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Ecology & Environment	Client Project ID:	ZT2051, USEPA/Mark Twain	Sampled:	Sep 1, 1993
111 W. Jackson Blvd.	Sample Descript:	Liquid	Received:	Sep 2, 1993
Chicago, IL 60604	Analysis for:	Flash Point, Closed Cup(F)		
Attention: Mary Jane Ripp	First Sample #:	309-0039	Analyzed:	Sep 7-8, 1993
			Reported:	Sep 8, 1993

LABORATORY ANALYSIS FOR: Flash Point, Closed Cup(F)

Sample Number	Sample Description	Sample Result
309-0039	D01	>200
309-0040	D02	>200
309-0043	D05	>200
309-0044	D06	70

EPA Region 5 Records Ctr.
235093

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Crystal Pallick

Kevin W. Keeley
Laboratory Director

3090039.ECE <14>

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Ecology & Environment
111 W. Jackson Blvd.
Chicago, IL 60604
Attention: Mary Jane Ripp

Client Project ID: ZT2051, USEPA, Mark Twain
Sample Descript: Solid
Analysis for: Flash Point, Open Cup(F)
First Sample #: 309-0041

Sampled: Sep 1, 1993
Received: Sep 2, 1993
Analyzed: Sep 7, 1993
Reported: Sep 8, 1993

LABORATORY ANALYSIS FOR: Flash Point, Open Cup(F)

Sample Number	Sample Description	Sample Result
309-0041	D03	>200
309-0042	D04	>200

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Laboratory Director

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01

GREAT LAKES ANALYTICAL 1380 Busch Parkway • Buffalo Grove, Illinois 60089 (708) 808-7766 FAX (708) 808-7772

Ecology & Environment	Client Project ID:	ZT2051, USEPA/Mark Twain	Sampled:	Sep 1, 1993
111 W. Jackson Blvd.	Sample Descript:	Liquid: D01	Received:	Sep 2, 1993
Chicago, IL 60604	Analysis Method:	EPA 8240	Analyzed:	Sep 3-7, 1993
Attention: Mary Jane Ripp	Lab Number:	309-0039	Revised Report:	Sep 16, 1993

VOLATILE ORGANICS by GC/MS (EPA 8240)

Analyte	Detection Limit µg/L	Sample Results µg/L
Acetone	**10**	**280**
Benzene	**2.0**	**4.5**
Bromodichloromethane	2.0	N.D.
Bromoform	2.0	N.D.
Bromomethane	2.0	N.D.
2-Butanone	10	N.D.
Carbon disulfide	2.0	N.D.
Carbon tetrachloride	2.0	N.D.
Chlorobenzene	2.0	N.D.
Chlorodibromomethane	2.0	N.D.
Chloroethane	2.0	N.D.
2-Chloroethyl vinyl ether	10	N.D.
Chloroform	2.0	N.D.
Chloromethane	2.0	N.D.
1,1-Dichloroethane	2.0	N.D.
1,2-Dichloroethane	2.0	N.D.
1,1-Dichloroethene	2.0	N.D.
Total 1,2-Dichloroethene	2.0	N.D.
1,2-Dichloropropane	2.0	N.D.
cis 1,3-Dichloropropene	2.0	N.D.
trans 1,3-Dichloropropene	2.0	N.D.
Ethylbenzene	**2.0**	**68**
2-Hexanone	10	N.D.
Methylene chloride	**2.0**	**780**
4-Methyl-2-pentanone	10	N.D.
Styrene	**2.0**	**2,200**
1,1,2,2-Tetrachloroethane	2.0	N.D.
Tetrachloroethene	2.0	N.D.
Toluene	2.0	N.D.
1,1,1-Trichloroethane	2.0	N.D.
1,1,2-Trichloroethane	2.0	N.D.
Trichloroethene	2.0	N.D.
Trichlorofluoromethane	2.0	N.D.
Vinyl acetate	2.0	N.D.
Vinyl chloride	2.0	N.D.
Total Xylenes	2.0	N.D.

Analytes reported as N.D. were not present above the stated limit of detection.

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Ecology & Environment	Client Project ID:	ZT2051, USEPA/Mark Twain	Sampled:	Sep 1, 1993
111 W. Jackson Blvd.	Sample Descript:	Liquid: D02	Received:	Sep 2, 1993
Chicago, IL 60604	Analysis Method:	EPA 8240	Analyzed:	Sep 2, 1993
Attention: Mary Jane Ripp	Lab Number:	309-0040	Reported:	Sep 8, 1993

VOLATILE ORGANICS by GC/MS (EPA 8240)

Analyte	Detection Limit µg/L	Sample Results µg/L
Acetone	10,000	N.D.
Benzene	2,000	N.D.
Bromodichloromethane	2,000	N.D.
Bromoform	2,000	N.D.
Bromomethane	2,000	N.D.
2-Butanone	10,000	N.D.
Carbon disulfide	2,000	N.D.
Carbon tetrachloride	2,000	N.D.
Chlorobenzene	2,000	N.D.
Chlorodibromomethane	2,000	N.D.
Chloroethane	2,000	N.D.
2-Chloroethyl vinyl ether	10,000	N.D.
Chloroform	2,000	N.D.
Chloromethane	2,000	N.D.
1,1-Dichloroethane	2,000	N.D.
1,2-Dichloroethane	2,000	N.D.
1,1-Dichloroethene	2,000	N.D.
Total 1,2-Dichloroethene	2,000	N.D.
1,2-Dichloropropane	2,000	N.D.
cis 1,3-Dichloropropene	2,000	N.D.
trans 1,3-Dichloropropene	2,000	N.D.
Ethylbenzene	2,000	N.D.
2-Hexanone	10,000	N.D.
Methylene chloride	2,000	N.D.
4-Methyl-2-pentanone	10,000	N.D.
Styrene	2,000	3,000
1,1,2,2-Tetrachloroethane	2,000	N.D.
Tetrachloroethene	2,000	N.D.
Toluene	2,000	N.D.
1,1,1-Trichloroethane	2,000	N.D.
1,1,2-Trichloroethane	2,000	N.D.
Trichloroethene	2,000	N.D.
Trichlorofluoromethane	2,000	14,000
Vinyl acetate	2,000	N.D.
Vinyl chloride	2,000	N.D.
Total Xylenes	2,000	N.D.

Analytes reported as N.D. were not present above the stated limit of detection. Because matrix effects and/or other factors required additional sample dilution, detection limits for this sample have been raised.

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GREAT LAKES ANALYTICAL 1380 Busch Parkway • Buffalo Grove, Illinois 60089 (708) 808-7766 FAX (708) 808-7772

Ecology & Environment	Client Project ID:	ZT2051, USEPA/Mark Twain	Sampled:	Sep 1, 1993
111 W. Jackson Blvd.	Sample Descript:	Solid: D03	Received:	Sep 2, 1993
Chicago, IL 60604	Analysis Method:	EPA 8240	Analyzed:	Sep 3, 1993
Attention: Mary Jane Ripp	Lab Number:	309-0041	Reported:	Sep 8, 1993

VOLATILE ORGANICS by GC/MS (EPA 8240)

Analyte	Detection Limit µg/kg, Dry Weight	Sample Results µg/kg, Dry Weight
Acetone	6,300	N.D.
Benzene	1,300	N.D.
Bromodichloromethane	1,300	N.D.
Bromoform	1,300	N.D.
Bromomethane	1,300	N.D.
2-Butanone	6,300	N.D.
Carbon disulfide	1,300	N.D.
Carbon tetrachloride	1,300	N.D.
Chlorobenzene	1,300	N.D.
Chlorodibromomethane	1,300	N.D.
Chloroethane	1,300	N.D.
2-Chloroethyl vinyl ether	6,300	N.D.
Chloroform	1,300	N.D.
Chloromethane	1,300	N.D.
1,1-Dichloroethane	1,300	N.D.
1,2-Dichloroethane	1,300	N.D.
1,1-Dichloroethene	1,300	N.D.
cis-1,2-Dichloroethene	1,300	N.D.
trans-1,2-Dichloroethene	1,300	N.D.
1,2-Dichloropropane	1,300	N.D.
cis 1,3-Dichloropropene	1,300	N.D.
trans 1,3-Dichloropropene	1,300	N.D.
Ethylbenzene	1,300	N.D.
2-Hexanone	2,500	N.D.
Methylene chloride	1,300	N.D.
4-Methyl-2-pentanone	2,500	N.D.
Styrene	1,300	25,000
1,1,2,2-Tetrachloroethane	1,300	N.D.
Tetrachloroethene	1,300	N.D.
Toluene	1,300	N.D.
1,1,1-Trichloroethane	1,300	N.D.
1,1,2-Trichloroethane	1,300	N.D.
Trichloroethene	1,300	N.D.
Trichlorofluoromethane	1,300	N.D.
Vinyl acetate	2,500	N.D.
Vinyl chloride	1,300	N.D.
Total Xylenes	3,800	N.D.

Analytes reported as N.D. were not present above the stated limit of detection. Because matrix effects and/or other factors required additional sample dilution, detection limits for this sample have been raised.

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Ecology & Environment	Client Project ID:	ZT2051, USEPA/Mark Twain	Sampled:	Sep 1, 1993
111 W. Jackson Blvd.	Sample Descript:	Solid: D04	Received:	Sep 2, 1993
Chicago, IL 60604	Analysis Method:	EPA 8240	Analyzed:	Sep 2, 1993
Attention: Mary Jane Ripp	Lab Number:	309-0042	Reported:	Sep 8, 1993

VOLATILE ORGANICS by GC/MS (EPA 8240)

Analyte	Detection Limit µg/kg, Dry Weight	Sample Results µg/kg, Dry Weight
Acetone	13,000	N.D.
Benzene	2,500	N.D.
Bromodichloromethane	2,500	N.D.
Bromoform	2,500	N.D.
Bromomethane	2,500	N.D.
2-Butanone	13,000	N.D.
Carbon disulfide	2,500	N.D.
Carbon tetrachloride	2,500	N.D.
Chlorobenzene	2,500	N.D.
Chlorodibromomethane	2,500	N.D.
Chloroethane	2,500	N.D.
2-Chloroethyl vinyl ether	13,000	N.D.
Chloroform	2,500	N.D.
Chloromethane	2,500	N.D.
1,1-Dichloroethane	2,500	N.D.
1,2-Dichloroethane	2,500	N.D.
1,1-Dichloroethene	2,500	N.D.
cis-1,2-Dichloroethene	2,500	N.D.
trans-1,2-Dichloroethene	2,500	N.D.
1,2-Dichloropropane	2,500	N.D.
cis 1,3-Dichloropropene	2,500	N.D.
trans 1,3-Dichloropropene	2,500	N.D.
Ethylbenzene	**2,500**	**2,900**
2-Hexanone	5,000	N.D.
Methylene chloride	2,500	N.D.
4-Methyl-2-pentanone	5,000	N.D.
Styrene	**2,500**	**41,000,000**
1,1,2,2-Tetrachloroethane	2,500	N.D.
Tetrachloroethene	2,500	N.D.
Toluene	2,500	N.D.
1,1,1-Trichloroethane	2,500	N.D.
1,1,2-Trichloroethane	2,500	N.D.
Trichloroethene	2,500	N.D.
Trichlorofluoromethane	2,500	N.D.
Vinyl acetate	5,000	N.D.
Vinyl chloride	2,500	N.D.
Total Xylenes	7,500	N.D.

Analytes reported as N.D. were not present above the stated limit of detection. Because matrix effects and/or other factors required additional sample dilution, detection limits for this sample have been raised.

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Ecology & Environment	Client Project ID:	ZT2051, USEPA/Mark Twain	Sampled:	Sep 1, 1993
111 W. Jackson Blvd.	Sample Descript:	Liquid: D05	Received:	Sep 2, 1993
Chicago, IL 60604	Analysis Method:	EPA 8240	Analyzed:	Sep 2, 1993
Attention: Mary Jane Ripp	Lab Number:	309-0043	Reported:	Sep 8, 1993

VOLATILE ORGANICS by GC/MS (EPA 8240)

Analyte	Detection Limit µg/L	Sample Results µg/L
Acetone	100,000	N.D.
Benzene	20,000	N.D.
Bromodichloromethane	20,000	N.D.
Bromoform	20,000	N.D.
Bromomethane	20,000	N.D.
2-Butanone	100,000	N.D.
Carbon disulfide	20,000	N.D.
Carbon tetrachloride	20,000	N.D.
Chlorobenzene	20,000	100,000
Chlorodibromomethane	20,000	N.D.
Chloroethane	20,000	N.D.
2-Chloroethyl vinyl ether	100,000	N.D.
Chloroform	20,000	N.D.
Chloromethane	20,000	N.D.
1,1-Dichloroethane	20,000	N.D.
1,2-Dichloroethane	20,000	N.D.
1,1-Dichloroethene	20,000	N.D.
Total 1,2-Dichloroethene	20,000	N.D.
1,2-Dichloropropane	20,000	N.D.
cis 1,3-Dichloropropene	20,000	N.D.
trans 1,3-Dichloropropene	20,000	N.D.
Ethylbenzene	20,000	N.D.
2-Hexanone	100,000	N.D.
Methylene chloride	20,000	N.D.
4-Methyl-2-pentanone	100,000	N.D.
Styrene	20,000	N.D.
1,1,2,2-Tetrachloroethane	20,000	N.D.
Tetrachloroethene	20,000	N.D.
Toluene	20,000	N.D.
1,1,1-Trichloroethane	20,000	N.D.
1,1,2-Trichloroethane	20,000	N.D.
Trichloroethene	20,000	N.D.
Trichlorofluoromethane	20,000	N.D.
Vinyl acetate	20,000	N.D.
Vinyl chloride	20,000	N.D.
Total Xylenes	20,000	N.D.

Analytes reported as N.D. were not present above the stated limit of detection. Because matrix effects and/or other factors required additional sample dilution, detection limits for this sample have been raised.

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Ecology & Environment	Client Project ID:	ZT2051, USEPA/Mark Twain	Sampled:	Sep 1, 1993
111 W. Jackson Blvd.	Sample Descript.	Liquid: D06	Received:	Sep 2, 1993
Chicago, IL 60604	Analysis Method:	EPA 8240	Analyzed:	Sep 3, 1993
Attention: Mary Jane Ripp	Lab Number:	309-0044	Reported:	Sep 8, 1993

VOLATILE ORGANICS by GC/MS (EPA 8240)

Analyte	Detection Limit µg/L	Sample Results µg/L
Acetone	10,000,000	N.D.
Benzene	2,000,000	N.D.
Bromodichloromethane	2,000,000	N.D.
Bromoform	2,000,000	N.D.
Bromomethane	2,000,000	N.D.
2-Butanone	2,000,000	170,000,000
Carbon disulfide	2,000,000	N.D.
Carbon tetrachloride	2,000,000	N.D.
Chlorobenzene	2,000,000	N.D.
Chlorodibromomethane	2,000,000	N.D.
Chloroethane	2,000,000	N.D.
2-Chloroethyl vinyl ether	10,000,000	N.D.
Chloroform	2,000,000	N.D.
Chloromethane	2,000,000	N.D.
1,1-Dichloroethane	2,000,000	N.D.
1,2-Dichloroethane	2,000,000	N.D.
1,1-Dichloroethene	2,000,000	N.D.
Total 1,2-Dichloroethene	2,000,000	N.D.
1,2-Dichloropropane	2,000,000	N.D.
cis 1,3-Dichloropropene	2,000,000	N.D.
trans 1,3-Dichloropropene	2,000,000	N.D.
Ethylbenzene	2,000,000	N.D.
2-Hexanone	10,000,000	N.D.
Methylene chloride	2,000,000	N.D.
4-Methyl-2-pentanone	10,000,000	N.D.
Styrene	2,000,000	43,000,000
1,1,2,2-Tetrachloroethane	2,000,000	N.D.
Tetrachloroethene	2,000,000	N.D.
Toluene	2,000,000	N.D.
1,1,1-Trichloroethane	2,000,000	N.D.
1,1,2-Trichloroethane	2,000,000	N.D.
Trichloroethene	2,000,000	N.D.
Trichlorofluoromethane	2,000,000	N.D.
Vinyl acetate	2,000,000	N.D.
Vinyl chloride	2,000,000	N.D.
Total Xylenes	2,000,000	N.D.

Analytes reported as N.D. were not present above the stated limit of detection. Because matrix effects and/or other factors required additional sample dilution, detection limits for this sample have been raised.

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Kevin W. Keeley
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Ecology & Environment	Client Project ID:	ZT2051, USEPA/Mark Twain	Sampled:	Sep 1, 1993
111 W. Jackson Blvd.	Sample Descript:	Liquid: D01	Received:	Sep 2, 1993
Chicago, IL 60604	Analysis Method:	EPA 8270	Extracted:	Sep 2, 1993
Attention: Mary Jane Ripp	Lab Number:	309-0039	Analyzed:	Sep 6, 1993
			Reported:	Sep 8, 1993

SEMI-VOLATILE ORGANICS by GC/MS (EPA 8270)

Analyte	Detection Limit µg/L	Sample Results µg/L
Acenaphthene	400	N.D.
Acenaphthylene	400	N.D.
Aniline	400	N.D.
Anthracene	400	N.D.
Benzidine	10,000	N.D.
Benzoic Acid	2,000	N.D.
Benzo(a)anthracene	400	N.D.
Benzo(b)fluoranthene	400	N.D.
Benzo(k)fluoranthene	400	N.D.
Benzo(g,h,i)perylene	400	N.D.
Benzo(a)pyrene	400	N.D.
Benzyl alcohol	400	32,000
Bis(2-chloroethoxy)methane	400	N.D.
Bis(2-chloroethyl)ether	400	N.D.
Bis(2-chloroisopropyl)ether	400	N.D.
Bis(2-ethylhexyl)phthalate	2,000	N.D.
4-Bromophenyl phenyl ether	400	N.D.
Butyl benzyl phthalate	400	N.D.
4-Chloroaniline	400	N.D.
2-Chloronaphthalene	400	N.D.
4-Chloro-3-methylphenol	400	N.D.
2-Chlorophenol	400	N.D.
4-Chlorophenyl phenyl ether	400	N.D.
Chrysene	400	N.D.
Dibenz(a,h)anthracene	400	N.D.
Dibenzofuran	400	N.D.
Di-N-butyl phthalate	2,000	N.D.
1,3-Dichlorobenzene	400	N.D.
1,4-Dichlorobenzene	400	N.D.
1,2-Dichlorobenzene	400	N.D.
3,3-Dichlorobenzidine	2,000	N.D.
2,4-Dichlorophenol	400	N.D.
Diethyl phthalate	400	N.D.
2,4-Dimethylphenol	400	N.D.
Dimethyl phthalate	400	N.D.
4,6-Dinitro-2-methylphenol	2,000	N.D.
2,4-Dinitrophenol	2,000	N.D.

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Ecology & Environment	Client Project ID:	ZT2051, USEPA/Mark Twain	Sampled:	Sep 1, 1993
111 W. Jackson Blvd.	Sample Descript:	Liquid: D01	Received:	Sep 2, 1993
Chicago, IL 60604	Analysis Method:	EPA 8270	Extracted:	Sep 2, 1993
Attention: Mary Jane Ripp	Lab Number:	309-0039	Analyzed:	Sep 6, 1993
			Reported:	Sep 8, 1993

SEMI-VOLATILE ORGANICS by GC/MS (EPA 8270)

Analyte	Detection Limit µg/L	Sample Results µg/L
2,4-Dinitrotoluene	400.0	N.D.
2,6-Dinitrotoluene	400.0	N.D.
Di-N-octyl phthalate	400.0	N.D.
Fluoranthene	400.0	N.D.
Fluorene	400.0	N.D.
Hexachlorobenzene	400.0	N.D.
Hexachlorobutadiene	400.0	N.D.
Hexachlorocyclopentadiene	400.0	N.D.
Hexachloroethane	400.0	N.D.
Indeno(1,2,3-cd)pyrene	400.0	N.D.
Isophorone	400.0	N.D.
2-Methylnaphthalene	400.0	N.D.
2-Methylphenol	400.0	N.D.
4-Methylphenol	400.0	N.D.
Naphthalene	400.0	N.D.
2-Nitroaniline	2,000	N.D.
3-Nitroaniline	2,000	N.D.
4-Nitroaniline	2,000	N.D.
Nitrobenzene	400.0	N.D.
2-Nitrophenol	400.0	N.D.
4-Nitrophenol	2,000	N.D.
N-Nitrosodiphenylamine	400.0	N.D.
N-Nitroso-di-N-propylamine	400.0	N.D.
Pentachlorophenol	2,000	N.D.
Phenanthrene	400.0	N.D.
Phenol	400.0	N.D.
Pyrene	400.0	N.D.
1,2,4-Trichlorobenzene	400.0	N.D.
2,4,5-Trichlorophenol	2,000	N.D.
2,4,6-Trichlorophenol	400.0	N.D.

Analytes reported as N.D. were not present above the stated limit of detection. Because matrix effects and/or other factors required additional sample dilution, detection limits for this sample have been raised.

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Kevin W. Keeley
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3090039.ECE <27>

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GREAT LAKES ANALYTICAL 1380 Busch Parkway • Buffalo Grove, Illinois 60089 (708) 808-7766 FAX (708) 808-7772

Ecology & Environment	Client Project ID:	ZT2051, USEPA/Mark Twain	Sampled:	Sep 1, 1993
111 W. Jackson Blvd.	Sample Descript:	Liquid: D02	Received:	Sep 2, 1993
Chicago, IL 60604	Analysis Method:	EPA 8270	Extracted:	Sep 2, 1993
Attention: Mary Jane Ripp	Lab Number:	309-0040	Analyzed:	Sep 6, 1993
			Reported:	Sep 8, 1993

SEMI-VOLATILE ORGANICS by GC/MS (EPA 8270)

Analyte	Detection Limit µg/L	Sample Results µg/L
Acenaphthene	400	N.D.
Acenaphthylene	400	N.D.
Aniline	400	N.D.
Anthracene	400	N.D.
Benzidine	10,000	N.D.
Benzoic Acid	2,000	N.D.
Benzo(a)anthracene	400	N.D.
Benzo(b)fluoranthene	400	N.D.
Benzo(k)fluoranthene	400	N.D.
Benzo(g,h,i)perylene	400	N.D.
Benzo(a)pyrene	400	N.D.
Benzyl alcohol	400	N.D.
Bis(2-chloroethoxy)methane	400	N.D.
Bis(2-chloroethyl)ether	400	N.D.
Bis(2-chloroisopropyl)ether	400	N.D.
Bis(2-ethylhexyl)phthalate	2,000	N.D.
4-Bromophenyl phenyl ether	400	N.D.
Butyl benzyl phthalate	400	N.D.
4-Chloroaniline	400	N.D.
2-Chloronaphthalene	400	N.D.
4-Chloro-3-methylphenol	400	N.D.
2-Chlorophenol	400	N.D.
4-Chlorophenyl phenyl ether	400	N.D.
Chrysene	400	N.D.
Dibenz(a,h)anthracene	400	N.D.
Dibenzofuran	400	N.D.
Di-N-butyl phthalate	2,000	N.D.
1,3-Dichlorobenzene	400	N.D.
1,4-Dichlorobenzene	400	N.D.
1,2-Dichlorobenzene	400	N.D.
3,3-Dichlorobenzidine	2,000	N.D.
2,4-Dichlorophenol	400	N.D.
Diethyl phthalate	400	N.D.
2,4-Dimethylphenol	400	N.D.
Dimethyl phthalate	400	N.D.
4,6-Dinitro-2-methylphenol	2,000	N.D.
2,4-Dinitrophenol	2,000	N.D.

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Ecology & Environment	Client Project ID:	ZT2051, USEPA/Mark Twain	Sampled:	Sep 1, 1993
111 W. Jackson Blvd.	Sample Descript:	Liquid: D02	Received:	Sep 2, 1993
Chicago, IL 60604	Analysis Method:	EPA 8270	Extracted:	Sep 2, 1993
Attention: Mary Jane Ripp	Lab Number:	309-0040	Analyzed:	Sep 6, 1993
			Reported:	Sep 8, 1993

SEMI-VOLATILE ORGANICS by GC/MS (EPA 8270)

Analyte	Detection Limit µg/L	Sample Results µg/L
2,4-Dinitrotoluene	400.0	N.D.
2,6-Dinitrotoluene	400.0	N.D.
Di-N-octyl phthalate	400.0	N.D.
Fluoranthene	400.0	N.D.
Fluorene	400.0	N.D.
Hexachlorobenzene	400.0	N.D.
Hexachlorobutadiene	400.0	N.D.
Hexachlorocyclopentadiene	400.0	N.D.
Hexachloroethane	400.0	N.D.
Indeno(1,2,3-cd)pyrene	400.0	N.D.
Isophorone	400.0	N.D.
2-Methylnaphthalene	400.0	N.D.
2-Methylphenol	400.0	N.D.
4-Methylphenol	400.0	N.D.
Naphthalene	400.0	N.D.
2-Nitroaniline	2,000	N.D.
3-Nitroaniline	2,000	N.D.
4-Nitroaniline	2,000	N.D.
Nitrobenzene	400.0	N.D.
2-Nitrophenol	400.0	N.D.
4-Nitrophenol	2,000	N.D.
N-Nitrosodiphenylamine	400.0	N.D.
N-Nitroso-di-N-propylamine	400.0	N.D.
Pentachlorophenol	2,000	N.D.
Phenanthrene	400.0	N.D.
Phenol	400.0	N.D.
Pyrene	400.0	N.D.
1,2,4-Trichlorobenzene	400.0	N.D.
2,4,5-Trichlorophenol	2,000	N.D.
2,4,6-Trichlorophenol	400.0	N.D.

Analytes reported as N.D. were not present above the stated limit of detection. Because matrix effects and/or other factors required additional sample dilution, detection limits for this sample have been raised.

GREAT LAKES ANALYTICAL

Kevin W. Keeley
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3090039.ECE <29>

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GREAT LAKES ANALYTICAL 1380 Busch Parkway • Buffalo Grove, Illinois 60089 (708) 808-7766 FAX (708) 808-7772

Ecology & Environment	Client Project ID:	ZT2051, USEPA/Mark Twain	Sampled:	Sep 1, 1993
111 W. Jackson Blvd.	Sample Descript:	Solid: D03	Received:	Sep 2, 1993
Chicago, IL 60604	Analysis Method:	EPA 8270	Extracted:	Sep 2, 1993
Attention: Mary Jane Ripp	Lab Number:	309-0041	Analyzed:	Sep 6, 1993
			Reported:	Sep 8, 1993

SEMI-VOLATILE ORGANICS by GC/MS (EPA 8270)

Analyte	Detection Limit µg/kg, Dry Weight	Sample Results µg/kg, Dry Weight
Acenaphthene	1,000	N.D.
Acenaphthylene	1,000	N.D.
Aniline	1,000	N.D.
Anthracene	1,000	N.D.
Benzidine	25,000	N.D.
Benzoic Acid	5,000	6,000
Benzo(a)anthracene	1,000	N.D.
Benzo(b)fluoranthene	1,000	N.D.
Benzo(k)fluoranthene	1,000	N.D.
Benzo(g,h,i)perylene	1,000	N.D.
Benzo(a)pyrene	1,000	N.D.
Benzyl alcohol	1,000	1,000
Bis(2-chloroethoxy)methane	1,000	N.D.
Bis(2-chloroethyl)ether	1,000	N.D.
Bis(2-chloroisopropyl)ether	1,000	N.D.
Bis(2-ethylhexyl)phthalate	3,300	N.D.
4-Bromophenyl phenyl ether	1,000	N.D.
Butyl benzyl phthalate	1,000	N.D.
4-Chloroaniline	1,000	N.D.
2-Chloronaphthalene	1,000	N.D.
4-Chloro-3-methylphenol	1,000	N.D.
2-Chlorophenol	1,000	N.D.
4-Chlorophenyl phenyl ether	1,000	N.D.
Chrysene	1,000	N.D.
Dibenz(a,h)anthracene	1,000	N.D.
Dibenzofuran	1,000	N.D.
Di-N-butyl phthalate	3,300	N.D.
1,3-Dichlorobenzene	1,000	N.D.
1,4-Dichlorobenzene	1,000	N.D.
1,2-Dichlorobenzene	1,000	N.D.
3,3-Dichlorobenzidine	5,000	N.D.
2,4-Dichlorophenol	1,000	N.D.
Diethyl phthalate	1,000	N.D.
2,4-Dimethylphenol	1,000	N.D.
Dimethyl phthalate	1,000	26,000
4,6-Dinitro-2-methylphenol	5,000	N.D.
2,4-Dinitrophenol	5,000	N.D.

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Ecology & Environment	Client Project ID:	ZT2051, USEPA/Mark Twain	Sampled:	Sep 1, 1993
111 W. Jackson Blvd.	Sample Descript:	Solid: D03	Received:	Sep 2, 1993
Chicago, IL 60604	Analysis Method:	EPA 8270	Extracted:	Sep 2, 1993
Attention: Mary Jane Ripp	Lab Number:	309-0041	Analyzed:	Sep 6, 1993
			Reported:	Sep 8, 1993

SEMI-VOLATILE ORGANICS by GC/MS (EPA 8270)

Analyte	Detection Limit µg/kg, Dry Weight	Sample Results µg/kg, Dry Weight
2,4-Dinitrotoluene	1.000	N.D.
2,6-Dinitrotoluene	1.000	N.D.
Di-N-octyl phthalate	1.000	N.D.
Fluoranthene	1.000	N.D.
Fluorene	1.000	N.D.
Hexachlorobenzene	1.000	N.D.
Hexachlorobutadiene	1.000	N.D.
Hexachlorocyclopentadiene	1.000	N.D.
Hexachloroethane	1.000	N.D.
Indeno(1,2,3-cd)pyrene	1.000	N.D.
Isophorone	1.000	N.D.
2-Methylnaphthalene	1.000	N.D.
2-Methylphenol	1.000	N.D.
4-Methylphenol	1.000	N.D.
Naphthalene	1.000	N.D.
2-Nitroaniline	5.000	N.D.
3-Nitroaniline	5.000	N.D.
4-Nitroaniline	5.000	N.D.
Nitrobenzene	1.000	N.D.
2-Nitrophenol	1.000	N.D.
4-Nitrophenol	5.000	N.D.
N-Nitrosodiphenylamine	1.000	N.D.
N-Nitroso-di-N-propylamine	1.000	N.D.
Pentachlorophenol	5.000	N.D.
Phenanthrene	1.000	N.D.
Phenol	1.000	N.D.
Pyrene	1.000	N.D.
1,2,4-Trichlorobenzene	1.000	N.D.
2,4,5-Trichlorophenol	5.000	N.D.
2,4,6-Trichlorophenol	1.000	N.D.

Analytes reported as N.D. were not present above the stated limit of detection. Because matrix effects and/or other factors required additional sample dilution, detection limits for this sample have been raised.

GREAT LAKES ANALYTICAL

Kevin W. Keeley
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Ecology & Environment	Client Project ID:	ZT2051, USEPA/Mark Twain	Sampled:	Sep 1, 1993
111 W. Jackson Blvd.	Sample Descript:	Solid: D04	Received:	Sep 2, 1993
Chicago, IL 60604	Analysis Method:	EPA 8270	Extracted:	Sep 2, 1993
Attention: Mary Jane Ripp	Lab Number:	309-0042	Analyzed:	Sep 6, 1993
			Reported:	Sep 8, 1993

SEMI-VOLATILE ORGANICS by GC/MS (EPA 8270)

Analyte	Detection Limit µg/kg, Dry Weight	Sample Results µg/kg, Dry Weight
Acenaphthene	18,000	N.D.
Acenaphthylene	18,000	N.D.
Aniline	18,000	N.D.
Anthracene	18,000	N.D.
Benzidine	450,000	N.D.
Benzoic Acid	90,000	N.D.
Benzo(a)anthracene	18,000	N.D.
Benzo(b)fluoranthene	18,000	N.D.
Benzo(k)fluoranthene	18,000	N.D.
Benzo(g,h,i)perylene	18,000	N.D.
Benzo(a)pyrene	18,000	N.D.
Benzyl alcohol	18,000	N.D.
Bis(2-chloroethoxy)methane	18,000	N.D.
Bis(2-chloroethyl)ether	18,000	N.D.
Bis(2-chloroisopropyl)ether	18,000	N.D.
Bis(2-ethylhexyl)phthalate	59,000	N.D.
4-Bromophenyl phenyl ether	18,000	N.D.
Butyl benzyl phthalate	**18,000**	**75,000**
4-Chloroaniline	18,000	N.D.
2-Chloronaphthalene	18,000	N.D.
4-Chloro-3-methylphenol	18,000	N.D.
2-Chlorophenol	18,000	N.D.
4-Chlorophenyl phenyl ether	18,000	N.D.
Chrysene	18,000	N.D.
Dibenz(a,h)anthracene	18,000	N.D.
Dibenzofuran	18,000	N.D.
Di-N-butyl phthalate	**59,000**	**77,000**
1,3-Dichlorobenzene	18,000	N.D.
1,4-Dichlorobenzene	18,000	N.D.
1,2-Dichlorobenzene	18,000	N.D.
3,3-Dichlorobenzidine	90,000	N.D.
2,4-Dichlorophenol	18,000	N.D.
Diethyl phthalate	18,000	N.D.
2,4-Dimethylphenol	18,000	N.D.
Dimethyl phthalate	18,000	N.D.
4,6-Dinitro-2-methylphenol	90,000	N.D.
2,4-Dinitrophenol	90,000	N.D.

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Ecology & Environment	Client Project ID:	ZT2051 USEPA/Mark Twain	Sampled:	Sep 1, 1993
111 W. Jackson Blvd.	Sample Descript:	Solid: D04	Received:	Sep 2, 1993
Chicago, IL 60604	Analysis Method:	EPA 8270	Extracted:	Sep 2, 1993
Attention: Mary Jane Ripp	Lab Number:	309-0042	Analyzed:	Sep 6, 1993
			Reported:	Sep 8, 1993

SEMI-VOLATILE ORGANICS by GC/MS (EPA 8270)

Analyte	Detection Limit µg/kg, Dry Weight	Sample Results µg/kg, Dry Weight
2,4-Dinitrotoluene	18,000	N.D.
2,6-Dinitrotoluene	18,000	N.D.
Di-N-octyl phthalate	18,000	N.D.
Fluoranthene	18,000	N.D.
Fluorene	18,000	N.D.
Hexachlorobenzene	18,000	N.D.
Hexachlorobutadiene	18,000	N.D.
Hexachlorocyclopentadiene	18,000	N.D.
Hexachloroethane	18,000	N.D.
Indeno(1,2,3-cd)pyrene	18,000	N.D.
Isophorone	18,000	N.D.
2-Methylnaphthalene	18,000	N.D.
2-Methylphenol	18,000	N.D.
4-Methylphenol	18,000	N.D.
Naphthalene	18,000	N.D.
2-Nitroaniline	90,000	N.D.
3-Nitroaniline	90,000	N.D.
4-Nitroaniline	90,000	N.D.
Nitrobenzene	18,000	N.D.
2-Nitrophenol	18,000	N.D.
4-Nitrophenol	90,000	N.D.
N-Nitrosodiphenylamine	18,000	N.D.
N-Nitroso-di-N-propylamine	18,000	N.D.
Pentachlorophenol	90,000	N.D.
Phenanthrene	18,000	N.D.
Phenol	18,000	N.D.
Pyrene	18,000	N.D.
1,2,4-Trichlorobenzene	18,000	N.D.
2,4,5-Trichlorophenol	90,000	N.D.
2,4,6-Trichlorophenol	18,000	N.D.

Analytes reported as N.D. were not present above the stated limit of detection. Because matrix effects and/or other factors required additional sample dilution, detection limits for this sample have been raised.

GREAT LAKES ANALYTICAL

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3090041.ECE <4>

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GREAT LAKES ANALYTICAL 1380 Busch Parkway • Buffalo Grove, Illinois 60089 (708) 808-7766 FAX (708) 808-7772

Ecology & Environment	Client Project ID:	ZT2051, USEPA/Mark Twain	Sampled:	Sep 1, 1993
111 W. Jackson Blvd.	Sample Descript:	Liquid: D05	Received:	Sep 2, 1993
Chicago, IL 60604	Analysis Method:	EPA 8270	Extracted:	Sep 3, 1993
Attention: Mary Jane Ripp	Lab Number:	309-0043	Analyzed:	Sep 6, 1993
			Reported:	Sep 8, 1993

SEMI-VOLATILE ORGANICS by GC/MS (EPA 8270)

Analyte	Detection Limit mg/L	Sample Results mg/L
Acenaphthene	2.0	N.D.
Acenaphthylene	2.0	N.D.
Aniline	2.0	N.D.
Anthracene	2.0	N.D.
Benzidine	50	N.D.
Benzoic Acid	10	N.D.
Benzo(a)anthracene	2.0	N.D.
Benzo(b)fluoranthene	2.0	N.D.
Benzo(k)fluoranthene	2.0	N.D.
Benzo(g,h,i)perylene	2.0	N.D.
Benzo(a)pyrene	2.0	N.D.
Benzyl alcohol	2.0	N.D.
Bis(2-chloroethoxy)methane	2.0	N.D.
Bis(2-chloroethyl)ether	2.0	N.D.
Bis(2-chloroisopropyl)ether	2.0	N.D.
Bis(2-ethylhexyl)phthalate	10	N.D.
4-Bromophenyl phenyl ether	2.0	N.D.
Butyl benzyl phthalate	2.0	N.D.
4-Chloroaniline	2.0	N.D.
2-Chloronaphthalene	2.0	N.D.
4-Chloro-3-methylphenol	2.0	N.D.
2-Chlorophenol	2.0	N.D.
4-Chlorophenyl phenyl ether	2.0	N.D.
Chrysene	2.0	N.D.
Dibenz(a,h)anthracene	2.0	N.D.
Dibenzofuran	2.0	N.D.
Di-N-butyl phthalate	10	N.D.
1,3-Dichlorobenzene	2.0	N.D.
1,4-Dichlorobenzene	2.0	N.D.
1,2-Dichlorobenzene	2.0	N.D.
3,3-Dichlorobenzidine	10	N.D.
2,4-Dichlorophenol	2.0	N.D.
Diethyl phthalate	2.0	N.D.
2,4-Dimethylphenol	2.0	N.D.
Dimethyl phthalate	2.0	N.D.
4,6-Dinitro-2-methylphenol	10	N.D.
2,4-Dinitrophenol	10	N.D.

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Ecology & Environment	Client Project ID:	ZT2051, USEPA/Mark Twain	Sampled:	Sep 1, 1993
111 W. Jackson Blvd.	Sample Descript:	Liquid: D05	Received:	Sep 2, 1993
Chicago, IL 60604	Analysis Method:	EPA 8270	Extracted:	Sep 3, 1993
Attention: Mary Jane Ripp	Lab Number:	309-0043	Analyzed:	Sep 6, 1993
			Reported:	Sep 8, 1993

SEMI-VOLATILE ORGANICS by GC/MS (EPA 8270)

Analyte	Detection Limit mg/L	Sample Results mg/L
2,4-Dinitrotoluene	2.0	N.D.
2,6-Dinitrotoluene	2.0	N.D.
Di-N-octyl phthalate	2.0	N.D.
Fluoranthene	2.0	N.D.
Fluorene	2.0	N.D.
Hexachlorobenzene	2.0	N.D.
Hexachlorobutadiene	2.0	N.D.
Hexachlorocyclopentadiene	2.0	N.D.
Hexachloroethane	2.0	N.D.
Indeno(1,2,3-cd)pyrene	2.0	N.D.
Isophorone	2.0	N.D.
2-Methylnaphthalene	2.0	N.D.
2-Methylphenol	2.0	N.D.
4-Methylphenol	2.0	N.D.
Naphthalene	2.0	N.D.
2-Nitroaniline	10	N.D.
3-Nitroaniline	10	N.D.
4-Nitroaniline	10	N.D.
Nitrobenzene	2.0	N.D.
2-Nitrophenol	2.0	N.D.
4-Nitrophenol	10	N.D.
N-Nitrosodiphenylamine	2.0	N.D.
N-Nitroso-di-N-propylamine	2.0	N.D.
Pentachlorophenol	10	N.D.
Phenanthrene	2.0	N.D.
Phenol	2.0	N.D.
Pyrene	2.0	N.D.
1,2,4-Trichlorobenzene	2.0	N.D.
2,4,5-Trichlorophenol	10	N.D.
2,4,6-Trichlorophenol	2.0	N.D.

Analytes reported as N.D. were not present above the stated limit of detection.

GREAT LAKES ANALYTICAL

Kevin W. Keeley
Laboratory Director

3090039.ECE <31>

020

GREAT LAKES ANALYTICAL 1380 Busch Parkway • Buffalo Grove, Illinois 60089 (708) 808-7766 FAX (708) 808-7772

Ecology & Environment	Client Project ID:	ZT2051, USEPA/Mark Twain	Sampled:	Sep 1, 1993
111 W. Jackson Blvd.	Sample Descript:	Liquid: D06	Received:	Sep 2, 1993
Chicago, IL 60604	Analysis Method:	EPA 8270	Extracted:	Sep 3, 1993
Attention: Mary Jane Ripp	Lab Number:	309-0044	Analyzed:	Sep 6, 1993
			Reported:	Sep 8, 1993

SEMI-VOLATILE ORGANICS by GC/MS (EPA 8270)

Analyte	Detection Limit mg/L	Sample Results mg/L
Acenaphthene	20	N.D.
Acenaphthylene	20	N.D.
Aniline	20	N.D.
Anthracene	20	N.D.
Benzidine	500	N.D.
Benzoic Acid	100	N.D.
Benzo(a)anthracene	20	N.D.
Benzo(b)fluoranthene	20	N.D.
Benzo(k)fluoranthene	20	N.D.
Benzo(g,h,i)perylene	20	N.D.
Benzo(a)pyrene	20	N.D.
Benzyl alcohol	20	N.D.
Bis(2-chloroethoxy)methane	20	N.D.
Bis(2-chloroethyl)ether	20	N.D.
Bis(2-chloroisopropyl)ether	20	N.D.
Bis(2-ethylhexyl)phthalate	100	N.D.
4-Bromophenyl phenyl ether	20	N.D.
Butyl benzyl phthalate	20	N.D.
4-Chloroaniline	20	N.D.
2-Chloronaphthalene	20	N.D.
4-Chloro-3-methylphenol	20	N.D.
2-Chlorophenol	20	N.D.
4-Chlorophenyl phenyl ether	20	N.D.
Chrysene	20	N.D.
Dibenz(a,h)anthracene	20	N.D.
Dibenzofuran	20	N.D.
Di-N-butyl phthalate	100	N.D.
1,3-Dichlorobenzene	20	N.D.
1,4-Dichlorobenzene	20	N.D.
1,2-Dichlorobenzene	20	N.D.
3,3-Dichlorobenzidine	100	N.D.
2,4-Dichlorophenol	20	N.D.
Diethyl phthalate	20	N.D.
2,4-Dimethylphenol	20	N.D.
Dimethyl phthalate	20	N.D.
4,6-Dinitro-2-methylphenol	100	N.D.
2,4-Dinitrophenol	100	N.D.

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Ecology & Environment	Client Project ID:	ZT2051, USEPA, Mark Twain	Sampled:	Sep 1, 1993
111 W. Jackson Blvd.	Sample Descript:	Liquid: D06	Received:	Sep 2, 1993
Chicago, IL 60604	Analysis Method:	EPA 8270	Extracted:	Sep 3, 1993
Attention: Mary Jane Ripp	Lab Number:	309-0044	Analyzed:	Sep 6, 1993
			Reported:	Sep 8, 1993

SEMI-VOLATILE ORGANICS by GC/MS (EPA 8270)

Analyte	Detection Limit mg/L	Sample Results mg/L
2,4-Dinitrotoluene	20.0	N.D.
2,6-Dinitrotoluene	20.0	N.D.
Di-N-octyl phthalate	20.0	N.D.
Fluoranthene	20.0	N.D.
Fluorene	20.0	N.D.
Hexachlorobenzene	20.0	N.D.
Hexachlorobutadiene	20.0	N.D.
Hexachlorocyclopentadiene	20.0	N.D.
Hexachloroethane	20.0	N.D.
Indeno(1,2,3-cd)pyrene	20.0	N.D.
Isophorone	20.0	N.D.
2-Methylnaphthalene	20.0	N.D.
2-Methylphenol	20.0	N.D.
4-Methylphenol	20.0	N.D.
Naphthalene	20.0	N.D.
2-Nitroaniline	100	N.D.
3-Nitroaniline	100	N.D.
4-Nitroaniline	100	N.D.
Nitrobenzene	20.0	N.D.
2-Nitrophenol	20.0	N.D.
4-Nitrophenol	100	N.D.
N-Nitrosodiphenylamine	20.0	N.D.
N-Nitroso-di-N-propylamine	20.0	N.D.
Pentachlorophenol	100	N.D.
Phenanthrene	20.0	N.D.
Phenol	20.0	N.D.
Pyrene	20.0	N.D.
1,2,4-Trichlorobenzene	20.0	N.D.
2,4,5-Trichlorophenol	100	N.D.
2,4,6-Trichlorophenol	20.0	N.D.

Analytes reported as N.D. were not present above the stated limit of detection. Because matrix effects and/or other factors required additional sample dilution, detection limits for this sample have been raised.

GREAT LAKES ANALYTICAL

Kevin W. Keeley
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3090039.ECE <33>

02

GREAT LAKES ANALYTICAL 1380 Busch Parkway • Buffalo Grove, Illinois 60089 (708) 808-7766 FAX (708) 808-7772

Ecology & Environment	Client Project ID:	ZT2051, USEPA/Mark Twain	Sampled:	Sep 1, 1993
111 W. Jackson Blvd.	Sample Descript:	Liquid: D01	Received:	Sep 2, 1993
Chicago, IL 60604			Extracted:	Sep 1-7, 1993
Attention: Mary Jane Ripp	Lab Number:	309-0039	Analyzed:	Sep 3-8, 193
			Reported:	Sep 8, 1993

RCRA METALS

Analyte	EPA Method	Detection Limit mg/L (ppm)	Sample Results mg/L (ppm)
Arsenic	3010/7060	0.050	N.D.
Barium	3010/6010	0.50	N.D.
Cadmium	3010/6010	0.010	N.D.
Chromium	3010/6010	0.010	N.D.
Lead	3010/7421	0.10	N.D.
Mercury	7470	0.0020	N.D.
Selenium	3010/7740	0.010	N.D.
Silver	3010/6010	0.050	N.D.

Analytes reported as N.D. were not present above the stated limit of detection.

GREAT LAKES ANALYTICAL

Kevin W. Keeley
Laboratory Director

GREAT LAKES ANALYTICAL
1380 Busch Parkway • Buffalo Grove Illinois 60089 (708) 808-7766 FAX (708) 808-7772

Ecology & Environment
111 W. Jackson Blvd.
Chicago, IL 60604
Attention: Mary Jane Ripp

Client Project ID: ZT2051, USEPA/Mark Twain
Sample Descript: Liquid: D02
Lab Number: 309-0040

Sampled: Sep 1, 1993
Received: Sep 2, 1993
Extracted: Sep 1-7, 1993
Analyzed: Sep 3-8, 193
Reported: Sep 8, 1993

RCRA METALS

Analyte	EPA Method	Detection Limit mg/L (ppm)	Sample Results mg/L (ppm)
Arsenic	3010/7060	0.050	N.D.
Barium	3010/6010	0.50	N.D.
Cadmium	3010/6010	0.010	0.036
Chromium	3010/6010	0.010	0.062
Lead	3010/7421	0.10	N.D.
Mercury	7470	0.0020	N.D.
Selenium	3010/7740	0.010	N.D.
Silver	3010/6010	0.050	N.D.

Analytes reported as N.D. were not present above the stated limit of detection.

GREAT LAKES ANALYTICAL

Kevin W. Keeley
Laboratory Director

3090039.ECE <2>

GREAT LAKES ANALYTICAL 1380 Busch Parkway • Buffalo Grove, Illinois 60089 (708) 808-7766 FAX (708) 808-7772

Ecology & Environment	Client Project ID:	ZT2051, USEPA/Mark Twain	Sampled:	Sep 1, 1993
111 W. Jackson Blvd.	Sample Descript:	Liquid: D05	Received:	Sep 2, 1993
Chicago, IL 60604			Extracted:	Sep 1-7, 1993
Attention: Mary Jane Ripp	Lab Number:	309-0043	Analyzed:	Sep 3-8, 193
			Reported:	Sep 8, 1993

RCRA METALS

Analyte	EPA Method	Detection Limit mg/L (ppm)	Sample Results mg/L (ppm)
Arsenic	3010/7060	0.050	N.D.
Barium	3010/6010	0.50	N.D.
Cadmium	3010/6010	0.010	N.D.
Chromium	3010/6010	0.20	N.D.
Lead	3010/7421	0.10	N.D.
Mercury	7470	0.0050	N.D.
Selenium	3010/7740	0.020	N.D.
Silver	3010/6010	0.050	N.D.

Analytes reported as N.D. were not present above the stated limit of detection.

GREAT LAKES ANALYTICAL

Kevin W. Keeley
Laboratory Director

3090039.ECE <3>

GREAT LAKES ANALYTICAL 1380 Busch Parkway • Buffalo Grove, Illinois 60089 (708) 808-7766 FAX (708) 808-7772

Ecology & Environment
111 W. Jackson Blvd.
Chicago, IL 60604
Attention: Mary Jane Ripp

Client Project ID: ZT2051, USEPA/Mark Twain
Sample Descript: Solid: D03
Lab Number: 309-0041

Sampled: Sep 1, 1993
Received: Sep 2, 1993
Extracted: Sep 1-7, 1993
Analyzed: Sep 3-8, 193
Reported: Sep 8, 1993

RCRA METALS

Analyte	EPA Method	Detection Limit mg/kg, Dry Weight	Sample Results mg/kg, Dry Weight
Arsenic	3050/7060	2.5	N.D.
Barium	3050/6010	25	31
Cadmium	3050/6010	0.51	N.D.
Chromium	3050/6010	0.51	940
Lead	3050/6010	5.1	2,300
Mercury	7471	0.10	N.D.
Selenium	3050/7740	0.51	N.D.
Silver	3050/6010	2.5	N.D.

Analytes reported as N.D. were not present above the stated limit of detection.

GREAT LAKES ANALYTICAL

Kevin W. Keeley
Laboratory Director

3090039.ECE <8>

GREAT LAKES ANALYTICAL 1380 Busch Parkway • Buffalo Grove, Illinois 60089 (708) 808-7766 FAX (708) 808-7772

Ecology & Environment	Client Project ID:	ZT2051, USEPA/Mark Twain	Sampled:	Sep 1, 1993
111 W. Jackson Blvd.	Sample Descript:	Solid: D04	Received:	Sep 2, 1993
Chicago, IL 60604			Extracted:	Sep 1-7, 1993
Attention: Mary Jane Ripp	Lab Number:	309-0042	Analyzed:	Sep 3-8, 193
			Reported:	Sep 8, 1993

RCRA METALS

Analyte	EPA Method	Detection Limit mg/kg , Dry Weight	Sample Results mg/kg , Dry Weight
Arsenic	3050/7060	2.6	N.D.
Barium	3050/6010	26	160
Cadmium	3050/6010	0.53	0.74
Chromium	3050/6010	0.53	2.3
Lead	3050/6010	5.3	8.2
Mercury	7471	0.11	N.D.
Selenium	3050/7740	0.53	N.D.
Silver	3050/6010	2.6	N.D.

Analytes reported as N.D. were not present above the stated limit of detection.

GREAT LAKES ANALYTICAL

Kevin W. Keeley
Laboratory Director

3090039.ECE <9>