

Addendum Report

Preliminary Hydrogeologic Site Assessment

**Eagle Comtronics, Inc.
Clay, New York**

November 1989



O'BRIEN & GERE

ADDENDUM REPORT

PRELIMINARY HYDROGEOLOGIC SITE ASSESSMENT

EAGLE COMTRONICS, INC.

CLAY, NEW YORK

NOVEMBER, 1989

O'BRIEN & GERE ENGINEERS, INC.

P.O. BOX 4873

SYRACUSE, NEW YORK 13221

INTRODUCTION

Earlier this month, October 1989, O'Brien & Gere Engineers, Inc. prepared and submitted to Eagle Comtronics, Inc. a final report entitled "Preliminary Hydrogeologic Site Assessment". This report documented ground water sampling activities conducted on the Eagle Comtronics site in response to recent findings. Due to time constraints, excluded from this report was a discussion of the results for two specific sets of samples which were in the process of being analyzed.

The purpose of this Addendum to the above referenced report is to complete the documentation and report on the results of these two additional sets of samples. The reader is referenced to the initial report for a description of the project and pertinent information surrounding it.

On September 1, 1989, samples for total priority pollutants were obtained from MW1 and MW4. Total priority pollutant samples were obtained from MW1 since this well is located in the area in which spent solvent was allegedly spilled thus causing the ground water contamination already under investigation. The total priority pollutant samples in this area were intended to provide an indication of any other compounds which may be present in the ground water in this source area. Similarly, total priority pollutant samples were obtained from MW4. This well was sampled for total priority pollutant samples in order to establish the ground water quality at an upgradient location, and to assess the quality of ground water flowing from off-site areas.

SAMPLE RESULTS

A. Volatile Organic Compounds

See the initial report for a discussion of the results from samples taken from MW1 and MW4 for volatile organic compounds.

B. Metals

Attachment 1 contains the sample results for priority pollutant metals. With the exception of zinc, all metals analyses from both wells were below detection limits. Zinc was detected in MW1 at 0.03 mg/l, and in MW4 at 0.01 mg/l. All of these results, including zinc, are below the ground water quality standards for metals.

C. Cyanide

Also contained in Attachment 1 are the results for the cyanide analyses. These results indicate non-detectable levels of cyanide from both MW1 and MW4.

D. Pesticides

Attachment 2 contains the sample results for pesticides. The results indicate non-detectable levels of pesticides from both MW1 and MW4. In addition, no detectable levels of pesticides were found in the equipment blank sample.

E. PCBs

Also contained in Attachment 2 are the results for PCB analyses. The results indicate non-detectable levels of PCBs from both MW1 and MW4. In addition, no detectable levels of PCBs were found in the equipment blank sample.

F. Base Neutral Compounds

Attachment 3 contains the sample results for base neutral compounds. With one exception, the results indicate non-detectable levels of base neutral compounds from both MW1 and MW4. The exception is a detectable level (15 ug/l) of bis(2-ethylhexyl) phthalate in MW4. The presence of this commonly occurring compound at 15 ug/l is not indicative of any additional compounds in the ground water.

G. Acid Extractable Compounds

Attachment 4 contains the sample results for acid extractable compounds. The results indicate non-detectable levels of acid extractable compounds from both MW1 and MW4.

H. Phenols

Attachment 5 contains the sample results for phenols. The results indicate the presence of phenols in MW1 at 0.005 mg/l and in MW4 at 0.006 mg/l. These results are within the applicable ground water quality standards.

I. Sample Chain of Custody

Attachment 6 contains the chains of custody for the total priority pollutant samples from MW1 and MW4.

Attachments



O'BRIEN & GERE

ATTACHMENT 1



Laboratory Report

CLIENT O'BRIEN & GERE ENGINEERS, INC. JOB NO. 3435.001.760

DESCRIPTION Eagle Comtronics, Clay, NY - Waters

DATE COLLECTED 9-1-89 DATE REC'D. 9-1-89 DATE ANALYZED _____

Description	MW-4	MW-1		
Sample #	J0097	J0098		
Total Metals:				
SILVER	<0.01	<0.01		
ARSENIC	<0.005	<0.005		
BERYLLIUM	<0.05	<0.05		
CADMIUM	<0.01	<0.01		
CHROMIUM	<0.05	<0.05		
COPPER	<0.01	<0.01		
MERCURY	<0.0005	<0.0005		
NICKEL	<0.05	<0.05		
LEAD	<0.05	<0.05		
ANTIMONY	<0.1	<0.1		
SELENIUM	<0.005	<0.005		
ZINC	0.01	0.03		
THALLIUM	<0.5	<0.5		
Other Analysis:				
CYANIDE	<0.01	<0.01		
			UNITS:	mg/l

Methodology: Federal Register — 40 CFR, Part 136, October 26, 1984

Units: mg/l (ppm) unless otherwise noted

Comments:

OBG Laboratories, Inc., an O'Brien & Gere Limited Company
Box 4942 / 1304 Buckley Rd. / Syracuse, NY 13221 / (315) 457-1494

Authorized:

Thomas A. Alexander

Date: October 18, 1989

ATTACHMENT 2



Pesticide/PCB Priority Pollutants

CLIENT O'BRIEN & GERE ENGINEERS, INC. JOB NO. 3435.001.760

DESCRIPTION Eagle Comtronics, Clay, NY

MW-1 - Water

SAMPLE NO. J0098 DATE COLLECTED 9-1-89 DATE REC'D. 9-1-89 DATE ANALYZED 9-6-89

ppb		ppb	
α -BHC	<0.05	4,4'-DDT	<0.10
γ -BHC	↓	Endosulfan Sulfate	↓
β -BHC		Endrin Aldehyde	
Heptachlor		Methoxychlor	
δ -BHC		Endrin Ketone	
Aldrin		Chlordane	
Heptachlor Epoxide	↓	Toxaphene	<1.0
Endosulfan I		PCB-1221	<0.50
4,4'-DDE		PCB-1232	↓
Dieldrin		PCB-1016/1242	
Endrin		PCB-1248	
4,4'-DDD		PCB-1254	
Endosulfan II		PCB-1260	

Methodology: Federal Register—40 CFR, Part 136, October 26, 1984

Comments:

Authorized: 

Date: October 17, 1989



Pesticide/PCB Priority Pollutants

CLIENT O'BRIEN & GERE ENGINEERS, INC. JOB NO. 3435.001.760

DESCRIPTION Eagle Comtronics, Clay, NY

MW-4 - Water

SAMPLE NO. J0097 DATE COLLECTED 9-1-89 DATE REC'D. 9-1-89 DATE ANALYZED 9-6-89

ppb		ppb	
α -BHC	<0.05	4,4'-DDT	<0.10
γ -BHC	↓	Endosulfan Sulfate	↓
β -BHC		Endrin Aldehyde	
Heptachlor		Methoxychlor	<0.50
δ -BHC		Endrin Ketone	<0.10
Aldrin		Chlordane	<0.50
Heptachlor Epoxide	↓	Toxaphene	<1.0
Endosulfan I		PCB-1221	<0.50
4,4'-DDE	<0.10	PCB-1232	↓
Dieldrin	↓	PCB-1016/1242	
Endrin		PCB-1248	
4,4'-DDD		PCB-1254	<1.0
Endosulfan II	↓	PCB-1260	↓

Methodology: Federal Register—40 CFR, Part 136, October 26, 1984

Comments:

Authorized: Thomas G. Alexander

Date: October 17, 1989



Pesticide/PCB Priority Pollutants

CLIENT O'BRIEN & GERE ENGINEERS, INC. JOB NO. 3435.001.760

DESCRIPTION Eagle Comtronics, Clay, NY

Bailer Blank - Water

SAMPLE NO. J0099 DATE COLLECTED 9-1-89 DATE REC'D. 9-1-89 DATE ANALYZED 9-6-89

ppb		ppb	
α -BHC	<0.05	4,4'-DDT	<0.10
γ -BHC		Endosulfan Sulfate	
β -BHC		Endrin Aldehyde	
Heptachlor		Methoxychlor	<0.50
δ -BHC		Endrin Ketone	<0.10
Aldrin		Chlordane	<0.50
Heptachlor Epoxide		Toxaphene	<1.0
Endosulfan I		PCB-1221	<0.50
4,4'-DDE	<0.10	PCB-1232	
Dieldrin		PCB-1016/1242	
Endrin		PCB-1248	
4,4'-DDD		PCB-1254	<1.0
Endosulfan II		PCB-1260	

Methodology: Federal Register—40 CFR, Part 136, October 26, 1984

Comments:

Authorized: Thomas R. Alexander

Date: October 17, 1989

ATTACHMENT 3



Base/Neutral Priority Pollutants

CLIENT O'BRIEN & GERE ENGINEERS, INC. JOB NO. 3435.001.760
DESCRIPTION Eagle Comtronics, Clay, NY
MW-1 - Water
SAMPLE NO. J0098 DATE COLLECTED 9-1-89 DATE REC'D. 9-1-89 DATE ANALYZED 9-7-89

ppb		ppb	
1,3-Dichlorobenzene	<11.	Diethylphthalate	<11.
1,4-Dichlorobenzene		N-nitrosodiphenylamine	
1,2-Dichlorobenzene		Hexachlorobenzene	
Hexachloroethane		4-Bromophenyl phenyl ether	
Bis (2-chloroethyl) ether		Phenanthrene	
Bis (2-chloroisopropyl) ether		Anthracene	
N-Nitrosodi-n-propylamine		Di-n-butyl phthalate	
Nitrobenzene		Fluoranthene	
Hexachlorobutadiene		Pyrene	
1,2,4-Trichlorobenzene		Benzidine	<54.
Isophorone		Butyl benzyl phthalate	<11.
Naphthalene		Bis(2-ethylhexyl)phthalate	
Bis (2-chloroethoxy) methane		Chrysene	
Hexachlorocyclopentadiene		Benzo(a)anthracene	
2-Chloronaphthalene		3,3-Dichlorobenzidine	<22.
Acenaphthylene		Di-n-octylphthalate	<11.
Acenaphthene		Benzo(b)fluoranthene	
Dimethyl phthalate		Benzo(k)fluoranthene	
2,6-Dinitrotoluene		Benzo(a)pyrene	
Fluorene		Indeno(1,2,3-cd)pyrene	
4-Chlorophenyl phenyl ether		Dibenzo(a,h)anthracene	
2,4-Dinitrotoluene		Benzo(g,h,i)perylene	
1,2-Diphenylhydrazine		N-Nitrosodimethyl Amine	

Methodology: Federal Register — 40 CFR, Part 136, October 26, 1984

Comments:

Authorized: 

Date: October 17, 1989



Base/Neutral Priority Pollutants

CLIENT O'BRIEN & GERE ENGINEERS, INC. JOB NO. 3435.001.760

DESCRIPTION Eagle Comtronics, Clay, NY

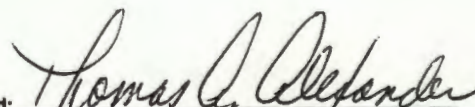
MW-4 - Water

SAMPLE NO. J0097 DATE COLLECTED 9-1-89 DATE REC'D. 9-1-89 DATE ANALYZED 9-7-89

ppb		ppb	
1,3-Dichlorobenzene	<10.	Diethylphthalate	<10.
1,4-Dichlorobenzene		N-nitrosodiphenylamine	
1,2-Dichlorobenzene		Hexachlorobenzene	
Hexachloroethane		4-Bromophenyl phenyl ether	
Bis (2-chloroethyl) ether		Phenanthrene	
Bis (2-chloroisopropyl) ether		Anthracene	
N-Nitrosodi-n-propylamine		Di-n-butyl phthalate	
Nitrobenzene		Fluoranthene	
Hexachlorobutadiene		Pyrene	↓
1,2,4-Trichlorobenzene		Benzidine	<53.
Isophorone		Butyl benzyl phthalate	<10.
Naphthalene		Bis(2-ethylhexyl)phthalate	15.
Bis (2-chloroethoxy) methane		Chrysene	<10.
Hexachlorocyclopentadiene		Benzo(a)anthracene	<10.
2-Chloronaphthalene		3,3-Dichlorobenzidine	<21.
Acenaphthylene		Di-n-octylphthalate	<10.
Acenaphthene		Benzo(b)fluoranthene	
Dimethyl phthalate		Benzo(k)fluoranthene	
2,6-Dinitrotoluene		Benzo(a)pyrene	
Fluorene		Indeno(1,2,3-cd)pyrene	
4-Chlorophenyl phenyl ether		Dibenzo(a,h)anthracene	
2,4-Dinitrotoluene		Benzo(g,h,i)perylene	
1,2-Diphenylhydrazine	↓	N-Nitrosodimethyl Amine	↓

Methodology: Federal Register — 40 CFR, Part 136, October 26, 1984

Comments:

Authorized: 

Date: October 17, 1989

ATTACHMENT 4



Acid Priority Pollutants

CLIENT O'BRIEN & GERE ENGINEERS, INC. JOB NO. 3435.001.760
DESCRIPTION Eagle Comtronics, Clay, NY
MW-1 - Water
SAMPLE NO. J0098 DATE COLLECTED 9-1-89 DATE REC'D. 9-1-89 DATE ANALYZED 9-7-89

	ppb		ppb
2-Chlorophenol	<11.	2,4,6-Trichlorophenol	<11.
2-Nitrophenol	↓	4-Chloro-3-methylphenol	<11.
Phenol	↓	2,4-Dinitrophenol	<54.
2,4-Dimethylphenol	↓	2-Methyl-4,6-dinitrophenol	↓
2,4-Dichlorophenol	↓	Pentachlorophenol	↓
		4-Nitrophenol	↓

Methodology: Federal Register — 40 CFR, Part 136, October 26, 1984

Comments:

Benzyl Alcohol	<11.
2-Methylphenol	↓
4-Methylphenol	↓
Benzoic Acid	<54.
4-Chloroaniline	<11.
2-Methylnaphthalene	↓
2,4,5-Trichlorophenol	<54.
2-Nitroaniline	↓
3-Nitroaniline	↓
Dibenzofuran	<11.
4-Nitroaniline	<54.

Authorized: Thomas A. Alexander
Date: October 17, 1989



Acid Priority Pollutants

CLIENT O'BRIEN & GERE ENGINEERS, INC. JOB NO. 3435.001.760
DESCRIPTION Eagle Comtronics, Clay, NY
MW-4 - Water
SAMPLE NO. J0097 DATE COLLECTED 9-1-89 DATE REC'D. 9-1-89 DATE ANALYZED 9-7-89

	ppb		ppb
2-Chlorophenol	<10.	2,4,6-Trichlorophenol	<10.
2-Nitrophenol	↓	4-Chloro-3-methylphenol	<10.
Phenol		2,4-Dinitrophenol	<53.
2,4-Dimethylphenol		2-Methyl-4,6-dinitrophenol	↓
2,4-Dichlorophenol	↓	Pentachlorophenol	
		4-Nitrophenol	↓

Methodology: Federal Register — 40 CFR, Part 136, October 26, 1984

Comments:

Benzyl Alcohol	<10.
2-Methylphenol	↓
4-Methylphenol	↓
Benzoic Acid	<53.
4-Chloroaniline	<10.
2-Methylnaphthalene	↓
2,4,5-Trichlorophenol	<53.
2-Nitroaniline	↓
3-Nitroaniline	↓
Dibenzofuran	<10.
4-Nitroaniline	<53.

ATTACHMENT 5



Date: October 6, 1989

ATTACHMENT 6



LABORATORIES, INC.

CHAIN OF CUSTODY RECORD

SURVEY EAGLE COMTRONICS INC.	SAMPLERS: (Signature) <i>John G. Mason</i>
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STATION NUMBER	STATION LOCATION	DATE	TIME	SAMPLE TYPE			SEQ. NO.	NO. OF CONTAINERS	ANALYSIS REQUIRED
				Water		Air			
				Comb.	Grav.				
MW-2E	NORTH OF BUILDING	9/19/89	1:45 PM	✓			1	1	PHENOLS
MW-3E	"	9/19/89	2:10 PM	✓			2	1	PHENOLS
MW-5	"	"	2:25 PM	✓			3	1	PHENOLS
MW-7	NORTH EAST CORNER	"	2:40 PM	✓			4	1	PHENOLS
MW-6	EAST SIDE	"	2:55 PM	✓			5	1	PHENOLS
MW-4	SOUTH SIDE	"	3:15 PM	✓			6	1	PHENOLS
MW-1	"	"	3:40 PM	✓			7	1	PHENOLS

Relinquished by: (Signature) <i>John G. Mason</i>	Received by: (Signature)	Date/Time
Relinquished by: (Signature)	Received by: (Signature)	Date/Time
Relinquished by: (Signature)	Received by: (Signature)	Date/Time
Relinquished by: (Signature)	Received by Mobile Laboratory for field analysis: (Signature)	Date/Time
Dispatched by: (Signature)	Date/Time 9/19/89 4:00 PM	Received for Laboratory by: Wendy Smith
Method of Shipment:		Date/Time 9/20/89 07:20

