOLID

DATE RECEIVED: 12/18/91
DATE COMPLETED: 01/10/92

PARAMETER	REFERENCE METHOD	PRACTICAL QUANTITATION LIMIT	RESULT
Reactive Cyanide ✓	EPA 7.3.3	50 mg/kg	BDL mg/kg
Reactive Sulfide ✓	EPA 7.3.4	125 mg/kg	BDL mg/kg
* Flashpoint			
Flashpoint	SW 1020		<60 F
EP-TOX Metals			
Copper ✓	SW 6010	0.01 mg/l	0.06 mg/l
Zinc ✓	SW 6010	0.01 mg/l	0.21 mg/l
TCLP Metals			
Arsenic	SW 6010	0.1 mg/l	BDL mg/l
Barium	SW 6010	0.01 mg/l	0.16 mg/l
Cadmium	SW 6010	0.01 mg/l	BDL mg/l
Chromium	SW 6010	0.01 mg/l	BDL mg/l
Lead	SW 6010	0.1 mg/l	0.5 mg/l
Selenium	SW 6010	0.1 mg/l	BDL mg/l
Silver	SW 6010	0.01 mg/l	BDL mg/l
% Recovery Metals			
Arsenic	SW 6010		95 % Rec
Barium	SW 6010		92 % Rec
Cadmium	SW 6010		86 % Rec
Chromium	SW 6010		94 % Rec
Lead	SW 6010		89 % Rec
Selenium	SW 6010		95 % Rec

BDL = BELOW QUANTITATION LIMIT % REC = PERCENT RECOVERY (T) = TOTALS

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WYANDOTTE MI 48192

Analytical Services

SAMPLE IDENTIFICATION: 10009273

CUSTOMER IDENTIFICATION: A633

REPORT NUMBER: 1893
DATE SAMPLED: 12/13/91
TYPE OF MATERIAL: SOLID

DATE RECEIVED: 12/18/91
DATE COMPLETED: 01/10/92

PARAMETER	REFERENCE METHOD	PRACTICAL QUANTITATION LIMIT	RESULT
Silver	SW 6010		82 % Rec
Reportable Metals			
Arsenic	SW 6010	0.1 mg/l	BDL mg/l
Barium ✓	SW 6010	0.01 mg/l	0.17 mg/l
Cadmium ✓	SW 6010	0.01 mg/l	BDL mg/l
Chromium ✓	SW 6010	0.01 mg/l	BDL mg/l
Lead ✓	SW 6010	0.1 mg/l	0.6 mg/l
Selenium ✓	SW 6010	0.1 mg/l	BDL mg/l
Silver ✓	SW 6010	0.01 mg/l	BDL mg/l
TCLP Mercury			
Mercury	SW 7470	0.0005 mg/l	BDL mg/l ✓
% Recovery Mercury			
Mercury	SW 7470		101. % Rec
Reportable Mercury ✓			
Mercury	SW 7470	0.0005 mg/l	BDL mg/l
Volatiles			
Chloroform	SW 8260	1000 mg/kg	BDL mg/kg
Vinyl chloride	SW 8260	2000 mg/kg	BDL mg/kg
Chlorobenzene	SW 8260	1000 mg/kg	BDL mg/kg
Tetrachloroethene	SW 8260	1000 mg/kg	BDL mg/kg
Benzene	SW 8260	1000 mg/kg	52500 mg/kg
Carbon Tetrachloride	SW 8260	1000 mg/kg	BDL mg/kg
1,2-Dichloroethane	SW 8260	1000 mg/kg	BDL mg/kg

BDL = BELOW QUANTITATION LIMIT % REC = PERCENT RECOVERY (T) = TOTALS

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Analytical Services

SAMPLE IDENTIFICATION: 10009273

CUSTOMER IDENTIFICATION: A633

REPORT NUMBER: 1893
DATE SAMPLED: 12/13/91
TYPE OF MATERIAL: SOLID

DATE RECEIVED: 12/18/91
DATE COMPLETED: 01/10/92

PARAMETER	REFERENCE METHOD	PRACTICAL QUANTITATION LIMIT	RESULT
Trichloroethene	SW 8260	1000 mg/kg	BDL mg/kg
1,4-Dichlorobenzene	SW 8260	1000 mg/kg	BDL mg/kg
1,1-Dichloroethylene	SW 8260	1000 mg/kg	BDL mg/kg
Methyl ethyl ketone	SW 8260	20000 mg/kg	BDL mg/kg
Pyridine	SW 8260	1000 mg/kg	BDL mg/kg
TCLP Volatiles			
1,1-Dichloroethylene	SW 8260	0.7 mg/l	BDL mg/l
Chloroform	SW 8260	6 mg/l	BDL mg/l
1,2-Dichloroethane	SW 8260	0.5 mg/l	BDL mg/l
Carbon Tetrachloride	SW 8260	0.5 mg/l	BDL mg/l
Trichloroethylene	SW 8260	0.5 mg/l	BDL mg/l
Benzene	SW 8260	0.5 mg/l	402. mg/l
Chlorobenzene	SW 8260	100 mg/l	BDL mg/l
Tetrachloroethene	SW 8260	0.7 mg/l	BDL mg/l
Methyl ethyl ketone	SW 8260	200 mg/l	BDL mg/l
Vinyl Chloride	SW 8260	0.2 mg/l	BDL mg/l
% Recovery Volatiles			
1,1-Dichloroethylene	SW 8260		95 % Rec
Chloroform	SW 8260		93 % Rec
1,2-Dichloroethane	SW 8260		91 % Rec
Carbon Tetrachloride	SW 8260		92 % Rec
Trichloroethylene	SW 8260		91 % Rec
Benzene	SW 8260		55 % Rec
Chlorobenzene	SW 8260		91 % Rec
Tetrachloroethene	SW 8260		87 % Rec
Methyl ethyl ketone	SW 8260		81 % Rec

BDL = BELOW QUANTITATION LIMIT % REC = PERCENT RECOVERY (T) = TOTALS

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Analytical Services

SAMPLE IDENTIFICATION: 10009273

CUSTOMER IDENTIFICATION: A633

REPORT NUMBER: 1893
DATE SAMPLED: 12/13/91
TYPE OF MATERIAL: SOLID

DATE RECEIVED: 12/18/91
DATE COMPLETED: 01/10/92

PARAMETER	REFERENCE METHOD	PRACTICAL QUANTITATION LIMIT	RESULT
Vinyl Chloride	SW 8260		87 % Rec
Reportable Volatiles			
1,1-Dichloroethylene	SW 8260	0.7 mg/l	BDL mg/l
Chloroform	SW 8260	6 mg/l	BDL mg/l
1,2-Dichloroethane	SW 8260	0.5 mg/l	BDL mg/l
Carbon Tetrachloride	SW 8260	0.5 mg/l	BDL mg/l
Trichloroethylene	SW 8260	0.5 mg/l	BDL mg/l
* Benzene	SW 8260	0.5 mg/l	731. mg/l
Chlorobenzene	SW 8260	100 mg/l	BDL mg/l
Tetrachloroethene	SW 8260	0.7 mg/l	BDL mg/l
Methyl ethyl ketone	SW 8260	200 mg/l	BDL mg/l
Vinyl Chloride	SW 8260	0.2 mg/l	BDL mg/l
Semivolatiles - I			
2,4,6-Trichlorophenol	SW 8270	806 mg/kg	BDL mg/kg
2,4,5-Trichlorophenol	SW 8270	806 mg/kg	BDL mg/kg
Pentachlorophenol	SW 8270	4030 mg/kg	BDL mg/kg
Hexachloroethane	SW 8270	806 mg/kg	BDL mg/kg
Nitrobenzene	SW 8270	806 mg/kg	BDL mg/kg
2,4-Dinitrotoluene	SW 8270	806 mg/kg	BDL mg/kg
Hexachlorobenzene	SW 8270	806 mg/kg	BDL mg/kg
Cresol	SW 8270	806 mg/kg	BDL mg/kg
O-Cresol	SW 8270	806 mg/kg	BDL mg/kg
M-Cresol	SW 8270	806 mg/kg	BDL mg/kg
P-Cresol	SW 8270	806 mg/kg	BDL mg/kg
Hexachlorobutadiene	SW 8270	806 mg/kg	BDL mg/kg
TCLP Semivolatiles			
O-Cresol (D023)	SW 8270	200 mg/l	BDL mg/l

BDL = BELOW QUANTITATION LIMIT % REC = PERCENT RECOVERY (T) = TOTALS

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Analytical Services

SAMPLE IDENTIFICATION: 10009273

CUSTOMER IDENTIFICATION: A633

REPORT NUMBER: 1893
DATE SAMPLED: 12/13/91
TYPE OF MATERIAL: SOLID

DATE RECEIVED: 12/18/91
DATE COMPLETED: 01/10/92

PARAMETER	REFERENCE METHOD	PRACTICAL QUANTITATION LIMIT	RESULT
M-Cresol (D024)	SW 8270	200 mg/l	BDL mg/l
P-Cresol (D025)	SW 8270	200 mg/l	BDL mg/l
Pentachlorophenol (D037)	SW 8270	100 mg/l	BDL mg/l
2,4,5-Trichlorophenol (D041)	SW 8270	400 mg/l	BDL mg/l
2,4,6-Trichlorophenol (D042)	SW 8270	2.0 mg/l	BDL mg/l
1,4-Dichlorobenzene (D027)	SW 8270	7.5 mg/l	BDL mg/l
2,4-Dinitrotoluene (D030)	SW 8270	0.13 mg/l	BDL mg/l
Hexachlorobenzene (D032)	SW 8270	0.13 mg/l	BDL mg/l
Hexachlorobutadiene (D033)	SW 8270	0.5 mg/l	BDL mg/l
Hexachloroethane (D034)	SW 8270	3.0 mg/l	BDL mg/l
Nitrobenzene (D036)	SW 8270	2.0 mg/l	BDL mg/l
Pyridine (D038)	SW 8270	5 mg/l	BDL mg/l
% Recovery Semivols.			
O-Cresol (D023)	SW 8270		73. % Rec
M-Cresol (D024)	SW 8270		80. % Rec
P-Cresol (D025)	SW 8270		80. % Rec
Pentachlorophenol (D037)	SW 8270		105. % Rec
2,4,5-Trichlorophenol (D041)	SW 8270		92. % Rec
2,4,6-Trichlorophenol (D042)	SW 8270		115. % Rec
1,4-Dichlorobenzene (D027)	SW 8270		78. % Rec
2,4-Dinitrotoluene (D030)	SW 8270		90. % Rec
Hexachlorobenzene (D032)	SW 8270		128. % Rec
Hexachlorobutadiene (D033)	SW 8270		91. % Rec
Hexachloroethane (D034)	SW 8270		81. % Rec
Nitrobenzene (D036)	SW 8270		100. % Rec
Pyridine (D038)	SW 8270		138. % Rec
Reportable Semivols.			
O-Cresol (D023)	SW 8270	200 mg/l	BDL mg/l

BDL = BELOW QUANTITATION LIMIT % REC = PERCENT RECOVERY (T) = TOTALS

4322 South 49th West Avenue • Tulsa, Oklahoma 74107 • 918/446-1162 • Fax 918/445-0945

USPCI
A Subsidiary of Union Pacific Corporation

10 Jan 92 PAGE 6
ADAM BICKEL
BASF CORPORATION
1609 BIDDLE AVE
WYANDOTTE MI 48192

Analytical Services

SAMPLE IDENTIFICATION: 10009273

CUSTOMER IDENTIFICATION: A633

REPORT NUMBER: 1893
DATE SAMPLED: 12/13/91
TYPE OF MATERIAL: SOLID

DATE RECEIVED: 12/18/91
DATE COMPLETED: 01/10/92

PARAMETER	REFERENCE METHOD	PRACTICAL QUANTITATION LIMIT	RESULT
M-Cresol (D024)	SW 8270	200 mg/l	BDL mg/l
P-Cresol (D025)	SW 8270	200 mg/l	BDL mg/l
Pentachlorophenol (D037)	SW 8270	100 mg/l	BDL mg/l
2,4,5-Trichlorophenol (D041)	SW 8270	400 mg/l	BDL mg/l
2,4,6-Trichlorophenol (D042)	SW 8270	2.0 mg/l	BDL mg/l
1,4-Dichlorobenzene (D027)	SW 8270	7.5 mg/l	BDL mg/l
2,4-Dinitrotoluene (D030)	SW 8270	0.13 mg/l	BDL mg/l
Hexachlorobenzene (D032)	SW 8270	0.13 mg/l	BDL mg/l
Hexachlorobutadiene (D033)	SW 8270	0.5 mg/l	BDL mg/l
Hexachloroethane (D034)	SW 8270	3.0 mg/l	BDL mg/l
Nitrobenzene (D036)	SW 8270	2.0 mg/l	BDL mg/l
Pyridine (D038)	SW 8270	5 mg/l	BDL mg/l
Corrosivity	SW 9045		<1. pH

BDL = BELOW QUANTITATION LIMIT % REC = PERCENT RECOVERY (T) = TOTALS

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2.3.c.

BASF CORPORATION
POLYMERS DIVISION
RESEARCH SERVICES

BASF Restricted Document

ANALYTICAL REPORT

PAGINATION : 125282
PROJECT NO. : 5Y0160

PAGINATION	:	125282
DESCRIPTION	:	EXCAVATION SOUTHEAST OF OTTAWA, WYANDOTTE
PROJECT NO.	:	5Y0160
REQUESTOR/ID	:	MARTIN, MICHAEL J / 13283 **Ext:** 6878
COST CENTER	:	20270
COORDINATOR/ID	:	MARTIN, MICHAEL J / 13283 **Ext:** 6878
DATE ENTERED	:	05/04/92
DATE FINISHED	:	07/27/92 8/5/92
COPIES TO	:	ADAM BICKEL

INFORMATION/INSTRUCTIONS

Description	Sample #	Test Required
Excavation Southest of Ottawa & Wyandotte	31489	Full TCLP, IR, Identification, Corrosivity, Ignitablity, and Reactivity.

RESULTS

CORROSIVITY T. McGahey

THE PH OF THE TOP AQUEOUS PHASE WAS MEASURED AS 7.45. THE SAMPLE WAS THEN SHAKEN VIGOROUSLY AND THE PH WAS AGAIN MEASURED. THE PH FOR THE SLURRY RANGED FROM 6.40 - 7.45.

FTIR SPECTROSCOPY W. Floutz, L. Barczewski

An IR spectrum for the excavation solids shows mainly inorganic material as a mixture of carbonate and silicate salts. A much lower level organic component is indicated. Acetone extraction of the solids provides an organic fraction with an IR spectrum which is primarily that of a polyether polyol. No indication of hydrocarbons.

X-RAY MICROANALYSIS J.S. Jourdan

EDS analysis of the dried solids showed mostly silicon, calcium, and iron, with lower levels of sodium, magnesium, aluminum, sulfur, chlorine, and potassium.

APPROVAL: Michael J. Martin

FLASH POINT J.S. Jourdan

The sludge sample was analyzed for flash point using an ERDCO Closed-Cup (Seta) Flash Point Apparatus. No* flash point below 300°C was detected.

* - Initial measurements suggested a flash point at 80°C due to flame being extinguished when introduced into the chamber. However, no "flash" normally associated with the test was observed. Subsequent tests using distilled water showed that enough water vapor is emitted at 80°C to extinguish the test flame when it is introduced into the sample chamber. Further tests using less sample proved negative for flash point. Tests using dried soil also showed no flash. A sample of the sludge was even tested for ignitability by directing an open flame on it. The sludge dried without burning.

TCLP VOLATILES BY GC/MS - S.C.WALKINSHAW

THIS SAMPLES WAS EXTRACTED ACCORDING TO THE TCLP METHOD AND THEN ANALYZED ACCORDING TO EPA METHOD 625. SAMPLE HAD TO BE DILUTED 10X AND 50X FOR ANALYSIS.

	CONC.(PPB)	
COMPOUND	BLANK	31489 (SLUDGE)
VINYL CHLORIDE	ND	5200
1,1,-DICHLOROETHENE	ND	ND
CHLOROFORM	ND	ND
1,2-DICHLOROETHANE	ND	160*
BENZENE	ND	8100
CARBON TETRACHLORIDE	ND	ND
TRICHLOROETHENE	ND	2000
TETRACHLOROETHENE	ND	ND
CHLOROBENZENE	ND	53000
METHYLETHYL KETONE	ND	ND

DETECTION LIMITS ARE ~5PPB FOR ALL COMPOUNDS EXCEPT MEK WHICH IS ~50PPB. SINCE THE SAMPLE WAS DILUTED, THE DETECTION LIMITS ARE 10X OR 50X THOSE GIVEN.

* = QUANTITATION BASED ON 50X DIL., ALL OTHERS BASED ON 10X DIL.

GC/MS ANALYSIS OF SEMI-VOLATILES - S.C.WALKINSHAW

These samples were extracted using the TCLP procedure and analyzed according to EPA Method 625.

	Conc.(PPM)		
ACIDS:	31489	BLANK	REG. LEVEL
Total Cresols (o-,m-, & p-)	.075	ND	200*
Pentachlorophenol	ND	ND	100
2,4,5-Trichlorophenol	.075	ND	400
2,4,6-Trichlorophenol	ND	ND	2.0

APPROVAL: Michael J. Martin

BASF CORPORATION
POLYMERS DIVISION
RESEARCH SERVICES

ANALYTICAL REPORT

PAGINATION : 125282
PROJECT NO. : 5Y0160

SURROGATE RECOVERY	31489(%)	BLANK(%)
2-FLUOROPHENOL	26	35
d5-PHENOL	17	26
2,4,6-TRIBROMOPHENOL	37	49

METHOD STD SPIKE RECOVERY(%):

	31493MSTD	%RECOVERY LIMITS
PENTACHLOROPHENOL	51	14-176

SURROGATE RECOVERY	31493MSTD(%)
2-FLUOROPHENOL	43
d5-PHENOL	30
2,4,6-TRIBROMOPHENOL	54

NOTES:
1. ND = not detected
2. Detection limits are ~5ppb.
3. * = The cresol isomers are reported as total cresol because 2 of the isomers are not resolved. Also the TCLP regulatory levels are given as 200mg/L for each cresol isomer and 200mg/L for total cresol, which implies a limit of 200mg/L for each isomer with the total of the 3 isomers not more than 200mg/L.

	CONC.(PPM) 31489	BLANK	REG. LEVEL
BASE/NEUTRALS:			
1,4-DICHLOROBENZENE	.0075	ND	7.5
HEXACHLOROETHANE	ND	ND	3.0
NITROBENZENE	ND	ND	2.0
HEXACHLOROBUTADIENE	ND	ND	0.5
2,4-DINITROTOLUENE	ND	ND	0.13
HEXACHLOROBENZENE	ND	ND	0.13
PYRIDINE	ND	ND	5.0

SURROGATE RECOVERY	31489(%)	BLANK(%)
NITROBENZENE-d5	75	68
2-FLUOROBIPHENYL	83	69
p-TERPHENYL-d14	57	0

METHOD STD SPIKE RECOVERY(%):

	31493MSTD	%RECOVERY LIMITS
BASE/NEUTRALS:		
1,4-DICHLOROBENZENE	63	20-124
2,4-DINITROTOLUENE	61	39-139

SURROGATE RECOVERY	31493MSTD(%)
NITROBENZENE-d5	46
2-FLUOROBIPHENYL	61
p-TERPHENYL-d14	80

APPROVAL: Michael J. Martin

BASF CORPORATION
POLYMERS DIVISION
RESEARCH SERVICES

ANALYTICAL REPORT

PAGINATION : 125282
PROJECT NO. : 5Y0160

NOTES:
1. ND = NOT DETECTED
2. Detection Limits are ~ 5ppb.

✓ ____Metals Analysis--N. M. Less____

These samples were prepared following the Toxicity Characteristic Leaching Procedure (TCLP), Method 1311. The samples were analyzed for mercury using cold vapor atomic absorption spectroscopy and for all other metals using inductively coupled plasma atomic emission spectroscopy. Values which are less than the method detection limit (MDL) are reported as not detected (ND). Other values which are greater than the MDL but less than the practical quantification limit (PQL) are reported as "< PQL".

	Blk #31489	#31489	MDL	Reg. Limit
Arsenic (ppm)	ND	<0.1	0.03	5.0
Barium (ppm)	ND	<0.5	0.003	100.
Cadmium (ppm)	ND	<0.02	0.003	1.0
Chromium (ppm)	ND	0.09	0.009	5.0
*Copper (ppm)	ND	<0.05	0.003	---
Lead (ppm)	ND	<0.2	0.04	5.0
Mercury (ppm)	ND	ND	0.0004	0.2
*Nickel (ppm)	ND	0.38	0.01	---
Selenium (ppm)	ND	ND	0.05	1.0
Silver (ppm)	ND	****	0.003	5.0
*Zinc (ppm)	<0.05	0.14	0.003	---

*: The values listed for copper, nickel, and zinc are from the analysis of the neat (i.e. undigested) samples. The digested samples were not prepared for the analysis of these metals.

****Note: Sample RS #31489 had high levels of chloride. The recovery for Ag was poor (3%). The sample had white particulate matter dispersed throughout it. Ammonium hydroxide was added to the sample to dissolve any silver chloride present. The particles were not dissolved by the ammonium hydroxide and are most likely silicon dioxide.

✓ REACTIVITY - CANTON ANALYTICAL LAB

As Cyanide	<0.02mg/kg	by EPA Method 9010	Analyzed on 5/11/92 by DM
As Sulfide	<0.1 mg/kg	by EPA Method 9030	Analyzed on 5/12/92 by DM

APPROVAL: Michael G. Martin

2.3.d

BASF Corporation

Sample #: L2113-5 (Project)

Description : C6 SOIL/SEDIMENT
FROM POLYOL H2O EXC.
RELEASE Y62412R

Site: POLYOLS Matrix: 2phaseliq Submitted: 28-SEP-92

PARAMETERS	RESULT	PQL	UNITS	MDL	METHOD
Reactive Cyanide	ND	10	mg/kg	10	9010
Flashpoint	194	200	degrees F	200	7.1
pH	8.93	1	Units	1	150.1
Reactive Sulfide	ND	10	mg/kg	10	9030
TCLP METALS					
TCLP Arsenic	ND	.053	mg/l	.053	6010
TCLP Barium	.157	.05	mg/l	.05	6010
TCLP Cadmium	.006	.003	mg/l	.003	6010
TCLP Chromium	.007	.007	mg/l	.007	6010
TCLP Copper	.011	.005	mg/l	.005	6010
TCLP Lead	ND	.042	mg/l	.042	6010
TCLP Mercury	ND	.005	mg/l	.005	7470
TCLP Selenium	ND	.075	mg/l	.075	6010
TCLP Silver	ND	.05	mg/l	.05	6010
TCLP Zinc	.454	.05	mg/l	.05	6010
TCLP SEMIVOLATILES					
2,4-Dinitrotoluene	ND	.01	mg/l	.005	8270
Hexachlorobenzene	ND	.01	mg/l	.005	8270
Hexachlorobutadiene	ND	.01	mg/l	.005	8270
Hexachloroethane	ND	.01	mg/l	.005	8270
Nitrobenzene	ND	.01	mg/l	.005	8270
Pyridine	.1	.01	mg/l	.005	8270
o-Cresol	.07	.01	mg/l	.005	8270
m&p-Cresol	.025	.01	mg/l	.005	8270
Pentachlorophenol	ND	.01	mg/l	.005	8270
2,4,5-Trichlorophenol	ND	.01	mg/l	.005	8270
2,4,6-Trichlorophenol	ND	.01	mg/l	.005	8270
TCLP VOLATILES					
Benzene	3.7	.1	mg/l	.001	8240
Carbon Tetrachloride	ND	.1	mg/l	.001	8240

Source: US EPA SW846 Methodology / 600 Series
Note: ND denotes none detected above Practical Quantitative Limit

Martine Hurwitz

Janine Reagan/Martine Hurwitz
Project Managers

END OF REPORT

Analytic & Biological Laboratories, Inc.
24 50 INDOPLEX CIRCLE FARMINGTON HILLS MICHIGAN 48335 [illegible]

BASF Corporation

Sample #: L2113-5 (Project)

Description : C6 SOIL/SEDIMENT
FROM POLYOL H2O EXC.
RELEASE Y62412R

Site: POLYOLS Matrix: 2phaseliq Submitted: 28-SEP-92

PARAMETERS	RESULT	PQL	UNITS	MDL	METHOD
Chlorobenzene	ND	.1	mg/l	.001	8240
Chloroform	ND	.5	mg/l	.005	8240
1,4-Dichlorobenzene	ND	.1	mg/l	.001	8240
1,2-Dichloroethane	ND	.1	mg/l	.001	8240
1,1-Dichloroethene	ND	.1	mg/l	.001	8240
Methyl ethyl ketone	ND	1	mg/l	.01	8240
Tetrachloroethene	ND	.1	mg/l	.001	8240
Trichloroethene	ND	.1	mg/l	.001	8240
Vinyl chloride	ND	.1	mg/l	.001	8240

Source: US EPA SW846 Methodology / 600 Series
Note: ND denotes none detected above Practical Quantitative Limit

Martine Hurwitz

Janine Reagan/Martine Hurwitz
Project Managers

END OF REPORT

Analytic & Biological Laboratories, Inc.
2455 INDOPLEX CIRCLE FARMINGTON HILLS MI [illegible] FAX [illegible]

BASF CORPORATION
1609 BIDDLE AVE.
WYANDOTTE, MI 48192
ECOLOGY SERVICES DEPARTMENT
FAX NO.: 313/246-6775

LABORATORY SAMPLE NO.: _____
BASF SAMPLE NO.: _____
SAMPLE DESCRIPTION: Soil/Sediment from Polyol Water Excavation

ANALYTICAL RESULTS REQUIRED BY: 10/26/92

W147

CHAIN OF CUSTODY RECORD
LABORATORY ANALYSIS REQUEST

COLLECTOR'S NAME: Adam C. Bickel TELEPHONE NO.: (313) 246-6836

P.O. NUMBER: _____ RELEASE ORDER NO.: _____

DATE SAMPLED: _____ TIME SAMPLED: _____ am/pm

SAMPLING METHOD: GRAB ____ COMPOSITE ____ OTHER: _____

SAMPLE DESCRIPTION: SOIL/SEDIMENT FROM POLYOL ~~H2O~~ H2O EXCAVATION

LOCATION OF SAMPLING: PLANT POLYOLS

LOCATION DESCRIPTION _____

PROCESS DESCRIPTION: _____

FIELD INFORMATION: _____

CHAIN OF POSSESSION

SIGNATURE	TITLE	ORGANIZATION OR DEPARTMENT	DATE RECEIVED	DATE RELINQUISHED
1)				
2)				
3)				
4)				
5)				
6)				

(Rev. 10/90)

2.3.e.

BASF Corporation

W131

Sample #: L2250-3 (Project)

Description : POLYOL
Y62411R

Matrix: Solid Submitted: 07-OCT-92

PARAMETERS	RESULT	PQL	UNITS	MDL	METHOD
Reactive Cyanide	ND	10	mg/kg	10	9010
Flashpoint	158	200	degrees F	200	7.1
pH	12.02	1	Units	1	150.1
Reactive Sulfide	ND	10	mg/kg	10	9030
TCLP METALS					
TCLP Arsenic	ND	.053	mg/l	.053	6010
TCLP Barium	ND	.05	mg/l	.05	6010
TCLP Cadmium	ND	.003	mg/l	.003	6010
TCLP Chromium	ND	.007	mg/l	.007	6010
TCLP Copper	.036	.005	mg/l	.005	6010
TCLP Lead	ND	.042	mg/l	.042	6010
TCLP Mercury	ND	.005	mg/l	.005	7470
TCLP Selenium	ND	.075	mg/l	.075	6010
TCLP Silver	ND	.05	mg/l	.05	6010
TCLP Zinc	ND	.05	mg/l	.05	6010
TCLP SEMIVOLATILES					
2,4-Dinitrotoluene	ND	.01	mg/l	.005	8270
Hexachlorobenzene	ND	.01	mg/l	.005	8270
Hexachlorobutadiene	ND	.01	mg/l	.005	8270
Hexachloroethane	ND	.01	mg/l	.005	8270
Nitrobenzene	ND	.01	mg/l	.005	8270
Pyridine	ND	.01	mg/l	.005	8270
o-Cresol	ND	.01	mg/l	.005	8270
m&p-Cresol	ND	.01	mg/l	.005	8270
Pentachlorophenol	ND	.01	mg/l	.005	8270
2,4,5-Trichlorophenol	ND	.01	mg/l	.005	8270
2,4,6-Trichlorophenol	ND	.01	mg/l	.005	8270
TCLP VOLATILES					
Benzene	ND	.02	mg/l	.001	8240
Carbon Tetrachloride	ND	.02	mg/l	.001	8240

Source: US EPA SW846 Methodology / 600 Series
Note: ND denotes none detected above Practical Quantitative Limit

Martine Hurwitz

Janine Reagan/Martine Hurwitz
Project Managers

END OF REPORT

Analytic & Biological Laboratories, Inc.
24350 INDOPLEX CIRCLE FARMINGTON HILLS MICHIGAN 48335 (313) 477-6666 FAX (313) 477-4604

BASF Corporation

Sample #: L2250-3 (Project)

Description : POLYOL
Y62411R

Matrix: Solid Submitted: 07-OCT-92

PARAMETERS	RESULT	PQL	UNITS	MDL	METHOD
Chlorobenzene	ND	.02	mg/l	.001	8240
Chloroform	ND	.1	mg/l	.005	8240
1,4-Dichlorobenzene	ND	.02	mg/l	.001	8240
1,2-Dichloroethane	ND	.02	mg/l	.001	8240
1,1-Dichloroethene	ND	.02	mg/l	.001	8240
Methyl ethyl ketone	ND	.2	mg/l	.01	8240
Tetrachloroethene	ND	.02	mg/l	.001	8240
Trichloroethene	ND	.02	mg/l	.001	8240
Vinyl chloride	ND	.02	mg/l	.001	8240

Source: US EPA SW846 Methodology / 600 Series
Note: ND denotes none detected above Practical Quantitative Limit

Martine Hurwitz

Janine Reagan/Martine Hurwitz
Project Managers

END OF REPORT

Analytic & Biological Laboratories, Inc.
24350 INDOPLEX CIRCLE FARMINGTON HILLS MICHIGAN 48335 (313) 477-6666 FAX (313) 477-4604

BASF CORPORATION
1609 BIDDLE AVE.
WYANDOTTE, MI 48192
ECOLOGY SERVICES DEPARTMENT
FAX NO.: 313/246-6775

LABORATORY SAMPLE NO.: _____
BASF SAMPLE NO.: 1021
SAMPLE DESCRIPTION: Polyol SB

ANALYTICAL RESULTS REQUIRED BY: 10/26/92

CHAIN OF CUSTODY RECORD
LABORATORY ANALYSIS REQUEST

COLLECTOR'S NAME: Adam C. Bickel TELEPHONE NO.: (313) 246-6836

P.O. NUMBER: Y9015 3T8 RELEASE ORDER NO.: Y62411R

DATE SAMPLED: 10/1/92 TIME SAMPLED: _____ am/pm

SAMPLING METHOD: GRAB X COMPOSITE ____ OTHER: _____

SAMPLE DESCRIPTION: _____

LOCATION OF SAMPLING: PLANT Polyol

LOCATION DESCRIPTION _____

PROCESS DESCRIPTION: _____

FIELD INFORMATION: POLYOL PLT- SOIL BORINGS

CHAIN OF POSSESSION

SIGNATURE	TITLE	ORGANIZATION OR DEPARTMENT	DATE RECEIVED	DATE RELINQUISHED
1)				
2)				
3)				
4)				
5)				
6)				

(Rev. 10/90)

ITEM 2.4

Fig. 1 – Outfall 003 Monitoring

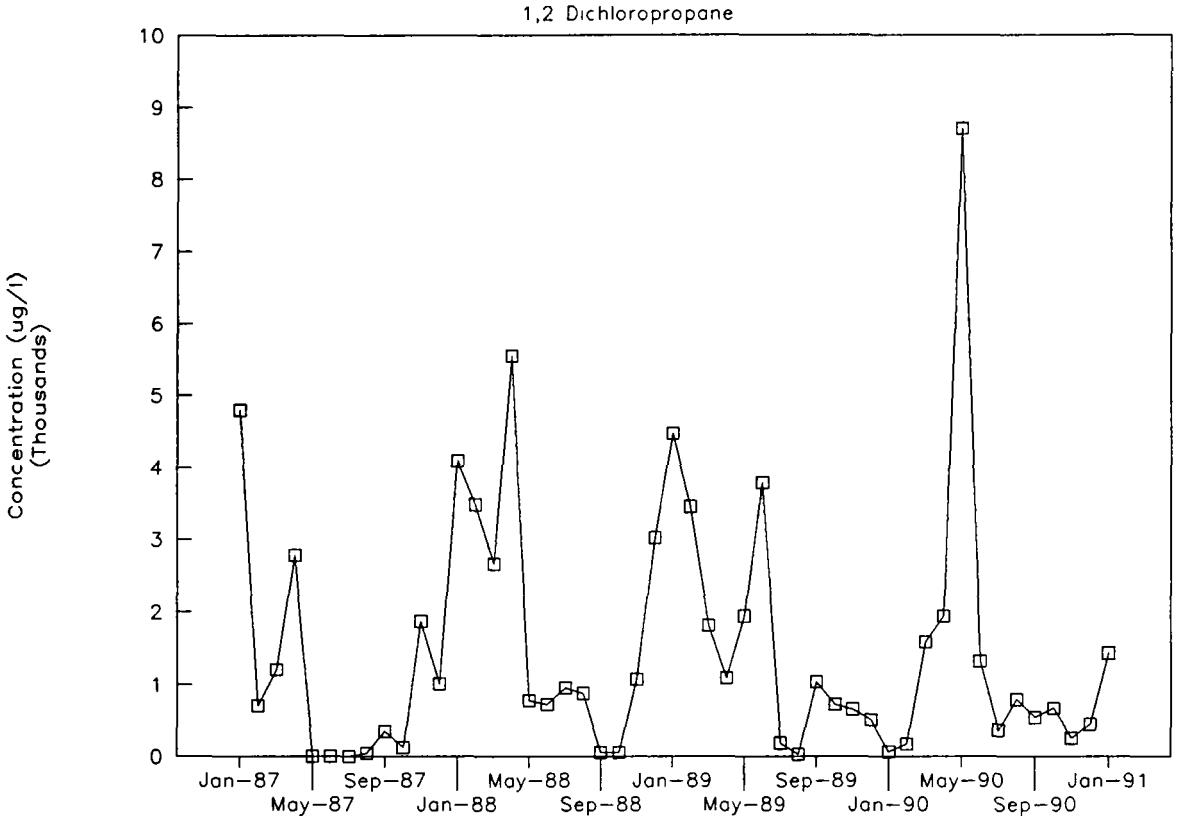


Fig. 2 – Outfall 003 Monitoring

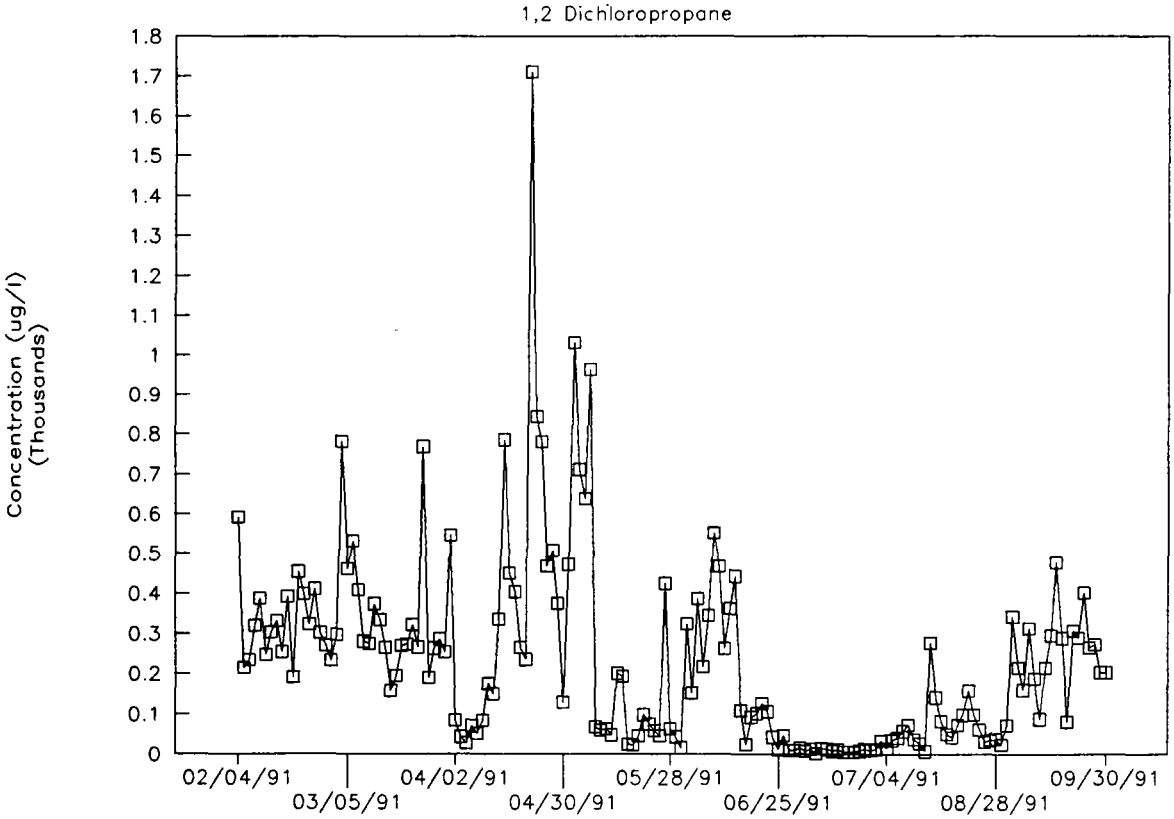


Fig. 3 – Outfall 003 Monitoring

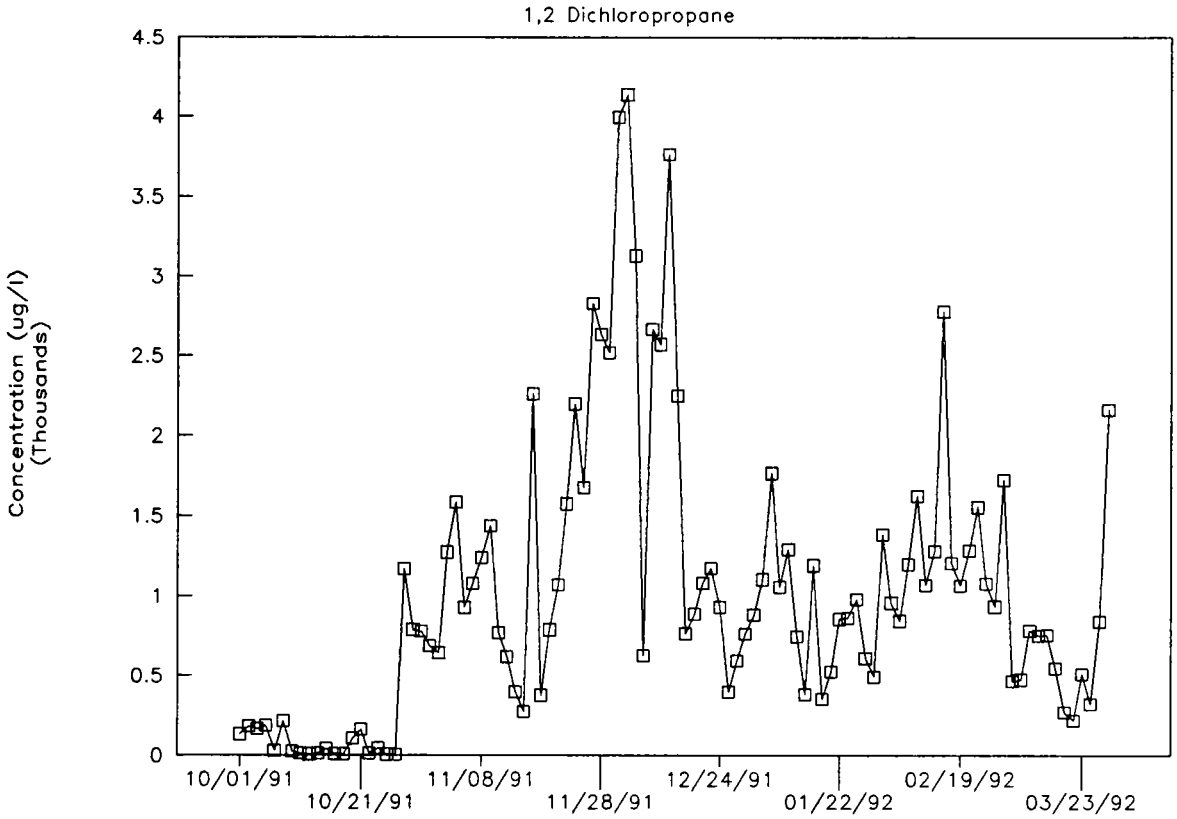


Fig. 4 – Outfall 003 Monitoring

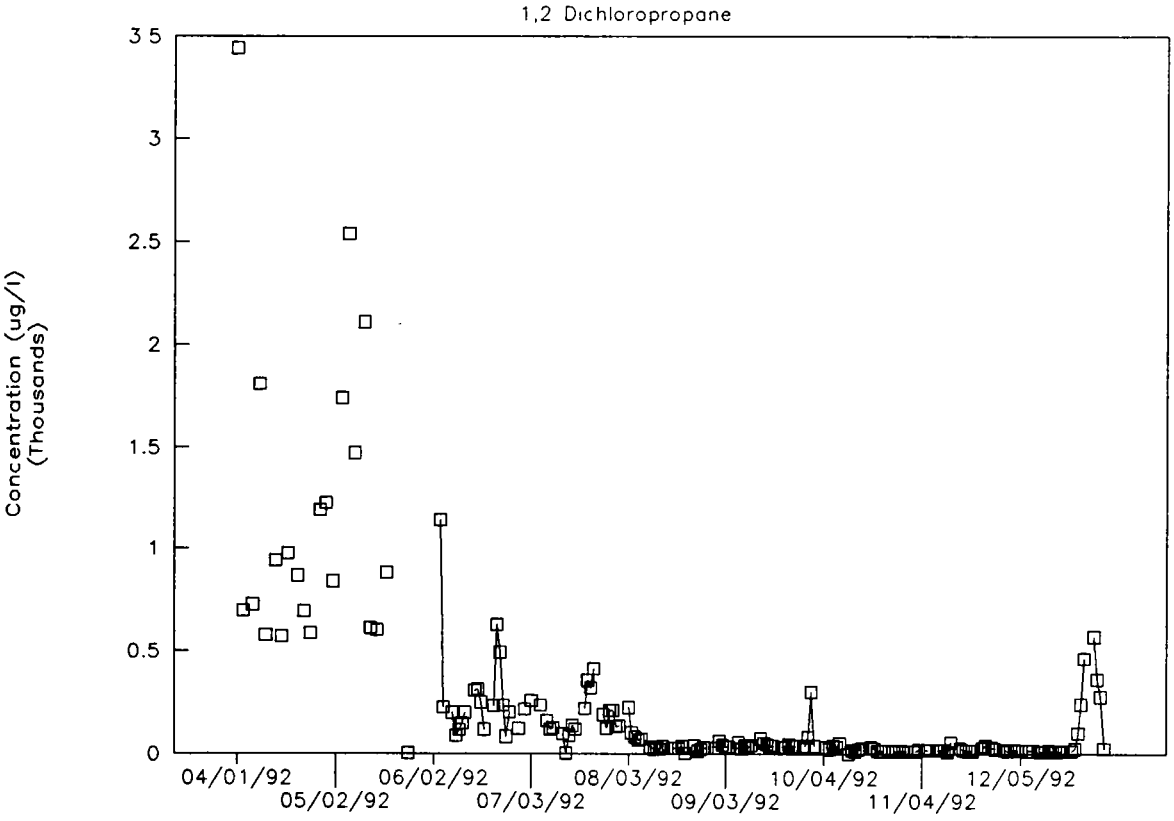


Fig. 5 – Outfall 003 Monitoring

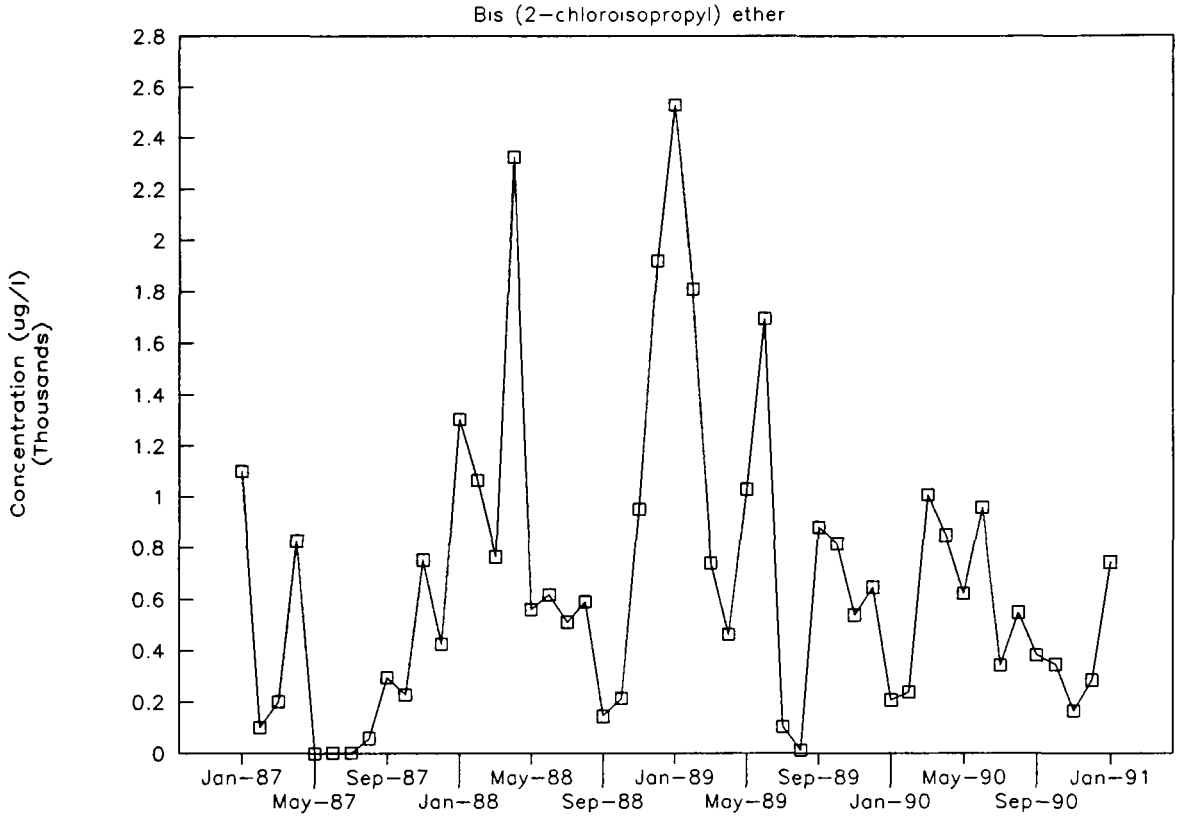


Fig. 6 – Outfall 003 Monitoring

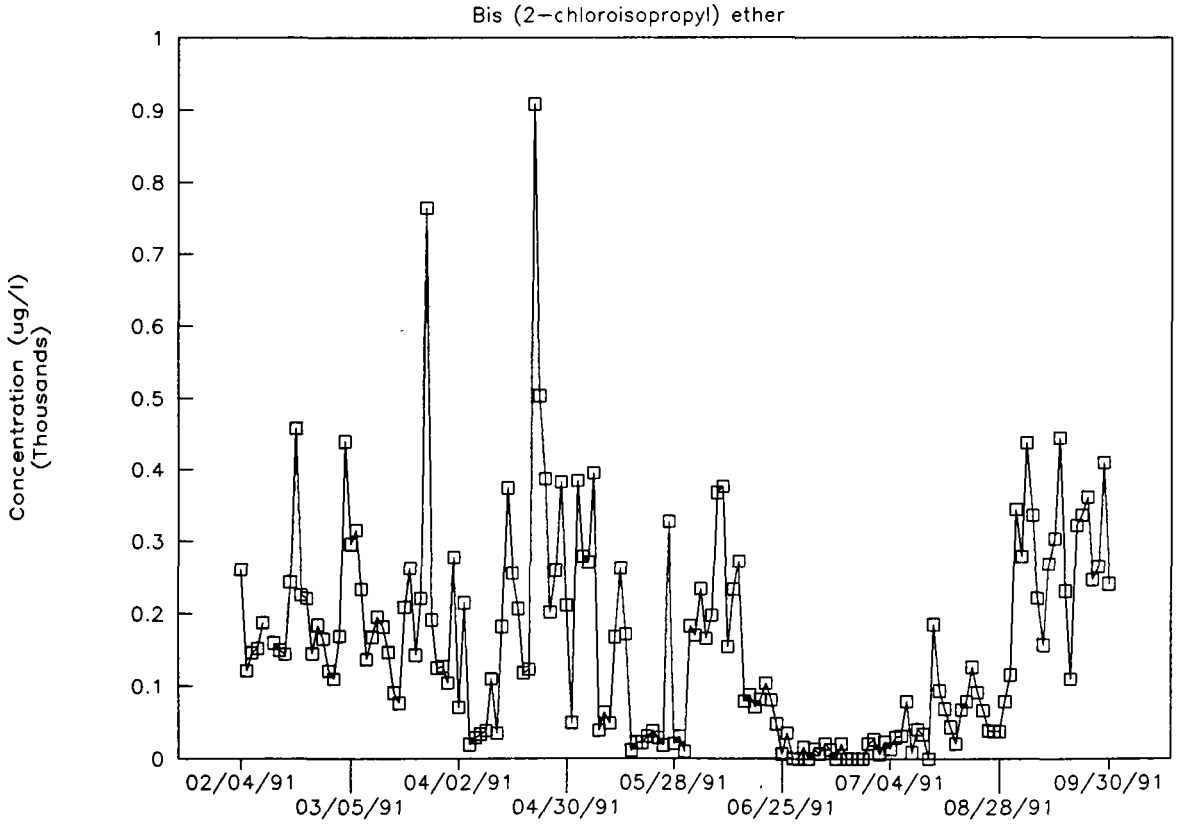


Fig. 7 – Outfall 003 Monitoring

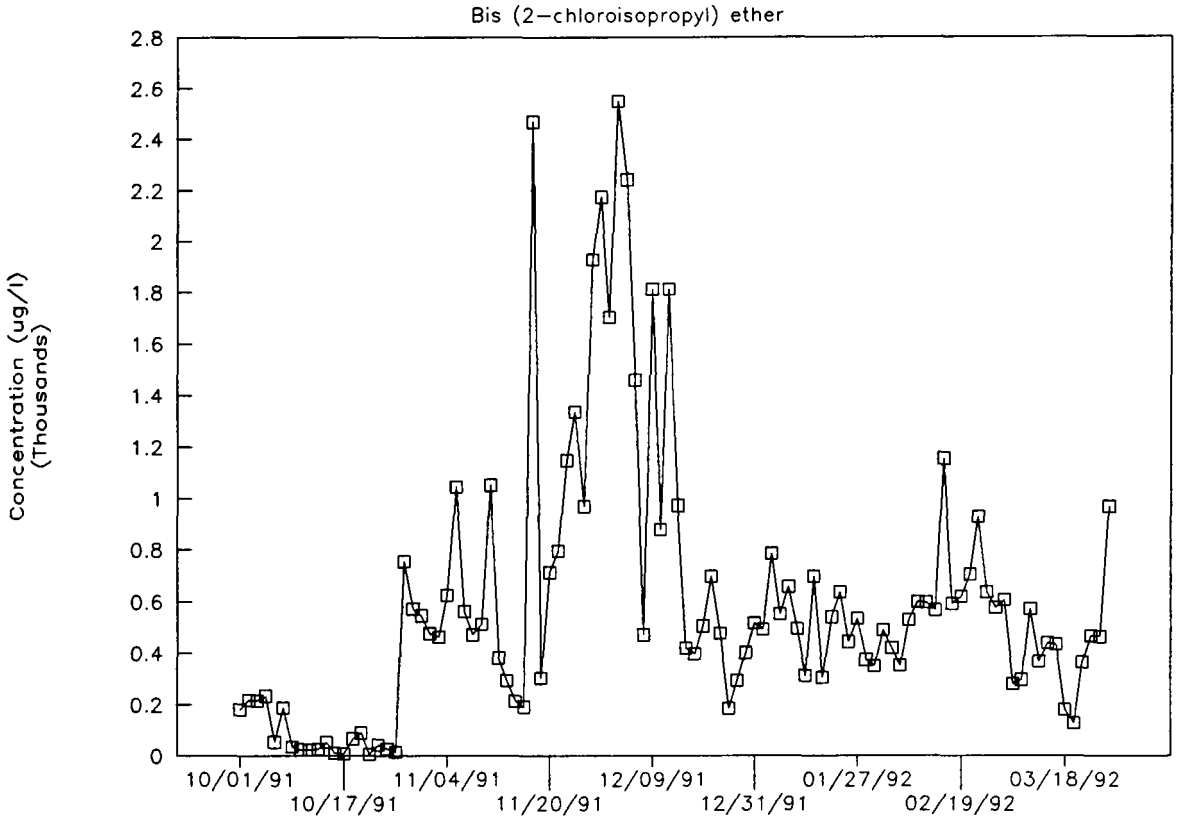
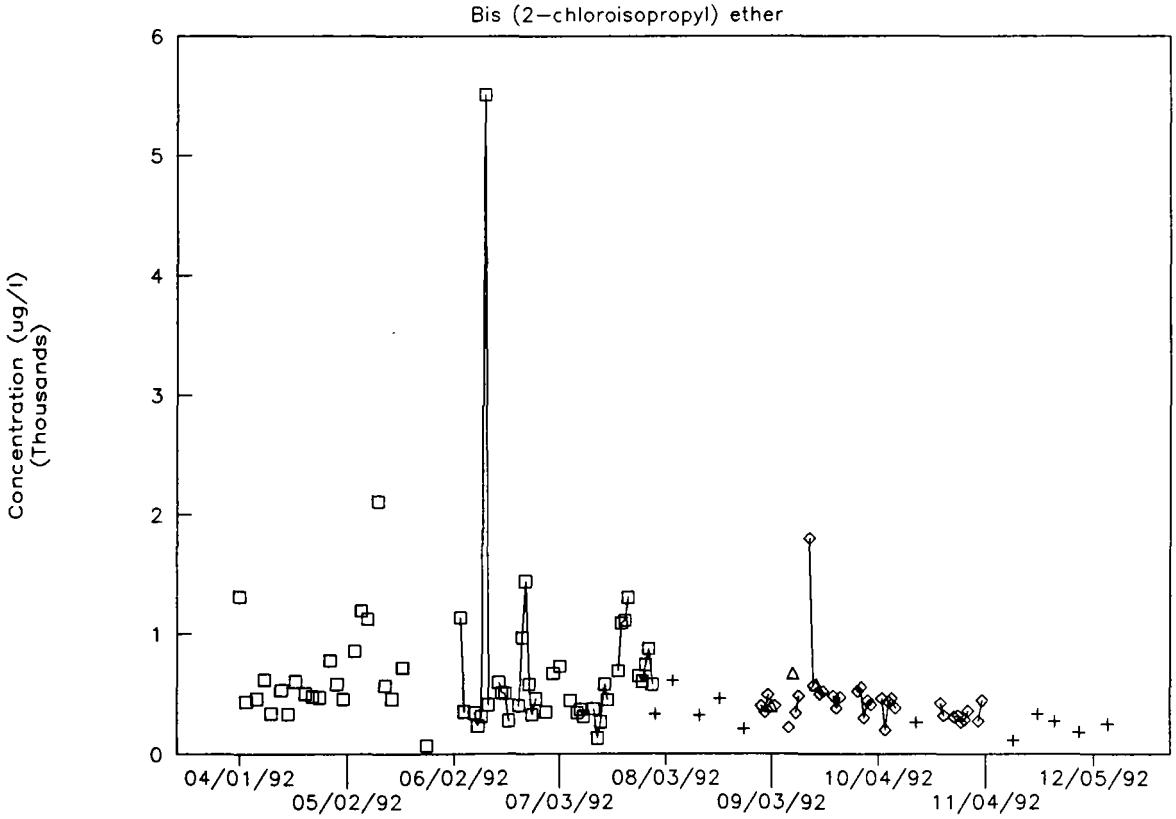


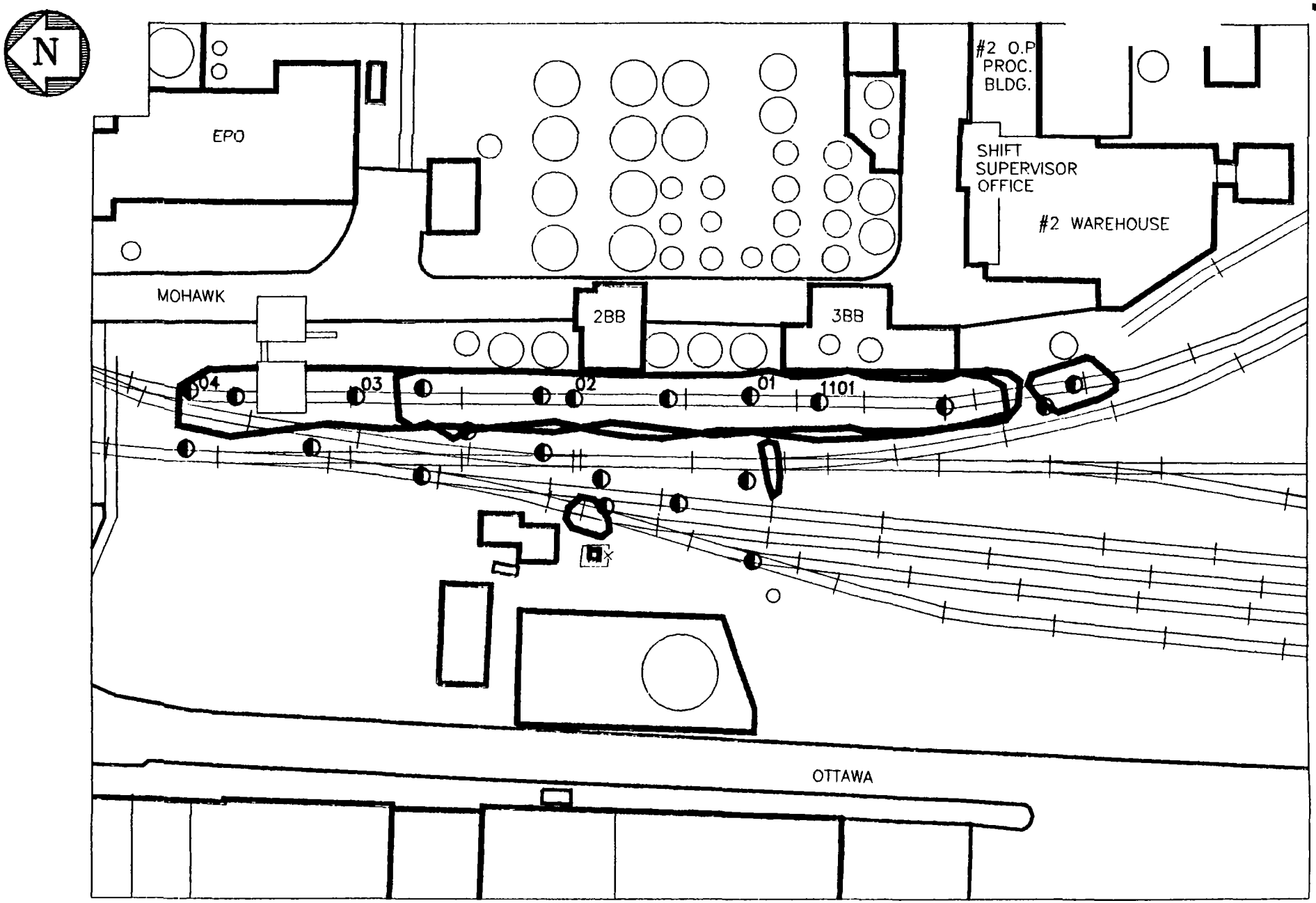
Fig. 8 – Outfall 003 Monitoring



						Measurements above MDL (ppb)				
Date	Location	Qty.	Type	Analysis	ID	Tol	EthB	Ben	Sty	Others
14-Oct-92	Tracks	1	Grab	BTEX, Sty	-					None
	Puddles outside of tracks	3	Grab	BTEX, Sty	-					None
16-Oct-92	Tracks	2	Grab	BTEX, Sty	-					None
		1	Grab	BTEX, Sty	1101	2,100	31	15	38	None
	Puddles outside of tracks	11	Grab	BTEX, Sty	-					None
04-Nov-92	Tracks	4	Grab	BTEX, Sty	01	3,400	57	61	71	Xylene 7
					02	10	2			None
					03	19				None
					04	4		14		None
		1	Comp	VOA, Xyl, Sty	01-04	840	14		17	Bromodichloromethane 19
										Chlorobenzene 7
										PDC 11
										Trichlorofluoromethane 93
										Xylene 2
	Puddles outside of tracks	2	Grab	BTEX, Sty	-					None

Ben = Benzene
BTEX = Benzene, Toluene, Ethylbenzene, Xylene
EthB = Ethylbenzene
MDL = Method Detection Limit
PDC = Dichloropropane
Sty = Styrene
Tol = Toluene
VOA = Volatile Organic Analysis using EPA Method 8240 (32 analytes)
Xyl = Xylene

C.E. Anderson



DRAWN BY	RAS		
DATE	12/11/92		
CHECKED BY	VJJ		

APPROVALS		DATE
MGR. DESIGN		
PROJECT ENGR.		
SR PROJ. ENGR.		
INSTR. ENGR.		
ELECT. ENGR.		
MAT'LS. ENGR.		
CHIEF ENGR.		

TITLE

WEST TRACK SURFACE WATER INVESTIGATION

LOCATION: WYANDOTTE-NW

CLASSIFICATION: SITE

BASF Corporation

REV.	DATE	APV'D	DESCRIPTION

APPP NO.	
PROJ. NO.	
JOB NO	
SCALE	1" = 60'

DRAWING NUMBER: S-18277

REV. NO

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ITEM 2.6

2.6.a

BASF Wyandotte Corporation

File No. _____

ANALYTICAL REQUISITION – QUALITY AND POLLUTION CONTROL

Sample Ground Water

Laboratory No. _____

No. Samples _____ Project No. _____ Date 6-1-87

SAMPLE INFORMATION (WHERE FROM AND WHY)

Ground Water From Ditch on North West side of New Adhesive Plant.

ANALYSIS REQUIRED:

SAMPLE IDENTIFICATION	RESULTS								
	Benzene	Toluene	Methylene Chloride	Hexachloro-butadiene					
6-1-87 Garb @ 9 00 am Ground Water	0.645 PPM	18.186 PPM	0.010 PPM	1.626 PPM					

Requested By _____

Send Copies To _____

Analyst F. Manore

Time Required _____

Date Completed 6-1-87

L. Anderson

BASF Wyandotte Corporation

2.6.b

File No. _____

ANALYTICAL REQUISITION – QUALITY AND POLLUTION CONTROL

Sample: Ground Water North of Adhesives Plant.

Laboratory No. _____

No. Samples _____ Project No. _____ Date: Feb. 3, 1989

SAMPLE INFORMATION (WHERE FROM AND WHY)

Ground Water being pumped into North Plant Sanitary Sewer.

ANALYSIS REQUIRED:

SAMPLE IDENTIFICATION		PPM Toluene	RESULTS						
2-3-89 Discharge of Pump To Sanitary Sewer	(0900)	5.214							
2-2-89 Sanitary Sewer Grab	(1145)	0.005							
2-3-89 Sanitary Sewer Grab	(0845)	0.170							

Requested By: H. D. Roush

Send Copies To: D. Thiel – L. Anderson – lab.

Analyst: F. Manore

Time Required _____

Date Completed _____

L. Anderson
CHIEF CHEMIST

F 875 REV. 2/76

2.6.c

File No. _____

BASF Wyandotte Corporation

ANALYTICAL REQUISITION – QUALITY AND POLLUTION CONTROL

Sample: Ground Water - Electrical Manhole #176 Near Adhesives Plant Loading Dock.

Laboratory No. _____

No. Samples: 1

Project No. _____

Date: April 25, 1989

SAMPLE INFORMATION (WHERE FROM AND WHY)

ANALYSIS REQUIRED:

SAMPLE IDENTIFICATION	PPM Hexachloro benzene	PPM Toluene	PPM Hexachloro 1,3 butadine	RESULTS					
Manhole #176	12.6	14.3	5.8						

Requested By: K. Padar

Send Copies To: K. Padar - 2 Lab.

Analyst: F. Manore

Time Required _____

Date Completed _____

CHIEF CHEMIST

F 875 REV. 2/76

Analytical Requisition—Ecology Services Department

2.6.d

BASF Corporation

BASF

Sample Ground Water Taken From Ditch west side of Sanitary Sewer Pump House. Contractors Pumping Water on Ground. 12 15 PM

No. samples

Date Aug. 22, 1990

Sample information (collected where and for what pupose)

Analysis required:

Sample Identification	Results								
	PH	PPM PDC							
1	11.7	0.003							

F 875 REV 9/89

Requested by K. Padar

Analyst F. Manore

Send copies to

K. Padar
Ecology Services Engineer

2.6e

Analytical Requisition—Ecology Services Department

BASF Corporation

BASF

Sample Water From Sump Hole By Rail Road Scale House

No. samples

Date May 13, 1991

Sample information (collected where and for what pupose)

Analysis required:

Sample Identification	Date	PH	PPM 1,1,1 Trichloroethane	Results					
Water From Sump	5-13-91	7.0	2.189						

F 875 REV 9/89

Requested by J. Gerlach

Analyst F. Manore

Send copies to

K. Grenada
Ecology Services Engineer

BASF Wyandotte Corporation

File No. _____

ANALYTICAL REQUISITION – QUALITY AND POLLUTION CONTROL

Sample: OUTFALLS

Laboratory No. _____

No. Samples _____ Project No. _____ Date: Dec. 1986

SAMPLE INFORMATION (WHERE FROM AND WHY)

001 is a 24 Hour Composite 003 is a 7 AM grab

ANALYSIS REQUIRED

SAMPLE IDENTIFICATION	001 PO ppm	003 PDC ppm	001 lbs/TOC	0	RESULTS	001 ppm PO	003 ppm PDC	001 lbs/TOC	
date									
1	0.94	3.27	—		18	1.15	1.41	254	
2	1.22	1.73	546		19	0.10	1.71	866	
3	0.89	2.27	450		20	0.10	2.67	752	
4	2.27	4.61	1074		21	0.21	3.39	1070	
5	97.61	5.79	800		22	0.18	3.08	1038	
6	0.33	4.91	—		23	0.68	6.13	2514	
7	0.34	5.10	—		24	0.07	7.73	1336	
8	1.38	4.95	—		25	0.02	10.06	832	
9	0.01	—	774		26	0.04	3.49	668	
10	0.11	2.93	234		27	—	—	668	
11	6.89	5.83	448		28	—	—	668	
12	0.77	5.60	664		29	0.80	10.83	304	
13	0.11	3.05	526		30	0.14	7.52	946	
14	4.35	5.64	364		31	137.8	10.12	806	
15	4.59	2.55	660						
16	4.84	1.79	—		AVE	9.29	4.63	773	
17	1.40	1.45	826						

Requested By: H.D. Roush

Send Copies To: D Figg, D Knowles, R Galletti
T. Gallagher, M. Barone

Analyst: F. Manore, L. Wilson

Time Required _____

Date Completed: 1-1-87

L. Anderson
CHIEF CHEMIST

BASF Wyandotte Corporation

File No. _____

ANALYTICAL REQUISITION – QUALITY AND POLLUTION CONTROL

Sample: OUTFALLS

Laboratory No. _____

No. Samples _____ Project No. _____ Date: November 1986

SAMPLE INFORMATION (WHERE FROM AND WHY)

001 is a 24 Hour Composite 003 is a 7 AM grab

ANALYSIS REQUIRED

SAMPLE IDENTIFICATION	001 PO ppm	003 PDC ppm	001 lbs/Day Toc	0	RESULTS	001 ppm PO	003 ppm PDC	001 lbs/Day Toc	
date									
1	98.40	3.50	356		18	0.54	1.45	—	
2	0.49	0.23	—		19	0.46	1.54	—	
3	0.84	4.23	131		20	0.58	2.19	—	
4	0.56	3.20	363		21	0.19	1.05	—	
5	0.58	0.07	189		22	1.29	1.12	—	
6	0.23	2.32	133		23	3.03	1.10	—	
7	1.14	0.42	76		24	0.81	0.85	—	
8	2.07	4.23	203		25	1.99	1.49	—	
9	3.09	2.89	351		26	2.64	1.64	524	
10	4.41	0.76	586		27	1.37	2.65	—	
11	2.05	0.80	228		28	0.83	2.76	—	
12	0.29	0.38	131		29	1.45	2.93	—	
13	1.23	0.25	—		30	0.87	2.82	—	
14	2.52	1.18	—		31				
15	1.08	4.61	—						
16	1.01	0.19	—		AVE	* 1.28	1.77	273	
17	0.57	0.21	—			4.52			

* Ave. with 98.4 PPM Deleted

Requested By: H.D. Roush

Send Copies To: D Figg, D Knowles, R Galletti
T. Gallagher, M. Barone

Analyst: F. Manore

Time Required: _____

Date Completed: 12-1-86

L. Anderson
CHIEF CHEMIST

BASF Wyanc .te Corporation

FILE NO

ANALYTICAL REQUISITION – QUALITY AND POLLUTION CONTROL

Sample OUTFALLS

Laboratory No.

No. Samples

Project No.

Date October 1986

SAMPLE INFORMATION (WHERE FROM AND WHY)

001 is a 24 Hour Composite 003 is a 7 AM grab

ANALYSIS REQUIRED

SAMPLE IDENTIFICATION	001 PO ppm	003 PDC ppm	001 lbs/Day TOC	0	RESULTS	001 ppm PO	003 ppm PDC	001 lbls/Day TOC
date								
1	0.97	6.93	879		18	2.09	14.62	133
2	0.09	6.02	3283		19	2.36	14.47	325
3	0.28	5.71	1337		20	0.06	14.62	465
4	22.93	8.23	1030		21	1.14	3.58	505
5	2.68	10.89	877		22	0.18	2.09	572
6	1.08	8.61	520		23	0.45	0.99	519
7	0.11	6.78	535		24	1.46	3.77	171
8	0.41	6.63	1748		25	0.46	0.69	84
9	13.87	4.04	479		26	0.12	1.41	120
10	5.79	11.20	502		27	0.88	1.33	—
11	29.13	10.43	591		28	0.31	5.14	114
12	0.31	9.14	1254		29	1.54	4.34	46
13	4.15	10.89	608		30	1.30	4.15	273
14	0.24	16.22	1189		31	0.75	2.82	190
15	5.66	15.69	1471					
16	0.35	10.28	290					
17	0.98	6.85	48		AVE	3.30	7.37	672

Requested By H.D. Roush

Send Copies To D Figg, D Knowles, R Galletti

T. Gallagher, M. Barone

Analyst F. Manore

Time Required

Date Completed 11-1-86

L. Anderson

CHIEF CHEMIST

BASF Wyandotte Corporation

File No. _____

ANALYTICAL REQUISITION – QUALITY AND POLLUTION CONTROL

Sample: OUTFALLS

Laboratory No. _____

No. Samples _____ Project No. _____ Date: September 1986

SAMPLE INFORMATION (WHERE FROM AND WHY)

001 is a 24 Hour Composite 003 is a 7 AM grab

ANALYSIS REQUIRED.

SAMPLE IDENTIFICATION	001 PO ppm	003 PDC ppm		0	RESULTS	001 ppm PO	003 ppm PDC		001 lbs/Day TOC
date									
1	0.15	2.38			18	0.10	1.28		
2	5.25	2.33			19	0.23	0.03		
3	0.72	1.56			20	0.03	0.36		
4	0.87	3.04			21	0.22	0.20		
5	0.83	2.51			22	0.01	—		
6	0.86	3.39			23	0.14	0.10		
7	0.03	5.03			24	0.11	8.11		248
8	0.06	4.57			25	0.61	0.08		239
9	0.15	3.58			26	3.21	8.53		567
10	0.09	2.89			27	0.54	8.72		934
11	0.03	3.45			28	0.36	9.14		1005
12	0.19	2.67			29	0.47	8.15		2078
13	3.25	4.19			30	1.99	6.78		406
14	1.62	3.73			31				
15	0.18	4.30							
16	0.05	0.21			AVE	0.75	3.57		782
17	0.14	2.13							

Requested By: H.D. Roush

Send Copies To: D Figg, D Knowles, R Galletti
T. Gallagher, M. Barone

Analyst: F. Manore L. Wilson

Time Required: _____

Date Completed: 10-1-86

L. Anderson
CHIEF CHEMIST

BASF Wyan. tte Corporation

File No. _____

ANALYTICAL REQUISITION – QUALITY AND POLLUTION CONTROL

Sample: OUTFALLS

Laboratory No. _____

No. Samples _____ Project No. _____ Date: August 1986

SAMPLE INFORMATION (WHERE FROM AND WHY)

001 is a 24 Hour Composite 003 is a 7 AM grab

ANALYSIS REQUIRED:

SAMPLE IDENTIFICATION	001 PO ppm	003 PDC ppm		0	RESULTS	001 ppm PO	003 ppm PDC		
date									
1	0.02	2.77			18	3.85	0.91		
2	0.01	2.91			19	0.02	3.18		
3	10.42	3.77			20	0.99	2.65		
4	0.10	3.47			21	0.61	2.06		
5	0.14	3.03			22	0.09	2.77		
6	0.01	4.42			23	0.09	038		
7	0.11	3.30			24	0.06	4.12		
8	0.06	1.09			25	0.11	2.12		
9	1.40	5.01			26	0.30	3.50		
10	1.03	4.39			27	0.13	2.03		
11	0.02	4.53			28	1.45	3.59		
12	0.06	4.98			29	1.03	3.56		
13	0.01	5.15			30	0.14	2.92		
14	0.84	2.30			31	0.50	2.68		
15	0.78	1.88							
16	0.01	2.00			AVE	0.87	3.03		
17	2.52	2.53							

Requested By: H.D. Roush

Send Copies To: D Figg, D Knowles, R Galletti
T. Gallagher, M. Barone

Analyst: F. Manore – L. Wilson

Time Required: _____

Date Completed: 9-1-86

L. Anderson
CHIEF CHEMIST

F 875 REV. 2/76

BASF Wyanc .e Corporation

File No. _____

ANALYTICAL REQUISITION – QUALITY AND POLLUTION CONTROL

Sample OUTFALLS

Laboratory No. _____

No. Samples _____ Project No. _____ Date July 1986

SAMPLE INFORMATION (WHERE FROM AND WHY)

001 is a 24 Hour Composite 003 is a 7 AM grab

ANALYSIS REQUIRED:

SAMPLE IDENTIFICATION	001 PO ppm	003 PDC ppm		0	RESULTS	001 ppm PO	003 ppm PDC		
date									
1	0.95	4.24			18	0.07	4.06		
2	0.13	4.53			19	0.11	4.27		
3	0.44	2.94			20	0.06	4.27		
4	0.17	5.65			21	0.08	0.50		
5	1.05	5.48			22	0.89	3.47		
6	0.03	0.06			23	0.32	3.56		
7	3.98	2.69			24	151.10	3.59		
8	0.57	3.50			25	2.10	2.36		
9	1.80	0.81			26	0.93	2.06		
10	0.12	0.29			27	0.33	3.34		
11	17.13	2.40			28	0.19	0.32		
12	0.23	5.00			29	0.05	3.50		
13	0.08	4.71			30	0.02	2.80		
14	1.47	1.62			31	0.14	1.73		
15	0.07	3.82							
16	0.06	0.65							
17	0.11	7.71			AVE	5.99	3.09		

Requested By H.D. Roush

Send Copies To D Figg, D Knowles, R Galletti
T. Gallagher

Analyst F. Manore – L. Wilson

Time Required _____

Date Completed 8-1-86

L. Anderson
CHIEF CHEMIST

F 876 REV. 2/76

BASF Wyan .te Corporation

File No. _____

ANALYTICAL REQUISITION – QUALITY AND POLLUTION CONTROL

Sample: OUTFALLS

Laboratory No. _____

No. Samples _____ Project No. _____ Date: May 1986

SAMPLE INFORMATION (WHERE FROM AND WHY)

001 is a 24 Hour Composite 003 is a 7 AM grab

ANALYSIS REQUIRED:

SAMPLE IDENTIFICATION	001 PO ppm	003 PDC ppm		0	RESULTS	001 ppm PO	003 ppm PDC		
date									
1	2.30	3.63			18	0.29	3.09		
2	0.35	3.40			19	0.06	1.47		
3	0.36	3.55			20	0.24	2.37		
4	0.77	3.58			21	—	2.87		
5	0.21	4.04			22	0.24	—		
6	0.82	3.40			23	0.04	2.83		
7	0.63	2.81			24	0.38	0.31		
8	0.56	2.83			25	0.43	2.62		
9	0.02	4.19			26	0.16	2.60		
10	0.21	3.81			27	3.31	3.03		
11	0.13	3.38			28	2.08	2.86		
12	0.05	3.04			29	3.75	2.71		
13	0.29	2.57			30	6.71	2.91		
14	0.25	1.68			31	1.73	2.97		
15	0.03	3.32					*		
16	0.36	3.85							
17	4.65	3.30			AVE	1.05	2.97		

Requested By: H.D. Roush

Send Copies To: D Figg, D Knowles, R Galletti
T. Gallagher

Analyst: F. Manone

Time Required: _____

Date Completed: 6-1-86

L. Anderson
CHIEF CHEMIST

875 REV. 2/76

BASF Wyand( ) Corporation

File No. _____

ANALYTICAL REQUISITION – QUALITY AND POLLUTION CONTROL

Sample: OUTFALLS

Laboratory No. _____

No. Samples _____ Project No. _____ Date: April 1986

SAMPLE INFORMATION (WHERE FROM AND WHY)

001 is a 24 Hour Composite 003 is a 7 AM grab

ANALYSIS REQUIRED:

SAMPLE IDENTIFICATION	001 PO ppm	003 PDC ppm			0 RESULTS	001 ppm PO	003 ppm PDC		
date									
1	0.07	2.87			18	0.24	3.04		
2	1.95	1.38			19	0.21	4.51		
3	0.14	—			20	2.75	4.09		
4	0.55	2.87			21	2.30	3.51		
5	1.02	2.77			22	1.00	4.30		
6	0.28	3.19			23	1.55	3.96		
7	0.20	3.55			24	0.03	7.66		
8	0.34	3.64			25	0.01	4.89		
9	15.52	3.51			26	2.70	4.49		
10	0.64	2.85			27	0.68	4.58		
11	0.71	2.87			28	0.33	3.28		
12	0.02	2.70			29	0.52	3.81		
13	0.35	2.55			30	0.19	3.11		
14	0.37	2.60			31				
15	0.07	2.04							
16	0.02	2.55							
17	—	2.96			AVE	1.20	3.45		

Requested By: H.D. Roush

Send Copies To: D Figg, D Knowles, R Galletti
T. Gallagher

Analyst: F. Manore

Time Required: _____

Date Completed: 5-1-86

L. Anderson
CHIEF CHEMIST

F 875 REV. 2/76

BASF Wyandotte Corporation

File No. _____

ANALYTICAL REQUISITION – QUALITY AND POLLUTION CONTROL

Sample: OUTFALLS

Laboratory No. _____

No. Samples _____ Project No. _____ Date: March 1986

SAMPLE INFORMATION (WHERE FROM AND WHY)

001 is a 24 Hour Composite 003 is a 7 AM grab

ANALYSIS REQUIRED:

SAMPLE IDENTIFICATION	001 PO ppm	003 PDC ppm			0 RESULTS	001 ppm PO	003 ppm PDC		
date									
1	0.73	3.62			18	0.06	4.38		
2	0.11	3.19			19	0.24	6.06		
3	0.03	3.77			20	61.24	—		
4	3.17	4.11			21	1.24	—		
5	0.16	4.81			22	0.66	5.32		
6	0.03	3.83			23	0.46	4.58		
7	0.18	4.87			24	0.13	3.09		
8	0.43	5.11			25	0.61	4.26		
9	1.50	5.64			26	0.24	3.45		
10	0.20	3.30			27	0.25	—		
11	2.04	5.21			28	0.40	3.51		
12	2.02	5.85			29	7.71	3.83		
13	0.09	4.04			30	1.00	—		
14	0.62	4.83			31	1.57	3.09		
15	0.05	5.11							
16	0.39	5.00							
17	1.08	4.60			AVE	2.86	4.39		

Requested By: H.D. Roush

Send Copies To: D Figg, D Knowles, R Galletti

Analyst: F. Manore

Time Required: _____

Date Completed: 4-1-86

CHIEF CHEMIST

F 875 REV 2/78

BASF Wyandotte Corporation

File No. _____

ANALYTICAL REQUISITION – QUALITY AND POLLUTION CONTROL

Sample OUTFALLS

Laboratory No. _____

No. Samples _____ Project No. _____ Date February 1986

SAMPLE INFORMATION (WHERE FROM AND WHY)

001 is a 24 Hour Composite 003 is a 7 AM grab

ANALYSIS REQUIRED:

SAMPLE IDENTIFICATION	001 PO ppm	003 PDC ppm		0	RESULTS	001 ppm PO	003 ppm PDC		
date									
1	0.17	2.49			18	0.42	30.64		
2	0.06	2.51			19	0.09	5.53		
3	0.20	2.60			20	0.81	4.58		
4	0.37	3.02			21	0.03	5.00		
5	0.51	3.00			22	1.32	4.68		
6	0.46	3.68			23	0.40	4.26		
7	0.86	4.00			24	4.01	4.26		
8	0.12	3.70			25	1.21	4.36		
9	80.26	3.28			26	1.71	3.72		
10	1.53	0.14			27	1.03	3.94		
11	0.12	0.71			28	1.30	3.40		
12	0.29	4.38			29				
13	0.32	3.92			30				
14	0.38	4.04			31				
15	1.35	4.15							
16	17.16	4.28							
17	0.73	3.96			AVE	4.19	4.58		

Requested By H.D. Roush

Send Copies To D Figg, D Knowles, R Galletti

Analyst F. Manore

Time Required _____

Date Completed _____

CHIEF CHEMIST

[illegible] REV. 2/76

BASF Wyan..te Corporation

File No. _____

ANALYTICAL REQUISITION – QUALITY AND POLLUTION CONTROL

Sample OUTFALLS

Laboratory No. _____

No. Samples _____ Project No. _____ Date January 1986

SAMPLE INFORMATION (WHERE FROM AND WHY)

001 is a 24 Hour Composite 003 is a 7 AM grab

ANALYSIS REQUIRED:

SAMPLE IDENTIFICATION	001 PO ppm	003 PDC ppm		0	RESULTS	001 ppm PO	003 ppm PDC		
date									
1	—	—			18	0.41	2.13		
2	—	—			19	0.07	1.77		
3	—	—			20	1.67	2.83		
4	—	—			21	1.30	2.94		
5	—	—			22	0.29	1.98		
6	1.49	—			23	0.82	2.00		
7	0.16	2.91			24	0.24	1.81		
8	0.91	—			25	0.08	2.45		
9	1.20	—			26	0.65	2.11		
10	0.12	2.59			27	3.48	2.43		
11	0.14	1.93			28	1.19	1.79		
12	0.20	1.70			29	0.48	1.40		
13	3.85	1.24			30	0.13	1.23		
14	0.40	1.01			31	0.21	1.19		
15	0.83	0.83							
16	0.20	1.03							
17	1.06	1.13			AVE	0.83	1.84		

Requested By H.D. Roush

Send Copies To D Figg, D Knowles, R Galletti

Analyst F. Manore

Time Required _____

Date Completed _____

CHIEF CHEMIST

F 875 REV. 2/76

BASF Wyanc .te Corporation

File No. _____

ANALYTICAL REQUISITION – QUALITY AND POLLUTION CONTROL

Sample OUTFALLS

Laboratory No. _____

No. Samples _____ Project No. _____ Date December 1985

SAMPLE INFORMATION (WHERE FROM AND WHY)

001 is a 24 Hour Composite 003 is a 7 AM grab

ANALYSIS REQUIRED:

SAMPLE IDENTIFICATION	001 PO ppm	003 PDC ppm		0	RESULTS	001 ppm PO	003 ppm PDC		
date									
1	0.97	3.64			18	13.50	1.57		
2	0.13	3.59			19	0.38	1.53		
3	1.06	2.82			20	0.08	1.41		
4	1.00	2.93			21	0.20	1.48		
5	1.39	1.94			22	—	1.58		
6	0.65	2.09			23	—	—		
7	0.30	1.83			24	—	—		
8	0.31	2.11			25	—	—		
9	0.19	2.08			26	—	—		
10	0.13	2.24			27	—	—		
11	0.48	2.18			28	—	—		
12	0.27	1.60			29	—	—		
13	1.00	2.13			30	—	—		
14	0.94	2.04			31	—	—		
15	1.20	2.68							
16	0.30	1.72							
17	0.70	1.69			AVE	1.20	2.13		

Requested By H.D. Roush

Send Copies To D Figg, D Knowles, R Galletti

Analyst F. Manore

Time Required _____

Date Completed _____

CHIEF CHEMIST

F 876 REV. 2/76

BASF Wyan..te Corporation

File No. _____

ANALYTICAL REQUISITION – QUALITY AND POLLUTION CONTROL

Sample OUTFALLS

Laboratory No. _____

No. Samples _____ Project No. _____ Date November 1985

SAMPLE INFORMATION (WHERE FROM AND WHY)

001 is a 24 Hour Composite 003 is a 7 AM grab

ANALYSIS REQUIRED:

SAMPLE IDENTIFICATION	001 PO ppm	003 PDC ppm		0	RESULTS	001 ppm PO	003 ppm PDC		
date									
1	4.14	2.20			18	1.32	2.99		
2	5.07	2.20			19	0.24	3.08		
3	0.65	0.77			20	0.23	3.03		
4	0.41	2.27			21	0.26	2.71		
5	0.14	2.15			22	0.34	2.64		
6	0.25	2.20			23	0.04	2.53		
7	0.70	2.15			24	1.49	2.46		
8	0.38	2.25			25	1.92	2.32		
9	0.08	2.13			26	0.11	1.32		
10	5.22	1.25			27	0.11	3.29		
11	116.05	3.50			28	0.75	3.01		
12	1.88	3.52			29	1.33	3.20		
13	0.55	3.03			30	0.22	3.43		
14	0.64	3.70			31				
15	0.38	2.78							
16	0.14	1.27							
17	0.51	3.40			AVE	4.85	2.56		

Requested By H.D. Roush

Send Copies To D Figg, D Knowles, R Galletti

Analyst Frank Manno

Time Required _____

Date Completed _____

CHIEF CHEMIST

F 875 REV. 2/76

BASF Wyandotte Corporation

File No. _____

ANALYTICAL REQUISITION – QUALITY AND POLLUTION CONTROL

Sample: OUTFALLS

Laboratory No. _____

No. Samples _____ Project No. _____ Date: October 1985

SAMPLE INFORMATION (WHERE FROM AND WHY)

001 is a 24 Hour Composite 003 is a 7 AM grab

ANALYSIS REQUIRED:

SAMPLE IDENTIFICATION	001 PO ppm	003 PDC ppm		0	RESULTS	001 ppm PO	003 ppm PDC		
date									
1	—	—			18	5.82	1.85		
2	—	—			19	0.04	0.08		
3	—	—			20	0.06	1.65		
4	0.21	1.06			21	0.03	1.17		
5	0.04	0.95			22	0.06	1.94		
6	0.78	0.93			23	0.06	3.43		
7	0.03	1.50			24	0.08	3.06		
8	3.01	0.76			25	6.03	2.87		
9	0.19	1.47			26	0.12	2.75		
10	0.14	0.93			27	0.07	2.82		
11	0.10	0.76			28	0.18	3.08		
12	0.09	1.02			29	1.10	2.04		
13	0.01	1.74			30	0.38	2.09		
14	0.06	1.99			31	0.17	2.02		
15	1.00	2.09							
16	1.05	1.79							
17	1.19	1.74			AVE	0.79	1.77		

Requested By: H.D. Roush

Send Copies To: D Figg, D Knowles, R Galletti

Analyst: Frank Manoe

Time Required: _____

Date Completed: 11-1-85

CHIEF CHEMIST

F 875 REV. 2/76

BASF Wyandotte Corporation

File No. _____

ANALYTICAL REQUISITION – QUALITY AND POLLUTION CONTROL

Sample: OUTFALLS

Laboratory No. _____

No. Samples _____ Project No. _____ Date: SepTember 1985

SAMPLE INFORMATION (WHERE FROM AND WHY)

001 is a 24 Hour Composite 003 is a 7 AM grab

ANALYSIS REQUIRED:

SAMPLE IDENTIFICATION	001 PO ppm	003 PDC ppm		0	RESULTS	001 ppm PO	003 ppm PDC		
date									
1	0.03	—			18		1.72		
2	0.03	—			19		—		
3		1.82			20		1.74		
4		1.54			21		2.23		
5	0.71	1.66			22	0.23	2.82		
6	0.00	1.79			23	0.32	2.18		
7		2.56			24	0.14	2.89		
8		2.38			25		2.41		
9		2.18			26				
10		1.72			27				
11	0.01	2.46			28				
12	0.09	2.59			29				
13	0.12	2.10			30				
14	0.04	2.12			31				
15		2.59							
16		2.51							
17		0.51			AVE	0.16	2.11		

Requested By: H.D. Roush

Send Copies To: D Figg, D Knowles, R Galletti

Analyst _____

Time Required _____

Date Completed _____

CHIEF CHEMIST

BASF Wyan .te Corporation

File No. _____

ANALYTICAL REQUISITION – QUALITY AND POLLUTION CONTROL

Sample OUTFALLS

Laboratory No. _____

No. Samples _____ Project No. _____ Date August 1985

SAMPLE INFORMATION (WHERE FROM AND WHY)

001 is a 24 Hour Composite 003 is a 7 AM grab

ANALYSIS REQUIRED:

SAMPLE IDENTIFICATION	001 PO ppm	003 PDC ppm			0 RESULTS	001 ppm PO	003 ppm PDC		
date									
1	1.72	0.82			18	0.01	0.49		
2	16.49	0.23			19	0.01	0.08		
3	5.11	1.03			20	0.04	0.46		
4	1.38	0.93			21	0.03	0.86		
5	0.08	0.81			22	0.04	0.85		
6	0.98	0.84			23	0.02	0.79		
7	0.10	0.58			24	0.01	0.56		
8	0.03	0.65			25	0.05	0.49		
9	0.70	0.76			26	0.08	0.66		
10	0.05	1.16			27	0.01	0.54		
11	0.04	0.98 ✓			28	0.04	0.76		
12	0.45	0.90			29	0.01	0.45		
13	0.04	0.47			30	0.11	0.27		
14	0.70	0.47			31	0.02	0.36		
15	0.01	0.78							
16	0.01	1.52							
17	0.58	0.57			AVE	0.93	0.68		

Requested By H.D. Roush

Send Copies To D Figg, D Knowles, R Galletti

Analyst JM

Time Required _____

Date Completed 9-1-85

CHIEF CHEMIST

F 875 REV. 2/76

BASF Wyandotte Corporation

File No. _____

ANALYTICAL REQUISITION – QUALITY AND POLLUTION CONTROL

Sample: OUTFALLS

Laboratory No. _____

No. Samples _____ Project No. _____ Date: July 1985

SAMPLE INFORMATION (WHERE FROM AND WHY)

001 is a 24 Hour Composite 003 is a 7 AM grab

ANALYSIS REQUIRED:

SAMPLE IDENTIFICATION	001 PO ppm	003 PDC ppm		0	RESULTS	001 ppm PO	003 ppm PDC		
date									
1	0.12	1.30			18	0.03	1.20		
2	0.13	1.02			19	0.16	1.16		
3	0.07	1.18			20	0.08	0.40		
4	5.20	1.26			21	1.45	1.18		
5	0.64	0.36	Heavy Rain		22	2.46	0.36		
6	0.15	1.52			23	0.06	0.72		
7	0.18	1.68			24	0.08	1.05		
8	0.16	1.33			25	0.44	0.76		
9	0.73	1.04			26	0.25	0.78		
10	16.30	0.86			27	2.15	1.03		
11	0.34	1.05			28	2.80	1.22		
12	0.04	1.08			29	2.11	1.13		
13	0.03	1.00			30	1.88	0.93		
14	0.24	0.15	Heavy Rain		31	3.38	0.98		
15	0.09	0.39							
16	0.09	1.37							
17	0.05	1.52			AVE	1.35	1.00		

Requested By: H.D. Roush

Send Copies To: D Figg, D Knowles, R Galletti

Analyst: JM

Time Required _____

Date Completed: 8-1-85

CHIEF CHEMIST

F 075 REV. 2/78

ANALYTICAL REQUISITION – QUALITY CONTROL File No.

BASF Wyandotte Corporation

Sample _____ Laboratory No. _____

No Samples _____ Project No. _____ Date JUNE 1985

SAMPLE INFORMATION (WHERE FROM AND WHY)

001 is A Composite 003 is A Grab

ANALYSIS REQUIRED.

SAMPLE IDENTIFICATION	PPM P.O.	003 PPM PDC			RESULTS	PPM P.O	003 PPM PDC		
6-1 85	0.23	1.76			6-19	0.07	1.55		
6-2	0.74	1.67			6-20	0.06	1.42		
6-3	0.51	1.15			6-21	0.05	1.59		
6-4	0.15	1.32			6-22	0.04	1.55		
6-5	0.15	1.44			6-23	0.25	1.56		
6-6	0.21	1.52			6-24	0.10	1.39		
6-7	0.56	1.44			6-25	0.04	1.65		
6-8	1.74	1.56			6-27	0.09	1.79		
6-9	2.19	1.45			6-28	0.13	1.48		
6-10	0.39	1.24			6-29	0.06	1.32		
6-11	1.21	0.94			6-30	0.06	1.37		
6-12	1.52	1.50							
6-13	0.27	1.06			AVE	0.56	1.40		
6-14	1.40	0.45							
6-15	0.53	1.55							
6-16	3.34	1.86							
6-17	0.33	1.74							
6-18	0.24	1.55							

Requested By H. Roush

Send Copies To H Roush D. Figg.

Analyst _____

Time Required _____

Date Completed _____

ANALYTICAL DIVISION – QUALITY CONTROL File No.

BASF Wyandotte Corporation

Sample _____ Laboratory No. _____

No Samples _____ Project No. _____ Date MAY 1985

SAMPLE INFORMATION (WHERE FROM AND WHY)

001 IS A COMPOSITE — 003 IS A GRAB

ANALYSIS REQUIRED

SAMPLE IDENTIFICATION	PPM P.O	PPM PDC		RESULTS	PPM P.O	PPM PDC			
5-1-85	0.31	1.61		5-19	29.57	1.43			
5-2	0.20	1.17		5-20	1.57	1.38			
5-3	0.05	0.84		5-21	0.86	1.07			
5-4	0.07	1.51		5-22	0.10	1.19			
5-5	0.10	1.47		5-23	1.55	1.02			
5-6	1.54	1.58		5-24	1.23	1.12			
5-7	2.60	1.51		5-25	1.46	1.23			
5-8	0.24	1.40		5-26	0.59	1.05			
5-9	0.19	1.25		5-27	0.08	1.05			
5-10	0.06	1.31		5-28	0.99	1.38			
5-11	0.34	1.79		5-29	0.18	0.03			
5-12	0.09	1.81		5-30	0.10	1.18			
5-13	0.48	2.17		5-31		1.59			
5-14	2.06	1.49							
5-15	1.30	1.22			1.50	1.35			
5-16	0.65	1.34							
5-17	0.94	1.16							
5-18									

Requested By H. Roush

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Analyst _____

Time Required _____

Date Completed _____

CHIEF CHEMIST

ANALYTICAL DIVISION – QUALITY CONTROL File No.

BASF Wyandotte Corporation

Sample _____ Laboratory No. _____

No Samples _____ Project No. _____ Date April 1985

SAMPLE INFORMATION (WHERE FROM AND WHY)

001 IS A composite — 003 is A GRAB

ANALYSIS REQUIRED.

SAMPLE IDENTIFICATION	PPM P.O.	PPM PDC			RESULTS PPM P.O	PPM PDC			
4-1-85	0.12	2.78		4-19-85	1.68	1.82			
4-2	0.08	3.05		4-20	0.12	1.77			
4-3	0.15	2.04		4-21	0.48	1.84			
4-4	0.05	2.83		4-22	0.74	1.71			
4-5	0.72	2.61		4-23	0.31	1.59			
4-6	0.28	2.22		4-24	0.19	1.26			
4-7	2.60	2.04		4-25	0.12	1.34			
4-8	0.36	1.96		4-26	0.07	1.79			
4-9	0.13	1.77		4-27	0.07	1.70			
4-10	0.69	1.94		4-28	0.11	1.74			
4-11	0.60	2.12		4-29	0.27	1.00			
4-12	0.10	1.49		4-30	8.71	1.29			
4-13	0.12	2.07							
4-14	0.29	1.76			.44	1.88			
4-15	0.36	1.99							
4-16	0.11	1.66							
4-17	0.84	1.65							
4-18	0.87	1.46							

Requested By H. Roush

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Analyst D. C. Schultz

Time Required

Date Completed

ANALYTICAL DIVISION – QUALITY CONTROL

File No. _____

BASF Wyandotte Corporation

Sample _____ Laboratory No. _____

No Samples _____ Project No. _____ Date MARCH 1985

SAMPLE INFORMATION (WHERE FROM AND WHY)

001 IS A Composite — 003 IS A GRAB.

ANALYSIS REQUIRED

SAMPLE IDENTIFICATION	PPM P.O.	PPM P.D.C.			RESULTS PPM P.O.	PPM P.DC			
3-1-85	0.17	2.27		3-19-85	0.22	2.36			
3-2	0.22	2.04		3-20	0.10	2.24			
3-3	0.92	2.02		3-21	0.30	3.27			
3-4	0.42	2.27		3-22	0.19	1.84			
3-5	0.51	2.72		3-23	0.10	1.82			
3-6	0.12	2.12		3-24	0.22	1.74			
3-7	0.25	0.87		3-25	0.10	2.10			
3-8	0.44	2.40		3-26	0.13	2.02			
3-9	0.14	2.49		3-27	0.22	2.26			
3-10	0.13	2.72		3-28	0.10	1.82			
3-11	0.22	2.55		3-29	(28.13)	2.26			
3-12	0.15	2.13		3-30	4.28	2.40			
3-13	0.07	1.06		3-31	0.60	1.49			
3-14	0.10	0.75							
3-15	0.31	0.86							
3-16	0.29	0.79							
3-17	0.26	0.87							
3-18	0.16	0.82							

AVE. ~~0.45~~ 1.30 1.88

Requested By H. Roosh. D.GGG

Analyst D.C. Schultz

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CHIEF CHEMIST

ANALYTICAL DIVISION – QUALITY CONTROL File No.

BASF Wyandotte Corporation

Sample _____ Laboratory No. _____

No Samples _____ Project No. _____ Date FEBRUARY 1985

SAMPLE INFORMATION (WHERE FROM AND WHY)

001 IS A COMPOSITE 003 IS A GRAB

ANALYSIS REQUIRED.

SAMPLE IDENTIFICATION	PPM P.O.	PPM PDC		RESULTS	PPM P.O.	PPM PDC			
2-1-85	0.07	0.53		2-19-85	1.04	0.84			
2-2	0.10	0.41		2-20	0.59	0.99			
2-3	0.08	0.45		2-21	0.14	1.09			
2-4	0.12	0.31		2-22	0.55	0.73			
2-5	1.08	0.48		2-23	3.52	2.50			
2-6	0.19	0.60		2-24	1.69	2.52			
2-7	12.07	0.37		2-25	0.89	2.49			
2-8	0.66	0.02		2-26	0.82	Down			
2-9	0.28	0.14		2-27	2.28	4.35			
2-10	0.74	1.00		2-28	0.18	2.24			
2-11	0.11	1.01							
2-12	0.18	0.79							
2-13	0.20	0.71							
2-14	0.15	0.48							
2-15	0.10	0.45							
2-16	0.10	0.46							
2-17	0.66	0.71							
2-18	0.14	1.03							

Requested By H. Roush D. Figg

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Analyst D. C. Schultz

Time Required _____

Date Completed _____

ANALYTICAL DIVISION – QUALITY CONTROL File No.

BASF Wyandotte Corporation

Sample _____ Laboratory No. _____

No Samples _____ Project No. _____ Date JANUARY 1985

SAMPLE INFORMATION (WHERE FROM AND WHY)

001 IS A 24HR Composite 003 IS A GRAB

ANALYSIS REQUIRED.

SAMPLE IDENTIFICATION	PPM P.O 001	PPM PDC 003			RESULTS DATE	PPM P.O 001	PPM PDC 003		
1-1	0.35	0.24			1-19	9.45	0.97		
1-2	0.52	0.24			1-20	0.27	0.93		
1-3	0.21	3.11			1-21	0.10	0.92		
1-4	0.58	3.25			1-22	0.12	0.68		
1-5	0.10	2.36			1-23	0.05	0.96		
1-6	0.37	2.36			1-24	2.02	0.70		
1-7	1.25	2.40			1-25	1.76	0.97		
1-8	0.07	1.96			1-26	1.51	0.70		
1-9	0.24	1.79			1-27	0.63	0.70		
1-10	0.65	0.93			1-28	0.67	0.54		
1-11	0.15	1.73			1-29	0.08	0.56		
1-12	0.43	1.71			1-30	0.28	0.37		
1-13	0.53	1.82			1-31	0.07	0.65		
1-14	0.59	1.93							
1-15	0.03	1.35							
1-16	0.19	1.15							
1-17	0.12	1.15							
1-18	0.08	0.96							

Requested By H.D. Rouse

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Analyst D.C. Schulz

Time Required _____

Date Completed _____

CHIEF CHEMIST

ANALYTICAL DIVISION – QUALITY CONTROL File No. _____

BASF Wyandotte Corporation

Sample _____ Laboratory No. _____

No Samples _____ Project No. _____ Date DECEMBER 1984

SAMPLE INFORMATION (WHERE FROM AND WHY)

001 IS A 24HR Composite 003 IS A GRAB

ANALYSIS REQUIRED.

SAMPLE IDENTIFICATION	PPM P.O 001	PPM PDC 003			RESULTS	PPM PO 001	PPM PDC 003		
					DATE				
12-1	2.00	2.20		12-19		0.11	1.24		
12-2	4.11	1.94		12-20		0.03	0.16		
12-3	0.91	2.27		12-21		0.13	0.16		
12-4	0.43	2.15		12-22		0.07	0.32		
12-5	0.31	2.16		12-23		0.38	0.45		
12-6	0.12	2.37		12-24		0.03	1.80		
12-7	0.52	2.19		12-25		0.04	1.18		
12-8	0.25	0.62		12-26		14.69	1.32		
12-9	0.25	0.66		12-27		0.12	1.13		
12-10	0.10	0.50		12-28		0.34	0.64		
12-11	0.42	1.48		12-29		0.37	0.28		
12-12	6.72	1.81		12-30		4.54	0.67		
12-13	3.41	1.92		12-31			0.97		
12-14	0.67	1.00							
12-15	1.57	1.46							
12-16	1.36	1.80							
12-17	1.04	1.77							
12-18	0.73	1.36							

Requested By H. D Reush

Send Copies To H.D. Reush, D. FIGG

Analyst D.C. Schulz

Time Required _____

Date Completed _____

CHIEF CHEMIST

ANALYTICAL DIVISION — QUALITY CONTROL

File No. _____

BASF Wyandotte Corporation

Sample _____ Laboratory No. _____

No Samples _____ Project No. _____ Date NOVEMBER 1984

SAMPLE INFORMATION (WHERE FROM AND WHY)

001 IS A 24HR COMPOSITE 003 IS A GRAB

ANALYSIS REQUIRED.

SAMPLE IDENTIFICATION	PPM PO 001	PPM PDC 003			RESULTS DATE	PPM PO 001	PPM PDC 003		
11-1	0.23	2.02			11-19	0.66	3.28		
11-2	8.37	2.00			11-20	0.60	3.14		
11-3	6.38	1.95			11-21	0.49	3.20		
11-4	0.42	2.02			11-22	0.29	3.58		
11-5	0.52	2.15			11-23	0.39	4.35		
11-6	0.89	1.77			11-24	0.49	4.78		
11-7	0.91	1.84			11-25	1.64	3.58		
11-8	2.71	1.94			11-26	2.43	2.96		
11-9	0.34	2.02			11-27	1.43	3.28		
11-10	1.09	2.23			11-28	1.66	1.24		
11-11	1.24	2.42			11-29	0.79	2.18		
11-12	0.11	3.09			11-30	1.51	2.20		
11-13	0.22	3.59			AVE	1.44	2.74		
11-14	0.16	3.63							
11-15	0.10	3.41							
11-16	1.99	3.49							
11-17	4.60	3.81							
11-18	0.64	1.05							

Requested By H D Roush

Send Copies To H.D. Roush D. FIGG

Analyst D.C. Schulz

Time Required _____

Date Completed _____

CHIEF CHEMIST

ANALYTICAL DIVISION - QUALITY CONTROL

File No. _____

BASF Wyandotte Corporation

Sample _____ Laboratory No. _____

No Samples _____ Project No. _____ Date October 1984

SAMPLE INFORMATION (WHERE FROM AND WHY)

001 IS A 24HR Composite 003 IS A GRAb

ANALYSIS REQUIRED.

SAMPLE IDENTIFICATION	P.P.M P.O. 001	P.PM P.D.C. 003			RESULTS	PPM P.O 001	PPM P.D.C 003		
10-1	0.15	3.04			10-19	0.06	2.03		
10-2	0.03	2.49			20	0.07	0.96		
3	0.35	1.75			21	2.37	0.70		
4	0.08	1.66			22	1.22	0.34		
5	0.70	1.93			23	0.08	2.23		
6	0.23	1.82			24	2.15	2.38		
7	0.12	2.16			25	1.66	2.55		
8	6.56	2.01			26	1.12	0.35		
9	22.6	1.81			27	3.47	2.19		
10	5.46	1.22			28	0.98	1.79		
11	0.10	1.94			29	0.50	1.95		
12	0.19	2.17			30	4.71	1.52		
13	0.32	5.01			31	1.23	2.02		
14	1.90	1.92							
15	0.11	2.67							
16	0.04	0.84							
17	0.49	0.04							
18	2.18	0.04							

Requested By H.D. Roush

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Analyst D.C. Schulz

Time Required _____

Date Completed _____

ANALYTICAL R[illegible]ISITION – QUALITY CONTROL File No. _____

BASF Wyandotte Corporation

Sample _____ Laboratory No. _____

No Samples _____ Project No. _____ Date SEPTEMBER 1984

SAMPLE INFORMATION (WHERE FROM AND WHY)

001 IS A 24HR COMP 003 IS A GRAB

ANALYSIS REQUIRED.

SAMPLE IDENTIFICATION	PPM P.O. 001	PPM PDC 003			RESULTS	PPM P.O. 001	PPM PDC 003		
9-1	4.35	2.03			9-19	2.77	1.97		
2	4.54	0.63			20	0.08	2.10		
3	1.07	0.49			21	0.14	1.82		
4	4.72	2.41			22	0.25	1.86		
5	0.18	2.47			23	0.09	1.57		
6	2.87	0.76			24	0.14	1.09		
7	0.19	2.29			25	0.16	1.75		
8	3.36	1.94			26	0.12	2.89		
9	0.04	1.84			27	0.09	3.04		
10	0.20	1.82			28	1.06	3.04		
11	6.10	1.75			29	0.03	3.04		
12	0.04	2.16			30	0.02	NO FLOW		
13	0.15	1.81							
14	0.19	2.29							
15	0.40	2.27							
16	45.4	2.27							
17	136.0	2.13							
18	0.43	1.60							

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Analyst D. C. SCHULTZ

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BASF Wyandotte Corporation

Sample 003 OUTFALL

Laboratory No.

No Samples Grab Samples

Project No

Date June 1984

SAMPLE INFORMATION (WHERE FROM AND WHY)

PDC Grab Samples TOC 24 HR Composite

ANALYSIS REQUIRED

SAMPLE IDENTIFICATION	RESULTS								
Date	PDC	TOC			Date	PDC	TOC		
1	4.50				18	1.25			
2	3.88				19	2.86	36		
3	3.87				20	2.58			
4	3.43				21	2.75	43		
5	3.47	36			22	2.43			
6	3.04				23	2.10			
7	2.65	49			24	2.02			
8	2.43				25	1.16	33		
9	1.05				26	~~[illegible]~~			
10	1.69				27	2.04	28		
11	1.95	35			28	1.29			
12	1.50				29	1.62			
13	1.25	31			30	1.82			
14	1.71								
15	1.65								
16	2.36								
17	2.17								

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L Anderson

CHIEF CHEMIST

ANALYTICAL DIVISION - QUALITY CONTROL File No. _____

BASF Wyandotte Corporation

Sample 003 OUTFALL Laboratory No. _____

No Samples GRAB SAMPLES Project No. _____ Date MAY 1984

SAMPLE INFORMATION (WHERE FROM AND WHY)

PDC Grab Samples TOC 24 Hr composite

ANALYSIS REQUIRED

SAMPLE IDENTIFICATION	RESULTS								
DATE	PDC	TOC			DATE	PDC	TOC		
1	5.16	45			18	2.76			
2	4.87				19	2.53			
3	3.13	47			20	.85			
4	2.91				21	3.04			
5	2.91				22	2.58	58		
6	3.04				23	2.29			
7	2.73				24	2.64	37		
8	2.27	31			25	2.51			
9	3.02				26	2.76			
10	3.45	29			27	4.64			
11	2.91				28	4.18	33		
12	2.50				29	4.30			
13	2.93				30	4.05	35		
14	2.75				31	3.40			
15	2.80	32							
16	2.82								
17	2.97	35							

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CHIEF CHEMIST

ANALYTICAL REQUISITION – QUALITY CONTROL File No.

BASF Wyandotte Corporation

Sample 003 OUTFALL Laboratory No.

No Samples GRAb Sample Project No. Date APRIL 1984

SAMPLE INFORMATION (WHERE FROM AND WHY)

PDC Grab Sample TOC 24HR Composite

ANALYSIS REQUIRED.

SAMPLE IDENTIFICATION	RESULTS								
DATE	PDC	TOC			DATE	PDC	TOC		
1	0.73				18	0.24	53		
2	0.67	47			19	1.18			
3	0.58				20	2.17			
4	0.47	53			21	2.13			
5	0.55				22	2.24			
6	0.55				23	2.49	44		
7	0.52				24	3.00			
8	0.54				25	2.25	39		
9	0.48				26	2.32			
10	0.47	45			27	4.90			
11	0.42				28	6.64			
12	0.40	49			29	5.64			
13	1.99				30	5.75			
14	0.47								
15	0.69								
16	0.56	48							
17	0.64								

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ANALYTICAL RE ISITION – QUALITY CONTROL File No. _____

BASF Wyandotte Corporation

Sample 003 OUTFALL Laboratory No. _____

No Samples _____ Project No. _____ Date MARCH 1984

SAMPLE INFORMATION (WHERE FROM AND WHY)

PDC - GRAB SAMPLE TOC 24 HR COMPOSITE

ANALYSIS REQUIRED:

SAMPLE IDENTIFICATION	RESULTS								
DATE	PDC	TOC			DATE	PDC	TOC		
1	1.75	50			18	1.46			
2	1.23				19	1.45	52		
3	1.36				20	0.56			
4	1.24				21	0.33	50		
5	.97	54			22	1.53			
6	.22				23	0.88			
7	1.42	49			24	0.96			
8	1.37				25	0.86			
9	1.32				26	0.83	65		
10	1.09				27	0.84			
11	1.37				28	0.76	62		
12	0.69				29	0.70			
13	1.45	54			30	0.69			
14	0.94				31	0.81			
15	1.36	63							
16	0.36								
17	1.97								

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Lab Chemist

BASF Wyandotte Corporation

Sample 003 Outfall

Laboratory No.

No Samples

Project No.

Date FEB. 1984

SAMPLE INFORMATION (WHERE FROM AND WHY)

PDC-GRAB SAMPLE TOC - 24 HOUR Composite

ANALYSIS REQUIRED

SAMPLE IDENTIFICATION	RESULTS								
DATE	PDC	TOC			DATE	PDC	TOC		
1	.86	42			18	2.20			
2	1.62				19	3.29			
3	1.12				20	2.90			
4	2.21				21	2.72	51		
5	2.28				22	2.63			
6	2.03	50			23	2.10			
7	.78				24	2.14	65		
8	1.94	45			25	1.67			
9	1.87				26	1.43			
10	1.85				27	1.32			
11	2.44				28				
12	2.22				29	1.11	50		
13	2.10	62							
14	3.02								
15	2.53	58							
16	1.41								
17	1.41								

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CHIEF CHEMIST

BASF Wyandotte Corporation

Sample 003 OUTFALL

Laboratory No.

No. Samples

Project No.

Date JAN. 1984

SAMPLE INFORMATION (WHERE FROM AND WHY)

PDC - GRAB SAMPLE TOC 24 HOUR COMPOSITE

ANALYSIS REQUIRED

SAMPLE IDENTIFICATION	RESULTS								
DATE	PDC	TOC			DATE	PDC	TOC		
1	.25				18	.29	24		
2	1.25				19	1.84			
3	1.76	25			20	1.58			
4	1.76	33			21	.72			
5	1.28				22	1.49			
6	1.21				23	1.28	32		
7	1.62				24	1.36			
8	1.40				25	2.63	70		
9	1.20	24			26	10.79			
10	.61				27	3.80			
11	1.07	21			28	1.61			
12	1.09				29	1.74			
13	.99				30	1.49	47		
14	4.40				31	1.44			
15	1.70								
16	1.75	26							
17	1.64								

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CHIEF CHEMIST

BASF Wyandotte Corporation

Sample 003 OUTFALL

Laboratory No.

No Samples

Project No.

Date DEC. 1983

SAMPLE INFORMATION (WHERE FROM AND WHY)

PDC - GRAB SAMPLE TOC 24 HOUR COMPOSITE

ANALYSIS REQUIRED

SAMPLE IDENTIFICATION	RESULTS								
DATE	PDC	TOC			DATE	PDC	TOC		
1	.99				18	1.66			
2	.81				19	1.35	39		
3	.86				20	1.29			
4	.92				21	1.11	31		
5	1.25	34			22	1.01			
6	.67				23	.86			
7	2.26	46			24	.65			
8	2.05				25	—			
9	1.53				26	—			
10	1.27				27	—	31		
11	1.13				28	1.19	41		
12	1.88	40			29	.92			
13	1.83				30	.55			
14	1.73	48			31	.60			
15	1.69								
16	1.77								
17	1.73								

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CHIEF CHEMIST

BASF Wyandotte Corporation

Sample 003 OutFALL

Laboratory No.

No Samples

Project No.

Date Nov. 1983

SAMPLE INFORMATION (WHERE FROM AND WHY)

PDC - Grab Sample TOC 24 Hour Composite

ANALYSIS REQUIRED:

SAMPLE IDENTIFICATION	RESULTS								
Date	PDC	TOC			Date	PDC	TOC		
1	.67				18	.77			
2	.99	15			19	1.10			
3	.94				20	1.22			
4	.94				21	1.22	30		
5	.70				22	0.50			
6	.63				23	0.90	44		
7	.24	25			24	.92			
8	.52				25	.94			
9	.43	31			26	1.32			
10	.46				27	1.12			
11	.42				28	1.08	71		
12	1.01				29	1.23			
13	1.19				30	1.06	32		
14	.97	28							
15	.57								
16	.92	33							
17	.87								

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Sample 003 OutfALL

Laboratory No.

No Samples

Project No.

Date Oct. 1983

SAMPLE INFORMATION (WHERE FROM AND WHY)

PDC - GRAB SAMPLE T.O.C. 24 HOUR Composite

ANALYSIS REQUIRED.

SAMPLE IDENTIFICATION	RESULTS								
DATE	PDC	TOC			DATE	PDC	TOC		
1	.66				18	.88			
2	1.00				19	1.15	19		
3	1.00	15			20	1.24			
4	.87				21	.98			
5	.65	18			22	2.76			
6	.73				23	1.08			
7	.36				24	1.19	15		
8	1.09				25	1.38			
9	1.03				26	.98	18		
10	0.38	25			27	.92			
11	0.86	20			28	.82			
12	0.64				29	0.69			
13	<.01	(RAIN)			30	0.62			
14	1.35				31	.57	16		
15	1.16								
16	1.11								
17	1.02	18							

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Time Required

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BASF Wyandotte Corporation

Sample 003 outfall

Laboratory No.

No Samples

Project No.

Date Sept. 1983

SAMPLE INFORMATION (WHERE FROM AND WHY)

P.D.C. = Grab Sample T.O.C. 24 Hour Composite

ANALYSIS REQUIRED

SAMPLE IDENTIFICATION	RESULTS								
Date	PDC	TOC			DATE	PDC	TOC		
1	.77				18	1.00			
2	.76				19	.77	9		
3	.92				20	.04		(RAIN STORM)	
4	1.39				21	1.35			
5	.29	24			22	1.30	13		
6	.44				23	1.52			
7	1.29	24			24	1.50			
8	1.32				25	1.07			
9	1.41				26	.72	14		
10	1.15				27	1.05			
11	1.74				28	1.08	16		
12	.27	25			29	1.15			
13	.56				30	.89			
14	.75	20							
15	.84								
16	.78								
17	1.26								

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Analyst RH + LG

Time Required —

Date Completed —

L Anderson

CHIEF CHEMIST

BASF Wyandotte Corporation

Sample 003 Outfall

Laboratory No.

No Samples

Project No.

Date August 1983

SAMPLE INFORMATION (WHERE FROM AND WHY)

PDC = Grab sample TOC = 24 hr composite sample

ANALYSIS REQUIRED

SAMPLE IDENTIFICATION	RESULTS								
Date	PDC	TOC			Date	PDC	TOC		
1	1.61	44			18	1.73			
2	1.39	[illegible]			19	1.26			
3	2.80	38			20	.98			
4	2.30				21	1.19			
5	2.65				22	1.13			
6	3.38				23	1.28			
7	1.10				24	6.09	36		
8	1.06	33			25	1.17			
9	1.83				26	.58			
10	3.33	32			27	0.91			
11	2.58				28	0.88			
12	3.14				29	.18	33		
13	3.10				30	.81			
14	3.10				31	.61	34		
15	2.93	31			31				
16	2.88								
17	2.63	31							

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CHIEF CHEMIST

C-1

BASF Wyandotte Corporation

Sample 003 OUTFALL

Laboratory No.

No Samples

Project No.

Date JULY 1983

SAMPLE INFORMATION (WHERE FROM AND WHY)

GRAB SAMPLE FOR PDC 24 hr COMPOSITE FOR TOC

ANALYSIS REQUIRED. mg/l

SAMPLE IDENTIFICATION	RESULTS								
	PDC	TOC			PDC	TOC			
1	1.91			19	.91				
2	4.66			20	3.86	39			
3	4.13			21	3.66				
4	3.53	41		22	2.68				
5	4.63			23	4.20				
6	4.23	30		24	3.40				
7	4.63			25	1.22	39			
8	3.48			26	4.66				
9	3.16			27	3.25	35			
10	3.89			28	3.08				
11	1.15			29	2.37				
12	1.71	30		30	2.53				
13	1.47			31	2.98				
14	2.95	33							
15	3.31								
16	2.98								
17	2.66								
18	.78	24							

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Date Completed 7-31-83

[illegible]

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Sample 003 OUTFALL

Laboratory No.

No Samples

Project No.

Date JUNE 1983

SAMPLE INFORMATION (WHERE FROM AND WHY)

GRAB SAMPLE FOR PDC 24hr COMPOSITE FOR TOC

ANALYSIS REQUIRED P.P.M.

SAMPLE IDENTIFICATION	RESULTS								
	PDC	TOC				PDC	TOC		
1	.98	31			19	0.39			
2	.39				20	0.62	18		
3	1.38				21	1.69			
4	1.25				22	1.38	23		
5	2.93				23	1.03			
6	.47	33			24	2.42			
7	2.45				25	1.90			
8	1.96	37			26	1.59			
9	1.62				27	0.44	25		
10	2.05				28	0.27	33		
11	2.06				29	3.23			
12	1.81				30	2.40			
13	0.64	26							
14	1.53								
15	1.32	22							
16	1.54								
17	1.91								
18	2.17								

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ANALYTICAL REPORT

BASF Wyandotte Corporation

Sample 003 OUTFALL

Laboratory No. 11-83

No Samples

Project No

Date MAY 1983

SAMPLE INFORMATION (WHERE FROM AND WHY)

GRAB SAMPLE FOR PDC 24 HOUR COMPOSITE FOR TOC

ANALYSIS REQUIRED. P.P.M.

SAMPLE IDENTIFICATION	RESULTS								
	PDC	TOC					PDC	TOC	
1	3.05					19	1.82		
2	3.94	42				20	1.59		
3	4.85					21	POWER OUTAGE		
4	4.96	43				22	2.85		
5	1.44					23	2.43	39	
6	4.44					24	2.40		
7	4.16					25	1.46	33	
8	2.07					26	1.01		
9	2.87	46				27	1.36		
10	3.39					28	0.73		
11	3.42	46				29	1.12		
12	3.18					30	1.59	37	
13	2.65					31	1.41		
14	4.06								
15	2.54								
16	3.53	33							
17	1.96								
18	1.61	36							

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Date Completed 6-1-83

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CHIEF CHEMIST

BASF Wyandotte Corporation

Sample 003 OUTFALL

Laboratory No.

No Samples

Project No.

Date April 1983

SAMPLE INFORMATION (WHERE FROM AND WHY)

GRAB SAMPLE FOR PDC 24 HOUR Composite FOR TOC

ANALYSIS REQUIRED. P.P.M.

SAMPLE IDENTIFICATION	RESULTS								
	PDC	TOC					PDC	TOC	
1	1.91					19	2.07		
2	1.46					20	2.14	42	
3	2.35					21	2.12		
4	2.03	44				22	2.11		
5	1.72					23	1.96		
6	1.87	41				24	2.35		
7	1.88					25	2.25	42	
8	1.59					26	2.17		
9	1.53					27	2.20	37	
10	2.42					28	1.04		
11	1.67	44				29	1.76		
12	1.14					30	1.01		
13	2.17								
14	1.77								
15	2.67								
16	2.49								
17	2.02								
18	1.89	42							

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BASF Wyandotte Corporation

Sample 003 OUTFALL

Laboratory No.

No Samples

Project No.

Date MARCH 1983

SAMPLE INFORMATION (WHERE FROM AND WHY)

GRAB SAMPLE FOR PDC 24 HOUR COMP. FOR TOC

ANALYSIS REQUIRED P.P.M.

SAMPLE IDENTIFICATION	RESULTS								
	PDC	TOC					PDC	TOC	
1	CHROMATOGRAPH DOWN	35				19	.81		
2	"	44				20	.74		
3	"	61				21	.98	41	
4	"	47				22	.78		
5	.91					23	.81	34	
6	.73					24	.33		
7	1.06	38				25	.86		
8	.99					26	1.67		
9	.42	32				27	1.54		
10	.45					28	2.48	46	
11	.50					29	1.75		
12	1.08					30	2.07	47	
13	.92					31	1.69		
14	.83	32							
15	.63								
16	.49								
17	.92	40							
18	1.41								

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BASF Wyandotte Corporation

Sample 003 outfall

Laboratory No.

No Samples

Project No.

Date FEBUARY 1983

SAMPLE INFORMATION (WHERE FROM AND WHY)

GRAB SAMPLE FOR PDC 24 HOUR COMP. FOR T.O.C.

ANALYSIS REQUIRED P.P.M.

SAMPLE IDENTIFICATION	RESULTS								
	PDC	T.O.C.					PDC	TOC	
1	.59					19	CHROMATOGRAPH DOWN	.38	
2	.22	38				20	"	35	
3	1.31					21	"	38	
4	.58					22	"	37	
5	.44					23	"	—	
6	.53					24	"	39	
7	.47	39				25	"	37	
8	.45					26	"	30	
9	.37	32				27	"	36	
10	.45					28	"	36	
11	.52								
12	1.18	36							
13	CHROMATOGRAPH DOWN	35							
14	"	36							
15	"	40							
16	"	32							
17	"	37							
18									

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BASF Wyandotte Corporation

Sample 003 OUTFALL

Laboratory No.

No Samples

Project No.

Date JANUARY 1983

SAMPLE INFORMATION (WHERE FROM AND WHY)

GRAB SAMPLE FOR PDC 24 HOUR COMP. FOR T.O.C.

ANALYSIS REQUIRED P.P.M.

SAMPLE IDENTIFICATION	RESULTS								
	PDC	TOC					PDC	TOC	
1	5.20					19	1.29	31	
2	3.75					20	1.66		
3	3.24	47				21	1.64		
4	1.84					22	1.18		
5	2.58					23	1.83		
6	1.78					24	0.31	49	
7	1.77					25	.24		
8	2.07					26	.22	45	
9	2.97					27	CHROMATOGRAPH DOWN		
10	.28					28	.69		
11	.45					29	.93		
12	.35					30	.87		
13	.98	26				31	.89	32	
14	.56								
15	1.14								
16	.89								
17	1.03	20							
18	.75								

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CHIEF CHEMIST

BASF Wyandotte Corporation

Sample 003 OUTFALL

Laboratory No.

No Samples

Project No.

Date DECEMBER 1982

SAMPLE INFORMATION (WHERE FROM AND WHY)

GRAB SAMPLE FOR PDC 24 hr comp FOR TOC

ANALYSIS REQUIRED: PPM

SAMPLE IDENTIFICATION	RESULTS								
	PDC	TOC					PDC	TOC	
1	.34					19	2.25		
2	.36	55				20	2.18	42	
3	.62					21	2.10		
4	.65					22	1.94	44	
5	.68					23	1.99		
6	.99					24	2.87		
7	1.72	33				25	3.00		
8	1.97					26	3.36		
9	1.30	27				27	1.19	46	
10	3.45					28	1.14		
11	DOWN					29	.12	28	
12	6.58					30	.03		
13	2.77	82				31	2.76		
14	.49	26							
15	.70	27							
16	1.23								
17	1.78								
18	2.68								

Requested By HD ROUSH

Send Copies To

Analyst

Time Required

Date Completed

CHIEF CHEMIST

F 875 RE ·/70

ANALYTICAL RE[illegible]ISITION – QUALITY CONTROL

File No. _____

BASF Wyandotte Corporation

Sample 003 OUTFALL

Laboratory No. _____

No Samples _____ Project No. _____ Date NOVEMBER 1982

SAMPLE INFORMATION (WHERE FROM AND WHY)

GRAB SAMPLE FOR P.D.C. 24 HR COMP FOR TOC

ANALYSIS REQUIRED: PPM

SAMPLE IDENTIFICATION	RESULTS								
	PDC	TOC				DAY	PDC	TOC	
1	.11	20				19	.79		
2	.77					20	.03		RAIN Ditch FULL
3	3.89	29				21	1.55		
4	2.27					22	1.37	44	
5	1.50					23	1.02		
6	1.04					24	.78	37	
7	1.48					25	.86		
8	.92	40				26	.89		
9	1.51					27	.80		
10	1.21	26				28	.72		
11	.72					29	.76	35	
12	1.06					30	.74		
13	1.64								
14	2.15								
15	.75	39							
16	.98								
17	.78	51							
18	.87								

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F 875 RE 4/70

ANALYTICAL REQUISITION – QUALITY CONTROL

File No. C

BASF Wyandotte Corporation

Sample 003 OUTFALL

Laboratory No.

No Samples

Project No.

Date OCTOBER

SAMPLE INFORMATION (WHERE FROM AND WHY)

GRAB SAMPLE FOR PDC 24 hr COMPOSITE FOR TOC

ANALYSIS REQUIRED: PPM

SAMPLE IDENTIFICATION	RESULTS								
	PDC	TOC				PDC	TOC		
1	.90				19	.26			
2	.96				20	1.24	25		
3	1.06				21	.39			
4	.88	19			22	.20			
5	.70				23	.55			
6	.63	19			24	.27			
7	.60				25	.57	29		
8	.70				26	.60			
9	.46				27	.43	42		
10	.64				28	2.07			
11	.81	19			29	.25			
12	.49				30	.33			
13	.59	37			31	.29			
14	.55								
15	.89								
16	.55								
17	.78								
18	.61	23							

Requested By H D ROUSH

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Date Completed –

L Anderson

CHIEF CHEMIST

F 875 RE 1/70

ANALYTICAL REQUISITION – QUALITY CONTROL

File No. C 1

BASF Wyandotte Corporation

Sample 003 outfall

Laboratory No. 54-82

No Samples

Project No.

Date Sept. 1982

SAMPLE INFORMATION (WHERE FROM AND WHY)
Grab Samples

ANALYSIS REQUIRED: P.P.M.

SAMPLE IDENTIFICATION	RESULTS								
	PDC	TOC				PDC	TOC		
1	.81	11			19	.74			
2	.11				20	.62			
3	.17				21	.44	13		
4	.78				22	.29	11		
5	.93				23	.27			
6	1.02	21			24	.16			
7	.73				25	.74			
8	.86	14			26	.95			
9	.72				27	.44	21		
10	.74				28	1.30			
11	.77				29	1.15			
12	.59				30	1.09	20		
13	.47	17							
14	.77								
15	.57	19							
16	.76								
17	.55								
18	.70								

Requested By H. D. Roush

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L Anderson

F 875 Rf .70

ANALYTICAL R' JISITION – QUALITY CONTROL

File No. _____

BASF Wyandotte Corporation

Sample 003 outfall

Laboratory No. _____

No Samples _____ Project No. _____ Date August 1982

SAMPLE INFORMATION (WHERE FROM AND WHY)

Grab Samples

ANALYSIS REQUIRED: PPM

SAMPLE IDENTIFICATION	RESULTS								
	PDC	TOC				PDC	TOC		
1	1.22				19	.41	20		
2	1.24	21			20	.28			
3	1.00				21	1.04			
4	.97	25			22	.44			
5	1.24				23	.40	13		
6	1.32				24	.94			
7	1.18				25	.47	9		
8	1.09				26	.43			
9	1.46	29			27	.22			
10	1.50				28	.68			
11	1.72	29			29	.28			
12	1.08				30	.45			
13	1.10				31	.58	33		
14	1.10								
15	1.45								
16	0.73								
17	0.22	19							
18	0.54								

Requested By H. D. Raush

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Analyst _____

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F 875 REV 4.70

ANALYTICAL REQUISITION – QUALITY CONTROL

File No. _____

BASF Wyandotte Corporation

Sample 003 OUTFALL

Laboratory No. _____

No Samples _____ Project No. _____ Date JULY 1982

SAMPLE INFORMATION (WHERE FROM AND WHY)
GRAB SAMPLES

ANALYSIS REQUIRED: PPM

SAMPLE IDENTIFICATION	RESULTS								
	PDC	TOC			PDC	TOC			
1	0.95			19	1.21				
2	.81			20	1.63	19			
3	.65			21	1.38	21			
4	1.20			22	1.19				
5	1.30	33		23	1.12				
6	1.68			24	1.33				
7	1.30	18		25	1.42				
8	1.22			26	1.32	22			
9	.95	26		27	1.24				
10	1.07			28	0.08		(heavy rain)		
11	.58			29	1.34	24			
12	.74			30	1.56				
13	.83			31	1.29				
14	.37	18							
15	.86								
16	1.34								
17	.22								
18	.84								

Requested By HD Rouse

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Date Completed _____

F 875 RF 1/70

ANALYTICAL R' JISITION – QUALITY CONTROL

File No. C

BASF Wyandotte Corporation

Sample 003 OUTFALL

Laboratory No. 44-82

No Samples

Project No.

Date JUNE 1982

SAMPLE INFORMATION (WHERE FROM AND WHY)

ANALYSIS REQUIRED: P.P.M.

SAMPLE IDENTIFICATION	PDC	TOC		DATE	PDC	TOC			
	RESULTS								
1	1.51			19	.36				
2	1.08	29		20	1.06				
3	.84			21	1.04	30			
4	1.38			22	.74				
5	1.32			23	1.03	36			
6	1.15			24	.94				
7	.87	32		25	1.28				
8	1.02			26	1.13				
9	0.73	22		27	.61				
10	0.56			28	.81				
11	0.94			29	.99	14			
12	0.77			30	1.15	27			
13	.86								
14	1.06	23							
15	1.09								
16	1.01	20							
17	1.11								
18	1.43								

Requested By HD Rousch

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Analyst LL + RH

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Date Completed

L Anderson

F 875 RE 4/70

ANALYTICAL R[illegible]JISITION – QUALITY CONTROL

File No. C-1

BASF Wyandotte Corporation

Sample 003 Outfall

Laboratory No. 38-82

No Samples

Project No.

Date May 1982

SAMPLE INFORMATION (WHERE FROM AND WHY)

P.P.M.

ANALYSIS REQUIRED:

SAMPLE IDENTIFICATION	RESULTS								
	PDC	TOC		DATE	PDC	TOC			
1	1.10			19	0.80	19			
2	1.23			20	0.74				
3	1.20	23		21	0.74				
4	1.02			22	0.86				
5	1.01			23	0.90				
6	0.60			24	0.91				
7	1.33			25	0.70	23			
8	0.88	23		26	0.57				
9	1.11			27	0.37				
10	1.28	16		28	1.45				
11	1.12			29	1.52				
12	0.90			30	1.94				
13	0.70	20		31	1.74	27			
14	0.90								
15	0.86								
16	0.81								
17	0.65								
18	1.11	21							

Requested By HD Roush

Send Copies To

Analyst RH + LA

Time Required —

Date Completed —

L Anderson

F 875 REV 4/70

ANALYTICAL REQUISITION – QUALITY CONTROL

File No. C-1

BASF Wyanotte Corporation

Sample 003N

Laboratory No. 29-82

No. Samples

Project No.

Date April 1982

SAMPLE INFORMATION (WHERE FROM AND WHY)

PPM

ANALYSIS REQUIRED.

SAMPLE IDENTIFICATION	RESULTS								
	PDC	TOC			PDC	TOC			
4-1-82	0.69			4/19	0.37	50			
4-2-82	0.37			4/20	0.28				
4-3-82	0.47			4/21	0.23	47			
4-4	0.86			4/22	0.22				
4-5	0.29	53		4/23	0.23				
4-6	0.31			4/24	0.22				
4-7	0.65	57		4/25	0.07				
4-8	0.69			4/26	0.19	31			
4-9	0.65			4/27	0.12				
4-10	0.43			4/28	0.35	28			
4-11	0.62			4/29	0.23				
4-12	0.61	54		4/30	1.10 *				
4-13	0.37								
4-14	0.43	48			*	7AM GRAB	5/1/82		
4-15	0.54								
4-16	0.45								
4-17	0.36								
4-18	0.44								

Requested By HD Roush

Send Copies To

Analyst RH + LG

Time Required —

Date Completed 5-1-82

L Anderson

F 875 RF 70

ANALYTICAL R' JISITION – QUALITY CONTROL

File No. _____

BASF Wyandotte Corporation

Sample 003N

Laboratory No. _____

No Samples _____ Project No. _____ Date MARCH 1982

SAMPLE INFORMATION (WHERE FROM AND WHY)

P. P. M.

ANALYSIS REQUIRED:

SAMPLE IDENTIFICATION	RESULTS								
	PDC	TOC			PDC	TOC			
3-1-82	0.64	28		3-19-82	1.00				
3-2-82	1.03			3-20-82	1.12				
3-3-82	0.69	34		3-21-82	0.70				
3-4-82	0.74			3-22-82	0.74	48			
3-5-82	0.61			3-23-82	0.80				
3-6-82	0.52			3-24-82	0.63	42			
3-7-82	0.55			3-25-82	0.86				
3-8-82	0.44	38		3-26-82	0.77				
3-9-82	0.46			3-27-82	0.59				
3-10-82	0.53	37		3-28-82	0.57				
3-11-82	0.44			3-29-82	0.48	49			
3-12-82	0.47			3-30-82	0.40				
3-13-82	0.14			3-31-82	0.57	48			
3-14-82	0.09								
3-15-82	0.16	33							
3-16-82	0.61								
3-17-82	1.23	56							
3-18-82	0.95								

Requested By _____

Send Copies To HD Roush

Analyst _____

Time Required _____

Date Completed _____

F 875 REV. 4.70

ANALYTICAL REQUISITION – QUALITY CONTROL

File No. _____

BASF Wyandotte Corporation

Sample 003N

Laboratory No. _____

No Samples _____ Project No. _____ Date FEBRUARY 1982

SAMPLE INFORMATION (WHERE FROM AND WHY)

P.P.M.

ANALYSIS REQUIRED.

SAMPLE IDENTIFICATION	PDC	TOC			RESULTS PDC	TOC			
2/1/82	0.29	30		2-19-82	0.04				
2/2/82	0.46			2-20-82	0.13				
2-3-82	0.31			2-21-82	0.19				
2/4/82	0.37			2-22-82	1.42	38			
2/5/82	0.74			2-23-82	1.10				
2/6/82	0.47			2-24-82	1.01	64			
2/7/82	1.91	36		2-25-82	0.65				
2-8-82	.69			2-26-82	0.74				
2-9-82	0.71			2-27-82	0.80				
2-10-82	1.26	38		2-28-82	0.74				
2-11-82	0.99								
2-12-82	0.96								
2-13-82	0.98								
2-14-82	0.99								
2-15-82	0.81	33							
2-16-82	0.72								
2-17-82	0.60	44							
2-18-82	0.05								

Requested By _____

Send Copies To _____

Analyst _____

Time Required _____

Date Completed _____

F 875 R 4/70

ANALYTICAL R UISITION – QUALITY CONTROL

File No. _____

BASF Wyandotte Corporation

Sample 003 N

Laboratory No. _____

No Samples _____ Project No. _____ Date JANUARY 1982

SAMPLE INFORMATION (WHERE FROM AND WHY)

PDC - TOC

ANALYSIS REQUIRED:

SAMPLE IDENTIFICATION	RESULTS								
	PDC	TOC			PDC	TOC			
1/1/82	0.82			1/19/82	0.40				
1/2/82	0.31			1/20/82	0.14	28			
1/3/82	0.32			1/21/82	0.47				
1/4/82	0.09	25		1/22/82	0.55				
1/5/82	1.05			1/23/82	0.41				
1/6/82	0.43	29		1/24/82	0.60				
1/7/82	0.25			1/25/82	0.25	22			
1/8/82	0.82			1/26/82	0.02				
1/9/82	0.61			1/27/82	0.21	25			
1/10/82	0.07			1/28/82	0.63				
1/11/82	0.06	23		1/29/82	0.58				
1/12/82	0.07			1/30/82	0.23				
1/13/82	0.01	21		1/31/82	0.27				
1/14/82	0.21								
1/15/82	0.10								
1/16/82	0.02								
1/17/82	<0.01								
1/18/82	<0.01	20							

Requested By _____

Send Copies To _____

Analyst _____

Time Required _____

Date Completed _____

ITEM 2.8

BASF Wyandotte Corporation

File No. _____

ANALYTICAL REQUISITION – QUALITY AND POLLUTION CONTROL

Sample: STreams To 001 OuTFall

Laboratory No. _____

No. Samples _____ Project No. _____ Date: OcT. 31, 1988

SAMPLE INFORMATION (WHERE FROM AND WHY)

ANALYSIS REQUIRED: Toluene PPM

SAMPLE IDENTIFICATION	1330 10-31-88	1030 11-1-88	0930 11-2-88	0930 11-3-88	RESULTS 1115 11-4-88				
HoT Well	0.000	0.000	0.000	0.000	—				
# 4 LiFT STation	0.002	0.000	0.002	0.000	—				
#4 Load Rack Trench	0.001	0.000	0.018	0.000	—				
WesT Track #3 PT Load Rack	3.326	0.827	0.339	2.170	0.524				

Requested By: H. D. Roush

Send Copies To: L. Anderson - D. Thiel - D. Figg
Lab. - M. Barone - T. Gallagher
G. Yoder

Analyst: F. Manore

Time Required _____

Date Completed _____

L. Anderson
CHIEF CHEMIST

F 876 REV. 2/76

BASF Wyandotte Corporation

File No. _____

ANALYTICAL REQUISITION – QUALITY AND POLLUTION CONTROL

Sample: Polyol Plant - West Load Rack Trench

Laboratory No. _____

No. Samples _____ Project No. _____ Date: Nov. 4, 1988

SAMPLE INFORMATION (WHERE FROM AND WHY): Trench Sampled @ 6 Points 11 00 AM 11-4-88

ANALYSIS REQUIRED: Toluene

SAMPLE IDENTIFICATION	PPM Toluene			RESULTS PPM	Toluene				
South End Point #1	5.251			Surface Water Running	2.548				
Point #2	1.466			Into South End of Trench 1400					
Point #3	0.524								
Point #4	0.718								
Point #5	—			#7 Manhole South East Corner	0.633				
North End Point #6	0.894			of Fuel Tank (West Road Drain) 1500					
[redacted]									

Requested By: H. D. Roush

Send Copies To: L. Anderson - D. Thiel - D. Figg
M. Barone - T. Gallagher - G. Yoder
Lab.

Analyst: F. Manore

Time Required _____

Date Completed _____

L. Anderson
CHIEF CHEMIST

75 REV. 2/76

ASF Wyan...te Corporation

File No. _____

NALYTICAL REQUISITION – QUALITY AND POLLUTION CONTROL

nple Polyol Plant - Streams To 001 Outfall Laboratory No. _____

. Samples _____ Project No. _____ Date _____

AMPLE INFORMATION (WHERE FROM AND WHY)

* Suspect That Some Samples were Mis labeled being reason For 41 PPB @ Clean Water Lift

NALYSIS REQUIRED: Toluene PPM

RESULTS

SAMPLE IDENTIFICATION	11-8-88 Comp. of 4 Samples	11-8,9, 88 24 HR. Composit	11-9,10,88 24 HR. Composit	11-10,11-88 24 HR. Composit	11-15,16,88 24 HR. Composit	11-16,17, 88 24 HR. Composit	11-17,18, 88 24 HR. Composit		
Point #1 #4 Load Rack Lift Station	0.024	0.050	0.045	0.033	0.021	0.017	0.032		
Point #2 West Load Rack Trench	4.155	6.870	1.763	3.757	1.539	3.093	2.699		
Point #3 Dirty Water Lift Station	0.112	0.133	0.149	0.150	3.90# 0.781	0.157	0.177		
Point #4 Clean Water Lift Station	0.000	* ? 0.041	0.000	0.000	0.024	0.001	0.001		
Point #5 Ottawa Street Drain	0.077	0.100	0.050	0.078	0.055	0.035	0.037		

Requested By H. D. Roush

Send Copies To L. Anderson - D. Thiel - D. Figg
T. Gallagher - M. Barone - G. Yoder

Analyst F. Manore

Time Required _____

Date Completed _____

L. Anderson
CHIEF CHEMIST

REV. 2/76

BASF Wyandotte Corporation

File No. _____

ANALYTICAL REQUISITION – QUALITY AND POLLUTION CONTROL

Sample: Polyol Plant - Streams To ool Outfall

Laboratory No. _____

No. Samples _____ Project No. _____ Date: Nov. 22, 1988

SAMPLE INFORMATION (WHERE FROM AND WHY)

ANALYSIS REQUIRED: Toluene PPB

SAMPLE IDENTIFICATION	11-21-88 Grab Samples 4 30 PM	11-22-88 8 30 AM	RESULTS						
Surface Water South of West Track - Dirty	1	—							
Surface Water South of West Track - Clean	0	—							
Surface Water South End of West Track	31,888	—							
Point #1 #4 Load Rack Lift Station	—	221							
Point #2 West Load Rack Trench	—	6,973							
Point #3 Dirty Water Lift Station	—	173							

Requested By: H. D. Roush

Send Copies To: L. Anderson - D. Thiel - D. Figg
T. Gallagher - M. Barone - G. Yoder

Analyst: F. Manore

Time Required _____

Date Completed _____

L. Anderson
CHIEF CHEMIST

875 REV. 2/76

BASF Wyandotte Corporation

File No. _____

ANALYTICAL REQUISITION – QUALITY AND POLLUTION CONTROL

Sample: Polyol Plant - Streams To 001 OutFall

Laboratory No. _____

No. Samples _____ Project No. _____ Date: Nov. 22, 23, 1988

SAMPLE INFORMATION (WHERE FROM AND WHY)

ANALYSIS REQUIRED: Toluene PPB

SAMPLE IDENTIFICATION	RESULTS 11-22,23,88				11-22,23,1988				
Dirty Water Lift Station Valve Closed	786			Surface Water being					
Dirty Water Lift Station Valve opened	207			Pumped into Drum	22,719				
#4 Load Rack Lift Station Valve Closed	31			Road Run OFF To West Track	6,730				
#4 Load Rack Lift Station Valve open	20			8 30 AM 11-23-88					
West Load Rack Trench Valve Closed	5,876								
West Load Rack Trench Valve open	3,928								

Requested By: H. D. Roush

Send Copies To: L. Anderson - D. Thiel - D. Figg
T. Gallagher - M. Barone - G. Yoder

Analyst: F. Manore

Time Required _____

Date Completed _____

L. Anderson
CHIEF CHEMIST

275 REV. 2/76

BASF Wyandotte Corporation

File No. _____

ANALYTICAL REQUISITION – QUALITY AND POLLUTION CONTROL

Sample Polyol Plant – Streams To 001 OutFall

Laboratory No. _____

No. Samples _____ Project No. _____ Date _____

SAMPLE INFORMATION (WHERE FROM AND WHY)

Toluene PPB * 48 Hour Composit 1 Sample Taken @ 8 30 AM

ANALYSIS REQUIRED:

SAMPLE IDENTIFICATION	RESULTS 11-29-88 24 HR. Comp.	11-30-88 24 HR. Comp.	12-1-88 24 HR. Comp	12-2-88 24 HR. Comp.					
Dirty Water Lift Station	127	106	92	102					
West Track Trench Head Rock	1020	2641	1826	1314					
#4 Lift Station	19 *	19 *	13	17					

Requested By H. D. Roush

Send Copies To L. Anderson – D. Thiel – D. Figg
T. Gallagher – M. Barone – G. Yoder

Analyst F. Manore

Time Required _____

Date Completed _____

L. Anderson
CHIEF CHEMIST

[illegible]75 REV. 2/76

BASF Wyandotte Corporation

File No. _____

ANALYTICAL REQUISITION – QUALITY AND POLLUTION CONTROL

Sample: Polyol Plant Streams To Pool Out Fall

Laboratory No. _____

No. Samples _____ Project No. _____ Date: Jan. 5, 1989

SAMPLE INFORMATION (WHERE FROM AND WHY)

Toluene PPB

ANALYSIS REQUIRED:

SAMPLE IDENTIFICATION	RESULTS 1-5-89								
#4 Load Rack 12 15 PM	35								
West Track 12 15 PM	1799								
Dirty Water Lift Station 12 30 PM	51								
Clean Water Lift Station 12 30 PM	4								
#4 Lift Station 12 12 PM	300								

Requested By: H. D. Roush

Send Copies To: L. Anderson - D. Thiel - D. Figg
T. Gallagher - M. Barone - G. Yoder

Analyst: F. Manore

Time Required _____

Date Completed _____

L. Anderson
CHIEF CHEMIST

275 REV. 2/76

BASF Wyandotte Corporation

File No. _____

ANALYTICAL REQUISITION – QUALITY AND POLLUTION CONTROL

Sample: Polyol Plant Streams To eel Outfall

Laboratory No. _____

No. Samples _____ Project No. _____ Date: Jan. 27, 1989

SAMPLE INFORMATION (WHERE FROM AND WHY)

ANALYSIS REQUIRED: Toluene PPB

SAMPLE IDENTIFICATION	Toluene PPB			RESULTS	Toluene PPB				
Clean Water Lift Station 1325	2			West Track South End 1315	19,533				
Dirty Water Lift Station 1325	53			West Track North End 1320	6,930				
East Track 1335	0			Hot Well 1350	1				
Weir 1330	6								

Requested By: T. Gallagher

Send Copies To: L. Anderson - D. Thiel - D. Figg
M. Barone - G. Yoder - B. Buck - Lab.

Analyst: F. Manore

Time Required _____

Date Completed _____

L. Anderson
CHIEF CHEMIST

275 REV. 2/76

Analytical Requisition—Ecology Services Department

BASF Corporation

BASF

Sample 001 OuT Fall 0720 Grab Sample

No. samples

Date May 1990

Sample information (collected where and for what pupose)

Sealed and open Bottles were stored For 24 HRS.

Analysis required: Tolvene PPB

Sample Identification			24 HR.		24 HR. ~~Results~~				
	5-22-90 Grab		Sealed Bottle		open Bottle				
5-22-90	11		10		6	These	Samples	Were stored in	reFrigeraTor
5-29-90	4		1		1	"	"	"	"
6-6-90	5		4		2	"	"	"	"
6-12-90	3		0		0	"	"	"	"
6-26-90	2		2		1	"	"	"	"
7-3-90									
7-10-90									
7-17-90									

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Requested by K. Padar

Analyst F. Manore

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Sample 001 OUTFALL GRAB Sample after rain

No. samples _____ Date May 1990

Sample information (collected where and for what pupose)

Analysis required: Toluene & PO

Sample Identification	Toluene PPM	PO PPM	Results						
5-15-90	0.001	0.401							
5-16-90	0.002	4.01							
5:30 PM 5-26-90	0.002	0.13							

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Sample 001 Composite Portion Sample

No. samples _____ Date May 1990

Sample information (collected where and for what pupose)

Analysis required: Toluene

Sample Identification	Toluene PPM	Toluene PPB	Results						
001 Comp. Portion 5-16-90	0.001	1							

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Sample 001 OUTFALL 0720 GRAB SAMPLE

No. samples

Date July - Aug 1990

Sample information (collected where and for what pupose)
Toluene PPB sealed and open Bottles were stored for 24 HRS.

Analysis required:

Sample Identification	PPB		PPB		PPB ~~Results~~				
	Grab		Sealed Bottle		OPEN Bottle 24HR.				
7-24-90									
7-31-90									
8-7-90									
8-14-90	1		0		0	These samples were stored under Hood @ Room Temp.			
8-21-90	1		0		0	"	"	"	"
8-28-90	2		0		0	"	"	"	"
9-4-90	1		0		0	"	"	"	"
9-11-90	4		0		0	"	"	"	"

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Analyst F. Mamore & D. Fitzpatrick

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Sample 001 OuTFall 0720 Grab Sample

No. samples _____ Date Sept.-Oct 1990

Sample information (collected where and for what pupose)
Sealed Bottle and open Bottle Tested 24 HRS. later

Analysis required: Toluene PPB

Sample Identification	Grab	Sealed Bottle	open Bottle	Results					
9-18-90	4	4	4	These samples were stored in refrigerator					
9-25-90	11	9	6	"	"	"	"	"	
10-2-90	3	2	2	"	"	"	"	"	
10-9-90	9	8	5	"	"	"	"	"	
10-23-90	7	6	4	"	"	"	"	"	

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Requested by K. Padar Analyst F. Manore

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Sample Polyol Plant - #2 Plant Lift Station

No. samples

Date Nov. 90

Sample information (collected where and for what pupose)

Analysis required:

Sample Identification	PPM PO	PPb Toluene				Results	PPM PO	PPb Toluene	
11-7-90 1800	0.3	1 ✓				11-9-90 1000	0.0	0 ✓	
11-7-90 2200	1.3	0 ✓				11-9-90 1400	0.1	3 ✓	
11-8-90 0600	0.3	1 ✓				11-10-90 0200	0.0	8 ✓	
11-8-90 1000	0.4	1 ✓				11-11-90 0500	0.0	5 ✓	
11-8-90 1400	0.2	0 ✓				11-12-90 0600	0.1	0 ✓	
11-8-90 1800	0.2	1 ✓				11-13-90	0.1	3 ✓	
11-8-90 2200	0.0	0 ✓				11-14-90	0.0	1 ✓	
11-9-90 0200	0.1	1 ✓				11-15-90	1.2	1 ✓	
11-9-90 Composite From Sampler 0600	0.1	0 ✓				11-16-90	0.0	0 ✓	

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Requested by D. Easley

Analyst F. Manore

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Sample Polyol Plant Carbon Absorbers

No. samples

Date March 14, 1990

Sample information (collected where and for what pupose)

Analysis required:

Sample Identification	PPB Toluene			PPB Toluene	Results				
3-14-90 Feed	7264		3-19-90 South End of West Trench	5401					
3-14-90 Discharge	55								
			3-19-90 TK-140 Top Dip Sample	5757					
3-19-90 Feed	5197								
3-19-90 Discharge	234		3-19-90 TK-140 Bottom Sample	5506					
			3-19-90 Discharge of TK-139	7					

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Carbon Bed H_2O

Date 12-23-91

rmation (collected where and for what purpose)

quired:

nple ication	PO	EPC	PDC	Toluene	BCEP				
	ppm				Results				
91 (in)	.527	.049	.019	.363	—				
-91 (out)	.435	.053	.023	.348	.038				
-91 (in)	.532			8.9					
-91 (out)	.694			0.230					
-91 (in)	.593			10.5					
-91 (out)	.679			0.260					

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Sample Polyol Plant Carbon Absorbers - West Trench

No. samples _____ Date Jan. 1992

Sample information (collected where and for what purpose)

Analysis required:

Sample Identification		PPb Toluene	Results						
1-6-92	Feed	21316							✓
1-6-92	Discharge	10618							✓
1-7-92	Feed	11409							✓
1-7-92	Discharge	5762							✓
1-10-92	Feed	16134							
1-10-92	Discharge	1258							
1-13-92	Feed	11902							✓
1-13-92	Discharge	7							✓
1-17-92	Feed	15188							✓
1-17-92	Discharge	1769							✓
1-31-92 *	Feed	8987							
1-31-92	Discharge	2111							✓
									✓

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Sample Polyol Plant Carbon Absorbers - West Trench

No. samples

Date Feb. 1992

Sample information (collected where and for what purpose)

Analysis required:

Sample Identification		PPb Toluene	Results						
2-15-92	Feed	5461							✓
2-15-92	Discharge	3514							✓
2-19-92	Feed	4472							✓
2-19-92	Feed	4480							✓
2-19-92	Discharge	1127							✓
2-19-92	Discharge	1094							✓
2-20-92	Feed	5465							✓
2-20-92	Discharge	2550							✓

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Sample Polyol Plant Carbon Absorbers - West Trench

No. samples

Date Feb - March 1992

Sample information (collected where and for what purpose)

Analysis required:

Sample Identification			Date	PPb Toluene	Results				
Feed To #1 Absorber			2-26-92	8300					✓
Feed To #2 Absorber			2-26-92	3468					✓
Discharge From #2 Absorber			2-26-92	0					✓
Feed To #1 Absorber			3-2-92	9698					✓
Feed To #2 Absorber			3-2-92	2319					✓
Discharge From #2 Absorber			3-2-92	6					✓
Feed To #1 Absorber			3-9-92	6304					✓
Feed To #2 Absorber			3-9-92	3451					✓
Discharge From #2 Absorber			3-9-92	42					✓
Feed To #1 Absorber			3-15-92	10252					✓
Feed To #2 Absorber			3-15-92	3074					✓
Discharge From #2 Absorber			3-15-92	0					✓

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Sample Polyol Plant Carbon Absorbers - West Trench

No. samples _____

Date March - April 1992

Sample information (collected where and for what purpose)

Analysis required:

Sample Identification		Date	PPb Toluene	Results				
Feed To #1	Absorber	3-23-92	8546					✓
Feed To #2	Absorber	3-23-92	1079					✓
Discharge	From #2 Absorber	3-23-92	0					✓
Feed To #1	Absorber	3-30-92	7628					✓
Feed To #2	Absorber	3-30-92	4865					✓
Discharge	From #2 Absorber	3-30-92	44					✓
Feed To #1	Absorber	3-31-92	6218					✓
Feed To #2	Absorber	3-31-92	47					✓
Discharge	From #2 Absorber	3-31-92	8					✓
Feed To #1	Absorber	4-6-92	6854					✓
Feed To #2	Absorber	4-6-92	32					✓
Discharge	From #2 Absorber	4-6-92	0					✓

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Sample Polyol Plant Carbon Absorbers - West Trench

No. samples

Date April - May 1992

Sample information (collected where and for what purpose)

Analysis required:

Sample Identification			Date	PPb Toluene	Results				
Feed To #1	Absorber		4-21-92	3197					✓
Feed To #2	Absorber		4-21-92	114					✓
Discharge From #2 Absorber			4-21-92	0					✓
Feed To #1	Absorber		4-27-92	13448					✓
Feed To #2	Absorber		4-27-92	180					✓
Discharge From #2 Absorber			4-27-92	0					✓
Feed To #1	Absorber		5-4-92	8406					✓
Feed To #2	Absorber		5-4-92	377					✓
Discharge From #2 Absorber			5-4-92	0					✓
Feed To #1	Absorber		5-11-92	6233					✓
Feed To #2	Absorber		5-11-92	0					✓
Discharge From #2 Absorber			5-11-92	0					✓

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Sample Polyol Plant Carbon Absorbers - West Trench

No. samples

Date May 92

Sample information (collected where and for what purpose)

Analysis required:

Sample Identification			Date	PPb Toluene	Results				
Feed To #1 Absorber			5-19-92	8049					✓
Feed To #2 Absorber			5-19-92	69					✓
Discharge From #2 Absorber			5-19-92	0					✓
Feed To #1 Absorber			6-1-92	6356					✓
Feed To #2 Absorber			6-1-92	517					✓
Discharge From #2 Absorber			6-1-92	0					✓
Feed To #1 Absorber			6-9-92	8525					✓
Feed To #2 Absorber			6-9-92	755					✓
Discharge From #2 Absorber			6-9-92	0					✓
Discharge From #1 Absorber			6-12-92	605					✓
Feed To #1 Absorber			6-16-92	761					✓
Discharge From #2 Absorber			6-16-92	0					✓

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Sample POLYOL CARBON ABSORBERS

No. samples

Date June - July 92

Sample information (collected where and for what pupose)

Analysis required:

Sample Identification		TOLUENE PPB			Results				
6-19-92 DISCHARGE		0.00							
FEED #2		2250							
W. TRENCH		10700							
7-6-92 DISCHARGE		0.00							
FEED #2		1470							
W. TRENCH		2409							
7-13-92 DISCHARGE		0.00							
FEED #2		10							
W. TRENCH		6058							

Note: West Trench data is the same as "Feed to #1 H Absorber" in the previous reports.

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Sample _____

No. samples _____ Date July - Aug 92

Sample information (collected where and for what pupose)

Analysis required:

Sample Identification		TOLUENE	PPB		Results				
7-28-92 DISCHARGE		0.00							
FEED #2		0.00							
W. TRENCH		263B							
8-3-92 DISCHARGE		0.00							
FEED #2		0.00							
~~W. TRENCH~~									
8-17-92 DISCHARG		0.00							
W. TRENCH		3008							

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Sample _____

No. samples _____ Date Aug - Sept 92

Sample information (collected where and for what pupose)

Analysis required:

Sample Identification		TOLUENE	PPB		Results				
8-24-92 DISCHAGE		7638							
FEED #2		0.00							
W. TRENCH		0.00							
8-31-92 DISCHARGE		0.00							
FEED #2		0.00							
W. TRENCH		6272							
9-8-92 DISCHARGE		0.00							
FEED #2		0.00							
W. TRENCH		13							

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Sample _____

No. samples _____ Date Oct, Nov 92

Sample information (collected where and for what pupose)

Analysis required:

Sample Identification		TOLUENE			Results				
10-12-92 DISCHARGE		2							
W. TRENCH		7474							
10-20-92 DISCHARGE		2							
W. TRENCH		2943							
10-27-92 DISCHARGE		4							
W. TRENCH		2							
11-9-92 DISCHARGE		113							
W. TRENCH		10,850							

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Sample _____

No. samples _____ Date Nov 92

Sample information (collected where and for what pupose)

Analysis required:

Sample Identification		TOLUENE - PPB.			Results				
11-17-92 DISCHARGE		0.0							
FEED #2		48							
W. TRENCH		9470							
11-23-92 DISCHARGE		0.00							
FEED #2		112							
W. TRENCH		3							
11-30-92 DISCHRGE		1							
FEED #2		231							
W. TRENCH		2							

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Sample _____

No. samples _____ Date Dec 92

Sample information (collected where and for what pupose)

Analysis required:

Sample Identification	Results								
		TOLUENE							
12-7-92 DISCHARGE		0.0							
FEED #2		72							
W. TRENCH		10180							

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