PROJECT NUMBER 444-010-95

QUARTERLY GROUND WATER SAMPLING
JAMECO INDUSTRIES, INC.
248 WYANDANCH, AVE
WYANDANCH, NEW YORK

August 28, 1995

Prepared For:

New York State Department
of Environmental Conservation

and

Camille Gagnon
Watts Industries, Inc.
P.O. Box 6431
South Main Street
Franklin, NH 03235

GEC **Goldman** *Environmental Consultants, Inc.*
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QUARTERLY GROUND WATER SAMPLING REPORT
248 WYANDANCH AVENUE
WYANDANCH, NEW YORK

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1.0 Introduction

Goldman Environmental Consultants, Inc. (GEC) of Randolph, Massachusetts has been contracted by Watts Industries, Inc. (Watts) and Jameco Industries, Inc. (Jameco) to conduct Quarterly Ground Water Sampling at the Jameco facility located at 248 Wyandanch, Avenue in Wyandanch, New York. These activities are being conducted in accordance with Jameco's Maintenance Plan, that was approved by the New York Department of Environmental Conservation (NYSDEC).

The first quarterly sampling was conducted in July, 1995 by GEC and Jameco's previous consultants, AKRF, Inc. In conjunction with this sampling effort, GEC and AKRF also conducted a limited investigation to determine if there was evidence that a release of metals and/or chlorinated compounds had occurred beneath the site building. This investigation included the installation of three ground water observation wells through the floor of the building. As a result of this investigation dissolved-phase chlorinated compounds were detected in the shallow portions of the overburden aquifer beneath the building. Complete documentation of this investigation is presented in a document entitled Maintenance Plan First Quarterly Report prepared by AKRF and completed in August, 1994.

As a result of the investigations conducted by GEC and AKRF, and after conversations between GEC, Watts, and NYSDEC personnel, the scope of quarterly ground water sampling was amended so as to better characterize ground water conditions across the site. Changes in the scope were limited to adding one of the newly installed monitoring wells (MW-12) to the sampling list and removing two of the wells (MW-4 and MW-6) from the list. This submittal represents the first ground water sampling round where the revised scope of sampling and analysis has been employed.

All activities were conducted in accordance with GEC's Standard Operating Procedures and QA/QC Plan, copies of which are attached as Appendix A.

2.0 Ground Water Sampling and Surveying

On July 24, 1995, GEC personnel collected ground water samples from monitoring wells MW-1, MW-2, MW-3, MW-5, MW-7, MW-9 and MW-12. Prior to sample collection the approximate volume of standing water in each well was

computed and a volume of water equal to between three and five times the volume of standing water was evacuated from the monitoring well. GEC utilized dedicated standard check-valve bailers and pre-cleaned electric submersible pumps. The samples were collected using dedicated plastic bailers or electric submersible pumps and were stored on ice in laboratory-issued, preserved, glass and nalgene containers. All samples were shipped overnight to National Environmental Testing (NET), a New York State certified laboratory in Bedford, Massachusetts under fully documented chain of custody procedures.

Prior to initiation of well evacuation and sampling activities, GEC measured the depth to water in all of the on-site monitoring wells. Well MW-6, located in a dirt parking area, could not be located at the time of the site visit, and was not gauged as part of this effort. GEC personnel conducted a survey of monitoring wells, using standard "rod and level techniques" to determine the relative elevation of the monitoring wells as part of previous site investigations. As previously noted, well MW-6 could not be located during the site visit. Monitoring wells MW-10, MW-11 and MW-12, are located inside the site building are were only recently made accessible for surveying. Depth to water and ground water elevation for these wells is included in this Quarterly Sampling Report.

The results of the ground water gauging and well survey were used to determine the relative elevation of ground water at the site and to determine the direction of ground water flow. As a result of these activities, the ground water flow at the site appears to be toward the southeast. Complete results of the gauging and survey are included as Table 1.

3.0 Laboratory Analysis

Ground water samples were submitted for laboratory analysis to determine the concentration of volatile organic compounds (VOCs) (via EPA Method 524.2), hexavalent chrome (via Colorimetric, 307-B Methods) and 13 Priority Pollutant Metals (total). The laboratory results are summarized on Tables 2 and 3 attached, and a complete laboratory report is included as Appendix B. Also included on these tables are the results of the sampling that was conducted during previous rounds. The results of these analyses are also summarized in the paragraphs below.

Volatile Organic Compounds

Results of recent analyses indicate that the concentrations of volatile organic compounds in ground water at the site remain essentially unchanged from previous sampling rounds. Low concentrations of chlorinated compounds were detected in the upgradient observation well (MW-1) and higher concentrations were detected in a well situated within the building footprint and downgradient of the building.

Hexavalent Chrome and Metals

Concentrations of total and dissolved metals and hexavalent chrome remain essentially unchanged from previous sampling rounds. Concentrations are relatively low across the entire site but are somewhat higher in the immediate vicinity of the plating area (within the building footprint) and downgradient of the former leaching lagoons. Hexavalent chrome was not detected in ground water samples collected from any of the observation wells.

4.0 Conclusions

In accordance with the NYSDEC-approved Maintenance Plan, and on behalf of Jameco and Watts, GEC has completed the most recent round of quarterly ground water sampling at the Jameco facility, located at 248 Wyandanch, Avenue in Wyandanch, New York.

The results of the ground water sampling indicate that concentrations of volatile organic compound and metals remain generally unchanged from the previous sampling rounds. GEC will continue to collect ground water samples from designated wells on a regular basis. The next sampling round is tentatively scheduled for July 1995.

5.0 Warranty

The conclusions contained in this report are based on the information readily available to GEC as of August 28, 1995. GEC provides no warranties on information provided by third parties and contained herein. Data compiled was in accordance with GEC's approved scope of services, and the NYSDEC -approved Maintenance Plan and should not be construed beyond its limitations. Any interpretations or use of this report other than those expressed herein are not warranted. The use, partial use, or duplication of this report without the express written consent of Goldman Environmental Consultants, Inc. is strictly prohibited.

Respectfully submitted,
Goldman Environmental Consultants, Inc.

Prepared By:

Samuel W. Butcher
Senior Project Manager

Reviewed By:

For Gary Siegel: Paul Bartlett

Gary W. Siegel, P.E.
Vice President,
Environmental Engineering

TABLES

GROUNDWATER ELEVATION MEASUREMENTS

Jameco Industries, Inc.
248 Wyandanch, Ave., Wyandanch, New York
(unit, feet)

Well Number	Screened Interval Depth	Depth To Water	Measuring Point Elevation	Groundwater Elevation
MW-1				
10/4/94	6.43 to 16.43	11.27	101.47	90.2
1/26/95		11.08	101.47	90.39
4/19/95		11.15	101.47	90.32
7/24/95		12.34	101.47	89.13
MW-2				
10/4/94	6.00 to 16.00	11.02	100	88.98
1/26/95		10.79	100	89.21
4/19/95		10.9	100	89.10
7/24/95		11.92	100	88.08
MW-3				
10/4/94	9.91 to 19.91	14.61	102.57	87.96
1/26/95		14.44	102.57	88.13
4/19/95		14.56	102.57	88.01
7/24/95		15.49	102.57	87.08
MW-4				
10/4/94	10.05 to 20.05	13.85	103.41	89.56
1/26/95		13.60	103.41	89.81
4/19/95		13.73	103.41	89.68
7/24/95		14.63	103.41	88.78
MW-5				
10/4/94	6.27 to 16.27	10.44	99.32	88.88
1/26/95		10.18	99.32	89.14
4/19/95		10.37	99.32	88.95
7/24/95		11.31	99.32	88.01
MW-6				
10/4/94	6.00 to 16.00	9.86	Not Found	N.A.
1/26/95		Not Found	Not Found	N.A.
4/19/95		Not Found	Not Found	N.A.
7/24/95		Not Found	Not Found	N.A.
MW-7				
10/4/94	12.56 to 22.56	9.01	98.76	89.75
1/26/95		8.83	98.76	89.93
4/19/95		8.97	98.76	89.79
7/24/95		9.90	98.76	88.86
MW-8				
10/4/94	10.89 to 20.89	10.70	99.47	88.77
1/26/95		10.43	99.47	89.04
4/19/95		10.60	99.47	88.87
7/24/95		11.42	99.47	88.05

Prepared by PT
Reviewed by SB
Revised 8/16/95

Well Number	Screened Interval Depth	Depth To Water	Measuring Point Elevation	Groundwater Elevation
MW-9				
10/4/94	10.57 to 20.57	8.90	97.8	88.9
1/26/95		8.68	97.80	89.12
4/19/95		8.88	97.80	88.92
7/24/95		9.72	97.80	88.08
MW-10				
10/4/94	86.7 to 96.7	11.14	99.97	88.83
1/26/95		10.53	99.97	89.44
4/19/95		10.72	99.97	89.25
7/24/95		11.66	99.97	88.31
MW-11				
10/4/94	50.0 to 60.0	10.77	99.95	89.18
1/26/95		10.54	99.95	89.41
4/19/95		10.66	99.95	89.29
7/24/95		11.61	99.95	88.34
MW-12				
10/4/94	5.35 to 15.35	11.79	99.97	88.18
1/26/95		10.51	99.97	89.46
4/19/95		10.66	99.97	89.31
7/24/95		11.66	99.97	88.31

Prepared by PT
Reviewed by SB
Revised 8/16/95

Table 2

Summary of Groundwater Analyses for Volatile Organic Compounds (VOC)

Watts Co., Wyandanch, New York

(unit, parts per billion [ppb], µg/L)

Sample Identification	Benzene	Bromodi-chloromethane	Chloro-benzene	Chloroform	Dibromochloro-methane	1,2-Dichloro benzene	1,3-Dichloro benzene	1,4-Dichloro benzene	1,1-Dichloro ethane	1,1-Dichloro ethene	cis-1,2-Dichloro ethene	trans-1,2-Dichloro ethene
MW-1												
6/91	ND	ND	ND	ND	ND	ND	ND	ND	2	ND	ND	ND
5/23/94	ND	ND	ND	ND	ND	ND	ND	ND	2	ND	ND	ND
1/27/95	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4/19/95	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
7/24/95	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
MW-2												
6/91	ND	ND	ND	5	ND	ND	ND	ND	ND	ND	ND	82
5/23/94	ND	ND	ND	6	ND	ND	ND	ND	4	0.6	510	8
1/27/95	ND	ND	4	ND	ND	ND	ND	ND	ND	ND	280	ND
4/19/95	ND	ND	1	ND	ND	ND	ND	ND	ND	ND	55	ND
7/24/95	ND	ND	6	ND	ND	1	2	2	ND	ND	4	ND
MW-3												
6/91	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5/23/94	0.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.4	ND
1/27/95	ND	ND	ND	ND	ND	ND	0.32	ND	ND	ND	2	ND
4/19/95	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	83	ND
7/24/95	ND	ND	ND	ND	ND	ND	ND		ND	ND	5	ND
MW-5												
6/91	17	ND	34	ND	ND	ND	ND	ND	ND	ND	ND	5
5/23/94	ND	ND	0.2	ND	ND	0.5	0.4	0.6	0.7	ND	49	0.3
1/27/95	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2	ND
4/19/95	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2	ND
7/24/85	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
MW-7												
6/91	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5/23/94	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	9	ND
1/27/95	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	35	ND
4/19/95	ND	0.5	ND	0.8	0.5	ND	ND	ND	ND	ND	2	ND
7/24/95	ND	ND	ND	ND	0.5	ND	ND	ND	ND	ND	4	ND
MW-9												
6/91	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5/23/94	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.6	ND
1/27/95	ND	ND	ND	190	ND	ND	ND	ND	ND	ND	ND	190
4/19/95	ND	1	ND	34	ND	ND	ND	ND	ND	ND	ND	ND
7/24/95	ND	ND	ND	2	0.4	ND	ND	ND	ND	ND	ND	ND
MW-12												
6/91	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5/23/94	NA	ND	NA	NA	ND	NA	NA	NA	NA	NA	NA	NA
1/27/95	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1300	ND
4/19/95	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	650	12
7/24/95	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1000	16

Notes:

Standard* refers to the groundwater standard for each element for Class GA groundwaters (6NYCRR Parts 700-705)

MDL - Method Detection Limit ND - Not Detected NA - Not Analyzed NS - Not Sampled

MDL - Ranged from 0.20 ppb to 1 ppb depending on analysis and element.

Δ No compounds were detected above detection limits for samples from 6/91 and 5/18/94. ** No guidance value exists

Wells that were not sampled on specific dates were not included in the sample identification column.

Laboratory analyses were conducted via EPA Method 8260 or 524 or equivalent.

Complete laboratory reports for 1/27/95 sampling are included in GEC's Quarterly Monitoring Report.

Information on this table is summarized from previous investigations.

Prepared by: AA
Reviewed by: SB
Last Revised 8/28/95

Table 2
Summary of Groundwater Analyses for Volatile Organic Compounds (VOC)
Watts Co., Wyandanch, New York
(unit, parts per billion [ppb], µg/L)

Ethyl Benzene	Methylene Chloride	4-Methyl-2-pentanone	1,1,2,2-Tetra-chloroethane	Tetrachloro ethene	Toluene	1,1,1-Trichloro ethane	1,1,2-Trichloro ethane	Trichloro ethene	1,2,4-Trimethyl benzene	Vinyl Chloride	Xylenes (total)
ND	ND	7	ND	ND	ND	11	ND	ND	ND	ND	ND
NA	0.2	NA	ND	ND	ND	30	ND	ND	ND	ND	NA
NA	ND	NA	ND	ND	ND	0.6	ND	ND	ND	ND	NA
ND	1	NA	0.3	ND	ND	0.6	ND	ND	ND	ND	ND
ND	ND	ND	ND	ND	ND	0.7	ND	ND	ND	ND	ND
ND	ND	ND	ND	1500	ND	12	ND	5400	ND	ND	ND
NA	0.3	NA	ND	28	ND	4	0.4	1200	0.2	12.00	NA
NA	ND	NA	ND	26	ND	ND	ND	180	ND	33.00	NA
ND	ND	NA	ND	11	ND	ND	ND	46	ND	6.00	ND
ND	ND	ND	ND	0.5	ND	ND	ND	5	ND	ND	ND
ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
NA	0.2	NA	ND	ND	ND	ND	ND	10	ND	ND	NA
NA	ND	NA	ND	ND	ND	ND	ND	4	ND	ND	NA
ND	ND	NA	ND	25	ND	ND	ND	170	ND	ND	ND
ND	ND	ND	ND	4	ND	ND	ND	12	ND	ND	ND
2	6	46	ND	30	14.00	30	ND	17	ND	ND	5
NA	0.3	NA	ND	9	0.90	0.2	ND	14	ND	5.00	NA
NA	ND	NA	ND	5	ND	ND	ND	5	ND	0.50	NA
ND	ND	NA	ND	4	ND	ND	ND	5	ND	ND	ND
ND	ND	ND	ND	280	ND	ND	ND	9	ND	ND	ND
ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
NA	0.3	NA	ND	30	ND	ND	ND	4	ND	ND	NA
NA	ND	NA	ND	39	ND	ND	ND	3	ND	ND	NA
ND	ND	NA	ND	15	ND	ND	ND	0.6	ND	ND	ND
ND	ND	ND	ND	13	ND	ND	ND	0.8	ND	ND	ND
ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
NA	ND	NA	ND	2	ND	ND	ND	0.3	ND	ND	NA
NA	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	NA
ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND
ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
ND	ND	ND	ND	44	ND	ND	ND	ND	ND	ND	ND
NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
NA	370	NA	ND	120	ND	ND	ND	3300	ND	ND	NA
ND	ND	NA	ND	400	ND	ND	ND	1500	ND	58	ND
ND	ND	ND	ND	100	ND	ND	ND	1800	ND	54	ND

Prepared by: AA
Reviewed by: SB
Last Revised 8/28/95

Table 3
Summary of Groundwater Analyses for Metals (Total)
Watts Co., Wyandanch, New York
(units, parts per million, ppm, mg/L)

Sample Identification	Antimony	Arsenic	Beryllium	Cadmium	Chromium	Hexavalent Chromium	Copper	Lead	Mercury	Nickel	Selenium	Silver	Thallium	Zinc
MW-1														
5/23/94	32	0.019	ND	ND	0.029	0.02	0.026	0.035	0	ND	ND	ND	ND	0.173
1/27/95	ND	0.042	ND	0.0068	0.065	ND	0.084	0.056	0.00029	0.042	ND	0.01	ND	0.250
4/19/95	ND	0.035	ND	0.0061	0.040	NA	0.054	0.044	ND	ND	ND	ND	ND	0.16
7/24/95	ND	0.048	ND	0.0077	0.052	ND	0.071	0.044	0.00034	ND	ND	ND	ND	0.18
MW-2														
5/23/94	0.038	0.007	ND	ND	8.88	0.24	3.16	0.087	0	4.49	ND	ND	ND	0.747
1/27/95	ND	0.03	ND	0.014	4	ND	3.8	0.079	0.00048	5.7	ND	0.01	ND	0.700
4/19/95	ND	0.060	ND	0.021	4.9	NA	3.5	0.11	0.00044	4.3	ND	ND	ND	0.69
7/24/95	ND	0.054	ND	0.019	3.9	ND	4.1	0.10	0.0013	3.6	ND	ND	ND	0.67
MW-3														
5/23/94	ND	ND	ND	ND	0.119	0.02	0.597	ND	ND	1.75	ND	ND	ND	0.109
1/27/95	ND	ND	ND	ND	0.32	ND	4.5	ND	ND	3.5	ND	0.011	ND	0.680
4/19/95	ND	ND	ND	ND	0.20	NA	2.8	ND	ND	2.0	ND	ND	ND	0.37
7/24/95	ND	ND	ND	ND	0.061	ND	6.6	ND	0.0002	4.2	ND	ND	ND	0.89
MW-5														
5/23/94	0.040	0.029	ND	ND	0.117	0.02	0.639	0.022	0	0.373	ND	ND	ND	0.582
1/27/95	ND	0.046	ND	0.0066	0.1	ND	0.73	0.020	ND	0.23	ND	0.013	ND	0.480
4/19/95	ND	0.049	ND	0.0081	0.13	NA	0.92	0.038	ND	0.27	ND	ND	ND	0.42
7/24/95	ND	0.048	ND	0.007	0.10	ND	0.75	0.018	0.00022	0.19	ND	ND	ND	0.36
MW-7														
5/23/94	ND	0.005	ND	ND	ND	0.01	ND	0.006	ND	0.025	ND	ND	ND	0.026
1/27/95	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.011	ND	ND
4/19/95	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND
7/24/95	ND	ND	ND	0.0052	ND	ND	0.013	ND	ND	ND	ND	ND	ND	0.035
MW-9														
5/23/94	ND	ND	ND	ND	ND	0.01	ND	0.005	0	ND	ND	ND	ND	0.034
1/27/95	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.011	ND	0.024
4/19/95	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	0.025
7/24/95	ND	0.013	ND	ND	0.017	ND	0.019	0.010	ND	ND	ND	ND	ND	0.10
MW-12														
5/23/94	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
1/27/95	0.18	0.11	0.019	0.082	18	ND	21	0.310	0.0013	21	0.0055	ND	ND	5.600
4/19/95	ND	0.10	0.015	0.059	14	NA	25	0.23	0.0013	22	ND	ND	ND	4.7
7/24/95	0.16	0.073	0.011	0.05	10	ND	13	0.16	0.0013	16	ND	ND	ND	3.0
Standard*	**0.003****	**0.025**	**0.003**	**0.01**	**0.05**	**0.05**	**0.2**	**0.025**	**0.002**	**No Stnd.**	**0.01**	**0.05**	**.004****	**0.300**

Notes:

Samples were analyzed via the following SW-846

Standard* refers to the groundwater standard for each element for Class GA groundwaters (6NYCRR Parts 700-705)

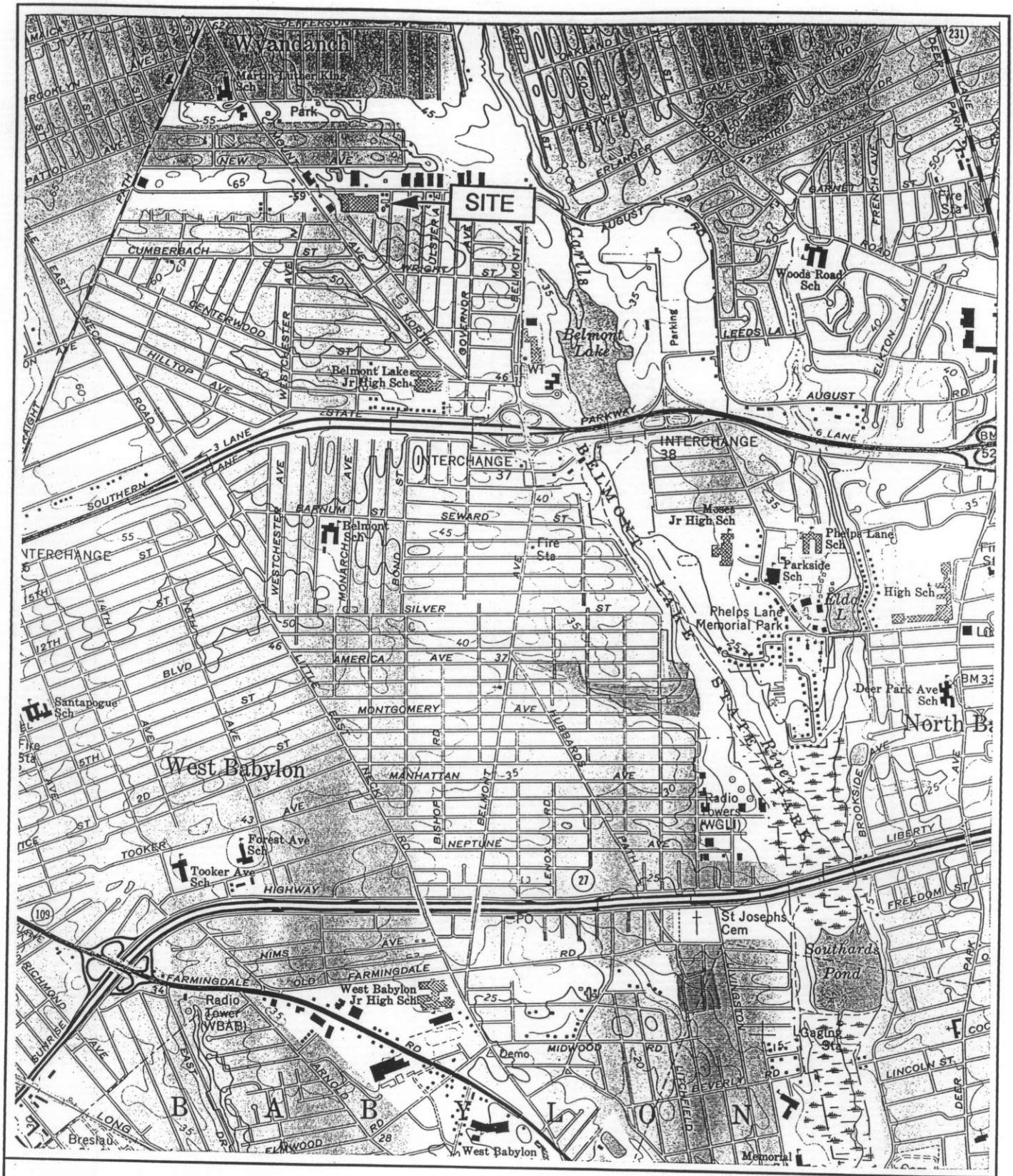
** refers to a Guidance value where no Standard exists

MDL - Method Detection Limit ND - Not Detected NA - Not Analyzed NS - Not Sampled

MDL - Ranged from 0.00020 ppm to 0.2 ppm depending on analysis and element.

Prepared by: AA
Reviewed by: SB
Last Revised 8/28/95

FIGURES



USGS 7.5' Series Topographic

BAY SHORE WEST, N.Y. Quadrangle

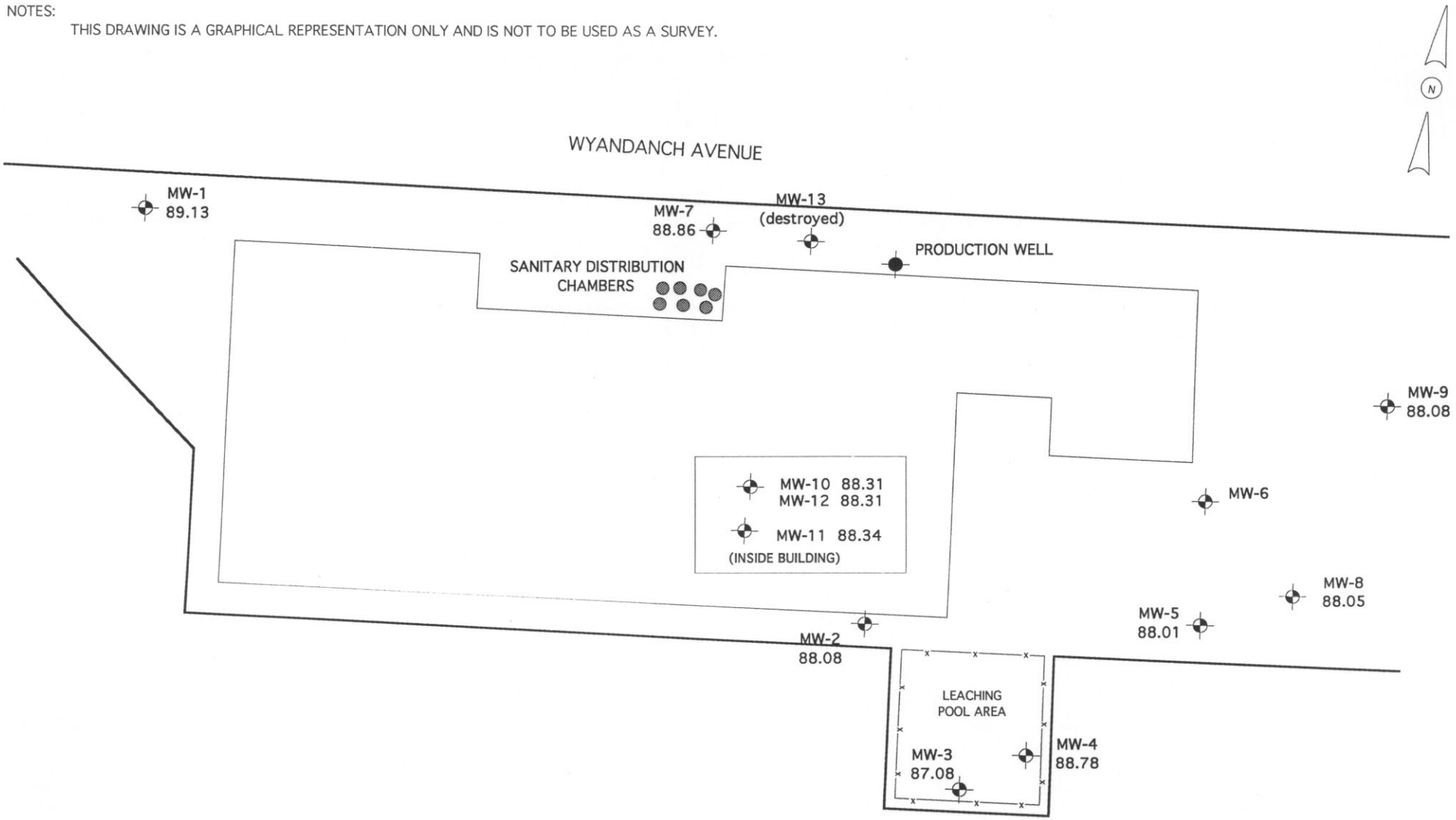
GEC Goldman Environmental Consultants, Inc.
15 Pacella Park Drive
Randolph, MA 02368
(617) 961-1200 or (800) 446-2014

SITE LOCATION MAP
248 WYANDANCH AVENUE
WYANDANCH, NEW YORK
Project No. 444-010-95

FIGURE 1
SCALE
1 : 24 000
N

NOTES:

THIS DRAWING IS A GRAPHICAL REPRESENTATION ONLY AND IS NOT TO BE USED AS A SURVEY.



GROUND WATER ELEVATION PLAN

JAMECO INDUSTRIES
248 WYANDANCH AVENUE
WYANDANCH, NEW YORK

JOB NUMBER: 444-006-94	SCALE: 1" = 100' ±
DATE: JULY 24, 1995	DRAWN BY: JRD
	CHECKED BY

GEC Goldman Environmental Consultants, Inc.
15 Pacella Park Drive
Randolph, MA 02368
(617) 961-1200 or (800) 446-2014

2
FIGURE

APPENDIX A

STANDARD OPERATING PROCEDURES

Standard Operating Procedure
Sample Preservation and Chain of Custody

This protocol is designed to ensure that proper techniques are employed in the preservation and chain-of custody of samples collected for laboratory analyses or for screening. This Protocol is intended to be consistent with Massachusetts Publication #WSC-310-91 (Standard References for Monitoring Wells), and 40 CFR 136 (Guidelines Establishing Test Procedures for the Analysis of Pollutants).

The results of screening and/or laboratory analysis of solid, liquid or gaseous media constitute the basis of evaluation of the majority of the disposal sites under investigation. It is therefore imperative that the preservation of the samples be appropriate to the media being analyzed as well as the analysis which is being performed. In addition, the integrity of the sample is dependent upon the premise that a clear chain of responsibility for the sample integrity has been maintained. Without this "Chain-of-Custody", the integrity of the laboratory results may inevitably come into question.

The preservation and Chain-of-Custody (COC) protocols outlined in the following paragraphs are not intended to be all inclusive, and this protocol is written with the understanding that the sampling of certain media or analyses may require specific sample preservation. This protocol is, however, intended to cover the majority of the media and analyses performed as well as the COC procedures employed at the majority of waste disposal sites.

A COC program must be followed during sampling and handling activities from the field through laboratory operations. This program is designed to assure that each sample is accounted for at all times. Field data sheets, COC records, and sample labels must also be completed by the appropriate sampling and laboratory personnel for each sample. The objective of the sample custody identification and control system is to assure, to the extent practical, that:

- all samples are uniquely identified;
- the correct samples are analyzed for the correct parameters and are traceable through their records;
- important sample characteristics are preserved;
- samples are protected from damage or loss;
- any processing of samples (e.g., filtration, preservation) is documented; and
- client confidentially is maintained.

A sample is considered under a COC if it meets all of the following criteria:

- the sample is in your custody,
- the sample is in your view, after being in your possession,
- the sample is in your possession and then you locked it up to prevent tampering, and
- the sample is in a designated, secured area.

The following paragraphs outline GEC's preservation and COC protocol.

1) Prior to initiating any work, the Health and Safety Plan developed for the specific site activities should be reviewed by all field personnel. The indicated measures on the Plan should be enacted prior to initiation of any sampling activities. Any concerns not addressed in the Plan are to be brought immediately to the attention of the Health and Safety Officer. Personnel participating in the excavations will dress with protective equipment appropriate for the anticipated conditions.

2) Sample integrity is assured by use of containers appropriate to both the matrix to be sampled and the analytes of interest. Sample containers must be prepared in the laboratory in a manner consistent with USEPA protocols. Unless the proper sample bottle preparation and sample preservation measures are taken in the field, sample composition can be altered by contamination, degradation, biological transformation, chemical interaction, and other factors during the time between sample collection and analysis. Prior to sampling GEC personnel will ensure that the sample containers obtained from either a laboratory or a commercial supplier have been prepared in accordance with DEP and EPA protocols. Sample containers are to be used once and discarded. Under no circumstance should a soil, water or gaseous media which has been collected for analysis be placed in a previously used sample container unless that container has been recleaned and preserved by a certified laboratory.

   As part of the COC protocol, sample containers should have prepared labels for each sample. The label should include sample identification, date and time of collection, sample parameters to be analyzed, any preservatives used, and the name of the sample collector.

   Upon collection of the sample(s), documentation of chain of custody (i.e. COC form) should be initiated and should include at least the following:

   - date and time of sampling;
   - sampling locations;
   - sample bottle identification;
   - and specific sample acquisition measures.

   The COC and sample description requires:

   - a unique identification of each sample;
   - the name(s), address(es) and telephone number(s) of the sampler(s) and the person(s) shipping the samples and all subsequent transfers of custody;
   - the type and method of analyses requested;

- the date and time of sample collection and transfer of custody; and the name(s) of those responsible for receiving the samples at the laboratory.

3) In some cases, field filtration of samples may be required. Information regarding the method of filtration should be determined in advance and communicated to the laboratory. Filtering of any sample collected for organic analysis should be avoided. Decanting of a liquid media is a preferred method for the removal of particulate matter. When field filtering is required, an appropriate filter medium must be selected to avoid potential sample contamination during the filtering process.

4) Sample holding times are specified for the initiation of chemical analyses, usually beginning at the time of sample collection but occasionally beginning at the time of sample receipt at the laboratory. This determination must be made prior to sampling to allow proper logistical planning for sample shipments. Holding times also vary with the regulatory basis under which analyses are conducted. It is essential that the laboratory be consulted before sampling take place in order to properly schedule work.

5) Sample containers are most often packed in plastic, insulated "coolers" for shipment. Bottles are to be packed tightly so that only minimal motion of the sample containers is possible. Materials which are considered to be highly hazardous may require special handling and packing for shipment. Ice, or a similar heat transfer fluid, should be placed over the top of the sample containers and should be placed within a water tight plastic bag to assure that the samples are kept as dry as possible. In addition, all applicable paper work should also be enclosed within a second water-tight bag and included in the cooler. The sample cooler should then be taped shut.

6) Upon receipt of the samples at the laboratory, any laboratory identification numbers should also be included on the COC form. Finally, those responsible for receipt of the samples should be indicated on the COC form as well as the date and time of the sample drop-off.

Standard Operating Procedure
Field Sampling Protocols
Quality Assurance/Quality Control

I. Purpose

The purpose of the GEC QA/QC program is to generate analytical data that is of known and defensible quality. These procedures apply to all projects in which sampling is involved. QA/QC from one project is not transferable to another.

II. Decontamination

1) Decontamination should be performed on all reusable field sampling equipment and protective gear. Sampling equipment should be decontaminated before the collection of a sample and after sampling has been completed. Protective gear should be decontaminated after the collection of a sample.

2) It is necessary to use the following decontamination solutions in the field:

   - Non-phosphate detergent plus tap water wash.
   - Distilled/ deionized water rinse.
   - 10% Nitric Acid rinse.*
   - Distilled/ deionized water rinse.*
   - Methanol rinse, when sampling volatiles only.
   - Acetone then hexane rinse.**
   - Distilled/ deionized water rinse. **

   * Only if sample is to be analyzed for metals.
   ** Only if sample is to be analyzed for semi-volatile organics, PCBs or pesticides.

3) Sample bottles and sampling equipment should not be stored near gasoline, solvents, or other potential sources of contamination. If unavoidable bottles and equipment should be sealed in containers or plastic.

4) Heavy equipment, including hand tools, should be cleaned by steam cleaning or manual scrubbing prior and subsequent to use in hazardous waste investigations.

III. Measures or Quality Control/Quality Assurance

1. Trip Blanks

- Trip blanks are used in order to detect additional sources of contamination that might affect analytical results. The following are potential sources of additional contamination:
  a. Sample containers,
  b. Contamination during shipment to and from the site,
  c. Ambient air contact with analytical instrumentation at the laboratory during analysis, or
  d. Laboratory reagent used in analytical procedures.

- One trip blank is required for every set of samples sent to the lab regardless of job size. Generally, the trip blank should be for VOCs. If, however, VOCs are not a parameter of the sampling round, consult the laboratory as to which parameter should have an associated trip blank.

- Trip blanks are to be kept with containers used in the sampling round at all times. More specifically, they should accompany the site specific sampling containers from the time the containers leave the laboratory until they are returned for analysis.

- Obtain containers and trip blanks prepared specifically for each job from the laboratory. Return unused containers to the laboratory upon completion of a project.

2. Field Blanks

- Field blanks are used to indicate potential contamination contracted from ambient air or from sampling equipment. It also serves as a QA/QC for decontamination procedures.

- Collect one set of field blanks for every 20 samples per project. It is not necessary to take a field blank for jobs in which less than 10 samples are collected.

- Procedure

  a. Collect two sets of sample containers to cover all sampling parameters. One set will be full of analyte free water (obtain extra analyte free water to fill two VOA vials). The other set is empty.
  b. Go to the most contaminated area and run the water from the full containers, through the decontaminated sampling equipment and into the associated empty containers.
  c. Send to the lab for analysis.

- Use containers and field blanks prepared specifically for job.

3. Duplicate Samples

- Duplicate samples are collected in order to serve as a laboratory check. Therefore, it is important that the lab does not know which samples are to serve for this purpose.

- Frequency

  a. Obtain one (1) duplicate sample for every 10 samples of each matrix. If less than ten samples are collected of a given matrix, a duplicate must be collected anyway.
  b. If a total of less than 10 samples are collected, collect one (1) duplicate of the majority medium.
  c. If a total of less than five (5) samples are collected, it is not necessary to collect a duplicate sample.

  * Note that the frequency as outlined here pertains to the number of samples collected per project, not per location of a given project.

- Procedures

  The idea behind the duplicate sample is to collect two samples as close to identical as possible.

  a. For water

     Alternately fill containers for the same parameter with equal amounts of liquid per bailer. Fill duplicate VOC vials from the same bailer of liquid.

  b. For soil

     -- VOC samples must be taken from the discreet sampling locations.
     -- For all other samples, mix the applicable soil in a decontaminated stainless steel or polyethylene bowl or tray. Then fill sample containers with the soil mix.
     -- When confronted with the option of collecting a water sample or a soil sample, choose the water sample.

- Labeling for the laboratory

  a. Label the containers normally and give the duplicate samples different reference numbers.

  b. Indicate the quantity of duplicates in the "special instructions" or "remarks" portion of the chain of custody and laboratory services sheet, however, do not indicate the reference numbers of the duplicates.

  c. Upon receipt of analytical results, contact the laboratory and convey all data pertaining to the duplicates for their QA/QC.

4. Background samples

- Background samples are taken only if it is required for comparison of site conditions to the surrounding environment. This is to be dictated by client needs on a site to site basis.

5. Performance Evaluation Samples

- The project manger should consider the use of the following performance evaluation samples on a periodic basis. Typically, these will be reserved for larger jobs:

   a. Laboratory performance evaluation samples

      -- Collect duplicate samples and send to two different laboratories for comparison. Avoid using soil samples for this procedure.
      -- Send a sample of known quantity and quality to the laboratory in order to determine laboratory performance. Such samples can be prepared by any laboratory.

   b. Gas chromatograph (GC) performance evaluation samples

      -- Acquire a sample of known quantity and quality from a laboratory. Analyze the sample with the gas chromatograph in order to determine the integrity of GC results.

IV. Field Sampling QA/QC

1) When sampling a well, collect VOA samples first and Oil & Grease samples last.

2) Start sampling at the presumed least contaminated areas, proceeding to the more contaminated areas.

3) Preservatives

   - Consult the laboratory in order to determine which sampling parameters require preservatives. The laboratory will provide sampling containers specific for each job.
   - It is necessary to fill the sample container when using preserved bottles; preservative is added with this assumption
   - If samples are not collected correctly, they will not pass GEC QA/QC.

4) A chain-of-custody must accompany each set of samples from the job site to the laboratory. Be sure to identify the presence of trip blanks on the chain-of-custody sheets.

5) If possible, use the numbering system outlined on the attached sheet for identifying samples.

V. Ordering Sample Containers

1) Pre-plan sampling strategy to determine the sample parameters, the number of sample points including QA/QC samples, and the matrix of the given sample points.

2) Call laboratory and tell them:

   - Sample parameters,
   - Number of samples to be collected,
   - The number of container sets needed for trip blanks, field blanks, and duplicates, and
   - The matrix of each sample to be collected.

3) Sample containers should be ordered specifically for each job. Any sample containers unused at the end of the job should be sent back to the laboratory.

VI. Conclusions

1) Pre-planning is crucial.

2) Keep open communication with the laboratory on all matters.

3) If you make a mistake in sampling collection, accept it, and retake the necessary samples.

Standard Operating Procedure
Decontamination Procedures for Field Equipment

All field equipment (bailers, well sounder, gloves, etc.) must be decontaminated before each use, between samples and before it is returned to the equipment room. Decontamination procedures vary for the type of analyses to be performed. The following basic procedures should always be used to decontaminate equipment regardless of the type of analysis:

1) Scrub equipment with soapy water (Liquinox, Alconox, trisodiumphosphate or equivalent).
2) Rinse with tap water, if available.
3) Rinse with deionized water from green spray bottle.

For Metals, perform the following additional procedures:

4) Rinse with 10% nitric acid (HNO_3).
5) Final rinse with deionized water.

For base/neutral/acid extractables, PCB's and pesticides perform the following, additional procedures:

4) Rinse with acetone and let dry.
5) Rinse with hexane and let dry.
6) Final rinse with deionized water.

For Volatile Organics and all other analyses, perform the following additional procedures:

4) Rinse with methanol.
5) Final rinse with deionized water

NOTE: When sampling for more than one of the above types of analyses, use the protocol for volatile organics last.
Solvent use should be gauged carefully so that a minimal amount of solvent is left after use. Allow any remaining solvent to evaporate.

Standard Operating Procedure
Observation Well Sampling
Using a Bucket-Type Bailer

This protocol is designed to ensure that proper techniques are used, safety is considered and quality assurance maintained during the performance of observation well sampling. A GEC representative is assigned to oversee and/or perform all observation well sampling for the project. The duties of the representative are to ensure that the scope of work is followed.

Sampling of groundwater observation wells is the primary means by which the chemical characteristics of groundwater can be determined. Therefore, it is imperative that care be taken in the development and subsequent sampling of observation wells. Water standing in the well prior to sampling may be stagnant and may not be representative of true groundwater quality in the aquifer in question

Procedures for performance of groundwater observation well evacuation and sampling are outline in the following paragraphs:

Well Evacuation:

1) Prior to initiating any work, the Health and Safety Plan developed for the specific site activities should be reviewed by all field personnel. The indicated measures on the Plan should be enacted prior to initiation of the sampling activities. Any concerns not addressed in the Plan are to be brought immediately to the attention of the Health and Safety Officer. Personnel participating in the sampling will dress with protective equipment appropriate for the anticipated conditions.

2) Decontaminate all equipment to be used in the performance of the activities. Decontamination should at least be performed by alternately rinsing all equipment with methanol and distilled water and vigorously scrubbing the equipment with a clean brush.

3) The extent that contamination may be known at a given site, observation wells should be sampled in an order from "least contaminated" to "most contaminated".

4) Screen the well headspace with a photoionization detector (PID) or other appropriate instrumentation to confirm that concentrations of potential contaminants are within acceptable limits.

5) Test the well for accumulation of non-aqueous phase product (LNAPL or DNAPL) using a pre-cleaned interface probe or transparent disposable bailer. If present, collect a sample of the NAPL and place in an appropriate sample container. This sample should be kept away from other samples.

6) Measure and record the depth to NAPL(if present), depth to water, and total depth of the wells. If NAPL is present, sampling for dissolved phase contaminants should generally not be performed. In addition, if sampling is to be performed, appropriate measures should be taken to assure that any water removed from a contaminated well is disposed appropriately.

7) Calculate the volume of saturated well casing and the volume of water which will be removed to assure sufficient well evacuation. Evacuate well water into a clean, small (< 0.5 gallons), bucket or similar vessel in which precleaned and calibrated conductivity and pH probes have been placed. Attach a precleaned bailer to cable or line for lowering the bailer into the well. Lower the bailer slowly into the well until it contacts the water surface. Allow the bailer to sink and fill with a minimum of surface disturbance. Raise the bailer to the surface . Do not allow the bailer line to contact the ground. Drain the bailer into the small bucket.

8) Purging should continue until between three and five well volumes have been evacuated and pH, temperature, and specific conductivity values do not vary appreciably.

9) Record final pH, conductivity and temperature values.

10) Allow between one (1) and four (4) hours for the well to equilibrate prior to sampling. Discard string, and discard or decontaminate the bailer or pump in accordance with the Protocol for Decontamination.

Well Sampling:

1) Sampling of observation wells will be conducted only with clean, decontaminated Teflon, or stainless steel sampling bailers or with clean disposable bailers. Disposable bailers shall not be re-used for any purpose. In addition, disposable gloves are worn for each individual well sampling and line used to support the bailer is to be discarded between wells.

2) Samples at any given well will be collected in order of decreasing order of sensitivity to volatilization (i.e. VOC, total organic carbon, semi-volatile organics (BNA), ammonia, PCBs, pesticides, oil and grease, phenols, cyanide, sulfate and chloride, nitrate and ammonia, metals and radionuclides).

3) Lower the bailer slowly until it contacts the water surface. Allow the bailer to sink to a point such that the bailer becomes filled with water, but not to the point where the string comes in contact with the water. Note: Under specific sampling conditions this sample collection procedure may vary. Under these conditions specific notation is required regarding any modifications or amendments made to the Protocol.

4) Slowly raise the bailer to the surface and remove the bailer from the well. Care should be taken to ensure that the string and bailer do not come in contact with the ground or other potential contaminant sources.

5) Carefully and slowly transfer the contents of the bailer into appropriately preserved, pre-labeled containers. Check that the sample containers seal properly and that the cap is sealed tightly. Record applicable information in the field logbook and complete all chain-of-custody documents.

6) Discard string, and discard or decontaminate the bailer appropriately.

APPENDIX B

LABORATORY ANALYTICAL REPORTS

ANALYTICAL REPORT

Report To:	Sam Butcher Goldman Env. Const. Co. 15 Pacella Park Drive Randolph, MA 02368
Project:	JAMECO Quarterly Monitoring

08/14/1995

NET Job Number: 95.02736

National Environmental Testing

NET Atlantic, Inc.
Cambridge Division
12 Oak Park
Bedford, MA 01730

Massachusetts Certification Number
M MA023

NET Cambridge Division

ANALYTICAL REPORT

Report To:	Reported By:
Sam Butcher Goldman Env. Const. Co. 15 Pacella Park Drive Randolph, MA 02368	National Environmental Testing NET Atlantic, Incorporated Cambridge Division 12 Oak Park Bedford, MA 01730

Report Date: 08/14/1995

NET Job Number: 95.02736

Project: JAMECO Quarterly Monitoring

NET Client No: 39500

P.O. No: 444 010 94

Collected By: CLIENT

Shipped Via: AIRBORNE

Job Description: NY 524.2, RCRA 8 + Cr, CR+6

Airbill No: 2933208946

This report has been approved and certified for release by the following staff. Please feel free to call the NET Project Manager at 617-275-3535 with any questions or comments.

Paul F. Bernard (for)

Alison P. Darrow
NET Project Manager

Report prepared by
NET Reports Group

Analytical data for the following samples are included in this data report.

SAMPLE ID	NET ID	DATE TAKEN	TIME TAKEN	DATE REC'D	MATRIX
MW-1	127165	07/24/1995	12:00	07/25/1995	GROUND WATER
MW-2	127166	07/24/1995	12:00	07/25/1995	GROUND WATER
MW-3	127167	07/24/1995	12:00	07/25/1995	GROUND WATER
MW-5	127168	07/24/1995	12:00	07/25/1995	GROUND WATER
MW-7	127169	07/24/1995	12:00	07/25/1995	GROUND WATER
MW-9	127170	07/24/1995	12:00	07/25/1995	GROUND WATER
MW-12	127171	07/24/1995	12:00	07/25/1995	GROUND WATER

NET Cambridge Division
ANALYTICAL REPORT

Report Date: 08/14/1995

Report To: Goldman Env. Const. Co.

NET Job No: 95.02736

Project: JAMECO Quarterly Monitoring

Date Rec'd: 07/25/1995

Sample ID: MW-1

NET Sample No: 127165

Parameter	Method	Result	Units	Analysis Date	Prep Batch	Run Batch	Analyst
Colorimet. Hexaval. ChromiumAQ	APHA 307B (14th Ed., 19	<0.015	mg/L	07/25/1995		423	smw
Metal Priority Pollutants, AQ	EPA 200 series	08/07/1995		08/07/1995		133	ecw
Aqueous Digestion EPA200 AQ	EPA 200 mod	08/01/1995	date	08/01/1995	5864cw		gsw
Aqueous Digestion GFAA EPA AQ	EPA 200 mod	08/01/1995		08/01/1995	5864cw		gsw
Antimony (Sb) 200 ICP AQ	EPA 200 ICP, 200.7	<0.10	mg/L	08/04/1995		386	gmp
Arsenic (As) 200 GFAA AQ	EPA 200 furnace, 200mod	0.048	mg/L	08/08/1995		227	mwt
Beryllium (Be) 200 ICP AQ	EPA 200 ICP, 200.7mod.	<0.0050	mg/L	08/04/1995		369	gmp
Cadmium (Cd) 200 ICP AQ	EPA 200 ICP, 200.7mod.	0.0077	mg/L	08/04/1995		559	gmp
Chromium (Cr) 200 ICP AQ	EPA 200 ICP, 200.7 mod.	0.052	mg/L	08/04/1995		528	gmp
Copper (Cu) 200 ICP AQ	EPA 200 ICP, 200.7 mod.	0.071	mg/L	08/04/1995		551	gmp
Lead (Pb) 200 GFAA AQ	EPA 200 furnace, 200 mo	0.044	mg/L	08/07/1995		253	mwt
Mercury (Hg) 200 CVAA AQ	EPA 200 cold vapor, 245	0.00034	mg/L	08/03/1995		513	drm
Nickel (Ni) 200 ICP AQ	EPA 200 ICP, 200.7 mod.	<0.040	mg/L	08/04/1995		505	gmp
Selenium (Se) 200 GFAA AQ	EPA 200 furnace, 200 mo	<0.0050	mg/L	08/04/1995		167	mwt
Silver (Ag) 200 ICP AQ	EPA 200 ICP, 200.7 mod.	<0.010	mg/L	08/04/1995		507	gmp
Thallium (Tl) 200 GFAA AQ	EPA 200 furnace, 200 mo	<0.010	mg/L	08/04/1995		134	mwt
Zinc (Zn) 200 ICP AQ	EPA 200 ICP, 200.7 mod.	0.18	mg/L	08/04/1995		554	gmp

NET Cambridge Division
ANALYTICAL REPORT

Report Date: 08/14/1995

Report To: Goldman Env. Const. Co.

NET Job No: 95.02736

Project: JAMECO Quarterly Monitoring

Date Rec'd: 07/25/1995

Sample ID: MW-2

NET Sample No: 127166

Parameter	Method	Result	Units	Analysis Date	Prep Batch	Run Batch	Analyst
Colorimet. Hexaval. ChromiumAQ	APHA 307B (14th Ed., 19	<0.015	mg/L	07/25/1995		423	smw
Metal Priority Pollutants, AQ	EPA 200 series	08/07/1995		08/07/1995		133	ecw
Aqueous Digestion EPA200 AQ	EPA 200 mod	08/01/1995	date	08/01/1995	5864cw		gsw
Aqueous Digestion GFAA EPA AQ	EPA 200 mod	08/01/1995		08/01/1995	5864cw		gsw
Antimony (Sb) 200 ICP AQ	EPA 200 ICP, 200.7	<0.10	mg/L	08/04/1995		386	gmp
Arsenic (As) 200 GFAA AQ	EPA 200 furnace, 200mod	0.054	mg/L	08/08/1995		227	mwt
Beryllium (Be) 200 ICP AQ	EPA 200 ICP, 200.7mod.	<0.0050	mg/L	08/04/1995		369	gmp
Cadmium (Cd) 200 ICP AQ	EPA 200 ICP, 200.7mod.	0.019	mg/L	08/04/1995		559	gmp
Chromium (Cr) 200 ICP AQ	EPA 200 ICP, 200.7 mod.	3.9	mg/L	08/04/1995		528	gmp
Copper (Cu) 200 ICP AQ	EPA 200 ICP, 200.7 mod.	4.1	mg/L	08/04/1995		551	gmp
Lead (Pb) 200 GFAA AQ	EPA 200 furnace, 200 mo	0.10	mg/L	08/07/1995		253	mwt
Mercury (Hg) 200 CVAA AQ	EPA 200 cold vapor, 245	0.0013	mg/L	08/03/1995		513	drm
Nickel (Ni) 200 ICP AQ	EPA 200 ICP, 200.7 mod.	3.6	mg/L	08/04/1995		505	gmp
Selenium (Se) 200 GFAA AQ	EPA 200 furnace, 200 mo	<0.0050	mg/L	08/04/1995		167	mwt
Silver (Ag) 200 ICP AQ	EPA 200 ICP, 200.7 mod.	<0.010	mg/L	08/04/1995		507	gmp
Thallium (Tl) 200 GFAA AQ	EPA 200 furnace, 200 mo	<0.010	mg/L	08/04/1995		134	mwt
Zinc (Zn) 200 ICP AQ	EPA 200 ICP, 200.7 mod.	0.67	mg/L	08/04/1995		554	gmp

NET Cambridge Division
ANALYTICAL REPORT

Report Date: 08/14/1995

Report To: Goldman Env. Const. Co.

NET Job No: 95.02736

Project: JAMECO Quarterly Monitoring

Date Rec'd: 07/25/1995

Sample ID: MW-3

NET Sample No: 127167

Parameter	Method	Result		Units	Analysis Date	Prep Batch	Run Batch	Analyst
Colorimet. Hexaval. ChromiumAQ	APHA 307B (14th Ed., 19	<0.015		mg/L	07/25/1995		423	smw
Metal Priority Pollutants, AQ	EPA 200 series	08/07/1995			08/07/1995		133	ecw
Aqueous Digestion EPA200 AQ	EPA 200 mod	08/01/1995		date	08/01/1995	5864cw		gsw
Aqueous Digestion GFAA EPA AQ	EPA 200 mod	08/01/1995			08/01/1995	5864cw		gsw
Antimony (Sb) 200 ICP AQ	EPA 200 ICP, 200.7	<0.10		mg/L	08/04/1995		386	gmp
Arsenic (As) 200 GFAA AQ	EPA 200 furnace, 200mod	<0.010		mg/L	08/08/1995		227	mwt
Beryllium (Be) 200 ICP AQ	EPA 200 ICP, 200.7mod.	<0.0050		mg/L	08/04/1995		369	gmp
Cadmium (Cd) 200 ICP AQ	EPA 200 ICP, 200.7mod.	<0.0050		mg/L	08/04/1995		559	gmp
Chromium (Cr) 200 ICP AQ	EPA 200 ICP, 200.7 mod.	0.061		mg/L	08/04/1995		528	gmp
Copper (Cu) 200 ICP AQ	EPA 200 ICP, 200.7 mod.	6.6		mg/L	08/04/1995		551	gmp
Lead (Pb) 200 GFAA AQ	EPA 200 furnace, 200 mo	<0.010		mg/L	08/07/1995		253	mwt
Mercury (Hg) 200 CVAA AQ	EPA 200 cold vapor, 245	0.00020		mg/L	08/03/1995		513	drm
Nickel (Ni) 200 ICP AQ	EPA 200 ICP, 200.7 mod.	4.2		mg/L	08/04/1995		505	gmp
Selenium (Se) 200 GFAA AQ	EPA 200 furnace, 200 mo	<0.0050		mg/L	08/04/1995		167	mwt
Silver (Ag) 200 ICP AQ	EPA 200 ICP, 200.7 mod.	<0.010		mg/L	08/04/1995		507	gmp
Thallium (Tl) 200 GFAA AQ	EPA 200 furnace, 200 mo	<0.020	*	mg/L	08/04/1995		134	mwt
Zinc (Zn) 200 ICP AQ	EPA 200 ICP, 200.7 mod.	0.89		mg/L	08/04/1995		554	gmp

*Sample was diluted due to matrix interference.

NET Cambridge Division
ANALYTICAL REPORT

Report Date: 08/14/1995

Report To: Goldman Env. Const. Co.

NET Job No: 95.02736

Project: JAMECO Quarterly Monitoring

Date Rec'd: 07/25/1995

Sample ID: MW-5

NET Sample No: 127168

Parameter	Method	Result	Units	Analysis Date	Prep Batch	Run Batch	Analyst
Colorimet. Hexaval. ChromiumAQ	APHA 307B (14th Ed., 19	<0.015	mg/L	07/25/1995		423	smw
Metal Priority Pollutants, AQ	EPA 200 series	08/07/1995		08/07/1995		133	ecw
Aqueous Digestion EPA200 AQ	EPA 200 mod	08/01/1995	date	08/01/1995	5864cw		gsw
Aqueous Digestion GFAA EPA AQ	EPA 200 mod	08/01/1995		08/01/1995	5864cw		gsw
Antimony (Sb) 200 ICP AQ	EPA 200 ICP, 200.7	<0.10	mg/L	08/04/1995		386	gmp
Arsenic (As) 200 GFAA AQ	EPA 200 furnace, 200mod	0.048	mg/L	08/08/1995		227	mwt
Beryllium (Be) 200 ICP AQ	EPA 200 ICP, 200.7mod.	<0.0050	mg/L	08/04/1995		369	gmp
Cadmium (Cd) 200 ICP AQ	EPA 200 ICP, 200.7mod.	0.0070	mg/L	08/04/1995		559	gmp
Chromium (Cr) 200 ICP AQ	EPA 200 ICP, 200.7 mod.	0.10	mg/L	08/04/1995		528	gmp
Copper (Cu) 200 ICP AQ	EPA 200 ICP, 200.7 mod.	0.75	mg/L	08/04/1995		551	gmp
Lead (Pb) 200 GFAA AQ	EPA 200 furnace, 200 mo	0.018	mg/L	08/07/1995		253	mwt
Mercury (Hg) 200 CVAA AQ	EPA 200 cold vapor, 245	0.00022	mg/L	08/03/1995		513	drm
Nickel (Ni) 200 ICP AQ	EPA 200 ICP, 200.7 mod.	0.19	mg/L	08/04/1995		505	gmp
Selenium (Se) 200 GFAA AQ	EPA 200 furnace, 200 mo	<0.0050	mg/L	08/04/1995		167	mwt
Silver (Ag) 200 ICP AQ	EPA 200 ICP, 200.7 mod.	<0.010	mg/L	08/04/1995		507	gmp
Thallium (Tl) 200 GFAA AQ	EPA 200 furnace, 200 mo	<0.010	mg/L	08/04/1995		134	mwt
Zinc (Zn) 200 ICP AQ	EPA 200 ICP, 200.7 mod.	0.36	mg/L	08/04/1995		554	gmp

NET Cambridge Division
ANALYTICAL REPORT

Report Date: 08/14/1995

Report To: Goldman Env. Const. Co.

NET Job No: 95.02736

Project: JAMECO Quarterly Monitoring

Date Rec'd: 07/25/1995

Sample ID: MW-7

NET Sample No: 127169

Parameter	Method	Result	Units	Analysis Date	Prep Batch	Run Batch	Analyst
Colorimet. Hexaval. ChromiumAQ	APHA 307B (14th Ed., 19	<0.015	mg/L	07/25/1995		423	smw
Metal Priority Pollutants, AQ	EPA 200 series	08/07/1995		08/07/1995		133	ecw
Aqueous Digestion EPA200 AQ	EPA 200 mod	08/01/1995	date	08/01/1995	5864cw		gsw
Aqueous Digestion GFAA EPA AQ	EPA 200 mod	08/01/1995		08/01/1995	5864cw		gsw
Antimony (Sb) 200 ICP AQ	EPA 200 ICP, 200.7	<0.10	mg/L	08/04/1995		386	gmp
Arsenic (As) 200 GFAA AQ	EPA 200 furnace, 200mod	<0.010	mg/L	08/08/1995		227	mwt
Beryllium (Be) 200 ICP AQ	EPA 200 ICP, 200.7mod.	<0.0050	mg/L	08/04/1995		369	gmp
Cadmium (Cd) 200 ICP AQ	EPA 200 ICP, 200.7mod.	0.0052	mg/L	08/04/1995		559	gmp
Chromium (Cr) 200 ICP AQ	EPA 200 ICP, 200.7 mod.	<0.010	mg/L	08/04/1995		528	gmp
Copper (Cu) 200 ICP AQ	EPA 200 ICP, 200.7 mod.	0.013	mg/L	08/04/1995		551	gmp
Lead (Pb) 200 GFAA AQ	EPA 200 furnace, 200 mo	<0.010	mg/L	08/07/1995		253	mwt
Mercury (Hg) 200 CVAA AQ	EPA 200 cold vapor, 245	<0.00020	mg/L	08/03/1995		513	drm
Nickel (Ni) 200 ICP AQ	EPA 200 ICP, 200.7 mod.	<0.040	mg/L	08/04/1995		505	gmp
Selenium (Se) 200 GFAA AQ	EPA 200 furnace, 200 mo	<0.0050	mg/L	08/04/1995		167	mwt
Silver (Ag) 200 ICP AQ	EPA 200 ICP, 200.7 mod.	<0.010	mg/L	08/04/1995		507	gmp
Thallium (Tl) 200 GFAA AQ	EPA 200 furnace, 200 mo	<0.010	mg/L	08/04/1995		134	mwt
Zinc (Zn) 200 ICP AQ	EPA 200 ICP, 200.7 mod.	0.035	mg/L	08/04/1995		554	gmp

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Report Date: 08/14/1995

Report To: Goldman Env. Const. Co.

NET Job No: 95.02736

Project: JAMECO Quarterly Monitoring

Date Rec'd: 07/25/1995

Sample ID: MW-9

NET Sample No: 127170

Parameter	Method	Result	Units	Analysis Date	Prep Batch	Run Batch	Analyst
Colorimet. Hexaval. ChromiumAQ	APHA 307B (14th Ed., 19	<0.015	mg/L	07/25/1995		423	smw
Metal Priority Pollutants, AQ	EPA 200 series	08/07/1995		08/07/1995		133	ecw
Aqueous Digestion EPA200 AQ	EPA 200 mod	08/01/1995	date	08/01/1995	5864cw		gsw
Aqueous Digestion GFAA EPA AQ	EPA 200 mod	08/01/1995		08/01/1995	5864cw		gsw
Antimony (Sb) 200 ICP AQ	EPA 200 ICP, 200.7	<0.10	mg/L	08/04/1995		386	gmp
Arsenic (As) 200 GFAA AQ	EPA 200 furnace, 200mod	0.013	mg/L	08/08/1995		227	mwt
Beryllium (Be) 200 ICP AQ	EPA 200 ICP, 200.7mod.	<0.0050	mg/L	08/04/1995		369	gmp
Cadmium (Cd) 200 ICP AQ	EPA 200 ICP, 200.7mod.	<0.0050	mg/L	08/04/1995		559	gmp
Chromium (Cr) 200 ICP AQ	EPA 200 ICP, 200.7 mod.	0.017	mg/L	08/04/1995		528	gmp
Copper (Cu) 200 ICP AQ	EPA 200 ICP, 200.7 mod.	0.019	mg/L	08/04/1995		551	gmp
Lead (Pb) 200 GFAA AQ	EPA 200 furnace, 200 mo	0.010	mg/L	08/07/1995		253	mwt
Mercury (Hg) 200 CVAA AQ	EPA 200 cold vapor, 245	<0.00020	mg/L	08/03/1995		513	drm
Nickel (Ni) 200 ICP AQ	EPA 200 ICP, 200.7 mod.	<0.040	mg/L	08/04/1995		505	gmp
Selenium (Se) 200 GFAA AQ	EPA 200 furnace, 200 mo	<0.0050	mg/L	08/04/1995		167	mwt
Silver (Ag) 200 ICP AQ	EPA 200 ICP, 200.7 mod.	<0.010	mg/L	08/04/1995		507	gmp
Thallium (Tl) 200 GFAA AQ	EPA 200 furnace, 200 mo	<0.010	mg/L	08/04/1995		134	mwt
Zinc (Zn) 200 ICP AQ	EPA 200 ICP, 200.7 mod.	0.10	mg/L	08/04/1995		554	gmp

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Report Date: 08/14/1995

Report To: Goldman Env. Const. Co.

NET Job No: 95.02736

Project: JAMECO Quarterly Monitoring

Date Rec'd: 07/25/1995

Sample ID: MW-12

NET Sample No: 127171

Parameter	Method	Result	Units	Analysis Date	Prep Batch	Run Batch	Analyst
Colorimet. Hexaval. ChromiumAQ	APHA 307B (14th Ed., 19	<0.015	mg/L	07/25/1995		423	smw
Metal Priority Pollutants, AQ	EPA 200 series	08/07/1995		08/07/1995		133	ecw
Aqueous Digestion EPA200 AQ	EPA 200 mod	08/01/1995	date	08/01/1995	5864cw		gsw
Aqueous Digestion GFAA EPA AQ	EPA 200 mod	08/01/1995		08/01/1995	5864cw		gsw
Antimony (Sb) 200 ICP AQ	EPA 200 ICP, 200.7	0.16	mg/L	08/04/1995		386	gmp
Arsenic (As) 200 GFAA AQ	EPA 200 furnace, 200mod	0.073	mg/L	08/08/1995		227	mwt
Beryllium (Be) 200 ICP AQ	EPA 200 ICP, 200.7mod.	0.011	mg/L	08/04/1995		369	gmp
Cadmium (Cd) 200 ICP AQ	EPA 200 ICP, 200.7mod.	0.050	mg/L	08/04/1995		559	gmp
Chromium (Cr) 200 ICP AQ	EPA 200 ICP, 200.7 mod.	10	mg/L	08/04/1995		528	gmp
Copper (Cu) 200 ICP AQ	EPA 200 ICP, 200.7 mod.	13	mg/L	08/04/1995		551	gmp
Lead (Pb) 200 GFAA AQ	EPA 200 furnace, 200 mo	0.16	mg/L	08/07/1995		253	mwt
Mercury (Hg) 200 CVAA AQ	EPA 200 cold vapor, 245	0.0013	mg/L	08/03/1995		513	drm
Nickel (Ni) 200 ICP AQ	EPA 200 ICP, 200.7 mod.	16	mg/L	08/04/1995		505	gmp
Selenium (Se) 200 GFAA AQ	EPA 200 furnace, 200 mo	<0.0050	mg/L	08/08/1995		167	mwt
Silver (Ag) 200 ICP AQ	EPA 200 ICP, 200.7 mod.	<0.010	mg/L	08/04/1995		507	gmp
Thallium (Tl) 200 GFAA AQ	EPA 200 furnace, 200 mo	<0.010	mg/L	08/04/1995		134	mwt
Zinc (Zn) 200 ICP AQ	EPA 200 ICP, 200.7 mod.	3.0	mg/L	08/04/1995		554	gmp

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Report Date: 08/14/1995

Report To: Goldman Env. Const. Co.

NET Job No: 95.02736

Project: JAMECO Quarterly Monitoring

Date Rec'd: 07/25/1995

Sample ID: MW-1

NET Sample No: 127165

Parameter	Result	Units	Analysis Date	Prep Batch	Run Batch	Analyst
Volatiles by GC/MS 524.2 AQ						
Benzene	<0.2	ug/L	07/26/1995		262	bel
Bromobenzene	<0.4	ug/L				
Bromochloromethane	<0.3	ug/L				
Bromodichloromethane	<0.4	ug/L				
Bromoform	<0.3	ug/L				
Bromomethane	<0.3	ug/L				
n-Butylbenzene	<0.4	ug/L				
sec-Butylbenzene	<0.2	ug/L				
tert-Butylbenzene	<0.3	ug/L				
Carbon Tetrachloride	<0.6	ug/L				
Chlorobenzene	<0.2	ug/L				
Chloroethane	<0.4	ug/L				
Chloroform	<0.7	ug/L				
Chloromethane	<0.5	ug/L				
2-Chlorotoluene	<0.4	ug/L				
4-Chlorotoluene	<0.3	ug/L				
1,2-Dibromo-3-chloropropane	<0.8	ug/L				
Dibromochloromethane	<0.3	ug/L				
1,2-Dibromoethane (EDB)	<0.3	ug/L				
Dibromomethane	<0.3	ug/L				
1,2-Dichlorobenzene	<0.4	ug/L				
1,3-Dichlorobenzene	<0.2	ug/L				
1,4-Dichlorobenzene	<0.5	ug/L				
Dichlorodifluoromethane	<1.5	ug/L				
1,1-Dichloroethane	<0.3	ug/L				
1,2-Dichloroethane	<0.7	ug/L				
1,1-Dichloroethene	<1.3	ug/L				
cis-1,2-Dichloroethene	<0.4	ug/L				
trans-1,2-Dichloroethene	<0.2	ug/L				
1,2-Dichloropropane	<0.3	ug/L				
1,3-Dichloropropane	<0.3	ug/L				
2,2-Dichloropropane	<0.6	ug/L				
1,1-Dichloropropene	<0.3	ug/L				
cis -1,3-Dichloropropene	<0.4	ug/L				
trans-1,3-Dichloropropene	<0.4	ug/L				
Ethylbenzene	<0.3	ug/L				
Hexachlorobutadiene	<0.6	ug/L				
Isopropylbenzene	<0.4	ug/L				
4-Isopropyltoluene	<0.4	ug/L				
Methylene Chloride	<1.0	ug/L				
Naphthalene	<2.8	ug/L				
n-Propylbenzene	<0.4	ug/L				
Styrene	<0.4	ug/L				
1,1,1,2-Tetrachloroethane	<0.5	ug/L				
1,1,2,2-Tetrachloroethane	<0.3	ug/L				
Tetrachloroethene	<0.4	ug/L				
Toluene	<0.2	ug/L				

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Report Date: 08/14/1995

Report To: Goldman Env. Const. Co.

NET Job No: 95.02736

Project: JAMECO Quarterly Monitoring

Date Rec'd: 07/25/1995

Sample ID: MW-1

NET Sample No: 127165

Parameter	Result	Units	Analysis Date	Prep Batch	Run Batch	Analyst
1,2,3-Trichlorobenzene	<0.9	ug/L				
1,2,4-Trichlorobenzene	<0.7	ug/L	07/26/1995		262	bel
1,1,1-Trichloroethane	0.7	ug/L				
1,1,2-Trichloroethane	<0.2	ug/L				
Trichloroethene	<0.3	ug/L				
Trichlorofluoromethane	<0.6	ug/L				
1,2,4-Trimethylbenzene	<0.4	ug/L				
1,3,5-Trimethylbenzene	<0.4	ug/L				
1,2,3-Trichloropropane	<0.6	ug/L				
Vinyl Chloride	<0.4	ug/L				
m-Xylene	<0.4	ug/L				
o-Xylene	<0.7	ug/L				
p-Xylene	<0.7	ug/L				

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Report To: Goldman Env. Const. Co.

NET Job No: 95.02736

Project: JAMECO Quarterly Monitoring

Date Rec'd: 07/25/1995

Sample ID: MW-2

NET Sample No: 127166

Parameter	Result	Units	Analysis Date	Prep Batch	Run Batch	Analyst
Volatiles by GC/MS 524.2 AQ						
Benzene	<0.2	ug/L	07/27/1995		263	bel
Bromobenzene	<0.4	ug/L				
Bromochloromethane	<0.3	ug/L				
Bromodichloromethane	<0.4	ug/L				
Bromoform	<0.3	ug/L				
Bromomethane	<0.3	ug/L				
n-Butylbenzene	<0.4	ug/L				
sec-Butylbenzene	<0.2	ug/L				
tert-Butylbenzene	<0.3	ug/L				
Carbon Tetrachloride	<0.6	ug/L				
Chlorobenzene	6	ug/L				
Chloroethane	<0.4	ug/L				
Chloroform	<0.7	ug/L				
Chloromethane	<0.5	ug/L				
2-Chlorotoluene	<0.4	ug/L				
4-Chlorotoluene	<0.3	ug/L				
1,2-Dibromo-3-chloropropane	<0.8	ug/L				
Dibromochloromethane	<0.3	ug/L				
1,2-Dibromoethane (EDB)	<0.3	ug/L				
Dibromomethane	<0.3	ug/L				
1,2-Dichlorobenzene	1	ug/L				
1,3-Dichlorobenzene	2	ug/L				
1,4-Dichlorobenzene	2	ug/L				
Dichlorodifluoromethane	<1.5	ug/L				
1,1-Dichloroethane	<0.3	ug/L				
1,2-Dichloroethane	<0.7	ug/L				
1,1-Dichloroethene	<1.3	ug/L				
cis-1,2-Dichloroethene	4	ug/L				
trans-1,2-Dichloroethene	<0.2	ug/L				
1,2-Dichloropropane	<0.3	ug/L				
1,3-Dichloropropane	<0.3	ug/L				
2,2-Dichloropropane	<0.6	ug/L				
1,1-Dichloropropene	<0.3	ug/L				
cis -1,3-Dichloropropene	<0.4	ug/L				
trans-1,3-Dichloropropene	<0.4	ug/L				
Ethylbenzene	<0.3	ug/L				
Hexachlorobutadiene	<0.6	ug/L				
Isopropylbenzene	<0.4	ug/L				
4-Isopropyltoluene	<0.4	ug/L				
Methylene Chloride	<1.0	ug/L				
Naphthalene	<2.8	ug/L				
n-Propylbenzene	<0.4	ug/L				
Styrene	<0.4	ug/L				
1,1,1,2-Tetrachloroethane	<0.5	ug/L				
1,1,2,2-Tetrachloroethane	<0.3	ug/L				
Tetrachloroethene	0.5	ug/L				
Toluene	<0.2	ug/L				

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Report To: Goldman Env. Const. Co.

NET Job No: 95.02736

Project: JAMECO Quarterly Monitoring

Date Rec'd: 07/25/1995

Sample ID: MW-2

NET Sample No: 127166

Parameter	Result	Units	Analysis Date	Prep Batch	Run Batch	Analyst
1,2,3-Trichlorobenzene	<0.9	ug/L				
1,2,4-Trichlorobenzene	<0.7	ug/L	07/27/1995		263	bel
1,1,1-Trichloroethane	<0.5	ug/L				
1,1,2-Trichloroethane	<0.2	ug/L				
Trichloroethene	5	ug/L				
Trichlorofluoromethane	<0.6	ug/L				
1,2,4-Trimethylbenzene	<0.4	ug/L				
1,3,5-Trimethylbenzene	<0.4	ug/L				
1,2,3-Trichloropropane	<0.6	ug/L				
Vinyl Chloride	<0.4	ug/L				
m-Xylene	<0.4	ug/L				
o-Xylene	<0.7	ug/L				
p-Xylene	<0.7	ug/L				

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Report To: Goldman Env. Const. Co.

NET Job No: 95.02736

Project: JAMECO Quarterly Monitoring

Date Rec'd: 07/25/1995

Sample ID: MW-3

NET Sample No: 127167

Parameter	Result	Units	Analysis Date	Prep Batch	Run Batch	Analyst
Volatiles by GC/MS 524.2 AQ						
Benzene	<0.2	ug/L	07/27/1995		263	bel
Bromobenzene	<0.4	ug/L				
Bromochloromethane	<0.3	ug/L				
Bromodichloromethane	<0.4	ug/L				
Bromoform	<0.3	ug/L				
Bromomethane	<0.3	ug/L				
n-Butylbenzene	<0.4	ug/L				
sec-Butylbenzene	<0.2	ug/L				
tert-Butylbenzene	<0.3	ug/L				
Carbon Tetrachloride	<0.6	ug/L				
Chlorobenzene	<0.2	ug/L				
Chloroethane	<0.4	ug/L				
Chloroform	<0.7	ug/L				
Chloromethane	<0.5	ug/L				
2-Chlorotoluene	<0.4	ug/L				
4-Chlorotoluene	<0.3	ug/L				
1,2-Dibromo-3-chloropropane	<0.8	ug/L				
Dibromochloromethane	<0.3	ug/L				
1,2-Dibromoethane (EDB)	<0.3	ug/L				
Dibromomethane	<0.3	ug/L				
1,2-Dichlorobenzene	<0.4	ug/L				
1,3-Dichlorobenzene	<0.2	ug/L				
1,4-Dichlorobenzene	<0.5	ug/L				
Dichlorodifluoromethane	<1.5	ug/L				
1,1-Dichloroethane	<0.3	ug/L				
1,2-Dichloroethane	<0.7	ug/L				
1,1-Dichloroethene	<1.3	ug/L				
cis-1,2-Dichloroethene	5	ug/L				
trans-1,2-Dichloroethene	<0.2	ug/L				
1,2-Dichloropropane	<0.3	ug/L				
1,3-Dichloropropane	<0.3	ug/L				
2,2-Dichloropropane	<0.6	ug/L				
1,1-Dichloropropene	<0.3	ug/L				
cis -1,3-Dichloropropene	<0.4	ug/L				
trans-1,3-Dichloropropene	<0.4	ug/L				
Ethylbenzene	<0.3	ug/L				
Hexachlorobutadiene	<0.6	ug/L				
Isopropylbenzene	<0.4	ug/L				
4-Isopropyltoluene	<0.4	ug/L				
Methylene Chloride	<1.0	ug/L				
Naphthalene	<2.8	ug/L				
n-Propylbenzene	<0.4	ug/L				
Styrene	<0.4	ug/L				
1,1,1,2-Tetrachloroethane	<0.5	ug/L				
1,1,2,2-Tetrachloroethane	<0.3	ug/L				
Tetrachloroethene	4	ug/L				
Toluene	<0.2	ug/L				

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Report To: Goldman Env. Const. Co.

NET Job No: 95.02736

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Date Rec'd: 07/25/1995

Sample ID: MW-3

NET Sample No: 127167

Parameter	Result	Units	Analysis Date	Prep Batch	Run Batch	Analyst
1,2,3-Trichlorobenzene	<0.9	ug/L				
1,2,4-Trichlorobenzene	<0.7	ug/L	07/27/1995		263	bel
1,1,1-Trichloroethane	<0.5	ug/L				
1,1,2-Trichloroethane	<0.2	ug/L				
Trichloroethene	12	ug/L				
Trichlorofluoromethane	<0.6	ug/L				
1,2,4-Trimethylbenzene	<0.4	ug/L				
1,3,5-Trimethylbenzene	<0.4	ug/L				
1,2,3-Trichloropropane	<0.6	ug/L				
Vinyl Chloride	<0.4	ug/L				
m-Xylene	<0.4	ug/L				
o-Xylene	<0.7	ug/L				
p-Xylene	<0.7	ug/L				

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Report To: Goldman Env. Const. Co.

NET Job No: 95.02736

Project: JAMECO Quarterly Monitoring

Date Rec'd: 07/25/1995

Sample ID: MW-5

NET Sample No: 127168

Parameter	Result	Units	Analysis Date	Prep Batch	Run Batch	Analyst
Volatiles by GC/MS 524.2 AQ						
Benzene	<2.	ug/L	07/27/1995		263	bel
Bromobenzene	<4.	ug/L				
Bromochloromethane	<3.	ug/L				
Bromodichloromethane	<4.	ug/L				
Bromoform	<3.	ug/L				
Bromomethane	<3.	ug/L				
n-Butylbenzene	<4.	ug/L				
sec-Butylbenzene	<2.	ug/L				
tert-Butylbenzene	<3.	ug/L				
Carbon Tetrachloride	<6.	ug/L				
Chlorobenzene	<2.	ug/L				
Chloroethane	<4.	ug/L				
Chloroform	<7.	ug/L				
Chloromethane	<5.	ug/L				
2-Chlorotoluene	<4.	ug/L				
4-Chlorotoluene	<3.	ug/L				
1,2-Dibromo-3-chloropropane	<8.	ug/L				
Dibromochloromethane	<3.	ug/L				
1,2-Dibromoethane (EDB)	<3.	ug/L				
Dibromomethane	<3.	ug/L				
1,2-Dichlorobenzene	<4.	ug/L				
1,3-Dichlorobenzene	<2.	ug/L				
1,4-Dichlorobenzene	<5.	ug/L				
Dichlorodifluoromethane	<15.	ug/L				
1,1-Dichloroethane	<3.	ug/L				
1,2-Dichloroethane	<7.	ug/L				
1,1-Dichloroethene	<13.	ug/L				
cis-1,2-Dichloroethene	<4.	ug/L				
trans-1,2-Dichloroethene	<2.	ug/L				
1,2-Dichloropropane	<3.	ug/L				
1,3-Dichloropropane	<3.	ug/L				
2,2-Dichloropropane	<6.	ug/L				
1,1-Dichloropropene	<3.	ug/L				
cis -1,3-Dichloropropene	<4.	ug/L				
trans-1,3-Dichloropropene	<4.	ug/L				
Ethylbenzene	<3.	ug/L				
Hexachlorobutadiene	<6.	ug/L				
Isopropylbenzene	<4.	ug/L				
4-Isopropyltoluene	<4.	ug/L				
Methylene Chloride	<10.	ug/L				
Naphthalene	<28.	ug/L				
n-Propylbenzene	<4.	ug/L				
Styrene	<4.	ug/L				
1,1,1,2-Tetrachloroethane	<5.	ug/L				
1,1,2,2-Tetrachloroethane	<3.	ug/L				
Tetrachloroethene	280	ug/L				
Toluene	<2.	ug/L				

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Report To: Goldman Env. Const. Co.

NET Job No: 95.02736

Project: JAMECO Quarterly Monitoring

Date Rec'd: 07/25/1995

Sample ID: MW-5

NET Sample No: 127168

Parameter	Result	Units	Analysis Date	Prep Batch	Run Batch	Analyst
1,2,3-Trichlorobenzene	<9.	ug/L				
1,2,4-Trichlorobenzene	<7.	ug/L	07/27/1995		263	bel
1,1,1-Trichloroethane	<5.	ug/L				
1,1,2-Trichloroethane	<2.	ug/L				
Trichloroethene	9	ug/L				
Trichlorofluoromethane	<6.	ug/L				
1,2,4-Trimethylbenzene	<4.	ug/L				
1,3,5-Trimethylbenzene	<4.	ug/L				
1,2,3-Trichloropropane	<6.	ug/L				
Vinyl Chloride	<4.	ug/L				
m-Xylene	<4.	ug/L				
o-Xylene	<7.	ug/L				
p-Xylene	<7.	ug/L				

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Report To: Goldman Env. Const. Co. NET Job No: 95.02736

Project: JAMECO Quarterly Monitoring Date Rec'd: 07/25/1995

Sample ID: MW-7

NET Sample No: 127169

Parameter	Result	Units	Analysis Date	Prep Batch	Run Batch	Analyst
Volatiles by GC/MS 524.2 AQ						
Benzene	<0.2	ug/L	07/27/1995		263	bel
Bromobenzene	<0.4	ug/L				
Bromochloromethane	<0.3	ug/L				
Bromodichloromethane	<0.4	ug/L				
Bromoform	<0.3	ug/L				
Bromomethane	<0.3	ug/L				
n-Butylbenzene	<0.4	ug/L				
sec-Butylbenzene	<0.2	ug/L				
tert-Butylbenzene	<0.3	ug/L				
Carbon Tetrachloride	<0.6	ug/L				
Chlorobenzene	<0.2	ug/L				
Chloroethane	<0.4	ug/L				
Chloroform	<0.7	ug/L				
Chloromethane	<0.5	ug/L				
2-Chlorotoluene	<0.4	ug/L				
4-Chlorotoluene	<0.3	ug/L				
1,2-Dibromo-3-chloropropane	<0.8	ug/L				
Dibromochloromethane	0.5	ug/L				
1,2-Dibromoethane (EDB)	<0.3	ug/L				
Dibromomethane	<0.3	ug/L				
1,2-Dichlorobenzene	<0.4	ug/L				
1,3-Dichlorobenzene	<0.2	ug/L				
1,4-Dichlorobenzene	<0.5	ug/L				
Dichlorodifluoromethane	<1.5	ug/L				
1,1-Dichloroethane	<0.3	ug/L				
1,2-Dichloroethane	<0.7	ug/L				
1,1-Dichloroethene	<1.3	ug/L				
cis-1,2-Dichloroethene	4	ug/L				
trans-1,2-Dichloroethene	<0.2	ug/L				
1,2-Dichloropropane	<0.3	ug/L				
1,3-Dichloropropane	<0.3	ug/L				
2,2-Dichloropropane	<0.6	ug/L				
1,1-Dichloropropene	<0.3	ug/L				
cis -1,3-Dichloropropene	<0.4	ug/L				
trans-1,3-Dichloropropene	<0.4	ug/L				
Ethylbenzene	<0.3	ug/L				
Hexachlorobutadiene	<0.6	ug/L				
Isopropylbenzene	<0.4	ug/L				
4-Isopropyltoluene	<0.4	ug/L				
Methylene Chloride	<1.0	ug/L				
Naphthalene	<2.8	ug/L				
n-Propylbenzene	<0.4	ug/L				
Styrene	<0.4	ug/L				
1,1,1,2-Tetrachloroethane	<0.5	ug/L				
1,1,2,2-Tetrachloroethane	<0.3	ug/L				
Tetrachloroethene	13	ug/L				
Toluene	<0.2	ug/L				

NET Cambridge Division
ANALYTICAL REPORT

Report Date: 08/14/1995

Report To: Goldman Env. Const. Co.

NET Job No: 95.02736

Project: JAMECO Quarterly Monitoring

Date Rec'd: 07/25/1995

Sample ID: MW-7

NET Sample No: 127169

Parameter	Result	Units	Analysis Date	Prep Batch	Run Batch	Analyst
1,2,3-Trichlorobenzene	<0.9	ug/L				
1,2,4-Trichlorobenzene	<0.7	ug/L	07/27/1995		263	bel
1,1,1-Trichloroethane	<0.5	ug/L				
1,1,2-Trichloroethane	<0.2	ug/L				
Trichloroethene	0.8	ug/L				
Trichlorofluoromethane	<0.6	ug/L				
1,2,4-Trimethylbenzene	<0.4	ug/L				
1,3,5-Trimethylbenzene	<0.4	ug/L				
1,2,3-Trichloropropane	<0.6	ug/L				
Vinyl Chloride	<0.4	ug/L				
m-Xylene	<0.4	ug/L				
o-Xylene	<0.7	ug/L				
p-Xylene	<0.7	ug/L				

NET Cambridge Division
ANALYTICAL REPORT

Report Date: 08/14/1995

Report To: Goldman Env. Const. Co.

NET Job No: 95.02736

Project: JAMECO Quarterly Monitoring

Date Rec'd: 07/25/1995

Sample ID: MW-9

NET Sample No: 127170

Parameter	Result	Units	Analysis Date	Prep Batch	Run Batch	Analyst
Volatiles by GC/MS 524.2 AQ						
Benzene	<0.2	ug/L	07/26/1995		262	bel
Bromobenzene	<0.4	ug/L				
Bromochloromethane	<0.3	ug/L				
Bromodichloromethane	<0.4	ug/L				
Bromoform	<0.3	ug/L				
Bromomethane	<0.3	ug/L				
n-Butylbenzene	<0.4	ug/L				
sec-Butylbenzene	<0.2	ug/L				
tert-Butylbenzene	<0.3	ug/L				
Carbon Tetrachloride	<0.6	ug/L				
Chlorobenzene	<0.2	ug/L				
Chloroethane	<0.4	ug/L				
Chloroform	2	ug/L				
Chloromethane	<0.5	ug/L				
2-Chlorotoluene	<0.4	ug/L				
4-Chlorotoluene	<0.3	ug/L				
1,2-Dibromo-3-chloropropane	<0.8	ug/L				
Dibromochloromethane	0.4	ug/L				
1,2-Dibromoethane (EDB)	<0.3	ug/L				
Dibromomethane	<0.3	ug/L				
1,2-Dichlorobenzene	<0.4	ug/L				
1,3-Dichlorobenzene	<0.2	ug/L				
1,4-Dichlorobenzene	<0.5	ug/L				
Dichlorodifluoromethane	<1.5	ug/L				
1,1-Dichloroethane	<0.3	ug/L				
1,2-Dichloroethane	<0.7	ug/L				
1,1-Dichloroethene	<1.3	ug/L				
cis-1,2-Dichloroethene	<0.4	ug/L				
trans-1,2-Dichloroethene	<0.2	ug/L				
1,2-Dichloropropane	<0.3	ug/L				
1,3-Dichloropropane	<0.3	ug/L				
2,2-Dichloropropane	<0.6	ug/L				
1,1-Dichloropropene	<0.3	ug/L				
cis -1,3-Dichloropropene	<0.4	ug/L				
trans-1,3-Dichloropropene	<0.4	ug/L				
Ethylbenzene	<0.3	ug/L				
Hexachlorobutadiene	<0.6	ug/L				
Isopropylbenzene	<0.4	ug/L				
4-Isopropyltoluene	<0.4	ug/L				
Methylene Chloride	<1.0	ug/L				
Naphthalene	<2.8	ug/L				
n-Propylbenzene	<0.4	ug/L				
Styrene	<0.4	ug/L				
1,1,1,2-Tetrachloroethane	<0.5	ug/L				
1,1,2,2-Tetrachloroethane	<0.3	ug/L				
Tetrachloroethene	<0.4	ug/L				
Toluene	<0.2	ug/L				

NET Cambridge Division
ANALYTICAL REPORT

Report Date: 08/14/1995

Report To: Goldman Env. Const. Co.

NET Job No: 95.02736

Project: JAMECO Quarterly Monitoring

Date Rec'd: 07/25/1995

Sample ID: MW-9

NET Sample No: 127170

Parameter	Result	Units	Analysis Date	Prep Batch	Run Batch	Analyst
1,2,3-Trichlorobenzene	<0.9	ug/L				
1,2,4-Trichlorobenzene	<0.7	ug/L	07/26/1995		262	bel
1,1,1-Trichloroethane	<0.5	ug/L				
1,1,2-Trichloroethane	<0.2	ug/L				
Trichloroethene	<0.3	ug/L				
Trichlorofluoromethane	<0.6	ug/L				
1,2,4-Trimethylbenzene	<0.4	ug/L				
1,3,5-Trimethylbenzene	<0.4	ug/L				
1,2,3-Trichloropropane	<0.6	ug/L				
Vinyl Chloride	<0.4	ug/L				
m-Xylene	<0.4	ug/L				
o-Xylene	<0.7	ug/L				
p-Xylene	<0.7	ug/L				

NET Cambridge Division
ANALYTICAL REPORT

Report Date: 08/14/1995

Report To: Goldman Env. Const. Co.

NET Job No: 95.02736

Project: JAMECO Quarterly Monitoring

Date Rec'd: 07/25/1995

Sample ID: MW-12

NET Sample No: 127171

Parameter	Result	Units	Analysis Date	Prep Batch	Run Batch	Analyst
Volatiles by GC/MS 524.2 AQ						
Benzene	<10	ug/L	07/27/1995		263	bel
Bromobenzene	<20	ug/L				
Bromochloromethane	<20	ug/L				
Bromodichloromethane	<20	ug/L				
Bromoform	<20	ug/L				
Bromomethane	<20	ug/L				
n-Butylbenzene	<20	ug/L				
sec-Butylbenzene	<10	ug/L				
tert-Butylbenzene	<20	ug/L				
Carbon Tetrachloride	<30	ug/L				
Chlorobenzene	<10	ug/L				
Chloroethane	<20	ug/L				
Chloroform	<40	ug/L				
Chloromethane	<20	ug/L				
2-Chlorotoluene	<20	ug/L				
4-Chlorotoluene	<20	ug/L				
1,2-Dibromo-3-chloropropane	<40	ug/L				
Dibromochloromethane	<20	ug/L				
1,2-Dibromoethane (EDB)	<20	ug/L				
Dibromomethane	<20	ug/L				
1,2-Dichlorobenzene	<20	ug/L				
1,3-Dichlorobenzene	<10	ug/L				
1,4-Dichlorobenzene	<20	ug/L				
Dichlorodifluoromethane	<75.	ug/L				
1,1-Dichloroethane	<20	ug/L				
1,2-Dichloroethane	<40	ug/L				
1,1-Dichloroethene	<65.	ug/L				
cis-1,2-Dichloroethene	1000	ug/L				
trans-1,2-Dichloroethene	16	ug/L				
1,2-Dichloropropane	<20	ug/L				
1,3-Dichloropropane	<20	ug/L				
2,2-Dichloropropane	<30	ug/L				
1,1-Dichloropropene	<20	ug/L				
cis -1,3-Dichloropropene	<20	ug/L				
trans-1,3-Dichloropropene	<20	ug/L				
Ethylbenzene	<20	ug/L				
Hexachlorobutadiene	<30	ug/L				
Isopropylbenzene	<20	ug/L				
4-Isopropyltoluene	<20	ug/L				
Methylene Chloride	<50.	ug/L				
Naphthalene	<140	ug/L				
n-Propylbenzene	<20	ug/L				
Styrene	<20	ug/L				
1,1,1,2-Tetrachloroethane	<20	ug/L				
1,1,2,2-Tetrachloroethane	<20	ug/L				
Tetrachloroethene	100	ug/L				
Toluene	<10	ug/L				

NET Cambridge Division
ANALYTICAL REPORT

Report Date: 08/14/1995

Report To: Goldman Env. Const. Co.

NET Job No: 95.02736

Project: JAMECO Quarterly Monitoring

Date Rec'd: 07/25/1995

Sample ID: MW-12

NET Sample No: 127171

Parameter	Result	Units	Analysis Date	Prep Batch	Run Batch	Analyst
1,2,3-Trichlorobenzene	<40	ug/L				
1,2,4-Trichlorobenzene	<40	ug/L	07/27/1995		263	bel
1,1,1-Trichloroethane	<20	ug/L				
1,1,2-Trichloroethane	<10	ug/L				
Trichloroethene	1800	ug/L				
Trichlorofluoromethane	<30	ug/L				
1,2,4-Trimethylbenzene	<20	ug/L				
1,3,5-Trimethylbenzene	<20	ug/L				
1,2,3-Trichloropropane	<30	ug/L				
Vinyl Chloride	54	ug/L				
m-Xylene	<20	ug/L				
o-Xylene	<40	ug/L				
p-Xylene	<40	ug/L				

QC SUMMARY FOR INORGANICS REPORT: DUPLICATES

NET-CAMBRIDGE DIVISION
Date of report: 08/09/95

Work ID:
SDG/ Batch: 9502736
Page: 1

Duplicate: 2645-126856(Aqueous)

Element	Sample	Duplicate		%RPD	
% solids:					
Ag	< 0.010	< 0.010	mg/L	----	
As	< 0.010	<0.010	mg/L	----	
Be	< 0.0050	< 0.0050	mg/L	----	
Cd	0.0052	0.0050	mg/L	4	
Cr	< 0.010	< 0.010	mg/L	----	
Cu	0.074	0.074	mg/L	0	
Hg	0.00023	<0.00020	mg/L	200	*
Ni	< 0.040	< 0.040	mg/L	----	
Pb	0.017	< 0.010	mg/L	200	*
Sb	< 0.10	< 0.10	mg/L	----	
Se	< 0.0050	< 0.0050	mg/L	----	
Tl	< 0.010	< 0.010	mg/L	----	
Zn	0.034	0.047	mg/L	32	*

* Sample and/or duplicate value ≤ 5 x the DL. No control limits apply.

QC SUMMARY FOR INORGANICS REPORT: PRE-DIGESTION SPIKES

NET-CAMBRIDGE DIVISION
Date of report: 08/09/95

Work ID:
SDG/ Batch: 9502736

Spike: 2736-127167 (Aqueous)

Element	Sample		Spike Added	%Recovery	
Ag	< 0.010	mg/L	0.048	96	
As	< 0.010	mg/L	0.046	115	
Be	< 0.0050	mg/L	0.045	90	
Cd	< 0.0050	mg/L	0.049	98	
Cr	0.061	mg/L	0.24	90	
Cu	6.6	mg/L	6.9	120	*
Hg	0.00021	mg/L	0.0014	119	
Ni	4.2	mg/L	4.7	100	*
Pb	< 0.010	mg/L	0.017	85	
Sb	< 0.10	mg/L	0.45	90	
Se	< 0.0050	mg/L	0.0064	64	**
Tl	< 0.010	mg/L	0.038	76	
Zn	0.89	mg/L	1.3	82	

* Spiking level less than 0.25 times sample level. No control limits apply

** Possible matrix interference indicated.

QC SUMMARY FOR INORGANICS REPORT: DIGESTION BLANKS

NET-CAMBRIDGE DIVISION
Date of report: 08/09/95

Work ID:
SDG/ Batch: 9502736

Blank: 5864CW
Found, mg/L

Element	
Ag	< 0.010
As	< 0.010
Be	< 0.0050
Cd	0.0055
Cr	< 0.010
Cu	< 0.010
Hg	< 0.00020
Ni	< 0.040
Pb	< 0.010
Sb	< 0.10
Se	< 0.0050
Tl	< 0.010
Zn	< 0.020

All blank values are within acceptable limits.

QC SUMMARY FOR INORGANICS REPORT: LAB CONTROL STANDARDS

NET-CAMBRIDGE DIVISION
Date of report: 08/09/95

Work ID:
SDG/ Batch: 9502736

Standard:	LCSHCL 5864CW (Liquid)				LCSHG 5864CW (Liquid)			
Element	True	Found	Units	% R	True	Found	Units	% R
Ag	1.0	0.91	mg/L	91				
As								
Be	0.20	0.18	mg/L	90				
Cd	1.00	0.88	mg/L	88				
Cr	1.0	0.89	mg/L	89				
Cu	1.0	0.94	mg/L	94				
Hg					0.0040	0.0045	mg/L	112
Ni	1.0	0.91	mg/L	91				
Pb								
Sb	1.0	0.92	mg/L	92				
Se								
Tl								
Zn	1.0	0.89	mg/L	89				

Standard:	LCSHNO3 5864CW (Liquid			
Element	True	Found	Units	% R
Ag				
As	0.020	0.018	mg/L	90
Be				
Cd				
Cr				
Cu				
Hg				
Ni				
Pb				
Sb				
Se	0.010	0.011	mg/L	110
Tl	0.050	0.050	mg/L	100
Zn				

NET Cambridge Division
BATCH QUALITY CONTROL DATA

Report To: Goldman Env. Const. Co.

NET Job No: 95.02736

Program: JAMECO Quarterly Monitoring

Report Date: 08/08/1995

Parameter	LCS % Recovery	Method Blank	Spike % Recovery	Sample (Run 1)	Duplicate (Run 2)	RPD	Analyst
Colorimet. Hexaval. ChromiumAQ	90.0	<0.015	62.0	<0.015	<0.015		smw

Please note that the data reported for the Duplicates and Spikes were analyzed in the same batch, but may not necessarily be that of your sample.

LCS - Laboratory Control Sample. For analyses not requiring sample digestion/preparation, independent control check sample result is reported.

NET Cambridge Division

QUALITY CONTROL DATA

Client: Goldman Env. Const. Co.

NET Job No: 95.02736

Project: JAMECO Quarterly Monitoring

Report Date: 08/14/1995

Surrogate Standard Percent Recovery

Abbreviated Surrogate Standard Names:

SS1	SS2	SS3	SS4	SS5	SS6	SS7	SS8	SS9	SS10	SS11	SS12
1,2-Dic	1,2-Dic										

			Percent Recovery										
Sample ID	NET ID	Matrix	SS1	SS2	SS3	SS4	SS5	SS6	SS7	SS8	SS9	SS10	SS11	SS12
MW-1	127165	GROUND WATER	91	89										
MW-2	127166	GROUND WATER	104	104										
MW-3	127167	GROUND WATER	104	98										
MW-5	127168	GROUND WATER	109	96										
MW-7	127169	GROUND WATER	108	94										
MW-9	127170	GROUND WATER	111	94										
MW-12	127171	GROUND WATER	109	101										

Notes:
NR - This surrogate standard is Not Required. Other versions of this test method may use this surrogate standard.
Dil - This surrogate standard was diluted to below detectable levels due to concentrations of analytes in this sample.

Complete Surrogate Standard Names Listed by Analysis:

Pesticide Surrogate Standards:
Decachl = Decachlorobiphenyl
Dibutyl = Dibutylchlorendate
Tetrach = Tetrachloro-m-xylene

Volatile Surrogate Standards:
Bromofl = Bromofluorobenzene
1,2-Dichl = 1,2-Dichloroethane-d4
Toluene = Toluene-d8

Drinking Water Method 524
1,2-Dichl = 1,2-Dichlorobenzene-d4

Semivolatlile Surrogate Standards:
2-Fluor (1st) = 2-Fluorobiphenyl
Phenol- = Phenol-d6
2,4,6-T = 2,4,6-Tribromophenol
2-Fluor (2nd) = 2-Fluorophenol
Nitrobe = Nitrobenzene-d5
p-Terph = p-Terphenyl

Herbicides Surrogate Standard:
2,4-Dic = 2,4-Dichlorophenyl acetic acid

Petroleum Hydrocarbon Fingerprint Surrogate Standard:
2-Fluor = 2-Fluorobiphenyl
para-Te = para-Terphynyl

NET Cambridge Division

QUALITY CONTROL DATA

Report To: Goldman Env. Const. Co.

NET Job No: 95.02736

Project: JAMECO Quarterly Monitoring

Report Date : 08/14/1995

Method Blank Analysis Data

Test Name	Result	Units	Prep Batch	Run Batch	Run Date	Analyst Initials
Volatiles by GC/MS 524.2 AQ						
1,2-Dichloroethane-d4	101	% recov.		262	07/26/1995	bel
1,2-Dichlorobenzene-d4	94	% recov.		262	07/26/1995	bel
Benzene	<0.2	ug/L		262	07/26/1995	bel
Bromobenzene	<0.4	ug/L		262	07/26/1995	bel
Bromochloromethane	<0.3	ug/L		262	07/26/1995	bel
Bromodichloromethane	<0.4	ug/L		262	07/26/1995	bel
Bromoform	<0.3	ug/L		262	07/26/1995	bel
Bromomethane	<0.3	ug/L		262	07/26/1995	bel
n-Butylbenzene	<0.4	ug/L		262	07/26/1995	bel
sec-Butylbenzene	<0.2	ug/L		262	07/26/1995	bel
tert-Butylbenzene	<0.3	ug/L		262	07/26/1995	bel
Carbon Tetrachloride	<0.6	ug/L		262	07/26/1995	bel
Chlorobenzene	<0.2	ug/L		262	07/26/1995	bel
Chloroethane	<0.4	ug/L		262	07/26/1995	bel
Chloroform	<0.7	ug/L		262	07/26/1995	bel
Chloromethane	<0.5	ug/L		262	07/26/1995	bel
2-Chlorotoluene	<0.4	ug/L		262	07/26/1995	bel
4-Chlorotoluene	<0.3	ug/L		262	07/26/1995	bel
1,2-Dibromo-3-chloropropane	<0.8	ug/L		262	07/26/1995	bel
Dibromochloromethane	<0.3	ug/L		262	07/26/1995	bel
1,2-Dibromoethane (EDB)	<0.3	ug/L		262	07/26/1995	bel
Dibromomethane	<0.3	ug/L		262	07/26/1995	bel
1,2-Dichlorobenzene	<0.4	ug/L		262	07/26/1995	bel
1,3-Dichlorobenzene	<0.2	ug/L		262	07/26/1995	bel
1,4-Dichlorobenzene	<0.5	ug/L		262	07/26/1995	bel
Dichlorodifluoromethane	<1.5	ug/L		262	07/26/1995	bel
1,1-Dichloroethane	<0.3	ug/L		262	07/26/1995	bel
1,2-Dichloroethane	<0.7	ug/L		262	07/26/1995	bel
1,1-Dichloroethene	<1.3	ug/L		262	07/26/1995	bel
cis-1,2-Dichloroethene	<0.4	ug/L		262	07/26/1995	bel
trans-1,2-Dichloroethene	<0.2	ug/L		262	07/26/1995	bel
1,2-Dichloropropane	<0.3	ug/L		262	07/26/1995	bel
1,3-Dichloropropane	<0.3	ug/L		262	07/26/1995	bel
2,2-Dichloropropane	<0.6	ug/L		262	07/26/1995	bel
1,1-Dichloropropene	<0.3	ug/L		262	07/26/1995	bel
cis -1,3-Dichloropropene	<0.4	ug/L		262	07/26/1995	bel
trans-1,3-Dichloropropene	<0.4	ug/L		262	07/26/1995	bel
Ethylbenzene	<0.3	ug/L		262	07/26/1995	bel
Hexachlorobutadiene	<0.6	ug/L		262	07/26/1995	bel
Isopropylbenzene	<0.4	ug/L		262	07/26/1995	bel
4-Isopropyltoluene	<0.4	ug/L		262	07/26/1995	bel
Methylene Chloride	<1.0	ug/L		262	07/26/1995	bel
Naphthalene	<2.8	ug/L		262	07/26/1995	bel
n-Propylbenzene	<0.4	ug/L		262	07/26/1995	bel
Styrene	<0.4	ug/L		262	07/26/1995	bel
1,1,1,2-Tetrachloroethane	<0.5	ug/L		262	07/26/1995	bel
1,1,2,2-Tetrachloroethane	<0.3	ug/L		262	07/26/1995	bel
Tetrachloroethene	<0.4	ug/L		262	07/26/1995	bel
Toluene	<0.2	ug/L		262	07/26/1995	bel
1,2,3-Trichlorobenzene	<0.9	ug/L		262	07/26/1995	bel

NET Cambridge Division

QUALITY CONTROL DATA

Report To: Goldman Env. Const. Co.

NET Job No: 95.02736

Project: JAMECO Quarterly Monitoring

Report Date : 08/14/1995

Method Blank Analysis Data

Test Name	Result	Units	Prep Batch	Run Batch	Run Date	Analyst Initials
1,2,4-Trichlorobenzene	<0.7	ug/L		262	07/26/1995	bel
1,1,1-Trichloroethane	<0.5	ug/L		262	07/26/1995	bel
1,1,2-Trichloroethane	<0.2	ug/L		262	07/26/1995	bel
Trichloroethene	<0.3	ug/L		262	07/26/1995	bel
Trichlorofluoromethane	<0.6	ug/L		262	07/26/1995	bel
1,2,4-Trimethylbenzene	<0.4	ug/L		262	07/26/1995	bel
1,3,5-Trimethylbenzene	<0.4	ug/L		262	07/26/1995	bel
1,2,3-Trichloropropane	<0.6	ug/L		262	07/26/1995	bel
Vinyl Chloride	<0.4	ug/L		262	07/26/1995	bel
m-Xylene	<0.4	ug/L		262	07/26/1995	bel
o-Xylene	<0.7	ug/L		262	07/26/1995	bel
p-Xylene	<0.7	ug/L		262	07/26/1995	bel

NET Cambridge Division

QUALITY CONTROL DATA

Report To: Goldman Env. Const. Co.

NET Job No: 95.02736

Project: JAMECO Quarterly Monitoring

Report Date : 08/14/1995

Method Blank Analysis Data

Test Name	Result	Units	Prep Batch	Run Batch	Run Date	Analyst Initials
Volatiles by GC/MS 524.2 AQ						
1,2-Dichloroethane-d4	97	% recov.		263	07/27/1995	bel
1,2-Dichlorobenzene-d4	100	% recov.		263	07/27/1995	bel
Benzene	<0.2	ug/L		263	07/27/1995	bel
Bromobenzene	<0.4	ug/L		263	07/27/1995	bel
Bromochloromethane	<0.3	ug/L		263	07/27/1995	bel
Bromodichloromethane	<0.4	ug/L		263	07/27/1995	bel
Bromoform	<0.3	ug/L		263	07/27/1995	bel
Bromomethane	<0.3	ug/L		263	07/27/1995	bel
n-Butylbenzene	<0.4	ug/L		263	07/27/1995	bel
sec-Butylbenzene	<0.2	ug/L		263	07/27/1995	bel
tert-Butylbenzene	<0.3	ug/L		263	07/27/1995	bel
Carbon Tetrachloride	<0.6	ug/L		263	07/27/1995	bel
Chlorobenzene	<0.2	ug/L		263	07/27/1995	bel
Chloroethane	<0.4	ug/L		263	07/27/1995	bel
Chloroform	<0.7	ug/L		263	07/27/1995	bel
Chloromethane	<0.5	ug/L		263	07/27/1995	bel
2-Chlorotoluene	<0.4	ug/L		263	07/27/1995	bel
4-Chlorotoluene	<0.3	ug/L		263	07/27/1995	bel
1,2-Dibromo-3-chloropropane	<0.8	ug/L		263	07/27/1995	bel
Dibromochloromethane	<0.3	ug/L		263	07/27/1995	bel
1,2-Dibromoethane (EDB)	<0.3	ug/L		263	07/27/1995	bel
Dibromomethane	<0.3	ug/L		263	07/27/1995	bel
1,2-Dichlorobenzene	<0.4	ug/L		263	07/27/1995	bel
1,3-Dichlorobenzene	<0.2	ug/L		263	07/27/1995	bel
1,4-Dichlorobenzene	<0.5	ug/L		263	07/27/1995	bel
Dichlorodifluoromethane	<1.5	ug/L		263	07/27/1995	bel
1,1-Dichloroethane	<0.3	ug/L		263	07/27/1995	bel
1,2-Dichloroethane	<0.7	ug/L		263	07/27/1995	bel
1,1-Dichloroethene	<1.3	ug/L		263	07/27/1995	bel
cis-1,2-Dichloroethene	<0.4	ug/L		263	07/27/1995	bel
trans-1,2-Dichloroethene	<0.2	ug/L		263	07/27/1995	bel
1,2-Dichloropropane	<0.3	ug/L		263	07/27/1995	bel
1,3-Dichloropropane	<0.3	ug/L		263	07/27/1995	bel
2,2-Dichloropropane	<0.6	ug/L		263	07/27/1995	bel
1,1-Dichloropropene	<0.3	ug/L		263	07/27/1995	bel
cis -1,3-Dichloropropene	<0.4	ug/L		263	07/27/1995	bel
trans-1,3-Dichloropropene	<0.4	ug/L		263	07/27/1995	bel
Ethylbenzene	<0.3	ug/L		263	07/27/1995	bel
Hexachlorobutadiene	<0.6	ug/L		263	07/27/1995	bel
Isopropylbenzene	<0.4	ug/L		263	07/27/1995	bel
4-Isopropyltoluene	<0.4	ug/L		263	07/27/1995	bel
Methylene Chloride	<1.0	ug/L		263	07/27/1995	bel
Naphthalene	<2.8	ug/L		263	07/27/1995	bel
n-Propylbenzene	<0.4	ug/L		263	07/27/1995	bel
Styrene	<0.4	ug/L		263	07/27/1995	bel
1,1,1,2-Tetrachloroethane	<0.5	ug/L		263	07/27/1995	bel
1,1,2,2-Tetrachloroethane	<0.3	ug/L		263	07/27/1995	bel
Tetrachloroethene	<0.4	ug/L		263	07/27/1995	bel
Toluene	<0.2	ug/L		263	07/27/1995	bel
1,2,3-Trichlorobenzene	<0.9	ug/L		263	07/27/1995	bel

NET Cambridge Division

QUALITY CONTROL DATA

Report To: Goldman Env. Const. Co.

NET Job No: 95.02736

Project: JAMECO Quarterly Monitoring

Report Date : 08/14/1995

Method Blank Analysis Data

Test Name	Result	Units	Prep Batch	Run Batch	Run Date	Analyst Initials
1,2,4-Trichlorobenzene	<0.7	ug/L		263	07/27/1995	bel
1,1,1-Trichloroethane	<0.5	ug/L		263	07/27/1995	bel
1,1,2-Trichloroethane	<0.2	ug/L		263	07/27/1995	bel
Trichloroethene	<0.3	ug/L		263	07/27/1995	bel
Trichlorofluoromethane	<0.6	ug/L		263	07/27/1995	bel
1,2,4-Trimethylbenzene	<0.4	ug/L		263	07/27/1995	bel
1,3,5-Trimethylbenzene	<0.4	ug/L		263	07/27/1995	bel
1,2,3-Trichloropropane	<0.6	ug/L		263	07/27/1995	bel
Vinyl Chloride	<0.4	ug/L		263	07/27/1995	bel
m-Xylene	<0.4	ug/L		263	07/27/1995	bel
o-Xylene	<0.7	ug/L		263	07/27/1995	bel
p-Xylene	<0.7	ug/L		263	07/27/1995	bel

NET Cambridge Division

QUALITY CONTROL DATA

Report To: Goldman Env. Const. Co.

NET Job No: 95.02736

Project: JAMECO Quarterly Monitoring

Report Date: 08/14/1995

Matrix Spike/Matrix Spike Duplicate Results

Compound	Spike Amount	Sample Result	Units	MS Result	MS % Recovery	MSD Result	MSD % Recovery	RPD
Volatiles by GC/MS 524.2 AQ								
Benzene	10.0	<0.2	ug/L	9.18	91.8	9.27	92.7	1.0
Chlorobenzene	10.0	<0.2	ug/L	8.67	86.7	8.65	86.5	0.2
1,1-Dichloroethene	10.0	<1.3	ug/L	8.36	83.6	8.08	80.8	3.4
Toluene	10.0	<0.2	ug/L	8.73	87.3	8.98	89.8	2.8
Trichloroethene	10.0	<0.3	ug/L	9.33	93.3	8.90	89.0	4.7

NOTE: Data reported for spiked samples were analyzed in the same batch, but may not necessarily be that of your sample.

NET NATIONAL ENVIRONMENTAL TESTING, INC.®

95,02736

CHAIN OF CUSTODY RECORD

COMPANY GOLDMAN Environmental Consultants
ADDRESS 15 Pacella Park Dr, Randolph, MA 02368
PHONE (617) 961-1200 FAX (617) 961-6546
PROJECT NAME/LOCATION WYANDANCH, NY
PROJECT NUMBER 444-006
PROJECT MANAGER SAM Butcher

REPORT TO: SAM Butcher
INVOICE TO: SAME
P.O. NO. 444-006-94
NET QUOTE NO.

SAMPLED BY
DAVID Montplaisir (PRINT NAME) — SIGNATURE
ADAM GOLDMAN (PRINT NAME) — SIGNATURE

DATE	TIME	SAMPLE ID/DESCRIPTION	MATRIX	GRAB	COMP	# and Type of Containers: HCl	NaOH	HNO_3	H_2SO_4	OTHER	ANALYSES: 524.2	TOTAL RCRA 8	TOTAL HEX CR
7-24	PM	MW-1	AQ	✓		2		1		1	✓	✓	✓
		MW-2		✓		2		1		1	✓	✓	✓
		MW-3		✓		2		1		1	✓	✓	✓
		MW-5		✓		2		1		1	✓	✓	✓
		MW-7		✓		2		1		1	✓	✓	✓
		MW-9		✓		2		1		1	✓	✓	✓
↓	↓	MW-12	↓	✓		2		1		1	✓	✓	✓

To assist us in selecting the proper method

Is this work being conducted for regulatory compliance monitoring? Yes ___ No ___

Is this work being conducted for regulatory enforcement action? Yes ___ No ___

Which regulations apply: RCRA ___ NPDES Wastewater ___ UST ___ Drinking Water ___ Other ___ None ___

COMMENTS

CONDITION OF SAMPLE: BOTTLES INTACT? YES / NO
FIELD FILTERED? YES / NO
COC SEALS PRESENT AND INTACT? YES / NO
VOLATILES FREE OF HEADSPACE? YES / NO
TEMPERATURE UPON RECEIPT: ___
Bottles supplied by NET? YES / NO

SAMPLE REMAINDER DISPOSAL: RETURN SAMPLE REMAINDER TO CLIENT VIA ___
I REQUEST NET TO DISPOSE OF ALL SAMPLE REMAINDERS Daniel Montplaisir DATE 7-24-95

RELINQUISHED BY:	DATE	TIME	RECEIVED BY:	RELINQUISHED BY:	DATE	TIME	RECEIVED FOR NET BY:
Daniel Montplaisir	7/24/95	2:45	ABC	Bob Nye	7/25	1015	M. McCormack

METHOD OF SHIPMENT: AIRBORNE EXPRESS — 293 320 8946

PT 1 - ORIGINAL - WHITE PT 2 - NET PROJECT MANAGER - YELLOW PT 3 - CUSTOMER COPY - PINK