New Jersey
ACCUTEST LABORATORIES

10/06/15

Technical Report for

CH2M Hill

Quanta 2006 Groundwater Resources, Edgewater, NJ

COC#30916-081506-GW

Accutest Job Number: J38500

Sampling Date: 08/15/06

Report to:

CH2M Hill

Theresa.Himmer@CH2M.com

ATTN: Theresa Himmer

Total number of pages in report: **38**

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Nancy Cole
Laboratory Director

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350642

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Sample Summary

CH2M Hill

Job No: J38500

Quanta 2006 Groundwater Resources, Edgewater, NJ
Project No: COC#30916-081506-GW

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
J38500-2	08/15/06	15:15	AH	08/15/06	AQ	Equipment Blank	EB-081506-GW
J38500-3	08/15/06	12:55	AH	08/15/06	AQ	Ground Water	MW-106-081506
J38500-4	08/15/06	13:20	AH	08/15/06	AQ	Ground Water	MW-120A-081506
J38500-5	08/15/06	13:40	AH	08/15/06	AQ	Ground Water	MW-120B-081506

CASE NARRATIVE / CONFORMANCE SUMMARY

Client:	CH2M Hill	**Job No**	J38500
Site:	Quanta 2006 Groundwater Resources, Edgewater, NJ	**Report Date**	8/30/2006 3:40:51 PM

4 Sample(s), 0 Trip Blank(s) and 0 Field Blank(s) were collected on 08/15/2006 and were received at Accutest on 08/15/2006 properly preserved, at 4.4 Deg. C and intact. These Samples received an Accutest job number of J38500. A listing of the Laboratory Sample ID, Client Sample ID and dates of collection are presented in the Results Summary Section of this report. Trip Blank sample J38500-1 was not run because the volumes were received in non-Accutest bottles, unpreserved, and with macrobubbles.

Except as noted below, all method specified calibrations and quality control performance criteria were met for this job. For more information, please refer to QC summary pages.

Volatiles by GCMS By Method SW846 8260B

Matrix AQ **Batch ID:** V3A1165

- All samples were analyzed within the recommended method holding time.
- Sample(s) J38500-3MS, J38500-3MSD were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.
- RPD(s) for MSD for Styrene, trans-1,3-Dichloropropene are outside control limits for sample J38500-3MSD. Outside control limits due to matrix interference.

Extractables by GCMS By Method SW846 8270C

Matrix AQ **Batch ID:** OP24497

- All samples were extracted within the recommended method holding time.
- All samples were analyzed within the recommended method holding time.
- Sample(s) J38500-3MS, J38500-3MSD were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.
- Matrix Spike Recovery(s) for Di-n-octyl phthalate are outside control limits. Outside control limits due to matrix interference.
- Matrix Spike Duplicate Recovery(s) for Di-n-octyl phthalate are outside control limits. Outside control limits due to matrix interference.
- RPD(s) for MSD for Di-n-octyl phthalate are outside control limits for sample OP24497-MSD. Outside control limits due to matrix interference.
- Sample(s) OP24497-MS have surrogates outside of in house control limits.

Extractables by GCMS By Method SW846 8270C BY SIM

Matrix AQ **Batch ID:** OP24498

- All samples were extracted within the recommended method holding time.
- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) J38500-3MS, J38500-3MSD were used as the QC samples indicated.
- Matrix Spike Recovery(s) for Pentachlorophenol are outside control limits. Outside control limits due to matrix interference.
- RPD(s) for MSD for Fluoranthene are outside control limits for sample OP24498-MSD. Outside control limits due to matrix interference.

Extractables by GC By Method SW846 8082

Matrix AQ	**Batch ID:** OP24385

- All samples were extracted within the recommended method holding time.
- All samples were analyzed within the recommended method holding time.
- Sample(s) J37241-2MS, J37241-2MSD, OP24385-MSMSD were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.
- J38500-3: Had TBA cleanup 2x.
- J38500-4: Had TBA cleanup.
- J38500-5: Had TBA cleanup 2x.

Metals By Method SW846 6010B

Matrix AQ	**Batch ID:** MP35600

- All samples were digested within the recommended method holding time.
- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) J38500-3MS, J38500-3MSD, J38500-3SDL were used as the QC samples for metals.
- RPD(s) for Serial Dilution for Arsenic are outside control limits for sample MP35600-SD1. Percent difference acceptable due to low initial sample concentration (< 50 times IDL).

The Accutest Laboratories of New Jersey certifies that all analysis were performed within method specification. It is further recommended that this report to be used in its entirety.The Accutest Laboratories of NJ, Laboratory Director or assignee as verified by the signature on the cover page has authorized the release of this report(J38500).

Summary of Hits

Job Number: J38500
Account: CH2M Hill
Project: Quanta 2006 Groundwater Resources, Edgewater, NJ
Collected: 08/15/06

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Lab Sample ID Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
J38500-2	**EB-081506-GW**					
No hits reported in this sample.						
J38500-3	**MW-106-081506**					
Benzene		1.2	1.0	0.21	ug/l	SW846 8260B
Ethylbenzene		4.5	1.0	0.20	ug/l	SW846 8260B
Toluene		0.68 J	1.0	0.20	ug/l	SW846 8260B
m,p-Xylene		1.3	1.0	0.42	ug/l	SW846 8260B
o-Xylene		0.86 J	1.0	0.31	ug/l	SW846 8260B
Xylene (total)		2.2	1.0	0.31	ug/l	SW846 8260B
Total TIC, Volatile		52.2 J			ug/l	
Carbazole		0.64 J	2.1	0.38	ug/l	SW846 8270C
Dibenzofuran		2.2 J	5.3	0.36	ug/l	SW846 8270C
Acenaphthene		10.9	0.21	0.018	ug/l	SW846 8270C BY SIM
Anthracene		1.23	0.21	0.022	ug/l	SW846 8270C BY SIM
Benzo(a)anthracene		0.800	0.21	0.0072	ug/l	SW846 8270C BY SIM
Benzo(a)pyrene		0.351	0.21	0.018	ug/l	SW846 8270C BY SIM
Benzo(b)fluoranthene		0.407	0.21	0.038	ug/l	SW846 8270C BY SIM
Chrysene		0.513	0.21	0.018	ug/l	SW846 8270C BY SIM
Fluoranthene		4.77	0.21	0.0095	ug/l	SW846 8270C BY SIM
Fluorene		0.626	0.21	0.021	ug/l	SW846 8270C BY SIM
Naphthalene		10.8	0.21	0.027	ug/l	SW846 8270C BY SIM
Phenanthrene		2.85	0.21	0.022	ug/l	SW846 8270C BY SIM
Pyrene		4.00	0.21	0.015	ug/l	SW846 8270C BY SIM
Total TIC, Semi-Volatile		86.9 J			ug/l	
Arsenic		5.1	2.0		ug/l	SW846 6010B
J38500-4	**MW-120A-081506**					
Total TIC, Volatile		13 J			ug/l	
Fluoranthene		0.334	0.20	0.0090	ug/l	SW846 8270C BY SIM
Pyrene		0.247	0.20	0.014	ug/l	SW846 8270C BY SIM
Total TIC, Semi-Volatile		67 J			ug/l	
J38500-5	**MW-120B-081506**					
Total TIC, Volatile		14.4 J			ug/l	
1,1'-Biphenyl		0.54 J	2.0	0.33	ug/l	SW846 8270C
Dibenzofuran		1.3 J	5.0	0.34	ug/l	SW846 8270C
Acenaphthene		4.17	0.20	0.017	ug/l	SW846 8270C BY SIM
Anthracene		1.32	0.20	0.021	ug/l	SW846 8270C BY SIM
Benzo(a)anthracene		0.245	0.20	0.0068	ug/l	SW846 8270C BY SIM
Fluoranthene		1.95	0.20	0.0090	ug/l	SW846 8270C BY SIM

Summary of Hits

Job Number: J38500
Account: CH2M Hill
Project: Quanta 2006 Groundwater Resources, Edgewater, NJ
Collected: 08/15/06

Lab Sample ID Client Sample ID Analyte	Result/ Qual	RL	MDL	Units	Method
Fluorene	3.12	0.20	0.020	ug/l	SW846 8270C BY SIM
Naphthalene	6.31	0.20	0.026	ug/l	SW846 8270C BY SIM
Phenanthrene	5.00	0.20	0.021	ug/l	SW846 8270C BY SIM
Pyrene	1.49	0.20	0.014	ug/l	SW846 8270C BY SIM
Total TIC, Semi-Volatile	172 J			ug/l	
Arsenic	2.3	2.0		ug/l	SW846 6010B

New Jersey

ACCUTEST LABORATORIES

Sample Results

Report of Analysis

Report of Analysis

Client Sample ID:	EB-081506-GW		
Lab Sample ID:	J38500-2	**Date Sampled:**	08/15/06
Matrix:	AQ - Equipment Blank	**Date Received:**	08/15/06
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Quanta 2006 Groundwater Resources, Edgewater, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3A27820.D	1	08/18/06	LY	n/a	n/a	V3A1165
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List (OLM4.2)

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	2.4	ug/l	
71-43-2	Benzene	ND	1.0	0.21	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.17	ug/l	
75-25-2	Bromoform	ND	4.0	0.54	ug/l	
74-83-9	Bromomethane	ND	2.0	0.22	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	2.6	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.21	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.29	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.22	ug/l	
75-00-3	Chloroethane	ND	1.0	0.56	ug/l	
67-66-3	Chloroform	ND	1.0	0.22	ug/l	
74-87-3	Chloromethane	ND	1.0	0.35	ug/l	
110-82-7	Cyclohexane	ND	5.0	0.50	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	10	1.1	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.19	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	0.52	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.20	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.32	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.24	ug/l	
75-71-8	Dichlorodifluoromethane	ND	5.0	0.75	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.23	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.29	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.33	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.18	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.42	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.20	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.15	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.20	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.20	ug/l	
76-13-1	Freon 113	ND	5.0	0.69	ug/l	
591-78-6	2-Hexanone	ND	5.0	1.3	ug/l	
98-82-8	Isopropylbenzene	ND	2.0	0.20	ug/l	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	EB-081506-GW		
Lab Sample ID:	J38500-2	**Date Sampled:**	08/15/06
Matrix:	AQ - Equipment Blank	**Date Received:**	08/15/06
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Quanta 2006 Groundwater Resources, Edgewater, NJ		

VOA TCL List (OLM4.2)

CAS No.	Compound	Result	RL	MDL	Units	Q
79-20-9	Methyl Acetate	ND	5.0	2.1	ug/l	
108-87-2	Methylcyclohexane	ND	5.0	0.18	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.31	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.1	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.27	ug/l	
100-42-5	Styrene	ND	5.0	0.16	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.28	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.28	ug/l	
108-88-3	Toluene	ND	1.0	0.20	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.16	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.28	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.32	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.29	ug/l	
75-69-4	Trichlorofluoromethane	ND	5.0	0.25	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.29	ug/l	
	m,p-Xylene	ND	1.0	0.42	ug/l	
95-47-6	o-Xylene	ND	1.0	0.31	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.31	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	115%		77-121%
17060-07-0	1,2-Dichloroethane-D4	118%		65-133%
2037-26-5	Toluene-D8	101%		80-117%
460-00-4	4-Bromofluorobenzene	102%		79-124%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	EB-081506-GW		
Lab Sample ID:	J38500-2	**Date Sampled:**	08/15/06
Matrix:	AQ - Equipment Blank	**Date Received:**	08/15/06
Method:	SW846 8270C SW846 3510C	**Percent Solids:**	n/a
Project:	Quanta 2006 Groundwater Resources, Edgewater, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	R54467.D	1	08/24/06	OYA	08/16/06	OP24497	ER1909
Run #2							

	Initial Volume	Final Volume
Run #1	940 ml	1.0 ml
Run #2		

ABN TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	5.3	1.0	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	5.3	1.3	ug/l	
120-83-2	2,4-Dichlorophenol	ND	5.3	1.7	ug/l	
105-67-9	2,4-Dimethylphenol	ND	5.3	1.7	ug/l	
51-28-5	2,4-Dinitrophenol	ND	21	0.95	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	21	0.77	ug/l	
95-48-7	2-Methylphenol	ND	5.3	1.4	ug/l	
	3&4-Methylphenol	ND	5.3	1.4	ug/l	
88-75-5	2-Nitrophenol	ND	5.3	1.9	ug/l	
100-02-7	4-Nitrophenol	ND	21	0.90	ug/l	
108-95-2	Phenol	ND	5.3	0.53	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	5.3	2.1	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	5.3	1.3	ug/l	
98-86-2	Acetophenone	ND	5.3	0.40	ug/l	
1912-24-9	Atrazine	ND	5.3	0.17	ug/l	
100-52-7	Benzaldehyde	ND	5.3	0.28	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	2.1	0.32	ug/l	
85-68-7	Butyl benzyl phthalate	ND	2.1	0.63	ug/l	
92-52-4	1,1'-Biphenyl	ND	2.1	0.35	ug/l	
91-58-7	2-Chloronaphthalene	ND	5.3	1.0	ug/l	
106-47-8	4-Chloroaniline	ND	5.3	0.42	ug/l	
86-74-8	Carbazole	ND	2.1	0.39	ug/l	
105-60-2	Caprolactam	ND	2.1	0.34	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	2.1	0.70	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	2.1	0.56	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	2.1	0.79	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	2.1	0.46	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	2.1	0.91	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	2.1	0.59	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	5.3	1.3	ug/l	
132-64-9	Dibenzofuran	ND	5.3	0.37	ug/l	
84-74-2	Di-n-butyl phthalate	ND	2.1	0.63	ug/l	

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Report of Analysis

Client Sample ID:	EB-081506-GW		
Lab Sample ID:	J38500-2	**Date Sampled:**	08/15/06
Matrix:	AQ - Equipment Blank	**Date Received:**	08/15/06
Method:	SW846 8270C SW846 3510C	**Percent Solids:**	n/a
Project:	Quanta 2006 Groundwater Resources, Edgewater, NJ		

ABN TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
117-84-0	Di-n-octyl phthalate	ND	2.1	0.61	ug/l	
84-66-2	Diethyl phthalate	ND	2.1	0.41	ug/l	
131-11-3	Dimethyl phthalate	ND	2.1	0.35	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	2.1	0.70	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.1	0.19	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	21	0.43	ug/l	
67-72-1	Hexachloroethane	ND	5.3	0.30	ug/l	
78-59-1	Isophorone	ND	2.1	0.63	ug/l	
91-57-6	2-Methylnaphthalene	ND	2.1	0.43	ug/l	
88-74-4	2-Nitroaniline	ND	5.3	0.70	ug/l	
99-09-2	3-Nitroaniline	ND	5.3	1.3	ug/l	
100-01-6	4-Nitroaniline	ND	5.3	0.77	ug/l	
98-95-3	Nitrobenzene	ND	2.1	0.45	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	2.1	0.50	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	5.3	0.55	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	44%		12-76%
4165-62-2	Phenol-d5	33%		10-59%
118-79-6	2,4,6-Tribromophenol	59%		42-128%
4165-60-0	Nitrobenzene-d5	85%		30-122%
321-60-8	2-Fluorobiphenyl	71%		34-113%
1718-51-0	Terphenyl-d14	86%		42-125%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	system artifact/aldol-condensation	3.20	18	ug/l	J
	system artifact	22.90	7.6	ug/l	J
	Total TIC, Semi-Volatile		0	ug/l	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	EB-081506-GW		
Lab Sample ID:	J38500-2	**Date Sampled:**	08/15/06
Matrix:	AQ - Equipment Blank	**Date Received:**	08/15/06
Method:	SW846 8270C BY SIM SW846 3510C	**Percent Solids:**	n/a
Project:	Quanta 2006 Groundwater Resources, Edgewater, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Z29167.D	1	08/17/06	KLS	08/16/06	OP24498	EZ903
Run #2							

	Initial Volume	Final Volume
Run #1	940 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
87-86-5	Pentachlorophenol	ND	1.1	0.42	ug/l	
83-32-9	Acenaphthene	ND	0.21	0.018	ug/l	
208-96-8	Acenaphthylene	ND	0.21	0.010	ug/l	
120-12-7	Anthracene	ND	0.21	0.022	ug/l	
56-55-3	Benzo(a)anthracene	ND	0.21	0.0072	ug/l	
50-32-8	Benzo(a)pyrene	ND	0.21	0.018	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	0.21	0.039	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	0.21	0.019	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	0.21	0.017	ug/l	
218-01-9	Chrysene	ND	0.21	0.018	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	0.21	0.017	ug/l	
206-44-0	Fluoranthene	ND	0.21	0.0096	ug/l	
86-73-7	Fluorene	ND	0.21	0.021	ug/l	
118-74-1	Hexachlorobenzene	ND	0.11	0.065	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.21	0.012	ug/l	
91-20-3	Naphthalene	ND	0.21	0.027	ug/l	
85-01-8	Phenanthrene	ND	0.21	0.022	ug/l	
129-00-0	Pyrene	ND	0.21	0.015	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	46%		10-99%
4165-62-2	Phenol-d5	35%		10-83%
118-79-6	2,4,6-Tribromophenol	74%		10-140%
4165-60-0	Nitrobenzene-d5	72%		11-140%
321-60-8	2-Fluorobiphenyl	68%		10-133%
1718-51-0	Terphenyl-d14	97%		13-130%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	EB-081506-GW		
Lab Sample ID:	J38500-2	**Date Sampled:**	08/15/06
Matrix:	AQ - Equipment Blank	**Date Received:**	08/15/06
Method:	SW846 8082 SW846 3510C	**Percent Solids:**	n/a
Project:	Quanta 2006 Groundwater Resources, Edgewater, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3G12118.D	1	08/16/06	TDR	08/16/06	OP24385	G3G495
Run #2							

	Initial Volume	Final Volume
Run #1	860 ml	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	0.58	0.11	ug/l	
11104-28-2	Aroclor 1221	ND	0.58	0.55	ug/l	
11141-16-5	Aroclor 1232	ND	0.58	0.45	ug/l	
53469-21-9	Aroclor 1242	ND	0.58	0.19	ug/l	
12672-29-6	Aroclor 1248	ND	0.58	0.18	ug/l	
11097-69-1	Aroclor 1254	ND	0.58	0.13	ug/l	
11096-82-5	Aroclor 1260	ND	0.58	0.14	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	68%		38-133%
877-09-8	Tetrachloro-m-xylene	72%		38-133%
2051-24-3	Decachlorobiphenyl	54%		18-156%
2051-24-3	Decachlorobiphenyl	58%		18-156%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	EB-081506-GW		
Lab Sample ID:	J38500-2	**Date Sampled:**	08/15/06
Matrix:	AQ - Equipment Blank	**Date Received:**	08/15/06
		Percent Solids:	n/a
Project:	Quanta 2006 Groundwater Resources, Edgewater, NJ		

Total Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Arsenic	< 2.0	2.0	ug/l	1	08/19/06	08/21/06	LH	SW846 6010B [1]	SW846 3010A [3]
Lead	< 3.0	3.0	ug/l	1	08/19/06	08/23/06	ND	SW846 6010B [2]	SW846 3010A [3]

(1) Instrument QC Batch: MA17943
(2) Instrument QC Batch: MA17946
(3) Prep QC Batch: MP35600

RL = Reporting Limit

Report of Analysis

Client Sample ID:	MW-106-081506		
Lab Sample ID:	J38500-3	**Date Sampled:**	08/15/06
Matrix:	AQ - Ground Water	**Date Received:**	08/15/06
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Quanta 2006 Groundwater Resources, Edgewater, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3A27821.D	1	08/18/06	LY	n/a	n/a	V3A1165
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List (OLM4.2)

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	2.4	ug/l	
71-43-2	Benzene	1.2	1.0	0.21	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.17	ug/l	
75-25-2	Bromoform	ND	4.0	0.54	ug/l	
74-83-9	Bromomethane	ND	2.0	0.22	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	2.6	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.21	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.29	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.22	ug/l	
75-00-3	Chloroethane	ND	1.0	0.56	ug/l	
67-66-3	Chloroform	ND	1.0	0.22	ug/l	
74-87-3	Chloromethane	ND	1.0	0.35	ug/l	
110-82-7	Cyclohexane	ND	5.0	0.50	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	10	1.1	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.19	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	0.52	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.20	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.32	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.24	ug/l	
75-71-8	Dichlorodifluoromethane	ND	5.0	0.75	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.23	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.29	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.33	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.18	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.42	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.20	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.15	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.20	ug/l	
100-41-4	Ethylbenzene	4.5	1.0	0.20	ug/l	
76-13-1	Freon 113	ND	5.0	0.69	ug/l	
591-78-6	2-Hexanone	ND	5.0	1.3	ug/l	
98-82-8	Isopropylbenzene	ND	2.0	0.20	ug/l	

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E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-106-081506		
Lab Sample ID:	J38500-3	**Date Sampled:**	08/15/06
Matrix:	AQ - Ground Water	**Date Received:**	08/15/06
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Quanta 2006 Groundwater Resources, Edgewater, NJ		

VOA TCL List (OLM4.2)

CAS No.	Compound	Result	RL	MDL	Units	Q
79-20-9	Methyl Acetate	ND	5.0	2.1	ug/l	
108-87-2	Methylcyclohexane	ND	5.0	0.18	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.31	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.1	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.27	ug/l	
100-42-5	Styrene	ND	5.0	0.16	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.28	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.28	ug/l	
108-88-3	Toluene	0.68	1.0	0.20	ug/l	J
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.16	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.28	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.32	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.29	ug/l	
75-69-4	Trichlorofluoromethane	ND	5.0	0.25	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.29	ug/l	
	m,p-Xylene	1.3	1.0	0.42	ug/l	
95-47-6	o-Xylene	0.86	1.0	0.31	ug/l	J
1330-20-7	Xylene (total)	2.2	1.0	0.31	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	117%		77-121%
17060-07-0	1,2-Dichloroethane-D4	116%		65-133%
2037-26-5	Toluene-D8	102%		80-117%
460-00-4	4-Bromofluorobenzene	103%		79-124%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	unknown	4.43	14	ug/l	J
496-11-7	Indane	17.17	12	ug/l	JN
91-20-3	Naphthalene	19.21	17	ug/l	JN
	Naphthalene, methyl-	20.57	9.2	ug/l	J
	Total TIC, Volatile		52.2	ug/l	J

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Report of Analysis

Client Sample ID:	MW-106-081506		
Lab Sample ID:	J38500-3	**Date Sampled:**	08/15/06
Matrix:	AQ - Ground Water	**Date Received:**	08/15/06
Method:	SW846 8270C SW846 3510C	**Percent Solids:**	n/a
Project:	Quanta 2006 Groundwater Resources, Edgewater, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	R54466.D	1	08/24/06	OYA	08/16/06	OP24497	ER1909
Run #2							

	Initial Volume	Final Volume
Run #1	950 ml	1.0 ml
Run #2		

ABN TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	5.3	1.0	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	5.3	1.2	ug/l	
120-83-2	2,4-Dichlorophenol	ND	5.3	1.6	ug/l	
105-67-9	2,4-Dimethylphenol	ND	5.3	1.7	ug/l	
51-28-5	2,4-Dinitrophenol	ND	21	0.94	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	21	0.76	ug/l	
95-48-7	2-Methylphenol	ND	5.3	1.4	ug/l	
	3&4-Methylphenol	ND	5.3	1.3	ug/l	
88-75-5	2-Nitrophenol	ND	5.3	1.9	ug/l	
100-02-7	4-Nitrophenol	ND	21	0.89	ug/l	
108-95-2	Phenol	ND	5.3	0.52	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	5.3	2.0	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	5.3	1.3	ug/l	
98-86-2	Acetophenone	ND	5.3	0.39	ug/l	
1912-24-9	Atrazine	ND	5.3	0.17	ug/l	
100-52-7	Benzaldehyde	ND	5.3	0.28	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	2.1	0.31	ug/l	
85-68-7	Butyl benzyl phthalate	ND	2.1	0.62	ug/l	
92-52-4	1,1'-Biphenyl	ND	2.1	0.34	ug/l	
91-58-7	2-Chloronaphthalene	ND	5.3	1.0	ug/l	
106-47-8	4-Chloroaniline	ND	5.3	0.42	ug/l	
86-74-8	Carbazole	0.64	2.1	0.38	ug/l	J
105-60-2	Caprolactam	ND	2.1	0.33	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	2.1	0.69	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	2.1	0.56	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	2.1	0.78	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	2.1	0.45	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	2.1	0.91	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	2.1	0.59	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	5.3	1.3	ug/l	
132-64-9	Dibenzofuran	2.2	5.3	0.36	ug/l	J
84-74-2	Di-n-butyl phthalate	ND	2.1	0.62	ug/l	

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Report of Analysis

Client Sample ID:	MW-106-081506		
Lab Sample ID:	J38500-3	**Date Sampled:**	08/15/06
Matrix:	AQ - Ground Water	**Date Received:**	08/15/06
Method:	SW846 8270C SW846 3510C	**Percent Solids:**	n/a
Project:	Quanta 2006 Groundwater Resources, Edgewater, NJ		

ABN TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
117-84-0	Di-n-octyl phthalate	ND	2.1	0.60	ug/l	
84-66-2	Diethyl phthalate	ND	2.1	0.41	ug/l	
131-11-3	Dimethyl phthalate	ND	2.1	0.35	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	2.1	0.70	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.1	0.18	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	21	0.43	ug/l	
67-72-1	Hexachloroethane	ND	5.3	0.30	ug/l	
78-59-1	Isophorone	ND	2.1	0.62	ug/l	
91-57-6	2-Methylnaphthalene	ND	2.1	0.43	ug/l	
88-74-4	2-Nitroaniline	ND	5.3	0.70	ug/l	
99-09-2	3-Nitroaniline	ND	5.3	1.3	ug/l	
100-01-6	4-Nitroaniline	ND	5.3	0.76	ug/l	
98-95-3	Nitrobenzene	ND	2.1	0.44	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	2.1	0.49	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	5.3	0.54	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	42%		12-76%
4165-62-2	Phenol-d5	32%		10-59%
118-79-6	2,4,6-Tribromophenol	73%		42-128%
4165-60-0	Nitrobenzene-d5	93%		30-122%
321-60-8	2-Fluorobiphenyl	77%		34-113%
1718-51-0	Terphenyl-d14	96%		42-125%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	system artifact/aldol-condensation	3.20	19	ug/l	J
	Indane	5.77	6.1	ug/l	J
90-12-0	Naphthalene 1-methyl	9.72	9.8	ug/l	J
	Sulfur	18.03	71	ug/l	J
	Total TIC, Semi-Volatile		86.9	ug/l	J

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E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-106-081506		
Lab Sample ID:	J38500-3	**Date Sampled:**	08/15/06
Matrix:	AQ - Ground Water	**Date Received:**	08/15/06
Method:	SW846 8270C BY SIM SW846 3510C	**Percent Solids:**	n/a
Project:	Quanta 2006 Groundwater Resources, Edgewater, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Z29168.D	1	08/17/06	KLS	08/16/06	OP24498	EZ903
Run #2							

	Initial Volume	Final Volume
Run #1	950 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
87-86-5	Pentachlorophenol	ND	1.1	0.42	ug/l	
83-32-9	Acenaphthene	10.9	0.21	0.018	ug/l	
208-96-8	Acenaphthylene	ND	0.21	0.010	ug/l	
120-12-7	Anthracene	1.23	0.21	0.022	ug/l	
56-55-3	Benzo(a)anthracene	0.800	0.21	0.0072	ug/l	
50-32-8	Benzo(a)pyrene	0.351	0.21	0.018	ug/l	
205-99-2	Benzo(b)fluoranthene	0.407	0.21	0.038	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	0.21	0.019	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	0.21	0.017	ug/l	
218-01-9	Chrysene	0.513	0.21	0.018	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	0.21	0.017	ug/l	
206-44-0	Fluoranthene	4.77	0.21	0.0095	ug/l	
86-73-7	Fluorene	0.626	0.21	0.021	ug/l	
118-74-1	Hexachlorobenzene	ND	0.11	0.064	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.21	0.012	ug/l	
91-20-3	Naphthalene	10.8	0.21	0.027	ug/l	
85-01-8	Phenanthrene	2.85	0.21	0.022	ug/l	
129-00-0	Pyrene	4.00	0.21	0.015	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	49%		10-99%
4165-62-2	Phenol-d5	37%		10-83%
118-79-6	2,4,6-Tribromophenol	82%		10-140%
4165-60-0	Nitrobenzene-d5	79%		11-140%
321-60-8	2-Fluorobiphenyl	71%		10-133%
1718-51-0	Terphenyl-d14	103%		13-130%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-106-081506		
Lab Sample ID:	J38500-3	**Date Sampled:**	08/15/06
Matrix:	AQ - Ground Water	**Date Received:**	08/15/06
Method:	SW846 8082 SW846 3510C	**Percent Solids:**	n/a
Project:	Quanta 2006 Groundwater Resources, Edgewater, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	AB59230.D	1	08/22/06	JSE	08/16/06	OP24385	GAB2692
Run #2							

	Initial Volume	Final Volume
Run #1	950 ml	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	0.53	0.099	ug/l	
11104-28-2	Aroclor 1221	ND	0.53	0.49	ug/l	
11141-16-5	Aroclor 1232	ND	0.53	0.41	ug/l	
53469-21-9	Aroclor 1242	ND	0.53	0.17	ug/l	
12672-29-6	Aroclor 1248	ND	0.53	0.16	ug/l	
11097-69-1	Aroclor 1254	ND	0.53	0.11	ug/l	
11096-82-5	Aroclor 1260	ND	0.53	0.12	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	71%		38-133%
877-09-8	Tetrachloro-m-xylene	62%		38-133%
2051-24-3	Decachlorobiphenyl	87%		18-156%
2051-24-3	Decachlorobiphenyl	88%		18-156%

(a) Had TBA cleanup 2x.

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-106-081506		
Lab Sample ID:	J38500-3	**Date Sampled:**	08/15/06
Matrix:	AQ - Ground Water	**Date Received:**	08/15/06
		Percent Solids:	n/a
Project:	Quanta 2006 Groundwater Resources, Edgewater, NJ		

Total Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Arsenic	5.1	2.0	ug/l	1	08/19/06	08/21/06	LH	SW846 6010B [1]	SW846 3010A [3]
Lead	< 3.0	3.0	ug/l	1	08/19/06	08/23/06	ND	SW846 6010B [2]	SW846 3010A [3]

(1) Instrument QC Batch: MA17943
(2) Instrument QC Batch: MA17946
(3) Prep QC Batch: MP35600

RL = Reporting Limit

Report of Analysis

Client Sample ID:	MW-120A-081506		
Lab Sample ID:	J38500-4	**Date Sampled:**	08/15/06
Matrix:	AQ - Ground Water	**Date Received:**	08/15/06
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Quanta 2006 Groundwater Resources, Edgewater, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3A27822.D	1	08/18/06	LY	n/a	n/a	V3A1165
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List (OLM4.2)

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	2.4	ug/l	
71-43-2	Benzene	ND	1.0	0.21	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.17	ug/l	
75-25-2	Bromoform	ND	4.0	0.54	ug/l	
74-83-9	Bromomethane	ND	2.0	0.22	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	2.6	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.21	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.29	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.22	ug/l	
75-00-3	Chloroethane	ND	1.0	0.56	ug/l	
67-66-3	Chloroform	ND	1.0	0.22	ug/l	
74-87-3	Chloromethane	ND	1.0	0.35	ug/l	
110-82-7	Cyclohexane	ND	5.0	0.50	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	10	1.1	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.19	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	0.52	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.20	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.32	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.24	ug/l	
75-71-8	Dichlorodifluoromethane	ND	5.0	0.75	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.23	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.29	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.33	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.18	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.42	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.20	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.15	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.20	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.20	ug/l	
76-13-1	Freon 113	ND	5.0	0.69	ug/l	
591-78-6	2-Hexanone	ND	5.0	1.3	ug/l	
98-82-8	Isopropylbenzene	ND	2.0	0.20	ug/l	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-120A-081506		
Lab Sample ID:	J38500-4	**Date Sampled:**	08/15/06
Matrix:	AQ - Ground Water	**Date Received:**	08/15/06
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Quanta 2006 Groundwater Resources, Edgewater, NJ		

VOA TCL List (OLM4.2)

CAS No.	Compound	Result	RL	MDL	Units	Q
79-20-9	Methyl Acetate	ND	5.0	2.1	ug/l	
108-87-2	Methylcyclohexane	ND	5.0	0.18	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.31	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.1	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.27	ug/l	
100-42-5	Styrene	ND	5.0	0.16	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.28	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.28	ug/l	
108-88-3	Toluene	ND	1.0	0.20	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.16	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.28	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.32	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.29	ug/l	
75-69-4	Trichlorofluoromethane	ND	5.0	0.25	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.29	ug/l	
	m,p-Xylene	ND	1.0	0.42	ug/l	
95-47-6	o-Xylene	ND	1.0	0.31	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.31	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	118%		77-121%
17060-07-0	1,2-Dichloroethane-D4	115%		65-133%
2037-26-5	Toluene-D8	100%		80-117%
460-00-4	4-Bromofluorobenzene	101%		79-124%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	unknown	4.41	13	ug/l	J
	Total TIC, Volatile		13	ug/l	J

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Report of Analysis

Client Sample ID:	MW-120A-081506		
Lab Sample ID:	J38500-4	**Date Sampled:**	08/15/06
Matrix:	AQ - Ground Water	**Date Received:**	08/15/06
Method:	SW846 8270C SW846 3510C	**Percent Solids:**	n/a
Project:	Quanta 2006 Groundwater Resources, Edgewater, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	R54468.D	1	08/24/06	OYA	08/16/06	OP24497	ER1909
Run #2							

	Initial Volume	Final Volume
Run #1	1000 ml	1.0 ml
Run #2		

ABN TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	5.0	0.95	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	5.0	1.2	ug/l	
120-83-2	2,4-Dichlorophenol	ND	5.0	1.6	ug/l	
105-67-9	2,4-Dimethylphenol	ND	5.0	1.6	ug/l	
51-28-5	2,4-Dinitrophenol	ND	20	0.89	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	20	0.72	ug/l	
95-48-7	2-Methylphenol	ND	5.0	1.4	ug/l	
	3&4-Methylphenol	ND	5.0	1.3	ug/l	
88-75-5	2-Nitrophenol	ND	5.0	1.8	ug/l	
100-02-7	4-Nitrophenol	ND	20	0.84	ug/l	
108-95-2	Phenol	ND	5.0	0.50	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	5.0	1.9	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	5.0	1.3	ug/l	
98-86-2	Acetophenone	ND	5.0	0.37	ug/l	
1912-24-9	Atrazine	ND	5.0	0.16	ug/l	
100-52-7	Benzaldehyde	ND	5.0	0.27	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	2.0	0.30	ug/l	
85-68-7	Butyl benzyl phthalate	ND	2.0	0.59	ug/l	
92-52-4	1,1'-Biphenyl	ND	2.0	0.33	ug/l	
91-58-7	2-Chloronaphthalene	ND	5.0	0.98	ug/l	
106-47-8	4-Chloroaniline	ND	5.0	0.40	ug/l	
86-74-8	Carbazole	ND	2.0	0.36	ug/l	
105-60-2	Caprolactam	ND	2.0	0.32	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	2.0	0.65	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	2.0	0.53	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	2.0	0.74	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	2.0	0.43	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	2.0	0.86	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	2.0	0.56	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	5.0	1.2	ug/l	
132-64-9	Dibenzofuran	ND	5.0	0.34	ug/l	
84-74-2	Di-n-butyl phthalate	ND	2.0	0.59	ug/l	

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Report of Analysis

Client Sample ID:	MW-120A-081506		
Lab Sample ID:	J38500-4	**Date Sampled:**	08/15/06
Matrix:	AQ - Ground Water	**Date Received:**	08/15/06
Method:	SW846 8270C SW846 3510C	**Percent Solids:**	n/a
Project:	Quanta 2006 Groundwater Resources, Edgewater, NJ		

ABN TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
117-84-0	Di-n-octyl phthalate	ND	2.0	0.57	ug/l	
84-66-2	Diethyl phthalate	ND	2.0	0.39	ug/l	
131-11-3	Dimethyl phthalate	ND	2.0	0.33	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	2.0	0.66	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.18	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	20	0.41	ug/l	
67-72-1	Hexachloroethane	ND	5.0	0.28	ug/l	
78-59-1	Isophorone	ND	2.0	0.59	ug/l	
91-57-6	2-Methylnaphthalene	ND	2.0	0.41	ug/l	
88-74-4	2-Nitroaniline	ND	5.0	0.66	ug/l	
99-09-2	3-Nitroaniline	ND	5.0	1.3	ug/l	
100-01-6	4-Nitroaniline	ND	5.0	0.72	ug/l	
98-95-3	Nitrobenzene	ND	2.0	0.42	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	2.0	0.47	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	5.0	0.52	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	28%		12-76%
4165-62-2	Phenol-d5	21%		10-59%
118-79-6	2,4,6-Tribromophenol	65%		42-128%
4165-60-0	Nitrobenzene-d5	70%		30-122%
321-60-8	2-Fluorobiphenyl	65%		34-113%
1718-51-0	Terphenyl-d14	91%		42-125%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	system artifact/aldol-condensation	3.20	13	ug/l	J
	unknown	13.18	12	ug/l	J
	unknown	16.89	29	ug/l	J
	Sulfur	18.02	26	ug/l	J
	Total TIC, Semi-Volatile		67	ug/l	J

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Report of Analysis

Client Sample ID:	MW-120A-081506		
Lab Sample ID:	J38500-4	**Date Sampled:**	08/15/06
Matrix:	AQ - Ground Water	**Date Received:**	08/15/06
Method:	SW846 8270C BY SIM SW846 3510C	**Percent Solids:**	n/a
Project:	Quanta 2006 Groundwater Resources, Edgewater, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Z29169.D	1	08/17/06	KLS	08/16/06	OP24498	EZ903
Run #2							

	Initial Volume	Final Volume
Run #1	1000 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
87-86-5	Pentachlorophenol	ND	1.0	0.40	ug/l	
83-32-9	Acenaphthene	ND	0.20	0.017	ug/l	
208-96-8	Acenaphthylene	ND	0.20	0.0095	ug/l	
120-12-7	Anthracene	ND	0.20	0.021	ug/l	
56-55-3	Benzo(a)anthracene	ND	0.20	0.0068	ug/l	
50-32-8	Benzo(a)pyrene	ND	0.20	0.017	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	0.20	0.036	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	0.20	0.018	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	0.20	0.016	ug/l	
218-01-9	Chrysene	ND	0.20	0.017	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	0.20	0.016	ug/l	
206-44-0	Fluoranthene	0.334	0.20	0.0090	ug/l	
86-73-7	Fluorene	ND	0.20	0.020	ug/l	
118-74-1	Hexachlorobenzene	ND	0.10	0.061	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.20	0.011	ug/l	
91-20-3	Naphthalene	ND	0.20	0.026	ug/l	
85-01-8	Phenanthrene	ND	0.20	0.021	ug/l	
129-00-0	Pyrene	0.247	0.20	0.014	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	35%		10-99%
4165-62-2	Phenol-d5	29%		10-83%
118-79-6	2,4,6-Tribromophenol	80%		10-140%
4165-60-0	Nitrobenzene-d5	61%		11-140%
321-60-8	2-Fluorobiphenyl	61%		10-133%
1718-51-0	Terphenyl-d14	89%		13-130%

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Report of Analysis

Client Sample ID:	MW-120A-081506		
Lab Sample ID:	J38500-4	**Date Sampled:**	08/15/06
Matrix:	AQ - Ground Water	**Date Received:**	08/15/06
Method:	SW846 8082 SW846 3510C	**Percent Solids:**	n/a
Project:	Quanta 2006 Groundwater Resources, Edgewater, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	3G12145.D	1	08/17/06	TDR	08/16/06	OP24385	G3G496
Run #2							

	Initial Volume	Final Volume
Run #1	930 ml	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	0.54	0.10	ug/l	
11104-28-2	Aroclor 1221	ND	0.54	0.51	ug/l	
11141-16-5	Aroclor 1232	ND	0.54	0.42	ug/l	
53469-21-9	Aroclor 1242	ND	0.54	0.18	ug/l	
12672-29-6	Aroclor 1248	ND	0.54	0.16	ug/l	
11097-69-1	Aroclor 1254	ND	0.54	0.12	ug/l	
11096-82-5	Aroclor 1260	ND	0.54	0.13	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	71%		38-133%
877-09-8	Tetrachloro-m-xylene	73%		38-133%
2051-24-3	Decachlorobiphenyl	70%		18-156%
2051-24-3	Decachlorobiphenyl	77%		18-156%

(a) Had TBA Cleanup

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-120A-081506		
Lab Sample ID:	J38500-4	**Date Sampled:**	08/15/06
Matrix:	AQ - Ground Water	**Date Received:**	08/15/06
		Percent Solids:	n/a
Project:	Quanta 2006 Groundwater Resources, Edgewater, NJ		

Total Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Arsenic	< 2.0	2.0	ug/l	1	08/19/06	08/21/06	LH	SW846 6010B [1]	SW846 3010A [3]
Lead	< 3.0	3.0	ug/l	1	08/19/06	08/23/06	ND	SW846 6010B [2]	SW846 3010A [3]

(1) Instrument QC Batch: MA17943
(2) Instrument QC Batch: MA17946
(3) Prep QC Batch: MP35600

RL = Reporting Limit

Report of Analysis

Client Sample ID:	MW-120B-081506		
Lab Sample ID:	J38500-5	**Date Sampled:**	08/15/06
Matrix:	AQ - Ground Water	**Date Received:**	08/15/06
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Quanta 2006 Groundwater Resources, Edgewater, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3A27823.D	1	08/18/06	LY	n/a	n/a	V3A1165
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List (OLM4.2)

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	2.4	ug/l	
71-43-2	Benzene	ND	1.0	0.21	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.17	ug/l	
75-25-2	Bromoform	ND	4.0	0.54	ug/l	
74-83-9	Bromomethane	ND	2.0	0.22	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	2.6	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.21	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.29	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.22	ug/l	
75-00-3	Chloroethane	ND	1.0	0.56	ug/l	
67-66-3	Chloroform	ND	1.0	0.22	ug/l	
74-87-3	Chloromethane	ND	1.0	0.35	ug/l	
110-82-7	Cyclohexane	ND	5.0	0.50	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	10	1.1	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.19	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	0.52	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.20	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.32	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.24	ug/l	
75-71-8	Dichlorodifluoromethane	ND	5.0	0.75	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.23	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.29	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.33	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.18	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.42	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.20	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.15	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.20	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.20	ug/l	
76-13-1	Freon 113	ND	5.0	0.69	ug/l	
591-78-6	2-Hexanone	ND	5.0	1.3	ug/l	
98-82-8	Isopropylbenzene	ND	2.0	0.20	ug/l	

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E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-120B-081506		
Lab Sample ID:	J38500-5	**Date Sampled:**	08/15/06
Matrix:	AQ - Ground Water	**Date Received:**	08/15/06
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Quanta 2006 Groundwater Resources, Edgewater, NJ		

VOA TCL List (OLM4.2)

CAS No.	Compound	Result	RL	MDL	Units	Q
79-20-9	Methyl Acetate	ND	5.0	2.1	ug/l	
108-87-2	Methylcyclohexane	ND	5.0	0.18	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.31	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.1	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.27	ug/l	
100-42-5	Styrene	ND	5.0	0.16	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.28	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.28	ug/l	
108-88-3	Toluene	ND	1.0	0.20	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.16	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.28	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.32	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.29	ug/l	
75-69-4	Trichlorofluoromethane	ND	5.0	0.25	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.29	ug/l	
	m,p-Xylene	ND	1.0	0.42	ug/l	
95-47-6	o-Xylene	ND	1.0	0.31	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.31	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	115%		77-121%
17060-07-0	1,2-Dichloroethane-D4	114%		65-133%
2037-26-5	Toluene-D8	102%		80-117%
460-00-4	4-Bromofluorobenzene	99%		79-124%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	unknown	4.43	8	ug/l	J
91-20-3	Naphthalene	19.21	6.4	ug/l	JN
	Total TIC, Volatile		14.4	ug/l	J

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Report of Analysis

Client Sample ID:	MW-120B-081506		
Lab Sample ID:	J38500-5	**Date Sampled:**	08/15/06
Matrix:	AQ - Ground Water	**Date Received:**	08/15/06
Method:	SW846 8270C SW846 3510C	**Percent Solids:**	n/a
Project:	Quanta 2006 Groundwater Resources, Edgewater, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	R54469.D	1	08/24/06	OYA	08/16/06	OP24497	ER1909
Run #2							

	Initial Volume	Final Volume
Run #1	1000 ml	1.0 ml
Run #2		

ABN TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	5.0	0.95	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	5.0	1.2	ug/l	
120-83-2	2,4-Dichlorophenol	ND	5.0	1.6	ug/l	
105-67-9	2,4-Dimethylphenol	ND	5.0	1.6	ug/l	
51-28-5	2,4-Dinitrophenol	ND	20	0.89	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	20	0.72	ug/l	
95-48-7	2-Methylphenol	ND	5.0	1.4	ug/l	
	3&4-Methylphenol	ND	5.0	1.3	ug/l	
88-75-5	2-Nitrophenol	ND	5.0	1.8	ug/l	
100-02-7	4-Nitrophenol	ND	20	0.84	ug/l	
108-95-2	Phenol	ND	5.0	0.50	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	5.0	1.9	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	5.0	1.3	ug/l	
98-86-2	Acetophenone	ND	5.0	0.37	ug/l	
1912-24-9	Atrazine	ND	5.0	0.16	ug/l	
100-52-7	Benzaldehyde	ND	5.0	0.27	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	2.0	0.30	ug/l	
85-68-7	Butyl benzyl phthalate	ND	2.0	0.59	ug/l	
92-52-4	1,1'-Biphenyl	0.54	2.0	0.33	ug/l	J
91-58-7	2-Chloronaphthalene	ND	5.0	0.98	ug/l	
106-47-8	4-Chloroaniline	ND	5.0	0.40	ug/l	
86-74-8	Carbazole	ND	2.0	0.36	ug/l	
105-60-2	Caprolactam	ND	2.0	0.32	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	2.0	0.65	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	2.0	0.53	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	2.0	0.74	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	2.0	0.43	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	2.0	0.86	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	2.0	0.56	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	5.0	1.2	ug/l	
132-64-9	Dibenzofuran	1.3	5.0	0.34	ug/l	J
84-74-2	Di-n-butyl phthalate	ND	2.0	0.59	ug/l	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-120B-081506		
Lab Sample ID:	J38500-5	**Date Sampled:**	08/15/06
Matrix:	AQ - Ground Water	**Date Received:**	08/15/06
Method:	SW846 8270C SW846 3510C	**Percent Solids:**	n/a
Project:	Quanta 2006 Groundwater Resources, Edgewater, NJ		

ABN TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
117-84-0	Di-n-octyl phthalate	ND	2.0	0.57	ug/l	
84-66-2	Diethyl phthalate	ND	2.0	0.39	ug/l	
131-11-3	Dimethyl phthalate	ND	2.0	0.33	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	2.0	0.66	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.18	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	20	0.41	ug/l	
67-72-1	Hexachloroethane	ND	5.0	0.28	ug/l	
78-59-1	Isophorone	ND	2.0	0.59	ug/l	
91-57-6	2-Methylnaphthalene	ND	2.0	0.41	ug/l	
88-74-4	2-Nitroaniline	ND	5.0	0.66	ug/l	
99-09-2	3-Nitroaniline	ND	5.0	1.3	ug/l	
100-01-6	4-Nitroaniline	ND	5.0	0.72	ug/l	
98-95-3	Nitrobenzene	ND	2.0	0.42	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	2.0	0.47	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	5.0	0.52	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	45%		12-76%
4165-62-2	Phenol-d5	35%		10-59%
118-79-6	2,4,6-Tribromophenol	74%		42-128%
4165-60-0	Nitrobenzene-d5	87%		30-122%
321-60-8	2-Fluorobiphenyl	76%		34-113%
1718-51-0	Terphenyl-d14	93%		42-125%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	system artifact/aldol-condensation	3.20	20	ug/l	J
	unknown	15.09	12	ug/l	J
10544-50-0	Sulfur,mol. (S8)	18.01	160	ug/l	JN
	system artifact	22.91	7.4	ug/l	J
	system artifact	24.15	29	ug/l	J
	Total TIC, Semi-Volatile		172	ug/l	J

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-120B-081506		
Lab Sample ID:	J38500-5	**Date Sampled:**	08/15/06
Matrix:	AQ - Ground Water	**Date Received:**	08/15/06
Method:	SW846 8270C BY SIM SW846 3510C	**Percent Solids:**	n/a
Project:	Quanta 2006 Groundwater Resources, Edgewater, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Z29170.D	1	08/17/06	KLS	08/16/06	OP24498	EZ903
Run #2							

	Initial Volume	Final Volume
Run #1	1000 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
87-86-5	Pentachlorophenol	ND	1.0	0.40	ug/l	
83-32-9	Acenaphthene	4.17	0.20	0.017	ug/l	
208-96-8	Acenaphthylene	ND	0.20	0.0095	ug/l	
120-12-7	Anthracene	1.32	0.20	0.021	ug/l	
56-55-3	Benzo(a)anthracene	0.245	0.20	0.0068	ug/l	
50-32-8	Benzo(a)pyrene	ND	0.20	0.017	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	0.20	0.036	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	0.20	0.018	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	0.20	0.016	ug/l	
218-01-9	Chrysene	ND	0.20	0.017	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	0.20	0.016	ug/l	
206-44-0	Fluoranthene	1.95	0.20	0.0090	ug/l	
86-73-7	Fluorene	3.12	0.20	0.020	ug/l	
118-74-1	Hexachlorobenzene	ND	0.10	0.061	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.20	0.011	ug/l	
91-20-3	Naphthalene	6.31	0.20	0.026	ug/l	
85-01-8	Phenanthrene	5.00	0.20	0.021	ug/l	
129-00-0	Pyrene	1.49	0.20	0.014	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	51%		10-99%
4165-62-2	Phenol-d5	39%		10-83%
118-79-6	2,4,6-Tribromophenol	79%		10-140%
4165-60-0	Nitrobenzene-d5	78%		11-140%
321-60-8	2-Fluorobiphenyl	77%		10-133%
1718-51-0	Terphenyl-d14	94%		13-130%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-120B-081506		
Lab Sample ID:	J38500-5	**Date Sampled:**	08/15/06
Matrix:	AQ - Ground Water	**Date Received:**	08/15/06
Method:	SW846 8082 SW846 3510C	**Percent Solids:**	n/a
Project:	Quanta 2006 Groundwater Resources, Edgewater, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	AB59231.D	1	08/22/06	JSE	08/16/06	OP24385	GAB2692
Run #2							

	Initial Volume	Final Volume
Run #1	1000 ml	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	0.50	0.094	ug/l	
11104-28-2	Aroclor 1221	ND	0.50	0.47	ug/l	
11141-16-5	Aroclor 1232	ND	0.50	0.39	ug/l	
53469-21-9	Aroclor 1242	ND	0.50	0.16	ug/l	
12672-29-6	Aroclor 1248	ND	0.50	0.15	ug/l	
11097-69-1	Aroclor 1254	ND	0.50	0.11	ug/l	
11096-82-5	Aroclor 1260	ND	0.50	0.12	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	89%		38-133%
877-09-8	Tetrachloro-m-xylene	62%		38-133%
2051-24-3	Decachlorobiphenyl	84%		18-156%
2051-24-3	Decachlorobiphenyl	79%		18-156%

(a) Had TBA cleanup 2x.

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-120B-081506		
Lab Sample ID:	J38500-5	**Date Sampled:**	08/15/06
Matrix:	AQ - Ground Water	**Date Received:**	08/15/06
		Percent Solids:	n/a
Project:	Quanta 2006 Groundwater Resources, Edgewater, NJ		

Total Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Arsenic	2.3	2.0	ug/l	1	08/19/06	08/21/06	LH	SW846 6010B [1]	SW846 3010A [3]
Lead	< 3.0	3.0	ug/l	1	08/19/06	08/23/06	ND	SW846 6010B [2]	SW846 3010A [3]

(1) Instrument QC Batch: MA17943
(2) Instrument QC Batch: MA17946
(3) Prep QC Batch: MP35600

RL = Reporting Limit

New Jersey

ACCUTEST LABORATORIES

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody

TB. FB. GW

Accutest Labs
235 ROUTE 130
Hilton, NJ 8810
732-329-0200

Honeywell

Chain Of Custody / Analysis Request

J38500

AESI Ref: 38940.66388
COC#30916-081506-GW
Lab Proj # (SDG):
Lab ID: ACTD
Site ID: Quanta
Lab Job #:
Authorized User: Honeywell
Text & Excel File Drive: Excel & Text File Order

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Privileged & Confidential

Sampling Co.: CH2M HILL
EDD To: amy.klopper@ch2m.com, john.mitchell@ch2m.com
Site Name: Quanta Resources (Edgewater)
Location of Site: Edgewater, NJ
Phase: Sampling Program: Quanta 2006 Groundwater

Client Contact: (name, co., address)
Jennifer Simms
1700 Market Street, Suite 1600
Philadelphia, PA 19103
Sampler: Austin Hareclerode/CH2M HILL
PO #
Analysis Turnaround Time (TAT): 10
Consultant: CH2M
Full Report TAT:
Preliminary Data To: amy.klopper@ch2m.com, jennifer.simms@ch2m.com
Sample Receipt Acknowledgement To: amy.klopper@ch2m.com, jennifer.simms@ch2m.com
Hard Copy To: Amy Klopper, 3011 Southwest Williston Road, Gainesville, FL 32608
Invoice To: jennifer.simms@ch2m.com

Preservatives: 9 | 1 | 1 | 1 | 1 | 1
Containers: 2 | 3 | 3 | 3 | 3 | 4

Sample Identification: Location ID	Start Depth (ft)	End Depth (ft)	Field Sample ID	Sample Date	Sample Time	Sample Type	Sample Matrix	Sample Purpose	# of Cont.	Units	Composite (Y/N)	Field Filtered Sample ?	SW8260 - VOCs	SW8270 - SVOCs	SW8270-SIM	SW6010 - As, Pb	SW8081 - Pesticides	SW8082 - PCBs	E350.2 - Ammonia							Sampling Method (code)	Lab Sample Numbers
1 Trip Blank	—	*	TB 081506	08/15/06	00:00	BULKWATER	Water	TB	3	G	N	X										-	1	RWB 8-16-06 *		Grab	
2 Equip Blank	—		EB-081506-GW	08/15/06	15:15	BULKWATER	Water	EB	8	G	N	X	X	X	X		X					-	2			Grab	
3 MW-106	—		MW-106-081506	08/15/06	1255	GW	Water	REG	8	G	N	X	X	X	X		X					-	3			Bled Pump	
4 MW-120A	—		MW-120A-081506	08/15/06	1320	GW	Water	REG	8	G	N	X	X	X	X		X					-	4			Bled Pump	
5 MW-120B	—		MW-120B-081506	08/15/06	1340	GW	Water	REG	8	G	N	X	X	X	X		X					-	5			Bled Pump	
6																											
7																											
8																											
9																											
10																											
11																											
12																											

EX 66, AMET 10, 802

SW6010^LLI — See worksheet SW6010 - analyze for Arsenic (As) and Lead (Pb)

Relinquished by	Company	Date/Time	Received by	Company	Date/Time	Condition	Cooler Temp.	Custody Seals Intact
Jen Simms	CH2M HILL	08/15/06 1600	J. Ray	ACCUTEST	8/15/06 1600			
J. Ray	ACCUTEST	8/15/06 1745	M. Cotsis		8/15/06 1745			

Preservatives: (Other; Specify): 0 (none); 1 (4 Deg C); 2 (HCl pH<2); 3 (HNO3 pH<2); 4 (H2SO4 pH<2); 5 (NaOH pH>12); 6 (NaOH, Zn Acetate); 7 (H2SO4 (pH<2), 4 Deg C)); 8 (HCl pH<2); 9 (HCl 4 Deg C); 10 (HNO3 (pH<2), 4Deg C); 11 (4C NaOH (pH>12) & Ascorbic Acid); 12 (4C H2SO4 (pH<2) & Na2S2O3); 13 (Zn Acetate); sp (special instructions)

*unpreserved VOA's (WATER) 8/15/06 mc

ALL SAMPLES RECEIVED PRESERVED AS APPLICABLE

Amy Klopper KB + Amy Klopper do not run TB sample-1. RWB 8-16-06

3.6°C, 4.4°C

5.1 5

J38500: Chain of Custody
Page 1 of 1

New Jersey
ACCUTEST LABORATORIES

10/06/15

Technical Report for

CH2M Hill

Quanta 2006 Groundwater Resources, Edgewater, NJ

Accutest Job Number: J38643

Sampling Dates: 08/15/06 - 08/16/06

Report to:

CH2M Hill

Theresa.Himmer@CH2M.com

ATTN: Theresa Himmer

Total number of pages in report: **57**

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Program and/or state specific certification programs as applicable.

Nancy Cole
Laboratory Director

Client Service contact: Nadine Yakes 732-329-0200

Certifications: NJ(12129), NY(10983), CA, CT, DE, FL, IL, IN, KS, KY, LA, MA, MD, MI, MT, NC, OH VAP (CL0056), AK (UST-103), AZ (AZ0786), PA, RI, SC, TN, TX, VA, WV, DoD ELAP (L-A-B L2248)

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Accutest LabLink@876317 14:21 06-Oct-2015

Sample Summary

CH2M Hill

Job No: J38643

Quanta 2006 Groundwater Resources, Edgewater, NJ

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
J38643-1	08/16/06	15:25	AH	08/16/06	AQ	Trip Blank Water	TB-081606-GW
J38643-2	08/15/06	16:35	AH	08/16/06	AQ	Ground Water	MW-115A-081506
J38643-3	08/15/06	17:15	AH	08/16/06	AQ	Ground Water	MW-115B-081506
J38643-4	08/16/06	11:10	AH	08/16/06	AQ	Ground Water	MW-106A-081606
J38643-5	08/16/06	15:00	AH	08/16/06	AQ	Ground Water	MW-31-081606
J38643-6	08/16/06	15:25	AH	08/16/06	AQ	Ground Water	MW-29-081606

CASE NARRATIVE / CONFORMANCE SUMMARY

Client:	CH2M Hill	**Job No**	J38643
Site:	Quanta 2006 Groundwater Resources, Edgewater, NJ	**Report Date**	9/5/2006 12:04:18 PM

5 Sample(s), 1 Trip Blank(s) and 0 Field Blank(s) were collected on between 08/15/2006 and 08/16/2006 and were received at Accutest on 08/16/2006 properly preserved, at 4.6 Deg. C and intact. These Samples received an Accutest job number of J38643. A listing of the Laboratory Sample ID, Client Sample ID and dates of collection are presented in the Results Summary Section of this report.

Except as noted below, all method specified calibrations and quality control performance criteria were met for this job. For more information, please refer to QC summary pages.

Volatiles by GCMS By Method SW846 8260B

Matrix AQ **Batch ID:** V1B1172

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) J39182-5MS, J39182-5MSD were used as the QC samples indicated.
- RPD(s) for MSD for 2-Hexanone are outside control limits for sample J39182-5MSD. Outside control limits due to matrix interference.

Matrix AQ **Batch ID:** V1B1174

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) J38628-1MS, J38628-1MSD were used as the QC samples indicated.
- Matrix Spike / Matrix Spike Duplicate Recovery(s) for Benzene, Toluene are outside control limits. Outside control limits due to high level in sample relative to spike amount.
- RPD(s) for MSD for Carbon tetrachloride are outside control limits for sample J38628-1MSD. Outside control limits due to matrix interference.

Matrix AQ **Batch ID:** V1B1175

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) J39489-4MS, J39489-4MSD were used as the QC samples indicated.
- Matrix Spike / Matrix Spikd Duplicate Recovery(s) for Chlorobenzene are outside control limits. Outside control limits due to high level in sample relative to spike amount.
- RPD(s) for MSD for 1,2,4-Trichlorobenzene, 1,2-Dibromo-3-chloropropane are outside control limits for sample J39489-4MSD. Outside control limits due to matrix interference.
- Sample(s) J38643-6 have surrogates outside control limits. Probable cause due to matrix interference.
- J38643-6 for Toluene-D8: Outside control limits due to matrix interference.

Matrix AQ **Batch ID:** VE5192

- All samples were analyzed within the recommended method holding time.
- Sample(s) J39348-5MS, J39348-5MSD were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.

Extractables by GCMS By Method SW846 8270C

Matrix AQ	Batch ID: OP24513

- All samples were extracted within the recommended method holding time.
- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) J38611-4MS, J38611-4MSD were used as the QC samples indicated.
- Matrix Spike Recovery(s) for 2,4-Dinitrophenol, 3,3'-Dichlorobenzidine are outside control limits. Outside control limits due to matrix interference.
- Matrix Spike Duplicate Recovery(s) for 2,4-Dinitrophenol, 3,3'-Dichlorobenzidine are outside control limits. Probable cause due to matrix interference.
- Sample(s) J38643-3, J38643-5 have surrogates outside control limits. Probable cause due to matrix interference.
- J38643-5 for 2,4,6-Tribromophenol: Outside control limits due to dilution.
- J38643-3 for Phenol-d5: Outside control limits due to dilution.
- J38643-3 for Phenol-d5: Outside control limits due to dilution.

Extractables by GCMS By Method SW846 8270C BY SIM

Matrix AQ	Batch ID: OP24514

- All samples were extracted within the recommended method holding time.
- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) J38611-4MS, J38611-4MSD were used as the QC samples indicated.
- Matrix Spike Recovery(s) for Fluorene, Pentachlorophenol are outside control limits. Outside control limits due to matrix interference.
- Matrix Spike Duplicate Recovery(s) for Pentachlorophenol are outside control limits. Probable cause due to matrix interference.
- OP24514-MS / MSD for Benzo(a)pyrene: 50 ppm was added.
- OP24514-MS / MSD for Benzo(g,h,i)perylene: 50 ppm was added.
- OP24514-MS / MSD for Benzo(k)fluoranthene: 50 ppm was added.
- OP24514-MS / MSD for Chrysene: 50 ppm was added.
- OP24514-MS / MSD for Dibenzo(a,h)anthracene: 50 ppm was added.
- OP24514-MS / MSD for Anthracene: 50 ppm was added.
- OP24514-MS / MSD for Fluorene: 50 ppm was added.
- OP24514-MS / MSD for Benzo(a)anthracene: 50 ppm was added.
- OP24514-MS / MSD for Indeno(1,2,3-cd)pyrene: 50 ppm was added.
- OP24514-MS / MSD for Naphthalene: 50 ppm was added.
- OP24514-MS / MSD for Phenanthrene: 50 ppm was added.
- OP24514-MS / MSD for Pyrene: 50 ppm was added.
- OP24514-MS / MSD for Fluoranthene: 50 ppm was added.
- OP24514-MS / MSD for Acenaphthylene: 50 ppm was added.
- OP24514-MS / MSD for Benzo(b)fluoranthene: 50 ppm was added.
- OP24514-MS / MSD for Acenaphthene: 50 ppm was added.

Extractables by GC By Method SW846 8082

Matrix AQ	**Batch ID:** OP24453

- All samples were extracted within the recommended method holding time.
- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) J37991-1MS, J37991-1MSD, OP24453-MSMSD were used as the QC samples indicated.
- Sample(s) J38643-6, J38643-4 have surrogates outside control limits. Probable cause due to matrix interference.
- J38643-4: Had TBA cleanup.
- J38643-4 for Tetrachloro-m-xylene: Outside control limits due to matrix interference.
- J38643-6 for Tetrachloro-m-xylene: Outside control limits due to matrix interference.

Metals By Method SW846 6010B

Matrix AQ	**Batch ID:** MP35669

- All samples were digested within the recommended method holding time.
- All samples were digested within the recommended method holding time.
- All samples were analyzed within the recommended method holding time.
- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- All method blanks for this batch meet method specific criteria.
- Sample(s) J38751-3MS, J38751-3MSD, J38751-3SDL were used as the QC samples for metals.
- Matrix Spike / Matrix Spike Duplicate Recovery(s) for Arsenic are outside control limits. Spike amount low relative to the sample amount. Refer to lab control or spike blank for recovery information.
- RPD(s) for Serial Dilution for Arsenic are outside control limits for sample MP35669-SD1. Serial dilution indicates possible matrix interference.
- J38643-3 for Arsenic: Elevated detection limit due to dilution required for high interfering element.
- J38643-3 for Lead: Elevated detection limit due to dilution required for high interfering element.

The Accutest Laboratories of New Jersey certifies that all analysis were performed within method specification. It is further recommended that this report to be used in its entirety.The Accutest Laboratories of NJ, Laboratory Director or assignee as verified by the signature on the cover page has authorized the release of this report(J38643).

Summary of Hits

Job Number: J38643
Account: CH2M Hill
Project: Quanta 2006 Groundwater Resources, Edgewater, NJ
Collected: 08/15/06 thru 08/16/06

Lab Sample ID Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
J38643-1	**TB-081606-GW**					
No hits reported in this sample.						
J38643-2	**MW-115A-081506**					
m,p-Xylene		100	1.0	0.42	ug/l	SW846 8260B
Xylene (total)		100	1.0	0.31	ug/l	SW846 8260B
2,4-Dimethylphenol		3.8 J	5.4	1.8	ug/l	SW846 8270C
Total TIC, Semi-Volatile		1031.7 J			ug/l	
Arsenic		74.1	2.0		ug/l	SW846 6010B
J38643-3	**MW-115B-081506**					
Benzene		521	10	2.1	ug/l	SW846 8260B
Cyclohexane		5.1	5.0	0.50	ug/l	SW846 8260B
Ethylbenzene		271	10	2.0	ug/l	SW846 8260B
Isopropylbenzene		20.7	2.0	0.20	ug/l	SW846 8260B
Methylcyclohexane		2.0 J	5.0	0.18	ug/l	SW846 8260B
Styrene		30.2	5.0	0.16	ug/l	SW846 8260B
Toluene		64.5	1.0	0.20	ug/l	SW846 8260B
m,p-Xylene		95.5	1.0	0.42	ug/l	SW846 8260B
o-Xylene		90.2	1.0	0.31	ug/l	SW846 8260B
Xylene (total)		186	1.0	0.31	ug/l	SW846 8260B
Total TIC, Volatile		1296 J			ug/l	
2,4-Dimethylphenol		2600	250	82	ug/l	SW846 8270C
2-Methylphenol		4.2 J	5.0	1.4	ug/l	SW846 8270C
3&4-Methylphenol		65.2	5.0	1.3	ug/l	SW846 8270C
Acenaphthene		14.9	2.0	0.35	ug/l	SW846 8270C
Carbazole		4.7	2.0	0.36	ug/l	SW846 8270C
Diethyl phthalate		6.3	2.0	0.39	ug/l	SW846 8270C
2-Methylnaphthalene		14.4	2.0	0.41	ug/l	SW846 8270C
Naphthalene		1270	100	16	ug/l	SW846 8270C
Fluorene		0.409	0.20	0.020	ug/l	SW846 8270C BY SIM
Phenanthrene		0.511	0.20	0.021	ug/l	SW846 8270C BY SIM
Total TIC, Semi-Volatile		3718 J			ug/l	
J38643-4	**MW-106A-081606**					
Benzene		17.8	1.0	0.21	ug/l	SW846 8260B
Cyclohexane		27.5	5.0	0.50	ug/l	SW846 8260B
Ethylbenzene		22.1	1.0	0.20	ug/l	SW846 8260B
Isopropylbenzene		4.3	2.0	0.20	ug/l	SW846 8260B
Methylcyclohexane		105	5.0	0.18	ug/l	SW846 8260B
Toluene		193	1.0	0.20	ug/l	SW846 8260B

Summary of Hits

Job Number: J38643
Account: CH2M Hill
Project: Quanta 2006 Groundwater Resources, Edgewater, NJ
Collected: 08/15/06 thru 08/16/06

Lab Sample ID Client Sample ID Analyte	Result/ Qual	RL	MDL	Units	Method
m,p-Xylene	128	1.0	0.42	ug/l	SW846 8260B
o-Xylene	30.7	1.0	0.31	ug/l	SW846 8260B
Xylene (total)	159	1.0	0.31	ug/l	SW846 8260B
Total TIC, Volatile	217.1 J			ug/l	
3&4-Methylphenol	12.5	5.0	1.3	ug/l	SW846 8270C
Acenaphthene	23.8	2.0	0.35	ug/l	SW846 8270C
Carbazole	5.6	2.0	0.36	ug/l	SW846 8270C
Dibenzofuran	12.8	5.0	0.34	ug/l	SW846 8270C
2-Methylnaphthalene	2.4	2.0	0.41	ug/l	SW846 8270C
Phenanthrene	22.4	2.0	0.36	ug/l	SW846 8270C
Acenaphthylene	0.210	0.20	0.0095	ug/l	SW846 8270C BY SIM
Anthracene	4.40	0.20	0.021	ug/l	SW846 8270C BY SIM
Benzo(a)anthracene	0.232	0.20	0.0068	ug/l	SW846 8270C BY SIM
Fluoranthene	3.51	0.20	0.0090	ug/l	SW846 8270C BY SIM
Fluorene	11.1	0.20	0.020	ug/l	SW846 8270C BY SIM
Naphthalene	2.40	0.20	0.026	ug/l	SW846 8270C BY SIM
Pyrene	2.43	0.20	0.014	ug/l	SW846 8270C BY SIM
Total TIC, Semi-Volatile	210.6 J			ug/l	
Arsenic	5.5	2.0		ug/l	SW846 6010B
J38643-5 MW-31-081606					
Benzene	114	1.0	0.21	ug/l	SW846 8260B
Cyclohexane	4.3 J	5.0	0.50	ug/l	SW846 8260B
Ethylbenzene	129	1.0	0.20	ug/l	SW846 8260B
Isopropylbenzene	8.3	2.0	0.20	ug/l	SW846 8260B
Methylcyclohexane	1.4 J	5.0	0.18	ug/l	SW846 8260B
Toluene	7.3	1.0	0.20	ug/l	SW846 8260B
m,p-Xylene	11.0	1.0	0.42	ug/l	SW846 8260B
o-Xylene	36.0	1.0	0.31	ug/l	SW846 8260B
Xylene (total)	47.1	1.0	0.31	ug/l	SW846 8260B
Total TIC, Volatile	748.1 J			ug/l	
Carbazole	3.7	2.0	0.36	ug/l	SW846 8270C
Dibenzofuran	0.84 J	5.0	0.34	ug/l	SW846 8270C
2-Methylnaphthalene	14.5	2.0	0.41	ug/l	SW846 8270C
Naphthalene	683	100	16	ug/l	SW846 8270C
Acenaphthene	9.46	0.20	0.017	ug/l	SW846 8270C BY SIM
Acenaphthylene	2.09	0.20	0.0095	ug/l	SW846 8270C BY SIM
Anthracene	0.265	0.20	0.021	ug/l	SW846 8270C BY SIM
Fluoranthene	0.514	0.20	0.0090	ug/l	SW846 8270C BY SIM
Fluorene	1.39	0.20	0.020	ug/l	SW846 8270C BY SIM
Phenanthrene	0.539	0.20	0.021	ug/l	SW846 8270C BY SIM
Pyrene	0.350	0.20	0.014	ug/l	SW846 8270C BY SIM
Total TIC, Semi-Volatile	425.2 J			ug/l	
Arsenic	172	2.0		ug/l	SW846 6010B

Summary of Hits

Job Number: J38643
Account: CH2M Hill
Project: Quanta 2006 Groundwater Resources, Edgewater, NJ
Collected: 08/15/06 thru 08/16/06

Lab Sample ID Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
J38643-6	**MW-29-081606**					
Benzene		596	20	4.2	ug/l	SW846 8260B
Cyclohexane		11.0	5.0	0.50	ug/l	SW846 8260B
1,1-Dichloroethane		0.55 J	1.0	0.23	ug/l	SW846 8260B
cis-1,2-Dichloroethene		3.3	1.0	0.18	ug/l	SW846 8260B
trans-1,2-Dichloroethene		0.44 J	1.0	0.42	ug/l	SW846 8260B
Ethylbenzene		446	20	4.0	ug/l	SW846 8260B
Isopropylbenzene		55.4	2.0	0.20	ug/l	SW846 8260B
Methylcyclohexane		6.1	5.0	0.18	ug/l	SW846 8260B
Toluene		38.8	1.0	0.20	ug/l	SW846 8260B
Trichloroethene		0.68 J	1.0	0.29	ug/l	SW846 8260B
Vinyl chloride		1.9	1.0	0.29	ug/l	SW846 8260B
m,p-Xylene		261	1.0	0.42	ug/l	SW846 8260B
o-Xylene		111	1.0	0.31	ug/l	SW846 8260B
Xylene (total)		372	1.0	0.31	ug/l	SW846 8260B
Total TIC, Volatile		1684 J			ug/l	
2,4-Dimethylphenol		18.8	5.0	1.6	ug/l	SW846 8270C
2-Methylphenol		4.2 J	5.0	1.4	ug/l	SW846 8270C
Acenaphthene		203	40	7.0	ug/l	SW846 8270C
Carbazole		21.5	2.0	0.36	ug/l	SW846 8270C
Dibenzofuran		26.2	5.0	0.34	ug/l	SW846 8270C
2-Methylnaphthalene		20.8	2.0	0.41	ug/l	SW846 8270C
Naphthalene		1690	40	6.4	ug/l	SW846 8270C
Acenaphthylene		10.3	0.20	0.0095	ug/l	SW846 8270C BY SIM
Fluoranthene		0.620	0.20	0.0090	ug/l	SW846 8270C BY SIM
Fluorene		13.3	0.20	0.020	ug/l	SW846 8270C BY SIM
Phenanthrene		13.0	0.20	0.021	ug/l	SW846 8270C BY SIM
Pyrene		0.476	0.20	0.014	ug/l	SW846 8270C BY SIM
Total TIC, Semi-Volatile		3987 J			ug/l	
Arsenic		6.0	2.0		ug/l	SW846 6010B

New Jersey

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Sample Results

Report of Analysis

Report of Analysis

Client Sample ID:	TB-081606-GW		
Lab Sample ID:	J38643-1	**Date Sampled:**	08/16/06
Matrix:	AQ - Trip Blank Water	**Date Received:**	08/16/06
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Quanta 2006 Groundwater Resources, Edgewater, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1B28327.D	1	08/26/06	MKP	n/a	n/a	V1B1172
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List (OLM4.2)

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	2.4	ug/l	
71-43-2	Benzene	ND	1.0	0.21	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.17	ug/l	
75-25-2	Bromoform	ND	4.0	0.54	ug/l	
74-83-9	Bromomethane	ND	2.0	0.22	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	2.6	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.21	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.29	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.22	ug/l	
75-00-3	Chloroethane	ND	1.0	0.56	ug/l	
67-66-3	Chloroform	ND	1.0	0.22	ug/l	
74-87-3	Chloromethane	ND	1.0	0.35	ug/l	
110-82-7	Cyclohexane	ND	5.0	0.50	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	10	1.1	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.19	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	0.52	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.20	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.32	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.24	ug/l	
75-71-8	Dichlorodifluoromethane	ND	5.0	0.75	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.23	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.29	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.33	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.18	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.42	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.20	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.15	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.20	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.20	ug/l	
76-13-1	Freon 113	ND	5.0	0.69	ug/l	
591-78-6	2-Hexanone	ND	5.0	1.3	ug/l	
98-82-8	Isopropylbenzene	ND	2.0	0.20	ug/l	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TB-081606-GW		
Lab Sample ID:	J38643-1	**Date Sampled:**	08/16/06
Matrix:	AQ - Trip Blank Water	**Date Received:**	08/16/06
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Quanta 2006 Groundwater Resources, Edgewater, NJ		

VOA TCL List (OLM4.2)

CAS No.	Compound	Result	RL	MDL	Units	Q
79-20-9	Methyl Acetate	ND	5.0	2.1	ug/l	
108-87-2	Methylcyclohexane	ND	5.0	0.18	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.31	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.1	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.27	ug/l	
100-42-5	Styrene	ND	5.0	0.16	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.28	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.28	ug/l	
108-88-3	Toluene	ND	1.0	0.20	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.16	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.28	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.32	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.29	ug/l	
75-69-4	Trichlorofluoromethane	ND	5.0	0.25	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.29	ug/l	
	m,p-Xylene	ND	1.0	0.42	ug/l	
95-47-6	o-Xylene	ND	1.0	0.31	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.31	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	107%		77-121%
17060-07-0	1,2-Dichloroethane-D4	110%		65-133%
2037-26-5	Toluene-D8	100%		80-117%
460-00-4	4-Bromofluorobenzene	104%		79-124%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-115A-081506		
Lab Sample ID:	J38643-2	**Date Sampled:**	08/15/06
Matrix:	AQ - Ground Water	**Date Received:**	08/16/06
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Quanta 2006 Groundwater Resources, Edgewater, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1B28328.D	1	08/26/06	MKP	n/a	n/a	V1B1172
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List (OLM4.2)

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	2.4	ug/l	
71-43-2	Benzene	ND	1.0	0.21	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.17	ug/l	
75-25-2	Bromoform	ND	4.0	0.54	ug/l	
74-83-9	Bromomethane	ND	2.0	0.22	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	2.6	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.21	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.29	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.22	ug/l	
75-00-3	Chloroethane	ND	1.0	0.56	ug/l	
67-66-3	Chloroform	ND	1.0	0.22	ug/l	
74-87-3	Chloromethane	ND	1.0	0.35	ug/l	
110-82-7	Cyclohexane	ND	5.0	0.50	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	10	1.1	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.19	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	0.52	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.20	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.32	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.24	ug/l	
75-71-8	Dichlorodifluoromethane	ND	5.0	0.75	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.23	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.29	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.33	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.18	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.42	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.20	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.15	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.20	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.20	ug/l	
76-13-1	Freon 113	ND	5.0	0.69	ug/l	
591-78-6	2-Hexanone	ND	5.0	1.3	ug/l	
98-82-8	Isopropylbenzene	ND	2.0	0.20	ug/l	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-115A-081506		
Lab Sample ID:	J38643-2	**Date Sampled:**	08/15/06
Matrix:	AQ - Ground Water	**Date Received:**	08/16/06
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Quanta 2006 Groundwater Resources, Edgewater, NJ		

VOA TCL List (OLM4.2)

CAS No.	Compound	Result	RL	MDL	Units	Q
79-20-9	Methyl Acetate	ND	5.0	2.1	ug/l	
108-87-2	Methylcyclohexane	ND	5.0	0.18	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.31	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.1	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.27	ug/l	
100-42-5	Styrene	ND	5.0	0.16	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.28	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.28	ug/l	
108-88-3	Toluene	ND	1.0	0.20	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.16	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.28	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.32	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.29	ug/l	
75-69-4	Trichlorofluoromethane	ND	5.0	0.25	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.29	ug/l	
	m,p-Xylene	100	1.0	0.42	ug/l	
95-47-6	o-Xylene	ND	1.0	0.31	ug/l	
1330-20-7	Xylene (total)	100	1.0	0.31	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	108%		77-121%
17060-07-0	1,2-Dichloroethane-D4	111%		65-133%
2037-26-5	Toluene-D8	99%		80-117%
460-00-4	4-Bromofluorobenzene	102%		79-124%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-115A-081506		
Lab Sample ID:	J38643-2	**Date Sampled:**	08/15/06
Matrix:	AQ - Ground Water	**Date Received:**	08/16/06
Method:	SW846 8270C SW846 3510C	**Percent Solids:**	n/a
Project:	Quanta 2006 Groundwater Resources, Edgewater, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3E1851.D	1	08/25/06	MMC	08/17/06	OP24513	E3E64
Run #2							

	Initial Volume	Final Volume
Run #1	930 ml	1.0 ml
Run #2		

ABN TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	5.4	1.0	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	5.4	1.3	ug/l	
120-83-2	2,4-Dichlorophenol	ND	5.4	1.7	ug/l	
105-67-9	2,4-Dimethylphenol	3.8	5.4	1.8	ug/l	J
51-28-5	2,4-Dinitrophenol	ND	22	0.96	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	22	0.78	ug/l	
95-48-7	2-Methylphenol	ND	5.4	1.5	ug/l	
	3&4-Methylphenol	ND	5.4	1.4	ug/l	
88-75-5	2-Nitrophenol	ND	5.4	1.9	ug/l	
100-02-7	4-Nitrophenol	ND	22	0.91	ug/l	
108-95-2	Phenol	ND	5.4	0.53	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	5.4	2.1	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	5.4	1.4	ug/l	
98-86-2	Acetophenone	ND	5.4	0.40	ug/l	
1912-24-9	Atrazine	ND	5.4	0.18	ug/l	
100-52-7	Benzaldehyde	ND	5.4	0.28	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	2.2	0.32	ug/l	
85-68-7	Butyl benzyl phthalate	ND	2.2	0.64	ug/l	
92-52-4	1,1'-Biphenyl	ND	2.2	0.35	ug/l	
91-58-7	2-Chloronaphthalene	ND	5.4	1.1	ug/l	
106-47-8	4-Chloroaniline	ND	5.4	0.43	ug/l	
86-74-8	Carbazole	ND	2.2	0.39	ug/l	
105-60-2	Caprolactam	ND	2.2	0.34	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	2.2	0.70	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	2.2	0.57	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	2.2	0.79	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	2.2	0.46	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	2.2	0.92	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	2.2	0.60	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	5.4	1.3	ug/l	
132-64-9	Dibenzofuran	ND	5.4	0.37	ug/l	
84-74-2	Di-n-butyl phthalate	ND	2.2	0.64	ug/l	

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E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-115A-081506		
Lab Sample ID:	J38643-2	**Date Sampled:**	08/15/06
Matrix:	AQ - Ground Water	**Date Received:**	08/16/06
Method:	SW846 8270C SW846 3510C	**Percent Solids:**	n/a
Project:	Quanta 2006 Groundwater Resources, Edgewater, NJ		

ABN TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
117-84-0	Di-n-octyl phthalate	ND	2.2	0.61	ug/l	
84-66-2	Diethyl phthalate	ND	2.2	0.42	ug/l	
131-11-3	Dimethyl phthalate	ND	2.2	0.35	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	2.2	0.71	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.2	0.19	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	22	0.44	ug/l	
67-72-1	Hexachloroethane	ND	5.4	0.30	ug/l	
78-59-1	Isophorone	ND	2.2	0.63	ug/l	
91-57-6	2-Methylnaphthalene	ND	2.2	0.44	ug/l	
88-74-4	2-Nitroaniline	ND	5.4	0.71	ug/l	
99-09-2	3-Nitroaniline	ND	5.4	1.4	ug/l	
100-01-6	4-Nitroaniline	ND	5.4	0.78	ug/l	
98-95-3	Nitrobenzene	ND	2.2	0.45	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	2.2	0.50	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	5.4	0.55	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	36%		12-76%
4165-62-2	Phenol-d5	28%		10-59%
118-79-6	2,4,6-Tribromophenol	86%		42-128%
4165-60-0	Nitrobenzene-d5	64%		30-122%
321-60-8	2-Fluorobiphenyl	62%		34-113%
1718-51-0	Terphenyl-d14	92%		42-125%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	system artifact/aldol-condensation	3.81	11	ug/l	J
	unknown	7.55	10	ug/l	J
	Benzenediol methyl	10.23	25	ug/l	J
	unknown	13.51	20	ug/l	J
	unknown	13.93	9	ug/l	J
	unknown	14.36	8.2	ug/l	J
	unknown	15.61	11	ug/l	J
	unknown	16.51	7.2	ug/l	J
	unknown	19.63	27	ug/l	J
	unknown	20.18	69	ug/l	J
	unknown	20.32	6.6	ug/l	J
	unknown	20.55	28	ug/l	J
	unknown	20.93	12	ug/l	J

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Report of Analysis

Client Sample ID:	MW-115A-081506		
Lab Sample ID:	J38643-2	**Date Sampled:**	08/15/06
Matrix:	AQ - Ground Water	**Date Received:**	08/16/06
Method:	SW846 8270C SW846 3510C	**Percent Solids:**	n/a
Project:	Quanta 2006 Groundwater Resources, Edgewater, NJ		

ABN TCL List

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	unknown	21.38	8.3	ug/l	J
	system artifact	21.46	25	ug/l	J
	unknown	21.75	29	ug/l	J
	unknown	21.98	140	ug/l	J
	unknown	22.28	46	ug/l	J
	unknown	22.52	43	ug/l	J
	unknown	22.91	7.4	ug/l	J
	unknown	23.00	44	ug/l	J
	unknown	23.33	150	ug/l	J
	unknown	23.80	80	ug/l	J
	unknown	24.11	19	ug/l	J
	unknown	24.43	14	ug/l	J
	unknown	25.98	48	ug/l	J
	unknown	26.54	170	ug/l	J
	Total TIC, Semi-Volatile		1031.7	ug/l	J

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Report of Analysis

Client Sample ID:	MW-115A-081506		
Lab Sample ID:	J38643-2	**Date Sampled:**	08/15/06
Matrix:	AQ - Ground Water	**Date Received:**	08/16/06
Method:	SW846 8270C BY SIM SW846 3510C	**Percent Solids:**	n/a
Project:	Quanta 2006 Groundwater Resources, Edgewater, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Z29247.D	1	08/22/06	KLS	08/17/06	OP24514	EZ906
Run #2							

	Initial Volume	Final Volume
Run #1	930 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
87-86-5	Pentachlorophenol	ND	1.1	0.43	ug/l	
83-32-9	Acenaphthene	ND	0.22	0.018	ug/l	
208-96-8	Acenaphthylene	ND	0.22	0.010	ug/l	
120-12-7	Anthracene	ND	0.22	0.022	ug/l	
56-55-3	Benzo(a)anthracene	ND	0.22	0.0073	ug/l	
50-32-8	Benzo(a)pyrene	ND	0.22	0.018	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	0.22	0.039	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	0.22	0.019	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	0.22	0.017	ug/l	
218-01-9	Chrysene	ND	0.22	0.018	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	0.22	0.018	ug/l	
206-44-0	Fluoranthene	ND	0.22	0.0097	ug/l	
86-73-7	Fluorene	ND	0.22	0.022	ug/l	
118-74-1	Hexachlorobenzene	ND	0.11	0.065	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.22	0.012	ug/l	
91-20-3	Naphthalene	ND	0.22	0.028	ug/l	
85-01-8	Phenanthrene	ND	0.22	0.023	ug/l	
129-00-0	Pyrene	ND	0.22	0.015	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	38%		10-99%
4165-62-2	Phenol-d5	30%		10-83%
118-79-6	2,4,6-Tribromophenol	91%		10-140%
4165-60-0	Nitrobenzene-d5	58%		11-140%
321-60-8	2-Fluorobiphenyl	76%		10-133%
1718-51-0	Terphenyl-d14	78%		13-130%

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E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-115A-081506		
Lab Sample ID:	J38643-2	**Date Sampled:**	08/15/06
Matrix:	AQ - Ground Water	**Date Received:**	08/16/06
Method:	SW846 8082 SW846 3510C	**Percent Solids:**	n/a
Project:	Quanta 2006 Groundwater Resources, Edgewater, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	AB59283.D	1	08/23/06	JSE	08/18/06	OP24453	GAB2694
Run #2							

	Initial Volume	Final Volume
Run #1	1000 ml	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	0.50	0.094	ug/l	
11104-28-2	Aroclor 1221	ND	0.50	0.47	ug/l	
11141-16-5	Aroclor 1232	ND	0.50	0.39	ug/l	
53469-21-9	Aroclor 1242	ND	0.50	0.16	ug/l	
12672-29-6	Aroclor 1248	ND	0.50	0.15	ug/l	
11097-69-1	Aroclor 1254	ND	0.50	0.11	ug/l	
11096-82-5	Aroclor 1260	ND	0.50	0.12	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	70%		38-133%
877-09-8	Tetrachloro-m-xylene	70%		38-133%
2051-24-3	Decachlorobiphenyl	67%		18-156%
2051-24-3	Decachlorobiphenyl	67%		18-156%

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Report of Analysis

Client Sample ID:	MW-115A-081506		
Lab Sample ID:	J38643-2	**Date Sampled:**	08/15/06
Matrix:	AQ - Ground Water	**Date Received:**	08/16/06
		Percent Solids:	n/a
Project:	Quanta 2006 Groundwater Resources, Edgewater, NJ		

Total Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Arsenic	74.1	2.0	ug/l	1	08/24/06	08/26/06	ND	SW846 6010B [2]	SW846 3010A [3]
Lead	< 3.0	3.0	ug/l	1	08/24/06	08/25/06	ND	SW846 6010B [1]	SW846 3010A [3]

(1) Instrument QC Batch: MA17965
(2) Instrument QC Batch: MA17968
(3) Prep QC Batch: MP35669

RL = Reporting Limit

Report of Analysis

Client Sample ID:	MW-115B-081506		
Lab Sample ID:	J38643-3	**Date Sampled:**	08/15/06
Matrix:	AQ - Ground Water	**Date Received:**	08/16/06
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Quanta 2006 Groundwater Resources, Edgewater, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1B28329.D	1	08/26/06	MKP	n/a	n/a	V1B1172
Run #2	1B28375.D	10	08/28/06	MKP	n/a	n/a	V1B1174

	Purge Volume
Run #1	5.0 ml
Run #2	5.0 ml

VOA TCL List (OLM4.2)

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	2.4	ug/l	
71-43-2	Benzene	521 [a]	10	2.1	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.17	ug/l	
75-25-2	Bromoform	ND	4.0	0.54	ug/l	
74-83-9	Bromomethane	ND	2.0	0.22	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	2.6	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.21	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.29	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.22	ug/l	
75-00-3	Chloroethane	ND	1.0	0.56	ug/l	
67-66-3	Chloroform	ND	1.0	0.22	ug/l	
74-87-3	Chloromethane	ND	1.0	0.35	ug/l	
110-82-7	Cyclohexane	5.1	5.0	0.50	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	10	1.1	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.19	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	0.52	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.20	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.32	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.24	ug/l	
75-71-8	Dichlorodifluoromethane	ND	5.0	0.75	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.23	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.29	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.33	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.18	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.42	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.20	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.15	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.20	ug/l	
100-41-4	Ethylbenzene	271 [a]	10	2.0	ug/l	
76-13-1	Freon 113	ND	5.0	0.69	ug/l	
591-78-6	2-Hexanone	ND	5.0	1.3	ug/l	
98-82-8	Isopropylbenzene	20.7	2.0	0.20	ug/l	

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Report of Analysis

Client Sample ID:	MW-115B-081506		
Lab Sample ID:	J38643-3	**Date Sampled:**	08/15/06
Matrix:	AQ - Ground Water	**Date Received:**	08/16/06
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Quanta 2006 Groundwater Resources, Edgewater, NJ		

VOA TCL List (OLM4.2)

CAS No.	Compound	Result	RL	MDL	Units	Q
79-20-9	Methyl Acetate	ND	5.0	2.1	ug/l	
108-87-2	Methylcyclohexane	2.0	5.0	0.18	ug/l	J
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.31	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.1	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.27	ug/l	
100-42-5	Styrene	30.2	5.0	0.16	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.28	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.28	ug/l	
108-88-3	Toluene	64.5	1.0	0.20	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.16	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.28	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.32	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.29	ug/l	
75-69-4	Trichlorofluoromethane	ND	5.0	0.25	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.29	ug/l	
	m,p-Xylene	95.5	1.0	0.42	ug/l	
95-47-6	o-Xylene	90.2	1.0	0.31	ug/l	
1330-20-7	Xylene (total)	186	1.0	0.31	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	107%	100%	77-121%
17060-07-0	1,2-Dichloroethane-D4	115%	97%	65-133%
2037-26-5	Toluene-D8	115%	99%	80-117%
460-00-4	4-Bromofluorobenzene	97%	100%	79-124%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
110-02-1	Thiophene	11.54	30	ug/l	JN
108-67-8	Benzene, 1,3,5-trimethyl-	16.03	16	ug/l	JN
	C3 alkyl benzene	16.25	12	ug/l	J
95-36-3	1,2,4-Trimethylbenzene	16.40	23	ug/l	JN
271-89-6	Benzofuran	16.72	22	ug/l	JN
496-11-7	Indane	17.05	370	ug/l	JN
95-13-6	Indene	17.28	120	ug/l	JN
	1H-indene-dihydro-methyl	17.58	14	ug/l	J
	Benzofuran, methyl-	17.83	27	ug/l	J
	Benzofuran, methyl-	17.93	35	ug/l	J
	1H-indene-methyl	18.55	13	ug/l	J
91-20-3	Naphthalene	19.09	520	ug/l	JN

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E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-115B-081506		
Lab Sample ID:	J38643-3	**Date Sampled:**	08/15/06
Matrix:	AQ - Ground Water	**Date Received:**	08/16/06
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Quanta 2006 Groundwater Resources, Edgewater, NJ		

VOA TCL List (OLM4.2)

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Benzo[]thiophene	19.23	46	ug/l	J
	Naphthalene methyl	20.23	14	ug/l	J
	Naphthalene methyl	20.45	34	ug/l	J
	Total TIC, Volatile		1296	ug/l	J

(a) Result is from Run# 2

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-115B-081506		
Lab Sample ID:	J38643-3	**Date Sampled:**	08/15/06
Matrix:	AQ - Ground Water	**Date Received:**	08/16/06
Method:	SW846 8270C SW846 3510C	**Percent Solids:**	n/a
Project:	Quanta 2006 Groundwater Resources, Edgewater, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3E1852.D	1	08/25/06	MMC	08/17/06	OP24513	E3E64
Run #2	3E1894.D	10	08/28/06	MMC	08/17/06	OP24513	E3E66
Run #3	3E1921.D	50	08/29/06	MMC	08/17/06	OP24513	E3E67

	Initial Volume	Final Volume
Run #1	1000 ml	1.0 ml
Run #2	1000 ml	1.0 ml
Run #3	1000 ml	1.0 ml

ABN TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	5.0	0.95	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	5.0	1.2	ug/l	
120-83-2	2,4-Dichlorophenol	ND	5.0	1.6	ug/l	
105-67-9	2,4-Dimethylphenol	2600 [a]	250	82	ug/l	
51-28-5	2,4-Dinitrophenol	ND	20	0.89	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	20	0.72	ug/l	
95-48-7	2-Methylphenol	4.2	5.0	1.4	ug/l	J
	3&4-Methylphenol	65.2	5.0	1.3	ug/l	
88-75-5	2-Nitrophenol	ND	5.0	1.8	ug/l	
100-02-7	4-Nitrophenol	ND	20	0.84	ug/l	
108-95-2	Phenol	ND	5.0	0.50	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	5.0	1.9	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	5.0	1.3	ug/l	
83-32-9	Acenaphthene	14.9	2.0	0.35	ug/l	
98-86-2	Acetophenone	ND	5.0	0.37	ug/l	
1912-24-9	Atrazine	ND	5.0	0.16	ug/l	
100-52-7	Benzaldehyde	ND	5.0	0.27	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	2.0	0.30	ug/l	
85-68-7	Butyl benzyl phthalate	ND	2.0	0.59	ug/l	
92-52-4	1,1'-Biphenyl	ND	2.0	0.33	ug/l	
91-58-7	2-Chloronaphthalene	ND	5.0	0.98	ug/l	
106-47-8	4-Chloroaniline	ND	5.0	0.40	ug/l	
86-74-8	Carbazole	4.7	2.0	0.36	ug/l	
105-60-2	Caprolactam	ND	2.0	0.32	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	2.0	0.65	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	2.0	0.53	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	2.0	0.74	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	2.0	0.43	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	2.0	0.86	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	2.0	0.56	ug/l	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-115B-081506		
Lab Sample ID:	J38643-3	**Date Sampled:**	08/15/06
Matrix:	AQ - Ground Water	**Date Received:**	08/16/06
Method:	SW846 8270C SW846 3510C	**Percent Solids:**	n/a
Project:	Quanta 2006 Groundwater Resources, Edgewater, NJ		

ABN TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
91-94-1	3,3'-Dichlorobenzidine	ND	5.0	1.2	ug/l	
132-64-9	Dibenzofuran	ND	5.0	0.34	ug/l	
84-74-2	Di-n-butyl phthalate	ND	2.0	0.59	ug/l	
117-84-0	Di-n-octyl phthalate	ND	2.0	0.57	ug/l	
84-66-2	Diethyl phthalate	6.3	2.0	0.39	ug/l	
131-11-3	Dimethyl phthalate	ND	2.0	0.33	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	2.0	0.66	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.18	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	20	0.41	ug/l	
67-72-1	Hexachloroethane	ND	5.0	0.28	ug/l	
78-59-1	Isophorone	ND	2.0	0.59	ug/l	
91-57-6	2-Methylnaphthalene	14.4	2.0	0.41	ug/l	
88-74-4	2-Nitroaniline	ND	5.0	0.66	ug/l	
99-09-2	3-Nitroaniline	ND	5.0	1.3	ug/l	
100-01-6	4-Nitroaniline	ND	5.0	0.72	ug/l	
91-20-3	Naphthalene	1270 [a]	100	16	ug/l	
98-95-3	Nitrobenzene	ND	2.0	0.42	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	2.0	0.47	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	5.0	0.52	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Run# 3	Limits
367-12-4	2-Fluorophenol	56%	74%	75%	12-76%
4165-62-2	Phenol-d5	48%	65% [b]	68% [b]	10-59%
118-79-6	2,4,6-Tribromophenol	88%	99%	87%	42-128%
4165-60-0	Nitrobenzene-d5	64%	100%	104%	30-122%
321-60-8	2-Fluorobiphenyl	69%	94%	104%	34-113%
1718-51-0	Terphenyl-d14	88%	110%	114%	42-125%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
496	Indane	6.64	500	ug/l	JN
95	Indene	6.76	190	ug/l	JN
	Phenol, dimethyl-	7.65	130	ug/l	J
	Phenol dimethyl	8.59	580	ug/l	J
	Phenol, dimethyl-	8.72	190	ug/l	J
	Benzothiophene	9.02	82	ug/l	J
	Phenol,trimethyl-	9.11	210	ug/l	J
	Phenol, ethyl-methyl-	9.39	93	ug/l	J
	Phenol, trimethyl-	9.51	59	ug/l	J

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RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-115B-081506		
Lab Sample ID:	J38643-3	**Date Sampled:**	08/15/06
Matrix:	AQ - Ground Water	**Date Received:**	08/16/06
Method:	SW846 8270C SW846 3510C	**Percent Solids:**	n/a
Project:	Quanta 2006 Groundwater Resources, Edgewater, NJ		

ABN TCL List

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Phenol,methylethyl	9.55	100	ug/l	J
	Phenol, ethyl-methyl-	9.61	100	ug/l	J
	Phenol, ethyl-methyl-	9.87	310	ug/l	J
	Phenol, trimethyl	9.99	160	ug/l	J
	Phenol, trimethyl-	10.05	150	ug/l	J
	Phenol, trimethyl-	10.67	46	ug/l	J
	unknown	10.71	140	ug/l	J
	Phenol diethyl	11.03	79	ug/l	J
	unknown	11.64	84	ug/l	J
	Methyl indanol	11.99	57	ug/l	J
	unknown	12.16	51	ug/l	J
	unknown	12.41	76	ug/l	J
	Naphthalenol	13.19	60	ug/l	J
	Naphthalenol	13.31	140	ug/l	J
	Naphthalenol, methyl-	14.44	57	ug/l	J
	unknown	14.55	74	ug/l	J
	Total TIC, Semi-Volatile		3718	ug/l	J

(a) Result is from Run# 3
(b) Outside control limits due to dilution.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-115B-081506		
Lab Sample ID:	J38643-3	**Date Sampled:**	08/15/06
Matrix:	AQ - Ground Water	**Date Received:**	08/16/06
Method:	SW846 8270C BY SIM SW846 3510C	**Percent Solids:**	n/a
Project:	Quanta 2006 Groundwater Resources, Edgewater, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Z29248.D	1	08/22/06	KLS	08/17/06	OP24514	EZ906
Run #2							

	Initial Volume	Final Volume
Run #1	1000 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
87-86-5	Pentachlorophenol	ND	1.0	0.40	ug/l	
208-96-8	Acenaphthylene	ND	0.20	0.0095	ug/l	
120-12-7	Anthracene	ND	0.20	0.021	ug/l	
56-55-3	Benzo(a)anthracene	ND	0.20	0.0068	ug/l	
50-32-8	Benzo(a)pyrene	ND	0.20	0.017	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	0.20	0.036	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	0.20	0.018	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	0.20	0.016	ug/l	
218-01-9	Chrysene	ND	0.20	0.017	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	0.20	0.016	ug/l	
206-44-0	Fluoranthene	ND	0.20	0.0090	ug/l	
86-73-7	Fluorene	0.409	0.20	0.020	ug/l	
118-74-1	Hexachlorobenzene	ND	0.10	0.061	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.20	0.011	ug/l	
85-01-8	Phenanthrene	0.511	0.20	0.021	ug/l	
129-00-0	Pyrene	ND	0.20	0.014	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	62%		10-99%
4165-62-2	Phenol-d5	49%		10-83%
118-79-6	2,4,6-Tribromophenol	95%		10-140%
4165-60-0	Nitrobenzene-d5	65%		11-140%
321-60-8	2-Fluorobiphenyl	49%		10-133%
1718-51-0	Terphenyl-d14	80%		13-130%

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E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-115B-081506		
Lab Sample ID:	J38643-3	**Date Sampled:**	08/15/06
Matrix:	AQ - Ground Water	**Date Received:**	08/16/06
Method:	SW846 8082 SW846 3510C	**Percent Solids:**	n/a
Project:	Quanta 2006 Groundwater Resources, Edgewater, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	AB59284.D	1	08/23/06	JSE	08/18/06	OP24453	GAB2694
Run #2							

	Initial Volume	Final Volume
Run #1	910 ml	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	0.55	0.10	ug/l	
11104-28-2	Aroclor 1221	ND	0.55	0.52	ug/l	
11141-16-5	Aroclor 1232	ND	0.55	0.43	ug/l	
53469-21-9	Aroclor 1242	ND	0.55	0.18	ug/l	
12672-29-6	Aroclor 1248	ND	0.55	0.17	ug/l	
11097-69-1	Aroclor 1254	ND	0.55	0.12	ug/l	
11096-82-5	Aroclor 1260	ND	0.55	0.13	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	79%		38-133%
877-09-8	Tetrachloro-m-xylene	83%		38-133%
2051-24-3	Decachlorobiphenyl	60%		18-156%
2051-24-3	Decachlorobiphenyl	65%		18-156%

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Report of Analysis

Client Sample ID:	MW-115B-081506		
Lab Sample ID:	J38643-3	**Date Sampled:**	08/15/06
Matrix:	AQ - Ground Water	**Date Received:**	08/16/06
		Percent Solids:	n/a
Project:	Quanta 2006 Groundwater Resources, Edgewater, NJ		

Total Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Arsenic [a]	< 40	40	ug/l	5	08/24/06	08/31/06	ND	SW846 6010B [1]	SW846 3010A [2]
Lead [a]	< 15	15	ug/l	5	08/24/06	08/31/06	ND	SW846 6010B [1]	SW846 3010A [2]

(1) Instrument QC Batch: MA17991
(2) Prep QC Batch: MP35669

(a) Elevated detection limit due to dilution required for high interfering element.

RL = Reporting Limit

Report of Analysis

Client Sample ID:	MW-106A-081606		
Lab Sample ID:	J38643-4	**Date Sampled:**	08/16/06
Matrix:	AQ - Ground Water	**Date Received:**	08/16/06
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Quanta 2006 Groundwater Resources, Edgewater, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1B28374.D	1	08/28/06	MKP	n/a	n/a	V1B1174
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List (OLM4.2)

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	2.4	ug/l	
71-43-2	Benzene	17.8	1.0	0.21	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.17	ug/l	
75-25-2	Bromoform	ND	4.0	0.54	ug/l	
74-83-9	Bromomethane	ND	2.0	0.22	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	2.6	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.21	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.29	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.22	ug/l	
75-00-3	Chloroethane	ND	1.0	0.56	ug/l	
67-66-3	Chloroform	ND	1.0	0.22	ug/l	
74-87-3	Chloromethane	ND	1.0	0.35	ug/l	
110-82-7	Cyclohexane	27.5	5.0	0.50	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	10	1.1	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.19	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	0.52	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.20	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.32	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.24	ug/l	
75-71-8	Dichlorodifluoromethane	ND	5.0	0.75	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.23	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.29	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.33	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.18	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.42	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.20	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.15	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.20	ug/l	
100-41-4	Ethylbenzene	22.1	1.0	0.20	ug/l	
76-13-1	Freon 113	ND	5.0	0.69	ug/l	
591-78-6	2-Hexanone	ND	5.0	1.3	ug/l	
98-82-8	Isopropylbenzene	4.3	2.0	0.20	ug/l	

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Report of Analysis

Client Sample ID:	MW-106A-081606		
Lab Sample ID:	J38643-4	**Date Sampled:**	08/16/06
Matrix:	AQ - Ground Water	**Date Received:**	08/16/06
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Quanta 2006 Groundwater Resources, Edgewater, NJ		

VOA TCL List (OLM4.2)

CAS No.	Compound	Result	RL	MDL	Units	Q
79-20-9	Methyl Acetate	ND	5.0	2.1	ug/l	
108-87-2	Methylcyclohexane	105	5.0	0.18	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.31	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.1	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.27	ug/l	
100-42-5	Styrene	ND	5.0	0.16	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.28	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.28	ug/l	
108-88-3	Toluene	193	1.0	0.20	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.16	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.28	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.32	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.29	ug/l	
75-69-4	Trichlorofluoromethane	ND	5.0	0.25	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.29	ug/l	
	m,p-Xylene	128	1.0	0.42	ug/l	
95-47-6	o-Xylene	30.7	1.0	0.31	ug/l	
1330-20-7	Xylene (total)	159	1.0	0.31	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	99%		77-121%
17060-07-0	1,2-Dichloroethane-D4	96%		65-133%
2037-26-5	Toluene-D8	102%		80-117%
460-00-4	4-Bromofluorobenzene	100%		79-124%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Cyclopentane, methyl-	10.00	9.9	ug/l	JN
	Cyclopentane, dimethyl-	11.34	6.8	ug/l	J
142-82-5	Heptane	11.43	24	ug/l	JN
352-93-2	Diethyl sulfide	11.96	8.6	ug/l	JN
	alkane	12.69	7.7	ug/l	J
	unknown	12.87	20	ug/l	J
	Cyclohexane, dimethyl-	13.15	32	ug/l	J
	Cyclohexane, dimethyl-	13.35	13	ug/l	J
	Cyclohexane, dimethyl-	13.53	16	ug/l	J
	Cyclohexane, dimethyl-	13.63	14	ug/l	J
66-25-1	Hexanal	13.94	8.1	ug/l	JN
1678-91-7	Cyclohexane, ethyl-	14.08	22	ug/l	JN

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Report of Analysis

Client Sample ID:	MW-106A-081606		
Lab Sample ID:	J38643-4	**Date Sampled:**	08/16/06
Matrix:	AQ - Ground Water	**Date Received:**	08/16/06
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Quanta 2006 Groundwater Resources, Edgewater, NJ		

VOA TCL List (OLM4.2)

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	C3 alkyl benzene	15.95	11	ug/l	J
108-67-8	Benzene, 1,3,5-trimethyl-	16.03	11	ug/l	JN
95-36-3	1,2,4-Trimethylbenzene	16.40	13	ug/l	JN
	Total TIC, Volatile		217.1	ug/l	J

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-106A-081606		
Lab Sample ID:	J38643-4	**Date Sampled:**	08/16/06
Matrix:	AQ - Ground Water	**Date Received:**	08/16/06
Method:	SW846 8270C SW846 3510C	**Percent Solids:**	n/a
Project:	Quanta 2006 Groundwater Resources, Edgewater, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3E1853.D	1	08/25/06	MMC	08/17/06	OP24513	E3E64
Run #2							

	Initial Volume	Final Volume
Run #1	1000 ml	1.0 ml
Run #2		

ABN TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	5.0	0.95	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	5.0	1.2	ug/l	
120-83-2	2,4-Dichlorophenol	ND	5.0	1.6	ug/l	
105-67-9	2,4-Dimethylphenol	ND	5.0	1.6	ug/l	
51-28-5	2,4-Dinitrophenol	ND	20	0.89	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	20	0.72	ug/l	
95-48-7	2-Methylphenol	ND	5.0	1.4	ug/l	
	3&4-Methylphenol	12.5	5.0	1.3	ug/l	
88-75-5	2-Nitrophenol	ND	5.0	1.8	ug/l	
100-02-7	4-Nitrophenol	ND	20	0.84	ug/l	
108-95-2	Phenol	ND	5.0	0.50	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	5.0	1.9	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	5.0	1.3	ug/l	
83-32-9	Acenaphthene	23.8	2.0	0.35	ug/l	
98-86-2	Acetophenone	ND	5.0	0.37	ug/l	
1912-24-9	Atrazine	ND	5.0	0.16	ug/l	
100-52-7	Benzaldehyde	ND	5.0	0.27	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	2.0	0.30	ug/l	
85-68-7	Butyl benzyl phthalate	ND	2.0	0.59	ug/l	
92-52-4	1,1'-Biphenyl	ND	2.0	0.33	ug/l	
91-58-7	2-Chloronaphthalene	ND	5.0	0.98	ug/l	
106-47-8	4-Chloroaniline	ND	5.0	0.40	ug/l	
86-74-8	Carbazole	5.6	2.0	0.36	ug/l	
105-60-2	Caprolactam	ND	2.0	0.32	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	2.0	0.65	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	2.0	0.53	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	2.0	0.74	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	2.0	0.43	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	2.0	0.86	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	2.0	0.56	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	5.0	1.2	ug/l	
132-64-9	Dibenzofuran	12.8	5.0	0.34	ug/l	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
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E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-106A-081606		
Lab Sample ID:	J38643-4	**Date Sampled:**	08/16/06
Matrix:	AQ - Ground Water	**Date Received:**	08/16/06
Method:	SW846 8270C SW846 3510C	**Percent Solids:**	n/a
Project:	Quanta 2006 Groundwater Resources, Edgewater, NJ		

ABN TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
84-74-2	Di-n-butyl phthalate	ND	2.0	0.59	ug/l	
117-84-0	Di-n-octyl phthalate	ND	2.0	0.57	ug/l	
84-66-2	Diethyl phthalate	ND	2.0	0.39	ug/l	
131-11-3	Dimethyl phthalate	ND	2.0	0.33	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	2.0	0.66	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.18	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	20	0.41	ug/l	
67-72-1	Hexachloroethane	ND	5.0	0.28	ug/l	
78-59-1	Isophorone	ND	2.0	0.59	ug/l	
91-57-6	2-Methylnaphthalene	2.4	2.0	0.41	ug/l	
88-74-4	2-Nitroaniline	ND	5.0	0.66	ug/l	
99-09-2	3-Nitroaniline	ND	5.0	1.3	ug/l	
100-01-6	4-Nitroaniline	ND	5.0	0.72	ug/l	
98-95-3	Nitrobenzene	ND	2.0	0.42	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	2.0	0.47	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	5.0	0.52	ug/l	
85-01-8	Phenanthrene	22.4	2.0	0.36	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	40%		12-76%
4165-62-2	Phenol-d5	29%		10-59%
118-79-6	2,4,6-Tribromophenol	97%		42-128%
4165-60-0	Nitrobenzene-d5	88%		30-122%
321-60-8	2-Fluorobiphenyl	82%		34-113%
1718-51-0	Terphenyl-d14	89%		42-125%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	system artifact	3.34	8.6	ug/l	J
	system artifact/aldol-condensation	3.81	17	ug/l	J
	unknown	5.14	9.8	ug/l	J
	C3 alkyl benzene	5.49	8.6	ug/l	J
	C3 alkyl benzene	5.59	8.8	ug/l	J
	C3 alkyl benzene	5.97	8.8	ug/l	J
	unknown	7.41	4.9	ug/l	J
90-12-0	Naphthalene, 1-methyl-	10.68	4.1	ug/l	JN
	unknown	10.71	6.5	ug/l	J
	unknown	11.72	5.8	ug/l	J
	Naphthalene dimethyl	12.11	7.5	ug/l	J

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-106A-081606		
Lab Sample ID:	J38643-4	**Date Sampled:**	08/16/06
Matrix:	AQ - Ground Water	**Date Received:**	08/16/06
Method:	SW846 8270C SW846 3510C	**Percent Solids:**	n/a
Project:	Quanta 2006 Groundwater Resources, Edgewater, NJ		

ABN TCL List

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	unknown	12.30	5.8	ug/l	J
	unknown	15.88	10	ug/l	J
10544-50-0	Sulfur, mol. (S8)	19.05	130	ug/l	JN
	Total TIC, Semi-Volatile		210.6	ug/l	J

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-106A-081606		
Lab Sample ID:	J38643-4	**Date Sampled:**	08/16/06
Matrix:	AQ - Ground Water	**Date Received:**	08/16/06
Method:	SW846 8270C BY SIM SW846 3510C	**Percent Solids:**	n/a
Project:	Quanta 2006 Groundwater Resources, Edgewater, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Z29284.D	1	08/23/06	KLS	08/17/06	OP24514	EZ907
Run #2							

	Initial Volume	Final Volume
Run #1	1000 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
87-86-5	Pentachlorophenol	ND	1.0	0.40	ug/l	
208-96-8	Acenaphthylene	0.210	0.20	0.0095	ug/l	
120-12-7	Anthracene	4.40	0.20	0.021	ug/l	
56-55-3	Benzo(a)anthracene	0.232	0.20	0.0068	ug/l	
50-32-8	Benzo(a)pyrene	ND	0.20	0.017	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	0.20	0.036	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	0.20	0.018	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	0.20	0.016	ug/l	
218-01-9	Chrysene	ND	0.20	0.017	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	0.20	0.016	ug/l	
206-44-0	Fluoranthene	3.51	0.20	0.0090	ug/l	
86-73-7	Fluorene	11.1	0.20	0.020	ug/l	
118-74-1	Hexachlorobenzene	ND	0.10	0.061	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.20	0.011	ug/l	
91-20-3	Naphthalene	2.40	0.20	0.026	ug/l	
129-00-0	Pyrene	2.43	0.20	0.014	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	43%		10-99%
4165-62-2	Phenol-d5	31%		10-83%
118-79-6	2,4,6-Tribromophenol	120%		10-140%
4165-60-0	Nitrobenzene-d5	78%		11-140%
321-60-8	2-Fluorobiphenyl	86%		10-133%
1718-51-0	Terphenyl-d14	87%		13-130%

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E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-106A-081606		
Lab Sample ID:	J38643-4	**Date Sampled:**	08/16/06
Matrix:	AQ - Ground Water	**Date Received:**	08/16/06
Method:	SW846 8082 SW846 3510C	**Percent Solids:**	n/a
Project:	Quanta 2006 Groundwater Resources, Edgewater, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	AB59305.D	1	08/24/06	JSE	08/18/06	OP24453	GAB2695
Run #2							

	Initial Volume	Final Volume
Run #1	1000 ml	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	0.50	0.094	ug/l	
11104-28-2	Aroclor 1221	ND	0.50	0.47	ug/l	
11141-16-5	Aroclor 1232	ND	0.50	0.39	ug/l	
53469-21-9	Aroclor 1242	ND	0.50	0.16	ug/l	
12672-29-6	Aroclor 1248	ND	0.50	0.15	ug/l	
11097-69-1	Aroclor 1254	ND	0.50	0.11	ug/l	
11096-82-5	Aroclor 1260	ND	0.50	0.12	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	149% [b]		38-133%
877-09-8	Tetrachloro-m-xylene	58%		38-133%
2051-24-3	Decachlorobiphenyl	47%		18-156%
2051-24-3	Decachlorobiphenyl	51%		18-156%

(a) Had TBA cleanup.
(b) Outside control limits due to matrix interference.

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Report of Analysis

Client Sample ID:	MW-106A-081606		
Lab Sample ID:	J38643-4	**Date Sampled:**	08/16/06
Matrix:	AQ - Ground Water	**Date Received:**	08/16/06
		Percent Solids:	n/a
Project:	Quanta 2006 Groundwater Resources, Edgewater, NJ		

Total Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Arsenic	5.5	2.0	ug/l	1	08/24/06	08/26/06	ND	SW846 6010B [2]	SW846 3010A [3]
Lead	< 3.0	3.0	ug/l	1	08/24/06	08/25/06	ND	SW846 6010B [1]	SW846 3010A [3]

(1) Instrument QC Batch: MA17965
(2) Instrument QC Batch: MA17968
(3) Prep QC Batch: MP35669

RL = Reporting Limit

Report of Analysis

Client Sample ID:	MW-31-081606		
Lab Sample ID:	J38643-5	**Date Sampled:**	08/16/06
Matrix:	AQ - Ground Water	**Date Received:**	08/16/06
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Quanta 2006 Groundwater Resources, Edgewater, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1B28395.D	1	08/29/06	MKP	n/a	n/a	V1B1175
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List (OLM4.2)

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	2.4	ug/l	
71-43-2	Benzene	114	1.0	0.21	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.17	ug/l	
75-25-2	Bromoform	ND	4.0	0.54	ug/l	
74-83-9	Bromomethane	ND	2.0	0.22	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	2.6	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.21	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.29	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.22	ug/l	
75-00-3	Chloroethane	ND	1.0	0.56	ug/l	
67-66-3	Chloroform	ND	1.0	0.22	ug/l	
74-87-3	Chloromethane	ND	1.0	0.35	ug/l	
110-82-7	Cyclohexane	4.3	5.0	0.50	ug/l	J
96-12-8	1,2-Dibromo-3-chloropropane	ND	10	1.1	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.19	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	0.52	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.20	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.32	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.24	ug/l	
75-71-8	Dichlorodifluoromethane	ND	5.0	0.75	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.23	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.29	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.33	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.18	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.42	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.20	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.15	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.20	ug/l	
100-41-4	Ethylbenzene	129	1.0	0.20	ug/l	
76-13-1	Freon 113	ND	5.0	0.69	ug/l	
591-78-6	2-Hexanone	ND	5.0	1.3	ug/l	
98-82-8	Isopropylbenzene	8.3	2.0	0.20	ug/l	

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Report of Analysis

Client Sample ID:	MW-31-081606		
Lab Sample ID:	J38643-5	**Date Sampled:**	08/16/06
Matrix:	AQ - Ground Water	**Date Received:**	08/16/06
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Quanta 2006 Groundwater Resources, Edgewater, NJ		

VOA TCL List (OLM4.2)

CAS No.	Compound	Result	RL	MDL	Units	Q
79-20-9	Methyl Acetate	ND	5.0	2.1	ug/l	
108-87-2	Methylcyclohexane	1.4	5.0	0.18	ug/l	J
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.31	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.1	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.27	ug/l	
100-42-5	Styrene	ND	5.0	0.16	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.28	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.28	ug/l	
108-88-3	Toluene	7.3	1.0	0.20	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.16	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.28	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.32	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.29	ug/l	
75-69-4	Trichlorofluoromethane	ND	5.0	0.25	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.29	ug/l	
	m,p-Xylene	11.0	1.0	0.42	ug/l	
95-47-6	o-Xylene	36.0	1.0	0.31	ug/l	
1330-20-7	Xylene (total)	47.1	1.0	0.31	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	103%		77-121%
17060-07-0	1,2-Dichloroethane-D4	107%		65-133%
2037-26-5	Toluene-D8	101%		80-117%
460-00-4	4-Bromofluorobenzene	99%		79-124%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	C3 alkyl benzene	16.25	8.7	ug/l	J
95-63-6	Benzene, 1,2,4-trimethyl-	16.40	8.9	ug/l	JN
496-11-7	Indane	17.05	190	ug/l	JN
95-13-6	Indene	17.28	26	ug/l	JN
	1H-indene-dihydro-methyl	17.59	6.3	ug/l	J
	Benzofuran, methyl-	17.82	10	ug/l	J
	1H-indene-dihydro-methyl	18.36	6.2	ug/l	J
91-20-3	Naphthalene	19.09	430	ug/l	JN
	Benzo[]thiophene	19.23	26	ug/l	J
	Naphthalene methyl	20.23	12	ug/l	J
	Naphthalene methyl	20.45	24	ug/l	J
	Total TIC, Volatile		748.1	ug/l	J

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Report of Analysis

Client Sample ID:	MW-31-081606		
Lab Sample ID:	J38643-5	**Date Sampled:**	08/16/06
Matrix:	AQ - Ground Water	**Date Received:**	08/16/06
Method:	SW846 8270C SW846 3510C	**Percent Solids:**	n/a
Project:	Quanta 2006 Groundwater Resources, Edgewater, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3E1854.D	1	08/25/06	MMC	08/17/06	OP24513	E3E64
Run #2	3E1893.D	50	08/28/06	MMC	08/17/06	OP24513	E3E66

	Initial Volume	Final Volume
Run #1	1000 ml	1.0 ml
Run #2	1000 ml	1.0 ml

ABN TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	5.0	0.95	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	5.0	1.2	ug/l	
120-83-2	2,4-Dichlorophenol	ND	5.0	1.6	ug/l	
105-67-9	2,4-Dimethylphenol	ND	5.0	1.6	ug/l	
51-28-5	2,4-Dinitrophenol	ND	20	0.89	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	20	0.72	ug/l	
95-48-7	2-Methylphenol	ND	5.0	1.4	ug/l	
	3&4-Methylphenol	ND	5.0	1.3	ug/l	
88-75-5	2-Nitrophenol	ND	5.0	1.8	ug/l	
100-02-7	4-Nitrophenol	ND	20	0.84	ug/l	
108-95-2	Phenol	ND	5.0	0.50	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	5.0	1.9	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	5.0	1.3	ug/l	
98-86-2	Acetophenone	ND	5.0	0.37	ug/l	
1912-24-9	Atrazine	ND	5.0	0.16	ug/l	
100-52-7	Benzaldehyde	ND	5.0	0.27	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	2.0	0.30	ug/l	
85-68-7	Butyl benzyl phthalate	ND	2.0	0.59	ug/l	
92-52-4	1,1'-Biphenyl	ND	2.0	0.33	ug/l	
91-58-7	2-Chloronaphthalene	ND	5.0	0.98	ug/l	
106-47-8	4-Chloroaniline	ND	5.0	0.40	ug/l	
86-74-8	Carbazole	3.7	2.0	0.36	ug/l	
105-60-2	Caprolactam	ND	2.0	0.32	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	2.0	0.65	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	2.0	0.53	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	2.0	0.74	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	2.0	0.43	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	2.0	0.86	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	2.0	0.56	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	5.0	1.2	ug/l	
132-64-9	Dibenzofuran	0.84	5.0	0.34	ug/l	J
84-74-2	Di-n-butyl phthalate	ND	2.0	0.59	ug/l	

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Report of Analysis

Client Sample ID:	MW-31-081606		
Lab Sample ID:	J38643-5	**Date Sampled:**	08/16/06
Matrix:	AQ - Ground Water	**Date Received:**	08/16/06
Method:	SW846 8270C SW846 3510C	**Percent Solids:**	n/a
Project:	Quanta 2006 Groundwater Resources, Edgewater, NJ		

ABN TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
117-84-0	Di-n-octyl phthalate	ND	2.0	0.57	ug/l	
84-66-2	Diethyl phthalate	ND	2.0	0.39	ug/l	
131-11-3	Dimethyl phthalate	ND	2.0	0.33	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	2.0	0.66	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.18	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	20	0.41	ug/l	
67-72-1	Hexachloroethane	ND	5.0	0.28	ug/l	
78-59-1	Isophorone	ND	2.0	0.59	ug/l	
91-57-6	2-Methylnaphthalene	14.5	2.0	0.41	ug/l	
88-74-4	2-Nitroaniline	ND	5.0	0.66	ug/l	
99-09-2	3-Nitroaniline	ND	5.0	1.3	ug/l	
100-01-6	4-Nitroaniline	ND	5.0	0.72	ug/l	
91-20-3	Naphthalene	683 [a]	100	16	ug/l	
98-95-3	Nitrobenzene	ND	2.0	0.42	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	2.0	0.47	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	5.0	0.52	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	41%	53%	12-76%
4165-62-2	Phenol-d5	31%	35%	10-59%
118-79-6	2,4,6-Tribromophenol	84%	0% [b]	42-128%
4165-60-0	Nitrobenzene-d5	77%	87%	30-122%
321-60-8	2-Fluorobiphenyl	73%	87%	34-113%
1718-51-0	Terphenyl-d14	89%	101%	42-125%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	system artifact/aldol-condensation	3.81	13	ug/l	J
	C3 alkyl benzene	4.96	4.7	ug/l	J
	C3 alkyl benzene	5.51	4.5	ug/l	J
	C3 alkyl benzene	5.77	9.3	ug/l	J
	C3 alkyl benzene	5.97	10	ug/l	J
	C3 alkyl benzene	6.42	17	ug/l	J
496	Indane	6.63	180	ug/l	JN
95	Indene	6.76	140	ug/l	JN
	Phenol diethyl	11.01	4.7	ug/l	J
	Phenol ethyl dimethyl	11.26	4.7	ug/l	J
	Naphthalenol	13.19	6.3	ug/l	J
	unknown	13.66	4.2	ug/l	J

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
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Report of Analysis

Client Sample ID:	MW-31-081606		
Lab Sample ID:	J38643-5	**Date Sampled:**	08/16/06
Matrix:	AQ - Ground Water	**Date Received:**	08/16/06
Method:	SW846 8270C SW846 3510C	**Percent Solids:**	n/a
Project:	Quanta 2006 Groundwater Resources, Edgewater, NJ		

ABN TCL List

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Naphthalenol, -methyl-	14.43	8.2	ug/l	J
	unknown	15.03	6.2	ug/l	J
	unknown	15.08	4.6	ug/l	J
	unknown	15.80	4.2	ug/l	J
	unknown	16.03	5.1	ug/l	J
	unknown	16.25	4.4	ug/l	J
	unknown	16.58	7.1	ug/l	J
	system artifact	19.85	31	ug/l	J
	system artifact	21.18	46	ug/l	J
	Total TIC, Semi-Volatile		425.2	ug/l	J

(a) Result is from Run# 2
(b) Outside control limits due to dilution.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-31-081606		
Lab Sample ID:	J38643-5	**Date Sampled:**	08/16/06
Matrix:	AQ - Ground Water	**Date Received:**	08/16/06
Method:	SW846 8270C BY SIM SW846 3510C	**Percent Solids:**	n/a
Project:	Quanta 2006 Groundwater Resources, Edgewater, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Z29250.D	1	08/22/06	KLS	08/17/06	OP24514	EZ906
Run #2							

	Initial Volume	Final Volume
Run #1	1000 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
87-86-5	Pentachlorophenol	ND	1.0	0.40	ug/l	
83-32-9	Acenaphthene	9.46	0.20	0.017	ug/l	
208-96-8	Acenaphthylene	2.09	0.20	0.0095	ug/l	
120-12-7	Anthracene	0.265	0.20	0.021	ug/l	
56-55-3	Benzo(a)anthracene	ND	0.20	0.0068	ug/l	
50-32-8	Benzo(a)pyrene	ND	0.20	0.017	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	0.20	0.036	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	0.20	0.018	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	0.20	0.016	ug/l	
218-01-9	Chrysene	ND	0.20	0.017	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	0.20	0.016	ug/l	
206-44-0	Fluoranthene	0.514	0.20	0.0090	ug/l	
86-73-7	Fluorene	1.39	0.20	0.020	ug/l	
118-74-1	Hexachlorobenzene	ND	0.10	0.061	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.20	0.011	ug/l	
85-01-8	Phenanthrene	0.539	0.20	0.021	ug/l	
129-00-0	Pyrene	0.350	0.20	0.014	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	45%		10-99%
4165-62-2	Phenol-d5	33%		10-83%
118-79-6	2,4,6-Tribromophenol	103%		10-140%
4165-60-0	Nitrobenzene-d5	67%		11-140%
321-60-8	2-Fluorobiphenyl	84%		10-133%
1718-51-0	Terphenyl-d14	79%		13-130%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-31-081606		
Lab Sample ID:	J38643-5	**Date Sampled:**	08/16/06
Matrix:	AQ - Ground Water	**Date Received:**	08/16/06
Method:	SW846 8082 SW846 3510C	**Percent Solids:**	n/a
Project:	Quanta 2006 Groundwater Resources, Edgewater, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	AB59286.D	1	08/24/06	JSE	08/18/06	OP24453	GAB2694
Run #2							

	Initial Volume	Final Volume
Run #1	1000 ml	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	0.50	0.094	ug/l	
11104-28-2	Aroclor 1221	ND	0.50	0.47	ug/l	
11141-16-5	Aroclor 1232	ND	0.50	0.39	ug/l	
53469-21-9	Aroclor 1242	ND	0.50	0.16	ug/l	
12672-29-6	Aroclor 1248	ND	0.50	0.15	ug/l	
11097-69-1	Aroclor 1254	ND	0.50	0.11	ug/l	
11096-82-5	Aroclor 1260	ND	0.50	0.12	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	128%		38-133%
877-09-8	Tetrachloro-m-xylene	84%		38-133%
2051-24-3	Decachlorobiphenyl	69%		18-156%
2051-24-3	Decachlorobiphenyl	71%		18-156%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-31-081606		
Lab Sample ID:	J38643-5	**Date Sampled:**	08/16/06
Matrix:	AQ - Ground Water	**Date Received:**	08/16/06
		Percent Solids:	n/a
Project:	Quanta 2006 Groundwater Resources, Edgewater, NJ		

Total Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Arsenic	172	2.0	ug/l	1	08/24/06	08/26/06	ND	SW846 6010B [2]	SW846 3010A [3]
Lead	< 3.0	3.0	ug/l	1	08/24/06	08/25/06	ND	SW846 6010B [1]	SW846 3010A [3]

(1) Instrument QC Batch: MA17965
(2) Instrument QC Batch: MA17968
(3) Prep QC Batch: MP35669

RL = Reporting Limit

Report of Analysis

Client Sample ID:	MW-29-081606		
Lab Sample ID:	J38643-6	**Date Sampled:**	08/16/06
Matrix:	AQ - Ground Water	**Date Received:**	08/16/06
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Quanta 2006 Groundwater Resources, Edgewater, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1B28396.D	1	08/29/06	MKP	n/a	n/a	V1B1175
Run #2	E117005.D	20	08/30/06	ET	n/a	n/a	VE5192

	Purge Volume
Run #1	5.0 ml
Run #2	5.0 ml

VOA TCL List (OLM4.2)

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	2.4	ug/l	
71-43-2	Benzene	596 [a]	20	4.2	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.17	ug/l	
75-25-2	Bromoform	ND	4.0	0.54	ug/l	
74-83-9	Bromomethane	ND	2.0	0.22	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	2.6	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.21	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.29	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.22	ug/l	
75-00-3	Chloroethane	ND	1.0	0.56	ug/l	
67-66-3	Chloroform	ND	1.0	0.22	ug/l	
74-87-3	Chloromethane	ND	1.0	0.35	ug/l	
110-82-7	Cyclohexane	11.0	5.0	0.50	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	10	1.1	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.19	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	0.52	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.20	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.32	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.24	ug/l	
75-71-8	Dichlorodifluoromethane	ND	5.0	0.75	ug/l	
75-34-3	1,1-Dichloroethane	0.55	1.0	0.23	ug/l	J
107-06-2	1,2-Dichloroethane	ND	1.0	0.29	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.33	ug/l	
156-59-2	cis-1,2-Dichloroethene	3.3	1.0	0.18	ug/l	
156-60-5	trans-1,2-Dichloroethene	0.44	1.0	0.42	ug/l	J
78-87-5	1,2-Dichloropropane	ND	1.0	0.20	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.15	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.20	ug/l	
100-41-4	Ethylbenzene	446 [a]	20	4.0	ug/l	
76-13-1	Freon 113	ND	5.0	0.69	ug/l	
591-78-6	2-Hexanone	ND	5.0	1.3	ug/l	
98-82-8	Isopropylbenzene	55.4	2.0	0.20	ug/l	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
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E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-29-081606		
Lab Sample ID:	J38643-6	**Date Sampled:**	08/16/06
Matrix:	AQ - Ground Water	**Date Received:**	08/16/06
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Quanta 2006 Groundwater Resources, Edgewater, NJ		

VOA TCL List (OLM4.2)

CAS No.	Compound	Result	RL	MDL	Units	Q
79-20-9	Methyl Acetate	ND	5.0	2.1	ug/l	
108-87-2	Methylcyclohexane	6.1	5.0	0.18	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.31	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.1	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.27	ug/l	
100-42-5	Styrene	ND	5.0	0.16	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.28	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.28	ug/l	
108-88-3	Toluene	38.8	1.0	0.20	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.16	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.28	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.32	ug/l	
79-01-6	Trichloroethene	0.68	1.0	0.29	ug/l	J
75-69-4	Trichlorofluoromethane	ND	5.0	0.25	ug/l	
75-01-4	Vinyl chloride	1.9	1.0	0.29	ug/l	
	m,p-Xylene	261	1.0	0.42	ug/l	
95-47-6	o-Xylene	111	1.0	0.31	ug/l	
1330-20-7	Xylene (total)	372	1.0	0.31	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	102%	104%	77-121%
17060-07-0	1,2-Dichloroethane-D4	106%	119%	65-133%
2037-26-5	Toluene-D8	119% [b]	94%	80-117%
460-00-4	4-Bromofluorobenzene	101%	98%	79-124%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	C3 alkyl benzene	15.95	42	ug/l	J
	C3 alkyl benzene	16.25	45	ug/l	J
95-63-6	Benzene, 1,2,4-trimethyl-	16.39	58	ug/l	JN
271-89-6	Benzofuran	16.72	47	ug/l	JN
	C4 alkyl benzene	16.94	22	ug/l	J
496-11-7	Indane	17.05	390	ug/l	JN
95-13-6	Indene	17.27	87	ug/l	JN
	1H-indene-dihydro-methyl	17.58	110	ug/l	J
	Benzofuran, methyl-	17.82	61	ug/l	J
	1H-indene-dihydro-methyl	18.18	31	ug/l	J
	1H-indene-methyl	18.55	23	ug/l	J
91-20-3	Naphthalene	19.09	610	ug/l	JN

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-29-081606		
Lab Sample ID:	J38643-6	**Date Sampled:**	08/16/06
Matrix:	AQ - Ground Water	**Date Received:**	08/16/06
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Quanta 2006 Groundwater Resources, Edgewater, NJ		

VOA TCL List (OLM4.2)

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Benzo[]thiophene	19.23	50	ug/l	J
	Naphthalene methyl	20.23	25	ug/l	J
	Naphthalene methyl	20.45	83	ug/l	J
	Total TIC, Volatile		1684	ug/l	J

(a) Result is from Run# 2
(b) Outside control limits due to matrix interference.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-29-081606		
Lab Sample ID:	J38643-6	**Date Sampled:**	08/16/06
Matrix:	AQ - Ground Water	**Date Received:**	08/16/06
Method:	SW846 8270C SW846 3510C	**Percent Solids:**	n/a
Project:	Quanta 2006 Groundwater Resources, Edgewater, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3E1855.D	1	08/25/06	MMC	08/17/06	OP24513	E3E64
Run #2	3E1895.D	20	08/28/06	MMC	08/17/06	OP24513	E3E66

	Initial Volume	Final Volume
Run #1	1000 ml	1.0 ml
Run #2	1000 ml	1.0 ml

ABN TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	5.0	0.95	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	5.0	1.2	ug/l	
120-83-2	2,4-Dichlorophenol	ND	5.0	1.6	ug/l	
105-67-9	2,4-Dimethylphenol	18.8	5.0	1.6	ug/l	
51-28-5	2,4-Dinitrophenol	ND	20	0.89	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	20	0.72	ug/l	
95-48-7	2-Methylphenol	4.2	5.0	1.4	ug/l	J
	3&4-Methylphenol	ND	5.0	1.3	ug/l	
88-75-5	2-Nitrophenol	ND	5.0	1.8	ug/l	
100-02-7	4-Nitrophenol	ND	20	0.84	ug/l	
108-95-2	Phenol	ND	5.0	0.50	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	5.0	1.9	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	5.0	1.3	ug/l	
83-32-9	Acenaphthene	203 [a]	40	7.0	ug/l	
98-86-2	Acetophenone	ND	5.0	0.37	ug/l	
1912-24-9	Atrazine	ND	5.0	0.16	ug/l	
100-52-7	Benzaldehyde	ND	5.0	0.27	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	2.0	0.30	ug/l	
85-68-7	Butyl benzyl phthalate	ND	2.0	0.59	ug/l	
92-52-4	1,1'-Biphenyl	ND	2.0	0.33	ug/l	
91-58-7	2-Chloronaphthalene	ND	5.0	0.98	ug/l	
106-47-8	4-Chloroaniline	ND	5.0	0.40	ug/l	
86-74-8	Carbazole	21.5	2.0	0.36	ug/l	
105-60-2	Caprolactam	ND	2.0	0.32	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	2.0	0.65	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	2.0	0.53	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	2.0	0.74	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	2.0	0.43	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	2.0	0.86	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	2.0	0.56	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	5.0	1.2	ug/l	
132-64-9	Dibenzofuran	26.2	5.0	0.34	ug/l	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-29-081606		
Lab Sample ID:	J38643-6	**Date Sampled:**	08/16/06
Matrix:	AQ - Ground Water	**Date Received:**	08/16/06
Method:	SW846 8270C SW846 3510C	**Percent Solids:**	n/a
Project:	Quanta 2006 Groundwater Resources, Edgewater, NJ		

ABN TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
84-74-2	Di-n-butyl phthalate	ND	2.0	0.59	ug/l	
117-84-0	Di-n-octyl phthalate	ND	2.0	0.57	ug/l	
84-66-2	Diethyl phthalate	ND	2.0	0.39	ug/l	
131-11-3	Dimethyl phthalate	ND	2.0	0.33	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	2.0	0.66	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.18	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	20	0.41	ug/l	
67-72-1	Hexachloroethane	ND	5.0	0.28	ug/l	
78-59-1	Isophorone	ND	2.0	0.59	ug/l	
91-57-6	2-Methylnaphthalene	20.8	2.0	0.41	ug/l	
88-74-4	2-Nitroaniline	ND	5.0	0.66	ug/l	
99-09-2	3-Nitroaniline	ND	5.0	1.3	ug/l	
100-01-6	4-Nitroaniline	ND	5.0	0.72	ug/l	
91-20-3	Naphthalene	1690 [a]	40	6.4	ug/l	
98-95-3	Nitrobenzene	ND	2.0	0.42	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	2.0	0.47	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	5.0	0.52	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	43%	55%	12-76%
4165-62-2	Phenol-d5	37%	48%	10-59%
118-79-6	2,4,6-Tribromophenol	89%	107%	42-128%
4165-60-0	Nitrobenzene-d5	70%	92%	30-122%
321-60-8	2-Fluorobiphenyl	66%	93%	34-113%
1718-51-0	Terphenyl-d14	85%	115%	42-125%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	C3 alkyl benzene	5.97	75	ug/l	J
271	Benzofuran	6.03	97	ug/l	JN
496	Indane	6.64	530	ug/l	JN
	Benzofuran, -methyl-	7.57	130	ug/l	J
	Benzofuran, methyl-	7.64	160	ug/l	J
	Benzofuran, methyl-	7.71	57	ug/l	J
	C4 alkyl benzene	7.82	70	ug/l	J
	1H-indene-dihydro-methyl	8.18	99	ug/l	J
	1H-Indene, methyl-	8.34	280	ug/l	J
	1H-Indene, methyl-	8.43	170	ug/l	J
	Phenol, dimethyl-	8.68	54	ug/l	J

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-29-081606		
Lab Sample ID:	J38643-6	**Date Sampled:**	08/16/06
Matrix:	AQ - Ground Water	**Date Received:**	08/16/06
Method:	SW846 8270C SW846 3510C	**Percent Solids:**	n/a
Project:	Quanta 2006 Groundwater Resources, Edgewater, NJ		

ABN TCL List

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Benzothiophene	9.02	380	ug/l	J
	Phenol, trimethyl-	9.08	200	ug/l	J
	Phenol, trimethyl-	9.49	86	ug/l	J
	Phenol, trimethyl-	9.82	63	ug/l	J
	Benzothiophene, dihydro-	9.90	210	ug/l	J
	Phenol, trimethyl-	10.02	130	ug/l	J
	Phenol diethyl	10.35	150	ug/l	J
	Phenol methyl methylethyl-	10.62	110	ug/l	J
90-12-0	Naphthalene, 1-methyl-	10.70	620	ug/l	JN
	Phenol, diethyl-	11.02	59	ug/l	J
	Phenol methyl methylethyl	11.27	60	ug/l	J
	unknown	14.11	56	ug/l	J
	Naphthalenol, -methyl-	14.44	72	ug/l	J
	Amino-fluorenone	20.30	69	ug/l	J
	Total TIC, Semi-Volatile		3987	ug/l	J

(a) Result is from Run# 2

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-29-081606		
Lab Sample ID:	J38643-6	**Date Sampled:**	08/16/06
Matrix:	AQ - Ground Water	**Date Received:**	08/16/06
Method:	SW846 8270C BY SIM SW846 3510C	**Percent Solids:**	n/a
Project:	Quanta 2006 Groundwater Resources, Edgewater, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Z29251.D	1	08/22/06	KLS	08/17/06	OP24514	EZ906
Run #2							

	Initial Volume	Final Volume
Run #1	1000 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
87-86-5	Pentachlorophenol	ND	1.0	0.40	ug/l	
208-96-8	Acenaphthylene	10.3	0.20	0.0095	ug/l	
120-12-7	Anthracene	ND	0.20	0.021	ug/l	
56-55-3	Benzo(a)anthracene	ND	0.20	0.0068	ug/l	
50-32-8	Benzo(a)pyrene	ND	0.20	0.017	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	0.20	0.036	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	0.20	0.018	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	0.20	0.016	ug/l	
218-01-9	Chrysene	ND	0.20	0.017	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	0.20	0.016	ug/l	
206-44-0	Fluoranthene	0.620	0.20	0.0090	ug/l	
86-73-7	Fluorene	13.3	0.20	0.020	ug/l	
118-74-1	Hexachlorobenzene	ND	0.10	0.061	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.20	0.011	ug/l	
85-01-8	Phenanthrene	13.0	0.20	0.021	ug/l	
129-00-0	Pyrene	0.476	0.20	0.014	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	52%		10-99%
4165-62-2	Phenol-d5	38%		10-83%
118-79-6	2,4,6-Tribromophenol	73%		10-140%
4165-60-0	Nitrobenzene-d5	71%		11-140%
321-60-8	2-Fluorobiphenyl	69%		10-133%
1718-51-0	Terphenyl-d14	79%		13-130%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-29-081606		
Lab Sample ID:	J38643-6	**Date Sampled:**	08/16/06
Matrix:	AQ - Ground Water	**Date Received:**	08/16/06
Method:	SW846 8082 SW846 3510C	**Percent Solids:**	n/a
Project:	Quanta 2006 Groundwater Resources, Edgewater, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	AB59287.D	1	08/24/06	JSE	08/18/06	OP24453	GAB2694
Run #2							

	Initial Volume	Final Volume
Run #1	1000 ml	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	0.50	0.094	ug/l	
11104-28-2	Aroclor 1221	ND	0.50	0.47	ug/l	
11141-16-5	Aroclor 1232	ND	0.50	0.39	ug/l	
53469-21-9	Aroclor 1242	ND	0.50	0.16	ug/l	
12672-29-6	Aroclor 1248	ND	0.50	0.15	ug/l	
11097-69-1	Aroclor 1254	ND	0.50	0.11	ug/l	
11096-82-5	Aroclor 1260	ND	0.50	0.12	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	217% [a]		38-133%
877-09-8	Tetrachloro-m-xylene	92%		38-133%
2051-24-3	Decachlorobiphenyl	74%		18-156%
2051-24-3	Decachlorobiphenyl	76%		18-156%

(a) Outside control limits due to matrix interference.

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-29-081606		
Lab Sample ID:	J38643-6	**Date Sampled:**	08/16/06
Matrix:	AQ - Ground Water	**Date Received:**	08/16/06
		Percent Solids:	n/a
Project:	Quanta 2006 Groundwater Resources, Edgewater, NJ		

Total Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Arsenic	6.0	2.0	ug/l	1	08/24/06	08/26/06	ND	SW846 6010B [2]	SW846 3010A [3]
Lead	< 3.0	3.0	ug/l	1	08/24/06	08/25/06	ND	SW846 6010B [1]	SW846 3010A [3]

(1) Instrument QC Batch: MA17965
(2) Instrument QC Batch: MA17968
(3) Prep QC Batch: MP35669

RL = Reporting Limit

New Jersey

ACCUTEST LABORATORIES

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody

TB, GW

Accutest Labs
2235 ROUTE 130
Dayton, NJ 8810
732-329-0200

Honeywell

Chain Of Custody / Analysis Request

J38643

AESI Ref: 38940.66388
COC# 3091 G-081606-GW

Privileged & Confidential		Site Name:	Quanta Resources (Edgewater)
EDD To:	amy.klopper@ch2m.com, john.mitchell@ch2m.com	Location of Site:	Edgewater, NJ
Sampling Co.:	CH2M HILL	Phase:	
Client Contact: (name, co., address)		Sampling Program	Quanta 2006 Groundwater
Sampler:	Austin Hareclerode/CH2M HILL	Lab Proj # (SDG):	
PO #		Lab ID	ACTD
Analysis Turnaround Time (TAT):	10	Site ID	Quanta
Consultant	CH2M	Lab Job #	
Full Report TAT:		Authorized User:	Honeywell

Jennifer Simms
1700 Market Street, Suite 1600
Philadelphia, PA 19103

Preliminary Data To: amy.klopper@ch2m.com, jennifer.simms@ch2m.com
Sample Receipt: amy.klopper@ch2m.com
Acknowledgement To: jennifer.simms@ch2m.com
Hard Copy To: Amy Klopper, 3011 Southwest Williston Road, Gainesville, FL 32608
Invoice To: jennifer.simms@ch2m.com

Text & Excel File Drive | Excel & Text File Order

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	Location ID	Start Depth (ft)	End Depth (ft)	Field Sample ID	Sample Date	Sample Time	Sample Type	Sample Matrix	Sample Purpose	# of Cont.	Units	Field Filtered Sample	SW8260 - VOCs	SW8270 - SVOCs	SW8270-SIM	SW6010 - As, Pb	SW8081 - Pesticides	SW8082 - PCBs	E350.2 - Ammonia	Sampling Method (code)	Lab Sample Numbers
													9	1	1	10	1	1	7		
1	Trip Blank	—		TB-081606-GW	08/16/06	0000	BLK WATER	WATER	TB	2	G	N	X	X	X			JS		- 1	Grab
2	MW-115A	—		MW-115A-081506	08/15/06	1635	GW	WATER	REG	8	G	N	X	X	X	X		X		- 2	Bladd Pump
3	MW-115B	—		MW-115B-081506	08/15/06	1715	GW	WATER	REG	8	G	N	X	X	X	X		X		- 3	Bladd Pump
4	MW-106A	—	*	MW-106A-081606	08/16/06	1110	GW	WATER	REG	8	G	N	X	X	X	X		X		- 4	Bladd Pump
5	MW-31	—		MW-31-081606	08/16/06	1500	GW	WATER	REG	8	G	N	X	X	X	X		X		- 5	Bladd Pump
6	MW-29	—	*	MW-29-081606	08/16/06	1625	GW	WATER	REG	8	G	N	X	X	X	X		X		- 6	Bladd Pump
7																					
8																					
9																					EX36,
10																					AMET3,
11																					935
12																					

SW6010^LLI

See worksheet SW6010 - analyze for Arsenic (As) and Lead (Pb)

Relinquished by	Company	Date/Time	Received by	Company	Date/Time	Condition	Cooler Temp.	Custody Seals Intact
[signature]	CH2M HILL	08/16/06 1610	[signature]	ACCUTEST	8/16/06 1610			
[signature]	ACCUTEST	8/16/06 1735	[signature]	ACCUTEST	8/16/06 1735		4.0	4.5

Preservatives: (Other; Specify)

0 (none); 1 (4 Deg C); 2 (HCl pH<2); 3 (HNO3 pH<2); 4 (H2SO4 pH<2); 5 (NaOH pH>12); 6 (NaOH, Zn Acetate); 7 (H2SO4 (pH<2), 4 Deg C)); 8 (HCl pH<2); 9 (HCl 4 Deg C); 10 (HNO3 (pH<2), 4Deg C); 11 (4C NaOH (pH>12) & Ascorbic Acid); 12 (4C H2SO4 (pH<2) & Na2S2O3); 13 (Zn Acetate); sp (special instructions)

*metals unpreserved - HNO3 added 8/16/06 lot # C16038

5.1

5

J38643: Chain of Custody
Page 1 of 1

New Jersey
ACCUTEST LABORATORIES

10/06/15

Technical Report for

CH2M Hill

Quanta 2006 Groundwater Resources, Edgewater, NJ

Accutest Job Number: J39011R

Sampling Dates: 08/19/06 - 08/21/06

Report to:

CH2M Hill

Theresa.Himmer@CH2M.com

ATTN: Theresa Himmer

Total number of pages in report: **19**

NELAP ACCREDITED TNI LABORATORY

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Program and/or state specific certification programs as applicable.

Nancy Cole
Laboratory Director

Client Service contact: Nadine Yakes 732-329-0200

Certifications: NJ(12129), NY(10983), CA, CT, DE, FL, IL, IN, KS, KY, LA, MA, MD, MI, MT, NC, OH VAP (CL0056), AK (UST-103), AZ (AZ0786), PA, RI, SC, TN, TX, VA, WV, DoD ELAP (L-A-B L2248)

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Accutest LabLink@876317 14:22 06-Oct-2015

Sample Summary

CH2M Hill

Job No: J39011R

Quanta 2006 Groundwater Resources, Edgewater, NJ

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
J39011-1R	08/19/06	09:35	AH	08/21/06	AQ	Ground Water	MW-119B-081906
J39011-2R	08/19/06	10:50	AH	08/21/06	AQ	Ground Water	MW-121A-081906
J39011-3R	08/19/06	12:45	AH	08/21/06	AQ	Ground Water	MW-114A-081906
J39011-4R	08/19/06	16:00	AH	08/21/06	AQ	Equipment Blank	EB-081906-GW
J39011-5R	08/21/06	09:50	AH	08/21/06	AQ	Ground Water	MW-111A-082106
J39011-6R	08/21/06	10:25	AH	08/21/06	AQ	Ground Water	MW-101A-082106
J39011-7R	08/21/06	10:55	AH	08/21/06	AQ	Ground Water	MW-101DS-082106
J39011-8R	08/21/06	13:00	AH	08/21/06	AQ	Equipment Blank	EB-082106-GW
J39011-9R	08/21/06	13:00	AH	08/21/06	AQ	Trip Blank Water	TB-081706-GW
J39011-10R	08/21/06	00:00	AH	08/21/06	AQ	Ground Water	DUP-082106-GW

CASE NARRATIVE / CONFORMANCE SUMMARY

Client:	CH2M Hill	**Job No**	J39011R
Site:	Quanta 2006 Groundwater Resources, Edgewater, NJ	**Report Date**	7/25/2008 6:10:27 PM

On 08/21/2006, 9 Sample(s), 1 Trip Blank(s) and 0 Field Blank(s) were received at Accutest Laboratories at a temperature of 6 C. Samples were intact and properly preserved, unless noted below. An Accutest Job Number of J39011R was assigned to the project. Laboratory sample ID, client sample ID and dates of sample collection are detailed in the report's Results Summary Section.

Specified quality control criteria were achieved for this job except as noted below. For more information, please refer to the analytical results and QC summary pages.

Volatiles by GCMS By Method SW846 8260B

Matrix: AQ **Batch ID:** VA3821

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) J39432-6MS, J39432-6MSD were used as the QC samples indicated.

Matrix: AQ **Batch ID:** VX2289

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) J39073-4MS, J39073-4MSD were used as the QC samples indicated.
- Blank Spike Recovery(s) for Acrolein are outside control limits. Outside control limits. No associated sample required/reported for this compound.
- Matrix Spike Recovery(s) for Acrolein are outside control limits.
- Matrix Spike Duplicate Recovery(s) for Acrolein are outside control limits.

Matrix: AQ **Batch ID:** VX2291

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) J39397-1MS, J39397-1MSD were used as the QC samples indicated.
- Blank Spike Recovery(s) for Acrolein are outside control limits. High percent recoveries and no associated positive found in the QC batch.
- Matrix Spike Recovery(s) for Acrolein are outside control limits.
- Matrix Spike Duplicate Recovery(s) for Acrolein are outside control limits.

Accutest certifies that data reported for samples received, listed on the associated custody chain or analytical task order, were produced to specifications meeting Accutest's Quality System precision, accuracy and completeness objectives except as noted.

Estimated non-standard method measurement uncertainty data is available on request, based on quality control bias and implicit for standard methods. Acceptable uncertainty requires tested parameter quality control data to meet method criteria.

Accutest Laboratories is not responsible for data quality assumptions if partial reports are used and recommends that this report be used in its entirety. Data release is authorized by Accutest Laboratories indicated via signature on the report cover

Summary of Hits

Job Number: J39011R
Account: CH2M Hill
Project: Quanta 2006 Groundwater Resources, Edgewater, NJ
Collected: 08/19/06 thru 08/21/06

Lab Sample ID Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
J39011-1R	**MW-119B-081906**					
n-Propylbenzene		0.51 J	5.0	0.18	ug/l	SW846 8260B
1,2,4-Trimethylbenzene		0.45 J	5.0	0.22	ug/l	SW846 8260B
J39011-2R	**MW-121A-081906**					
n-Propylbenzene		0.30 J	5.0	0.18	ug/l	SW846 8260B
1,2,4-Trimethylbenzene		1.5 J	5.0	0.22	ug/l	SW846 8260B
1,3,5-Trimethylbenzene		0.66 J	5.0	0.58	ug/l	SW846 8260B
J39011-3R	**MW-114A-081906**					
n-Propylbenzene		2.9 J	5.0	0.18	ug/l	SW846 8260B
1,2,4-Trimethylbenzene		34.0	5.0	0.22	ug/l	SW846 8260B
1,3,5-Trimethylbenzene		5.9	5.0	0.58	ug/l	SW846 8260B

J39011-4R **EB-081906-GW**

No hits reported in this sample.

J39011-5R **MW-111A-082106**

No hits reported in this sample.

J39011-6R **MW-101A-082106**

No hits reported in this sample.

J39011-7R **MW-101DS-082106**

No hits reported in this sample.

J39011-8R **EB-082106-GW**

No hits reported in this sample.

J39011-9R **TB-081706-GW**

No hits reported in this sample.

J39011-10R **DUP-082106-GW**

No hits reported in this sample.

New Jersey

ACCUTEST LABORATORIES

Sample Results

Report of Analysis

Report of Analysis

Client Sample ID:	MW-119B-081906		
Lab Sample ID:	J39011-1R	**Date Sampled:**	08/19/06
Matrix:	AQ - Ground Water	**Date Received:**	08/21/06
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Quanta 2006 Groundwater Resources, Edgewater, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	X57673R.D	1	08/31/06	DTM	n/a	n/a	VX2289
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

CAS No.	Compound	Result	RL	MDL	Units	Q
107-02-8	Acrolein	ND	50	4.3	ug/l	
103-65-1	n-Propylbenzene	0.51	5.0	0.18	ug/l	J
95-63-6	1,2,4-Trimethylbenzene	0.45	5.0	0.22	ug/l	J
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	0.58	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	118%		72-120%
17060-07-0	1,2-Dichloroethane-D4	120%		59-137%
2037-26-5	Toluene-D8	102%		73-116%
460-00-4	4-Bromofluorobenzene	92%		69-126%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-121A-081906		
Lab Sample ID:	J39011-2R	**Date Sampled:**	08/19/06
Matrix:	AQ - Ground Water	**Date Received:**	08/21/06
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Quanta 2006 Groundwater Resources, Edgewater, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	X57674R.D	1	08/31/06	DTM	n/a	n/a	VX2289
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

CAS No.	Compound	Result	RL	MDL	Units	Q
107-02-8	Acrolein	ND	50	4.3	ug/l	
103-65-1	n-Propylbenzene	0.30	5.0	0.18	ug/l	J
95-63-6	1,2,4-Trimethylbenzene	1.5	5.0	0.22	ug/l	J
108-67-8	1,3,5-Trimethylbenzene	0.66	5.0	0.58	ug/l	J

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	113%		72-120%
17060-07-0	1,2-Dichloroethane-D4	122%		59-137%
2037-26-5	Toluene-D8	105%		73-116%
460-00-4	4-Bromofluorobenzene	95%		69-126%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-114A-081906		
Lab Sample ID:	J39011-3R	**Date Sampled:**	08/19/06
Matrix:	AQ - Ground Water	**Date Received:**	08/21/06
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Quanta 2006 Groundwater Resources, Edgewater, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	X57670R.D	1	08/31/06	DTM	n/a	n/a	VX2289
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

CAS No.	Compound	Result	RL	MDL	Units	Q
107-02-8	Acrolein	ND	50	4.3	ug/l	
103-65-1	n-Propylbenzene	2.9	5.0	0.18	ug/l	J
95-63-6	1,2,4-Trimethylbenzene	34.0	5.0	0.22	ug/l	
108-67-8	1,3,5-Trimethylbenzene	5.9	5.0	0.58	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	118%		72-120%
17060-07-0	1,2-Dichloroethane-D4	132%		59-137%
2037-26-5	Toluene-D8	105%		73-116%
460-00-4	4-Bromofluorobenzene	99%		69-126%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	EB-081906-GW		
Lab Sample ID:	J39011-4R	**Date Sampled:**	08/19/06
Matrix:	AQ - Equipment Blank	**Date Received:**	08/21/06
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Quanta 2006 Groundwater Resources, Edgewater, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	X57679R.D	1	08/31/06	DTM	n/a	n/a	VX2289
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

CAS No.	Compound	Result	RL	MDL	Units	Q
107-02-8	Acrolein	ND	50	4.3	ug/l	
103-65-1	n-Propylbenzene	ND	5.0	0.18	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	0.22	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	0.58	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	120%		72-120%
17060-07-0	1,2-Dichloroethane-D4	125%		59-137%
2037-26-5	Toluene-D8	107%		73-116%
460-00-4	4-Bromofluorobenzene	99%		69-126%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-111A-082106		
Lab Sample ID:	J39011-5R	**Date Sampled:**	08/21/06
Matrix:	AQ - Ground Water	**Date Received:**	08/21/06
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Quanta 2006 Groundwater Resources, Edgewater, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	A113920R.D	1	09/01/06	ET	n/a	n/a	VA3821
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

CAS No.	Compound	Result	RL	MDL	Units	Q
107-02-8	Acrolein	ND	50	4.3	ug/l	
103-65-1	n-Propylbenzene	ND	5.0	0.18	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	0.22	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	0.58	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	92%		72-120%
17060-07-0	1,2-Dichloroethane-D4	97%		59-137%
2037-26-5	Toluene-D8	93%		73-116%
460-00-4	4-Bromofluorobenzene	92%		69-126%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-101A-082106		
Lab Sample ID:	J39011-6R	**Date Sampled:**	08/21/06
Matrix:	AQ - Ground Water	**Date Received:**	08/21/06
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Quanta 2006 Groundwater Resources, Edgewater, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	A113921R.D	1	09/01/06	ET	n/a	n/a	VA3821
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

CAS No.	Compound	Result	RL	MDL	Units	Q
107-02-8	Acrolein	ND	50	4.3	ug/l	
103-65-1	n-Propylbenzene	ND	5.0	0.18	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	0.22	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	0.58	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	92%		72-120%
17060-07-0	1,2-Dichloroethane-D4	96%		59-137%
2037-26-5	Toluene-D8	92%		73-116%
460-00-4	4-Bromofluorobenzene	93%		69-126%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-101DS-082106		
Lab Sample ID:	J39011-7R	**Date Sampled:**	08/21/06
Matrix:	AQ - Ground Water	**Date Received:**	08/21/06
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Quanta 2006 Groundwater Resources, Edgewater, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	A113919R.D	1	09/01/06	ET	n/a	n/a	VA3821
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

CAS No.	Compound	Result	RL	MDL	Units	Q
107-02-8	Acrolein	ND	50	4.3	ug/l	
103-65-1	n-Propylbenzene	ND	5.0	0.18	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	0.22	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	0.58	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	90%		72-120%
17060-07-0	1,2-Dichloroethane-D4	92%		59-137%
2037-26-5	Toluene-D8	93%		73-116%
460-00-4	4-Bromofluorobenzene	93%		69-126%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	EB-082106-GW		
Lab Sample ID:	J39011-8R	**Date Sampled:**	08/21/06
Matrix:	AQ - Equipment Blank	**Date Received:**	08/21/06
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Quanta 2006 Groundwater Resources, Edgewater, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	X57712R.D	1	09/01/06	DTM	n/a	n/a	VX2291
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

CAS No.	Compound	Result	RL	MDL	Units	Q
107-02-8	Acrolein	ND	50	4.3	ug/l	
103-65-1	n-Propylbenzene	ND	5.0	0.18	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	0.22	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	0.58	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	110%		72-120%
17060-07-0	1,2-Dichloroethane-D4	119%		59-137%
2037-26-5	Toluene-D8	104%		73-116%
460-00-4	4-Bromofluorobenzene	99%		69-126%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TB-081706-GW		
Lab Sample ID:	J39011-9R	**Date Sampled:**	08/21/06
Matrix:	AQ - Trip Blank Water	**Date Received:**	08/21/06
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Quanta 2006 Groundwater Resources, Edgewater, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	X57707R.D	1	09/01/06	DTM	n/a	n/a	VX2291
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

CAS No.	Compound	Result	RL	MDL	Units	Q
107-02-8	Acrolein	ND	50	4.3	ug/l	
103-65-1	n-Propylbenzene	ND	5.0	0.18	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	0.22	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	0.58	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	113%		72-120%
17060-07-0	1,2-Dichloroethane-D4	120%		59-137%
2037-26-5	Toluene-D8	104%		73-116%
460-00-4	4-Bromofluorobenzene	99%		69-126%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	DUP-082106-GW		
Lab Sample ID:	J39011-10R	**Date Sampled:**	08/21/06
Matrix:	AQ - Ground Water	**Date Received:**	08/21/06
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Quanta 2006 Groundwater Resources, Edgewater, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	X57713R.D	1	09/01/06	DTM	n/a	n/a	VX2291
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

CAS No.	Compound	Result	RL	MDL	Units	Q
107-02-8	Acrolein	ND	50	4.3	ug/l	
103-65-1	n-Propylbenzene	ND	5.0	0.18	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	0.22	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	0.58	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	115%		72-120%
17060-07-0	1,2-Dichloroethane-D4	127%		59-137%
2037-26-5	Toluene-D8	106%		73-116%
460-00-4	4-Bromofluorobenzene	98%		69-126%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

New Jersey

ACCUTEST LABORATORIES

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody

GW
tb
fb

Accutest Labs
2235 ROUTE 130
Dayton, NJ 08810
732-329-0200

Honeywell — Chain Of Custody / Analysis Request

J39011

AESI Ref: 38946.54932
COC#: 081906-GW
Lab Proj # (SDG):
Lab ID:
Site ID:
Lab Job #:
Authorized User: Honeywell

Privileged & Confidential
EDD To: amy.klopper@ch2m.com, john.mitchell@ch2m.com
Sampler: Austin Hareclerode/CH2M HILL
PO #:
Analysis Turnaround Time (TAT): 10
Consultant: CH2M
Full Report TAT:

Site Name: Quanta Resources (Edgewater)
Location of Site: Edgewater, NJ
Phase: Sampling Program: Quanta 2006 Groundwater

Sampling Co.: CH2M HILL
Client Contact: (name, co., address)
Jennifer Simms
1700 Market Street, Suite 1600
Philadelphia, PA 19103
[redacted]
Hard Copy To: Amy Klopper, 3011 Southwest Williston Road,
Invoice To: jennifer.simms@ch2m.com

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	Location ID	Start Depth (ft)	End Depth (ft)	Field Sample ID	Sample Date	Sample Time	Sample Type	Sample Matrix	Sample Purpose	# of Cont.	Units	Field Filtered Sample?	SW6260 - VOCs	SW6270 - SVOCs	SW6270-SIM	SW6010 - As, Pb	SW6081 - Pesticides	SW6082 - PCBs	E350.2 - Ammonia	Sampling Method (code)	Lab Sample Numbers
													9	1	1	10	1	1	7		
1	MW-119B	* -1		MW-119B-081906	8/19/06	0935	GW	WATER	REG	8	G	N	X	X	X	X		X		Bld pump	EX90,
2	MW-121A	-2		MW-121A-081906	8/19/06	1050	GW	WATER	REG	8	G	N	X	X	X	X		X		Bld pump	WC8,
3	MW-114A	-3		MW-114A-081906	8/19/06	1245	GW	WATER	REG	8	G	N	X	X	X	X		X		Bld pump	AMET9,
4	Equip Blank	-4		EB-081906-GW	8/19/06	1600	BLK WATER	WATER	EB	8	G	N	X	X	X	X		X		Bld pump	2204
5	MW-111A	-5		MW-111A-082106	8/21/06	0950	GW	WATER	REG	9	G	N	X	X	X	X	X	X	X	Bld pump	
6	MW-101A	-6		MW-101A-082106	8/21/06	1025	GW	WATER	REG	9	G	N	X	X	X	X	X	X	X	Bld pump	
7	MW-101DS	• -7		MW-101DS-082106	8/21/06	1055	GW	WATER	REG	8	G	N	X	X	X	X		X		Bld pump	
8	Equip Blank	-8		EB-082106-GW	8/21/06	1300	BLK WATER	WATER	EB	9	G	N	X	X	X	X	X	X	X	Bld pump	
9	Trip Blank	Δ -9		TB-081706-GW	8/17/06	0:00	BLK WATER	WATER	TB	2	G	N	X								
10																					
11																					
12	DUPLICATE	-10		DUP-082106-GW	8/21/06	0:00	GW	WATER	FD	9	G	N	X	X	X	X	X	X	X	Bld pump	

SW6010^LLI — See worksheet SW6010 - analyze for Arsenic (As) and Lead (Pb)

Relinquished by	Company	Date/Time	Received by	Company	Date/Time	Condition	Cooler Temp.	Custody Seals Intact
[signature]	CH2M HILL	8/21/06 1503	[signature]	ACCUTEST	8/21/06 1505			
[signature]	ACCUTEST	8/21/06 1700	PD		8/21/06 17:00			

Preservatives: (Other Specify):
0 (none); 1 (4 Deg C); 2 (HCl pH<2); 3 (HNO3 pH<2); 4 (H2SO4 pH<2); 5 (NaOH pH>12); 6 (NaOH, Zn Acetate); 7 (H2SO4 (pH<2), 4 Deg C)); 8 (HCl pH<2); 9 (HCl 4 Deg C); 10 (HNO3 (pH<2), 4Deg C); 11 (4C NaOH (pH>12) & Ascorbic Acid); 12 (4C H2SO4 (pH<2) & Na2S2O3); 13 (Zn Acetate); sp (special instructions)

Δ TB Lab 8-17-06 @ 1800 BL 8-21-06
* AMN VOLUME REC'D UNDERPRESERVED H2SO4 ADDED SAMP 4 GMT LOT # GNES-11374 BL 8-21-06
• IVOA REC'D BROKEN BL 8-21-06
Vanpk B AMY KLOPPER INFORMED. RWB 8-22-06

SEAL # 338 366 340 INTACT

RCVD 3 COOLERS 8/21/06 JP BL 4.8 6.0 5.2 C

1A

5.1
5

J39011R: Chain of Custody
Page 1 of 2

Job Change Order: J39011_6/27/2008

+R

Requested Date:	6/27/2008	**Received Date:**	8/21/2006
Account Name:	CH2M Hill	**Due Date:**	9/4/2006
Project Description:	Quanta 2006 Groundwater Resources, Edgewater,	**Deliverable:**	FULT1
CSR:	NY	**TAT (Days):**	14

Sample #:
J39011-ALL

Change: Please Relog/Retrieve: VR8260124TMB, VMS+135TMB, VMS+ACROLEIN, VMS+PROPBNZ

Above Changes Amy Klopper **Date:** 6/27/2008

To Client: This Change Order is confirmation of the revisions, previously discussed with the Accutest Client Service

Page 1 of 1

J39011R: Chain of Custody
Page 2 of 2

New Jersey
ACCUTEST LABORATORIES

10/06/15

Technical Report for

CH2M Hill

Quanta 2006 Groundwater Resources, Edgewater, NJ

Accutest Job Number: J39095

Sampling Dates: 08/21/06 - 08/22/06

Report to:

CH2M Hill

Theresa.Himmer@CH2M.com

ATTN: Theresa Himmer

Total number of pages in report: **71**

NELAP ACCREDITED TNI LABORATORY

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Program and/or state specific certification programs as applicable.

Nancy Cole
Laboratory Director

Client Service contact: Nadine Yakes 732-329-0200

Certifications: NJ(12129), NY(10983), CA, CT, DE, FL, IL, IN, KS, KY, LA, MA, MD, MI, MT, NC, OH VAP (CL0056), AK (UST-103), AZ (AZ0786), PA, RI, SC, TN, TX, VA, WV, DoD ELAP (L-A-B L2248)

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Accutest LabLink@876317 14:22 06-Oct-2015

Sample Summary

CH2M Hill

Job No: J39095

Quanta 2006 Groundwater Resources, Edgewater, NJ

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
J39095-1	08/21/06	16:05	AH	08/22/06	AQ	Ground Water	MW-113C-082106
J39095-2	08/21/06	16:20	AH	08/22/06	AQ	Ground Water	MW-113A-082106
J39095-3	08/22/06	09:55	AH	08/22/06	AQ	Ground Water	MW-116DS-082206
J39095-4	08/22/06	10:40	AH	08/22/06	AQ	Ground Water	MW-103A-082206
J39095-5	08/22/06	11:40	AH	08/22/06	AQ	Ground Water	MW-103DS-082206
J39095-6	08/22/06	13:30	AH	08/22/06	AQ	Ground Water	MW-111B-082206
J39095-6D	08/22/06	13:30	AH	08/22/06	AQ	Water Dup/MSD	MW-111B-082206
J39095-6S	08/22/06	13:30	AH	08/22/06	AQ	Water Matrix Spike	MW-111B-082206
J39095-7	08/22/06	15:10	AH	08/22/06	AQ	Ground Water	MW-113B-082206
J39095-8	08/22/06	15:10	AH	08/22/06	AQ	Trip Blank Water	TB-081406-GW

CASE NARRATIVE / CONFORMANCE SUMMARY

Client:	CH2M Hill	**Job No**	J39095
Site:	Quanta 2006 Groundwater Resources, Edgewater, NJ	**Report Date**	9/13/2006 9:43:32 AM

7 Sample(s), 1 Trip Blank(s) and 0 Field Blank(s) were collected between 08/21/2006 and 08/22/2006 and were received at Accutest on 08/22/2006 properly preserved, at 4.8 Deg. C and intact. These Samples received an Accutest job number of J39095. A listing of the Laboratory Sample ID, Client Sample ID and dates of collection are presented in the Results Summary Section of this report.

Except as noted below, all method specified calibrations and quality control performance criteria were met for this job. For more information, please refer to QC summary pages.

Volatiles by GCMS By Method SW846 8260B

Matrix AQ **Batch ID:** V3A1181

- All samples were analyzed within the recommended method holding time.
- Sample(s) J39095-6MS, J39095-6MSD were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.
- Blank Spike Recovery(s) for Bromomethane are outside control limits. High percent recoveries and no associated positive found in the QC batch.

Extractables by GCMS By Method SW846 8270C

Matrix AQ **Batch ID:** OP24573

- All samples were extracted within the recommended method holding time.
- All samples were analyzed within the recommended method holding time.
- Sample(s) J39095-6MS, J39095-6MSD were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.
- Sample(s) J39095-4 have surrogates outside control limits due to dilution.

Extractables by GCMS By Method SW846 8270C BY SIM

Matrix AQ **Batch ID:** OP24575

- All samples were extracted within the recommended method holding time.
- All samples were analyzed within the recommended method holding time.
- Sample(s) J39095-6MS, J39095-6MSD were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.
- Blank Spike Recovery(s) for Chrysene are outside of in house control limits.
- Sample(s) J39095-4 have surrogates outside control limits due to matrix interference.
- OP24575-MS, OP24575-MSD for Dibenzo(a,h)anthracene: 50 ppm was added.
- OP24575-MS, OP24575-MSD for Phenanthrene: 50 ppm was added.
- OP24575-MS, OP24575-MSD for Pentachlorophenol: 50 ppm was added.
- OP24575-MS, OP24575-MSD for Naphthalene: 50 ppm was added.
- OP24575-MS, OP24575-MSD for Indeno(1,2,3-cd)pyrene: 50 ppm was added.
- OP24575-MS, OP24575-MSD for Benzo(g,h,i)perylene: 50 ppm was added.
- OP24575-MS, OP24575-MSD for Hexachlorobenzene: 50 ppm was added.
- OP24575-MS, OP24575-MSD for Fluorene: 50 ppm was added.
- OP24575-MS, OP24575-MSD for Fluoranthene: 50 ppm was added.
- OP24575-MS, OP24575-MSD for Pyrene: 50 ppm was added.
- OP24575-MS, OP24575-MSD for Benzo(k)fluoranthene: 50 ppm was added.
- OP24575-MS, OP24575-MSD for Benzo(b)fluoranthene: 50 ppm was added.
- OP24575-MS, OP24575-MSD for Benzo(a)pyrene: 50 ppm was added.
- OP24575-MS, OP24575-MSD for Benzo(a)anthracene: 50 ppm was added.
- OP24575-MS, OP24575-MSD for Anthracene: 50 ppm was added.
- OP24575-MS, OP24575-MSD for Acenaphthylene: 50 ppm was added.
- OP24575-MS, OP24575-MSD for Chrysene: 50 ppm was added.
- OP24575-MS, OP24575-MSD for Acenaphthene: 50 ppm was added.

Extractables by GC By Method SW846 8081A

Matrix AQ **Batch ID:** OP24576

- All samples were extracted within the recommended method holding time.
- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) J39095-6MS, J39095-6MSD, OP24576-MSMSD were used as the QC samples indicated.
- Matrix Spike Recovery(s) for delta-BHC are outside control limits. Outside control limits due to matrix interference.
- Matrix Spike Duplicate Recovery(s) for delta-BHC are outside control limits. Outside control limits due to matrix interference.
- Sample(s) J39095-4 have surrogates outside control limits due to matrix interference.

Extractables by GC By Method SW846 8082

Matrix AQ	**Batch ID:** OP24578

- All samples were extracted within the recommended method holding time.
- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) J39095-6MS, OP24578-MSMSD, J39095-6MSD were used as the QC samples indicated.
- RPD(s) for MSD for Aroclor 1016, Aroclor 1260 are outside of in house control limits for sample OP24578-MSD.
- Sample(s) J39095-4 have surrogates outside control limits due to matrix interference.

Metals By Method SW846 6010B

Matrix AQ	**Batch ID:** MP35699

- All samples were digested within the recommended method holding time.
- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) J39095-6MS, J39095-6MSD, J39095-6SDL were used as the QC samples for metals.
- Matrix Spike and Matrix Spike Duplicate Recovery(s) for Arsenic are outside control limits. Spike amount low relative to the sample amount. Refer to lab control or spike blank for recovery information.
- RPD(s) for Serial Dilution for Lead are outside control limits for sample MP35699-SD1. Percent difference acceptable due to low initial sample concentration (< 50 times IDL).
- RPD(s) for Serial Dilution for Arsenic are outside control limits indicating possible matrix interference.

Wet Chemistry By Method EPA 350.1/LACHAT

Matrix AQ	**Batch ID:** GP35270

- All samples were prepared within the recommended method holding time.
- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) J39095-6DUP, J39095-6MS were used as the QC samples for Nitrogen, Ammonia.

The Accutest Laboratories of New Jersey certifies that all analysis were performed within method specification. It is further recommended that this report to be used in its entirety.The Accutest Laboratories of NJ, Laboratory Director or assignee as verified by the signature on the cover page has authorized the release of this report(J39095).

Summary of Hits

Job Number: J39095
Account: CH2M Hill
Project: Quanta 2006 Groundwater Resources, Edgewater, NJ
Collected: 08/21/06 thru 08/22/06

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
J39095-1	**MW-113C-082106**					
Benzene		0.59 J	1.0	0.21	ug/l	SW846 8260B
cis-1,2-Dichloroethene		0.85 J	1.0	0.18	ug/l	SW846 8260B
Trichloroethene		4.7	1.0	0.29	ug/l	SW846 8260B
Total TIC, Volatile		7.6 J			ug/l	
Carbazole		2.8	2.0	0.36	ug/l	SW846 8270C
Caprolactam		4.2	2.0	0.32	ug/l	SW846 8270C
Dibenzofuran		1.5 J	5.0	0.34	ug/l	SW846 8270C
2-Methylnaphthalene		1.7 J	2.0	0.41	ug/l	SW846 8270C
Acenaphthene		3.80	0.20	0.017	ug/l	SW846 8270C BY SIM
Anthracene		1.45	0.20	0.021	ug/l	SW846 8270C BY SIM
Benzo(a)anthracene		0.296	0.20	0.0068	ug/l	SW846 8270C BY SIM
Fluoranthene		3.61	0.20	0.0090	ug/l	SW846 8270C BY SIM
Fluorene		2.79	0.20	0.020	ug/l	SW846 8270C BY SIM
Naphthalene		4.84	0.20	0.026	ug/l	SW846 8270C BY SIM
Phenanthrene		6.46	0.20	0.021	ug/l	SW846 8270C BY SIM
Pyrene		2.52	0.20	0.014	ug/l	SW846 8270C BY SIM
Total TIC, Semi-Volatile		6.7 J			ug/l	
Arsenic		6210	8.0		ug/l	SW846 6010B
J39095-2	**MW-113A-082106**					
Acetone		2.9 J	10	2.4	ug/l	SW846 8260B
Acenaphthene		4.30	0.22	0.019	ug/l	SW846 8270C BY SIM
Anthracene		0.902	0.22	0.023	ug/l	SW846 8270C BY SIM
Benzo(a)anthracene		0.306	0.22	0.0074	ug/l	SW846 8270C BY SIM
Benzo(b)fluoranthene		0.229	0.22	0.039	ug/l	SW846 8270C BY SIM
Chrysene		0.243	0.22	0.018	ug/l	SW846 8270C BY SIM
Fluoranthene		2.50	0.22	0.0098	ug/l	SW846 8270C BY SIM
Fluorene		0.617	0.22	0.022	ug/l	SW846 8270C BY SIM
Naphthalene		0.943	0.22	0.028	ug/l	SW846 8270C BY SIM
Pyrene		2.17	0.22	0.015	ug/l	SW846 8270C BY SIM
Total TIC, Semi-Volatile		21.5 J			ug/l	
Arsenic		923	8.0		ug/l	SW846 6010B
J39095-3	**MW-116DS-082206**					
Benzene		0.90 J	1.0	0.21	ug/l	SW846 8260B
cis-1,2-Dichloroethene		0.97 J	1.0	0.18	ug/l	SW846 8260B
Ethylbenzene		0.84 J	1.0	0.20	ug/l	SW846 8260B
Toluene		0.61 J	1.0	0.20	ug/l	SW846 8260B
Trichloroethene		14.5	1.0	0.29	ug/l	SW846 8260B
m,p-Xylene		0.88 J	1.0	0.42	ug/l	SW846 8260B
o-Xylene		0.50 J	1.0	0.31	ug/l	SW846 8260B

Summary of Hits

Job Number: J39095
Account: CH2M Hill
Project: Quanta 2006 Groundwater Resources, Edgewater, NJ
Collected: 08/21/06 thru 08/22/06

Lab Sample ID Client Sample ID Analyte	Result/ Qual	RL	MDL	Units	Method
Xylene (total)	1.4	1.0	0.31	ug/l	SW846 8260B
Total TIC, Volatile	27 J			ug/l	
Carbazole	0.73 J	2.0	0.36	ug/l	SW846 8270C
Dibenzofuran	1.3 J	5.0	0.34	ug/l	SW846 8270C
2-Methylnaphthalene	1.6 J	2.0	0.41	ug/l	SW846 8270C
Naphthalene	17.4	2.0	0.32	ug/l	SW846 8270C
Acenaphthene	1.31	0.20	0.017	ug/l	SW846 8270C BY SIM
Anthracene	0.580	0.20	0.021	ug/l	SW846 8270C BY SIM
Benzo(a)anthracene	0.243	0.20	0.0068	ug/l	SW846 8270C BY SIM
Fluoranthene	1.62	0.20	0.0090	ug/l	SW846 8270C BY SIM
Fluorene	0.670	0.20	0.020	ug/l	SW846 8270C BY SIM
Phenanthrene	2.28	0.20	0.021	ug/l	SW846 8270C BY SIM
Pyrene	1.36	0.20	0.014	ug/l	SW846 8270C BY SIM
Total TIC, Semi-Volatile	14.1 J			ug/l	
J39095-4 MW-103A-082206					
Benzene	190	5.0	1.1	ug/l	SW846 8260B
Ethylbenzene	913	5.0	1.0	ug/l	SW846 8260B
Isopropylbenzene	141	10	1.0	ug/l	SW846 8260B
Toluene	106	5.0	1.0	ug/l	SW846 8260B
m,p-Xylene	1210	5.0	2.1	ug/l	SW846 8260B
o-Xylene	704	5.0	1.5	ug/l	SW846 8260B
Xylene (total)	1910	5.0	1.5	ug/l	SW846 8260B
Total TIC, Volatile	5860 J			ug/l	
2,4-Dimethylphenol	215 J	560	180	ug/l	SW846 8270C
2-Methylphenol	206 J	560	150	ug/l	SW846 8270C
3&4-Methylphenol	45.6	5.6	1.4	ug/l	SW846 8270C
Phenol	8.3	5.6	0.55	ug/l	SW846 8270C
Acenaphthene	219 J	220	39	ug/l	SW846 8270C
1,1'-Biphenyl	103	2.2	0.36	ug/l	SW846 8270C
Carbazole	74.7	2.2	0.40	ug/l	SW846 8270C
Dibenzofuran	65.1	5.6	0.38	ug/l	SW846 8270C
Fluorene	97.2	2.2	0.50	ug/l	SW846 8270C
2-Methylnaphthalene	1270	220	45	ug/l	SW846 8270C
Naphthalene	12100	440	71	ug/l	SW846 8270C
Phenanthrene	85.3	2.2	0.40	ug/l	SW846 8270C
Anthracene	15.5	0.22	0.023	ug/l	SW846 8270C BY SIM
Benzo(a)anthracene	0.483	0.22	0.0076	ug/l	SW846 8270C BY SIM
Benzo(b)fluoranthene	0.253	0.22	0.040	ug/l	SW846 8270C BY SIM
Chrysene	0.349	0.22	0.019	ug/l	SW846 8270C BY SIM
Fluoranthene	6.68	0.22	0.010	ug/l	SW846 8270C BY SIM
Pyrene	6.13	0.22	0.016	ug/l	SW846 8270C BY SIM
Total TIC, Semi-Volatile	4190 J			ug/l	
Arsenic	4.7	2.0		ug/l	SW846 6010B

Summary of Hits

Job Number: J39095
Account: CH2M Hill
Project: Quanta 2006 Groundwater Resources, Edgewater, NJ
Collected: 08/21/06 thru 08/22/06

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
J39095-5	**MW-103DS-082206**					
Chloroform		0.73 J	1.0	0.22	ug/l	SW846 8260B
1,1-Dichloroethane		1.2	1.0	0.23	ug/l	SW846 8260B
1,1-Dichloroethene		2.5	1.0	0.33	ug/l	SW846 8260B
cis-1,2-Dichloroethene		3.6	1.0	0.18	ug/l	SW846 8260B
Tetrachloroethene		1.0	1.0	0.28	ug/l	SW846 8260B
1,1,1-Trichloroethane		0.53 J	1.0	0.28	ug/l	SW846 8260B
Trichloroethene		142	1.0	0.29	ug/l	SW846 8260B
Fluoranthene		0.230	0.20	0.0090	ug/l	SW846 8270C BY SIM
Naphthalene		0.785	0.20	0.026	ug/l	SW846 8270C BY SIM
Phenanthrene		0.449	0.20	0.021	ug/l	SW846 8270C BY SIM
Pyrene		0.226	0.20	0.014	ug/l	SW846 8270C BY SIM
Arsenic		2.9	2.0		ug/l	SW846 6010B
J39095-6	**MW-111B-082206**					
Acenaphthene		0.574	0.20	0.017	ug/l	SW846 8270C BY SIM
Anthracene		0.380	0.20	0.021	ug/l	SW846 8270C BY SIM
Fluoranthene		1.01	0.20	0.0090	ug/l	SW846 8270C BY SIM
Fluorene		0.344	0.20	0.020	ug/l	SW846 8270C BY SIM
Naphthalene		2.35	0.20	0.026	ug/l	SW846 8270C BY SIM
Pyrene		0.911	0.20	0.014	ug/l	SW846 8270C BY SIM
Arsenic		59800	40		ug/l	SW846 6010B
Lead		6.5	3.0		ug/l	SW846 6010B
Nitrogen, Ammonia		5.3	0.30		mg/l	EPA 350.1/LACHAT
J39095-7	**MW-113B-082206**					
Benzene		3.1	1.0	0.21	ug/l	SW846 8260B
Carbon disulfide		0.85 J	2.0	0.21	ug/l	SW846 8260B
Ethylbenzene		0.62 J	1.0	0.20	ug/l	SW846 8260B
Toluene		0.74 J	1.0	0.20	ug/l	SW846 8260B
m,p-Xylene		1.0	1.0	0.42	ug/l	SW846 8260B
o-Xylene		1.2	1.0	0.31	ug/l	SW846 8260B
Xylene (total)		2.2	1.0	0.31	ug/l	SW846 8260B
Total TIC, Volatile		13 J			ug/l	
Carbazole		2.8	2.0	0.36	ug/l	SW846 8270C
Dibenzofuran		1.6 J	5.0	0.34	ug/l	SW846 8270C
2-Methylnaphthalene		1.5 J	2.0	0.41	ug/l	SW846 8270C
Acenaphthene		2.48	0.20	0.017	ug/l	SW846 8270C BY SIM
Anthracene		1.78	0.20	0.021	ug/l	SW846 8270C BY SIM
Benzo(a)anthracene		0.361	0.20	0.0068	ug/l	SW846 8270C BY SIM
Chrysene		0.295	0.20	0.017	ug/l	SW846 8270C BY SIM

Summary of Hits

Job Number: J39095
Account: CH2M Hill
Project: Quanta 2006 Groundwater Resources, Edgewater, NJ
Collected: 08/21/06 thru 08/22/06

Lab Sample ID Client Sample ID Analyte	Result/ Qual	RL	MDL	Units	Method
Fluoranthene	2.88	0.20	0.0090	ug/l	SW846 8270C BY SIM
Fluorene	1.86	0.20	0.020	ug/l	SW846 8270C BY SIM
Naphthalene	7.53	0.20	0.026	ug/l	SW846 8270C BY SIM
Phenanthrene	5.49	0.20	0.021	ug/l	SW846 8270C BY SIM
Pyrene	2.56	0.20	0.014	ug/l	SW846 8270C BY SIM
Total TIC, Semi-Volatile	9.8 J			ug/l	
Arsenic	12400	8.0		ug/l	SW846 6010B
Lead	4.7	3.0		ug/l	SW846 6010B

J39095-8 TB-081406-GW

No hits reported in this sample.

New Jersey

ACCUTEST LABORATORIES

Sample Results

Report of Analysis

Report of Analysis

Client Sample ID:	MW-113C-082106		
Lab Sample ID:	J39095-1	**Date Sampled:**	08/21/06
Matrix:	AQ - Ground Water	**Date Received:**	08/22/06
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Quanta 2006 Groundwater Resources, Edgewater, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3A28266.D	1	08/31/06	LY	n/a	n/a	V3A1181
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List (OLM4.2)

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	2.4	ug/l	
71-43-2	Benzene	0.59	1.0	0.21	ug/l	J
75-27-4	Bromodichloromethane	ND	1.0	0.17	ug/l	
75-25-2	Bromoform	ND	4.0	0.54	ug/l	
74-83-9	Bromomethane	ND	2.0	0.22	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	2.6	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.21	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.29	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.22	ug/l	
75-00-3	Chloroethane	ND	1.0	0.56	ug/l	
67-66-3	Chloroform	ND	1.0	0.22	ug/l	
74-87-3	Chloromethane	ND	1.0	0.35	ug/l	
110-82-7	Cyclohexane	ND	5.0	0.50	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	10	1.1	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.19	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	0.52	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.20	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.32	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.24	ug/l	
75-71-8	Dichlorodifluoromethane	ND	5.0	0.75	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.23	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.29	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.33	ug/l	
156-59-2	cis-1,2-Dichloroethene	0.85	1.0	0.18	ug/l	J
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.42	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.20	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.15	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.20	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.20	ug/l	
76-13-1	Freon 113	ND	5.0	0.69	ug/l	
591-78-6	2-Hexanone	ND	5.0	1.3	ug/l	
98-82-8	Isopropylbenzene	ND	2.0	0.20	ug/l	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-113C-082106		
Lab Sample ID:	J39095-1	**Date Sampled:**	08/21/06
Matrix:	AQ - Ground Water	**Date Received:**	08/22/06
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Quanta 2006 Groundwater Resources, Edgewater, NJ		

VOA TCL List (OLM4.2)

CAS No.	Compound	Result	RL	MDL	Units	Q
79-20-9	Methyl Acetate	ND	5.0	2.1	ug/l	
108-87-2	Methylcyclohexane	ND	5.0	0.18	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.31	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.1	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.27	ug/l	
100-42-5	Styrene	ND	5.0	0.16	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.28	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.28	ug/l	
108-88-3	Toluene	ND	1.0	0.20	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.16	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.28	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.32	ug/l	
79-01-6	Trichloroethene	4.7	1.0	0.29	ug/l	
75-69-4	Trichlorofluoromethane	ND	5.0	0.25	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.29	ug/l	
	m,p-Xylene	ND	1.0	0.42	ug/l	
95-47-6	o-Xylene	ND	1.0	0.31	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.31	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	110%		77-121%
17060-07-0	1,2-Dichloroethane-D4	102%		65-133%
2037-26-5	Toluene-D8	97%		80-117%
460-00-4	4-Bromofluorobenzene	94%		79-124%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
91-20-3	Naphthalene	19.21	7.6	ug/l	JN
	Total TIC, Volatile		7.6	ug/l	J

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RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-113C-082106		
Lab Sample ID:	J39095-1	**Date Sampled:**	08/21/06
Matrix:	AQ - Ground Water	**Date Received:**	08/22/06
Method:	SW846 8270C SW846 3510C	**Percent Solids:**	n/a
Project:	Quanta 2006 Groundwater Resources, Edgewater, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3E2045.D	1	09/05/06	MMC	08/23/06	OP24573	E3E71
Run #2							

	Initial Volume	Final Volume
Run #1	1000 ml	1.0 ml
Run #2		

ABN TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	5.0	0.95	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	5.0	1.2	ug/l	
120-83-2	2,4-Dichlorophenol	ND	5.0	1.6	ug/l	
105-67-9	2,4-Dimethylphenol	ND	5.0	1.6	ug/l	
51-28-5	2,4-Dinitrophenol	ND	20	0.89	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	20	0.72	ug/l	
95-48-7	2-Methylphenol	ND	5.0	1.4	ug/l	
	3&4-Methylphenol	ND	5.0	1.3	ug/l	
88-75-5	2-Nitrophenol	ND	5.0	1.8	ug/l	
100-02-7	4-Nitrophenol	ND	20	0.84	ug/l	
108-95-2	Phenol	ND	5.0	0.50	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	5.0	1.9	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	5.0	1.3	ug/l	
98-86-2	Acetophenone	ND	5.0	0.37	ug/l	
1912-24-9	Atrazine	ND	5.0	0.16	ug/l	
100-52-7	Benzaldehyde	ND	5.0	0.27	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	2.0	0.30	ug/l	
85-68-7	Butyl benzyl phthalate	ND	2.0	0.59	ug/l	
92-52-4	1,1'-Biphenyl	ND	2.0	0.33	ug/l	
91-58-7	2-Chloronaphthalene	ND	5.0	0.98	ug/l	
106-47-8	4-Chloroaniline	ND	5.0	0.40	ug/l	
86-74-8	Carbazole	2.8	2.0	0.36	ug/l	
105-60-2	Caprolactam	4.2	2.0	0.32	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	2.0	0.65	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	2.0	0.53	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	2.0	0.74	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	2.0	0.43	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	2.0	0.86	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	2.0	0.56	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	5.0	1.2	ug/l	
132-64-9	Dibenzofuran	1.5	5.0	0.34	ug/l	J
84-74-2	Di-n-butyl phthalate	ND	2.0	0.59	ug/l	

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RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-113C-082106		
Lab Sample ID:	J39095-1	**Date Sampled:**	08/21/06
Matrix:	AQ - Ground Water	**Date Received:**	08/22/06
Method:	SW846 8270C SW846 3510C	**Percent Solids:**	n/a
Project:	Quanta 2006 Groundwater Resources, Edgewater, NJ		

ABN TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
117-84-0	Di-n-octyl phthalate	ND	2.0	0.57	ug/l	
84-66-2	Diethyl phthalate	ND	2.0	0.39	ug/l	
131-11-3	Dimethyl phthalate	ND	2.0	0.33	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	2.0	0.66	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.18	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	20	0.41	ug/l	
67-72-1	Hexachloroethane	ND	5.0	0.28	ug/l	
78-59-1	Isophorone	ND	2.0	0.59	ug/l	
91-57-6	2-Methylnaphthalene	1.7	2.0	0.41	ug/l	J
88-74-4	2-Nitroaniline	ND	5.0	0.66	ug/l	
99-09-2	3-Nitroaniline	ND	5.0	1.3	ug/l	
100-01-6	4-Nitroaniline	ND	5.0	0.72	ug/l	
98-95-3	Nitrobenzene	ND	2.0	0.42	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	2.0	0.47	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	5.0	0.52	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	31%		12-76%
4165-62-2	Phenol-d5	22%		10-59%
118-79-6	2,4,6-Tribromophenol	81%		42-128%
4165-60-0	Nitrobenzene-d5	70%		30-122%
321-60-8	2-Fluorobiphenyl	66%		34-113%
1718-51-0	Terphenyl-d14	89%		42-125%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	system artifact	3.78	11	ug/l	J
	Sulfur	18.94	6.7	ug/l	J
	Total TIC, Semi-Volatile		6.7	ug/l	J

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-113C-082106		
Lab Sample ID:	J39095-1	**Date Sampled:**	08/21/06
Matrix:	AQ - Ground Water	**Date Received:**	08/22/06
Method:	SW846 8270C BY SIM SW846 3510C	**Percent Solids:**	n/a
Project:	Quanta 2006 Groundwater Resources, Edgewater, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Z29540.D	1	09/02/06	KLS	08/23/06	OP24575	EZ917
Run #2							

	Initial Volume	Final Volume
Run #1	1000 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
87-86-5	Pentachlorophenol	ND	1.0	0.40	ug/l	
83-32-9	Acenaphthene	3.80	0.20	0.017	ug/l	
208-96-8	Acenaphthylene	ND	0.20	0.0095	ug/l	
120-12-7	Anthracene	1.45	0.20	0.021	ug/l	
56-55-3	Benzo(a)anthracene	0.296	0.20	0.0068	ug/l	
50-32-8	Benzo(a)pyrene	ND	0.20	0.017	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	0.20	0.036	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	0.20	0.018	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	0.20	0.016	ug/l	
218-01-9	Chrysene	ND	0.20	0.017	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	0.20	0.016	ug/l	
206-44-0	Fluoranthene	3.61	0.20	0.0090	ug/l	
86-73-7	Fluorene	2.79	0.20	0.020	ug/l	
118-74-1	Hexachlorobenzene	ND	0.10	0.061	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.20	0.011	ug/l	
91-20-3	Naphthalene	4.84	0.20	0.026	ug/l	
85-01-8	Phenanthrene	6.46	0.20	0.021	ug/l	
129-00-0	Pyrene	2.52	0.20	0.014	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	34%		10-99%
4165-62-2	Phenol-d5	25%		10-83%
118-79-6	2,4,6-Tribromophenol	98%		10-140%
4165-60-0	Nitrobenzene-d5	67%		11-140%
321-60-8	2-Fluorobiphenyl	63%		10-133%
1718-51-0	Terphenyl-d14	82%		13-130%

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E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-113C-082106		
Lab Sample ID:	J39095-1	**Date Sampled:**	08/21/06
Matrix:	AQ - Ground Water	**Date Received:**	08/22/06
Method:	SW846 8082 SW846 3510C	**Percent Solids:**	n/a
Project:	Quanta 2006 Groundwater Resources, Edgewater, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	AB59329.D	1	08/25/06	JSE	08/23/06	OP24578	GAB2695
Run #2							

	Initial Volume	Final Volume
Run #1	1000 ml	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	0.50	0.094	ug/l	
11104-28-2	Aroclor 1221	ND	0.50	0.47	ug/l	
11141-16-5	Aroclor 1232	ND	0.50	0.39	ug/l	
53469-21-9	Aroclor 1242	ND	0.50	0.16	ug/l	
12672-29-6	Aroclor 1248	ND	0.50	0.15	ug/l	
11097-69-1	Aroclor 1254	ND	0.50	0.11	ug/l	
11096-82-5	Aroclor 1260	ND	0.50	0.12	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	114%		38-133%
877-09-8	Tetrachloro-m-xylene	68%		38-133%
2051-24-3	Decachlorobiphenyl	98%		18-156%
2051-24-3	Decachlorobiphenyl	95%		18-156%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-113C-082106		
Lab Sample ID:	J39095-1	**Date Sampled:**	08/21/06
Matrix:	AQ - Ground Water	**Date Received:**	08/22/06
		Percent Solids:	n/a
Project:	Quanta 2006 Groundwater Resources, Edgewater, NJ		

Total Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Arsenic	6210	8.0	ug/l	1	08/28/06	09/01/06	ND	SW846 6010B [1]	SW846 3010A [2]
Lead	< 3.0	3.0	ug/l	1	08/28/06	09/01/06	ND	SW846 6010B [1]	SW846 3010A [2]

(1) Instrument QC Batch: MA17997
(2) Prep QC Batch: MP35699

RL = Reporting Limit

Report of Analysis

Client Sample ID:	MW-113A-082106		
Lab Sample ID:	J39095-2	**Date Sampled:**	08/21/06
Matrix:	AQ - Ground Water	**Date Received:**	08/22/06
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Quanta 2006 Groundwater Resources, Edgewater, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3A28267.D	1	08/31/06	LY	n/a	n/a	V3A1181
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List (OLM4.2)

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	2.9	10	2.4	ug/l	J
71-43-2	Benzene	ND	1.0	0.21	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.17	ug/l	
75-25-2	Bromoform	ND	4.0	0.54	ug/l	
74-83-9	Bromomethane	ND	2.0	0.22	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	2.6	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.21	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.29	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.22	ug/l	
75-00-3	Chloroethane	ND	1.0	0.56	ug/l	
67-66-3	Chloroform	ND	1.0	0.22	ug/l	
74-87-3	Chloromethane	ND	1.0	0.35	ug/l	
110-82-7	Cyclohexane	ND	5.0	0.50	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	10	1.1	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.19	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	0.52	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.20	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.32	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.24	ug/l	
75-71-8	Dichlorodifluoromethane	ND	5.0	0.75	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.23	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.29	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.33	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.18	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.42	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.20	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.15	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.20	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.20	ug/l	
76-13-1	Freon 113	ND	5.0	0.69	ug/l	
591-78-6	2-Hexanone	ND	5.0	1.3	ug/l	
98-82-8	Isopropylbenzene	ND	2.0	0.20	ug/l	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-113A-082106		
Lab Sample ID:	J39095-2	**Date Sampled:**	08/21/06
Matrix:	AQ - Ground Water	**Date Received:**	08/22/06
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Quanta 2006 Groundwater Resources, Edgewater, NJ		

VOA TCL List (OLM4.2)

CAS No.	Compound	Result	RL	MDL	Units	Q
79-20-9	Methyl Acetate	ND	5.0	2.1	ug/l	
108-87-2	Methylcyclohexane	ND	5.0	0.18	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.31	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.1	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.27	ug/l	
100-42-5	Styrene	ND	5.0	0.16	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.28	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.28	ug/l	
108-88-3	Toluene	ND	1.0	0.20	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.16	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.28	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.32	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.29	ug/l	
75-69-4	Trichlorofluoromethane	ND	5.0	0.25	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.29	ug/l	
	m,p-Xylene	ND	1.0	0.42	ug/l	
95-47-6	o-Xylene	ND	1.0	0.31	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.31	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	110%		77-121%
17060-07-0	1,2-Dichloroethane-D4	104%		65-133%
2037-26-5	Toluene-D8	96%		80-117%
460-00-4	4-Bromofluorobenzene	93%		79-124%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-113A-082106		
Lab Sample ID:	J39095-2	**Date Sampled:**	08/21/06
Matrix:	AQ - Ground Water	**Date Received:**	08/22/06
Method:	SW846 8270C SW846 3510C	**Percent Solids:**	n/a
Project:	Quanta 2006 Groundwater Resources, Edgewater, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3E2046.D	1	09/05/06	MMC	08/23/06	OP24573	E3E71
Run #2							

	Initial Volume	Final Volume
Run #1	920 ml	1.0 ml
Run #2		

ABN TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	5.4	1.0	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	5.4	1.3	ug/l	
120-83-2	2,4-Dichlorophenol	ND	5.4	1.7	ug/l	
105-67-9	2,4-Dimethylphenol	ND	5.4	1.8	ug/l	
51-28-5	2,4-Dinitrophenol	ND	22	0.97	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	22	0.78	ug/l	
95-48-7	2-Methylphenol	ND	5.4	1.5	ug/l	
	3&4-Methylphenol	ND	5.4	1.4	ug/l	
88-75-5	2-Nitrophenol	ND	5.4	2.0	ug/l	
100-02-7	4-Nitrophenol	ND	22	0.92	ug/l	
108-95-2	Phenol	ND	5.4	0.54	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	5.4	2.1	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	5.4	1.4	ug/l	
98-86-2	Acetophenone	ND	5.4	0.41	ug/l	
1912-24-9	Atrazine	ND	5.4	0.18	ug/l	
100-52-7	Benzaldehyde	ND	5.4	0.29	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	2.2	0.33	ug/l	
85-68-7	Butyl benzyl phthalate	ND	2.2	0.64	ug/l	
92-52-4	1,1'-Biphenyl	ND	2.2	0.36	ug/l	
91-58-7	2-Chloronaphthalene	ND	5.4	1.1	ug/l	
106-47-8	4-Chloroaniline	ND	5.4	0.43	ug/l	
86-74-8	Carbazole	ND	2.2	0.40	ug/l	
105-60-2	Caprolactam	ND	2.2	0.34	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	2.2	0.71	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	2.2	0.58	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	2.2	0.80	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	2.2	0.47	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	2.2	0.93	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	2.2	0.61	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	5.4	1.3	ug/l	
132-64-9	Dibenzofuran	ND	5.4	0.37	ug/l	
84-74-2	Di-n-butyl phthalate	ND	2.2	0.64	ug/l	

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E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-113A-082106		
Lab Sample ID:	J39095-2	**Date Sampled:**	08/21/06
Matrix:	AQ - Ground Water	**Date Received:**	08/22/06
Method:	SW846 8270C SW846 3510C	**Percent Solids:**	n/a
Project:	Quanta 2006 Groundwater Resources, Edgewater, NJ		

ABN TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
117-84-0	Di-n-octyl phthalate	ND	2.2	0.62	ug/l	
84-66-2	Diethyl phthalate	ND	2.2	0.42	ug/l	
131-11-3	Dimethyl phthalate	ND	2.2	0.36	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	2.2	0.72	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.2	0.19	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	22	0.44	ug/l	
67-72-1	Hexachloroethane	ND	5.4	0.31	ug/l	
78-59-1	Isophorone	ND	2.2	0.64	ug/l	
91-57-6	2-Methylnaphthalene	ND	2.2	0.44	ug/l	
88-74-4	2-Nitroaniline	ND	5.4	0.72	ug/l	
99-09-2	3-Nitroaniline	ND	5.4	1.4	ug/l	
100-01-6	4-Nitroaniline	ND	5.4	0.78	ug/l	
98-95-3	Nitrobenzene	ND	2.2	0.46	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	2.2	0.51	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	5.4	0.56	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	31%		12-76%
4165-62-2	Phenol-d5	23%		10-59%
118-79-6	2,4,6-Tribromophenol	73%		42-128%
4165-60-0	Nitrobenzene-d5	65%		30-122%
321-60-8	2-Fluorobiphenyl	61%		34-113%
1718-51-0	Terphenyl-d14	79%		42-125%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	system artifact	3.78	10	ug/l	J
	alkane	22.86	5.5	ug/l	J
	alkane	23.36	5.2	ug/l	J
	alkane	23.83	6.1	ug/l	J
	alkane	24.32	4.7	ug/l	J
	Total TIC, Semi-Volatile		21.5	ug/l	J

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E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-113A-082106		
Lab Sample ID:	J39095-2	**Date Sampled:**	08/21/06
Matrix:	AQ - Ground Water	**Date Received:**	08/22/06
Method:	SW846 8270C BY SIM SW846 3510C	**Percent Solids:**	n/a
Project:	Quanta 2006 Groundwater Resources, Edgewater, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Z29541.D	1	09/02/06	KLS	08/23/06	OP24575	EZ917
Run #2							

	Initial Volume	Final Volume
Run #1	920 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
87-86-5	Pentachlorophenol	ND	1.1	0.43	ug/l	
83-32-9	Acenaphthene	4.30	0.22	0.019	ug/l	
208-96-8	Acenaphthylene	ND	0.22	0.010	ug/l	
120-12-7	Anthracene	0.902	0.22	0.023	ug/l	
56-55-3	Benzo(a)anthracene	0.306	0.22	0.0074	ug/l	
50-32-8	Benzo(a)pyrene	ND	0.22	0.018	ug/l	
205-99-2	Benzo(b)fluoranthene	0.229	0.22	0.039	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	0.22	0.019	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	0.22	0.017	ug/l	
218-01-9	Chrysene	0.243	0.22	0.018	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	0.22	0.018	ug/l	
206-44-0	Fluoranthene	2.50	0.22	0.0098	ug/l	
86-73-7	Fluorene	0.617	0.22	0.022	ug/l	
118-74-1	Hexachlorobenzene	ND	0.11	0.066	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.22	0.012	ug/l	
91-20-3	Naphthalene	0.943	0.22	0.028	ug/l	
85-01-8	Phenanthrene	ND	0.22	0.023	ug/l	
129-00-0	Pyrene	2.17	0.22	0.015	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	34%		10-99%
4165-62-2	Phenol-d5	27%		10-83%
118-79-6	2,4,6-Tribromophenol	93%		10-140%
4165-60-0	Nitrobenzene-d5	64%		11-140%
321-60-8	2-Fluorobiphenyl	55%		10-133%
1718-51-0	Terphenyl-d14	69%		13-130%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
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E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-113A-082106		
Lab Sample ID:	J39095-2	**Date Sampled:**	08/21/06
Matrix:	AQ - Ground Water	**Date Received:**	08/22/06
Method:	SW846 8081A SW846 3510C	**Percent Solids:**	n/a
Project:	Quanta 2006 Groundwater Resources, Edgewater, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2G12716.D	1	08/31/06	JSE	08/23/06	OP24576	G2G516
Run #2							

	Initial Volume	Final Volume
Run #1	890 ml	10.0 ml
Run #2		

Pesticide TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
309-00-2	Aldrin	ND	0.022	0.0038	ug/l	
319-84-6	alpha-BHC	ND	0.022	0.0029	ug/l	
319-85-7	beta-BHC	ND	0.022	0.0069	ug/l	
319-86-8	delta-BHC	ND	0.022	0.0035	ug/l	
58-89-9	gamma-BHC (Lindane)	ND	0.022	0.0019	ug/l	
5103-71-9	alpha-Chlordane	ND	0.022	0.0049	ug/l	
5103-74-2	gamma-Chlordane	ND	0.022	0.0019	ug/l	
60-57-1	Dieldrin	ND	0.022	0.0019	ug/l	
72-54-8	4,4'-DDD	ND	0.022	0.0027	ug/l	
72-55-9	4,4'-DDE	ND	0.022	0.0019	ug/l	
50-29-3	4,4'-DDT	ND	0.022	0.0055	ug/l	
72-20-8	Endrin	ND	0.022	0.0034	ug/l	
1031-07-8	Endosulfan sulfate	ND	0.022	0.0052	ug/l	
7421-93-4	Endrin aldehyde	ND	0.022	0.0072	ug/l	
53494-70-5	Endrin ketone	ND	0.056	0.0039	ug/l	
959-98-8	Endosulfan-I	ND	0.022	0.0024	ug/l	
33213-65-9	Endosulfan-II	ND	0.022	0.0036	ug/l	
76-44-8	Heptachlor	ND	0.022	0.0029	ug/l	
1024-57-3	Heptachlor epoxide	ND	0.022	0.0017	ug/l	
72-43-5	Methoxychlor	ND	0.056	0.0076	ug/l	
8001-35-2	Toxaphene	ND	0.28	0.11	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	51%		36-126%
877-09-8	Tetrachloro-m-xylene	49%		36-126%
2051-24-3	Decachlorobiphenyl	57%		15-142%
2051-24-3	Decachlorobiphenyl	63%		15-142%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-113A-082106		
Lab Sample ID:	J39095-2	**Date Sampled:**	08/21/06
Matrix:	AQ - Ground Water	**Date Received:**	08/22/06
Method:	SW846 8082 SW846 3510C	**Percent Solids:**	n/a
Project:	Quanta 2006 Groundwater Resources, Edgewater, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	AB59326.D	1	08/25/06	JSE	08/23/06	OP24578	GAB2695
Run #2							

	Initial Volume	Final Volume
Run #1	890 ml	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	0.56	0.11	ug/l	
11104-28-2	Aroclor 1221	ND	0.56	0.53	ug/l	
11141-16-5	Aroclor 1232	ND	0.56	0.44	ug/l	
53469-21-9	Aroclor 1242	ND	0.56	0.18	ug/l	
12672-29-6	Aroclor 1248	ND	0.56	0.17	ug/l	
11097-69-1	Aroclor 1254	ND	0.56	0.12	ug/l	
11096-82-5	Aroclor 1260	ND	0.56	0.13	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	59%		38-133%
877-09-8	Tetrachloro-m-xylene	54%		38-133%
2051-24-3	Decachlorobiphenyl	67%		18-156%
2051-24-3	Decachlorobiphenyl	64%		18-156%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-113A-082106		
Lab Sample ID:	J39095-2	**Date Sampled:**	08/21/06
Matrix:	AQ - Ground Water	**Date Received:**	08/22/06
		Percent Solids:	n/a
Project:	Quanta 2006 Groundwater Resources, Edgewater, NJ		

Total Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Arsenic	923	8.0	ug/l	1	08/28/06	09/07/06	ND	SW846 6010B [2]	SW846 3010A [3]
Lead	< 3.0	3.0	ug/l	1	08/28/06	09/01/06	ND	SW846 6010B [1]	SW846 3010A [3]

(1) Instrument QC Batch: MA17997
(2) Instrument QC Batch: MA18013
(3) Prep QC Batch: MP35699

RL = Reporting Limit

Report of Analysis

Client Sample ID:	MW-116DS-082206		
Lab Sample ID:	J39095-3	**Date Sampled:**	08/22/06
Matrix:	AQ - Ground Water	**Date Received:**	08/22/06
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Quanta 2006 Groundwater Resources, Edgewater, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3A28268.D	1	08/31/06	LY	n/a	n/a	V3A1181
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List (OLM4.2)

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	2.4	ug/l	
71-43-2	Benzene	0.90	1.0	0.21	ug/l	J
75-27-4	Bromodichloromethane	ND	1.0	0.17	ug/l	
75-25-2	Bromoform	ND	4.0	0.54	ug/l	
74-83-9	Bromomethane	ND	2.0	0.22	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	2.6	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.21	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.29	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.22	ug/l	
75-00-3	Chloroethane	ND	1.0	0.56	ug/l	
67-66-3	Chloroform	ND	1.0	0.22	ug/l	
74-87-3	Chloromethane	ND	1.0	0.35	ug/l	
110-82-7	Cyclohexane	ND	5.0	0.50	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	10	1.1	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.19	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	0.52	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.20	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.32	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.24	ug/l	
75-71-8	Dichlorodifluoromethane	ND	5.0	0.75	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.23	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.29	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.33	ug/l	
156-59-2	cis-1,2-Dichloroethene	0.97	1.0	0.18	ug/l	J
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.42	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.20	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.15	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.20	ug/l	
100-41-4	Ethylbenzene	0.84	1.0	0.20	ug/l	J
76-13-1	Freon 113	ND	5.0	0.69	ug/l	
591-78-6	2-Hexanone	ND	5.0	1.3	ug/l	
98-82-8	Isopropylbenzene	ND	2.0	0.20	ug/l	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-116DS-082206		
Lab Sample ID:	J39095-3	**Date Sampled:**	08/22/06
Matrix:	AQ - Ground Water	**Date Received:**	08/22/06
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Quanta 2006 Groundwater Resources, Edgewater, NJ		

VOA TCL List (OLM4.2)

CAS No.	Compound	Result	RL	MDL	Units	Q
79-20-9	Methyl Acetate	ND	5.0	2.1	ug/l	
108-87-2	Methylcyclohexane	ND	5.0	0.18	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.31	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.1	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.27	ug/l	
100-42-5	Styrene	ND	5.0	0.16	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.28	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.28	ug/l	
108-88-3	Toluene	0.61	1.0	0.20	ug/l	J
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.16	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.28	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.32	ug/l	
79-01-6	Trichloroethene	14.5	1.0	0.29	ug/l	
75-69-4	Trichlorofluoromethane	ND	5.0	0.25	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.29	ug/l	
	m,p-Xylene	0.88	1.0	0.42	ug/l	J
95-47-6	o-Xylene	0.50	1.0	0.31	ug/l	J
1330-20-7	Xylene (total)	1.4	1.0	0.31	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	110%		77-121%
17060-07-0	1,2-Dichloroethane-D4	104%		65-133%
2037-26-5	Toluene-D8	99%		80-117%
460-00-4	4-Bromofluorobenzene	95%		79-124%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
91-20-3	Naphthalene	19.21	27	ug/l	JN
	Total TIC, Volatile		27	ug/l	J

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Report of Analysis

Client Sample ID:	MW-116DS-082206		
Lab Sample ID:	J39095-3	**Date Sampled:**	08/22/06
Matrix:	AQ - Ground Water	**Date Received:**	08/22/06
Method:	SW846 8270C SW846 3510C	**Percent Solids:**	n/a
Project:	Quanta 2006 Groundwater Resources, Edgewater, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3E2047.D	1	09/05/06	MMC	08/23/06	OP24573	E3E71
Run #2							

	Initial Volume	Final Volume
Run #1	1000 ml	1.0 ml
Run #2		

ABN TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	5.0	0.95	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	5.0	1.2	ug/l	
120-83-2	2,4-Dichlorophenol	ND	5.0	1.6	ug/l	
105-67-9	2,4-Dimethylphenol	ND	5.0	1.6	ug/l	
51-28-5	2,4-Dinitrophenol	ND	20	0.89	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	20	0.72	ug/l	
95-48-7	2-Methylphenol	ND	5.0	1.4	ug/l	
	3&4-Methylphenol	ND	5.0	1.3	ug/l	
88-75-5	2-Nitrophenol	ND	5.0	1.8	ug/l	
100-02-7	4-Nitrophenol	ND	20	0.84	ug/l	
108-95-2	Phenol	ND	5.0	0.50	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	5.0	1.9	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	5.0	1.3	ug/l	
98-86-2	Acetophenone	ND	5.0	0.37	ug/l	
1912-24-9	Atrazine	ND	5.0	0.16	ug/l	
100-52-7	Benzaldehyde	ND	5.0	0.27	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	2.0	0.30	ug/l	
85-68-7	Butyl benzyl phthalate	ND	2.0	0.59	ug/l	
92-52-4	1,1'-Biphenyl	ND	2.0	0.33	ug/l	
91-58-7	2-Chloronaphthalene	ND	5.0	0.98	ug/l	
106-47-8	4-Chloroaniline	ND	5.0	0.40	ug/l	
86-74-8	Carbazole	0.73	2.0	0.36	ug/l	J
105-60-2	Caprolactam	ND	2.0	0.32	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	2.0	0.65	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	2.0	0.53	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	2.0	0.74	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	2.0	0.43	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	2.0	0.86	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	2.0	0.56	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	5.0	1.2	ug/l	
132-64-9	Dibenzofuran	1.3	5.0	0.34	ug/l	J
84-74-2	Di-n-butyl phthalate	ND	2.0	0.59	ug/l	

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Report of Analysis

Client Sample ID:	MW-116DS-082206		
Lab Sample ID:	J39095-3	**Date Sampled:**	08/22/06
Matrix:	AQ - Ground Water	**Date Received:**	08/22/06
Method:	SW846 8270C SW846 3510C	**Percent Solids:**	n/a
Project:	Quanta 2006 Groundwater Resources, Edgewater, NJ		

ABN TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
117-84-0	Di-n-octyl phthalate	ND	2.0	0.57	ug/l	
84-66-2	Diethyl phthalate	ND	2.0	0.39	ug/l	
131-11-3	Dimethyl phthalate	ND	2.0	0.33	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	2.0	0.66	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.18	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	20	0.41	ug/l	
67-72-1	Hexachloroethane	ND	5.0	0.28	ug/l	
78-59-1	Isophorone	ND	2.0	0.59	ug/l	
91-57-6	2-Methylnaphthalene	1.6	2.0	0.41	ug/l	J
88-74-4	2-Nitroaniline	ND	5.0	0.66	ug/l	
99-09-2	3-Nitroaniline	ND	5.0	1.3	ug/l	
100-01-6	4-Nitroaniline	ND	5.0	0.72	ug/l	
91-20-3	Naphthalene	17.4	2.0	0.32	ug/l	
98-95-3	Nitrobenzene	ND	2.0	0.42	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	2.0	0.47	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	5.0	0.52	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	39%		12-76%
4165-62-2	Phenol-d5	27%		10-59%
118-79-6	2,4,6-Tribromophenol	81%		42-128%
4165-60-0	Nitrobenzene-d5	83%		30-122%
321-60-8	2-Fluorobiphenyl	75%		34-113%
1718-51-0	Terphenyl-d14	91%		42-125%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	system artifact	3.78	14	ug/l	J
	Phenol, -(2-phenylethyl)-	16.74	5.4	ug/l	J
	Sulfur	18.95	8.7	ug/l	J
	Total TIC, Semi-Volatile		14.1	ug/l	J

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Report of Analysis

Client Sample ID:	MW-116DS-082206		
Lab Sample ID:	J39095-3	**Date Sampled:**	08/22/06
Matrix:	AQ - Ground Water	**Date Received:**	08/22/06
Method:	SW846 8270C BY SIM SW846 3510C	**Percent Solids:**	n/a
Project:	Quanta 2006 Groundwater Resources, Edgewater, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Z29542.D	1	09/02/06	KLS	08/23/06	OP24575	EZ917
Run #2							

	Initial Volume	Final Volume
Run #1	1000 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
87-86-5	Pentachlorophenol	ND	1.0	0.40	ug/l	
83-32-9	Acenaphthene	1.31	0.20	0.017	ug/l	
208-96-8	Acenaphthylene	ND	0.20	0.0095	ug/l	
120-12-7	Anthracene	0.580	0.20	0.021	ug/l	
56-55-3	Benzo(a)anthracene	0.243	0.20	0.0068	ug/l	
50-32-8	Benzo(a)pyrene	ND	0.20	0.017	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	0.20	0.036	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	0.20	0.018	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	0.20	0.016	ug/l	
218-01-9	Chrysene	ND	0.20	0.017	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	0.20	0.016	ug/l	
206-44-0	Fluoranthene	1.62	0.20	0.0090	ug/l	
86-73-7	Fluorene	0.670	0.20	0.020	ug/l	
118-74-1	Hexachlorobenzene	ND	0.10	0.061	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.20	0.011	ug/l	
85-01-8	Phenanthrene	2.28	0.20	0.021	ug/l	
129-00-0	Pyrene	1.36	0.20	0.014	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	43%		10-99%
4165-62-2	Phenol-d5	30%		10-83%
118-79-6	2,4,6-Tribromophenol	105%		10-140%
4165-60-0	Nitrobenzene-d5	78%		11-140%
321-60-8	2-Fluorobiphenyl	67%		10-133%
1718-51-0	Terphenyl-d14	81%		13-130%

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E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-116DS-082206		
Lab Sample ID:	J39095-3	**Date Sampled:**	08/22/06
Matrix:	AQ - Ground Water	**Date Received:**	08/22/06
Method:	SW846 8082 SW846 3510C	**Percent Solids:**	n/a
Project:	Quanta 2006 Groundwater Resources, Edgewater, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	AB59330.D	1	08/25/06	JSE	08/23/06	OP24578	GAB2695
Run #2							

	Initial Volume	Final Volume
Run #1	950 ml	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	0.53	0.099	ug/l	
11104-28-2	Aroclor 1221	ND	0.53	0.49	ug/l	
11141-16-5	Aroclor 1232	ND	0.53	0.41	ug/l	
53469-21-9	Aroclor 1242	ND	0.53	0.17	ug/l	
12672-29-6	Aroclor 1248	ND	0.53	0.16	ug/l	
11097-69-1	Aroclor 1254	ND	0.53	0.11	ug/l	
11096-82-5	Aroclor 1260	ND	0.53	0.12	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	81%		38-133%
877-09-8	Tetrachloro-m-xylene	70%		38-133%
2051-24-3	Decachlorobiphenyl	75%		18-156%
2051-24-3	Decachlorobiphenyl	72%		18-156%

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Report of Analysis

Client Sample ID:	MW-116DS-082206		
Lab Sample ID:	J39095-3	**Date Sampled:**	08/22/06
Matrix:	AQ - Ground Water	**Date Received:**	08/22/06
		Percent Solids:	n/a
Project:	Quanta 2006 Groundwater Resources, Edgewater, NJ		

Total Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Arsenic	< 2.0	2.0	ug/l	1	08/28/06	09/11/06	LH	SW846 6010B [2]	SW846 3010A [3]
Lead	< 3.0	3.0	ug/l	1	08/28/06	09/01/06	ND	SW846 6010B [1]	SW846 3010A [3]

(1) Instrument QC Batch: MA17997
(2) Instrument QC Batch: MA18032
(3) Prep QC Batch: MP35699

RL = Reporting Limit

Report of Analysis

Client Sample ID:	MW-103A-082206		
Lab Sample ID:	J39095-4	**Date Sampled:**	08/22/06
Matrix:	AQ - Ground Water	**Date Received:**	08/22/06
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Quanta 2006 Groundwater Resources, Edgewater, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3A28258.D	5	08/31/06	LY	n/a	n/a	V3A1181
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List (OLM4.2)

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	50	12	ug/l	
71-43-2	Benzene	190	5.0	1.1	ug/l	
75-27-4	Bromodichloromethane	ND	5.0	0.87	ug/l	
75-25-2	Bromoform	ND	20	2.7	ug/l	
74-83-9	Bromomethane	ND	10	1.1	ug/l	
78-93-3	2-Butanone (MEK)	ND	50	13	ug/l	
75-15-0	Carbon disulfide	ND	10	1.0	ug/l	
56-23-5	Carbon tetrachloride	ND	5.0	1.5	ug/l	
108-90-7	Chlorobenzene	ND	5.0	1.1	ug/l	
75-00-3	Chloroethane	ND	5.0	2.8	ug/l	
67-66-3	Chloroform	ND	5.0	1.1	ug/l	
74-87-3	Chloromethane	ND	5.0	1.7	ug/l	
110-82-7	Cyclohexane	ND	25	2.5	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	50	5.5	ug/l	
124-48-1	Dibromochloromethane	ND	5.0	0.94	ug/l	
106-93-4	1,2-Dibromoethane	ND	10	2.6	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	5.0	1.0	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	5.0	1.6	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	5.0	1.2	ug/l	
75-71-8	Dichlorodifluoromethane	ND	25	3.8	ug/l	
75-34-3	1,1-Dichloroethane	ND	5.0	1.2	ug/l	
107-06-2	1,2-Dichloroethane	ND	5.0	1.5	ug/l	
75-35-4	1,1-Dichloroethene	ND	5.0	1.6	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	5.0	0.89	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	5.0	2.1	ug/l	
78-87-5	1,2-Dichloropropane	ND	5.0	1.0	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	5.0	0.74	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	5.0	1.0	ug/l	
100-41-4	Ethylbenzene	913	5.0	1.0	ug/l	
76-13-1	Freon 113	ND	25	3.4	ug/l	
591-78-6	2-Hexanone	ND	25	6.3	ug/l	
98-82-8	Isopropylbenzene	141	10	1.0	ug/l	

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RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-103A-082206		
Lab Sample ID:	J39095-4	**Date Sampled:**	08/22/06
Matrix:	AQ - Ground Water	**Date Received:**	08/22/06
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Quanta 2006 Groundwater Resources, Edgewater, NJ		

VOA TCL List (OLM4.2)

CAS No.	Compound	Result	RL	MDL	Units	Q
79-20-9	Methyl Acetate	ND	25	10	ug/l	
108-87-2	Methylcyclohexane	ND	25	0.91	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	5.0	1.5	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	25	5.3	ug/l	
75-09-2	Methylene chloride	ND	10	1.3	ug/l	
100-42-5	Styrene	ND	25	0.79	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.0	1.4	ug/l	
127-18-4	Tetrachloroethene	ND	5.0	1.4	ug/l	
108-88-3	Toluene	106	5.0	1.0	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	25	0.80	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	5.0	1.4	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	5.0	1.6	ug/l	
79-01-6	Trichloroethene	ND	5.0	1.4	ug/l	
75-69-4	Trichlorofluoromethane	ND	25	1.3	ug/l	
75-01-4	Vinyl chloride	ND	5.0	1.4	ug/l	
	m,p-Xylene	1210	5.0	2.1	ug/l	
95-47-6	o-Xylene	704	5.0	1.5	ug/l	
1330-20-7	Xylene (total)	1910	5.0	1.5	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	108%		77-121%
17060-07-0	1,2-Dichloroethane-D4	99%		65-133%
2037-26-5	Toluene-D8	100%		80-117%
460-00-4	4-Bromofluorobenzene	90%		79-124%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	C3 alkyl benzene	16.07	250	ug/l	J
108-67-8	Benzene, 1,3,5-trimethyl-	16.14	110	ug/l	JN
	C3 alkyl benzene	16.36	75	ug/l	J
95-63-6	Benzene, 1,2,4-trimethyl-	16.51	370	ug/l	JN
496-11-7	Indane	17.17	1100	ug/l	JN
	C4 alkyl benzene	17.51	50	ug/l	J
	1H-indene-dihydro-methyl	17.70	94	ug/l	J
	benzofuran, methyl	18.04	53	ug/l	J
	1H-indene-dihydro-methyl	18.29	120	ug/l	J
	1H-indene-dihydro-methyl	18.47	120	ug/l	J
	Indene, methyl-	18.67	98	ug/l	J
91-20-3	Naphthalene	19.22	2400	ug/l	JN

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-103A-082206		
Lab Sample ID:	J39095-4	**Date Sampled:**	08/22/06
Matrix:	AQ - Ground Water	**Date Received:**	08/22/06
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Quanta 2006 Groundwater Resources, Edgewater, NJ		

VOA TCL List (OLM4.2)

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
95-15-8	Benzo[b]thiophene	19.35	130	ug/l	JN
91-57-6	Naphthalene, 2-methyl-	20.35	490	ug/l	JN
90-12-0	Naphthalene, 1-methyl-	20.57	400	ug/l	JN
	Total TIC, Volatile		5860	ug/l	J

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-103A-082206		
Lab Sample ID:	J39095-4	**Date Sampled:**	08/22/06
Matrix:	AQ - Ground Water	**Date Received:**	08/22/06
Method:	SW846 8270C SW846 3510C	**Percent Solids:**	n/a
Project:	Quanta 2006 Groundwater Resources, Edgewater, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3E2073.D	1	09/06/06	MMC	08/23/06	OP24573	E3E71
Run #2	3E2058.D	100	09/06/06	MMC	08/23/06	OP24573	E3E71
Run #3	3E2078.D	200	09/06/06	MMC	08/23/06	OP24573	E3E72

	Initial Volume	Final Volume
Run #1	900 ml	1.0 ml
Run #2	900 ml	1.0 ml
Run #3	900 ml	1.0 ml

ABN TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	5.6	1.1	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	5.6	1.3	ug/l	
120-83-2	2,4-Dichlorophenol	ND	5.6	1.7	ug/l	
105-67-9	2,4-Dimethylphenol	215 [a]	560	180	ug/l	J
51-28-5	2,4-Dinitrophenol	ND	22	0.99	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	22	0.80	ug/l	
95-48-7	2-Methylphenol	206 [a]	560	150	ug/l	J
	3&4-Methylphenol	45.6	5.6	1.4	ug/l	
88-75-5	2-Nitrophenol	ND	5.6	2.0	ug/l	
100-02-7	4-Nitrophenol	ND	22	0.94	ug/l	
108-95-2	Phenol	8.3	5.6	0.55	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	5.6	2.1	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	5.6	1.4	ug/l	
83-32-9	Acenaphthene	219 [a]	220	39	ug/l	J
98-86-2	Acetophenone	ND	5.6	0.42	ug/l	
1912-24-9	Atrazine	ND	5.6	0.18	ug/l	
100-52-7	Benzaldehyde	ND	5.6	0.29	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	2.2	0.33	ug/l	
85-68-7	Butyl benzyl phthalate	ND	2.2	0.66	ug/l	
92-52-4	1,1'-Biphenyl	103	2.2	0.36	ug/l	
91-58-7	2-Chloronaphthalene	ND	5.6	1.1	ug/l	
106-47-8	4-Chloroaniline	ND	5.6	0.44	ug/l	
86-74-8	Carbazole	74.7	2.2	0.40	ug/l	
105-60-2	Caprolactam	ND	2.2	0.35	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	2.2	0.73	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	2.2	0.59	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	2.2	0.82	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	2.2	0.48	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	2.2	0.96	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	2.2	0.62	ug/l	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-103A-082206		
Lab Sample ID:	J39095-4	**Date Sampled:**	08/22/06
Matrix:	AQ - Ground Water	**Date Received:**	08/22/06
Method:	SW846 8270C SW846 3510C	**Percent Solids:**	n/a
Project:	Quanta 2006 Groundwater Resources, Edgewater, NJ		

ABN TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
91-94-1	3,3'-Dichlorobenzidine	ND	5.6	1.4	ug/l	
132-64-9	Dibenzofuran	65.1	5.6	0.38	ug/l	
84-74-2	Di-n-butyl phthalate	ND	2.2	0.66	ug/l	
117-84-0	Di-n-octyl phthalate	ND	2.2	0.63	ug/l	
84-66-2	Diethyl phthalate	ND	2.2	0.43	ug/l	
131-11-3	Dimethyl phthalate	ND	2.2	0.36	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	2.2	0.73	ug/l	
86-73-7	Fluorene	97.2	2.2	0.50	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.2	0.19	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	22	0.45	ug/l	
67-72-1	Hexachloroethane	ND	5.6	0.31	ug/l	
78-59-1	Isophorone	ND	2.2	0.65	ug/l	
91-57-6	2-Methylnaphthalene	1270 [a]	220	45	ug/l	
88-74-4	2-Nitroaniline	ND	5.6	0.74	ug/l	
99-09-2	3-Nitroaniline	ND	5.6	1.4	ug/l	
100-01-6	4-Nitroaniline	ND	5.6	0.80	ug/l	
91-20-3	Naphthalene	12100 [b]	440	71	ug/l	
98-95-3	Nitrobenzene	ND	2.2	0.47	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	2.2	0.52	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	5.6	0.57	ug/l	
85-01-8	Phenanthrene	85.3	2.2	0.40	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Run# 3	Limits
367-12-4	2-Fluorophenol	44%	0% [c]	0% [c]	12-76%
4165-62-2	Phenol-d5	31%	0% [c]	0% [c]	10-59%
118-79-6	2,4,6-Tribromophenol	84%	0% [c]	0% [c]	42-128%
4165-60-0	Nitrobenzene-d5	93%	0% [c]	0% [c]	30-122%
321-60-8	2-Fluorobiphenyl	74%	0% [c]	0% [c]	34-113%
1718-51-0	Terphenyl-d14	104%	0% [c]	0% [c]	42-125%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	C3 alkyl benzene	4.92	73	ug/l	J
	C3 alkyl benzene	5.34	40	ug/l	J
	C3 alkyl benzene	5.46	470	ug/l	J
	C3 alkyl benzene	5.56	150	ug/l	J
	C3 alkyl benzene	5.73	110	ug/l	J
	C3 alkyl benzene	5.95	520	ug/l	J
271	Benzofuran	5.99	71	ug/l	JN

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-103A-082206		
Lab Sample ID:	J39095-4	**Date Sampled:**	08/22/06
Matrix:	AQ - Ground Water	**Date Received:**	08/22/06
Method:	SW846 8270C SW846 3510C	**Percent Solids:**	n/a
Project:	Quanta 2006 Groundwater Resources, Edgewater, NJ		

ABN TCL List

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	C3 alkyl benzene	6.38	260	ug/l	J
	C3 alkyl benzene	6.42	61	ug/l	J
496	Indane	6.62	1600	ug/l	JN
95	Indene	6.73	40	ug/l	JN
	C4 alkyl benzene	6.90	53	ug/l	J
	C4 alkyl benzene	7.19	34	ug/l	J
	Benzofuran, -methyl-	7.52	45	ug/l	J
2471	1H-Indene, 1-methylene-	8.98	44	ug/l	JN
	Naphthalene ethyl	11.73	40	ug/l	J
	Naphthalene dimethyl	11.87	88	ug/l	J
	Naphthalene dimethyl	12.08	130	ug/l	J
	Naphthalene dimethyl	12.12	54	ug/l	J
	Naphthalene dimethyl	12.33	50	ug/l	J
	Naphthalene dimethyl	12.53	35	ug/l	J
	unknown	13.25	34	ug/l	J
	unknown	14.99	34	ug/l	J
491	1(2H)-Isoquinolinone	15.39	34	ug/l	JN
7704	Sulfur	18.98	120	ug/l	JN
	Total TIC, Semi-Volatile		4190	ug/l	J

(a) Result is from Run# 2
(b) Result is from Run# 3
(c) Outside control limits due to dilution.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-103A-082206		
Lab Sample ID:	J39095-4	**Date Sampled:**	08/22/06
Matrix:	AQ - Ground Water	**Date Received:**	08/22/06
Method:	SW846 8270C BY SIM SW846 3510C	**Percent Solids:**	n/a
Project:	Quanta 2006 Groundwater Resources, Edgewater, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Z29543.D	1	09/02/06	KLS	08/23/06	OP24575	EZ917
Run #2	Z29583.D	10	09/05/06	KLS	08/23/06	OP24575	EZ918

	Initial Volume	Final Volume
Run #1	900 ml	1.0 ml
Run #2	900 ml	1.0 ml

CAS No.	Compound	Result	RL	MDL	Units	Q
87-86-5	Pentachlorophenol	ND	1.1	0.44	ug/l	
208-96-8	Acenaphthylene	ND	0.22	0.011	ug/l	
120-12-7	Anthracene	15.5	0.22	0.023	ug/l	
56-55-3	Benzo(a)anthracene	0.483	0.22	0.0076	ug/l	
50-32-8	Benzo(a)pyrene	ND	0.22	0.019	ug/l	
205-99-2	Benzo(b)fluoranthene	0.253	0.22	0.040	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	0.22	0.020	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	0.22	0.017	ug/l	
218-01-9	Chrysene	0.349	0.22	0.019	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	0.22	0.018	ug/l	
206-44-0	Fluoranthene	6.68	0.22	0.010	ug/l	
118-74-1	Hexachlorobenzene	ND	0.11	0.068	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.22	0.012	ug/l	
129-00-0	Pyrene	6.13	0.22	0.016	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	41%	54%	10-99%
4165-62-2	Phenol-d5	30%	31%	10-83%
118-79-6	2,4,6-Tribromophenol	86%	74%	10-140%
4165-60-0	Nitrobenzene-d5	193% [a]	92%	11-140%
321-60-8	2-Fluorobiphenyl	68%	60%	10-133%
1718-51-0	Terphenyl-d14	83%	99%	13-130%

(a) Outside control limits due to matrix interference.

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E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-103A-082206		
Lab Sample ID:	J39095-4	**Date Sampled:**	08/22/06
Matrix:	AQ - Ground Water	**Date Received:**	08/22/06
Method:	SW846 8081A SW846 3510C	**Percent Solids:**	n/a
Project:	Quanta 2006 Groundwater Resources, Edgewater, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2G12717.D	1	08/31/06	JSE	08/23/06	OP24576	G2G516
Run #2							

	Initial Volume	Final Volume
Run #1	960 ml	10.0 ml
Run #2		

Pesticide TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
309-00-2	Aldrin	ND	0.021	0.0035	ug/l	
319-84-6	alpha-BHC	ND	0.021	0.0027	ug/l	
319-85-7	beta-BHC	ND	0.021	0.0064	ug/l	
319-86-8	delta-BHC	ND	0.021	0.0032	ug/l	
58-89-9	gamma-BHC (Lindane)	ND	0.021	0.0018	ug/l	
5103-71-9	alpha-Chlordane	ND	0.021	0.0045	ug/l	
5103-74-2	gamma-Chlordane	ND	0.021	0.0018	ug/l	
60-57-1	Dieldrin	ND	0.021	0.0018	ug/l	
72-54-8	4,4'-DDD	ND	0.021	0.0025	ug/l	
72-55-9	4,4'-DDE	ND	0.021	0.0017	ug/l	
50-29-3	4,4'-DDT	ND	0.021	0.0051	ug/l	
72-20-8	Endrin	ND	0.021	0.0031	ug/l	
1031-07-8	Endosulfan sulfate	ND	0.021	0.0048	ug/l	
7421-93-4	Endrin aldehyde	ND	0.021	0.0067	ug/l	
53494-70-5	Endrin ketone	ND	0.052	0.0036	ug/l	
959-98-8	Endosulfan-I	ND	0.021	0.0022	ug/l	
33213-65-9	Endosulfan-II	ND	0.021	0.0034	ug/l	
76-44-8	Heptachlor	ND	0.021	0.0027	ug/l	
1024-57-3	Heptachlor epoxide	ND	0.021	0.0015	ug/l	
72-43-5	Methoxychlor	ND	0.052	0.0070	ug/l	
8001-35-2	Toxaphene	ND	0.26	0.098	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	225% [a]		36-126%
877-09-8	Tetrachloro-m-xylene	67%		36-126%
2051-24-3	Decachlorobiphenyl	65%		15-142%
2051-24-3	Decachlorobiphenyl	67%		15-142%

(a) Outside control limits due to matrix interference.

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-103A-082206		
Lab Sample ID:	J39095-4	**Date Sampled:**	08/22/06
Matrix:	AQ - Ground Water	**Date Received:**	08/22/06
Method:	SW846 8082 SW846 3510C	**Percent Solids:**	n/a
Project:	Quanta 2006 Groundwater Resources, Edgewater, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	AB59327.D	1	08/25/06	JSE	08/23/06	OP24578	GAB2695
Run #2							

	Initial Volume	Final Volume
Run #1	960 ml	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	0.52	0.098	ug/l	
11104-28-2	Aroclor 1221	ND	0.52	0.49	ug/l	
11141-16-5	Aroclor 1232	ND	0.52	0.41	ug/l	
53469-21-9	Aroclor 1242	ND	0.52	0.17	ug/l	
12672-29-6	Aroclor 1248	ND	0.52	0.16	ug/l	
11097-69-1	Aroclor 1254	ND	0.52	0.11	ug/l	
11096-82-5	Aroclor 1260	ND	0.52	0.12	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	304% [a]		38-133%
877-09-8	Tetrachloro-m-xylene	60%		38-133%
2051-24-3	Decachlorobiphenyl	71%		18-156%
2051-24-3	Decachlorobiphenyl	70%		18-156%

(a) Outside control limits due to matrix interference.

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-103A-082206		
Lab Sample ID:	J39095-4	**Date Sampled:**	08/22/06
Matrix:	AQ - Ground Water	**Date Received:**	08/22/06
		Percent Solids:	n/a
Project:	Quanta 2006 Groundwater Resources, Edgewater, NJ		

Total Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Arsenic	4.7	2.0	ug/l	1	08/28/06	09/11/06	LH	SW846 6010B [2]	SW846 3010A [3]
Lead	< 3.0	3.0	ug/l	1	08/28/06	09/01/06	ND	SW846 6010B [1]	SW846 3010A [3]

(1) Instrument QC Batch: MA17997
(2) Instrument QC Batch: MA18032
(3) Prep QC Batch: MP35699

RL = Reporting Limit

Report of Analysis

Client Sample ID:	MW-103DS-082206		
Lab Sample ID:	J39095-5	**Date Sampled:**	08/22/06
Matrix:	AQ - Ground Water	**Date Received:**	08/22/06
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Quanta 2006 Groundwater Resources, Edgewater, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3A28269.D	1	08/31/06	LY	n/a	n/a	V3A1181
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List (OLM4.2)

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	2.4	ug/l	
71-43-2	Benzene	ND	1.0	0.21	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.17	ug/l	
75-25-2	Bromoform	ND	4.0	0.54	ug/l	
74-83-9	Bromomethane	ND	2.0	0.22	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	2.6	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.21	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.29	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.22	ug/l	
75-00-3	Chloroethane	ND	1.0	0.56	ug/l	
67-66-3	Chloroform	0.73	1.0	0.22	ug/l	J
74-87-3	Chloromethane	ND	1.0	0.35	ug/l	
110-82-7	Cyclohexane	ND	5.0	0.50	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	10	1.1	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.19	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	0.52	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.20	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.32	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.24	ug/l	
75-71-8	Dichlorodifluoromethane	ND	5.0	0.75	ug/l	
75-34-3	1,1-Dichloroethane	1.2	1.0	0.23	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.29	ug/l	
75-35-4	1,1-Dichloroethene	2.5	1.0	0.33	ug/l	
156-59-2	cis-1,2-Dichloroethene	3.6	1.0	0.18	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.42	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.20	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.15	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.20	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.20	ug/l	
76-13-1	Freon 113	ND	5.0	0.69	ug/l	
591-78-6	2-Hexanone	ND	5.0	1.3	ug/l	
98-82-8	Isopropylbenzene	ND	2.0	0.20	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-103DS-082206		
Lab Sample ID:	J39095-5	**Date Sampled:**	08/22/06
Matrix:	AQ - Ground Water	**Date Received:**	08/22/06
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Quanta 2006 Groundwater Resources, Edgewater, NJ		

VOA TCL List (OLM4.2)

CAS No.	Compound	Result	RL	MDL	Units	Q
79-20-9	Methyl Acetate	ND	5.0	2.1	ug/l	
108-87-2	Methylcyclohexane	ND	5.0	0.18	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.31	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.1	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.27	ug/l	
100-42-5	Styrene	ND	5.0	0.16	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.28	ug/l	
127-18-4	Tetrachloroethene	1.0	1.0	0.28	ug/l	
108-88-3	Toluene	ND	1.0	0.20	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.16	ug/l	
71-55-6	1,1,1-Trichloroethane	0.53	1.0	0.28	ug/l	J
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.32	ug/l	
79-01-6	Trichloroethene	142	1.0	0.29	ug/l	
75-69-4	Trichlorofluoromethane	ND	5.0	0.25	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.29	ug/l	
	m,p-Xylene	ND	1.0	0.42	ug/l	
95-47-6	o-Xylene	ND	1.0	0.31	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.31	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	111%		77-121%
17060-07-0	1,2-Dichloroethane-D4	108%		65-133%
2037-26-5	Toluene-D8	99%		80-117%
460-00-4	4-Bromofluorobenzene	93%		79-124%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-103DS-082206		
Lab Sample ID:	J39095-5	**Date Sampled:**	08/22/06
Matrix:	AQ - Ground Water	**Date Received:**	08/22/06
Method:	SW846 8270C SW846 3510C	**Percent Solids:**	n/a
Project:	Quanta 2006 Groundwater Resources, Edgewater, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3E2049.D	1	09/05/06	MMC	08/23/06	OP24573	E3E71
Run #2							

	Initial Volume	Final Volume
Run #1	1000 ml	1.0 ml
Run #2		

ABN TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	5.0	0.95	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	5.0	1.2	ug/l	
120-83-2	2,4-Dichlorophenol	ND	5.0	1.6	ug/l	
105-67-9	2,4-Dimethylphenol	ND	5.0	1.6	ug/l	
51-28-5	2,4-Dinitrophenol	ND	20	0.89	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	20	0.72	ug/l	
95-48-7	2-Methylphenol	ND	5.0	1.4	ug/l	
	3&4-Methylphenol	ND	5.0	1.3	ug/l	
88-75-5	2-Nitrophenol	ND	5.0	1.8	ug/l	
100-02-7	4-Nitrophenol	ND	20	0.84	ug/l	
108-95-2	Phenol	ND	5.0	0.50	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	5.0	1.9	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	5.0	1.3	ug/l	
98-86-2	Acetophenone	ND	5.0	0.37	ug/l	
1912-24-9	Atrazine	ND	5.0	0.16	ug/l	
100-52-7	Benzaldehyde	ND	5.0	0.27	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	2.0	0.30	ug/l	
85-68-7	Butyl benzyl phthalate	ND	2.0	0.59	ug/l	
92-52-4	1,1'-Biphenyl	ND	2.0	0.33	ug/l	
91-58-7	2-Chloronaphthalene	ND	5.0	0.98	ug/l	
106-47-8	4-Chloroaniline	ND	5.0	0.40	ug/l	
86-74-8	Carbazole	ND	2.0	0.36	ug/l	
105-60-2	Caprolactam	ND	2.0	0.32	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	2.0	0.65	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	2.0	0.53	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	2.0	0.74	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	2.0	0.43	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	2.0	0.86	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	2.0	0.56	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	5.0	1.2	ug/l	
132-64-9	Dibenzofuran	ND	5.0	0.34	ug/l	
84-74-2	Di-n-butyl phthalate	ND	2.0	0.59	ug/l	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-103DS-082206		
Lab Sample ID:	J39095-5	**Date Sampled:**	08/22/06
Matrix:	AQ - Ground Water	**Date Received:**	08/22/06
Method:	SW846 8270C SW846 3510C	**Percent Solids:**	n/a
Project:	Quanta 2006 Groundwater Resources, Edgewater, NJ		

ABN TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
117-84-0	Di-n-octyl phthalate	ND	2.0	0.57	ug/l	
84-66-2	Diethyl phthalate	ND	2.0	0.39	ug/l	
131-11-3	Dimethyl phthalate	ND	2.0	0.33	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	2.0	0.66	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.18	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	20	0.41	ug/l	
67-72-1	Hexachloroethane	ND	5.0	0.28	ug/l	
78-59-1	Isophorone	ND	2.0	0.59	ug/l	
91-57-6	2-Methylnaphthalene	ND	2.0	0.41	ug/l	
88-74-4	2-Nitroaniline	ND	5.0	0.66	ug/l	
99-09-2	3-Nitroaniline	ND	5.0	1.3	ug/l	
100-01-6	4-Nitroaniline	ND	5.0	0.72	ug/l	
98-95-3	Nitrobenzene	ND	2.0	0.42	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	2.0	0.47	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	5.0	0.52	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	36%		12-76%
4165-62-2	Phenol-d5	24%		10-59%
118-79-6	2,4,6-Tribromophenol	78%		42-128%
4165-60-0	Nitrobenzene-d5	83%		30-122%
321-60-8	2-Fluorobiphenyl	77%		34-113%
1718-51-0	Terphenyl-d14	96%		42-125%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	system artifact	3.78	13	ug/l	J
	Total TIC, Semi-Volatile		0	ug/l	

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N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-103DS-082206		
Lab Sample ID:	J39095-5	**Date Sampled:**	08/22/06
Matrix:	AQ - Ground Water	**Date Received:**	08/22/06
Method:	SW846 8270C BY SIM SW846 3510C	**Percent Solids:**	n/a
Project:	Quanta 2006 Groundwater Resources, Edgewater, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Z29544.D	1	09/02/06	KLS	08/23/06	OP24575	EZ917
Run #2							

	Initial Volume	Final Volume
Run #1	1000 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
87-86-5	Pentachlorophenol	ND	1.0	0.40	ug/l	
83-32-9	Acenaphthene	ND	0.20	0.017	ug/l	
208-96-8	Acenaphthylene	ND	0.20	0.0095	ug/l	
120-12-7	Anthracene	ND	0.20	0.021	ug/l	
56-55-3	Benzo(a)anthracene	ND	0.20	0.0068	ug/l	
50-32-8	Benzo(a)pyrene	ND	0.20	0.017	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	0.20	0.036	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	0.20	0.018	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	0.20	0.016	ug/l	
218-01-9	Chrysene	ND	0.20	0.017	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	0.20	0.016	ug/l	
206-44-0	Fluoranthene	0.230	0.20	0.0090	ug/l	
86-73-7	Fluorene	ND	0.20	0.020	ug/l	
118-74-1	Hexachlorobenzene	ND	0.10	0.061	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.20	0.011	ug/l	
91-20-3	Naphthalene	0.785	0.20	0.026	ug/l	
85-01-8	Phenanthrene	0.449	0.20	0.021	ug/l	
129-00-0	Pyrene	0.226	0.20	0.014	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	41%		10-99%
4165-62-2	Phenol-d5	29%		10-83%
118-79-6	2,4,6-Tribromophenol	105%		10-140%
4165-60-0	Nitrobenzene-d5	77%		11-140%
321-60-8	2-Fluorobiphenyl	67%		10-133%
1718-51-0	Terphenyl-d14	88%		13-130%

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E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-103DS-082206		
Lab Sample ID:	J39095-5	**Date Sampled:**	08/22/06
Matrix:	AQ - Ground Water	**Date Received:**	08/22/06
Method:	SW846 8082 SW846 3510C	**Percent Solids:**	n/a
Project:	Quanta 2006 Groundwater Resources, Edgewater, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	AB59333.D	1	08/25/06	JSE	08/23/06	OP24578	GAB2696
Run #2							

	Initial Volume	Final Volume
Run #1	1000 ml	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	0.50	0.094	ug/l	
11104-28-2	Aroclor 1221	ND	0.50	0.47	ug/l	
11141-16-5	Aroclor 1232	ND	0.50	0.39	ug/l	
53469-21-9	Aroclor 1242	ND	0.50	0.16	ug/l	
12672-29-6	Aroclor 1248	ND	0.50	0.15	ug/l	
11097-69-1	Aroclor 1254	ND	0.50	0.11	ug/l	
11096-82-5	Aroclor 1260	ND	0.50	0.12	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	77%		38-133%
877-09-8	Tetrachloro-m-xylene	81%		38-133%
2051-24-3	Decachlorobiphenyl	96%		18-156%
2051-24-3	Decachlorobiphenyl	97%		18-156%

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RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-103DS-082206		
Lab Sample ID:	J39095-5	**Date Sampled:**	08/22/06
Matrix:	AQ - Ground Water	**Date Received:**	08/22/06
		Percent Solids:	n/a
Project:	Quanta 2006 Groundwater Resources, Edgewater, NJ		

Total Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Arsenic	2.9	2.0	ug/l	1	08/28/06	09/11/06	LH	SW846 6010B [2]	SW846 3010A [3]
Lead	< 3.0	3.0	ug/l	1	08/28/06	09/01/06	ND	SW846 6010B [1]	SW846 3010A [3]

(1) Instrument QC Batch: MA17997
(2) Instrument QC Batch: MA18032
(3) Prep QC Batch: MP35699

RL = Reporting Limit

Report of Analysis

Client Sample ID:	MW-111B-082206		
Lab Sample ID:	J39095-6	**Date Sampled:**	08/22/06
Matrix:	AQ - Ground Water	**Date Received:**	08/22/06
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Quanta 2006 Groundwater Resources, Edgewater, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3A28270.D	1	08/31/06	LY	n/a	n/a	V3A1181
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List (OLM4.2)

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	2.4	ug/l	
71-43-2	Benzene	ND	1.0	0.21	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.17	ug/l	
75-25-2	Bromoform	ND	4.0	0.54	ug/l	
74-83-9	Bromomethane	ND	2.0	0.22	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	2.6	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.21	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.29	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.22	ug/l	
75-00-3	Chloroethane	ND	1.0	0.56	ug/l	
67-66-3	Chloroform	ND	1.0	0.22	ug/l	
74-87-3	Chloromethane	ND	1.0	0.35	ug/l	
110-82-7	Cyclohexane	ND	5.0	0.50	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	10	1.1	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.19	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	0.52	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.20	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.32	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.24	ug/l	
75-71-8	Dichlorodifluoromethane	ND	5.0	0.75	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.23	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.29	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.33	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.18	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.42	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.20	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.15	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.20	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.20	ug/l	
76-13-1	Freon 113	ND	5.0	0.69	ug/l	
591-78-6	2-Hexanone	ND	5.0	1.3	ug/l	
98-82-8	Isopropylbenzene	ND	2.0	0.20	ug/l	

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E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-111B-082206		
Lab Sample ID:	J39095-6	**Date Sampled:**	08/22/06
Matrix:	AQ - Ground Water	**Date Received:**	08/22/06
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Quanta 2006 Groundwater Resources, Edgewater, NJ		

VOA TCL List (OLM4.2)

CAS No.	Compound	Result	RL	MDL	Units	Q
79-20-9	Methyl Acetate	ND	5.0	2.1	ug/l	
108-87-2	Methylcyclohexane	ND	5.0	0.18	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.31	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.1	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.27	ug/l	
100-42-5	Styrene	ND	5.0	0.16	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.28	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.28	ug/l	
108-88-3	Toluene	ND	1.0	0.20	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.16	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.28	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.32	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.29	ug/l	
75-69-4	Trichlorofluoromethane	ND	5.0	0.25	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.29	ug/l	
	m,p-Xylene	ND	1.0	0.42	ug/l	
95-47-6	o-Xylene	ND	1.0	0.31	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.31	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	112%		77-121%
17060-07-0	1,2-Dichloroethane-D4	107%		65-133%
2037-26-5	Toluene-D8	99%		80-117%
460-00-4	4-Bromofluorobenzene	93%		79-124%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-111B-082206		
Lab Sample ID:	J39095-6	**Date Sampled:**	08/22/06
Matrix:	AQ - Ground Water	**Date Received:**	08/22/06
Method:	SW846 8270C SW846 3510C	**Percent Solids:**	n/a
Project:	Quanta 2006 Groundwater Resources, Edgewater, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	F61441.D	1	08/31/06	NAP	08/23/06	OP24573	EF3019
Run #2							

	Initial Volume	Final Volume
Run #1	1000 ml	1.0 ml
Run #2		

ABN TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	5.0	0.95	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	5.0	1.2	ug/l	
120-83-2	2,4-Dichlorophenol	ND	5.0	1.6	ug/l	
105-67-9	2,4-Dimethylphenol	ND	5.0	1.6	ug/l	
51-28-5	2,4-Dinitrophenol	ND	20	0.89	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	20	0.72	ug/l	
95-48-7	2-Methylphenol	ND	5.0	1.4	ug/l	
	3&4-Methylphenol	ND	5.0	1.3	ug/l	
88-75-5	2-Nitrophenol	ND	5.0	1.8	ug/l	
100-02-7	4-Nitrophenol	ND	20	0.84	ug/l	
108-95-2	Phenol	ND	5.0	0.50	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	5.0	1.9	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	5.0	1.3	ug/l	
98-86-2	Acetophenone	ND	5.0	0.37	ug/l	
1912-24-9	Atrazine	ND	5.0	0.16	ug/l	
100-52-7	Benzaldehyde	ND	5.0	0.27	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	2.0	0.30	ug/l	
85-68-7	Butyl benzyl phthalate	ND	2.0	0.59	ug/l	
92-52-4	1,1'-Biphenyl	ND	2.0	0.33	ug/l	
91-58-7	2-Chloronaphthalene	ND	5.0	0.98	ug/l	
106-47-8	4-Chloroaniline	ND	5.0	0.40	ug/l	
86-74-8	Carbazole	ND	2.0	0.36	ug/l	
105-60-2	Caprolactam	ND	2.0	0.32	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	2.0	0.65	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	2.0	0.53	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	2.0	0.74	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	2.0	0.43	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	2.0	0.86	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	2.0	0.56	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	5.0	1.2	ug/l	
132-64-9	Dibenzofuran	ND	5.0	0.34	ug/l	
84-74-2	Di-n-butyl phthalate	ND	2.0	0.59	ug/l	

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Report of Analysis

Client Sample ID:	MW-111B-082206		
Lab Sample ID:	J39095-6	**Date Sampled:**	08/22/06
Matrix:	AQ - Ground Water	**Date Received:**	08/22/06
Method:	SW846 8270C SW846 3510C	**Percent Solids:**	n/a
Project:	Quanta 2006 Groundwater Resources, Edgewater, NJ		

ABN TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
117-84-0	Di-n-octyl phthalate	ND	2.0	0.57	ug/l	
84-66-2	Diethyl phthalate	ND	2.0	0.39	ug/l	
131-11-3	Dimethyl phthalate	ND	2.0	0.33	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	2.0	0.66	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.18	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	20	0.41	ug/l	
67-72-1	Hexachloroethane	ND	5.0	0.28	ug/l	
78-59-1	Isophorone	ND	2.0	0.59	ug/l	
91-57-6	2-Methylnaphthalene	ND	2.0	0.41	ug/l	
88-74-4	2-Nitroaniline	ND	5.0	0.66	ug/l	
99-09-2	3-Nitroaniline	ND	5.0	1.3	ug/l	
100-01-6	4-Nitroaniline	ND	5.0	0.72	ug/l	
98-95-3	Nitrobenzene	ND	2.0	0.42	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	2.0	0.47	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	5.0	0.52	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	42%		12-76%
4165-62-2	Phenol-d5	30%		10-59%
118-79-6	2,4,6-Tribromophenol	87%		42-128%
4165-60-0	Nitrobenzene-d5	93%		30-122%
321-60-8	2-Fluorobiphenyl	81%		34-113%
1718-51-0	Terphenyl-d14	91%		42-125%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	system artifact	3.72	20	ug/l	J
	Total TIC, Semi-Volatile		0	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-111B-082206		
Lab Sample ID:	J39095-6	**Date Sampled:**	08/22/06
Matrix:	AQ - Ground Water	**Date Received:**	08/22/06
Method:	SW846 8270C BY SIM SW846 3510C	**Percent Solids:**	n/a
Project:	Quanta 2006 Groundwater Resources, Edgewater, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Z29584.D	1	09/05/06	KLS	08/23/06	OP24575	EZ918
Run #2							

	Initial Volume	Final Volume
Run #1	1000 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
87-86-5	Pentachlorophenol	ND	1.0	0.40	ug/l	
83-32-9	Acenaphthene	0.574	0.20	0.017	ug/l	
208-96-8	Acenaphthylene	ND	0.20	0.0095	ug/l	
120-12-7	Anthracene	0.380	0.20	0.021	ug/l	
56-55-3	Benzo(a)anthracene	ND	0.20	0.0068	ug/l	
50-32-8	Benzo(a)pyrene	ND	0.20	0.017	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	0.20	0.036	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	0.20	0.018	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	0.20	0.016	ug/l	
218-01-9	Chrysene	ND	0.20	0.017	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	0.20	0.016	ug/l	
206-44-0	Fluoranthene	1.01	0.20	0.0090	ug/l	
86-73-7	Fluorene	0.344	0.20	0.020	ug/l	
118-74-1	Hexachlorobenzene	ND	0.10	0.061	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.20	0.011	ug/l	
91-20-3	Naphthalene	2.35	0.20	0.026	ug/l	
85-01-8	Phenanthrene	ND	0.20	0.021	ug/l	
129-00-0	Pyrene	0.911	0.20	0.014	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	46%		10-99%
4165-62-2	Phenol-d5	32%		10-83%
118-79-6	2,4,6-Tribromophenol	111%		10-140%
4165-60-0	Nitrobenzene-d5	81%		11-140%
321-60-8	2-Fluorobiphenyl	71%		10-133%
1718-51-0	Terphenyl-d14	75%		13-130%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-111B-082206		
Lab Sample ID:	J39095-6	**Date Sampled:**	08/22/06
Matrix:	AQ - Ground Water	**Date Received:**	08/22/06
Method:	SW846 8081A SW846 3510C	**Percent Solids:**	n/a
Project:	Quanta 2006 Groundwater Resources, Edgewater, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2G12565.D	1	08/25/06	JSE	08/23/06	OP24576	G2G511
Run #2							

	Initial Volume	Final Volume
Run #1	930 ml	10.0 ml
Run #2		

Pesticide TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
309-00-2	Aldrin	ND	0.022	0.0036	ug/l	
319-84-6	alpha-BHC	ND	0.022	0.0028	ug/l	
319-85-7	beta-BHC	ND	0.022	0.0066	ug/l	
319-86-8	delta-BHC	ND	0.022	0.0033	ug/l	
58-89-9	gamma-BHC (Lindane)	ND	0.022	0.0018	ug/l	
5103-71-9	alpha-Chlordane	ND	0.022	0.0047	ug/l	
5103-74-2	gamma-Chlordane	ND	0.022	0.0018	ug/l	
60-57-1	Dieldrin	ND	0.022	0.0018	ug/l	
72-54-8	4,4'-DDD	ND	0.022	0.0026	ug/l	
72-55-9	4,4'-DDE	ND	0.022	0.0018	ug/l	
50-29-3	4,4'-DDT	ND	0.022	0.0053	ug/l	
72-20-8	Endrin	ND	0.022	0.0032	ug/l	
1031-07-8	Endosulfan sulfate	ND	0.022	0.0050	ug/l	
7421-93-4	Endrin aldehyde	ND	0.022	0.0069	ug/l	
53494-70-5	Endrin ketone	ND	0.054	0.0038	ug/l	
959-98-8	Endosulfan-I	ND	0.022	0.0023	ug/l	
33213-65-9	Endosulfan-II	ND	0.022	0.0035	ug/l	
76-44-8	Heptachlor	ND	0.022	0.0028	ug/l	
1024-57-3	Heptachlor epoxide	ND	0.022	0.0016	ug/l	
72-43-5	Methoxychlor	ND	0.054	0.0073	ug/l	
8001-35-2	Toxaphene	ND	0.27	0.10	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	75%		36-126%
877-09-8	Tetrachloro-m-xylene	73%		36-126%
2051-24-3	Decachlorobiphenyl	29%		15-142%
2051-24-3	Decachlorobiphenyl	31%		15-142%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-111B-082206		
Lab Sample ID:	J39095-6	**Date Sampled:**	08/22/06
Matrix:	AQ - Ground Water	**Date Received:**	08/22/06
Method:	SW846 8082 SW846 3510C	**Percent Solids:**	n/a
Project:	Quanta 2006 Groundwater Resources, Edgewater, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	AB59313.D	1	08/24/06	JSE	08/23/06	OP24578	GAB2695
Run #2							

	Initial Volume	Final Volume
Run #1	1000 ml	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	0.50	0.094	ug/l	
11104-28-2	Aroclor 1221	ND	0.50	0.47	ug/l	
11141-16-5	Aroclor 1232	ND	0.50	0.39	ug/l	
53469-21-9	Aroclor 1242	ND	0.50	0.16	ug/l	
12672-29-6	Aroclor 1248	ND	0.50	0.15	ug/l	
11097-69-1	Aroclor 1254	ND	0.50	0.11	ug/l	
11096-82-5	Aroclor 1260	ND	0.50	0.12	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	74%		38-133%
877-09-8	Tetrachloro-m-xylene	72%		38-133%
2051-24-3	Decachlorobiphenyl	31%		18-156%
2051-24-3	Decachlorobiphenyl	31%		18-156%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-111B-082206		
Lab Sample ID:	J39095-6	**Date Sampled:**	08/22/06
Matrix:	AQ - Ground Water	**Date Received:**	08/22/06
		Percent Solids:	n/a
Project:	Quanta 2006 Groundwater Resources, Edgewater, NJ		

Total Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Arsenic	59800	40	ug/l	5	08/28/06	08/29/06	ND	SW846 6010B [1]	SW846 3010A [2]
Lead	6.5	3.0	ug/l	1	08/28/06	08/29/06	ND	SW846 6010B [1]	SW846 3010A [2]

(1) Instrument QC Batch: MA17977
(2) Prep QC Batch: MP35699

RL = Reporting Limit

Report of Analysis

Client Sample ID:	MW-111B-082206		
Lab Sample ID:	J39095-6	**Date Sampled:**	08/22/06
Matrix:	AQ - Ground Water	**Date Received:**	08/22/06
		Percent Solids:	n/a
Project:	Quanta 2006 Groundwater Resources, Edgewater, NJ		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Nitrogen, Ammonia	5.3	0.30	mg/l	3	09/01/06 14:32	NR	EPA 350.1/LACHAT

RL = Reporting Limit

Report of Analysis

Client Sample ID:	MW-113B-082206		
Lab Sample ID:	J39095-7	**Date Sampled:**	08/22/06
Matrix:	AQ - Ground Water	**Date Received:**	08/22/06
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Quanta 2006 Groundwater Resources, Edgewater, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3A28271.D	1	08/31/06	LY	n/a	n/a	V3A1181
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List (OLM4.2)

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	2.4	ug/l	
71-43-2	Benzene	3.1	1.0	0.21	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.17	ug/l	
75-25-2	Bromoform	ND	4.0	0.54	ug/l	
74-83-9	Bromomethane	ND	2.0	0.22	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	2.6	ug/l	
75-15-0	Carbon disulfide	0.85	2.0	0.21	ug/l	J
56-23-5	Carbon tetrachloride	ND	1.0	0.29	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.22	ug/l	
75-00-3	Chloroethane	ND	1.0	0.56	ug/l	
67-66-3	Chloroform	ND	1.0	0.22	ug/l	
74-87-3	Chloromethane	ND	1.0	0.35	ug/l	
110-82-7	Cyclohexane	ND	5.0	0.50	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	10	1.1	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.19	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	0.52	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.20	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.32	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.24	ug/l	
75-71-8	Dichlorodifluoromethane	ND	5.0	0.75	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.23	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.29	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.33	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.18	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.42	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.20	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.15	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.20	ug/l	
100-41-4	Ethylbenzene	0.62	1.0	0.20	ug/l	J
76-13-1	Freon 113	ND	5.0	0.69	ug/l	
591-78-6	2-Hexanone	ND	5.0	1.3	ug/l	
98-82-8	Isopropylbenzene	ND	2.0	0.20	ug/l	

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RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-113B-082206		
Lab Sample ID:	J39095-7	**Date Sampled:**	08/22/06
Matrix:	AQ - Ground Water	**Date Received:**	08/22/06
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Quanta 2006 Groundwater Resources, Edgewater, NJ		

VOA TCL List (OLM4.2)

CAS No.	Compound	Result	RL	MDL	Units	Q
79-20-9	Methyl Acetate	ND	5.0	2.1	ug/l	
108-87-2	Methylcyclohexane	ND	5.0	0.18	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.31	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.1	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.27	ug/l	
100-42-5	Styrene	ND	5.0	0.16	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.28	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.28	ug/l	
108-88-3	Toluene	0.74	1.0	0.20	ug/l	J
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.16	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.28	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.32	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.29	ug/l	
75-69-4	Trichlorofluoromethane	ND	5.0	0.25	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.29	ug/l	
	m,p-Xylene	1.0	1.0	0.42	ug/l	
95-47-6	o-Xylene	1.2	1.0	0.31	ug/l	
1330-20-7	Xylene (total)	2.2	1.0	0.31	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	113%		77-121%
17060-07-0	1,2-Dichloroethane-D4	110%		65-133%
2037-26-5	Toluene-D8	100%		80-117%
460-00-4	4-Bromofluorobenzene	93%		79-124%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
91-20-3	Naphthalene	19.21	13	ug/l	JN
	Total TIC, Volatile		13	ug/l	J

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RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-113B-082206		
Lab Sample ID:	J39095-7	**Date Sampled:**	08/22/06
Matrix:	AQ - Ground Water	**Date Received:**	08/22/06
Method:	SW846 8270C SW846 3510C	**Percent Solids:**	n/a
Project:	Quanta 2006 Groundwater Resources, Edgewater, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3E2050.D	1	09/05/06	MMC	08/23/06	OP24573	E3E71
Run #2							

	Initial Volume	Final Volume
Run #1	1000 ml	1.0 ml
Run #2		

ABN TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	5.0	0.95	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	5.0	1.2	ug/l	
120-83-2	2,4-Dichlorophenol	ND	5.0	1.6	ug/l	
105-67-9	2,4-Dimethylphenol	ND	5.0	1.6	ug/l	
51-28-5	2,4-Dinitrophenol	ND	20	0.89	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	20	0.72	ug/l	
95-48-7	2-Methylphenol	ND	5.0	1.4	ug/l	
	3&4-Methylphenol	ND	5.0	1.3	ug/l	
88-75-5	2-Nitrophenol	ND	5.0	1.8	ug/l	
100-02-7	4-Nitrophenol	ND	20	0.84	ug/l	
108-95-2	Phenol	ND	5.0	0.50	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	5.0	1.9	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	5.0	1.3	ug/l	
98-86-2	Acetophenone	ND	5.0	0.37	ug/l	
1912-24-9	Atrazine	ND	5.0	0.16	ug/l	
100-52-7	Benzaldehyde	ND	5.0	0.27	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	2.0	0.30	ug/l	
85-68-7	Butyl benzyl phthalate	ND	2.0	0.59	ug/l	
92-52-4	1,1'-Biphenyl	ND	2.0	0.33	ug/l	
91-58-7	2-Chloronaphthalene	ND	5.0	0.98	ug/l	
106-47-8	4-Chloroaniline	ND	5.0	0.40	ug/l	
86-74-8	Carbazole	2.8	2.0	0.36	ug/l	
105-60-2	Caprolactam	ND	2.0	0.32	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	2.0	0.65	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	2.0	0.53	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	2.0	0.74	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	2.0	0.43	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	2.0	0.86	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	2.0	0.56	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	5.0	1.2	ug/l	
132-64-9	Dibenzofuran	1.6	5.0	0.34	ug/l	J
84-74-2	Di-n-butyl phthalate	ND	2.0	0.59	ug/l	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
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E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-113B-082206		
Lab Sample ID:	J39095-7	**Date Sampled:**	08/22/06
Matrix:	AQ - Ground Water	**Date Received:**	08/22/06
Method:	SW846 8270C SW846 3510C	**Percent Solids:**	n/a
Project:	Quanta 2006 Groundwater Resources, Edgewater, NJ		

ABN TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
117-84-0	Di-n-octyl phthalate	ND	2.0	0.57	ug/l	
84-66-2	Diethyl phthalate	ND	2.0	0.39	ug/l	
131-11-3	Dimethyl phthalate	ND	2.0	0.33	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	2.0	0.66	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.18	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	20	0.41	ug/l	
67-72-1	Hexachloroethane	ND	5.0	0.28	ug/l	
78-59-1	Isophorone	ND	2.0	0.59	ug/l	
91-57-6	2-Methylnaphthalene	1.5	2.0	0.41	ug/l	J
88-74-4	2-Nitroaniline	ND	5.0	0.66	ug/l	
99-09-2	3-Nitroaniline	ND	5.0	1.3	ug/l	
100-01-6	4-Nitroaniline	ND	5.0	0.72	ug/l	
98-95-3	Nitrobenzene	ND	2.0	0.42	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	2.0	0.47	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	5.0	0.52	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	25%		12-76%
4165-62-2	Phenol-d5	18%		10-59%
118-79-6	2,4,6-Tribromophenol	75%		42-128%
4165-60-0	Nitrobenzene-d5	61%		30-122%
321-60-8	2-Fluorobiphenyl	56%		34-113%
1718-51-0	Terphenyl-d14	80%		42-125%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	system artifact	3.78	8.2	ug/l	J
464	Bicyclo[2.2.1]heptan-2-one, 1,7,7-	8.24	4	ug/l	JN
	unknown	15.01	5.8	ug/l	J
	Total TIC, Semi-Volatile		9.8	ug/l	J

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-113B-082206		
Lab Sample ID:	J39095-7	**Date Sampled:**	08/22/06
Matrix:	AQ - Ground Water	**Date Received:**	08/22/06
Method:	SW846 8270C BY SIM SW846 3510C	**Percent Solids:**	n/a
Project:	Quanta 2006 Groundwater Resources, Edgewater, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Z29545.D	1	09/02/06	KLS	08/23/06	OP24575	EZ917
Run #2							

	Initial Volume	Final Volume
Run #1	1000 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
87-86-5	Pentachlorophenol	ND	1.0	0.40	ug/l	
83-32-9	Acenaphthene	2.48	0.20	0.017	ug/l	
208-96-8	Acenaphthylene	ND	0.20	0.0095	ug/l	
120-12-7	Anthracene	1.78	0.20	0.021	ug/l	
56-55-3	Benzo(a)anthracene	0.361	0.20	0.0068	ug/l	
50-32-8	Benzo(a)pyrene	ND	0.20	0.017	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	0.20	0.036	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	0.20	0.018	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	0.20	0.016	ug/l	
218-01-9	Chrysene	0.295	0.20	0.017	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	0.20	0.016	ug/l	
206-44-0	Fluoranthene	2.88	0.20	0.0090	ug/l	
86-73-7	Fluorene	1.86	0.20	0.020	ug/l	
118-74-1	Hexachlorobenzene	ND	0.10	0.061	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.20	0.011	ug/l	
91-20-3	Naphthalene	7.53	0.20	0.026	ug/l	
85-01-8	Phenanthrene	5.49	0.20	0.021	ug/l	
129-00-0	Pyrene	2.56	0.20	0.014	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	30%		10-99%
4165-62-2	Phenol-d5	23%		10-83%
118-79-6	2,4,6-Tribromophenol	101%		10-140%
4165-60-0	Nitrobenzene-d5	60%		11-140%
321-60-8	2-Fluorobiphenyl	48%		10-133%
1718-51-0	Terphenyl-d14	68%		13-130%

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E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-113B-082206		
Lab Sample ID:	J39095-7	**Date Sampled:**	08/22/06
Matrix:	AQ - Ground Water	**Date Received:**	08/22/06
Method:	SW846 8081A SW846 3510C	**Percent Solids:**	n/a
Project:	Quanta 2006 Groundwater Resources, Edgewater, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2G12718.D	1	08/31/06	JSE	08/23/06	OP24576	G2G516
Run #2							

	Initial Volume	Final Volume
Run #1	1000 ml	10.0 ml
Run #2		

Pesticide TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
309-00-2	Aldrin	ND	0.020	0.0033	ug/l	
319-84-6	alpha-BHC	ND	0.020	0.0026	ug/l	
319-85-7	beta-BHC	ND	0.020	0.0062	ug/l	
319-86-8	delta-BHC	ND	0.020	0.0031	ug/l	
58-89-9	gamma-BHC (Lindane)	ND	0.020	0.0017	ug/l	
5103-71-9	alpha-Chlordane	ND	0.020	0.0044	ug/l	
5103-74-2	gamma-Chlordane	ND	0.020	0.0017	ug/l	
60-57-1	Dieldrin	ND	0.020	0.0017	ug/l	
72-54-8	4,4'-DDD	ND	0.020	0.0024	ug/l	
72-55-9	4,4'-DDE	ND	0.020	0.0017	ug/l	
50-29-3	4,4'-DDT	ND	0.020	0.0049	ug/l	
72-20-8	Endrin	ND	0.020	0.0030	ug/l	
1031-07-8	Endosulfan sulfate	ND	0.020	0.0046	ug/l	
7421-93-4	Endrin aldehyde	ND	0.020	0.0064	ug/l	
53494-70-5	Endrin ketone	ND	0.050	0.0035	ug/l	
959-98-8	Endosulfan-I	ND	0.020	0.0021	ug/l	
33213-65-9	Endosulfan-II	ND	0.020	0.0032	ug/l	
76-44-8	Heptachlor	ND	0.020	0.0026	ug/l	
1024-57-3	Heptachlor epoxide	ND	0.020	0.0015	ug/l	
72-43-5	Methoxychlor	ND	0.050	0.0068	ug/l	
8001-35-2	Toxaphene	ND	0.25	0.094	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	65%		36-126%
877-09-8	Tetrachloro-m-xylene	59%		36-126%
2051-24-3	Decachlorobiphenyl	55%		15-142%
2051-24-3	Decachlorobiphenyl	64%		15-142%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-113B-082206		
Lab Sample ID:	J39095-7	**Date Sampled:**	08/22/06
Matrix:	AQ - Ground Water	**Date Received:**	08/22/06
Method:	SW846 8082 SW846 3510C	**Percent Solids:**	n/a
Project:	Quanta 2006 Groundwater Resources, Edgewater, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	AB59328.D	1	08/25/06	JSE	08/23/06	OP24578	GAB2695
Run #2							

	Initial Volume	Final Volume
Run #1	1000 ml	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	0.50	0.094	ug/l	
11104-28-2	Aroclor 1221	ND	0.50	0.47	ug/l	
11141-16-5	Aroclor 1232	ND	0.50	0.39	ug/l	
53469-21-9	Aroclor 1242	ND	0.50	0.16	ug/l	
12672-29-6	Aroclor 1248	ND	0.50	0.15	ug/l	
11097-69-1	Aroclor 1254	ND	0.50	0.11	ug/l	
11096-82-5	Aroclor 1260	ND	0.50	0.12	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	85%		38-133%
877-09-8	Tetrachloro-m-xylene	59%		38-133%
2051-24-3	Decachlorobiphenyl	63%		18-156%
2051-24-3	Decachlorobiphenyl	60%		18-156%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-113B-082206		
Lab Sample ID:	J39095-7	**Date Sampled:**	08/22/06
Matrix:	AQ - Ground Water	**Date Received:**	08/22/06
		Percent Solids:	n/a
Project:	Quanta 2006 Groundwater Resources, Edgewater, NJ		

Total Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Arsenic	12400	8.0	ug/l	1	08/28/06	09/01/06	ND	SW846 6010B [1]	SW846 3010A [2]
Lead	4.7	3.0	ug/l	1	08/28/06	09/01/06	ND	SW846 6010B [1]	SW846 3010A [2]

(1) Instrument QC Batch: MA17997
(2) Prep QC Batch: MP35699

RL = Reporting Limit

Report of Analysis

Client Sample ID:	TB-081406-GW		
Lab Sample ID:	J39095-8	**Date Sampled:**	08/22/06
Matrix:	AQ - Trip Blank Water	**Date Received:**	08/22/06
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Quanta 2006 Groundwater Resources, Edgewater, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3A28272.D	1	08/31/06	LY	n/a	n/a	V3A1181
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List (OLM4.2)

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	2.4	ug/l	
71-43-2	Benzene	ND	1.0	0.21	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.17	ug/l	
75-25-2	Bromoform	ND	4.0	0.54	ug/l	
74-83-9	Bromomethane	ND	2.0	0.22	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	2.6	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.21	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.29	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.22	ug/l	
75-00-3	Chloroethane	ND	1.0	0.56	ug/l	
67-66-3	Chloroform	ND	1.0	0.22	ug/l	
74-87-3	Chloromethane	ND	1.0	0.35	ug/l	
110-82-7	Cyclohexane	ND	5.0	0.50	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	10	1.1	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.19	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	0.52	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.20	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.32	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.24	ug/l	
75-71-8	Dichlorodifluoromethane	ND	5.0	0.75	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.23	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.29	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.33	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.18	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.42	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.20	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.15	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.20	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.20	ug/l	
76-13-1	Freon 113	ND	5.0	0.69	ug/l	
591-78-6	2-Hexanone	ND	5.0	1.3	ug/l	
98-82-8	Isopropylbenzene	ND	2.0	0.20	ug/l	

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Report of Analysis

Client Sample ID:	TB-081406-GW		
Lab Sample ID:	J39095-8	**Date Sampled:**	08/22/06
Matrix:	AQ - Trip Blank Water	**Date Received:**	08/22/06
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Quanta 2006 Groundwater Resources, Edgewater, NJ		

VOA TCL List (OLM4.2)

CAS No.	Compound	Result	RL	MDL	Units	Q
79-20-9	Methyl Acetate	ND	5.0	2.1	ug/l	
108-87-2	Methylcyclohexane	ND	5.0	0.18	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.31	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.1	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.27	ug/l	
100-42-5	Styrene	ND	5.0	0.16	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.28	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.28	ug/l	
108-88-3	Toluene	ND	1.0	0.20	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.16	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.28	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.32	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.29	ug/l	
75-69-4	Trichlorofluoromethane	ND	5.0	0.25	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.29	ug/l	
	m,p-Xylene	ND	1.0	0.42	ug/l	
95-47-6	o-Xylene	ND	1.0	0.31	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.31	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	112%		77-121%
17060-07-0	1,2-Dichloroethane-D4	106%		65-133%
2037-26-5	Toluene-D8	98%		80-117%
460-00-4	4-Bromofluorobenzene	95%		79-124%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

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E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

New Jersey

ACCUTEST LABORATORIES

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody

SW, TB

Accutest Labs
[illegible]
Dayton, NJ 08810
732-329-0200

Honeywell — Chain Of Custody / Analysis Request

J39095

AESI Ref: 38946.64932
COC#: 082206-GW-A
Lab Proj # (SDG):
Lab ID
Site ID
Lab Job #
Authorized User: Honeywell

Site Name: Quanta Resources (Edgewater)
Location of Site: Edgewater, NJ
Phase:
Sampling Program: Quanta 2006 Groundwater

EDD To: amy.klopper@ch2m.com, john.mitchell@ch2m.com
Sampler: Austin Harsolerode/CH2M HILL
PO #
Analysis Turnaround Time (TAT): 10
Consultant: CH2M
Full Report TAT:

Sampling Co.: CH2M HILL
Client Contact: (name, co., address)
Jennifer Simms
1700 Market Street, Suite 1600
Philadelphia, PA 19103
[redacted]
Hard Copy To: Amy Klopper, 3011 Southwest Williston Road, [illegible]
Invoice To: jennifer.simms@ch2m.com

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	Location ID	Start Depth (ft)	End Depth (ft)	Field Sample ID	Sample Date	Sample Time	Sample Type	Sample Matrix	Sample Purpose	# of Cont.	Units		SW6260 - VOCs	SW6270 - SVOCs	SW6270-SIM	SW6010 - As, Pb	SW6081 - Pesticides	SW6082 - PCBs	E350.2 - Ammonia	Sampling Method (code)	Lab Sample Numbers
													0	1	1	10	1	1	7		
1	MW-113C	–	1	MW-113C-082206	8/21/06	1605	GW	WATER	REG	8	G	N	X	X	X	X		X		Bld pump	
2	MW-113A	–	2	MW-113A-082206	8/21/06	1620	GW	WATER	REG	9	G	N	X	X	X	X	X	X		Bld pump	
3	MW-116DS	–	3	MW-116DS-082206	8/22/06	2955	GW	WATER	REG	8	G	N	X	X	X	X		X		Bld pump	
4	MW-103A	–	4	MW-103A-082206	8/22/06	1040	GW	WATER	REG	8	G	N	X	X	X	X	X	X		Bld pump	
5	MW-103DS	–	5	MW-103DS-082206	8/22/06	1140	GW	WATER	REG	8	G	N	X	X	X	X	X	X		Bld pump	MS/MSD
6	MW-111B	–	6	MW-111B-082206	8/22/06	1330	GW	WATER	REG	27	G	N	X	X	X	X	X	X	X	Bld pump	
7	MW-113B	–	7	MW-113B-082206	8/22/06	1510	GW	WATER	REG	8	G	N	X	X	X	X	X	X		01 x 32oz metals	
8	TRIP BLANK	–	8	TB-081406-GW	8/14/06	0:680	BLK WATER	WATER	TB	2	G	N	X							rec'd under preserved	
9																				added HNO3 at lab	
10																				lot #C-16038	
11																				8-22-06	
12																					

SW6010^LLI

Seaworksheet SW6010 - analyze for Arsenic (As) and Lead (Pb)

Relinquished by	Company	Date/Time	Received by	Company	Date/Time	Condition	Cooler Temp.	Custody Seals Intact
[signature]	CH2M HILL	1600	[signature]	ACCUTEST	8/22/06 1700			6A-64-336
[signature]	ACCUTEST	8/22/06 1700	[signature]		8/22/06 1700			48°C-36°C-40°C

Preservatives: (Other; Specify):

0 (none); 1 (4 Deg C); 2 (HCl pH<2); 3 (HNO3 pH<2); 4 (H2SO4 pH<2); 5 (NaOH pH>12); 6 (NaOH, Zn Acetate); 7 (H2SO4 (pH<2), 4 Deg C)); 8 (HCl pH<2); 9 (HCl 4 Deg C); 10 (HNO3 (pH<2), 4Deg C); 11 (4C NaOH (pH>12) & Ascorbic Acid); 12 (4C H2SO4 (pH<2) & Na2S2O3); 13 (Zn Acetate); sp (special instructions)

EX68, AMETII, WC38, 2219
EX29

TB

PhD

5.1

5

J39095: Chain of Custody
Page 1 of 1

New Jersey
ACCUTEST LABORATORIES

10/06/15

Technical Report for

CH2M Hill

Quanta 2006 Groundwater Resources, Edgewater, NJ

Accutest Job Number: J39222

Sampling Date: 08/23/06

Report to:

CH2M Hill

Theresa.Himmer@CH2M.com

ATTN: Theresa Himmer

Total number of pages in report: **65**

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Program and/or state specific certification programs as applicable.

Nancy Cole
Laboratory Director

Client Service contact: Nadine Yakes 732-329-0200

Certifications: NJ(12129), NY(10983), CA, CT, DE, FL, IL, IN, KS, KY, LA, MA, MD, MI, MT, NC, OH VAP (CL0056), AK (UST-103), AZ (AZ0786), PA, RI, SC, TN, TX, VA, WV, DoD ELAP (L-A-B L2248)

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Accutest LabLink@876317 14:22 06-Oct-2015

Sample Summary

CH2M Hill

Job No: J39222

Quanta 2006 Groundwater Resources, Edgewater, NJ

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
J39222-1	08/23/06	07:00	AH	08/23/06	AQ	Equipment Blank	EB-082206-GW
J39222-2	08/23/06	09:10	AH	08/23/06	AQ	Ground Water	MW-118A-082306
J39222-3	08/23/06	09:50	AH	08/23/06	AQ	Ground Water	MW-117B-082306
J39222-4	08/23/06	11:55	AH	08/23/06	AQ	Ground Water	MW-J-082306
J39222-5	08/23/06	12:30	AH	08/23/06	AQ	Ground Water	MW-A-1-082306
J39222-6	08/23/06	13:30	AH	08/23/06	AQ	Equipment Blank	EB-082306-GW
J39222-7	08/23/06	13:30	AH	08/23/06	AQ	Trip Blank Water	TB-082306-GW

CASE NARRATIVE / CONFORMANCE SUMMARY

Client:	CH2M Hill	**Job No**	J39222
Site:	Quanta 2006 Groundwater Resources, Edgewater, NJ	**Report Date**	9/19/2006 10:38:17 AM

6 Sample(s), 1 Trip Blank(s) and 0 Field Blank(s) were collected on 08/23/2006 and were received at Accutest on 08/23/2006 properly preserved, at 6 Deg. C and intact. These Samples received an Accutest job number of J39222. A listing of the Laboratory Sample ID, Client Sample ID and dates of collection are presented in the Results Summary Section of this report. For sample J39222-3, ASNJ was rerun to meet client requirements.

Except as noted below, all method specified calibrations and quality control performance criteria were met for this job. For more information, please refer to QC summary pages.

Volatiles by GCMS By Method SW846 8260B

Matrix AQ **Batch ID:** VU3076

- All samples were analyzed within the recommended method holding time.
- Sample(s) J39837-1MS, J39837-1MSD were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.

Matrix AQ **Batch ID:** VU3082

- All samples were analyzed within the recommended method holding time.
- Sample(s) J39983-1MS, J39983-1MSD were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.
- Matrix Spike Recovery(s) for Styrene are outside control limits. Outside control limits due to matrix interference.
- Matrix Spike Duplicate Recovery(s) for Styrene are outside control limits. Outside control limits due to matrix interference.
- J39222-5: Diluted due to high concentration of non-target compound.

Extractables by GCMS By Method SW846 8270C

Matrix AQ **Batch ID:** OP24587

- All samples were extracted within the recommended method holding time.
- All samples were analyzed within the recommended method holding time.
- Sample(s) J39222-2MS, J39222-2MSD were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.
- Sample(s) J39222-3 have surrogates outside control limits due to dilution.

Extractables by GCMS By Method SW846 8270C BY SIM

Matrix AQ **Batch ID:** OP24588

- All samples were extracted within the recommended method holding time.
- All samples were analyzed within the recommended method holding time.
- Sample(s) J39222-2MS, J39222-2MSD were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.
- Sample(s) J39222-3 have surrogates outside control limits due to matrix interference.
- J39222-3: Confirmation run.
- OP24588-MS, OP24588-MSD for Fluoranthene: 50 ppm was added.
- OP24588-MS, OP24588-MSD for Indeno(1,2,3-cd)pyrene: 50 ppm was added.
- OP24588-MS, OP24588-MSD for Naphthalene: 50 ppm was added.
- OP24588-MS, OP24588-MSD for Pentachlorophenol: 50 ppm was added.
- OP24588-MS, OP24588-MSD for Phenanthrene: 50 ppm was added.
- OP24588-MS, OP24588-MSD for Benzo(a)pyrene: 50 ppm was added.
- OP24588-MS, OP24588-MSD for Hexachlorobenzene: 50 ppm was added.
- OP24588-MS, OP24588-MSD for Fluorene: 50 ppm was added.
- OP24588-MS, OP24588-MSD for Pyrene: 50 ppm was added.
- OP24588-MS, OP24588-MSD for Dibenzo(a,h)anthracene: 50 ppm was added.
- OP24588-MS, OP24588-MSD for Chrysene: 50 ppm was added.
- OP24588-MS, OP24588-MSD for Benzo(k)fluoranthene: 50 ppm was added.
- OP24588-MS, OP24588-MSD for Benzo(g,h,i)perylene: 50 ppm was added.
- OP24588-MS, OP24588-MSD for Benzo(b)fluoranthene: 50 ppm was added.
- OP24588-MS, OP24588-MSD for Acenaphthene: 50 ppm was added.
- OP24588-MS, OP24588-MSD for Acenaphthylene: 50 ppm was added.
- OP24588-MS, OP24588-MSD for Anthracene: 50 ppm was added.
- OP24588-MS, OP24588-MSD for Benzo(a)anthracene: 50 ppm was added.

Extractables by GC By Method SW846 8081A

Matrix AQ **Batch ID:** OP24515

- All samples were extracted within the recommended method holding time.
- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) J38598-2MS, J38598-2MSD, OP24515-MSMSD were used as the QC samples indicated.

Extractables by GC By Method SW846 8082

Matrix AQ **Batch ID:** OP24470

- All samples were extracted within the recommended method holding time.
- All samples were analyzed within the recommended method holding time.
- Sample(s) J38131-1MS, J38131-1MSD, OP24470-MSMSD were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.
- Sample(s) J39222-5 have surrogates outside control limits due to matrix interference.

Metals By Method SW846 6010B

Matrix AQ	**Batch ID:** MP35774

- All samples were digested within the recommended method holding time.
- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) J39323-5MS, J39323-5MSD, J39323-5SDL were used as the QC samples for metals.

Wet Chemistry By Method EPA 350.1/LACHAT

Matrix AQ	**Batch ID:** GP35270

- All samples were prepared within the recommended method holding time.
- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) J39095-6DUP, J39095-6MS were used as the QC samples for Nitrogen, Ammonia.

The Accutest Laboratories of New Jersey certifies that all analysis were performed within method specification. It is further recommended that this report to be used in its entirety.The Accutest Laboratories of NJ, Laboratory Director or assignee as verified by the signature on the cover page has authorized the release of this report(J39222).

Summary of Hits

Job Number: J39222
Account: CH2M Hill
Project: Quanta 2006 Groundwater Resources, Edgewater, NJ
Collected: 08/23/06

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Lab Sample ID Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
J39222-1	**EB-082206-GW**					
No hits reported in this sample.						
J39222-2	**MW-118A-082306**					
Benzene		2.1	1.0	0.21	ug/l	SW846 8260B
Ethylbenzene		5.6	1.0	0.20	ug/l	SW846 8260B
Isopropylbenzene		2.6	2.0	0.20	ug/l	SW846 8260B
Toluene		1.7	1.0	0.20	ug/l	SW846 8260B
m,p-Xylene		2.4	1.0	0.42	ug/l	SW846 8260B
o-Xylene		4.4	1.0	0.31	ug/l	SW846 8260B
Xylene (total)		6.8	1.0	0.31	ug/l	SW846 8260B
Total TIC, Volatile		621 J			ug/l	
Acenaphthene		88.2	2.0	0.35	ug/l	SW846 8270C
1,1'-Biphenyl		4.9	2.0	0.33	ug/l	SW846 8270C
Carbazole		38.3	2.0	0.36	ug/l	SW846 8270C
Dibenzofuran		51.1	5.0	0.34	ug/l	SW846 8270C
Fluoranthene		19.2	2.0	0.25	ug/l	SW846 8270C
Fluorene		69.2	2.0	0.45	ug/l	SW846 8270C
2-Methylnaphthalene		4.1	2.0	0.41	ug/l	SW846 8270C
Naphthalene		148	10	1.6	ug/l	SW846 8270C
Phenanthrene		40.1	2.0	0.36	ug/l	SW846 8270C
Acenaphthylene		1.74	0.20	0.0095	ug/l	SW846 8270C BY SIM
Anthracene		14.7	0.20	0.021	ug/l	SW846 8270C BY SIM
Benzo(a)anthracene		1.53	0.20	0.0068	ug/l	SW846 8270C BY SIM
Benzo(a)pyrene		1.04	0.20	0.017	ug/l	SW846 8270C BY SIM
Benzo(b)fluoranthene		1.10	0.20	0.036	ug/l	SW846 8270C BY SIM
Benzo(g,h,i)perylene		0.752	0.20	0.018	ug/l	SW846 8270C BY SIM
Benzo(k)fluoranthene		0.314	0.20	0.016	ug/l	SW846 8270C BY SIM
Chrysene		1.40	0.20	0.017	ug/l	SW846 8270C BY SIM
Dibenzo(a,h)anthracene		0.600	0.20	0.016	ug/l	SW846 8270C BY SIM
Indeno(1,2,3-cd)pyrene		0.736	0.20	0.011	ug/l	SW846 8270C BY SIM
Pyrene		10.3	0.20	0.014	ug/l	SW846 8270C BY SIM
Total TIC, Semi-Volatile		423.5 J			ug/l	
Arsenic		14.5	8.0		ug/l	SW846 6010B
J39222-3	**MW-117B-082306**					
Benzene		188	10	2.1	ug/l	SW846 8260B
Ethylbenzene		426	10	2.0	ug/l	SW846 8260B
Isopropylbenzene		30.0	20	2.0	ug/l	SW846 8260B
Toluene		424	10	2.0	ug/l	SW846 8260B
m,p-Xylene		468	10	4.2	ug/l	SW846 8260B
o-Xylene		260	10	3.1	ug/l	SW846 8260B

Summary of Hits

Job Number: J39222
Account: CH2M Hill
Project: Quanta 2006 Groundwater Resources, Edgewater, NJ
Collected: 08/23/06

3

Lab Sample ID Client Sample ID Analyte	Result/ Qual	RL	MDL	Units	Method
Xylene (total)	728	10	3.1	ug/l	SW846 8260B
Total TIC, Volatile	14212 J			ug/l	
2,4-Dimethylphenol	829	50	16	ug/l	SW846 8270C
2-Methylphenol	232	50	14	ug/l	SW846 8270C
3&4-Methylphenol	64.1	5.0	1.3	ug/l	SW846 8270C
Phenol	26.2	5.0	0.50	ug/l	SW846 8270C
Acenaphthene	252	20	3.5	ug/l	SW846 8270C
Acenaphthylene	25.4	2.0	0.38	ug/l	SW846 8270C
Anthracene	21.0	2.0	0.40	ug/l	SW846 8270C
1,1'-Biphenyl	71.0	2.0	0.33	ug/l	SW846 8270C
Carbazole	287	20	3.6	ug/l	SW846 8270C
Dibenzofuran	147	50	3.4	ug/l	SW846 8270C
Fluoranthene	16.8	2.0	0.25	ug/l	SW846 8270C
Fluorene	135	20	4.5	ug/l	SW846 8270C
2-Methylnaphthalene	779	20	4.1	ug/l	SW846 8270C
Naphthalene	9110	200	32	ug/l	SW846 8270C
Phenanthrene	148	20	3.6	ug/l	SW846 8270C
Benzo(a)anthracene	1.02	0.20	0.0068	ug/l	SW846 8270C BY SIM
Benzo(a)pyrene	0.292	0.20	0.017	ug/l	SW846 8270C BY SIM
Benzo(b)fluoranthene	0.584	0.20	0.036	ug/l	SW846 8270C BY SIM
Chrysene	1.17	0.20	0.017	ug/l	SW846 8270C BY SIM
Pyrene	14.7	0.20	0.014	ug/l	SW846 8270C BY SIM
Total TIC, Semi-Volatile	3910 J			ug/l	
J39222-4 MW-J-082306					
Chlorobenzene	0.67 J	1.0	0.22	ug/l	SW846 8260B
1,3-Dichlorobenzene	4.1	1.0	0.32	ug/l	SW846 8260B
1,4-Dichlorobenzene	2.1	1.0	0.24	ug/l	SW846 8260B
Acenaphthene	1.70	0.24	0.021	ug/l	SW846 8270C BY SIM
Acenaphthylene	0.433	0.24	0.011	ug/l	SW846 8270C BY SIM
Anthracene	0.910	0.24	0.025	ug/l	SW846 8270C BY SIM
Benzo(a)anthracene	2.62	0.24	0.0082	ug/l	SW846 8270C BY SIM
Benzo(a)pyrene	2.98	0.24	0.020	ug/l	SW846 8270C BY SIM
Benzo(b)fluoranthene	3.29	0.24	0.044	ug/l	SW846 8270C BY SIM
Benzo(g,h,i)perylene	1.25	0.24	0.021	ug/l	SW846 8270C BY SIM
Benzo(k)fluoranthene	1.33	0.24	0.019	ug/l	SW846 8270C BY SIM
Chrysene	2.95	0.24	0.020	ug/l	SW846 8270C BY SIM
Dibenzo(a,h)anthracene	0.347	0.24	0.020	ug/l	SW846 8270C BY SIM
Fluoranthene	6.82	0.24	0.011	ug/l	SW846 8270C BY SIM
Indeno(1,2,3-cd)pyrene	1.26	0.24	0.013	ug/l	SW846 8270C BY SIM
Naphthalene	0.956	0.24	0.031	ug/l	SW846 8270C BY SIM
Phenanthrene	0.492	0.24	0.025	ug/l	SW846 8270C BY SIM
Pyrene	4.91	0.24	0.017	ug/l	SW846 8270C BY SIM
Total TIC, Semi-Volatile	25 J			ug/l	

Summary of Hits

Job Number: J39222
Account: CH2M Hill
Project: Quanta 2006 Groundwater Resources, Edgewater, NJ
Collected: 08/23/06

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
Aroclor 1260		6.1	0.56	0.13	ug/l	SW846 8082
Arsenic		152	8.0		ug/l	SW846 6010B
Lead		45.0	3.0		ug/l	SW846 6010B
J39222-5	**MW-A-1-082306**					
Benzene [a]		62.9	5.0	1.1	ug/l	SW846 8260B
Ethylbenzene [a]		121	5.0	1.0	ug/l	SW846 8260B
Isopropylbenzene [a]		20.6	10	1.0	ug/l	SW846 8260B
Toluene [a]		5.1	5.0	1.0	ug/l	SW846 8260B
m,p-Xylene [a]		9.5	5.0	2.1	ug/l	SW846 8260B
o-Xylene [a]		13.3	5.0	1.5	ug/l	SW846 8260B
Xylene (total) [a]		22.8	5.0	1.5	ug/l	SW846 8260B
Total TIC, Volatile		2487 J			ug/l	
2,4-Dimethylphenol		32.0	6.0	2.0	ug/l	SW846 8270C
2-Methylphenol		2.0 J	6.0	1.6	ug/l	SW846 8270C
Acenaphthene		55.6	2.4	0.42	ug/l	SW846 8270C
1,1'-Biphenyl		10.9	2.4	0.39	ug/l	SW846 8270C
Carbazole		37.7	2.4	0.43	ug/l	SW846 8270C
Dibenzofuran		8.3	6.0	0.41	ug/l	SW846 8270C
2-Methylnaphthalene		56.8	2.4	0.49	ug/l	SW846 8270C
Naphthalene		1210	48	7.6	ug/l	SW846 8270C
Acenaphthylene		0.886	0.24	0.011	ug/l	SW846 8270C BY SIM
Anthracene		0.772	0.24	0.025	ug/l	SW846 8270C BY SIM
Fluoranthene		0.790	0.24	0.011	ug/l	SW846 8270C BY SIM
Fluorene		8.05	0.24	0.024	ug/l	SW846 8270C BY SIM
Phenanthrene		4.37	0.24	0.025	ug/l	SW846 8270C BY SIM
Pyrene		0.396	0.24	0.017	ug/l	SW846 8270C BY SIM
Total TIC, Semi-Volatile		1661 J			ug/l	
Arsenic		5530	8.0		ug/l	SW846 6010B
Lead		5.5	3.0		ug/l	SW846 6010B
J39222-6	**EB-082306-GW**					
Naphthalene		2.27	0.24	0.030	ug/l	SW846 8270C BY SIM
J39222-7	**TB-082306-GW**					

No hits reported in this sample.

(a) Diluted due to high concentration of non-target compound.

New Jersey

ACCUTEST LABORATORIES

Sample Results

Report of Analysis

Report of Analysis

Client Sample ID:	EB-082206-GW		
Lab Sample ID:	J39222-1	**Date Sampled:**	08/23/06
Matrix:	AQ - Equipment Blank	**Date Received:**	08/23/06
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Quanta 2006 Groundwater Resources, Edgewater, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	U81735.D	1	09/01/06	YMH	n/a	n/a	VU3076
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List (OLM4.2)

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	2.4	ug/l	
71-43-2	Benzene	ND	1.0	0.21	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.17	ug/l	
75-25-2	Bromoform	ND	4.0	0.54	ug/l	
74-83-9	Bromomethane	ND	2.0	0.22	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	2.6	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.21	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.29	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.22	ug/l	
75-00-3	Chloroethane	ND	1.0	0.56	ug/l	
67-66-3	Chloroform	ND	1.0	0.22	ug/l	
74-87-3	Chloromethane	ND	1.0	0.35	ug/l	
110-82-7	Cyclohexane	ND	5.0	0.50	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	10	1.1	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.19	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	0.52	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.20	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.32	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.24	ug/l	
75-71-8	Dichlorodifluoromethane	ND	5.0	0.75	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.23	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.29	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.33	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.18	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.42	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.20	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.15	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.20	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.20	ug/l	
76-13-1	Freon 113	ND	5.0	0.69	ug/l	
591-78-6	2-Hexanone	ND	5.0	1.3	ug/l	
98-82-8	Isopropylbenzene	ND	2.0	0.20	ug/l	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	EB-082206-GW		
Lab Sample ID:	J39222-1	**Date Sampled:**	08/23/06
Matrix:	AQ - Equipment Blank	**Date Received:**	08/23/06
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Quanta 2006 Groundwater Resources, Edgewater, NJ		

VOA TCL List (OLM4.2)

CAS No.	Compound	Result	RL	MDL	Units	Q
79-20-9	Methyl Acetate	ND	5.0	2.1	ug/l	
108-87-2	Methylcyclohexane	ND	5.0	0.18	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.31	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.1	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.27	ug/l	
100-42-5	Styrene	ND	5.0	0.16	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.28	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.28	ug/l	
108-88-3	Toluene	ND	1.0	0.20	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.16	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.28	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.32	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.29	ug/l	
75-69-4	Trichlorofluoromethane	ND	5.0	0.25	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.29	ug/l	
	m,p-Xylene	ND	1.0	0.42	ug/l	
95-47-6	o-Xylene	ND	1.0	0.31	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.31	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	98%		77-121%
17060-07-0	1,2-Dichloroethane-D4	105%		65-133%
2037-26-5	Toluene-D8	95%		80-117%
460-00-4	4-Bromofluorobenzene	95%		79-124%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	EB-082206-GW		
Lab Sample ID:	J39222-1	**Date Sampled:**	08/23/06
Matrix:	AQ - Equipment Blank	**Date Received:**	08/23/06
Method:	SW846 8270C SW846 3510C	**Percent Solids:**	n/a
Project:	Quanta 2006 Groundwater Resources, Edgewater, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3E2079.D	1	09/06/06	MMC	08/24/06	OP24587	E3E72
Run #2							

	Initial Volume	Final Volume
Run #1	780 ml	1.0 ml
Run #2		

ABN TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	6.4	1.2	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	6.4	1.5	ug/l	
120-83-2	2,4-Dichlorophenol	ND	6.4	2.0	ug/l	
105-67-9	2,4-Dimethylphenol	ND	6.4	2.1	ug/l	
51-28-5	2,4-Dinitrophenol	ND	26	1.1	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	26	0.92	ug/l	
95-48-7	2-Methylphenol	ND	6.4	1.7	ug/l	
	3&4-Methylphenol	ND	6.4	1.6	ug/l	
88-75-5	2-Nitrophenol	ND	6.4	2.3	ug/l	
100-02-7	4-Nitrophenol	ND	26	1.1	ug/l	
108-95-2	Phenol	ND	6.4	0.64	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	6.4	2.5	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	6.4	1.6	ug/l	
98-86-2	Acetophenone	ND	6.4	0.48	ug/l	
1912-24-9	Atrazine	ND	6.4	0.21	ug/l	
100-52-7	Benzaldehyde	ND	6.4	0.34	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	2.6	0.38	ug/l	
85-68-7	Butyl benzyl phthalate	ND	2.6	0.76	ug/l	
92-52-4	1,1'-Biphenyl	ND	2.6	0.42	ug/l	
91-58-7	2-Chloronaphthalene	ND	6.4	1.3	ug/l	
106-47-8	4-Chloroaniline	ND	6.4	0.51	ug/l	
86-74-8	Carbazole	ND	2.6	0.47	ug/l	
105-60-2	Caprolactam	ND	2.6	0.40	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	2.6	0.84	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	2.6	0.68	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	2.6	0.95	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	2.6	0.55	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	2.6	1.1	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	2.6	0.72	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	6.4	1.6	ug/l	
132-64-9	Dibenzofuran	ND	6.4	0.44	ug/l	
84-74-2	Di-n-butyl phthalate	ND	2.6	0.76	ug/l	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	EB-082206-GW		
Lab Sample ID:	J39222-1	**Date Sampled:**	08/23/06
Matrix:	AQ - Equipment Blank	**Date Received:**	08/23/06
Method:	SW846 8270C SW846 3510C	**Percent Solids:**	n/a
Project:	Quanta 2006 Groundwater Resources, Edgewater, NJ		

ABN TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
117-84-0	Di-n-octyl phthalate	ND	2.6	0.73	ug/l	
84-66-2	Diethyl phthalate	ND	2.6	0.50	ug/l	
131-11-3	Dimethyl phthalate	ND	2.6	0.42	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	2.6	0.85	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.6	0.22	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	26	0.52	ug/l	
67-72-1	Hexachloroethane	ND	6.4	0.36	ug/l	
78-59-1	Isophorone	ND	2.6	0.76	ug/l	
91-57-6	2-Methylnaphthalene	ND	2.6	0.52	ug/l	
88-74-4	2-Nitroaniline	ND	6.4	0.85	ug/l	
99-09-2	3-Nitroaniline	ND	6.4	1.6	ug/l	
100-01-6	4-Nitroaniline	ND	6.4	0.93	ug/l	
98-95-3	Nitrobenzene	ND	2.6	0.54	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	2.6	0.60	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	6.4	0.66	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	40%		12-76%
4165-62-2	Phenol-d5	32%		10-59%
118-79-6	2,4,6-Tribromophenol	59%		42-128%
4165-60-0	Nitrobenzene-d5	75%		30-122%
321-60-8	2-Fluorobiphenyl	68%		34-113%
1718-51-0	Terphenyl-d14	87%		42-125%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	system artifact	3.77	21	ug/l	J
	system artifact	26.86	7.3	ug/l	J
	Total TIC, Semi-Volatile		0	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	EB-082206-GW		
Lab Sample ID:	J39222-1	**Date Sampled:**	08/23/06
Matrix:	AQ - Equipment Blank	**Date Received:**	08/23/06
Method:	SW846 8270C BY SIM SW846 3510C	**Percent Solids:**	n/a
Project:	Quanta 2006 Groundwater Resources, Edgewater, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Z29595.D	1	09/06/06	KLS	08/24/06	OP24588	EZ918
Run #2							

	Initial Volume	Final Volume
Run #1	780 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
87-86-5	Pentachlorophenol	ND	1.3	0.51	ug/l	
83-32-9	Acenaphthene	ND	0.26	0.022	ug/l	
208-96-8	Acenaphthylene	ND	0.26	0.012	ug/l	
120-12-7	Anthracene	ND	0.26	0.027	ug/l	
56-55-3	Benzo(a)anthracene	ND	0.26	0.0087	ug/l	
50-32-8	Benzo(a)pyrene	ND	0.26	0.022	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	0.26	0.046	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	0.26	0.023	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	0.26	0.020	ug/l	
218-01-9	Chrysene	ND	0.26	0.021	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	0.26	0.021	ug/l	
206-44-0	Fluoranthene	ND	0.26	0.012	ug/l	
86-73-7	Fluorene	ND	0.26	0.026	ug/l	
118-74-1	Hexachlorobenzene	ND	0.13	0.078	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.26	0.014	ug/l	
91-20-3	Naphthalene	ND	0.26	0.033	ug/l	
85-01-8	Phenanthrene	ND	0.26	0.027	ug/l	
129-00-0	Pyrene	ND	0.26	0.018	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	47%		10-99%
4165-62-2	Phenol-d5	35%		10-83%
118-79-6	2,4,6-Tribromophenol	89%		10-140%
4165-60-0	Nitrobenzene-d5	72%		11-140%
321-60-8	2-Fluorobiphenyl	63%		10-133%
1718-51-0	Terphenyl-d14	79%		13-130%

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RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	EB-082206-GW		
Lab Sample ID:	J39222-1	**Date Sampled:**	08/23/06
Matrix:	AQ - Equipment Blank	**Date Received:**	08/23/06
Method:	SW846 8081A SW846 3510C	**Percent Solids:**	n/a
Project:	Quanta 2006 Groundwater Resources, Edgewater, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	XX61857.D	1	08/25/06	OPM	08/24/06	OP24515	GXX1856
Run #2							

	Initial Volume	Final Volume
Run #1	870 ml	10.0 ml
Run #2		

Pesticide TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
309-00-2	Aldrin	ND	0.023	0.0038	ug/l	
319-84-6	alpha-BHC	ND	0.023	0.0030	ug/l	
319-85-7	beta-BHC	ND	0.023	0.0071	ug/l	
319-86-8	delta-BHC	ND	0.023	0.0036	ug/l	
58-89-9	gamma-BHC (Lindane)	ND	0.023	0.0020	ug/l	
5103-71-9	alpha-Chlordane	ND	0.023	0.0050	ug/l	
5103-74-2	gamma-Chlordane	ND	0.023	0.0020	ug/l	
60-57-1	Dieldrin	ND	0.023	0.0020	ug/l	
72-54-8	4,4'-DDD	ND	0.023	0.0028	ug/l	
72-55-9	4,4'-DDE	ND	0.023	0.0019	ug/l	
50-29-3	4,4'-DDT	ND	0.023	0.0057	ug/l	
72-20-8	Endrin	ND	0.023	0.0035	ug/l	
1031-07-8	Endosulfan sulfate	ND	0.023	0.0053	ug/l	
7421-93-4	Endrin aldehyde	ND	0.023	0.0074	ug/l	
53494-70-5	Endrin ketone	ND	0.057	0.0040	ug/l	
959-98-8	Endosulfan-I	ND	0.023	0.0024	ug/l	
33213-65-9	Endosulfan-II	ND	0.023	0.0037	ug/l	
76-44-8	Heptachlor	ND	0.023	0.0029	ug/l	
1024-57-3	Heptachlor epoxide	ND	0.023	0.0017	ug/l	
72-43-5	Methoxychlor	ND	0.057	0.0078	ug/l	
8001-35-2	Toxaphene	ND	0.29	0.11	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	84%		36-126%
877-09-8	Tetrachloro-m-xylene	89%		36-126%
2051-24-3	Decachlorobiphenyl	61%		15-142%
2051-24-3	Decachlorobiphenyl	59%		15-142%

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E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	EB-082206-GW		
Lab Sample ID:	J39222-1	**Date Sampled:**	08/23/06
Matrix:	AQ - Equipment Blank	**Date Received:**	08/23/06
Method:	SW846 8082 SW846 3510C	**Percent Solids:**	n/a
Project:	Quanta 2006 Groundwater Resources, Edgewater, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	OA32120.D	1	08/25/06	TDR	08/24/06	OP24470	GOA1087
Run #2							

	Initial Volume	Final Volume
Run #1	810 ml	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	0.62	0.12	ug/l	
11104-28-2	Aroclor 1221	ND	0.62	0.58	ug/l	
11141-16-5	Aroclor 1232	ND	0.62	0.48	ug/l	
53469-21-9	Aroclor 1242	ND	0.62	0.20	ug/l	
12672-29-6	Aroclor 1248	ND	0.62	0.19	ug/l	
11097-69-1	Aroclor 1254	ND	0.62	0.13	ug/l	
11096-82-5	Aroclor 1260	ND	0.62	0.14	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	81%		38-133%
877-09-8	Tetrachloro-m-xylene	93%		38-133%
2051-24-3	Decachlorobiphenyl	68%		18-156%
2051-24-3	Decachlorobiphenyl	78%		18-156%

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Report of Analysis

Client Sample ID:	EB-082206-GW		
Lab Sample ID:	J39222-1	**Date Sampled:**	08/23/06
Matrix:	AQ - Equipment Blank	**Date Received:**	08/23/06
		Percent Solids:	n/a
Project:	Quanta 2006 Groundwater Resources, Edgewater, NJ		

Total Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Arsenic	< 2.0	2.0	ug/l	1	09/03/06	09/08/06	LH	SW846 6010B [2]	SW846 3010A [3]
Lead	< 3.0	3.0	ug/l	1	09/03/06	09/06/06	ND	SW846 6010B [1]	SW846 3010A [3]

(1) Instrument QC Batch: MA18012
(2) Instrument QC Batch: MA18025
(3) Prep QC Batch: MP35774

RL = Reporting Limit

Report of Analysis

Client Sample ID:	EB-082206-GW		
Lab Sample ID:	J39222-1	**Date Sampled:**	08/23/06
Matrix:	AQ - Equipment Blank	**Date Received:**	08/23/06
		Percent Solids:	n/a
Project:	Quanta 2006 Groundwater Resources, Edgewater, NJ		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Nitrogen, Ammonia	< 0.10	0.10	mg/l	1	09/01/06 14:17	NR	EPA 350.1/LACHAT

RL = Reporting Limit

Report of Analysis

Client Sample ID:	MW-118A-082306		
Lab Sample ID:	J39222-2	**Date Sampled:**	08/23/06
Matrix:	AQ - Ground Water	**Date Received:**	08/23/06
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Quanta 2006 Groundwater Resources, Edgewater, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	U81736.D	1	09/01/06	YMH	n/a	n/a	VU3076
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List (OLM4.2)

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	2.4	ug/l	
71-43-2	Benzene	2.1	1.0	0.21	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.17	ug/l	
75-25-2	Bromoform	ND	4.0	0.54	ug/l	
74-83-9	Bromomethane	ND	2.0	0.22	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	2.6	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.21	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.29	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.22	ug/l	
75-00-3	Chloroethane	ND	1.0	0.56	ug/l	
67-66-3	Chloroform	ND	1.0	0.22	ug/l	
74-87-3	Chloromethane	ND	1.0	0.35	ug/l	
110-82-7	Cyclohexane	ND	5.0	0.50	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	10	1.1	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.19	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	0.52	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.20	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.32	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.24	ug/l	
75-71-8	Dichlorodifluoromethane	ND	5.0	0.75	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.23	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.29	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.33	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.18	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.42	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.20	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.15	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.20	ug/l	
100-41-4	Ethylbenzene	5.6	1.0	0.20	ug/l	
76-13-1	Freon 113	ND	5.0	0.69	ug/l	
591-78-6	2-Hexanone	ND	5.0	1.3	ug/l	
98-82-8	Isopropylbenzene	2.6	2.0	0.20	ug/l	

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E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-118A-082306		
Lab Sample ID:	J39222-2	**Date Sampled:**	08/23/06
Matrix:	AQ - Ground Water	**Date Received:**	08/23/06
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Quanta 2006 Groundwater Resources, Edgewater, NJ		

VOA TCL List (OLM4.2)

CAS No.	Compound	Result	RL	MDL	Units	Q
79-20-9	Methyl Acetate	ND	5.0	2.1	ug/l	
108-87-2	Methylcyclohexane	ND	5.0	0.18	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.31	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.1	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.27	ug/l	
100-42-5	Styrene	ND	5.0	0.16	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.28	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.28	ug/l	
108-88-3	Toluene	1.7	1.0	0.20	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.16	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.28	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.32	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.29	ug/l	
75-69-4	Trichlorofluoromethane	ND	5.0	0.25	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.29	ug/l	
	m,p-Xylene	2.4	1.0	0.42	ug/l	
95-47-6	o-Xylene	4.4	1.0	0.31	ug/l	
1330-20-7	Xylene (total)	6.8	1.0	0.31	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	104%		77-121%
17060-07-0	1,2-Dichloroethane-D4	116%		65-133%
2037-26-5	Toluene-D8	95%		80-117%
460-00-4	4-Bromofluorobenzene	92%		79-124%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
108-67-8	Benzene, 1,3,5-trimethyl-	15.33	7.1	ug/l	JN
	C3 alkyl benzene	15.58	8.1	ug/l	J
95-63-6	Benzene, 1,2,4-trimethyl-	15.76	12	ug/l	JN
	C3 alkyl benzene	16.25	23	ug/l	J
496-11-7	Indane	16.51	210	ug/l	JN
	1H-indene-dihydro-methyl	17.12	24	ug/l	J
	C4 alkyl benzene	17.38	16	ug/l	J
	C4 alkyl benzene	17.44	7.6	ug/l	J
	unknown	17.49	6.2	ug/l	J
	1H-indene-dihydro-methyl	17.77	21	ug/l	J
	C4 alkyl benzene	17.92	7	ug/l	J
	1H-indene-dihydro-methyl	17.96	17	ug/l	J

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Report of Analysis

Client Sample ID:	MW-118A-082306		
Lab Sample ID:	J39222-2	**Date Sampled:**	08/23/06
Matrix:	AQ - Ground Water	**Date Received:**	08/23/06
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Quanta 2006 Groundwater Resources, Edgewater, NJ		

VOA TCL List (OLM4.2)

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
91-20-3	Naphthalene	18.70	210	ug/l	JN
	Benzo[]thiophene	18.85	10	ug/l	J
	Naphthalene methyl	20.26	42	ug/l	J
	Total TIC, Volatile		621	ug/l	J

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-118A-082306		
Lab Sample ID:	J39222-2	**Date Sampled:**	08/23/06
Matrix:	AQ - Ground Water	**Date Received:**	08/23/06
Method:	SW846 8270C SW846 3510C	**Percent Solids:**	n/a
Project:	Quanta 2006 Groundwater Resources, Edgewater, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3E2080.D	1	09/06/06	MMC	08/24/06	OP24587	E3E72
Run #2	3E2103.D	5	09/07/06	MMC	08/24/06	OP24587	E3E73

	Initial Volume	Final Volume
Run #1	1000 ml	1.0 ml
Run #2	1000 ml	1.0 ml

ABN TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	5.0	0.95	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	5.0	1.2	ug/l	
120-83-2	2,4-Dichlorophenol	ND	5.0	1.6	ug/l	
105-67-9	2,4-Dimethylphenol	ND	5.0	1.6	ug/l	
51-28-5	2,4-Dinitrophenol	ND	20	0.89	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	20	0.72	ug/l	
95-48-7	2-Methylphenol	ND	5.0	1.4	ug/l	
	3&4-Methylphenol	ND	5.0	1.3	ug/l	
88-75-5	2-Nitrophenol	ND	5.0	1.8	ug/l	
100-02-7	4-Nitrophenol	ND	20	0.84	ug/l	
108-95-2	Phenol	ND	5.0	0.50	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	5.0	1.9	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	5.0	1.3	ug/l	
83-32-9	Acenaphthene	88.2	2.0	0.35	ug/l	
98-86-2	Acetophenone	ND	5.0	0.37	ug/l	
1912-24-9	Atrazine	ND	5.0	0.16	ug/l	
100-52-7	Benzaldehyde	ND	5.0	0.27	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	2.0	0.30	ug/l	
85-68-7	Butyl benzyl phthalate	ND	2.0	0.59	ug/l	
92-52-4	1,1'-Biphenyl	4.9	2.0	0.33	ug/l	
91-58-7	2-Chloronaphthalene	ND	5.0	0.98	ug/l	
106-47-8	4-Chloroaniline	ND	5.0	0.40	ug/l	
86-74-8	Carbazole	38.3	2.0	0.36	ug/l	
105-60-2	Caprolactam	ND	2.0	0.32	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	2.0	0.65	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	2.0	0.53	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	2.0	0.74	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	2.0	0.43	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	2.0	0.86	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	2.0	0.56	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	5.0	1.2	ug/l	
132-64-9	Dibenzofuran	51.1	5.0	0.34	ug/l	

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Report of Analysis

Client Sample ID:	MW-118A-082306		
Lab Sample ID:	J39222-2	**Date Sampled:**	08/23/06
Matrix:	AQ - Ground Water	**Date Received:**	08/23/06
Method:	SW846 8270C SW846 3510C	**Percent Solids:**	n/a
Project:	Quanta 2006 Groundwater Resources, Edgewater, NJ		

ABN TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
84-74-2	Di-n-butyl phthalate	ND	2.0	0.59	ug/l	
117-84-0	Di-n-octyl phthalate	ND	2.0	0.57	ug/l	
84-66-2	Diethyl phthalate	ND	2.0	0.39	ug/l	
131-11-3	Dimethyl phthalate	ND	2.0	0.33	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	2.0	0.66	ug/l	
206-44-0	Fluoranthene	19.2	2.0	0.25	ug/l	
86-73-7	Fluorene	69.2	2.0	0.45	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.18	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	20	0.41	ug/l	
67-72-1	Hexachloroethane	ND	5.0	0.28	ug/l	
78-59-1	Isophorone	ND	2.0	0.59	ug/l	
91-57-6	2-Methylnaphthalene	4.1	2.0	0.41	ug/l	
88-74-4	2-Nitroaniline	ND	5.0	0.66	ug/l	
99-09-2	3-Nitroaniline	ND	5.0	1.3	ug/l	
100-01-6	4-Nitroaniline	ND	5.0	0.72	ug/l	
91-20-3	Naphthalene	148 [a]	10	1.6	ug/l	
98-95-3	Nitrobenzene	ND	2.0	0.42	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	2.0	0.47	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	5.0	0.52	ug/l	
85-01-8	Phenanthrene	40.1	2.0	0.36	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	42%	44%	12-76%
4165-62-2	Phenol-d5	33%	33%	10-59%
118-79-6	2,4,6-Tribromophenol	81%	70%	42-128%
4165-60-0	Nitrobenzene-d5	79%	79%	30-122%
321-60-8	2-Fluorobiphenyl	73%	78%	34-113%
1718-51-0	Terphenyl-d14	89%	86%	42-125%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	system artifact/aldol-condensation	3.77	16	ug/l	J
	C3 alkyl benzene	5.54	5.6	ug/l	J
	C3 alkyl benzene	5.72	6.1	ug/l	J
	C3 alkyl benzene	5.92	9	ug/l	J
	C3 alkyl benzene	6.36	18	ug/l	J
496	Indane	6.58	130	ug/l	JN
95	Indene	6.71	5.5	ug/l	JN
	unknown	7.59	9.3	ug/l	J

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-118A-082306		
Lab Sample ID:	J39222-2	**Date Sampled:**	08/23/06
Matrix:	AQ - Ground Water	**Date Received:**	08/23/06
Method:	SW846 8270C SW846 3510C	**Percent Solids:**	n/a
Project:	Quanta 2006 Groundwater Resources, Edgewater, NJ		

ABN TCL List

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	C4 alkyl benzene	7.76	7.4	ug/l	J
	1H-indene-dihydro-methyl	8.12	13	ug/l	J
	1H-indene-dihydro-methyl	8.29	19	ug/l	J
	unknown	8.37	14	ug/l	J
	Benzo[ ]thiophene	8.94	14	ug/l	J
	Benzo[b]thiophene, methyl-	10.29	5.5	ug/l	J
90-12-0	Naphthalene, 1-methyl-	10.63	60	ug/l	JN
	Naphthalene dimethyl	11.86	11	ug/l	J
	Naphthalene dimethyl	12.05	13	ug/l	J
	Naphthalene dimethyl	12.32	7.3	ug/l	J
	unknown	14.33	5.1	ug/l	J
	unknown	14.97	16	ug/l	J
132	Dibenzothiophene	16.04	7.9	ug/l	JN
	unknown	17.07	6.4	ug/l	J
	unknown	17.77	12	ug/l	J
10544-50-0	Sulfur, mol. (S8)	18.94	10	ug/l	JN
	unknown	20.18	7.4	ug/l	J
	unknown	21.06	11	ug/l	J
	Total TIC, Semi-Volatile		423.5	ug/l	J

(a) Result is from Run# 2

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-118A-082306		
Lab Sample ID:	J39222-2	**Date Sampled:**	08/23/06
Matrix:	AQ - Ground Water	**Date Received:**	08/23/06
Method:	SW846 8270C BY SIM SW846 3510C	**Percent Solids:**	n/a
Project:	Quanta 2006 Groundwater Resources, Edgewater, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Z29654.D	1	09/08/06	KLS	08/24/06	OP24588	EZ921
Run #2							

	Initial Volume	Final Volume
Run #1	1000 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
87-86-5	Pentachlorophenol	ND	1.0	0.40	ug/l	
208-96-8	Acenaphthylene	1.74	0.20	0.0095	ug/l	
120-12-7	Anthracene	14.7	0.20	0.021	ug/l	
56-55-3	Benzo(a)anthracene	1.53	0.20	0.0068	ug/l	
50-32-8	Benzo(a)pyrene	1.04	0.20	0.017	ug/l	
205-99-2	Benzo(b)fluoranthene	1.10	0.20	0.036	ug/l	
191-24-2	Benzo(g,h,i)perylene	0.752	0.20	0.018	ug/l	
207-08-9	Benzo(k)fluoranthene	0.314	0.20	0.016	ug/l	
218-01-9	Chrysene	1.40	0.20	0.017	ug/l	
53-70-3	Dibenzo(a,h)anthracene	0.600	0.20	0.016	ug/l	
118-74-1	Hexachlorobenzene	ND	0.10	0.061	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	0.736	0.20	0.011	ug/l	
129-00-0	Pyrene	10.3	0.20	0.014	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	49%		10-99%
4165-62-2	Phenol-d5	35%		10-83%
118-79-6	2,4,6-Tribromophenol	98%		10-140%
4165-60-0	Nitrobenzene-d5	70%		11-140%
321-60-8	2-Fluorobiphenyl	72%		10-133%
1718-51-0	Terphenyl-d14	68%		13-130%

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RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-118A-082306		
Lab Sample ID:	J39222-2	**Date Sampled:**	08/23/06
Matrix:	AQ - Ground Water	**Date Received:**	08/23/06
Method:	SW846 8082 SW846 3510C	**Percent Solids:**	n/a
Project:	Quanta 2006 Groundwater Resources, Edgewater, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	OA32121.D	1	08/25/06	TDR	08/24/06	OP24470	GOA1087
Run #2							

	Initial Volume	Final Volume
Run #1	1000 ml	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	0.50	0.094	ug/l	
11104-28-2	Aroclor 1221	ND	0.50	0.47	ug/l	
11141-16-5	Aroclor 1232	ND	0.50	0.39	ug/l	
53469-21-9	Aroclor 1242	ND	0.50	0.16	ug/l	
12672-29-6	Aroclor 1248	ND	0.50	0.15	ug/l	
11097-69-1	Aroclor 1254	ND	0.50	0.11	ug/l	
11096-82-5	Aroclor 1260	ND	0.50	0.12	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	87%		38-133%
877-09-8	Tetrachloro-m-xylene	70%		38-133%
2051-24-3	Decachlorobiphenyl	80%		18-156%
2051-24-3	Decachlorobiphenyl	92%		18-156%

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RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-118A-082306		
Lab Sample ID:	J39222-2	**Date Sampled:**	08/23/06
Matrix:	AQ - Ground Water	**Date Received:**	08/23/06
		Percent Solids:	n/a
Project:	Quanta 2006 Groundwater Resources, Edgewater, NJ		

Total Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Arsenic	14.5	8.0	ug/l	1	09/03/06	09/06/06	ND	SW846 6010B [1]	SW846 3010A [2]
Lead	< 3.0	3.0	ug/l	1	09/03/06	09/06/06	ND	SW846 6010B [1]	SW846 3010A [2]

(1) Instrument QC Batch: MA18012
(2) Prep QC Batch: MP35774

RL = Reporting Limit

Report of Analysis

Client Sample ID:	MW-117B-082306		
Lab Sample ID:	J39222-3	**Date Sampled:**	08/23/06
Matrix:	AQ - Ground Water	**Date Received:**	08/23/06
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Quanta 2006 Groundwater Resources, Edgewater, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	U81725.D	10	09/01/06	YMH	n/a	n/a	VU3076
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List (OLM4.2)

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	100	24	ug/l	
71-43-2	Benzene	188	10	2.1	ug/l	
75-27-4	Bromodichloromethane	ND	10	1.7	ug/l	
75-25-2	Bromoform	ND	40	5.4	ug/l	
74-83-9	Bromomethane	ND	20	2.2	ug/l	
78-93-3	2-Butanone (MEK)	ND	100	26	ug/l	
75-15-0	Carbon disulfide	ND	20	2.1	ug/l	
56-23-5	Carbon tetrachloride	ND	10	2.9	ug/l	
108-90-7	Chlorobenzene	ND	10	2.2	ug/l	
75-00-3	Chloroethane	ND	10	5.6	ug/l	
67-66-3	Chloroform	ND	10	2.2	ug/l	
74-87-3	Chloromethane	ND	10	3.5	ug/l	
110-82-7	Cyclohexane	ND	50	5.0	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	100	11	ug/l	
124-48-1	Dibromochloromethane	ND	10	1.9	ug/l	
106-93-4	1,2-Dibromoethane	ND	20	5.2	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	10	2.0	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	10	3.2	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	10	2.4	ug/l	
75-71-8	Dichlorodifluoromethane	ND	50	7.5	ug/l	
75-34-3	1,1-Dichloroethane	ND	10	2.3	ug/l	
107-06-2	1,2-Dichloroethane	ND	10	2.9	ug/l	
75-35-4	1,1-Dichloroethene	ND	10	3.3	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	10	1.8	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	10	4.2	ug/l	
78-87-5	1,2-Dichloropropane	ND	10	2.0	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	10	1.5	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	10	2.0	ug/l	
100-41-4	Ethylbenzene	426	10	2.0	ug/l	
76-13-1	Freon 113	ND	50	6.9	ug/l	
591-78-6	2-Hexanone	ND	50	13	ug/l	
98-82-8	Isopropylbenzene	30.0	20	2.0	ug/l	

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Report of Analysis

Client Sample ID:	MW-117B-082306		
Lab Sample ID:	J39222-3	**Date Sampled:**	08/23/06
Matrix:	AQ - Ground Water	**Date Received:**	08/23/06
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Quanta 2006 Groundwater Resources, Edgewater, NJ		

VOA TCL List (OLM4.2)

CAS No.	Compound	Result	RL	MDL	Units	Q
79-20-9	Methyl Acetate	ND	50	21	ug/l	
108-87-2	Methylcyclohexane	ND	50	1.8	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	10	3.1	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	50	11	ug/l	
75-09-2	Methylene chloride	ND	20	2.7	ug/l	
100-42-5	Styrene	ND	50	1.6	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	10	2.8	ug/l	
127-18-4	Tetrachloroethene	ND	10	2.8	ug/l	
108-88-3	Toluene	424	10	2.0	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	50	1.6	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	10	2.8	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	10	3.2	ug/l	
79-01-6	Trichloroethene	ND	10	2.9	ug/l	
75-69-4	Trichlorofluoromethane	ND	50	2.5	ug/l	
75-01-4	Vinyl chloride	ND	10	2.9	ug/l	
	m,p-Xylene	468	10	4.2	ug/l	
95-47-6	o-Xylene	260	10	3.1	ug/l	
1330-20-7	Xylene (total)	728	10	3.1	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	102%		77-121%
17060-07-0	1,2-Dichloroethane-D4	121%		65-133%
2037-26-5	Toluene-D8	97%		80-117%
460-00-4	4-Bromofluorobenzene	91%		79-124%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	C3 alkyl benzene	15.24	100	ug/l	J
95-63-6	Benzene, 1,2,4-trimethyl-	15.76	250	ug/l	JN
271-89-6	Benzofuran	16.10	180	ug/l	JN
	C3 alkyl benzene	16.25	120	ug/l	J
496-11-7	Indane	16.51	1400	ug/l	JN
95-13-6	Indene	16.75	630	ug/l	JN
	1H-indene-dihydro-methyl	17.13	72	ug/l	J
4265-25-2	Benzofuran, 2-methyl-	17.48	130	ug/l	JN
	1H-indene-dihydro-methyl	17.77	72	ug/l	J
	1H-indene-dihydro-methyl	17.96	88	ug/l	J
	1H-Indene, methyl-	18.15	100	ug/l	J
91-20-3	Naphthalene	18.71	10000	ug/l	JN

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E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-117B-082306		
Lab Sample ID:	J39222-3	**Date Sampled:**	08/23/06
Matrix:	AQ - Ground Water	**Date Received:**	08/23/06
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Quanta 2006 Groundwater Resources, Edgewater, NJ		

VOA TCL List (OLM4.2)

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Benzo[]thiophene	18.85	250	ug/l	J
	Naphthalene methyl	20.01	510	ug/l	J
	Naphthalene methyl	20.25	310	ug/l	J
	Total TIC, Volatile		14212	ug/l	J

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-117B-082306		
Lab Sample ID:	J39222-3	**Date Sampled:**	08/23/06
Matrix:	AQ - Ground Water	**Date Received:**	08/23/06
Method:	SW846 8270C SW846 3510C	**Percent Solids:**	n/a
Project:	Quanta 2006 Groundwater Resources, Edgewater, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3E2081.D	1	09/06/06	MMC	08/24/06	OP24587	E3E72
Run #2	3E2104.D	10	09/07/06	MMC	08/24/06	OP24587	E3E73
Run #3	3E2105.D	100	09/07/06	MMC	08/24/06	OP24587	E3E73

	Initial Volume	Final Volume
Run #1	1000 ml	1.0 ml
Run #2	1000 ml	1.0 ml
Run #3	1000 ml	1.0 ml

ABN TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	5.0	0.95	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	5.0	1.2	ug/l	
120-83-2	2,4-Dichlorophenol	ND	5.0	1.6	ug/l	
105-67-9	2,4-Dimethylphenol	829 [a]	50	16	ug/l	
51-28-5	2,4-Dinitrophenol	ND	20	0.89	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	20	0.72	ug/l	
95-48-7	2-Methylphenol	232 [a]	50	14	ug/l	
	3&4-Methylphenol	64.1	5.0	1.3	ug/l	
88-75-5	2-Nitrophenol	ND	5.0	1.8	ug/l	
100-02-7	4-Nitrophenol	ND	20	0.84	ug/l	
108-95-2	Phenol	26.2	5.0	0.50	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	5.0	1.9	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	5.0	1.3	ug/l	
83-32-9	Acenaphthene	252 [a]	20	3.5	ug/l	
208-96-8	Acenaphthylene	25.4	2.0	0.38	ug/l	
98-86-2	Acetophenone	ND	5.0	0.37	ug/l	
120-12-7	Anthracene	21.0	2.0	0.40	ug/l	
1912-24-9	Atrazine	ND	5.0	0.16	ug/l	
100-52-7	Benzaldehyde	ND	5.0	0.27	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	2.0	0.30	ug/l	
85-68-7	Butyl benzyl phthalate	ND	2.0	0.59	ug/l	
92-52-4	1,1'-Biphenyl	71.0	2.0	0.33	ug/l	
91-58-7	2-Chloronaphthalene	ND	5.0	0.98	ug/l	
106-47-8	4-Chloroaniline	ND	5.0	0.40	ug/l	
86-74-8	Carbazole	287 [a]	20	3.6	ug/l	
105-60-2	Caprolactam	ND	2.0	0.32	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	2.0	0.65	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	2.0	0.53	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	2.0	0.74	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	2.0	0.43	ug/l	

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E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-117B-082306		
Lab Sample ID:	J39222-3	**Date Sampled:**	08/23/06
Matrix:	AQ - Ground Water	**Date Received:**	08/23/06
Method:	SW846 8270C SW846 3510C	**Percent Solids:**	n/a
Project:	Quanta 2006 Groundwater Resources, Edgewater, NJ		

ABN TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
121-14-2	2,4-Dinitrotoluene	ND	2.0	0.86	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	2.0	0.56	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	5.0	1.2	ug/l	
132-64-9	Dibenzofuran	147 [a]	50	3.4	ug/l	
84-74-2	Di-n-butyl phthalate	ND	2.0	0.59	ug/l	
117-84-0	Di-n-octyl phthalate	ND	2.0	0.57	ug/l	
84-66-2	Diethyl phthalate	ND	2.0	0.39	ug/l	
131-11-3	Dimethyl phthalate	ND	2.0	0.33	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	2.0	0.66	ug/l	
206-44-0	Fluoranthene	16.8	2.0	0.25	ug/l	
86-73-7	Fluorene	135 [a]	20	4.5	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.18	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	20	0.41	ug/l	
67-72-1	Hexachloroethane	ND	5.0	0.28	ug/l	
78-59-1	Isophorone	ND	2.0	0.59	ug/l	
91-57-6	2-Methylnaphthalene	779 [a]	20	4.1	ug/l	
88-74-4	2-Nitroaniline	ND	5.0	0.66	ug/l	
99-09-2	3-Nitroaniline	ND	5.0	1.3	ug/l	
100-01-6	4-Nitroaniline	ND	5.0	0.72	ug/l	
91-20-3	Naphthalene	9110 [b]	200	32	ug/l	
98-95-3	Nitrobenzene	ND	2.0	0.42	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	2.0	0.47	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	5.0	0.52	ug/l	
85-01-8	Phenanthrene	148 [a]	20	3.6	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Run# 3	Limits
367-12-4	2-Fluorophenol	46%	49%	0% [c]	12-76%
4165-62-2	Phenol-d5	33%	35%	0% [c]	10-59%
118-79-6	2,4,6-Tribromophenol	90%	84%	0% [c]	42-128%
4165-60-0	Nitrobenzene-d5	72%	95%	0% [c]	30-122%
321-60-8	2-Fluorobiphenyl	79%	92%	0% [c]	34-113%
1718-51-0	Terphenyl-d14	87%	99%	0% [c]	42-125%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Pyridine, methyl-	3.49	130	ug/l	J
	Pyridine, dimethyl-	4.32	54	ug/l	J
	C3 alkyl benzene	4.91	72	ug/l	J
	C3 alkyl benzene	5.45	140	ug/l	J

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-117B-082306		
Lab Sample ID:	J39222-3	**Date Sampled:**	08/23/06
Matrix:	AQ - Ground Water	**Date Received:**	08/23/06
Method:	SW846 8270C SW846 3510C	**Percent Solids:**	n/a
Project:	Quanta 2006 Groundwater Resources, Edgewater, NJ		

ABN TCL List

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	C3 alkyl benzene	5.54	58	ug/l	J
	C3 alkyl benzene	5.94	270	ug/l	J
271	Benzofuran	5.99	230	ug/l	JN
	C3 alkyl benzene	6.37	110	ug/l	J
496	Indane	6.60	900	ug/l	JN
95	Indene	6.73	790	ug/l	JN
	unknown	7.18	47	ug/l	J
	Benzofuran, methyl-	7.52	49	ug/l	J
	Phenol, dimethyl-	7.60	350	ug/l	J
90-12-0	Naphthalene, 1-methyl-	10.67	49	ug/l	JN
	Naphthalene dimethyl	11.87	40	ug/l	J
	Naphthalene dimethyl	12.06	51	ug/l	J
	Naphthalenol	13.15	62	ug/l	J
	Naphthalenol	13.25	47	ug/l	J
	unknown	13.85	65	ug/l	J
	unknown	14.39	53	ug/l	J
	unknown	15.49	74	ug/l	J
	unknown	17.09	46	ug/l	J
	unknown	20.25	130	ug/l	J
	unknown	21.10	93	ug/l	J
	Total TIC, Semi-Volatile		3910	ug/l	J

(a) Result is from Run# 2
(b) Result is from Run# 3
(c) Outside control limits due to dilution.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-117B-082306		
Lab Sample ID:	J39222-3	**Date Sampled:**	08/23/06
Matrix:	AQ - Ground Water	**Date Received:**	08/23/06
Method:	SW846 8270C BY SIM SW846 3510C	**Percent Solids:**	n/a
Project:	Quanta 2006 Groundwater Resources, Edgewater, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Z29655.D	1	09/08/06	KLS	08/24/06	OP24588	EZ921
Run #2 [a]	Z29608.D	1	09/06/06	KLS	08/24/06	OP24588	EZ918

	Initial Volume	Final Volume
Run #1	1000 ml	1.0 ml
Run #2	1000 ml	1.0 ml

CAS No.	Compound	Result	RL	MDL	Units	Q
87-86-5	Pentachlorophenol	ND	1.0	0.40	ug/l	
56-55-3	Benzo(a)anthracene	1.02	0.20	0.0068	ug/l	
50-32-8	Benzo(a)pyrene	0.292	0.20	0.017	ug/l	
205-99-2	Benzo(b)fluoranthene	0.584	0.20	0.036	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	0.20	0.018	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	0.20	0.016	ug/l	
218-01-9	Chrysene	1.17	0.20	0.017	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	0.20	0.016	ug/l	
118-74-1	Hexachlorobenzene	ND	0.10	0.061	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.20	0.011	ug/l	
129-00-0	Pyrene	14.7	0.20	0.014	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	61%	50%	10-99%
4165-62-2	Phenol-d5	33%	33%	10-83%
118-79-6	2,4,6-Tribromophenol	96%	97%	10-140%
4165-60-0	Nitrobenzene-d5	294% [b]	386% [b]	11-140%
321-60-8	2-Fluorobiphenyl	53%	71%	10-133%
1718-51-0	Terphenyl-d14	89%	90%	13-130%

(a) Confirmation run.
(b) Outside control limits due to matrix interference.

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-117B-082306		
Lab Sample ID:	J39222-3	**Date Sampled:**	08/23/06
Matrix:	AQ - Ground Water	**Date Received:**	08/23/06
Method:	SW846 8081A SW846 3510C	**Percent Solids:**	n/a
Project:	Quanta 2006 Groundwater Resources, Edgewater, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	XX61858.D	1	08/25/06	OPM	08/24/06	OP24515	GXX1856
Run #2							

	Initial Volume	Final Volume
Run #1	1000 ml	10.0 ml
Run #2		

Pesticide TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
309-00-2	Aldrin	ND	0.020	0.0033	ug/l	
319-84-6	alpha-BHC	ND	0.020	0.0026	ug/l	
319-85-7	beta-BHC	ND	0.020	0.0062	ug/l	
319-86-8	delta-BHC	ND	0.020	0.0031	ug/l	
58-89-9	gamma-BHC (Lindane)	ND	0.020	0.0017	ug/l	
5103-71-9	alpha-Chlordane	ND	0.020	0.0044	ug/l	
5103-74-2	gamma-Chlordane	ND	0.020	0.0017	ug/l	
60-57-1	Dieldrin	ND	0.020	0.0017	ug/l	
72-54-8	4,4'-DDD	ND	0.020	0.0024	ug/l	
72-55-9	4,4'-DDE	ND	0.020	0.0017	ug/l	
50-29-3	4,4'-DDT	ND	0.020	0.0049	ug/l	
72-20-8	Endrin	ND	0.020	0.0030	ug/l	
1031-07-8	Endosulfan sulfate	ND	0.020	0.0046	ug/l	
7421-93-4	Endrin aldehyde	ND	0.020	0.0064	ug/l	
53494-70-5	Endrin ketone	ND	0.050	0.0035	ug/l	
959-98-8	Endosulfan-I	ND	0.020	0.0021	ug/l	
33213-65-9	Endosulfan-II	ND	0.020	0.0032	ug/l	
76-44-8	Heptachlor	ND	0.020	0.0026	ug/l	
1024-57-3	Heptachlor epoxide	ND	0.020	0.0015	ug/l	
72-43-5	Methoxychlor	ND	0.050	0.0068	ug/l	
8001-35-2	Toxaphene	ND	0.25	0.094	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	125%		36-126%
877-09-8	Tetrachloro-m-xylene	86%		36-126%
2051-24-3	Decachlorobiphenyl	51%		15-142%
2051-24-3	Decachlorobiphenyl	51%		15-142%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-117B-082306		
Lab Sample ID:	J39222-3	**Date Sampled:**	08/23/06
Matrix:	AQ - Ground Water	**Date Received:**	08/23/06
Method:	SW846 8082 SW846 3510C	**Percent Solids:**	n/a
Project:	Quanta 2006 Groundwater Resources, Edgewater, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	OA32123.D	1	08/25/06	TDR	08/24/06	OP24470	GOA1087
Run #2							

	Initial Volume	Final Volume
Run #1	1000 ml	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	0.50	0.094	ug/l	
11104-28-2	Aroclor 1221	ND	0.50	0.47	ug/l	
11141-16-5	Aroclor 1232	ND	0.50	0.39	ug/l	
53469-21-9	Aroclor 1242	ND	0.50	0.16	ug/l	
12672-29-6	Aroclor 1248	ND	0.50	0.15	ug/l	
11097-69-1	Aroclor 1254	ND	0.50	0.11	ug/l	
11096-82-5	Aroclor 1260	ND	0.50	0.12	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	122%		38-133%
877-09-8	Tetrachloro-m-xylene	87%		38-133%
2051-24-3	Decachlorobiphenyl	57%		18-156%
2051-24-3	Decachlorobiphenyl	72%		18-156%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-117B-082306		
Lab Sample ID:	J39222-3	**Date Sampled:**	08/23/06
Matrix:	AQ - Ground Water	**Date Received:**	08/23/06
		Percent Solids:	n/a
Project:	Quanta 2006 Groundwater Resources, Edgewater, NJ		

Total Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Arsenic	< 2.0	2.0	ug/l	1	09/03/06	09/18/06	LH	SW846 6010B [2]	SW846 3010A [3]
Lead	< 3.0	3.0	ug/l	1	09/03/06	09/08/06	ND	SW846 6010B [1]	SW846 3010A [3]

(1) Instrument QC Batch: MA18018
(2) Instrument QC Batch: MA18073
(3) Prep QC Batch: MP35774

RL = Reporting Limit

Report of Analysis

Client Sample ID:	MW-J-082306		
Lab Sample ID:	J39222-4	**Date Sampled:**	08/23/06
Matrix:	AQ - Ground Water	**Date Received:**	08/23/06
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Quanta 2006 Groundwater Resources, Edgewater, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	U81739.D	1	09/01/06	YMH	n/a	n/a	VU3076
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List (OLM4.2)

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	2.4	ug/l	
71-43-2	Benzene	ND	1.0	0.21	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.17	ug/l	
75-25-2	Bromoform	ND	4.0	0.54	ug/l	
74-83-9	Bromomethane	ND	2.0	0.22	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	2.6	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.21	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.29	ug/l	
108-90-7	Chlorobenzene	0.67	1.0	0.22	ug/l	J
75-00-3	Chloroethane	ND	1.0	0.56	ug/l	
67-66-3	Chloroform	ND	1.0	0.22	ug/l	
74-87-3	Chloromethane	ND	1.0	0.35	ug/l	
110-82-7	Cyclohexane	ND	5.0	0.50	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	10	1.1	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.19	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	0.52	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.20	ug/l	
541-73-1	1,3-Dichlorobenzene	4.1	1.0	0.32	ug/l	
106-46-7	1,4-Dichlorobenzene	2.1	1.0	0.24	ug/l	
75-71-8	Dichlorodifluoromethane	ND	5.0	0.75	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.23	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.29	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.33	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.18	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.42	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.20	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.15	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.20	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.20	ug/l	
76-13-1	Freon 113	ND	5.0	0.69	ug/l	
591-78-6	2-Hexanone	ND	5.0	1.3	ug/l	
98-82-8	Isopropylbenzene	ND	2.0	0.20	ug/l	

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E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-J-082306		
Lab Sample ID:	J39222-4	**Date Sampled:**	08/23/06
Matrix:	AQ - Ground Water	**Date Received:**	08/23/06
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Quanta 2006 Groundwater Resources, Edgewater, NJ		

VOA TCL List (OLM4.2)

CAS No.	Compound	Result	RL	MDL	Units	Q
79-20-9	Methyl Acetate	ND	5.0	2.1	ug/l	
108-87-2	Methylcyclohexane	ND	5.0	0.18	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.31	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.1	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.27	ug/l	
100-42-5	Styrene	ND	5.0	0.16	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.28	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.28	ug/l	
108-88-3	Toluene	ND	1.0	0.20	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.16	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.28	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.32	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.29	ug/l	
75-69-4	Trichlorofluoromethane	ND	5.0	0.25	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.29	ug/l	
	m,p-Xylene	ND	1.0	0.42	ug/l	
95-47-6	o-Xylene	ND	1.0	0.31	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.31	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	93%		77-121%
17060-07-0	1,2-Dichloroethane-D4	96%		65-133%
2037-26-5	Toluene-D8	93%		80-117%
460-00-4	4-Bromofluorobenzene	91%		79-124%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

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RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-J-082306		
Lab Sample ID:	J39222-4	**Date Sampled:**	08/23/06
Matrix:	AQ - Ground Water	**Date Received:**	08/23/06
Method:	SW846 8270C SW846 3510C	**Percent Solids:**	n/a
Project:	Quanta 2006 Groundwater Resources, Edgewater, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3E2082.D	1	09/06/06	MMC	08/24/06	OP24587	E3E72
Run #2							

	Initial Volume	Final Volume
Run #1	830 ml	1.0 ml
Run #2		

ABN TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	6.0	1.1	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	6.0	1.4	ug/l	
120-83-2	2,4-Dichlorophenol	ND	6.0	1.9	ug/l	
105-67-9	2,4-Dimethylphenol	ND	6.0	2.0	ug/l	
51-28-5	2,4-Dinitrophenol	ND	24	1.1	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	24	0.87	ug/l	
95-48-7	2-Methylphenol	ND	6.0	1.6	ug/l	
	3&4-Methylphenol	ND	6.0	1.5	ug/l	
88-75-5	2-Nitrophenol	ND	6.0	2.2	ug/l	
100-02-7	4-Nitrophenol	ND	24	1.0	ug/l	
108-95-2	Phenol	ND	6.0	0.60	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	6.0	2.3	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	6.0	1.5	ug/l	
98-86-2	Acetophenone	ND	6.0	0.45	ug/l	
1912-24-9	Atrazine	ND	6.0	0.20	ug/l	
100-52-7	Benzaldehyde	ND	6.0	0.32	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	2.4	0.36	ug/l	
85-68-7	Butyl benzyl phthalate	ND	2.4	0.71	ug/l	
92-52-4	1,1'-Biphenyl	ND	2.4	0.39	ug/l	
91-58-7	2-Chloronaphthalene	ND	6.0	1.2	ug/l	
106-47-8	4-Chloroaniline	ND	6.0	0.48	ug/l	
86-74-8	Carbazole	ND	2.4	0.44	ug/l	
105-60-2	Caprolactam	ND	2.4	0.38	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	2.4	0.79	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	2.4	0.64	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	2.4	0.89	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	2.4	0.52	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	2.4	1.0	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	2.4	0.67	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	6.0	1.5	ug/l	
132-64-9	Dibenzofuran	ND	6.0	0.41	ug/l	
84-74-2	Di-n-butyl phthalate	ND	2.4	0.71	ug/l	

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Report of Analysis

Client Sample ID:	MW-J-082306		
Lab Sample ID:	J39222-4	**Date Sampled:**	08/23/06
Matrix:	AQ - Ground Water	**Date Received:**	08/23/06
Method:	SW846 8270C SW846 3510C	**Percent Solids:**	n/a
Project:	Quanta 2006 Groundwater Resources, Edgewater, NJ		

ABN TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
117-84-0	Di-n-octyl phthalate	ND	2.4	0.69	ug/l	
84-66-2	Diethyl phthalate	ND	2.4	0.47	ug/l	
131-11-3	Dimethyl phthalate	ND	2.4	0.40	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	2.4	0.80	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.4	0.21	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	24	0.49	ug/l	
67-72-1	Hexachloroethane	ND	6.0	0.34	ug/l	
78-59-1	Isophorone	ND	2.4	0.71	ug/l	
91-57-6	2-Methylnaphthalene	ND	2.4	0.49	ug/l	
88-74-4	2-Nitroaniline	ND	6.0	0.80	ug/l	
99-09-2	3-Nitroaniline	ND	6.0	1.5	ug/l	
100-01-6	4-Nitroaniline	ND	6.0	0.87	ug/l	
98-95-3	Nitrobenzene	ND	2.4	0.50	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	2.4	0.56	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	6.0	0.62	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	42%		12-76%
4165-62-2	Phenol-d5	33%		10-59%
118-79-6	2,4,6-Tribromophenol	76%		42-128%
4165-60-0	Nitrobenzene-d5	77%		30-122%
321-60-8	2-Fluorobiphenyl	71%		34-113%
1718-51-0	Terphenyl-d14	84%		42-125%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	system artifact	3.77	19	ug/l	J
10544-50-0	Sulfur, mol. (S8)	18.95	25	ug/l	JN
	Total TIC, Semi-Volatile		25	ug/l	J

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RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-J-082306		
Lab Sample ID:	J39222-4	**Date Sampled:**	08/23/06
Matrix:	AQ - Ground Water	**Date Received:**	08/23/06
Method:	SW846 8270C BY SIM SW846 3510C	**Percent Solids:**	n/a
Project:	Quanta 2006 Groundwater Resources, Edgewater, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Z29656.D	1	09/08/06	KLS	08/24/06	OP24588	EZ921
Run #2							

	Initial Volume	Final Volume
Run #1	830 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
87-86-5	Pentachlorophenol	ND	1.2	0.48	ug/l	
83-32-9	Acenaphthene	1.70	0.24	0.021	ug/l	
208-96-8	Acenaphthylene	0.433	0.24	0.011	ug/l	
120-12-7	Anthracene	0.910	0.24	0.025	ug/l	
56-55-3	Benzo(a)anthracene	2.62	0.24	0.0082	ug/l	
50-32-8	Benzo(a)pyrene	2.98	0.24	0.020	ug/l	
205-99-2	Benzo(b)fluoranthene	3.29	0.24	0.044	ug/l	
191-24-2	Benzo(g,h,i)perylene	1.25	0.24	0.021	ug/l	
207-08-9	Benzo(k)fluoranthene	1.33	0.24	0.019	ug/l	
218-01-9	Chrysene	2.95	0.24	0.020	ug/l	
53-70-3	Dibenzo(a,h)anthracene	0.347	0.24	0.020	ug/l	
206-44-0	Fluoranthene	6.82	0.24	0.011	ug/l	
86-73-7	Fluorene	ND	0.24	0.024	ug/l	
118-74-1	Hexachlorobenzene	ND	0.12	0.073	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	1.26	0.24	0.013	ug/l	
91-20-3	Naphthalene	0.956	0.24	0.031	ug/l	
85-01-8	Phenanthrene	0.492	0.24	0.025	ug/l	
129-00-0	Pyrene	4.91	0.24	0.017	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	49%		10-99%
4165-62-2	Phenol-d5	37%		10-83%
118-79-6	2,4,6-Tribromophenol	79%		10-140%
4165-60-0	Nitrobenzene-d5	73%		11-140%
321-60-8	2-Fluorobiphenyl	78%		10-133%
1718-51-0	Terphenyl-d14	64%		13-130%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-J-082306		
Lab Sample ID:	J39222-4	**Date Sampled:**	08/23/06
Matrix:	AQ - Ground Water	**Date Received:**	08/23/06
Method:	SW846 8082 SW846 3510C	**Percent Solids:**	n/a
Project:	Quanta 2006 Groundwater Resources, Edgewater, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	OA32122.D	1	08/25/06	TDR	08/24/06	OP24470	GOA1087
Run #2							

	Initial Volume	Final Volume
Run #1	900 ml	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	0.56	0.10	ug/l	
11104-28-2	Aroclor 1221	ND	0.56	0.52	ug/l	
11141-16-5	Aroclor 1232	ND	0.56	0.43	ug/l	
53469-21-9	Aroclor 1242	ND	0.56	0.18	ug/l	
12672-29-6	Aroclor 1248	ND	0.56	0.17	ug/l	
11097-69-1	Aroclor 1254	ND	0.56	0.12	ug/l	
11096-82-5	Aroclor 1260	6.1	0.56	0.13	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	87%		38-133%
877-09-8	Tetrachloro-m-xylene	87%		38-133%
2051-24-3	Decachlorobiphenyl	64%		18-156%
2051-24-3	Decachlorobiphenyl	79%		18-156%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-J-082306		
Lab Sample ID:	J39222-4	**Date Sampled:**	08/23/06
Matrix:	AQ - Ground Water	**Date Received:**	08/23/06
		Percent Solids:	n/a
Project:	Quanta 2006 Groundwater Resources, Edgewater, NJ		

Total Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Arsenic	152	8.0	ug/l	1	09/03/06	09/07/06	ND	SW846 6010B [1]	SW846 3010A [2]
Lead	45.0	3.0	ug/l	1	09/03/06	09/07/06	ND	SW846 6010B [1]	SW846 3010A [2]

(1) Instrument QC Batch: MA18012
(2) Prep QC Batch: MP35774

RL = Reporting Limit

Report of Analysis

Client Sample ID:	MW-A-1-082306		
Lab Sample ID:	J39222-5	**Date Sampled:**	08/23/06
Matrix:	AQ - Ground Water	**Date Received:**	08/23/06
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Quanta 2006 Groundwater Resources, Edgewater, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	U81868.D	5	09/06/06	YMH	n/a	n/a	VU3082
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List (OLM4.2)

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	50	12	ug/l	
71-43-2	Benzene	62.9	5.0	1.1	ug/l	
75-27-4	Bromodichloromethane	ND	5.0	0.87	ug/l	
75-25-2	Bromoform	ND	20	2.7	ug/l	
74-83-9	Bromomethane	ND	10	1.1	ug/l	
78-93-3	2-Butanone (MEK)	ND	50	13	ug/l	
75-15-0	Carbon disulfide	ND	10	1.0	ug/l	
56-23-5	Carbon tetrachloride	ND	5.0	1.5	ug/l	
108-90-7	Chlorobenzene	ND	5.0	1.1	ug/l	
75-00-3	Chloroethane	ND	5.0	2.8	ug/l	
67-66-3	Chloroform	ND	5.0	1.1	ug/l	
74-87-3	Chloromethane	ND	5.0	1.7	ug/l	
110-82-7	Cyclohexane	ND	25	2.5	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	50	5.5	ug/l	
124-48-1	Dibromochloromethane	ND	5.0	0.94	ug/l	
106-93-4	1,2-Dibromoethane	ND	10	2.6	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	5.0	1.0	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	5.0	1.6	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	5.0	1.2	ug/l	
75-71-8	Dichlorodifluoromethane	ND	25	3.8	ug/l	
75-34-3	1,1-Dichloroethane	ND	5.0	1.2	ug/l	
107-06-2	1,2-Dichloroethane	ND	5.0	1.5	ug/l	
75-35-4	1,1-Dichloroethene	ND	5.0	1.6	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	5.0	0.89	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	5.0	2.1	ug/l	
78-87-5	1,2-Dichloropropane	ND	5.0	1.0	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	5.0	0.74	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	5.0	1.0	ug/l	
100-41-4	Ethylbenzene	121	5.0	1.0	ug/l	
76-13-1	Freon 113	ND	25	3.4	ug/l	
591-78-6	2-Hexanone	ND	25	6.3	ug/l	
98-82-8	Isopropylbenzene	20.6	10	1.0	ug/l	

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Report of Analysis

Client Sample ID:	MW-A-1-082306		
Lab Sample ID:	J39222-5	**Date Sampled:**	08/23/06
Matrix:	AQ - Ground Water	**Date Received:**	08/23/06
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Quanta 2006 Groundwater Resources, Edgewater, NJ		

VOA TCL List (OLM4.2)

CAS No.	Compound	Result	RL	MDL	Units	Q
79-20-9	Methyl Acetate	ND	25	10	ug/l	
108-87-2	Methylcyclohexane	ND	25	0.91	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	5.0	1.5	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	25	5.3	ug/l	
75-09-2	Methylene chloride	ND	10	1.3	ug/l	
100-42-5	Styrene	ND	25	0.79	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.0	1.4	ug/l	
127-18-4	Tetrachloroethene	ND	5.0	1.4	ug/l	
108-88-3	Toluene	5.1	5.0	1.0	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	25	0.80	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	5.0	1.4	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	5.0	1.6	ug/l	
79-01-6	Trichloroethene	ND	5.0	1.4	ug/l	
75-69-4	Trichlorofluoromethane	ND	25	1.3	ug/l	
75-01-4	Vinyl chloride	ND	5.0	1.4	ug/l	
	m,p-Xylene	9.5	5.0	2.1	ug/l	
95-47-6	o-Xylene	13.3	5.0	1.5	ug/l	
1330-20-7	Xylene (total)	22.8	5.0	1.5	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	106%		77-121%
17060-07-0	1,2-Dichloroethane-D4	121%		65-133%
2037-26-5	Toluene-D8	96%		80-117%
460-00-4	4-Bromofluorobenzene	97%		79-124%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
496-11-7	Indane	16.51	1300	ug/l	JN
	1H-indene-dihydro-methyl	17.77	27	ug/l	J
	1H-indene-dihydro-methyl	17.96	44	ug/l	J
91-20-3	Naphthalene	18.70	970	ug/l	JN
	Benzo[]thiophene	18.85	58	ug/l	J
	Naphthalene methyl	20.26	88	ug/l	J
	Total TIC, Volatile		2487	ug/l	J

(a) Diluted due to high concentration of non-target compound.

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E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-A-1-082306		
Lab Sample ID:	J39222-5	**Date Sampled:**	08/23/06
Matrix:	AQ - Ground Water	**Date Received:**	08/23/06
Method:	SW846 8270C SW846 3510C	**Percent Solids:**	n/a
Project:	Quanta 2006 Groundwater Resources, Edgewater, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3E2083.D	1	09/06/06	MMC	08/24/06	OP24587	E3E72
Run #2	3E2106.D	20	09/07/06	MMC	08/24/06	OP24587	E3E73

	Initial Volume	Final Volume
Run #1	840 ml	1.0 ml
Run #2	840 ml	1.0 ml

ABN TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	6.0	1.1	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	6.0	1.4	ug/l	
120-83-2	2,4-Dichlorophenol	ND	6.0	1.9	ug/l	
105-67-9	2,4-Dimethylphenol	32.0	6.0	2.0	ug/l	
51-28-5	2,4-Dinitrophenol	ND	24	1.1	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	24	0.86	ug/l	
95-48-7	2-Methylphenol	2.0	6.0	1.6	ug/l	J
	3&4-Methylphenol	ND	6.0	1.5	ug/l	
88-75-5	2-Nitrophenol	ND	6.0	2.2	ug/l	
100-02-7	4-Nitrophenol	ND	24	1.0	ug/l	
108-95-2	Phenol	ND	6.0	0.59	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	6.0	2.3	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	6.0	1.5	ug/l	
83-32-9	Acenaphthene	55.6	2.4	0.42	ug/l	
98-86-2	Acetophenone	ND	6.0	0.45	ug/l	
1912-24-9	Atrazine	ND	6.0	0.19	ug/l	
100-52-7	Benzaldehyde	ND	6.0	0.32	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	2.4	0.36	ug/l	
85-68-7	Butyl benzyl phthalate	ND	2.4	0.71	ug/l	
92-52-4	1,1'-Biphenyl	10.9	2.4	0.39	ug/l	
91-58-7	2-Chloronaphthalene	ND	6.0	1.2	ug/l	
106-47-8	4-Chloroaniline	ND	6.0	0.47	ug/l	
86-74-8	Carbazole	37.7	2.4	0.43	ug/l	
105-60-2	Caprolactam	ND	2.4	0.38	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	2.4	0.78	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	2.4	0.63	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	2.4	0.88	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	2.4	0.51	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	2.4	1.0	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	2.4	0.67	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	6.0	1.5	ug/l	
132-64-9	Dibenzofuran	8.3	6.0	0.41	ug/l	

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E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-A-1-082306		
Lab Sample ID:	J39222-5	**Date Sampled:**	08/23/06
Matrix:	AQ - Ground Water	**Date Received:**	08/23/06
Method:	SW846 8270C SW846 3510C	**Percent Solids:**	n/a
Project:	Quanta 2006 Groundwater Resources, Edgewater, NJ		

ABN TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
84-74-2	Di-n-butyl phthalate	ND	2.4	0.70	ug/l	
117-84-0	Di-n-octyl phthalate	ND	2.4	0.68	ug/l	
84-66-2	Diethyl phthalate	ND	2.4	0.46	ug/l	
131-11-3	Dimethyl phthalate	ND	2.4	0.39	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	2.4	0.79	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.4	0.21	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	24	0.48	ug/l	
67-72-1	Hexachloroethane	ND	6.0	0.34	ug/l	
78-59-1	Isophorone	ND	2.4	0.70	ug/l	
91-57-6	2-Methylnaphthalene	56.8	2.4	0.49	ug/l	
88-74-4	2-Nitroaniline	ND	6.0	0.79	ug/l	
99-09-2	3-Nitroaniline	ND	6.0	1.5	ug/l	
100-01-6	4-Nitroaniline	ND	6.0	0.86	ug/l	
91-20-3	Naphthalene	1210 [a]	48	7.6	ug/l	
98-95-3	Nitrobenzene	ND	2.4	0.50	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	2.4	0.56	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	6.0	0.61	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	46%	45%	12-76%
4165-62-2	Phenol-d5	36%	32%	10-59%
118-79-6	2,4,6-Tribromophenol	90%	65%	42-128%
4165-60-0	Nitrobenzene-d5	85%	83%	30-122%
321-60-8	2-Fluorobiphenyl	79%	86%	34-113%
1718-51-0	Terphenyl-d14	89%	89%	42-125%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	system artifact/aldol-condensation	3.77	23	ug/l	J
	C3 alkyl benzene	4.91	24	ug/l	J
	C3 alkyl benzene	5.54	17	ug/l	J
	C3 alkyl benzene	5.72	20	ug/l	J
	C3 alkyl benzene	6.37	30	ug/l	J
496	Indane	6.60	980	ug/l	JN
95	Indene	6.71	22	ug/l	JN
	Benzonitrile, methyl-	7.04	21	ug/l	J
1195	Bicyclo[2.2.1]heptan-2-one, 1,3,3-	7.37	43	ug/l	JN
	Phenol diethyl	10.96	18	ug/l	J
	unknown	12.35	22	ug/l	J

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-A-1-082306		
Lab Sample ID:	J39222-5	**Date Sampled:**	08/23/06
Matrix:	AQ - Ground Water	**Date Received:**	08/23/06
Method:	SW846 8270C SW846 3510C	**Percent Solids:**	n/a
Project:	Quanta 2006 Groundwater Resources, Edgewater, NJ		

ABN TCL List

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Naphthalenol	13.13	48	ug/l	J
	Naphthalenol	13.23	25	ug/l	J
	unknown	13.98	50	ug/l	J
	unknown	14.38	27	ug/l	J
	unknown	14.49	28	ug/l	J
	unknown	14.64	25	ug/l	J
	unknown	15.02	41	ug/l	J
	unknown	15.09	36	ug/l	J
	unknown	15.35	18	ug/l	J
	unknown	15.46	23	ug/l	J
	unknown	15.87	29	ug/l	J
	unknown	16.08	30	ug/l	J
	unknown	16.62	17	ug/l	J
	unknown	16.74	43	ug/l	J
	unknown	17.07	24	ug/l	J
	Total TIC, Semi-Volatile		1661	ug/l	J

(a) Result is from Run# 2

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-A-1-082306		
Lab Sample ID:	J39222-5	**Date Sampled:**	08/23/06
Matrix:	AQ - Ground Water	**Date Received:**	08/23/06
Method:	SW846 8270C BY SIM SW846 3510C	**Percent Solids:**	n/a
Project:	Quanta 2006 Groundwater Resources, Edgewater, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Z29596.D	1	09/06/06	KLS	08/24/06	OP24588	EZ918
Run #2							

	Initial Volume	Final Volume
Run #1	840 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
87-86-5	Pentachlorophenol	ND	1.2	0.47	ug/l	
208-96-8	Acenaphthylene	0.886	0.24	0.011	ug/l	
120-12-7	Anthracene	0.772	0.24	0.025	ug/l	
56-55-3	Benzo(a)anthracene	ND	0.24	0.0081	ug/l	
50-32-8	Benzo(a)pyrene	ND	0.24	0.020	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	0.24	0.043	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	0.24	0.021	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	0.24	0.019	ug/l	
218-01-9	Chrysene	ND	0.24	0.020	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	0.24	0.020	ug/l	
206-44-0	Fluoranthene	0.790	0.24	0.011	ug/l	
86-73-7	Fluorene	8.05	0.24	0.024	ug/l	
118-74-1	Hexachlorobenzene	ND	0.12	0.073	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.24	0.013	ug/l	
85-01-8	Phenanthrene	4.37	0.24	0.025	ug/l	
129-00-0	Pyrene	0.396	0.24	0.017	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	53%		10-99%
4165-62-2	Phenol-d5	38%		10-83%
118-79-6	2,4,6-Tribromophenol	96%		10-140%
4165-60-0	Nitrobenzene-d5	96%		11-140%
321-60-8	2-Fluorobiphenyl	57%		10-133%
1718-51-0	Terphenyl-d14	79%		13-130%

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E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-A-1-082306		
Lab Sample ID:	J39222-5	**Date Sampled:**	08/23/06
Matrix:	AQ - Ground Water	**Date Received:**	08/23/06
Method:	SW846 8082 SW846 3510C	**Percent Solids:**	n/a
Project:	Quanta 2006 Groundwater Resources, Edgewater, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	OA32126.D	1	08/25/06	TDR	08/24/06	OP24470	GOA1087
Run #2							

	Initial Volume	Final Volume
Run #1	900 ml	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	0.56	0.10	ug/l	
11104-28-2	Aroclor 1221	ND	0.56	0.52	ug/l	
11141-16-5	Aroclor 1232	ND	0.56	0.43	ug/l	
53469-21-9	Aroclor 1242	ND	0.56	0.18	ug/l	
12672-29-6	Aroclor 1248	ND	0.56	0.17	ug/l	
11097-69-1	Aroclor 1254	ND	0.56	0.12	ug/l	
11096-82-5	Aroclor 1260	ND	0.56	0.13	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	135% [a]		38-133%
877-09-8	Tetrachloro-m-xylene	103%		38-133%
2051-24-3	Decachlorobiphenyl	78%		18-156%
2051-24-3	Decachlorobiphenyl	88%		18-156%

(a) Outside control limits due to matrix interference.

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-A-1-082306		
Lab Sample ID:	J39222-5	**Date Sampled:**	08/23/06
Matrix:	AQ - Ground Water	**Date Received:**	08/23/06
		Percent Solids:	n/a
Project:	Quanta 2006 Groundwater Resources, Edgewater, NJ		

Total Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Arsenic	5530	8.0	ug/l	1	09/03/06	09/07/06	ND	SW846 6010B [1]	SW846 3010A [2]
Lead	5.5	3.0	ug/l	1	09/03/06	09/07/06	ND	SW846 6010B [1]	SW846 3010A [2]

(1) Instrument QC Batch: MA18012
(2) Prep QC Batch: MP35774

RL = Reporting Limit

Report of Analysis

Client Sample ID:	EB-082306-GW		
Lab Sample ID:	J39222-6	**Date Sampled:**	08/23/06
Matrix:	AQ - Equipment Blank	**Date Received:**	08/23/06
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Quanta 2006 Groundwater Resources, Edgewater, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	U81866.D	1	09/06/06	YMH	n/a	n/a	VU3082
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List (OLM4.2)

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	2.4	ug/l	
71-43-2	Benzene	ND	1.0	0.21	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.17	ug/l	
75-25-2	Bromoform	ND	4.0	0.54	ug/l	
74-83-9	Bromomethane	ND	2.0	0.22	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	2.6	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.21	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.29	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.22	ug/l	
75-00-3	Chloroethane	ND	1.0	0.56	ug/l	
67-66-3	Chloroform	ND	1.0	0.22	ug/l	
74-87-3	Chloromethane	ND	1.0	0.35	ug/l	
110-82-7	Cyclohexane	ND	5.0	0.50	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	10	1.1	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.19	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	0.52	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.20	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.32	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.24	ug/l	
75-71-8	Dichlorodifluoromethane	ND	5.0	0.75	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.23	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.29	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.33	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.18	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.42	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.20	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.15	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.20	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.20	ug/l	
76-13-1	Freon 113	ND	5.0	0.69	ug/l	
591-78-6	2-Hexanone	ND	5.0	1.3	ug/l	
98-82-8	Isopropylbenzene	ND	2.0	0.20	ug/l	

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E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	EB-082306-GW		
Lab Sample ID:	J39222-6	**Date Sampled:**	08/23/06
Matrix:	AQ - Equipment Blank	**Date Received:**	08/23/06
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Quanta 2006 Groundwater Resources, Edgewater, NJ		

VOA TCL List (OLM4.2)

CAS No.	Compound	Result	RL	MDL	Units	Q
79-20-9	Methyl Acetate	ND	5.0	2.1	ug/l	
108-87-2	Methylcyclohexane	ND	5.0	0.18	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.31	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.1	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.27	ug/l	
100-42-5	Styrene	ND	5.0	0.16	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.28	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.28	ug/l	
108-88-3	Toluene	ND	1.0	0.20	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.16	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.28	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.32	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.29	ug/l	
75-69-4	Trichlorofluoromethane	ND	5.0	0.25	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.29	ug/l	
	m,p-Xylene	ND	1.0	0.42	ug/l	
95-47-6	o-Xylene	ND	1.0	0.31	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.31	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	101%		77-121%
17060-07-0	1,2-Dichloroethane-D4	106%		65-133%
2037-26-5	Toluene-D8	96%		80-117%
460-00-4	4-Bromofluorobenzene	98%		79-124%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

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RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	EB-082306-GW		
Lab Sample ID:	J39222-6	**Date Sampled:**	08/23/06
Matrix:	AQ - Equipment Blank	**Date Received:**	08/23/06
Method:	SW846 8270C SW846 3510C	**Percent Solids:**	n/a
Project:	Quanta 2006 Groundwater Resources, Edgewater, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3E2084.D	1	09/06/06	MMC	08/24/06	OP24587	E3E72
Run #2							

	Initial Volume	Final Volume
Run #1	850 ml	1.0 ml
Run #2		

ABN TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	5.9	1.1	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	5.9	1.4	ug/l	
120-83-2	2,4-Dichlorophenol	ND	5.9	1.8	ug/l	
105-67-9	2,4-Dimethylphenol	ND	5.9	1.9	ug/l	
51-28-5	2,4-Dinitrophenol	ND	24	1.0	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	24	0.85	ug/l	
95-48-7	2-Methylphenol	ND	5.9	1.6	ug/l	
	3&4-Methylphenol	ND	5.9	1.5	ug/l	
88-75-5	2-Nitrophenol	ND	5.9	2.1	ug/l	
100-02-7	4-Nitrophenol	ND	24	0.99	ug/l	
108-95-2	Phenol	ND	5.9	0.58	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	5.9	2.3	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	5.9	1.5	ug/l	
98-86-2	Acetophenone	ND	5.9	0.44	ug/l	
1912-24-9	Atrazine	ND	5.9	0.19	ug/l	
100-52-7	Benzaldehyde	ND	5.9	0.31	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	2.4	0.35	ug/l	
85-68-7	Butyl benzyl phthalate	ND	2.4	0.70	ug/l	
92-52-4	1,1'-Biphenyl	ND	2.4	0.38	ug/l	
91-58-7	2-Chloronaphthalene	ND	5.9	1.2	ug/l	
106-47-8	4-Chloroaniline	ND	5.9	0.47	ug/l	
86-74-8	Carbazole	ND	2.4	0.43	ug/l	
105-60-2	Caprolactam	ND	2.4	0.37	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	2.4	0.77	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	2.4	0.62	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	2.4	0.87	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	2.4	0.51	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	2.4	1.0	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	2.4	0.66	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	5.9	1.4	ug/l	
132-64-9	Dibenzofuran	ND	5.9	0.40	ug/l	
84-74-2	Di-n-butyl phthalate	ND	2.4	0.70	ug/l	

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Report of Analysis

Client Sample ID:	EB-082306-GW		
Lab Sample ID:	J39222-6	**Date Sampled:**	08/23/06
Matrix:	AQ - Equipment Blank	**Date Received:**	08/23/06
Method:	SW846 8270C SW846 3510C	**Percent Solids:**	n/a
Project:	Quanta 2006 Groundwater Resources, Edgewater, NJ		

ABN TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
117-84-0	Di-n-octyl phthalate	ND	2.4	0.67	ug/l	
84-66-2	Diethyl phthalate	ND	2.4	0.46	ug/l	
131-11-3	Dimethyl phthalate	ND	2.4	0.39	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	2.4	0.78	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.4	0.21	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	24	0.48	ug/l	
67-72-1	Hexachloroethane	ND	5.9	0.33	ug/l	
78-59-1	Isophorone	ND	2.4	0.69	ug/l	
91-57-6	2-Methylnaphthalene	ND	2.4	0.48	ug/l	
88-74-4	2-Nitroaniline	ND	5.9	0.78	ug/l	
99-09-2	3-Nitroaniline	ND	5.9	1.5	ug/l	
100-01-6	4-Nitroaniline	ND	5.9	0.85	ug/l	
98-95-3	Nitrobenzene	ND	2.4	0.49	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	2.4	0.55	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	5.9	0.61	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	42%		12-76%
4165-62-2	Phenol-d5	31%		10-59%
118-79-6	2,4,6-Tribromophenol	70%		42-128%
4165-60-0	Nitrobenzene-d5	87%		30-122%
321-60-8	2-Fluorobiphenyl	80%		34-113%
1718-51-0	Terphenyl-d14	90%		42-125%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	system artifact/aldol-condensation	3.77	19	ug/l	J
	system artifact	19.80	13	ug/l	J
	Total TIC, Semi-Volatile		0	ug/l	

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Report of Analysis

Client Sample ID:	EB-082306-GW		
Lab Sample ID:	J39222-6	**Date Sampled:**	08/23/06
Matrix:	AQ - Equipment Blank	**Date Received:**	08/23/06
Method:	SW846 8270C BY SIM SW846 3510C	**Percent Solids:**	n/a
Project:	Quanta 2006 Groundwater Resources, Edgewater, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Z29597.D	1	09/06/06	KLS	08/24/06	OP24588	EZ918
Run #2							

	Initial Volume	Final Volume
Run #1	850 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
87-86-5	Pentachlorophenol	ND	1.2	0.47	ug/l	
83-32-9	Acenaphthene	ND	0.24	0.020	ug/l	
208-96-8	Acenaphthylene	ND	0.24	0.011	ug/l	
120-12-7	Anthracene	ND	0.24	0.025	ug/l	
56-55-3	Benzo(a)anthracene	ND	0.24	0.0080	ug/l	
50-32-8	Benzo(a)pyrene	ND	0.24	0.020	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	0.24	0.043	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	0.24	0.021	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	0.24	0.018	ug/l	
218-01-9	Chrysene	ND	0.24	0.020	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	0.24	0.019	ug/l	
206-44-0	Fluoranthene	ND	0.24	0.011	ug/l	
86-73-7	Fluorene	ND	0.24	0.024	ug/l	
118-74-1	Hexachlorobenzene	ND	0.12	0.072	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.24	0.013	ug/l	
91-20-3	Naphthalene	2.27	0.24	0.030	ug/l	
85-01-8	Phenanthrene	ND	0.24	0.025	ug/l	
129-00-0	Pyrene	ND	0.24	0.016	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	48%		10-99%
4165-62-2	Phenol-d5	34%		10-83%
118-79-6	2,4,6-Tribromophenol	100%		10-140%
4165-60-0	Nitrobenzene-d5	84%		11-140%
321-60-8	2-Fluorobiphenyl	77%		10-133%
1718-51-0	Terphenyl-d14	81%		13-130%

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Report of Analysis

Client Sample ID:	EB-082306-GW		
Lab Sample ID:	J39222-6	**Date Sampled:**	08/23/06
Matrix:	AQ - Equipment Blank	**Date Received:**	08/23/06
Method:	SW846 8081A SW846 3510C	**Percent Solids:**	n/a
Project:	Quanta 2006 Groundwater Resources, Edgewater, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	XX61859.D	1	08/26/06	OPM	08/24/06	OP24515	GXX1856
Run #2							

	Initial Volume	Final Volume
Run #1	1000 ml	10.0 ml
Run #2		

Pesticide TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
309-00-2	Aldrin	ND	0.020	0.0033	ug/l	
319-84-6	alpha-BHC	ND	0.020	0.0026	ug/l	
319-85-7	beta-BHC	ND	0.020	0.0062	ug/l	
319-86-8	delta-BHC	ND	0.020	0.0031	ug/l	
58-89-9	gamma-BHC (Lindane)	ND	0.020	0.0017	ug/l	
5103-71-9	alpha-Chlordane	ND	0.020	0.0044	ug/l	
5103-74-2	gamma-Chlordane	ND	0.020	0.0017	ug/l	
60-57-1	Dieldrin	ND	0.020	0.0017	ug/l	
72-54-8	4,4'-DDD	ND	0.020	0.0024	ug/l	
72-55-9	4,4'-DDE	ND	0.020	0.0017	ug/l	
50-29-3	4,4'-DDT	ND	0.020	0.0049	ug/l	
72-20-8	Endrin	ND	0.020	0.0030	ug/l	
1031-07-8	Endosulfan sulfate	ND	0.020	0.0046	ug/l	
7421-93-4	Endrin aldehyde	ND	0.020	0.0064	ug/l	
53494-70-5	Endrin ketone	ND	0.050	0.0035	ug/l	
959-98-8	Endosulfan-I	ND	0.020	0.0021	ug/l	
33213-65-9	Endosulfan-II	ND	0.020	0.0032	ug/l	
76-44-8	Heptachlor	ND	0.020	0.0026	ug/l	
1024-57-3	Heptachlor epoxide	ND	0.020	0.0015	ug/l	
72-43-5	Methoxychlor	ND	0.050	0.0068	ug/l	
8001-35-2	Toxaphene	ND	0.25	0.094	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	88%		36-126%
877-09-8	Tetrachloro-m-xylene	92%		36-126%
2051-24-3	Decachlorobiphenyl	57%		15-142%
2051-24-3	Decachlorobiphenyl	55%		15-142%

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E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	EB-082306-GW		
Lab Sample ID:	J39222-6	**Date Sampled:**	08/23/06
Matrix:	AQ - Equipment Blank	**Date Received:**	08/23/06
Method:	SW846 8082 SW846 3510C	**Percent Solids:**	n/a
Project:	Quanta 2006 Groundwater Resources, Edgewater, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	OA32127.D	1	08/25/06	TDR	08/24/06	OP24470	GOA1087
Run #2							

	Initial Volume	Final Volume
Run #1	1000 ml	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	0.50	0.094	ug/l	
11104-28-2	Aroclor 1221	ND	0.50	0.47	ug/l	
11141-16-5	Aroclor 1232	ND	0.50	0.39	ug/l	
53469-21-9	Aroclor 1242	ND	0.50	0.16	ug/l	
12672-29-6	Aroclor 1248	ND	0.50	0.15	ug/l	
11097-69-1	Aroclor 1254	ND	0.50	0.11	ug/l	
11096-82-5	Aroclor 1260	ND	0.50	0.12	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	86%		38-133%
877-09-8	Tetrachloro-m-xylene	101%		38-133%
2051-24-3	Decachlorobiphenyl	65%		18-156%
2051-24-3	Decachlorobiphenyl	75%		18-156%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	EB-082306-GW		
Lab Sample ID:	J39222-6	**Date Sampled:**	08/23/06
Matrix:	AQ - Equipment Blank	**Date Received:**	08/23/06
		Percent Solids:	n/a
Project:	Quanta 2006 Groundwater Resources, Edgewater, NJ		

Total Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Arsenic	< 2.0	2.0	ug/l	1	09/03/06	09/08/06	LH	SW846 6010B [2]	SW846 3010A [3]
Lead	< 3.0	3.0	ug/l	1	09/03/06	09/08/06	ND	SW846 6010B [1]	SW846 3010A [3]

(1) Instrument QC Batch: MA18018
(2) Instrument QC Batch: MA18025
(3) Prep QC Batch: MP35774

RL = Reporting Limit

Report of Analysis

Client Sample ID:	TB-082306-GW		
Lab Sample ID:	J39222-7	**Date Sampled:**	08/23/06
Matrix:	AQ - Trip Blank Water	**Date Received:**	08/23/06
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Quanta 2006 Groundwater Resources, Edgewater, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	U81867.D	1	09/06/06	YMH	n/a	n/a	VU3082
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List (OLM4.2)

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	2.4	ug/l	
71-43-2	Benzene	ND	1.0	0.21	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.17	ug/l	
75-25-2	Bromoform	ND	4.0	0.54	ug/l	
74-83-9	Bromomethane	ND	2.0	0.22	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	2.6	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.21	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.29	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.22	ug/l	
75-00-3	Chloroethane	ND	1.0	0.56	ug/l	
67-66-3	Chloroform	ND	1.0	0.22	ug/l	
74-87-3	Chloromethane	ND	1.0	0.35	ug/l	
110-82-7	Cyclohexane	ND	5.0	0.50	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	10	1.1	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.19	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	0.52	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.20	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.32	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.24	ug/l	
75-71-8	Dichlorodifluoromethane	ND	5.0	0.75	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.23	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.29	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.33	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.18	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.42	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.20	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.15	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.20	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.20	ug/l	
76-13-1	Freon 113	ND	5.0	0.69	ug/l	
591-78-6	2-Hexanone	ND	5.0	1.3	ug/l	
98-82-8	Isopropylbenzene	ND	2.0	0.20	ug/l	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TB-082306-GW		
Lab Sample ID:	J39222-7	**Date Sampled:**	08/23/06
Matrix:	AQ - Trip Blank Water	**Date Received:**	08/23/06
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Quanta 2006 Groundwater Resources, Edgewater, NJ		

VOA TCL List (OLM4.2)

CAS No.	Compound	Result	RL	MDL	Units	Q
79-20-9	Methyl Acetate	ND	5.0	2.1	ug/l	
108-87-2	Methylcyclohexane	ND	5.0	0.18	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.31	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.1	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.27	ug/l	
100-42-5	Styrene	ND	5.0	0.16	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.28	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.28	ug/l	
108-88-3	Toluene	ND	1.0	0.20	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.16	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.28	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.32	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.29	ug/l	
75-69-4	Trichlorofluoromethane	ND	5.0	0.25	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.29	ug/l	
	m,p-Xylene	ND	1.0	0.42	ug/l	
95-47-6	o-Xylene	ND	1.0	0.31	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.31	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	104%		77-121%
17060-07-0	1,2-Dichloroethane-D4	115%		65-133%
2037-26-5	Toluene-D8	96%		80-117%
460-00-4	4-Bromofluorobenzene	101%		79-124%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

New Jersey

ACCUTEST LABORATORIES

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody

FB, EW, TB

Accutest Labs
2235 ROUTE 130
Dayton, NJ 08810
732-329-0200

Honeywell — Chain Of Custody / Analysis Request

J39222

AESI Ref:	38946.64932
COC#	[illegible]
Lab Proj # (SDG):	
Lab ID	[illegible]
Site ID	[illegible]
Lab Job #	
Authorized User:	Honeywell

Privileged & Confidential

EDD To: amy.klopper@ch2m.com, john.mitchell@ch2m.com

Sampling Co.: CH2M HILL

Client Contact: (name, co., address)
Jennifer Simms
1700 Market Street, Suite 1600
Philadelphia, PA 19103

Sampler: Austin Hareclerode/CH2M HILL

PO #

Analysis Turnaround Time (TAT): 10

Consultant: CH2M

Full Report TAT:

Hard Copy To: Amy Klopper, 3011 Southwest Williston Road,

Invoice To: jennifer.simms@ch2m.com

Site Name: Quanta Resources (Edgewater)

Location of Site: Edgewater, NJ

Phase:

Sampling Program: Quanta 2006 Groundwater

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	Location ID	Start Depth (ft)	End Depth (ft)	Field Sample ID	Sample Date	Sample Time	Sample Type	Sample Matrix	Sample Purpose	# of Cont.	Units	Field Filtered Sample?	SW8260 - VOCs	SW8270 - SVOCs	SW8270-SIM	SW6010 - As, Pb	SW8081 - Pesticides	SW8082 - PCBs	E350.2 - Ammonia	Sampling Method (code)	Lab Sample Numbers
													9	1	1	10	1	1	7		
1	Equip Blank	-	1	EB-082306-GW	8/23/06	0700	BLK WATER	WATER	EB	8	G	N	X	X	X	X	X	X	X	Bld pump	
2	MW-118A	-	2	MW-118A-082306	8/23/06	0910	GW	WATER	REG	8	G	N	X	X	X	X		X		Bld pump	
3	MW-117B	-	3	MW-117B-082306	8/23/06	0950	GW	WATER	REG	8	G	N	X	X	X	X	X	X		Bld pump	
4	MW-J	-	4	MW-J-082306	8/23/06	1155	GW	WATER	REG	8	G	N	X	X	X	X		X		Bld pump	
5	MW-A-1	-	5	MW-A-1-082306	8/23/06	1230	GW	WATER	REG	8	G	N	X	X	X	X	X	X		Bld pump	
6	Equip Blank	-	6	EB-082306-GW	8/23/06	1330	BLK WATER	WATER	EB	8	G	N	X	X	X	X	X	X		Δ 8-21-06 @ 1800	
7	Trip Blank Δ	-	7	TB-082306-GW	8/23/06	—	Blank Water	Water	TB	2	G	N	X							8-23-06 [illegible]	
8																					
9																				EX81,	2253
10																				AMET10,	
11																				WC14	
12																					

See worksheet SW6010 - analyze for Arsenic (As) and Lead (Pb)

SW6010^LLI

Relinquished by	Company	Date/Time	Received by	Company	Date/Time	Condition	Cooler Temp.	Custody Seals Intact
[signature]	CH2M HILL	8/23/06 1605	[signature]	Accutest	8/23/06 1600			
[signature]		8/23/06 1730	[signature]		8/23/06 1730			

Preservatives: (Other; Specify):

0 (none); 1 (4 Deg C); 2 (HCl pH<2); 3 (HNO3 pH<2); 4 (H2SO4 pH<2); 5 (NaOH pH>12); 6 (NaOH, Zn Acetate); 7 (H2SO4 (pH<2), 4 Deg C)); 8 (HCl pH<2); 9 (HCl 4 Deg C); 10 (HNO3 (pH<2), 4Deg C); 11 (4C NaOH (pH>12) & Ascorbic Acid); 12 (4C H2SO4 (pH<2) & Na2S2O3); 13 (Zn Acetate); sp (special instructions)

ALL SAMPLES RECEIVED PRESERVED AS APPLICABLE DK 6.0°C - 5.6°C

5.1

5

J39222: Chain of Custody
Page 1 of 1

New Jersey
ACCUTEST LABORATORIES

10/06/15

Technical Report for

CH2M Hill

Quanta 2006 Groundwater Resources, Edgewater, NJ

30916-082406-GW-A

Accutest Job Number: J39323

Sampling Dates: 08/23/06 - 08/24/06

Report to:

CH2M Hill

Theresa.Himmer@CH2M.com

ATTN: Theresa Himmer

Total number of pages in report: **99**

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Program and/or state specific certification programs as applicable.

Nancy Cole
Laboratory Director

Client Service contact: Nadine Yakes 732-329-0200

Certifications: NJ(12129), NY(10983), CA, CT, DE, FL, IL, IN, KS, KY, LA, MA, MD, MI, MT, NC, OH VAP (CL0056), AK (UST-103), AZ (AZ0786), PA, RI, SC, TN, TX, VA, WV, DoD ELAP (L-A-B L2248)

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Accutest LabLink@876317 14:23 06-Oct-2015

Sample Summary

CH2M Hill

Job No: J39323

Quanta 2006 Groundwater Resources, Edgewater, NJ
Project No: 30916-082406-GW-A

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
J39323-1	08/23/06	14:50	AH	08/24/06	AQ	Ground Water	MW-G-082306
J39323-2	08/23/06	15:27	AH	08/24/06	AQ	Ground Water	MW-I-082306
J39323-3	08/24/06	09:15	AH	08/24/06	AQ	Ground Water	MW-C-082406
J39323-4	08/24/06	09:50	AH	08/24/06	AQ	Ground Water	MW-B-082406
J39323-5	08/24/06	10:20	AH	08/24/06	AQ	Ground Water	MW-A-2-082406
J39323-5D	08/24/06	10:20	AH	08/24/06	AQ	Water Dup/MSD	MW-A-2-082406
J39323-5S	08/24/06	10:20	AH	08/24/06	AQ	Water Matrix Spike	MW-A-2-082406
J39323-6	08/24/06	13:45	AH	08/24/06	AQ	Ground Water	MW-F-082406
J39323-7	08/24/06	14:30	AH	08/24/06	AQ	Ground Water	MW-L-082406
J39323-7D	08/24/06	14:30	AH	08/24/06	AQ	Water Dup/MSD	MW-L-082406
J39323-7S	08/24/06	14:30	AH	08/24/06	AQ	Water Matrix Spike	MW-L-082406
J39323-8	08/24/06	15:00	AH	08/24/06	AQ	Equipment Blank	EB-082406-GW
J39323-9	08/24/06	15:00	AH	08/24/06	AQ	Trip Blank Water	TB-082406-GW

Sample Summary
(continued)

CH2M Hill

Job No: J39323

Quanta 2006 Groundwater Resources, Edgewater, NJ
Project No: 30916-082406-GW-A

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
J39323-10	08/24/06	00:00	AH	08/24/06	AQ	Ground Water	DUP-082406-GW-1
J39323-11	08/24/06	00:00	AH	08/29/06	AQ	Ground Water	DUP-082406-GW-2

CASE NARRATIVE / CONFORMANCE SUMMARY

Client:	CH2M Hill	**Job No**	J39323
Site:	Quanta 2006 Groundwater Resources, Edgewater, NJ	**Report Date**	9/22/2006 12:10:44 PM

10 Sample(s), 1 Trip Blank(s) and 0 Field Blank(s) were collected between 08/23/2006 and 08/24/2006 and were received at Accutest between 08/24/2006 and 08/29/2006 at 5.4 Deg. C and intact. These Samples received an Accutest job number of J39323. A listing of the Laboratory Sample ID, Client Sample ID and dates of collection are presented in the Results Summary Section of this report. For sample J39323-3, Metals volume was received underpreserved and preservative was added upon arrival.

Except as noted below, all method specified calibrations and quality control performance criteria were met for this job. For more information, please refer to QC summary pages.

Volatiles by GCMS By Method SW846 8260B

Matrix AQ **Batch ID:** VA3824

- All samples were analyzed within the recommended method holding time.
- Sample(s) J39323-5MS, J39323-5MSD were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.
- J39323-5: Diluted due to high concentration of non-target compound.

Matrix AQ **Batch ID:** VA3826

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) J39323-7MS, J39323-7MSD were used as the QC samples indicated.
- J39323-10: Diluted due to high concentration of non-target compound.

Matrix AQ **Batch ID:** VA3828

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) J39460-33MS, J39460-33MSD were used as the QC samples indicated.
- Matrix Spike Recovery(s) for Trichloroethene are outside control limits. Outside control limits due to high level in sample relative to spike amount.
- Matrix Spike Duplicate Recovery(s) for Trichloroethene are outside control limits. Outside control limits due to high level in sample relative to spike amount.

Extractables by GCMS By Method SW846 8270C

2

Matrix AQ	**Batch ID:** OP24604

- All samples were extracted within the recommended method holding time.
- All samples were analyzed within the recommended method holding time.
- Sample(s) J39323-5MS, J39323-5MSD were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.
- Matrix Spike Recovery(s) for 2-Methylnaphthalene, Acenaphthene, Atrazine are outside control limits. Outside control limits due to matrix interference.
- Matrix Spike Duplicate Recovery(s) for 1,1'-Biphenyl, 2-Methylnaphthalene, 3,3'-Dichlorobenzidine, Acenaphthene, Atrazine are outside control limits. Outside control limits due to matrix interference.
- Matrix Spike and Matrix Spike Duplicate Recovery(s) for Naphthalene are outside control limits. Outside control limits due to high level in sample relative to spike amount.
- Sample(s) OP24604-MB1 have surrogates outside of in house control limits.
- J39323-3: Diluted due to high concentration of non-target compound.

Matrix AQ	**Batch ID:** OP24606

- All samples were extracted within the recommended method holding time.
- All samples were analyzed within the recommended method holding time.
- Sample(s) J39323-7MS, J39323-7MSD were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.
- Blank Spike Recovery(s) for Di-n-octyl phthalate are outside control limits. Possible laboratory contamination.

Extractables by GCMS By Method SW846 8270C BY SIM

2

Matrix AQ	**Batch ID:** OP24605

- All samples were extracted within the recommended method holding time.
- All samples were analyzed within the recommended method holding time.
- Sample(s) J39323-5MS, J39323-5MSD were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.
- Blank Spike Recovery(s) for Naphthalene are outside of in house control limits.
- Matrix Spike Recovery(s) for Acenaphthene, Fluorene are outside control limits. Outside control limits due to matrix interference.
- Matrix Spike Duplicate Recovery(s) for Acenaphthene, Fluorene are outside control limits. Outside control limits due to matrix interference.
- Sample(s) J39323-11, J39323-3 have surrogates outside control limits due to matrix interference with corresponding I.S.
- Matrix Spike Duplicate Recovery(s) for Naphthalene are outside control limits. Outside control limits due to high level in sample relative to spike amount.

Matrix AQ	**Batch ID:** OP24607

- All samples were extracted within the recommended method holding time.
- All samples were analyzed within the recommended method holding time.
- Sample(s) J39323-7MS, J39323-7MSD were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.
- RPD(s) for MSD for Benzo(k)fluoranthene are outside control limits for sample OP24607-MSD. Outside control limits due to matrix interference.
- Sample(s) J39323-7 have surrogates outside control limits due to matrix interference with corresponding I.S.
- OP24607-MS, OP24607-MSD for Naphthalene: 50 ppm was added.
- OP24607-MS, OP24607-MSD for Pentachlorophenol: 50 ppm was added.
- OP24607-MS, OP24607-MSD for Indeno(1,2,3-cd)pyrene: 50 ppm was added.
- OP24607-MS, OP24607-MSD for Hexachlorobenzene: 50 ppm was added.
- OP24607-MS, OP24607-MSD for Benzo(k)fluoranthene: 50 ppm was added.
- OP24607-MS, OP24607-MSD for Phenanthrene: 50 ppm was added.
- OP24607-MS, OP24607-MSD for Dibenzo(a,h)anthracene: 50 ppm was added.
- OP24607-MS, OP24607-MSD for Benzo(a)pyrene: 50 ppm was added.
- OP24607-MS, OP24607-MSD for Fluoranthene: 50 ppm was added.
- OP24607-MS, OP24607-MSD for Fluorene: 50 ppm was added.
- OP24607-MS, OP24607-MSD for Chrysene: 50 ppm was added.
- OP24607-MS, OP24607-MSD for Benzo(b)fluoranthene: 50 ppm was added.
- OP24607-MS, OP24607-MSD for Benzo(a)anthracene: 50 ppm was added.
- OP24607-MS, OP24607-MSD for Pyrene: 50 ppm was added.
- OP24607-MS, OP24607-MSD for Acenaphthylene: 50 ppm was added.
- OP24607-MS, OP24607-MSD for Benzo(g,h,i)perylene: 50 ppm was added.
- OP24607-MS, OP24607-MSD for Anthracene: 50 ppm was added.

Extractables by GC By Method SW846 8082

Matrix AQ	**Batch ID:** OP24608

- All samples were extracted within the recommended method holding time.
- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) J39323-5MS, J39323-5MSD, OP24608-MSMSD were used as the QC samples indicated.
- Sample(s) J39323-10, J39323-3, J39323-8 have surrogates outside control limits due to matrix interference.
- J39323-11: Had TBA cleanup.
- OP24608-MB1 for Decachlorobiphenyl: Double spiked.
- OP24608-MB1 for Tetrachloro-m-xylene: Double spiked.

Matrix AQ	**Batch ID:** OP24633

- All samples were extracted within the recommended method holding time.
- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) J39323-7MS, J39323-7MSD, OP24633-MSMSD were used as the QC samples indicated.
- OP24633-MSD: Had TBA cleanup.
- OP24633-MS: Had TBA cleanup.
- J39323-7: Had TBA cleanup.

Metals By Method SW846 6010B

Matrix AQ	**Batch ID:** MP35774

- All samples were digested within the recommended method holding time.
- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) J39323-5MS, J39323-5MSD, J39323-5SDL were used as the QC samples for metals.

Matrix AQ	**Batch ID:** MP35819

- All samples were digested within the recommended method holding time.
- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) J39323-7MS, J39323-7MSD, J39323-7SDL were used as the QC samples for metals.

Wet Chemistry By Method EPA 350.1/LACHAT

Matrix AQ	**Batch ID:** GP35298

- All samples were prepared within the recommended method holding time.
- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) J39323-5DUP, J39323-5MS, J39323-7DUP, J39323-7MS were used as the QC samples for Nitrogen, Ammonia.

The Accutest Laboratories of New Jersey certifies that all analysis were performed within method specification. It is further recommended that this report to be used in its entirety.The Accutest Laboratories of NJ, Laboratory Director or assignee as verified by the signature on the cover page has authorized the release of this report(J39323).

Summary of Hits

Job Number: J39323
Account: CH2M Hill
Project: Quanta 2006 Groundwater Resources, Edgewater, NJ
Collected: 08/23/06 thru 08/24/06

3

Lab Sample ID Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
J39323-1	**MW-G-082306**					
Naphthalene		1.04	0.21	0.027	ug/l	SW846 8270C BY SIM
Arsenic		11.9	2.0		ug/l	SW846 6010B
J39323-2	**MW-I-082306**					
Naphthalene		0.251	0.22	0.028	ug/l	SW846 8270C BY SIM
Total TIC, Semi-Volatile		4.8 J			ug/l	
Arsenic		9.2	2.0		ug/l	SW846 6010B
Lead		48.9	3.0		ug/l	SW846 6010B
J39323-3	**MW-C-082406**					
Benzene		456	5.0	1.1	ug/l	SW846 8260B
Ethylbenzene		265	2.0	0.40	ug/l	SW846 8260B
Isopropylbenzene		65.2	4.0	0.40	ug/l	SW846 8260B
Methyl Tert Butyl Ether		1.0 J	2.0	0.61	ug/l	SW846 8260B
Toluene		124	2.0	0.40	ug/l	SW846 8260B
m,p-Xylene		56.6	2.0	0.84	ug/l	SW846 8260B
o-Xylene		44.2	2.0	0.61	ug/l	SW846 8260B
Xylene (total)		101	2.0	0.61	ug/l	SW846 8260B
Total TIC, Volatile		1185 J			ug/l	
2,4-Dimethylphenol [a]		2.9 J	5.4	1.8	ug/l	SW846 8270C
2-Methylphenol [a]		1.8 J	5.4	1.5	ug/l	SW846 8270C
3&4-Methylphenol [a]		3.1 J	5.4	1.4	ug/l	SW846 8270C
Phenol [a]		4.0 J	5.4	0.53	ug/l	SW846 8270C
Acenaphthene [a]		18.9	2.2	0.38	ug/l	SW846 8270C
1,1'-Biphenyl [a]		0.98 J	2.2	0.35	ug/l	SW846 8270C
Carbazole [a]		19.6	2.2	0.39	ug/l	SW846 8270C
Dibenzofuran [a]		14.1	5.4	0.37	ug/l	SW846 8270C
Fluoranthene [a]		13.3	2.2	0.27	ug/l	SW846 8270C
Fluorene [a]		10.4	2.2	0.48	ug/l	SW846 8270C
2-Methylnaphthalene [a]		1.4 J	2.2	0.44	ug/l	SW846 8270C
Naphthalene [a]		95.4	2.2	0.35	ug/l	SW846 8270C
Acenaphthylene		1.18	0.22	0.010	ug/l	SW846 8270C BY SIM
Anthracene		6.71	0.22	0.022	ug/l	SW846 8270C BY SIM
Benzo(a)anthracene		4.30	0.22	0.0073	ug/l	SW846 8270C BY SIM
Benzo(a)pyrene		2.99	0.22	0.018	ug/l	SW846 8270C BY SIM
Benzo(b)fluoranthene		2.80	0.22	0.039	ug/l	SW846 8270C BY SIM
Benzo(g,h,i)perylene		1.29	0.22	0.019	ug/l	SW846 8270C BY SIM
Benzo(k)fluoranthene		2.82	0.22	0.017	ug/l	SW846 8270C BY SIM
Chrysene		3.79	0.22	0.018	ug/l	SW846 8270C BY SIM
Dibenzo(a,h)anthracene		0.762	0.22	0.018	ug/l	SW846 8270C BY SIM
Indeno(1,2,3-cd)pyrene		1.43	0.22	0.012	ug/l	SW846 8270C BY SIM

Summary of Hits

Job Number: J39323
Account: CH2M Hill
Project: Quanta 2006 Groundwater Resources, Edgewater, NJ
Collected: 08/23/06 thru 08/24/06

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
Phenanthrene		3.38	0.22	0.023	ug/l	SW846 8270C BY SIM
Pyrene		14.0	0.22	0.015	ug/l	SW846 8270C BY SIM
Total TIC, Semi-Volatile		889.3 J			ug/l	
Arsenic		987	8.0		ug/l	SW846 6010B
Lead		21.3	3.0		ug/l	SW846 6010B
J39323-4	**MW-B-082406**					
Benzene		5.0	1.0	0.21	ug/l	SW846 8260B
Chloroethane		6.2	1.0	0.56	ug/l	SW846 8260B
Chloroform		1.7	1.0	0.22	ug/l	SW846 8260B
1,1-Dichloroethane		51.8	1.0	0.23	ug/l	SW846 8260B
1,2-Dichloroethane		1.0	1.0	0.29	ug/l	SW846 8260B
cis-1,2-Dichloroethene		2.0	1.0	0.18	ug/l	SW846 8260B
Methyl Tert Butyl Ether		0.36 J	1.0	0.31	ug/l	SW846 8260B
Methylene chloride		0.54 J	2.0	0.27	ug/l	SW846 8260B
Tetrachloroethene		0.81 J	1.0	0.28	ug/l	SW846 8260B
1,1,1-Trichloroethane		0.64 J	1.0	0.28	ug/l	SW846 8260B
Trichloroethene		0.64 J	1.0	0.29	ug/l	SW846 8260B
Vinyl chloride		2.8	1.0	0.29	ug/l	SW846 8260B
1,1'-Biphenyl		0.45 J	2.2	0.35	ug/l	SW846 8270C
Carbazole		3.8	2.2	0.39	ug/l	SW846 8270C
Dibenzofuran		4.1 J	5.4	0.37	ug/l	SW846 8270C
2-Methylnaphthalene		1.8 J	2.2	0.44	ug/l	SW846 8270C
Acenaphthene		5.42	0.22	0.018	ug/l	SW846 8270C BY SIM
Anthracene		0.757	0.22	0.022	ug/l	SW846 8270C BY SIM
Fluoranthene		0.325	0.22	0.0097	ug/l	SW846 8270C BY SIM
Fluorene		2.16	0.22	0.022	ug/l	SW846 8270C BY SIM
Naphthalene		3.85	0.22	0.028	ug/l	SW846 8270C BY SIM
Phenanthrene		1.86	0.22	0.023	ug/l	SW846 8270C BY SIM
Total TIC, Semi-Volatile		55.1 J			ug/l	
Arsenic		992	8.0		ug/l	SW846 6010B
J39323-5	**MW-A-2-082406**					
Benzene [a]		22.2	5.0	1.1	ug/l	SW846 8260B
Carbon disulfide [a]		8.8 J	10	1.0	ug/l	SW846 8260B
Ethylbenzene [a]		4.1 J	5.0	1.0	ug/l	SW846 8260B
Toluene [a]		1.5 J	5.0	1.0	ug/l	SW846 8260B
o-Xylene [a]		4.6 J	5.0	1.5	ug/l	SW846 8260B
Xylene (total) [a]		6.6	5.0	1.5	ug/l	SW846 8260B
Total TIC, Volatile		1003 J			ug/l	
2-Methylphenol		1.6 J	5.6	1.5	ug/l	SW846 8270C
3&4-Methylphenol		2.0 J	5.6	1.4	ug/l	SW846 8270C
Acenaphthene		66.4	2.2	0.39	ug/l	SW846 8270C

Summary of Hits

Job Number: J39323
Account: CH2M Hill
Project: Quanta 2006 Groundwater Resources, Edgewater, NJ
Collected: 08/23/06 thru 08/24/06

Lab Sample ID Client Sample ID Analyte	Result/ Qual	RL	MDL	Units	Method
1,1'-Biphenyl	17.2	2.2	0.36	ug/l	SW846 8270C
Carbazole	16.2	2.2	0.40	ug/l	SW846 8270C
Dibenzofuran	31.5	5.6	0.38	ug/l	SW846 8270C
Diethyl phthalate	18.5	2.2	0.43	ug/l	SW846 8270C
Fluorene	34.3	2.2	0.50	ug/l	SW846 8270C
2-Methylnaphthalene	62.5	2.2	0.45	ug/l	SW846 8270C
Naphthalene	898	22	3.6	ug/l	SW846 8270C
Phenanthrene	30.4	2.2	0.40	ug/l	SW846 8270C
Acenaphthylene	1.07	0.22	0.011	ug/l	SW846 8270C BY SIM
Anthracene	3.96	0.22	0.023	ug/l	SW846 8270C BY SIM
Benzo(a)anthracene	0.202 J	0.22	0.0076	ug/l	SW846 8270C BY SIM
Chrysene	0.271	0.22	0.019	ug/l	SW846 8270C BY SIM
Fluoranthene	5.07	0.22	0.010	ug/l	SW846 8270C BY SIM
Pyrene	3.70	0.22	0.016	ug/l	SW846 8270C BY SIM
Total TIC, Semi-Volatile	5660 J			ug/l	
Arsenic	84200	40		ug/l	SW846 6010B
Lead	536	3.0		ug/l	SW846 6010B
Nitrogen, Ammonia	4.7	0.30		mg/l	EPA 350.1/LACHAT
J39323-6 MW-F-082406					
Acenaphthene	0.582	0.22	0.018	ug/l	SW846 8270C BY SIM
Fluoranthene	1.06	0.22	0.0097	ug/l	SW846 8270C BY SIM
Naphthalene	0.713	0.22	0.028	ug/l	SW846 8270C BY SIM
Pyrene	0.937	0.22	0.015	ug/l	SW846 8270C BY SIM
Total TIC, Semi-Volatile	17.6 J			ug/l	
Arsenic	107	8.0		ug/l	SW846 6010B
Lead	15.8	3.0		ug/l	SW846 6010B
J39323-7 MW-L-082406					
Total TIC, Volatile	17 J			ug/l	
Acenaphthene	149	4.0	0.70	ug/l	SW846 8270C
Dibenzofuran	8.1	5.0	0.34	ug/l	SW846 8270C
bis(2-Ethylhexyl)phthalate	1.1 J	2.0	0.66	ug/l	SW846 8270C
Acenaphthylene	0.803	0.20	0.0095	ug/l	SW846 8270C BY SIM
Anthracene	1.94	0.20	0.021	ug/l	SW846 8270C BY SIM
Benzo(a)anthracene	0.314	0.20	0.0068	ug/l	SW846 8270C BY SIM
Fluoranthene	10.1	0.20	0.0090	ug/l	SW846 8270C BY SIM
Pyrene	5.57	0.20	0.014	ug/l	SW846 8270C BY SIM
Total TIC, Semi-Volatile	599.4 J			ug/l	
Arsenic	321	8.0		ug/l	SW846 6010B
Nitrogen, Ammonia	3.3	0.20		mg/l	EPA 350.1/LACHAT

Summary of Hits

Job Number: J39323
Account: CH2M Hill
Project: Quanta 2006 Groundwater Resources, Edgewater, NJ
Collected: 08/23/06 thru 08/24/06

Lab Sample ID Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
J39323-8	**EB-082406-GW**					
No hits reported in this sample.						
J39323-9	**TB-082406-GW**					
No hits reported in this sample.						
J39323-10	**DUP-082406-GW-1**					
Benzene [a]		23.8	2.5	0.53	ug/l	SW846 8260B
Ethylbenzene [a]		5.1	2.5	0.51	ug/l	SW846 8260B
Isopropylbenzene [a]		0.92 J	5.0	0.50	ug/l	SW846 8260B
Toluene [a]		2.2 J	2.5	0.50	ug/l	SW846 8260B
m,p-Xylene [a]		3.2	2.5	1.0	ug/l	SW846 8260B
o-Xylene [a]		6.7	2.5	0.76	ug/l	SW846 8260B
Xylene (total) [a]		9.9	2.5	0.76	ug/l	SW846 8260B
Total TIC, Volatile		1138 J			ug/l	
2,4-Dimethylphenol		4.3 J	5.7	1.9	ug/l	SW846 8270C
Acenaphthene		72.8	23	4.0	ug/l	SW846 8270C
1,1'-Biphenyl		15.5	2.3	0.38	ug/l	SW846 8270C
Carbazole		16.6	2.3	0.42	ug/l	SW846 8270C
Dibenzofuran		29.8	5.7	0.40	ug/l	SW846 8270C
Diethyl phthalate		19.1	2.3	0.45	ug/l	SW846 8270C
Fluorene		38.2	23	5.2	ug/l	SW846 8270C
2-Methylnaphthalene		59.5	2.3	0.47	ug/l	SW846 8270C
Naphthalene		992	23	3.7	ug/l	SW846 8270C
Phenanthrene		35.4	23	4.2	ug/l	SW846 8270C
Acenaphthylene		1.36	0.23	0.011	ug/l	SW846 8270C BY SIM
Anthracene		4.46	0.23	0.024	ug/l	SW846 8270C BY SIM
Benzo(a)anthracene		0.515	0.23	0.0078	ug/l	SW846 8270C BY SIM
Benzo(a)pyrene		0.256	0.23	0.019	ug/l	SW846 8270C BY SIM
Chrysene		0.407	0.23	0.019	ug/l	SW846 8270C BY SIM
Fluoranthene		6.42	0.23	0.010	ug/l	SW846 8270C BY SIM
Pyrene		5.10	0.23	0.016	ug/l	SW846 8270C BY SIM
Total TIC, Semi-Volatile		8043 J			ug/l	
Arsenic		95800	40		ug/l	SW846 6010B
Lead		590	3.0		ug/l	SW846 6010B
Nitrogen, Ammonia		4.5	0.30		mg/l	EPA 350.1/LACHAT
J39323-11	**DUP-082406-GW-2**					
Total TIC, Volatile		18 J			ug/l	
Acenaphthene		181	4.3	0.75	ug/l	SW846 8270C
Dibenzofuran		10.7 J	11	0.74	ug/l	SW846 8270C

Summary of Hits

Job Number: J39323
Account: CH2M Hill
Project: Quanta 2006 Groundwater Resources, Edgewater, NJ
Collected: 08/23/06 thru 08/24/06

Lab Sample ID Client Sample ID Analyte	Result/ Qual	RL	MDL	Units	Method
Acenaphthylene	0.965	0.22	0.010	ug/l	SW846 8270C BY SIM
Benzo(a)anthracene	0.299	0.22	0.0073	ug/l	SW846 8270C BY SIM
Fluoranthene	9.38	0.22	0.0097	ug/l	SW846 8270C BY SIM
Phenanthrene	1.84	0.22	0.023	ug/l	SW846 8270C BY SIM
Pyrene	5.72	0.22	0.015	ug/l	SW846 8270C BY SIM
Total TIC, Semi-Volatile	371 J			ug/l	
Nitrogen, Ammonia	3.1	0.20		mg/l	EPA 350.1/LACHAT

(a) Diluted due to high concentration of non-target compound.

New Jersey

ACCUTEST LABORATORIES

Sample Results

Report of Analysis

Report of Analysis

Client Sample ID:	MW-G-082306		
Lab Sample ID:	J39323-1	**Date Sampled:**	08/23/06
Matrix:	AQ - Ground Water	**Date Received:**	08/24/06
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Quanta 2006 Groundwater Resources, Edgewater, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	A114016.D	1	09/05/06	ET	n/a	n/a	VA3824
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List (OLM4.2)

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	2.4	ug/l	
71-43-2	Benzene	ND	1.0	0.21	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.17	ug/l	
75-25-2	Bromoform	ND	4.0	0.54	ug/l	
74-83-9	Bromomethane	ND	2.0	0.22	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	2.6	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.21	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.29	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.22	ug/l	
75-00-3	Chloroethane	ND	1.0	0.56	ug/l	
67-66-3	Chloroform	ND	1.0	0.22	ug/l	
74-87-3	Chloromethane	ND	1.0	0.35	ug/l	
110-82-7	Cyclohexane	ND	5.0	0.50	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	10	1.1	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.19	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	0.52	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.20	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.32	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.24	ug/l	
75-71-8	Dichlorodifluoromethane	ND	5.0	0.75	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.23	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.29	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.33	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.18	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.42	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.20	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.15	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.20	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.20	ug/l	
76-13-1	Freon 113	ND	5.0	0.69	ug/l	
591-78-6	2-Hexanone	ND	5.0	1.3	ug/l	
98-82-8	Isopropylbenzene	ND	2.0	0.20	ug/l	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-G-082306		
Lab Sample ID:	J39323-1	**Date Sampled:**	08/23/06
Matrix:	AQ - Ground Water	**Date Received:**	08/24/06
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Quanta 2006 Groundwater Resources, Edgewater, NJ		

VOA TCL List (OLM4.2)

CAS No.	Compound	Result	RL	MDL	Units	Q
79-20-9	Methyl Acetate	ND	5.0	2.1	ug/l	
108-87-2	Methylcyclohexane	ND	5.0	0.18	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.31	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.1	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.27	ug/l	
100-42-5	Styrene	ND	5.0	0.16	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.28	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.28	ug/l	
108-88-3	Toluene	ND	1.0	0.20	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.16	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.28	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.32	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.29	ug/l	
75-69-4	Trichlorofluoromethane	ND	5.0	0.25	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.29	ug/l	
	m,p-Xylene	ND	1.0	0.42	ug/l	
95-47-6	o-Xylene	ND	1.0	0.31	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.31	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	93%		77-121%
17060-07-0	1,2-Dichloroethane-D4	95%		65-133%
2037-26-5	Toluene-D8	94%		80-117%
460-00-4	4-Bromofluorobenzene	96%		79-124%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-G-082306		
Lab Sample ID:	J39323-1	**Date Sampled:**	08/23/06
Matrix:	AQ - Ground Water	**Date Received:**	08/24/06
Method:	SW846 8270C SW846 3510C	**Percent Solids:**	n/a
Project:	Quanta 2006 Groundwater Resources, Edgewater, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	F61808.D	1	09/13/06	NAP	08/25/06	OP24604	EF3029
Run #2							

	Initial Volume	Final Volume
Run #1	950 ml	1.0 ml
Run #2		

ABN TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	5.3	1.0	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	5.3	1.2	ug/l	
120-83-2	2,4-Dichlorophenol	ND	5.3	1.6	ug/l	
105-67-9	2,4-Dimethylphenol	ND	5.3	1.7	ug/l	
51-28-5	2,4-Dinitrophenol	ND	21	0.94	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	21	0.76	ug/l	
95-48-7	2-Methylphenol	ND	5.3	1.4	ug/l	
	3&4-Methylphenol	ND	5.3	1.3	ug/l	
88-75-5	2-Nitrophenol	ND	5.3	1.9	ug/l	
100-02-7	4-Nitrophenol	ND	21	0.89	ug/l	
108-95-2	Phenol	ND	5.3	0.52	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	5.3	2.0	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	5.3	1.3	ug/l	
98-86-2	Acetophenone	ND	5.3	0.39	ug/l	
1912-24-9	Atrazine	ND	5.3	0.17	ug/l	
100-52-7	Benzaldehyde	ND	5.3	0.28	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	2.1	0.31	ug/l	
85-68-7	Butyl benzyl phthalate	ND	2.1	0.62	ug/l	
92-52-4	1,1'-Biphenyl	ND	2.1	0.34	ug/l	
91-58-7	2-Chloronaphthalene	ND	5.3	1.0	ug/l	
106-47-8	4-Chloroaniline	ND	5.3	0.42	ug/l	
86-74-8	Carbazole	ND	2.1	0.38	ug/l	
105-60-2	Caprolactam	ND	2.1	0.33	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	2.1	0.69	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	2.1	0.56	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	2.1	0.78	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	2.1	0.45	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	2.1	0.91	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	2.1	0.59	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	5.3	1.3	ug/l	
132-64-9	Dibenzofuran	ND	5.3	0.36	ug/l	
84-74-2	Di-n-butyl phthalate	ND	2.1	0.62	ug/l	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-G-082306		
Lab Sample ID:	J39323-1	**Date Sampled:**	08/23/06
Matrix:	AQ - Ground Water	**Date Received:**	08/24/06
Method:	SW846 8270C SW846 3510C	**Percent Solids:**	n/a
Project:	Quanta 2006 Groundwater Resources, Edgewater, NJ		

ABN TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
117-84-0	Di-n-octyl phthalate	ND	2.1	0.60	ug/l	
84-66-2	Diethyl phthalate	ND	2.1	0.41	ug/l	
131-11-3	Dimethyl phthalate	ND	2.1	0.35	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	2.1	0.70	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.1	0.18	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	21	0.43	ug/l	
67-72-1	Hexachloroethane	ND	5.3	0.30	ug/l	
78-59-1	Isophorone	ND	2.1	0.62	ug/l	
91-57-6	2-Methylnaphthalene	ND	2.1	0.43	ug/l	
88-74-4	2-Nitroaniline	ND	5.3	0.70	ug/l	
99-09-2	3-Nitroaniline	ND	5.3	1.3	ug/l	
100-01-6	4-Nitroaniline	ND	5.3	0.76	ug/l	
98-95-3	Nitrobenzene	ND	2.1	0.44	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	2.1	0.49	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	5.3	0.54	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	42%		12-76%
4165-62-2	Phenol-d5	32%		10-59%
118-79-6	2,4,6-Tribromophenol	110%		42-128%
4165-60-0	Nitrobenzene-d5	98%		30-122%
321-60-8	2-Fluorobiphenyl	84%		34-113%
1718-51-0	Terphenyl-d14	98%		42-125%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	system artifact/aldol-condensation	3.62	24	ug/l	J
	system artifact	19.73	12	ug/l	J
	system artifact	21.07	7.7	ug/l	J
	Total TIC, Semi-Volatile		0	ug/l	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-G-082306		
Lab Sample ID:	J39323-1	**Date Sampled:**	08/23/06
Matrix:	AQ - Ground Water	**Date Received:**	08/24/06
Method:	SW846 8270C BY SIM SW846 3510C	**Percent Solids:**	n/a
Project:	Quanta 2006 Groundwater Resources, Edgewater, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	M43937.D	1	09/20/06	NAP	08/25/06	OP24605	EM1462
Run #2							

	Initial Volume	Final Volume
Run #1	950 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
87-86-5	Pentachlorophenol	ND	1.1	0.42	ug/l	
83-32-9	Acenaphthene	ND	0.21	0.018	ug/l	
208-96-8	Acenaphthylene	ND	0.21	0.010	ug/l	
120-12-7	Anthracene	ND	0.21	0.022	ug/l	
56-55-3	Benzo(a)anthracene	ND	0.21	0.0072	ug/l	
50-32-8	Benzo(a)pyrene	ND	0.21	0.018	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	0.21	0.038	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	0.21	0.019	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	0.21	0.017	ug/l	
218-01-9	Chrysene	ND	0.21	0.018	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	0.21	0.017	ug/l	
206-44-0	Fluoranthene	ND	0.21	0.0095	ug/l	
86-73-7	Fluorene	ND	0.21	0.021	ug/l	
118-74-1	Hexachlorobenzene	ND	0.11	0.064	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.21	0.012	ug/l	
91-20-3	Naphthalene	1.04	0.21	0.027	ug/l	
85-01-8	Phenanthrene	ND	0.21	0.022	ug/l	
129-00-0	Pyrene	ND	0.21	0.015	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	42%		10-99%
4165-62-2	Phenol-d5	30%		10-83%
118-79-6	2,4,6-Tribromophenol	82%		10-140%
4165-60-0	Nitrobenzene-d5	74%		11-140%
321-60-8	2-Fluorobiphenyl	72%		10-133%
1718-51-0	Terphenyl-d14	75%		13-130%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-G-082306		
Lab Sample ID:	J39323-1	**Date Sampled:**	08/23/06
Matrix:	AQ - Ground Water	**Date Received:**	08/24/06
Method:	SW846 8082 SW846 3510C	**Percent Solids:**	n/a
Project:	Quanta 2006 Groundwater Resources, Edgewater, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	AB59531.D	1	09/01/06	JSE	08/25/06	OP24608	GAB2702
Run #2							

	Initial Volume	Final Volume
Run #1	970 ml	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	0.52	0.096	ug/l	
11104-28-2	Aroclor 1221	ND	0.52	0.48	ug/l	
11141-16-5	Aroclor 1232	ND	0.52	0.40	ug/l	
53469-21-9	Aroclor 1242	ND	0.52	0.17	ug/l	
12672-29-6	Aroclor 1248	ND	0.52	0.16	ug/l	
11097-69-1	Aroclor 1254	ND	0.52	0.11	ug/l	
11096-82-5	Aroclor 1260	ND	0.52	0.12	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	85%		38-133%
877-09-8	Tetrachloro-m-xylene	89%		38-133%
2051-24-3	Decachlorobiphenyl	95%		18-156%
2051-24-3	Decachlorobiphenyl	93%		18-156%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-G-082306		
Lab Sample ID:	J39323-1	**Date Sampled:**	08/23/06
Matrix:	AQ - Ground Water	**Date Received:**	08/24/06
		Percent Solids:	n/a
Project:	Quanta 2006 Groundwater Resources, Edgewater, NJ		

Total Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Arsenic	11.9	2.0	ug/l	1	09/03/06	09/11/06	LH	SW846 6010B [2]	SW846 3010A [3]
Lead	< 3.0	3.0	ug/l	1	09/03/06	09/08/06	ND	SW846 6010B [1]	SW846 3010A [3]

(1) Instrument QC Batch: MA18018
(2) Instrument QC Batch: MA18032
(3) Prep QC Batch: MP35774

RL = Reporting Limit

Report of Analysis

Client Sample ID:	MW-I-082306		
Lab Sample ID:	J39323-2	**Date Sampled:**	08/23/06
Matrix:	AQ - Ground Water	**Date Received:**	08/24/06
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Quanta 2006 Groundwater Resources, Edgewater, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	A114017.D	1	09/05/06	ET	n/a	n/a	VA3824
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List (OLM4.2)

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	2.4	ug/l	
71-43-2	Benzene	ND	1.0	0.21	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.17	ug/l	
75-25-2	Bromoform	ND	4.0	0.54	ug/l	
74-83-9	Bromomethane	ND	2.0	0.22	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	2.6	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.21	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.29	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.22	ug/l	
75-00-3	Chloroethane	ND	1.0	0.56	ug/l	
67-66-3	Chloroform	ND	1.0	0.22	ug/l	
74-87-3	Chloromethane	ND	1.0	0.35	ug/l	
110-82-7	Cyclohexane	ND	5.0	0.50	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	10	1.1	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.19	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	0.52	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.20	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.32	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.24	ug/l	
75-71-8	Dichlorodifluoromethane	ND	5.0	0.75	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.23	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.29	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.33	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.18	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.42	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.20	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.15	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.20	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.20	ug/l	
76-13-1	Freon 113	ND	5.0	0.69	ug/l	
591-78-6	2-Hexanone	ND	5.0	1.3	ug/l	
98-82-8	Isopropylbenzene	ND	2.0	0.20	ug/l	

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Report of Analysis

Client Sample ID:	MW-I-082306		
Lab Sample ID:	J39323-2	**Date Sampled:**	08/23/06
Matrix:	AQ - Ground Water	**Date Received:**	08/24/06
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Quanta 2006 Groundwater Resources, Edgewater, NJ		

VOA TCL List (OLM4.2)

CAS No.	Compound	Result	RL	MDL	Units	Q
79-20-9	Methyl Acetate	ND	5.0	2.1	ug/l	
108-87-2	Methylcyclohexane	ND	5.0	0.18	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.31	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.1	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.27	ug/l	
100-42-5	Styrene	ND	5.0	0.16	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.28	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.28	ug/l	
108-88-3	Toluene	ND	1.0	0.20	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.16	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.28	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.32	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.29	ug/l	
75-69-4	Trichlorofluoromethane	ND	5.0	0.25	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.29	ug/l	
	m,p-Xylene	ND	1.0	0.42	ug/l	
95-47-6	o-Xylene	ND	1.0	0.31	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.31	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	95%		77-121%
17060-07-0	1,2-Dichloroethane-D4	99%		65-133%
2037-26-5	Toluene-D8	94%		80-117%
460-00-4	4-Bromofluorobenzene	95%		79-124%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-I-082306		
Lab Sample ID:	J39323-2	**Date Sampled:**	08/23/06
Matrix:	AQ - Ground Water	**Date Received:**	08/24/06
Method:	SW846 8270C SW846 3510C	**Percent Solids:**	n/a
Project:	Quanta 2006 Groundwater Resources, Edgewater, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	F61809.D	1	09/13/06	NAP	08/25/06	OP24604	EF3029
Run #2							

	Initial Volume	Final Volume
Run #1	930 ml	1.0 ml
Run #2		

ABN TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	5.4	1.0	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	5.4	1.3	ug/l	
120-83-2	2,4-Dichlorophenol	ND	5.4	1.7	ug/l	
105-67-9	2,4-Dimethylphenol	ND	5.4	1.8	ug/l	
51-28-5	2,4-Dinitrophenol	ND	22	0.96	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	22	0.78	ug/l	
95-48-7	2-Methylphenol	ND	5.4	1.5	ug/l	
	3&4-Methylphenol	ND	5.4	1.4	ug/l	
88-75-5	2-Nitrophenol	ND	5.4	1.9	ug/l	
100-02-7	4-Nitrophenol	ND	22	0.91	ug/l	
108-95-2	Phenol	ND	5.4	0.53	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	5.4	2.1	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	5.4	1.4	ug/l	
98-86-2	Acetophenone	ND	5.4	0.40	ug/l	
1912-24-9	Atrazine	ND	5.4	0.18	ug/l	
100-52-7	Benzaldehyde	ND	5.4	0.28	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	2.2	0.32	ug/l	
85-68-7	Butyl benzyl phthalate	ND	2.2	0.64	ug/l	
92-52-4	1,1'-Biphenyl	ND	2.2	0.35	ug/l	
91-58-7	2-Chloronaphthalene	ND	5.4	1.1	ug/l	
106-47-8	4-Chloroaniline	ND	5.4	0.43	ug/l	
86-74-8	Carbazole	ND	2.2	0.39	ug/l	
105-60-2	Caprolactam	ND	2.2	0.34	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	2.2	0.70	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	2.2	0.57	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	2.2	0.79	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	2.2	0.46	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	2.2	0.92	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	2.2	0.60	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	5.4	1.3	ug/l	
132-64-9	Dibenzofuran	ND	5.4	0.37	ug/l	
84-74-2	Di-n-butyl phthalate	ND	2.2	0.64	ug/l	

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Report of Analysis

Client Sample ID:	MW-I-082306		
Lab Sample ID:	J39323-2	**Date Sampled:**	08/23/06
Matrix:	AQ - Ground Water	**Date Received:**	08/24/06
Method:	SW846 8270C SW846 3510C	**Percent Solids:**	n/a
Project:	Quanta 2006 Groundwater Resources, Edgewater, NJ		

ABN TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
117-84-0	Di-n-octyl phthalate	ND	2.2	0.61	ug/l	
84-66-2	Diethyl phthalate	ND	2.2	0.42	ug/l	
131-11-3	Dimethyl phthalate	ND	2.2	0.35	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	2.2	0.71	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.2	0.19	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	22	0.44	ug/l	
67-72-1	Hexachloroethane	ND	5.4	0.30	ug/l	
78-59-1	Isophorone	ND	2.2	0.63	ug/l	
91-57-6	2-Methylnaphthalene	ND	2.2	0.44	ug/l	
88-74-4	2-Nitroaniline	ND	5.4	0.71	ug/l	
99-09-2	3-Nitroaniline	ND	5.4	1.4	ug/l	
100-01-6	4-Nitroaniline	ND	5.4	0.78	ug/l	
98-95-3	Nitrobenzene	ND	2.2	0.45	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	2.2	0.50	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	5.4	0.55	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	35%		12-76%
4165-62-2	Phenol-d5	28%		10-59%
118-79-6	2,4,6-Tribromophenol	99%		42-128%
4165-60-0	Nitrobenzene-d5	76%		30-122%
321-60-8	2-Fluorobiphenyl	67%		34-113%
1718-51-0	Terphenyl-d14	95%		42-125%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	system artifact/aldol-condensation	3.62	20	ug/l	J
	unknown	11.77	4.8	ug/l	J
	Total TIC, Semi-Volatile		4.8	ug/l	J

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RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-I-082306		
Lab Sample ID:	J39323-2	**Date Sampled:**	08/23/06
Matrix:	AQ - Ground Water	**Date Received:**	08/24/06
Method:	SW846 8270C BY SIM SW846 3510C	**Percent Solids:**	n/a
Project:	Quanta 2006 Groundwater Resources, Edgewater, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	M43938.D	1	09/20/06	NAP	08/25/06	OP24605	EM1462
Run #2							

	Initial Volume	Final Volume
Run #1	930 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
87-86-5	Pentachlorophenol	ND	1.1	0.43	ug/l	
83-32-9	Acenaphthene	ND	0.22	0.018	ug/l	
208-96-8	Acenaphthylene	ND	0.22	0.010	ug/l	
120-12-7	Anthracene	ND	0.22	0.022	ug/l	
56-55-3	Benzo(a)anthracene	ND	0.22	0.0073	ug/l	
50-32-8	Benzo(a)pyrene	ND	0.22	0.018	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	0.22	0.039	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	0.22	0.019	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	0.22	0.017	ug/l	
218-01-9	Chrysene	ND	0.22	0.018	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	0.22	0.018	ug/l	
206-44-0	Fluoranthene	ND	0.22	0.0097	ug/l	
86-73-7	Fluorene	ND	0.22	0.022	ug/l	
118-74-1	Hexachlorobenzene	ND	0.11	0.065	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.22	0.012	ug/l	
91-20-3	Naphthalene	0.251	0.22	0.028	ug/l	
85-01-8	Phenanthrene	ND	0.22	0.023	ug/l	
129-00-0	Pyrene	ND	0.22	0.015	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	37%		10-99%
4165-62-2	Phenol-d5	27%		10-83%
118-79-6	2,4,6-Tribromophenol	75%		10-140%
4165-60-0	Nitrobenzene-d5	60%		11-140%
321-60-8	2-Fluorobiphenyl	59%		10-133%
1718-51-0	Terphenyl-d14	72%		13-130%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-I-082306		
Lab Sample ID:	J39323-2	**Date Sampled:**	08/23/06
Matrix:	AQ - Ground Water	**Date Received:**	08/24/06
Method:	SW846 8082 SW846 3510C	**Percent Solids:**	n/a
Project:	Quanta 2006 Groundwater Resources, Edgewater, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	AB59532.D	1	09/01/06	JSE	08/25/06	OP24608	GAB2702
Run #2							

	Initial Volume	Final Volume
Run #1	950 ml	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	0.53	0.099	ug/l	
11104-28-2	Aroclor 1221	ND	0.53	0.49	ug/l	
11141-16-5	Aroclor 1232	ND	0.53	0.41	ug/l	
53469-21-9	Aroclor 1242	ND	0.53	0.17	ug/l	
12672-29-6	Aroclor 1248	ND	0.53	0.16	ug/l	
11097-69-1	Aroclor 1254	ND	0.53	0.11	ug/l	
11096-82-5	Aroclor 1260	ND	0.53	0.12	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	79%		38-133%
877-09-8	Tetrachloro-m-xylene	75%		38-133%
2051-24-3	Decachlorobiphenyl	91%		18-156%
2051-24-3	Decachlorobiphenyl	95%		18-156%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-I-082306		
Lab Sample ID:	J39323-2	**Date Sampled:**	08/23/06
Matrix:	AQ - Ground Water	**Date Received:**	08/24/06
		Percent Solids:	n/a
Project:	Quanta 2006 Groundwater Resources, Edgewater, NJ		

Total Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Arsenic	9.2	2.0	ug/l	1	09/03/06	09/11/06	LH	SW846 6010B [2]	SW846 3010A [3]
Lead	48.9	3.0	ug/l	1	09/03/06	09/08/06	ND	SW846 6010B [1]	SW846 3010A [3]

(1) Instrument QC Batch: MA18018
(2) Instrument QC Batch: MA18032
(3) Prep QC Batch: MP35774

RL = Reporting Limit

Report of Analysis

Client Sample ID:	MW-C-082406		
Lab Sample ID:	J39323-3	**Date Sampled:**	08/24/06
Matrix:	AQ - Ground Water	**Date Received:**	08/24/06
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Quanta 2006 Groundwater Resources, Edgewater, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	A114093.D	2	09/07/06	ET	n/a	n/a	VA3828
Run #2	A114049.D	5	09/06/06	ET	n/a	n/a	VA3826

	Purge Volume
Run #1	5.0 ml
Run #2	5.0 ml

VOA TCL List (OLM4.2)

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	20	4.8	ug/l	
71-43-2	Benzene	456 [a]	5.0	1.1	ug/l	
75-27-4	Bromodichloromethane	ND	2.0	0.35	ug/l	
75-25-2	Bromoform	ND	8.0	1.1	ug/l	
74-83-9	Bromomethane	ND	4.0	0.45	ug/l	
78-93-3	2-Butanone (MEK)	ND	20	5.2	ug/l	
75-15-0	Carbon disulfide	ND	4.0	0.41	ug/l	
56-23-5	Carbon tetrachloride	ND	2.0	0.58	ug/l	
108-90-7	Chlorobenzene	ND	2.0	0.45	ug/l	
75-00-3	Chloroethane	ND	2.0	1.1	ug/l	
67-66-3	Chloroform	ND	2.0	0.43	ug/l	
74-87-3	Chloromethane	ND	2.0	0.70	ug/l	
110-82-7	Cyclohexane	0.0	10	0.99	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	20	2.2	ug/l	
124-48-1	Dibromochloromethane	ND	2.0	0.38	ug/l	
106-93-4	1,2-Dibromoethane	ND	4.0	1.0	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	2.0	0.41	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	2.0	0.63	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	2.0	0.48	ug/l	
75-71-8	Dichlorodifluoromethane	ND	10	1.5	ug/l	
75-34-3	1,1-Dichloroethane	ND	2.0	0.47	ug/l	
107-06-2	1,2-Dichloroethane	ND	2.0	0.59	ug/l	
75-35-4	1,1-Dichloroethene	ND	2.0	0.65	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	2.0	0.36	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	2.0	0.84	ug/l	
78-87-5	1,2-Dichloropropane	ND	2.0	0.40	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	2.0	0.30	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	2.0	0.40	ug/l	
100-41-4	Ethylbenzene	265	2.0	0.40	ug/l	
76-13-1	Freon 113	ND	10	1.4	ug/l	
591-78-6	2-Hexanone	ND	10	2.5	ug/l	
98-82-8	Isopropylbenzene	65.2	4.0	0.40	ug/l	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-C-082406		
Lab Sample ID:	J39323-3	**Date Sampled:**	08/24/06
Matrix:	AQ - Ground Water	**Date Received:**	08/24/06
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Quanta 2006 Groundwater Resources, Edgewater, NJ		

VOA TCL List (OLM4.2)

CAS No.	Compound	Result	RL	MDL	Units	Q
79-20-9	Methyl Acetate	ND	10	4.2	ug/l	
108-87-2	Methylcyclohexane	ND	10	0.36	ug/l	
1634-04-4	Methyl Tert Butyl Ether	1.0	2.0	0.61	ug/l	J
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	10	2.1	ug/l	
75-09-2	Methylene chloride	ND	4.0	0.53	ug/l	
100-42-5	Styrene	ND	10	0.32	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	2.0	0.55	ug/l	
127-18-4	Tetrachloroethene	ND	2.0	0.55	ug/l	
108-88-3	Toluene	124	2.0	0.40	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	10	0.32	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	2.0	0.55	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	2.0	0.63	ug/l	
79-01-6	Trichloroethene	ND	2.0	0.58	ug/l	
75-69-4	Trichlorofluoromethane	ND	10	0.51	ug/l	
75-01-4	Vinyl chloride	ND	2.0	0.58	ug/l	
	m,p-Xylene	56.6	2.0	0.84	ug/l	
95-47-6	o-Xylene	44.2	2.0	0.61	ug/l	
1330-20-7	Xylene (total)	101	2.0	0.61	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	96%	83%	77-121%
17060-07-0	1,2-Dichloroethane-D4	89%	74%	65-133%
2037-26-5	Toluene-D8	98%	95%	80-117%
460-00-4	4-Bromofluorobenzene	93%	92%	79-124%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Di-sec-butyl ether isomer	12.03	32	ug/l	J
103-65-1	Benzene, propyl-	15.10	97	ug/l	JN
	C3 alkyl benzene	15.54	87	ug/l	J
271-89-6	Benzofuran	16.06	34	ug/l	JN
	C4 alkyl benzene	16.40	52	ug/l	J
496-11-7	Indane	16.48	58	ug/l	JN
	C4 alkyl benzene	16.73	41	ug/l	J
	1H-indene-dihydro-methyl	17.11	83	ug/l	J
	C4 alkyl benzene	17.37	110	ug/l	J
	C4 alkyl benzene	17.44	100	ug/l	J
	unknown	17.48	35	ug/l	J
	dihydrodimethylindene + C5 alkyl benzene	18.28	46	ug/l	J

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-C-082406		
Lab Sample ID:	J39323-3	**Date Sampled:**	08/24/06
Matrix:	AQ - Ground Water	**Date Received:**	08/24/06
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Quanta 2006 Groundwater Resources, Edgewater, NJ		

VOA TCL List (OLM4.2)

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
91-20-3	Naphthalene	18.69	340	ug/l	JN
	Benzothiophene	18.83	34	ug/l	J
	Naphthalene, methyl-	20.23	36	ug/l	J
	Total TIC, Volatile		1185	ug/l	J

(a) Result is from Run# 2

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-C-082406		
Lab Sample ID:	J39323-3	**Date Sampled:**	08/24/06
Matrix:	AQ - Ground Water	**Date Received:**	08/24/06
Method:	SW846 8270C SW846 3510C	**Percent Solids:**	n/a
Project:	Quanta 2006 Groundwater Resources, Edgewater, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	F61810.D	1	09/13/06	NAP	08/25/06	OP24604	EF3029
Run #2							

	Initial Volume	Final Volume
Run #1	930 ml	1.0 ml
Run #2		

ABN TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	5.4	1.0	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	5.4	1.3	ug/l	
120-83-2	2,4-Dichlorophenol	ND	5.4	1.7	ug/l	
105-67-9	2,4-Dimethylphenol	2.9	5.4	1.8	ug/l	J
51-28-5	2,4-Dinitrophenol	ND	22	0.96	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	22	0.78	ug/l	
95-48-7	2-Methylphenol	1.8	5.4	1.5	ug/l	J
	3&4-Methylphenol	3.1	5.4	1.4	ug/l	J
88-75-5	2-Nitrophenol	ND	5.4	1.9	ug/l	
100-02-7	4-Nitrophenol	ND	22	0.91	ug/l	
108-95-2	Phenol	4.0	5.4	0.53	ug/l	J
95-95-4	2,4,5-Trichlorophenol	ND	5.4	2.1	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	5.4	1.4	ug/l	
83-32-9	Acenaphthene	18.9	2.2	0.38	ug/l	
98-86-2	Acetophenone	ND	5.4	0.40	ug/l	
1912-24-9	Atrazine	ND	5.4	0.18	ug/l	
100-52-7	Benzaldehyde	ND	5.4	0.28	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	2.2	0.32	ug/l	
85-68-7	Butyl benzyl phthalate	ND	2.2	0.64	ug/l	
92-52-4	1,1'-Biphenyl	0.98	2.2	0.35	ug/l	J
91-58-7	2-Chloronaphthalene	ND	5.4	1.1	ug/l	
106-47-8	4-Chloroaniline	ND	5.4	0.43	ug/l	
86-74-8	Carbazole	19.6	2.2	0.39	ug/l	
105-60-2	Caprolactam	ND	2.2	0.34	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	2.2	0.70	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	2.2	0.57	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	2.2	0.79	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	2.2	0.46	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	2.2	0.92	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	2.2	0.60	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	5.4	1.3	ug/l	
132-64-9	Dibenzofuran	14.1	5.4	0.37	ug/l	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-C-082406		
Lab Sample ID:	J39323-3	**Date Sampled:**	08/24/06
Matrix:	AQ - Ground Water	**Date Received:**	08/24/06
Method:	SW846 8270C SW846 3510C	**Percent Solids:**	n/a
Project:	Quanta 2006 Groundwater Resources, Edgewater, NJ		

ABN TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
84-74-2	Di-n-butyl phthalate	ND	2.2	0.64	ug/l	
117-84-0	Di-n-octyl phthalate	ND	2.2	0.61	ug/l	
84-66-2	Diethyl phthalate	ND	2.2	0.42	ug/l	
131-11-3	Dimethyl phthalate	ND	2.2	0.35	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	2.2	0.71	ug/l	
206-44-0	Fluoranthene	13.3	2.2	0.27	ug/l	
86-73-7	Fluorene	10.4	2.2	0.48	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.2	0.19	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	22	0.44	ug/l	
67-72-1	Hexachloroethane	ND	5.4	0.30	ug/l	
78-59-1	Isophorone	ND	2.2	0.63	ug/l	
91-57-6	2-Methylnaphthalene	1.4	2.2	0.44	ug/l	J
88-74-4	2-Nitroaniline	ND	5.4	0.71	ug/l	
99-09-2	3-Nitroaniline	ND	5.4	1.4	ug/l	
100-01-6	4-Nitroaniline	ND	5.4	0.78	ug/l	
91-20-3	Naphthalene	95.4	2.2	0.35	ug/l	
98-95-3	Nitrobenzene	ND	2.2	0.45	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	2.2	0.50	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	5.4	0.55	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	23%		12-76%
4165-62-2	Phenol-d5	18%		10-59%
118-79-6	2,4,6-Tribromophenol	56%		42-128%
4165-60-0	Nitrobenzene-d5	49%		30-122%
321-60-8	2-Fluorobiphenyl	42%		34-113%
1718-51-0	Terphenyl-d14	54%		42-125%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
6863-58-7	Di-sec-butyl ether	3.08	7.9	ug/l	JN
6863-58-7	Di-sec-butyl ether	3.14	7.7	ug/l	JN
	system artifact/aldol-condensation	3.63	17	ug/l	J
98-82-8	Benzene, (1-methylethyl)-	4.77	17	ug/l	JN
103-65-1	Benzene, propyl-	5.19	28	ug/l	JN
	C3 alkyl benzene	5.79	6.7	ug/l	J
271-89-6	Benzofuran	5.85	19	ug/l	JN
496-11-7	Indane	6.45	14	ug/l	JN
95-13-6	Indene	6.58	15	ug/l	JN

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-C-082406		
Lab Sample ID:	J39323-3	**Date Sampled:**	08/24/06
Matrix:	AQ - Ground Water	**Date Received:**	08/24/06
Method:	SW846 8270C SW846 3510C	**Percent Solids:**	n/a
Project:	Quanta 2006 Groundwater Resources, Edgewater, NJ		

ABN TCL List

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	C4 alkyl benzene	6.82	11	ug/l	J
	C4 alkyl benzene	6.90	16	ug/l	J
104-55-2	2-Propenal, 3-phenyl-	7.39	14	ug/l	JN
	Benzofuran, -methyl-	7.47	21	ug/l	J
	unknown	7.61	8.8	ug/l	J
	C4 alkyl benzene	7.65	27	ug/l	J
	C4 alkyl benzene	7.71	34	ug/l	J
	unknown	8.37	7.4	ug/l	J
	Benzothiophene	8.83	28	ug/l	J
	Benzo[b]thiophene,-methyl-	10.19	6.2	ug/l	J
90-12-0	Naphthalene, 1-methyl-	10.52	31	ug/l	JN
	Phenol, -diethyl-	10.87	6.7	ug/l	J
	unknown	13.05	18	ug/l	J
	unknown	13.59	38	ug/l	J
1000128-38-5	Acenaphthenone	14.89	7.2	ug/l	JN
10544-50-0	Cyclic octaatomic sulfur	18.54	9.7	ug/l	JN
10544-50-0	Cyclic octaatomic sulfur	18.94	490	ug/l	JN
	Total TIC, Semi-Volatile		889.3	ug/l	J

(a) Diluted due to high concentration of non-target compound.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-C-082406		
Lab Sample ID:	J39323-3	**Date Sampled:**	08/24/06
Matrix:	AQ - Ground Water	**Date Received:**	08/24/06
Method:	SW846 8270C BY SIM SW846 3510C	**Percent Solids:**	n/a
Project:	Quanta 2006 Groundwater Resources, Edgewater, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	M43939.D	1	09/20/06	NAP	08/25/06	OP24605	EM1462
Run #2							

	Initial Volume	Final Volume
Run #1	930 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
87-86-5	Pentachlorophenol	ND	1.1	0.43	ug/l	
208-96-8	Acenaphthylene	1.18	0.22	0.010	ug/l	
120-12-7	Anthracene	6.71	0.22	0.022	ug/l	
56-55-3	Benzo(a)anthracene	4.30	0.22	0.0073	ug/l	
50-32-8	Benzo(a)pyrene	2.99	0.22	0.018	ug/l	
205-99-2	Benzo(b)fluoranthene	2.80	0.22	0.039	ug/l	
191-24-2	Benzo(g,h,i)perylene	1.29	0.22	0.019	ug/l	
207-08-9	Benzo(k)fluoranthene	2.82	0.22	0.017	ug/l	
218-01-9	Chrysene	3.79	0.22	0.018	ug/l	
53-70-3	Dibenzo(a,h)anthracene	0.762	0.22	0.018	ug/l	
118-74-1	Hexachlorobenzene	ND	0.11	0.065	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	1.43	0.22	0.012	ug/l	
85-01-8	Phenanthrene	3.38	0.22	0.023	ug/l	
129-00-0	Pyrene	14.0	0.22	0.015	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	798% [a]		10-99%
4165-62-2	Phenol-d5	1551% [a]		10-83%
118-79-6	2,4,6-Tribromophenol	72%		10-140%
4165-60-0	Nitrobenzene-d5	56%		11-140%
321-60-8	2-Fluorobiphenyl	56%		10-133%
1718-51-0	Terphenyl-d14	76%		13-130%

(a) Outside control limits due to matrix interference with corresponding I.S.

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-C-082406		
Lab Sample ID:	J39323-3	**Date Sampled:**	08/24/06
Matrix:	AQ - Ground Water	**Date Received:**	08/24/06
Method:	SW846 8082 SW846 3510C	**Percent Solids:**	n/a
Project:	Quanta 2006 Groundwater Resources, Edgewater, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	AB59533.D	1	09/01/06	JSE	08/25/06	OP24608	GAB2702
Run #2							

	Initial Volume	Final Volume
Run #1	910 ml	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	0.55	0.10	ug/l	
11104-28-2	Aroclor 1221	ND	0.55	0.52	ug/l	
11141-16-5	Aroclor 1232	ND	0.55	0.43	ug/l	
53469-21-9	Aroclor 1242	ND	0.55	0.18	ug/l	
12672-29-6	Aroclor 1248	ND	0.55	0.17	ug/l	
11097-69-1	Aroclor 1254	ND	0.55	0.12	ug/l	
11096-82-5	Aroclor 1260	ND	0.55	0.13	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	196% [a]		38-133%
877-09-8	Tetrachloro-m-xylene	74%		38-133%
2051-24-3	Decachlorobiphenyl	75%		18-156%
2051-24-3	Decachlorobiphenyl	81%		18-156%

(a) Outside control limits due to matrix interference.

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-C-082406		
Lab Sample ID:	J39323-3	**Date Sampled:**	08/24/06
Matrix:	AQ - Ground Water	**Date Received:**	08/24/06
		Percent Solids:	n/a
Project:	Quanta 2006 Groundwater Resources, Edgewater, NJ		

Total Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Arsenic	987	8.0	ug/l	1	09/03/06	09/08/06	ND	SW846 6010B [1]	SW846 3010A [2]
Lead	21.3	3.0	ug/l	1	09/03/06	09/08/06	ND	SW846 6010B [1]	SW846 3010A [2]

(1) Instrument QC Batch: MA18018
(2) Prep QC Batch: MP35774

RL = Reporting Limit

Report of Analysis

Client Sample ID:	MW-B-082406		
Lab Sample ID:	J39323-4	**Date Sampled:**	08/24/06
Matrix:	AQ - Ground Water	**Date Received:**	08/24/06
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Quanta 2006 Groundwater Resources, Edgewater, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	A114018.D	1	09/05/06	ET	n/a	n/a	VA3824
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List (OLM4.2)

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	2.4	ug/l	
71-43-2	Benzene	5.0	1.0	0.21	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.17	ug/l	
75-25-2	Bromoform	ND	4.0	0.54	ug/l	
74-83-9	Bromomethane	ND	2.0	0.22	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	2.6	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.21	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.29	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.22	ug/l	
75-00-3	Chloroethane	6.2	1.0	0.56	ug/l	
67-66-3	Chloroform	1.7	1.0	0.22	ug/l	
74-87-3	Chloromethane	ND	1.0	0.35	ug/l	
110-82-7	Cyclohexane	ND	5.0	0.50	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	10	1.1	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.19	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	0.52	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.20	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.32	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.24	ug/l	
75-71-8	Dichlorodifluoromethane	ND	5.0	0.75	ug/l	
75-34-3	1,1-Dichloroethane	51.8	1.0	0.23	ug/l	
107-06-2	1,2-Dichloroethane	1.0	1.0	0.29	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.33	ug/l	
156-59-2	cis-1,2-Dichloroethene	2.0	1.0	0.18	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.42	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.20	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.15	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.20	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.20	ug/l	
76-13-1	Freon 113	ND	5.0	0.69	ug/l	
591-78-6	2-Hexanone	ND	5.0	1.3	ug/l	
98-82-8	Isopropylbenzene	ND	2.0	0.20	ug/l	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-B-082406		
Lab Sample ID:	J39323-4	**Date Sampled:**	08/24/06
Matrix:	AQ - Ground Water	**Date Received:**	08/24/06
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Quanta 2006 Groundwater Resources, Edgewater, NJ		

VOA TCL List (OLM4.2)

CAS No.	Compound	Result	RL	MDL	Units	Q
79-20-9	Methyl Acetate	ND	5.0	2.1	ug/l	
108-87-2	Methylcyclohexane	ND	5.0	0.18	ug/l	
1634-04-4	Methyl Tert Butyl Ether	0.36	1.0	0.31	ug/l	J
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.1	ug/l	
75-09-2	Methylene chloride	0.54	2.0	0.27	ug/l	J
100-42-5	Styrene	ND	5.0	0.16	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.28	ug/l	
127-18-4	Tetrachloroethene	0.81	1.0	0.28	ug/l	J
108-88-3	Toluene	ND	1.0	0.20	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.16	ug/l	
71-55-6	1,1,1-Trichloroethane	0.64	1.0	0.28	ug/l	J
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.32	ug/l	
79-01-6	Trichloroethene	0.64	1.0	0.29	ug/l	J
75-69-4	Trichlorofluoromethane	ND	5.0	0.25	ug/l	
75-01-4	Vinyl chloride	2.8	1.0	0.29	ug/l	
	m,p-Xylene	ND	1.0	0.42	ug/l	
95-47-6	o-Xylene	ND	1.0	0.31	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.31	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	97%		77-121%
17060-07-0	1,2-Dichloroethane-D4	101%		65-133%
2037-26-5	Toluene-D8	94%		80-117%
460-00-4	4-Bromofluorobenzene	95%		79-124%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

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E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-B-082406		
Lab Sample ID:	J39323-4	**Date Sampled:**	08/24/06
Matrix:	AQ - Ground Water	**Date Received:**	08/24/06
Method:	SW846 8270C SW846 3510C	**Percent Solids:**	n/a
Project:	Quanta 2006 Groundwater Resources, Edgewater, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3E2268.D	1	09/12/06	MMC	08/25/06	OP24604	E3E77
Run #2							

	Initial Volume	Final Volume
Run #1	930 ml	1.0 ml
Run #2		

ABN TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	5.4	1.0	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	5.4	1.3	ug/l	
120-83-2	2,4-Dichlorophenol	ND	5.4	1.7	ug/l	
105-67-9	2,4-Dimethylphenol	ND	5.4	1.8	ug/l	
51-28-5	2,4-Dinitrophenol	ND	22	0.96	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	22	0.78	ug/l	
95-48-7	2-Methylphenol	ND	5.4	1.5	ug/l	
	3&4-Methylphenol	ND	5.4	1.4	ug/l	
88-75-5	2-Nitrophenol	ND	5.4	1.9	ug/l	
100-02-7	4-Nitrophenol	ND	22	0.91	ug/l	
108-95-2	Phenol	ND	5.4	0.53	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	5.4	2.1	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	5.4	1.4	ug/l	
98-86-2	Acetophenone	ND	5.4	0.40	ug/l	
1912-24-9	Atrazine	ND	5.4	0.18	ug/l	
100-52-7	Benzaldehyde	ND	5.4	0.28	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	2.2	0.32	ug/l	
85-68-7	Butyl benzyl phthalate	ND	2.2	0.64	ug/l	
92-52-4	1,1'-Biphenyl	0.45	2.2	0.35	ug/l	J
91-58-7	2-Chloronaphthalene	ND	5.4	1.1	ug/l	
106-47-8	4-Chloroaniline	ND	5.4	0.43	ug/l	
86-74-8	Carbazole	3.8	2.2	0.39	ug/l	
105-60-2	Caprolactam	ND	2.2	0.34	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	2.2	0.70	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	2.2	0.57	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	2.2	0.79	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	2.2	0.46	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	2.2	0.92	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	2.2	0.60	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	5.4	1.3	ug/l	
132-64-9	Dibenzofuran	4.1	5.4	0.37	ug/l	J
84-74-2	Di-n-butyl phthalate	ND	2.2	0.64	ug/l	

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Report of Analysis

Client Sample ID:	MW-B-082406		
Lab Sample ID:	J39323-4	**Date Sampled:**	08/24/06
Matrix:	AQ - Ground Water	**Date Received:**	08/24/06
Method:	SW846 8270C SW846 3510C	**Percent Solids:**	n/a
Project:	Quanta 2006 Groundwater Resources, Edgewater, NJ		

ABN TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
117-84-0	Di-n-octyl phthalate	ND	2.2	0.61	ug/l	
84-66-2	Diethyl phthalate	ND	2.2	0.42	ug/l	
131-11-3	Dimethyl phthalate	ND	2.2	0.35	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	2.2	0.71	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.2	0.19	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	22	0.44	ug/l	
67-72-1	Hexachloroethane	ND	5.4	0.30	ug/l	
78-59-1	Isophorone	ND	2.2	0.63	ug/l	
91-57-6	2-Methylnaphthalene	1.8	2.2	0.44	ug/l	J
88-74-4	2-Nitroaniline	ND	5.4	0.71	ug/l	
99-09-2	3-Nitroaniline	ND	5.4	1.4	ug/l	
100-01-6	4-Nitroaniline	ND	5.4	0.78	ug/l	
98-95-3	Nitrobenzene	ND	2.2	0.45	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	2.2	0.50	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	5.4	0.55	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	43%		12-76%
4165-62-2	Phenol-d5	34%		10-59%
118-79-6	2,4,6-Tribromophenol	88%		42-128%
4165-60-0	Nitrobenzene-d5	82%		30-122%
321-60-8	2-Fluorobiphenyl	71%		34-113%
1718-51-0	Terphenyl-d14	104%		42-125%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	system artifact/aldol-condensation	3.73	18	ug/l	J
	unknown	9.07	5.2	ug/l	J
	unknown C15H16O2	19.79	16	ug/l	J
	system artifact	20.39	4.8	ug/l	J
	unknown	21.96	5.6	ug/l	J
	system artifact	22.69	75	ug/l	J
	unknown	22.82	20	ug/l	J
	system artifact	23.64	6.1	ug/l	J
	system artifact	25.56	21	ug/l	J
	unknown	26.92	8.3	ug/l	J
	Total TIC, Semi-Volatile		55.1	ug/l	J

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Report of Analysis

Client Sample ID:	MW-B-082406		
Lab Sample ID:	J39323-4	**Date Sampled:**	08/24/06
Matrix:	AQ - Ground Water	**Date Received:**	08/24/06
Method:	SW846 8270C BY SIM SW846 3510C	**Percent Solids:**	n/a
Project:	Quanta 2006 Groundwater Resources, Edgewater, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Z29922.D	1	09/19/06	KLS	08/25/06	OP24605	EZ931
Run #2							

	Initial Volume	Final Volume
Run #1	930 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
87-86-5	Pentachlorophenol	ND	1.1	0.43	ug/l	
83-32-9	Acenaphthene	5.42	0.22	0.018	ug/l	
208-96-8	Acenaphthylene	ND	0.22	0.010	ug/l	
120-12-7	Anthracene	0.757	0.22	0.022	ug/l	
56-55-3	Benzo(a)anthracene	ND	0.22	0.0073	ug/l	
50-32-8	Benzo(a)pyrene	ND	0.22	0.018	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	0.22	0.039	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	0.22	0.019	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	0.22	0.017	ug/l	
218-01-9	Chrysene	ND	0.22	0.018	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	0.22	0.018	ug/l	
206-44-0	Fluoranthene	0.325	0.22	0.0097	ug/l	
86-73-7	Fluorene	2.16	0.22	0.022	ug/l	
118-74-1	Hexachlorobenzene	ND	0.11	0.065	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.22	0.012	ug/l	
91-20-3	Naphthalene	3.85	0.22	0.028	ug/l	
85-01-8	Phenanthrene	1.86	0.22	0.023	ug/l	
129-00-0	Pyrene	ND	0.22	0.015	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	44%		10-99%
4165-62-2	Phenol-d5	36%		10-83%
118-79-6	2,4,6-Tribromophenol	76%		10-140%
4165-60-0	Nitrobenzene-d5	70%		11-140%
321-60-8	2-Fluorobiphenyl	58%		10-133%
1718-51-0	Terphenyl-d14	86%		13-130%

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Report of Analysis

Client Sample ID:	MW-B-082406		
Lab Sample ID:	J39323-4	**Date Sampled:**	08/24/06
Matrix:	AQ - Ground Water	**Date Received:**	08/24/06
Method:	SW846 8082 SW846 3510C	**Percent Solids:**	n/a
Project:	Quanta 2006 Groundwater Resources, Edgewater, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	AB59534.D	1	09/01/06	JSE	08/25/06	OP24608	GAB2702
Run #2							

	Initial Volume	Final Volume
Run #1	950 ml	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	0.53	0.099	ug/l	
11104-28-2	Aroclor 1221	ND	0.53	0.49	ug/l	
11141-16-5	Aroclor 1232	ND	0.53	0.41	ug/l	
53469-21-9	Aroclor 1242	ND	0.53	0.17	ug/l	
12672-29-6	Aroclor 1248	ND	0.53	0.16	ug/l	
11097-69-1	Aroclor 1254	ND	0.53	0.11	ug/l	
11096-82-5	Aroclor 1260	ND	0.53	0.12	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	97%		38-133%
877-09-8	Tetrachloro-m-xylene	64%		38-133%
2051-24-3	Decachlorobiphenyl	45%		18-156%
2051-24-3	Decachlorobiphenyl	48%		18-156%

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Report of Analysis

Client Sample ID:	MW-B-082406		
Lab Sample ID:	J39323-4	**Date Sampled:**	08/24/06
Matrix:	AQ - Ground Water	**Date Received:**	08/24/06
		Percent Solids:	n/a
Project:	Quanta 2006 Groundwater Resources, Edgewater, NJ		

Total Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Arsenic	992	8.0	ug/l	1	09/03/06	09/08/06	ND	SW846 6010B [1]	SW846 3010A [2]
Lead	< 3.0	3.0	ug/l	1	09/03/06	09/08/06	ND	SW846 6010B [1]	SW846 3010A [2]

(1) Instrument QC Batch: MA18018
(2) Prep QC Batch: MP35774

RL = Reporting Limit

Report of Analysis

Client Sample ID:	MW-A-2-082406		
Lab Sample ID:	J39323-5	**Date Sampled:**	08/24/06
Matrix:	AQ - Ground Water	**Date Received:**	08/24/06
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Quanta 2006 Groundwater Resources, Edgewater, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	A114008.D	5	09/05/06	ET	n/a	n/a	VA3824
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List (OLM4.2)

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	50	12	ug/l	
71-43-2	Benzene	22.2	5.0	1.1	ug/l	
75-27-4	Bromodichloromethane	ND	5.0	0.87	ug/l	
75-25-2	Bromoform	ND	20	2.7	ug/l	
74-83-9	Bromomethane	ND	10	1.1	ug/l	
78-93-3	2-Butanone (MEK)	ND	50	13	ug/l	
75-15-0	Carbon disulfide	8.8	10	1.0	ug/l	J
56-23-5	Carbon tetrachloride	ND	5.0	1.5	ug/l	
108-90-7	Chlorobenzene	ND	5.0	1.1	ug/l	
75-00-3	Chloroethane	ND	5.0	2.8	ug/l	
67-66-3	Chloroform	ND	5.0	1.1	ug/l	
74-87-3	Chloromethane	ND	5.0	1.7	ug/l	
110-82-7	Cyclohexane	ND	25	2.5	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	50	5.5	ug/l	
124-48-1	Dibromochloromethane	ND	5.0	0.94	ug/l	
106-93-4	1,2-Dibromoethane	ND	10	2.6	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	5.0	1.0	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	5.0	1.6	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	5.0	1.2	ug/l	
75-71-8	Dichlorodifluoromethane	ND	25	3.8	ug/l	
75-34-3	1,1-Dichloroethane	ND	5.0	1.2	ug/l	
107-06-2	1,2-Dichloroethane	ND	5.0	1.5	ug/l	
75-35-4	1,1-Dichloroethene	ND	5.0	1.6	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	5.0	0.89	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	5.0	2.1	ug/l	
78-87-5	1,2-Dichloropropane	ND	5.0	1.0	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	5.0	0.74	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	5.0	1.0	ug/l	
100-41-4	Ethylbenzene	4.1	5.0	1.0	ug/l	J
76-13-1	Freon 113	ND	25	3.4	ug/l	
591-78-6	2-Hexanone	ND	25	6.3	ug/l	
98-82-8	Isopropylbenzene	ND	10	1.0	ug/l	

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RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-A-2-082406		
Lab Sample ID:	J39323-5	**Date Sampled:**	08/24/06
Matrix:	AQ - Ground Water	**Date Received:**	08/24/06
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Quanta 2006 Groundwater Resources, Edgewater, NJ		

VOA TCL List (OLM4.2)

CAS No.	Compound	Result	RL	MDL	Units	Q
79-20-9	Methyl Acetate	ND	25	10	ug/l	
108-87-2	Methylcyclohexane	ND	25	0.91	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	5.0	1.5	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	25	5.3	ug/l	
75-09-2	Methylene chloride	ND	10	1.3	ug/l	
100-42-5	Styrene	ND	25	0.79	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.0	1.4	ug/l	
127-18-4	Tetrachloroethene	ND	5.0	1.4	ug/l	
108-88-3	Toluene	1.5	5.0	1.0	ug/l	J
120-82-1	1,2,4-Trichlorobenzene	ND	25	0.80	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	5.0	1.4	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	5.0	1.6	ug/l	
79-01-6	Trichloroethene	ND	5.0	1.4	ug/l	
75-69-4	Trichlorofluoromethane	ND	25	1.3	ug/l	
75-01-4	Vinyl chloride	ND	5.0	1.4	ug/l	
	m,p-Xylene	ND	5.0	2.1	ug/l	
95-47-6	o-Xylene	4.6	5.0	1.5	ug/l	J
1330-20-7	Xylene (total)	6.6	5.0	1.5	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	93%		77-121%
17060-07-0	1,2-Dichloroethane-D4	93%		65-133%
2037-26-5	Toluene-D8	92%		80-117%
460-00-4	4-Bromofluorobenzene	93%		79-124%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
496-11-7	Indane	16.48	54	ug/l	JN
91-20-3	Naphthalene	18.69	860	ug/l	JN
	Naphtalene, methyl-	19.99	48	ug/l	J
	Naphtalene, methyl-	20.23	41	ug/l	J
	Total TIC, Volatile		1003	ug/l	J

(a) Diluted due to high concentration of non-target compound.

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-A-2-082406		
Lab Sample ID:	J39323-5	**Date Sampled:**	08/24/06
Matrix:	AQ - Ground Water	**Date Received:**	08/24/06
Method:	SW846 8270C SW846 3510C	**Percent Solids:**	n/a
Project:	Quanta 2006 Groundwater Resources, Edgewater, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	F61811.D	1	09/13/06	NAP	08/25/06	OP24604	EF3029
Run #2	F61821.D	10	09/13/06	NAP	08/25/06	OP24604	EF3029

	Initial Volume	Final Volume
Run #1	900 ml	1.0 ml
Run #2	900 ml	1.0 ml

ABN TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	5.6	1.1	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	5.6	1.3	ug/l	
120-83-2	2,4-Dichlorophenol	ND	5.6	1.7	ug/l	
105-67-9	2,4-Dimethylphenol	ND	5.6	1.8	ug/l	
51-28-5	2,4-Dinitrophenol	ND	22	0.99	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	22	0.80	ug/l	
95-48-7	2-Methylphenol	1.6	5.6	1.5	ug/l	J
	3&4-Methylphenol	2.0	5.6	1.4	ug/l	J
88-75-5	2-Nitrophenol	ND	5.6	2.0	ug/l	
100-02-7	4-Nitrophenol	ND	22	0.94	ug/l	
108-95-2	Phenol	ND	5.6	0.55	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	5.6	2.1	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	5.6	1.4	ug/l	
83-32-9	Acenaphthene	66.4	2.2	0.39	ug/l	
98-86-2	Acetophenone	ND	5.6	0.42	ug/l	
1912-24-9	Atrazine	ND	5.6	0.18	ug/l	
100-52-7	Benzaldehyde	ND	5.6	0.29	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	2.2	0.33	ug/l	
85-68-7	Butyl benzyl phthalate	ND	2.2	0.66	ug/l	
92-52-4	1,1'-Biphenyl	17.2	2.2	0.36	ug/l	
91-58-7	2-Chloronaphthalene	ND	5.6	1.1	ug/l	
106-47-8	4-Chloroaniline	ND	5.6	0.44	ug/l	
86-74-8	Carbazole	16.2	2.2	0.40	ug/l	
105-60-2	Caprolactam	ND	2.2	0.35	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	2.2	0.73	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	2.2	0.59	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	2.2	0.82	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	2.2	0.48	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	2.2	0.96	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	2.2	0.62	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	5.6	1.4	ug/l	
132-64-9	Dibenzofuran	31.5	5.6	0.38	ug/l	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-A-2-082406		
Lab Sample ID:	J39323-5	**Date Sampled:**	08/24/06
Matrix:	AQ - Ground Water	**Date Received:**	08/24/06
Method:	SW846 8270C SW846 3510C	**Percent Solids:**	n/a
Project:	Quanta 2006 Groundwater Resources, Edgewater, NJ		

ABN TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
84-74-2	Di-n-butyl phthalate	ND	2.2	0.66	ug/l	
117-84-0	Di-n-octyl phthalate	ND	2.2	0.63	ug/l	
84-66-2	Diethyl phthalate	18.5	2.2	0.43	ug/l	
131-11-3	Dimethyl phthalate	ND	2.2	0.36	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	2.2	0.73	ug/l	
86-73-7	Fluorene	34.3	2.2	0.50	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.2	0.19	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	22	0.45	ug/l	
67-72-1	Hexachloroethane	ND	5.6	0.31	ug/l	
78-59-1	Isophorone	ND	2.2	0.65	ug/l	
91-57-6	2-Methylnaphthalene	62.5	2.2	0.45	ug/l	
88-74-4	2-Nitroaniline	ND	5.6	0.74	ug/l	
99-09-2	3-Nitroaniline	ND	5.6	1.4	ug/l	
100-01-6	4-Nitroaniline	ND	5.6	0.80	ug/l	
91-20-3	Naphthalene	898 [a]	22	3.6	ug/l	
98-95-3	Nitrobenzene	ND	2.2	0.47	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	2.2	0.52	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	5.6	0.57	ug/l	
85-01-8	Phenanthrene	30.4	2.2	0.40	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	41%	36%	12-76%
4165-62-2	Phenol-d5	39%	36%	10-59%
118-79-6	2,4,6-Tribromophenol	101%	82%	42-128%
4165-60-0	Nitrobenzene-d5	82%	79%	30-122%
321-60-8	2-Fluorobiphenyl	69%	71%	34-113%
1718-51-0	Terphenyl-d14	92%	93%	42-125%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
470-82-6	Eucalyptol	6.37	44	ug/l	JN
496-11-7	Indane	6.45	45	ug/l	JN
	unknown	7.42	62	ug/l	J
	unknown	7.50	180	ug/l	J
	unknown	7.56	91	ug/l	J
	unknown	7.63	500	ug/l	J
	unknown	7.70	85	ug/l	J
	unknown	7.82	51	ug/l	J
	unknown	7.91	160	ug/l	J

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
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E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-A-2-082406		
Lab Sample ID:	J39323-5	**Date Sampled:**	08/24/06
Matrix:	AQ - Ground Water	**Date Received:**	08/24/06
Method:	SW846 8270C SW846 3510C	**Percent Solids:**	n/a
Project:	Quanta 2006 Groundwater Resources, Edgewater, NJ		

ABN TCL List

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Benzene, -ethenyl--dimethyl-	8.01	63	ug/l	J
	unknown	8.18	310	ug/l	J
124-76-5	Isoborneol	8.30	110	ug/l	JN
	Phenol, -ethyl-	8.39	74	ug/l	J
	unknown	8.43	290	ug/l	J
	Benzothiophene	8.84	910	ug/l	J
	Phenol, -trimethyl-	8.92	100	ug/l	J
	unknown	9.28	220	ug/l	J
	unknown	9.37	100	ug/l	J
	Benzothiophene, 2,3-dihydro-	9.74	240	ug/l	J
	Phenol, -trimethyl-	9.82	54	ug/l	J
	unknown	9.92	45	ug/l	J
	1H-Inden--one, -dihydro-	10.06	56	ug/l	J
	Benzothiophene, -methyl-	10.19	100	ug/l	J
	unknown	10.37	270	ug/l	J
90-12-0	Naphthalene, 1-methyl-	10.52	1500	ug/l	JN
	Total TIC, Semi-Volatile		5660	ug/l	J

(a) Result is from Run# 2

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-A-2-082406		
Lab Sample ID:	J39323-5	**Date Sampled:**	08/24/06
Matrix:	AQ - Ground Water	**Date Received:**	08/24/06
Method:	SW846 8270C BY SIM SW846 3510C	**Percent Solids:**	n/a
Project:	Quanta 2006 Groundwater Resources, Edgewater, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Z29409.D	1	08/29/06	KLS	08/25/06	OP24605	EZ911
Run #2							

	Initial Volume	Final Volume
Run #1	900 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
87-86-5	Pentachlorophenol	ND	1.1	0.44	ug/l	
208-96-8	Acenaphthylene	1.07	0.22	0.011	ug/l	
120-12-7	Anthracene	3.96	0.22	0.023	ug/l	
56-55-3	Benzo(a)anthracene	0.202	0.22	0.0076	ug/l	J
50-32-8	Benzo(a)pyrene	ND	0.22	0.019	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	0.22	0.040	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	0.22	0.020	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	0.22	0.017	ug/l	
218-01-9	Chrysene	0.271	0.22	0.019	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	0.22	0.018	ug/l	
206-44-0	Fluoranthene	5.07	0.22	0.010	ug/l	
118-74-1	Hexachlorobenzene	ND	0.11	0.068	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.22	0.012	ug/l	
129-00-0	Pyrene	3.70	0.22	0.016	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	40%		10-99%
4165-62-2	Phenol-d5	34%		10-83%
118-79-6	2,4,6-Tribromophenol	82%		10-140%
4165-60-0	Nitrobenzene-d5	67%		11-140%
321-60-8	2-Fluorobiphenyl	61%		10-133%
1718-51-0	Terphenyl-d14	63%		13-130%

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E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-A-2-082406		
Lab Sample ID:	J39323-5	**Date Sampled:**	08/24/06
Matrix:	AQ - Ground Water	**Date Received:**	08/24/06
Method:	SW846 8082 SW846 3510C	**Percent Solids:**	n/a
Project:	Quanta 2006 Groundwater Resources, Edgewater, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	AB59535.D	1	09/01/06	JSE	08/25/06	OP24608	GAB2702
Run #2							

	Initial Volume	Final Volume
Run #1	880 ml	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	0.57	0.11	ug/l	
11104-28-2	Aroclor 1221	ND	0.57	0.53	ug/l	
11141-16-5	Aroclor 1232	ND	0.57	0.44	ug/l	
53469-21-9	Aroclor 1242	ND	0.57	0.19	ug/l	
12672-29-6	Aroclor 1248	ND	0.57	0.17	ug/l	
11097-69-1	Aroclor 1254	ND	0.57	0.12	ug/l	
11096-82-5	Aroclor 1260	ND	0.57	0.13	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	57%		38-133%
877-09-8	Tetrachloro-m-xylene	57%		38-133%
2051-24-3	Decachlorobiphenyl	72%		18-156%
2051-24-3	Decachlorobiphenyl	74%		18-156%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-A-2-082406		
Lab Sample ID:	J39323-5	**Date Sampled:**	08/24/06
Matrix:	AQ - Ground Water	**Date Received:**	08/24/06
		Percent Solids:	n/a
Project:	Quanta 2006 Groundwater Resources, Edgewater, NJ		

Total Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Arsenic	84200	40	ug/l	5	09/03/06	09/07/06	ND	SW846 6010B [1]	SW846 3010A [2]
Lead	536	3.0	ug/l	1	09/03/06	09/06/06	ND	SW846 6010B [1]	SW846 3010A [2]

(1) Instrument QC Batch: MA18012
(2) Prep QC Batch: MP35774

RL = Reporting Limit

Report of Analysis

Client Sample ID:	MW-A-2-082406		
Lab Sample ID:	J39323-5	**Date Sampled:**	08/24/06
Matrix:	AQ - Ground Water	**Date Received:**	08/24/06
		Percent Solids:	n/a
Project:	Quanta 2006 Groundwater Resources, Edgewater, NJ		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Nitrogen, Ammonia	4.7	0.30	mg/l	3	09/06/06 10:55	NR	EPA 350.1/LACHAT

RL = Reporting Limit

Report of Analysis

Client Sample ID:	MW-F-082406		
Lab Sample ID:	J39323-6	**Date Sampled:**	08/24/06
Matrix:	AQ - Ground Water	**Date Received:**	08/24/06
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Quanta 2006 Groundwater Resources, Edgewater, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	A114092.D	1	09/07/06	ET	n/a	n/a	VA3828
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List (OLM4.2)

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	2.4	ug/l	
71-43-2	Benzene	ND	1.0	0.21	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.17	ug/l	
75-25-2	Bromoform	ND	4.0	0.54	ug/l	
74-83-9	Bromomethane	ND	2.0	0.22	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	2.6	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.21	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.29	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.22	ug/l	
75-00-3	Chloroethane	ND	1.0	0.56	ug/l	
67-66-3	Chloroform	ND	1.0	0.22	ug/l	
74-87-3	Chloromethane	ND	1.0	0.35	ug/l	
110-82-7	Cyclohexane	ND	5.0	0.50	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	10	1.1	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.19	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	0.52	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.20	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.32	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.24	ug/l	
75-71-8	Dichlorodifluoromethane	ND	5.0	0.75	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.23	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.29	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.33	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.18	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.42	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.20	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.15	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.20	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.20	ug/l	
76-13-1	Freon 113	ND	5.0	0.69	ug/l	
591-78-6	2-Hexanone	ND	5.0	1.3	ug/l	
98-82-8	Isopropylbenzene	ND	2.0	0.20	ug/l	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-F-082406		
Lab Sample ID:	J39323-6	**Date Sampled:**	08/24/06
Matrix:	AQ - Ground Water	**Date Received:**	08/24/06
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Quanta 2006 Groundwater Resources, Edgewater, NJ		

VOA TCL List (OLM4.2)

CAS No.	Compound	Result	RL	MDL	Units	Q
79-20-9	Methyl Acetate	ND	5.0	2.1	ug/l	
108-87-2	Methylcyclohexane	ND	5.0	0.18	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.31	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.1	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.27	ug/l	
100-42-5	Styrene	ND	5.0	0.16	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.28	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.28	ug/l	
108-88-3	Toluene	ND	1.0	0.20	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.16	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.28	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.32	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.29	ug/l	
75-69-4	Trichlorofluoromethane	ND	5.0	0.25	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.29	ug/l	
	m,p-Xylene	ND	1.0	0.42	ug/l	
95-47-6	o-Xylene	ND	1.0	0.31	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.31	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	96%		77-121%
17060-07-0	1,2-Dichloroethane-D4	89%		65-133%
2037-26-5	Toluene-D8	92%		80-117%
460-00-4	4-Bromofluorobenzene	92%		79-124%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-F-082406		
Lab Sample ID:	J39323-6	**Date Sampled:**	08/24/06
Matrix:	AQ - Ground Water	**Date Received:**	08/24/06
Method:	SW846 8270C SW846 3510C	**Percent Solids:**	n/a
Project:	Quanta 2006 Groundwater Resources, Edgewater, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3E2271.D	1	09/12/06	MMC	08/25/06	OP24604	E3E77
Run #2							

	Initial Volume	Final Volume
Run #1	930 ml	1.0 ml
Run #2		

ABN TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	5.4	1.0	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	5.4	1.3	ug/l	
120-83-2	2,4-Dichlorophenol	ND	5.4	1.7	ug/l	
105-67-9	2,4-Dimethylphenol	ND	5.4	1.8	ug/l	
51-28-5	2,4-Dinitrophenol	ND	22	0.96	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	22	0.78	ug/l	
95-48-7	2-Methylphenol	ND	5.4	1.5	ug/l	
	3&4-Methylphenol	ND	5.4	1.4	ug/l	
88-75-5	2-Nitrophenol	ND	5.4	1.9	ug/l	
100-02-7	4-Nitrophenol	ND	22	0.91	ug/l	
108-95-2	Phenol	ND	5.4	0.53	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	5.4	2.1	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	5.4	1.4	ug/l	
98-86-2	Acetophenone	ND	5.4	0.40	ug/l	
1912-24-9	Atrazine	ND	5.4	0.18	ug/l	
100-52-7	Benzaldehyde	ND	5.4	0.28	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	2.2	0.32	ug/l	
85-68-7	Butyl benzyl phthalate	ND	2.2	0.64	ug/l	
92-52-4	1,1'-Biphenyl	ND	2.2	0.35	ug/l	
91-58-7	2-Chloronaphthalene	ND	5.4	1.1	ug/l	
106-47-8	4-Chloroaniline	ND	5.4	0.43	ug/l	
86-74-8	Carbazole	ND	2.2	0.39	ug/l	
105-60-2	Caprolactam	ND	2.2	0.34	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	2.2	0.70	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	2.2	0.57	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	2.2	0.79	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	2.2	0.46	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	2.2	0.92	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	2.2	0.60	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	5.4	1.3	ug/l	
132-64-9	Dibenzofuran	ND	5.4	0.37	ug/l	
84-74-2	Di-n-butyl phthalate	ND	2.2	0.64	ug/l	

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E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-F-082406		
Lab Sample ID:	J39323-6	**Date Sampled:**	08/24/06
Matrix:	AQ - Ground Water	**Date Received:**	08/24/06
Method:	SW846 8270C SW846 3510C	**Percent Solids:**	n/a
Project:	Quanta 2006 Groundwater Resources, Edgewater, NJ		

ABN TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
117-84-0	Di-n-octyl phthalate	ND	2.2	0.61	ug/l	
84-66-2	Diethyl phthalate	ND	2.2	0.42	ug/l	
131-11-3	Dimethyl phthalate	ND	2.2	0.35	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	2.2	0.71	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.2	0.19	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	22	0.44	ug/l	
67-72-1	Hexachloroethane	ND	5.4	0.30	ug/l	
78-59-1	Isophorone	ND	2.2	0.63	ug/l	
91-57-6	2-Methylnaphthalene	ND	2.2	0.44	ug/l	
88-74-4	2-Nitroaniline	ND	5.4	0.71	ug/l	
99-09-2	3-Nitroaniline	ND	5.4	1.4	ug/l	
100-01-6	4-Nitroaniline	ND	5.4	0.78	ug/l	
98-95-3	Nitrobenzene	ND	2.2	0.45	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	2.2	0.50	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	5.4	0.55	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	43%		12-76%
4165-62-2	Phenol-d5	34%		10-59%
118-79-6	2,4,6-Tribromophenol	87%		42-128%
4165-60-0	Nitrobenzene-d5	81%		30-122%
321-60-8	2-Fluorobiphenyl	71%		34-113%
1718-51-0	Terphenyl-d14	110%		42-125%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	system artifact	3.43	4.7	ug/l	J
	system artifact/aldol-condensation	3.73	19	ug/l	J
	unknown	11.81	9.1	ug/l	J
10544	Sulfur, mol. (S8)	18.88	8.5	ug/l	JN
	system artifact	21.29	4.9	ug/l	J
	system artifact	22.09	4.4	ug/l	J
	Total TIC, Semi-Volatile		17.6	ug/l	J

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Report of Analysis

Client Sample ID:	MW-F-082406		
Lab Sample ID:	J39323-6	**Date Sampled:**	08/24/06
Matrix:	AQ - Ground Water	**Date Received:**	08/24/06
Method:	SW846 8270C BY SIM SW846 3510C	**Percent Solids:**	n/a
Project:	Quanta 2006 Groundwater Resources, Edgewater, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Z29923.D	1	09/19/06	KLS	08/25/06	OP24605	EZ931
Run #2							

	Initial Volume	Final Volume
Run #1	930 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
87-86-5	Pentachlorophenol	ND	1.1	0.43	ug/l	
83-32-9	Acenaphthene	0.582	0.22	0.018	ug/l	
208-96-8	Acenaphthylene	ND	0.22	0.010	ug/l	
120-12-7	Anthracene	ND	0.22	0.022	ug/l	
56-55-3	Benzo(a)anthracene	ND	0.22	0.0073	ug/l	
50-32-8	Benzo(a)pyrene	ND	0.22	0.018	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	0.22	0.039	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	0.22	0.019	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	0.22	0.017	ug/l	
218-01-9	Chrysene	ND	0.22	0.018	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	0.22	0.018	ug/l	
206-44-0	Fluoranthene	1.06	0.22	0.0097	ug/l	
86-73-7	Fluorene	ND	0.22	0.022	ug/l	
118-74-1	Hexachlorobenzene	ND	0.11	0.065	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.22	0.012	ug/l	
91-20-3	Naphthalene	0.713	0.22	0.028	ug/l	
85-01-8	Phenanthrene	ND	0.22	0.023	ug/l	
129-00-0	Pyrene	0.937	0.22	0.015	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	45%		10-99%
4165-62-2	Phenol-d5	36%		10-83%
118-79-6	2,4,6-Tribromophenol	75%		10-140%
4165-60-0	Nitrobenzene-d5	72%		11-140%
321-60-8	2-Fluorobiphenyl	59%		10-133%
1718-51-0	Terphenyl-d14	96%		13-130%

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E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-F-082406		
Lab Sample ID:	J39323-6	**Date Sampled:**	08/24/06
Matrix:	AQ - Ground Water	**Date Received:**	08/24/06
Method:	SW846 8082 SW846 3510C	**Percent Solids:**	n/a
Project:	Quanta 2006 Groundwater Resources, Edgewater, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	AB59536.D	1	09/01/06	JSE	08/25/06	OP24608	GAB2702
Run #2							

	Initial Volume	Final Volume
Run #1	900 ml	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	0.56	0.10	ug/l	
11104-28-2	Aroclor 1221	ND	0.56	0.52	ug/l	
11141-16-5	Aroclor 1232	ND	0.56	0.43	ug/l	
53469-21-9	Aroclor 1242	ND	0.56	0.18	ug/l	
12672-29-6	Aroclor 1248	ND	0.56	0.17	ug/l	
11097-69-1	Aroclor 1254	ND	0.56	0.12	ug/l	
11096-82-5	Aroclor 1260	ND	0.56	0.13	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	81%		38-133%
877-09-8	Tetrachloro-m-xylene	81%		38-133%
2051-24-3	Decachlorobiphenyl	51%		18-156%
2051-24-3	Decachlorobiphenyl	53%		18-156%

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Report of Analysis

Client Sample ID:	MW-F-082406		
Lab Sample ID:	J39323-6	**Date Sampled:**	08/24/06
Matrix:	AQ - Ground Water	**Date Received:**	08/24/06
		Percent Solids:	n/a
Project:	Quanta 2006 Groundwater Resources, Edgewater, NJ		

Total Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Arsenic	107	8.0	ug/l	1	09/03/06	09/08/06	ND	SW846 6010B [1]	SW846 3010A [2]
Lead	15.8	3.0	ug/l	1	09/03/06	09/08/06	ND	SW846 6010B [1]	SW846 3010A [2]

(1) Instrument QC Batch: MA18018
(2) Prep QC Batch: MP35774

RL = Reporting Limit

Report of Analysis

Client Sample ID:	MW-L-082406		
Lab Sample ID:	J39323-7	**Date Sampled:**	08/24/06
Matrix:	AQ - Ground Water	**Date Received:**	08/24/06
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Quanta 2006 Groundwater Resources, Edgewater, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	A114052.D	1	09/06/06	ET	n/a	n/a	VA3826
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List (OLM4.2)

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	2.4	ug/l	
71-43-2	Benzene	ND	1.0	0.21	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.17	ug/l	
75-25-2	Bromoform	ND	4.0	0.54	ug/l	
74-83-9	Bromomethane	ND	2.0	0.22	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	2.6	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.21	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.29	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.22	ug/l	
75-00-3	Chloroethane	ND	1.0	0.56	ug/l	
67-66-3	Chloroform	ND	1.0	0.22	ug/l	
74-87-3	Chloromethane	ND	1.0	0.35	ug/l	
110-82-7	Cyclohexane	ND	5.0	0.50	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	10	1.1	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.19	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	0.52	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.20	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.32	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.24	ug/l	
75-71-8	Dichlorodifluoromethane	ND	5.0	0.75	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.23	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.29	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.33	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.18	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.42	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.20	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.15	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.20	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.20	ug/l	
76-13-1	Freon 113	ND	5.0	0.69	ug/l	
591-78-6	2-Hexanone	ND	5.0	1.3	ug/l	
98-82-8	Isopropylbenzene	ND	2.0	0.20	ug/l	

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Report of Analysis

Client Sample ID:	MW-L-082406		
Lab Sample ID:	J39323-7	**Date Sampled:**	08/24/06
Matrix:	AQ - Ground Water	**Date Received:**	08/24/06
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Quanta 2006 Groundwater Resources, Edgewater, NJ		

VOA TCL List (OLM4.2)

CAS No.	Compound	Result	RL	MDL	Units	Q
79-20-9	Methyl Acetate	ND	5.0	2.1	ug/l	
108-87-2	Methylcyclohexane	ND	5.0	0.18	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.31	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.1	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.27	ug/l	
100-42-5	Styrene	ND	5.0	0.16	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.28	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.28	ug/l	
108-88-3	Toluene	ND	1.0	0.20	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.16	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.28	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.32	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.29	ug/l	
75-69-4	Trichlorofluoromethane	ND	5.0	0.25	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.29	ug/l	
	m,p-Xylene	ND	1.0	0.42	ug/l	
95-47-6	o-Xylene	ND	1.0	0.31	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.31	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	84%		77-121%
17060-07-0	1,2-Dichloroethane-D4	76%		65-133%
2037-26-5	Toluene-D8	93%		80-117%
460-00-4	4-Bromofluorobenzene	91%		79-124%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	unknown	3.45	17	ug/l	J
	Total TIC, Volatile		17	ug/l	J

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Report of Analysis

Client Sample ID:	MW-L-082406		
Lab Sample ID:	J39323-7	**Date Sampled:**	08/24/06
Matrix:	AQ - Ground Water	**Date Received:**	08/24/06
Method:	SW846 8270C SW846 3510C	**Percent Solids:**	n/a
Project:	Quanta 2006 Groundwater Resources, Edgewater, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	F61633.D	1	09/07/06	NAP	08/25/06	OP24606	EF3024
Run #2	F61663.D	2	09/08/06	NAP	08/25/06	OP24606	EF3024

	Initial Volume	Final Volume
Run #1	1000 ml	1.0 ml
Run #2	1000 ml	1.0 ml

ABN TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	5.0	0.95	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	5.0	1.2	ug/l	
120-83-2	2,4-Dichlorophenol	ND	5.0	1.6	ug/l	
105-67-9	2,4-Dimethylphenol	ND	5.0	1.6	ug/l	
51-28-5	2,4-Dinitrophenol	ND	20	0.89	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	20	0.72	ug/l	
95-48-7	2-Methylphenol	ND	5.0	1.4	ug/l	
	3&4-Methylphenol	ND	5.0	1.3	ug/l	
88-75-5	2-Nitrophenol	ND	5.0	1.8	ug/l	
100-02-7	4-Nitrophenol	ND	20	0.84	ug/l	
108-95-2	Phenol	ND	5.0	0.50	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	5.0	1.9	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	5.0	1.3	ug/l	
83-32-9	Acenaphthene	149 [a]	4.0	0.70	ug/l	
98-86-2	Acetophenone	ND	5.0	0.37	ug/l	
1912-24-9	Atrazine	ND	5.0	0.16	ug/l	
100-52-7	Benzaldehyde	ND	5.0	0.27	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	2.0	0.30	ug/l	
85-68-7	Butyl benzyl phthalate	ND	2.0	0.59	ug/l	
92-52-4	1,1'-Biphenyl	ND	2.0	0.33	ug/l	
91-58-7	2-Chloronaphthalene	ND	5.0	0.98	ug/l	
106-47-8	4-Chloroaniline	ND	5.0	0.40	ug/l	
86-74-8	Carbazole	ND	2.0	0.36	ug/l	
105-60-2	Caprolactam	ND	2.0	0.32	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	2.0	0.65	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	2.0	0.53	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	2.0	0.74	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	2.0	0.43	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	2.0	0.86	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	2.0	0.56	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	5.0	1.2	ug/l	
132-64-9	Dibenzofuran	8.1	5.0	0.34	ug/l	

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Report of Analysis

Client Sample ID:	MW-L-082406		
Lab Sample ID:	J39323-7	**Date Sampled:**	08/24/06
Matrix:	AQ - Ground Water	**Date Received:**	08/24/06
Method:	SW846 8270C SW846 3510C	**Percent Solids:**	n/a
Project:	Quanta 2006 Groundwater Resources, Edgewater, NJ		

ABN TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
84-74-2	Di-n-butyl phthalate	ND	2.0	0.59	ug/l	
117-84-0	Di-n-octyl phthalate	ND	2.0	0.57	ug/l	
84-66-2	Diethyl phthalate	ND	2.0	0.39	ug/l	
131-11-3	Dimethyl phthalate	ND	2.0	0.33	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	1.1	2.0	0.66	ug/l	J
87-68-3	Hexachlorobutadiene	ND	2.0	0.18	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	20	0.41	ug/l	
67-72-1	Hexachloroethane	ND	5.0	0.28	ug/l	
78-59-1	Isophorone	ND	2.0	0.59	ug/l	
91-57-6	2-Methylnaphthalene	ND	2.0	0.41	ug/l	
88-74-4	2-Nitroaniline	ND	5.0	0.66	ug/l	
99-09-2	3-Nitroaniline	ND	5.0	1.3	ug/l	
100-01-6	4-Nitroaniline	ND	5.0	0.72	ug/l	
98-95-3	Nitrobenzene	ND	2.0	0.42	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	2.0	0.47	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	5.0	0.52	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	38%	39%	12-76%
4165-62-2	Phenol-d5	29%	29%	10-59%
118-79-6	2,4,6-Tribromophenol	108%	105%	42-128%
4165-60-0	Nitrobenzene-d5	76%	79%	30-122%
321-60-8	2-Fluorobiphenyl	73%	75%	34-113%
1718-51-0	Terphenyl-d14	97%	99%	42-125%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	system artifact/aldol-condensation	3.69	20	ug/l	J
	Benzo[b]thiophene,-dihydro-	9.81	5.3	ug/l	J
	unknown	13.14	21	ug/l	J
	unknown	13.21	11	ug/l	J
	Benzene, [-(-cyclopentadien--	14.24	4.3	ug/l	J
	Benzene, [-(-cyclopentadien--	14.29	4.4	ug/l	J
1000128-38-5	Acenaphthenone	14.97	5.6	ug/l	JN
	unknown	17.77	8.4	ug/l	J
10544-50-0	Cyclic octaatomic sulfur	18.49	4	ug/l	JN
10544-50-0	Cyclic octaatomic sulfur	19.03	530	ug/l	JN
	-Acridinone	21.10	5.4	ug/l	J
	Total TIC, Semi-Volatile		599.4	ug/l	J

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
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Report of Analysis

Client Sample ID:	MW-L-082406		
Lab Sample ID:	J39323-7	**Date Sampled:**	08/24/06
Matrix:	AQ - Ground Water	**Date Received:**	08/24/06
Method:	SW846 8270C SW846 3510C	**Percent Solids:**	n/a
Project:	Quanta 2006 Groundwater Resources, Edgewater, NJ		

ABN TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q

(a) Result is from Run# 2

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-L-082406		
Lab Sample ID:	J39323-7	**Date Sampled:**	08/24/06
Matrix:	AQ - Ground Water	**Date Received:**	08/24/06
Method:	SW846 8270C BY SIM SW846 3510C	**Percent Solids:**	n/a
Project:	Quanta 2006 Groundwater Resources, Edgewater, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Z29809.D	1	09/14/06	KLS	08/25/06	OP24607	EZ926
Run #2							

	Initial Volume	Final Volume
Run #1	1000 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
87-86-5	Pentachlorophenol	ND	1.0	0.40	ug/l	
208-96-8	Acenaphthylene	0.803	0.20	0.0095	ug/l	
120-12-7	Anthracene	1.94	0.20	0.021	ug/l	
56-55-3	Benzo(a)anthracene	0.314	0.20	0.0068	ug/l	
50-32-8	Benzo(a)pyrene	ND	0.20	0.017	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	0.20	0.036	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	0.20	0.018	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	0.20	0.016	ug/l	
218-01-9	Chrysene	ND	0.20	0.017	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	0.20	0.016	ug/l	
206-44-0	Fluoranthene	10.1	0.20	0.0090	ug/l	
86-73-7	Fluorene	ND	0.20	0.020	ug/l	
118-74-1	Hexachlorobenzene	ND	0.10	0.061	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.20	0.011	ug/l	
91-20-3	Naphthalene	ND	0.20	0.026	ug/l	
85-01-8	Phenanthrene	ND	0.20	0.021	ug/l	
129-00-0	Pyrene	5.57	0.20	0.014	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	274% [a]		10-99%
4165-62-2	Phenol-d5	309% [a]		10-83%
118-79-6	2,4,6-Tribromophenol	112%		10-140%
4165-60-0	Nitrobenzene-d5	47%		11-140%
321-60-8	2-Fluorobiphenyl	50%		10-133%
1718-51-0	Terphenyl-d14	80%		13-130%

(a) Outside control limits due to matrix interference with corresponding I.S.

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-L-082406		
Lab Sample ID:	J39323-7	**Date Sampled:**	08/24/06
Matrix:	AQ - Ground Water	**Date Received:**	08/24/06
Method:	SW846 8082 SW846 3510C	**Percent Solids:**	n/a
Project:	Quanta 2006 Groundwater Resources, Edgewater, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	AB59487.D	1	08/31/06	JSE	08/28/06	OP24633	GAB2700
Run #2							

	Initial Volume	Final Volume
Run #1	940 ml	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	0.53	0.10	ug/l	
11104-28-2	Aroclor 1221	ND	0.53	0.50	ug/l	
11141-16-5	Aroclor 1232	ND	0.53	0.41	ug/l	
53469-21-9	Aroclor 1242	ND	0.53	0.17	ug/l	
12672-29-6	Aroclor 1248	ND	0.53	0.16	ug/l	
11097-69-1	Aroclor 1254	ND	0.53	0.12	ug/l	
11096-82-5	Aroclor 1260	ND	0.53	0.12	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	67%		38-133%
877-09-8	Tetrachloro-m-xylene	67%		38-133%
2051-24-3	Decachlorobiphenyl	87%		18-156%
2051-24-3	Decachlorobiphenyl	87%		18-156%

(a) Had TBA cleanup.

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-L-082406		
Lab Sample ID:	J39323-7	**Date Sampled:**	08/24/06
Matrix:	AQ - Ground Water	**Date Received:**	08/24/06
		Percent Solids:	n/a
Project:	Quanta 2006 Groundwater Resources, Edgewater, NJ		

Total Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Arsenic	321	8.0	ug/l	1	09/08/06	09/09/06	ND	SW846 6010B [1]	SW846 3010A [3]
Lead	< 3.0	3.0	ug/l	1	09/08/06	09/13/06	ND	SW846 6010B [2]	SW846 3010A [3]

(1) Instrument QC Batch: MA18023
(2) Instrument QC Batch: MA18044
(3) Prep QC Batch: MP35819

RL = Reporting Limit

Report of Analysis

Client Sample ID:	MW-L-082406		
Lab Sample ID:	J39323-7	**Date Sampled:**	08/24/06
Matrix:	AQ - Ground Water	**Date Received:**	08/24/06
		Percent Solids:	n/a
Project:	Quanta 2006 Groundwater Resources, Edgewater, NJ		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Nitrogen, Ammonia	3.3	0.20	mg/l	2	09/06/06 10:56	NR	EPA 350.1/LACHAT

RL = Reporting Limit

Report of Analysis

Client Sample ID:	EB-082406-GW		
Lab Sample ID:	J39323-8	**Date Sampled:**	08/24/06
Matrix:	AQ - Equipment Blank	**Date Received:**	08/24/06
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Quanta 2006 Groundwater Resources, Edgewater, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	A114053.D	1	09/06/06	ET	n/a	n/a	VA3826
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List (OLM4.2)

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	2.4	ug/l	
71-43-2	Benzene	ND	1.0	0.21	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.17	ug/l	
75-25-2	Bromoform	ND	4.0	0.54	ug/l	
74-83-9	Bromomethane	ND	2.0	0.22	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	2.6	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.21	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.29	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.22	ug/l	
75-00-3	Chloroethane	ND	1.0	0.56	ug/l	
67-66-3	Chloroform	ND	1.0	0.22	ug/l	
74-87-3	Chloromethane	ND	1.0	0.35	ug/l	
110-82-7	Cyclohexane	ND	5.0	0.50	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	10	1.1	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.19	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	0.52	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.20	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.32	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.24	ug/l	
75-71-8	Dichlorodifluoromethane	ND	5.0	0.75	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.23	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.29	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.33	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.18	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.42	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.20	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.15	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.20	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.20	ug/l	
76-13-1	Freon 113	ND	5.0	0.69	ug/l	
591-78-6	2-Hexanone	ND	5.0	1.3	ug/l	
98-82-8	Isopropylbenzene	ND	2.0	0.20	ug/l	

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E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	EB-082406-GW		
Lab Sample ID:	J39323-8	**Date Sampled:**	08/24/06
Matrix:	AQ - Equipment Blank	**Date Received:**	08/24/06
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Quanta 2006 Groundwater Resources, Edgewater, NJ		

VOA TCL List (OLM4.2)

CAS No.	Compound	Result	RL	MDL	Units	Q
79-20-9	Methyl Acetate	ND	5.0	2.1	ug/l	
108-87-2	Methylcyclohexane	ND	5.0	0.18	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.31	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.1	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.27	ug/l	
100-42-5	Styrene	ND	5.0	0.16	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.28	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.28	ug/l	
108-88-3	Toluene	ND	1.0	0.20	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.16	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.28	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.32	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.29	ug/l	
75-69-4	Trichlorofluoromethane	ND	5.0	0.25	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.29	ug/l	
	m,p-Xylene	ND	1.0	0.42	ug/l	
95-47-6	o-Xylene	ND	1.0	0.31	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.31	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	85%		77-121%
17060-07-0	1,2-Dichloroethane-D4	76%		65-133%
2037-26-5	Toluene-D8	92%		80-117%
460-00-4	4-Bromofluorobenzene	91%		79-124%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	EB-082406-GW		
Lab Sample ID:	J39323-8	**Date Sampled:**	08/24/06
Matrix:	AQ - Equipment Blank	**Date Received:**	08/24/06
Method:	SW846 8270C SW846 3510C	**Percent Solids:**	n/a
Project:	Quanta 2006 Groundwater Resources, Edgewater, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3E2272.D	1	09/12/06	MMC	08/25/06	OP24604	E3E77
Run #2							

	Initial Volume	Final Volume
Run #1	940 ml	1.0 ml
Run #2		

ABN TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	5.3	1.0	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	5.3	1.3	ug/l	
120-83-2	2,4-Dichlorophenol	ND	5.3	1.7	ug/l	
105-67-9	2,4-Dimethylphenol	ND	5.3	1.7	ug/l	
51-28-5	2,4-Dinitrophenol	ND	21	0.95	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	21	0.77	ug/l	
95-48-7	2-Methylphenol	ND	5.3	1.4	ug/l	
	3&4-Methylphenol	ND	5.3	1.4	ug/l	
88-75-5	2-Nitrophenol	ND	5.3	1.9	ug/l	
100-02-7	4-Nitrophenol	ND	21	0.90	ug/l	
108-95-2	Phenol	ND	5.3	0.53	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	5.3	2.1	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	5.3	1.3	ug/l	
98-86-2	Acetophenone	ND	5.3	0.40	ug/l	
1912-24-9	Atrazine	ND	5.3	0.17	ug/l	
100-52-7	Benzaldehyde	ND	5.3	0.28	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	2.1	0.32	ug/l	
85-68-7	Butyl benzyl phthalate	ND	2.1	0.63	ug/l	
92-52-4	1,1'-Biphenyl	ND	2.1	0.35	ug/l	
91-58-7	2-Chloronaphthalene	ND	5.3	1.0	ug/l	
106-47-8	4-Chloroaniline	ND	5.3	0.42	ug/l	
86-74-8	Carbazole	ND	2.1	0.39	ug/l	
105-60-2	Caprolactam	ND	2.1	0.34	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	2.1	0.70	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	2.1	0.56	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	2.1	0.79	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	2.1	0.46	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	2.1	0.91	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	2.1	0.59	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	5.3	1.3	ug/l	
132-64-9	Dibenzofuran	ND	5.3	0.37	ug/l	
84-74-2	Di-n-butyl phthalate	ND	2.1	0.63	ug/l	

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E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	EB-082406-GW		
Lab Sample ID:	J39323-8	**Date Sampled:**	08/24/06
Matrix:	AQ - Equipment Blank	**Date Received:**	08/24/06
Method:	SW846 8270C SW846 3510C	**Percent Solids:**	n/a
Project:	Quanta 2006 Groundwater Resources, Edgewater, NJ		

ABN TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
117-84-0	Di-n-octyl phthalate	ND	2.1	0.61	ug/l	
84-66-2	Diethyl phthalate	ND	2.1	0.41	ug/l	
131-11-3	Dimethyl phthalate	ND	2.1	0.35	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	2.1	0.70	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.1	0.19	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	21	0.43	ug/l	
67-72-1	Hexachloroethane	ND	5.3	0.30	ug/l	
78-59-1	Isophorone	ND	2.1	0.63	ug/l	
91-57-6	2-Methylnaphthalene	ND	2.1	0.43	ug/l	
88-74-4	2-Nitroaniline	ND	5.3	0.70	ug/l	
99-09-2	3-Nitroaniline	ND	5.3	1.3	ug/l	
100-01-6	4-Nitroaniline	ND	5.3	0.77	ug/l	
98-95-3	Nitrobenzene	ND	2.1	0.45	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	2.1	0.50	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	5.3	0.55	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	45%		12-76%
4165-62-2	Phenol-d5	35%		10-59%
118-79-6	2,4,6-Tribromophenol	79%		42-128%
4165-60-0	Nitrobenzene-d5	88%		30-122%
321-60-8	2-Fluorobiphenyl	75%		34-113%
1718-51-0	Terphenyl-d14	112%		42-125%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	system artifact	3.43	4.3	ug/l	J
	system artifact/aldol-condensation	3.73	20	ug/l	J
	system artifact	10.61	4.9	ug/l	J
	system artifact	21.29	4.5	ug/l	J
	system artifact	22.09	4.7	ug/l	J
	system artifact	23.49	4.6	ug/l	J
	Total TIC, Semi-Volatile		0	ug/l	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	EB-082406-GW		
Lab Sample ID:	J39323-8	**Date Sampled:**	08/24/06
Matrix:	AQ - Equipment Blank	**Date Received:**	08/24/06
Method:	SW846 8270C BY SIM SW846 3510C	**Percent Solids:**	n/a
Project:	Quanta 2006 Groundwater Resources, Edgewater, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Z29924.D	1	09/19/06	KLS	08/25/06	OP24605	EZ931
Run #2							

	Initial Volume	Final Volume
Run #1	940 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
87-86-5	Pentachlorophenol	ND	1.1	0.42	ug/l	
83-32-9	Acenaphthene	ND	0.21	0.018	ug/l	
208-96-8	Acenaphthylene	ND	0.21	0.010	ug/l	
120-12-7	Anthracene	ND	0.21	0.022	ug/l	
56-55-3	Benzo(a)anthracene	ND	0.21	0.0072	ug/l	
50-32-8	Benzo(a)pyrene	ND	0.21	0.018	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	0.21	0.039	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	0.21	0.019	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	0.21	0.017	ug/l	
218-01-9	Chrysene	ND	0.21	0.018	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	0.21	0.017	ug/l	
206-44-0	Fluoranthene	ND	0.21	0.0096	ug/l	
86-73-7	Fluorene	ND	0.21	0.021	ug/l	
118-74-1	Hexachlorobenzene	ND	0.11	0.065	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.21	0.012	ug/l	
91-20-3	Naphthalene	ND	0.21	0.027	ug/l	
85-01-8	Phenanthrene	ND	0.21	0.022	ug/l	
129-00-0	Pyrene	ND	0.21	0.015	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	48%		10-99%
4165-62-2	Phenol-d5	37%		10-83%
118-79-6	2,4,6-Tribromophenol	72%		10-140%
4165-60-0	Nitrobenzene-d5	77%		11-140%
321-60-8	2-Fluorobiphenyl	62%		10-133%
1718-51-0	Terphenyl-d14	91%		13-130%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	EB-082406-GW		
Lab Sample ID:	J39323-8	**Date Sampled:**	08/24/06
Matrix:	AQ - Equipment Blank	**Date Received:**	08/24/06
Method:	SW846 8082 SW846 3510C	**Percent Solids:**	n/a
Project:	Quanta 2006 Groundwater Resources, Edgewater, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	AB59537.D	1	09/01/06	JSE	08/25/06	OP24608	GAB2702
Run #2							

	Initial Volume	Final Volume
Run #1	850 ml	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	0.59	0.11	ug/l	
11104-28-2	Aroclor 1221	ND	0.59	0.55	ug/l	
11141-16-5	Aroclor 1232	ND	0.59	0.46	ug/l	
53469-21-9	Aroclor 1242	ND	0.59	0.19	ug/l	
12672-29-6	Aroclor 1248	ND	0.59	0.18	ug/l	
11097-69-1	Aroclor 1254	ND	0.59	0.13	ug/l	
11096-82-5	Aroclor 1260	ND	0.59	0.14	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	123%		38-133%
877-09-8	Tetrachloro-m-xylene	135% [a]		38-133%
2051-24-3	Decachlorobiphenyl	56%		18-156%
2051-24-3	Decachlorobiphenyl	57%		18-156%

(a) Outside control limits due to matrix interference.

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	EB-082406-GW		
Lab Sample ID:	J39323-8	**Date Sampled:**	08/24/06
Matrix:	AQ - Equipment Blank	**Date Received:**	08/24/06
		Percent Solids:	n/a
Project:	Quanta 2006 Groundwater Resources, Edgewater, NJ		

Total Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Arsenic	< 2.0	2.0	ug/l	1	09/03/06	09/08/06	LH	SW846 6010B [2]	SW846 3010A [3]
Lead	< 3.0	3.0	ug/l	1	09/03/06	09/08/06	ND	SW846 6010B [1]	SW846 3010A [3]

(1) Instrument QC Batch: MA18018
(2) Instrument QC Batch: MA18025
(3) Prep QC Batch: MP35774

RL = Reporting Limit

Report of Analysis

Client Sample ID:	EB-082406-GW		
Lab Sample ID:	J39323-8	**Date Sampled:**	08/24/06
Matrix:	AQ - Equipment Blank	**Date Received:**	08/24/06
		Percent Solids:	n/a
Project:	Quanta 2006 Groundwater Resources, Edgewater, NJ		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Nitrogen, Ammonia	< 0.10	0.10	mg/l	1	09/06/06 09:40	NR	EPA 350.1/LACHAT

RL = Reporting Limit

Report of Analysis

Client Sample ID:	TB-082406-GW		
Lab Sample ID:	J39323-9	**Date Sampled:**	08/24/06
Matrix:	AQ - Trip Blank Water	**Date Received:**	08/24/06
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Quanta 2006 Groundwater Resources, Edgewater, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	A114054.D	1	09/06/06	ET	n/a	n/a	VA3826
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List (OLM4.2)

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	2.4	ug/l	
71-43-2	Benzene	ND	1.0	0.21	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.17	ug/l	
75-25-2	Bromoform	ND	4.0	0.54	ug/l	
74-83-9	Bromomethane	ND	2.0	0.22	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	2.6	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.21	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.29	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.22	ug/l	
75-00-3	Chloroethane	ND	1.0	0.56	ug/l	
67-66-3	Chloroform	ND	1.0	0.22	ug/l	
74-87-3	Chloromethane	ND	1.0	0.35	ug/l	
110-82-7	Cyclohexane	ND	5.0	0.50	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	10	1.1	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.19	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	0.52	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.20	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.32	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.24	ug/l	
75-71-8	Dichlorodifluoromethane	ND	5.0	0.75	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.23	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.29	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.33	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.18	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.42	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.20	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.15	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.20	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.20	ug/l	
76-13-1	Freon 113	ND	5.0	0.69	ug/l	
591-78-6	2-Hexanone	ND	5.0	1.3	ug/l	
98-82-8	Isopropylbenzene	ND	2.0	0.20	ug/l	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TB-082406-GW		
Lab Sample ID:	J39323-9	**Date Sampled:**	08/24/06
Matrix:	AQ - Trip Blank Water	**Date Received:**	08/24/06
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Quanta 2006 Groundwater Resources, Edgewater, NJ		

VOA TCL List (OLM4.2)

CAS No.	Compound	Result	RL	MDL	Units	Q
79-20-9	Methyl Acetate	ND	5.0	2.1	ug/l	
108-87-2	Methylcyclohexane	ND	5.0	0.18	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.31	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.1	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.27	ug/l	
100-42-5	Styrene	ND	5.0	0.16	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.28	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.28	ug/l	
108-88-3	Toluene	ND	1.0	0.20	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.16	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.28	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.32	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.29	ug/l	
75-69-4	Trichlorofluoromethane	ND	5.0	0.25	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.29	ug/l	
	m,p-Xylene	ND	1.0	0.42	ug/l	
95-47-6	o-Xylene	ND	1.0	0.31	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.31	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	85%		77-121%
17060-07-0	1,2-Dichloroethane-D4	78%		65-133%
2037-26-5	Toluene-D8	92%		80-117%
460-00-4	4-Bromofluorobenzene	92%		79-124%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	DUP-082406-GW-1		
Lab Sample ID:	J39323-10	**Date Sampled:**	08/24/06
Matrix:	AQ - Ground Water	**Date Received:**	08/24/06
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Quanta 2006 Groundwater Resources, Edgewater, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	A114050.D	2.5	09/06/06	ET	n/a	n/a	VA3826
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List (OLM4.2)

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	25	6.1	ug/l	
71-43-2	Benzene	23.8	2.5	0.53	ug/l	
75-27-4	Bromodichloromethane	ND	2.5	0.44	ug/l	
75-25-2	Bromoform	ND	10	1.3	ug/l	
74-83-9	Bromomethane	ND	5.0	0.56	ug/l	
78-93-3	2-Butanone (MEK)	ND	25	6.5	ug/l	
75-15-0	Carbon disulfide	ND	5.0	0.52	ug/l	
56-23-5	Carbon tetrachloride	ND	2.5	0.73	ug/l	
108-90-7	Chlorobenzene	ND	2.5	0.56	ug/l	
75-00-3	Chloroethane	ND	2.5	1.4	ug/l	
67-66-3	Chloroform	ND	2.5	0.54	ug/l	
74-87-3	Chloromethane	ND	2.5	0.87	ug/l	
110-82-7	Cyclohexane	ND	13	1.2	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	25	2.7	ug/l	
124-48-1	Dibromochloromethane	ND	2.5	0.47	ug/l	
106-93-4	1,2-Dibromoethane	ND	5.0	1.3	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	2.5	0.51	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	2.5	0.79	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	2.5	0.60	ug/l	
75-71-8	Dichlorodifluoromethane	ND	13	1.9	ug/l	
75-34-3	1,1-Dichloroethane	ND	2.5	0.58	ug/l	
107-06-2	1,2-Dichloroethane	ND	2.5	0.73	ug/l	
75-35-4	1,1-Dichloroethene	ND	2.5	0.81	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	2.5	0.45	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	2.5	1.1	ug/l	
78-87-5	1,2-Dichloropropane	ND	2.5	0.50	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	2.5	0.37	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	2.5	0.50	ug/l	
100-41-4	Ethylbenzene	5.1	2.5	0.51	ug/l	
76-13-1	Freon 113	ND	13	1.7	ug/l	
591-78-6	2-Hexanone	ND	13	3.2	ug/l	
98-82-8	Isopropylbenzene	0.92	5.0	0.50	ug/l	J

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	DUP-082406-GW-1		
Lab Sample ID:	J39323-10	**Date Sampled:**	08/24/06
Matrix:	AQ - Ground Water	**Date Received:**	08/24/06
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Quanta 2006 Groundwater Resources, Edgewater, NJ		

VOA TCL List (OLM4.2)

CAS No.	Compound	Result	RL	MDL	Units	Q
79-20-9	Methyl Acetate	ND	13	5.2	ug/l	
108-87-2	Methylcyclohexane	ND	13	0.46	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	2.5	0.76	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	13	2.7	ug/l	
75-09-2	Methylene chloride	ND	5.0	0.66	ug/l	
100-42-5	Styrene	ND	13	0.40	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	2.5	0.69	ug/l	
127-18-4	Tetrachloroethene	ND	2.5	0.69	ug/l	
108-88-3	Toluene	2.2	2.5	0.50	ug/l	J
120-82-1	1,2,4-Trichlorobenzene	ND	13	0.40	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	2.5	0.69	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	2.5	0.79	ug/l	
79-01-6	Trichloroethene	ND	2.5	0.72	ug/l	
75-69-4	Trichlorofluoromethane	ND	13	0.63	ug/l	
75-01-4	Vinyl chloride	ND	2.5	0.72	ug/l	
	m,p-Xylene	3.2	2.5	1.0	ug/l	
95-47-6	o-Xylene	6.7	2.5	0.76	ug/l	
1330-20-7	Xylene (total)	9.9	2.5	0.76	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	84%		77-121%
17060-07-0	1,2-Dichloroethane-D4	74%		65-133%
2037-26-5	Toluene-D8	92%		80-117%
460-00-4	4-Bromofluorobenzene	91%		79-124%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
470-82-6	Eucalyptol	16.25	19	ug/l	JN
496-11-7	Indane	16.48	63	ug/l	JN
464-48-2	Bicyclo[2.2.1]heptan-2-one, 1,7,7-	18.28	13	ug/l	JN
91-20-3	Naphthalene	18.69	900	ug/l	JN
270-82-6	Benzo[c]thiophene	18.84	23	ug/l	JN
	Naphtalene, methyl-	19.99	65	ug/l	J
	Naphtalene, methyl-	20.23	55	ug/l	J
	Total TIC, Volatile		1138	ug/l	J

(a) Diluted due to high concentration of non-target compound.

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	DUP-082406-GW-1		
Lab Sample ID:	J39323-10	**Date Sampled:**	08/24/06
Matrix:	AQ - Ground Water	**Date Received:**	08/24/06
Method:	SW846 8270C SW846 3510C	**Percent Solids:**	n/a
Project:	Quanta 2006 Groundwater Resources, Edgewater, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3E2273.D	1	09/12/06	MMC	08/25/06	OP24604	E3E77
Run #2	3E2274.D	10	09/12/06	MMC	08/25/06	OP24604	E3E77

	Initial Volume	Final Volume
Run #1	870 ml	1.0 ml
Run #2	870 ml	1.0 ml

ABN TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	5.7	1.1	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	5.7	1.4	ug/l	
120-83-2	2,4-Dichlorophenol	ND	5.7	1.8	ug/l	
105-67-9	2,4-Dimethylphenol	4.3	5.7	1.9	ug/l	J
51-28-5	2,4-Dinitrophenol	ND	23	1.0	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	23	0.83	ug/l	
95-48-7	2-Methylphenol	ND	5.7	1.6	ug/l	
	3&4-Methylphenol	ND	5.7	1.5	ug/l	
88-75-5	2-Nitrophenol	ND	5.7	2.1	ug/l	
100-02-7	4-Nitrophenol	ND	23	0.97	ug/l	
108-95-2	Phenol	ND	5.7	0.57	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	5.7	2.2	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	5.7	1.4	ug/l	
83-32-9	Acenaphthene	72.8 [a]	23	4.0	ug/l	
98-86-2	Acetophenone	ND	5.7	0.43	ug/l	
1912-24-9	Atrazine	ND	5.7	0.19	ug/l	
100-52-7	Benzaldehyde	ND	5.7	0.30	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	2.3	0.34	ug/l	
85-68-7	Butyl benzyl phthalate	ND	2.3	0.68	ug/l	
92-52-4	1,1'-Biphenyl	15.5	2.3	0.38	ug/l	
91-58-7	2-Chloronaphthalene	ND	5.7	1.1	ug/l	
106-47-8	4-Chloroaniline	ND	5.7	0.46	ug/l	
86-74-8	Carbazole	16.6	2.3	0.42	ug/l	
105-60-2	Caprolactam	ND	2.3	0.36	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	2.3	0.75	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	2.3	0.61	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	2.3	0.85	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	2.3	0.50	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	2.3	0.99	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	2.3	0.64	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	5.7	1.4	ug/l	
132-64-9	Dibenzofuran	29.8	5.7	0.40	ug/l	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	DUP-082406-GW-1		
Lab Sample ID:	J39323-10	**Date Sampled:**	08/24/06
Matrix:	AQ - Ground Water	**Date Received:**	08/24/06
Method:	SW846 8270C SW846 3510C	**Percent Solids:**	n/a
Project:	Quanta 2006 Groundwater Resources, Edgewater, NJ		

ABN TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
84-74-2	Di-n-butyl phthalate	ND	2.3	0.68	ug/l	
117-84-0	Di-n-octyl phthalate	ND	2.3	0.65	ug/l	
84-66-2	Diethyl phthalate	19.1	2.3	0.45	ug/l	
131-11-3	Dimethyl phthalate	ND	2.3	0.38	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	2.3	0.76	ug/l	
86-73-7	Fluorene	38.2 [a]	23	5.2	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.3	0.20	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	23	0.47	ug/l	
67-72-1	Hexachloroethane	ND	5.7	0.33	ug/l	
78-59-1	Isophorone	ND	2.3	0.68	ug/l	
91-57-6	2-Methylnaphthalene	59.5	2.3	0.47	ug/l	
88-74-4	2-Nitroaniline	ND	5.7	0.76	ug/l	
99-09-2	3-Nitroaniline	ND	5.7	1.4	ug/l	
100-01-6	4-Nitroaniline	ND	5.7	0.83	ug/l	
91-20-3	Naphthalene	992 [a]	23	3.7	ug/l	
98-95-3	Nitrobenzene	ND	2.3	0.48	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	2.3	0.54	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	5.7	0.59	ug/l	
85-01-8	Phenanthrene	35.4 [a]	23	4.2	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	38%	43%	12-76%
4165-62-2	Phenol-d5	34%	36%	10-59%
118-79-6	2,4,6-Tribromophenol	85%	80%	42-128%
4165-60-0	Nitrobenzene-d5	73%	74%	30-122%
321-60-8	2-Fluorobiphenyl	62%	72%	34-113%
1718-51-0	Terphenyl-d14	106%	120%	42-125%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	unknown	7.49	160	ug/l	J
	unknown	7.54	220	ug/l	J
	unknown	7.62	120	ug/l	J
1632	Bicyclo[2.2.1]heptan-2-ol, 1,3,3-t	7.69	640	ug/l	JN
	unknown	7.76	110	ug/l	J
	unknown	7.97	230	ug/l	J
	1H-indene-dihydro-methyl	8.07	79	ug/l	J
	1H-indene-dihydro-methyl	8.24	430	ug/l	J
	unknown	8.36	110	ug/l	J

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	DUP-082406-GW-1		
Lab Sample ID:	J39323-10	**Date Sampled:**	08/24/06
Matrix:	AQ - Ground Water	**Date Received:**	08/24/06
Method:	SW846 8270C SW846 3510C	**Percent Solids:**	n/a
Project:	Quanta 2006 Groundwater Resources, Edgewater, NJ		

ABN TCL List

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Phenol, dimethyl-	8.42	50	ug/l	J
	unknown	8.49	350	ug/l	J
	Benzothiophene	8.89	1300	ug/l	J
	Phenol, trimethyl-	8.97	99	ug/l	J
	unknown	9.33	240	ug/l	J
	unknown	9.42	100	ug/l	J
	Phenol propyl	9.70	220	ug/l	J
	Benzothiophene, -dihydro-	9.79	340	ug/l	J
	Phenol methylethyl	9.85	59	ug/l	J
	unknown	9.97	59	ug/l	J
83	1H-Inden-1-one, 2,3-dihydro-	10.11	63	ug/l	JN
	Benzo[b]thiophene, methyl-	10.24	160	ug/l	J
	unknown	10.41	260	ug/l	J
	Benzo[b]thiophene, -methyl-	10.45	88	ug/l	J
	unknown	10.51	56	ug/l	J
90-12-0	Naphthalene, 1-methyl-	10.57	2500	ug/l	JN
	Total TIC, Semi-Volatile		8043	ug/l	J

(a) Result is from Run# 2

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	DUP-082406-GW-1		
Lab Sample ID:	J39323-10	**Date Sampled:**	08/24/06
Matrix:	AQ - Ground Water	**Date Received:**	08/24/06
Method:	SW846 8270C BY SIM SW846 3510C	**Percent Solids:**	n/a
Project:	Quanta 2006 Groundwater Resources, Edgewater, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Z29925.D	1	09/19/06	KLS	08/25/06	OP24605	EZ931
Run #2							

	Initial Volume	Final Volume
Run #1	870 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
87-86-5	Pentachlorophenol	ND	1.1	0.46	ug/l	
208-96-8	Acenaphthylene	1.36	0.23	0.011	ug/l	
120-12-7	Anthracene	4.46	0.23	0.024	ug/l	
56-55-3	Benzo(a)anthracene	0.515	0.23	0.0078	ug/l	
50-32-8	Benzo(a)pyrene	0.256	0.23	0.019	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	0.23	0.042	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	0.23	0.020	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	0.23	0.018	ug/l	
218-01-9	Chrysene	0.407	0.23	0.019	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	0.23	0.019	ug/l	
206-44-0	Fluoranthene	6.42	0.23	0.010	ug/l	
118-74-1	Hexachlorobenzene	ND	0.11	0.070	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.23	0.013	ug/l	
129-00-0	Pyrene	5.10	0.23	0.016	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	42%		10-99%
4165-62-2	Phenol-d5	37%		10-83%
118-79-6	2,4,6-Tribromophenol	84%		10-140%
4165-60-0	Nitrobenzene-d5	71%		11-140%
321-60-8	2-Fluorobiphenyl	56%		10-133%
1718-51-0	Terphenyl-d14	100%		13-130%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	DUP-082406-GW-1		
Lab Sample ID:	J39323-10	**Date Sampled:**	08/24/06
Matrix:	AQ - Ground Water	**Date Received:**	08/24/06
Method:	SW846 8082 SW846 3510C	**Percent Solids:**	n/a
Project:	Quanta 2006 Groundwater Resources, Edgewater, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	AB59542.D	1	09/01/06	JSE	08/25/06	OP24608	GAB2702
Run #2							

	Initial Volume	Final Volume
Run #1	940 ml	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	0.53	0.10	ug/l	
11104-28-2	Aroclor 1221	ND	0.53	0.50	ug/l	
11141-16-5	Aroclor 1232	ND	0.53	0.41	ug/l	
53469-21-9	Aroclor 1242	ND	0.53	0.17	ug/l	
12672-29-6	Aroclor 1248	ND	0.53	0.16	ug/l	
11097-69-1	Aroclor 1254	ND	0.53	0.12	ug/l	
11096-82-5	Aroclor 1260	ND	0.53	0.12	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	225% [a]		38-133%
877-09-8	Tetrachloro-m-xylene	54%		38-133%
2051-24-3	Decachlorobiphenyl	76%		18-156%
2051-24-3	Decachlorobiphenyl	76%		18-156%

(a) Outside control limits due to matrix interference.

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	DUP-082406-GW-1		
Lab Sample ID:	J39323-10	**Date Sampled:**	08/24/06
Matrix:	AQ - Ground Water	**Date Received:**	08/24/06
		Percent Solids:	n/a
Project:	Quanta 2006 Groundwater Resources, Edgewater, NJ		

Total Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Arsenic	95800	40	ug/l	5	09/03/06	09/13/06	ND	SW846 6010B [2]	SW846 3010A [3]
Lead	590	3.0	ug/l	1	09/03/06	09/08/06	ND	SW846 6010B [1]	SW846 3010A [3]

(1) Instrument QC Batch: MA18018
(2) Instrument QC Batch: MA18040
(3) Prep QC Batch: MP35774

RL = Reporting Limit

Report of Analysis

Client Sample ID:	DUP-082406-GW-1		
Lab Sample ID:	J39323-10	**Date Sampled:**	08/24/06
Matrix:	AQ - Ground Water	**Date Received:**	08/24/06
		Percent Solids:	n/a
Project:	Quanta 2006 Groundwater Resources, Edgewater, NJ		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Nitrogen, Ammonia	4.5	0.30	mg/l	3	09/06/06 10:57	NR	EPA 350.1/LACHAT

RL = Reporting Limit

Report of Analysis

Client Sample ID:	DUP-082406-GW-2		
Lab Sample ID:	J39323-11	**Date Sampled:**	08/24/06
Matrix:	AQ - Ground Water	**Date Received:**	08/29/06
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Quanta 2006 Groundwater Resources, Edgewater, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	A114055.D	1	09/06/06	ET	n/a	n/a	VA3826
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List (OLM4.2)

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	2.4	ug/l	
71-43-2	Benzene	ND	1.0	0.21	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.17	ug/l	
75-25-2	Bromoform	ND	4.0	0.54	ug/l	
74-83-9	Bromomethane	ND	2.0	0.22	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	2.6	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.21	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.29	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.22	ug/l	
75-00-3	Chloroethane	ND	1.0	0.56	ug/l	
67-66-3	Chloroform	ND	1.0	0.22	ug/l	
74-87-3	Chloromethane	ND	1.0	0.35	ug/l	
110-82-7	Cyclohexane	ND	5.0	0.50	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	10	1.1	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.19	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	0.52	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.20	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.32	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.24	ug/l	
75-71-8	Dichlorodifluoromethane	ND	5.0	0.75	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.23	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.29	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.33	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.18	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.42	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.20	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.15	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.20	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.20	ug/l	
76-13-1	Freon 113	ND	5.0	0.69	ug/l	
591-78-6	2-Hexanone	ND	5.0	1.3	ug/l	
98-82-8	Isopropylbenzene	ND	2.0	0.20	ug/l	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	DUP-082406-GW-2		
Lab Sample ID:	J39323-11	**Date Sampled:**	08/24/06
Matrix:	AQ - Ground Water	**Date Received:**	08/29/06
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Quanta 2006 Groundwater Resources, Edgewater, NJ		

VOA TCL List (OLM4.2)

CAS No.	Compound	Result	RL	MDL	Units	Q
79-20-9	Methyl Acetate	ND	5.0	2.1	ug/l	
108-87-2	Methylcyclohexane	ND	5.0	0.18	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.31	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.1	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.27	ug/l	
100-42-5	Styrene	ND	5.0	0.16	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.28	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.28	ug/l	
108-88-3	Toluene	ND	1.0	0.20	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.16	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.28	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.32	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.29	ug/l	
75-69-4	Trichlorofluoromethane	ND	5.0	0.25	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.29	ug/l	
	m,p-Xylene	ND	1.0	0.42	ug/l	
95-47-6	o-Xylene	ND	1.0	0.31	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.31	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	86%		77-121%
17060-07-0	1,2-Dichloroethane-D4	79%		65-133%
2037-26-5	Toluene-D8	92%		80-117%
460-00-4	4-Bromofluorobenzene	91%		79-124%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	unknown	3.38	18	ug/l	J
	Total TIC, Volatile		18	ug/l	J

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
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E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	DUP-082406-GW-2		
Lab Sample ID:	J39323-11	**Date Sampled:**	08/24/06
Matrix:	AQ - Ground Water	**Date Received:**	08/29/06
Method:	SW846 8270C SW846 3510C	**Percent Solids:**	n/a
Project:	Quanta 2006 Groundwater Resources, Edgewater, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3E2275.D	2	09/12/06	MMC	08/25/06	OP24604	E3E77
Run #2							

	Initial Volume	Final Volume
Run #1	930 ml	1.0 ml
Run #2		

ABN TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	11	2.1	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	11	2.5	ug/l	
120-83-2	2,4-Dichlorophenol	ND	11	3.4	ug/l	
105-67-9	2,4-Dimethylphenol	ND	11	3.5	ug/l	
51-28-5	2,4-Dinitrophenol	ND	43	1.9	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	43	1.6	ug/l	
95-48-7	2-Methylphenol	ND	11	2.9	ug/l	
	3&4-Methylphenol	ND	11	2.7	ug/l	
88-75-5	2-Nitrophenol	ND	11	3.9	ug/l	
100-02-7	4-Nitrophenol	ND	43	1.8	ug/l	
108-95-2	Phenol	ND	11	1.1	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	11	4.2	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	11	2.7	ug/l	
83-32-9	Acenaphthene	181	4.3	0.75	ug/l	
98-86-2	Acetophenone	ND	11	0.80	ug/l	
1912-24-9	Atrazine	ND	11	0.35	ug/l	
100-52-7	Benzaldehyde	ND	11	0.57	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	4.3	0.64	ug/l	
85-68-7	Butyl benzyl phthalate	ND	4.3	1.3	ug/l	
92-52-4	1,1'-Biphenyl	ND	4.3	0.70	ug/l	
91-58-7	2-Chloronaphthalene	ND	11	2.1	ug/l	
106-47-8	4-Chloroaniline	ND	11	0.85	ug/l	
86-74-8	Carbazole	ND	4.3	0.78	ug/l	
105-60-2	Caprolactam	ND	4.3	0.68	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	4.3	1.4	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	4.3	1.1	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	4.3	1.6	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	4.3	0.93	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	4.3	1.8	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	4.3	1.2	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	11	2.6	ug/l	
132-64-9	Dibenzofuran	10.7	11	0.74	ug/l	J

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RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	DUP-082406-GW-2		
Lab Sample ID:	J39323-11	**Date Sampled:**	08/24/06
Matrix:	AQ - Ground Water	**Date Received:**	08/29/06
Method:	SW846 8270C SW846 3510C	**Percent Solids:**	n/a
Project:	Quanta 2006 Groundwater Resources, Edgewater, NJ		

ABN TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
84-74-2	Di-n-butyl phthalate	ND	4.3	1.3	ug/l	
117-84-0	Di-n-octyl phthalate	ND	4.3	1.2	ug/l	
84-66-2	Diethyl phthalate	ND	4.3	0.84	ug/l	
131-11-3	Dimethyl phthalate	ND	4.3	0.71	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	4.3	1.4	ug/l	
87-68-3	Hexachlorobutadiene	ND	4.3	0.38	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	43	0.88	ug/l	
67-72-1	Hexachloroethane	ND	11	0.61	ug/l	
78-59-1	Isophorone	ND	4.3	1.3	ug/l	
91-57-6	2-Methylnaphthalene	ND	4.3	0.88	ug/l	
88-74-4	2-Nitroaniline	ND	11	1.4	ug/l	
99-09-2	3-Nitroaniline	ND	11	2.7	ug/l	
100-01-6	4-Nitroaniline	ND	11	1.6	ug/l	
98-95-3	Nitrobenzene	ND	4.3	0.90	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	4.3	1.0	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	11	1.1	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	50%		12-76%
4165-62-2	Phenol-d5	39%		10-59%
118-79-6	2,4,6-Tribromophenol	99%		42-128%
4165-60-0	Nitrobenzene-d5	98%		30-122%
321-60-8	2-Fluorobiphenyl	85%		34-113%
1718-51-0	Terphenyl-d14	125%		42-125%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	system artifact	3.43	9.8	ug/l	J
	system artifact/aldol-condensation	3.74	23	ug/l	J
	system artifact	10.60	13	ug/l	J
	unknown	13.18	11	ug/l	J
10544	Sulfur, mol. (S8)	18.93	360	ug/l	JN
	system artifact	21.29	9.5	ug/l	J
	system artifact	22.09	9.9	ug/l	J
	system artifact	23.49	13	ug/l	J
	Total TIC, Semi-Volatile		371	ug/l	J

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
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E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	DUP-082406-GW-2		
Lab Sample ID:	J39323-11	**Date Sampled:**	08/24/06
Matrix:	AQ - Ground Water	**Date Received:**	08/29/06
Method:	SW846 8270C BY SIM SW846 3510C	**Percent Solids:**	n/a
Project:	Quanta 2006 Groundwater Resources, Edgewater, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Z29926.D	1	09/19/06	KLS	08/25/06	OP24605	EZ931
Run #2							

	Initial Volume	Final Volume
Run #1	930 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
87-86-5	Pentachlorophenol	ND	1.1	0.43	ug/l	
208-96-8	Acenaphthylene	0.965	0.22	0.010	ug/l	
120-12-7	Anthracene	ND	0.22	0.022	ug/l	
56-55-3	Benzo(a)anthracene	0.299	0.22	0.0073	ug/l	
50-32-8	Benzo(a)pyrene	ND	0.22	0.018	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	0.22	0.039	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	0.22	0.019	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	0.22	0.017	ug/l	
218-01-9	Chrysene	ND	0.22	0.018	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	0.22	0.018	ug/l	
206-44-0	Fluoranthene	9.38	0.22	0.0097	ug/l	
86-73-7	Fluorene	ND	0.22	0.022	ug/l	
118-74-1	Hexachlorobenzene	ND	0.11	0.065	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.22	0.012	ug/l	
91-20-3	Naphthalene	ND	0.22	0.028	ug/l	
85-01-8	Phenanthrene	1.84	0.22	0.023	ug/l	
129-00-0	Pyrene	5.72	0.22	0.015	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	588% [a]		10-99%
4165-62-2	Phenol-d5	898% [a]		10-83%
118-79-6	2,4,6-Tribromophenol	79%		10-140%
4165-60-0	Nitrobenzene-d5	57%		11-140%
321-60-8	2-Fluorobiphenyl	57%		10-133%
1718-51-0	Terphenyl-d14	85%		13-130%

(a) Outside control limits due to matrix interference with corresponding I.S.

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	DUP-082406-GW-2		
Lab Sample ID:	J39323-11	**Date Sampled:**	08/24/06
Matrix:	AQ - Ground Water	**Date Received:**	08/29/06
Method:	SW846 8082 SW846 3510C	**Percent Solids:**	n/a
Project:	Quanta 2006 Groundwater Resources, Edgewater, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	AB59615.D	1	09/05/06	JSE	08/25/06	OP24608	GAB2704
Run #2							

	Initial Volume	Final Volume
Run #1	940 ml	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	0.53	0.10	ug/l	
11104-28-2	Aroclor 1221	ND	0.53	0.50	ug/l	
11141-16-5	Aroclor 1232	ND	0.53	0.41	ug/l	
53469-21-9	Aroclor 1242	ND	0.53	0.17	ug/l	
12672-29-6	Aroclor 1248	ND	0.53	0.16	ug/l	
11097-69-1	Aroclor 1254	ND	0.53	0.12	ug/l	
11096-82-5	Aroclor 1260	ND	0.53	0.12	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	71%		38-133%
877-09-8	Tetrachloro-m-xylene	74%		38-133%
2051-24-3	Decachlorobiphenyl	95%		18-156%
2051-24-3	Decachlorobiphenyl	96%		18-156%

(a) Had TBA cleanup.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	DUP-082406-GW-2		
Lab Sample ID:	J39323-11	**Date Sampled:**	08/24/06
Matrix:	AQ - Ground Water	**Date Received:**	08/29/06
		Percent Solids:	n/a
Project:	Quanta 2006 Groundwater Resources, Edgewater, NJ		

Total Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Lead	< 3.0	3.0	ug/l	1	09/03/06	09/08/06	ND	SW846 6010B [1]	SW846 3010A [2]

(1) Instrument QC Batch: MA18018
(2) Prep QC Batch: MP35774

RL = Reporting Limit

Report of Analysis

Client Sample ID:	DUP-082406-GW-2		
Lab Sample ID:	J39323-11	**Date Sampled:**	08/24/06
Matrix:	AQ - Ground Water	**Date Received:**	08/29/06
		Percent Solids:	n/a
Project:	Quanta 2006 Groundwater Resources, Edgewater, NJ		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Nitrogen, Ammonia	3.1	0.20	mg/l	2	09/06/06 10:58	NR	EPA 350.1/LACHAT

RL = Reporting Limit

New Jersey

ACCUTEST LABORATORIES

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody

GW
TB
FB

J 39323

Accutest Labs
2235 ROUTE 130
Dayton, NJ 8810
732-329-0200

Honeywell — Chain Of Custody / Analysis Request

AESI Ref:	38953.54381
COC#	38916
	082406-GW-A
Lab Proj # (SDG):	
Lab ID	ACTD
Site ID	Quanta
Lab Job #	
Authorized User:	Honeywell

Sampling Co.: CH2M HILL
Client Contact: (name, co., address)
Jennifer Simms
1700 Market Street, Suite 1600
Philadelphia, PA 19103
Preliminary Data To: [illegible]
Sample Receipt Acknowledgement To: [illegible]
Hard Copy To: Amy Klopper, 3011 Southwest Williston Road, [illegible]
Invoice To: jennifer.simms@ch2m.com

EDD To: amy.klopper@ch2m.com, john.mitchell@ch2m.com
Sampler: Austin Hareclerode/CH2M HILL
PO #
Analysis Turnaround Time (TAT): 10
Consultant: CH2M
Full Report TAT:

Site Name: Quanta Resources (Edgewater)
Location of Site: Edgewater, NJ
Phase:
Sampling Program: Quanta 2006 Groundwater

Test & Exceptions Order: Excel & Text File Order

Copyright AESI: Version 8.0 Unauthorized use strictly prohibited.

	Location ID	Start Depth (ft)	End Depth (ft)	Field Sample ID	Sample Date	Sample Time	Sample Type	Sample Matrix	Sample Purpose	# of Cont.	Units		SW8260 - VOCs (9)	SW8270 - SVOCs (1)	SW8270-SIM (1)	SW6010 - As, Pb (10)	SW8081 - Pesticides (1)	SW8082 - PCBs (1)	E350.2 - Ammonia (7)	Sampling Method (code)	Lab Sample Numbers
1	MW-G			MW-G-082306	8/23/06	1450	GW	WATER	REG	8	G	N	X	X	X	X		X		Bld pump	31 FIR, Amt
2	MW-I			MW-I-082306	8/23/06	1527	GW	WATER	REG	8	G	N	X	X	X	X		X		Bld pump	WC46, 226
3	MW-C		•	MW-C-082406	8/24/06	0915	GW	WATER	REG	8	G	N	X	X	X	X		X		Bld pump	
4	MW-B			MW-B-082406	8/24/06	0950	GW	WATER	REG	8	G	N	X	X	X	X		X		Bld pump	
5	MW-A-2			MW-A-2-082406	8/24/06	1020	GW	WATER	REG	9	G	N	X	X	X	X		X	X	Bld pump	MS/MSD
6	MW-F			MW-F-082406	8/24/06	1345	GW	WATER	REG	8	G	N	X	X	X	X		X		Bld pump	
7	MW-L			MW-L-082406	8/24/06	1430	GW	WATER	REG	9	G	N	X	X	X	X		X	X	Bld pump	MS/MSD
8	Equip Blank			EB-082406-GW	8/24/06	1500	BLK WATER	WATER	EB	9	G	N	X	X	X	X		X	X	Bld pump	
9	Trip Blank		*	TB-082406-GW	8/24/06	0:00	BLK WATER	WATER	TB	2	G	N	X								
10																					
11	Dup 1			DUP-082406-GW-1	8/24/06	—	GW	WATER	FD	9	G	N	X	X	X	X		X	X	Bld pump	
12	Dup 2		Δ	DUP-082406-GW-2	8/24/06	—	GW	WATER	FD	9	G	N	X	X	X	X		X	X	Bld pump	

SW6010^LLI — See worksheet SW6010 - analyze for Arsenic (As) and Lead (Pb)

Relinquished by	Company	Date/Time	Received by	Company	Date/Time	Condition	Cooler Temp.	Custody Seals Intact
[signature]	CH2M HILL	8/24/06 1550	[signature]	ACCUTEST	8/24/06 1550			318-981-898-316-314-302
[signature]	ACCUTEST	8/24/06 1700	[signature]					

Preservatives: (Other; Specify):

0 (none); 1 (4 Deg C); 2 (HCl pH<2); 3 (HNO3 pH<2); 4 (H2SO4 pH<2); 5 (NaOH pH>12); 6 (NaOH, Zn Acetate); 7 (H2SO4 (pH<2), 4 Deg C)); 8 (HCl pH<2); 9 (HCl 4 Deg C); 10 (HNO3 (pH<2), 4Deg C); 11 (4C NaOH (pH>12) & Ascorbic Acid); 12 (4C H2SO4 (pH<2) & Na2S2O3); 13 (Zn Acetate); sp (special instructions)

• Met. Acid under preserved HNO3 added lot # C16038 8/24/06

Δ Met. vol. Acid HCl preserved labeled MWB-082406 @0950 8/24/06

* Fill 8/22/06 1800

* sample to be sent to STL AND CORRECT SAMPLE FOR -11 METALS TO BE SENT TO US per K.B & AMY KLOPPER. RWB 8-24-06

28, 48, 36, 40, 42, 54

5.1

5

J39323: Chain of Custody
Page 1 of 2

NW

[redacted]

Chain of Custody Record

STL-4124 (0901)

SEVERN TRENT **STL**
Severn Trent Laboratories, Inc.

J39323
~~J39643~~ RWB 8-31-06*

Client	Project Manager	Date	Chain of Custody Number
Severn Trent Laboratories			308447
Address	**Telephone Number (Area Code)/Fax Number**	**Lab Number**	**Page** ____ **of** ____
4101 Shuffel Dr. NW.			

City	State	Zip Code	Site Contact	Lab Contact
North Canton	Oh	44720		Pat Omera

Project Name and Location (State)

Carrier/Waybill Number

Contract/Purchase Order/Quote No.

Analysis (Attach list if more space is needed)

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed.	Soil	Containers & Preservatives: Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	ASPb	Special Instructions/ Conditions of Receipt
DUP-082406-GW-02	8-24-06	1		X									X	~~ME13~~ AMET14
														*MOVED BACK TO JOB # RWB 8-31-06 J39323

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal
☐ Return To Client ☐ Disposal By Lab ☐ Archive For ____ Months (A fee may be assessed if samples are retained longer than 1 month)

Turn Around Time Required
☐ 24 Hours ☐ 48 Hours ☐ 7 Days ☐ 14 Days ☐ 21 Days ☐ Other____

QC Requirements (Specify)

	Date	Time		Date	Time
1. Relinquished By: Lisa Hines	8-28-06	1:30	1. Received By: FEDX		
2. Relinquished By: FEDX	8-29-06	1000	2. Received By: PDoS	8/29/06	10:00
3. Relinquished By			3. Received By		

Comments

ALL SAMPLES RECEIVED PROPERLY AS APPLICABLE
8-29-06 4.6°C

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

5.1
5

J39323: Chain of Custody
Page 2 of 2

New Jersey
ACCUTEST LABORATORIES

10/06/15

Technical Report for

CH2M Hill

Quanta 2006 Groundwater Resources, Edgewater, NJ

COC#30916-082606-GW-A

Accutest Job Number: J39596

Sampling Date: 08/26/06

Report to:

CH2M Hill

Theresa.Himmer@CH2M.com

ATTN: Theresa Himmer

Total number of pages in report: **20**

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Program and/or state specific certification programs as applicable.

Nancy Cole
Laboratory Director

Client Service contact: Nadine Yakes 732-329-0200

Certifications: NJ(12129), NY(10983), CA, CT, DE, FL, IL, IN, KS, KY, LA, MA, MD, MI, MT, NC, OH VAP (CL0056), AK (UST-103), AZ (AZ0786), PA, RI, SC, TN, TX, VA, WV, DoD ELAP (L-A-B L2248)

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Accutest LabLink@876317 14:24 06-Oct-2015

Sample Summary

CH2M Hill

Job No: J39596

Quanta 2006 Groundwater Resources, Edgewater, NJ
Project No: COC#30916-082606-GW-A

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
J39596-1	08/26/06	09:05	AH	08/28/06	AQ	Ground Water	MW-114B-082606
J39596-2	08/26/06	09:05	AH	08/28/06	AQ	Trip Blank Water	TB-082606-GW

CASE NARRATIVE / CONFORMANCE SUMMARY

Client:	CH2M Hill	**Job No**	J39596
Site:	Quanta 2006 Groundwater Resources, Edgewater, NJ	**Report Date**	9/15/2006 1:19:56 PM

1 Sample(s), 1 Trip Blank(s) and 0 Field Blank(s) were collected on 08/26/2006 and were received at Accutest on 08/28/2006 properly preserved, at 4.2 Deg. C and intact. These Samples received an Accutest job number of J39596. A listing of the Laboratory Sample ID, Client Sample ID and dates of collection are presented in the Results Summary Section of this report.

Except as noted below, all method specified calibrations and quality control performance criteria were met for this job. For more information, please refer to QC summary pages.

Volatiles by GCMS By Method SW846 8260B

Matrix AQ **Batch ID:** V1A1779

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) J39498-2MS, J39498-2MSD were used as the QC samples indicated.
- J39498-2MS: Sample pH did not satisfy field preservation criteria.
- J39498-2MSD: Sample pH did not satisfy field preservation criteria.
- J39596-1: Sample re-analyzed because outside the BFB time.

Matrix AQ **Batch ID:** VS3568

- Sample(s) J40395-2MS, J40395-2MSD were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.
- J39596-1: Sample run outside of holding time but originally analyzed within the holding time. Dilution due to high concentration of non-target compound.

Extractables by GCMS By Method SW846 8270C

Matrix AQ **Batch ID:** OP24641

- All samples were extracted within the recommended method holding time.
- All samples were analyzed within the recommended method holding time.
- Sample(s) J39489-4MS, J39489-4MSD were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.
- Matrix Spike Recovery(s) for 3,3'-Dichlorobenzidine, Caprolactam, Di-n-octyl phthalate are outside control limits. Outside control limits due to matrix interference.
- Matrix Spike Duplicate Recovery(s) for 3,3'-Dichlorobenzidine, Di-n-octyl phthalate are outside control limits. Outside control limits due to matrix interference.

Extractables by GCMS By Method SW846 8270C BY SIM

Matrix AQ	**Batch ID:** OP24642

- All samples were extracted within the recommended method holding time.
- All samples were analyzed within the recommended method holding time.
- Sample(s) J39489-4MS, J39489-4MSD were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.
- OP24642-MS, OP24642-MSD for Pentachlorophenol: 50ppm was added.
- OP24642-MS, OP24642-MSD for Indeno(1,2,3-cd)pyrene: 50ppm was added.
- OP24642-MS, OP24642-MSD for Chrysene: 50ppm was added.
- OP24642-MS, OP24642-MSD for Hexachlorobenzene: 50ppm was added.
- OP24642-MS, OP24642-MSD for Fluoranthene: 50ppm was added.
- OP24642-MS, OP24642-MSD for Dibenzo(a,h)anthracene: 50ppm was added.
- OP24642-MS, OP24642-MSD for Acenaphthylene: 50ppm was added.
- OP24642-MS, OP24642-MSD for Anthracene: 50ppm was added.
- OP24642-MS, OP24642-MSD for Benzo(a)anthracene: 50ppm was added.
- OP24642-MS, OP24642-MSD for Benzo(a)pyrene: 50ppm was added.
- OP24642-MS, OP24642-MSD for Benzo(b)fluoranthene: 50ppm was added.
- OP24642-MS, OP24642-MSD for Benzo(g,h,i)perylene: 50ppm was added.
- OP24642-MS, OP24642-MSD for Benzo(k)fluoranthene: 50ppm was added.
- OP24642-MS, OP24642-MSD for Pyrene: 50ppm was added.

Extractables by GC By Method SW846 8082

Matrix AQ	**Batch ID:** OP24646

- All samples were extracted within the recommended method holding time.
- All samples were analyzed within the recommended method holding time.
- Sample(s) J39489-4MS, J39489-4MSD, OP24646-MSMSD were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.
- RPD(s) for MSD for Aroclor 1260 are outside of in house control limits for sample OP24646-MSD.
- Sample(s) J39596-1 have surrogates outside control limits due to matrix interference.

Metals By Method SW846 6010B

Matrix AQ	**Batch ID:** MP35774

- All samples were digested within the recommended method holding time.
- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) J39323-5MS, J39323-5MSD, J39323-5SDL were used as the QC samples for metals.

The Accutest Laboratories of New Jersey certifies that all analysis were performed within method specification. It is further recommended that this report to be used in its entirety.The Accutest Laboratories of NJ, Laboratory Director or assignee as verified by the signature on the cover page has authorized the release of this report(J39596).

Summary of Hits

Job Number: J39596
Account: CH2M Hill
Project: Quanta 2006 Groundwater Resources, Edgewater, NJ
Collected: 08/26/06

3

Lab Sample ID Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
J39596-1	**MW-114B-082606**					
Benzene [a]		104	10	2.1	ug/l	SW846 8260B
Ethylbenzene [a]		181	10	2.0	ug/l	SW846 8260B
Isopropylbenzene [a]		46.9	20	2.0	ug/l	SW846 8260B
Toluene [a]		16.8	10	2.0	ug/l	SW846 8260B
m,p-Xylene [a]		162	10	4.2	ug/l	SW846 8260B
o-Xylene [a]		79.4	10	3.1	ug/l	SW846 8260B
Xylene (total) [a]		242	10	3.1	ug/l	SW846 8260B
Total TIC, Volatile		6212 J			ug/l	
2,4-Dimethylphenol		24.3	5.0	1.6	ug/l	SW846 8270C
2-Methylphenol		3.0 J	5.0	1.4	ug/l	SW846 8270C
3&4-Methylphenol		3.1 J	5.0	1.3	ug/l	SW846 8270C
Acenaphthene		164	50	8.8	ug/l	SW846 8270C
1,1'-Biphenyl		46.5	2.0	0.33	ug/l	SW846 8270C
Carbazole		120	50	9.1	ug/l	SW846 8270C
Dibenzofuran		98.2	5.0	0.34	ug/l	SW846 8270C
bis(2-Ethylhexyl)phthalate		1.2 J	2.0	0.66	ug/l	SW846 8270C
Fluorene		73.5	2.0	0.45	ug/l	SW846 8270C
2-Methylnaphthalene		224	50	10	ug/l	SW846 8270C
Naphthalene		2200	50	8.0	ug/l	SW846 8270C
Phenanthrene		61.3	2.0	0.36	ug/l	SW846 8270C
Acenaphthylene		13.8	0.20	0.0095	ug/l	SW846 8270C BY SIM
Anthracene		9.94	0.20	0.021	ug/l	SW846 8270C BY SIM
Benzo(a)anthracene		0.367	0.20	0.0068	ug/l	SW846 8270C BY SIM
Chrysene		0.323	0.20	0.017	ug/l	SW846 8270C BY SIM
Fluoranthene		4.40	0.20	0.0090	ug/l	SW846 8270C BY SIM
Pyrene		3.13	0.20	0.014	ug/l	SW846 8270C BY SIM
Total TIC, Semi-Volatile		1281 J			ug/l	
Arsenic		3810	8.0		ug/l	SW846 6010B
J39596-2	**TB-082606-GW**					

No hits reported in this sample.

(a) Sample originally analyzed within the holding time. Dilution due to high concentration of non-target compound.

New Jersey

ACCUTEST LABORATORIES

Sample Results

Report of Analysis

Report of Analysis

Client Sample ID:	MW-114B-082606		
Lab Sample ID:	J39596-1	**Date Sampled:**	08/26/06
Matrix:	AQ - Ground Water	**Date Received:**	08/28/06
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Quanta 2006 Groundwater Resources, Edgewater, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	S92817.D	10	09/11/06	NJ	n/a	n/a	VS3568
Run #2 [b]	1A41850.D	5	09/05/06	SDS	n/a	n/a	V1A1779

	Purge Volume
Run #1	5.0 ml
Run #2	5.0 ml

VOA TCL List (OLM4.2)

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	100	24	ug/l	
71-43-2	Benzene	104	10	2.1	ug/l	
75-27-4	Bromodichloromethane	ND	10	1.7	ug/l	
75-25-2	Bromoform	ND	40	5.4	ug/l	
74-83-9	Bromomethane	ND	20	2.2	ug/l	
78-93-3	2-Butanone (MEK)	ND	100	26	ug/l	
75-15-0	Carbon disulfide	ND	20	2.1	ug/l	
56-23-5	Carbon tetrachloride	ND	10	2.9	ug/l	
108-90-7	Chlorobenzene	ND	10	2.2	ug/l	
75-00-3	Chloroethane	ND	10	5.6	ug/l	
67-66-3	Chloroform	ND	10	2.2	ug/l	
74-87-3	Chloromethane	ND	10	3.5	ug/l	
110-82-7	Cyclohexane	ND	50	5.0	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	100	11	ug/l	
124-48-1	Dibromochloromethane	ND	10	1.9	ug/l	
106-93-4	1,2-Dibromoethane	ND	20	5.2	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	10	2.0	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	10	3.2	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	10	2.4	ug/l	
75-71-8	Dichlorodifluoromethane	ND	50	7.5	ug/l	
75-34-3	1,1-Dichloroethane	ND	10	2.3	ug/l	
107-06-2	1,2-Dichloroethane	ND	10	2.9	ug/l	
75-35-4	1,1-Dichloroethene	ND	10	3.3	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	10	1.8	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	10	4.2	ug/l	
78-87-5	1,2-Dichloropropane	ND	10	2.0	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	10	1.5	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	10	2.0	ug/l	
100-41-4	Ethylbenzene	181	10	2.0	ug/l	
76-13-1	Freon 113	ND	50	6.9	ug/l	
591-78-6	2-Hexanone	ND	50	13	ug/l	
98-82-8	Isopropylbenzene	46.9	20	2.0	ug/l	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-114B-082606		
Lab Sample ID:	J39596-1	**Date Sampled:**	08/26/06
Matrix:	AQ - Ground Water	**Date Received:**	08/28/06
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Quanta 2006 Groundwater Resources, Edgewater, NJ		

VOA TCL List (OLM4.2)

CAS No.	Compound	Result	RL	MDL	Units	Q
79-20-9	Methyl Acetate	ND	50	21	ug/l	
108-87-2	Methylcyclohexane	ND	50	1.8	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	10	3.1	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	50	11	ug/l	
75-09-2	Methylene chloride	ND	20	2.7	ug/l	
100-42-5	Styrene	ND	50	1.6	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	10	2.8	ug/l	
127-18-4	Tetrachloroethene	ND	10	2.8	ug/l	
108-88-3	Toluene	16.8	10	2.0	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	50	1.6	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	10	2.8	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	10	3.2	ug/l	
79-01-6	Trichloroethene	ND	10	2.9	ug/l	
75-69-4	Trichlorofluoromethane	ND	50	2.5	ug/l	
75-01-4	Vinyl chloride	ND	10	2.9	ug/l	
	m,p-Xylene	162	10	4.2	ug/l	
95-47-6	o-Xylene	79.4	10	3.1	ug/l	
1330-20-7	Xylene (total)	242	10	3.1	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	107%	97%	77-121%
17060-07-0	1,2-Dichloroethane-D4	108%	112%	65-133%
2037-26-5	Toluene-D8	105%	94%	80-117%
460-00-4	4-Bromofluorobenzene	102%	81%	79-124%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	C3 alkyl benzene	14.55	52	ug/l	J
	C3 alkyl benzene	14.63	60	ug/l	J
	C3 alkyl benzene	15.07	160	ug/l	J
496-11-7	Indane	15.83	810	ug/l	JN
95-13-6	Indene	16.09	300	ug/l	JN
	Beznofuran, methyl-	16.70	56	ug/l	J
	Benzofuran, methyl-	16.82	79	ug/l	J
	1H-indene-dihydro-methyl-	17.28	62	ug/l	J
	Indene, methyl-	17.36	63	ug/l	J
	Indene, methyl-	17.49	110	ug/l	J
91-20-3	Naphthalene	18.08	3600	ug/l	JN
	Benzothiophene	18.25	190	ug/l	J

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-114B-082606		
Lab Sample ID:	J39596-1	**Date Sampled:**	08/26/06
Matrix:	AQ - Ground Water	**Date Received:**	08/28/06
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Quanta 2006 Groundwater Resources, Edgewater, NJ		

VOA TCL List (OLM4.2)

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Naphthalene methyl	19.47	260	ug/l	J
	Naphthalene methyl	19.73	410	ug/l	J
	Total TIC, Volatile		6212	ug/l	J

(a) Sample originally analyzed within the holding time. Dilution due to high concentration of non-target compound.
(b) Sample re-analyzed due to outside the BFB time.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-114B-082606		
Lab Sample ID:	J39596-1	**Date Sampled:**	08/26/06
Matrix:	AQ - Ground Water	**Date Received:**	08/28/06
Method:	SW846 8270C SW846 3510C	**Percent Solids:**	n/a
Project:	Quanta 2006 Groundwater Resources, Edgewater, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3E2222.D	1	09/11/06	MMC	08/29/06	OP24641	E3E76
Run #2	3E2255.D	25	09/11/06	MMC	08/29/06	OP24641	E3E76

	Initial Volume	Final Volume
Run #1	1000 ml	1.0 ml
Run #2	1000 ml	1.0 ml

ABN TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	5.0	0.95	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	5.0	1.2	ug/l	
120-83-2	2,4-Dichlorophenol	ND	5.0	1.6	ug/l	
105-67-9	2,4-Dimethylphenol	24.3	5.0	1.6	ug/l	
51-28-5	2,4-Dinitrophenol	ND	20	0.89	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	20	0.72	ug/l	
95-48-7	2-Methylphenol	3.0	5.0	1.4	ug/l	J
	3&4-Methylphenol	3.1	5.0	1.3	ug/l	J
88-75-5	2-Nitrophenol	ND	5.0	1.8	ug/l	
100-02-7	4-Nitrophenol	ND	20	0.84	ug/l	
108-95-2	Phenol	ND	5.0	0.50	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	5.0	1.9	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	5.0	1.3	ug/l	
83-32-9	Acenaphthene	164 [a]	50	8.8	ug/l	
98-86-2	Acetophenone	ND	5.0	0.37	ug/l	
1912-24-9	Atrazine	ND	5.0	0.16	ug/l	
100-52-7	Benzaldehyde	ND	5.0	0.27	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	2.0	0.30	ug/l	
85-68-7	Butyl benzyl phthalate	ND	2.0	0.59	ug/l	
92-52-4	1,1'-Biphenyl	46.5	2.0	0.33	ug/l	
91-58-7	2-Chloronaphthalene	ND	5.0	0.98	ug/l	
106-47-8	4-Chloroaniline	ND	5.0	0.40	ug/l	
86-74-8	Carbazole	120 [a]	50	9.1	ug/l	
105-60-2	Caprolactam	ND	2.0	0.32	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	2.0	0.65	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	2.0	0.53	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	2.0	0.74	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	2.0	0.43	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	2.0	0.86	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	2.0	0.56	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	5.0	1.2	ug/l	
132-64-9	Dibenzofuran	98.2	5.0	0.34	ug/l	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-114B-082606		
Lab Sample ID:	J39596-1	**Date Sampled:**	08/26/06
Matrix:	AQ - Ground Water	**Date Received:**	08/28/06
Method:	SW846 8270C SW846 3510C	**Percent Solids:**	n/a
Project:	Quanta 2006 Groundwater Resources, Edgewater, NJ		

ABN TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
84-74-2	Di-n-butyl phthalate	ND	2.0	0.59	ug/l	
117-84-0	Di-n-octyl phthalate	ND	2.0	0.57	ug/l	
84-66-2	Diethyl phthalate	ND	2.0	0.39	ug/l	
131-11-3	Dimethyl phthalate	ND	2.0	0.33	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	1.2	2.0	0.66	ug/l	J
86-73-7	Fluorene	73.5	2.0	0.45	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.18	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	20	0.41	ug/l	
67-72-1	Hexachloroethane	ND	5.0	0.28	ug/l	
78-59-1	Isophorone	ND	2.0	0.59	ug/l	
91-57-6	2-Methylnaphthalene	224 [a]	50	10	ug/l	
88-74-4	2-Nitroaniline	ND	5.0	0.66	ug/l	
99-09-2	3-Nitroaniline	ND	5.0	1.3	ug/l	
100-01-6	4-Nitroaniline	ND	5.0	0.72	ug/l	
91-20-3	Naphthalene	2200 [a]	50	8.0	ug/l	
98-95-3	Nitrobenzene	ND	2.0	0.42	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	2.0	0.47	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	5.0	0.52	ug/l	
85-01-8	Phenanthrene	61.3	2.0	0.36	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	29%	34%	12-76%
4165-62-2	Phenol-d5	22%	23%	10-59%
118-79-6	2,4,6-Tribromophenol	81%	73%	42-128%
4165-60-0	Nitrobenzene-d5	56%	61%	30-122%
321-60-8	2-Fluorobiphenyl	51%	55%	34-113%
1718-51-0	Terphenyl-d14	80%	91%	42-125%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	C3 alkyl benzene	4.88	28	ug/l	J
	C3 alkyl benzene	5.41	58	ug/l	J
	C3 alkyl benzene	5.51	36	ug/l	J
	C3 alkyl benzene	5.68	28	ug/l	J
	C3 alkyl benzene	5.89	110	ug/l	J
271	Benzofuran	5.94	22	ug/l	JN
	C3 alkyl benzene	6.33	56	ug/l	J
496	Indane	6.54	430	ug/l	JN
95	Indene	6.67	190	ug/l	JN

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Report of Analysis

Client Sample ID:	MW-114B-082606		
Lab Sample ID:	J39596-1	**Date Sampled:**	08/26/06
Matrix:	AQ - Ground Water	**Date Received:**	08/28/06
Method:	SW846 8270C SW846 3510C	**Percent Solids:**	n/a
Project:	Quanta 2006 Groundwater Resources, Edgewater, NJ		

ABN TCL List

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Naphthalene dimethyl	11.81	32	ug/l	J
	Naphthalene dimethyl	12.01	36	ug/l	J
	Naphthalene dimethyl	12.05	18	ug/l	J
	Naphthalene dimethyl	12.27	15	ug/l	J
	Naphthalene dimethyl	12.47	12	ug/l	J
	Naphthalenecarbonitrile	12.97	16	ug/l	J
	Naphthalenol	13.09	12	ug/l	J
	Naphthalene trimethyl	13.60	12	ug/l	J
	unknown	13.95	39	ug/l	J
	Naphthalenol, -methyl-	14.33	18	ug/l	J
	unknown	14.96	20	ug/l	J
	unknown	16.55	16	ug/l	J
	unknown	16.63	13	ug/l	J
599	Phenol, 4-(1-methyl-1-phenylethyl)	17.02	28	ug/l	JN
10544	Sulfur, mol. (S8)	18.91	18	ug/l	JN
578	9(10H)-Acridinone	20.16	18	ug/l	JN
	Total TIC, Semi-Volatile		1281	ug/l	J

(a) Result is from Run# 2

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
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E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-114B-082606		
Lab Sample ID:	J39596-1	**Date Sampled:**	08/26/06
Matrix:	AQ - Ground Water	**Date Received:**	08/28/06
Method:	SW846 8270C BY SIM SW846 3510C	**Percent Solids:**	n/a
Project:	Quanta 2006 Groundwater Resources, Edgewater, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Z29770.D	1	09/13/06	KLS	08/29/06	OP24642	EZ925
Run #2							

	Initial Volume	Final Volume
Run #1	1000 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
87-86-5	Pentachlorophenol	ND	1.0	0.40	ug/l	
208-96-8	Acenaphthylene	13.8	0.20	0.0095	ug/l	
120-12-7	Anthracene	9.94	0.20	0.021	ug/l	
56-55-3	Benzo(a)anthracene	0.367	0.20	0.0068	ug/l	
50-32-8	Benzo(a)pyrene	ND	0.20	0.017	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	0.20	0.036	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	0.20	0.018	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	0.20	0.016	ug/l	
218-01-9	Chrysene	0.323	0.20	0.017	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	0.20	0.016	ug/l	
206-44-0	Fluoranthene	4.40	0.20	0.0090	ug/l	
118-74-1	Hexachlorobenzene	ND	0.10	0.061	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.20	0.011	ug/l	
129-00-0	Pyrene	3.13	0.20	0.014	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	36%		10-99%
4165-62-2	Phenol-d5	25%		10-83%
118-79-6	2,4,6-Tribromophenol	93%		10-140%
4165-60-0	Nitrobenzene-d5	79%		11-140%
321-60-8	2-Fluorobiphenyl	45%		10-133%
1718-51-0	Terphenyl-d14	63%		13-130%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
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E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-114B-082606		
Lab Sample ID:	J39596-1	**Date Sampled:**	08/26/06
Matrix:	AQ - Ground Water	**Date Received:**	08/28/06
Method:	SW846 8082 SW846 3510C	**Percent Solids:**	n/a
Project:	Quanta 2006 Groundwater Resources, Edgewater, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	AB59551.D	1	09/01/06	JSE	08/29/06	OP24646	GAB2702
Run #2							

	Initial Volume	Final Volume
Run #1	1000 ml	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	0.50	0.094	ug/l	
11104-28-2	Aroclor 1221	ND	0.50	0.47	ug/l	
11141-16-5	Aroclor 1232	ND	0.50	0.39	ug/l	
53469-21-9	Aroclor 1242	ND	0.50	0.16	ug/l	
12672-29-6	Aroclor 1248	ND	0.50	0.15	ug/l	
11097-69-1	Aroclor 1254	ND	0.50	0.11	ug/l	
11096-82-5	Aroclor 1260	ND	0.50	0.12	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	352% [a]		38-133%
877-09-8	Tetrachloro-m-xylene	70%		38-133%
2051-24-3	Decachlorobiphenyl	84%		18-156%
2051-24-3	Decachlorobiphenyl	84%		18-156%

(a) Outside control limits due to matrix interference.

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
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E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-114B-082606		
Lab Sample ID:	J39596-1	**Date Sampled:**	08/26/06
Matrix:	AQ - Ground Water	**Date Received:**	08/28/06
		Percent Solids:	n/a
Project:	Quanta 2006 Groundwater Resources, Edgewater, NJ		

Total Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Arsenic	3810	8.0	ug/l	1	09/03/06	09/08/06	ND	SW846 6010B [1]	SW846 3010A [2]
Lead	< 3.0	3.0	ug/l	1	09/03/06	09/08/06	ND	SW846 6010B [1]	SW846 3010A [2]

(1) Instrument QC Batch: MA18018
(2) Prep QC Batch: MP35774

RL = Reporting Limit

Report of Analysis

Client Sample ID:	TB-082606-GW		
Lab Sample ID:	J39596-2	**Date Sampled:**	08/26/06
Matrix:	AQ - Trip Blank Water	**Date Received:**	08/28/06
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Quanta 2006 Groundwater Resources, Edgewater, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1A41846.D	1	09/05/06	SDS	n/a	n/a	V1A1779
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List (OLM4.2)

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	2.4	ug/l	
71-43-2	Benzene	ND	1.0	0.21	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.17	ug/l	
75-25-2	Bromoform	ND	4.0	0.54	ug/l	
74-83-9	Bromomethane	ND	2.0	0.22	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	2.6	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.21	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.29	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.22	ug/l	
75-00-3	Chloroethane	ND	1.0	0.56	ug/l	
67-66-3	Chloroform	ND	1.0	0.22	ug/l	
74-87-3	Chloromethane	ND	1.0	0.35	ug/l	
110-82-7	Cyclohexane	ND	5.0	0.50	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	10	1.1	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.19	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	0.52	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.20	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.32	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.24	ug/l	
75-71-8	Dichlorodifluoromethane	ND	5.0	0.75	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.23	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.29	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.33	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.18	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.42	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.20	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.15	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.20	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.20	ug/l	
76-13-1	Freon 113	ND	5.0	0.69	ug/l	
591-78-6	2-Hexanone	ND	5.0	1.3	ug/l	
98-82-8	Isopropylbenzene	ND	2.0	0.20	ug/l	

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Report of Analysis

Client Sample ID:	TB-082606-GW		
Lab Sample ID:	J39596-2	**Date Sampled:**	08/26/06
Matrix:	AQ - Trip Blank Water	**Date Received:**	08/28/06
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Quanta 2006 Groundwater Resources, Edgewater, NJ		

VOA TCL List (OLM4.2)

CAS No.	Compound	Result	RL	MDL	Units	Q
79-20-9	Methyl Acetate	ND	5.0	2.1	ug/l	
108-87-2	Methylcyclohexane	ND	5.0	0.18	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.31	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.1	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.27	ug/l	
100-42-5	Styrene	ND	5.0	0.16	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.28	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.28	ug/l	
108-88-3	Toluene	ND	1.0	0.20	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.16	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.28	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.32	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.29	ug/l	
75-69-4	Trichlorofluoromethane	ND	5.0	0.25	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.29	ug/l	
	m,p-Xylene	ND	1.0	0.42	ug/l	
95-47-6	o-Xylene	ND	1.0	0.31	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.31	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	96%		77-121%
17060-07-0	1,2-Dichloroethane-D4	104%		65-133%
2037-26-5	Toluene-D8	93%		80-117%
460-00-4	4-Bromofluorobenzene	89%		79-124%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

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New Jersey

ACCUTEST LABORATORIES

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody

GW
tb

J39596

Accutest Labs
35 ROUTE 130
yton, NJ 08810
2-329-0200

Honeywell

Chain Of Custody / Analysis Request

AESI Ref: 38957.35937
COC#: 30916-082606-CW-A
Lab Proj # (SDG):
Lab ID: ACTD
Site ID: Quanta
Lab Job #:
Authorized User: Honeywell
Text & Excel File Dirve: Excel & Text File Order

Site Name: Quanta Resources (Edgewater)
Location of Site: Edgewater, NJ
Phase:
Sampling Program: Quanta 2006 Groundwater

EDD To: amy.klopper@ch2m.com, john.mitchell@ch2m.com

Sampling Co.: CH2M HILL
Client Contact: (name, co., address)
Jennifer Simms
00 Market Street, Suite 1600
iladelphia, PA 19103
Sampler: Austin Hareclerode/CH2M HILL
PO #
Analysis Turnaround Time (TAT): 10
Consultant: CH2M
Preliminary Data To: amy.klopper@ch2m.com, jennifer.simms@ch2m.com
Sample Receipt Acknowledgement To: amy.klopper@ch2m.com, jennifer.simms@ch2m.com
Hard Copy To: Amy Klopper, 3011 Southwest Williston Road, Gainesville, FL 32608
Invoice To: jennifer.simms@ch2m.com
Full Report TAT:

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Sample Identification: Location ID	Start Depth (ft)	End Depth (ft)	Field Sample ID	Sample Date	Sample Time	Sample Type	Sample Matrix	Sample Purpose	# of Cont.	Units	Preservative	Filtered	SW8260 - VOCs	SW8270 - SVOCs	SW8270-SIM	SW6010 - As, Pb	SW8081 - Pesticides	SW8082 - PCBs	Sampling Method (code)	Lab Sample Numbers
1 MW-114B			MW-114B-082606	8/26/2006	9:05	GW	WATER	REG	8	grab	N	X	X	X	X		X		BladPump	
2 Trip Blank			TB-082606-GW	8/24/2006	0:00	BLKWATER	WATER	TB	2	grab	N	X							Grab	

EXII, NE 8, 2290

SW6010^LLI — See worksheet SW6010 - analyze for Arsenic (As) and Lead (Pb)

Relinquished by	Company	Date/Time	Received by	Company	Date/Time	Condition	Cooler Temp.	Custody Seals Intact
[illegible]	CH2M HILL	8/28/06 1015	H. Johnson		8/28/06 1015			
H. Johnson	CH2M	8/28/06 1043	J. Law	ACCUTEST	8/28/06 1043			

Preservative: (Other; Specify): 0 (none); 1 (4 Deg C); 2 (HCl pH<2); 3 (HNO3 pH<2); 4 (H2SO4 pH<2); 5 (NaOH pH>12); 6 (NaOH, Zn Acetate); 7 (H2SO4 (pH<2), 4 Deg C)); 8 (HCl pH<2); 9 (HCl 4 Deg C); 10 (HNO3 (pH<2), 4Deg C); 11 (4C NaOH (pH>12) & Ascorbic Acid); 12 (4C H2SO4 (pH<2) & Na2S2O3); 13 (Zn Acetate); sp (special instructions)

RELINQUISH
13 J. Law/ DATE - TIME 8/28/06 1700 rec'd by: PDS

tb filled 8/27/06 @ 15:00 8/28/06 1600 UC

[illegible] RECEIVED

PWD

J39596: Chain of Custody
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SEVERN TRENT STL

STL North Canton
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North Canton, OH 44720

Tel: 330 497 9396 Fax: 330 497 0772
www.stl-inc.com

ANALYTICAL REPORT

PROJECT NO. 332898.QT.20.24

QUANTA RESOURCES

Lot #: A6H180299

Amy Klopper

CH2M Hill Constructors Inc
PO Box 147062
Gainesville, FL 32614-7062

SEVERN TRENT LABORATORIES, INC.

Patrick J. O'Meara
Project Manager

September 7, 2006

CASE NARRATIVE

CASE NARRATIVE

A6H180299

The following report contains the analytical results for four water samples submitted to STL North Canton by CH2M Hill Constructors, Inc. from the Quanta Resources Site, project number 332898.QT.20.24. The samples were received August 18, 2006, according to documented sample acceptance procedures.

STL utilizes USEPA approved methods in all analytical work. The samples presented in this report were analyzed for the parameter(s) listed on the analytical methods summary page in accordance with the method(s) indicated. Preliminary results were provided to Amy Klopper and Jennifer Simms on September 05, 2006. A summary of QC data for these analyses is included at the back of the report.

STL North Canton attests to the validity of the laboratory data generated by STL facilities reported herein. All analyses performed by STL facilities were done using established laboratory SOPs that incorporate QA/QC procedures described in the applicable methods. STL's operations groups have reviewed the data for compliance with the laboratory QA/QC plan, and data have been found to be compliant with laboratory protocols unless otherwise noted below.

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory.

If you have any questions, please call the Project Manager, Patrick J. O'Meara, at 330-497-9396.

This report is sequentially paginated. The final page of the report is labeled as "END OF REPORT."

SUPPLEMENTAL QC INFORMATION

SAMPLE RECEIVING

The temperature of the cooler upon sample receipt was 2.9°C.

GENERAL CHEMISTRY

The sample(s) had elevated reporting limits due to matrix interferences. Refer to the sample report pages for the affected analyte(s) flagged with "G".

QUALITY CONTROL ELEMENTS OF SW-846 METHODS

STL North Canton conducts a quality assurance/quality control (QA/QC) program designed to provide scientifically valid and legally defensible data. Toward this end, several types of quality control indicators are incorporated into the QA/QC program, which is described in detail in QA Policy, QA-003. These indicators are introduced into the sample testing process to provide a mechanism for the assessment of the analytical data.

QC BATCH

Environmental samples are taken through the testing process in groups called QUALITY CONTROL BATCHES (QC batches). A QC batch contains up to twenty environmental samples of a similar matrix (water, soil) that are processed using the same reagents and standards. STL North Canton requires that each environmental sample be associated with a QC batch.

Several quality control samples are included in each QC batch and are processed identically to the twenty environmental samples. These QC samples include a METHOD BLANK (MB), a LABORATORY CONTROL SAMPLE (LCS) and, where appropriate, a MATRIX SPIKE/MATRIX SPIKE DUPLICATE (MS/MSD) pair or a MATRIX SPIKE/SAMPLE DUPLICATE (MS/DU) pair. If there is insufficient sample to perform an MS/MSD or an MS/DU, then a LABORATORY CONTROL SAMPLE DUPLICATE (LCSD) is included in the QC batch.

LABORATORY CONTROL SAMPLE

The Laboratory Control Sample is a QC sample that is created by adding known concentrations of a full or partial set of target analytes to a matrix similar to that of the environmental samples in the QC batch. The LCS analyte recovery results are used to monitor the analytical process and provide evidence that the laboratory is performing the method within acceptable guidelines. All control analytes indicated by a bold type in the LCS must meet acceptance criteria. Failure to meet the established recovery guidelines requires the repreparation and reanalysis of all samples in the QC batch. The only exception is that if the LCS recoveries are biased high and the associated sample is ND (non-detected) for the parameter(s) of interest, the batch is acceptable.

At times, a Laboratory Control Sample Duplicate (LCSD) is also included in the QC batch. An LCSD is a QC sample that is created and handled identically to the LCS. Analyte recovery data from the LCSD is assessed in the same way as that of the LCS. The LCSD recoveries, together with the LCS recoveries, are used to determine the reproducibility (precision) of the analytical system. Precision data are expressed as relative percent differences (RPDs). If the RPD fails for an LCS/LCSD and yet the recoveries are within acceptance criteria, the batch is still acceptable.

METHOD BLANK

The Method Blank is a QC sample consisting of all the reagents used in analyzing the environmental samples contained in the QC batch. Method Blank results are used to determine if interference or contamination in the analytical system could lead to the reporting of false positive data or elevated analyte concentrations. All target analytes must be below the reporting limits (RL) or the associated sample(s) must be ND except under the following circumstances:

- Common organic contaminants may be present at concentrations up to 5 times the reporting limits. Common metals contaminants may be present at concentrations up to 2 times the reporting limit, or the reported blank concentration must be twenty fold less than the concentration reported in the associated environmental samples. (See common laboratory contaminants listed below.)
-

Volatile (GC or GC/MS)	Semivolatile (GC/MS)	Metals ICP-MS	Metals ICP Trace
Methylene Chloride, Acetone, 2-Butanone	Phthalate Esters	Copper, Iron, Zinc, Lead, Calcium, Magnesium, Potassium, Sodium, Barium, Chromium, Manganese	Copper, Iron, Zinc, Lead

- Organic blanks will be accepted if compounds detected in the blank are present in the associated samples at levels 10 times the blank level. Inorganic blanks will be accepted if elements detected in the blank are present in the associated samples at 20 times the blank level.

- Blanks will be accepted if the compounds/elements detected are not present in any of the associated environmental samples.

Failure to meet these Method Blank criteria requires the repreparation and reanalysis of all samples in the QC batch.

MATRIX SPIKE/MATRIX SPIKE DUPLICATE

A Matrix Spike and a Matrix Spike Duplicate are a pair of environmental samples to which known concentrations of a full or partial set of target analytes are added. The MS/MSD results are determined in the same manner as the results of the environmental sample used to prepare the MS/MSD. The analyte recoveries and the relative percent differences (RPDs) of the recoveries are calculated and used to evaluate the effect of the sample matrix on the analytical results. Due to the potential variability of the matrix of each sample, the MS/MSD results may not have an immediate bearing on any samples except the one spiked; therefore, the associated batch MS/MSD may not reflect the same compounds as the samples contained in the analytical report. When these MS/MSD results fail to meet acceptance criteria, the data is evaluated. If the LCS is within acceptance criteria, the batch is considered acceptable. The acceptance criteria do not apply to samples that are diluted for organics if the native sample amount is 4x the concentration of the spike.

For certain methods, a Matrix Spike/Sample Duplicate (MS/DU) may be included in the QC batch in place of the MS/MSD. For the parameters (i.e. pH, ignitability) where it is not possible to prepare a spiked sample, a Sample Duplicate may be included in the QC batch. However, a Sample Duplicate is less likely to provide usable precision statistics depending on the likelihood of finding concentrations below the standard reporting limit. When the Sample Duplicate result fails to meet acceptance criteria, the data is evaluated.

SURROGATE COMPOUNDS

In addition to these batch-related QC indicators, each organic environmental and QC sample is spiked with surrogate compounds. Surrogates are organic chemicals that behave similarly to the analytes of interest and that are rarely present in the environment. Surrogate recoveries are used to monitor the individual performance of a sample in the analytical system.

If surrogate recoveries are biased high in the LCS, LCSD, or the Method Blank, and the associated sample(s) are ND, the batch is acceptable. Otherwise, if the LCS, LCSD, or Method Blank surrogate(s) fail to meet recovery criteria, the entire sample batch is reprepped and reanalyzed. If the surrogate recoveries are outside criteria for environmental samples, the samples will be reprepped and reanalyzed unless there is objective evidence of matrix interference or if the sample dilution is greater than the threshold outlined in the associated method SOP.

For the GC/MS BNA methods, the surrogate criterion is that two of the three surrogates for each fraction must meet acceptance criteria. The third surrogate must have a recovery of ten percent or greater.

For the Pesticide, PCB, and PAH methods, the surrogate criterion is that one of two surrogate compounds must meet acceptance criteria.

STL North Canton Certifications and Approvals:

California (#01144CA), Connecticut (#PH-0590), Florida (#E87225),
Illinois (#200004), Kansas (#E10336), Minnesota (#39-999-348), New Jersey (#OH001), New York (#10975), Ohio (#6090), OhioVAP (#CL0024), Utah (#QUAN9), West Virginia (#210), Wisconsin (#999518190),NAVY, ARMY, USDA Soil Permit, ACIL Seal of Excellence – Participating Lab Status Award (#82)

C:\DOCUME~1\armans\LOCALS~1\Temp\Narrative_040306.docRevised 04/03/06 DJL

EXECUTIVE SUMMARY

EXECUTIVE SUMMARY - Detection Highlights

A6H180299

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
MW-107A-081706 08/17/06 11:10 001				
Arsenic (III)	30700	16000	ug/L	SW846 7063
MW-109A-081706 08/17/06 17:25 005				
Arsenic (III)	193	16.0	ug/L	SW846 7063
Arsenic (V)	174	64.0	ug/L	SW846 7063

METHOD SUMMARY

ANALYTICAL METHODS SUMMARY

A6H180299

PARAMETER	ANALYTICAL METHOD
Arsenic (III) Speciation by ASV	SW846 7063
Arsenic (V) Speciation by ASV	SW846 7063

References:

SW846 "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 and its updates.

SAMPLE SUMMARY

SAMPLE SUMMARY

A6H180299

WO #	SAMPLE#	CLIENT SAMPLE ID	SAMPLED DATE	SAMP TIME
JCN9A	001	MW-107A-081706	08/17/06	11:10
JCN9F	002	MW-36-081706	08/17/06	10:35
JCN9G	003	DUP-081706-GW-B	08/17/06	
JCN90	005	MW-109A-081706	08/17/06	17:25

NOTE(S):

- The analytical results of the samples listed above are presented on the following pages.
- All calculations are performed before rounding to avoid round-off errors in calculated results.
- Results noted as "ND" were not detected at or above the stated limit.
- This report must not be reproduced, except in full, without the written approval of the laboratory.
- Results for the following parameters are never reported on a dry weight basis: color, corrosivity, density, flashpoint, ignitability, layers, odor, paint filter test, pH, porosity pressure, reactivity, redox potential, specific gravity, spot tests, solids, solubility, temperature, viscosity, and weight.

SHIPPING
AND
RECEIVING DOCUMENTS

Severn Trent Laboratories
4101 Shuffel Drive NW
North Canton, OH 44720
(330) 497-9396

Honeywell — Chain Of Custody / Analysis Request

AESI Ref:	38946.64677		
COC#	30916-081706-GW-B		
Lab Proj # (SDG):			
Lab ID	BR		
Site ID	Quanta		
Lab Job #			
Authorized User:	Honeywell		
Text & Excel File Drive	Excel & Text File Order		

Privileged & Confidential

Site Name:	Quanta Resources (Edgewater)	Phase:	
Location of Site:	Edgewater, NJ	Sampling Program	Quanta 2006 Groundwater

Sampling Co.:	CH2M HILL
EDD To:	amy.klopper@ch2m.com, john.mitchell@ch2m.com
Client Contact: (name, co., address)	Jennifer Simms, 1700 Market Street, Suite 1600, Philadelphia, PA 19103
Sampler:	Austin Hareclerode/CH2M HILL
PO #	
Analysis Turnaround Time (TAT):	10
Consultant	CH2M
Preliminary Data To	amy.klopper@ch2m.com, jennifer.simms@ch2m.com
Sample Receipt Acknowledgement To	amy.klopper@ch2m.com, jennifer.simms@ch2m.com
Hard Copy To	Amy Klopper, 3011 Southwest Williston Road, [illegible]
Invoice To:	jennifer.simms@ch2m.com
Full Report TAT:	

Preservative: 9

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	Location ID	Start Depth (ft)	End Depth (ft)	Field Sample ID	Sample Date	Sample Time	Sample Type	Sample Matrix	Sample Purpose	# of Cont.	Units	Field Filtered Sample ?	7063 modified - Arsenic Speciation	Sampling Method (code)	Lab Sample Numbers
1	MW-107A	—	—	MW-107A-081706	8/17/2006	11:10	GW	WATER	REG	1	grab	N	X	BladPump	
2	MW-36	—	—	MW-36-081706	8/17/2006	10:35	GW	WATER	REG	1	grab	N	X	BladPump	
3	~~MW-26~~			~~MW-26-081706~~	~~8/17/2006~~		~~GW~~	~~WATER~~	~~REG~~	~~1~~	~~grab~~	~~N~~	~~X~~	~~BladPump~~	JS
4	Duplicate	—	—	DUP-081706-GW-B	8/17/2006	0:00	GW	WATER	FD	1	grab	N	X	BladPump	
5	Trip Blank	—	—	TB-081706-GW-B	8/17/2006	0:00	BLKWATER	WATER	TB	1	grab	N	X	Grab	
6	MW-109A	—	—	MW-109A-081706	08/17/2006	17:25	GW	WATER	REG	1	grab	N	X	Blad Pump	
7															
8															
9															
10															
11															
12															

SW6010^LLI

Relinquished by	Company	Received by	Company	Condition	Custody Seals Intact
[signature]	CH2M HILL	[signature]	STL		
	Date/Time: 08/17/06 1910		Date/Time: 8-18-06 9:15	Cooler Temp.	
Relinquished by	Company	Received by	Company	Condition	Custody Seals Intact
	Date/Time		Date/Time	Cooler Temp.	

Preservatives: (Other; Specify): 0 (none); 1 (4 Deg C); 2 (HCl pH<2); 3 (HNO3 pH<2); 4 (H2SO4 pH<2); 5 (NaOH pH>12); 6 (NaOH, Zn Acetate); 7 (H2SO4 (pH<2), 4 Deg C)); 8 (HCl pH<2); 9 (HCl 4 Deg C); 10 (HNO3 (pH<2), 4Deg C); 11 (4C NaOH (pH>12) & Ascorbic Acid); 12 (4C H2SO4 (pH<2) & Na2S2O3); 13 (Zn Acetate); sp (special instructions)

STL Cooler Receipt Form/Narrative **Lot Number:** A6H170240
North Canton Facility

Client: Honeywell Project: _____ Quote#: 71980
Cooler Received on: 8-18-06 Opened on: 8-18-06 by: [signature] (Signature)
Fedx ☐ Client Drop Off ☐ UPS ☐ DHL ☐ FAS ☐ STL Courier ☐
Stetson ☐ US Cargo ☐ Other: _____
STL Cooler No# K690 Foam Box ☐ Client Cooler ☐ Other _____

1. Were custody seals on the outside of the cooler? Yes ☒ No ☐ Intact? Yes ☒ No ☐ NA ☐
   If YES, Quantity 1
   Were the custody seals signed and dated? Yes ☒ No ☐ NA ☐
2. Shipper's packing slip attached to this form? Yes ☒ No ☐ NA ☐
3. Did custody papers accompany the samples? Yes ☒ No ☐ Relinquished by client? Yes ☒ No ☐
4. Did you sign the custody papers in the appropriate place? Yes ☒ No ☐
5. Packing material used: Bubble Wrap ☒ Foam ☐ None ☐ Other: _____
6. Cooler temperature upon receipt 2.9 °C (see back of form for multiple coolers/temp)

METHOD: Temp Vial ☐ Coolant & Sample ☐ Against Bottles ☐ IR ☒ ICE/H_2O Slurry ☐
COOLANT: Wet Ice ☒ Blue Ice ☐ Dry Ice ☐ Water ☐ None ☐

7. Did all bottles arrive in good condition (Unbroken)? Yes ☒ No ☐
8. Could all bottle labels and/or tags be reconciled with the COC? Yes ☒ No ☐
9. Were samples at the correct pH? (record below/on back) Yes ☒ No ☐ NA ☐
10. Were correct bottles used for the tests indicated? Yes ☒ No ☐
11. Were air bubbles >6 mm in any VOA vials? Yes ☐ No ☐ NA ☒
12. Sufficient quantity received to perform indicated analyses? Yes ☒ No ☐
13. Was a Trip Blank present in the cooler? Yes ☐ No ☒ Were VOAs on the COC? Yes ☒ No ☐
14. Does the trip blank number match the cooler number in which it was received? Yes ☐ No ☐ NA ☒

Contacted PM PJO Date: 8/18/06 by: [initials] via Voice Mail ☐ Verbal ☐ Other ☒ Green chain
Concerning: #1

√

1. CHAIN OF CUSTODY

The following discrepancies occurred:
received 1 x L for TB - B/K water not COC. Will archive per PJO.

2. SAMPLE CONDITION

Sample(s) _____ were received after the recommended holding time had expired.
Sample(s) _____ were received in a broken container.

3. SAMPLE PRESERVATION

Sample(s) _____ were further preserved in sample receiving to meet recommended pH level(s). *Nitric Acid Lot #* 122805-*HNO3; Sulfuric Acid Lot #* 100405-*H2SO4; Sodium Hydroxide Lot #* -100405 -*NaOH; Hydrochloric Acid Lot #* 100504-*HCl; Sodium Hydroxide and Zinc Acetate Lot #* 071604-*CH3COO2ZN/NaOH*
Sample(s) _____ were received with bubble > 6 mm in diameter (cc: PM)

4. Other (see below or back)

Client ID	pH	Date	Initials
107A	<2	8-18-06	[initials]
36	<2	↓	↓
Dup	<2	↓	↓
109A	<2	↓	↓

SOP: NC-SC-0005, Sample Receiving
\\qcanoh01\public\QAQC\NARRATIV\STL\Cooler Receipt STL\COOLER_STL_Rev 54 051506.doc

STL Cooler Receipt Form/Narrative
North Canton Facility

Client ID	pH	Date	Initials

Cooler	Temp	Method	Coolant

Discrepancies Cont.

GENERAL CHEMISTRY DATA

SAMPLE DATA

CH2M Hill Constructors, Inc.

Client Sample ID: MW-107A-081706

General Chemistry

Lot-Sample #...: A6H180299-001 **Work Order #...:** JCN9A **Matrix.....:** WG
Date Sampled...: 08/17/06 11:10 **Date Received..:** 08/18/06

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Arsenic (III)	**30700**	**16000**	**ug/L**	**SW846 7063**	**08/29/06**	**6241456**
		Dilution Factor: 8000				
Arsenic (V)	ND G	8000	ug/L	SW846 7063	08/31/06	6243671
		Dilution Factor: 4000				

NOTE(S):

RL Reporting Limit

G Elevated reporting limit. The reporting limit is elevated due to matrix interference.

CH2M Hill Constructors, Inc.

Client Sample ID: MW-36-081706

General Chemistry

Lot-Sample #...: A6H180299-002 **Work Order #...:** JCN9F **Matrix.....:** WG
Date Sampled...: 08/17/06 10:35 **Date Received..:** 08/18/06

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Arsenic (III)	ND	2.0	ug/L	SW846 7063	08/29/06	6241456
		Dilution Factor: 1				
Arsenic (V)	ND G	100	ug/L	SW846 7063	08/31/06	6243671
		Dilution Factor: 50				

NOTE(S):

RL Reporting Limit

G Elevated reporting limit. The reporting limit is elevated due to matrix interference.

CH2M Hill Constructors, Inc.

Client Sample ID: DUP-081706-GW-B

General Chemistry

Lot-Sample #...: A6H180299-003 **Work Order #...:** JCN9G **Matrix.....:** WG
Date Sampled...: 08/17/06 **Date Received..:** 08/18/06

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Arsenic (III)	ND	2.0	ug/L	SW846 7063	08/29/06	6241456
		Dilution Factor: 1				
Arsenic (V)	ND G	100	ug/L	SW846 7063	08/31/06	6243671
		Dilution Factor: 50				

NOTE(S):

RL Reporting Limit

G Elevated reporting limit. The reporting limit is elevated due to matrix interference.

CH2M Hill Constructors, Inc.

Client Sample ID: MW-109A-081706

General Chemistry

Lot-Sample #...: A6H180299-005 **Work Order #...:** JCN90 **Matrix.....:** WG
Date Sampled...: 08/17/06 17:25 **Date Received..:** 08/18/06

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Arsenic (III)	**193**	**16.0**	**ug/L**	**SW846 7063**	**08/29/06**	**6241456**
		Dilution Factor: 8				
Arsenic (V)	**174**	**64.0**	**ug/L**	**SW846 7063**	**08/31/06**	**6243671**
		Dilution Factor: 32				

METHOD BLANK REPORT

General Chemistry

Client Lot #...: A6H180299 **Matrix.....:** WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Arsenic (III)		Work Order #: JDEJ61AA		MB Lot-Sample #:	A6H290000-456	
	ND	2.0	ug/L	SW846 7063	08/29/06	6241456
		Dilution Factor: 1				
Arsenic (V)		Work Order #: JDJVQ1AA		MB Lot-Sample #:	A6H310000-671	
	ND	2.0	ug/L	SW846 7063	08/31/06	6243671
		Dilution Factor: 1				

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

General Chemistry

Lot-Sample #...: A6H180299 **Matrix.....:** WATER

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Arsenic (III)		WO#:JDEJ61AC-LCS/JDEJ61AD-LCSD				LCS Lot-Sample#: A6H290000-456	
	82	(25 - 130)			SW846 7063	08/29/06	6241456
	76	(25 - 130)	8.9	(0-50)	SW846 7063	08/29/06	6241456
		Dilution Factor: 1					
Arsenic (V)		WO#:JDJVQ1AC-LCS/JDJVQ1AD-LCSD				LCS Lot-Sample#: A6H310000-671	
	64	(25 - 130)			SW846 7063	08/31/06	6243671
	45	(25 - 130)	35	(0-50)	SW846 7063	08/31/06	6243671
		Dilution Factor: 1					

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE DATA REPORT

General Chemistry

Lot-Sample #...: A6H180299 **Matrix.....:** WATER

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCNT RECVRY	RPD	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Arsenic (III)		WO#:JDEJ61AC-LCS/JDEJ61AD-LCSD				LCS	Lot-Sample#: A6H290000-456	
	20.0	16.5	ug/L	82		SW846 7063	08/29/06	6241456
	20.0	15.1	ug/L	76	8.9	SW846 7063	08/29/06	6241456
		Dilution Factor: 1						
Arsenic (V)		WO#:JDJVQ1AC-LCS/JDJVQ1AD-LCSD				LCS	Lot-Sample#: A6H310000-671	
	20.0	12.8	ug/L	64		SW846 7063	08/31/06	6243671
	20.0	9.0	ug/L	45	35	SW846 7063	08/31/06	6243671
		Dilution Factor: 1						

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

MATRIX SPIKE SAMPLE EVALUATION REPORT

General Chemistry

Client Lot #...: A6H180299 **Matrix.....:** WATER
Date Sampled...: 08/15/06 08:00 **Date Received..:** 08/16/06

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Arsenic (III)		WO#: JCGPM1AE-MS/JCGPM1AF-MSD				MS Lot-Sample #: A6H160315-001	
	54	(25 - 130)			SW846 7063	08/29/06	6241456
	46	(25 - 130)	16	(0-50)	SW846 7063	08/29/06	6241456

Dilution Factor: 1

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

MATRIX SPIKE SAMPLE DATA REPORT

General Chemistry

Client Lot #...: A6H180299 **Matrix.....:** WATER
Date Sampled...: 08/15/06 08:00 **Date Received..:** 08/16/06

PARAMETER	SAMPLE AMOUNT	SPIKE AMT	MEASRD AMOUNT	UNITS	PERCNT RECVRY	RPD	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Arsenic (III)			WO#: JCGPM1AE-MS/JCGPM1AF-MSD				MS Lot-Sample #: A6H160315-001		
	ND	20.0	10.8	ug/L	54		SW846 7063	08/29/06	6241456
	ND	20.0	9.2	ug/L	46	16	SW846 7063	08/29/06	6241456

Dilution Factor: 1

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

SUPPORTIVE RAW DATA

STL North Canton Arsenic (III) Data Review Checklist

Run/Project Information

Run Date: 8/29/06 **Analyst:** [illegible] **Instrument:** _____

Prep Batches Run: 6241456

Methods used: **7063 mod :** NC-WC-000X Rev 1

Review Items

A. Instrument Setup	Yes	No	N/A	2ndLevel
1. Electrode sensitivity check?	X			✓
2. MSA working standard and verification standard within control limits?	X			✓
3. Cleanliness check (ICB) within +/- RL?	X			✓
B. Sample Results				
1. Were non-detect samples verified with single point MSA?	X			✓
2. All samples with As(III) quantified with 3-4 point MSA?	X			✓
3. Sample analyses done within holding time?	X			✓
C. Preparation/Matrix QC				
1. Samples preserved in the field?	X			✓
2. LCS done per prep batch and within QC limits?	X			✓
3. Method blank done per prep batch and < RL?	X			✓
4. MS run at required frequency (1 per 20 samples) and within limits?	X			✓
5. MSD or DU run at required frequency (1 per 20 samples) and RPD within limits?	X			✓
D. Other				
1. Are all nonconformances documented appropriately?			X	N/A
2. Current MDL data on file?	X			✓
3. Calculations and Transcriptions checked for error?	X			✓
4. All client/ project specific requirements met?	X			✓
5. Date of analysis verified as correct?	X			✓

Analyst: [signature] **Date:** 8/29/06

Comments:

2nd Level Reviewer : [signature] **Date:** 8/30/06

Standard, Reagent and Supply Numbers

MSA Working Std AS6053 **MSA Verification Std** AS6054 **MS As(V) Std** _____

Au plate soln WR60945 **conc HCl** WR60785 **Cu Remover** _____ **C18** _____

Acid ext _____ **Basic ext** _____

TraceDetect Nano-Band Explorer - C:\Program Files\Common Files\AS Temp\082906\JCGPM with 2ppb As III.tds

Sample ID: JCGPM with 2ppb As III

Trace Metals:

As(III): 49.0 nA

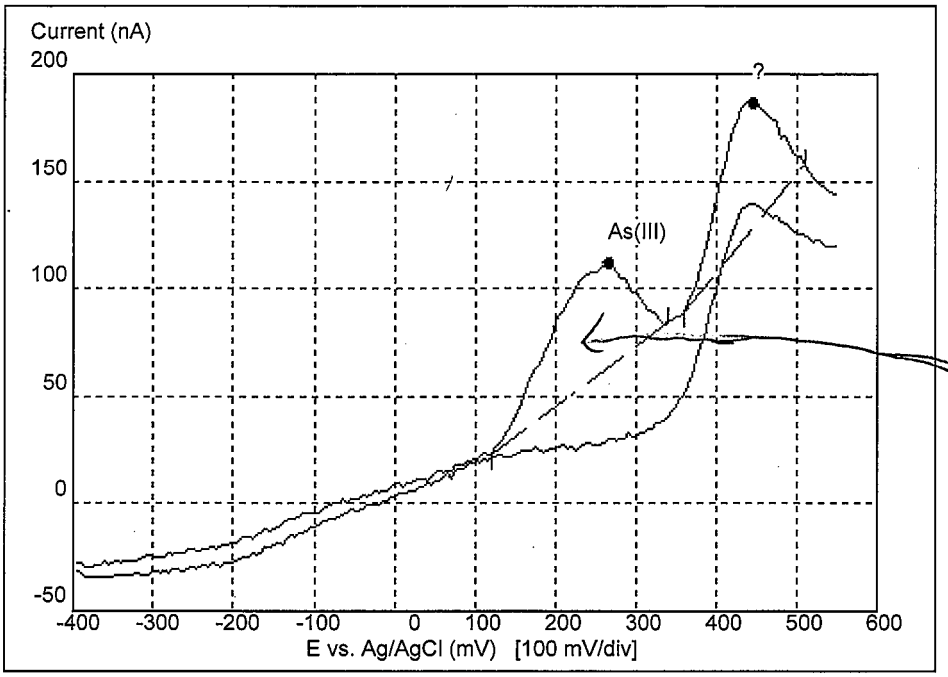
ND

Temperature:

Input 1:

Input 2:

29/Aug/06 12:01:12



2ppb

Settings:

Type:	ASV	Clean Time (S)	0.1	Signal Avg.	8
Waveform:	Staircase	Clean Voltage (mV):	600	Frequency (Hz):	2000
Cell	Three Electrode	Plate Time (S)	160	Start Voltage (mV):	-400
☑ Background subtraction		Plate Voltage (mV)	-400	Stop Voltage (mV):	550
		Range (uA):	12.5	Step Voltage (mV):	5

TraceDetect Nano-Band Explorer

Sample ID: JCN9A 500x As III

29/Aug/06 12:18:54

Trace Metals:

As(III): 1.47 uA

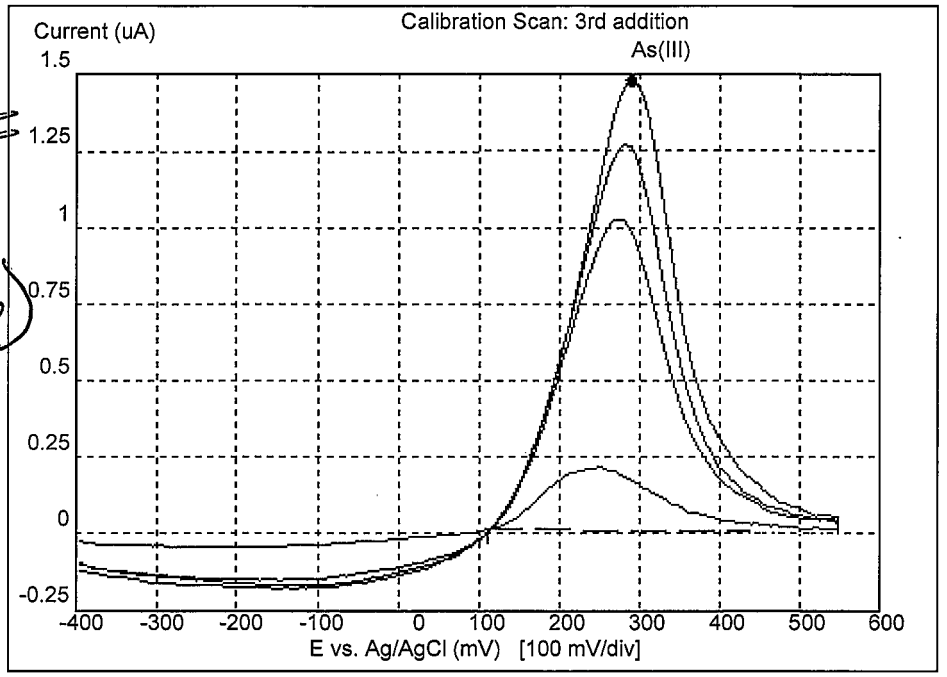
30,700ppb

(8000x for plate : Manual)

Temperature:

Input 1:

Input 2:



Settings:

Type:	ASV	Clean Time (S)	0.1	Signal Avg.	8
Waveform:	Staircase	Clean Voltage (mV):	600	Frequency (Hz):	2000
Cell	Three Electrode	Plate Time (S)	10	Start Voltage (mV):	-400
☑ Background subtraction		Plate Voltage (mV)	-400	Stop Voltage (mV):	550
		Range (uA):	12.5	Step Voltage (mV):	5

LDL : 16 000

500 X manual dilution
16 X plate time dilution

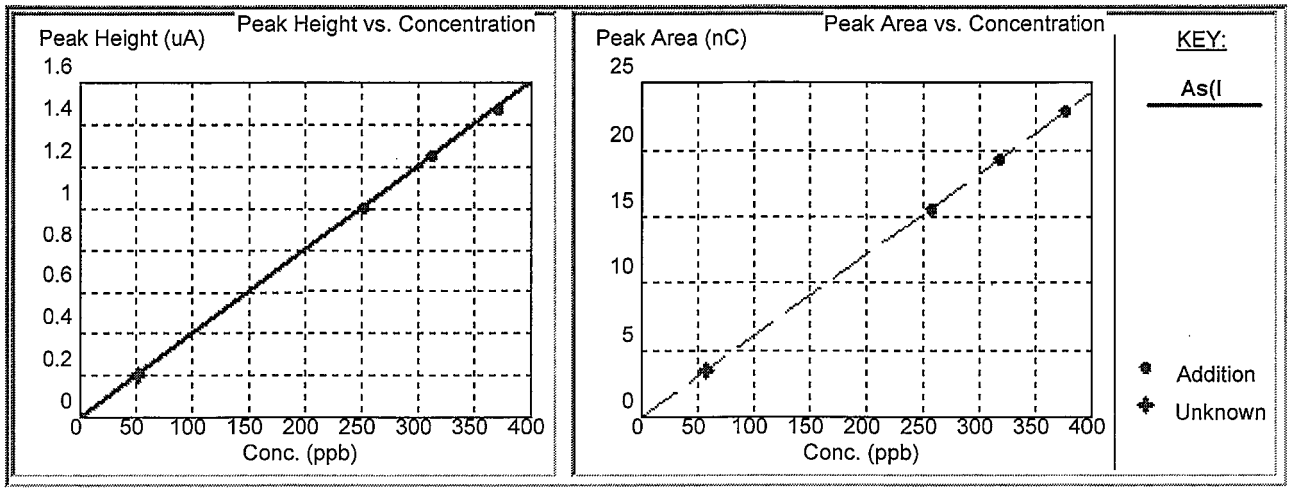
8000 X total

Calibration Summary:

JCN9A 500X

As III

Calibration Date: 21/Aug/06 at 15:19:47



Calibration Parameters

Metal	Calib. Mode	Fit Factor	Slope	Zero Offset	Starting Concentration	Concentration in Original Sample
As[III]	**Height**	1.000	0.250 ppb/nA	0 ppt	52 ppb	61 ppb
	Area	1.000	16.4 ppb/nC	0 ppt	57 ppb	68 ppb

Addition Data for Method of Standard Additions

Metal	Unknown Concentration	Concentration in original aliquot	1st Addition	2nd Addition	3rd Addition	Total added concentration
As(III)	51.5 ppb	61.4 ppb	10.0 uL (200 ppb)	3.00 uL (60.0 ppb)	3.00 uL (60.0 ppb)	320 ppb

JCN9A 500X
As^{III}

x 500
30,700 ppb

Starting Volume: 50.000 **mL**

Final Volume: 50.016 **mL**

TraceDetect Nano-Band Explorer

Sample ID: JCN9F As III with 2ppb

Trace Metals:

As(III): 246 ppt

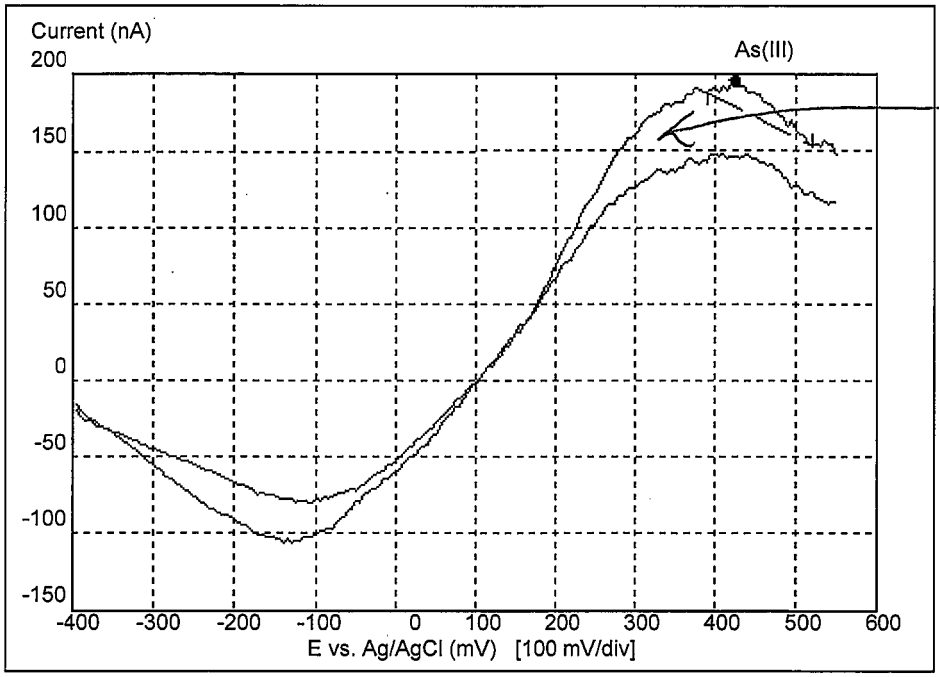
ND

Temperature:

Input 1:

Input 2:

29/Aug/06 12:40:17



2ppb

Settings:

Type:	ASV	Clean Time (S)	0.1	Signal Avg.	8
Waveform:	Staircase	Clean Voltage (mV):	600	Frequency (Hz):	2000
Cell	Three Electrode	Plate Time (S)	160	Start Voltage (mV):	-400
☑ Background subtraction		Plate Voltage (mV)	-400	Stop Voltage (mV):	550
		Range (uA):	12.5	Step Voltage (mV):	5

TraceDetect Nano-Band Explorer - C:\Program Files\Common Files\AS Temp\082906\JCN9G As III with 2ppb.tds

Sample ID: JCN9G As III with 2ppb

Trace Metals:

As(III): 1.13 ppb

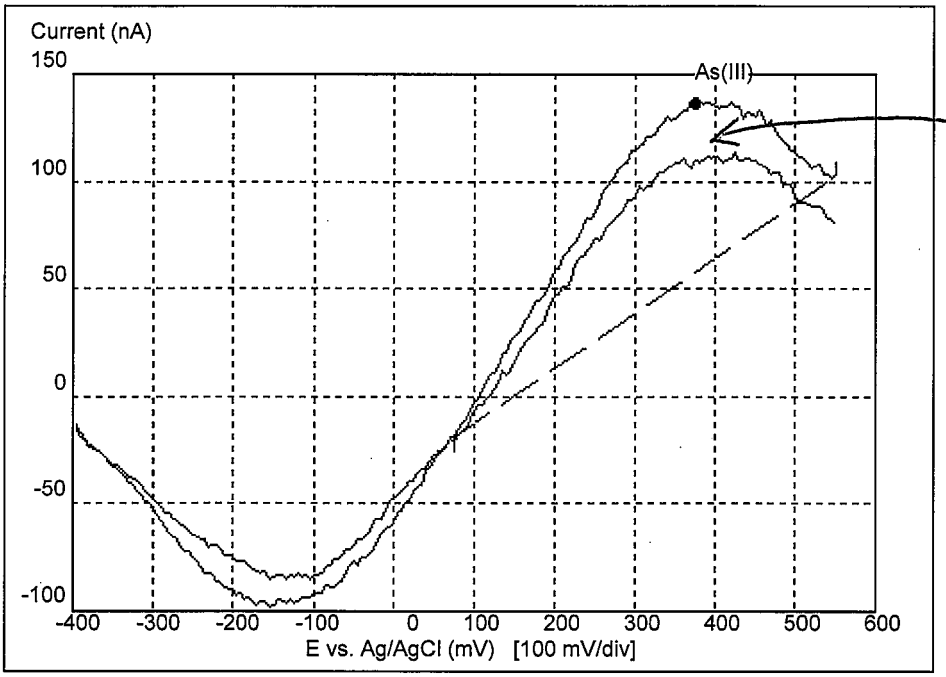
ND

Temperature:

Input 1:

Input 2:

29/Aug/06 12:55:16



2ppb

Settings:

Type:	ASV	Clean Time (S)	0.1	Signal Avg.	8
Waveform:	Staircase	Clean Voltage (mV):	600	Frequency (Hz):	2000
Cell	Three Electrode	Plate Time (S)	160	Start Voltage (mV):	-400
☑ Background subtraction		Plate Voltage (mV)	-400	Stop Voltage (mV):	550
		Range (uA):	12.5	Step Voltage (mV):	5

TraceDetect Nano-Band Explorer

Sample ID: JCN90 As III

Trace Metals:

As(III): 511 ppb

193 ppb

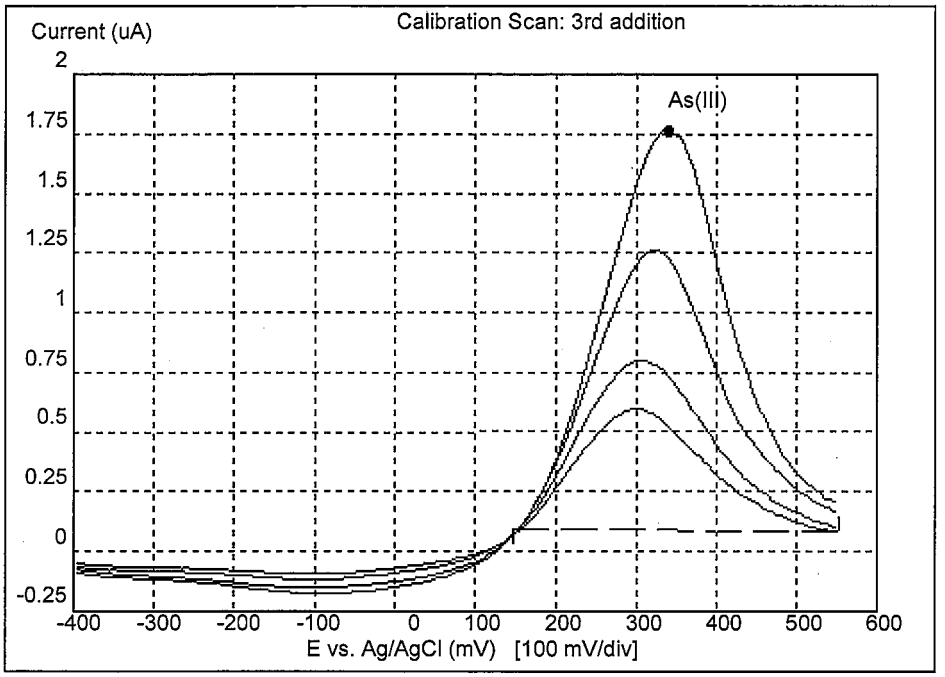
(8X for plate)

Temperature:

Input 1:

Input 2:

29/Aug/06 13:10:46



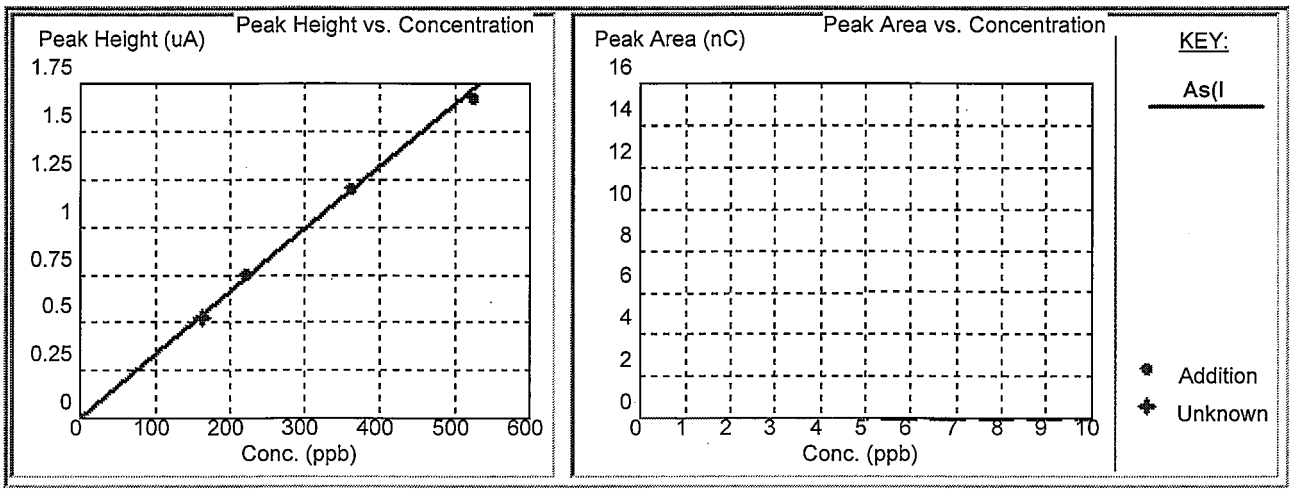
Settings:

Type:	ASV	Clean Time (S)	0.1	Signal Avg.	8
Waveform:	Staircase	Clean Voltage (mV):	600	Frequency (Hz):	2000
Cell	Three Electrode	Plate Time (S)	20	Start Voltage (mV):	-400
☑ Background subtraction		Plate Voltage (mV)	-400	Stop Voltage (mV):	550
		Range (uA):	12.5	Step Voltage (mV):	5

Calibration Summary:

JCN90 AsIII

Calibration Date: 29/Aug/06 at 12:19:45



Calibration Parameters

Metal	Calib. Mode	Fit Factor	Slope	Zero Offset	Starting Concentration	Concentration in Original Sample
As[III]	**Height**	0.998	0.304 ppb/nA	0 ppt	160 ppb	190 ppb
	Area	0.156	-122 ppb/nC	0 ppt	-590 ppb	-700 ppb

Addition Data for Method of Standard Additions

Metal	Unknown Concentration	Concentration in original aliquot	1st Addition	2nd Addition	3rd Addition	Total added concentration
As(III)	162 ppb	193 ppb	3.00 uL (60.0 ppb)	7.00 uL (140 ppb)	8.00 uL (160 ppb)	360 ppb

JCN90 As^{III}

Starting Volume: 50.000 mL

Final Volume: 50.018 mL

TraceDetect Nano-Band Explorer

Sample ID: JCWF3 5x As III

Trace Metals:

As(III): ~~424 ppb~~ 1e25 ppb

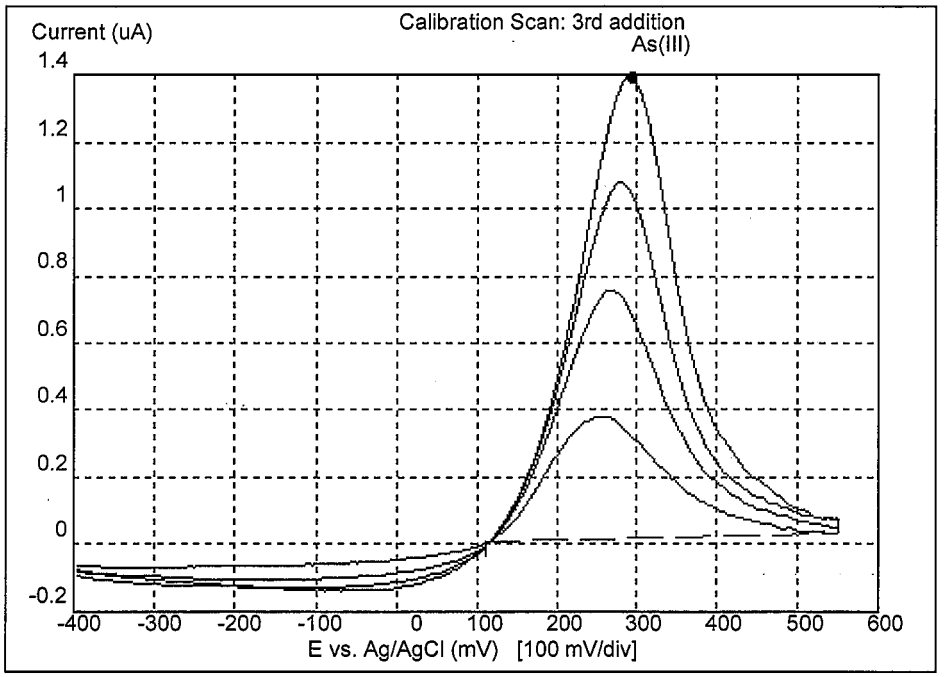
(80X)

Temperature:

Input 1:

Input 2:

29/Aug/06 13:50:54



Settings:

Type:	ASV	Clean Time (S)	0.1	Signal Avg.	8
Waveform:	Staircase	Clean Voltage (mV):	600	Frequency (Hz):	2000
Cell	Three Electrode	Plate Time (S)	10	Start Voltage (mV):	-400
☑ Background subtraction		Plate Voltage (mV)	-400	Stop Voltage (mV):	550
		Range (uA):	12.5	Step Voltage (mV):	5

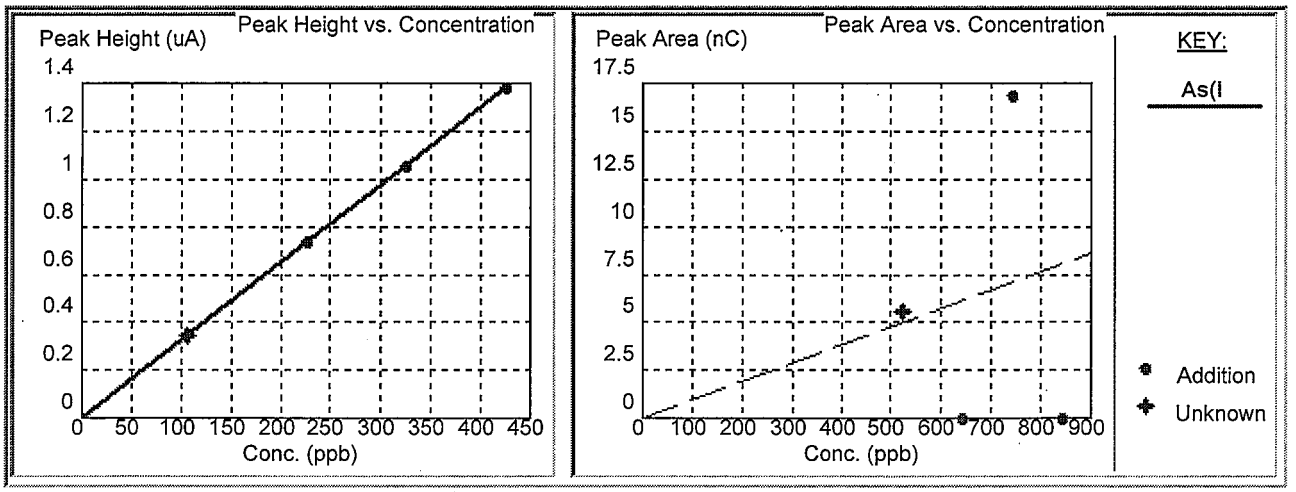
LDL = 160ppb

5X manual dilution
16X plate time
80X total dilution

Calibration Summary:

JC WF3 5X As^{III}

Calibration Date: 29/Aug/06 at 13:12:05



Calibration Parameters

Metal	Calib. Mode	Fit Factor	Slope	Zero Offset	Starting Concentration	Concentration in Original Sample
As[III]	**Height**	1.000	0.307 ppb/nA	0 ppt	110 ppb	130 ppb
	Area	0.000	104 ppb/nC	0 ppt	520 ppb	620 ppb

Addition Data for Method of Standard Additions

Metal	Unknown Concentration	Concentration in original aliquot	1st Addition	2nd Addition	3rd Addition	Total added concentration
As(III)	105 ppb	125 ppb	6.00 uL (120 ppb)	5.00 uL (100 ppb)	5.00 uL (100 ppb)	320 ppb

JCWF3 5X
As III

X 5
625 ppb

Starting Volume: 50.000 mL

Final Volume: 50.016 mL

TraceDetect Nano-Band Explorer

Sample ID: JCWGA As III

Trace Metals:

As(III): 236 ppb

65.4 ppb

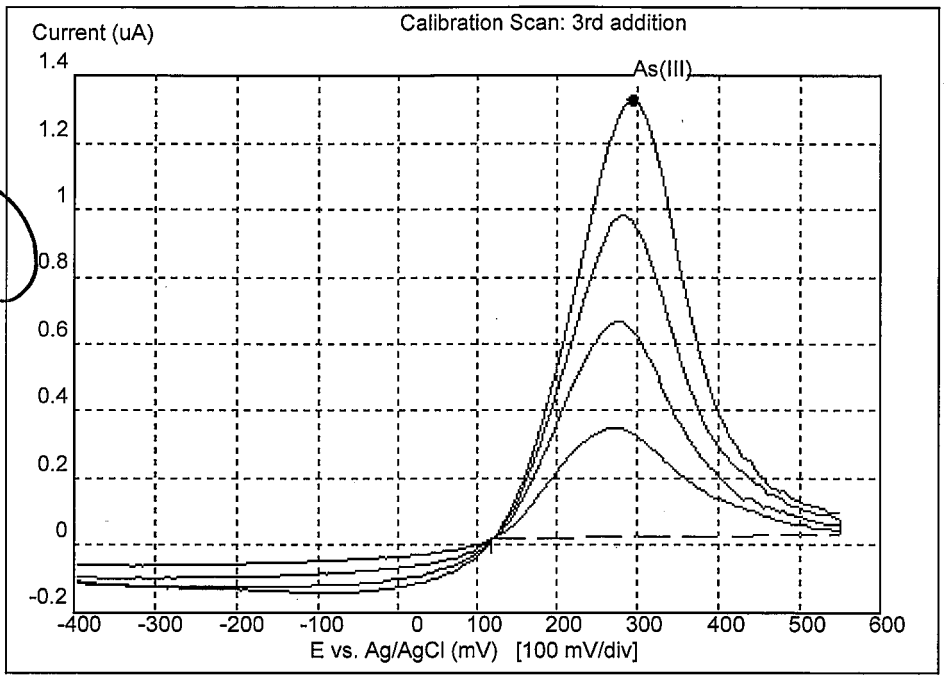
(8x for plate)

Temperature:

Input 1:

Input 2:

29/Aug/06 14:31:06



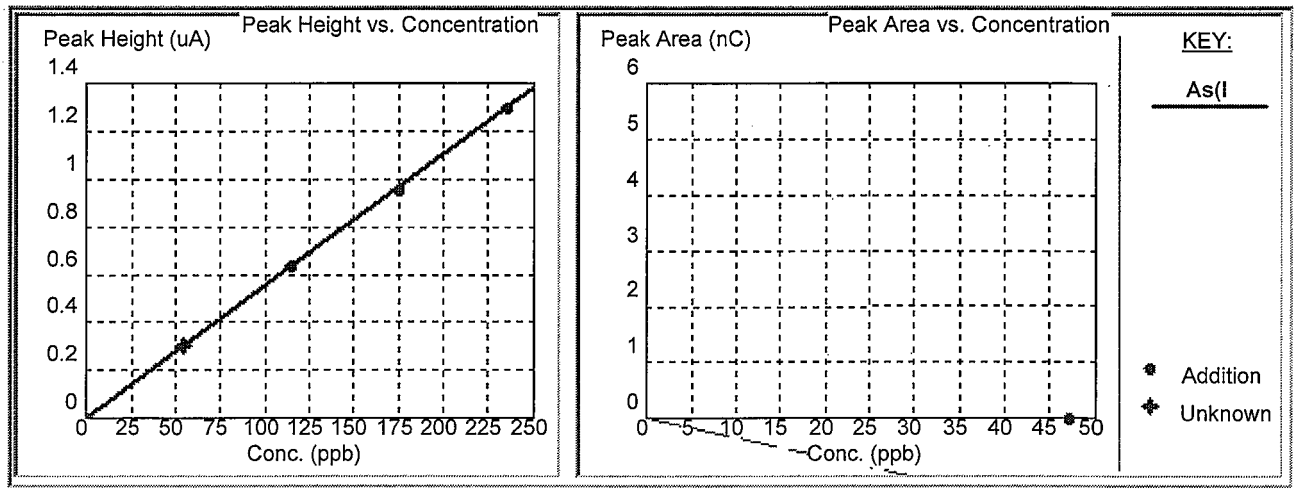
Settings:

Type:	ASV	Clean Time (S)	0.1	Signal Avg.	8
Waveform:	Staircase	Clean Voltage (mV):	600	Frequency (Hz):	2000
Cell	Three Electrode	Plate Time (S)	20	Start Voltage (mV):	-400
☑ Background subtraction		Plate Voltage (mV)	-400	Stop Voltage (mV):	550
		Range (uA):	12.5	Step Voltage (mV):	5

Calibration Summary:

JCWGA As III

Calibration Date: 29/Aug/06 at 13:51:34



Calibration Parameters

Metal	Calib. Mode	Fit Factor	Slope	Zero Offset	Starting Concentration	Concentration in Original Sample
As[III]	**Height**	1.000	0.181 ppb/nA	0 ppt	55 ppb	65 ppb
	Area	0.600	-28 ppb/nC	0 ppt	-130 ppb	-160 ppb

Addition Data for Method of Standard Additions

JCWGA

As III

Metal	Unknown Concentration	Concentration in original aliquot	1st Addition	2nd Addition	3rd Addition	Total added concentration
As(III)	54.9 ppb	65.4 ppb	3.00 uL (60.0 ppb)	3.00 uL (60.0 ppb)	3.00 uL (60.0 ppb)	180 ppb

Starting Volume: 50.000 **mL**

Final Volume: 50.009 **mL**

TraceDetect Nano-Band Explorer

Sample ID: JCWGC As III

Trace Metals:

As(III): 231 ppb

64.1 ppb

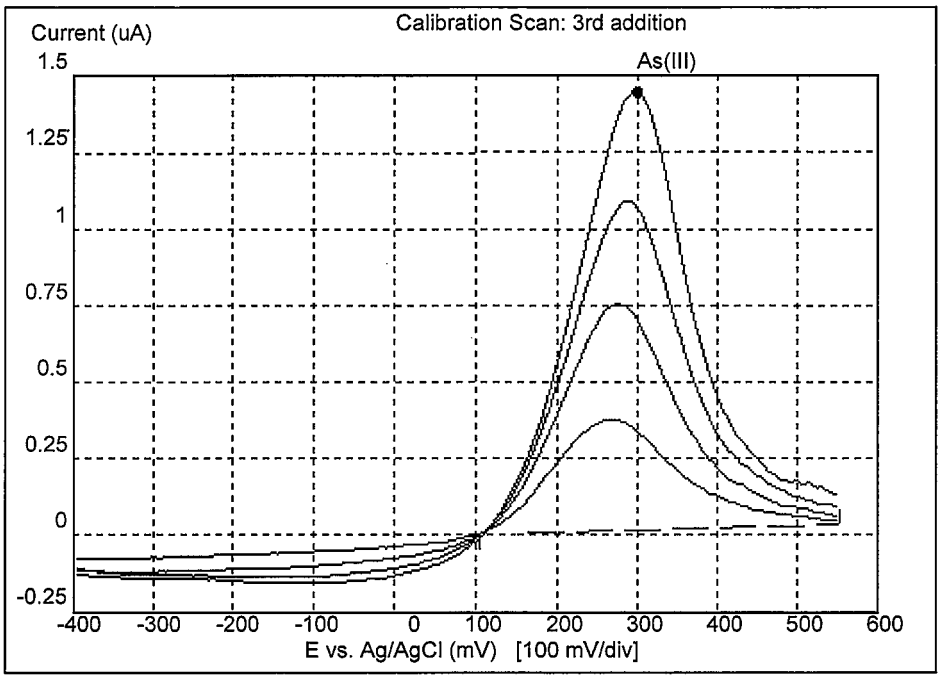
(8X for plate)

Temperature:

Input 1:

Input 2:

29/Aug/06 14:59:04



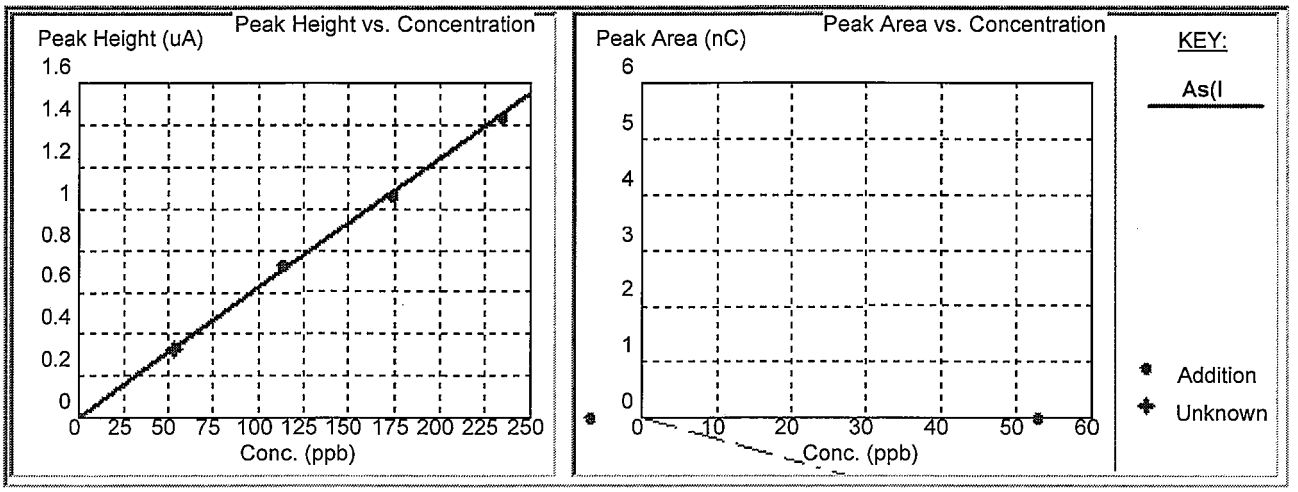
Settings:

Type:	ASV	Clean Time (S)	0.1	Signal Avg.	8
Waveform:	Staircase	Clean Voltage (mV):	600	Frequency (Hz):	2000
Cell	Three Electrode	Plate Time (S)	20	Start Voltage (mV):	-400
☑ Background subtraction		Plate Voltage (mV)	-400	Stop Voltage (mV):	550
		Range (uA):	12.5	Step Voltage (mV):	5

Calibration Summary:

JCWGC As III

Calibration Date: 29/Aug/06 at 14:31:58



Calibration Parameters

Metal	Calib. Mode	Fit Factor	Slope	Zero Offset	Starting Concentration	Concentration in Original Sample
As[III]	**Height**	0.999	0.161 ppb/nA	0 ppt	54 ppb	64 ppb
	Area	0.600	-27 ppb/nC	0 ppt	-130 ppb	-150 ppb

Addition Data for Method of Standard Additions

Metal	Unknown Concentration	Concentration in original aliquot	1st Addition	2nd Addition	3rd Addition	Total added concentration
As(III)	53.8 ppb	64.1 ppb	3.00 uL (60.0 ppb)	3.00 uL (60.0 ppb)	3.00 uL (60.0 ppb)	180 ppb

JCWGC
As III

Starting Volume: 50.000 **mL**

Final Volume: 50.009 **mL**

TraceDetect Nano-Band Explorer

Sample ID: JC0Q4 500x As III

Trace Metals:

As(III): 611 ppb

111,500 ppb

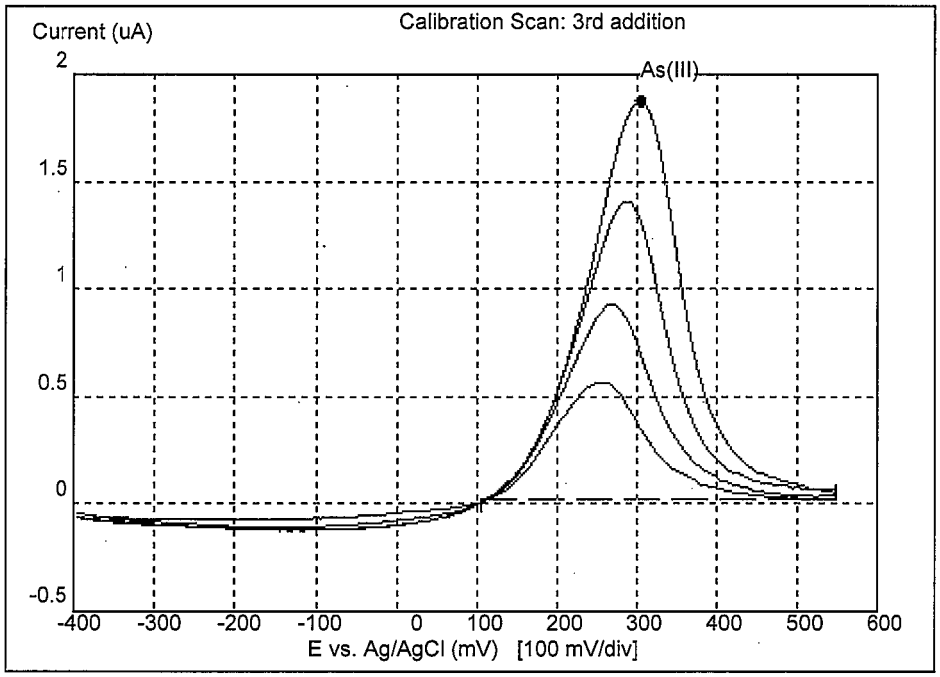
(8000X)

Temperature:

Input 1:

Input 2:

29/Aug/06 15:16:20



Settings:

Type:	ASV	Clean Time (S)	0.1	Signal Avg.	8
Waveform:	Staircase	Clean Voltage (mV):	600	Frequency (Hz):	2000
Cell	Three Electrode	Plate Time (S)	10	Start Voltage (mV):	-400
☑ Background subtraction		Plate Voltage (mV)	-400	Stop Voltage (mV):	550
		Range (uA):	12.5	Step Voltage (mV):	5

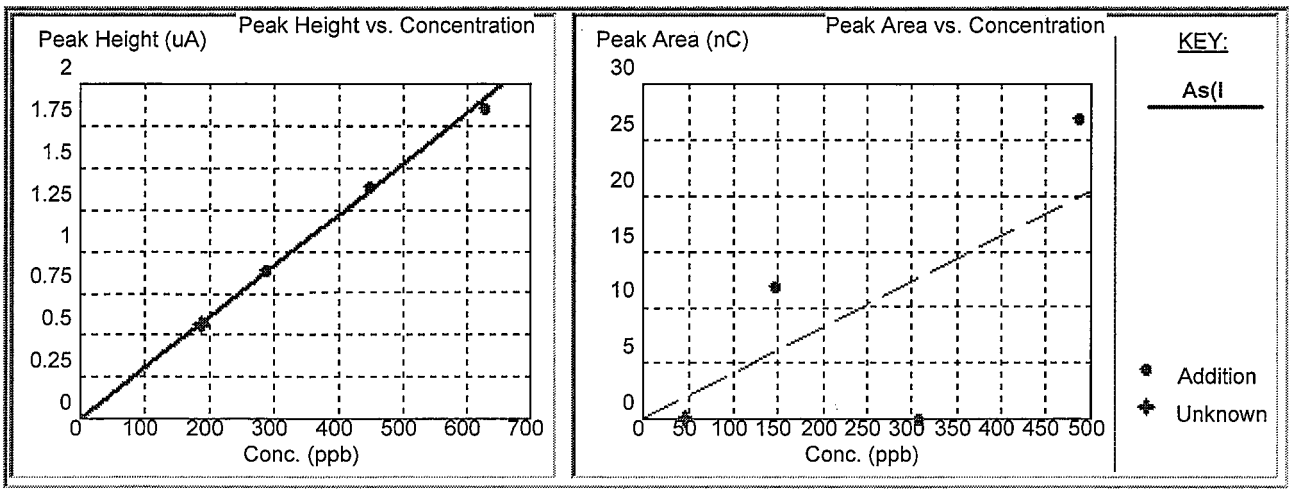
500X manual dilution
16X plate time dilution
8000X total dilution

LDL = 16,000 ppb

Calibration Summary:

JCOQ4 AsIII 500X

Calibration Date: 29/Aug/06 at 15:00:10



Calibration Parameters

Metal	Calib. Mode	Fit Factor	Slope	Zero Offset	Starting Concentration	Concentration in Original Sample
As(III)	**Height**	0.997	0.329 ppb/nA	0 ppt	190 ppb	220 ppb
	Area	0.510	24.4 ppb/nC	0 ppt	46 ppb	55 ppb

Addition Data for Method of Standard Additions

Metal	Unknown Concentration	Concentration in original aliquot	1st Addition	2nd Addition	3rd Addition	Total added concentration
As(III)	187 ppb	223 ppb	5.00 uL (100 ppb)	8.00 uL (160 ppb)	9.00 uL (180 ppb)	440 ppb

JC0Q4 As^{III}
500X

X 500
111,500

Starting Volume: 50.000 **mL**

Final Volume: 50.022 **mL**

TraceDetect Nano-Band Explorer

Sample ID: JCORQ 500x As III

29/Aug/06 15:28:45

Trace Metals:

As(III): 105 ppb

15,500ppb

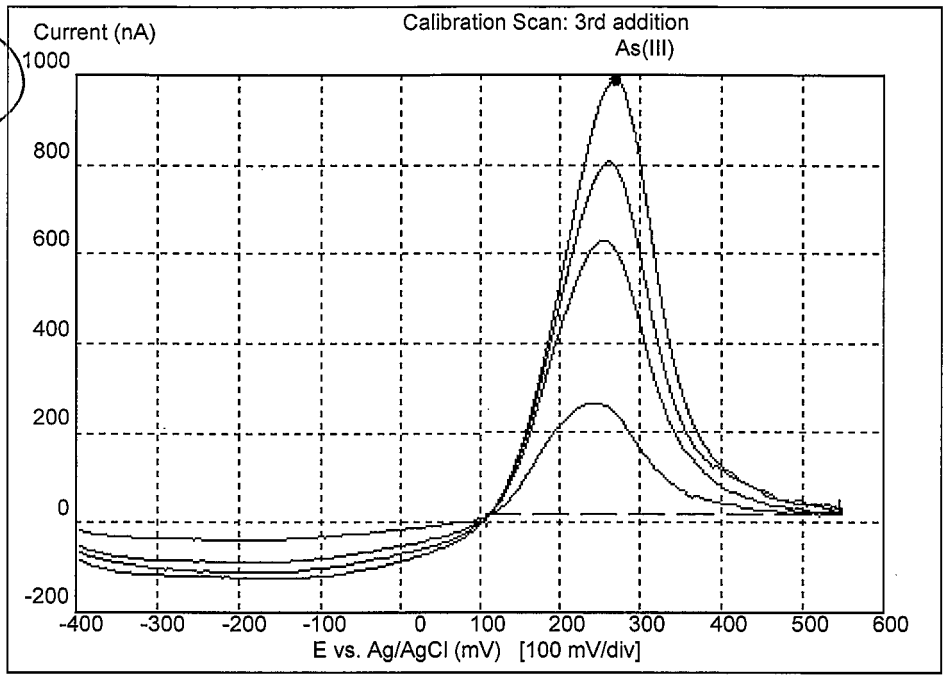
MFG 8/29/06

~~8000~~ 4000X

Temperature:

Input 1:

Input 2:



Settings:

Type:	ASV	Clean Time (S)	0.1	Signal Avg.	8
Waveform:	Staircase	Clean Voltage (mV):	600	Frequency (Hz):	2000
Cell	Three Electrode	Plate Time (S)	20	Start Voltage (mV):	-400
☑ Background subtraction		Plate Voltage (mV)	-400	Stop Voltage (mV):	550
		Range (uA):	12.5	Step Voltage (mV):	5

LDL = 8000ppb

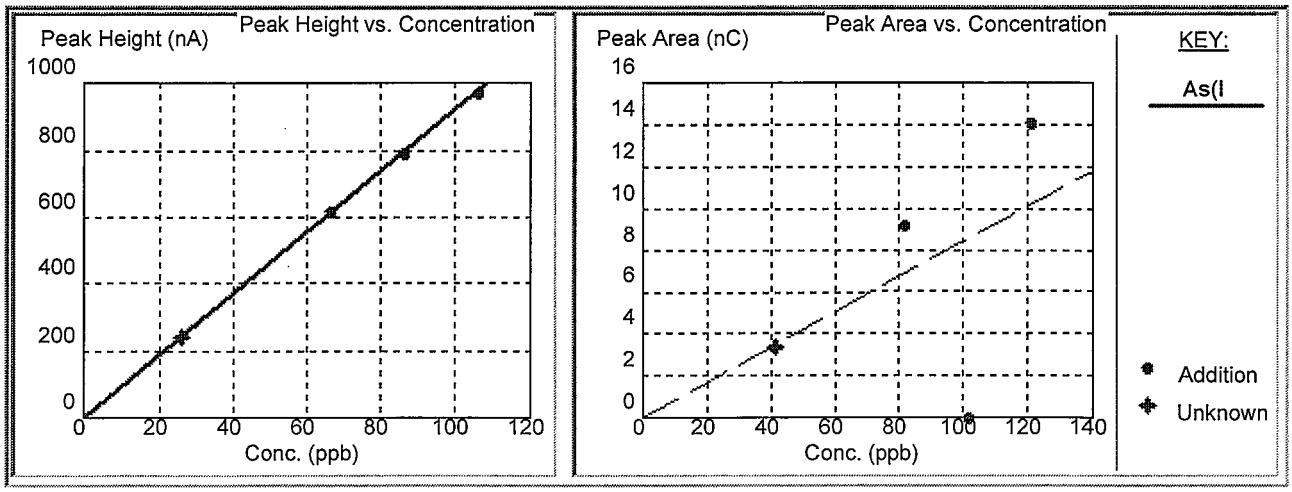
500X manual dilution
8X plate time dilution
4000X total

Calibration Summary:

JCORQ 500 X

Calibration Date: 29/Aug/06 at 15:17:28

As III



Calibration Parameters

Metal	Calib. Mode	Fit Factor	Slope	Zero Offset	Starting Concentration	Concentration in Original Sample
As(III)	**Height**	1.000	0.108 ppb/nA	0 ppt	26 ppb	31 ppb
	Area	0.212	11.9 ppb/nC	0 ppt	41 ppb	49 ppb

Addition Data for Method of Standard Additions

Metal	Unknown Concentration	Concentration in original aliquot	1st Addition	2nd Addition	3rd Addition	Total added concentration
As(III)	26.1 ppb	31.0 ppb	2.00 uL (40.0 ppb)	1.00 uL (20.0 ppb)	1.00 uL (20.0 ppb)	80.0 ppb

JCORQ 500X

As^{III}

x500

15,500 ppb

Starting Volume: 50.000 mL

Final Volume: 50.004 mL

TraceDetect Nano-Band Explorer

Sample ID: JC0R0 As III with 2ppb

Trace Metals:

As(III): 1.76 ppb

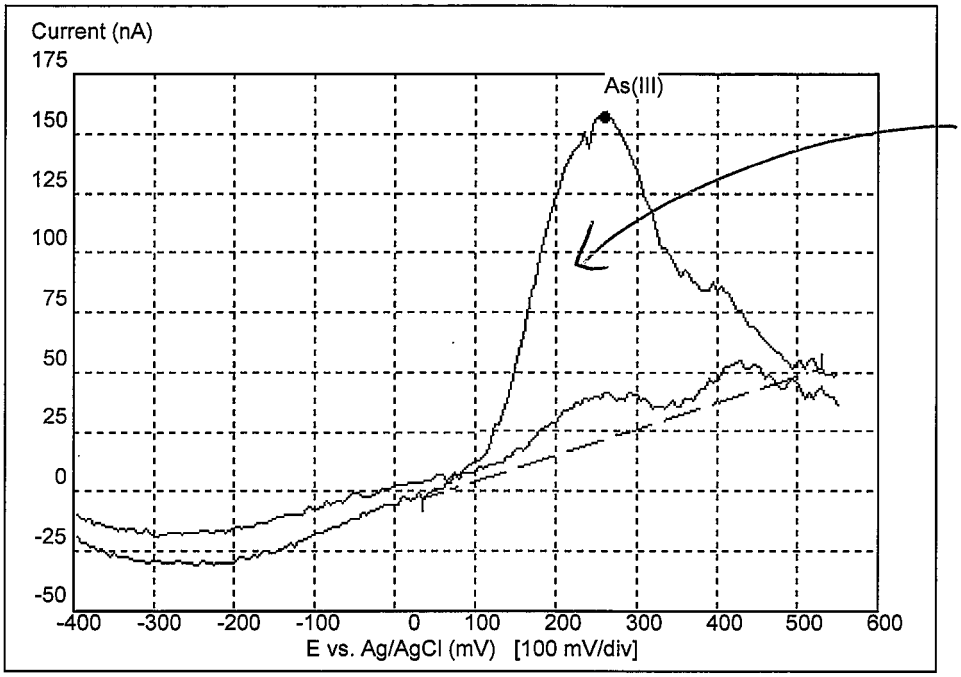
ND

Temperature:

Input 1:

Input 2:

29/Aug/06 15:39:19



2ppb

Settings:

Type:	ASV	Clean Time (S)	0.1	Signal Avg.	8
Waveform:	Staircase	Clean Voltage (mV):	600	Frequency (Hz):	2000
Cell	Three Electrode	Plate Time (S)	160	Start Voltage (mV):	-400
☑ Background subtraction		Plate Voltage (mV)	-400	Stop Voltage (mV):	550
		Range (uA):	12.5	Step Voltage (mV):	5

TraceDetect Nano-Band Explorer

Sample ID: JC1LR As III with 2ppb

Trace Metals:

As(III): 197 ppt

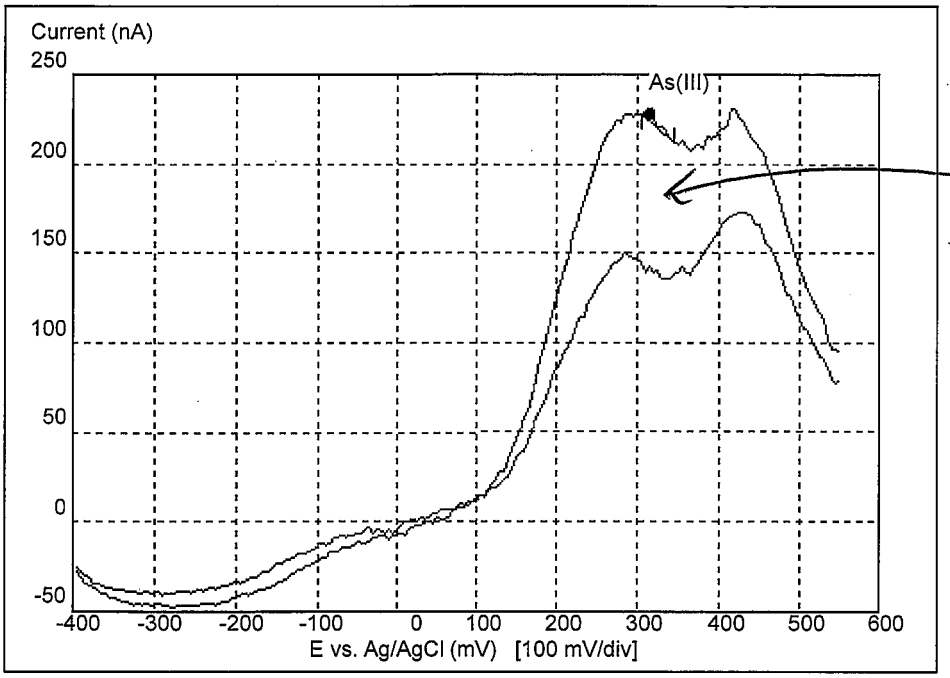
ND

Temperature:

Input 1:

Input 2:

29/Aug/06 13:33:13



2ppb

Settings:

Type:	ASV	Clean Time (S)	0.1	Signal Avg.	8
Waveform:	Staircase	Clean Voltage (mV):	600	Frequency (Hz):	2000
Cell	Three Electrode	Plate Time (S)	160	Start Voltage (mV):	-400
☑ Background subtraction		Plate Voltage (mV)	-400	Stop Voltage (mV):	550
		Range (uA):	12.5	Step Voltage (mV):	5

TraceDetect Nano-Band Explorer

Sample ID: Blank As III with 2ppb

Trace Metals:

As(III): 1.34 ppb

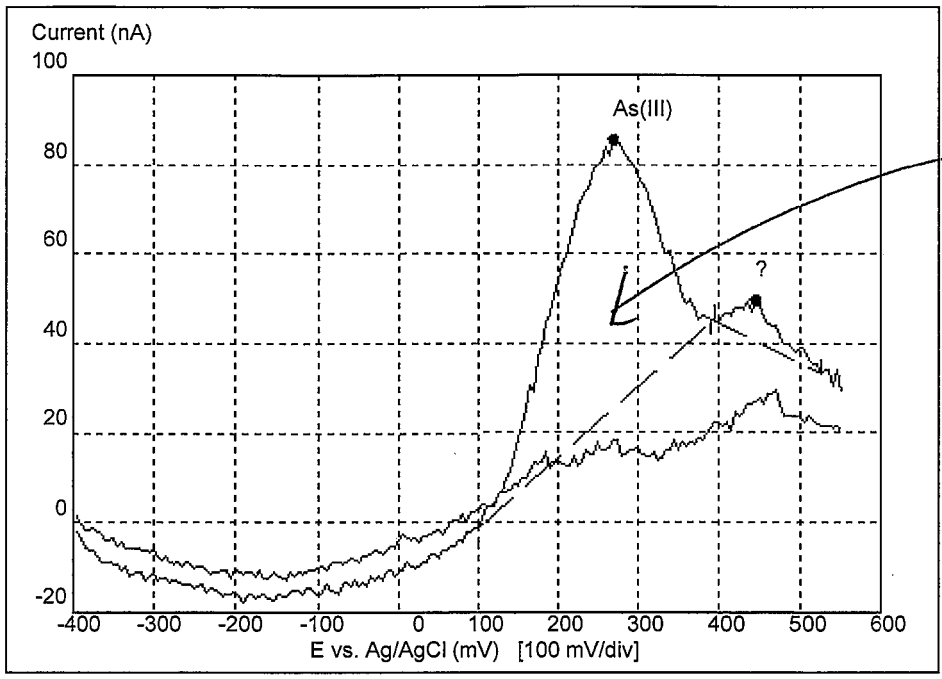
ND

Temperature:

Input 1:

Input 2:

29/Aug/06 16:37:59



2ppb

Settings:

Type:	ASV	Clean Time (S)	0.1	Signal Avg.	8
Waveform:	Staircase	Clean Voltage (mV):	600	Frequency (Hz):	2000
Cell	Three Electrode	Plate Time (S)	160	Start Voltage (mV):	-400
☑ Background subtraction		Plate Voltage (mV)	-400	Stop Voltage (mV):	550
		Range (uA):	12.5	Step Voltage (mV):	5

TraceDetect Nano-Band Explorer

Sample ID: LCS AsIII

Trace Metals:

As(III): 48.3 ppb

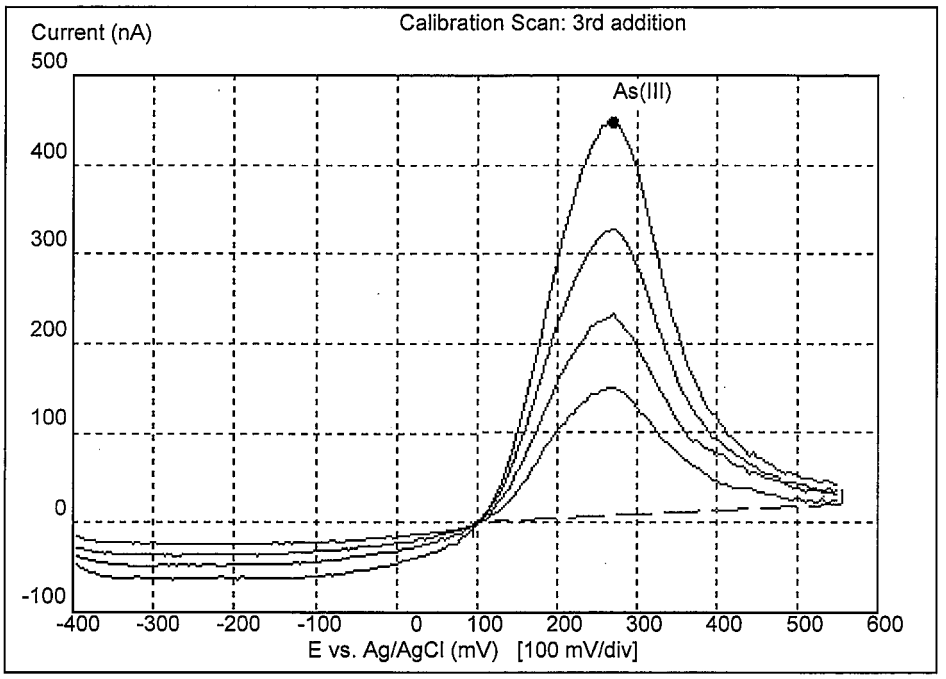
16.5 ppb

Temperature:

Input 1:

Input 2:

29/Aug/06 16:57:42



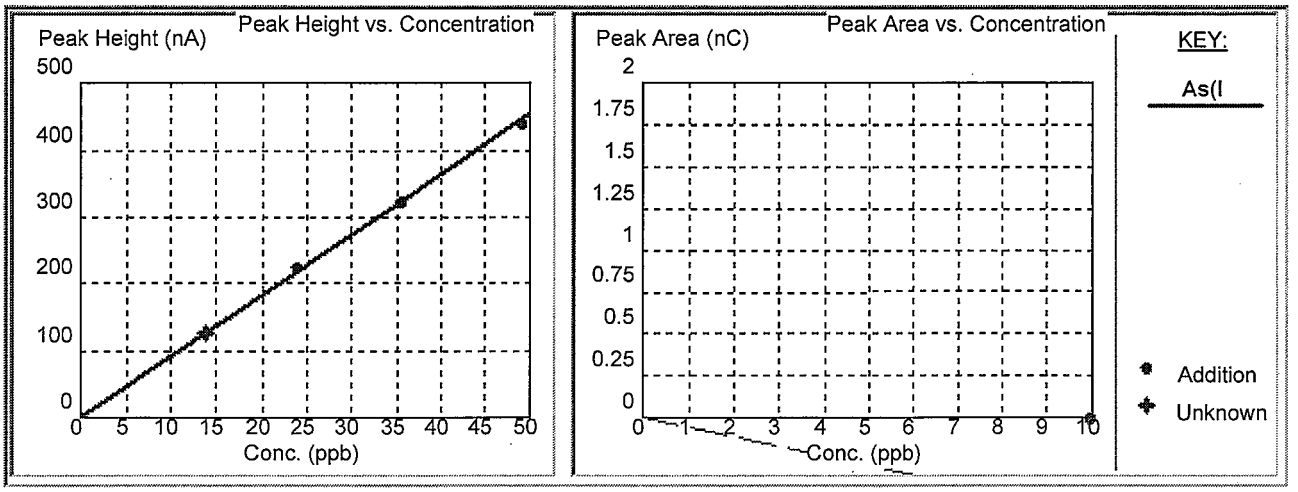
Settings:

Type:	ASV	Clean Time (S)	0.1	Signal Avg.	8
Waveform:	Staircase	Clean Voltage (mV)	600	Frequency (Hz):	2000
Cell	Three Electrode	Plate Time (S)	40	Start Voltage (mV):	-400
		Plate Voltage (mV)	-400	Stop Voltage (mV):	550
		Range (uA):	12.5	Step Voltage (mV):	5

☑ Background subtraction

Calibration Summary:

Calibration Date: 29/Aug/06 at 16:29:53



LCS As III

Calibration Parameters

Metal	Calib. Mode	Fit Factor	Slope	Zero Offset	Starting Concentration	Concentration in Original Sample
As(III)	**Height**	0.999	0.110 ppb/nA	0 ppt	14 ppb	17 ppb
	Area	0.537	-17 ppb/nC	0 ppt	-25 ppb	-30 ppb

Addition Data for Method of Standard Additions

Metal	Unknown Concentration	Concentration in original aliquot	1st Addition	2nd Addition	3rd Addition	Total added concentration
As(III)	13.9 ppb	16.5 ppb	500 uL (9.90 ppb)	600 uL (11.7 ppb)	700 uL (13.5 ppb)	35.2 ppb

LCS As III

Starting Volume: 50.000 **mL**

Final Volume: 51.800 **mL**

TraceDetect Nano-Band Explorer

Sample ID: LCSD AsIII

Trace Metals:

As(III): 52.0 ppb

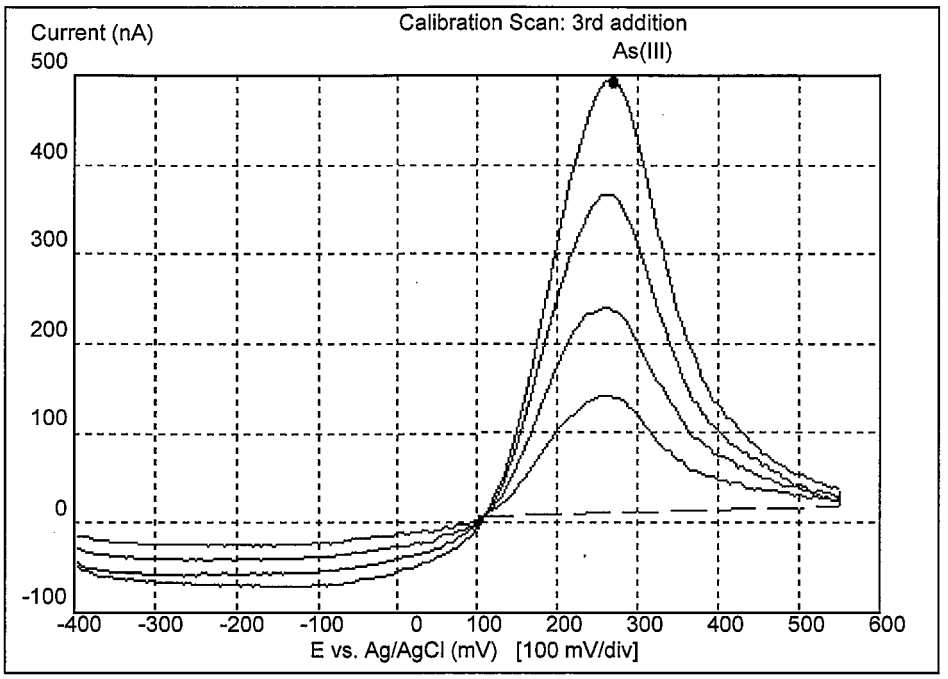
15.1 ppb

Temperature:

Input 1:

Input 2:

29/Aug/06 17:06:25



Settings:

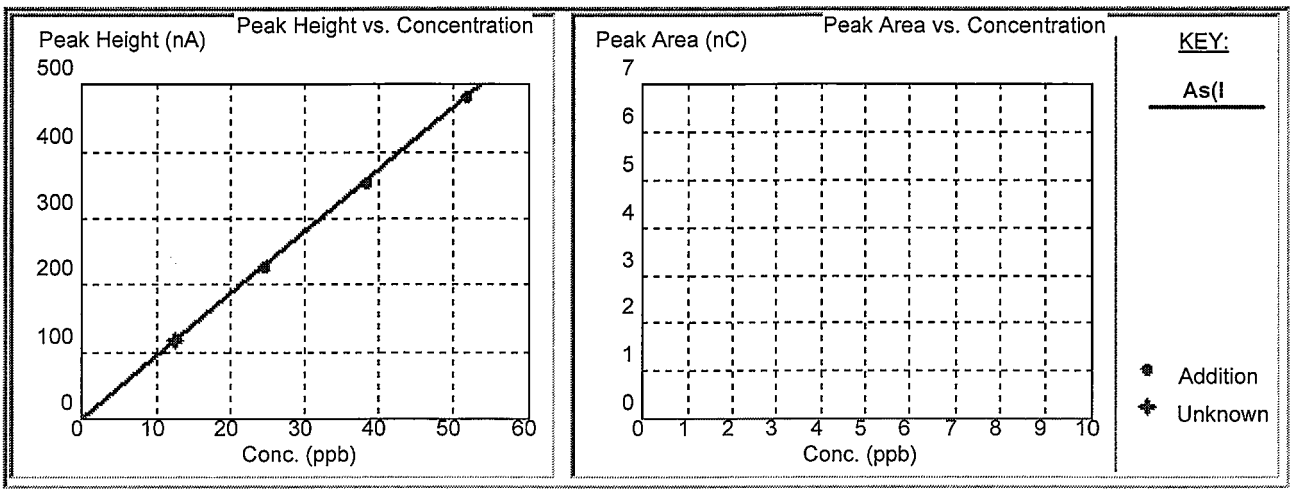
Type:	ASV	Clean Time (S)	0.1	Signal Avg.	8
Waveform:	Staircase	Clean Voltage (mV):	600	Frequency (Hz):	2000
Cell	Three Electrode	Plate Time (S)	40	Start Voltage (mV):	-400
☑ Background subtraction		Plate Voltage (mV)	-400	Stop Voltage (mV):	550
		Range (uA):	12.5	Step Voltage (mV):	5

LCSD

As III

Calibration Summary:

Calibration Date: 29/Aug/06 at 16:58:52



Calibration Parameters

Metal	Calib. Mode	Fit Factor	Slope	Zero Offset	Starting Concentration	Concentration in Original Sample
As[III]	**Height**	1.000	0.107 ppb/nA	0 ppt	13 ppb	15 ppb
	Area	0.036	-598 ppb/nC	0 ppt	-1.9 ppm	-2.3 ppm

Addition Data for Method of Standard Additions

Metal	Unknown Concentration	Concentration in original aliquot	1st Addition	2nd Addition	3rd Addition	Total added concentration
As(III)	12.7 ppb	15.1 ppb	600 uL (11.9 ppb)	700 uL (13.6 ppb)	700 uL (13.5 ppb)	39.0 ppb

LCSD As III

Starting Volume: 50.000 **mL**

Final Volume: 52.000 **mL**

TraceDetect Nano-Band Explorer

Sample ID: JCGPM MS As III

Trace Metals:

As(III): 33.5 ppb

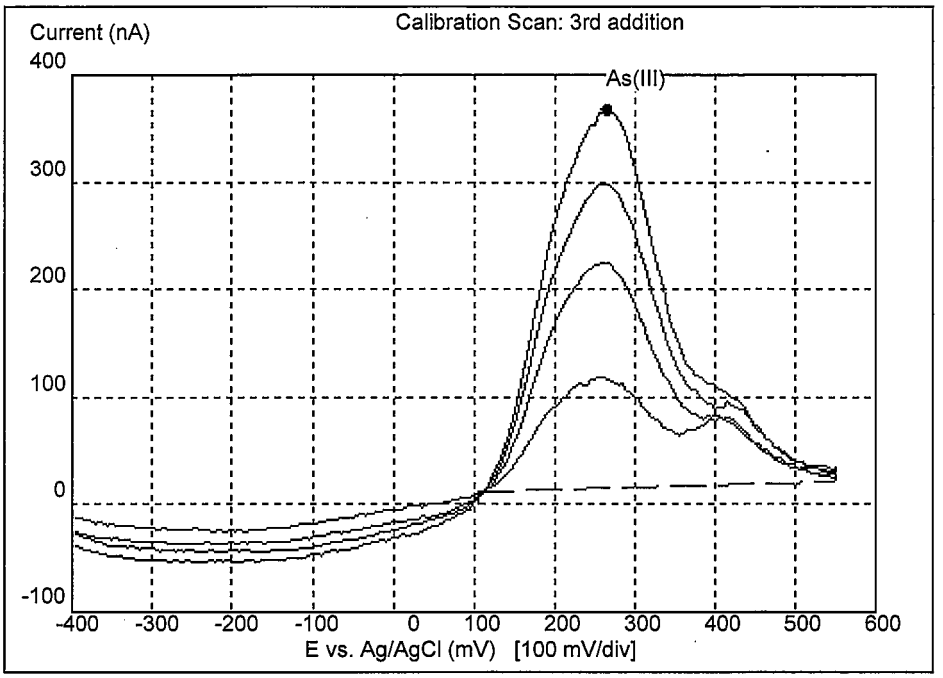
10.8 ppb

Temperature:

Input 1:

Input 2:

29/Aug/06 16:06:53



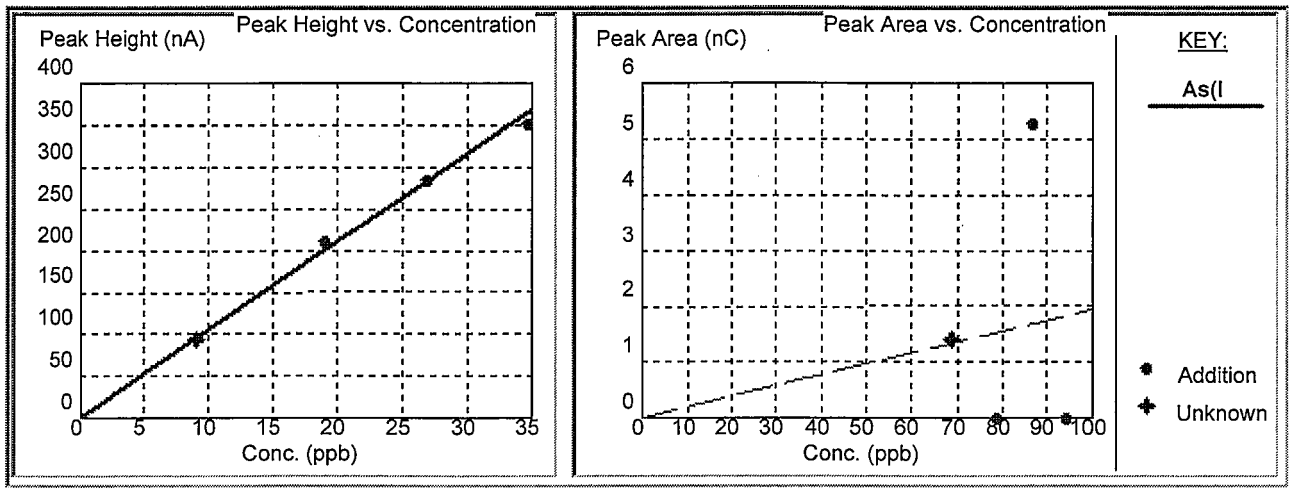
Settings:

Type:	ASV	Clean Time (S)	0.1	Signal Avg.	8
Waveform:	Staircase	Clean Voltage (mV):	600	Frequency (Hz):	2000
Cell	Three Electrode	Plate Time (S)	40	Start Voltage (mV):	-400
☑ Background subtraction		Plate Voltage (mV)	-400	Stop Voltage (mV):	550
		Range (uA):	12.5	Step Voltage (mV):	5

Calibration Summary:

JCGPM MS AsIII

Calibration Date: 29/Aug/06 at 15:29:36



Calibration Parameters

Metal	Calib. Mode	Fit Factor	Slope	Zero Offset	Starting Concentration	Concentration in Original Sample
As[III]	**Height**	0.995	0.095 ppb/nA	0 ppt	9.1 ppb	11 ppb
	Area	0.003	51.8 ppb/nC	0 ppt	69 ppb	82 ppb

Addition Data for Method of Standard Additions

Metal	Unknown Concentration	Concentration in original aliquot	1st Addition	2nd Addition	3rd Addition	Total added concentration
As(III)	9.10 ppb	10.8 ppb	500 uL (9.90 ppb)	400 uL (7.86 ppb)	400 uL (7.80 ppb)	25.6 ppb

JCGPM MS
As^{III}

Starting Volume: 50.000 **mL**

Final Volume: 51.300 **mL**

TraceDetect Nano-Band Explorer

Sample ID: JCGPM MSD As III

29/Aug/06 16:26:43

Trace Metals:

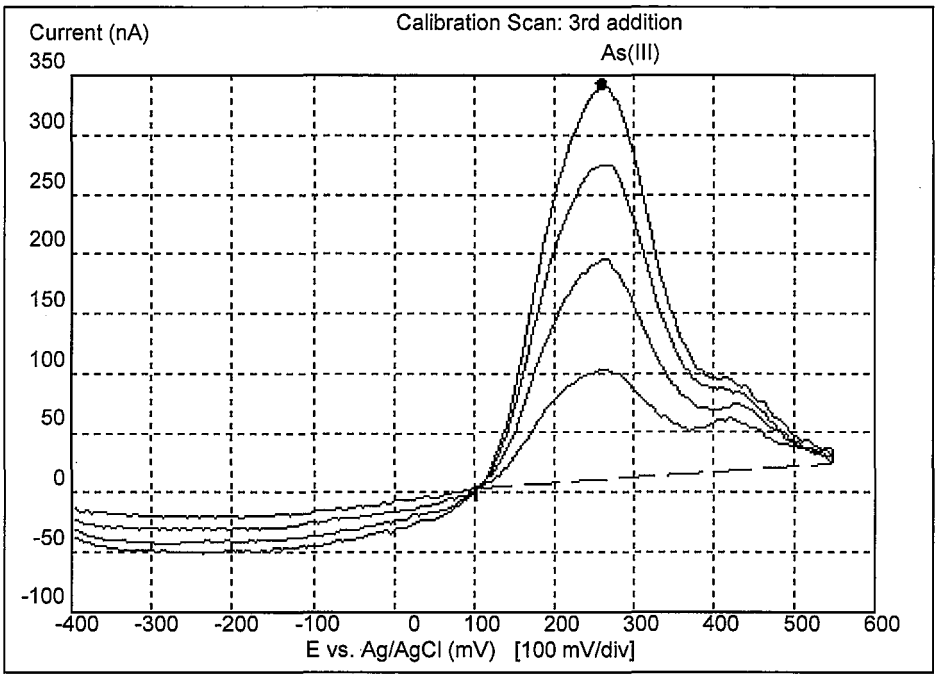
As(III): 30.0 ppb

9.18 ppb

Temperature:

Input 1:

Input 2:



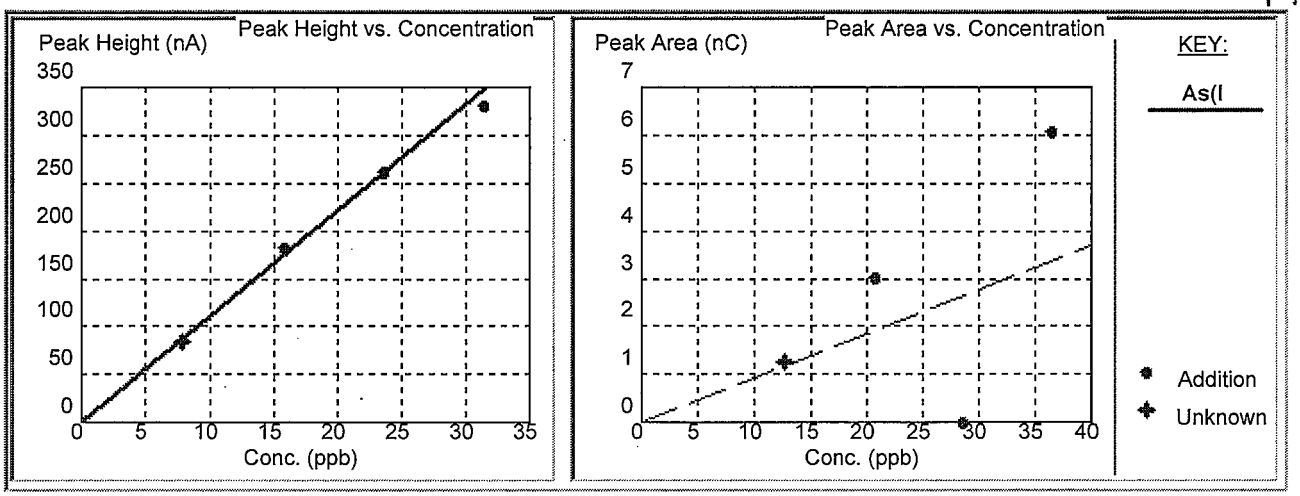
Settings:

Type:	ASV	Clean Time (S)	0.1	Signal Avg.	8
Waveform:	Staircase	Clean Voltage (mV):	600	Frequency (Hz):	2000
Cell	Three Electrode	Plate Time (S)	40	Start Voltage (mV):	-400
☑ Background subtraction		Plate Voltage (mV)	-400	Stop Voltage (mV):	550
		Range (uA):	12.5	Step Voltage (mV):	5

Calibration Summary:

JCGPM MSD AsIII

Calibration Date: 29/Aug/06 at 16:11:40



Calibration Parameters

Metal	Calib. Mode	Fit Factor	Slope	Zero Offset	Starting Concentration	Concentration in Original Sample
As(III)	**Height**	0.993	0.090 ppb/nA	0 ppt	7.7 ppb	9.2 ppb
	Area	0.309	10.8 ppb/nC	0 ppt	13 ppb	15 ppb

Addition Data for Method of Standard Additions

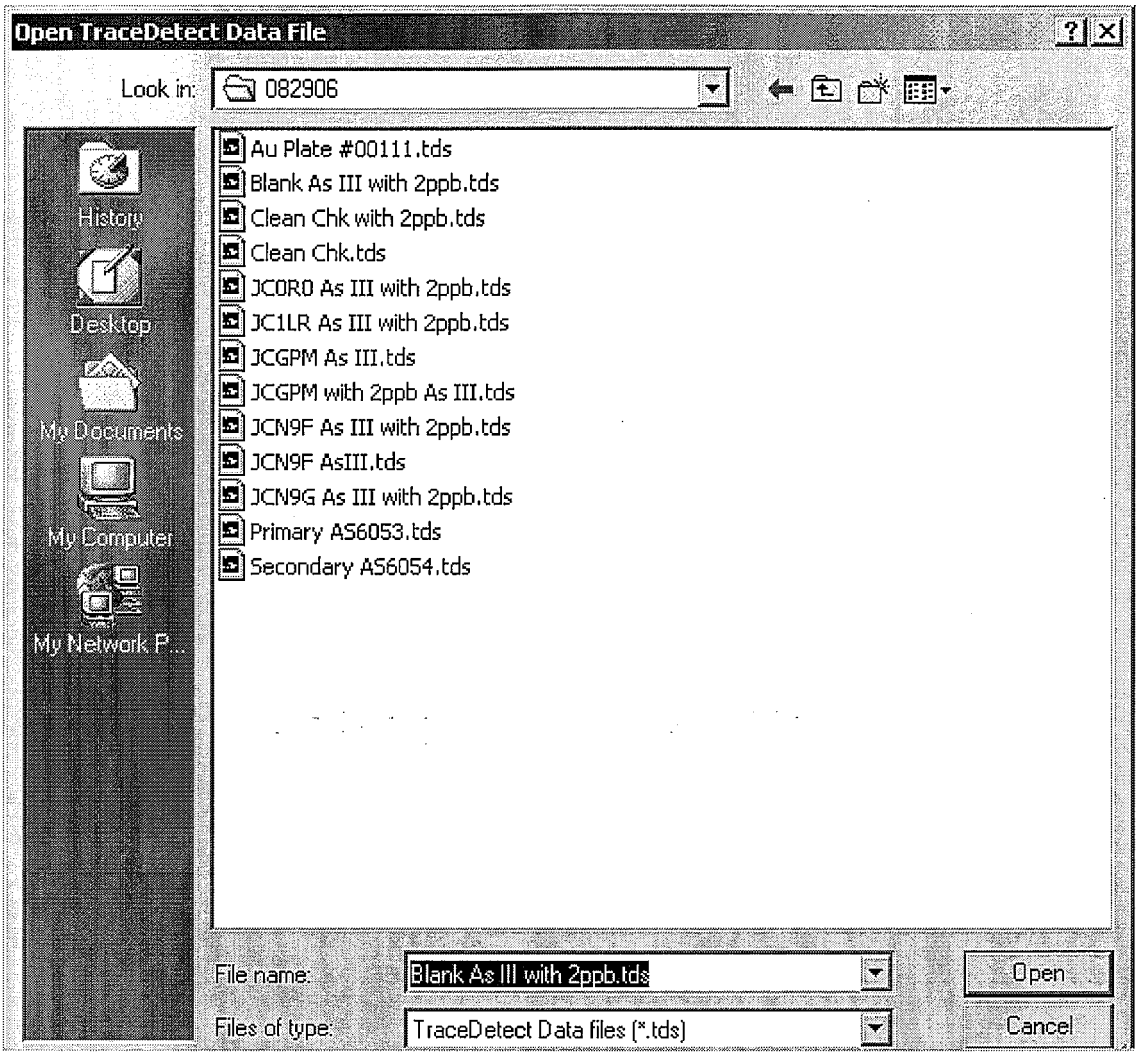
Metal	Unknown Concentration	Concentration in original aliquot	1st Addition	2nd Addition	3rd Addition	Total added concentration
As(III)	7.72 ppb	9.18 ppb	400 uL (7.94 ppb)	400 uL (7.87 ppb)	400 uL (7.81 ppb)	23.6 ppb

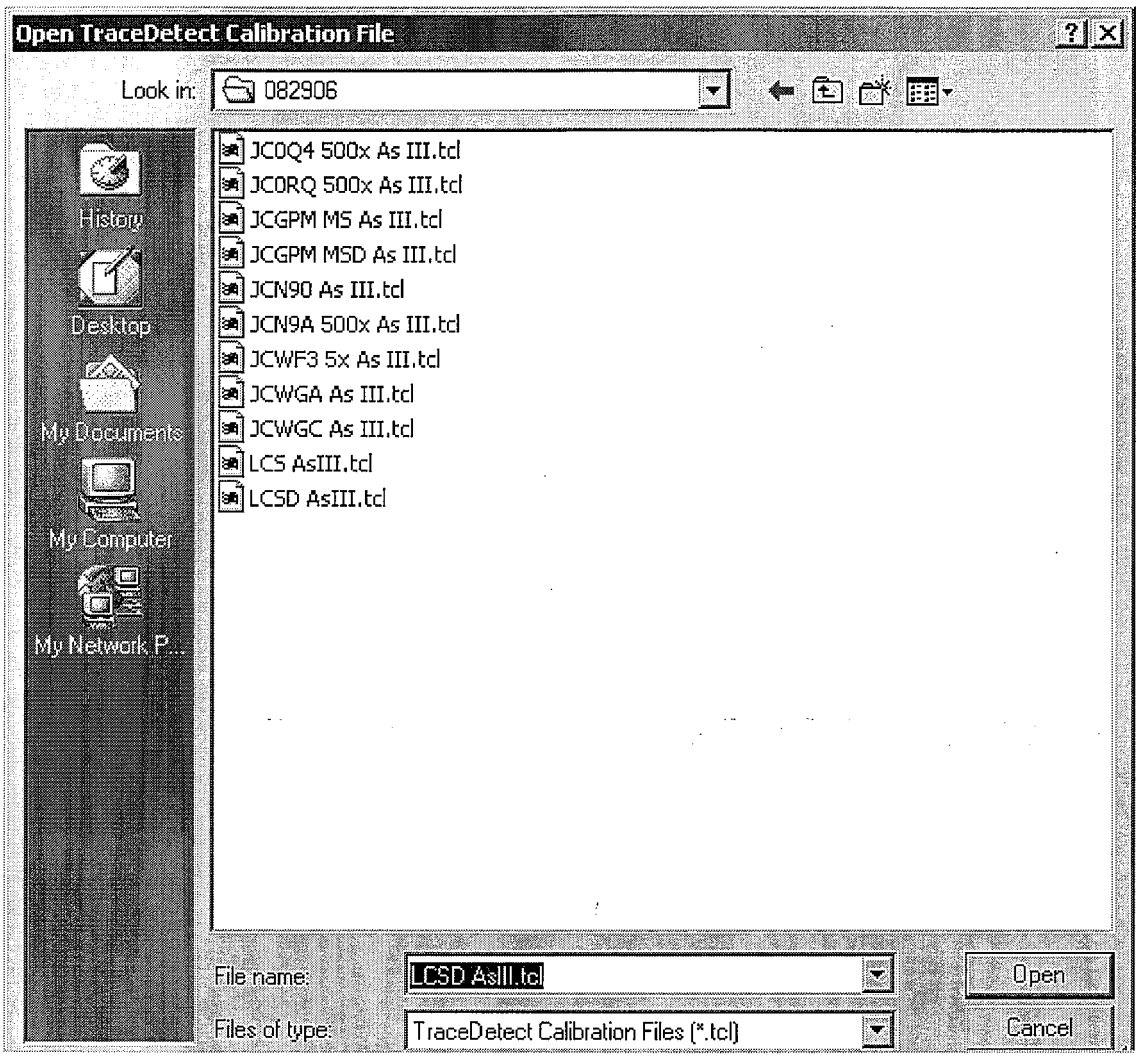
JCGPM
MSD
As^{III}

Starting Volume: 50.000 mL

Final Volume: 51.200 mL

6241456


Open TraceDetect Data File
Look in:
082906
History
Desktop
My Documents
My Computer
My Network P...
Au Plate #00111.tds
Blank As III with 2ppb.tds
Clean Chk with 2ppb.tds
Clean Chk.tds
JC0R0 As III with 2ppb.tds
JC1LR As III with 2ppb.tds
JCGPM As III.tds
JCGPM with 2ppb As III.tds
JCN9F As III with 2ppb.tds
JCN9F AsIII.tds
JCN9G As III with 2ppb.tds
Primary AS6053.tds
Secondary AS6054.tds
File name:
Blank As III with 2ppb.tds
Files of type:
TraceDetect Data files (*.tds)
Open
Cancel


Open TraceDetect Calibration File
Look in:
082906
History
Desktop
My Documents
My Computer
My Network P...
JC0Q4 500x As III.tcl
JC0RQ 500x As III.tcl
JCGPM MS As III.tcl
JCGPM MSD As III.tcl
JCN90 As III.tcl
JCN9A 500x As III.tcl
JCWF3 5x As III.tcl
JCWGA As III.tcl
JCWGC As III.tcl
LCS AsIII.tcl
LCSD AsIII.tcl
File name:
LCSD AsIII.tcl
Open
Files of type:
TraceDetect Calibration Files (*.tcl)
Cancel

TraceDetect Nano-Band Explorer - C:\Program Files\Common Files\AS Temp\082906\Au Plate #00111.tds

Sample ID: Au Plate #00111

Trace Metals:

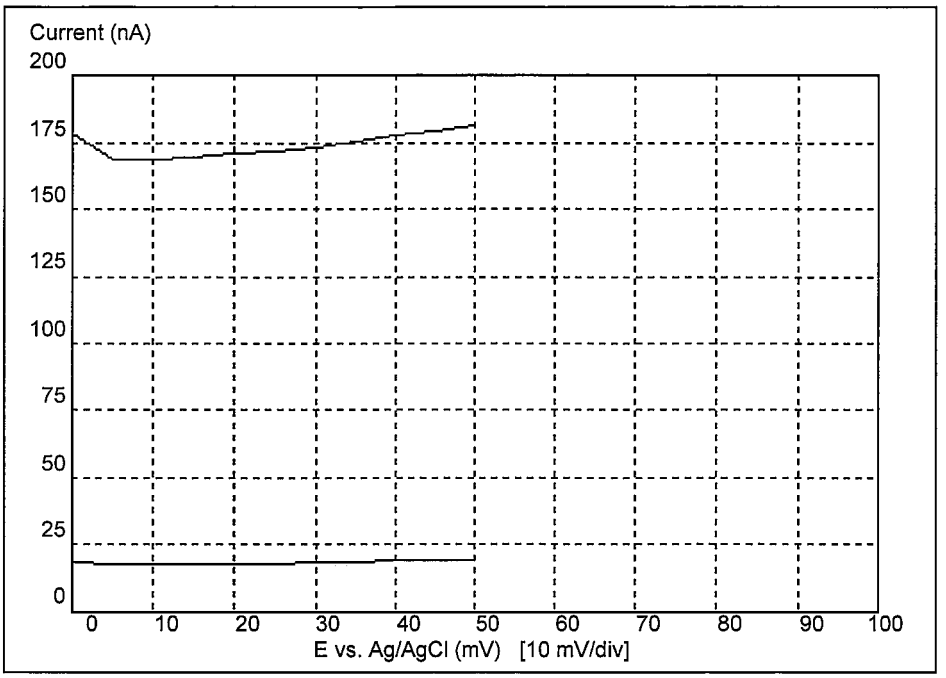
As(III): 26.1 nA

Temperature:

Input 1:

Input 2:

29/Aug/06 10:08:03



Settings:

Type:	ASV	Clean Time (S)	0	Signal Avg.	16
Waveform:	Sq. Wave	Clean Voltage (mV):	100	Frequency (Hz):	1000
Cell	Three Electrode	Plate Time (S)	55	Start Voltage (mV):	-50
☐ Background subtraction		Plate Voltage (mV)	-50	Stop Voltage (mV):	5
		Range (uA):	1.25	Step Voltage (mV):	5

TraceDetect Nano-Band Explorer

Sample ID: Clean Chk with 2ppb

Trace Metals:

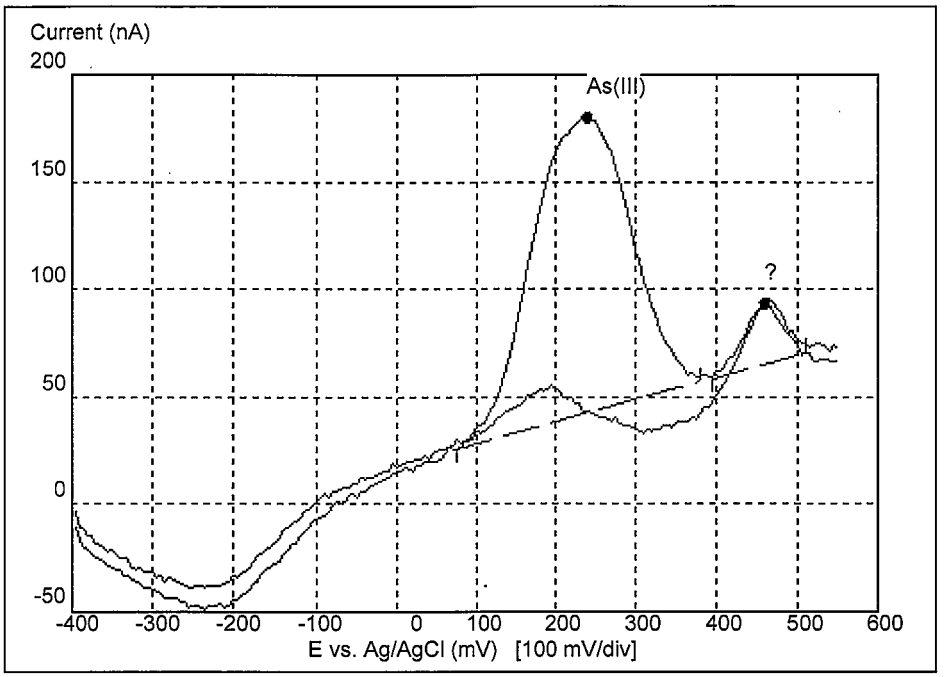
As[III]: 111 ppb

Temperature:

Input 1:

Input 2:

29/Aug/06 10:35:16



Settings:

Type:	ASV	Clean Time (S)	0.1	Signal Avg.	8
Waveform:	Staircase	Clean Voltage (mV):	600	Frequency (Hz):	2000
Cell	Three Electrode	Plate Time (S)	160	Start Voltage (mV):	-400
☑ Background subtraction		Plate Voltage (mV)	-400	Stop Voltage (mV):	550
		Range (uA):	12.5	Step Voltage (mV):	5

TraceDetect Nano-Band Explorer - C:\Program Files\Common Files\AS Temp\082906\Secondary AS6054.tds

Sample ID: Secondary AS6054

29/Aug/06 10:43:34

Trace Metals:

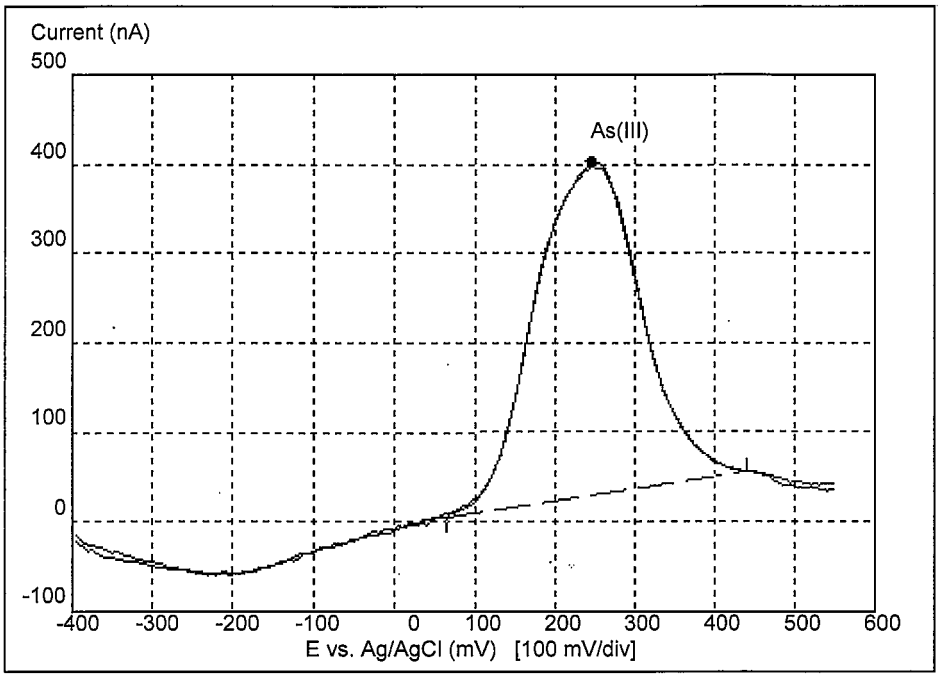
As(III): 375 nA

375/381 = 98%

Temperature:

Input 1:

Input 2:



Settings:

Type:	ASV	Clean Time (S)	0.1	Signal Avg.	8
Waveform:	Staircase	Clean Voltage (mV):	600	Frequency (Hz):	2000
Cell	Three Electrode	Plate Time (S)	40	Start Voltage (mV):	-400
☑ Background subtraction		Plate Voltage (mV)	-400	Stop Voltage (mV):	550
		Range (uA):	12.5	Step Voltage (mV):	5

TraceDetect Nano-Band Explorer

Sample ID: Primary AS6053

Trace Metals:

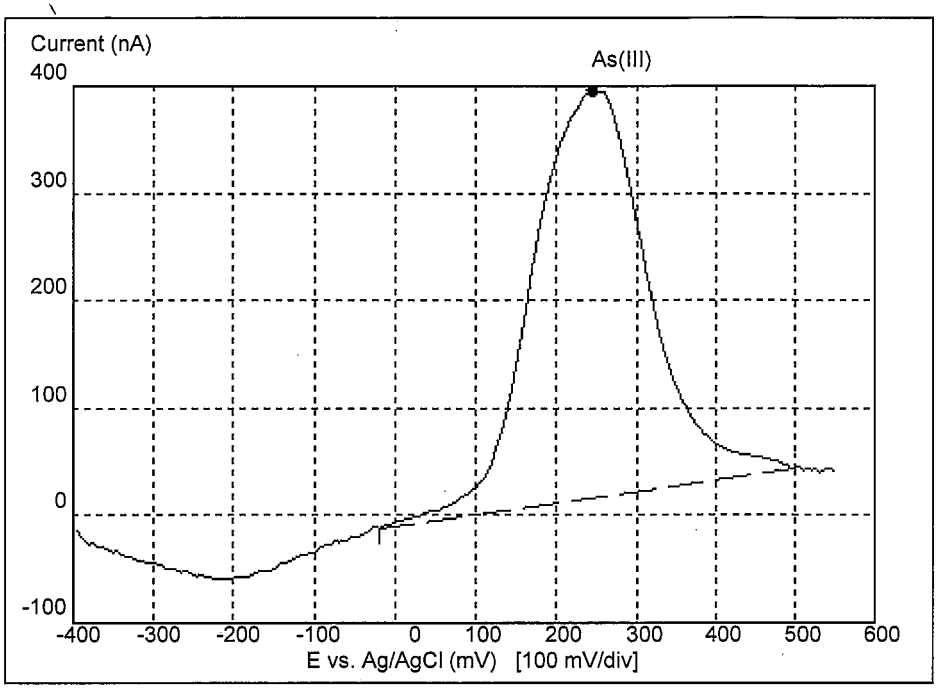
As[III]: 381 nA

Temperature:

Input 1:

Input 2:

29/Aug/06 10:41:31



Settings:

Type:	ASV	Clean Time (S)	0.1	Signal Avg.	8
Waveform:	Staircase	Clean Voltage (mV):	600	Frequency (Hz):	2000
Cell	Three Electrode	Plate Time (S)	40	Start Voltage (mV):	-400
☑ Background subtraction		Plate Voltage (mV)	-400	Stop Voltage (mV):	550
		Range (uA):	12.5	Step Voltage (mV):	5

STL North Canton Arsenic (III) Data Review Checklist

Run/Project Information

Run Date: 8/31/06 **Analyst:** [illegible] **Instrument:** _____
Prep Batches Run: _____

Methods used: **7063 mod :** NC-WC-000X Rev 1

Review Items

A. Instrument Setup	Yes	No	N/A	2ndLevel
1. Electrode sensitivity check?	✓			✓
2. MSA working standard and verification standard within control limits?	✓			✓
3. Cleanliness check (ICB) within +/- RL?	✓			✓
B. Sample Results				
1. Were non-detect samples verified with single point MSA?	✓			✓
2. All samples with As(III) quantified with 3-4 point MSA?	✓			✓
3. Sample analyses done within holding time?	✓			✓
C. Preparation/Matrix QC				
1. Samples preserved in the field?	✓			✓
2. LCS done per prep batch and within QC limits?	✓			✓
3. Method blank done per prep batch and < RL?	✓			✓
4. MS run at required frequency (1 per 20 samples) and within limits?		✓		✓
5. MSD or DU run at required frequency (1 per 20 samples) and RPD within limits?		✓		✓
D. Other				
1. Are all nonconformances documented appropriately?			✓	✓
2. Current MDL data on file?	✓			✓
3. Calculations and Transcriptions checked for error?	✓			✓
4. All client/ project specific requirements met?	✓			✓
5. Date of analysis verified as correct?	✓			✓

Analyst: [signature] **Date:** 8/31/06
Comments:

2nd Level Reviewer: [signature] **Date:** 8/31/06

Standard, Reagent and Supply Numbers

MSA Working Std AS6054 **MSA Verification Std** AS6053 **MS As(V) Std** AS6055

Au plate soln WR60965 **conc HCl** WR60283 **Cu Remover** _____ **C18** _____

Acid ext _____ **Basic ext** ____

NaThio WR60936
Starch WR60885
Iodine WR60950

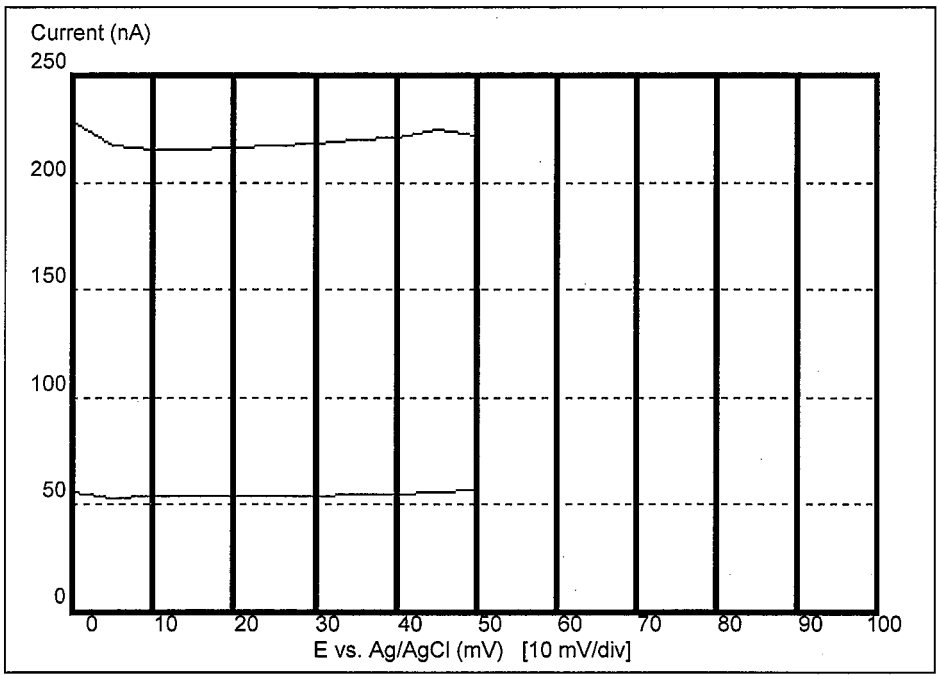
TraceDetect Nano-Band Explorer

Sample ID: Au Plate #00117

Trace Metals:

As(III+V): 614 ppt

31/Aug/06 11:54:06



Temperature:

Input 1:

Input 2:

Settings:

Type:	ASV	Clean Time (S)	0	Signal Avg.	16
Waveform:	Sq. Wave	Clean Voltage (mV):	100	Frequency (Hz):	1000
Cell	Three Electrode	Plate Time (S)	55	Start Voltage (mV):	-50
		Plate Voltage (mV)	-50	Stop Voltage (mV):	5
		Range (uA):	1.25	Step Voltage (mV):	5

☐ Background subtraction

TraceDetect Nano-Band Explorer

Sample ID: Au Plate #2 00117

Trace Metals:

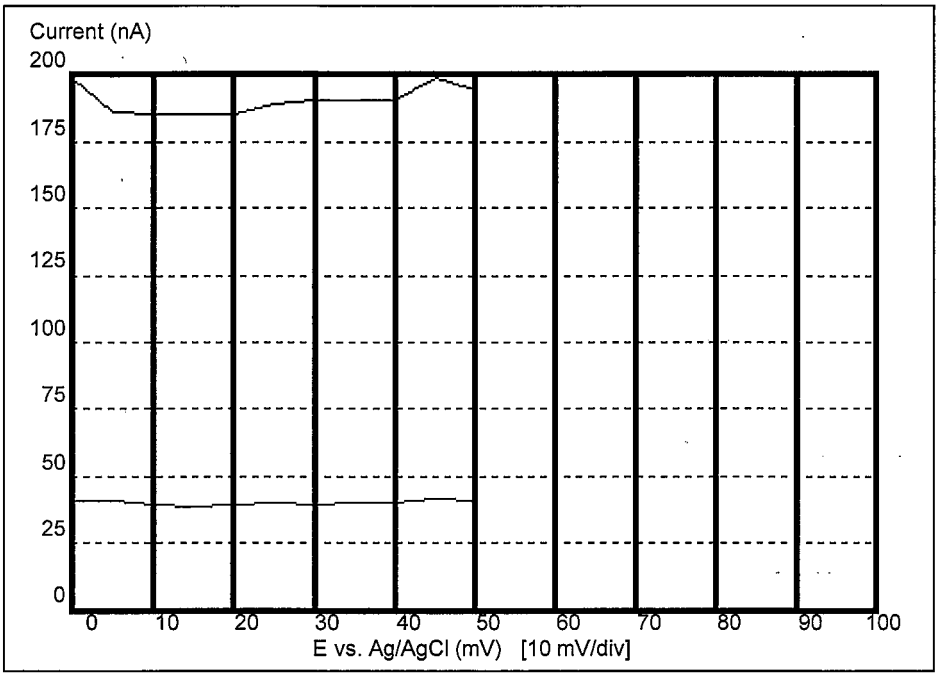
As(III+V) < 1.2 ppb

Temperature:

Input 1:

Input 2:

31/Aug/06 14:24:38



Settings:

Type:	ASV	Clean Time (S)	0	Signal Avg.	16
Waveform:	Sq. Wave	Clean Voltage (mV):	100	Frequency (Hz):	1000
Cell	Three Electrode	Plate Time (S)	55	Start Voltage (mV):	-50
		Plate Voltage (mV)	-50	Stop Voltage (mV):	5
		Range (uA):	1.25	Step Voltage (mV):	5

☐ Background subtraction

TraceDetect Nano-Band Explorer

Sample ID: Au Plate #3

Trace Metals:

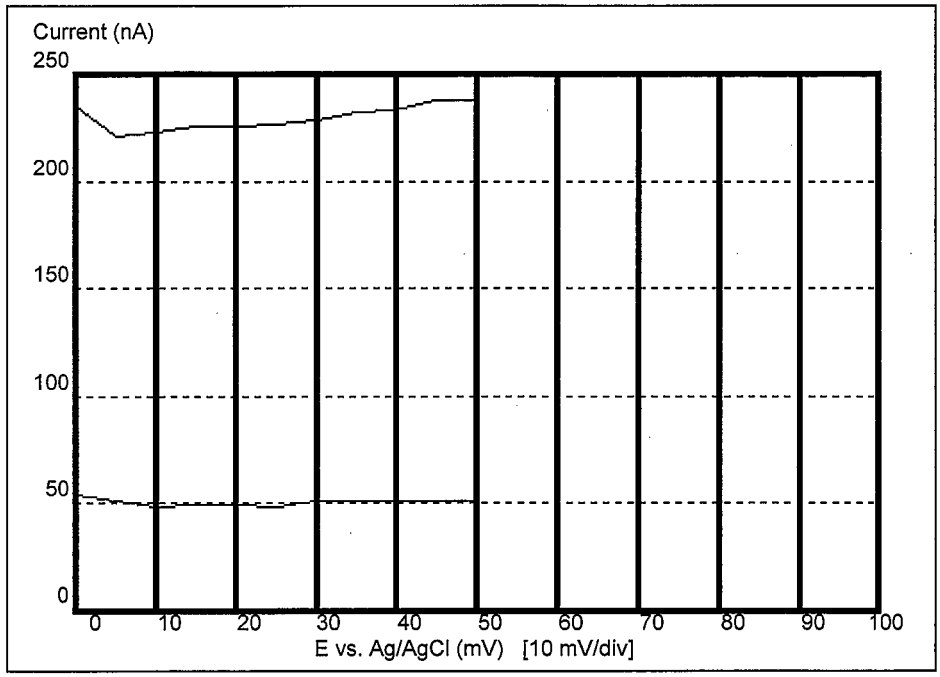
As(III+V) < 410 ppt

Temperature:

Input 1:

Input 2:

31/Aug/06 16:16:32



Settings:

Type:	ASV	Clean Time (S)	0	Signal Avg.	16
Waveform:	Sq. Wave	Clean Voltage (mV):	100	Frequency (Hz):	1000
Cell	Three Electrode	Plate Time (S)	55	Start Voltage (mV):	-50
		Plate Voltage (mV)	-50	Stop Voltage (mV):	5
		Range (uA):	1.25	Step Voltage (mV):	5

☐ Background subtraction

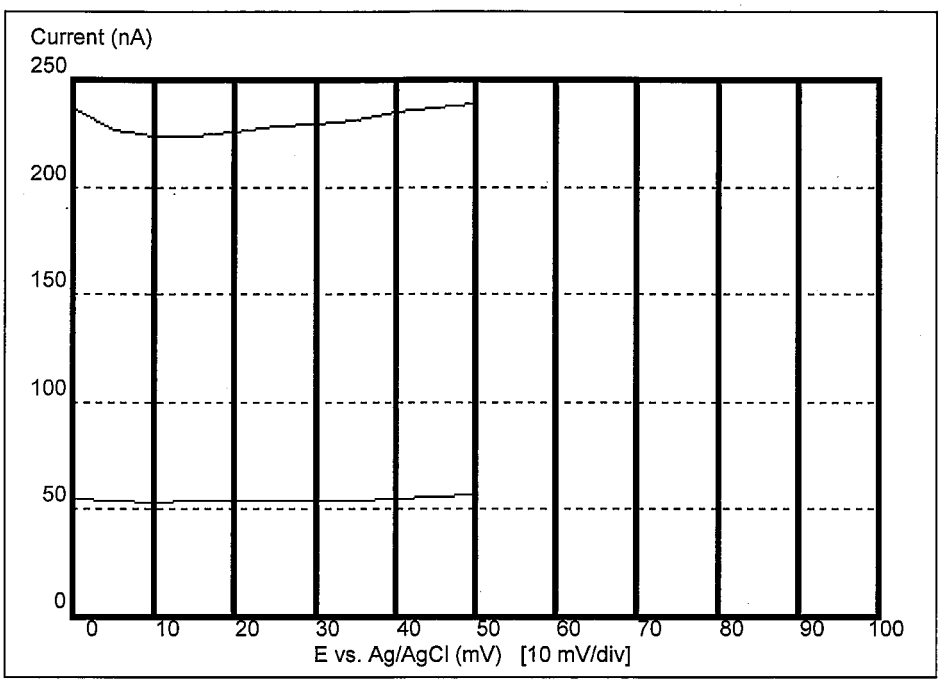
TraceDetect Nano-Band Explorer

Sample ID: Au Plate #4

Trace Metals:

As[III+V] < 1.6 ppb

31/Aug/06 17:46:32



Temperature:

Input 1:

Input 2:

Settings:

Type:	ASV	Clean Time (S)	0	Signal Avg.	16
Waveform:	Sq. Wave	Clean Voltage (mV):	100	Frequency (Hz):	1000
Cell	Three Electrode	Plate Time (S)	55	Start Voltage (mV):	-50
		Plate Voltage (mV)	-50	Stop Voltage (mV):	5
		Range (uA):	1.25	Step Voltage (mV):	5

☐ Background subtraction

TraceDetect Nano-Band Explorer

Sample ID: Clean Chk + 1ppb

Trace Metals:

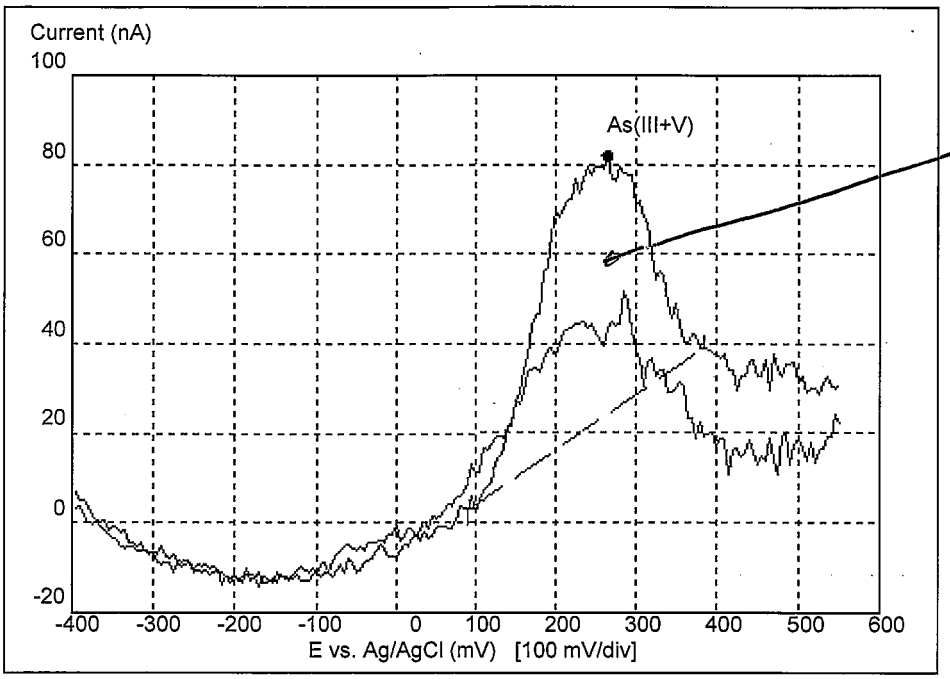
As(III+V): 1.40 ppb

Temperature:

Input 1:

Input 2:

31/Aug/06 12:17:12



1ppb

Settings:

Type:	ASV	Clean Time (S)	0.1	Signal Avg.	8
Waveform:	Staircase	Clean Voltage (mV):	600	Frequency (Hz):	2000
Cell	Three Electrode	Plate Time (S)	160	Start Voltage (mV):	-400
☑ Background subtraction		Plate Voltage (mV)	-400	Stop Voltage (mV):	550
		Range (uA):	12.5	Step Voltage (mV):	5

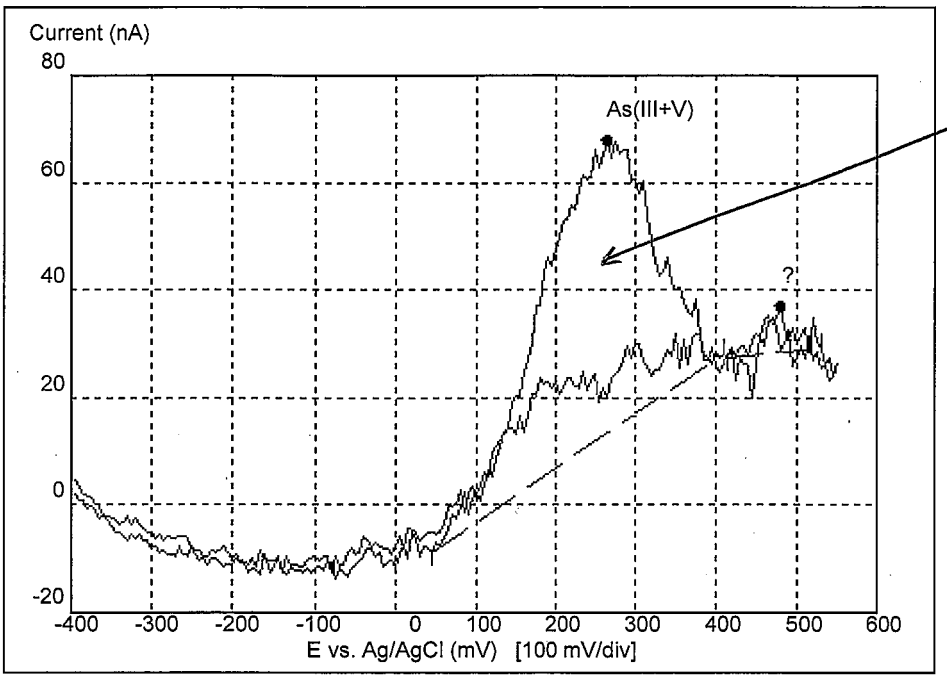
TraceDetect Nano-Band Explorer

Sample ID: Blank + 1ppb

Trace Metals:

As(III+V): 1.32 ppb

31/Aug/06 12:29:32



1ppb

Temperature:

Input 1:

Input 2:

Settings:

Type:	ASV	Clean Time (S)	0.1	Signal Avg.	8
Waveform:	Staircase	Clean Voltage (mV):	600	Frequency (Hz):	2000
Cell	Three Electrode	Plate Time (S)	160	Start Voltage (mV):	-400
☑ Background subtraction		Plate Voltage (mV)	-400	Stop Voltage (mV):	550
		Range (uA):	12.5	Step Voltage (mV):	5

TraceDetect Nano-Band Explorer

Sample ID: Primary Chk

Trace Metals:

As(III+V): 294 nA

310 nA

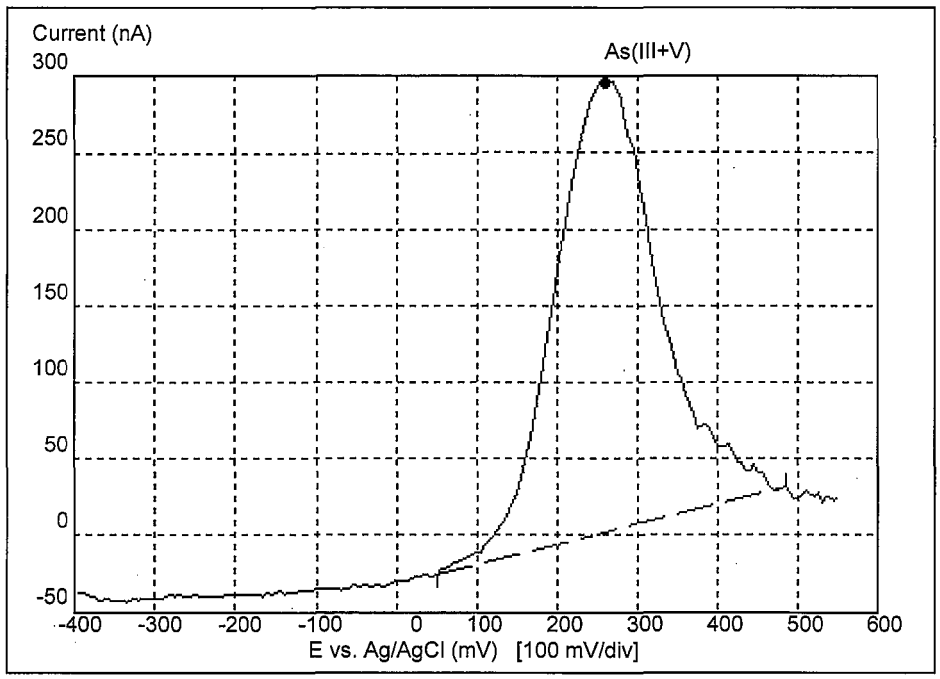
95%

Temperature:

Input 1:

Input 2:

31/Aug/06 12:37:51



Settings:

Type:	ASV	Clean Time (S)	0.1	Signal Avg.	8
Waveform:	Staircase	Clean Voltage (mV):	600	Frequency (Hz):	2000
Cell	Three Electrode	Plate Time (S)	40	Start Voltage (mV):	-400
		Plate Voltage (mV)	-400	Stop Voltage (mV):	550
		Range (uA):	12.5	Step Voltage (mV):	5

☑ Background subtraction

TraceDetect Nano-Band Explorer

Sample ID: Secondary Chk

Trace Metals:

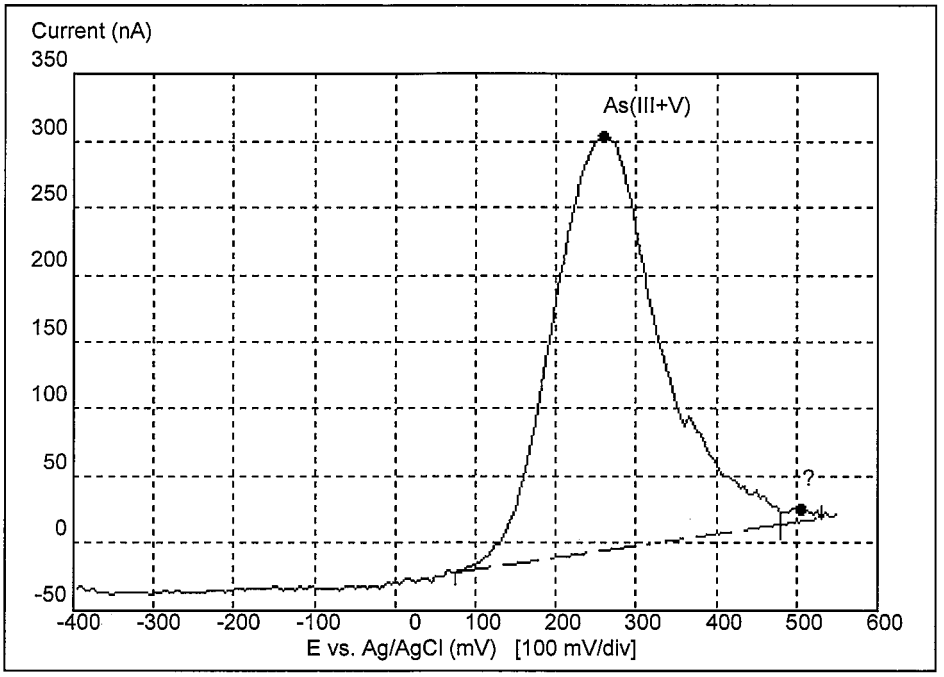
As(III+V): 310 nA

Temperature:

Input 1:

Input 2:

31/Aug/06 12:36:04



Settings:

Type:	ASV	Clean Time (S)	0.1	Signal Avg.	8
Waveform:	Staircase	Clean Voltage (mV):	600	Frequency (Hz):	2000
Cell	Three Electrode	Plate Time (S)	40	Start Voltage (mV):	-400
☑ Background subtraction		Plate Voltage (mV)	-400	Stop Voltage (mV):	550
		Range (uA):	12.5	Step Voltage (mV):	5

TraceDetect Nano-Band Explorer

Sample ID: LCS As III+V

Trace Metals:

As(III+V): 482 nA

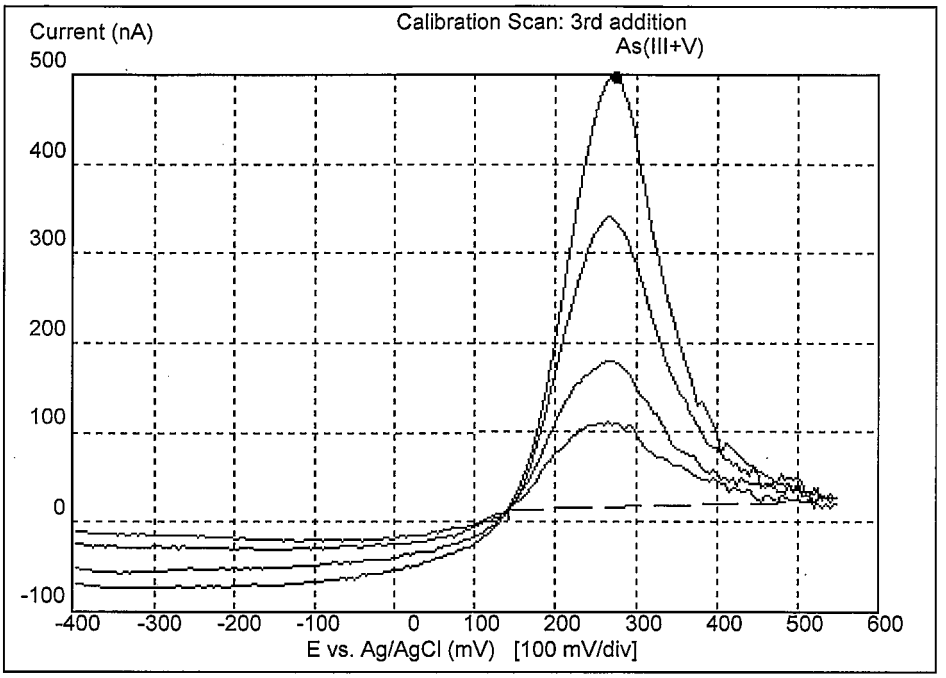
12.8ppb

Temperature:

Input 1:

Input 2:

31/Aug/06 12:44:13



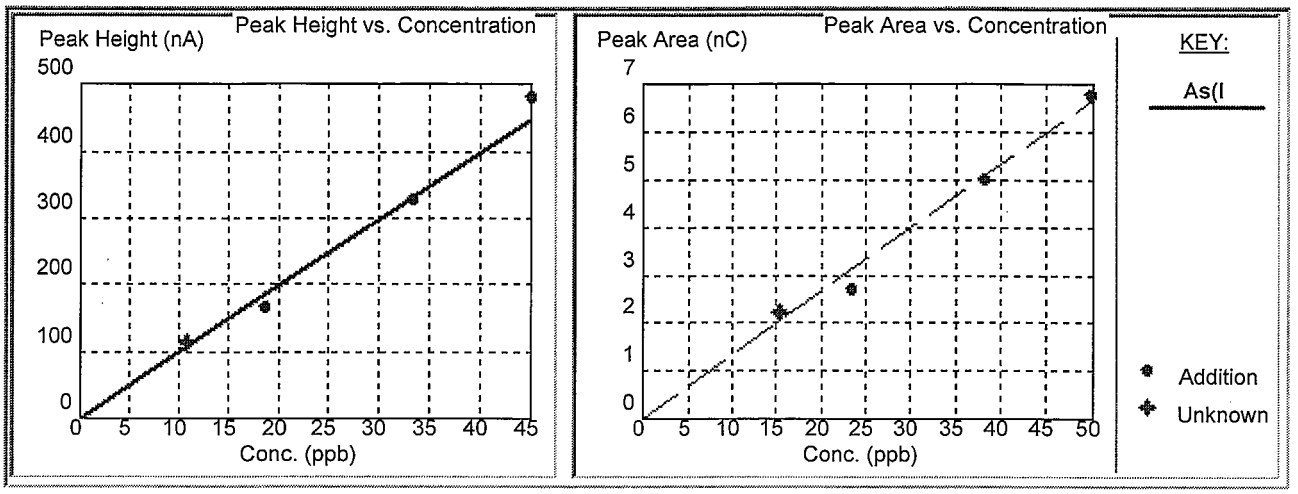
Settings:

Type:	ASV	Clean Time (S)	0.1	Signal Avg.	8
Waveform:	Staircase	Clean Voltage (mV):	600	Frequency (Hz):	2000
Cell	Three Electrode	Plate Time (S)	40	Start Voltage (mV):	-400
☑ Background subtraction		Plate Voltage (mV)	-400	Stop Voltage (mV):	550
		Range (uA):	12.5	Step Voltage (mV):	5

Calibration Summary:

Calibration Date: 31/Aug/06 at 11:19:10

LCS



Calibration Parameters

Metal	Calib. Mode	Fit Factor	Slope	Zero Offset	Starting Concentration	Concentration in Original Sample
As[III+V]	**Height**	0.990	0.101 ppb/nA	0 ppt	11 ppb	13 ppb
	Area	0.987	7.49 ppb/nC	0 ppt	15 ppb	18 ppb

Addition Data for Method of Standard Additions LCS

Metal	Unknown Concentration	Concentration in original aliquot	1st Addition	2nd Addition	3rd Addition	Total added concentration
As(III+V)	10.7 ppb	12.8 ppb	400 uL (7.94 ppb)	750 uL (14.7 ppb)	600 uL (11.6 ppb)	34.2 ppb

Starting Volume: 50.000 **mL**

Final Volume: 51.750 **mL**

TraceDetect Nano-Band Explorer

Sample ID: LCS Dup As III+V

Trace Metals:

As(III+V): 33.3 ppb

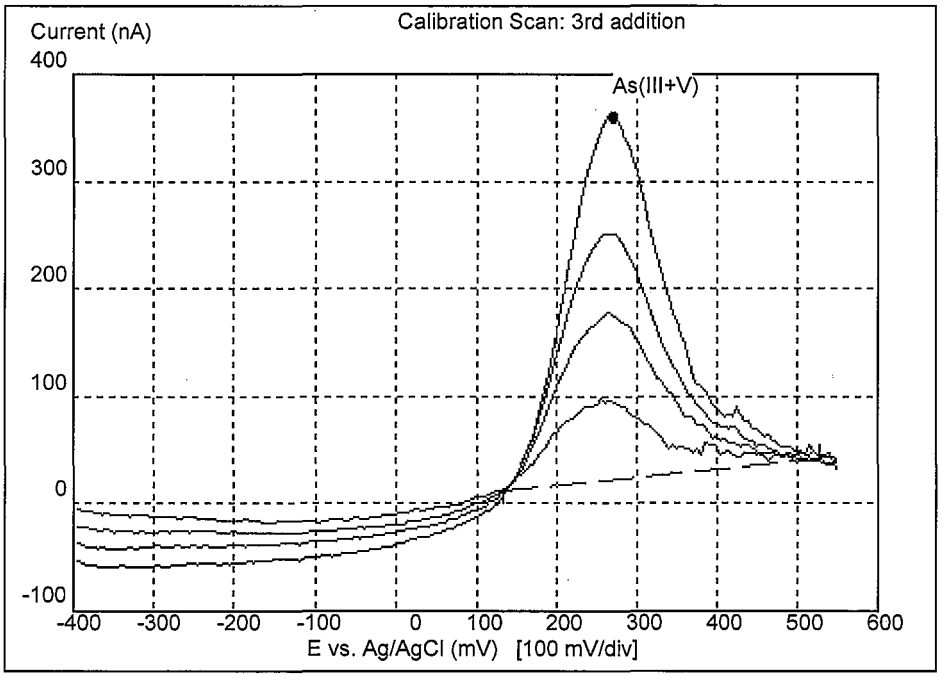
9.03ppb

Temperature:

Input 1:

Input 2:

31/Aug/06 12:55:56



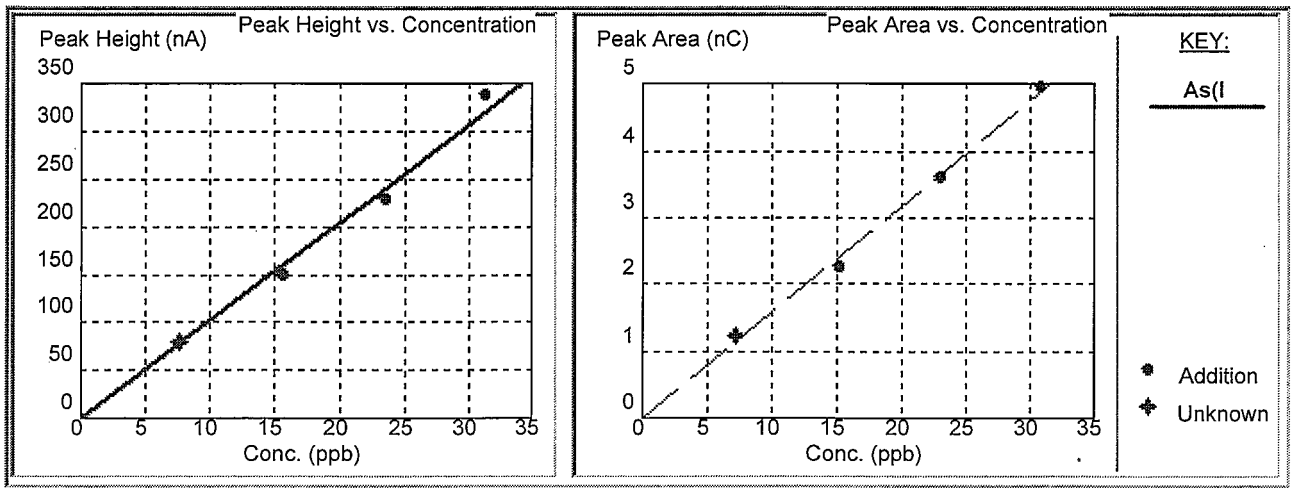
Settings:

Type:	ASV	Clean Time (S)	0.1	Signal Avg.	8
Waveform:	Staircase	Clean Voltage (mV):	600	Frequency (Hz):	2000
Cell	Three Electrode	Plate Time (S)	40	Start Voltage (mV):	-400
☑ Background subtraction		Plate Voltage (mV)	-400	Stop Voltage (mV):	550
		Range (uA):	12.5	Step Voltage (mV):	5

Calibration Summary:

LCS DUP

Calibration Date: 31/Aug/06 at 12:45:26



Calibration Parameters

Metal	Calib. Mode	Fit Factor	Slope	Zero Offset	Starting Concentration	Concentration in Original Sample
As[III+V]	**Height**	0.991	0.098 ppb/nA	0 ppt	7.6 ppb	9.0 ppb
	Area	0.996	6.31 ppb/nC	0 ppt	7.1 ppb	8.5 ppb

Addition Data for Method of Standard Additions LCS DUP

Metal	Unknown Concentration	Concentration in original aliquot	1st Addition	2nd Addition	3rd Addition	Total added concentration
As(III+V)	7.58 ppb	9.03 ppb	400 uL (7.94 ppb)	400 uL (7.87 ppb)	400 uL (7.81 ppb)	23.6 ppb

Starting Volume: 50.000 **mL**

Final Volume: 51.200 **mL**

TraceDetect Nano-Band Explorer

Sample ID: JCGPM AsIII+V

31/Aug/06 13:34:29

Trace Metals:

As(III+V): 30.8 ppb

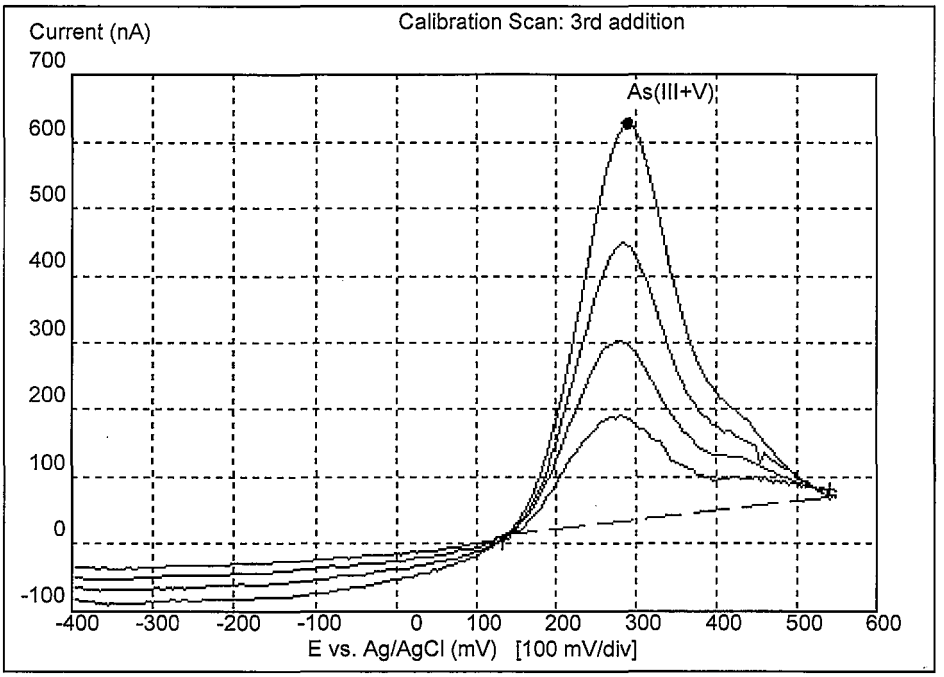
9.86 As III+V
ND As III
9.86 AsV

2X

Temperature:

Input 1:

Input 2:



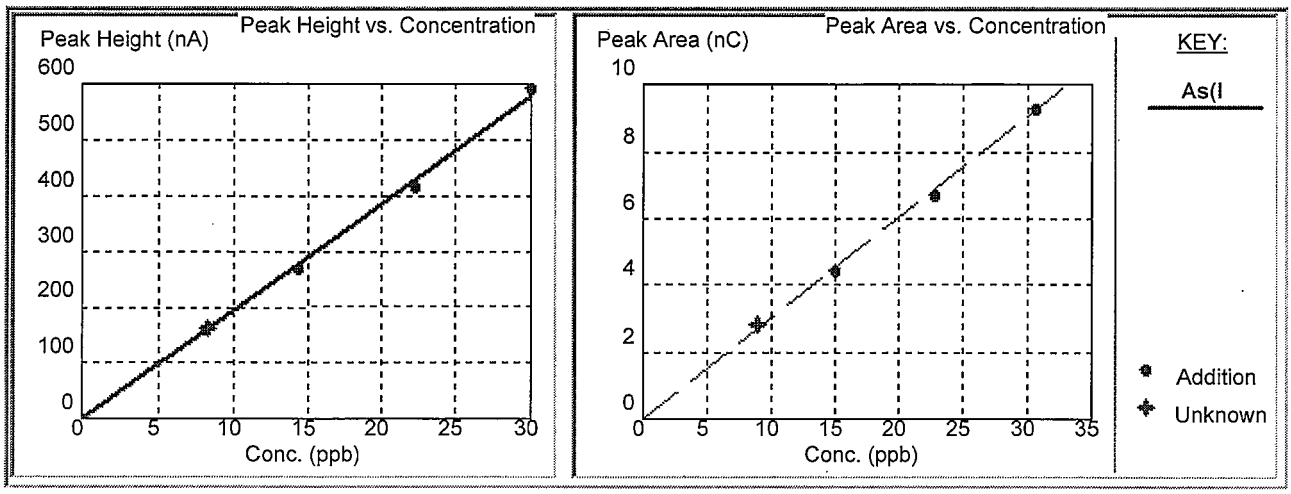
Settings:

Type:	ASV	Clean Time (S)	0.1	Signal Avg.	8
Waveform:	Staircase	Clean Voltage (mV):	600	Frequency (Hz):	2000
Cell	Three Electrode	Plate Time (S)	80	Start Voltage (mV):	-400
☑ Background subtraction		Plate Voltage (mV)	-400	Stop Voltage (mV):	550
		Range (uA):	12.5	Step Voltage (mV):	5

Calibration Summary:

JC @ PM

Calibration Date: 31/Aug/06 at 12:57:07



Calibration Parameters

Metal	Calib. Mode	Fit Factor	Slope	Zero Offset	Starting Concentration	Concentration in Original Sample
As[III+V]	**Height**	0.998	0.052 ppb/nA	0 ppt	8.3 ppb	9.9 ppb
	Area	0.999	3.32 ppb/nC	0 ppt	9.0 ppb	11 ppb

Addition Data for Method of Standard Additions

JCGPM

Metal	Unknown Concentration	Concentration in original aliquot	1st Addition	2nd Addition	3rd Addition	Total added concentration
As(III+V)	8.28 ppb	9.86 ppb	300 uL (5.96 ppb)	400 uL (7.89 ppb)	400 uL (7.83 ppb)	21.7 ppb

Starting Volume: 50.000 **mL**

Final Volume: 51.100 **mL**

TraceDetect Nano-Band Explorer

Sample ID: JCN9A AsIII+V 500x

31/Aug/06 14:45:38

Trace Metals:

As(III+V): 271 ppb

643 x 500

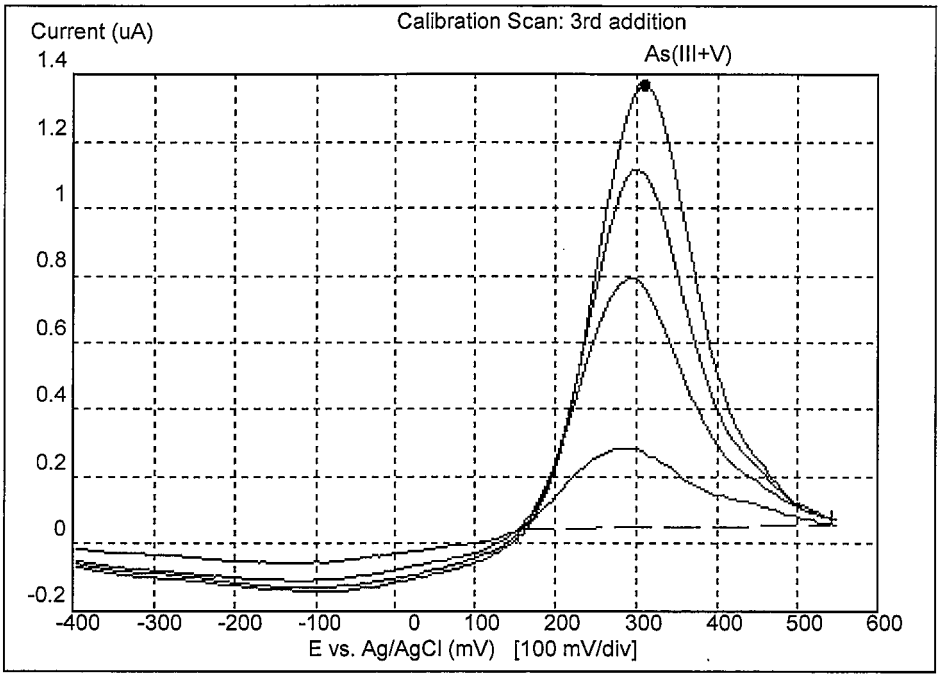
32150 As III+V
30700 As III
1450 As V

500x 8 = 4000 X

Temperature:

Input 1:

Input 2:



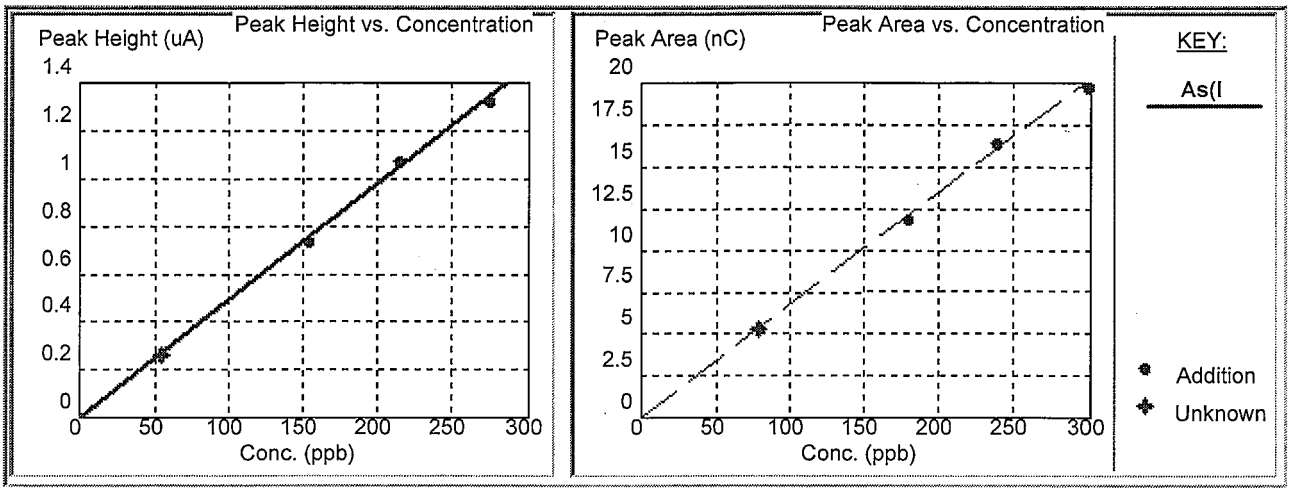
Settings:

Type:	ASV	Clean Time (S)	0.1	Signal Avg.	8
Waveform:	Staircase	Clean Voltage (mV):	600	Frequency (Hz):	2000
Cell	Three Electrode	Plate Time (S)	20	Start Voltage (mV):	-400
☑ Background subtraction		Plate Voltage (mV)	-400	Stop Voltage (mV):	550
		Range (uA):	12.5	Step Voltage (mV):	5

Calibration Summary:

JC N9A

Calibration Date: 31/Aug/06 at 14:40:20



Calibration Parameters

Metal	Calib. Mode	Fit Factor	Slope	Zero Offset	Starting Concentration	Concentration in Original Sample
As[III+V]	**Height**	0.999	0.204 ppb/nA	0 ppt	54 ppb	64 ppb
	Area	0.998	14.8 ppb/nC	0 ppt	79 ppb	94 ppb

JCN9A

Addition Data for Method of Standard Additions

Metal	Unknown Concentration	Concentration in original aliquot	1st Addition	2nd Addition	3rd Addition	Total added concentration
As(III+V)	54.0 ppb	64.3 ppb	5.00 uL (100 ppb)	3.00 uL (60.0 ppb)	3.00 uL (60.0 ppb)	220 ppb

Starting Volume: 50.000 **mL**

Final Volume: 50.011 **mL**

TraceDetect Nano-Band Explorer

Sample ID: JCN9F 50X +2ppb AsIII+V

Trace Metals:

As(III+V): 570 ppt

AsIII+V ND
AsIII ND
AsV ND G

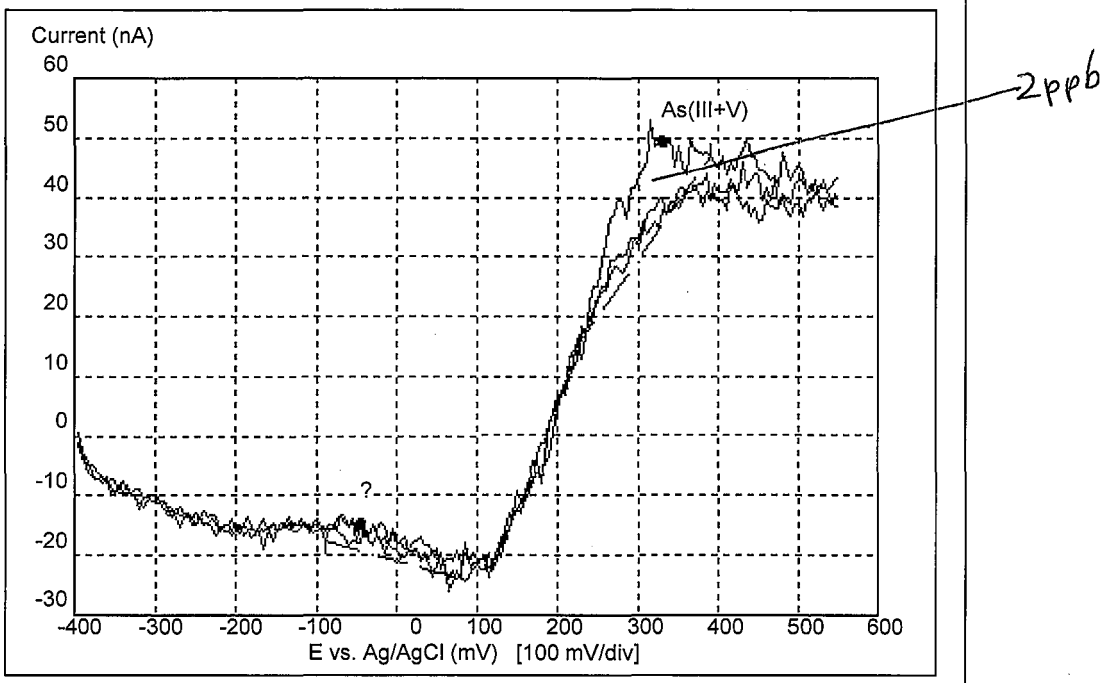
50X

Temperature:

Input 1:

Input 2:

31/Aug/06 17:08:56



Settings:

Type:	ASV	Clean Time (S)	0.1	Signal Avg.	8
Waveform:	Staircase	Clean Voltage (mV):	600	Frequency (Hz):	2000
Cell	Three Electrode	Plate Time (S)	160	Start Voltage (mV):	-400
☑ Background subtraction		Plate Voltage (mV)	-400	Stop Voltage (mV):	550
		Range (uA):	12.5	Step Voltage (mV):	5

TraceDetect Nano-Band Explorer

Sample ID: JCN9G 50X + 1ppb AsIII+V

Trace Metals:

As(III+V): 1.36 ppb

AsIII+V ND
AsIII ND
AsV ND G

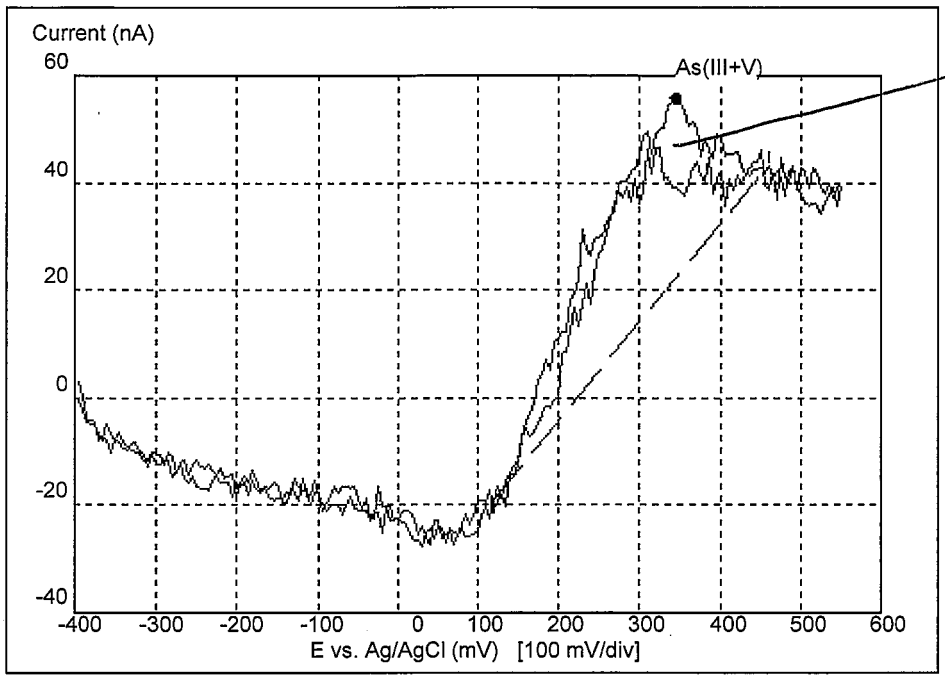
50X

Temperature:

Input 1:

Input 2:

31/Aug/06 16:57:45



1ppb

Settings:

Type:	ASV	Clean Time (S)	0.1	Signal Avg.	8
Waveform:	Staircase	Clean Voltage (mV):	600	Frequency (Hz):	2000
Cell	Three Electrode	Plate Time (S)	160	Start Voltage (mV):	-400
☑ Background subtraction		Plate Voltage (mV)	-400	Stop Voltage (mV):	550
		Range (uA):	12.5	Step Voltage (mV):	5

TraceDetect Nano-Band Explorer

Sample ID: JCN90 AsIII+V

Trace Metals:

As(III+V): 837 ppb

AsIII+V 367
AsIII 193
As V 174

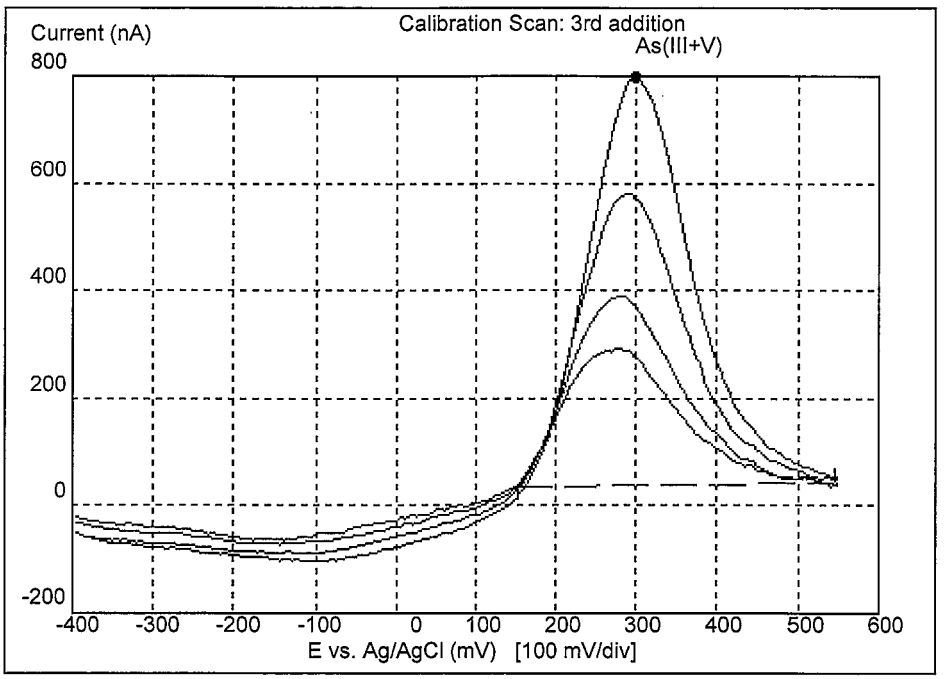
32X

Temperature:

Input 1:

Input 2:

31/Aug/06 14:39:29



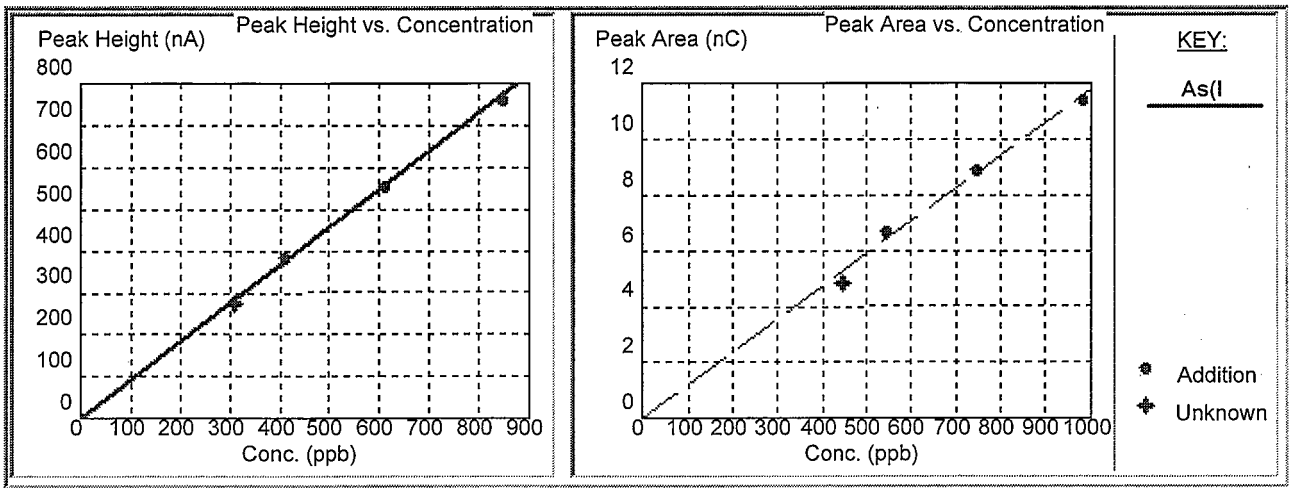
Settings:

Type:	ASV	Clean Time (S)	0.1	Signal Avg.	8
Waveform:	Staircase	Clean Voltage (mV):	600	Frequency (Hz):	2000
Cell	Three Electrode	Plate Time (S)	5	Start Voltage (mV):	-400
☑ Background subtraction		Plate Voltage (mV)	-400	Stop Voltage (mV):	550
		Range (uA):	12.5	Step Voltage (mV):	5

Calibration Summary:

JCN90

Calibration Date: 31/Aug/06 at 14:02:48



Calibration Parameters

Metal	Calib. Mode	Fit Factor	Slope	Zero Offset	Starting Concentration	Concentration in Original Sample
As[III+V]	**Height**	0.998	1.10 ppb/nA	0 ppt	310 ppb	370 ppb
	Area	0.990	84.9 ppb/nC	0 ppt	440 ppb	530 ppb

JCN90

Addition Data for Method of Standard Additions

Metal	Unknown Concentration	Concentration in original aliquot	1st Addition	2nd Addition	3rd Addition	Total added concentration
As(III+V)	309 ppb	367 ppb	5.00 uL (100 ppb)	10.0 uL (200 ppb)	12.0 uL (240 ppb)	540 ppb

Starting Volume: 50.000 mL

Final Volume: 50.027 mL

TraceDetect Nano-Band Explorer

Sample ID: JCWF3 As III+V

Trace Metals:

As(III+V): 2.19 ppm

1040 As III+V
625 As III
415 As V

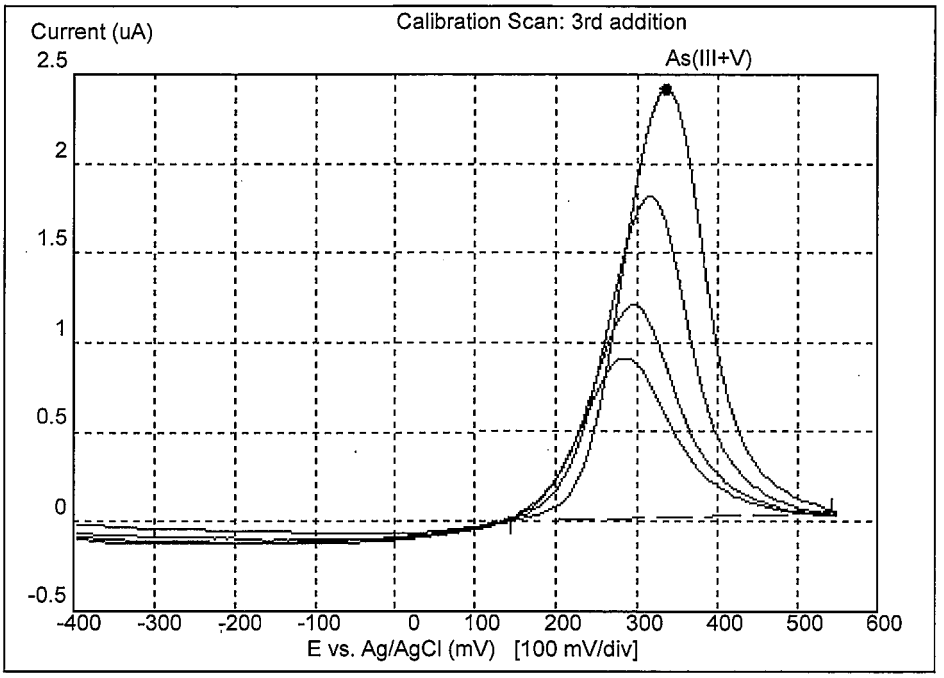
32X

Temperature:

Input 1:

Input 2:

31/Aug/06 15:00:33



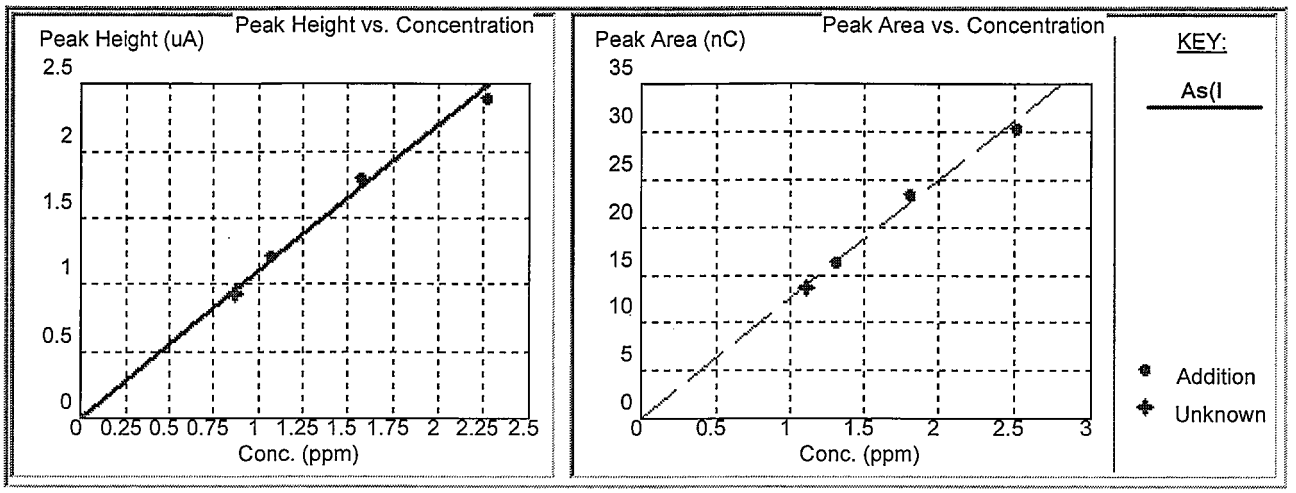
Settings:

Type:	ASV	Clean Time (S)	0.1	Signal Avg.	8
Waveform:	Staircase	Clean Voltage (mV):	600	Frequency (Hz):	2000
Cell	Three Electrode	Plate Time (S)	5	Start Voltage (mV):	-400
☑ Background subtraction		Plate Voltage (mV)	-400	Stop Voltage (mV):	550
		Range (uA):	12.5	Step Voltage (mV):	5

Calibration Summary:

JCWF3

Calibration Date: 31/Aug/06 at 14:46:30



Calibration Parameters

Metal	Calib. Mode	Fit Factor	Slope	Zero Offset	Starting Concentration	Concentration in Original Sample
As(III+V)	**Height**	0.990	0.910 ppb/nA	0 ppt	870 ppb	1.0 ppm
	Area	0.992	80.2 ppb/nC	0 ppt	1.1 ppm	1.3 ppm

Addition Data for Method of Standard Additions

JCWF3

Metal	Unknown Concentration	Concentration in original aliquot	1st Addition	2nd Addition	3rd Addition	Total added concentration
As(III+V)	870 ppb	1.04 ppm	10.0 uL (200 ppb)	25.0 uL (500 ppb)	35.0 uL (699 ppb)	1.40 ppm

Starting Volume: 50.000 **mL**

Final Volume: 50.070 **mL**

TraceDetect Nano-Band Explorer

Sample ID: JCW/GA AsIII+V

31/Aug/06 15:41:49

Trace Metals:

As(III+V): 386 ppb

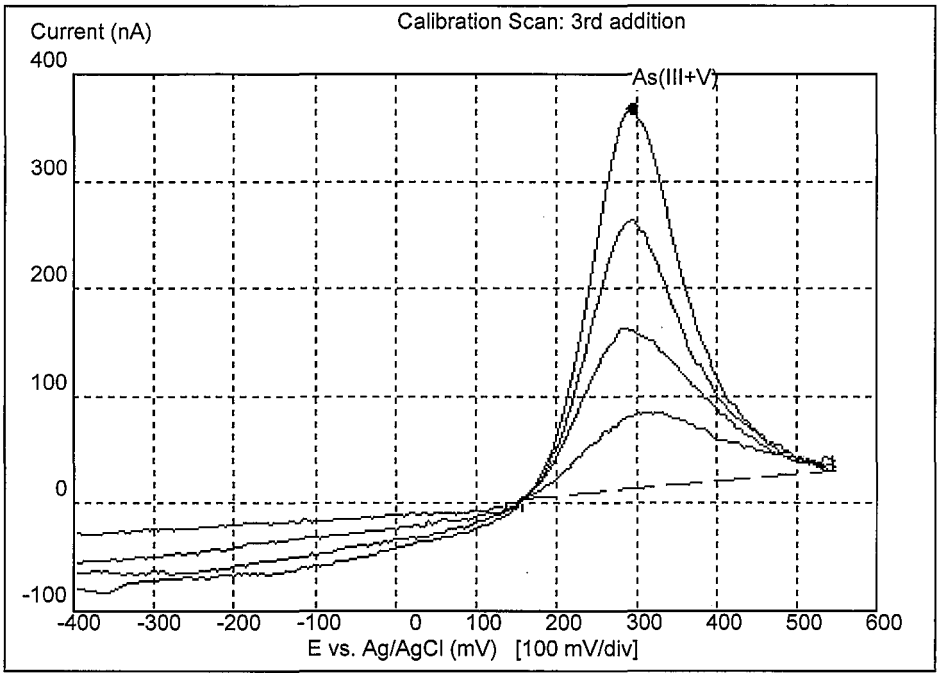
89.1 AsIII+V
65.4 AsIII
23.7 AsV

16X

Temperature:

Input 1:

Input 2:



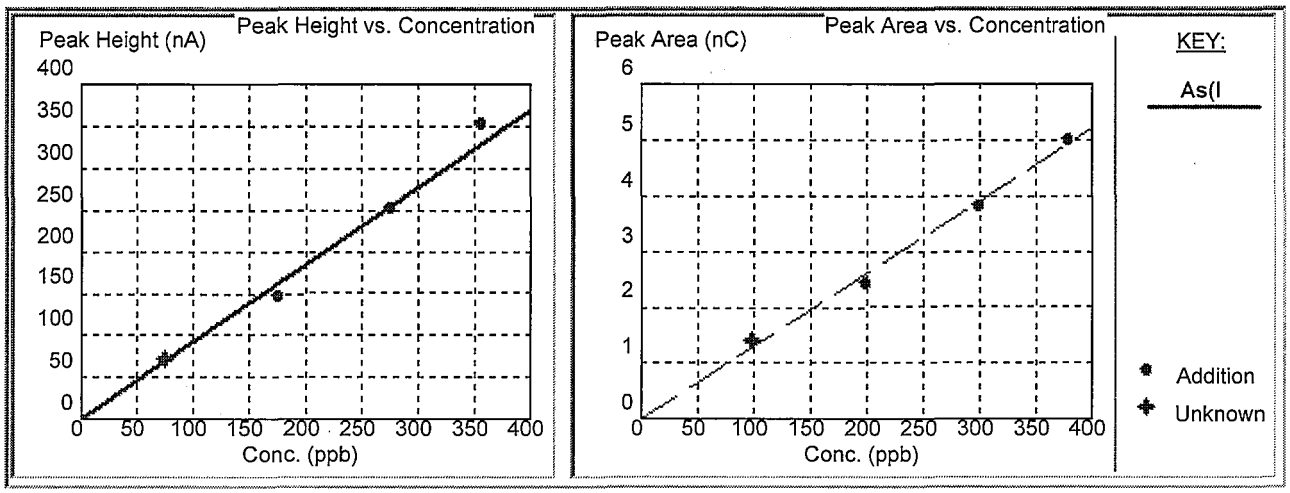
Settings:

Type:	ASV	Clean Time (S)	0.1	Signal Avg.	8
Waveform:	Staircase	Clean Voltage (mV):	600	Frequency (Hz):	2000
Cell	Three Electrode	Plate Time (S):	1.0	Start Voltage (mV):	-400
☑ Background subtraction		Plate Voltage (mV)	-400	Stop Voltage (mV):	550
		Range (uA):	12.5	Step Voltage (mV):	5

Calibration Summary:

JCW6A

Calibration Date: 31/Aug/06 at 15:29:18



Calibration Parameters

Metal	Calib. Mode	Fit Factor	Slope	Zero Offset	Starting Concentration	Concentration in Original Sample
As(III+V)	**Height**	0.988	1.08 ppb/nA	0 ppt	75 ppb	89 ppb
	Area	0.994	76.7 ppb/nC	0 ppt	98 ppb	120 ppb

JCWGA

Addition Data for Method of Standard Additions

Metal	Unknown Concentration	Concentration in original aliquot	1st Addition	2nd Addition	3rd Addition	Total added concentration
As(III+V)	74.8 ppb	89.1 ppb	5.00 uL (100 ppb)	5.00 uL (100 ppb)	4.00 uL (80.0 ppb)	280 ppb

Starting Volume: 50.000 **mL**

Final Volume: 50.014 **mL**

TraceDetect Nano-Band Explorer

Sample ID: JCWGC AsIII+V

Trace Metals:

As[III+V]: 363 ppb

143 As III+V
64.1 As III
78.9 As V

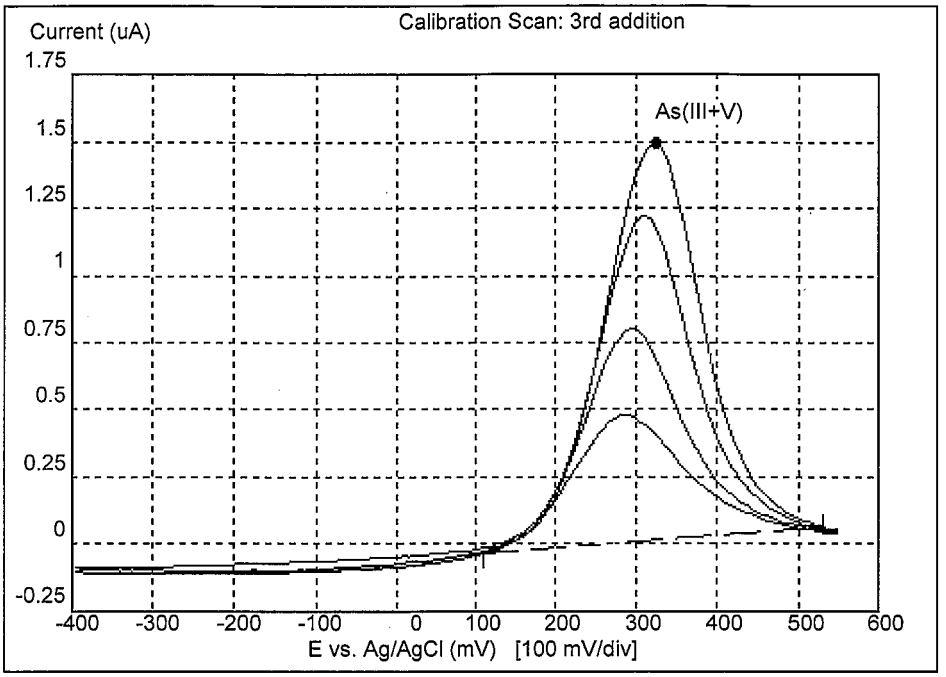
8X

Temperature:

Input 1:

Input 2:

31/Aug/06 15:14:07



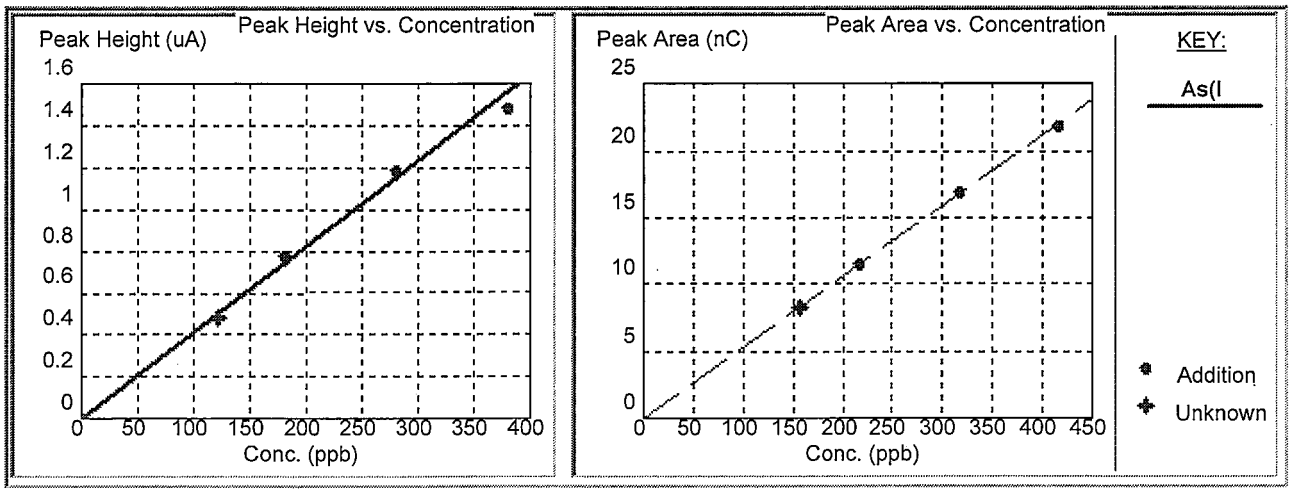
Settings:

Type:	ASV	Clean Time (S)	0.1	Signal Avg.	8
Waveform:	Staircase	Clean Voltage (mV):	600	Frequency (Hz):	2000
Cell	Three Electrode	Plate Time (S)	20	Start Voltage (mV):	-400
☑ Background subtraction		Plate Voltage (mV)	-400	Stop Voltage (mV):	550
		Range (uA):	12.5	Step Voltage (mV):	5

Calibration Summary:

JCWGC

Calibration Date: 31/Aug/06 at 15:08:22



Calibration Parameters

Metal	Calib. Mode	Fit Factor	Slope	Zero Offset	Starting Concentration	Concentration in Original Sample
As[III+V]	**Height**	0.990	0.244 ppb/nA	0 ppt	120 ppb	140 ppb
	Area	0.999	18.9 ppb/nC	0 ppt	160 ppb	190 ppb

JCWGC

Addition Data for Method of Standard Additions

Metal	Unknown Concentration	Concentration in original aliquot	1st Addition	2nd Addition	3rd Addition	Total added concentration
As(III+V)	120 ppb	143 ppb	3.00 uL (60.0 ppb)	5.00 uL (100 ppb)	5.00 uL (100 ppb)	260 ppb

Starting Volume: 50.000 **mL**

Final Volume: 50.013 **mL**

TraceDetect Nano-Band Explorer

Sample ID: JC1LR + 1ppb AsIII+V

Trace Metals:

As(III+V): 2.05 ppb

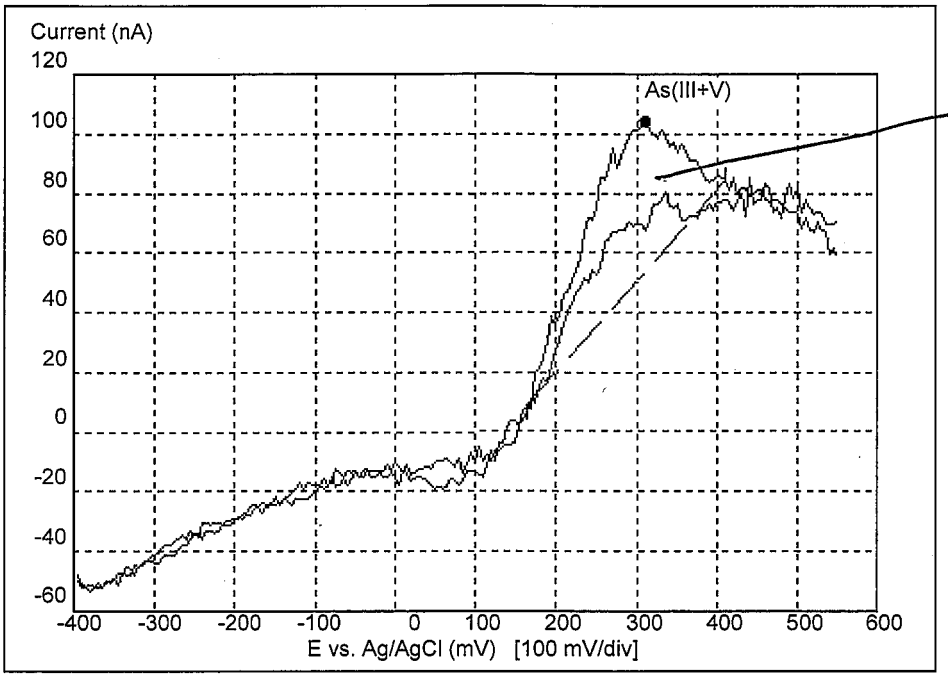
As III+V ND
As III ND
As V ND

Temperature:

Input 1:

Input 2:

31/Aug/06 16:29:45



1ppb

Settings:

Type:	ASV	Clean Time (S)	0.1	Signal Avg.	8
Waveform:	Staircase	Clean Voltage (mV):	600	Frequency (Hz):	2000
Cell	Three Electrode	Plate Time (S)	160	Start Voltage (mV):	-400
☑ Background subtraction		Plate Voltage (mV)	-400	Stop Voltage (mV):	550
		Range (uA):	12.5	Step Voltage (mV):	5

TraceDetect Nano-Band Explorer -

Sample ID: JC0R0 AsIII+V + 2ppb

Trace Metals:

As(III+V): 1.44 ppb

As III+V ND
As III ND
As V ND

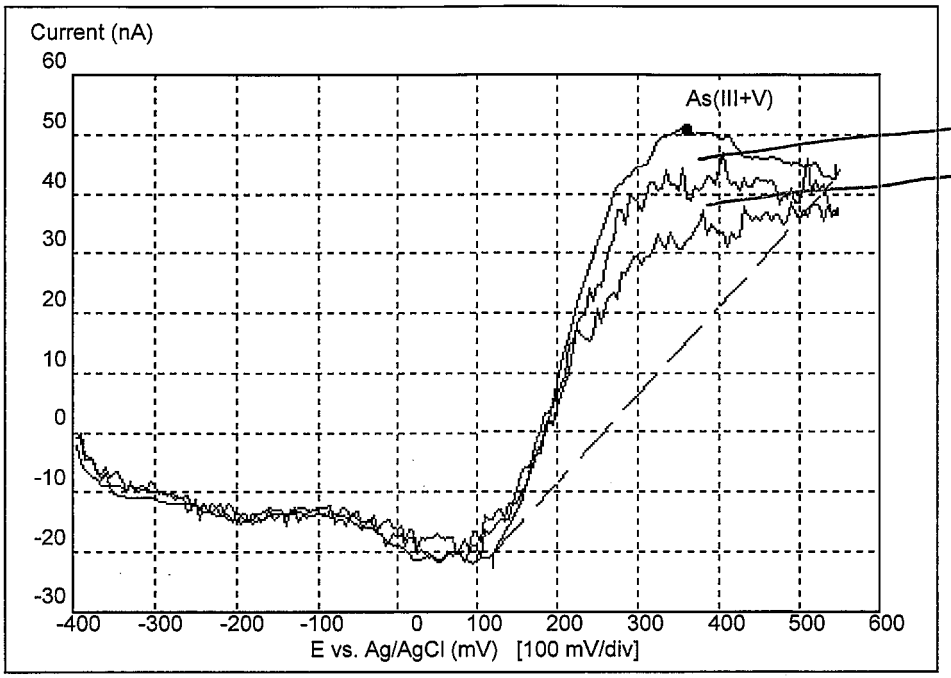
1X

Temperature:

Input 1:

Input 2:

31/Aug/06 17:27:04



Settings:

Type:	ASV	Clean Time (S)	0.1	Signal Avg.	8
Waveform:	Staircase	Clean Voltage (mV):	600	Frequency (Hz):	2000
Cell	Three Electrode	Plate Time (S)	160	Start Voltage (mV):	-400
		Plate Voltage (mV)	-400	Stop Voltage (mV):	550
		Range (uA):	12.5	Step Voltage (mV):	5

☑ Background subtraction

TraceDetect Nano-Band Explorer

Sample ID: JC0Q4 500x AsIII+V

31/Aug/06 18:07:12

Trace Metals:

As(III+V): 749 ppb

223x500 = 111500

~~22300 As III+V~~

111500 As III+V

111500 As V

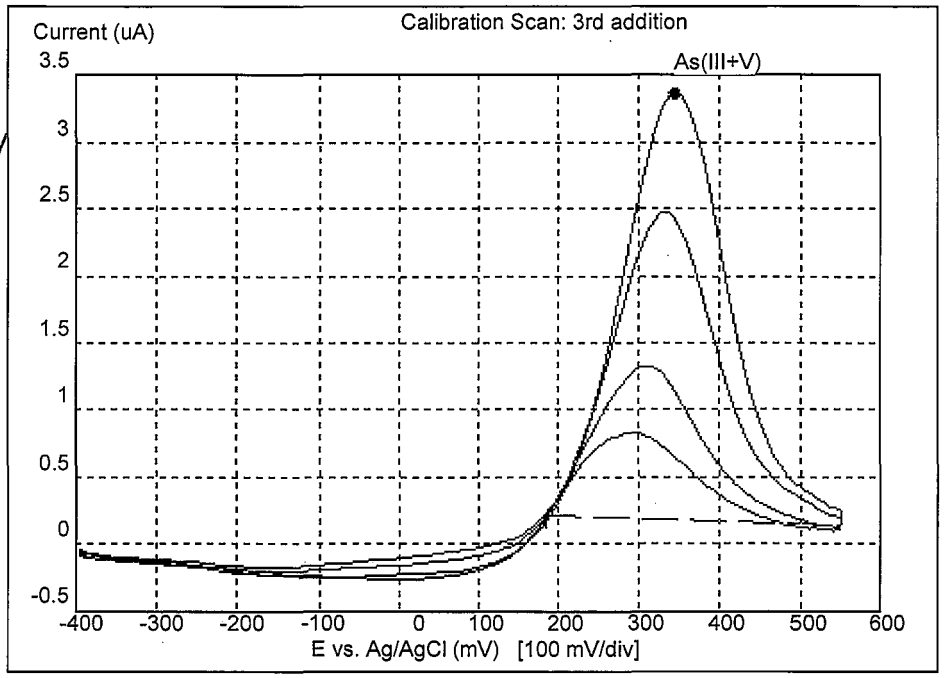
ND As III

500X16 = 8000X

Temperature:

Input 1:

Input 2:



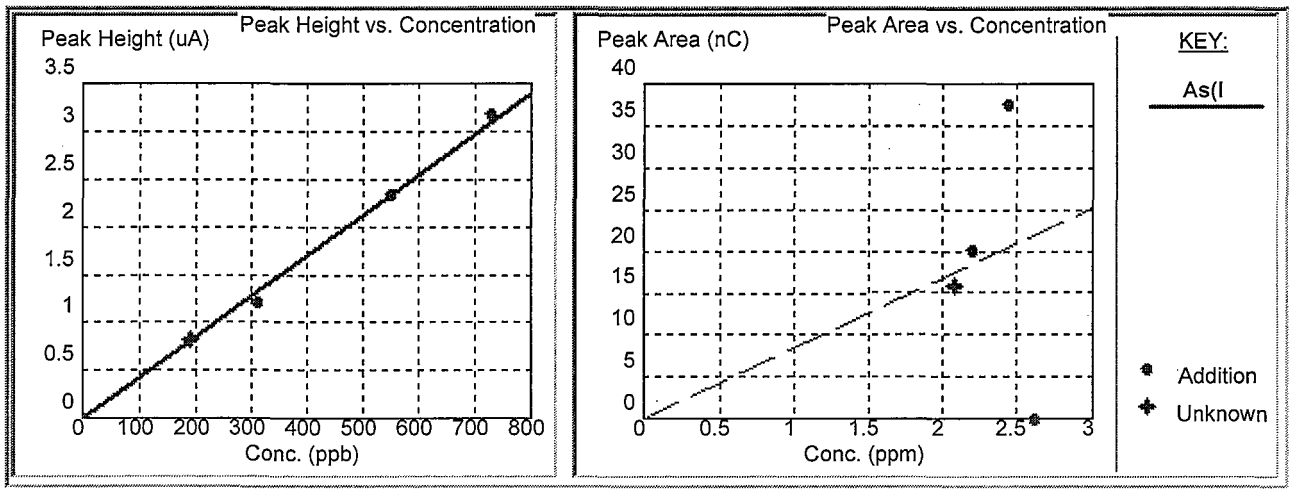
Settings:

Type:	ASV	Clean Time (S)	0.1	Signal Avg.	8
Waveform:	Staircase	Clean Voltage (mV):	600	Frequency (Hz):	2000
Cell	Three Electrode	Plate Time (S)	10	Start Voltage (mV):	-400
☑ Background subtraction		Plate Voltage (mV)	-400	Stop Voltage (mV):	550
		Range (uA):	12.5	Step Voltage (mV):	5

Calibration Summary:

JCOQ4

Calibration Date: 31/Aug/06 at 18:01:01



Calibration Parameters

Metal	Calib. Mode	Fit Factor	Slope	Zero Offset	Starting Concentration	Concentration in Original Sample
As(III+V)	**Height**	0.997	0.235 ppb/nA	0 ppt	190 ppb	220 ppb
	Area	0.063	119 ppb/nC	0 ppt	2.1 ppm	2.5 ppm

JCOQ4

Addition Data for Method of Standard Additions

Metal	Unknown Concentration	Concentration in original aliquot	1st Addition	2nd Addition	3rd Addition	Total added concentration
As(III+V)	188 ppb	223 ppb	6.00 uL (120 ppb)	12.0 uL (240 ppb)	9.00 uL (180 ppb)	540 ppb

Starting Volume: 50.000 mL

Final Volume: 50.027 mL

TraceDetect Nano-Band Explorer

Sample ID: JCORQ 100x AsIII+V

Trace Metals:

As(III+V): 880 ppb

250X~~500~~=100
~~125000~~ 25,000
~~125000 As III+V~~
~~111500 As III~~
~~13,500 ASV~~
100X16 = 1600X
~~500X16 = 8000X~~

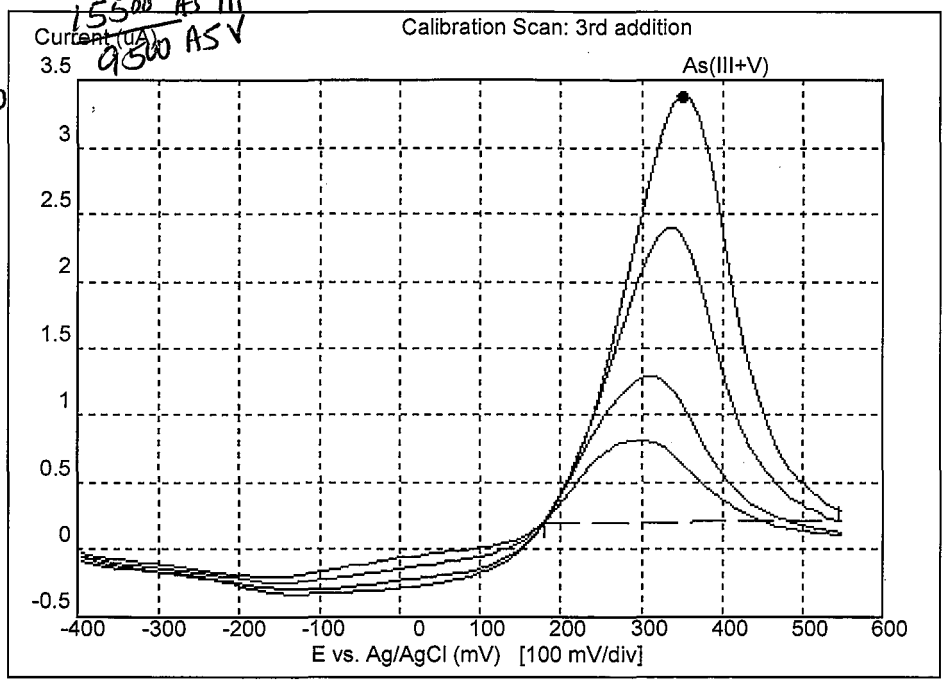
Temperature:

Input 1:

Input 2:

25000 As III+V
15500 As III
9500 ASV

31/Aug/06 18:00:22



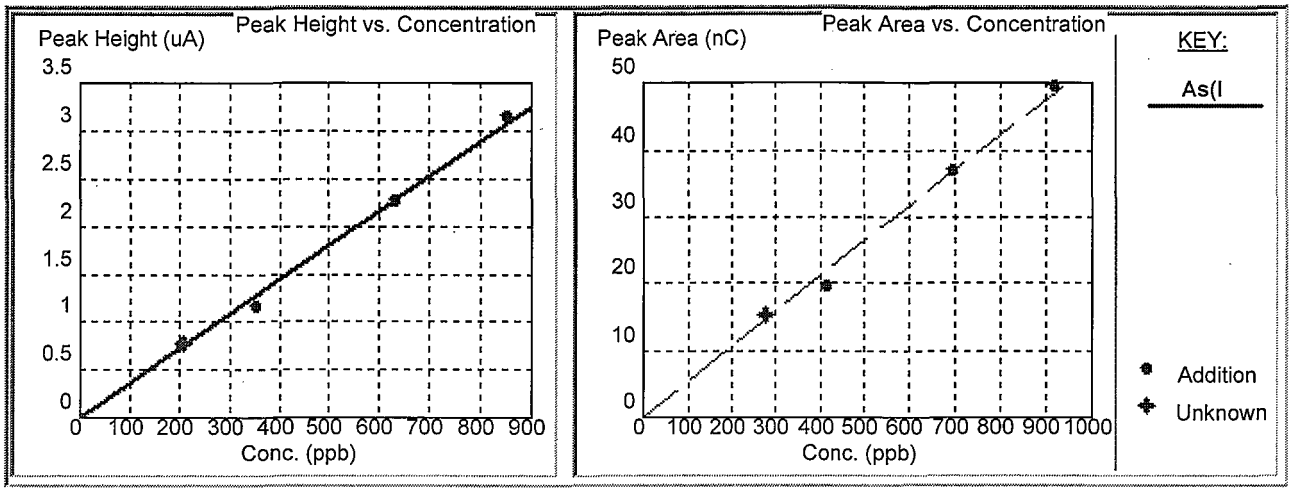
Settings:

Type:	ASV	Clean Time (S)	0.1	Signal Avg.	8
Waveform:	Staircase	Clean Voltage (mV):	600	Frequency (Hz):	2000
Cell	Three Electrode	Plate Time (S)	10	Start Voltage (mV):	-400
☑ Background subtraction		Plate Voltage (mV)	-400	Stop Voltage (mV):	550
		Range (uA):	12.5	Step Voltage (mV):	5

Calibration Summary:

Calibration Date: 31/Aug/06 at 17:40:10

JCORQ



Calibration Parameters

Metal	Calib. Mode	Fit Factor	Slope	Zero Offset	Starting Concentration	Concentration in Original Sample
As(III+V)	**Height**	0.997	0.277 ppb/nA	0 ppt	210 ppb	250 ppb
	Area	0.993	19.0 ppb/nC	0 ppt	280 ppb	330 ppb

Addition Data for Method of Standard Additions JCORQ

Metal	Unknown Concentration	Concentration in original aliquot	1st Addition	2nd Addition	3rd Addition	Total added concentration
As(III+V)	210 ppb	250 ppb	7.00 uL (140 ppb)	14.0 uL (280 ppb)	11.0 uL (220 ppb)	640 ppb

Starting Volume: 50.000 **mL**

Final Volume: 50.032 **mL**

STL North Canton

Sample Control Chain of Custody for General Chemistry

Lot Number	Sample	Suffix	Lab ID	Test	Prep Date	Prepared by
A6H180299	1		JCN9A1AC	Arsenic (V) Speciation by ASV	08/31/06	Deborah Bolgrin
A6H180299	1		JCN9A1AA	Arsenic (III) Speciation by ASV	08/29/06	Melissa Fuller-Gustavel
A6H180299	2		JCN9F1AC	Arsenic (V) Speciation by ASV	08/31/06	Deborah Bolgrin
A6H180299	2		JCN9F1AA	Arsenic (III) Speciation by ASV	08/29/06	Melissa Fuller-Gustavel
A6H180299	3		JCN9G1AC	Arsenic (V) Speciation by ASV	08/31/06	Deborah Bolgrin
A6H180299	3		JCN9G1AA	Arsenic (III) Speciation by ASV	08/29/06	Melissa Fuller-Gustavel
A6H180299	5		JCN901AC	Arsenic (V) Speciation by ASV	08/31/06	Deborah Bolgrin
A6H180299	5		JCN901AD	Arsenic (III) Speciation by ASV	08/29/06	Melissa Fuller-Gustavel

END OF REPORT

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SEVERN TRENT STL

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ANALYTICAL REPORT

PROJECT NO. 332898.QT.20.24

QUANTA RESOURCES (EDGEWATER)

Lot #: A6H230148

Amy Klopper

CH2M Hill Constructors Inc
PO Box 147062
Gainesville, FL 32614-7062

SEVERN TRENT LABORATORIES, INC.

Patrick J. O'Meara
Project Manager

September 8, 2006

CASE NARRATIVE

CASE NARRATIVE

A6H230148

The following report contains the analytical results for three water samples submitted to STL North Canton by CH2M Hill Constructors, Inc. from the Quanta Resources (Edgewater) Site, project number 332898.QT.20.24. The samples were received August 23, 2006, according to documented sample acceptance procedures.

STL utilizes USEPA approved methods in all analytical work. The samples presented in this report were analyzed for the parameter(s) listed on the analytical methods summary page in accordance with the method(s) indicated. Preliminary results were provided to Amy Klopper and Jennifer Simms on September 05, 2006. A summary of QC data for these analyses is included at the back of the report.

STL North Canton attests to the validity of the laboratory data generated by STL facilities reported herein. All analyses performed by STL facilities were done using established laboratory SOPs that incorporate QA/QC procedures described in the applicable methods. STL's operations groups have reviewed the data for compliance with the laboratory QA/QC plan, and data have been found to be compliant with laboratory protocols unless otherwise noted below.

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory.

If you have any questions, please call the Project Manager, Patrick J. O'Meara, at 330-497-9396.

This report is sequentially paginated. The final page of the report is labeled as "END OF REPORT."

SUPPLEMENTAL QC INFORMATION

SAMPLE RECEIVING

The temperature of the cooler upon sample receipt was 1.6°C.

GENERAL CHEMISTRY

The sample(s) had elevated reporting limits due to matrix interferences. Refer to the sample report pages for the affected analyte(s) flagged with "G".

QUALITY CONTROL ELEMENTS OF SW-846 METHODS

STL North Canton conducts a quality assurance/quality control (QA/QC) program designed to provide scientifically valid and legally defensible data. Toward this end, several types of quality control indicators are incorporated into the QA/QC program, which is described in detail in QA Policy, QA-003. These indicators are introduced into the sample testing process to provide a mechanism for the assessment of the analytical data.

QC BATCH

Environmental samples are taken through the testing process in groups called QUALITY CONTROL BATCHES (QC batches). A QC batch contains up to twenty environmental samples of a similar matrix (water, soil) that are processed using the same reagents and standards. STL North Canton requires that each environmental sample be associated with a QC batch.

Several quality control samples are included in each QC batch and are processed identically to the twenty environmental samples. These QC samples include a METHOD BLANK (MB), a LABORATORY CONTROL SAMPLE (LCS) and, where appropriate, a MATRIX SPIKE/MATRIX SPIKE DUPLICATE (MS/MSD) pair or a MATRIX SPIKE/SAMPLE DUPLICATE (MS/DU) pair. If there is insufficient sample to perform an MS/MSD or an MS/DU, then a LABORATORY CONTROL SAMPLE DUPLICATE (LCSD) is included in the QC batch.

LABORATORY CONTROL SAMPLE

The Laboratory Control Sample is a QC sample that is created by adding known concentrations of a full or partial set of target analytes to a matrix similar to that of the environmental samples in the QC batch. The LCS analyte recovery results are used to monitor the analytical process and provide evidence that the laboratory is performing the method within acceptable guidelines. All control analytes indicated by a bold type in the LCS must meet acceptance criteria. Failure to meet the established recovery guidelines requires the repreparation and reanalysis of all samples in the QC batch. The only exception is that if the LCS recoveries are biased high and the associated sample is ND (non-detected) for the parameter(s) of interest, the batch is acceptable.

At times, a Laboratory Control Sample Duplicate (LCSD) is also included in the QC batch. An LCSD is a QC sample that is created and handled identically to the LCS. Analyte recovery data from the LCSD is assessed in the same way as that of the LCS. The LCSD recoveries, together with the LCS recoveries, are used to determine the reproducibility (precision) of the analytical system. Precision data are expressed as relative percent differences (RPDs). If the RPD fails for an LCS/LCSD and yet the recoveries are within acceptance criteria, the batch is still acceptable.

METHOD BLANK

The Method Blank is a QC sample consisting of all the reagents used in analyzing the environmental samples contained in the QC batch. Method Blank results are used to determine if interference or contamination in the analytical system could lead to the reporting of false positive data or elevated analyte concentrations. All target analytes must be below the reporting limits (RL) or the associated sample(s) must be ND except under the following circumstances:

- Common organic contaminants may be present at concentrations up to 5 times the reporting limits. Common metals contaminants may be present at concentrations up to 2 times the reporting limit, or the reported blank concentration must be twenty fold less than the concentration reported in the associated environmental samples. (See common laboratory contaminants listed below.)
-

Volatile (GC or GC/MS)	Semivolatile (GC/MS)	Metals ICP-MS	Metals ICP Trace
Methylene Chloride, Acetone, 2-Butanone	Phthalate Esters	Copper, Iron, Zinc, Lead, Calcium, Magnesium, Potassium, Sodium, Barium, Chromium, Manganese	Copper, Iron, Zinc, Lead

- Organic blanks will be accepted if compounds detected in the blank are present in the associated samples at levels 10 times the blank level. Inorganic blanks will be accepted if elements detected in the blank are present in the associated samples at 20 times the blank level.

- Blanks will be accepted if the compounds/elements detected are not present in any of the associated environmental samples.

Failure to meet these Method Blank criteria requires the repreparation and reanalysis of all samples in the QC batch.

MATRIX SPIKE/MATRIX SPIKE DUPLICATE

A Matrix Spike and a Matrix Spike Duplicate are a pair of environmental samples to which known concentrations of a full or partial set of target analytes are added. The MS/MSD results are determined in the same manner as the results of the environmental sample used to prepare the MS/MSD. The analyte recoveries and the relative percent differences (RPDs) of the recoveries are calculated and used to evaluate the effect of the sample matrix on the analytical results. Due to the potential variability of the matrix of each sample, the MS/MSD results may not have an immediate bearing on any samples except the one spiked; therefore, the associated batch MS/MSD may not reflect the same compounds as the samples contained in the analytical report. When these MS/MSD results fail to meet acceptance criteria, the data is evaluated. If the LCS is within acceptance criteria, the batch is considered acceptable. The acceptance criteria do not apply to samples that are diluted for organics if the native sample amount is 4x the concentration of the spike.

For certain methods, a Matrix Spike/Sample Duplicate (MS/DU) may be included in the QC batch in place of the MS/MSD. For the parameters (i.e. pH, ignitability) where it is not possible to prepare a spiked sample, a Sample Duplicate may be included in the QC batch. However, a Sample Duplicate is less likely to provide usable precision statistics depending on the likelihood of finding concentrations below the standard reporting limit. When the Sample Duplicate result fails to meet acceptance criteria, the data is evaluated.

SURROGATE COMPOUNDS

In addition to these batch-related QC indicators, each organic environmental and QC sample is spiked with surrogate compounds. Surrogates are organic chemicals that behave similarly to the analytes of interest and that are rarely present in the environment. Surrogate recoveries are used to monitor the individual performance of a sample in the analytical system.

If surrogate recoveries are biased high in the LCS, LCSD, or the Method Blank, and the associated sample(s) are ND, the batch is acceptable. Otherwise, if the LCS, LCSD, or Method Blank surrogate(s) fail to meet recovery criteria, the entire sample batch is reprepped and reanalyzed. If the surrogate recoveries are outside criteria for environmental samples, the samples will be reprepped and reanalyzed unless there is objective evidence of matrix interference or if the sample dilution is greater than the threshold outlined in the associated method SOP.

For the GC/MS BNA methods, the surrogate criterion is that two of the three surrogates for each fraction must meet acceptance criteria. The third surrogate must have a recovery of ten percent or greater.

For the Pesticide, PCB, and PAH methods, the surrogate criterion is that one of two surrogate compounds must meet acceptance criteria.

STL North Canton Certifications and Approvals:

California (#01144CA), Connecticut (#PH-0590), Florida (#E87225),
Illinois (#200004), Kansas (#E10336), Minnesota (#39-999-348), New Jersey (#OH001), New York (#10975), Ohio (#6090), OhioVAP (#CL0024), Utah (#QUAN9), West Virginia (#210), Wisconsin (#999518190),NAVY, ARMY, USDA Soil Permit, ACIL Seal of Excellence – Participating Lab Status Award (#82)

C:\DOCUME~1\armans\LOCALS~1\Temp\Narrative_040306.docRevised 04/03/06 DJL

EXECUTIVE SUMMARY

EXECUTIVE SUMMARY - Detection Highlights

A6H230148

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
MW-111B-082206 08/22/06 13:30 001				
Arsenic (III)	112000	16000	ug/L	SW846 7063
MW-113B-082206 08/22/06 15:10 002				
Arsenic (III)	15500	8000	ug/L	SW846 7063
Arsenic (V)	9500	3200	ug/L	SW846 7063

METHOD SUMMARY

ANALYTICAL METHODS SUMMARY

A6H230148

PARAMETER	ANALYTICAL METHOD
Arsenic (III) Speciation by ASV	SW846 7063
Arsenic (V) Speciation by ASV	SW846 7063

References:

SW846 "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 and its updates.

SAMPLE SUMMARY

SAMPLE SUMMARY

A6H230148

WO #	SAMPLE#	CLIENT SAMPLE ID	SAMPLED DATE	SAMP TIME
JC0Q4	001	MW-111B-082206	08/22/06	13:30
JC0RQ	002	MW-113B-082206	08/22/06	15:10
JC0R0	003	EB-082206-GW-B	08/22/06	16:30

NOTE(S):

- The analytical results of the samples listed above are presented on the following pages.
- All calculations are performed before rounding to avoid round-off errors in calculated results.
- Results noted as "ND" were not detected at or above the stated limit.
- This report must not be reproduced, except in full, without the written approval of the laboratory.
- Results for the following parameters are never reported on a dry weight basis: color, corrosivity, density, flashpoint, ignitability, layers, odor, paint filter test, pH, porosity pressure, reactivity, redox potential, specific gravity, spot tests, solids, solubility, temperature, viscosity, and weight.

SHIPPING
AND
RECEIVING DOCUMENTS

Severn Trent Laboratories
4101 Shuffel Drive NW
North Canton, OH 44720
(330) 497-9396

Honeywell — Chain Of Custody / Analysis Request

AESI Ref:	38945.67803		
COC#	30916-001703-GW-B		
	082206-GW-B		
Lab Proj # (SDG):			
Lab ID	BR		
Site ID	Quanta		
Lab Job #			
Authorized User:	Honeywell		
Text & Excel File Drive	Excel & Text File Order		

Copyright AESI: Version 6.0 Unauthorized use strictly prohibited.

Privileged & Confidential		Site Name:	Quanta Resources (Edgewater)
EDD To:	amy.klopper@ch2m.com, john.mitchell@ch2m.com	Location of Site:	Edgewater, NJ
Sampler:	Austin Hareclerode/CH2M HILL		
PO #		Preservative	9
Analysis Turnaround Time (TAT):	10		
Consultant	CH2M		
Full Report TAT:			

Phase: | Sampling Program: Quanta 2006 Groundwater

Sampling Co.:	CH2M HILL
Client Contact: (name, co., address)	Jennifer Simms
	1700 Market Street, Suite 1600
	Philadelphia, PA 19103
Preliminary Data To	amy.klopper@ch2m.com, jennifer.simms@ch2m.com
Sample Receipt Acknowledgement To	amy.klopper@ch2m.com, jennifer.simms@ch2m.com
Hard Copy To	Amy Klopper, 3011 Southwest Williston Road, Gainesville, FL 32608
Invoice To:	jennifer.simms@ch2m.com

Sample Identification: Location ID	Start Depth (ft)	End Depth (ft)	Field Sample ID	Sample Date	Sample Time	Sample Type	Sample Matrix	Sample Purpose	# of Cont.	Composite/Grab	Field Filtered Sample ?	E1632 - Arsenic Speciation	Sampling Method (code)	Lab Sample Numbers
										Units				
1 MW-111B			MW-111B-082206	8/22/06	1330	GW	WATER	REG	1	G	N	X	Bld pump	
2 MW-113B			MW-113B-082206	8/22/06	1510	GW	WATER	REG	1	G	N	X	Bld pump	
3 Equip Blank			EB-082206-GW-B	8/22/06	1630	RIC water	WATER	EB	1	G	N	X	Bld pump	
4														
5														
6														
7														
8														
9														
10														
11														
12														

SW6010^LLI

Relinquished by	Company	Date/Time	Received by	Company	Date/Time	Condition	Cooler Temp.	Custody Seals Intact
Megan	CH2M HILL	8/22/06 1800	[illegible]		8/23/06 915	STL		
Relinquished by	Company	Date/Time	Received by	Company	Date/Time	Condition	Cooler Temp.	Custody Seals Intact

Preservatives: (Other; Specify):

0 (none); 1 (4 Deg C); 2 (HCl pH<2); 3 (HNO3 pH<2); 4 (H2SO4 pH<2); 5 (NaOH pH>12); 6 (NaOH, Zn Acetate); 7 (H2SO4 (pH<2), 4 Deg C)); 8 (HCl pH<2); 9 (HCl 4 Deg C); 10 (HNO3 (pH<2), 4Deg C); 11 (4C NaOH (pH>12) & Ascorbic Acid); 12 (4C H2SO4 (pH<2) & Na2S2O3); 13 (Zn Acetate); sp (special instructions)

STL Cooler Receipt Form/Narrative **Lot Number:**_____
North Canton Facility

Client: Honeywell Project:_____ Quote#: 71914
Cooler Received on: 8/27/06 Opened on: 8/27/06 by: (Signature)
Fedx ☒ Client Drop Off ☐ UPS ☐ DHL ☐ FAS ☐ STL Courier ☐
Stetson ☐ US Cargo ☐ Other:_____
STL Cooler No# L177 Foam Box ☐ ~~Client Cooler~~ ☒ Other_____

1. Were custody seals on the outside of the cooler? Yes ☒ No ☐ Intact? Yes ☒ No ☐ NA ☐
   If YES, Quantity 1
   Were the custody seals signed and dated? Yes ☒ No ☐ NA ☐
2. Shipper's packing slip attached to this form? Yes ☒ No ☐ NA ☐
3. Did custody papers accompany the samples? Yes ☒ No ☐ Relinquished by client? Yes ☒ No ☐
4. Did you sign the custody papers in the appropriate place? Yes ☒ No ☐
5. Packing material used: Bubble Wrap ☐ Foam ☐ None ☒ Other:_____
6. Cooler temperature upon receipt 1.6 °C (see back of form for multiple coolers/temp)

METHOD: Temp Vial ☐ Coolant & Sample ☐ Against Bottles ☐ IR ☒ ICE/H_2O Slurry ☐
COOLANT: Wet Ice ☒ Blue Ice ☐ Dry Ice ☐ Water ☐ None ☐

7. Did all bottles arrive in good condition (Unbroken)? Yes ☒ No ☐
8. Could all bottle labels and/or tags be reconciled with the COC? Yes ☒ No ☐
9. Were samples at the correct pH? (record below/on back) Yes ☒ No ☐ NA ☐
10. Were correct bottles used for the tests indicated? Yes ☒ No ☐
11. Were air bubbles >6 mm in any VOA vials? Yes ☐ No ☐ NA ☒
12. Sufficient quantity received to perform indicated analyses? Yes ☒ No ☐
13. Was a Trip Blank present in the cooler? Yes ☐ No ☒ Were VOAs on the COC? Yes ☐ No ☒
14. Does the trip blank number match the cooler number in which it was received? Yes ☐ No ☐ NA ☒

Contacted PM _____ Date:_____ by:_____ via Voice Mail ☐ Verbal ☐ Other ☐
Concerning:_____

√

1. CHAIN OF CUSTODY

The following discrepancies occurred:

2. SAMPLE CONDITION

Sample(s)_____ were received after the recommended holding time had expired.
Sample(s)_____ were received in a broken container.

3. SAMPLE PRESERVATION

Sample(s) _____ were further preserved in sample receiving to meet recommended pH level(s). *Nitric Acid Lot #* 122805-*HNO3; Sulfuric Acid Lot #* 100405-*H2SO4; Sodium Hydroxide Lot #* -100405 -*NaOH; Hydrochloric Acid Lot #* 100504-*HCl; Sodium Hydroxide and Zinc Acetate Lot #* 071604-*CH3COO2ZN/NaOH*
Sample(s)_____ were received with bubble > 6 mm in diameter (cc: PM)

4. Other (see below or back)

Client ID	pH	Date	Initials
MW11B	<2	8/25/06	
MW11BB	<2		
EQUIP BLNK	<2		

SOP: NC-SC-0005, Sample Receiving
\\qcanoh01\public\QAQC\NARRATIV\STL\Cooler Receipt STL\COOLER_STL_Rev 54 051506.doc

STL Cooler Receipt Form/Narrative
North Canton Facility

Client ID	pH	Date	Initials

Cooler	Temp	Method	Coolant

Discrepancies Cont.

GENERAL CHEMISTRY DATA

SAMPLE DATA

CH2M Hill Constructors, Inc.

Client Sample ID: MW-111B-082206

General Chemistry

Lot-Sample #...: A6H230148-001 **Work Order #...:** JC0Q4 **Matrix.....:** WG
Date Sampled...: 08/22/06 13:30 **Date Received..:** 08/23/06

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Arsenic (III)	**112000**	**16000**	**ug/L**	**SW846 7063**	**08/29/06**	**6241456**
		Dilution Factor: 8000				
Arsenic (V)	ND G	16000	ug/L	SW846 7063	08/31/06	6243671
		Dilution Factor: 8000				

NOTE(S):

RL Reporting Limit

G Elevated reporting limit. The reporting limit is elevated due to matrix interference.

CH2M Hill Constructors, Inc.

Client Sample ID: MW-113B-082206

General Chemistry

Lot-Sample #...: A6H230148-002 **Work Order #...:** JC0RQ **Matrix.....:** WG
Date Sampled...: 08/22/06 15:10 **Date Received..:** 08/23/06

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Arsenic (III)	**15500**	**8000**	**ug/L**	**SW846 7063**	**08/29/06**	**6241456**
		Dilution Factor: 4000				
Arsenic (V)	**9500**	**3200**	**ug/L**	**SW846 7063**	**08/31/06**	**6243671**
		Dilution Factor: 1600				

CH2M Hill Constructors, Inc.

Client Sample ID: EB-082206-GW-B

General Chemistry

Lot-Sample #...: A6H230148-003 **Work Order #...:** JC0R0 **Matrix.....:** WQ
Date Sampled...: 08/22/06 16:30 **Date Received..:** 08/23/06

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Arsenic (III)	ND	2.0	ug/L	SW846 7063	08/29/06	6241456
		Dilution Factor: 1				
Arsenic (V)	ND	2.0	ug/L	SW846 7063	08/31/06	6243671
		Dilution Factor: 1				

METHOD BLANK REPORT

General Chemistry

Client Lot #...: A6H230148 **Matrix.....:** WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Arsenic (III)		Work Order #: JDEJ61AA		MB Lot-Sample #:	A6H290000-456	
	ND	2.0	ug/L	SW846 7063	08/29/06	6241456
		Dilution Factor: 1				
Arsenic (V)		Work Order #: JDJVQ1AA		MB Lot-Sample #:	A6H310000-671	
	ND	2.0	ug/L	SW846 7063	08/31/06	6243671
		Dilution Factor: 1				

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

General Chemistry

Lot-Sample #...: A6H230148 **Matrix.....:** WATER

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Arsenic (III)		WO#:JDEJ61AC-LCS/JDEJ61AD-LCSD				LCS Lot-Sample#: A6H290000-456	
	82	(25 - 130)			SW846 7063	08/29/06	6241456
	76	(25 - 130)	8.9	(0-50)	SW846 7063	08/29/06	6241456
		Dilution Factor: 1					
Arsenic (V)		WO#:JDJVQ1AC-LCS/JDJVQ1AD-LCSD				LCS Lot-Sample#: A6H310000-671	
	64	(25 - 130)			SW846 7063	08/31/06	6243671
	45	(25 - 130)	35	(0-50)	SW846 7063	08/31/06	6243671
		Dilution Factor: 1					

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE DATA REPORT

General Chemistry

Lot-Sample #...: A6H230148 **Matrix.....:** WATER

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCNT RECVRY	RPD	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Arsenic (III)		WO#:JDEJ61AC-LCS/JDEJ61AD-LCSD				LCS	Lot-Sample#: A6H290000-456	
	20.0	16.5	ug/L	82		SW846 7063	08/29/06	6241456
	20.0	15.1	ug/L	76	8.9	SW846 7063	08/29/06	6241456
		Dilution Factor: 1						
Arsenic (V)		WO#:JDJVQ1AC-LCS/JDJVQ1AD-LCSD				LCS	Lot-Sample#: A6H310000-671	
	20.0	12.8	ug/L	64		SW846 7063	08/31/06	6243671
	20.0	9.0	ug/L	45	35	SW846 7063	08/31/06	6243671
		Dilution Factor: 1						

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

MATRIX SPIKE SAMPLE EVALUATION REPORT

General Chemistry

Client Lot #...: A6H230148 **Matrix.....:** WATER
Date Sampled...: 08/15/06 08:00 **Date Received..:** 08/16/06

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Arsenic (III)		WO#: JCGPM1AE-MS/JCGPM1AF-MSD				MS Lot-Sample #: A6H160315-001	
	54	(25 - 130)			SW846 7063	08/29/06	6241456
	46	(25 - 130)	16	(0-50)	SW846 7063	08/29/06	6241456

Dilution Factor: 1

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

MATRIX SPIKE SAMPLE DATA REPORT

General Chemistry

Client Lot #...: A6H230148 **Matrix.....:** WATER
Date Sampled...: 08/15/06 08:00 **Date Received..:** 08/16/06

PARAMETER	SAMPLE AMOUNT	SPIKE AMT	MEASRD AMOUNT	UNITS	PERCNT RECVRY	RPD	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Arsenic (III)			WO#: JCGPM1AE-MS/JCGPM1AF-MSD				MS Lot-Sample #: A6H160315-001		
	ND	20.0	10.8	ug/L	54		SW846 7063	08/29/06	6241456
	ND	20.0	9.2	ug/L	46	16	SW846 7063	08/29/06	6241456

Dilution Factor: 1

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

SUPPORTIVE RAW DATA

STL North Canton Arsenic (III) Data Review Checklist

Run/Project Information

Run Date: 8/29/06 **Analyst:** [illegible] **Instrument:** _____

Prep Batches Run: 6241456

Methods used: **7063 mod :** NC-WC-000X Rev 1

Review Items

A. Instrument Setup	Yes	No	N/A	2ndLevel
1. Electrode sensitivity check?	X			✓
2. MSA working standard and verification standard within control limits?	X			✓
3. Cleanliness check (ICB) within +/- RL?	X			✓
B. Sample Results				
1. Were non-detect samples verified with single point MSA?	X			✓
2. All samples with As(III) quantified with 3-4 point MSA?	X			✓
3. Sample analyses done within holding time?	X			✓
C. Preparation/Matrix QC				
1. Samples preserved in the field?	X			✓
2. LCS done per prep batch and within QC limits?	X			✓
3. Method blank done per prep batch and < RL?	X			✓
4. MS run at required frequency (1 per 20 samples) and within limits?	X			✓
5. MSD or DU run at required frequency (1 per 20 samples) and RPD within limits?	X			✓
D. Other				
1. Are all nonconformances documented appropriately?			X	N/A
2. Current MDL data on file?	X			✓
3. Calculations and Transcriptions checked for error?	X			✓
4. All client/ project specific requirements met?	X			✓
5. Date of analysis verified as correct?	X			✓

Analyst: [illegible] **Date:** 8/29/06

Comments:

2nd Level Reviewer : [illegible] **Date:** 8/30/06

Standard, Reagent and Supply Numbers

MSA Working Std AS6053 **MSA Verification Std** AS6054 **MS As(V) Std** _____

Au plate soln WR60945 **conc HCl** WR60785 **Cu Remover** _____ **C18** _____

Acid ext _____ **Basic ext** _____

TraceDetect Nano-Band Explorer - C:\Program Files\Common Files\AS Temp\082906\JCGPM with 2ppb As III.tds

Sample ID: JCGPM with 2ppb As III

Trace Metals:

As(III): 49.0 nA

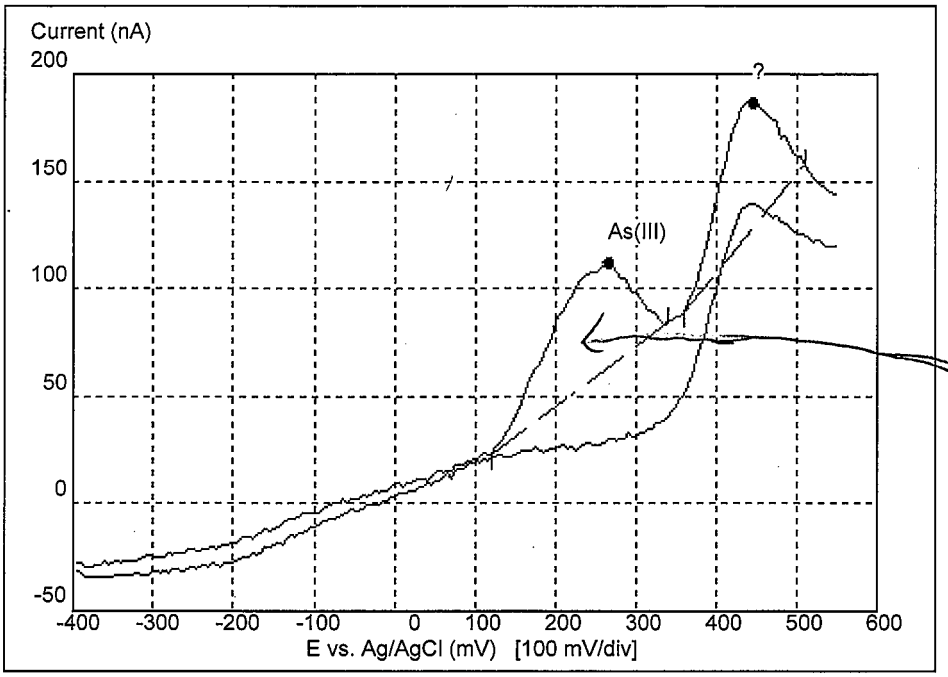
ND

Temperature:

Input 1:

Input 2:

29/Aug/06 12:01:12



2ppb

Settings:

Type:	ASV	Clean Time (S)	0.1	Signal Avg.	8
Waveform:	Staircase	Clean Voltage (mV):	600	Frequency (Hz):	2000
Cell	Three Electrode	Plate Time (S)	160	Start Voltage (mV):	-400
☑ Background subtraction		Plate Voltage (mV)	-400	Stop Voltage (mV):	550
		Range (uA):	12.5	Step Voltage (mV):	5

TraceDetect Nano-Band Explorer

Sample ID: JCN9A 500x As III

29/Aug/06 12:18:54

Trace Metals:

As(III): 1.47 uA

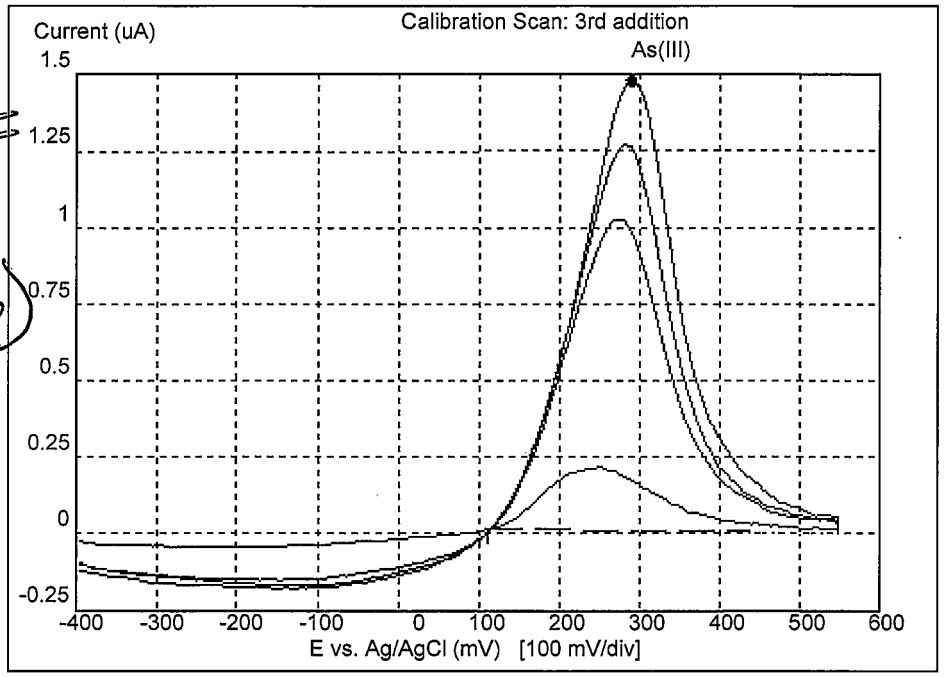
30,700ppb

(8000x for plate : Manual)

Temperature:

Input 1:

Input 2:



Settings:

Type:	ASV	Clean Time (S)	0.1	Signal Avg.	8
Waveform:	Staircase	Clean Voltage (mV):	600	Frequency (Hz):	2000
Cell	Three Electrode	Plate Time (S)	10	Start Voltage (mV):	-400
☑ Background subtraction		Plate Voltage (mV)	-400	Stop Voltage (mV):	550
		Range (uA):	12.5	Step Voltage (mV):	5

LOL : 16 000

500 X manual dilution
16 X plate time dilution

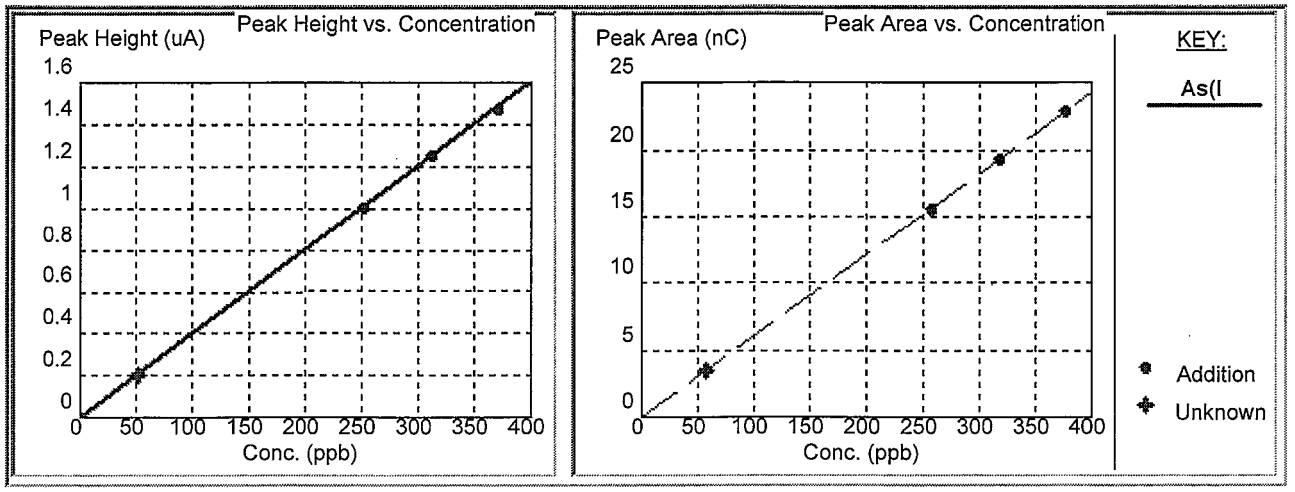
8000 X total

Calibration Summary:

JCN9A 500X

As III

Calibration Date: 21/Aug/06 at 15:19:47



Calibration Parameters

Metal	Calib. Mode	Fit Factor	Slope	Zero Offset	Starting Concentration	Concentration in Original Sample
As[III]	**Height**	1.000	0.250 ppb/nA	0 ppt	52 ppb	61 ppb
	Area	1.000	16.4 ppb/nC	0 ppt	57 ppb	68 ppb

Addition Data for Method of Standard Additions

Metal	Unknown Concentration	Concentration in original aliquot	1st Addition	2nd Addition	3rd Addition	Total added concentration
As(III)	51.5 ppb	61.4 ppb	10.0 uL (200 ppb)	3.00 uL (60.0 ppb)	3.00 uL (60.0 ppb)	320 ppb

JCN9A 500X
As^{III}

x 500
30,700 ppb

Starting Volume: 50.000 **mL**

Final Volume: 50.016 **mL**

TraceDetect Nano-Band Explorer

Sample ID: JCN9F As III with 2ppb

Trace Metals:

As(III): 246 ppt

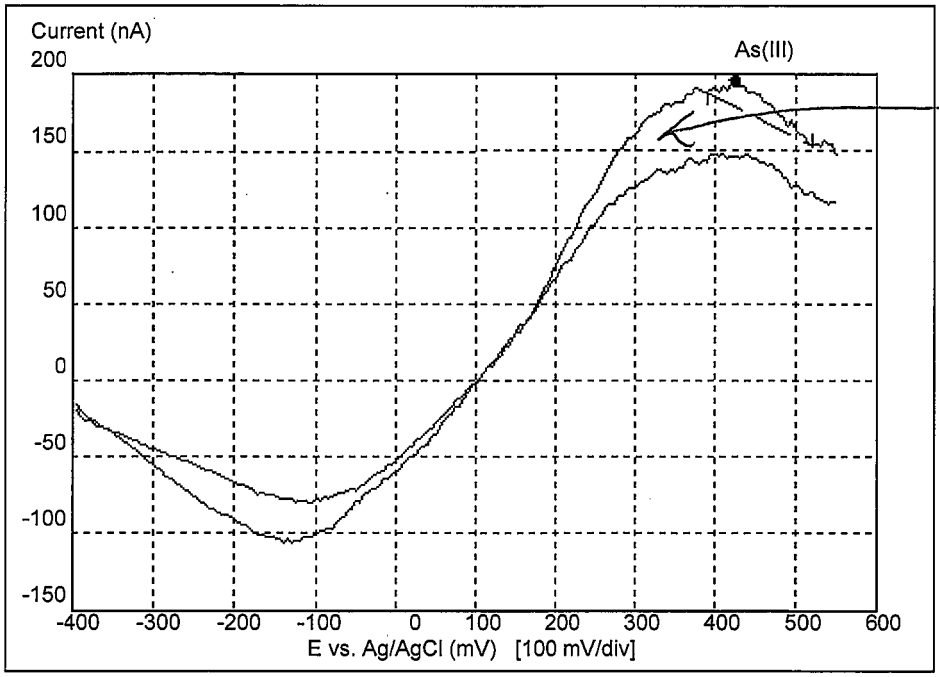
ND

Temperature:

Input 1:

Input 2:

29/Aug/06 12:40:17



2ppb

Settings:

Type:	ASV	Clean Time (S)	0.1	Signal Avg.	8
Waveform:	Staircase	Clean Voltage (mV):	600	Frequency (Hz):	2000
Cell	Three Electrode	Plate Time (S)	160	Start Voltage (mV):	-400
☑ Background subtraction		Plate Voltage (mV)	-400	Stop Voltage (mV):	550
		Range (uA):	12.5	Step Voltage (mV):	5

TraceDetect Nano-Band Explorer - C:\Program Files\Common Files\AS Temp\082906\JCN9G As III with 2ppb.tds

Sample ID: JCN9G As III with 2ppb

Trace Metals:

As(III): 1.13 ppb

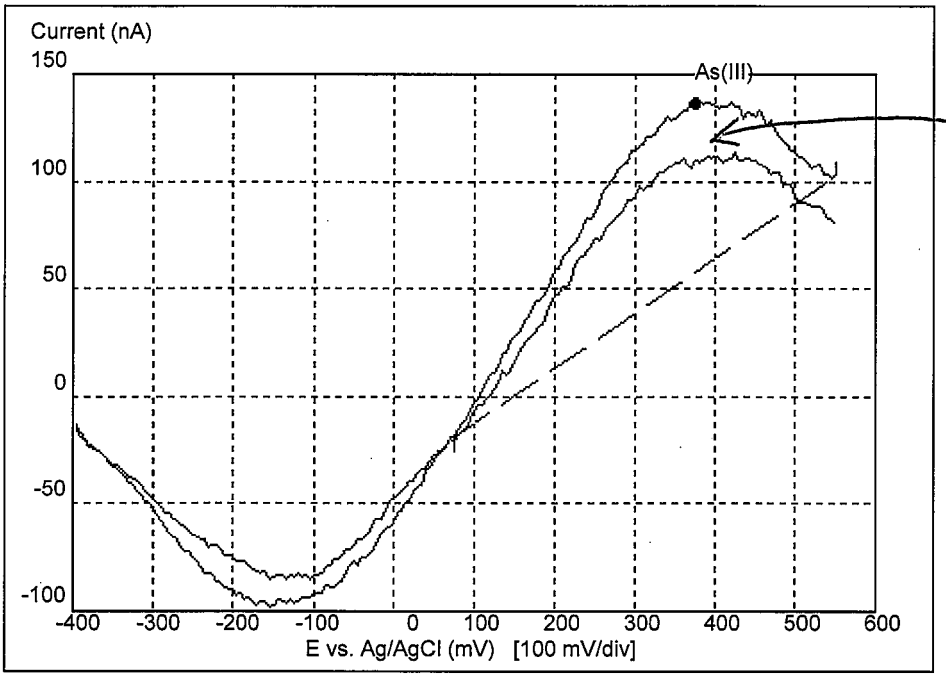
ND

Temperature:

Input 1:

Input 2:

29/Aug/06 12:55:16



2ppb

Settings:

Type:	ASV	Clean Time (S)	0.1	Signal Avg.	8
Waveform:	Staircase	Clean Voltage (mV):	600	Frequency (Hz):	2000
Cell	Three Electrode	Plate Time (S)	160	Start Voltage (mV):	-400
☑ Background subtraction		Plate Voltage (mV)	-400	Stop Voltage (mV):	550
		Range (uA):	12.5	Step Voltage (mV):	5

TraceDetect Nano-Band Explorer

Sample ID: JCN90 As III

Trace Metals:

As(III): 511 ppb

193 ppb

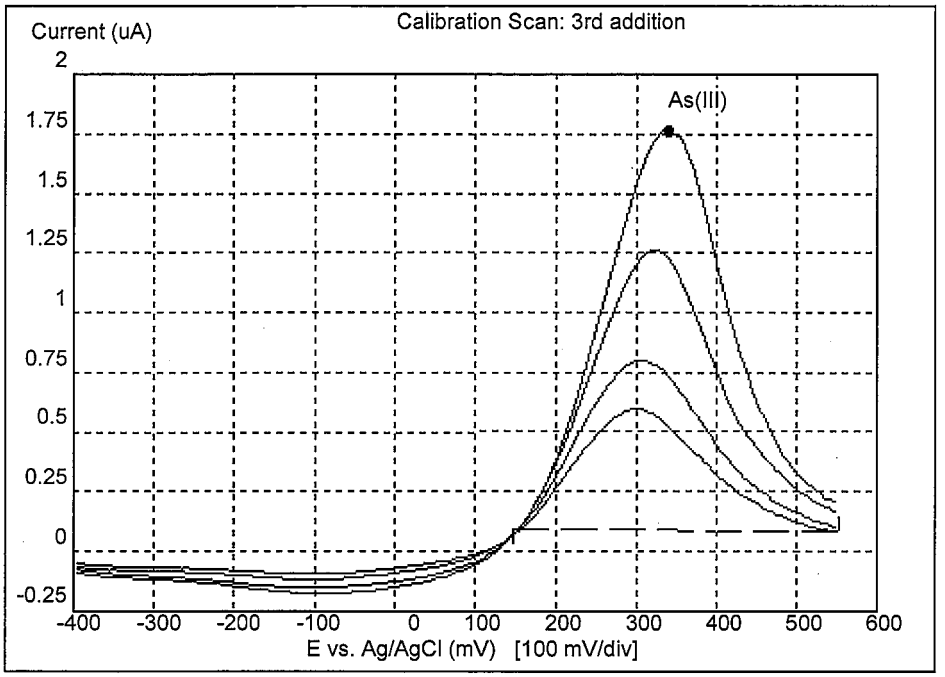
(8X for plate)

Temperature:

Input 1:

Input 2:

29/Aug/06 13:10:46



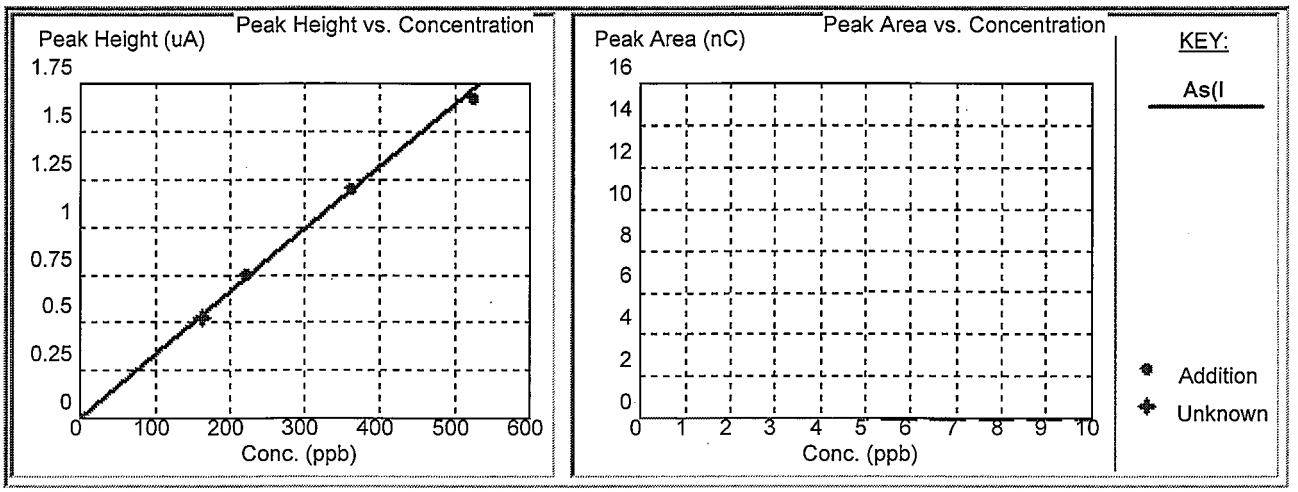
Settings:

Type:	ASV	Clean Time (S)	0.1	Signal Avg.	8
Waveform:	Staircase	Clean Voltage (mV):	600	Frequency (Hz):	2000
Cell	Three Electrode	Plate Time (S)	20	Start Voltage (mV):	-400
☑ Background subtraction		Plate Voltage (mV)	-400	Stop Voltage (mV):	550
		Range (uA):	12.5	Step Voltage (mV):	5

Calibration Summary:

JCN90 As[III]

Calibration Date: 29/Aug/06 at 12:19:45



Calibration Parameters

Metal	Calib. Mode	Fit Factor	Slope	Zero Offset	Starting Concentration	Concentration in Original Sample
As[III]	**Height**	0.998	0.304 ppb/nA	0 ppt	160 ppb	190 ppb
	Area	0.156	-122 ppb/nC	0 ppt	-590 ppb	-700 ppb

Addition Data for Method of Standard Additions

Metal	Unknown Concentration	Concentration in original aliquot	1st Addition	2nd Addition	3rd Addition	Total added concentration
As(III)	162 ppb	193 ppb	3.00 uL (60.0 ppb)	7.00 uL (140 ppb)	8.00 uL (160 ppb)	360 ppb

JCN90 As^{III}

Starting Volume: 50.000 mL

Final Volume: 50.018 mL

TraceDetect Nano-Band Explorer

Sample ID: JCWF3 5x As III

Trace Metals:

As(III): ~~424 ppb~~ 1e25 ppb

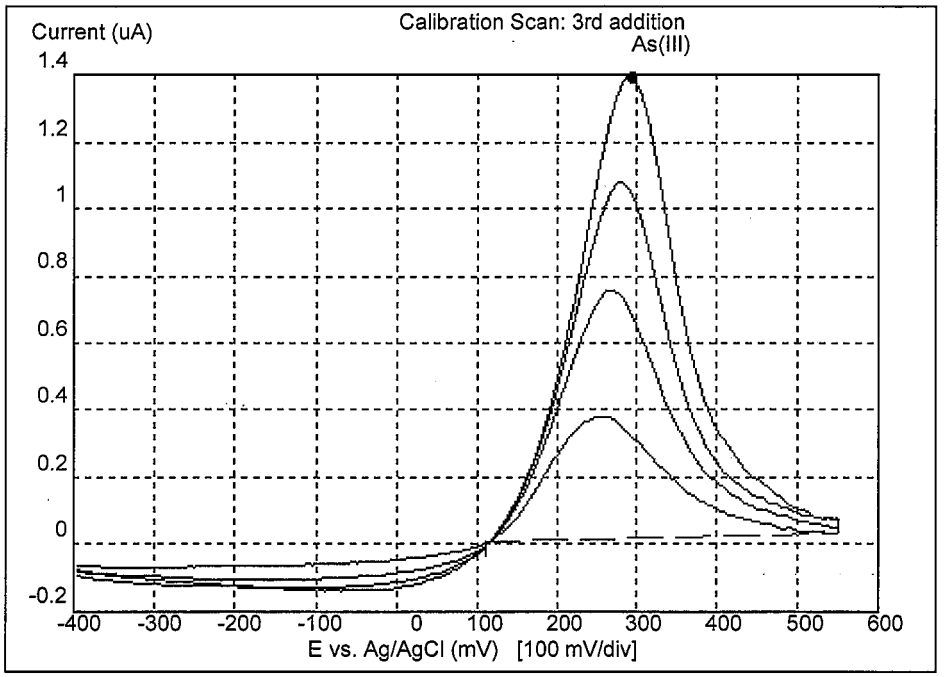
(80X)

Temperature:

Input 1:

Input 2:

29/Aug/06 13:50:54



Settings:

Type:	ASV	Clean Time (S)	0.1	Signal Avg.	8
Waveform:	Staircase	Clean Voltage (mV):	600	Frequency (Hz):	2000
Cell	Three Electrode	Plate Time (S)	10	Start Voltage (mV):	-400
☑ Background subtraction		Plate Voltage (mV)	-400	Stop Voltage (mV):	550
		Range (uA):	12.5	Step Voltage (mV):	5

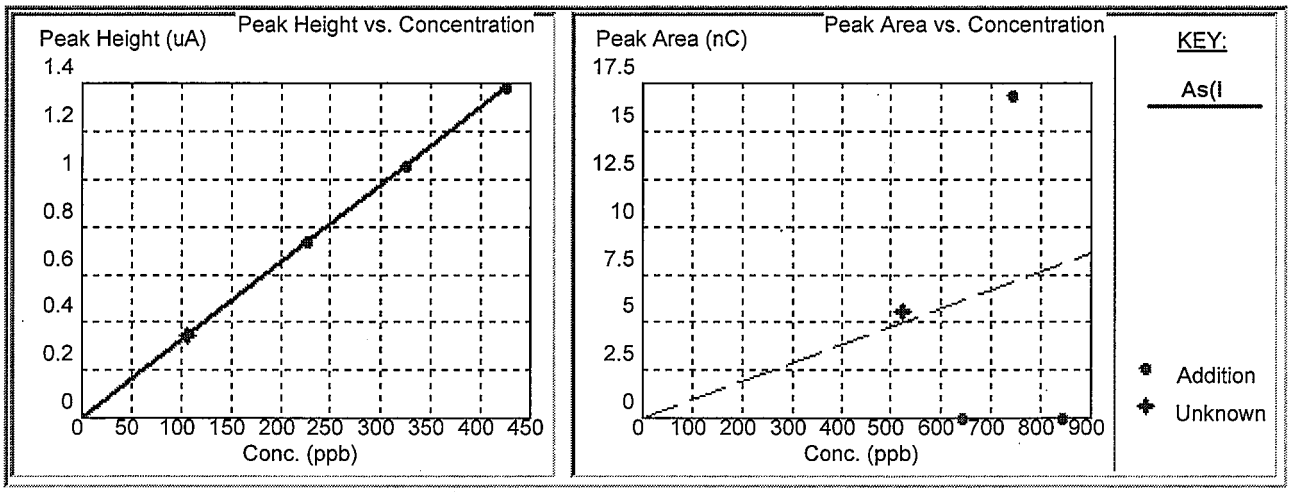
LDL = 160ppb

5X manual dilution
16X plate time
80X total dilution

Calibration Summary:

JC WF3 5X As^{III}

Calibration Date: 29/Aug/06 at 13:12:05



Calibration Parameters

Metal	Calib. Mode	Fit Factor	Slope	Zero Offset	Starting Concentration	Concentration in Original Sample
As[III]	**Height**	1.000	0.307 ppb/nA	0 ppt	110 ppb	130 ppb
	Area	0.000	104 ppb/nC	0 ppt	520 ppb	620 ppb

Addition Data for Method of Standard Additions

Metal	Unknown Concentration	Concentration in original aliquot	1st Addition	2nd Addition	3rd Addition	Total added concentration
As(III)	105 ppb	125 ppb	6.00 uL (120 ppb)	5.00 uL (100 ppb)	5.00 uL (100 ppb)	320 ppb

JCWF3 5X
As III

X 5
625 ppb

Starting Volume: 50.000 mL

Final Volume: 50.016 mL

TraceDetect Nano-Band Explorer

Sample ID: JCWGA As III

Trace Metals:

As(III): 236 ppb

65.4 ppb

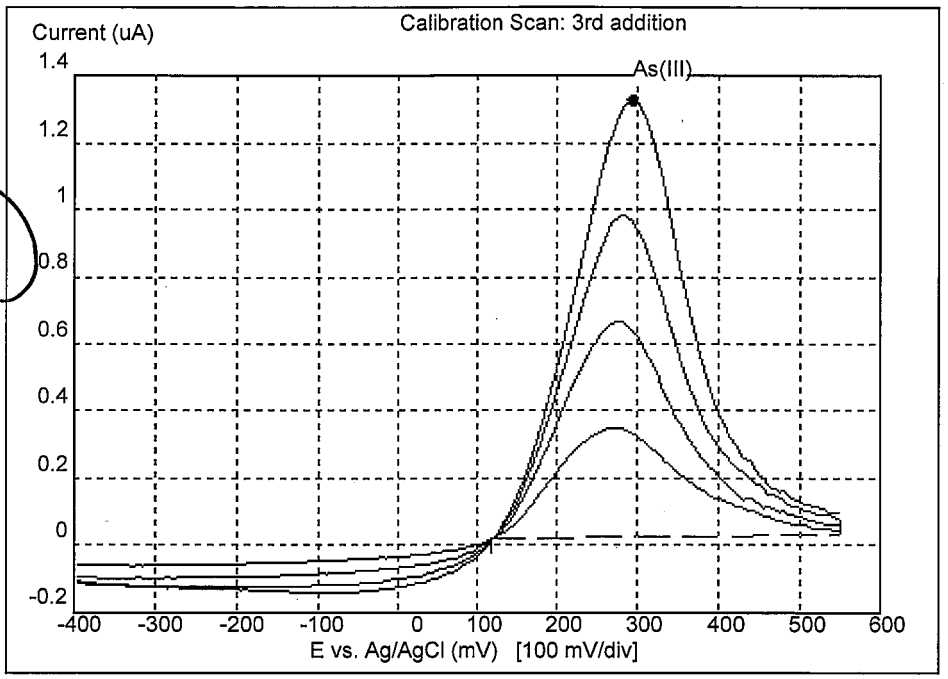
(8x for plate)

Temperature:

Input 1:

Input 2:

29/Aug/06 14:31:06



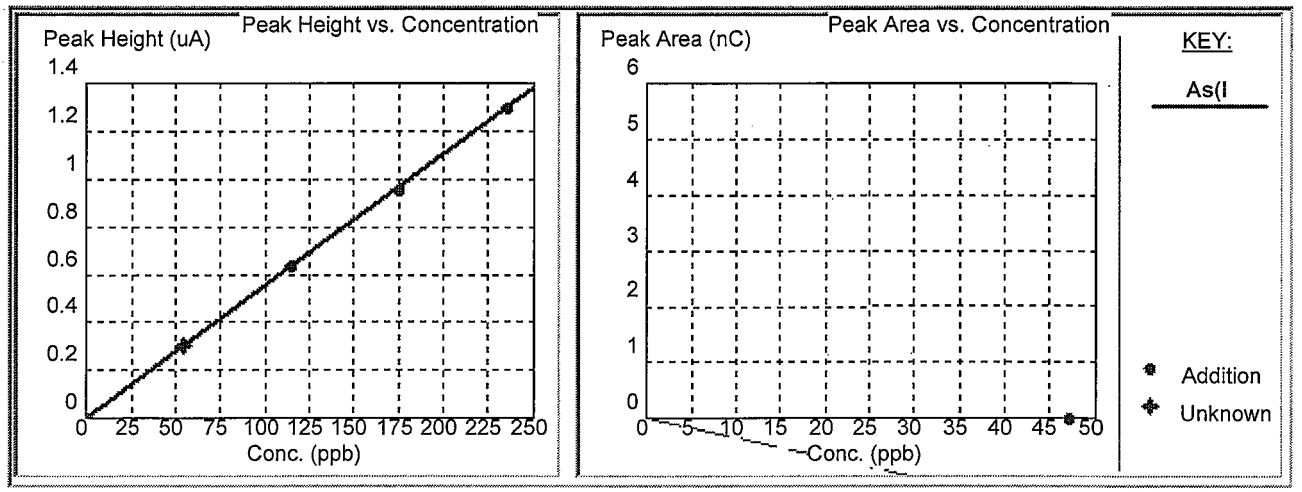
Settings:

Type:	ASV	Clean Time (S)	0.1	Signal Avg.	8
Waveform:	Staircase	Clean Voltage (mV):	600	Frequency (Hz):	2000
Cell	Three Electrode	Plate Time (S)	20	Start Voltage (mV):	-400
☑ Background subtraction		Plate Voltage (mV)	-400	Stop Voltage (mV):	550
		Range (uA):	12.5	Step Voltage (mV):	5

Calibration Summary:

JCWGA As III

Calibration Date: 29/Aug/06 at 13:51:34



Calibration Parameters

Metal	Calib. Mode	Fit Factor	Slope	Zero Offset	Starting Concentration	Concentration in Original Sample
As[III]	**Height**	1.000	0.181 ppb/nA	0 ppt	55 ppb	65 ppb
	Area	0.600	-28 ppb/nC	0 ppt	-130 ppb	-160 ppb

Addition Data for Method of Standard Additions

JCWGA

As III

Metal	Unknown Concentration	Concentration in original aliquot	1st Addition	2nd Addition	3rd Addition	Total added concentration
As(III)	54.9 ppb	65.4 ppb	3.00 uL (60.0 ppb)	3.00 uL (60.0 ppb)	3.00 uL (60.0 ppb)	180 ppb

Starting Volume: 50.000 **mL**

Final Volume: 50.009 **mL**

TraceDetect Nano-Band Explorer

Sample ID: JCWGC As III

Trace Metals:

As(III): 231 ppb

64.1 ppb

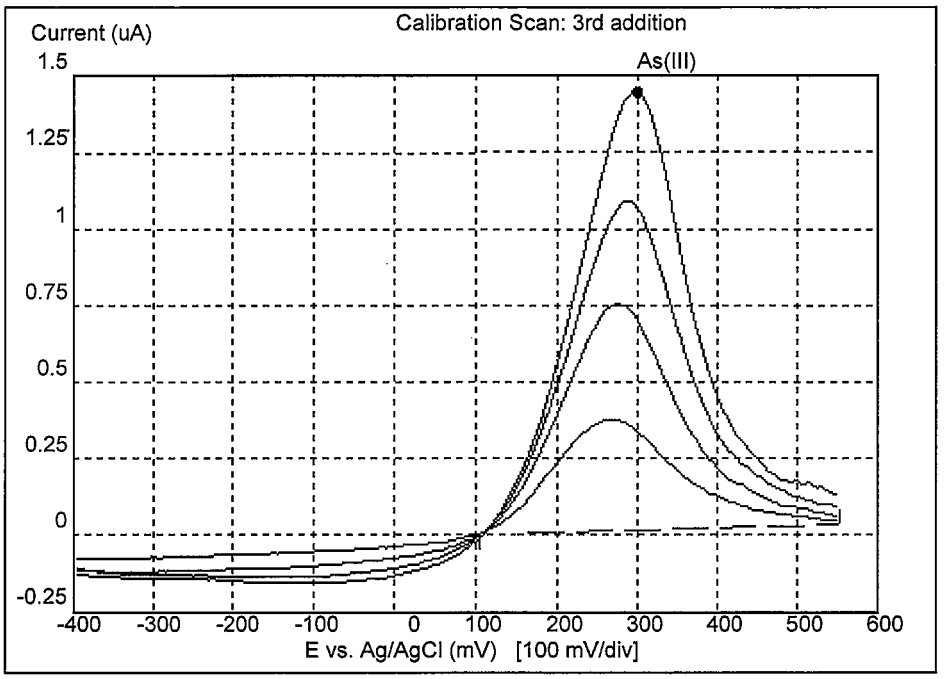
(8X for plate)

Temperature:

Input 1:

Input 2:

29/Aug/06 14:59:04



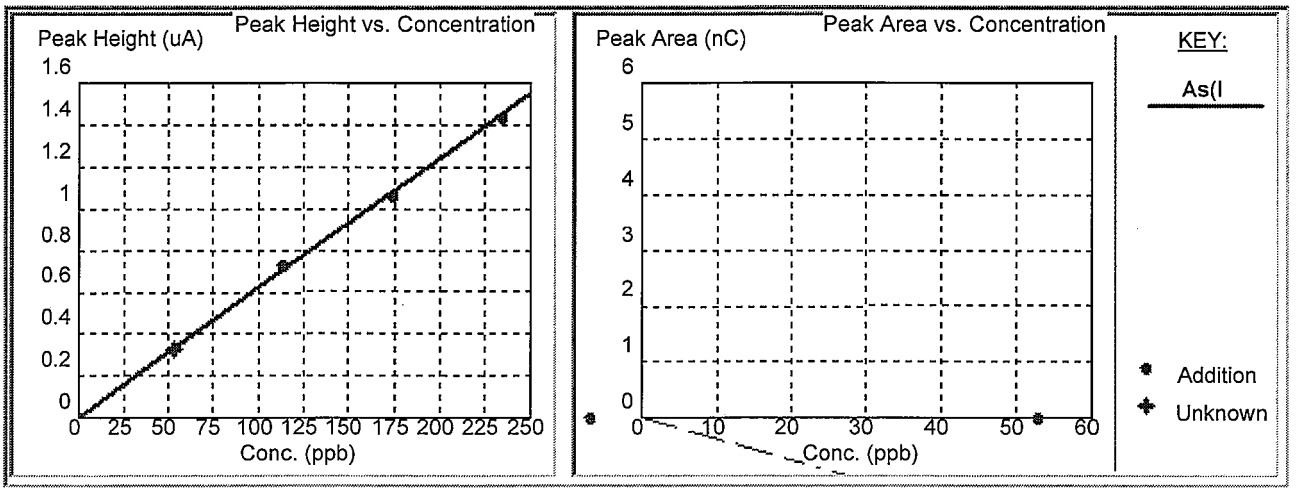
Settings:

Type:	ASV	Clean Time (S)	0.1	Signal Avg.	8
Waveform:	Staircase	Clean Voltage (mV):	600	Frequency (Hz):	2000
Cell	Three Electrode	Plate Time (S)	20	Start Voltage (mV):	-400
☑ Background subtraction		Plate Voltage (mV)	-400	Stop Voltage (mV):	550
		Range (uA):	12.5	Step Voltage (mV):	5

Calibration Summary:

JCWGC As III

Calibration Date: 29/Aug/06 at 14:31:58



Calibration Parameters

Metal	Calib. Mode	Fit Factor	Slope	Zero Offset	Starting Concentration	Concentration in Original Sample
As[III]	**Height**	0.999	0.161 ppb/nA	0 ppt	54 ppb	64 ppb
	Area	0.600	-27 ppb/nC	0 ppt	-130 ppb	-150 ppb

Addition Data for Method of Standard Additions

Metal	Unknown Concentration	Concentration in original aliquot	1st Addition	2nd Addition	3rd Addition	Total added concentration
As(III)	53.8 ppb	64.1 ppb	3.00 uL (60.0 ppb)	3.00 uL (60.0 ppb)	3.00 uL (60.0 ppb)	180 ppb

JCWGC
As III

Starting Volume: 50.000 **mL**

Final Volume: 50.009 **mL**

TraceDetect Nano-Band Explorer

Sample ID: JC0Q4 500x As III

Trace Metals:

As(III): 611 ppb

111,500 ppb

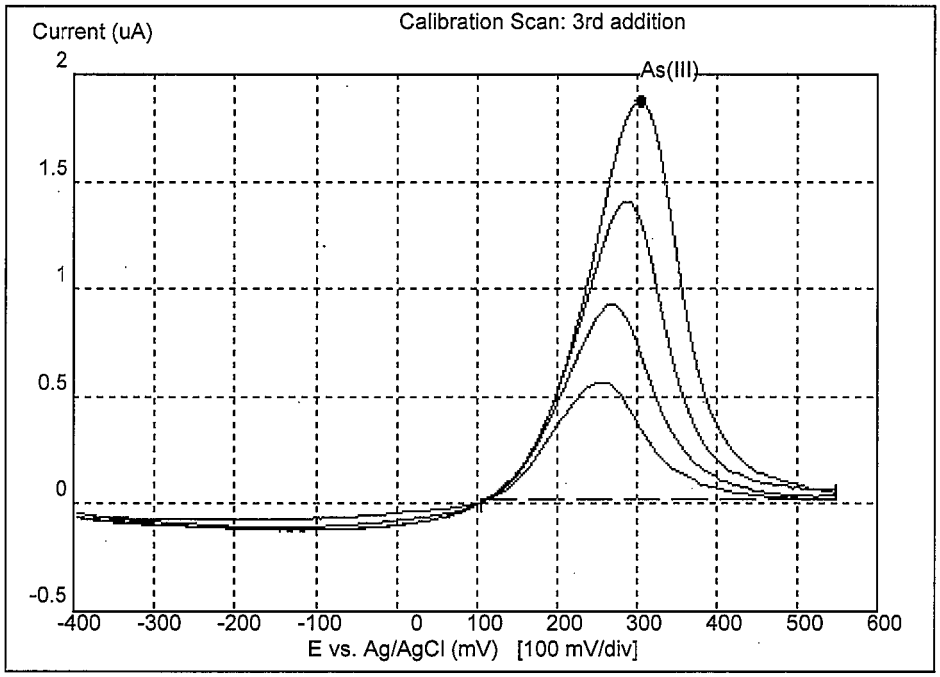
(8000X)

Temperature:

Input 1:

Input 2:

29/Aug/06 15:16:20



Settings:

Type:	ASV	Clean Time (S)	0.1	Signal Avg.	8
Waveform:	Staircase	Clean Voltage (mV):	600	Frequency (Hz):	2000
Cell	Three Electrode	Plate Time (S)	10	Start Voltage (mV):	-400
☑ Background subtraction		Plate Voltage (mV)	-400	Stop Voltage (mV):	550
		Range (uA):	12.5	Step Voltage (mV):	5

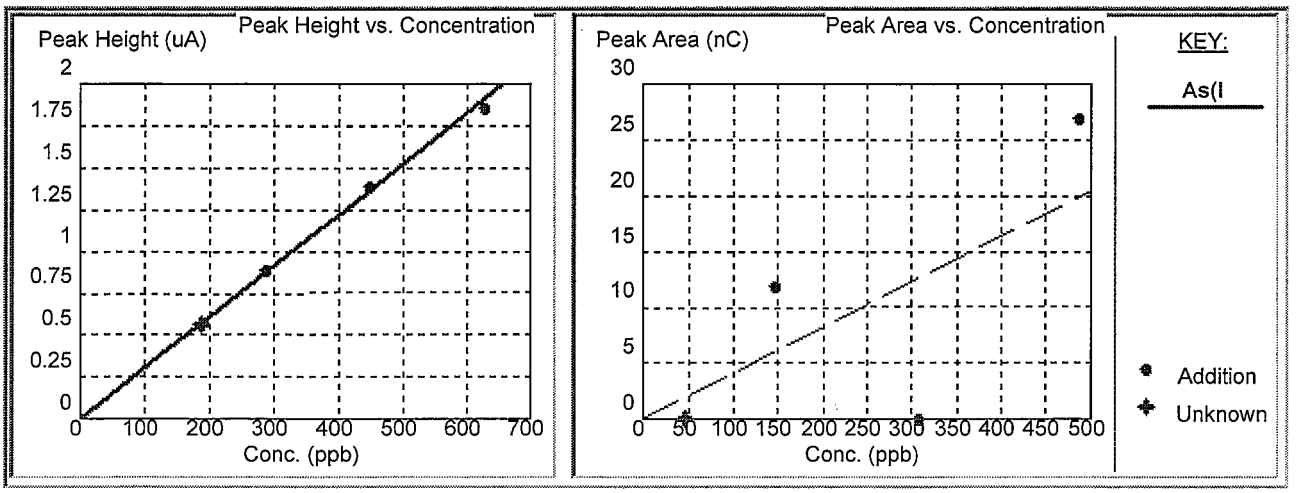
500X manual dilution
16X plate time dilution
8000X total dilution

LDL = 16,000 ppb

Calibration Summary:

JCOQ4 AsIII 500X

Calibration Date: 29/Aug/06 at 15:00:10



Calibration Parameters

Metal	Calib. Mode	Fit Factor	Slope	Zero Offset	Starting Concentration	Concentration in Original Sample
As(III)	**Height**	0.997	0.329 ppb/nA	0 ppt	190 ppb	220 ppb
	Area	0.510	24.4 ppb/nC	0 ppt	46 ppb	55 ppb

Addition Data for Method of Standard Additions

Metal	Unknown Concentration	Concentration in original aliquot	1st Addition	2nd Addition	3rd Addition	Total added concentration
As(III)	187 ppb	223 ppb	5.00 uL (100 ppb)	8.00 uL (160 ppb)	9.00 uL (180 ppb)	440 ppb

JC0Q4 As^{III}
500X

X 500
111,500

Starting Volume: 50.000 **mL**

Final Volume: 50.022 **mL**

TraceDetect Nano-Band Explorer

Sample ID: JCORQ 500x As III

29/Aug/06 15:28:45

Trace Metals:

As(III): 105 ppb

15,500ppb

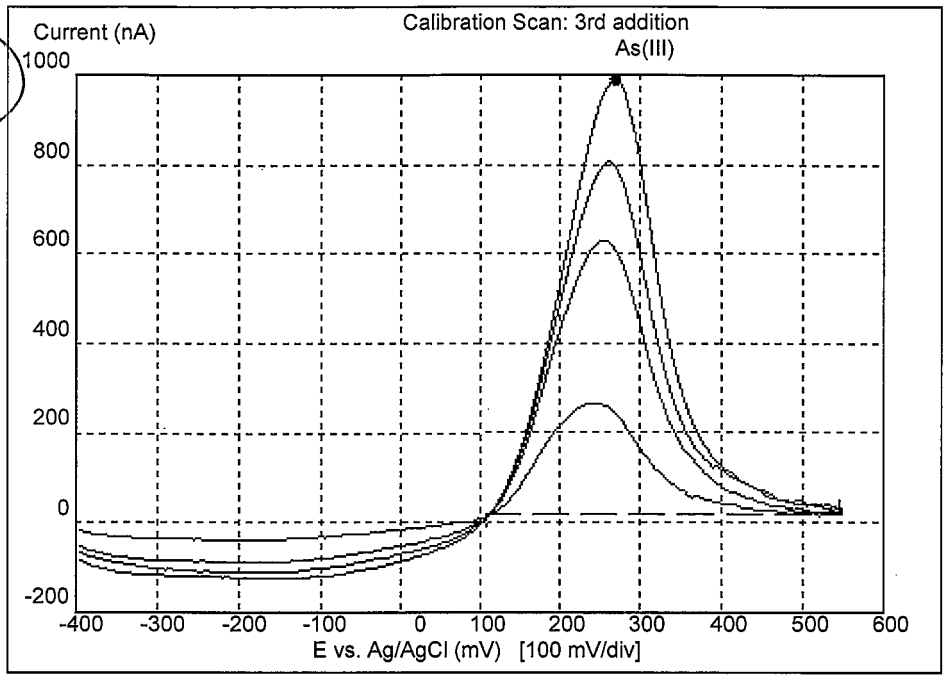
MFG 8/29/06

~~8000~~ 4000X

Temperature:

Input 1:

Input 2:



Settings:

Type:	ASV	Clean Time (S)	0.1	Signal Avg.	8
Waveform:	Staircase	Clean Voltage (mV):	600	Frequency (Hz):	2000
Cell	Three Electrode	Plate Time (S)	20	Start Voltage (mV):	-400
☑ Background subtraction		Plate Voltage (mV)	-400	Stop Voltage (mV):	550
		Range (uA):	12.5	Step Voltage (mV):	5

LDL = 8000ppb

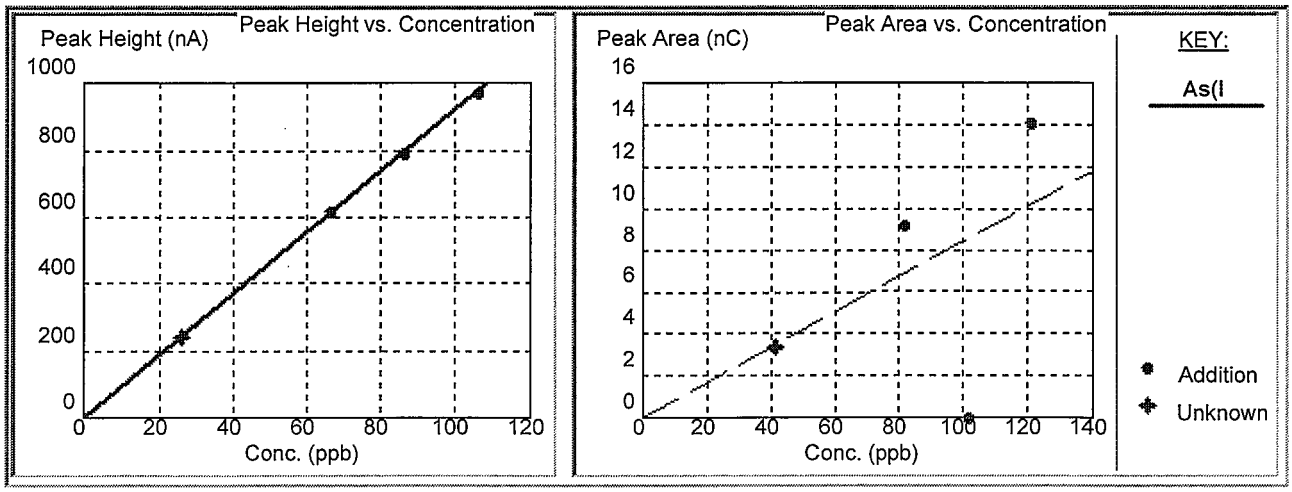
500X manual dilution
8X plate time dilution
4000X total

Calibration Summary:

Calibration Date: 29/Aug/06 at 15:17:28

JCORQ 500 X

AsIII



Calibration Parameters

Metal	Calib. Mode	Fit Factor	Slope	Zero Offset	Starting Concentration	Concentration in Original Sample
As(III)	**Height**	1.000	0.108 ppb/nA	0 ppt	26 ppb	31 ppb
	Area	0.212	11.9 ppb/nC	0 ppt	41 ppb	49 ppb

Addition Data for Method of Standard Additions

Metal	Unknown Concentration	Concentration in original aliquot	1st Addition	2nd Addition	3rd Addition	Total added concentration
As(III)	26.1 ppb	31.0 ppb	2.00 uL (40.0 ppb)	1.00 uL (20.0 ppb)	1.00 uL (20.0 ppb)	80.0 ppb

JCORQ 500X

As^{III}

X500

15,500 ppb

Starting Volume: 50.000 mL

Final Volume: 50.004 mL

TraceDetect Nano-Band Explorer

Sample ID: JC0R0 As III with 2ppb

Trace Metals:

As(III): 1.76 ppb

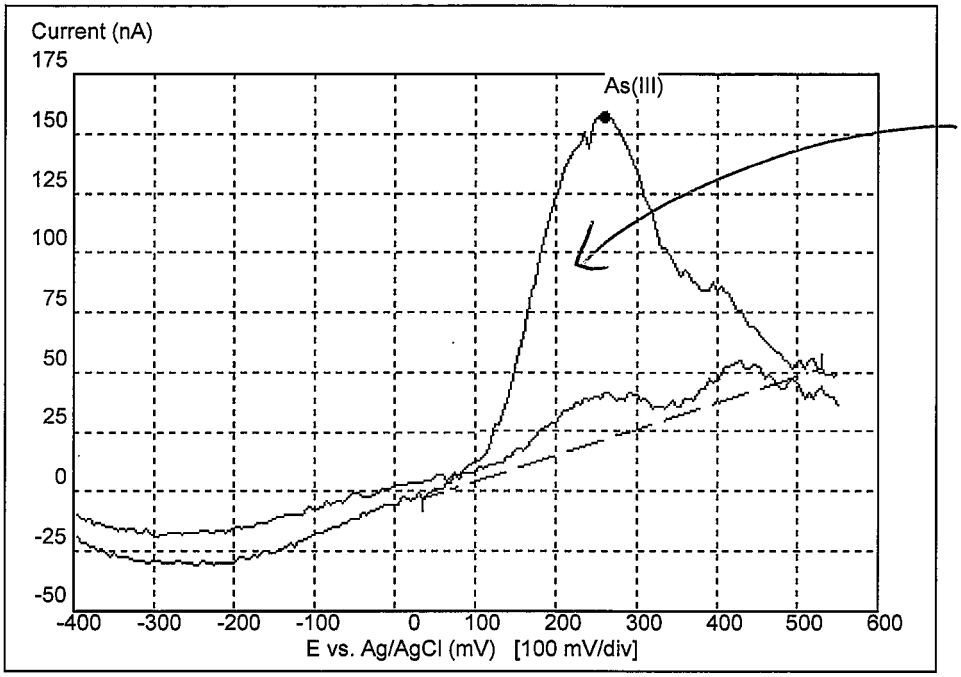
ND

Temperature:

Input 1:

Input 2:

29/Aug/06 15:39:19



2ppb

Settings:

Type:	ASV	Clean Time (S)	0.1	Signal Avg.	8
Waveform:	Staircase	Clean Voltage (mV):	600	Frequency (Hz):	2000
Cell	Three Electrode	Plate Time (S)	160	Start Voltage (mV):	-400
☑ Background subtraction		Plate Voltage (mV)	-400	Stop Voltage (mV):	550
		Range (uA):	12.5	Step Voltage (mV):	5

TraceDetect Nano-Band Explorer

Sample ID: JC1LR As III with 2ppb

Trace Metals:

As(III): 197 ppt

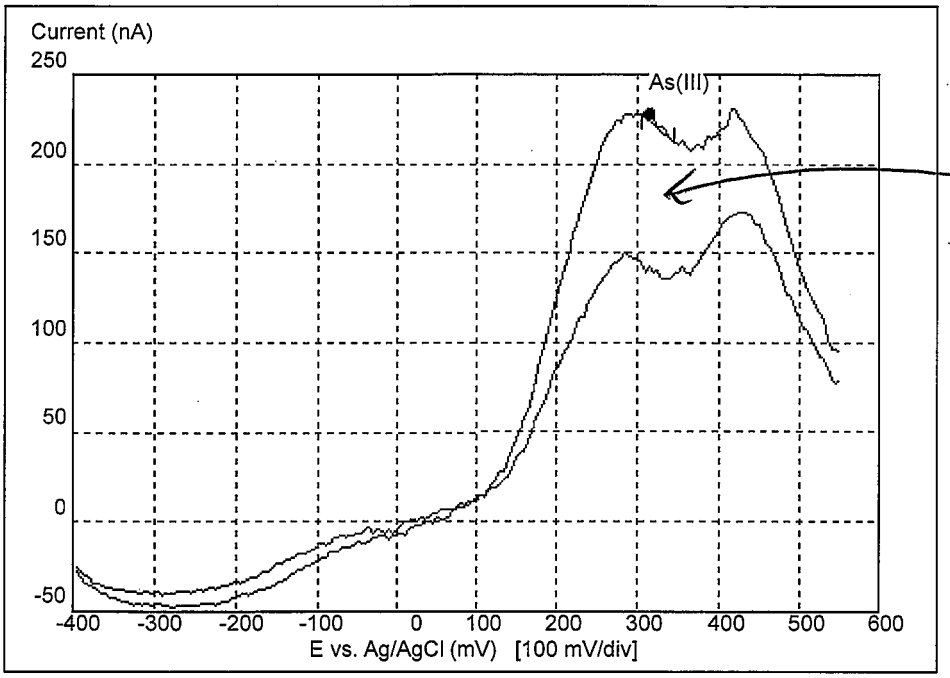
ND

Temperature:

Input 1:

Input 2:

29/Aug/06 13:33:13



2ppb

Settings:

Type:	ASV	Clean Time (S)	0.1	Signal Avg.	8
Waveform:	Staircase	Clean Voltage (mV):	600	Frequency (Hz):	2000
Cell	Three Electrode	Plate Time (S)	160	Start Voltage (mV):	-400
☑ Background subtraction		Plate Voltage (mV)	-400	Stop Voltage (mV):	550
		Range (uA):	12.5	Step Voltage (mV):	5

TraceDetect Nano-Band Explorer

Sample ID: Blank As III with 2ppb

Trace Metals:

As(III): 1.34 ppb

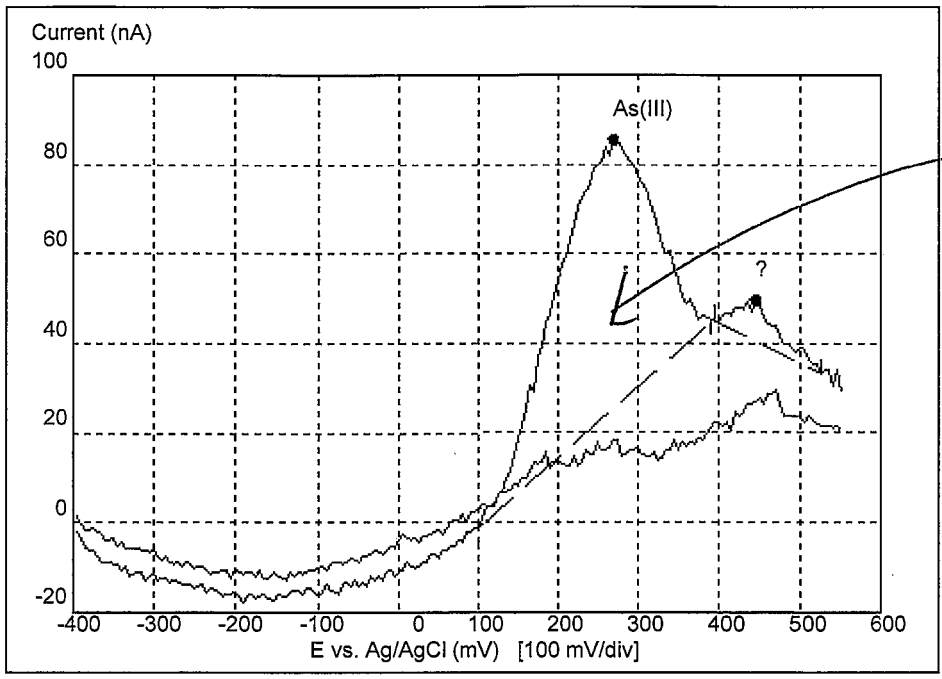
ND

Temperature:

Input 1:

Input 2:

29/Aug/06 16:37:59



2ppb

Settings:

Type:	ASV	Clean Time (S)	0.1	Signal Avg.	8
Waveform:	Staircase	Clean Voltage (mV):	600	Frequency (Hz):	2000
Cell	Three Electrode	Plate Time (S)	160	Start Voltage (mV):	-400
☑ Background subtraction		Plate Voltage (mV)	-400	Stop Voltage (mV):	550
		Range (uA):	12.5	Step Voltage (mV):	5

TraceDetect Nano-Band Explorer

Sample ID: LCS AsIII

Trace Metals:

As(III): 48.3 ppb

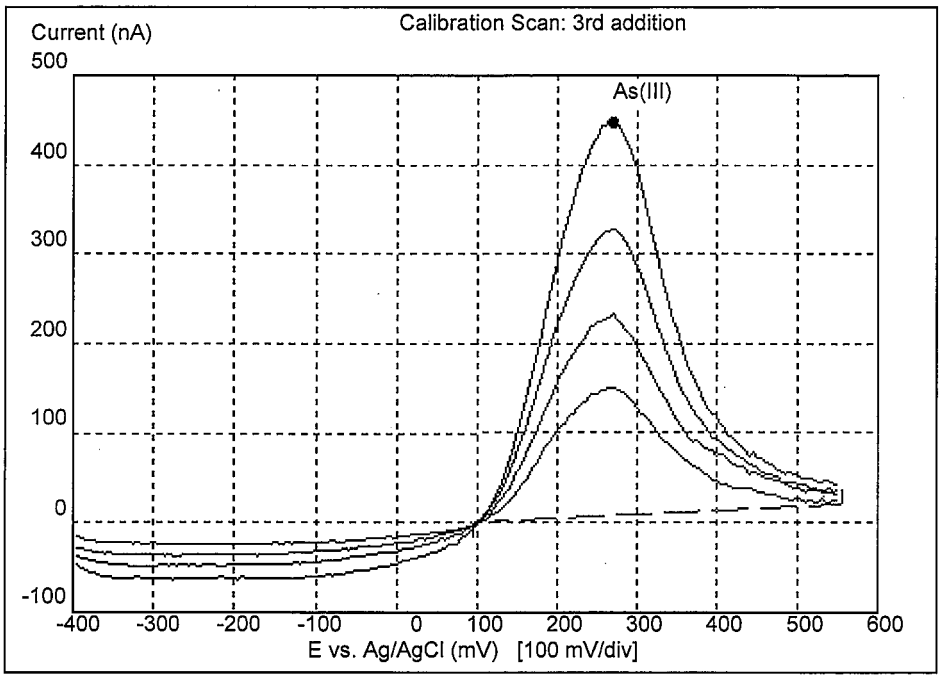
16.5 ppb

Temperature:

Input 1:

Input 2:

29/Aug/06 16:57:42



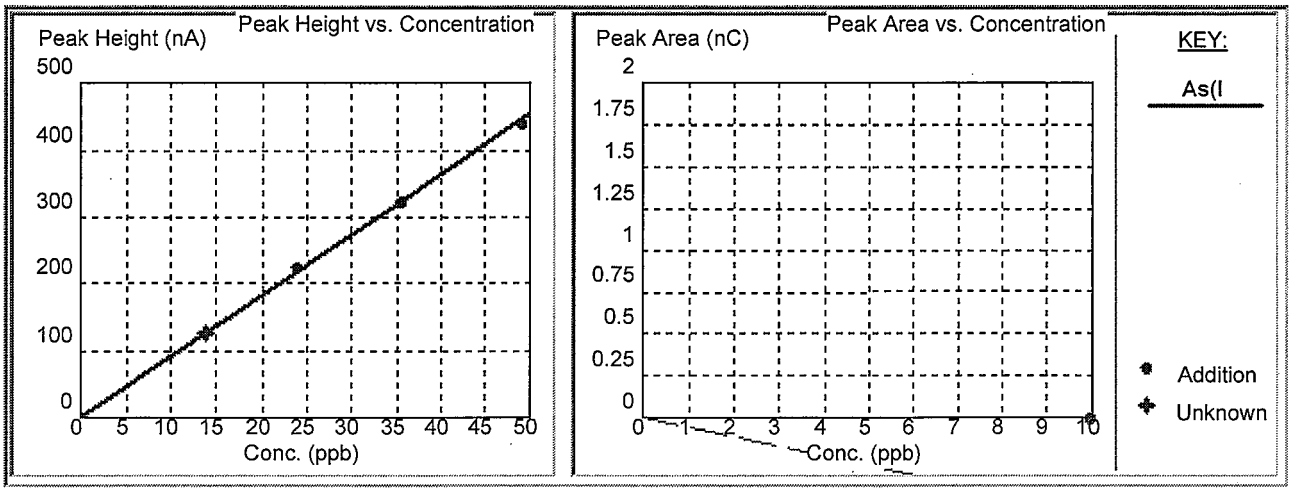
Settings:

Type:	ASV	Clean Time (S)	0.1	Signal Avg.	8
Waveform:	Staircase	Clean Voltage (mV)	600	Frequency (Hz):	2000
Cell	Three Electrode	Plate Time (S)	40	Start Voltage (mV):	-400
		Plate Voltage (mV)	-400	Stop Voltage (mV):	550
		Range (uA):	12.5	Step Voltage (mV):	5

☑ Background subtraction

Calibration Summary:

Calibration Date: 29/Aug/06 at 16:29:53



LCS As III

Calibration Parameters

Metal	Calib. Mode	Fit Factor	Slope	Zero Offset	Starting Concentration	Concentration in Original Sample
As(III)	**Height**	0.999	0.110 ppb/nA	0 ppt	14 ppb	17 ppb
	Area	0.537	-17 ppb/nC	0 ppt	-25 ppb	-30 ppb

Addition Data for Method of Standard Additions

Metal	Unknown Concentration	Concentration in original aliquot	1st Addition	2nd Addition	3rd Addition	Total added concentration
As(III)	13.9 ppb	16.5 ppb	500 uL (9.90 ppb)	600 uL (11.7 ppb)	700 uL (13.5 ppb)	35.2 ppb

LCS As III

Starting Volume: 50.000 **mL**

Final Volume: 51.800 **mL**

TraceDetect Nano-Band Explorer

Sample ID: LCSD AsIII

Trace Metals:

As(III): 52.0 ppb

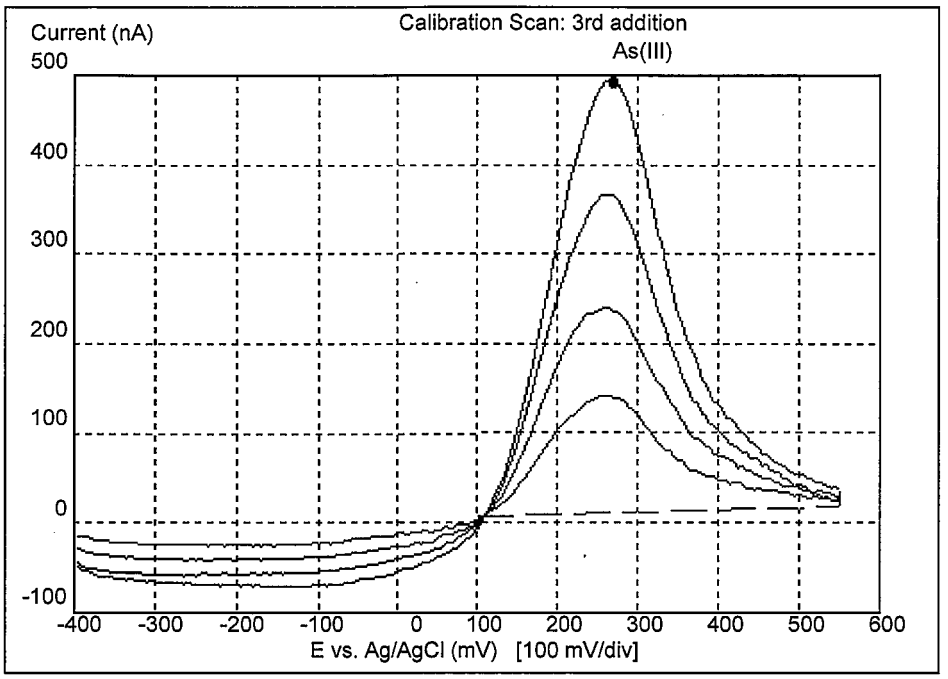
15.1 ppb

Temperature:

Input 1:

Input 2:

29/Aug/06 17:06:25



Settings:

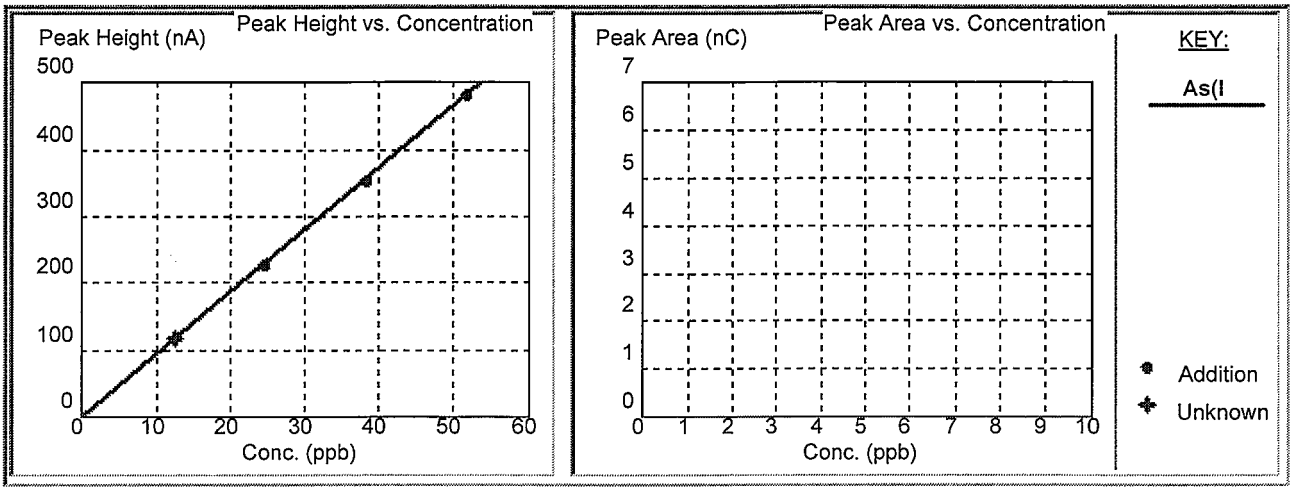
Type:	ASV	Clean Time (S)	0.1	Signal Avg.	8
Waveform:	Staircase	Clean Voltage (mV):	600	Frequency (Hz):	2000
Cell	Three Electrode	Plate Time (S)	40	Start Voltage (mV):	-400
☑ Background subtraction		Plate Voltage (mV)	-400	Stop Voltage (mV):	550
		Range (uA):	12.5	Step Voltage (mV):	5

LCSD

As III

Calibration Summary:

Calibration Date: 29/Aug/06 at 16:58:52



Calibration Parameters

Metal	Calib. Mode	Fit Factor	Slope	Zero Offset	Starting Concentration	Concentration in Original Sample
As[III]	**Height**	1.000	0.107 ppb/nA	0 ppt	13 ppb	15 ppb
	Area	0.036	-598 ppb/nC	0 ppt	-1.9 ppm	-2.3 ppm

Addition Data for Method of Standard Additions

Metal	Unknown Concentration	Concentration in original aliquot	1st Addition	2nd Addition	3rd Addition	Total added concentration
As(III)	12.7 ppb	15.1 ppb	600 uL (11.9 ppb)	700 uL (13.6 ppb)	700 uL (13.5 ppb)	39.0 ppb

LCSD As III

Starting Volume: 50.000 **mL**

Final Volume: 52.000 **mL**

TraceDetect Nano-Band Explorer

Sample ID: JCGPM MS As III

Trace Metals:

As(III): 33.5 ppb

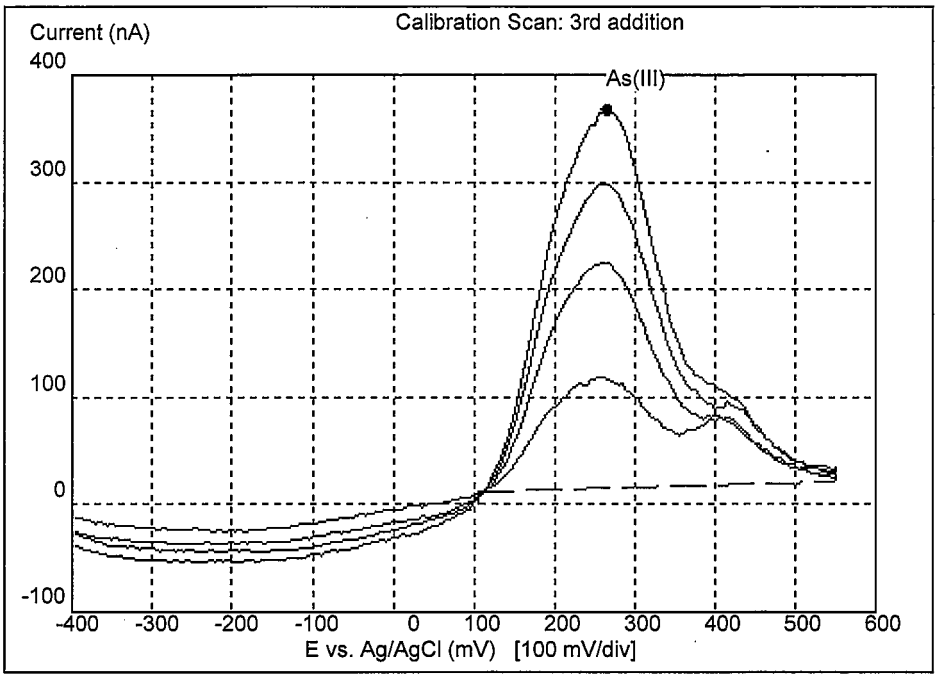
10.8 ppb

Temperature:

Input 1:

Input 2:

29/Aug/06 16:06:53



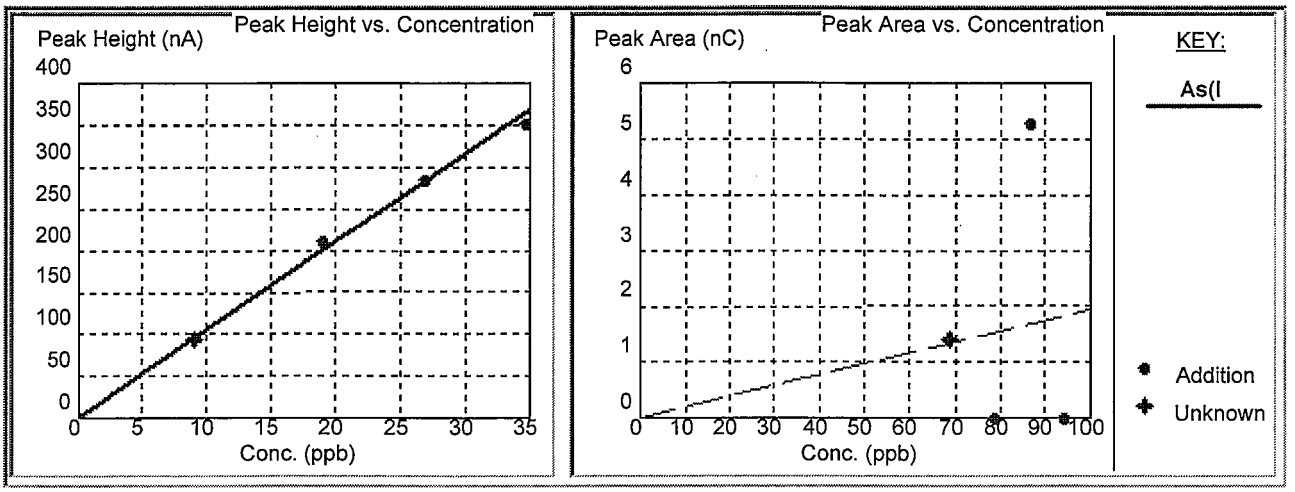
Settings:

Type:	ASV	Clean Time (S)	0.1	Signal Avg.	8
Waveform:	Staircase	Clean Voltage (mV):	600	Frequency (Hz):	2000
Cell	Three Electrode	Plate Time (S)	40	Start Voltage (mV):	-400
☑ Background subtraction		Plate Voltage (mV)	-400	Stop Voltage (mV):	550
		Range (uA):	12.5	Step Voltage (mV):	5

Calibration Summary:

JCGPM MS AsIII

Calibration Date: 29/Aug/06 at 15:29:36



Calibration Parameters

Metal	Calib. Mode	Fit Factor	Slope	Zero Offset	Starting Concentration	Concentration in Original Sample
As[III]	**Height**	0.995	0.095 ppb/nA	0 ppt	9.1 ppb	11 ppb
	Area	0.003	51.8 ppb/nC	0 ppt	69 ppb	82 ppb

Addition Data for Method of Standard Additions

Metal	Unknown Concentration	Concentration in original aliquot	1st Addition	2nd Addition	3rd Addition	Total added concentration
As(III)	9.10 ppb	10.8 ppb	500 uL (9.90 ppb)	400 uL (7.86 ppb)	400 uL (7.80 ppb)	25.6 ppb

JCGPM MS
As^{III}

Starting Volume: 50.000 **mL**

Final Volume: 51.300 **mL**

TraceDetect Nano-Band Explorer

Sample ID: JCGPM MSD As III

29/Aug/06 16:26:43

Trace Metals:

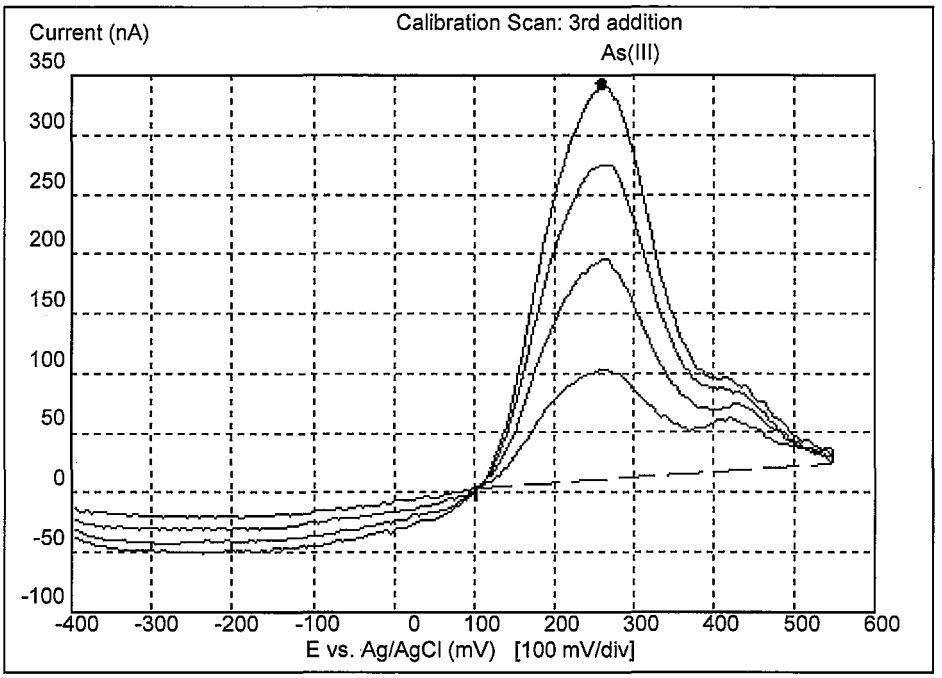
As(III): 30.0 ppb

9.18 ppb

Temperature:

Input 1:

Input 2:



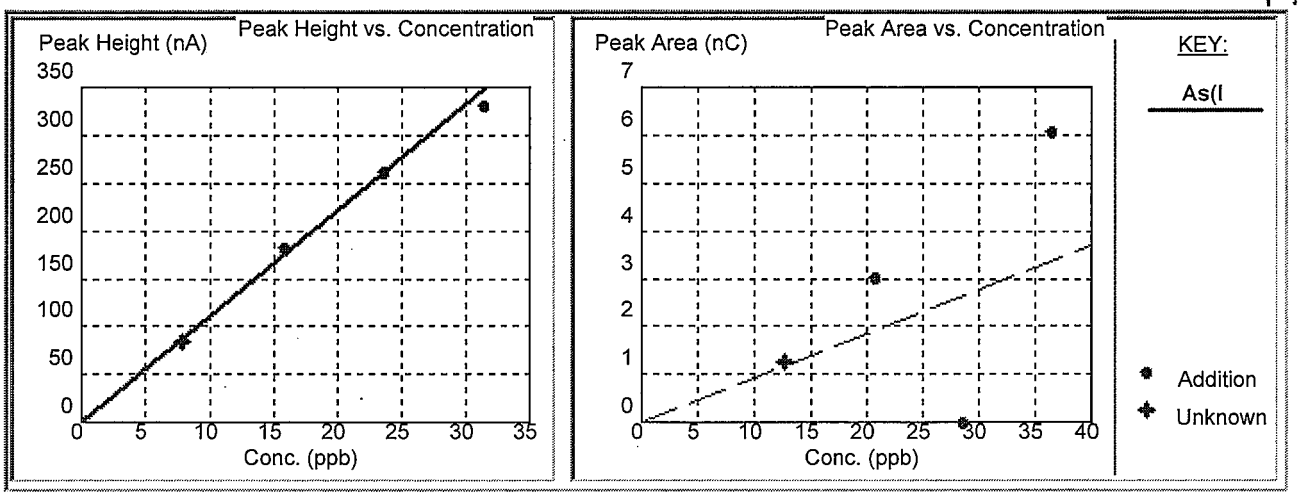
Settings:

Type:	ASV	Clean Time (S)	0.1	Signal Avg.	8
Waveform:	Staircase	Clean Voltage (mV):	600	Frequency (Hz):	2000
Cell	Three Electrode	Plate Time (S)	40	Start Voltage (mV):	-400
☑ Background subtraction		Plate Voltage (mV)	-400	Stop Voltage (mV):	550
		Range (uA):	12.5	Step Voltage (mV):	5

Calibration Summary:

JCGPM MSD AsIII

Calibration Date: 29/Aug/06 at 16:11:40



Calibration Parameters

Metal	Calib. Mode	Fit Factor	Slope	Zero Offset	Starting Concentration	Concentration in Original Sample
As(III)	**Height**	0.993	0.090 ppb/nA	0 ppt	7.7 ppb	9.2 ppb
	Area	0.309	10.8 ppb/nC	0 ppt	13 ppb	15 ppb

Addition Data for Method of Standard Additions

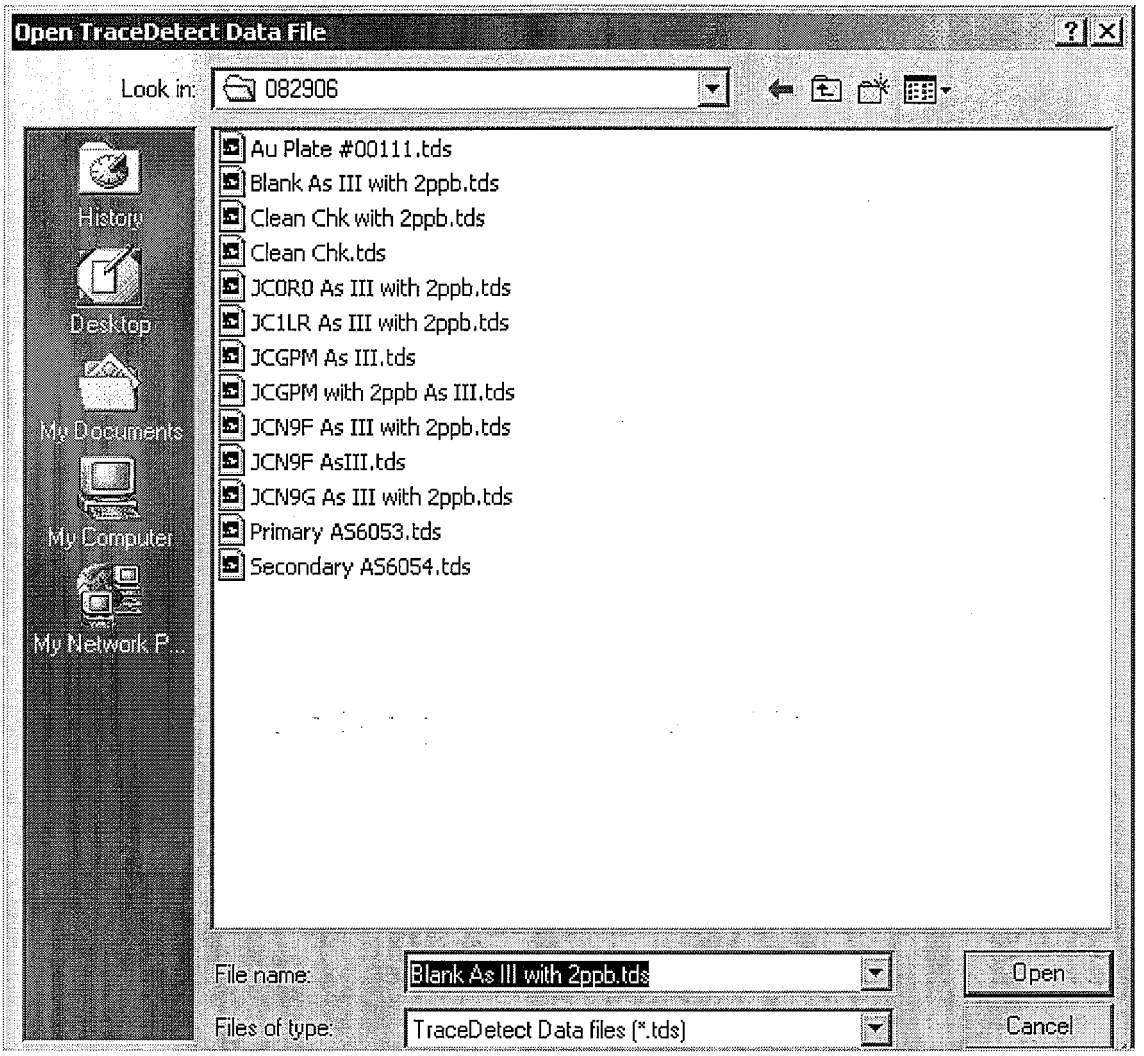
Metal	Unknown Concentration	Concentration in original aliquot	1st Addition	2nd Addition	3rd Addition	Total added concentration
As(III)	7.72 ppb	9.18 ppb	400 uL (7.94 ppb)	400 uL (7.87 ppb)	400 uL (7.81 ppb)	23.6 ppb

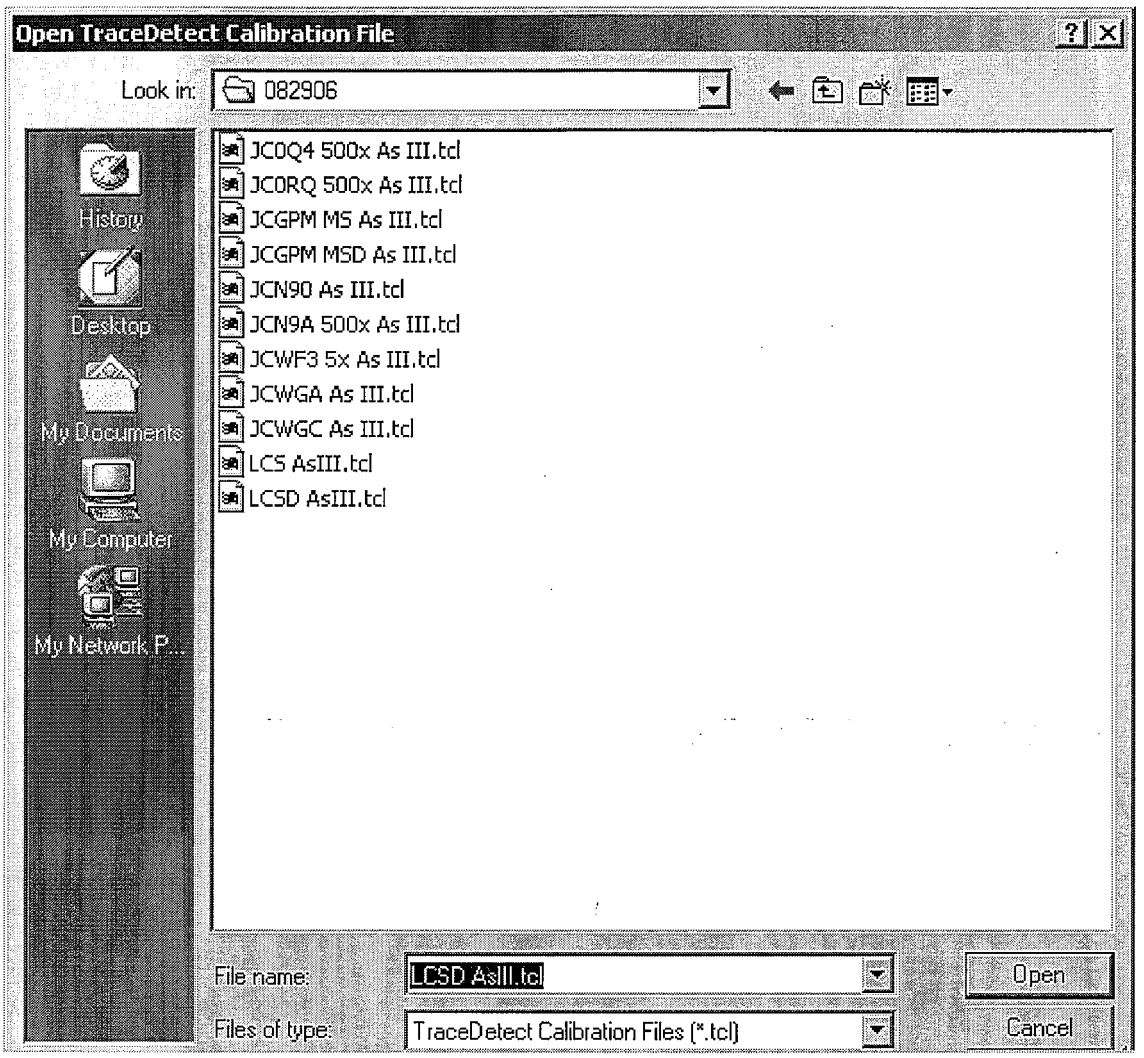
JCGPM
MSD
As^{III}

Starting Volume: 50.000 mL

Final Volume: 51.200 mL

6241456


Open TraceDetect Data File
Look in:
082906
History
Desktop
My Documents
My Computer
My Network P...
Au Plate #00111.tds
Blank As III with 2ppb.tds
Clean Chk with 2ppb.tds
Clean Chk.tds
JC0R0 As III with 2ppb.tds
JC1LR As III with 2ppb.tds
JCGPM As III.tds
JCGPM with 2ppb As III.tds
JCN9F As III with 2ppb.tds
JCN9F AsIII.tds
JCN9G As III with 2ppb.tds
Primary AS6053.tds
Secondary AS6054.tds
File name:
Blank As III with 2ppb.tds
Files of type:
TraceDetect Data files (*.tds)
Open
Cancel


Open TraceDetect Calibration File
Look in:
082906
History
Desktop
My Documents
My Computer
My Network P...
JC0Q4 500x As III.tcl
JC0RQ 500x As III.tcl
JCGPM MS As III.tcl
JCGPM MSD As III.tcl
JCN90 As III.tcl
JCN9A 500x As III.tcl
JCWF3 5x As III.tcl
JCWGA As III.tcl
JCWGC As III.tcl
LCS AsIII.tcl
LCSD AsIII.tcl
File name:
LCSD AsIII.tcl
Open
Files of type:
TraceDetect Calibration Files (*.tcl)
Cancel

TraceDetect Nano-Band Explorer - C:\Program Files\Common Files\AS Temp\082906\Au Plate #00111.tds

Sample ID: Au Plate #00111

Trace Metals:

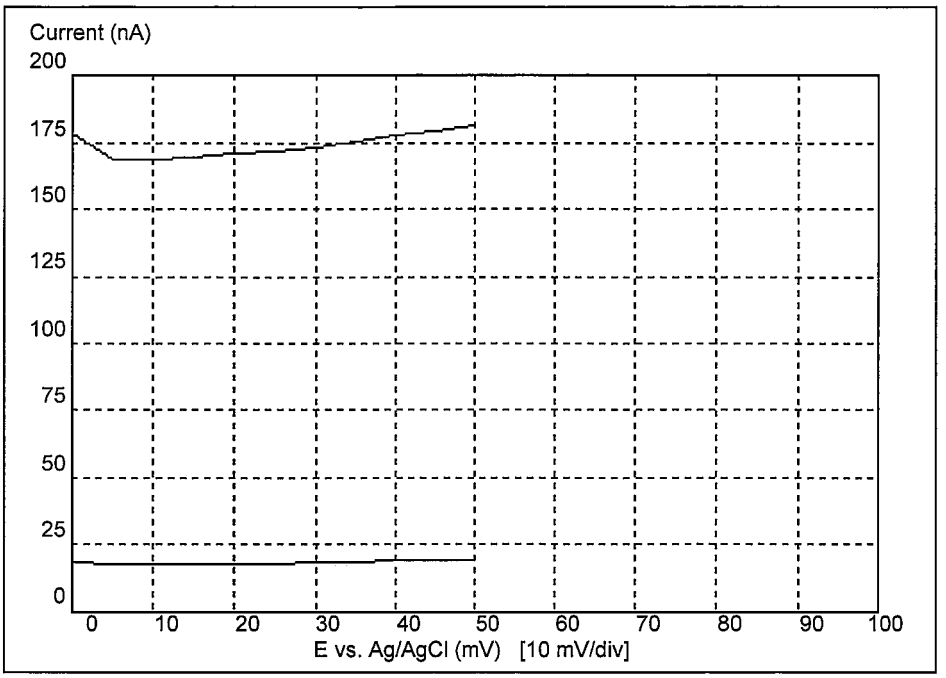
As(III): 26.1 nA

Temperature:

Input 1:

Input 2:

29/Aug/06 10:08:03



Settings:

Type:	ASV	Clean Time (S)	0	Signal Avg.	16
Waveform:	Sq. Wave	Clean Voltage (mV):	100	Frequency (Hz):	1000
Cell	Three Electrode	Plate Time (S)	55	Start Voltage (mV):	-50
☐ Background subtraction		Plate Voltage (mV)	-50	Stop Voltage (mV):	5
		Range (uA):	1.25	Step Voltage (mV):	5

TraceDetect Nano-Band Explorer

Sample ID: Clean Chk with 2ppb

Trace Metals:

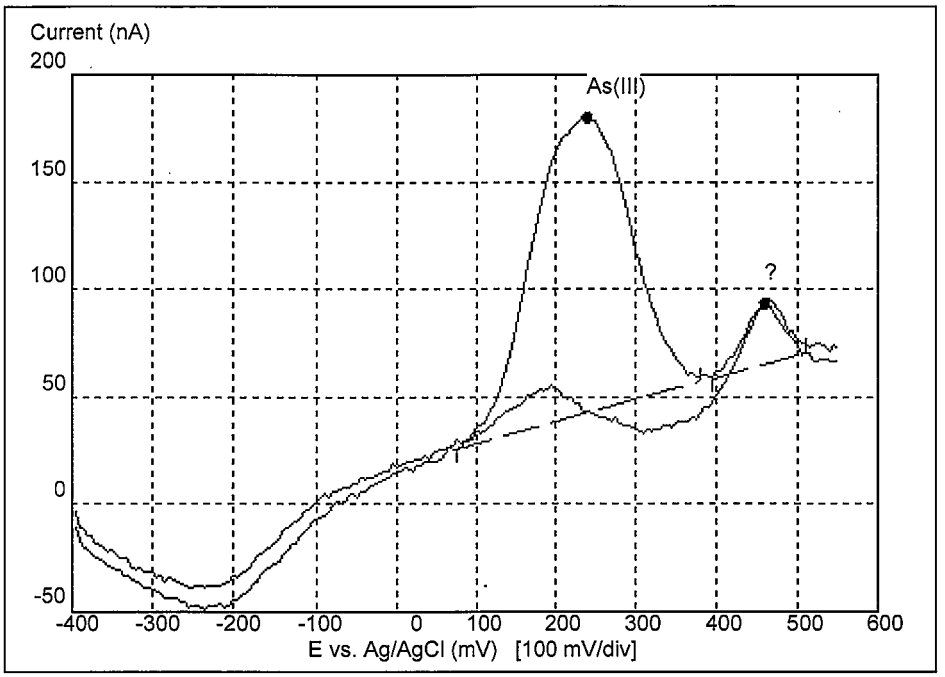
As[III]: 111 ppb

Temperature:

Input 1:

Input 2:

29/Aug/06 10:35:16



Settings:

Type:	ASV	Clean Time (S)	0.1	Signal Avg.	8
Waveform:	Staircase	Clean Voltage (mV):	600	Frequency (Hz):	2000
Cell	Three Electrode	Plate Time (S)	160	Start Voltage (mV):	-400
☑ Background subtraction		Plate Voltage (mV)	-400	Stop Voltage (mV):	550
		Range (uA):	12.5	Step Voltage (mV):	5

TraceDetect Nano-Band Explorer - C:\Program Files\Common Files\AS Temp\082906\Secondary AS6054.tds

Sample ID: Secondary AS6054

29/Aug/06 10:43:34

Trace Metals:

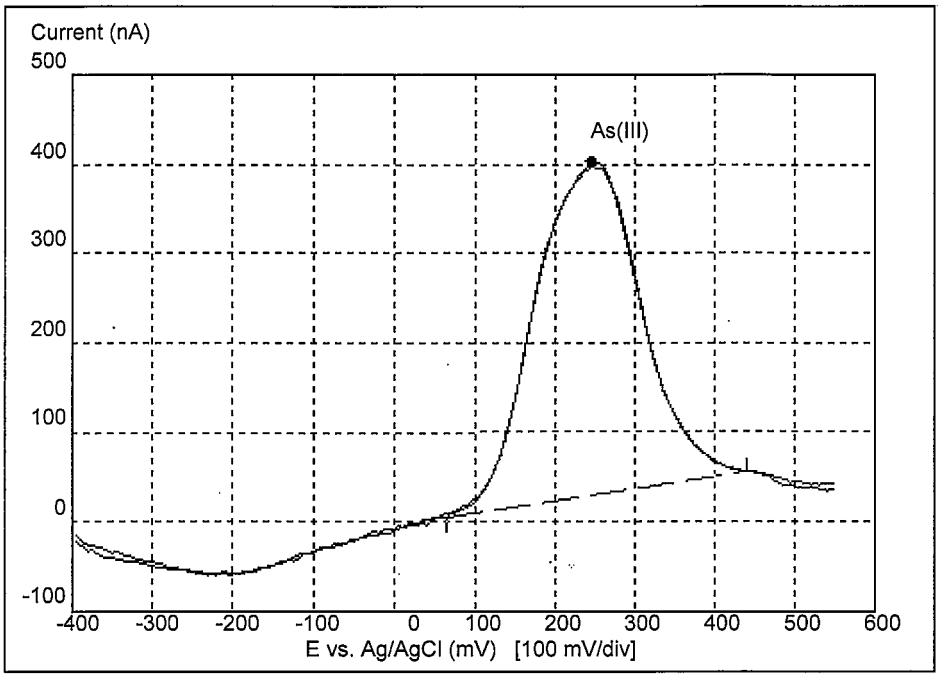
As(III): 375 nA

375/381 = 98%

Temperature:

Input 1:

Input 2:



Settings:

Type:	ASV	Clean Time (S)	0.1	Signal Avg.	8
Waveform:	Staircase	Clean Voltage (mV):	600	Frequency (Hz):	2000
Cell	Three Electrode	Plate Time (S)	40	Start Voltage (mV):	-400
☑ Background subtraction		Plate Voltage (mV)	-400	Stop Voltage (mV):	550
		Range (uA):	12.5	Step Voltage (mV):	5

TraceDetect Nano-Band Explorer

Sample ID: Primary AS6053

Trace Metals:

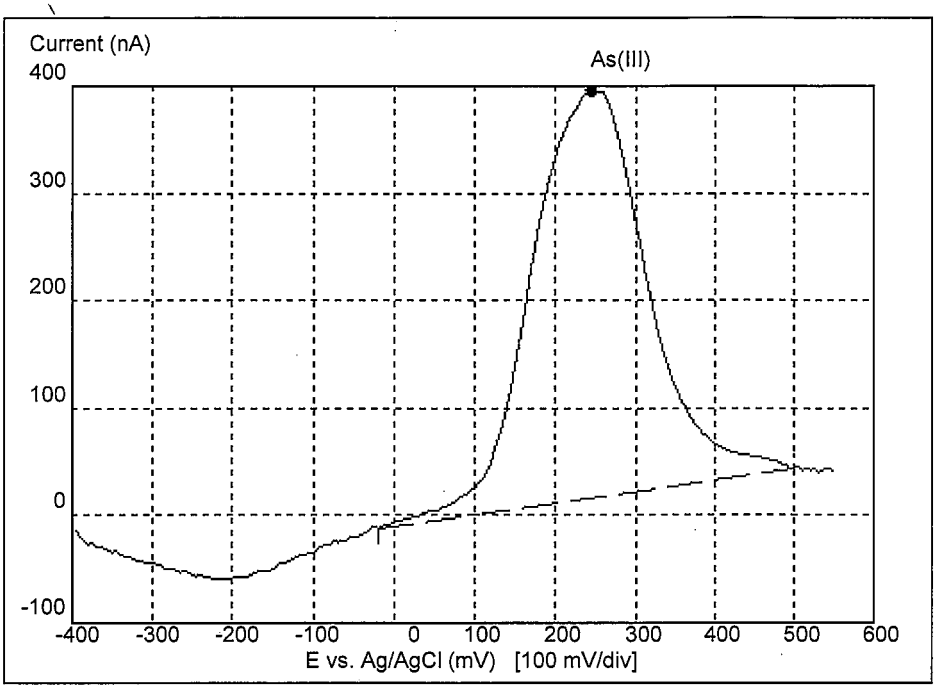
As[III]: 381 nA

Temperature:

Input 1:

Input 2:

29/Aug/06 10:41:31



Settings:

Type:	ASV	Clean Time (S)	0.1	Signal Avg.	8
Waveform:	Staircase	Clean Voltage (mV):	600	Frequency (Hz):	2000
Cell	Three Electrode	Plate Time (S)	40	Start Voltage (mV):	-400
☑ Background subtraction		Plate Voltage (mV)	-400	Stop Voltage (mV):	550
		Range (uA):	12.5	Step Voltage (mV):	5

STL North Canton Arsenic (III) Data Review Checklist

Run/Project Information

Run Date: 8/31/06 **Analyst:** [illegible] **Instrument:** _____
Prep Batches Run: _____

Methods used: **7063 mod :** NC-WC-000X Rev 1

Review Items

A. Instrument Setup	Yes	No	N/A	2ndLevel
1. Electrode sensitivity check?	✓			✓
2. MSA working standard and verification standard within control limits?	✓			✓
3. Cleanliness check (ICB) within +/- RL?	✓			✓
B. Sample Results				
1. Were non-detect samples verified with single point MSA?	✓			✓
2. All samples with As(III) quantified with 3-4 point MSA?	✓			✓
3. Sample analyses done within holding time?	✓			✓
C. Preparation/Matrix QC				
1. Samples preserved in the field?	✓			✓
2. LCS done per prep batch and within QC limits?	✓			✓
3. Method blank done per prep batch and < RL?	✓			✓
4. MS run at required frequency (1 per 20 samples) and within limits?		✓		✓
5. MSD or DU run at required frequency (1 per 20 samples) and RPD within limits?		✓		✓
D. Other				
1. Are all nonconformances documented appropriately?			✓	✓
2. Current MDL data on file?	✓			✓
3. Calculations and Transcriptions checked for error?	✓			✓
4. All client/ project specific requirements met?	✓			✓
5. Date of analysis verified as correct?	✓			✓

Analyst: [signature] **Date:** 8/31/06
Comments:

2nd Level Reviewer: [signature] **Date:** 8/31/06

Standard, Reagent and Supply Numbers

MSA Working Std AS6054 **MSA Verification Std** AS6053 **MS As(V) Std** AS6055

Au plate soln WR60965 **conc HCl** WR60283 **Cu Remover** _____ **C18** _____

Acid ext _____ **Basic ext** ____

NaThio WR60936
Starch WR60885
Iodine WR60950

TraceDetect Nano-Band Explorer

Sample ID: Au Plate #00117

Trace Metals:

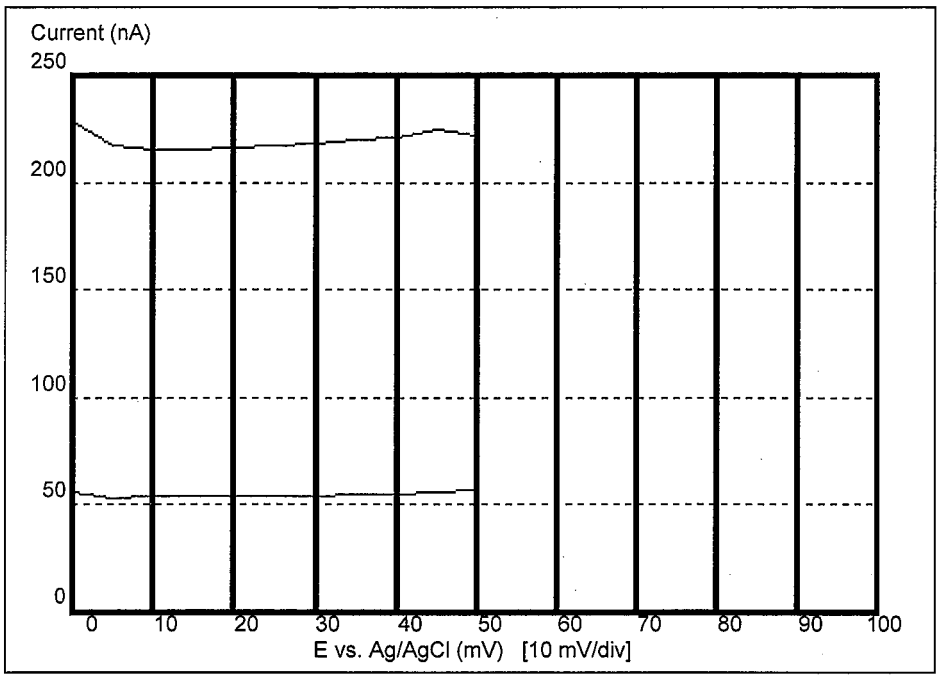
As(III+V): 614 ppt

Temperature:

Input 1:

Input 2:

31/Aug/06 11:54:06



Settings:

Type:	ASV	Clean Time (S)	0	Signal Avg.	16
Waveform:	Sq. Wave	Clean Voltage (mV):	100	Frequency (Hz):	1000
Cell	Three Electrode	Plate Time (S)	55	Start Voltage (mV):	-50
		Plate Voltage (mV)	-50	Stop Voltage (mV):	5
		Range (uA):	1.25	Step Voltage (mV):	5

☐ Background subtraction

TraceDetect Nano-Band Explorer

Sample ID: Au Plate #2 00117

Trace Metals:

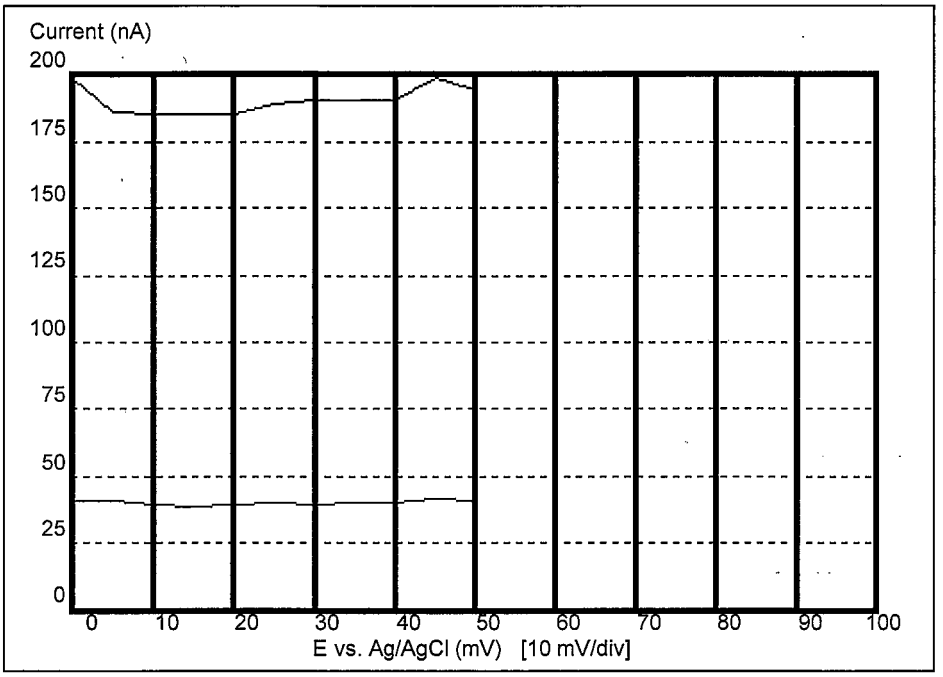
As(III+V) < 1.2 ppb

Temperature:

Input 1:

Input 2:

31/Aug/06 14:24:38



Settings:

Type:	ASV	Clean Time (S)	0	Signal Avg.	16
Waveform:	Sq. Wave	Clean Voltage (mV):	100	Frequency (Hz):	1000
Cell	Three Electrode	Plate Time (S)	55	Start Voltage (mV):	-50
		Plate Voltage (mV)	-50	Stop Voltage (mV):	5
		Range (uA):	1.25	Step Voltage (mV):	5

☐ Background subtraction

TraceDetect Nano-Band Explorer

Sample ID: Au Plate #3

Trace Metals:

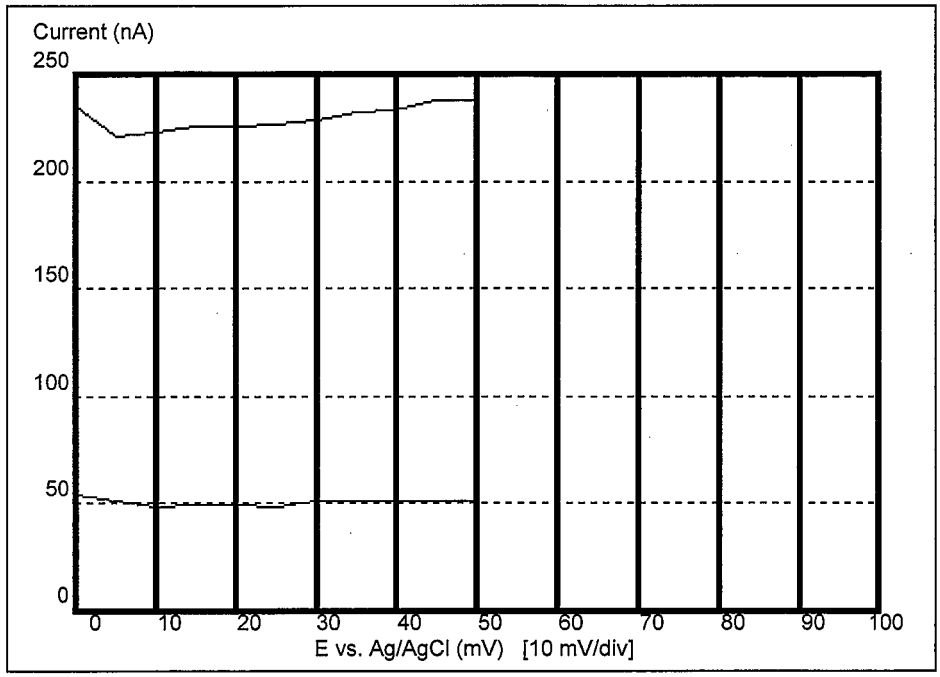
As(III+V) < 410 ppt

Temperature:

Input 1:

Input 2:

31/Aug/06 16:16:32



Settings:

Type:	ASV	Clean Time (S)	0	Signal Avg.	16
Waveform:	Sq. Wave	Clean Voltage (mV):	100	Frequency (Hz):	1000
Cell	Three Electrode	Plate Time (S)	55	Start Voltage (mV):	-50
		Plate Voltage (mV)	-50	Stop Voltage (mV):	5
		Range (uA):	1.25	Step Voltage (mV):	5

☐ Background subtraction

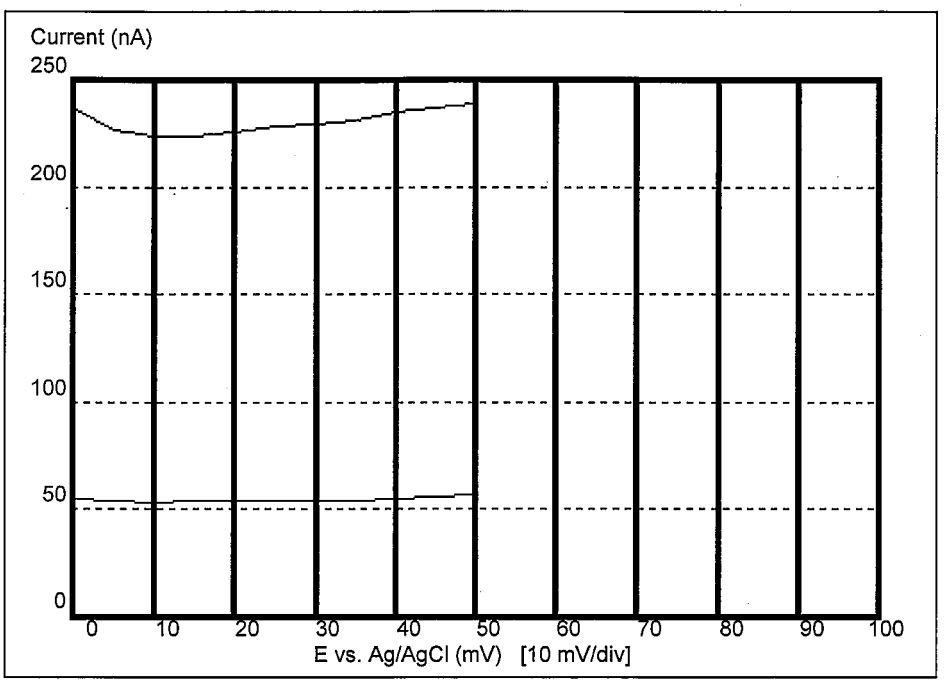
TraceDetect Nano-Band Explorer

Sample ID: Au Plate #4

Trace Metals:

As[III+V] < 1.6 ppb

31/Aug/06 17:46:32



Temperature:

Input 1:

Input 2:

Settings:

Type:	ASV	Clean Time (S)	0	Signal Avg.	16
Waveform:	Sq. Wave	Clean Voltage (mV):	100	Frequency (Hz):	1000
Cell	Three Electrode	Plate Time (S)	55	Start Voltage (mV):	-50
		Plate Voltage (mV)	-50	Stop Voltage (mV):	5
		Range (uA):	1.25	Step Voltage (mV):	5

☐ Background subtraction

TraceDetect Nano-Band Explorer

Sample ID: Clean Chk + 1ppb

Trace Metals:

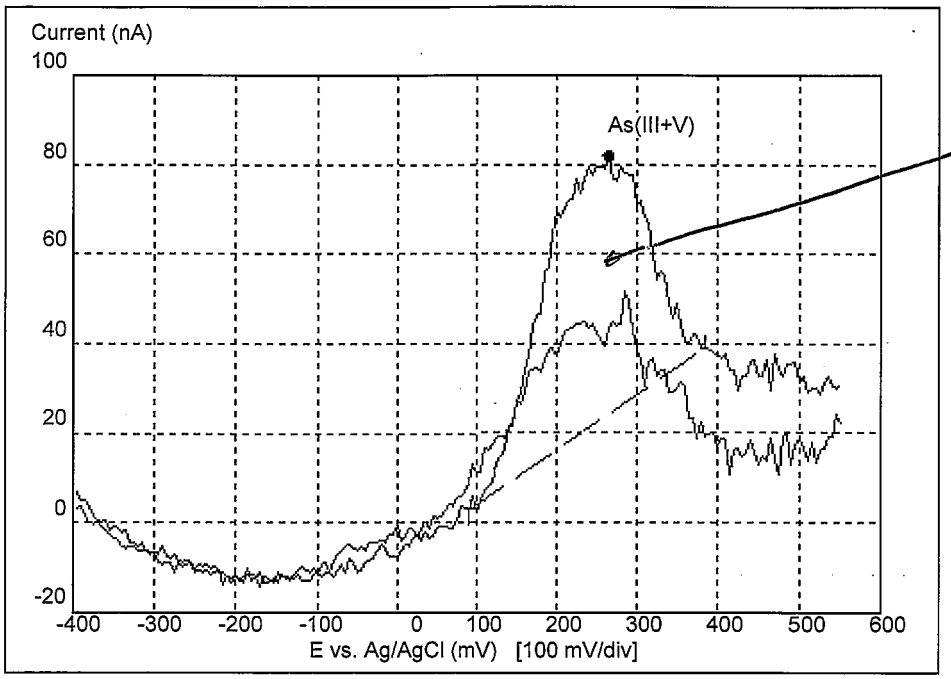
As(III+V): 1.40 ppb

Temperature:

Input 1:

Input 2:

31/Aug/06 12:17:12



1ppb

Settings:

Type:	ASV	Clean Time (S)	0.1	Signal Avg.	8
Waveform:	Staircase	Clean Voltage (mV):	600	Frequency (Hz):	2000
Cell	Three Electrode	Plate Time (S)	160	Start Voltage (mV):	-400
☑ Background subtraction		Plate Voltage (mV)	-400	Stop Voltage (mV):	550
		Range (uA):	12.5	Step Voltage (mV):	5

TraceDetect Nano-Band Explorer

Sample ID: Blank + 1ppb

Trace Metals:

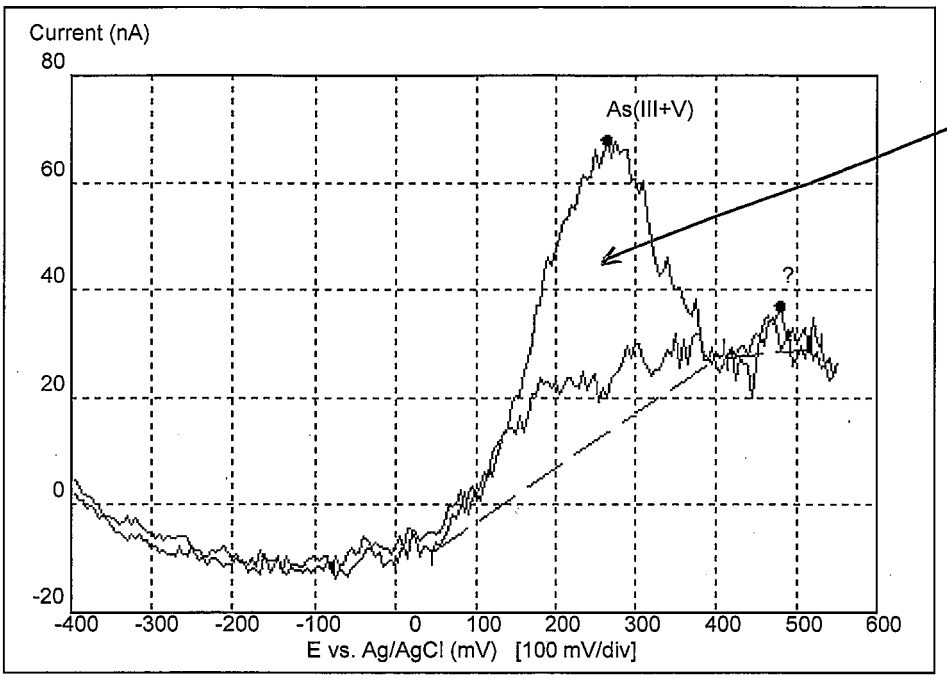
As(III+V): 1.32 ppb

Temperature:

Input 1:

Input 2:

31/Aug/06 12:29:32



1ppb

Settings:

Type:	ASV	Clean Time (S)	0.1	Signal Avg.	8
Waveform:	Staircase	Clean Voltage (mV):	600	Frequency (Hz):	2000
Cell	Three Electrode	Plate Time (S)	160	Start Voltage (mV):	-400
☑ Background subtraction		Plate Voltage (mV)	-400	Stop Voltage (mV):	550
		Range (uA):	12.5	Step Voltage (mV):	5

TraceDetect Nano-Band Explorer

Sample ID: Primary Chk

Trace Metals:

As(III+V): 294 nA

310 nA

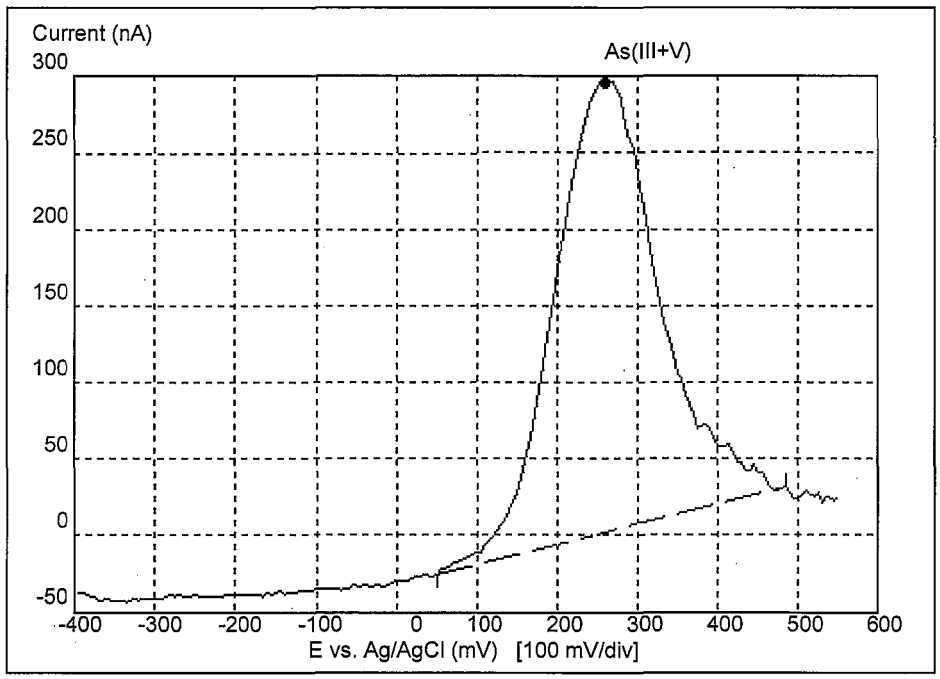
95%

Temperature:

Input 1:

Input 2:

31/Aug/06 12:37:51



Settings:

Type:	ASV	Clean Time (S)	0.1	Signal Avg.	8
Waveform:	Staircase	Clean Voltage (mV):	600	Frequency (Hz):	2000
Cell	Three Electrode	Plate Time (S)	40	Start Voltage (mV):	-400
		Plate Voltage (mV)	-400	Stop Voltage (mV):	550
		Range (uA):	12.5	Step Voltage (mV):	5

☑ Background subtraction

TraceDetect Nano-Band Explorer

Sample ID: Secondary Chk

Trace Metals:

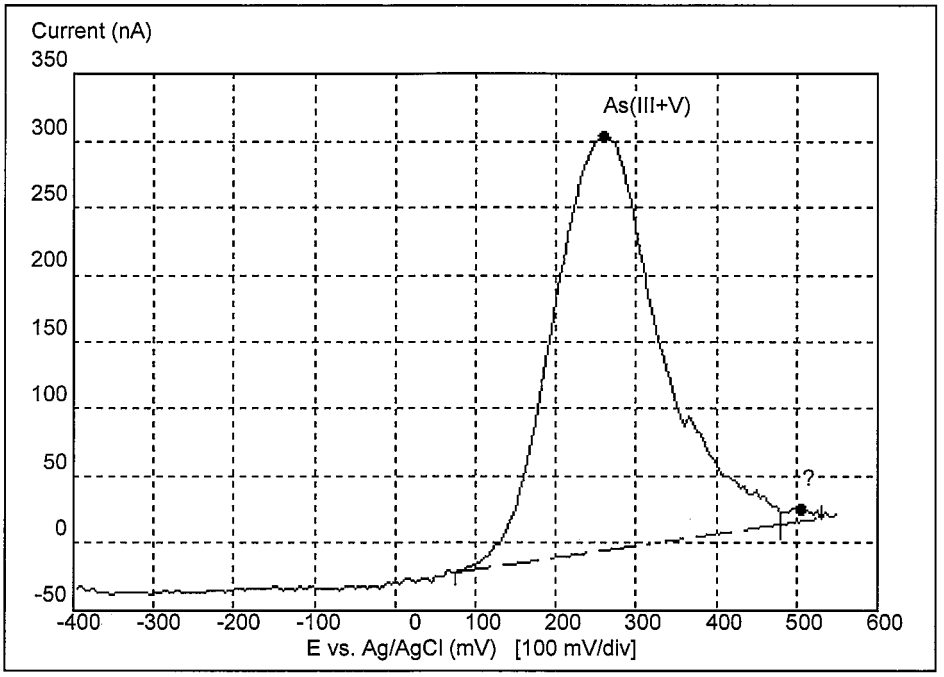
As(III+V): 310 nA

Temperature:

Input 1:

Input 2:

31/Aug/06 12:36:04



Settings:

Type:	ASV	Clean Time (S)	0.1	Signal Avg.	8
Waveform:	Staircase	Clean Voltage (mV):	600	Frequency (Hz):	2000
Cell	Three Electrode	Plate Time (S)	40	Start Voltage (mV):	-400
☑ Background subtraction		Plate Voltage (mV)	-400	Stop Voltage (mV):	550
		Range (uA):	12.5	Step Voltage (mV):	5

TraceDetect Nano-Band Explorer

Sample ID: LCS As III+V

Trace Metals:

As(III+V): 482 nA

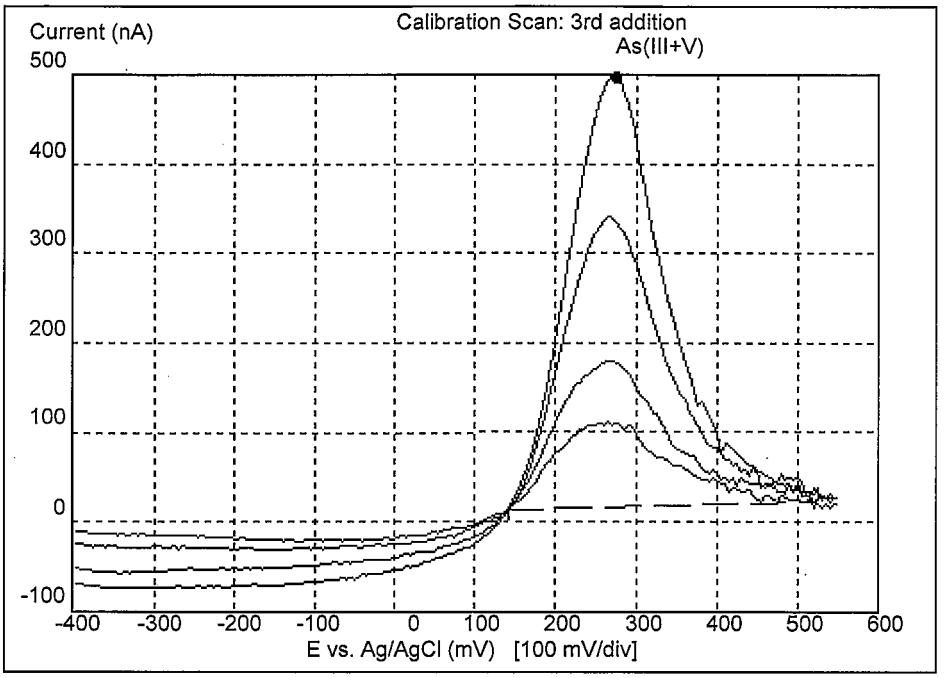
12.8ppb

Temperature:

Input 1:

Input 2:

31/Aug/06 12:44:13



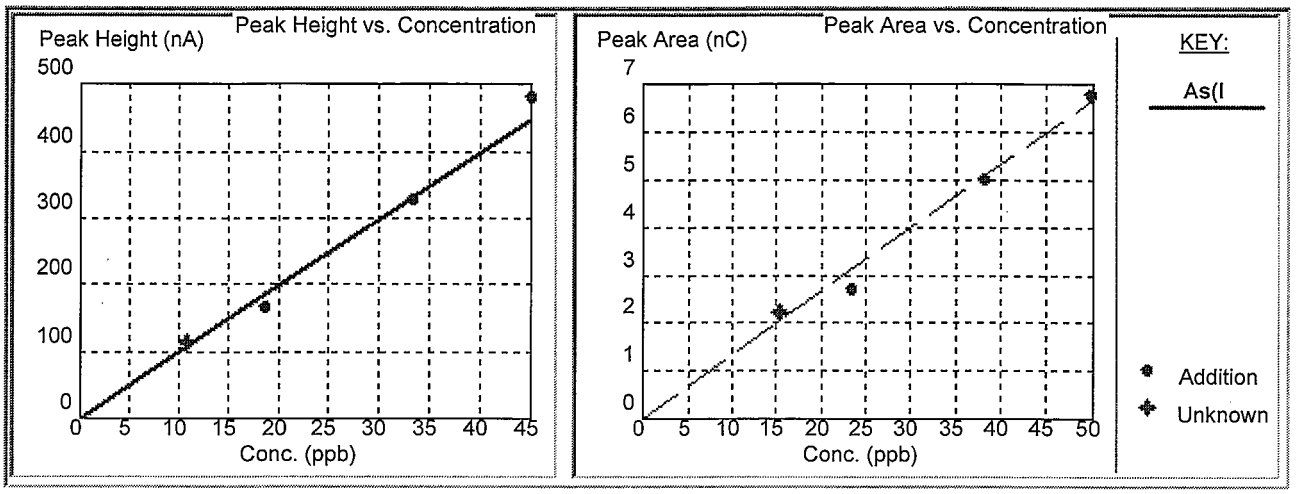
Settings:

Type:	ASV	Clean Time (S)	0.1	Signal Avg.	8
Waveform:	Staircase	Clean Voltage (mV):	600	Frequency (Hz):	2000
Cell	Three Electrode	Plate Time (S)	40	Start Voltage (mV):	-400
☑ Background subtraction		Plate Voltage (mV)	-400	Stop Voltage (mV):	550
		Range (uA):	12.5	Step Voltage (mV):	5

Calibration Summary:

Calibration Date: 31/Aug/06 at 11:19:10

LCS



Calibration Parameters

Metal	Calib. Mode	Fit Factor	Slope	Zero Offset	Starting Concentration	Concentration in Original Sample
As[III+V]	**Height**	0.990	0.101 ppb/nA	0 ppt	11 ppb	13 ppb
	Area	0.987	7.49 ppb/nC	0 ppt	15 ppb	18 ppb

Addition Data for Method of Standard Additions LCS

Metal	Unknown Concentration	Concentration in original aliquot	1st Addition	2nd Addition	3rd Addition	Total added concentration
As(III+V)	10.7 ppb	12.8 ppb	400 uL (7.94 ppb)	750 uL (14.7 ppb)	600 uL (11.6 ppb)	34.2 ppb

Starting Volume: 50.000 mL

Final Volume: 51.750 mL

TraceDetect Nano-Band Explorer

Sample ID: LCS Dup As III+V

Trace Metals:

As(III+V): 33.3 ppb

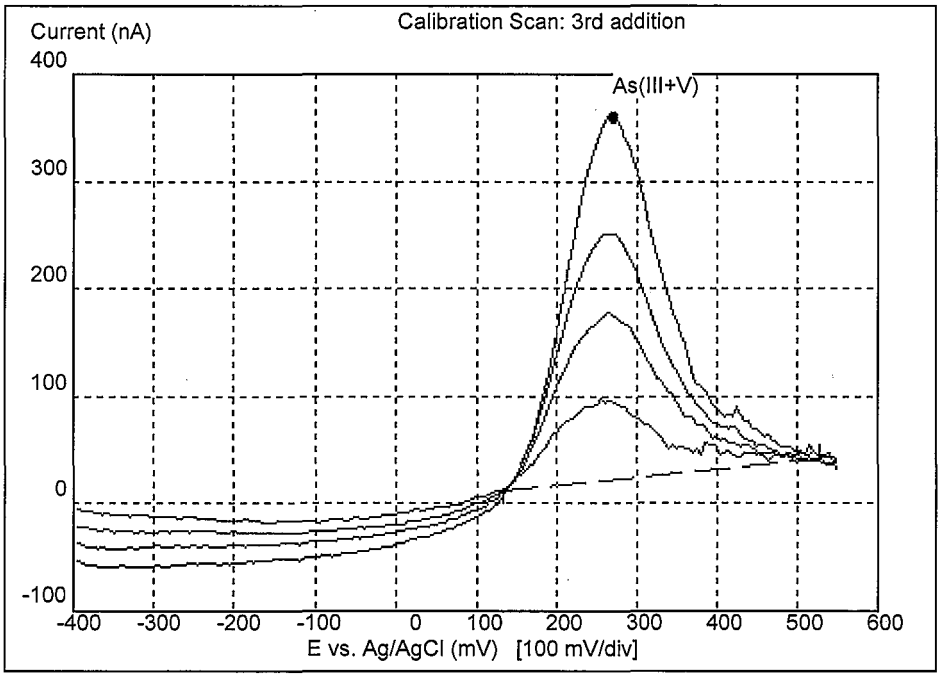
9.03ppb

Temperature:

Input 1:

Input 2:

31/Aug/06 12:55:56



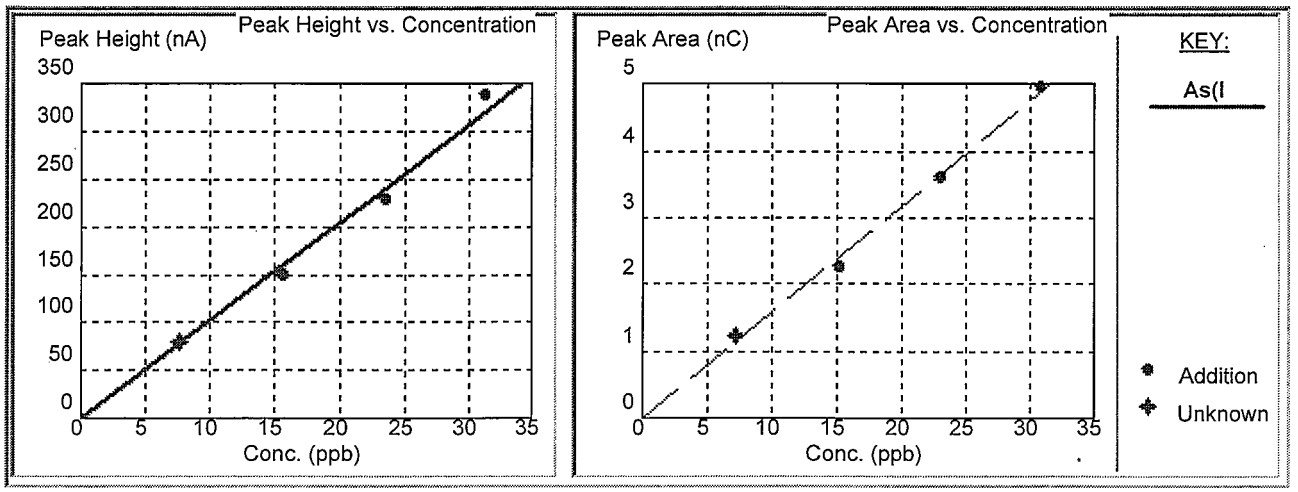
Settings:

Type:	ASV	Clean Time (S)	0.1	Signal Avg.	8
Waveform:	Staircase	Clean Voltage (mV):	600	Frequency (Hz):	2000
Cell	Three Electrode	Plate Time (S)	40	Start Voltage (mV):	-400
☑ Background subtraction		Plate Voltage (mV)	-400	Stop Voltage (mV):	550
		Range (uA):	12.5	Step Voltage (mV):	5

Calibration Summary:

LCS DUP

Calibration Date: 31/Aug/06 at 12:45:26



Calibration Parameters

Metal	Calib. Mode	Fit Factor	Slope	Zero Offset	Starting Concentration	Concentration in Original Sample
As[III+V]	**Height**	0.991	0.098 ppb/nA	0 ppt	7.6 ppb	9.0 ppb
	Area	0.996	6.31 ppb/nC	0 ppt	7.1 ppb	8.5 ppb

Addition Data for Method of Standard Additions LCS DUP

Metal	Unknown Concentration	Concentration in original aliquot	1st Addition	2nd Addition	3rd Addition	Total added concentration
As(III+V)	7.58 ppb	9.03 ppb	400 uL (7.94 ppb)	400 uL (7.87 ppb)	400 uL (7.81 ppb)	23.6 ppb

Starting Volume: 50.000 **mL**

Final Volume: 51.200 **mL**

TraceDetect Nano-Band Explorer

Sample ID: JCGPM AsIII+V

31/Aug/06 13:34:29

Trace Metals:

As(III+V): 30.8 ppb

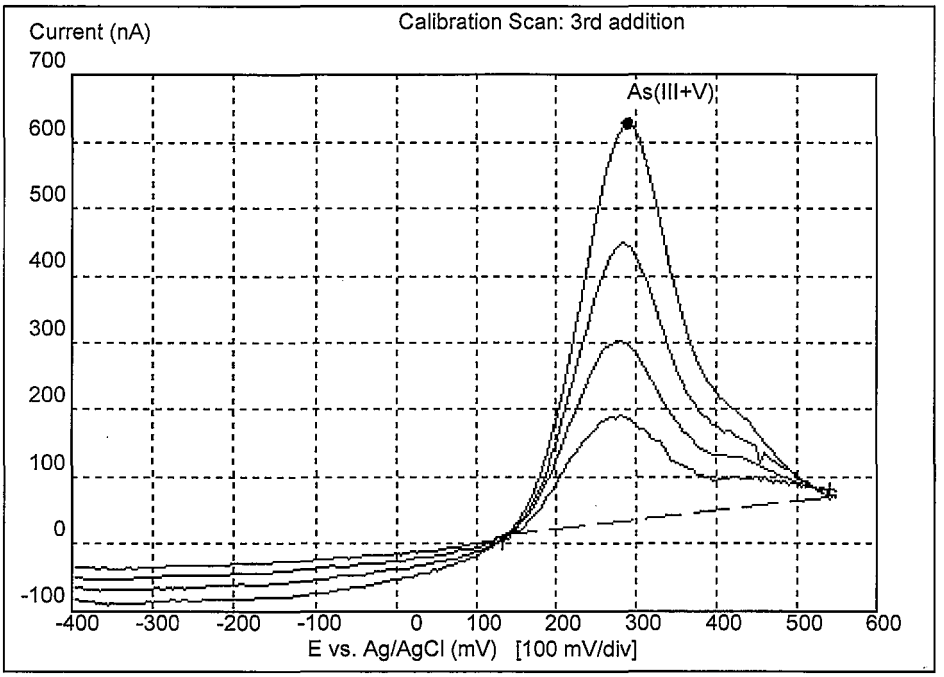
9.86 As III+V
ND As III
9.86 AsV

2X

Temperature:

Input 1:

Input 2:



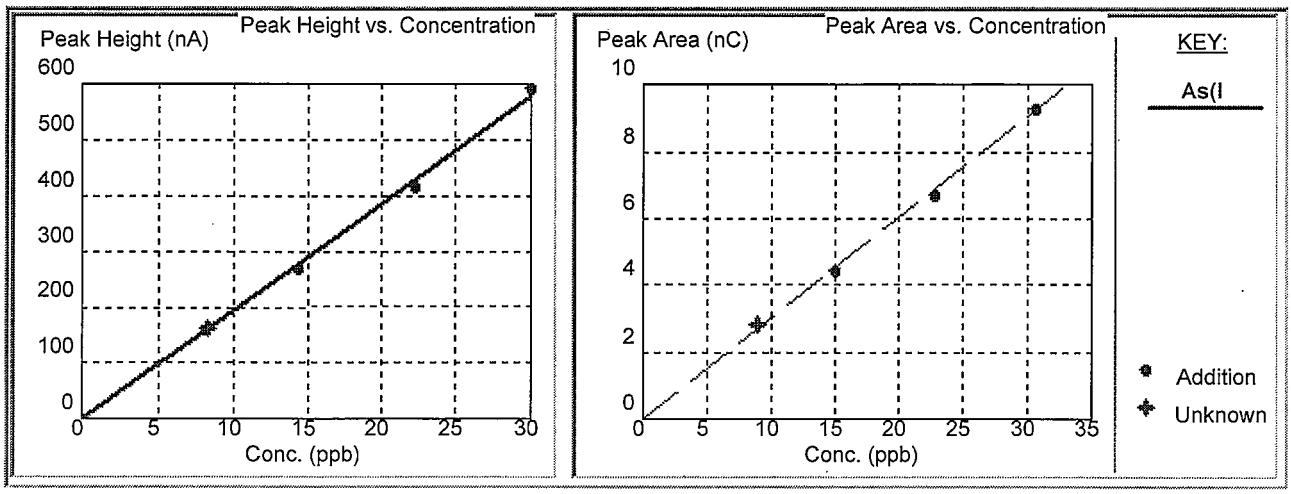
Settings:

Type:	ASV	Clean Time (S)	0.1	Signal Avg.	8
Waveform:	Staircase	Clean Voltage (mV):	600	Frequency (Hz):	2000
Cell	Three Electrode	Plate Time (S)	80	Start Voltage (mV):	-400
☑ Background subtraction		Plate Voltage (mV)	-400	Stop Voltage (mV):	550
		Range (uA):	12.5	Step Voltage (mV):	5

Calibration Summary:

JC @ PM

Calibration Date: 31/Aug/06 at 12:57:07



Calibration Parameters

Metal	Calib. Mode	Fit Factor	Slope	Zero Offset	Starting Concentration	Concentration in Original Sample
As[III+V]	**Height**	0.998	0.052 ppb/nA	0 ppt	8.3 ppb	9.9 ppb
	Area	0.999	3.32 ppb/nC	0 ppt	9.0 ppb	11 ppb

Addition Data for Method of Standard Additions

JCGPM

Metal	Unknown Concentration	Concentration in original aliquot	1st Addition	2nd Addition	3rd Addition	Total added concentration
As(III+V)	8.28 ppb	9.86 ppb	300 uL (5.96 ppb)	400 uL (7.89 ppb)	400 uL (7.83 ppb)	21.7 ppb

Starting Volume: 50.000 **mL**

Final Volume: 51.100 **mL**

TraceDetect Nano-Band Explorer

Sample ID: JCN9A AsIII+V 500x

31/Aug/06 14:45:38

Trace Metals:

As(III+V): 271 ppb

643 x 500

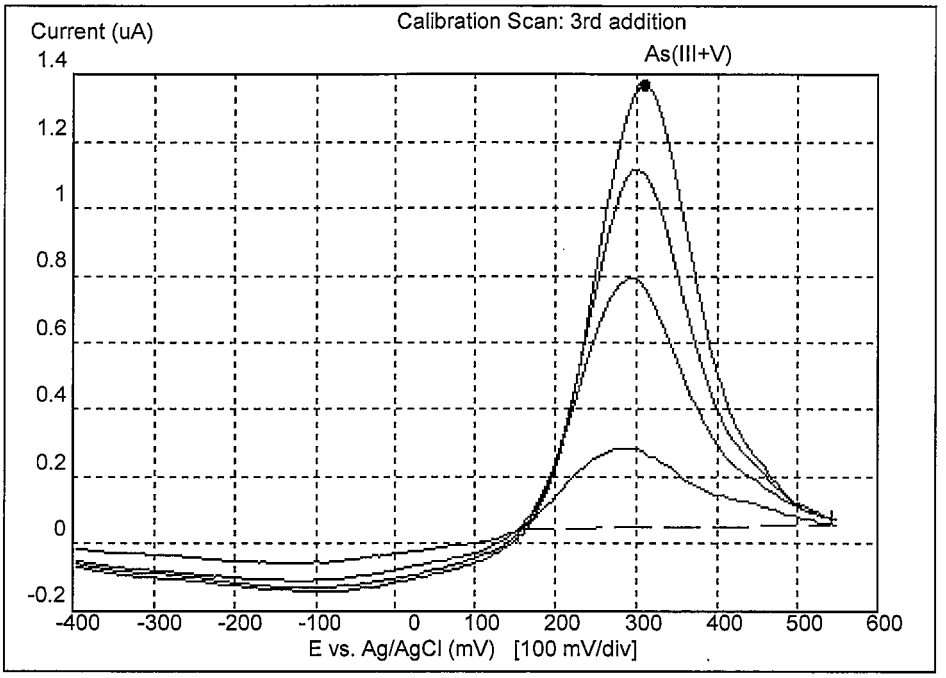
32150 As III+V
30700 As III
1450 As V

500x 8 = 4000 X

Temperature:

Input 1:

Input 2:



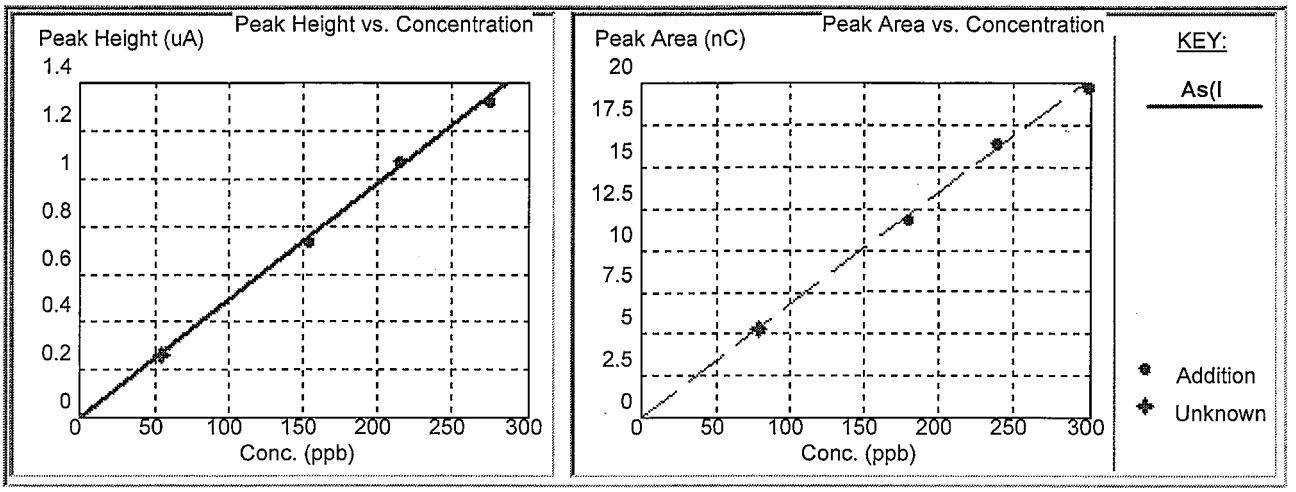
Settings:

Type:	ASV	Clean Time (S)	0.1	Signal Avg.	8
Waveform:	Staircase	Clean Voltage (mV):	600	Frequency (Hz):	2000
Cell	Three Electrode	Plate Time (S)	20	Start Voltage (mV):	-400
☑ Background subtraction		Plate Voltage (mV)	-400	Stop Voltage (mV):	550
		Range (uA):	12.5	Step Voltage (mV):	5

Calibration Summary:

JC N9A

Calibration Date: 31/Aug/06 at 14:40:20



Calibration Parameters

Metal	Calib. Mode	Fit Factor	Slope	Zero Offset	Starting Concentration	Concentration in Original Sample
As[III+V]	**Height**	0.999	0.204 ppb/nA	0 ppt	54 ppb	64 ppb
	Area	0.998	14.8 ppb/nC	0 ppt	79 ppb	94 ppb

JCN9A

Addition Data for Method of Standard Additions

Metal	Unknown Concentration	Concentration in original aliquot	1st Addition	2nd Addition	3rd Addition	Total added concentration
As(III+V)	54.0 ppb	64.3 ppb	5.00 uL (100 ppb)	3.00 uL (60.0 ppb)	3.00 uL (60.0 ppb)	220 ppb

Starting Volume: 50.000 **mL**

Final Volume: 50.011 **mL**

TraceDetect Nano-Band Explorer

Sample ID: JCN9F 50X +2ppb AsIII+V

Trace Metals:

As(III+V): 570 ppt

AsIII+V ND
AsIII ND
AsV ND G

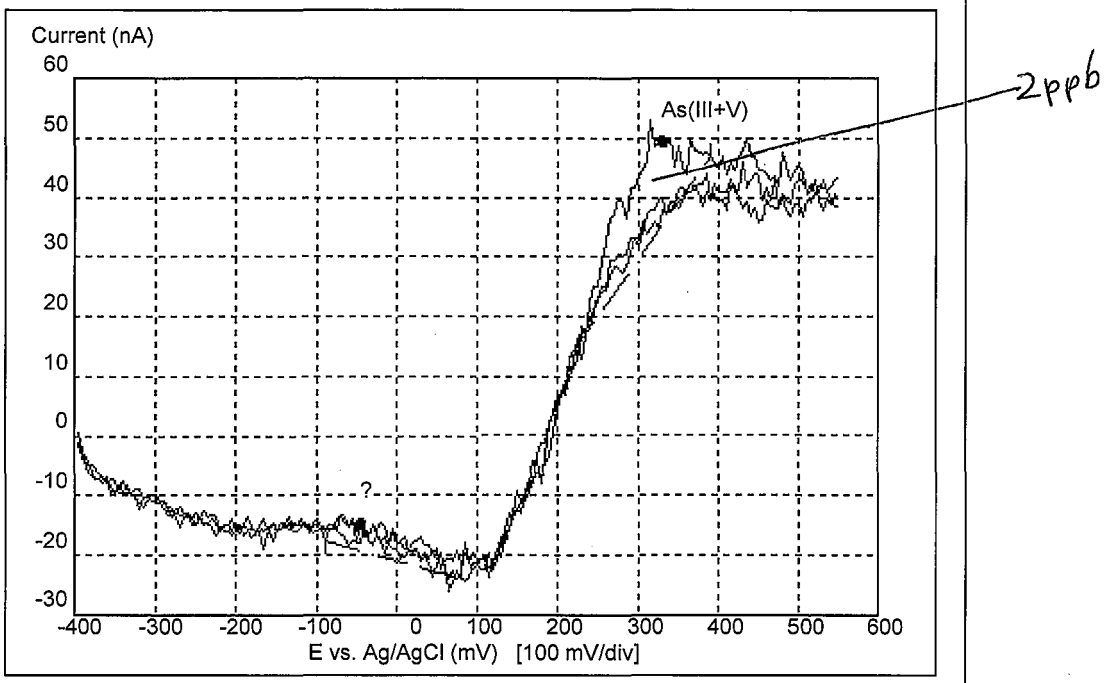
50X

Temperature:

Input 1:

Input 2:

31/Aug/06 17:08:56



Settings:

Type:	ASV	Clean Time (S)	0.1	Signal Avg.	8
Waveform:	Staircase	Clean Voltage (mV):	600	Frequency (Hz):	2000
Cell	Three Electrode	Plate Time (S)	160	Start Voltage (mV):	-400
☑ Background subtraction		Plate Voltage (mV)	-400	Stop Voltage (mV):	550
		Range (uA):	12.5	Step Voltage (mV):	5

TraceDetect Nano-Band Explorer

Sample ID: JCN9G 50X + 1ppb AsIII+V

Trace Metals:

As(III+V): 1.36 ppb

AsIII+V ND
AsIII ND
AsV ND G

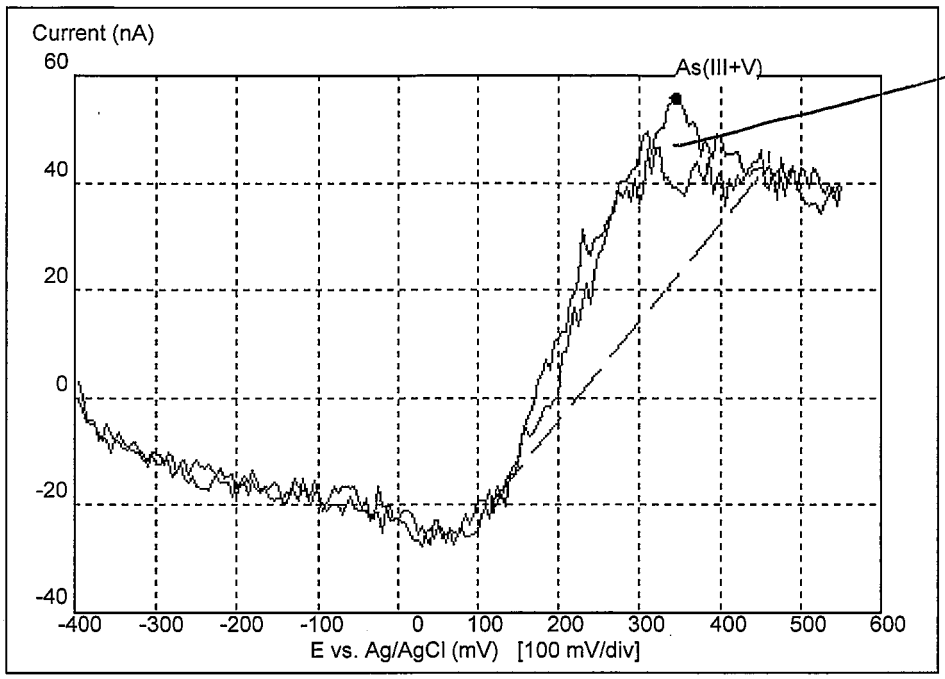
50X

Temperature:

Input 1:

Input 2:

31/Aug/06 16:57:45



1ppb

Settings:

Type:	ASV	Clean Time (S)	0.1	Signal Avg.	8
Waveform:	Staircase	Clean Voltage (mV):	600	Frequency (Hz):	2000
Cell	Three Electrode	Plate Time (S)	160	Start Voltage (mV):	-400
☑ Background subtraction		Plate Voltage (mV)	-400	Stop Voltage (mV):	550
		Range (uA):	12.5	Step Voltage (mV):	5

TraceDetect Nano-Band Explorer

Sample ID: JCN90 AsIII+V

Trace Metals:

As(III+V): 837 ppb

AsIII+V 367
AsIII 193
As V 174

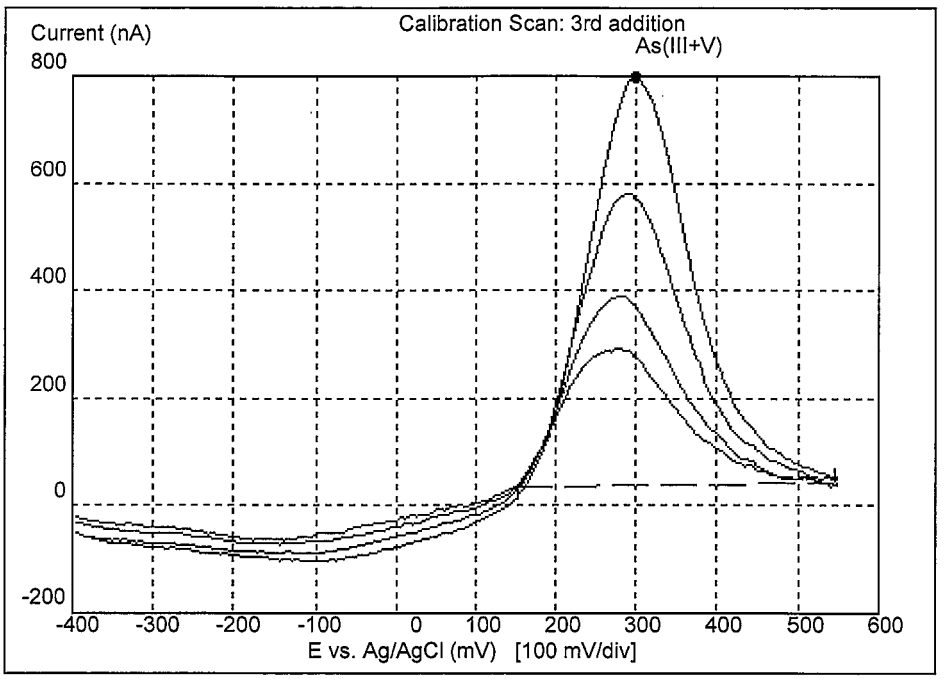
32X

Temperature:

Input 1:

Input 2:

31/Aug/06 14:39:29



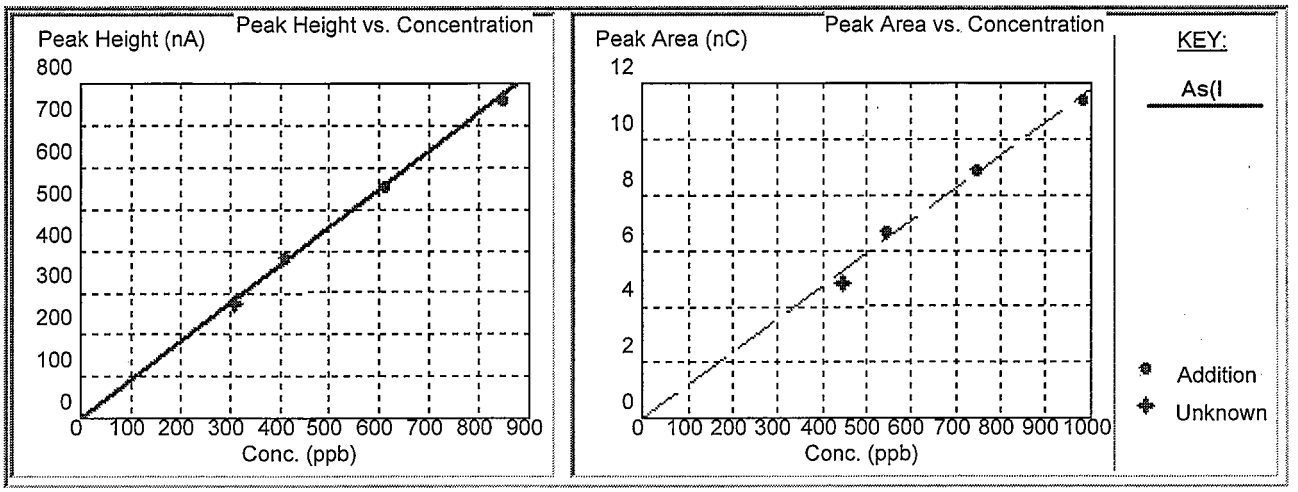
Settings:

Type:	ASV	Clean Time (S)	0.1	Signal Avg.	8
Waveform:	Staircase	Clean Voltage (mV):	600	Frequency (Hz):	2000
Cell	Three Electrode	Plate Time (S)	5	Start Voltage (mV):	-400
☑ Background subtraction		Plate Voltage (mV)	-400	Stop Voltage (mV):	550
		Range (uA):	12.5	Step Voltage (mV):	5

Calibration Summary:

JCN90

Calibration Date: 31/Aug/06 at 14:02:48



Calibration Parameters

Metal	Calib. Mode	Fit Factor	Slope	Zero Offset	Starting Concentration	Concentration in Original Sample
As[III+V]	**Height**	0.998	1.10 ppb/nA	0 ppt	310 ppb	370 ppb
	Area	0.990	84.9 ppb/nC	0 ppt	440 ppb	530 ppb

JCN90

Addition Data for Method of Standard Additions

Metal	Unknown Concentration	Concentration in original aliquot	1st Addition	2nd Addition	3rd Addition	Total added concentration
As(III+V)	309 ppb	367 ppb	5.00 uL (100 ppb)	10.0 uL (200 ppb)	12.0 uL (240 ppb)	540 ppb

Starting Volume: 50.000 **mL**

Final Volume: 50.027 **mL**

TraceDetect Nano-Band Explorer

Sample ID: JCWF3 As III+V

Trace Metals:

As(III+V): 2.19 ppm

1040 As III+V
625 As III
415 As V

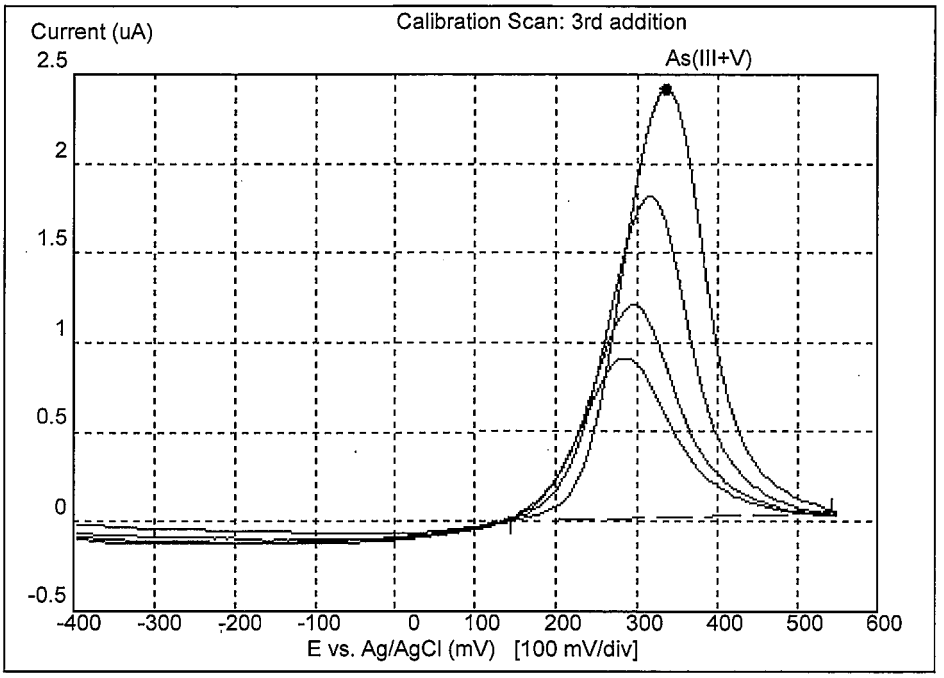
32X

Temperature:

Input 1:

Input 2:

31/Aug/06 15:00:33



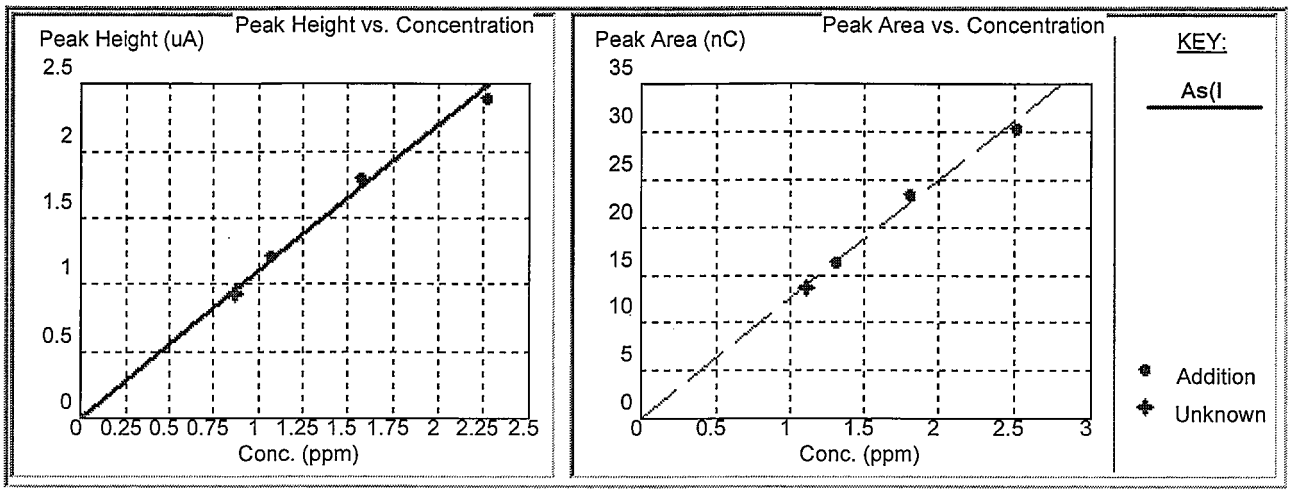
Settings:

Type:	ASV	Clean Time (S)	0.1	Signal Avg.	8
Waveform:	Staircase	Clean Voltage (mV):	600	Frequency (Hz):	2000
Cell	Three Electrode	Plate Time (S)	5	Start Voltage (mV):	-400
☑ Background subtraction		Plate Voltage (mV)	-400	Stop Voltage (mV):	550
		Range (uA):	12.5	Step Voltage (mV):	5

Calibration Summary:

JCWF3

Calibration Date: 31/Aug/06 at 14:46:30



Calibration Parameters

Metal	Calib. Mode	Fit Factor	Slope	Zero Offset	Starting Concentration	Concentration in Original Sample
As(III+V)	**Height**	0.990	0.910 ppb/nA	0 ppt	870 ppb	1.0 ppm
	Area	0.992	80.2 ppb/nC	0 ppt	1.1 ppm	1.3 ppm

Addition Data for Method of Standard Additions

JCWF3

Metal	Unknown Concentration	Concentration in original aliquot	1st Addition	2nd Addition	3rd Addition	Total added concentration
As(III+V)	870 ppb	1.04 ppm	10.0 uL (200 ppb)	25.0 uL (500 ppb)	35.0 uL (699 ppb)	1.40 ppm

Starting Volume: 50.000 **mL**

Final Volume: 50.070 **mL**

TraceDetect Nano-Band Explorer

Sample ID: JCWGA AsIII+V

Trace Metals:

As(III+V): 386 ppb

89.1 AsIII+V
65.4 AsIII
23.7 AsV

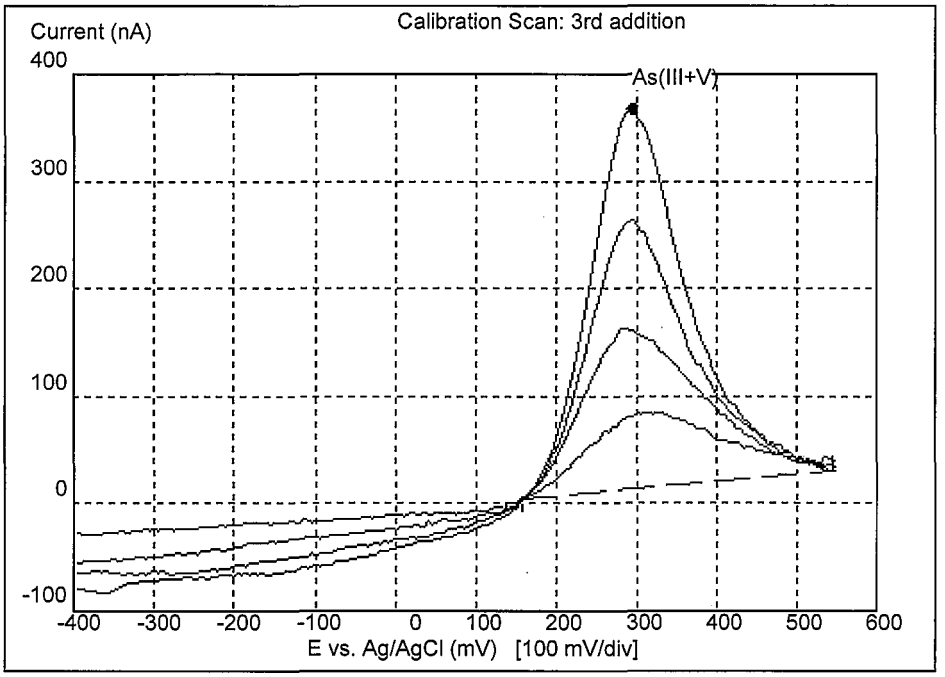
16X

Temperature:

Input 1:

Input 2:

31/Aug/06 15:41:49



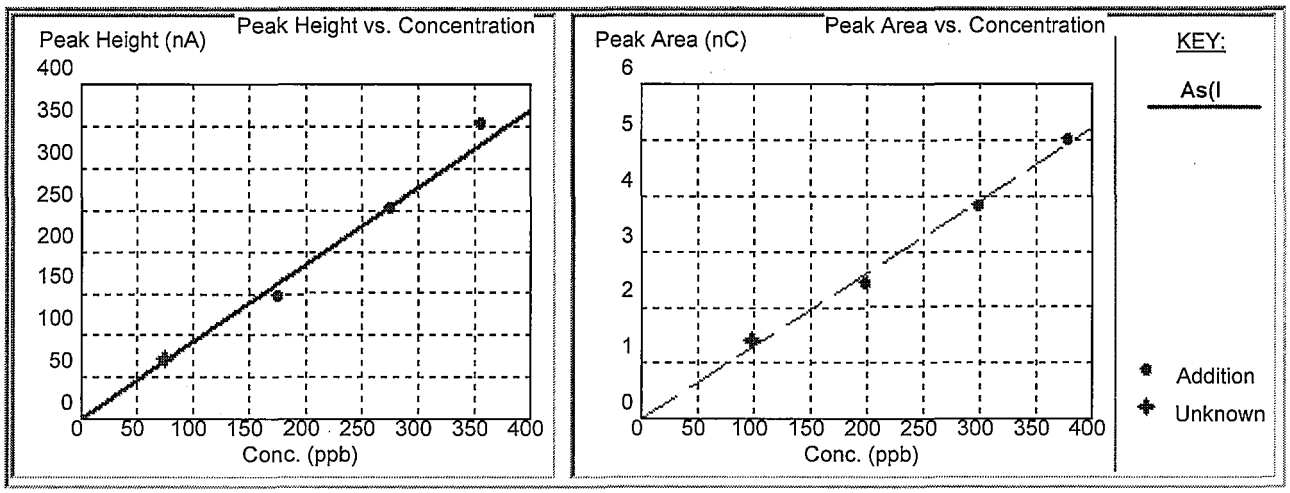
Settings:

Type:	ASV	Clean Time (S)	0.1	Signal Avg.	8
Waveform:	Staircase	Clean Voltage (mV):	600	Frequency (Hz):	2000
Cell	Three Electrode	Plate Time (S):	1.0	Start Voltage (mV):	-400
☑ Background subtraction		Plate Voltage (mV)	-400	Stop Voltage (mV):	550
		Range (uA):	12.5	Step Voltage (mV):	5

Calibration Summary:

JCW6A

Calibration Date: 31/Aug/06 at 15:29:18



Calibration Parameters

Metal	Calib. Mode	Fit Factor	Slope	Zero Offset	Starting Concentration	Concentration in Original Sample
As(III+V)	**Height**	0.988	1.08 ppb/nA	0 ppt	75 ppb	89 ppb
	Area	0.994	76.7 ppb/nC	0 ppt	98 ppb	120 ppb

JCWGA

Addition Data for Method of Standard Additions

Metal	Unknown Concentration	Concentration in original aliquot	1st Addition	2nd Addition	3rd Addition	Total added concentration
As(III+V)	74.8 ppb	89.1 ppb	5.00 uL (100 ppb)	5.00 uL (100 ppb)	4.00 uL (80.0 ppb)	280 ppb

Starting Volume: 50.000 **mL**

Final Volume: 50.014 **mL**

TraceDetect Nano-Band Explorer

Sample ID: JCWGC AsIII+V

Trace Metals:

As[III+V]: 363 ppb

143 As III+V
64.1 As III
78.9 As V

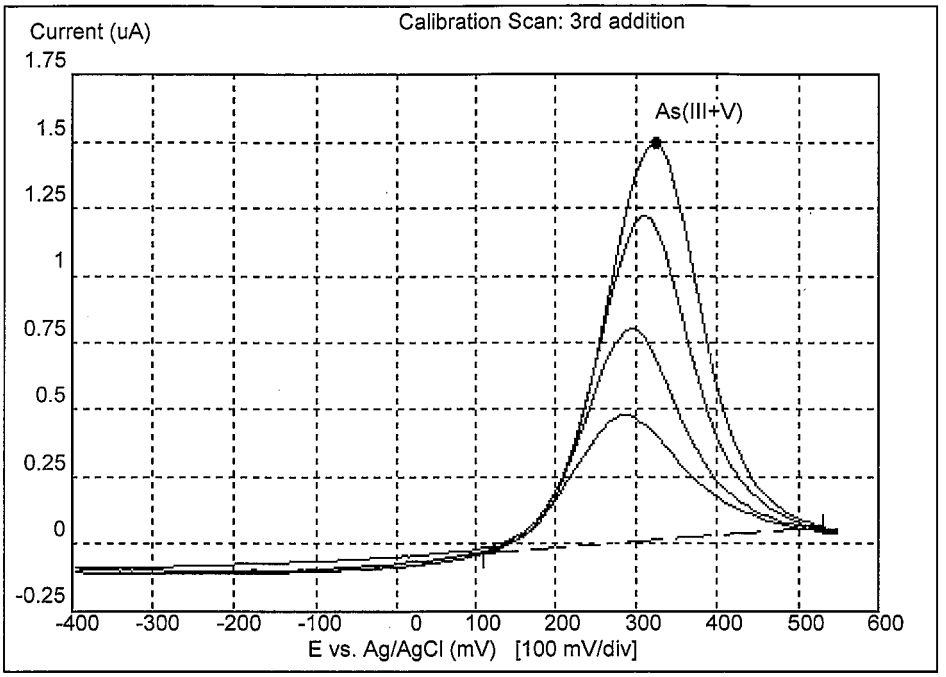
8X

Temperature:

Input 1:

Input 2:

31/Aug/06 15:14:07



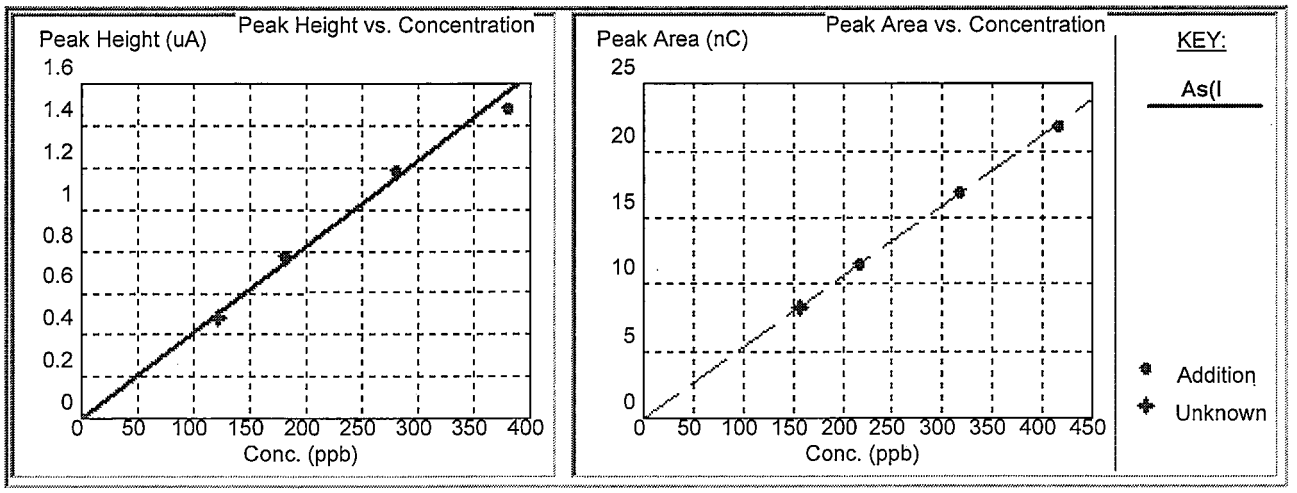
Settings:

Type:	ASV	Clean Time (S)	0.1	Signal Avg.	8
Waveform:	Staircase	Clean Voltage (mV):	600	Frequency (Hz):	2000
Cell	Three Electrode	Plate Time (S)	20	Start Voltage (mV):	-400
☑ Background subtraction		Plate Voltage (mV)	-400	Stop Voltage (mV):	550
		Range (uA):	12.5	Step Voltage (mV):	5

Calibration Summary:

JCWGC

Calibration Date: 31/Aug/06 at 15:08:22



Calibration Parameters

Metal	Calib. Mode	Fit Factor	Slope	Zero Offset	Starting Concentration	Concentration in Original Sample
As[III+V]	**Height**	0.990	0.244 ppb/nA	0 ppt	120 ppb	140 ppb
	Area	0.999	18.9 ppb/nC	0 ppt	160 ppb	190 ppb

JCWGC

Addition Data for Method of Standard Additions

Metal	Unknown Concentration	Concentration in original aliquot	1st Addition	2nd Addition	3rd Addition	Total added concentration
As(III+V)	120 ppb	143 ppb	3.00 uL (60.0 ppb)	5.00 uL (100 ppb)	5.00 uL (100 ppb)	260 ppb

Starting Volume: 50.000 **mL**

Final Volume: 50.013 **mL**

TraceDetect Nano-Band Explorer

Sample ID: JC1LR + 1ppb AsIII+V

Trace Metals:

As(III+V): 2.05 ppb

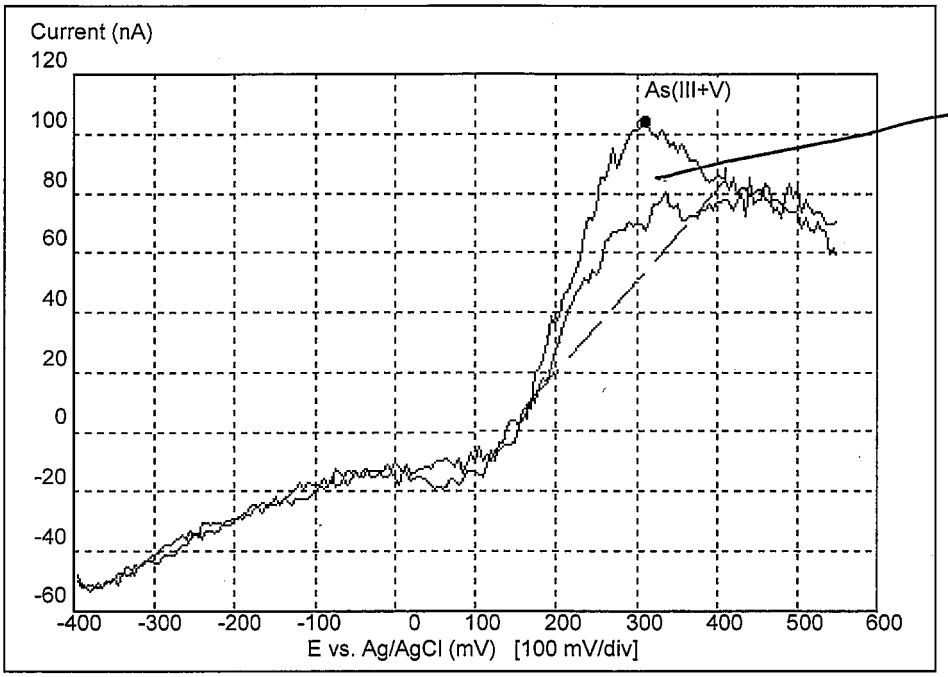
As III+V ND
As III ND
As V ND

Temperature:

Input 1:

Input 2:

31/Aug/06 16:29:45



1ppb

Settings:

Type:	ASV	Clean Time (S)	0.1	Signal Avg.	8
Waveform:	Staircase	Clean Voltage (mV):	600	Frequency (Hz):	2000
Cell	Three Electrode	Plate Time (S)	160	Start Voltage (mV):	-400
☑ Background subtraction		Plate Voltage (mV)	-400	Stop Voltage (mV):	550
		Range (uA):	12.5	Step Voltage (mV):	5

TraceDetect Nano-Band Explorer -

Sample ID: JC0R0 AsIII+V + 2ppb

Trace Metals:

As(III+V): 1.44 ppb

As III+V ND
As III ND
As V ND

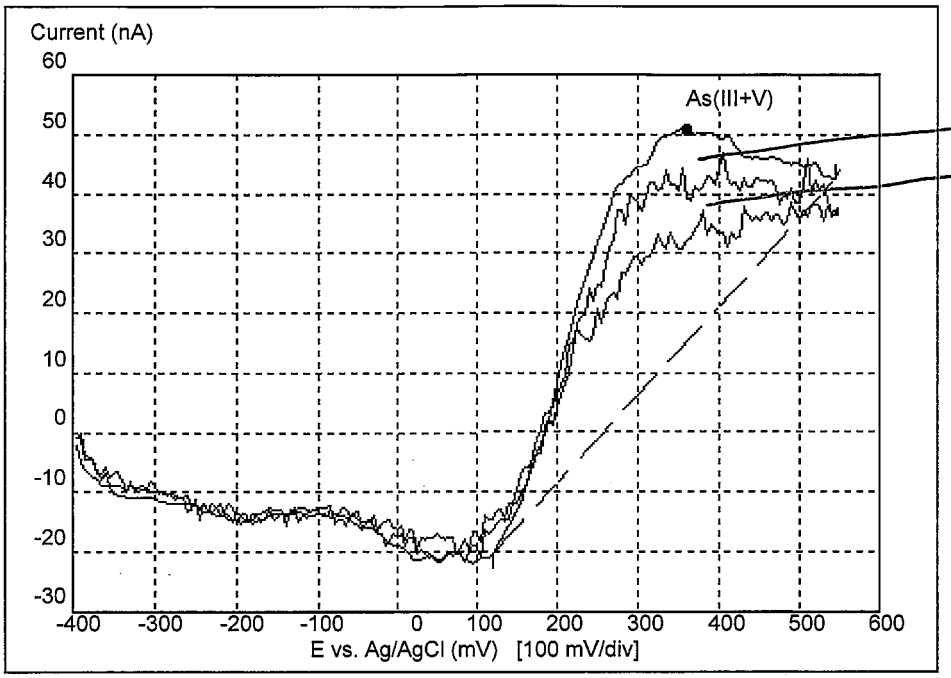
1X

Temperature:

Input 1:

Input 2:

31/Aug/06 17:27:04



Settings:

Type:	ASV	Clean Time (S)	0.1	Signal Avg.	8
Waveform:	Staircase	Clean Voltage (mV):	600	Frequency (Hz):	2000
Cell	Three Electrode	Plate Time (S)	160	Start Voltage (mV):	-400
		Plate Voltage (mV)	-400	Stop Voltage (mV):	550
		Range (uA):	12.5	Step Voltage (mV):	5

☑ Background subtraction

TraceDetect Nano-Band Explorer

Sample ID: JC0Q4 500x AsIII+V

31/Aug/06 18:07:12

Trace Metals:

As(III+V): 749 ppb

223 x 500 = 111500

~~22300 As III+V~~

111500 As III+V

111500 As V

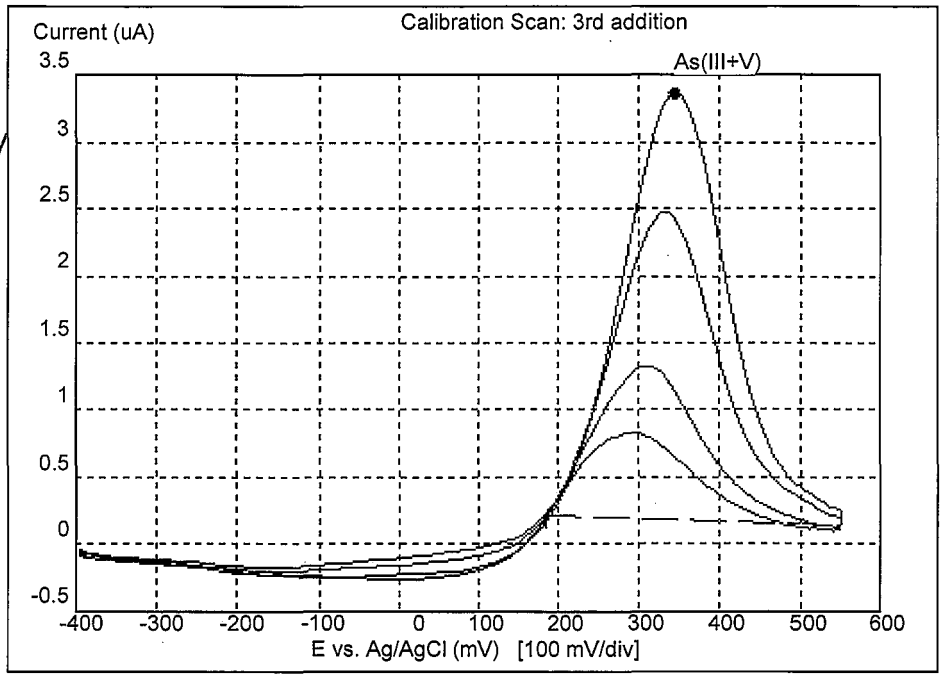
ND As III

500 X 16 = 8000X

Temperature:

Input 1:

Input 2:



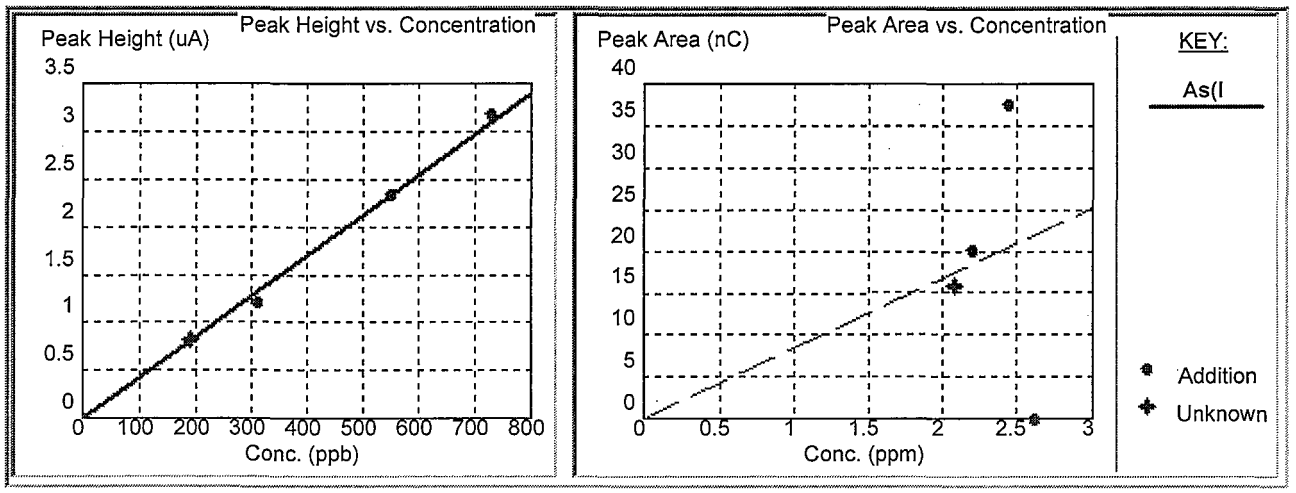
Settings:

Type:	ASV	Clean Time (S)	0.1	Signal Avg.	8
Waveform:	Staircase	Clean Voltage (mV):	600	Frequency (Hz):	2000
Cell	Three Electrode	Plate Time (S)	1.0	Start Voltage (mV):	-400
☑ Background subtraction		Plate Voltage (mV)	-400	Stop Voltage (mV):	550
		Range (uA):	12.5	Step Voltage (mV):	5

Calibration Summary:

JCOQ4

Calibration Date: 31/Aug/06 at 18:01:01



Calibration Parameters

Metal	Calib. Mode	Fit Factor	Slope	Zero Offset	Starting Concentration	Concentration in Original Sample
As[III+V]	**Height**	0.997	0.235 ppb/nA	0 ppt	190 ppb	220 ppb
	Area	0.063	119 ppb/nC	0 ppt	2.1 ppm	2.5 ppm

JCOQ4

Addition Data for Method of Standard Additions

Metal	Unknown Concentration	Concentration in original aliquot	1st Addition	2nd Addition	3rd Addition	Total added concentration
As(III+V)	188 ppb	223 ppb	6.00 uL (120 ppb)	12.0 uL (240 ppb)	9.00 uL (180 ppb)	540 ppb

Starting Volume: 50.000 mL

Final Volume: 50.027 mL

TraceDetect Nano-Band Explorer

Sample ID: JCORQ 100x AsIII+V

Trace Metals:

As(III+V): 880 ppb

250X~~500~~=100
~~125000~~ 25,000
~~125000 As III+V~~
~~111500 As III~~
~~13,500 ASV~~
100X16 = 1600X
~~500X16 = 8000X~~

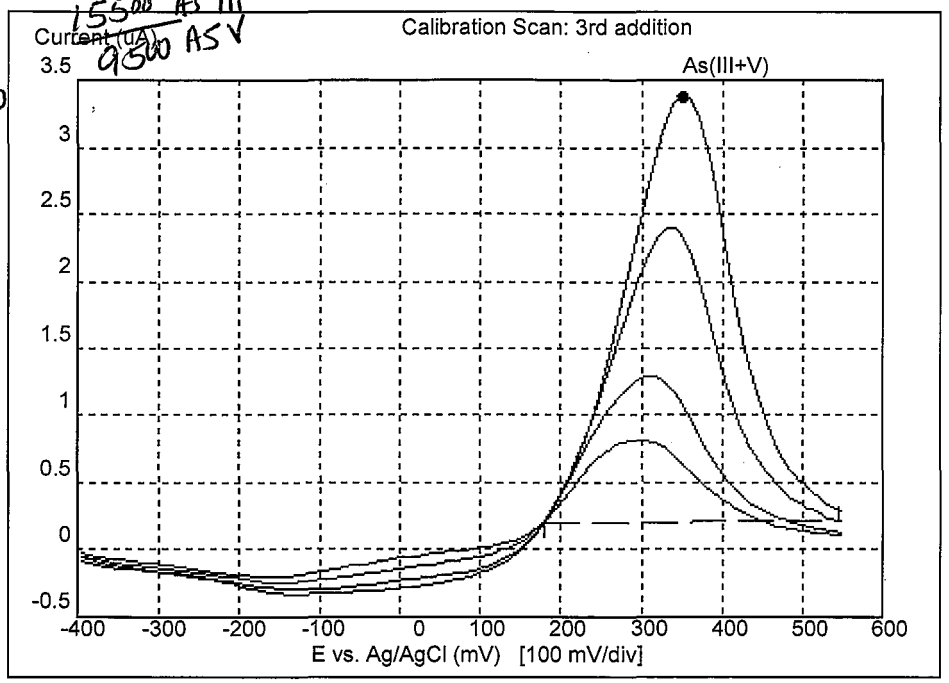
Temperature:

Input 1:

Input 2:

25000 As III+V
15500 As III
9500 ASV

31/Aug/06 18:00:22



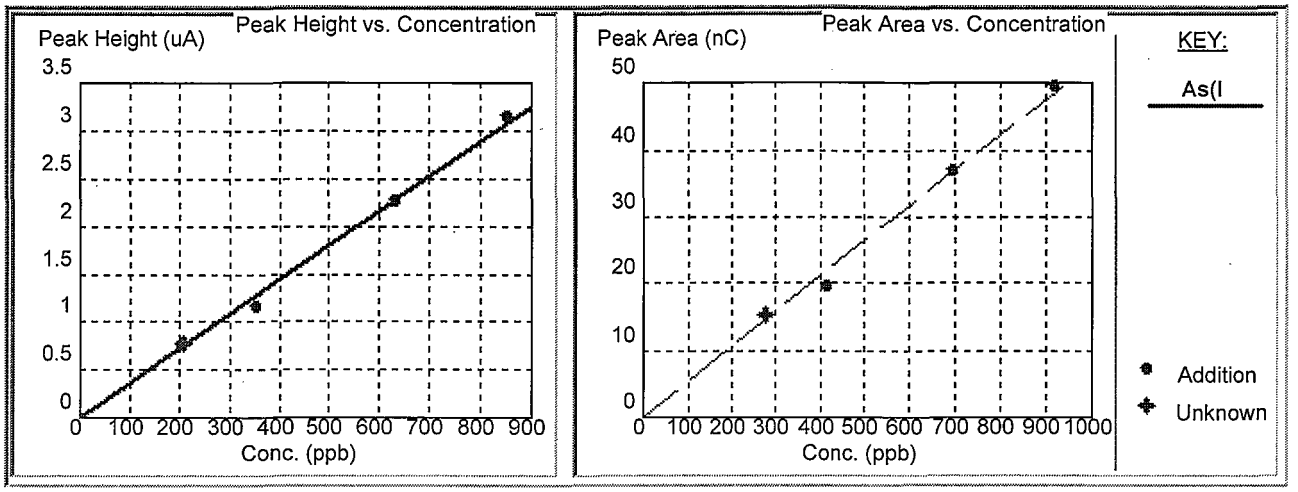
Settings:

Type:	ASV	Clean Time (S)	0.1	Signal Avg.	8
Waveform:	Staircase	Clean Voltage (mV):	600	Frequency (Hz):	2000
Cell	Three Electrode	Plate Time (S)	10	Start Voltage (mV):	-400
☑ Background subtraction		Plate Voltage (mV)	-400	Stop Voltage (mV):	550
		Range (uA):	12.5	Step Voltage (mV):	5

Calibration Summary:

Calibration Date: 31/Aug/06 at 17:40:10

JCORQ



Calibration Parameters

Metal	Calib. Mode	Fit Factor	Slope	Zero Offset	Starting Concentration	Concentration in Original Sample
As(III+V)	**Height**	0.997	0.277 ppb/nA	0 ppt	210 ppb	250 ppb
	Area	0.993	19.0 ppb/nC	0 ppt	280 ppb	330 ppb

Addition Data for Method of Standard Additions JCORQ

Metal	Unknown Concentration	Concentration in original aliquot	1st Addition	2nd Addition	3rd Addition	Total added concentration
As(III+V)	210 ppb	250 ppb	7.00 uL (140 ppb)	14.0 uL (280 ppb)	11.0 uL (220 ppb)	640 ppb

Starting Volume: 50.000 **mL**

Final Volume: 50.032 **mL**

STL North Canton

Sample Control Chain of Custody for General Chemistry

Lot Number	Sample	Suffix	Lab ID	Test	Prep Date	Prepared by
A6H230148	1		JC0Q41AC	Arsenic (V) Speciation by ASV	08/31/06	Deborah Bolgrin
A6H230148	1		JC0Q41AA	Arsenic (III) Speciation by ASV	08/29/06	Melissa Fuller-Gustavel
A6H230148	2		JC0RQ1AC	Arsenic (V) Speciation by ASV	08/31/06	Deborah Bolgrin
A6H230148	2		JC0RQ1AA	Arsenic (III) Speciation by ASV	08/29/06	Melissa Fuller-Gustavel
A6H230148	3		JC0R01AC	Arsenic (V) Speciation by ASV	08/31/06	Deborah Bolgrin
A6H230148	3		JC0R01AA	Arsenic (III) Speciation by ASV	08/29/06	Melissa Fuller-Gustavel

END OF REPORT

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ANALYTICAL REPORT

PROJECT NO. 332898.QT.20.24

QUANTA RESOURCES (EDGEWATER)

Lot #: A6H250218

Amy Klopper

CH2M Hill Constructors Inc
3011 SW Williston RD.
Gainesville, FL 32608

SEVERN TRENT LABORATORIES, INC.

Patrick J. O'Meara
Project Manager

September 11, 2006

CASE NARRATIVE

CASE NARRATIVE

A6H250218

The following report contains the analytical results for five water samples submitted to STL North Canton by CH2M Hill Constructors, Inc. from the Quanta Resources (Edgewater) Site, project number 332898.QT.20.24. The samples were received August 25, 2006, according to documented sample acceptance procedures.

STL utilizes USEPA approved methods in all analytical work. The samples presented in this report were analyzed for the parameter(s) listed on the analytical methods summary page in accordance with the method(s) indicated. Preliminary results were provided to Amy Klopper and Jennifer Simms on September 07, 2006. A summary of QC data for these analyses is included at the back of the report.

STL North Canton attests to the validity of the laboratory data generated by STL facilities reported herein. All analyses performed by STL facilities were done using established laboratory SOPs that incorporate QA/QC procedures described in the applicable methods. STL's operations groups have reviewed the data for compliance with the laboratory QA/QC plan, and data have been found to be compliant with laboratory protocols unless otherwise noted below.

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory.

If you have any questions, please call the Project Manager, Patrick J. O'Meara, at 330-497-9396.

This report is sequentially paginated. The final page of the report is labeled as "END OF REPORT."

SUPPLEMENTAL QC INFORMATION

SAMPLE RECEIVING

The temperature of the cooler upon sample receipt was 1.9°C.

CASE NARRATIVE (continued)

GENERAL CHEMISTRY

The sample(s) that contain results between the MDL and the RL were flagged with "B". There is the possibility of false positive or mis-identification at these quantitation levels. The acceptance criteria for the ICB, CCB, and Method Blank are +/- the standard reporting limit (SRL).

The sample(s) had elevated reporting limits due to matrix interferences. Refer to the sample report pages for the affected analyte(s) flagged with "G".

QUALITY CONTROL ELEMENTS OF SW-846 METHODS

STL North Canton conducts a quality assurance/quality control (QA/QC) program designed to provide scientifically valid and legally defensible data. Toward this end, several types of quality control indicators are incorporated into the QA/QC program, which is described in detail in QA Policy, QA-003. These indicators are introduced into the sample testing process to provide a mechanism for the assessment of the analytical data.

QC BATCH

Environmental samples are taken through the testing process in groups called QUALITY CONTROL BATCHES (QC batches). A QC batch contains up to twenty environmental samples of a similar matrix (water, soil) that are processed using the same reagents and standards. STL North Canton requires that each environmental sample be associated with a QC batch.

Several quality control samples are included in each QC batch and are processed identically to the twenty environmental samples. These QC samples include a METHOD BLANK (MB), a LABORATORY CONTROL SAMPLE (LCS) and, where appropriate, a MATRIX SPIKE/MATRIX SPIKE DUPLICATE (MS/MSD) pair or a MATRIX SPIKE/SAMPLE DUPLICATE (MS/DU) pair. If there is insufficient sample to perform an MS/MSD or an MS/DU, then a LABORATORY CONTROL SAMPLE DUPLICATE (LCSD) is included in the QC batch.

LABORATORY CONTROL SAMPLE

The Laboratory Control Sample is a QC sample that is created by adding known concentrations of a full or partial set of target analytes to a matrix similar to that of the environmental samples in the QC batch. The LCS analyte recovery results are used to monitor the analytical process and provide evidence that the laboratory is performing the method within acceptable guidelines. All control analytes indicated by a bold type in the LCS must meet acceptance criteria. Failure to meet the established recovery guidelines requires the repreparation and reanalysis of all samples in the QC batch. The only exception is that if the LCS recoveries are biased high and the associated sample is ND (non-detected) for the parameter(s) of interest, the batch is acceptable.

At times, a Laboratory Control Sample Duplicate (LCSD) is also included in the QC batch. An LCSD is a QC sample that is created and handled identically to the LCS. Analyte recovery data from the LCSD is assessed in the same way as that of the LCS. The LCSD recoveries, together with the LCS recoveries, are used to determine the reproducibility (precision) of the analytical system. Precision data are expressed as relative percent differences (RPDs). If the RPD fails for an LCS/LCSD and yet the recoveries are within acceptance criteria, the batch is still acceptable.

METHOD BLANK

The Method Blank is a QC sample consisting of all the reagents used in analyzing the environmental samples contained in the QC batch. Method Blank results are used to determine if interference or contamination in the analytical system could lead to the reporting of false positive data or elevated analyte concentrations. All target analytes must be below the reporting limits (RL) or the associated sample(s) must be ND except under the following circumstances:

- Common organic contaminants may be present at concentrations up to 5 times the reporting limits. Common metals contaminants may be present at concentrations up to 2 times the reporting limit, or the reported blank concentration must be twenty fold less than the concentration reported in the associated environmental samples. (See common laboratory contaminants listed below.)
-

Volatile (GC or GC/MS)	Semivolatile (GC/MS)	Metals ICP-MS	Metals ICP Trace
Methylene Chloride, Acetone, 2-Butanone	Phthalate Esters	Copper, Iron, Zinc, Lead, Calcium, Magnesium, Potassium, Sodium, Barium, Chromium, Manganese	Copper, Iron, Zinc, Lead

- Organic blanks will be accepted if compounds detected in the blank are present in the associated samples at levels 10 times the blank level. Inorganic blanks will be accepted if elements detected in the blank are present in the associated samples at 20 times the blank level.

- Blanks will be accepted if the compounds/elements detected are not present in any of the associated environmental samples.

Failure to meet these Method Blank criteria requires the repreparation and reanalysis of all samples in the QC batch.

MATRIX SPIKE/MATRIX SPIKE DUPLICATE

A Matrix Spike and a Matrix Spike Duplicate are a pair of environmental samples to which known concentrations of a full or partial set of target analytes are added. The MS/MSD results are determined in the same manner as the results of the environmental sample used to prepare the MS/MSD. The analyte recoveries and the relative percent differences (RPDs) of the recoveries are calculated and used to evaluate the effect of the sample matrix on the analytical results. Due to the potential variability of the matrix of each sample, the MS/MSD results may not have an immediate bearing on any samples except the one spiked; therefore, the associated batch MS/MSD may not reflect the same compounds as the samples contained in the analytical report. When these MS/MSD results fail to meet acceptance criteria, the data is evaluated. If the LCS is within acceptance criteria, the batch is considered acceptable. The acceptance criteria do not apply to samples that are diluted for organics if the native sample amount is 4x the concentration of the spike.

For certain methods, a Matrix Spike/Sample Duplicate (MS/DU) may be included in the QC batch in place of the MS/MSD. For the parameters (i.e. pH, ignitability) where it is not possible to prepare a spiked sample, a Sample Duplicate may be included in the QC batch. However, a Sample Duplicate is less likely to provide usable precision statistics depending on the likelihood of finding concentrations below the standard reporting limit. When the Sample Duplicate result fails to meet acceptance criteria, the data is evaluated.

SURROGATE COMPOUNDS

In addition to these batch-related QC indicators, each organic environmental and QC sample is spiked with surrogate compounds. Surrogates are organic chemicals that behave similarly to the analytes of interest and that are rarely present in the environment. Surrogate recoveries are used to monitor the individual performance of a sample in the analytical system.

If surrogate recoveries are biased high in the LCS, LCSD, or the Method Blank, and the associated sample(s) are ND, the batch is acceptable. Otherwise, if the LCS, LCSD, or Method Blank surrogate(s) fail to meet recovery criteria, the entire sample batch is reprepped and reanalyzed. If the surrogate recoveries are outside criteria for environmental samples, the samples will be reprepped and reanalyzed unless there is objective evidence of matrix interference or if the sample dilution is greater than the threshold outlined in the associated method SOP.

For the GC/MS BNA methods, the surrogate criterion is that two of the three surrogates for each fraction must meet acceptance criteria. The third surrogate must have a recovery of ten percent or greater.

For the Pesticide, PCB, and PAH methods, the surrogate criterion is that one of two surrogate compounds must meet acceptance criteria.

STL North Canton Certifications and Approvals:

California (#01144CA), Connecticut (#PH-0590), Florida (#E87225),
Illinois (#200004), Kansas (#E10336), Minnesota (#39-999-348), New Jersey (#OH001), New York (#10975), Ohio (#6090), OhioVAP (#CL0024), Utah (#QUAN9), West Virginia (#210), Wisconsin (#999518190),NAVY, ARMY, USDA Soil Permit, ACIL Seal of Excellence – Participating Lab Status Award (#82)

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EXECUTIVE SUMMARY

EXECUTIVE SUMMARY - Detection Highlights

A6H250218

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
MW-C-082406 08/24/06 09:15 001				
Arsenic (III)	23.1	4.0	ug/L	SW846 7063
Arsenic (V)	4.8 B,G	8.0	ug/L	SW846 7063
MW-A-2-082406 08/24/06 10:20 002				
Arsenic (III)	136000	32000	ug/L	SW846 7063
MW-F-082406 08/24/06 13:45 003				
Arsenic (III)	119	32.0	ug/L	SW846 7063
MW-L-082406 08/24/06 14:30 004				
Arsenic (III)	13.1	8.0	ug/L	SW846 7063
Arsenic (V)	12.7	8.0	ug/L	SW846 7063
MW-B-082406 08/24/06 09:50 005				
Arsenic (III)	448	160	ug/L	SW846 7063
Arsenic (V)	212	160	ug/L	SW846 7063

METHOD SUMMARY

ANALYTICAL METHODS SUMMARY

A6H250218

PARAMETER	ANALYTICAL METHOD
Arsenic (III) Speciation by ASV	SW846 7063
Arsenic (V) Speciation by ASV	SW846 7063

References:

SW846 "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 and its updates.

SAMPLE SUMMARY

SAMPLE SUMMARY

A6H250218

WO #	SAMPLE#	CLIENT SAMPLE ID	SAMPLED DATE	SAMP TIME
JC7CF	001	MW-C-082406	08/24/06	09:15
JC7CR	002	MW-A-2-082406	08/24/06	10:20
JC7CV	003	MW-F-082406	08/24/06	13:45
JC7C5	004	MW-L-082406	08/24/06	14:30
JDD3N	005	MW-B-082406	08/24/06	09:50

NOTE(S):

- The analytical results of the samples listed above are presented on the following pages.
- All calculations are performed before rounding to avoid round-off errors in calculated results.
- Results noted as "ND" were not detected at or above the stated limit.
- This report must not be reproduced, except in full, without the written approval of the laboratory.
- Results for the following parameters are never reported on a dry weight basis: color, corrosivity, density, flashpoint, ignitability, layers, odor, paint filter test, pH, porosity pressure, reactivity, redox potential, specific gravity, spot tests, solids, solubility, temperature, viscosity, and weight.

SHIPPING
AND
RECEIVING DOCUMENTS

Severn Trent Laboratories
4101 Shuffel Drive NW
North Canton, OH 44720
(330) 497-9396

Honeywell — Chain Of Custody / Analysis Request

AESI Ref:	38945.67803
COC#	30916-001706 GW B
	082406-GW-B
Lab Proj # (SDG):	
Lab ID	BR
Site ID	Quanta
Lab Job #	
Authorized User:	Honeywell
Text & Excel File Drive	Excel & Text File Order

Privileged & Confidential

Site Name:	Quanta Resources (Edgewater)	Phase:	
Location of Site:	Edgewater, NJ	Sampling Program	Quanta 2006 Groundwater
EDD To:	amy.klopper@ch2m.com, john.mitchell@ch2m.com		
Sampler:	Austin Hareclerode/CH2M HILL		
PO #			
Analysis Turnaround Time (TAT):	10		
Consultant	CH2M		
Full Report TAT:			

Sampling Co.: CH2M HILL

Client Contact: (name, co., address)
Jennifer Simms
1700 Market Street, Suite 1600
Philadelphia, PA 19103

Preliminary Data To: amy.klopper@ch2m.com, jennifer.simms@ch2m.com
Sample Receipt Acknowledgement To: amy.klopper@ch2m.com, jennifer.simms@ch2m.com
Hard Copy To: Amy Klopper, 3011 Southwest Williston Road, Gainesville, FL 32608
Invoice To: jennifer.simms@ch2m.com

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Sample Identification: Location ID	Start Depth (ft)	End Depth (ft)	Field Sample ID	Sample Date	Sample Time	Sample Type	Sample Matrix	Sample Purpose	# of Cont.	Units	Composite/Grab	Field Filtered Sample ?	E1632 - Arsenic Speciation	Sampling Method (code)	Lab Sample Numbers
1 MW-C			MW-C-082406		0915	GW	WATER	REG	1	G	N	X		Bd pump	
2 MW-B			MW-B-082406		0950	GW	WATER	REG	1	G	N	X		Bd pump	
3 MW-A-2			MW-A-2-082406		1020	GW	WATER	REG	1	G	N	X		Bd pump	
4 MW-F			MW-F-082406		1345	GW	WATER	REG	1	G	N	X		Bd pump	
5 MW-L			MW-L-082406		1430	GW	WATER	REG	1	G	N	X		Bd pump	
6															
7															
8															
9															
10															
11															
12															

SW6010^LLI

Relinquished by	Company	Received by	Company	Condition	Custody Seals Intact
Megan Munz	CH2M HILL	[signature]	STL		
	Date/Time 8/24/06 1610		Date/Time 8-25-06 9:15	Cooler Temp.	
Relinquished by	Company	Received by	Company	Condition	Custody Seals Intact
	Date/Time		Date/Time	Cooler Temp.	

Preservatives: (Other; Specify):

0 (none); 1 (4 Deg C); 2 (HCl pH<2); 3 (HNO3 pH<2); 4 (H2SO4 pH<2); 5 (NaOH pH>12); 6 (NaOH, Zn Acetate); 7 (H2SO4 (pH<2), 4 Deg C)); 8 (HCl pH<2); 9 (HCl 4 Deg C); 10 (HNO3 (pH<2), 4Deg C); 11 (4C NaOH (pH>12) & Ascorbic Acid); 12 (4C H2SO4 (pH<2) & Na2S2O3); 13 (Zn Acetate); sp (special instructions)

GW
TB
FB

J 39323

Accutest Labs
2235 ROUTE 130
Dayton, NJ 8810
732-329-0200

Honeywell — Chain Of Custody / Analysis Request

AESI Ref:	38953.54361
COC#	30516
	082406-GW-A
Lab Proj # (SDG):	
Lab ID	ACTD
Site ID	Quanta
Lab Job #	
Authorized User:	Honeywell
Test & Excel File Layout	Excel & Text File Order

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Sampling Co.:	CH2M HILL
Client Contact: (name, co., address)	Jennifer Simms, 1700 Market Street, Suite 1600, Philadelphia, PA 19103
Preliminary Data To	[illegible]
Sample Receipt Acknowledgement To	[illegible]
Hard Copy To	Amy Klopper, 3011 Southwest Williston Road, [illegible]
Invoice To:	jennifer.simms@ch2m.com
EDD To:	amy.klopper@ch2m.com, john.mitchell@ch2m.com
Sampler:	Austin Hareclerode/CH2M HILL
PO #	
Analysis Turnaround Time (TAT):	10
Consultant	CH2M
Full Report TAT:	
Site Name:	Quanta Resources (Edgewater)
Location of Site:	Edgewater, NJ
Phase:	
Sampling Program	Quanta 2006 Groundwater

	Location ID	Start Depth (ft)	End Depth (ft)	Field Sample ID	Sample Date	Sample Time	Sample Type	Sample Matrix	Sample Purpose	# of Cont.	Units		SW8260 - VOCs	SW8270 - SVOCs	SW8270-SIM	SW6010 - As, Pb	SW8081 - Pesticides	SW8082 - PCBs	E350.2 - Ammonia	Sampling Method (code)	Lab Sample Numbers
													9	1	1	10	1	1	7		
1	MW-G			MW-G-082306	8/23/06	1450	GW	WATER	REG	8	G	N	X	X	X	X		X		Bld pump	31FIR, Amet 14
2	MW-I			MW-I-082306	8/23/06	1527	GW	WATER	REG	8	G	N	X	X	X	X		X		Bld pump	WC46, 2268
3	MW-C		●	MW-C-082406	8/24/06	0915	GW	WATER	REG	8	G	N	X	X	X	X		X		Bld pump	
4	MW-B			MW-B-082406	8/24/06	0950	GW	WATER	REG	8	G	N	X	X	X	X		X		Bld pump	
5	MW-A-2			MW-A-2-082406	8/24/06	1020	GW	WATER	REG	[illegible]	G	N	X	X	X	X		X	X	Bld pump	MS/MSD
6	MW-F			MW-F-082406	8/24/06	1345	GW	WATER	REG	8	G	N	X	X	X	X		X		Bld pump	
7	MW-L			MW-L-082406	8/24/06	1430	GW	WATER	REG	[illegible]	G	N	X	X	X	X		X	X	Bld pump	MS/MSD
8	Equip Blank			EB-082406-GW	8/24/06	1500	BLK WATER	WATER	EB	9	G	N	X	X	X	X		X	X	Bld pump	
9	Trip Blank		*	TB-082406-GW	8/24/06	0:00	BLK WATER	WATER	TB	2	G	N	X								
10																					
11	Dup 1			DUP-082406-GW-1	8/24/06	—	GW	WATER	FD	9	G	N	X	X	X	X		X	X	Bld pump	
12	Dup 2		△	DUP-082406-GW-2	8/24/06	—	GW	WATER	FD	9	G	N	X	X	X	X		X	X	⊗ Bld pump	

SW6010^LLI

See worksheet SW6010 - analyze for Arsenic (As) and Lead (Pb)

Relinquished by	Company	Date/Time	Received by	Company	Date/Time	Condition	Cooler Temp.	Custody Seals Intact
[signature]	CH2M HILL	8/24/06 1550	[signature]	ACCUTEST	8/24/06 1550			318-901-898-316-314-302
[signature]	ACCUTEST	8/24/06 1700	[signature]					

Other: (Other; Specify):

0 (none); 1 (4 Deg C); 2 (HCl pH<2); 3 (HNO3 pH<2); 4 (H2SO4 pH<2); 5 (NaOH pH>12); 6 (NaOH, Zn Acetate); 7 (H2SO4 (pH<2), 4 Deg C)); 8 (HCl pH<2); 9 (HCl 4 Deg C); 10 (HNO3 (pH<2), 4Deg C); 11 (4C NaOH (pH>12) & Ascorbic Acid); 12 (4C H2SO4 (pH<2) & Na2S2O3); 13 (Zn Acetate); sp (special instructions)

● Met. acid under preserved HNO3 added lot# C16038 8/24/06

△ Met. vol. acid HCl preserved labeled MWB-082406 @0950 8/24/06

* Fill 8/22/06 1800

⊗ Sample forwarded to STL-OH.

28°, 48°, 36°, 40°, 42°, 54°

[signature] 8-29-06 9:20

STL North Canton

15

STL Cooler Receipt Form/Narrative **Lot Number:** A6H250218
North Canton Facility

Client: Honeywell Project: _____ Quote#: 71914
Cooler Received on: 8-29-04 Opened on: 8-29-04 by: [signature] (Signature)
Fedx ☒ Client Drop Off ☐ UPS ☐ DHL ☐ FAS ☐ STL Courier ☐
Stetson ☐ US Cargo ☐ Other: _____
STL Cooler No# _____ Foam Box ☐ Client Cooler ☒ Other _____

1. Were custody seals on the outside of the cooler? Yes ☒ No ☐ Intact? Yes ☒ No ☐ NA ☐
   If YES, Quantity 2
   Were the custody seals signed and dated? Yes ☒ No ☐ NA ☐
2. Shipper's packing slip attached to this form? Yes ☒ No ☐ NA ☐
3. Did custody papers accompany the samples? Yes ☒ No ☐ Relinquished by client? Yes ☒ No ☐
4. Did you sign the custody papers in the appropriate place? Yes ☒ No ☐
5. Packing material used: Bubble Wrap ☐ Foam ☐ None ☒ Other : _____
6. Cooler temperature upon receipt 1.9 °C (see back of form for multiple coolers/temp)

METHOD: Temp Vial ☐ Coolant & Sample ☐ Against Bottles ☐ IR ☒ ICE/H_2O Slurry ☐
COOLANT: Wet Ice ☒ Blue Ice ☐ Dry Ice ☐ Water ☐ None ☐

7. Did all bottles arrive in good condition (Unbroken)? Yes ☒ No ☐
8. Could all bottle labels and/or tags be reconciled with the COC? Yes ☒ No ☐
9. Were samples at the correct pH? (record below/on back) Yes ☐ No ☐ NA ☒
10. Were correct bottles used for the tests indicated? Yes ☒ No ☐
11. Were air bubbles >6 mm in any VOA vials? Yes ☐ No ☐ NA ☒
12. Sufficient quantity received to perform indicated analyses? Yes ☒ No ☐
13. Was a Trip Blank present in the cooler? Yes ☐ No ☒ Were VOAs on the COC? Yes ☐ No ☒
14. Does the trip blank number match the cooler number in which it was received? Yes ☐ No ☐ NA ☒

Contacted PM _____ Date: _____ by: _____ via Voice Mail ☐ Verbal ☐ Other ☐
Concerning:

√	
	1. CHAIN OF CUSTODY
	The following discrepancies occurred:
	2. SAMPLE CONDITION
	Sample(s) _____ were received after the recommended holding time had expired.
	Sample(s) _____ were received in a broken container.
	3. SAMPLE PRESERVATION
	Sample(s) _____ were further preserved in sample receiving to meet recommended pH level(s). *Nitric Acid Lot #* 122805-*HNO3; Sulfuric Acid Lot #* 100405-*H2SO4; Sodium Hydroxide Lot #* -100405 -*NaOH; Hydrochloric Acid Lot #* 100504-*HCl; Sodium Hydroxide and Zinc Acetate Lot #* 071604-*CH3COO2ZN/NaOH*
	Sample(s) _____ were received with bubble > 6 mm in diameter (cc: PM)
	4. Other (see below or back)

Client ID	pH	Date	Initials

STL Cooler Receipt Form/Narrative
North Canton Facility

Client ID	pH	Date	Initials

Cooler	Temp	Method	Coolant

Discrepancies Cont.

STL Cooler Receipt Form/Narrative **Lot Number:** A6H250218
North Canton Facility

Client: Honeywell Project: CH2M Hill Quote#: 71914
Cooler Received on: 8-25-06 Opened on: 8-25-06 by: [signature] (Signature)
Fedx ☒ Client Drop Off ☐ UPS ☐ DHL ☐ FAS ☐ STL Courier ☐
Stetson ☐ US Cargo ☐ Other:
STL Cooler No# Foam Box ☐ Client Cooler ☒ Other

1. Were custody seals on the outside of the cooler? Yes ☐ No ☒ Intact? Yes ☐ No ☐ NA ☒
   If YES, Quantity
   Were the custody seals signed and dated? Yes ☐ No ☐ NA ☒
2. Shipper's packing slip attached to this form? Yes ☒ No ☐ NA ☐
3. Did custody papers accompany the samples? Yes ☒ No ☐ Relinquished by client? Yes ☒ No ☐
4. Did you sign the custody papers in the appropriate place? Yes ☒ No ☐
5. Packing material used: Bubble Wrap ☒ Foam ☐ None ☐ Other :
6. Cooler temperature upon receipt 1.9 °C (see back of form for multiple coolers/temp)

METHOD: Temp Vial ☐ Coolant & Sample ☐ Against Bottles ☐ IR ☒ ICE/H_2O Slurry ☐
COOLANT: Wet Ice ☒ Blue Ice ☐ Dry Ice ☐ Water ☐ None ☐

7. Did all bottles arrive in good condition (Unbroken)? Yes ☒ No ☐
8. Could all bottle labels and/or tags be reconciled with the COC? Yes ☒ No ☐
9. Were samples at the correct pH? (record below/on back) Yes ☒ No ☐ NA ☐
10. Were correct bottles used for the tests indicated? Yes ☒ No ☐
11. Were air bubbles >6 mm in any VOA vials? Yes ☐ No ☐ NA ☒
12. Sufficient quantity received to perform indicated analyses? Yes ☒ No ☐
13. Was a Trip Blank present in the cooler? Yes ☐ No ☒ Were VOAs on the COC? Yes ☐ No ☒
14. Does the trip blank number match the cooler number in which it was received? Yes ☐ No ☐ NA ☒

Contacted PM POJO Date: 8/25/06 by: NS via Voice Mail ☒ Verbal ☒ Other ☐
Concerning: #1 NS

√		

1. CHAIN OF CUSTODY

The following discrepancies occurred:
Did not recieve MW-B - on COC
recieved Dup-082506-GW-02 OK to log-

2. SAMPLE CONDITION

Sample(s) _____ were received after the recommended holding time had expired.
Sample(s) _____ were received in a broken container.

3. SAMPLE PRESERVATION

Sample(s) _____ were further preserved in sample receiving to meet recommended pH level(s). *Nitric Acid Lot #* 122805-*HNO3; Sulfuric Acid Lot #* 100405-*H2SO4; Sodium Hydroxide Lot #* -100405 -*NaOH; Hydrochloric Acid Lot #* 100504-*HCl; Sodium Hydroxide and Zinc Acetate Lot #* 071604-*CH3COO2ZN/NaOH*
Sample(s) _____ were received with bubble > 6 mm in diameter (cc: PM)

4. Other (see below or back)

Client ID	pH	Date	Initials
MW-C	<2	8-25-06	NS
-A-2	<2		
-E	<2		
FL	<2		

STL Cooler Receipt Form/Narrative
North Canton Facility

Client ID	pH	Date	Initials
Dup	LZ	8-25-06	MS

Cooler	Temp	Method	Coolant

Discrepancies Cont.

GENERAL CHEMISTRY DATA

SAMPLE DATA

CH2M Hill Constructors, Inc.

Client Sample ID: MW-C-082406

General Chemistry

Lot-Sample #...: A6H250218-001 **Work Order #...:** JC7CF **Matrix.....:** WG
Date Sampled...: 08/24/06 09:15 **Date Received..:** 08/25/06

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Arsenic (III)	**23.1**	**4.0**	**ug/L**	**SW846 7063**	**09/05/06**	**6249061**
	Dilution Factor: 2					
Arsenic (V)	**4.8 B,G**	**8.0**	**ug/L**	**SW846 7063**	**09/06/06**	**6249409**
	Dilution Factor: 4					

NOTE(S):

RL Reporting Limit

B Estimated result. Result is less than RL.

G Elevated reporting limit. The reporting limit is elevated due to matrix interference.

CH2M Hill Constructors, Inc.

Client Sample ID: MW-A-2-082406

General Chemistry

Lot-Sample #...: A6H250218-002 **Work Order #...:** JC7CR **Matrix.....:** WG
Date Sampled...: 08/24/06 10:20 **Date Received..:** 08/25/06

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Arsenic (III)	**136000**	**32000**	**ug/L**	**SW846 7063**	**09/05/06**	**6249062**
		Dilution Factor: 16000				
Arsenic (V)	ND G	32000	ug/L	SW846 7063	09/05/06	6249063
		Dilution Factor: 16000				

NOTE(S):

RL Reporting Limit

G Elevated reporting limit. The reporting limit is elevated due to matrix interference.

CH2M Hill Constructors, Inc.

Client Sample ID: MW-F-082406

General Chemistry

Lot-Sample #...: A6H250218-003 **Work Order #...:** JC7CV **Matrix.....:** WG
Date Sampled...: 08/24/06 13:45 **Date Received..:** 08/25/06

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Arsenic (III)	**119**	**32.0**	**ug/L**	**SW846 7063**	**09/05/06**	**6249061**
		Dilution Factor: 16				
Arsenic (V)	ND G	32.0	ug/L	SW846 7063	09/06/06	6249409
		Dilution Factor: 16				

NOTE(S):

RL Reporting Limit

G Elevated reporting limit. The reporting limit is elevated due to matrix interference.

CH2M Hill Constructors, Inc.

Client Sample ID: MW-L-082406

General Chemistry

Lot-Sample #...: A6H250218-004 **Work Order #...:** JC7C5 **Matrix.....:** WG
Date Sampled...: 08/24/06 14:30 **Date Received..:** 08/25/06

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Arsenic (III)	**13.1**	**8.0**	**ug/L**	**SW846 7063**	**09/05/06**	**6249061**
		Dilution Factor: 4				
Arsenic (V)	**12.7**	**8.0**	**ug/L**	**SW846 7063**	**09/06/06**	**6249409**
		Dilution Factor: 4				

CH2M Hill Constructors, Inc.

Client Sample ID: MW-B-082406

General Chemistry

Lot-Sample #...: A6H250218-005 **Work Order #...:** JDD3N **Matrix.....:** WG
Date Sampled...: 08/24/06 09:50 **Date Received..:** 08/25/06

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Arsenic (III)	**448**	**160**	**ug/L**	**SW846 7063**	**09/05/06**	**6249061**
		Dilution Factor: 80				
Arsenic (V)	**212**	**160**	**ug/L**	**SW846 7063**	**09/06/06**	**6249409**
		Dilution Factor: 80				

METHOD BLANK REPORT

General Chemistry

Client Lot #...: A6H250218 **Matrix.....:** WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Arsenic (III)		Work Order #: JDQMJ1AA		MB Lot-Sample #:	A6I060000-061	
	ND	2.0	ug/L	SW846 7063	09/05/06	6249061
		Dilution Factor: 1				
Arsenic (III)		Work Order #: JDQMQ1AA		MB Lot-Sample #:	A6I060000-062	
	ND	2.0	ug/L	SW846 7063	09/05/06	6249062
		Dilution Factor: 1				
Arsenic (V)		Work Order #: JDQMX1AA		MB Lot-Sample #:	A6I060000-063	
	ND	2.0	ug/L	SW846 7063	09/05/06	6249063
		Dilution Factor: 1				
Arsenic (V)		Work Order #: JDR521AA		MB Lot-Sample #:	A6I060000-409	
	ND	2.0	ug/L	SW846 7063	09/06/06	6249409
		Dilution Factor: 1				

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

General Chemistry

Lot-Sample #...: A6H250218 **Matrix.....:** WATER

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Arsenic (V)		WO#:JDQMX1AC-LCS/JDQMX1AD-LCSD				LCS Lot-Sample#: A6I060000-063	
	96	(25 - 130)			SW846 7063	09/05/06	6249063
	72	(25 - 130)	29	(0-50)	SW846 7063	09/05/06	6249063

Dilution Factor: 1

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE DATA REPORT

General Chemistry

Lot-Sample #...: A6H250218 **Matrix.....:** WATER

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCNT RECVRY	RPD	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Arsenic (V)	WO#:JDQMX1AC-LCS/JDQMX1AD-LCSD					LCS Lot-Sample#: A6I060000-063		
	20.0	19.2	ug/L	96		SW846 7063	09/05/06	6249063
	20.0	14.3	ug/L	72	29	SW846 7063	09/05/06	6249063

Dilution Factor: 1

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

General Chemistry

Client Lot #...: A6H250218 **Matrix.....:** WATER

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Arsenic (III)		Work Order #: JDQMJ1AC		LCS Lot-Sample#: A6I060000-061	
	72	(25 - 130)	SW846 7063	09/05/06	6249061
		Dilution Factor: 1			
Arsenic (III)		Work Order #: JDQMQ1AC		LCS Lot-Sample#: A6I060000-062	
	59	(25 - 130)	SW846 7063	09/05/06	6249062
		Dilution Factor: 1			
Arsenic (V)		Work Order #: JDR521AC		LCS Lot-Sample#: A6I060000-409	
	49	(25 - 130)	SW846 7063	09/06/06	6249409
		Dilution Factor: 1			

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE DATA REPORT

General Chemistry

Client Lot #...: A6H250218 **Matrix.....:** WATER

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCNT RECVRY	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Arsenic (III)			Work Order #: JDQMJ1AC		LCS Lot-Sample#:	A6I060000-061	
	20.0	14.3	ug/L	72	SW846 7063	09/05/06	6249061
			Dilution Factor: 1				
Arsenic (III)			Work Order #: JDQMQ1AC		LCS Lot-Sample#:	A6I060000-062	
	20.0	11.8	ug/L	59	SW846 7063	09/05/06	6249062
			Dilution Factor: 1				
Arsenic (V)			Work Order #: JDR521AC		LCS Lot-Sample#:	A6I060000-409	
	20.0	9.8	ug/L	49	SW846 7063	09/06/06	6249409
			Dilution Factor: 1				

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

MATRIX SPIKE SAMPLE EVALUATION REPORT

General Chemistry

Client Lot #...: A6H250218 **Matrix.....:** WATER
Date Sampled...: 08/30/06 09:30 **Date Received..:** 08/31/06

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Arsenic (III)		WO#: JC1LX1AD-MS/JC1LX1AE-MSD				MS Lot-Sample #: A6H230232-001	
	82	(25 - 130)			SW846 7063	09/05/06	6249062
	92	(25 - 130)	11	(0-50)	SW846 7063	09/05/06	6249062
		Dilution Factor: 1					
Arsenic (III)		WO#: JDJ4V1AD-MS/JDJ4V1AE-MSD				MS Lot-Sample #: A6H310394-001	
	52	(25 - 130)			SW846 7063	09/05/06	6249061
	65	(25 - 130)	23	(0-50)	SW846 7063	09/05/06	6249061
		Dilution Factor: 1					
Arsenic (V)		WO#: JC1LX1AF-MS/JC1LX1AG-MSD				MS Lot-Sample #: A6H230232-001	
	44	(25 - 130)			SW846 7063	09/05/06	6249063
	56	(25 - 130)	10	(0-50)	SW846 7063	09/05/06	6249063
		Dilution Factor: 1					
Arsenic (V)		WO#: JDJ4V1AF-MS/JDJ4V1AG-MSD				MS Lot-Sample #: A6H310394-001	
	109	(25 - 130)			SW846 7063	09/06/06	6249409
	111	(25 - 130)	1.6	(0-50)	SW846 7063	09/06/06	6249409
		Dilution Factor: 1					

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

MATRIX SPIKE SAMPLE DATA REPORT

General Chemistry

Client Lot #...: A6H250218 **Matrix.....:** WATER
Date Sampled...: 08/30/06 09:30 **Date Received..:** 08/31/06

PARAMETER	SAMPLE AMOUNT	SPIKE AMT	MEASRD AMOUNT	UNITS	PERCNT RECVRY	RPD	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Arsenic (III)			WO#: JC1LX1AD-MS/JC1LX1AE-MSD				MS Lot-Sample #: A6H230232-001		
	ND	20.0	16.5	ug/L	82		SW846 7063	09/05/06	6249062
	ND	20.0	18.4	ug/L	92	11	SW846 7063	09/05/06	6249062
			Dilution Factor: 1						
Arsenic (III)			WO#: JDJ4V1AD-MS/JDJ4V1AE-MSD				MS Lot-Sample #: A6H310394-001		
	ND	20.0	10.3	ug/L	52		SW846 7063	09/05/06	6249061
	ND	20.0	13.0	ug/L	65	23	SW846 7063	09/05/06	6249061
			Dilution Factor: 1						
Arsenic (V)			WO#: JC1LX1AF-MS/JC1LX1AG-MSD				MS Lot-Sample #: A6H230232-001		
	12.1	20.0	20.9	ug/L	44		SW846 7063	09/05/06	6249063
	12.1	20.0	23.2	ug/L	56	10	SW846 7063	09/05/06	6249063
			Dilution Factor: 1						
Arsenic (V)			WO#: JDJ4V1AF-MS/JDJ4V1AG-MSD				MS Lot-Sample #: A6H310394-001		
	2.3	20.0	24.1	ug/L	109		SW846 7063	09/06/06	6249409
	2.3	20.0	24.5	ug/L	111	1.6	SW846 7063	09/06/06	6249409
			Dilution Factor: 1						

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

SUPPORTIVE RAW DATA

STL North Canton Arsenic (III) Data Review Checklist

Run/Project Information

Run Date: 9/5/06 **Analyst:** LKH **Instrument:** _____

Prep Batches Run: 624906 / 62163

Methods used: **7063 mod :** NC-WC-000X Rev 1

Review Items

	Yes	No	N/A	2ndLevel
A. Instrument Setup				
1. Electrode sensitivity check?	✓			✓
2. MSA working standard and verification standard within control limits?	✓			✓
3. Cleanliness check (ICB) within +/- RL?	✓			✓
B. Sample Results				
1. Were non-detect samples verified with single point MSA?	✓			✓
2. All samples with As(III) quantified with 3-4 point MSA?	✓			✓
3. Sample analyses done within holding time?	✓			✓
C. Preparation/Matrix QC				
1. Samples preserved in the field?	✓			✓
2. LCS done per prep batch and within QC limits?	✓			✓
3. Method blank done per prep batch and < RL?	✓			✓
4. MS run at required frequency (1 per 20 samples) and within limits?	✓			✓
5. MSD or DU run at required frequency (1 per 20 samples) and RPD within limits?	✓			✓
D. Other				
1. Are all nonconformances documented appropriately?			✓	✓
2. Current MDL data on file?	✓			✓
3. Calculations and Transcriptions checked for error?	✓			✓
4. All client/ project specific requirements met?	✓			✓
5. Date of analysis verified as correct?	✓			✓

Analyst: [signature] **Date:** 9/6/06

Comments:

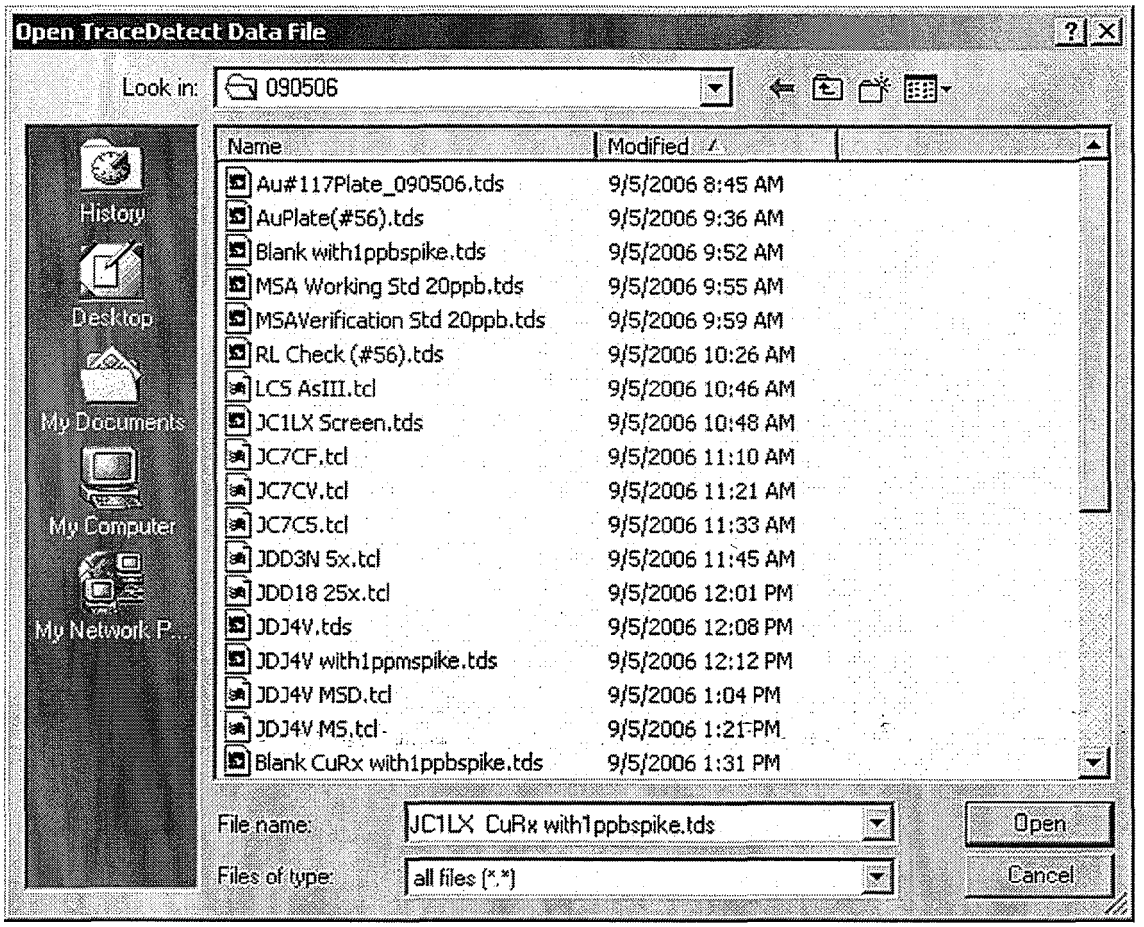
2nd Level Reviewer: [signature] **Date:** 9/6/06

Standard, Reagent and Supply Numbers

MSA Working Std AS6053 **MSA Verification Std** AS6054 **MS As(V) Std** AS6055

Au plate soln WR60945 **conc HCl** WR 60283 **Cu Remover** STR 300 #112267 **C18** —

Acid ext — **Basic ext** —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My Computer
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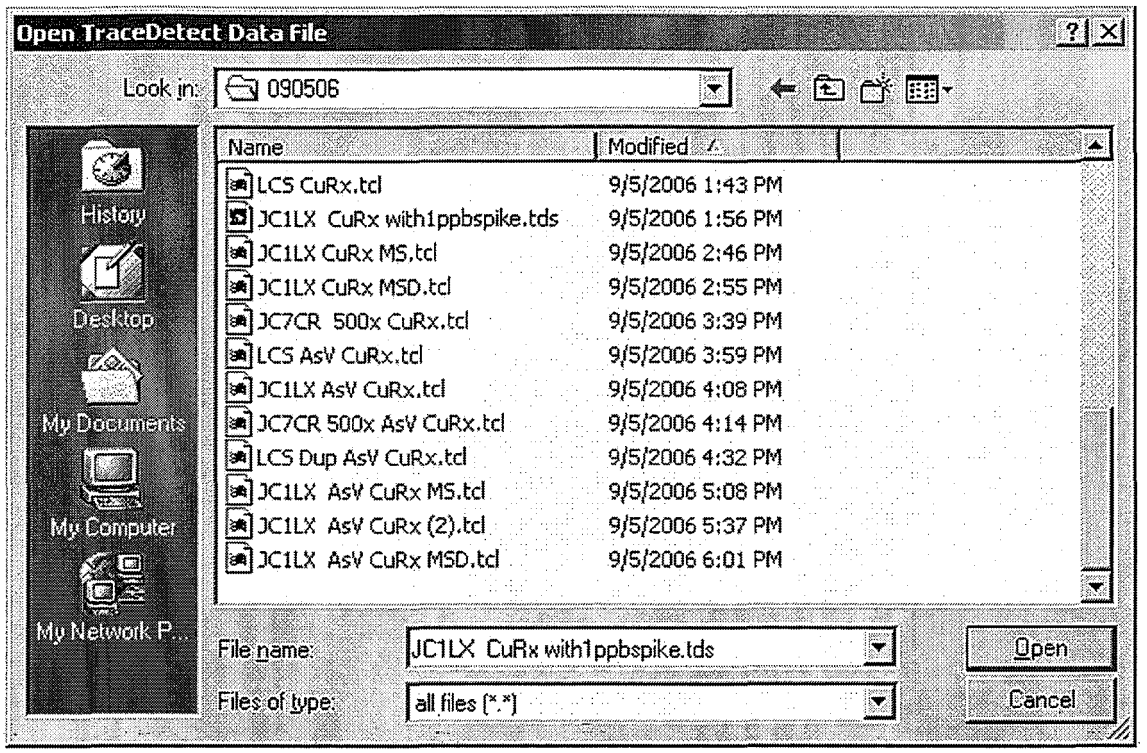
AuPlate(#56).tds 9/5/2006 9:36 AM
Blank with1ppbspike.tds 9/5/2006 9:52 AM
MSA Working Std 20ppb.tds 9/5/2006 9:55 AM
MSAVerification Std 20ppb.tds 9/5/2006 9:59 AM
RL Check (#56).tds 9/5/2006 10:26 AM
LCS AsIII.tcl 9/5/2006 10:46 AM
JC1LX Screen.tds 9/5/2006 10:48 AM
JC7CF.tcl 9/5/2006 11:10 AM
JC7CV.tcl 9/5/2006 11:21 AM
JC7C5.tcl 9/5/2006 11:33 AM
JDD3N 5x.tcl 9/5/2006 11:45 AM
JDD18 25x.tcl 9/5/2006 12:01 PM
JDJ4V.tds 9/5/2006 12:08 PM
JDJ4V with1ppmspike.tds 9/5/2006 12:12 PM
JDJ4V MSD.tcl 9/5/2006 1:04 PM
JDJ4V MS.tcl 9/5/2006 1:21 PM
Blank CuRx with1ppbspike.tds 9/5/2006 1:31 PM
File name: JC1LX CuRx with1ppbspike.tds
Files of type: all files (*.*)
Open
Cancel


Open TraceDetect Data File
Look in:
090506
History
Desktop
My Documents
My Computer
My Network P...
Name
Modified
LCS CuRx.tcl 9/5/2006 1:43 PM
JC1LX CuRx with1ppbspike.tds 9/5/2006 1:56 PM
JC1LX CuRx MS.tcl 9/5/2006 2:46 PM
JC1LX CuRx MSD.tcl 9/5/2006 2:55 PM
JC7CR 500x CuRx.tcl 9/5/2006 3:39 PM
LCS AsV CuRx.tcl 9/5/2006 3:59 PM
JC1LX AsV CuRx.tcl 9/5/2006 4:08 PM
JC7CR 500x AsV CuRx.tcl 9/5/2006 4:14 PM
LCS Dup AsV CuRx.tcl 9/5/2006 4:32 PM
JC1LX AsV CuRx MS.tcl 9/5/2006 5:08 PM
JC1LX AsV CuRx (2).tcl 9/5/2006 5:37 PM
JC1LX AsV CuRx MSD.tcl 9/5/2006 6:01 PM
File name:
JC1LX CuRx with1ppbspike.tds
Files of type:
all files (*.*)
Open
Cancel

TraceDetect Nano-Band Explorer

Sample ID: JC7CF

Trace Metals:

As(III): 57.1 ppb

23.1 ppb

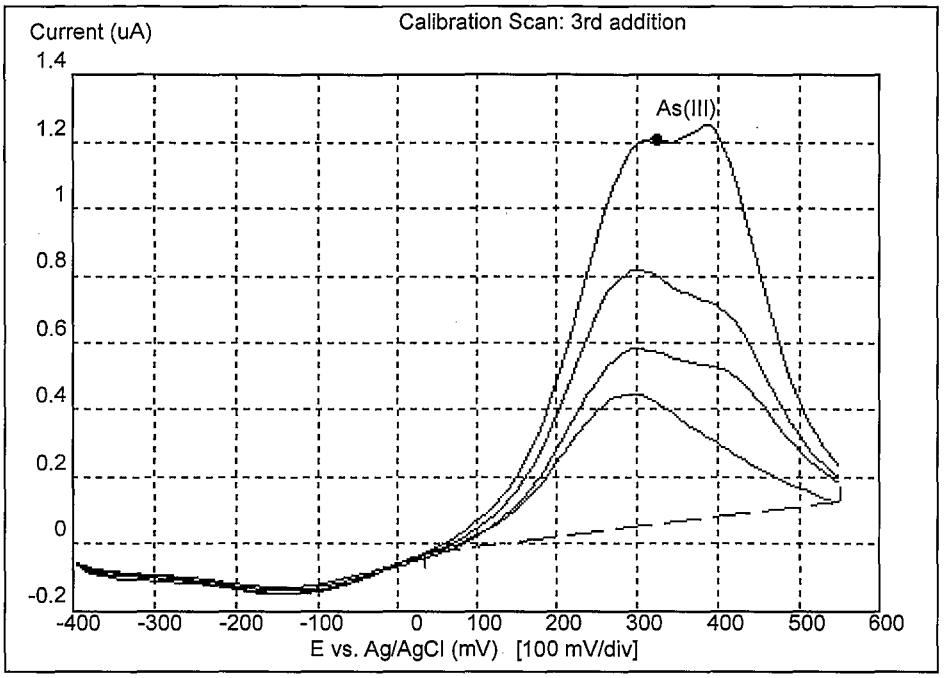
2X

Temperature:

Input 1:

Input 2:

05/Sep/06 11:07:24



Settings:

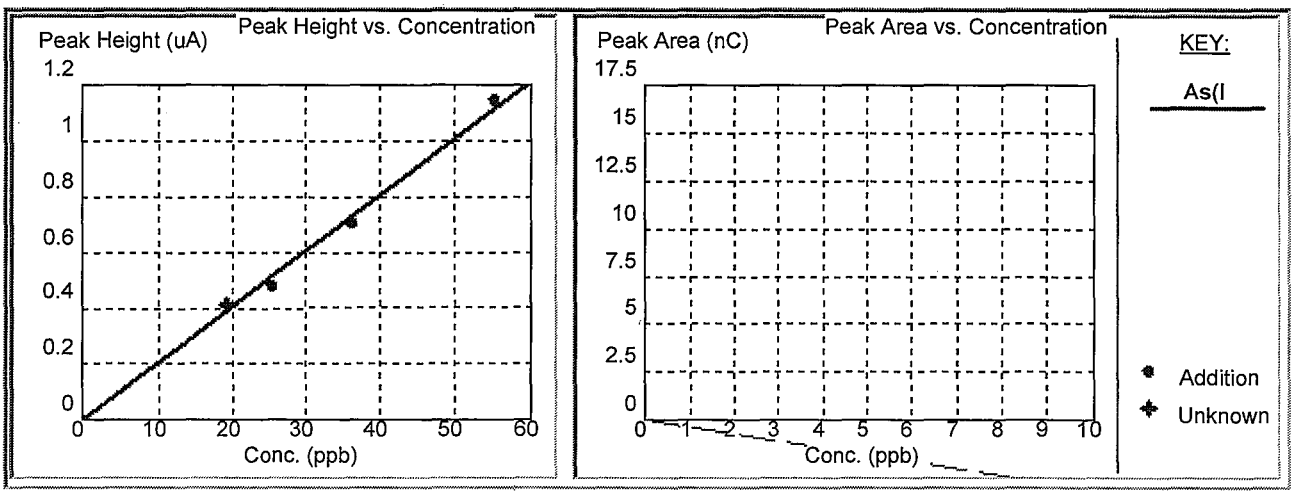
Type:	ASV	Clean Time (S)	0.1	Signal Avg.	8
Waveform:	Staircase	Clean Voltage (mV):	600	Frequency (Hz):	2000
Cell	Three Electrode	Plate Time (S)	80	Start Voltage (mV):	-400
		Plate Voltage (mV)	-400	Stop Voltage (mV):	550
		Range (uA):	12.5	Step Voltage (mV):	5

☑ Background subtraction

Calibration Summary:

Calibration Date: 05/Sep/06 at 10:46:15

JC7CF



Calibration Parameters

Metal	Calib. Mode	Fit Factor	Slope	Zero Offset	Starting Concentration	Concentration in Original Sample
As[III]	**Height**	0.995	0.050 ppb/nA	0 ppt	19 ppb	23 ppb
	Area	0.361	-3 ppb/nC	0 ppt	-38 ppb	-45 ppb

JC72F

Addition Data for Method of Standard Additions

Metal	Unknown Concentration	Concentration in original aliquot	1st Addition	2nd Addition	3rd Addition	Total added concentration
As(III)	19.4 ppb	23.1 ppb	300 uL (5.96 ppb)	540 uL (10.6 ppb)	1.00 mL (19.3 ppb)	35.9 ppb

Starting Volume: 50.000 **mL**

Final Volume: 51.840 **mL**

TraceDetect Nano-Band Explorer

Sample ID: JC7CV

Trace Metals:

As(III): 363 ppb

119 ppb

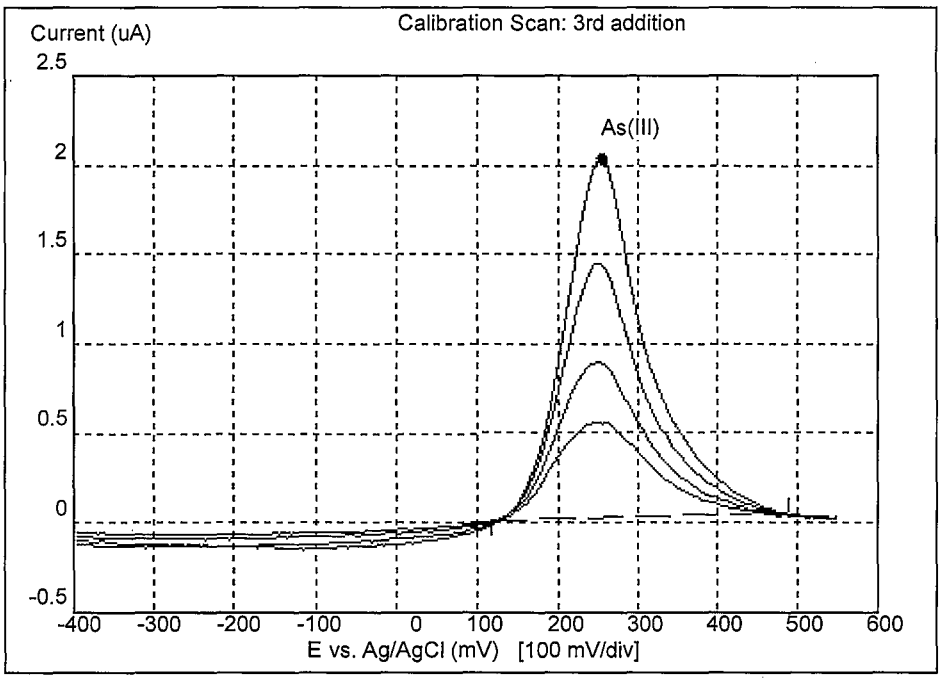
16X

Temperature:

Input 1:

Input 2:

05/Sep/06 11:19:24



Settings:

Type:	ASV	Clean Time (S)	0.1	Signal Avg.	8
Waveform:	Staircase	Clean Voltage (mV):	600	Frequency (Hz):	2000
Cell	Three Electrode	Plate Time (S)	10	Start Voltage (mV):	-400
		Plate Voltage (mV)	-400	Stop Voltage (mV):	550
		Range (uA):	12.5	Step Voltage (mV):	5

☑ Background subtraction

Addition Data for Method of Standard Additions J C7C V

Metal	Unknown Concentration	Concentration in original aliquot	1st Addition	2nd Addition	3rd Addition	Total added concentration
As(III)	100 ppb	119 ppb	3.00 uL (60.0 ppb)	5.00 uL (100 ppb)	5.00 uL (100 ppb)	260 ppb

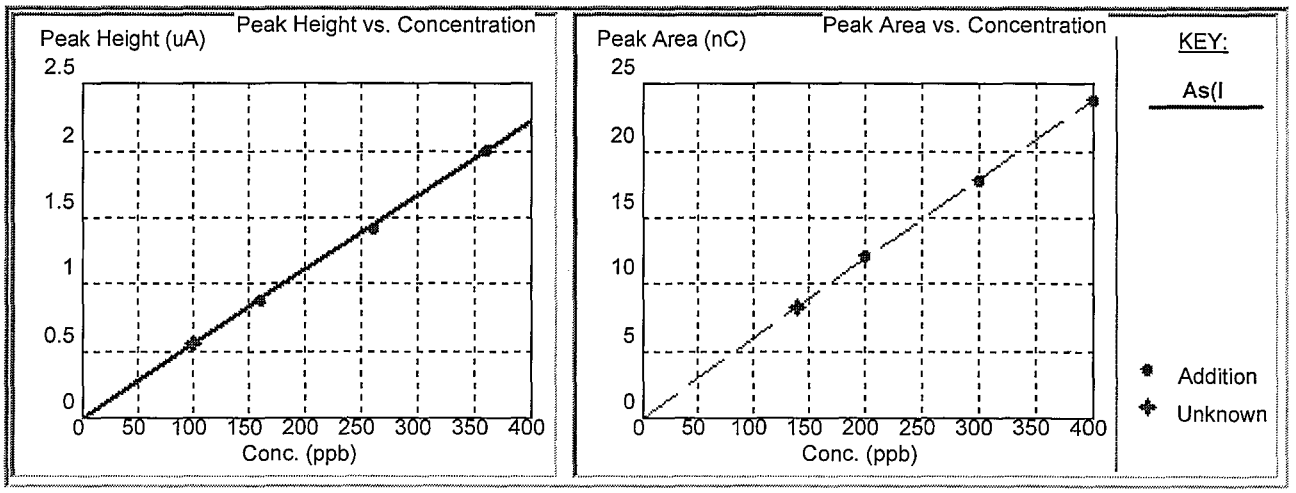
Starting Volume: 50.000 mL

Final Volume: 50.013 mL

Calibration Summary:

JC7CV

Calibration Date: 05/Sep/06 at 11:10:30



Calibration Parameters

Metal	Calib. Mode	Fit Factor	Slope	Zero Offset	Starting Concentration	Concentration in Original Sample
As[III]	**Height**	1.000	0.181 ppb/nA	0 ppt	100 ppb	120 ppb
	Area	1.000	16.7 ppb/nC	0 ppt	140 ppb	170 ppb

TraceDetect Nano-Band Explorer

Sample ID: JC7C5

Trace Metals:

As(III): 45.4 ppb

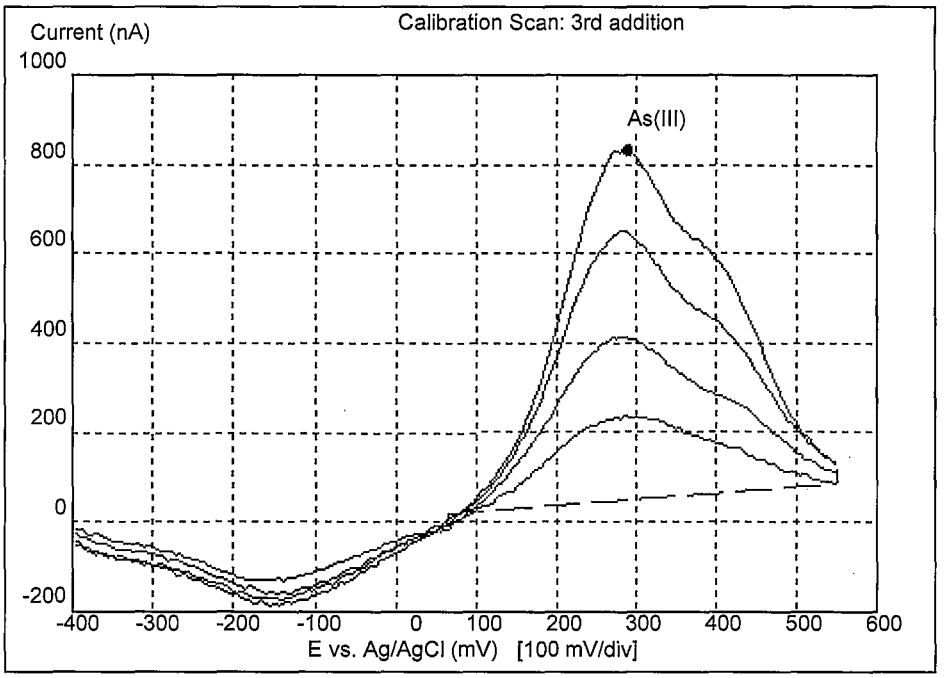
13.1 ppb

Temperature:

Input 1:

Input 2:

05/Sep/06 11:32:07



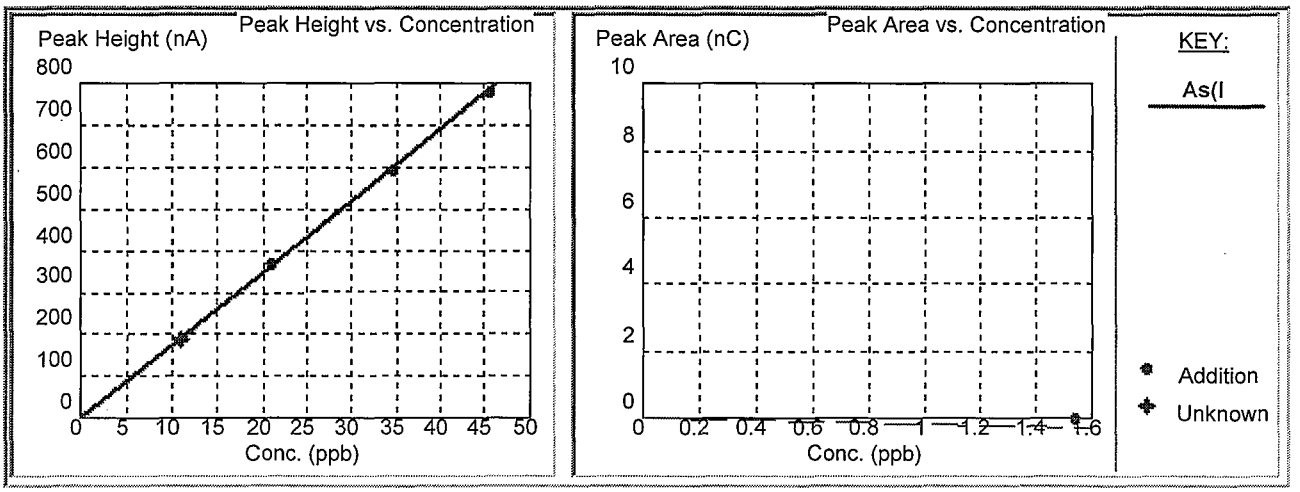
Settings:

Type:	ASV	Clean Time (S)	0.1	Signal Avg.	8
Waveform:	Staircase	Clean Voltage (mV):	600	Frequency (Hz):	2000
Cell	Three Electrode	Plate Time (S)	40	Start Voltage (mV):	-400
☑ Background subtraction		Plate Voltage (mV)	-400	Stop Voltage (mV):	550
		Range (uA):	12.5	Step Voltage (mV):	5

Calibration Summary:

Calibration Date: 05/Sep/06 at 11:21:20

JE7C5



Calibration Parameters

Metal	Calib. Mode	Fit Factor	Slope	Zero Offset	Starting Concentration	Concentration in Original Sample
As[III]	**Height**	1.000	0.058 ppb/nA	0 ppt	11 ppb	13 ppb
	Area	0.518	-5 ppb/nC	0 ppt	-33 ppb	-39 ppb

Addition Data for Method of Standard Additions

JC7C5

Metal	Unknown Concentration	Concentration in original aliquot	1st Addition	2nd Addition	3rd Addition	Total added concentration
As(III)	11.0 ppb	13.1 ppb	500 uL (9.90 ppb)	700 uL (13.7 ppb)	570 uL (11.0 ppb)	34.6 ppb

Starting Volume: 50.000 mL

Final Volume: 51.770 mL

TraceDetect Nano-Band Explorer

Sample ID: JDD3N 5x

Trace Metals:

As(III): 299 ppb

448 ppb

80x

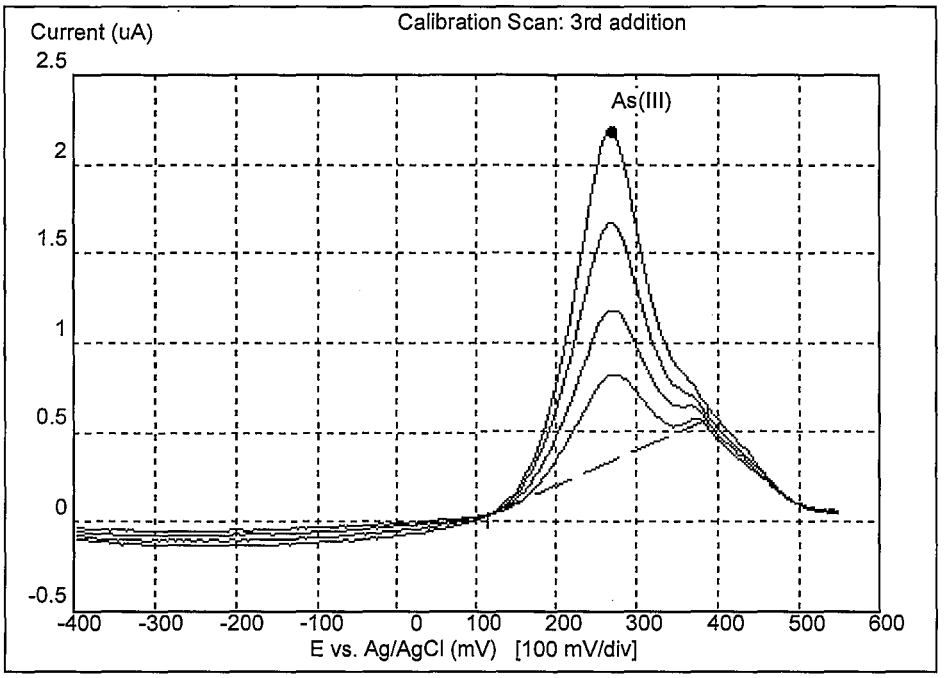
RL=160

Temperature:

Input 1:

Input 2:

05/Sep/06 11:44:59



Settings:

Type:	ASV	Clean Time (S)	0.1	Signal Avg.	8
Waveform:	Staircase	Clean Voltage (mV):	600	Frequency (Hz):	2000
Cell	Three Electrode	Plate Time (S)	10	Start Voltage (mV):	-400
		Plate Voltage (mV)	-400	Stop Voltage (mV):	550
		Range (uA):	12.5	Step Voltage (mV):	5

☑ Background subtraction

16
x5
80

Addition Data for Method of Standard Additions

JDD3N 5X

Metal	Unknown Concentration	Concentration in original aliquot	1st Addition	2nd Addition	3rd Addition	Total added concentration
As(III)	75.3 ppb	89.6 ppb	3.00 uL (60.0 ppb)	4.00 uL (80.0 ppb)	4.00 uL (80.0 ppb)	220 ppb

89.6
x5
448.0 ppb

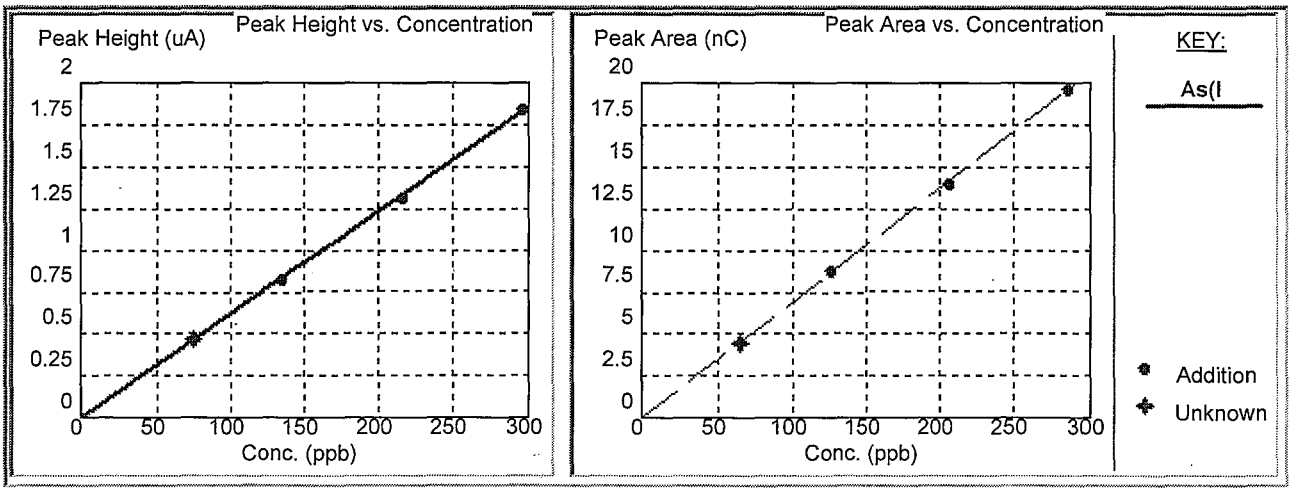
Starting Volume: 50.000 **mL**

Final Volume: 50.011 **mL**

Calibration Summary:

JDD3N 5x

Calibration Date: 05/Sep/06 at 11:45:39



Calibration Parameters

Metal	Calib. Mode	Fit Factor	Slope	Zero Offset	Starting Concentration	Concentration in Original Sample
As[III]	**Height**	1.000	0.161 ppb/nA	0 ppt	75 ppb	90 ppb
	Area	1.000	14.5 ppb/nC	0 ppt	65 ppb	78 ppb

Selected Calibration M

TraceDetect Nano-Band Explorer

Sample ID: JDD18 25x

Trace Metals:

As(III): 346 ppb

2975 ppb

400x dil

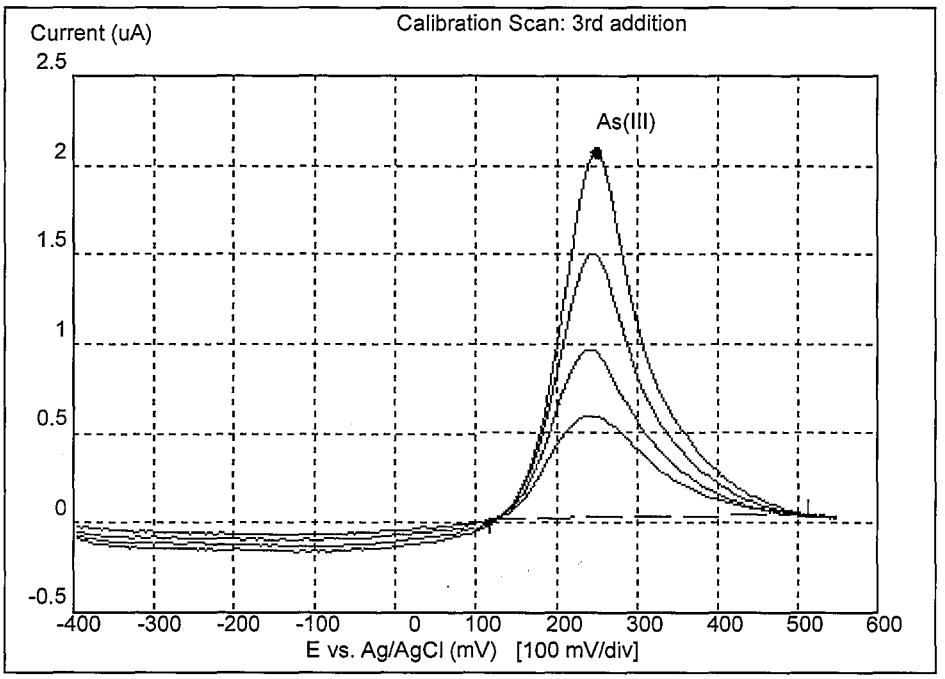
Temperature:

RL2 800ppb

Input 1:

Input 2:

05/Sep/06 12:00:37



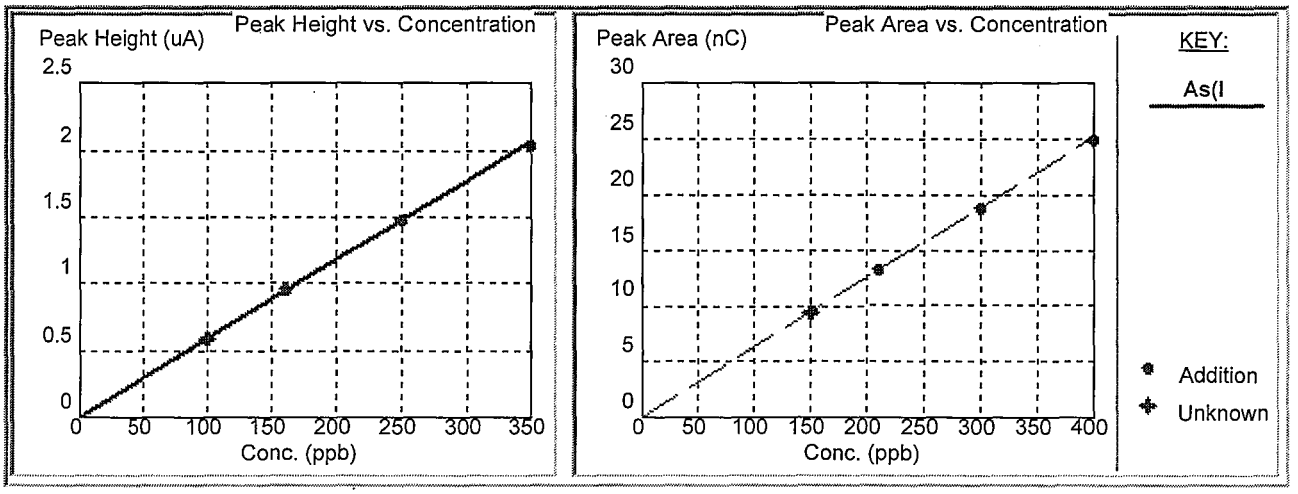
Settings:

Type:	ASV	Clean Time (S)	0.1	Signal Avg.	8
Waveform:	Staircase	Clean Voltage (mV):	600	Frequency (Hz):	2000
Cell	Three Electrode	Plate Time (S)	10	Start Voltage (mV):	-400
		Plate Voltage (mV)	-400	Stop Voltage (mV):	550
		Range (uA):	12.5	Step Voltage (mV):	5

☑ Background subtraction

Calibration Summary: JDM1R 25X

Calibration Date: 05/Sep/06 at 11:45:39



Calibration Parameters

Metal	Calib. Mode	Fit Factor	Slope	Zero Offset	Starting Concentration	Concentration in Original Sample
As(III)	**Height**	1.000	0.169 ppb/nA	0 ppt	100 ppb	120 ppb
	Area	1.000	15.9 ppb/nC	0 ppt	150 ppb	180 ppb

Addition Data for Method of Standard Additions

JDD18 25x

Metal	Unknown Concentration	Concentration in original aliquot	1st Addition	2nd Addition	3rd Addition	Total added concentration
As(III)	100 ppb	119 ppb	3.00 uL (60.0 ppb)	4.50 uL (90.0 ppb)	5.00 uL (100 ppb)	250 ppb

x25

2975 ppb

Starting Volume: 50.000 **mL**

Final Volume: 50.013 **mL**

TraceDetect Nano-Band Explorer -

Sample ID: JDJ4V with1ppmspike

Trace Metals:

As(III): 1.50 ppb

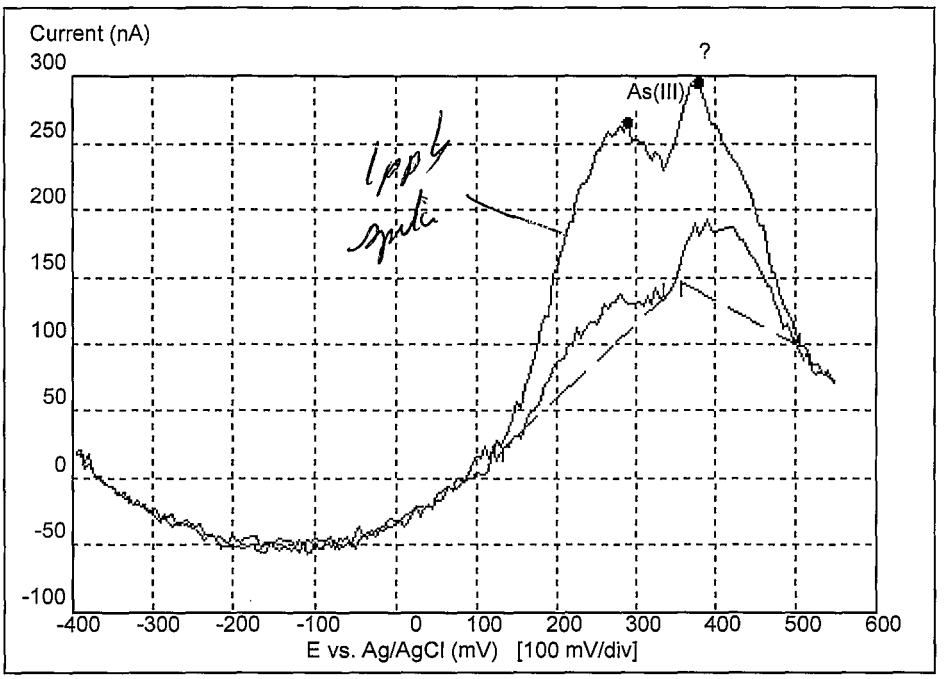
ND

Temperature:

Input 1:

Input 2:

05/Sep/06 12:08:56



Settings:

Type:	ASV	Clean Time (S)	0.1	Signal Avg.	8
Waveform:	Staircase	Clean Voltage (mV):	600	Frequency (Hz):	2000
Cell	Three Electrode	Plate Time (S)	160	Start Voltage (mV):	-400
		Plate Voltage (mV)	-400	Stop Voltage (mV):	550
		Range (uA):	12.5	Step Voltage (mV):	5

☑ Background subtraction

TraceDetect Nano-Band Explorer

Sample ID: JDJ4V MS

Trace Metals:

As(III): 33.8 ppb

10.3 ppb

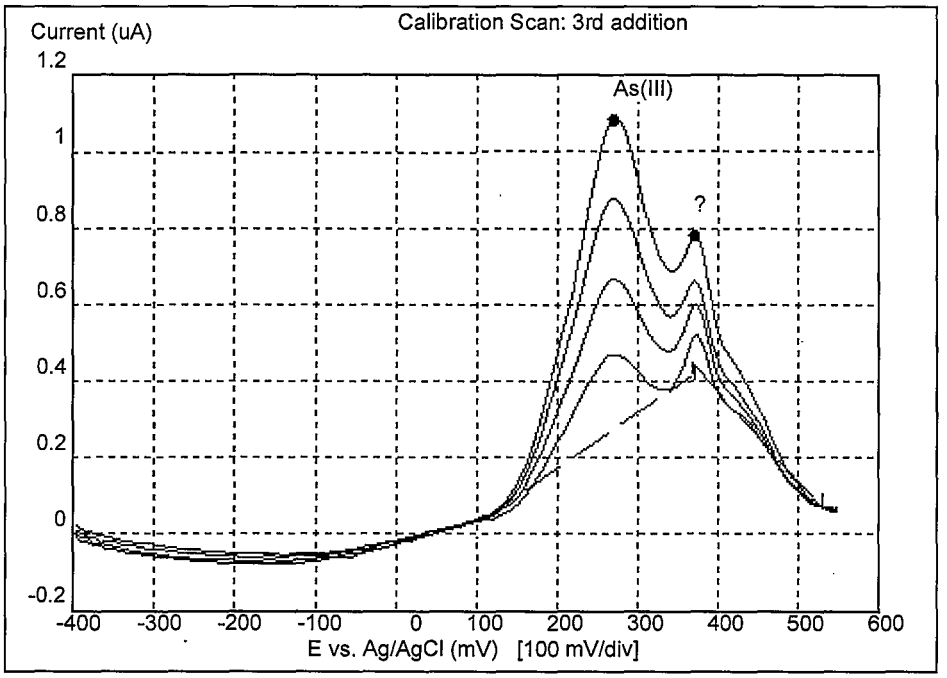
51%

Temperature:

Input 1:

Input 2:

05/Sep/06 13:19:31



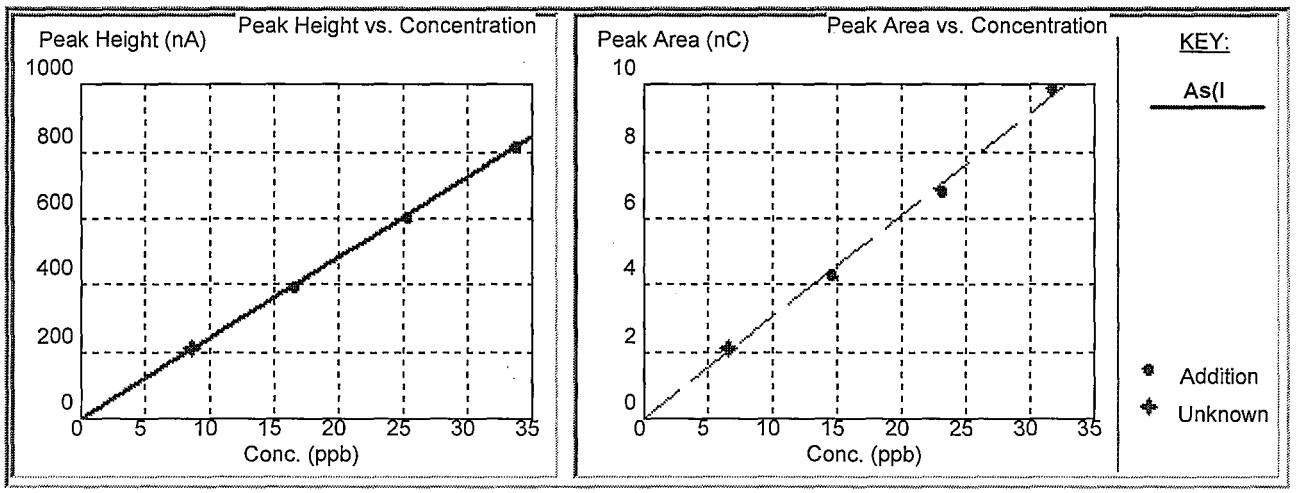
Settings:

Type:	ASV	Clean Time (S)	0.1	Signal Avg.	8
Waveform:	Staircase	Clean Voltage (mV):	600	Frequency (Hz):	2000
Cell	Three Electrode	Plate Time (S)	40	Start Voltage (mV):	-400
☑ Background subtraction		Plate Voltage (mV)	-400	Stop Voltage (mV):	550
		Range (uA):	12.5	Step Voltage (mV):	5

Calibration Summary:

JPJ4V ms

Calibration Date: 05/Sep/06 at 12:55:17



Calibration Parameters

Metal	Calib. Mode	Fit Factor	Slope	Zero Offset	Starting Concentration	Concentration in Original Sample
As(III)	**Height**	1.000	0.041 ppb/nA	0 ppt	8.6 ppb	10 ppb
	Area	0.997	3.28 ppb/nC	0 ppt	6.6 ppb	7.8 ppb

Addition Data for Method of Standard Additions

JDJ4V MSD

Metal	Unknown Concentration	Concentration in original aliquot	1st Addition	2nd Addition	3rd Addition	Total added concentration
As(III)	8.63 ppb	10.3 ppb	400 uL (7.94 ppb)	440 uL (8.65 ppb)	440 uL (8.58 ppb)	25.2 ppb

Starting Volume: 50.000 **mL**

Final Volume: 51.280 **mL**

TraceDetect Nano-Band Explorer

Sample ID: JDJ4V MSD

Trace Metals:

As(III): 42.1 ppb

13.0 ppb

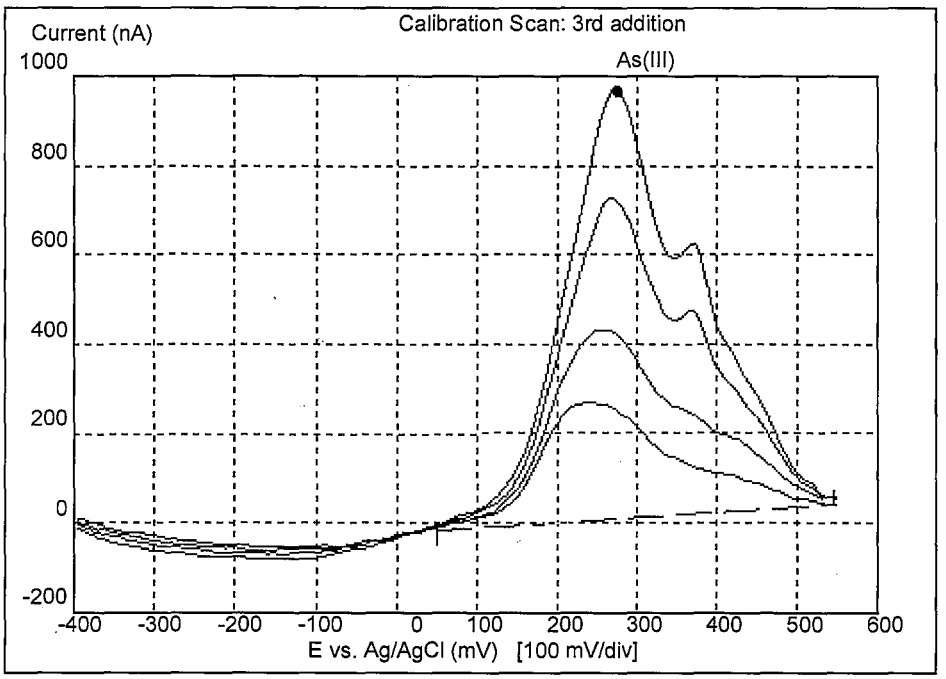
65%

Temperature:

Input 1:

Input 2:

05/Sep/06 13:03:09



Settings:

Type:	ASV	Clean Time (S)	0.1	Signal Avg.	8
Waveform:	Staircase	Clean Voltage (mV):	600	Frequency (Hz):	2000
Cell	Three Electrode	Plate Time (S)	40	Start Voltage (mV):	-400
		Plate Voltage (mV)	-400	Stop Voltage (mV):	550
		Range (uA):	12.5	Step Voltage (mV):	5

☑ Background subtraction

Addition Data for Method of Standard Additions

JDJ4V MSD

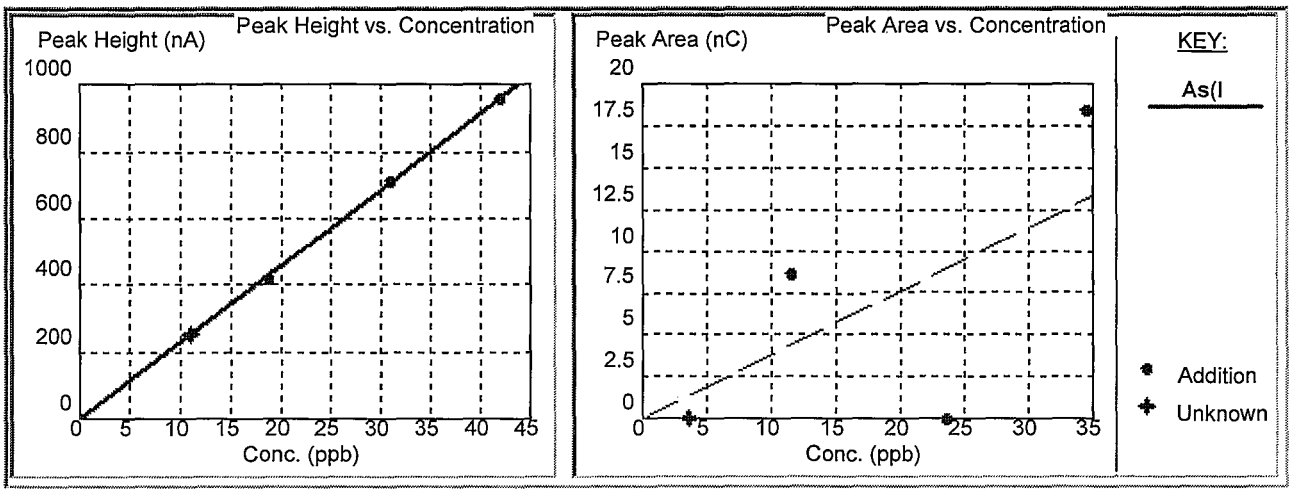
Metal	Unknown Concentration	Concentration in original aliquot	1st Addition	2nd Addition	3rd Addition	Total added concentration
As(III)	10.9 ppb	13.0 ppb	400 uL (7.94 ppb)	610 uL (12.0 ppb)	570 uL (11.1 ppb)	30.9 ppb

Starting Volume: 50.000 mL

Final Volume: 51.580 mL

Calibration Summary: JD J4V MSP

Calibration Date: 05/Sep/06 at 12:55:17



Calibration Parameters

Metal	Calib. Mode	Fit Factor	Slope	Zero Offset	Starting Concentration	Concentration in Original Sample
As(III)	**Height**	0.999	0.044 ppb/nA	0 ppt	11 ppb	13 ppb
	Area	0.457	2.63 ppb/nC	0 ppt	3.6 ppb	4.3 ppb

TraceDetect Nano-Band Explorer

Sample ID: LCS AsIII

Trace Metals:

As(III): 45.6 ppb

14.3 ppb

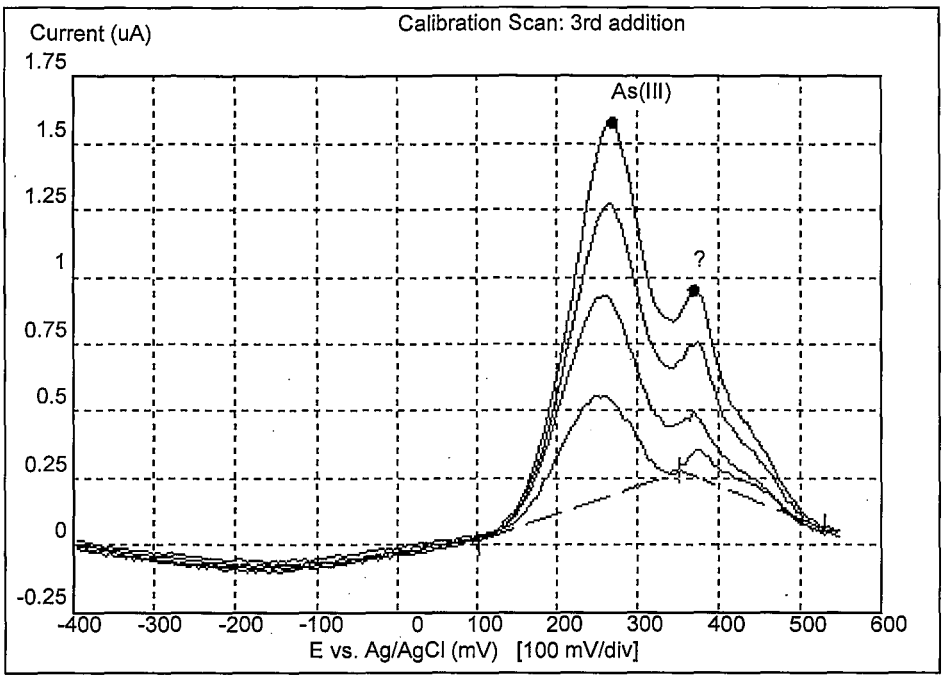
(72%)

Temperature:

Input 1:

Input 2:

05/Sep/06 10:44:30



Settings:

Type:	ASV	Clean Time (S)	0.1	Signal Avg.	8
Waveform:	Staircase	Clean Voltage (mV):	600	Frequency (Hz):	2000
Cell	Three Electrode	Plate Time (S)	40	Start Voltage (mV):	-400
		Plate Voltage (mV)	-400	Stop Voltage (mV):	550
		Range (uA):	12.5	Step Voltage (mV):	5

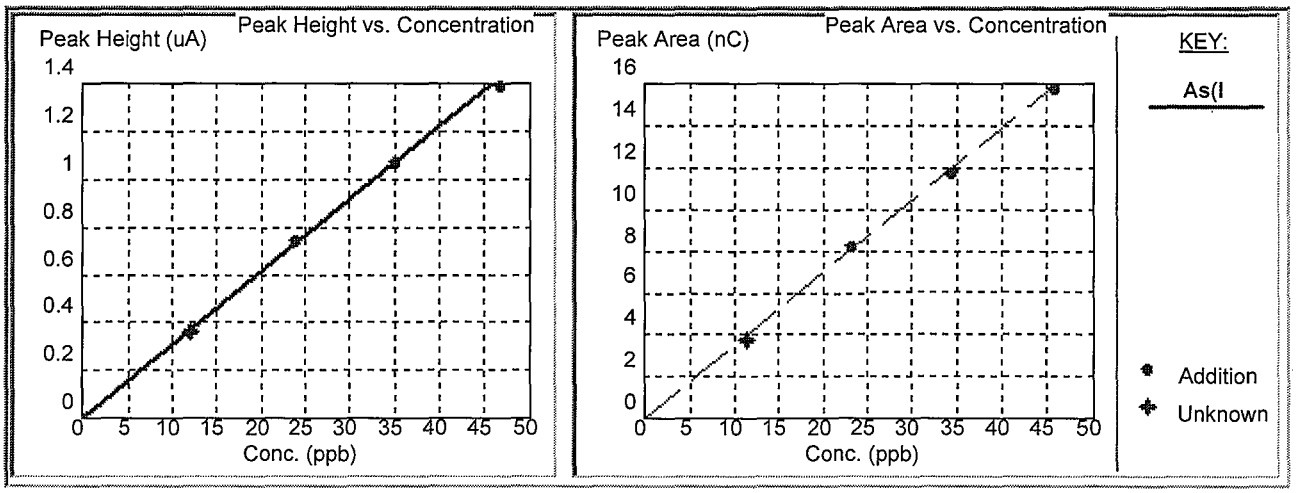
☑ Background subtraction

Calibration Summary:

LCS

As+3

Calibration Date: 05/Sep/06 at 10:36:26



Calibration Parameters

Metal	Calib. Mode	Fit Factor	Slope	Zero Offset	Starting Concentration	Concentration in Original Sample
As[III]	**Height**	0.998	0.033 ppb/nA	0 ppt	12 ppb	14 ppb
	Area	0.999	2.88 ppb/nC	0 ppt	11 ppb	13 ppb

Addition Data for Method of Standard Additions

LCS
As+J

Metal	Unknown Concentration	Concentration in original aliquot	1st Addition	2nd Addition	3rd Addition	Total added concentration
As(III)	12.0 ppb	14.3 ppb	600 uL (11.9 ppb)	570 uL (11.1 ppb)	600 uL (11.6 ppb)	34.6 ppb

Starting Volume: 50.000 **mL**

Final Volume: 51.770 **mL**

TraceDetect Nano-Band Explorer -

Sample ID: Blank with1ppbspike

Trace Metals:

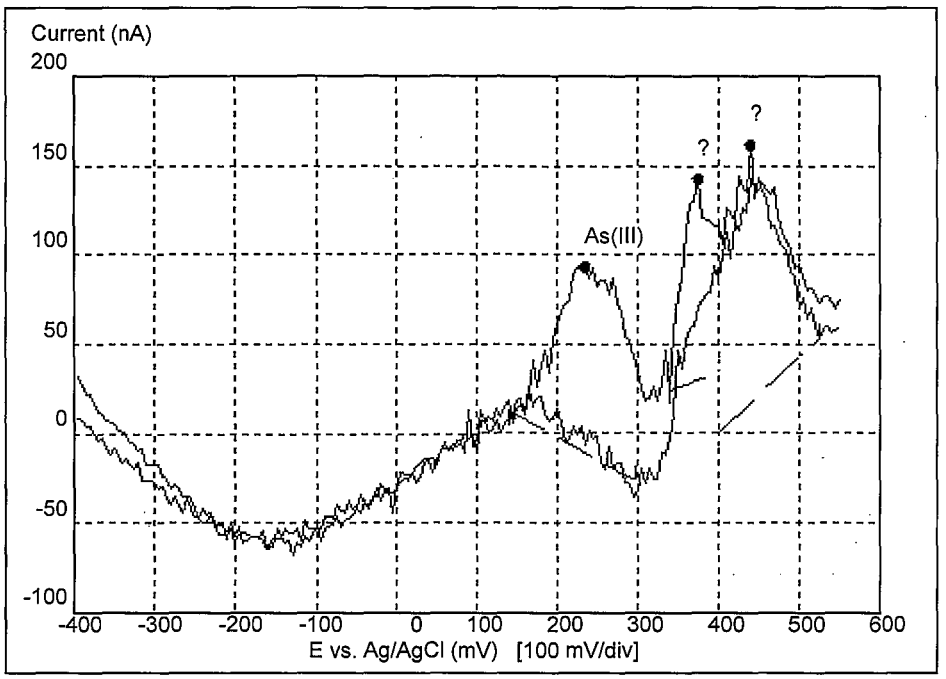
As(III): 104 nA

Temperature:

Input 1:

Input 2:

05/Sep/06 09:48:52



Settings:

Type:	ASV	Clean Time (S)	0.1	Signal Avg.	8
Waveform:	Staircase	Clean Voltage (mV):	600	Frequency (Hz):	2000
Cell	Three Electrode	Plate Time (S)	160	Start Voltage (mV):	-400
☑ Background subtraction		Plate Voltage (mV)	-400	Stop Voltage (mV):	550
		Range (uA):	12.5	Step Voltage (mV):	5

TraceDetect Nano-Band Explorer -

Sample ID: JC1LX CuRx with1ppbspike

05/Sep/06 13:51:06

Trace Metals:

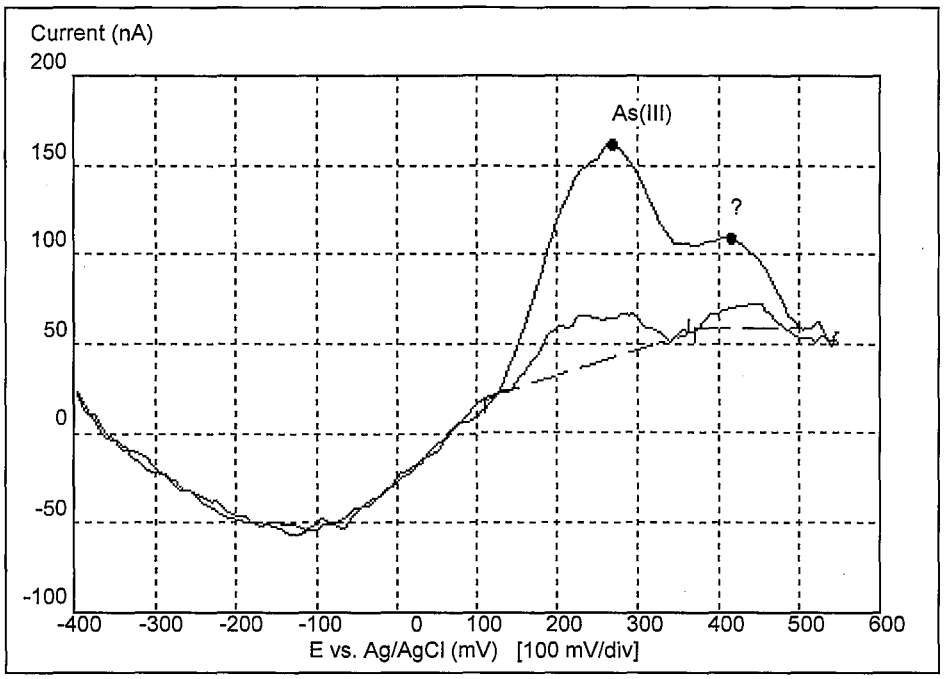
As(III): 1.15 ppb

NB

Temperature:

Input 1:

Input 2:



Settings:

Type:	ASV	Clean Time (S)	0.1	Signal Avg.	8
Waveform:	Staircase	Clean Voltage (mV):	600	Frequency (Hz):	2000
Cell	Three Electrode	Plate Time (S)	160	Start Voltage (mV):	-400
☑ Background subtraction		Plate Voltage (mV)	-400	Stop Voltage (mV):	550
		Range (uA):	12.5	Step Voltage (mV):	5

TraceDetect Nano-Band Explorer

Sample ID: JC1LX CuRx MS

Trace Metals:

As(III): 47.5 ppb

16.5 ppb

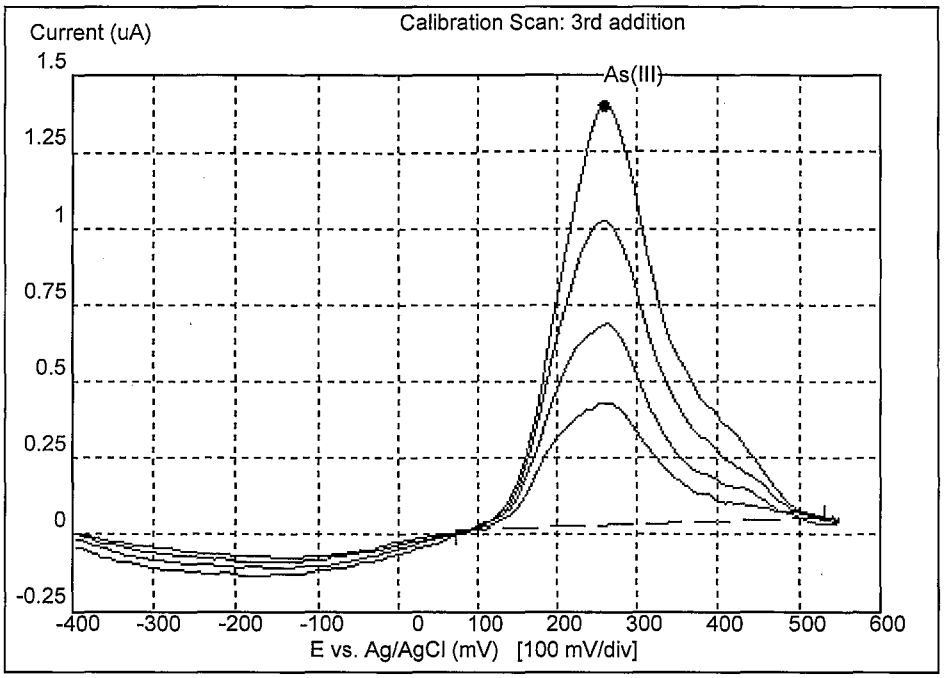
82%

Temperature:

Input 1:

Input 2:

05/Sep/06 14:45:03



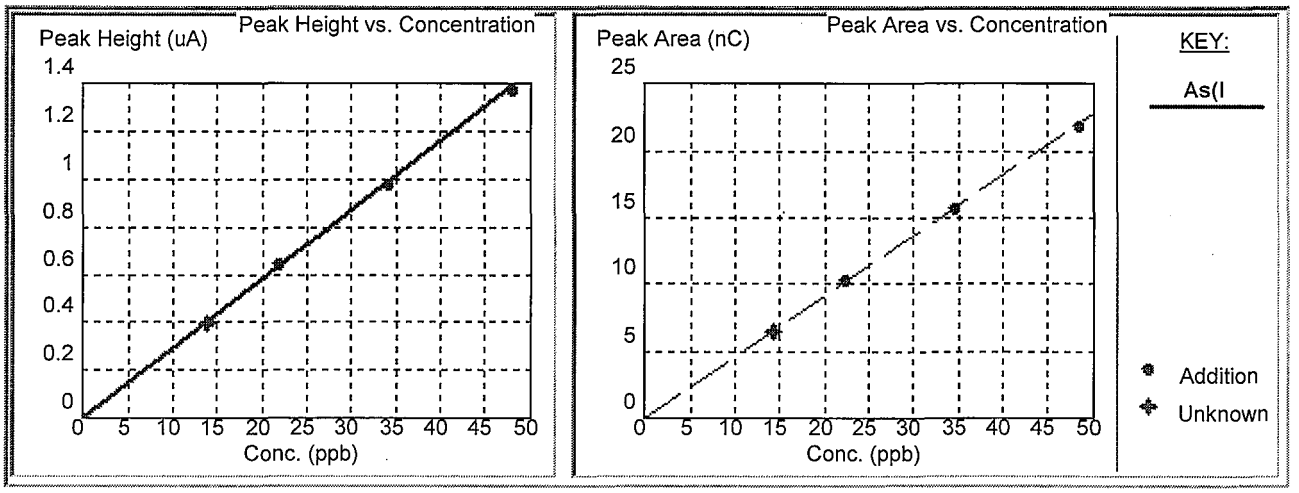
Settings:

Type:	ASV	Clean Time (S)	0.1	Signal Avg.	8
Waveform:	Staircase	Clean Voltage (mV):	600	Frequency (Hz):	2000
Cell	Three Electrode	Plate Time (S)	40	Start Voltage (mV):	-400
☑ Background subtraction		Plate Voltage (mV)	-400	Stop Voltage (mV):	550
		Range (uA):	12.5	Step Voltage (mV):	5

Calibration Summary:

JCILX CuRY MS

Calibration Date: 05/Sep/06 at 13:43:29



Calibration Parameters

Metal	Calib. Mode	Fit Factor	Slope	Zero Offset	Starting Concentration	Concentration in Original Sample
As(III)	**Height**	0.999	0.035 ppb/nA	0 ppt	14 ppb	17 ppb
	Area	1.000	2.19 ppb/nC	0 ppt	14 ppb	17 ppb

Addition Data for Method of Standard Additions

JC1LXCuRy

MS

Metal	Unknown Concentration	Concentration in original aliquot	1st Addition	2nd Addition	3rd Addition	Total added concentration
As(III)	13.9 ppb	16.5 ppb	400 uL (7.94 ppb)	630 uL (12.3 ppb)	710 uL (13.7 ppb)	34.0 ppb

Starting Volume: 50.000 **mL**

Final Volume: 51.740 **mL**

TraceDetect Nano-Band Explorer

Sample ID: JC1LX CuRx MSD

Trace Metals:

As(III): 54.9 ppb

18.4 ppb

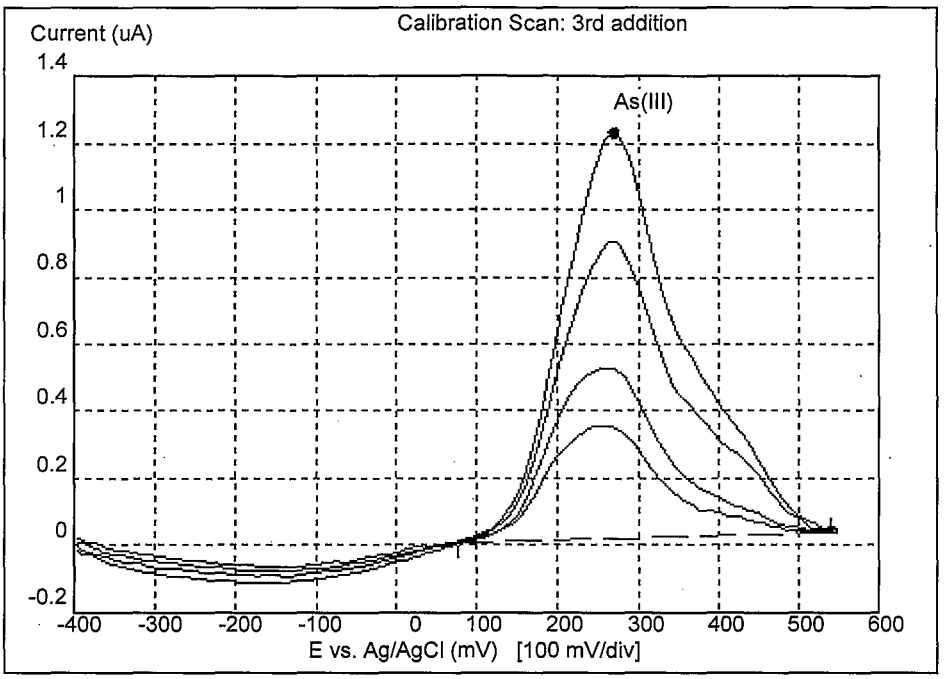
92%

Temperature:

Input 1:

Input 2:

05/Sep/06 14:54:24



Settings:

Type:	ASV	Clean Time (S)	0.1	Signal Avg.	8
Waveform:	Staircase	Clean Voltage (mV):	600	Frequency (Hz):	2000
Cell	Three Electrode	Plate Time (S)	40	Start Voltage (mV):	-400
		Plate Voltage (mV)	-400	Stop Voltage (mV):	550
		Range (uA):	12.5	Step Voltage (mV):	5

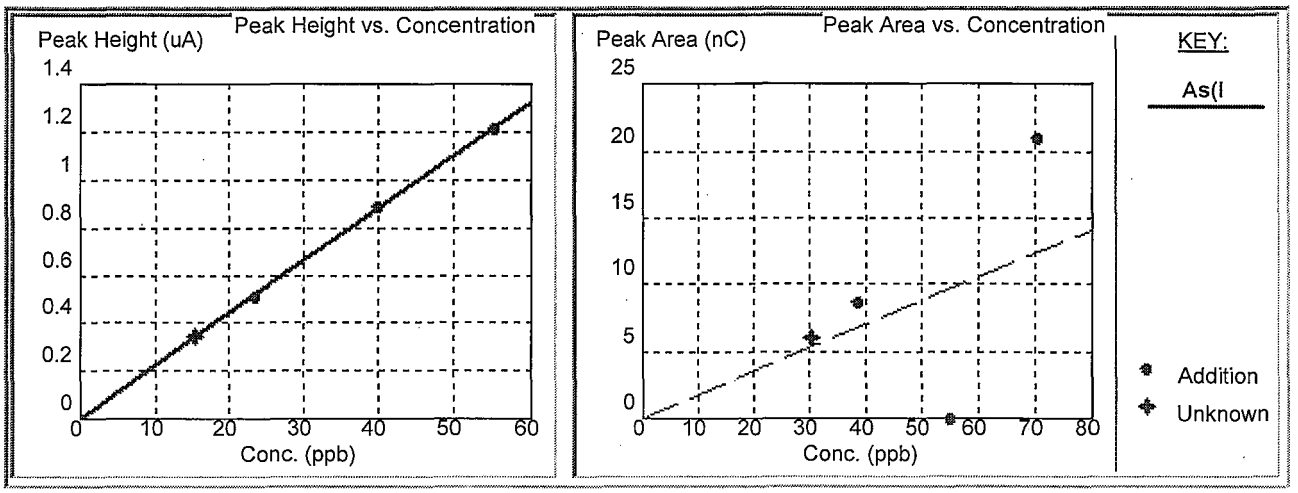
☑ Background subtraction

Calibration Summary:

JCILX CuR

MSD

Calibration Date: 05/Sep/06 at 14:46:18



Calibration Parameters

Metal	Calib. Mode	Fit Factor	Slope	Zero Offset	Starting Concentration	Concentration in Original Sample
As[III]	**Height**	0.999	0.045 ppb/nA	0 ppt	15 ppb	18 ppb
	Area	0.312	5.68 ppb/nC	0 ppt	30 ppb	36 ppb

Addition Data for Method of Standard Additions

Metal	Unknown Concentration	Concentration in original aliquot	1st Addition	2nd Addition	3rd Addition	Total added concentration
As(III)	15.5 ppb	18.4 ppb	400 uL (7.94 ppb)	840 uL (16.4 ppb)	800 uL (15.4 ppb)	39.7 ppb

JCILX
GRY
MSD

Starting Volume: 50.000 mL

Final Volume: 52.040 mL

TraceDetect Nano-Band Explorer

Sample ID: JC7CR 500x CuRx

Trace Metals:

As(III): 744 ppb

135,500 ppb

16000X

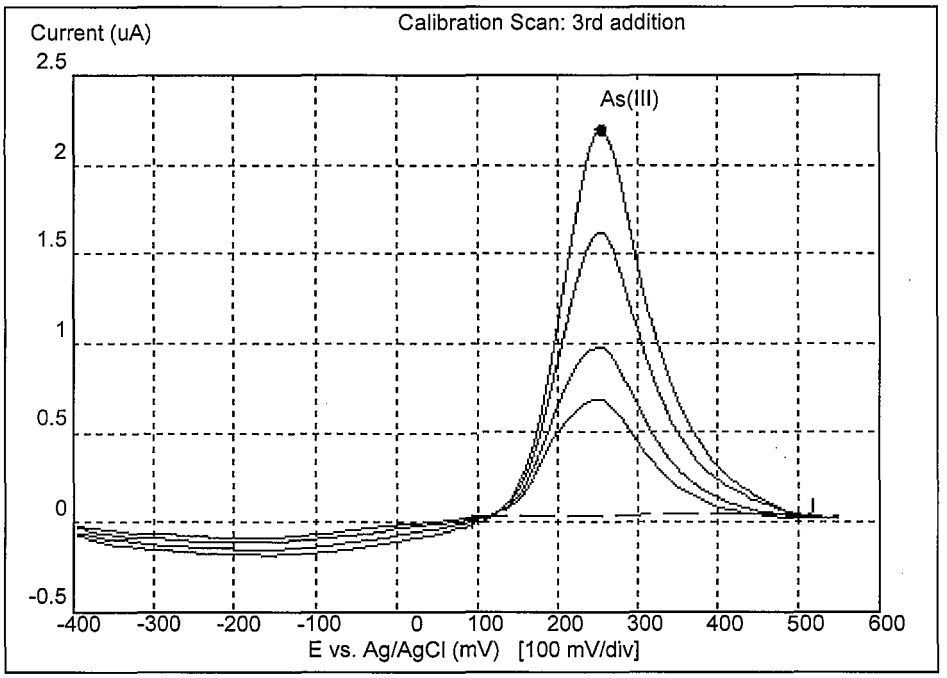
Temperature:

RL = 32000 ppb

Input 1:

Input 2:

05/Sep/06 15:38:36



Settings:

Type:	ASV	Clean Time (S)	0.1	Signal Avg.	8
Waveform:	Staircase	Clean Voltage (mV):	600	Frequency (Hz):	2000
Cell	Three Electrode	Plate Time (S)	5	Start Voltage (mV):	-400
		Plate Voltage (mV)	-400	Stop Voltage (mV):	550
		Range (uA):	12.5	Step Voltage (mV):	5

72X

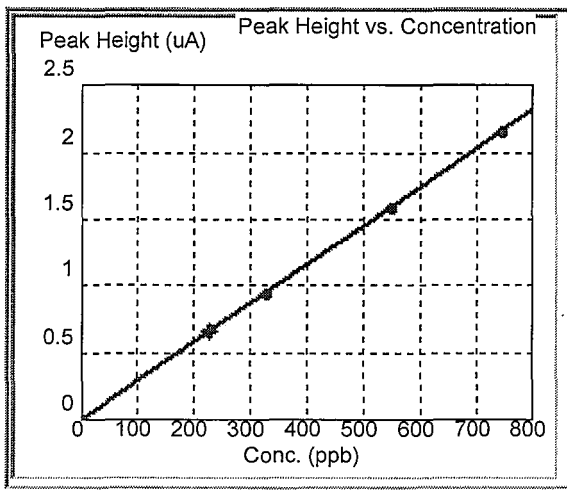
☑ Background subtraction

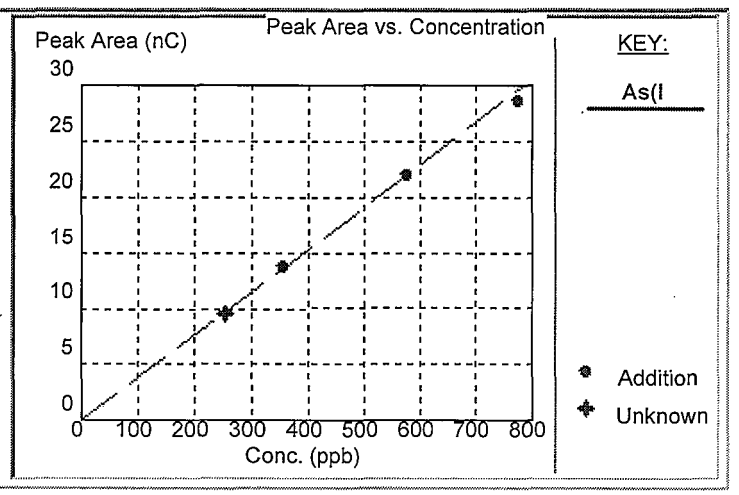
Calibration Summary:

Calibration Date: 05/Sep/06 at 14:55:35

Jc7CR 500X

CuR1





Calibration Parameters

Metal	Calib. Mode	Fit Factor	Slope	Zero Offset	Starting Concentration	Concentration in Original Sample
As[III]	**Height**	1.000	0.345 ppb/nA	0 ppt	230 ppb	270 ppb
	Area	0.997	26.2 ppb/nC	0 ppt	250 ppb	300 ppb

Addition Data for Method of Standard Additions

JC7CK
500 X
Cu RP

Metal	Unknown Concentration	Concentration in original aliquot	1st Addition	2nd Addition	3rd Addition	Total added concentration
As(III)	228 ppb	271 ppb	5.00 uL (100 ppb)	11.0 uL (220 ppb)	10.0 uL (200 ppb)	520 ppb

x500
135,500 ppb

Starting Volume: 50.000 mL

Final Volume: 50.026 mL

TraceDetect Nano-Band Explorer -

Sample ID: Blank CuRx with1ppbspike

05/Sep/06 13:27:08

Trace Metals:

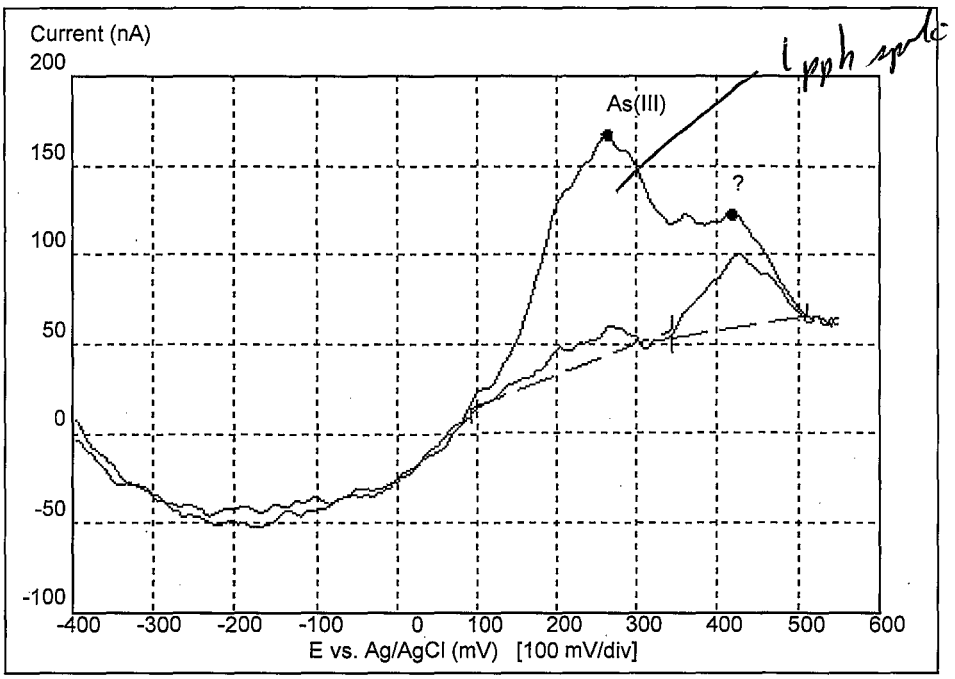
As(III): 1.26 ppb

pV

Temperature:

Input 1:

Input 2:



Settings:

Type:	ASV	Clean Time (S)	0.1	Signal Avg.	8
Waveform:	Staircase	Clean Voltage (mV):	600	Frequency (Hz):	2000
Cell	Three Electrode	Plate Time (S)	160	Start Voltage (mV):	-400
☑ Background subtraction		Plate Voltage (mV)	-400	Stop Voltage (mV):	550
		Range (uA):	12.5	Step Voltage (mV):	5

TraceDetect Nano-Band Explorer

Sample ID: LCS CuRx

Trace Metals:

As(III): 38.4 ppb

11.8 ppb

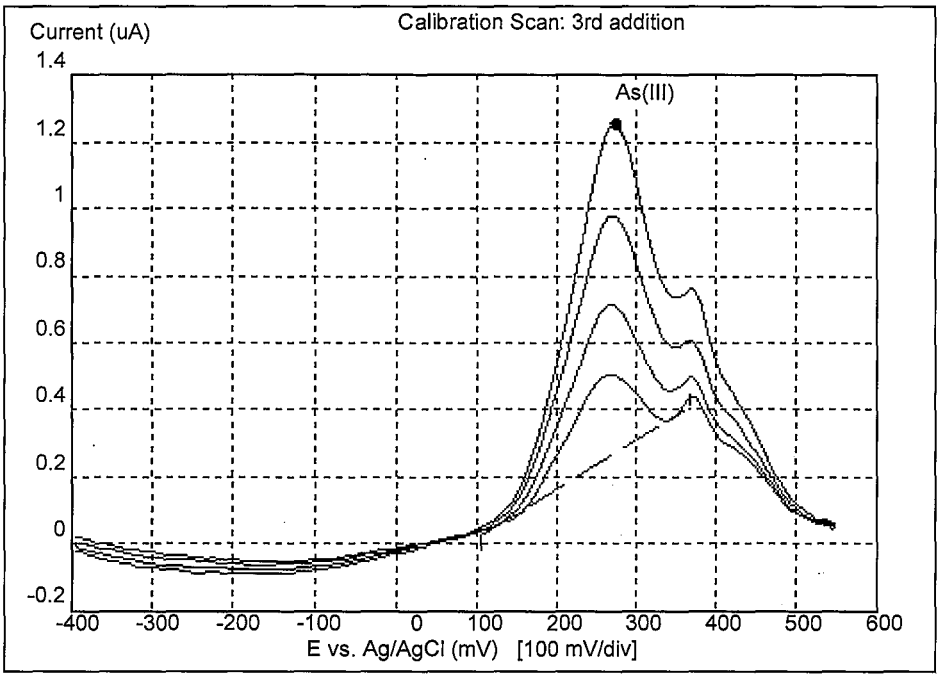
(59%)

Temperature:

Input 1:

Input 2:

05/Sep/06 13:42:02



Settings:

Type:	ASV	Clean Time (S)	0.1	Signal Avg.	8
Waveform:	Staircase	Clean Voltage (mV):	600	Frequency (Hz):	2000
Cell	Three Electrode	Plate Time (S)	40	Start Voltage (mV):	-400
☑ Background subtraction		Plate Voltage (mV)	-400	Stop Voltage (mV):	550
		Range (uA):	12.5	Step Voltage (mV):	5

LCS Cu Pb

Addition Data for Method of Standard Additions

Metal	Unknown Concentration	Concentration in original aliquot	1st Addition	2nd Addition	3rd Addition	Total added concentration
As(III)	9.93 ppb	11.8 ppb	400 uL (7.94 ppb)	520 uL (10.2 ppb)	520 uL (10.1 ppb)	28.3 ppb

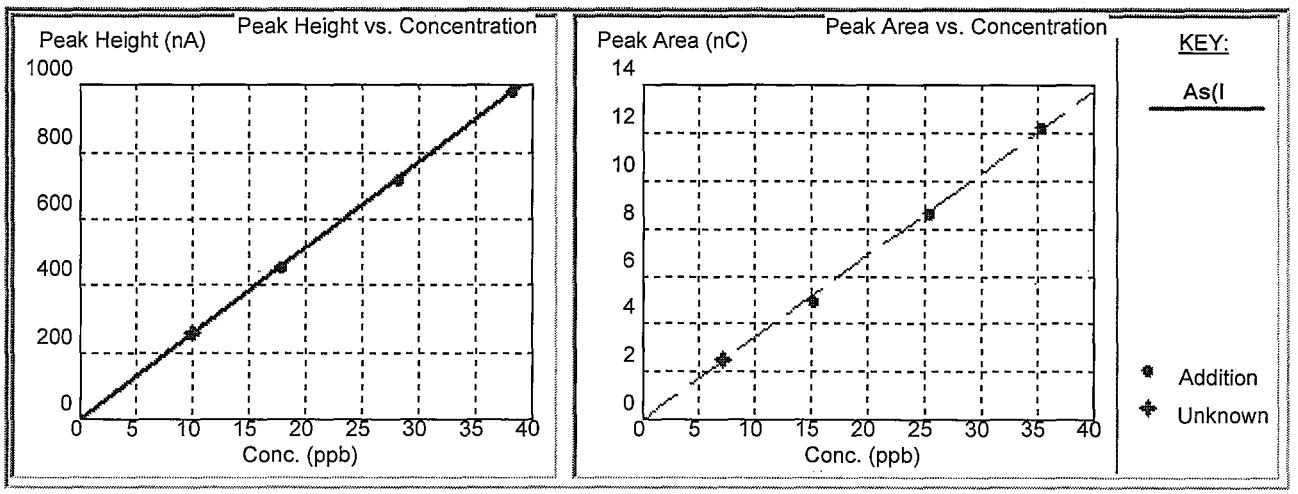
Starting Volume: 50.000 mL

Final Volume: 51.440 mL

Calibration Summary:

LCS Cal Ref

Calibration Date: 05/Sep/06 at 13:21:12



Calibration Parameters

Metal	Calib. Mode	Fit Factor	Slope	Zero Offset	Starting Concentration	Concentration in Original Sample
As[III]	**Height**	1.000	0.039 ppb/nA	0 ppt	9.9 ppb	12 ppb
	Area	0.999	2.90 ppb/nC	0 ppt	7.1 ppb	8.4 ppb

TraceDetect Nano-Band Explorer

Sample ID: JC1LX AsV CuRx (2)

Trace Metals:

As(III+V): 38.2 ppb

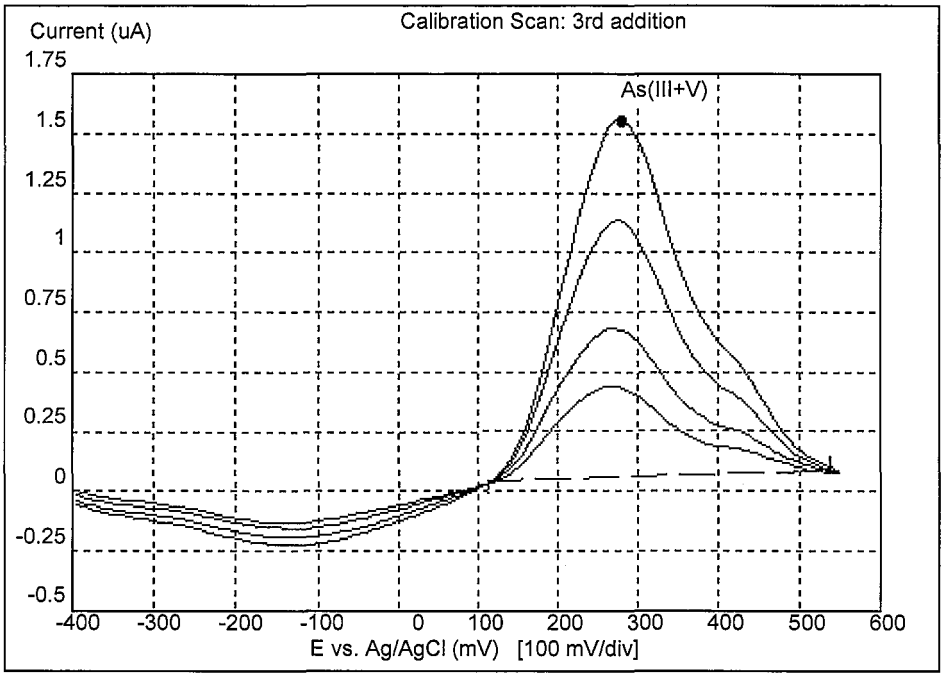
121

Temperature:

Input 1:

Input 2:

05/Sep/06 17:35:49



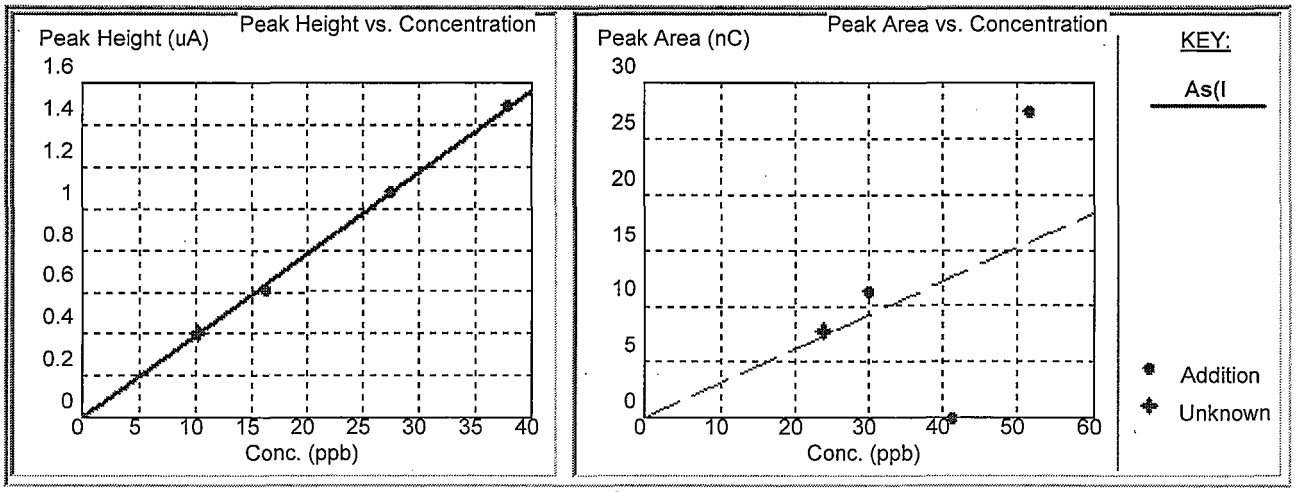
Settings:

Type:	ASV	Clean Time (S)	0.1	Signal Avg.	8
Waveform:	Staircase	Clean Voltage (mV):	600	Frequency (Hz):	2000
Cell	Three Electrode	Plate Time (S)	80	Start Voltage (mV):	-400
☑ Background subtraction		Plate Voltage (mV)	-400	Stop Voltage (mV):	550
		Range (uA):	12.5	Step Voltage (mV):	5

Calibration Summary:

Calibration Date: 05/Sep/06 at 17:08:20

ICILX (2)
AsI
CurRX



Calibration Parameters

Metal	Calib. Mode	Fit Factor	Slope	Zero Offset	Starting Concentration	Concentration in Original Sample
As(III+V)	**Height**	1.000	0.025 ppb/nA	0 ppt	10 ppb	12 ppb
	Area	0.302	3.27 ppb/nC	0 ppt	24 ppb	28 ppb

Addition Data for Method of Standard Additions

Metal	Unknown Concentration	Concentration in original aliquot	1st Addition	2nd Addition	3rd Addition	Total added concentration
As(III+V)	10.2 ppb	12.1 ppb	300 uL (5.96 ppb)	580 uL (11.4 ppb)	530 uL (10.3 ppb)	27.7 ppb

JC 11/X (2)
As ↓
cuPP

As^{+3} = ND
As^{+5} = 12.1

Starting Volume: 50.000 mL

Final Volume: 51.410 mL

TraceDetect Nano-Band Explorer

Sample ID: JC1LX AsV CuRx MS

Trace Metals:

As(III+V): 119 ppb

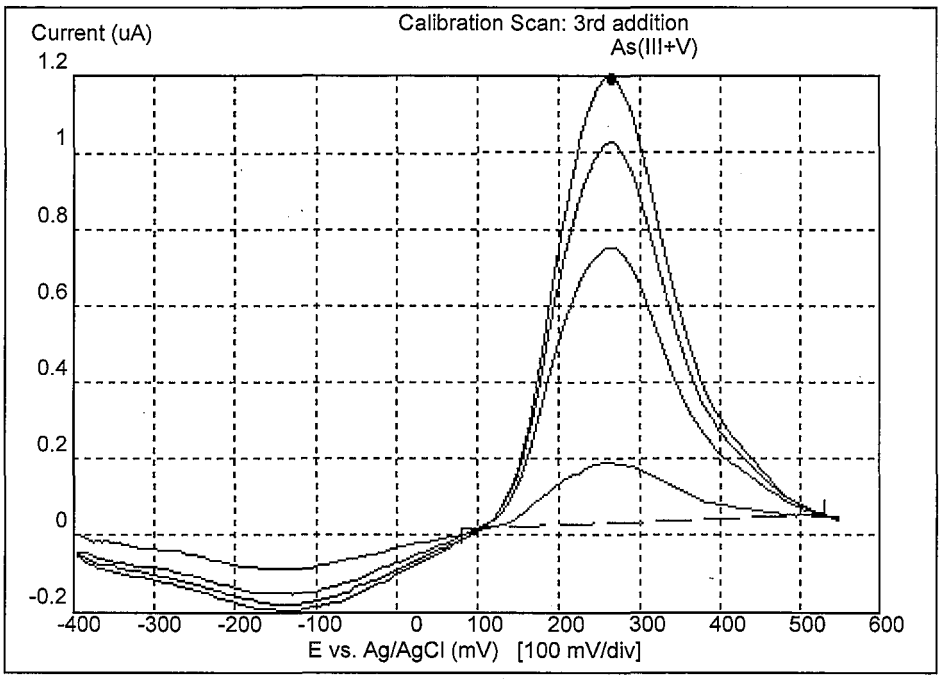
209 ppb

Temperature:

Input 1:

Input 2:

05/Sep/06 17:07:22



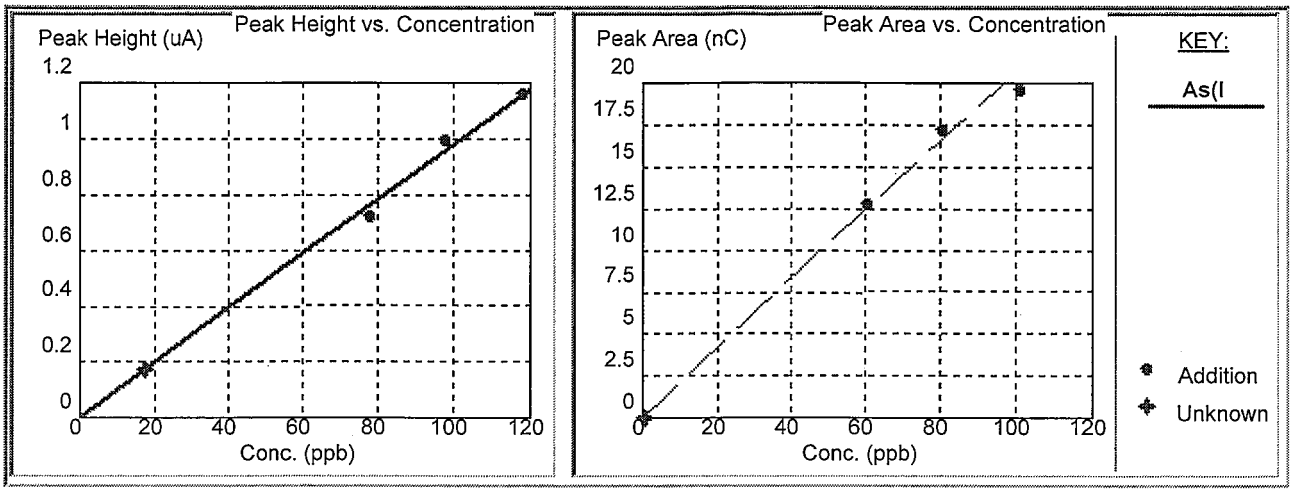
Settings:

Type:	ASV	Clean Time (S)	0.1	Signal Avg.	8
Waveform:	Staircase	Clean Voltage (mV):	600	Frequency (Hz):	2000
Cell	Three Electrode	Plate Time (S)	20	Start Voltage (mV):	-400
☑ Background subtraction		Plate Voltage (mV)	-400	Stop Voltage (mV):	550
		Range (uA):	12.5	Step Voltage (mV):	5

Calibration Summary:

Calibration Date: 05/Sep/06 at 16:47:44

JC ILX AsI
cu Rf
ms



Calibration Parameters

Metal	Calib. Mode	Fit Factor	Slope	Zero Offset	Starting Concentration	Concentration in Original Sample
As(III+V)	**Height**	0.995	0.102 ppb/nA	0 ppt	18 ppb	21 ppb
	Area	0.993	4.84 ppb/nC	0 ppt	420 ppt	500 ppt

Addition Data for Method of Standard Additions

Metal	Unknown Concentration	Concentration in original aliquot	1st Addition	2nd Addition	3rd Addition	Total added concentration
As(III+V)	17.6 ppb	20.9 ppb	3.00 uL (60.0 ppb)	1.00 uL (20.0 ppb)	1.00 uL (20.0 ppb)	100 ppb

JCILX As V
Cu Px
MS

Starting Volume: 50.000 mL

Final Volume: 50.005 mL

TraceDetect Nano-Band Explorer

Sample ID: JC1LX AsV CuRx MSD

Trace Metals:

As(III+V): 65.3 ppb

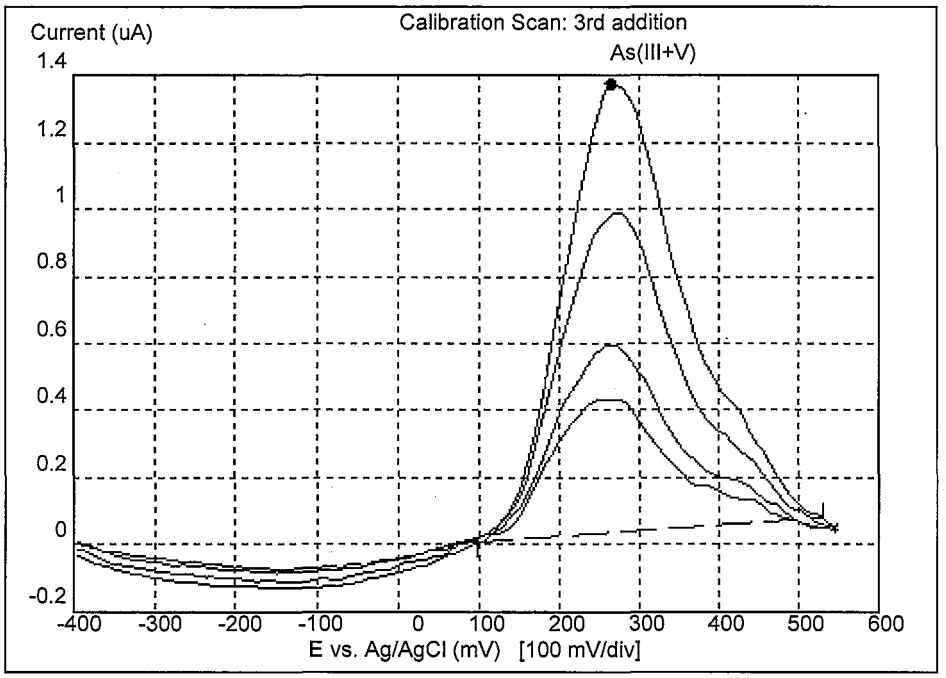
23.2 ppb

Temperature:

Input 1:

Input 2:

05/Sep/06 17:59:55

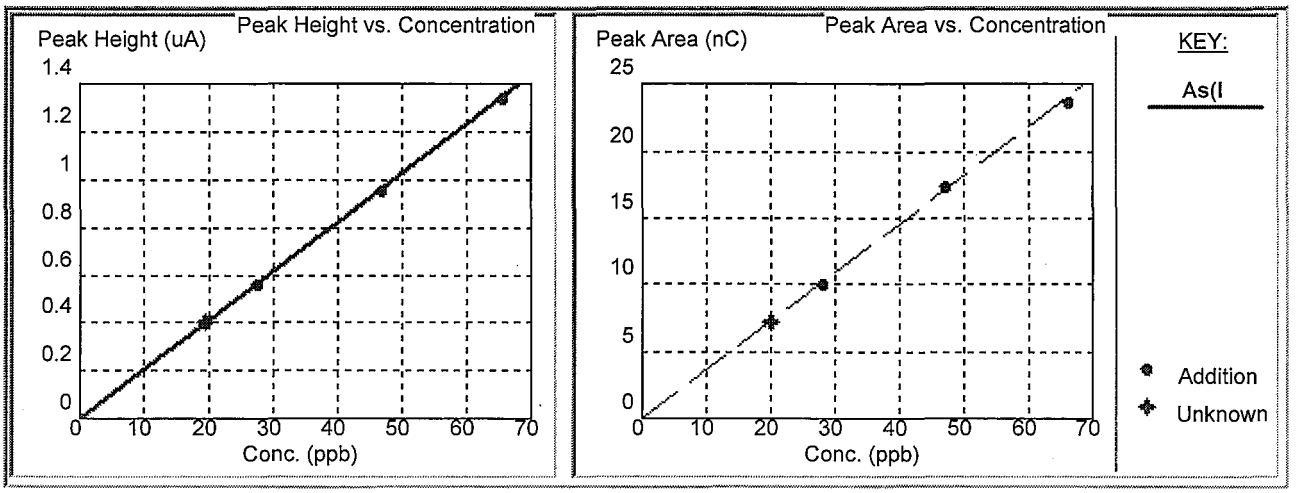


Settings:

Type:	ASV	Clean Time (S)	0.1	Signal Avg.	8
Waveform:	Staircase	Clean Voltage (mV):	600	Frequency (Hz):	2000
Cell	Three Electrode	Plate Time (S)	40	Start Voltage (mV):	-400
☑ Background subtraction		Plate Voltage (mV)	-400	Stop Voltage (mV):	550
		Range (uA):	12.5	Step Voltage (mV):	5

Calibration Summary:

Calibration Date: 05/Sep/06 at 17:52:55



Calibration Parameters

Metal	Calib. Mode	Fit Factor	Slope	Zero Offset	Starting Concentration	Concentration in Original Sample
As[III+V]	**Height**	1.000	0.049 ppb/nA	0 ppt	19 ppb	23 ppb
	Area	0.999	2.76 ppb/nC	0 ppt	20 ppb	24 ppb

Addition Data for Method of Standard Additions

Metal	Unknown Concentration	Concentration in original aliquot	1st Addition	2nd Addition	3rd Addition	Total added concentration
As(III+V)	19.5 ppb	23.2 ppb	400 uL (7.94 ppb)	990 uL (19.3 ppb)	990 uL (18.9 ppb)	46.1 ppb

Starting Volume: 50.000 **mL**

Final Volume: 52.380 **mL**

TraceDetect Nano-Band Explorer

Sample ID: JC7CR 500x AsV CuRx

Trace Metals:

As(III+V): 795 ppb

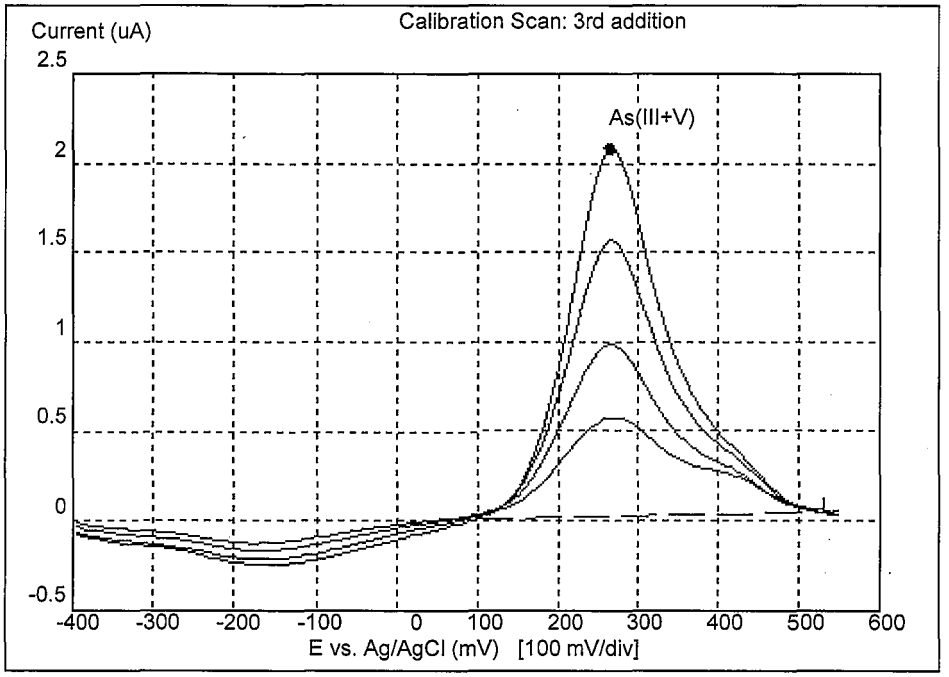
NO G
After

Temperature:

Input 1:

Input 2:

05/Sep/06 16:13:42



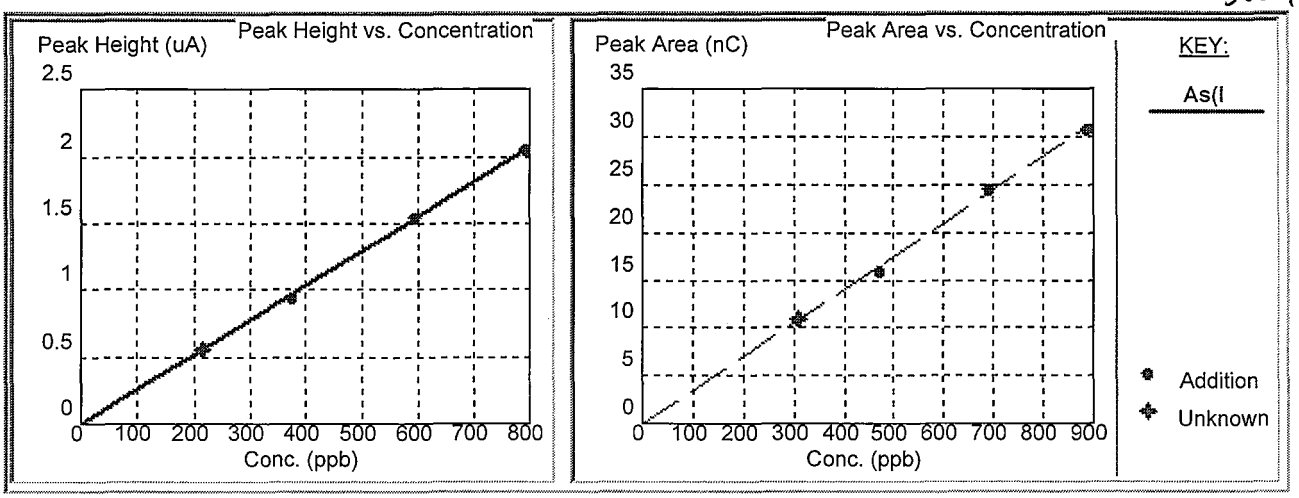
Settings:

Type:	ASV	Clean Time (S)	0.1	Signal Avg.	8
Waveform:	Staircase	Clean Voltage (mV):	600	Frequency (Hz):	2000
Cell	Three Electrode	Plate Time (S)	5	Start Voltage (mV):	-400
☑ Background subtraction		Plate Voltage (mV)	-400	Stop Voltage (mV):	550
		Range (uA):	12.5	Step Voltage (mV):	5

Calibration Summary:

JC7CR As+F
500X
CuRy

Calibration Date: 05/Sep/06 at 16:08:12



Calibration Parameters

Metal	Calib. Mode	Fit Factor	Slope	Zero Offset	Starting Concentration	Concentration in Original Sample
As(III+V)	**Height**	1.000	0.386 ppb/nA	0 ppt	210 ppb	250 ppb
	Area	0.998	28.6 ppb/nC	0 ppt	310 ppb	370 ppb

Addition Data for Method of Standard Additions

Metal	Unknown Concentration	Concentration in original aliquot	1st Addition	2nd Addition	3rd Addition	Total added concentration
As(III+V)	213 ppb	253 ppb	8.00 uL (160 ppb)	11.0 uL (220 ppb)	10.0 uL (200 ppb)	580 ppb

JC7CR SWY
As V GPY

Starting Volume: 50.000 **mL**

Final Volume: 50.029 **mL**

TraceDetect Nano-Band Explorer -

Sample ID: Blank AsV CuRx with1ppbspike

Trace Metals:

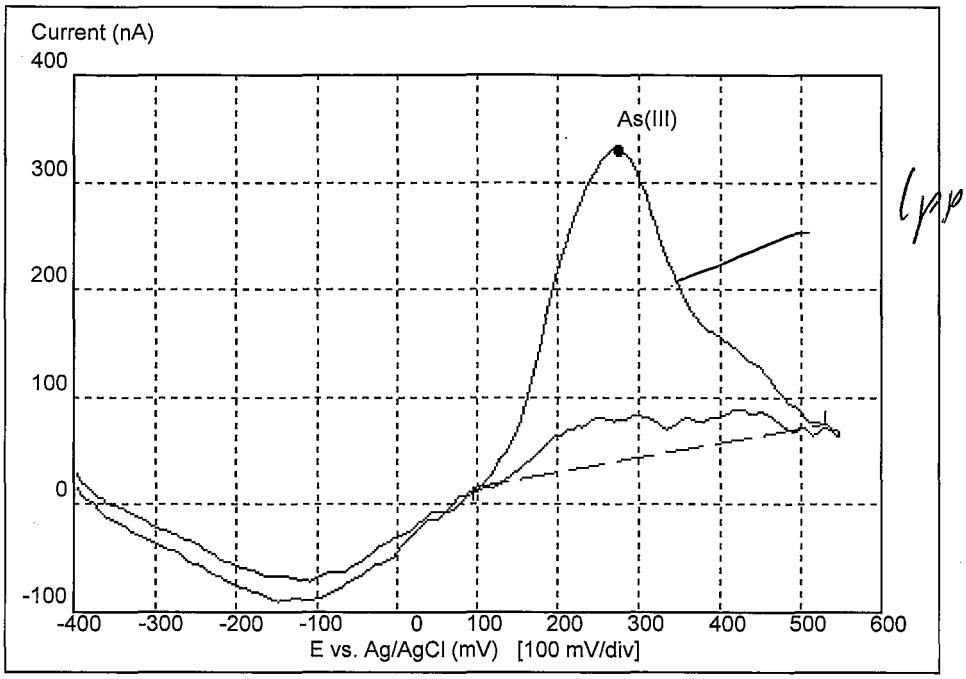
As(III): 3.23 ppb

Temperature:

Input 1:

Input 2:

05/Sep/06 15:23:12



1ppb spike

Settings:

Type:	ASV	Clean Time (S)	0.1	Signal Avg.	8
Waveform:	Staircase	Clean Voltage (mV):	600	Frequency (Hz):	2000
Cell	Three Electrode	Plate Time (S)	180	Start Voltage (mV):	-400
☑ Background subtraction		Plate Voltage (mV)	-400	Stop Voltage (mV):	550
		Range (uA):	12.5	Step Voltage (mV):	5

TraceDetect Nano-Band Explorer

Sample ID: LCS AsV CuRx

Trace Metals:

As(III+V): 54.1 ppb

19.2

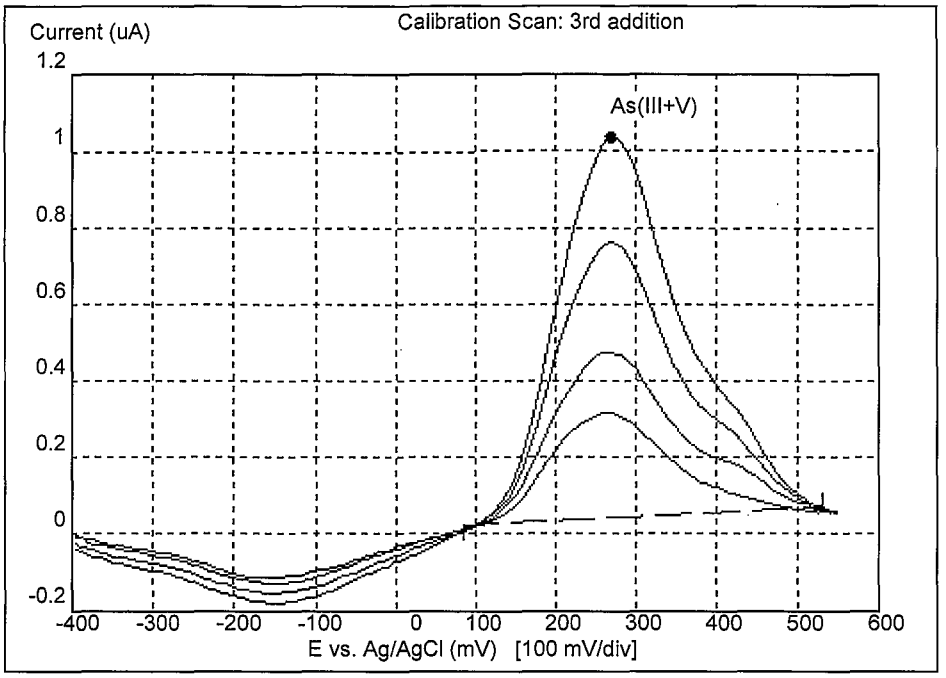
96%

Temperature:

Input 1:

Input 2:

05/Sep/06 15:58:32



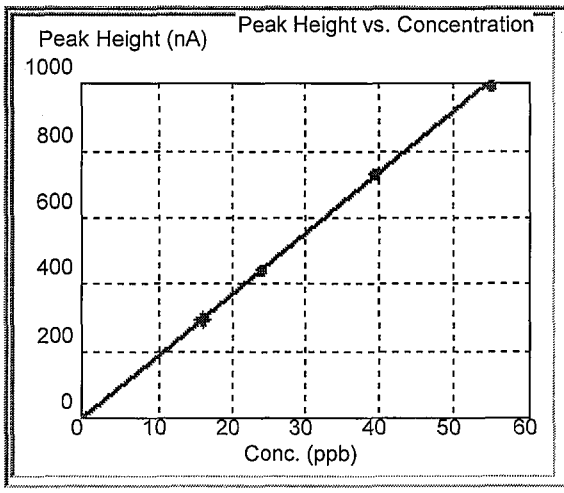
Settings:

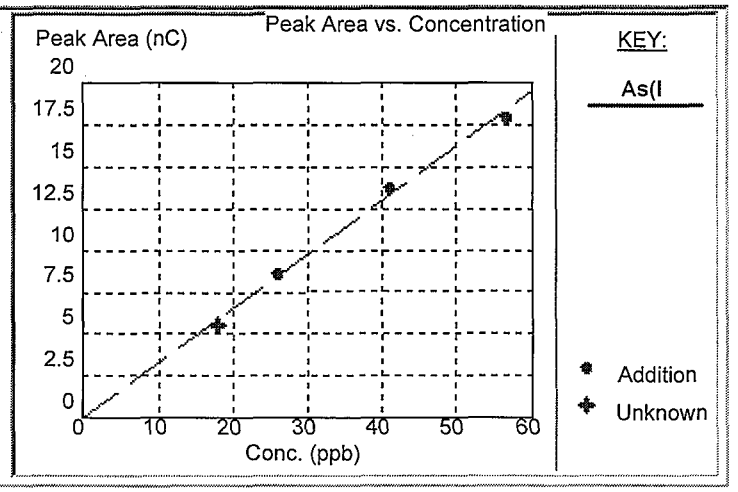
Type:	ASV	Clean Time (S)	0.1	Signal Avg.	8
Waveform:	Staircase	Clean Voltage (mV):	600	Frequency (Hz):	2000
Cell	Three Electrode	Plate Time (S)	40	Start Voltage (mV):	-400
☑ Background subtraction		Plate Voltage (mV)	-400	Stop Voltage (mV):	550
		Range (uA):	12.5	Step Voltage (mV):	5

Calibration Summary:

LCS As V Cu Ru

Calibration Date: 05/Sep/06 at 15:39:46





Calibration Parameters

Metal	Calib. Mode	Fit Factor	Slope	Zero Offset	Starting Concentration	Concentration in Original Sample
As[III+V]	**Height**	0.999	0.054 ppb/nA	0 ppt	16 ppb	19 ppb
	Area	0.995	3.06 ppb/nC	0 ppt	18 ppb	21 ppb

Addition Data for Method of Standard Additions

LCS As V
Cu Pf

Metal	Unknown Concentration	Concentration in original aliquot	1st Addition	2nd Addition	3rd Addition	Total added concentration
As(III+V)	16.1 ppb	19.2 ppb	400 uL (7.94 ppb)	780 uL (15.2 ppb)	810 uL (15.6 ppb)	38.8 ppb

Starting Volume: 50.000 **mL**

Final Volume: 51.990 **mL**

TraceDetect Nano-Band Explorer

Sample ID: LCS Dup AsV CuRx

Trace Metals:

As(III+V): 44.1 ppb

14.3

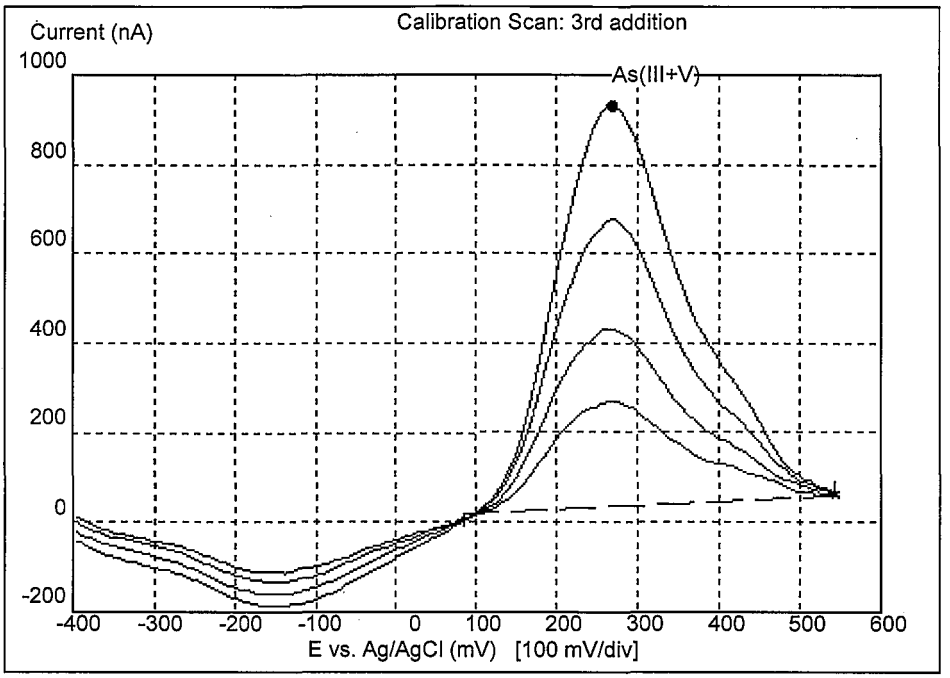
(72%)

Temperature:

Input 1:

Input 2:

05/Sep/06 16:31:13



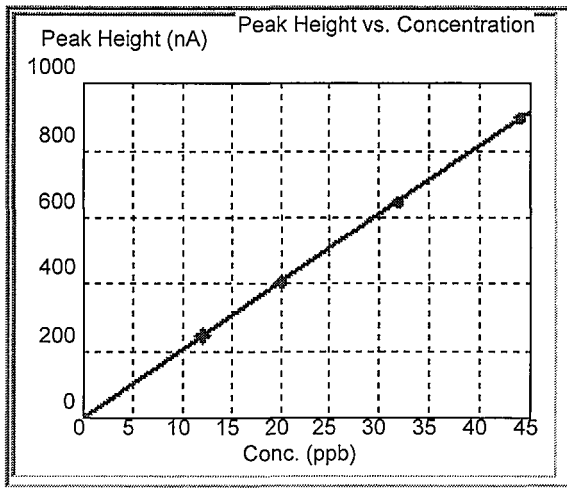
Settings:

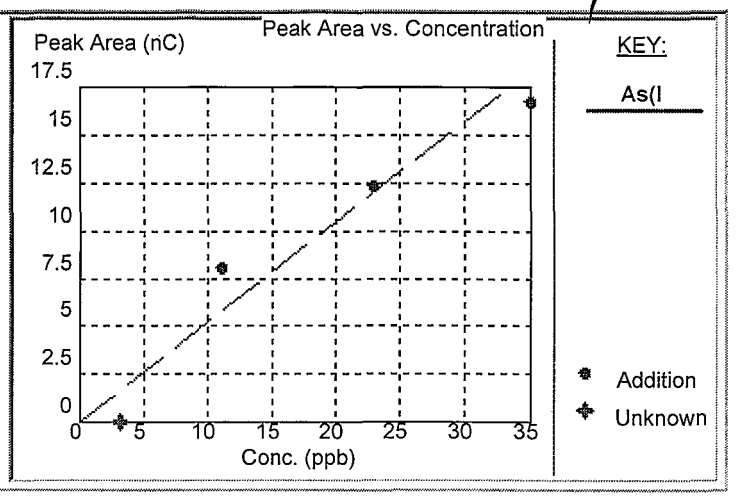
Type:	ASV	Clean Time (S)	0.1	Signal Avg.	8
Waveform:	Staircase	Clean Voltage (mV):	600	Frequency (Hz):	2000
Cell	Three Electrode	Plate Time (S)	40	Start Voltage (mV):	-400
☑ Background subtraction		Plate Voltage (mV)	-400	Stop Voltage (mV):	550
		Range (uA):	12.5	Step Voltage (mV):	5

Calibration Summary:

LCS Dup As I
CuRp

Calibration Date: 05/Sep/06 at 16:14:14





Calibration Parameters

Metal	Calib. Mode	Fit Factor	Slope	Zero Offset	Starting Concentration	Concentration in Original Sample
As(III+V)	**Height**	1.000	0.049 ppb/nA	0 ppt	12 ppb	14 ppb
	Area	0.934	1.91 ppb/nC	0 ppt	3.0 ppb	3.6 ppb

Addition Data for Method of Standard Additions

Metal	Unknown Concentration	Concentration in original aliquot	1st Addition	2nd Addition	3rd Addition	Total added concentration
As(III+V)	12.0 ppb	14.3 ppb	400 uL (7.94 ppb)	610 uL (12.0 ppb)	620 uL (12.0 ppb)	31.9 ppb

LCS Dup
As V
Cu Pb

Starting Volume: 50.000 **mL**

Final Volume: 51.630 **mL**

TraceDetect Nano-Band Explorer

Sample ID: RL Check

Trace Metals:

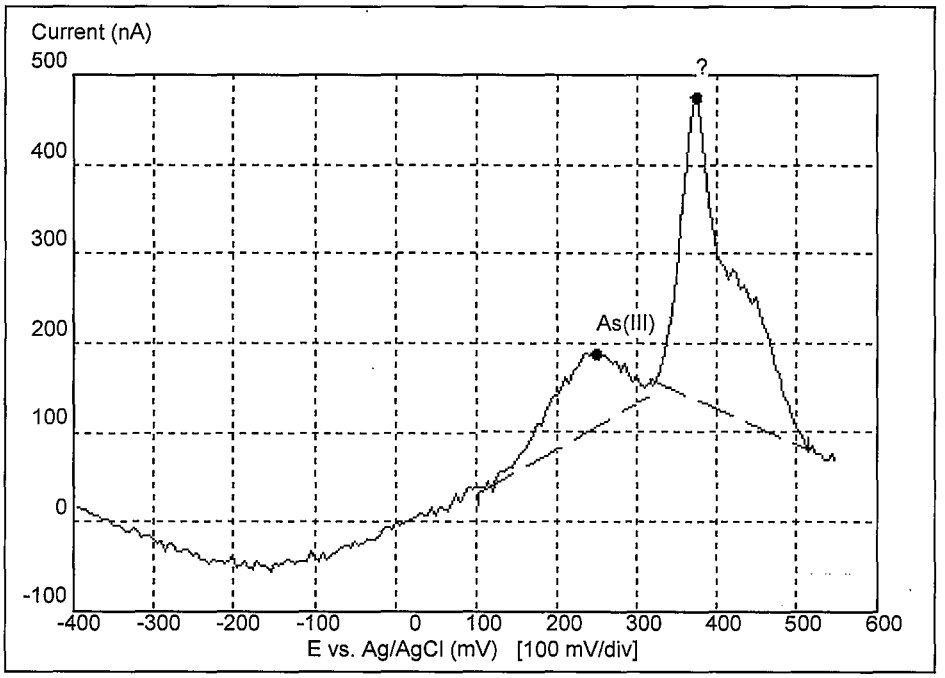
As(III): 82.9 nA

Temperature:

Input 1:

Input 2:

05/Sep/06 10:09:23



Settings:

Type:	ASV	Clean Time (S)	0.1	Signal Avg.	8
Waveform:	Staircase	Clean Voltage (mV):	600	Frequency (Hz):	2000
Cell	Three Electrode	Plate Time (S)	160	Start Voltage (mV):	-400
☑ Background subtraction		Plate Voltage (mV)	-400	Stop Voltage (mV):	550
		Range (uA):	12.5	Step Voltage (mV):	5

TraceDetect Nano-Band Explorer -

Sample ID: MSAVerification Std 20ppb

05/Sep/06 09:57:44

Trace Metals:

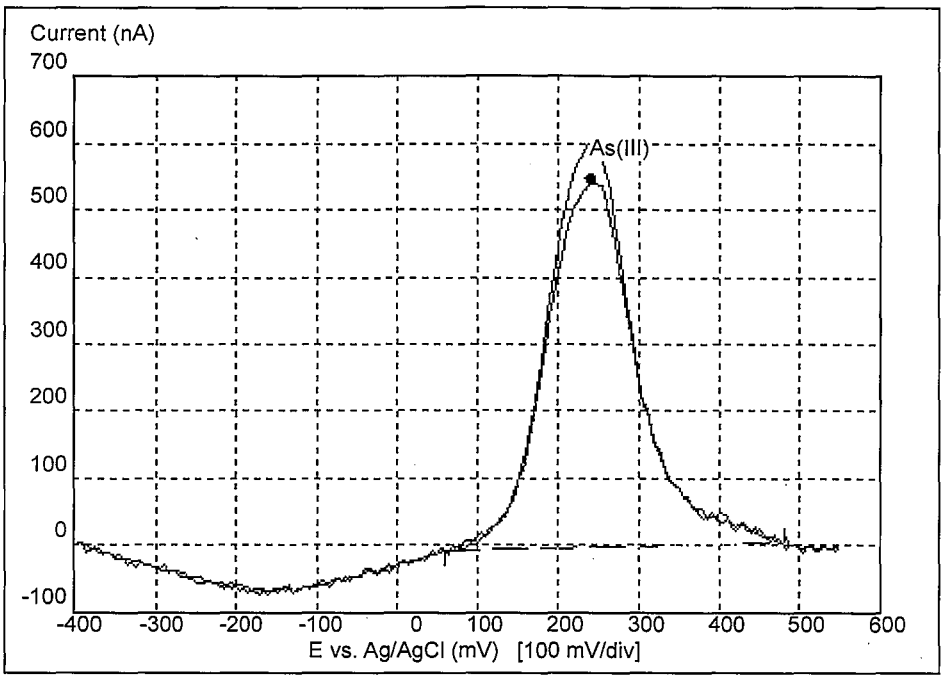
As(III): 550 nA

550 / 581 x100% = 95%

Temperature:

Input 1:

Input 2:



Settings:

Type:	ASV	Clean Time (S)	0.1	Signal Avg.	8
Waveform:	Staircase	Clean Voltage (mV):	600	Frequency (Hz):	2000
Cell	Three Electrode	Plate Time (S)	40	Start Voltage (mV):	-400
		Plate Voltage (mV)	-400	Stop Voltage (mV):	550
		Range (uA):	12.5	Step Voltage (mV):	5

☑ Background subtraction

TraceDetect Nano-Band Explorer

Sample ID: MSA Working Std 20ppb

Trace Metals:

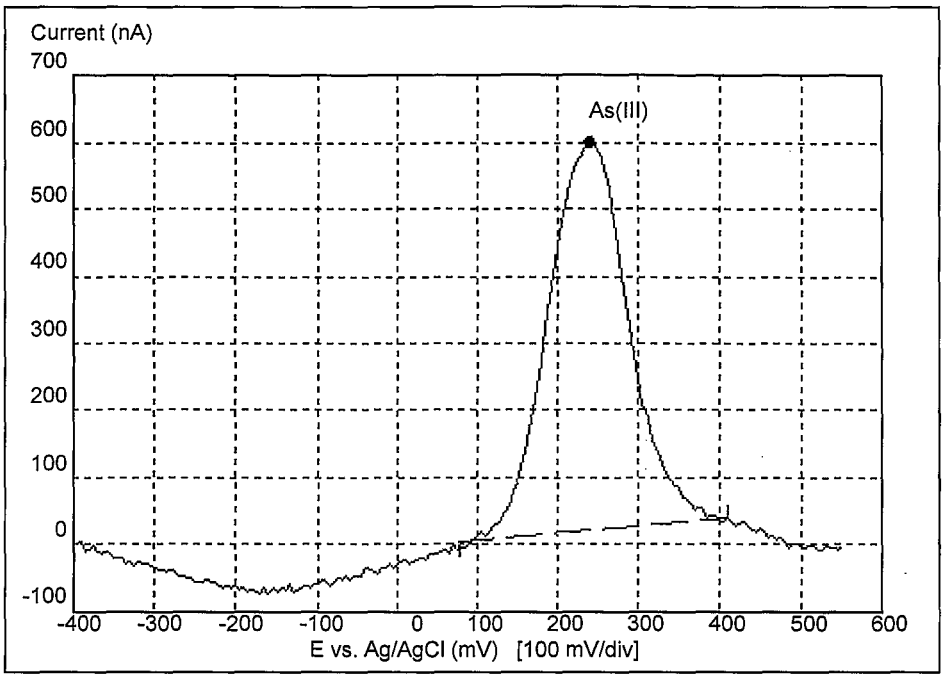
As(III): 581 nA

Temperature:

Input 1:

Input 2:

05/Sep/06 09:54:08



Settings:

Type:	ASV	Clean Time (S)	0.1	Signal Avg.	8
Waveform:	Staircase	Clean Voltage (mV):	600	Frequency (Hz):	2000
Cell	Three Electrode	Plate Time (S)	40	Start Voltage (mV):	-400
☑ Background subtraction		Plate Voltage (mV)	-400	Stop Voltage (mV):	550
		Range (uA):	12.5	Step Voltage (mV):	5

TraceDetect Nano-Band Explorer -

Sample ID: AuPlate(#56)

Trace Metals:

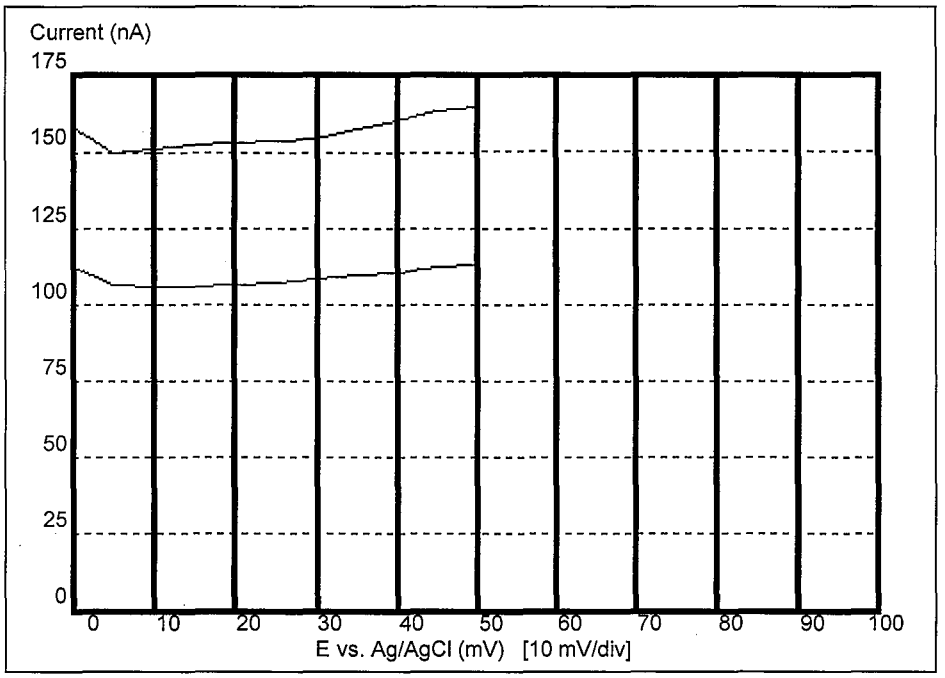
As(III) < 8.0 nA

Temperature:

Input 1:

Input 2:

05/Sep/06 09:34:26



Settings:

Type:	ASV	Clean Time (S)	0	Signal Avg.	16
Waveform:	Sq. Wave	Clean Voltage (mV):	100	Frequency (Hz):	1000
Cell	Three Electrode	Plate Time (S)	55	Start Voltage (mV):	-50
		Plate Voltage (mV)	-50	Stop Voltage (mV):	5
		Range (uA):	1.25	Step Voltage (mV):	5

☐ Background subtraction

TraceDetect Nano-Band Explorer

Sample ID: JC1LX Screen

Trace Metals:

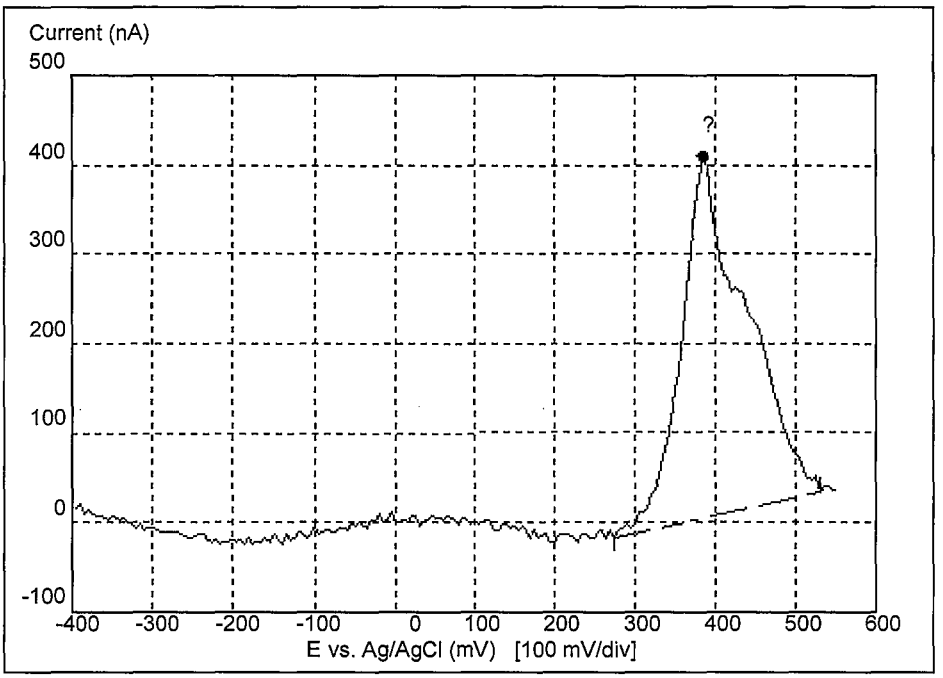
As(III) < 470 ppt

Temperature:

Input 1:

Input 2:

05/Sep/06 10:48:07



Settings:

Type:	ASV	Clean Time (S)	0.1	Signal Avg.	8
Waveform:	Staircase	Clean Voltage (mV):	600	Frequency (Hz):	2000
Cell	Three Electrode	Plate Time (S)	10	Start Voltage (mV):	-400
		Plate Voltage (mV)	-400	Stop Voltage (mV):	550
		Range (uA):	12.5	Step Voltage (mV):	5

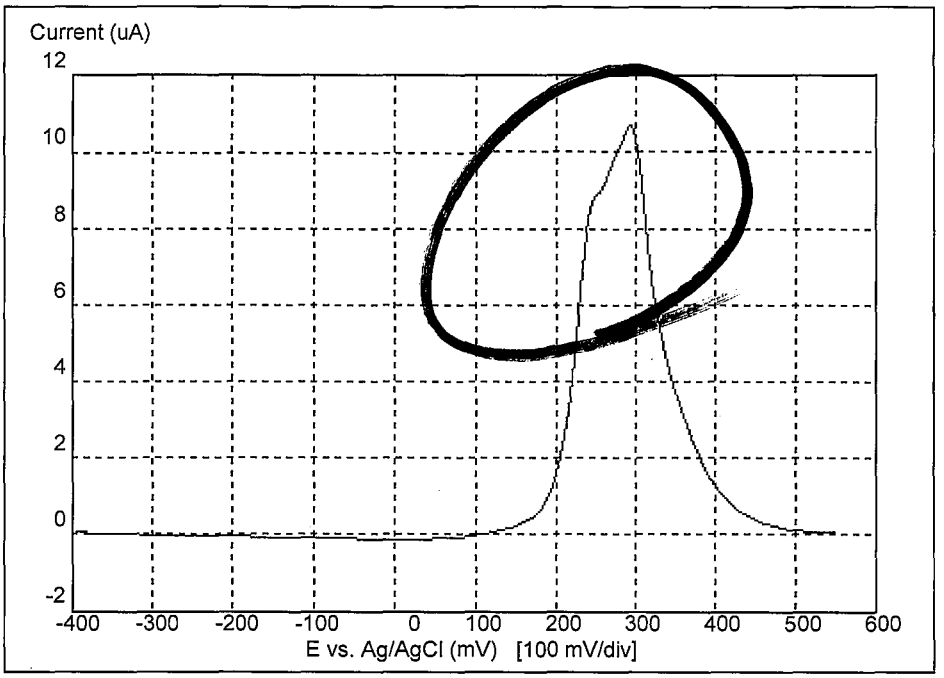
☑ Background subtraction

TraceDetect Nano-Band Explorer

Sample ID: JC7CR 10x CuRx

Trace Metals:
As(III) < 2.4 ppb

05/Sep/06 14:04:41



Temperature:

Input 1:

Input 2:

Settings:

Type:	ASV	Clean Time (S)	0.1	Signal Avg.	8
Waveform:	Staircase	Clean Voltage (mV):	600	Frequency (Hz):	2000
Cell	Three Electrode	Plate Time (S)	5	Start Voltage (mV):	-400
☑ Background subtraction		Plate Voltage (mV)	-400	Stop Voltage (mV):	550
		Range (uA):	12.5	Step Voltage (mV):	5

over

even at

10X

STL North Canton Arsenic (III) Data Review Checklist

Run/Project Information

Run Date: 9/6/04 **Analyst:** LFH **Instrument:** _____

Prep Batches Run: 6249409

Methods used: **7063 mod :** NC-WC-000X Rev 1

Review Items

A. Instrument Setup	Yes	No	N/A	2ndLevel
1. Electrode sensitivity check?	✓			✓
2. MSA working standard and verification standard within control limits?	✓			✓
3. Cleanliness check (ICB) within +/- RL?	✓			✓
B. Sample Results				
1. Were non-detect samples verified with single point MSA?	✓			✓
2. All samples with As(III) quantified with 3-4 point MSA?	✓			✓
3. Sample analyses done within holding time?	✓			✓
C. Preparation/Matrix QC				
1. Samples preserved in the field?	✓			✓
2. LCS done per prep batch and within QC limits?	✓			✓
3. Method blank done per prep batch and < RL?	✓			✓
4. MS run at required frequency (1 per 20 samples) and within limits?	✓			✓
5. MSD or DU run at required frequency (1 per 20 samples) and RPD within limits?	✓			✓
D. Other				
1. Are all nonconformances documented appropriately?			✓	✓
2. Current MDL data on file?	✓			✓
3. Calculations and Transcriptions checked for error?	✓			✓
4. All client/ project specific requirements met?	✓			✓
5. Date of analysis verified as correct?	✓			✓

Analyst: Lee Hydrick **Date:** 9/6/04

Comments:

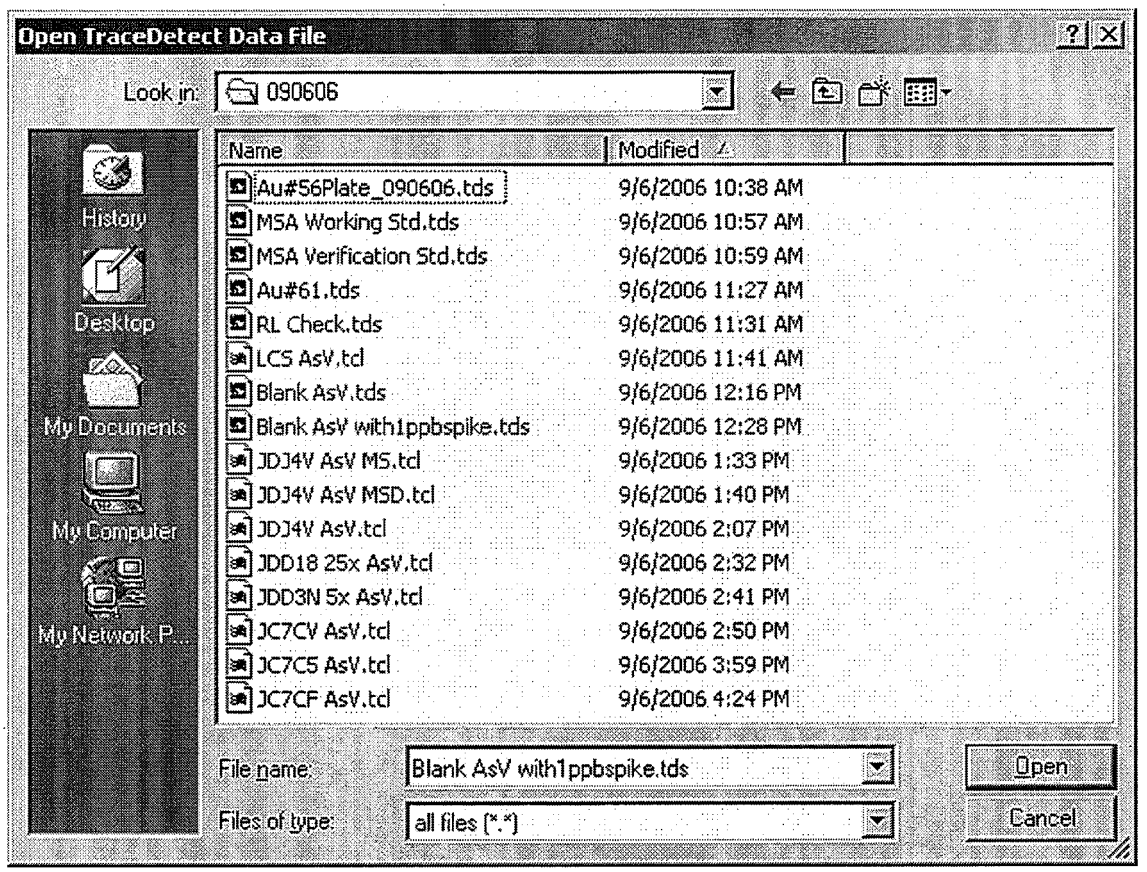
2nd Level Reviewer [illegible] **Date:** 9/16/04

Standard, Reagent and Supply Numbers

MSA Working Std AS6054 **MSA Verification Std** AS6053 **MS As(V) Std** AS6055

Au plate soln WR60945 **conc HCl** WR 60283 **Cu Remover** — **C18** —

Acid ext — **Basic ext** —


Open TraceDetect Data File
Look in: 090606
History
Desktop
My Documents
My Computer
My Network P...
Name
Modified
Au#56Plate_090606.tds 9/6/2006 10:38 AM
MSA Working Std.tds 9/6/2006 10:57 AM
MSA Verification Std.tds 9/6/2006 10:59 AM
Au#61.tds 9/6/2006 11:27 AM
RL Check.tds 9/6/2006 11:31 AM
LCS AsV.tcl 9/6/2006 11:41 AM
Blank AsV.tds 9/6/2006 12:16 PM
Blank AsV with1ppbspike.tds 9/6/2006 12:28 PM
JDJ4V AsV MS.tcl 9/6/2006 1:33 PM
JDJ4V AsV MSD.tcl 9/6/2006 1:40 PM
JDJ4V AsV.tcl 9/6/2006 2:07 PM
JDD18 25x AsV.tcl 9/6/2006 2:32 PM
JDD3N 5x AsV.tcl 9/6/2006 2:41 PM
JC7CV AsV.tcl 9/6/2006 2:50 PM
JC7C5 AsV.tcl 9/6/2006 3:59 PM
JC7CF AsV.tcl 9/6/2006 4:24 PM
File name: Blank AsV with1ppbspike.tds
Files of type: all files (*.*)
Open
Cancel

TraceDetect Nano-Band Explorer

Sample ID: JC7CF AsV

Trace Metals:

As(III+V): 90.3 ppb

4.8 G

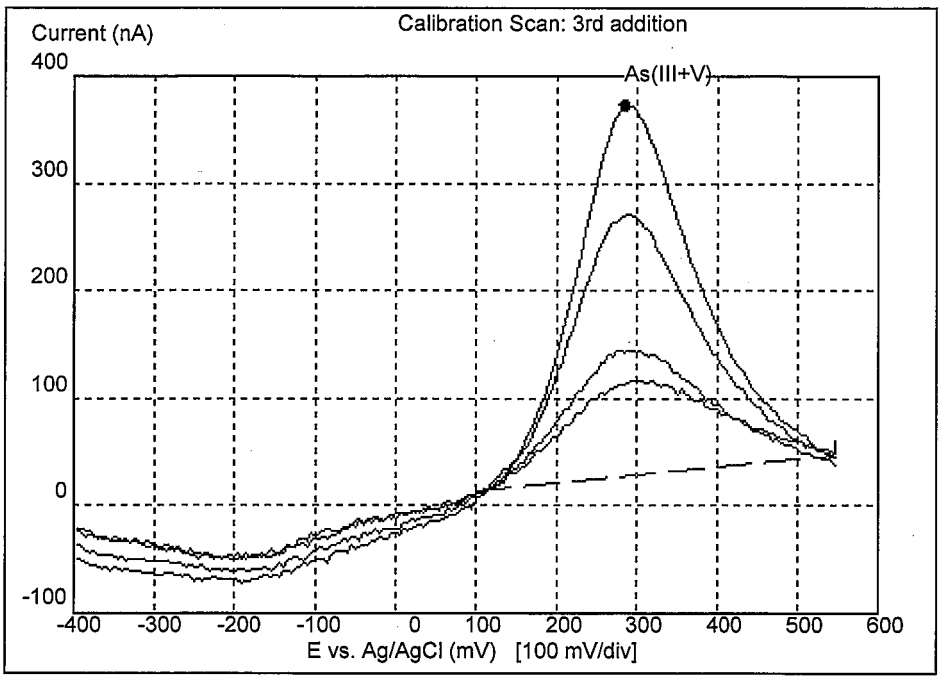
4x

Temperature:

Input 1:

Input 2:

06/Sep/06 16:23:15



Settings:

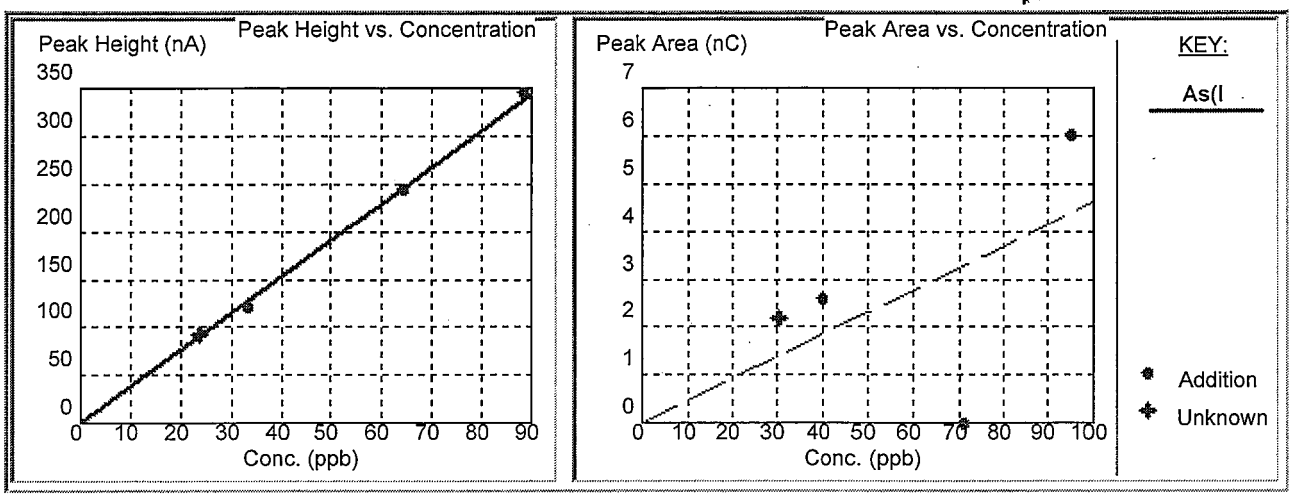
Type:	ASV	Clean Time (S)	0.1	Signal Avg.	8
Waveform:	Staircase	Clean Voltage (mV):	600	Frequency (Hz):	2000
Cell	Three Electrode	Plate Time (S)	40	Start Voltage (mV):	-400
		Plate Voltage (mV)	-400	Stop Voltage (mV):	550
		Range (uA):	12.5	Step Voltage (mV):	5

☑ Background subtraction

Calibration Summary:

JC7CF
AsII

Calibration Date: 06/Sep/06 at 16:13:22



Calibration Parameters

Metal	Calib. Mode	Fit Factor	Slope	Zero Offset	Starting Concentration	Concentration in Original Sample
As(III+V)	**Height**	0.999	0.261 ppb/nA	0 ppt	23 ppb	28 ppb
	Area	0.227	21.6 ppb/nC	0 ppt	30 ppb	36 ppb

Addition Data for Method of Standard Additions

Metal	Unknown Concentration	Concentration in original aliquot	1st Addition	2nd Addition	3rd Addition	Total added concentration
As(III+V)	23.4 ppb	27.9 ppb	500 uL (9.90 ppb)	1.60 mL (30.7 ppb)	1.30 mL (24.3 ppb)	65.0 ppb

JC7CF

AsV

$$\begin{array}{r} -\ 23.1 \\ \hline 4.8 \end{array} \quad \begin{array}{l} As^{+3} \\ As^{+5} \end{array}$$

Starting Volume: 50.000 **mL**

Final Volume: 53.400 **mL**

TraceDetect Nano-Band Explorer

Sample ID: JC7CV AsV

06/Sep/06 14:49:25

Trace Metals:

As(III): 315 ppb

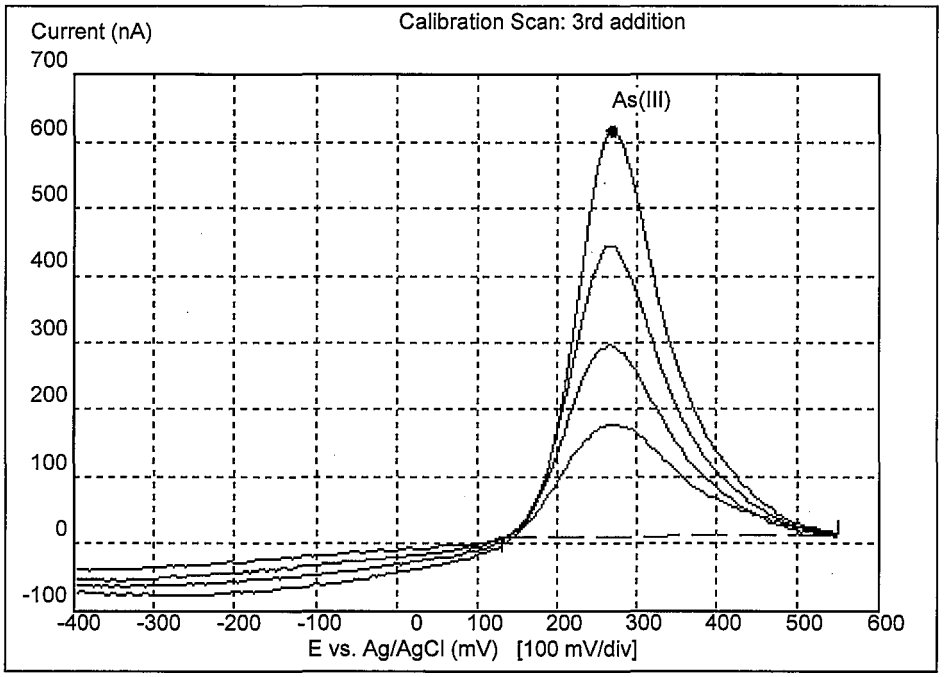
ND G

16X

Temperature:

Input 1:

Input 2:



Settings:

Type:	ASV	Clean Time (S)	0.1	Signal Avg.	8
Waveform:	Staircase	Clean Voltage (mV):	600	Frequency (Hz):	2000
Cell	Three Electrode	Plate Time (S)	10	Start Voltage (mV):	-400
☑ Background subtraction		Plate Voltage (mV)	-400	Stop Voltage (mV):	550
		Range (uA):	12.5	Step Voltage (mV):	5

Addition Data for Method of Standard Additions

Metal	Unknown Concentration	Concentration in original aliquot	1st Addition	2nd Addition	3rd Addition	Total added concentration
As(III)	88.1 ppb	105 ppb	3.00 uL (60.0 ppb)	4.00 uL (80.0 ppb)	4.40 uL (88.0 ppb)	228 ppb

JC7CU AsJ

$As^{+3} = 119$

As^{+5} ND

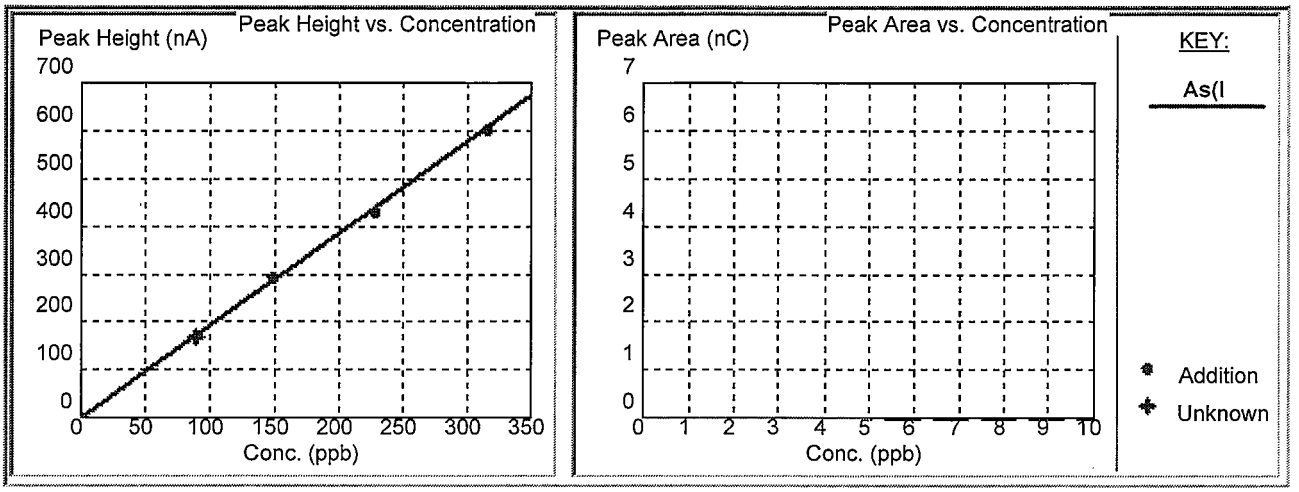
Starting Volume: 50.000 mL

Final Volume: 50.011 mL

Calibration Summary:

JC7CU As I

Calibration Date: 06/Sep/06 at 14:41:26



Calibration Parameters

Metal	Calib. Mode	Fit Factor	Slope	Zero Offset	Starting Concentration	Concentration in Original Sample
As(III)	**Height**	0.999	0.519 ppb/nA	0 ppt	88 ppb	100 ppb
	Area	0.013	-384 ppb/nC	0 ppt	-1.1 ppm	-1.3 ppm

TraceDetect Nano-Band Explorer

Sample ID: JC7C5 AsV

06/Sep/06 15:58:25

Trace Metals:

As(III+V): 524 nA

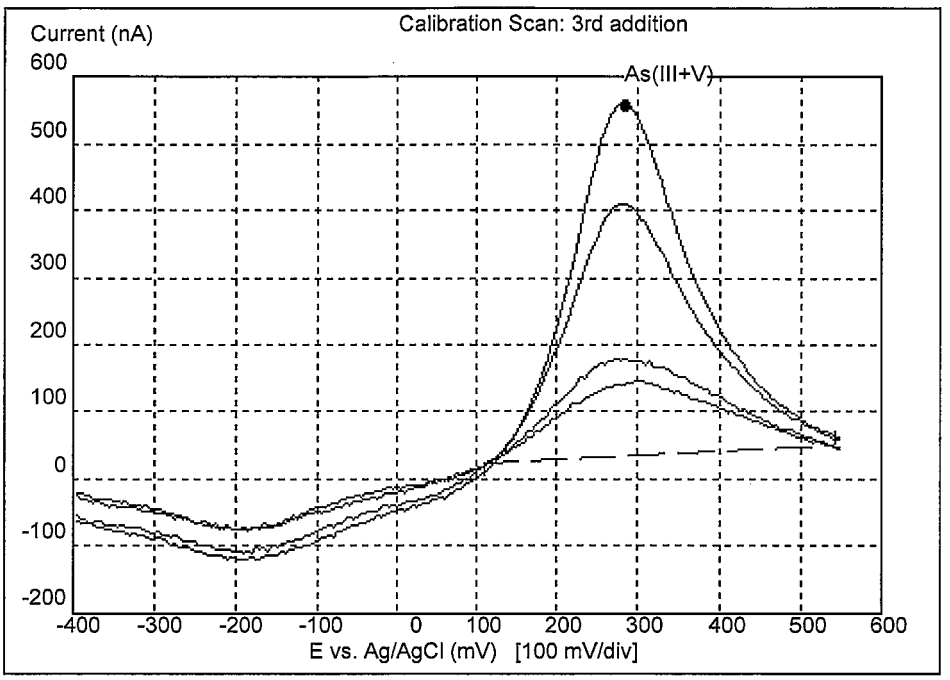
12.7 ppb

4X

Temperature:

Input 1:

Input 2:



Settings:

Type:	ASV	Clean Time (S)	0.1	Signal Avg.	8
Waveform:	Staircase	Clean Voltage (mV):	600	Frequency (Hz):	2000
Cell	Three Electrode	Plate Time (S)	40	Start Voltage (mV):	-400
		Plate Voltage (mV)	-400	Stop Voltage (mV):	550
		Range (uA):	12.5	Step Voltage (mV):	5

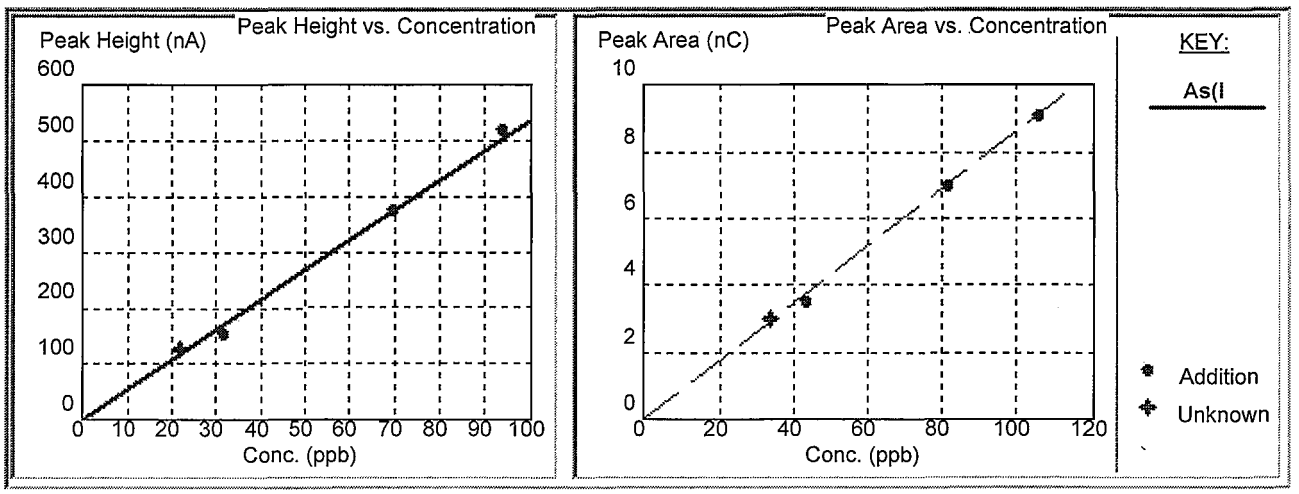
☑ Background subtraction

Calibration Summary:

IC7C5

As I

Calibration Date: 06/Sep/06 at 14:50:00



Calibration Parameters

Metal	Calib. Mode	Fit Factor	Slope	Zero Offset	Starting Concentration	Concentration in Original Sample
As(III+V)	**Height**	0.996	0.186 ppb/nA	0 ppt	22 ppb	26 ppb
	Area	0.998	11.6 ppb/nC	0 ppt	33 ppb	40 ppb

Addition Data for Method of Standard Additions

5C7C5
As V

Metal	Unknown Concentration	Concentration in original aliquot	1st Addition	2nd Addition	3rd Addition	Total added concentration
As(III+V)	21.6 ppb	25.8 ppb	500 uL (9.90 ppb)	2.00 mL (38.1 ppb)	1.30 mL (24.2 ppb)	72.2 ppb

-13.1 As^{+3}
12.7 As^{+5}

Starting Volume: 50.000 **mL**

Final Volume: 53.800 **mL**

TraceDetect Nano-Band Explorer

Sample ID: JDD18 25x AsV

Trace Metals:

As(III): 367 ppb

ND G

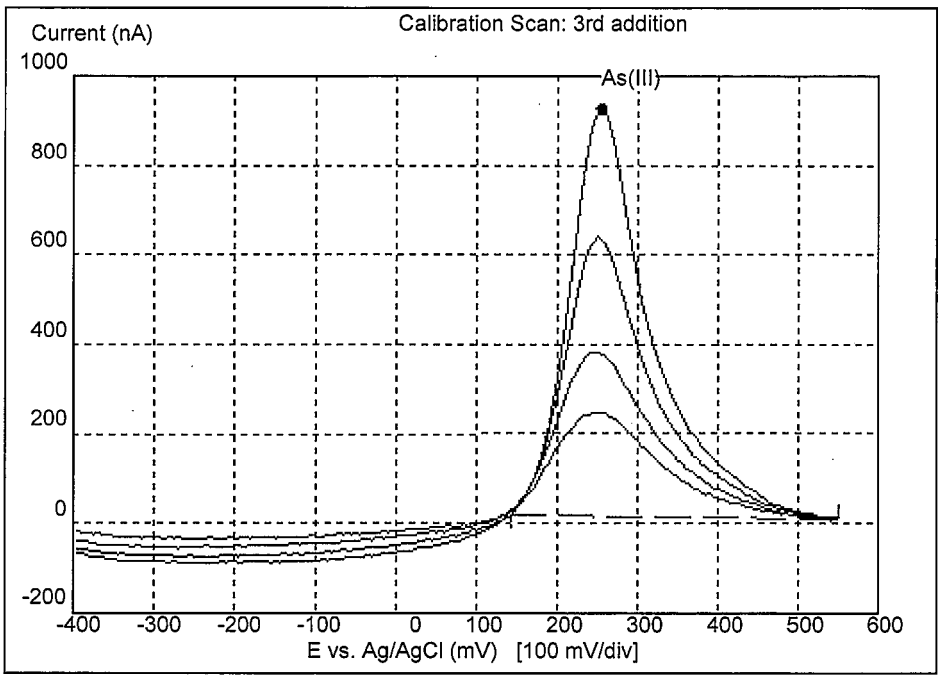
400X

Temperature:

Input 1:

Input 2:

06/Sep/06 14:31:39



Settings:

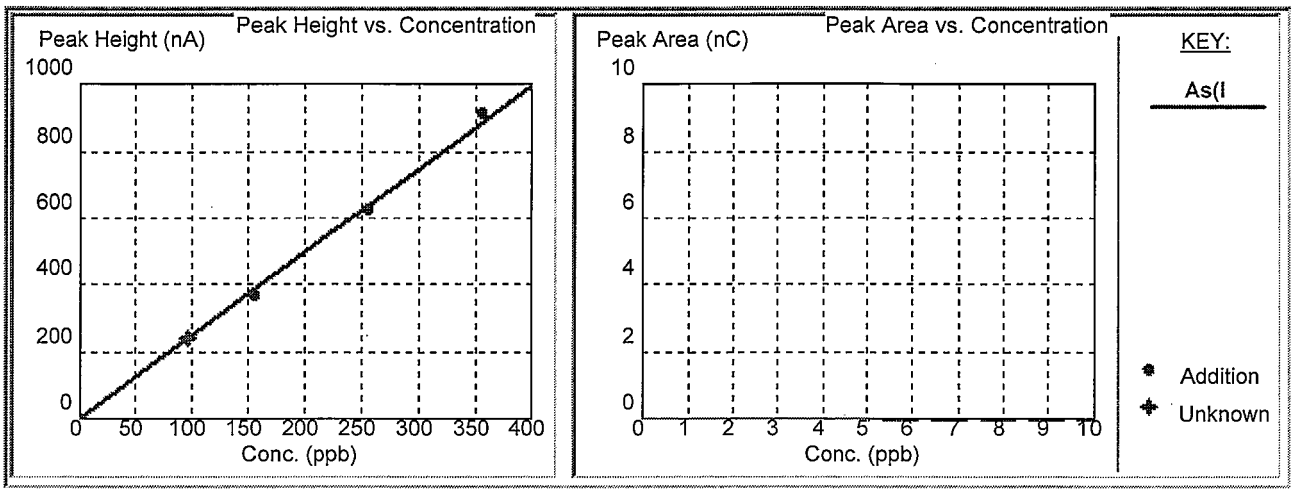
Type:	ASV	Clean Time (S)	0.1	Signal Avg.	8
Waveform:	Staircase	Clean Voltage (mV):	600	Frequency (Hz):	2000
Cell	Three Electrode	Plate Time (S)	10	Start Voltage (mV):	-400
		Plate Voltage (mV)	-400	Stop Voltage (mV):	550
		Range (uA):	12.5	Step Voltage (mV):	5

☑ Background subtraction

Calibration Summary:

JDD18 25x As V

Calibration Date: 06/Sep/06 at 14:07:17



Calibration Parameters

Metal	Calib. Mode	Fit Factor	Slope	Zero Offset	Starting Concentration	Concentration in Original Sample
As[III]	**Height**	0.997	0.401 ppb/nA	0 ppt	95 ppb	110 ppb
	Area	0.168	-112 ppb/nC	0 ppt	-630 ppb	-750 ppb

JDD18 25x

As V

Addition Data for Method of Standard Additions

Metal	Unknown Concentration	Concentration in original aliquot	1st Addition	2nd Addition	3rd Addition	Total added concentration
As(III)	95.3 ppb	113 ppb	3.00 uL (60.0 ppb)	5.00 uL (100 ppb)	5.00 uL (100 ppb)	260 ppb

~~x 400~~ 9/6/06

x25

2825 As(III + V)

As^{+3} = 2925

Starting Volume: 50.000 mL

Final Volume: 50.013 mL

TraceDetect Nano-Band Explorer

Sample ID: JDD3N 5x AsV

06/Sep/06 14:40:47

Trace Metals:

As(III): 366 ppb

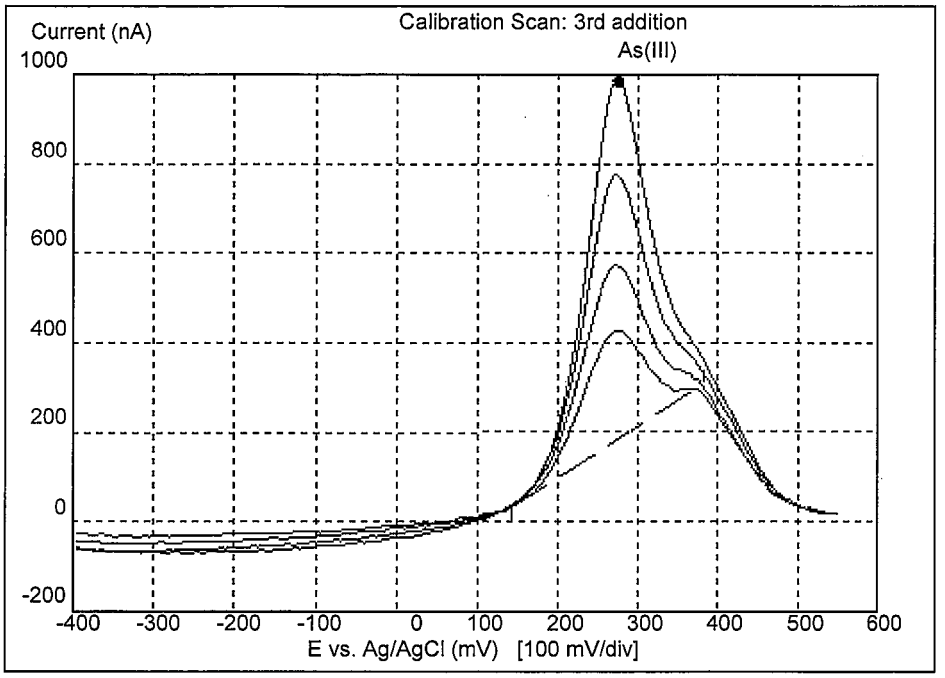
212ppb

80%

Temperature:

Input 1:

Input 2:



Settings:

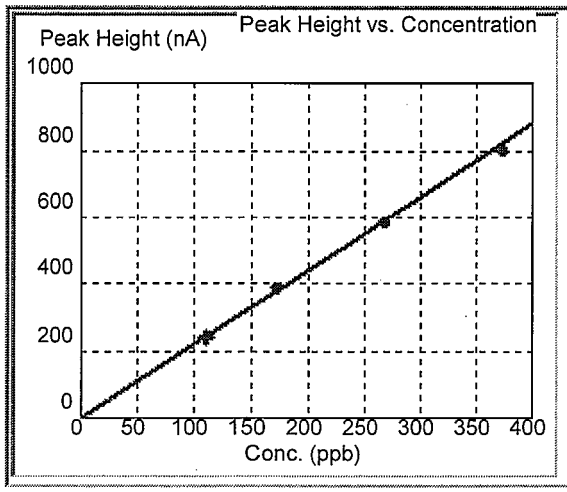
Type:	ASV	Clean Time (S)	0.1	Signal Avg.	8
Waveform:	Staircase	Clean Voltage (mV):	600	Frequency (Hz):	2000
Cell	Three Electrode	Plate Time (S)	10	Start Voltage (mV):	-400
		Plate Voltage (mV)	-400	Stop Voltage (mV):	550
		Range (uA):	12.5	Step Voltage (mV):	5

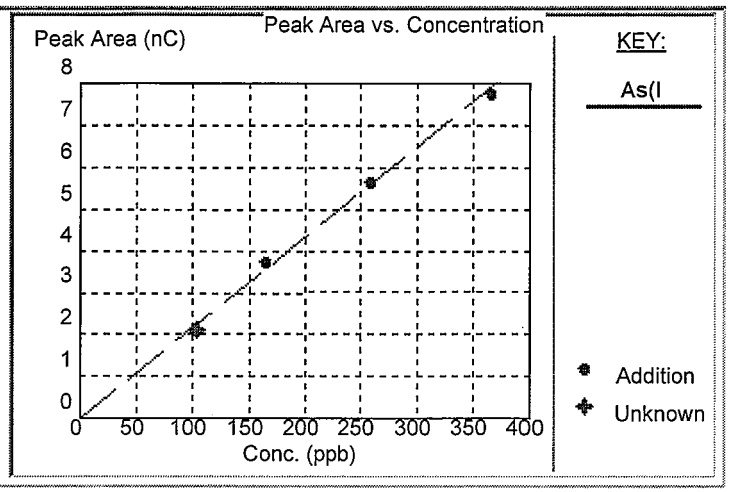
☑ Background subtraction

Calibration Summary:

JPD3W 5x Ast

Calibration Date: 06/Sep/06 at 14:32:17





Calibration Parameters

Metal	Calib. Mode	Fit Factor	Slope	Zero Offset	Starting Concentration	Concentration in Original Sample
As(III)	**Height**	0.998	0.454 ppb/nA	0 ppt	110 ppb	130 ppb
	Area	0.996	46.2 ppb/nC	0 ppt	100 ppb	120 ppb

JDD3N As+5
5X

Addition Data for Method of Standard Additions

Metal	Unknown Concentration	Concentration in original aliquot	1st Addition	2nd Addition	3rd Addition	Total added concentration
As(III)	111 ppb	132 ppb	3.00 uL (60.0 ppb)	4.80 uL (96.0 ppb)	5.30 uL (106 ppb)	262 ppb

x5
660 As(III+V)
-448 As(III)
212 As(V)

Starting Volume: 50.000 mL

Final Volume: 50.013 mL

TraceDetect Nano-Band Explorer

Sample ID: JDJ4V AsV

Trace Metals:

As(III): 6.97 ppb

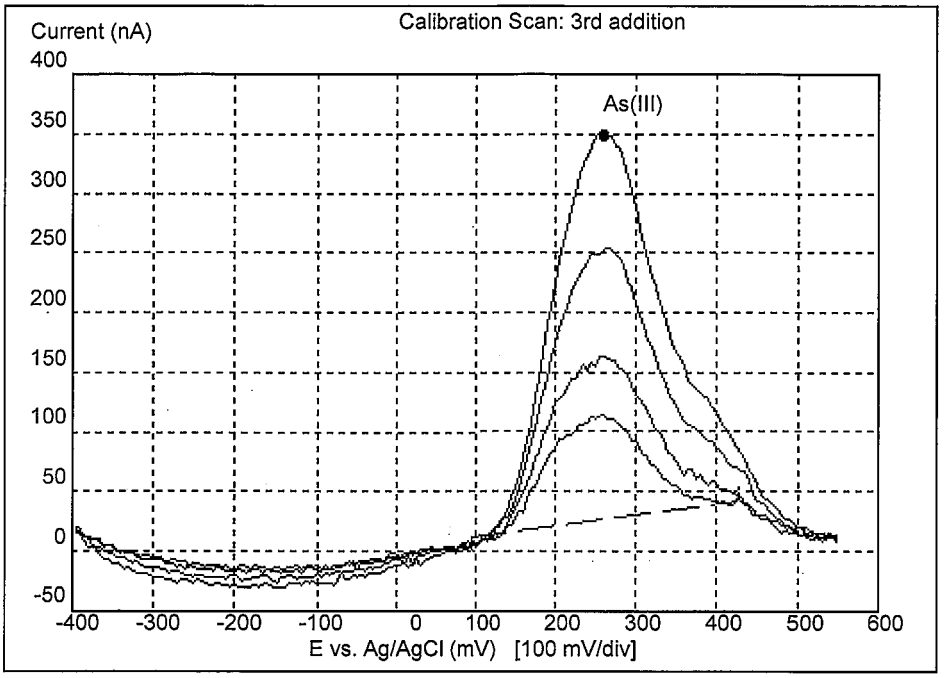
2.34

Temperature:

Input 1:

Input 2:

06/Sep/06 14:03:47



Settings:

Type:	ASV	Clean Time (S)	0.1	Signal Avg.	8
Waveform:	Staircase	Clean Voltage (mV):	600	Frequency (Hz):	2000
Cell	Three Electrode	Plate Time (S)	160	Start Voltage (mV):	-400
		Plate Voltage (mV)	-400	Stop Voltage (mV):	550
		Range (uA):	12.5	Step Voltage (mV):	5

☑ Background subtraction

Addition Data for Method of Standard Additions

Metal	Unknown Concentration	Concentration in original aliquot	1st Addition	2nd Addition	3rd Addition	Total added concentration
As(III)	1.97 ppb	2.34 ppb	50.0 uL (1.00 ppb)	100 uL (1.99 ppb)	100 uL (1.99 ppb)	4.98 ppb

J D JYV
As I

As^{+3} = ND

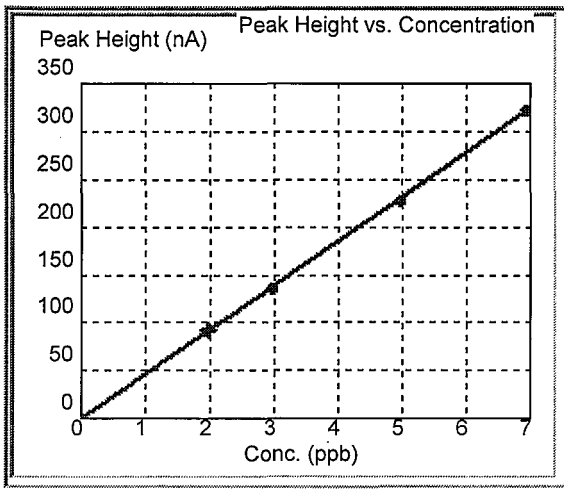
Starting Volume: 50.000 mL

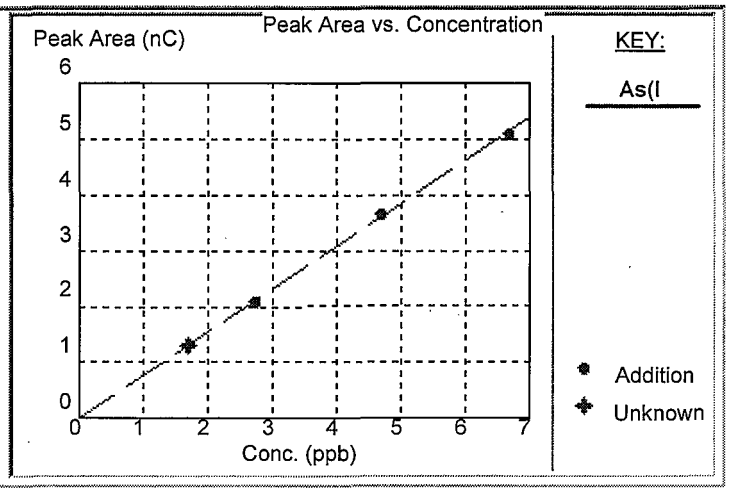
Final Volume: 50.250 mL

Calibration Summary:

JDJUV
AsJ

Calibration Date: 06/Sep/06 at 14:07:17





Calibration Parameters

Metal	Calib. Mode	Fit Factor	Slope	Zero Offset	Starting Concentration	Concentration in Original Sample	
As(III)	**Height**	1.000	0.022 ppb/nA	0 ppt	2.0 ppb	2.3 ppb	Selected Calibration M
	Area	0.999	1.29 ppb/nC	0 ppt	1.7 ppb	2.0 ppb	

TraceDetect Nano-Band Explorer

Sample ID: JDJ4V AsV MS

Trace Metals:

As(III): 63.7 ppb

24.1 ppb

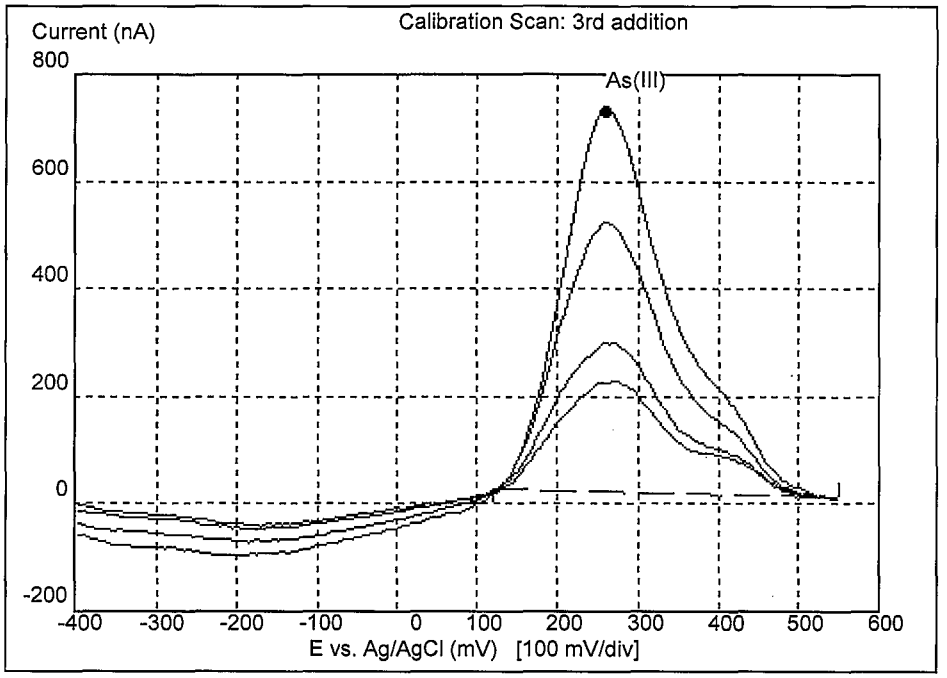
4x

Temperature:

Input 1:

Input 2:

06/Sep/06 13:32:15



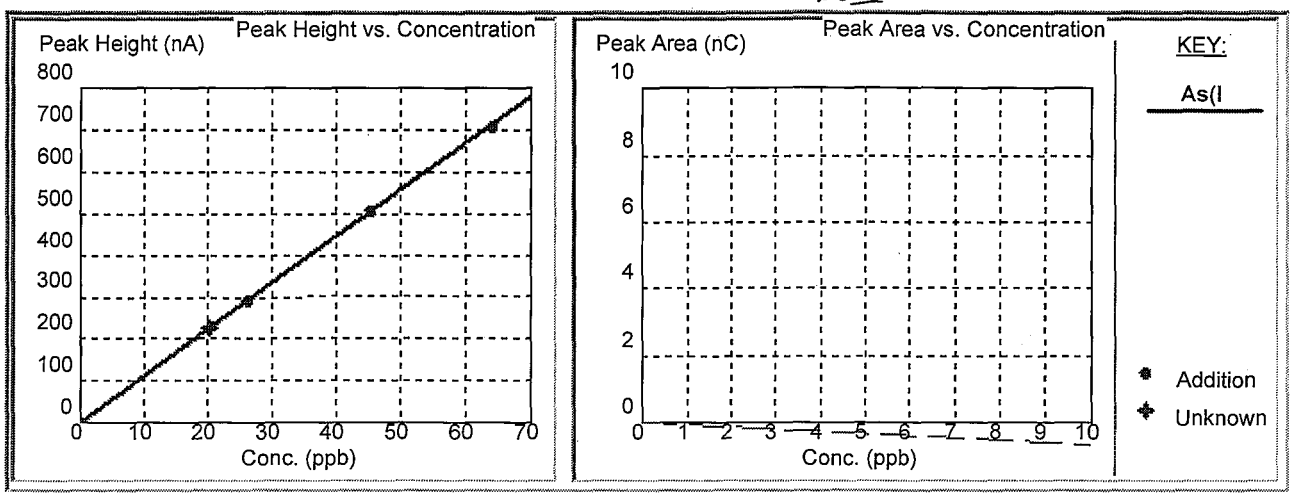
Settings:

Type:	ASV	Clean Time (S)	0.1	Signal Avg.	8
Waveform:	Staircase	Clean Voltage (mV):	600	Frequency (Hz):	2000
Cell	Three Electrode	Plate Time (S)	40	Start Voltage (mV):	-400
☑ Background subtraction		Plate Voltage (mV)	-400	Stop Voltage (mV):	550
		Range (uA):	12.5	Step Voltage (mV):	5

Calibration Summary:

JOJ4V MS
AsV

Calibration Date: 06/Sep/06 at 11:41:08



Calibration Parameters

Metal	Calib. Mode	Fit Factor	Slope	Zero Offset	Starting Concentration	Concentration in Original Sample
As(III)	**Height**	1.000	0.089 ppb/nA	0 ppt	20 ppb	24 ppb
	Area	0.215	-15 ppb/nC	0 ppt	-85 ppb	-100 ppb

Addition Data for Method of Standard Additions

IDJN

As V
MS

Metal	Unknown Concentration	Concentration in original aliquot	1st Addition	2nd Addition	3rd Addition	Total added concentration
As(III)	20.3 ppb	24.1 ppb	300 uL (5.96 ppb)	980 uL (19.1 ppb)	980 uL (18.8 ppb)	43.8 ppb

Starting Volume: 50.000 **mL**

Final Volume: 52.260 **mL**

TraceDetect Nano-Band Explorer

Sample ID: JDJ4V AsV MSD

06/Sep/06 13:39:31

Trace Metals:

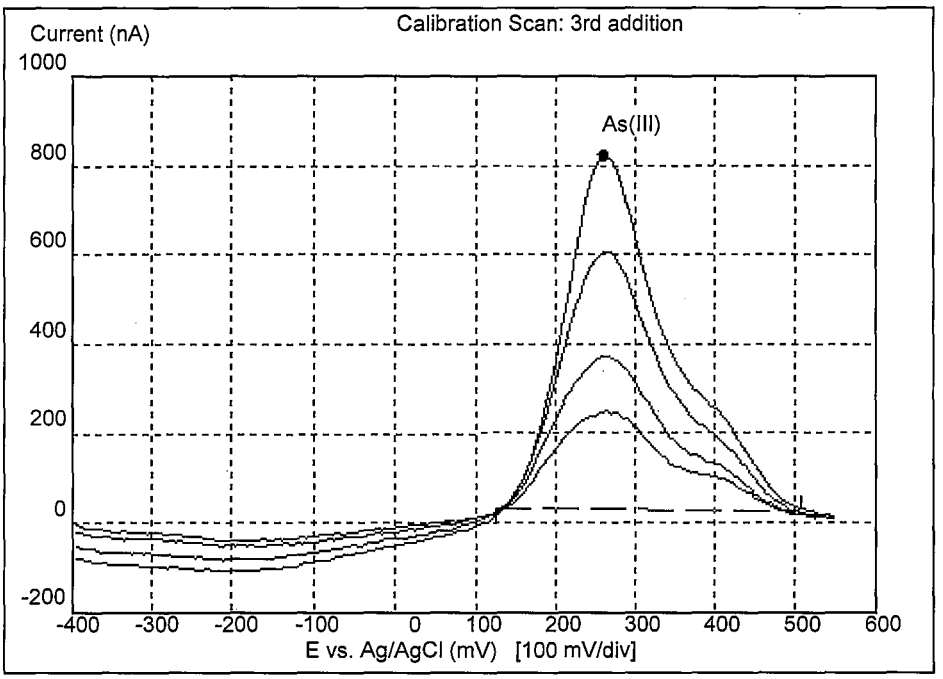
As(III): 68.3 ppb

24.5 ppb

Temperature:

Input 1:

Input 2:



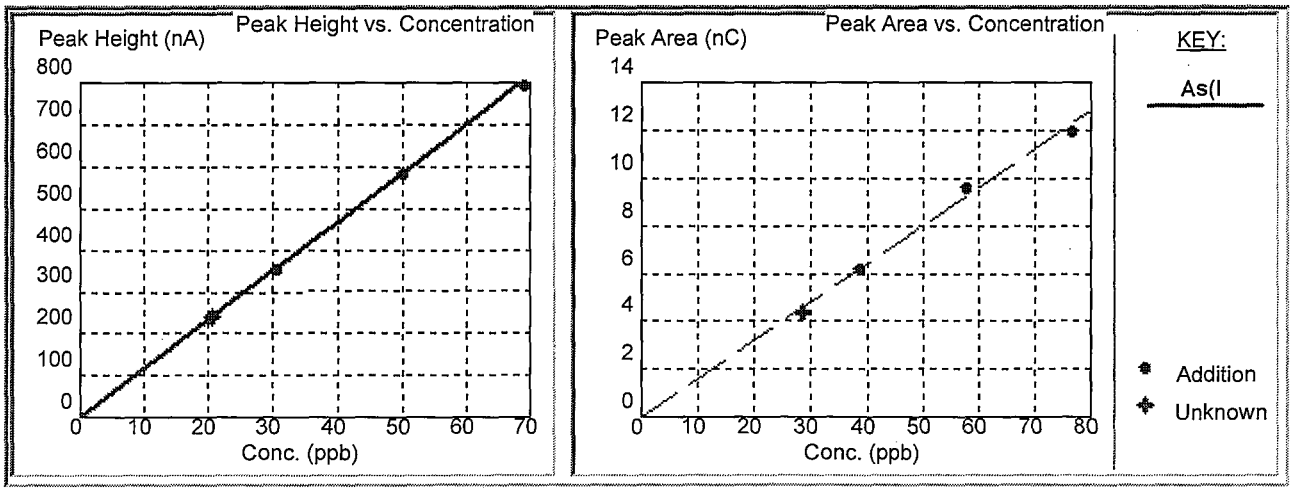
Settings:

Type:	ASV	Clean Time (S)	0.1	Signal Avg.	8
Waveform:	Staircase	Clean Voltage (mV):	600	Frequency (Hz):	2000
Cell	Three Electrode	Plate Time (S)	40	Start Voltage (mV):	-400
☑ Background subtraction		Plate Voltage (mV)	-400	Stop Voltage (mV):	550
		Range (uA):	12.5	Step Voltage (mV):	5

Calibration Summary:

JDJ4V AsI MSD

Calibration Date: 06/Sep/06 at 13:33:23



Calibration Parameters

Metal	Calib. Mode	Fit Factor	Slope	Zero Offset	Starting Concentration	Concentration in Original Sample
As(III)	**Height**	1.000	0.086 ppb/nA	0 ppt	21 ppb	24 ppb
	Area	0.993	6.24 ppb/nC	0 ppt	29 ppb	34 ppb

JDJYU AJJ
MSD

Addition Data for Method of Standard Additions

Metal	Unknown Concentration	Concentration in original aliquot	1st Addition	2nd Addition	3rd Addition	Total added concentration
As(III)	20.6 ppb	24.5 ppb	500 uL (9.90 ppb)	1.00 mL (19.4 ppb)	1.00 mL (19.0 ppb)	48.4 ppb

Starting Volume: 50.000 **mL**

Final Volume: 52.500 **mL**

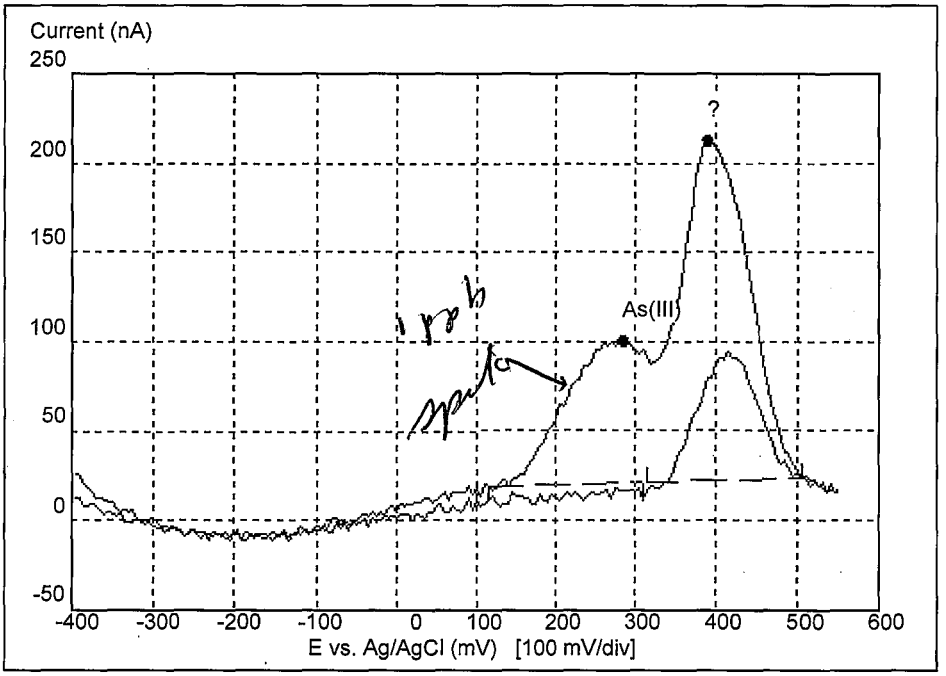
TraceDetect Nano-Band Explorer

Sample ID: Blank AsV with1ppbspike

Trace Metals:

As(III): 1.18 ppb

06/Sep/06 12:23:59



Temperature:

Input 1:

Input 2:

Settings:

Type:	ASV	Clean Time (S)	0.1	Signal Avg.	8
Waveform:	Staircase	Clean Voltage (mV):	600	Frequency (Hz):	2000
Cell	Three Electrode	Plate Time (S)	160	Start Voltage (mV):	-400
☑ Background subtraction		Plate Voltage (mV)	-400	Stop Voltage (mV):	550
		Range (uA):	12.5	Step Voltage (mV):	5

TraceDetect Nano-Band Explorer -

Sample ID: Blank AsV

Trace Metals:

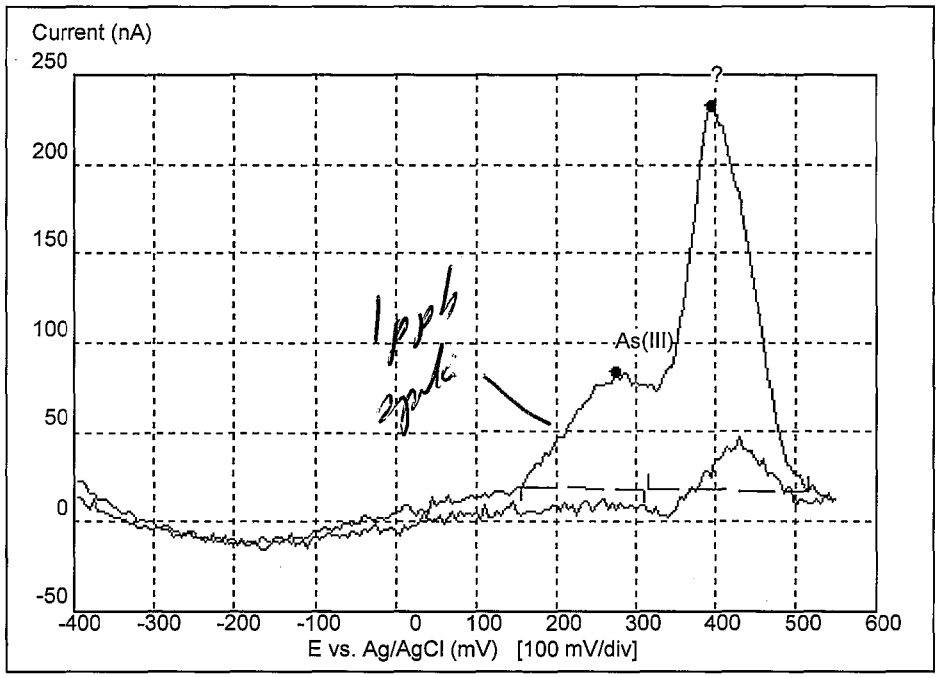
As(III): 962 ppt

Temperature:

Input 1:

Input 2:

06/Sep/06 12:10:19



Settings:

Type:	ASV	Clean Time (S)	0.1	Signal Avg.	8
Waveform:	Staircase	Clean Voltage (mV):	600	Frequency (Hz):	2000
Cell	Three Electrode	Plate Time (S)	160	Start Voltage (mV):	-400
		Plate Voltage (mV)	-400	Stop Voltage (mV):	550
		Range (uA):	12.5	Step Voltage (mV):	5

☑ Background subtraction

TraceDetect Nano-Band Explorer

Sample ID: LCS AsV

Trace Metals:

As(III): 511 nA

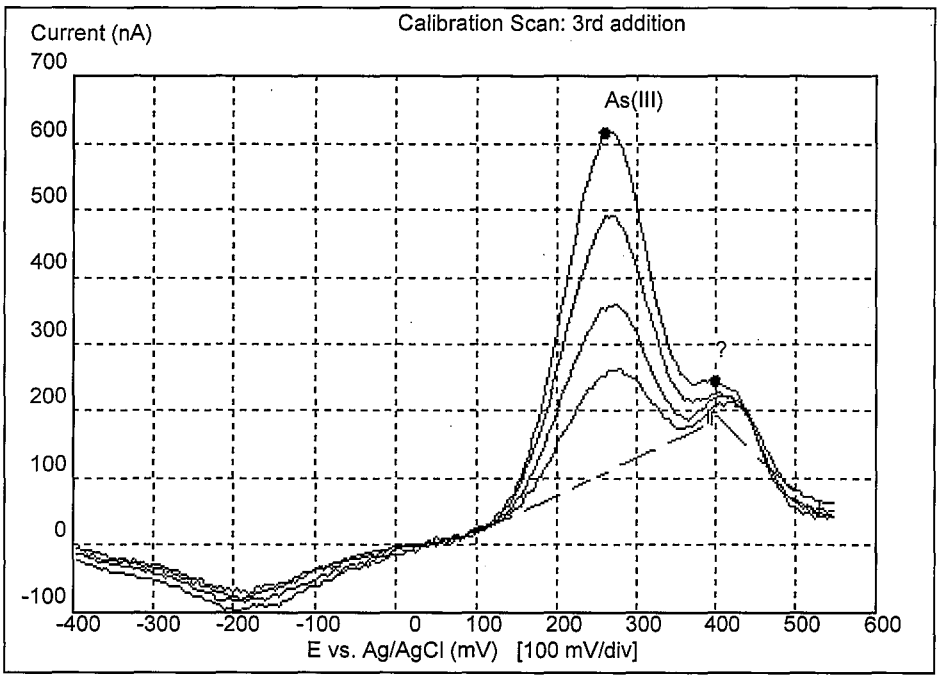
9.83

Temperature:

Input 1:

Input 2:

06/Sep/06 11:39:41



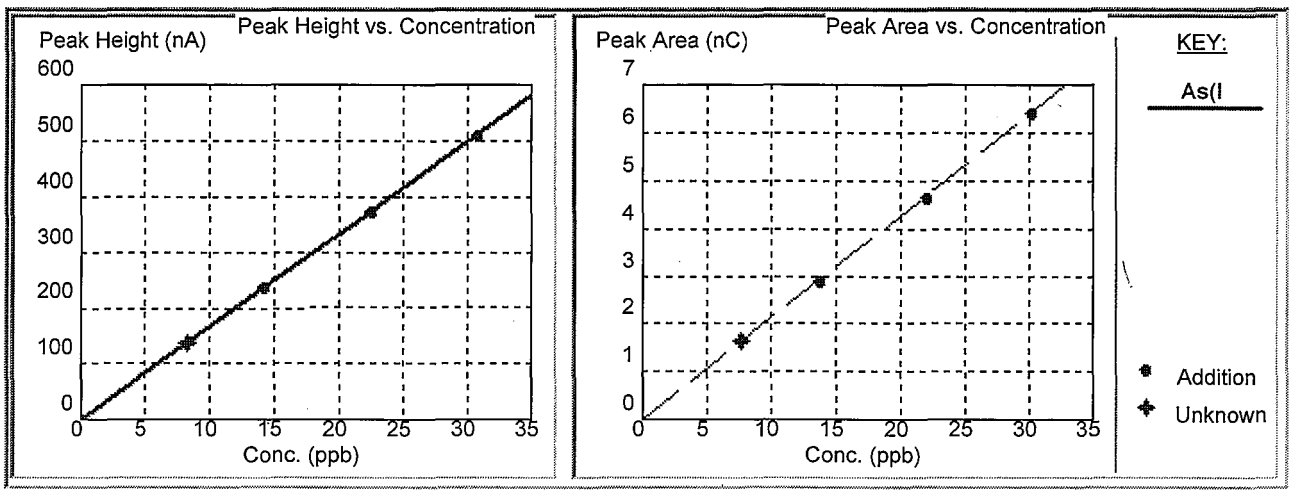
Settings:

Type:	ASV	Clean Time (S)	0.1	Signal Avg.	8
Waveform:	Staircase	Clean Voltage (mV):	600	Frequency (Hz):	2000
Cell	Three Electrode	Plate Time (S)	40	Start Voltage (mV):	-400
☑ Background subtraction		Plate Voltage (mV)	-400	Stop Voltage (mV):	550
		Range (uA):	12.5	Step Voltage (mV):	5

Calibration Summary:

LCS AsV

Calibration Date: 06/Sep/06 at 11:41:08



Calibration Parameters

Metal	Calib. Mode	Fit Factor	Slope	Zero Offset	Starting Concentration	Concentration in Original Sample	
As[III]	**Height**	1.000	0.060 ppb/nA	0 ppt	8.3 ppb	9.8 ppb	Selected Calibration M
	Area	1.000	4.69 ppb/nC	0 ppt	7.7 ppb	9.2 ppb	

LCS As#

Addition Data for Method of Standard Additions

Metal	Unknown Concentration	Concentration in original aliquot	1st Addition	2nd Addition	3rd Addition	Total added concentration
As(III)	8.26 ppb	9.83 ppb	300 uL (5.96 ppb)	420 uL (8.28 ppb)	420 uL (8.21 ppb)	22.5 ppb

Starting Volume: 50.000 mL

Final Volume: 51.140 mL

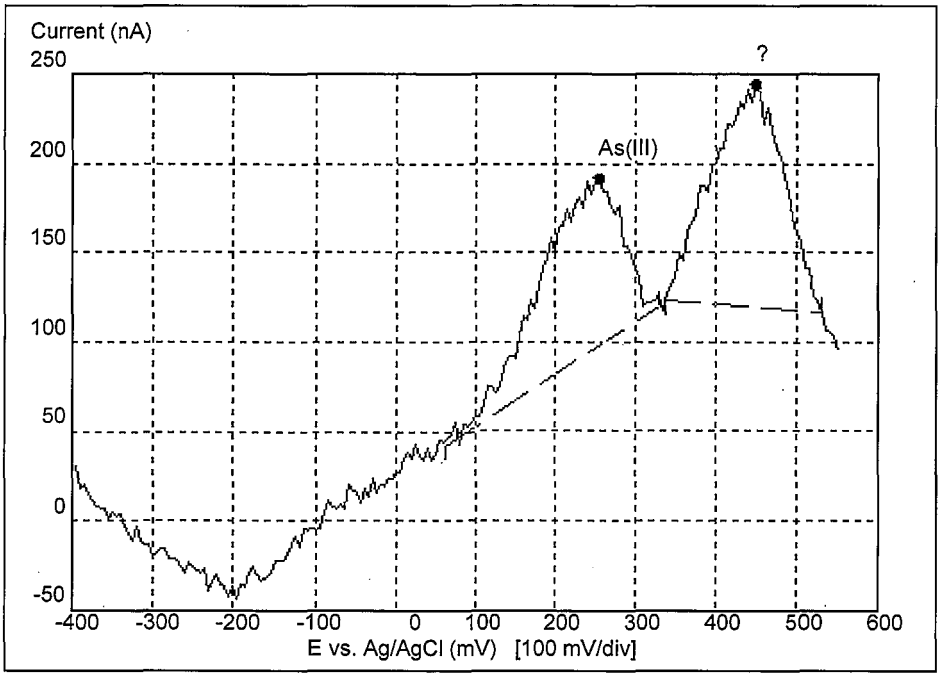
TraceDetect Nano-Band Explorer -

Sample ID: RL Check

Trace Metals:

As(III): 94.1 nA

06/Sep/06 11:28:09



Temperature:

Input 1:

Input 2:

Settings:

Type:	ASV	Clean Time (S)	0.1	Signal Avg.	8
Waveform:	Staircase	Clean Voltage (mV):	600	Frequency (Hz):	2000
Cell	Three Electrode	Plate Time (S)	160	Start Voltage (mV):	-400
		Plate Voltage (mV)	-400	Stop Voltage (mV):	550
		Range (uA):	12.5	Step Voltage (mV):	5

☑ Background subtraction

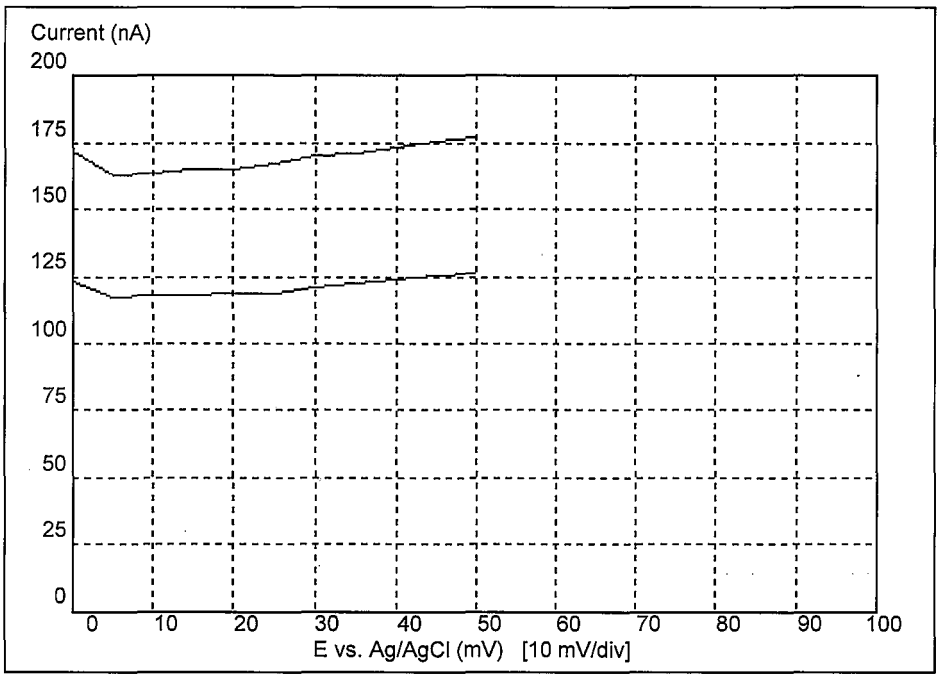
TraceDetect Nano-Band Explorer -

Sample ID: Au#61

Trace Metals:

As(III) < 7.0 nA

06/Sep/06 11:25:00



Temperature:

Input 1:

Input 2:

Settings:

Type:	ASV	Clean Time (S)	0	Signal Avg.	16
Waveform:	Sq. Wave	Clean Voltage (mV):	100	Frequency (Hz):	1000
Cell	Three Electrode	Plate Time (S)	55	Start Voltage (mV):	-50
		Plate Voltage (mV)	-50	Stop Voltage (mV):	5
		Range (uA):	1.25	Step Voltage (mV):	5

☐ Background subtraction

TraceDetect Nano-Band Explorer -

Sample ID: MSA Verification Std

06/Sep/06 10:57:53

Trace Metals:

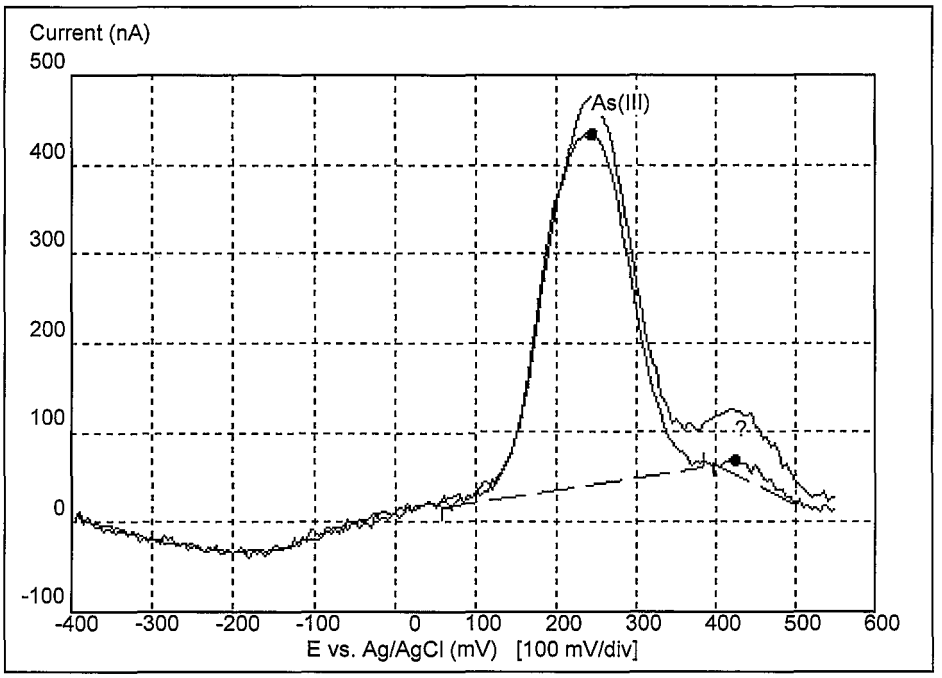
As(III): 394 nA

$\frac{394}{407} \times 100\% = 97\%$

Temperature:

Input 1:

Input 2:



Settings:

Type:	ASV	Clean Time (S)	0.1	Signal Avg.	8
Waveform:	Staircase	Clean Voltage (mV):	600	Frequency (Hz):	2000
Cell	Three Electrode	Plate Time (S)	40	Start Voltage (mV):	-400
☑ Background subtraction		Plate Voltage (mV)	-400	Stop Voltage (mV):	550
		Range (uA):	12.5	Step Voltage (mV):	5

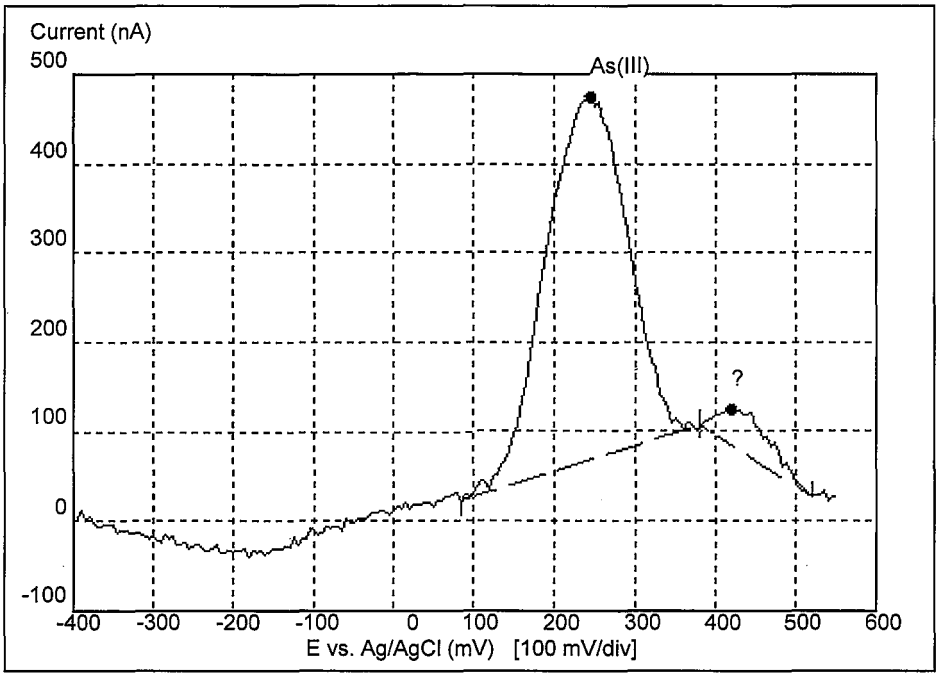
TraceDetect Nano-Band Explorer

Sample ID: MSA Working Std

Trace Metals:

As(III): 407 nA

06/Sep/06 10:55:54



Temperature:

Input 1:

Input 2:

Settings:

Type:	ASV	Clean Time (S)	0.1	Signal Avg.	8
Waveform:	Staircase	Clean Voltage (mV):	600	Frequency (Hz):	2000
Cell	Three Electrode	Plate Time (S)	40	Start Voltage (mV):	-400
☑ Background subtraction		Plate Voltage (mV)	-400	Stop Voltage (mV):	550
		Range (uA):	12.5	Step Voltage (mV):	5

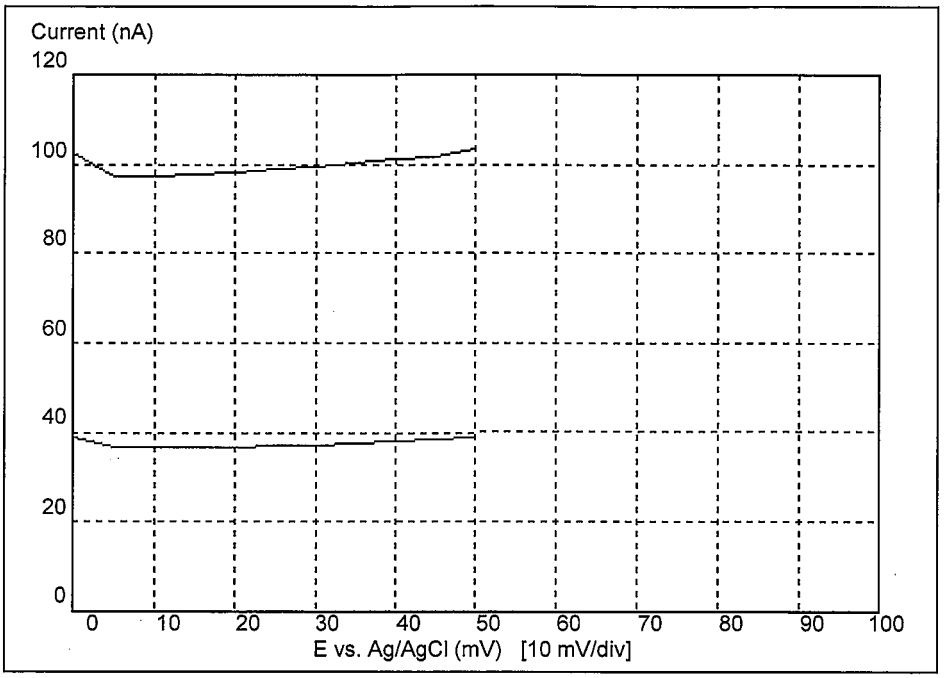
TraceDetect Nano-Band Explorer -

Sample ID: Au#56Plate_090606

Trace Metals:

As(III+V): 10.6 ppb

06/Sep/06 10:33:37



Temperature:

Input 1:

Input 2:

Settings:

Type:	ASV	Clean Time (S)	0	Signal Avg.	16
Waveform:	Sq. Wave	Clean Voltage (mV):	100	Frequency (Hz):	1000
Cell	Three Electrode	Plate Time (S)	55	Start Voltage (mV):	-50
☐ Background subtraction		Plate Voltage (mV)	-50	Stop Voltage (mV):	5
		Range (uA):	1.25	Step Voltage (mV):	5

STL North Canton

Sample Control Chain of Custody for General Chemistry

Lot Number	Sample	Suffix	Lab ID	Test	Prep Date	Prepared by
A6H250218	1		JC7CF1AA	Arsenic (III) Speciation by ASV	09/05/06	Loren Hazelwood
A6H250218	1		JC7CF1AC	Arsenic (V) Speciation by ASV	09/06/06	Loren Hazelwood
A6H250218	2		JC7CR1AA	Arsenic (III) Speciation by ASV	09/05/06	Loren Hazelwood
A6H250218	2		JC7CR1AC	Arsenic (V) Speciation by ASV	09/05/06	Loren Hazelwood
A6H250218	3		JC7CV1AA	Arsenic (III) Speciation by ASV	09/05/06	Loren Hazelwood
A6H250218	3		JC7CV1AC	Arsenic (V) Speciation by ASV	09/06/06	Loren Hazelwood
A6H250218	4		JC7C51AA	Arsenic (III) Speciation by ASV	09/05/06	Loren Hazelwood
A6H250218	4		JC7C51AC	Arsenic (V) Speciation by ASV	09/06/06	Loren Hazelwood
A6H250218	5		JDD3N1AA	Arsenic (III) Speciation by ASV	09/05/06	Loren Hazelwood
A6H250218	5		JDD3N1AC	Arsenic (V) Speciation by ASV	09/06/06	Loren Hazelwood

END OF REPORT

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SEVERN TRENT STL

STL North Canton
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www.stl-inc.com

ANALYTICAL REPORT

QUANTA RESOURCES (EDGEWATER)

Lot #: A6H290216

Amy Klopper

CH2M Hill Constructors Inc
3011 SW Williston RD.
Gainesville, FL 32608

SEVERN TRENT LABORATORIES, INC.

Patrick J. O'Meara
Project Manager

September 11, 2006

CASE NARRATIVE

CASE NARRATIVE

A6H290216

The following report contains the analytical results for one water sample submitted to STL North Canton by CH2M Hill Constructors, Inc. from the Quanta Resources (Edgewater) Site. The sample was received August 29, 2006, according to documented sample acceptance procedures.

STL utilizes USEPA approved methods in all analytical work. The sample presented in this report was analyzed for the parameter(s) listed on the analytical methods summary page in accordance with the method(s) indicated. Preliminary results were provided to Amy Klopper and Jennifer Simms on September 07, 2006. A summary of QC data for these analyses is included at the back of the report.

STL North Canton attests to the validity of the laboratory data generated by STL facilities reported herein. All analyses performed by STL facilities were done using established laboratory SOPs that incorporate QA/QC procedures described in the applicable methods. STL's operations groups have reviewed the data for compliance with the laboratory QA/QC plan, and data have been found to be compliant with laboratory protocols unless otherwise noted below.

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory.

If you have any questions, please call the Project Manager, Patrick J. O'Meara, at 330-497-9396.

This report is sequentially paginated. The final page of the report is labeled as "END OF REPORT."

SUPPLEMENTAL QC INFORMATION

SAMPLE RECEIVING

The temperature of the cooler upon sample receipt was 2.0°C.

GENERAL CHEMISTRY

The sample(s) had elevated reporting limits due to matrix interferences. Refer to the sample report pages for the affected analyte(s) flagged with "G".

QUALITY CONTROL ELEMENTS OF SW-846 METHODS

STL North Canton conducts a quality assurance/quality control (QA/QC) program designed to provide scientifically valid and legally defensible data. Toward this end, several types of quality control indicators are incorporated into the QA/QC program, which is described in detail in QA Policy, QA-003. These indicators are introduced into the sample testing process to provide a mechanism for the assessment of the analytical data.

QC BATCH

Environmental samples are taken through the testing process in groups called QUALITY CONTROL BATCHES (QC batches). A QC batch contains up to twenty environmental samples of a similar matrix (water, soil) that are processed using the same reagents and standards. STL North Canton requires that each environmental sample be associated with a QC batch.

Several quality control samples are included in each QC batch and are processed identically to the twenty environmental samples. These QC samples include a METHOD BLANK (MB), a LABORATORY CONTROL SAMPLE (LCS) and, where appropriate, a MATRIX SPIKE/MATRIX SPIKE DUPLICATE (MS/MSD) pair or a MATRIX SPIKE/SAMPLE DUPLICATE (MS/DU) pair. If there is insufficient sample to perform an MS/MSD or an MS/DU, then a LABORATORY CONTROL SAMPLE DUPLICATE (LCSD) is included in the QC batch.

LABORATORY CONTROL SAMPLE

The Laboratory Control Sample is a QC sample that is created by adding known concentrations of a full or partial set of target analytes to a matrix similar to that of the environmental samples in the QC batch. The LCS analyte recovery results are used to monitor the analytical process and provide evidence that the laboratory is performing the method within acceptable guidelines. All control analytes indicated by a bold type in the LCS must meet acceptance criteria. Failure to meet the established recovery guidelines requires the repreparation and reanalysis of all samples in the QC batch. The only exception is that if the LCS recoveries are biased high and the associated sample is ND (non-detected) for the parameter(s) of interest, the batch is acceptable.

At times, a Laboratory Control Sample Duplicate (LCSD) is also included in the QC batch. An LCSD is a QC sample that is created and handled identically to the LCS. Analyte recovery data from the LCSD is assessed in the same way as that of the LCS. The LCSD recoveries, together with the LCS recoveries, are used to determine the reproducibility (precision) of the analytical system. Precision data are expressed as relative percent differences (RPDs). If the RPD fails for an LCS/LCSD and yet the recoveries are within acceptance criteria, the batch is still acceptable.

METHOD BLANK

The Method Blank is a QC sample consisting of all the reagents used in analyzing the environmental samples contained in the QC batch. Method Blank results are used to determine if interference or contamination in the analytical system could lead to the reporting of false positive data or elevated analyte concentrations. All target analytes must be below the reporting limits (RL) or the associated sample(s) must be ND except under the following circumstances:

- Common organic contaminants may be present at concentrations up to 5 times the reporting limits. Common metals contaminants may be present at concentrations up to 2 times the reporting limit, or the reported blank concentration must be twenty fold less than the concentration reported in the associated environmental samples. (See common laboratory contaminants listed below.)
-

Volatile (GC or GC/MS)	Semivolatile (GC/MS)	Metals ICP-MS	Metals ICP Trace
Methylene Chloride, Acetone, 2-Butanone	Phthalate Esters	Copper, Iron, Zinc, Lead, Calcium, Magnesium, Potassium, Sodium, Barium, Chromium, Manganese	Copper, Iron, Zinc, Lead

- Organic blanks will be accepted if compounds detected in the blank are present in the associated samples at levels 10 times the blank level. Inorganic blanks will be accepted if elements detected in the blank are present in the associated samples at 20 times the blank level.

- Blanks will be accepted if the compounds/elements detected are not present in any of the associated environmental samples.

Failure to meet these Method Blank criteria requires the repreparation and reanalysis of all samples in the QC batch.

MATRIX SPIKE/MATRIX SPIKE DUPLICATE

A Matrix Spike and a Matrix Spike Duplicate are a pair of environmental samples to which known concentrations of a full or partial set of target analytes are added. The MS/MSD results are determined in the same manner as the results of the environmental sample used to prepare the MS/MSD. The analyte recoveries and the relative percent differences (RPDs) of the recoveries are calculated and used to evaluate the effect of the sample matrix on the analytical results. Due to the potential variability of the matrix of each sample, the MS/MSD results may not have an immediate bearing on any samples except the one spiked; therefore, the associated batch MS/MSD may not reflect the same compounds as the samples contained in the analytical report. When these MS/MSD results fail to meet acceptance criteria, the data is evaluated. If the LCS is within acceptance criteria, the batch is considered acceptable. The acceptance criteria do not apply to samples that are diluted for organics if the native sample amount is 4x the concentration of the spike.

For certain methods, a Matrix Spike/Sample Duplicate (MS/DU) may be included in the QC batch in place of the MS/MSD. For the parameters (i.e. pH, ignitability) where it is not possible to prepare a spiked sample, a Sample Duplicate may be included in the QC batch. However, a Sample Duplicate is less likely to provide usable precision statistics depending on the likelihood of finding concentrations below the standard reporting limit. When the Sample Duplicate result fails to meet acceptance criteria, the data is evaluated.

SURROGATE COMPOUNDS

In addition to these batch-related QC indicators, each organic environmental and QC sample is spiked with surrogate compounds. Surrogates are organic chemicals that behave similarly to the analytes of interest and that are rarely present in the environment. Surrogate recoveries are used to monitor the individual performance of a sample in the analytical system.

If surrogate recoveries are biased high in the LCS, LCSD, or the Method Blank, and the associated sample(s) are ND, the batch is acceptable. Otherwise, if the LCS, LCSD, or Method Blank surrogate(s) fail to meet recovery criteria, the entire sample batch is reprepped and reanalyzed. If the surrogate recoveries are outside criteria for environmental samples, the samples will be reprepped and reanalyzed unless there is objective evidence of matrix interference or if the sample dilution is greater than the threshold outlined in the associated method SOP.

For the GC/MS BNA methods, the surrogate criterion is that two of the three surrogates for each fraction must meet acceptance criteria. The third surrogate must have a recovery of ten percent or greater.

For the Pesticide, PCB, and PAH methods, the surrogate criterion is that one of two surrogate compounds must meet acceptance criteria.

STL North Canton Certifications and Approvals:

California (#01144CA), Connecticut (#PH-0590), Florida (#E87225),
Illinois (#200004), Kansas (#E10336), Minnesota (#39-999-348), New Jersey (#OH001), New York (#10975), Ohio (#6090), OhioVAP (#CL0024), Utah (#QUAN9), West Virginia (#210), Wisconsin (#999518190),NAVY, ARMY, USDA Soil Permit, ACIL Seal of Excellence – Participating Lab Status Award (#82)

C:\DOCUME~1\armans\LOCALS~1\Temp\Narrative_040306.docRevised 04/03/06 DJL

EXECUTIVE SUMMARY

EXECUTIVE SUMMARY - Detection Highlights

A6H290216

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
MW-114B-082606 08/26/06 09:05 001				
Arsenic (III)	2980	800	ug/L	SW846 7063

METHOD SUMMARY

ANALYTICAL METHODS SUMMARY

A6H290216

PARAMETER	ANALYTICAL METHOD
Arsenic (III) Speciation by ASV	SW846 7063
Arsenic (V) Speciation by ASV	SW846 7063

References:

SW846 "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 and its updates.

SAMPLE SUMMARY

SAMPLE SUMMARY

A6H290216

WO #	SAMPLE#	CLIENT SAMPLE ID	SAMPLED DATE	SAMP TIME
JDD18	001	MW-114B-082606	08/26/06	09:05

NOTE(S):

- The analytical results of the samples listed above are presented on the following pages.
- All calculations are performed before rounding to avoid round-off errors in calculated results.
- Results noted as "ND" were not detected at or above the stated limit.
- This report must not be reproduced, except in full, without the written approval of the laboratory.
- Results for the following parameters are never reported on a dry weight basis: color, corrosivity, density, flashpoint, ignitability, layers, odor, paint filter test, pH, porosity pressure, reactivity, redox potential, specific gravity, spot tests, solids, solubility, temperature, viscosity, and weight.

SHIPPING
AND
RECEIVING DOCUMENTS

Severn Trent Laboratories
4101 Shuffel Drive NW
North Canton, OH 44720
(330) 497-9396

Honeywell — Chain Of Custody / Analysis Request

AESI Ref:	38957.35026		
COC#	30916-082606-GW-B		
Lab Proj # (SDG):			
Lab ID	BR		
Site ID	Quanta		
Lab Job #			
Authorized User:	Honeywell		

Privileged & Confidential		Site Name:	Quanta Resources (Edgewater)
		Location of Site:	Edgewater, NJ
Phase:		Sampling Program	Quanta 2006 Groundwater
EDD To:	amy.klopper@ch2m.com, john.mitchell@ch2m.com		
Sampler:	Austin Hareclerode/CH2M HILL		
PO #		Preservative	9
Analysis Turnaround Time (TAT):	10		
Consultant	CH2M		
Full Report TAT:			

Sampling Co.:	CH2M HILL
Client Contact: (name, co., address)	Jennifer Simms 1700 Market Street, Suite 1600 Philadelphia, PA 19103
Preliminary Data To	amy.klopper@ch2m.com, jennifer.simms@ch2m.com
Sample Receipt Acknowledgement To	amy.klopper@ch2m.com, jennifer.simms@ch2m.com
Hard Copy To	Amy Klopper, 3011 Southwest Williston Road, Gainesville, FL 32608
Invoice To:	jennifer.simms@ch2m.com

Text & Excel File Drive | Excel & Text File Order

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	Sample Identification: Location ID	Start Depth (ft)	End Depth (ft)	Field Sample ID	Sample Date	Sample Time	Sample Type	Sample Matrix	Sample Purpose	# of Cont.	Composite/Grab	Field Filtered Sample ?	E1632 - Arsenic Speciation	Sampling Method (code)	Lab Sample Numbers
											Units				
1	MW-114B			MW-114B-082606	8/26/2006	9:05	GW	WATER	REG	1	grab	N	X	BladPump	
2															
3															
4															
5															
6															
7															
8															
9															
10															
11															
12															

SW6010^LLI

Relinquished by	Company	CH2M HILL	Received by	Company		Condition		Custody Seals Intact	
	Date/Time	4/29/06 0900		Date/Time	8/29/06 0920	Cooler Temp.			
Relinquished by	Company		Received by	Company		Condition		Custody Seals Intact	
	Date/Time			Date/Time		Cooler Temp.			

Preservatives: (Other; Specify):

0 (none); 1 (4 Deg C); 2 (HCl pH<2); 3 (HNO3 pH<2); 4 (H2SO4 pH<2); 5 (NaOH pH>12); 6 (NaOH, Zn Acetate); 7 (H2SO4 (pH<2), 4 Deg C)); 8 (HCl pH<2); 9 (HCl 4 Deg C); 10 (HNO3 (pH<2), 4Deg C); 11 (4C NaOH (pH>12) & Ascorbic Acid); 12 (4C H2SO4 (pH<2) & Na2S2O3); 13 (Zn Acetate); sp (special instructions)

STL Cooler Receipt Form/Narrative **Lot Number:** AH29021C
North Canton Facility

Client: Honeywell Project: _____ Quote#: 71914
Cooler Received on: 8-29-06 Opened on: 8-29 by: [signature] (Signature)
Fedx ☒ Client Drop Off ☐ UPS ☐ DHL ☐ FAS ☐ STL Courier ☐
Stetson ☐ US Cargo ☐ Other: _____
STL Cooler No# _____ Foam Box ☐ Client Cooler ☒ Other _____

1. Were custody seals on the outside of the cooler? Yes ☐ No ☒ Intact? Yes ☐ No ☐ NA ☒
   If YES, Quantity _____
   Were the custody seals signed and dated? Yes ☐ No ☐ NA ☒
2. Shipper's packing slip attached to this form? Yes ☒ No ☐ NA ☐
3. Did custody papers accompany the samples? Yes ☒ No ☐ Relinquished by client? Yes ☒ No ☐
4. Did you sign the custody papers in the appropriate place? Yes ☒ No ☐
5. Packing material used: Bubble Wrap ☐ Foam ☐ None ☒ Other: _____
6. Cooler temperature upon receipt 2.0 °C (see back of form for multiple coolers/temp)

METHOD: Temp Vial ☐ Coolant & Sample ☐ Against Bottles ☐ IR ☒ ICE/H_2O Slurry ☐
COOLANT: Wet Ice ☒ Blue Ice ☐ Dry Ice ☐ Water ☐ None ☐

7. Did all bottles arrive in good condition (Unbroken)? Yes ☒ No ☐
8. Could all bottle labels and/or tags be reconciled with the COC? Yes ☒ No ☐
9. Were samples at the correct pH? (record below/on back) Yes ☒ No ☐ NA ☐
10. Were correct bottles used for the tests indicated? Yes ☒ No ☐
11. Were air bubbles >6 mm in any VOA vials? Yes ☐ No ☐ NA ☒
12. Sufficient quantity received to perform indicated analyses? Yes ☒ No ☐
13. Was a Trip Blank present in the cooler? Yes ☐ No ☒ Were VOAs on the COC? Yes ☐ No ☒
14. Does the trip blank number match the cooler number in which it was received? Yes ☐ No ☐ NA ☒

Contacted PM _____ Date: _____ by: _____ via Voice Mail ☐ Verbal ☐ Other ☐
Concerning:

√

1. CHAIN OF CUSTODY

The following discrepancies occurred:

2. SAMPLE CONDITION

Sample(s) _____ were received after the recommended holding time had expired.
Sample(s) _____ were received in a broken container.

3. SAMPLE PRESERVATION

Sample(s) _____ were further preserved in sample receiving to meet recommended pH level(s). *Nitric Acid Lot #* 122805-*HNO3; Sulfuric Acid Lot #* 100405-*H2SO4; Sodium Hydroxide Lot #* -100405 -*NaOH; Hydrochloric Acid Lot #* 100504-*HCl; Sodium Hydroxide and Zinc Acetate Lot #* 071604-*CH3COO2ZN/NaOH*
Sample(s) _____ were received with bubble > 6 mm in diameter (cc: PM)

4. Other (see below or back)

Client ID	pH	Date	Initials
MW-114B	<2	8-29-06	[initials]

STL Cooler Receipt Form/Narrative
North Canton Facility

Client ID	pH	Date	Initials

Cooler	Temp	Method	Coolant

Discrepancies Cont.

GENERAL CHEMISTRY DATA

SAMPLE DATA

CH2M Hill Constructors, Inc.

Client Sample ID: MW-114B-082606

General Chemistry

Lot-Sample #...: A6H290216-001 **Work Order #...:** JDD18 **Matrix.....:** WG
Date Sampled...: 08/26/06 09:05 **Date Received..:** 08/29/06

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Arsenic (III)	**2980**	**800**	**ug/L**	**SW846 7063**	**09/05/06**	**6249061**
		Dilution Factor: 400				
Arsenic (V)	ND G	800	ug/L	SW846 7063	09/06/06	6249409
		Dilution Factor: 400				

NOTE(S):

RL Reporting Limit

G Elevated reporting limit. The reporting limit is elevated due to matrix interference.

METHOD BLANK REPORT

General Chemistry

Client Lot #...: A6H290216 **Matrix.....:** WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Arsenic (III)		Work Order #: JDQMJ1AA		MB Lot-Sample #:	A6I060000-061	
	ND	2.0	ug/L	SW846 7063	09/05/06	6249061
		Dilution Factor: 1				
Arsenic (V)		Work Order #: JDR521AA		MB Lot-Sample #:	A6I060000-409	
	ND	2.0	ug/L	SW846 7063	09/06/06	6249409
		Dilution Factor: 1				

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

General Chemistry

Client Lot #...: A6H290216 **Matrix.....:** WATER

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Arsenic (III)		Work Order #: JDQMJ1AC	LCS Lot-Sample#: A6I060000-061		
	72	(25 - 130)	SW846 7063	09/05/06	6249061
		Dilution Factor: 1			
Arsenic (V)		Work Order #: JDR521AC	LCS Lot-Sample#: A6I060000-409		
	49	(25 - 130)	SW846 7063	09/06/06	6249409
		Dilution Factor: 1			

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE DATA REPORT

General Chemistry

Client Lot #...: A6H290216 **Matrix.....:** WATER

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCNT RECVRY	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Arsenic (III)			Work Order #: JDQMJ1AC		LCS Lot-Sample#:	A6I060000-061	
	20.0	14.3	ug/L	72	SW846 7063	09/05/06	6249061
			Dilution Factor: 1				
Arsenic (V)			Work Order #: JDR521AC		LCS Lot-Sample#:	A6I060000-409	
	20.0	9.8	ug/L	49	SW846 7063	09/06/06	6249409
			Dilution Factor: 1				

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

MATRIX SPIKE SAMPLE EVALUATION REPORT

General Chemistry

Client Lot #...: A6H290216 **Matrix.....:** WATER
Date Sampled...: 08/30/06 09:30 **Date Received..:** 08/31/06

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Arsenic (III)		WO#: JDJ4V1AD-MS/JDJ4V1AE-MSD				MS Lot-Sample #: A6H310394-001	
	52	(25 - 130)			SW846 7063	09/05/06	6249061
	65	(25 - 130)	23	(0-50)	SW846 7063	09/05/06	6249061
		Dilution Factor: 1					
Arsenic (V)		WO#: JDJ4V1AF-MS/JDJ4V1AG-MSD				MS Lot-Sample #: A6H310394-001	
	109	(25 - 130)			SW846 7063	09/06/06	6249409
	111	(25 - 130)	1.6	(0-50)	SW846 7063	09/06/06	6249409
		Dilution Factor: 1					

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

MATRIX SPIKE SAMPLE DATA REPORT

General Chemistry

Client Lot #...: A6H290216 **Matrix.....:** WATER
Date Sampled...: 08/30/06 09:30 **Date Received..:** 08/31/06

PARAMETER	SAMPLE AMOUNT	SPIKE AMT	MEASRD AMOUNT	UNITS	PERCNT RECVRY	RPD	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Arsenic (III)			WO#: JDJ4V1AD-MS/JDJ4V1AE-MSD				MS Lot-Sample #: A6H310394-001		
	ND	20.0	10.3	ug/L	52		SW846 7063	09/05/06	6249061
	ND	20.0	13.0	ug/L	65	23	SW846 7063	09/05/06	6249061
			Dilution Factor: 1						
Arsenic (V)			WO#: JDJ4V1AF-MS/JDJ4V1AG-MSD				MS Lot-Sample #: A6H310394-001		
	2.3	20.0	24.1	ug/L	109		SW846 7063	09/06/06	6249409
	2.3	20.0	24.5	ug/L	111	1.6	SW846 7063	09/06/06	6249409
			Dilution Factor: 1						

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

SUPPORTIVE RAW DATA

STL North Canton Arsenic (III) Data Review Checklist

Run/Project Information

Run Date: 9/5/06 **Analyst:** LKH **Instrument:** _____

Prep Batches Run: 624906 / 62163

Methods used: **7063 mod :** NC-WC-000X Rev 1

Review Items

A. Instrument Setup	Yes	No	N/A	2ndLevel
1. Electrode sensitivity check?	✓			✓
2. MSA working standard and verification standard within control limits?	✓			✓
3. Cleanliness check (ICB) within +/- RL?	✓			✓
B. Sample Results				
1. Were non-detect samples verified with single point MSA?	✓			✓
2. All samples with As(III) quantified with 3-4 point MSA?	✓			✓
3. Sample analyses done within holding time?	✓			✓
C. Preparation/Matrix QC				
1. Samples preserved in the field?	✓			✓
2. LCS done per prep batch and within QC limits?	✓			✓
3. Method blank done per prep batch and < RL?	✓			✓
4. MS run at required frequency (1 per 20 samples) and within limits?	✓			✓
5. MSD or DU run at required frequency (1 per 20 samples) and RPD within limits?	✓			✓
D. Other				
1. Are all nonconformances documented appropriately?			✓	✓
2. Current MDL data on file?	✓			✓
3. Calculations and Transcriptions checked for error?	✓			✓
4. All client/ project specific requirements met?	✓			✓
5. Date of analysis verified as correct?	✓			✓

Analyst: [signature] **Date:** 9/6/06

Comments:

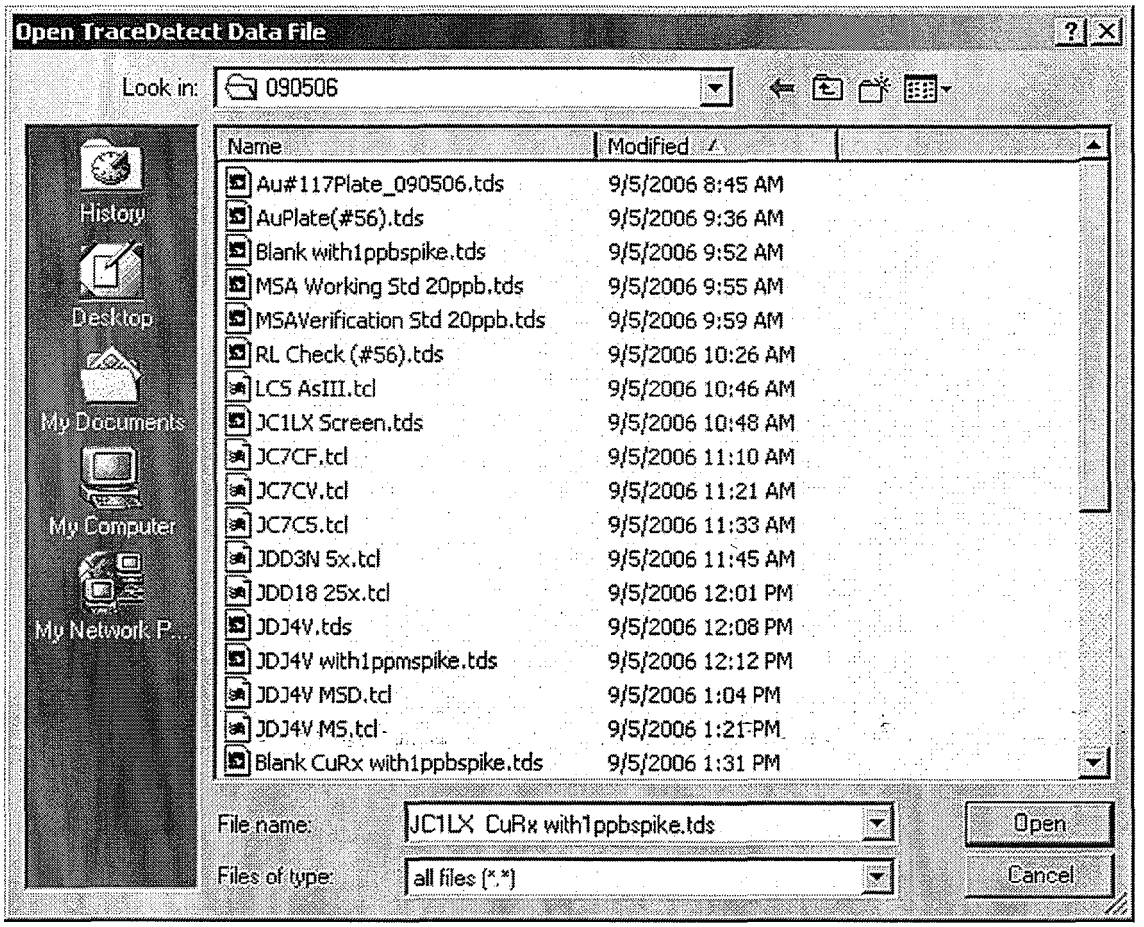
2nd Level Reviewer: [signature] **Date:** 9/6/06

Standard, Reagent and Supply Numbers

MSA Working Std AS6053 **MSA Verification Std** AS6054 **MS As(V) Std** AS6055

Au plate soln WR60945 **conc HCl** WR 60283 **Cu Remover** ~~#112267~~ STR 300 **C18** —

Acid ext — **Basic ext** —


Open TraceDetect Data File
Look in: 090506
History
Desktop
My Documents
My Computer
My Network P...
Name
Modified
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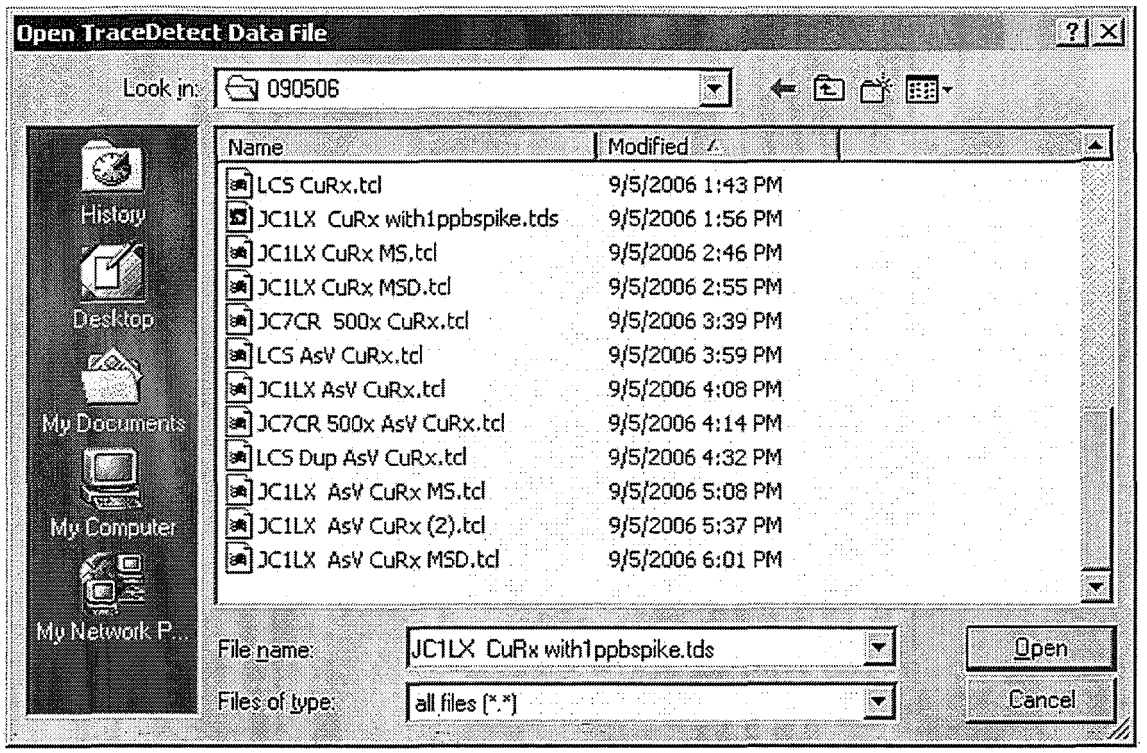
AuPlate(#56).tds 9/5/2006 9:36 AM
Blank with1ppbspike.tds 9/5/2006 9:52 AM
MSA Working Std 20ppb.tds 9/5/2006 9:55 AM
MSAVerification Std 20ppb.tds 9/5/2006 9:59 AM
RL Check (#56).tds 9/5/2006 10:26 AM
LCS AsIII.tcl 9/5/2006 10:46 AM
JC1LX Screen.tds 9/5/2006 10:48 AM
JC7CF.tcl 9/5/2006 11:10 AM
JC7CV.tcl 9/5/2006 11:21 AM
JC7C5.tcl 9/5/2006 11:33 AM
JDD3N 5x.tcl 9/5/2006 11:45 AM
JDD18 25x.tcl 9/5/2006 12:01 PM
JDJ4V.tds 9/5/2006 12:08 PM
JDJ4V with1ppmspike.tds 9/5/2006 12:12 PM
JDJ4V MSD.tcl 9/5/2006 1:04 PM
JDJ4V MS.tcl 9/5/2006 1:21 PM
Blank CuRx with1ppbspike.tds 9/5/2006 1:31 PM
File name: JC1LX CuRx with1ppbspike.tds
Files of type: all files (*.*)
Open
Cancel


Open TraceDetect Data File
Look in:
090506
History
Desktop
My Documents
My Computer
My Network P...
Name
Modified
LCS CuRx.tcl 9/5/2006 1:43 PM
JC1LX CuRx with1ppbspike.tds 9/5/2006 1:56 PM
JC1LX CuRx MS.tcl 9/5/2006 2:46 PM
JC1LX CuRx MSD.tcl 9/5/2006 2:55 PM
JC7CR 500x CuRx.tcl 9/5/2006 3:39 PM
LCS AsV CuRx.tcl 9/5/2006 3:59 PM
JC1LX AsV CuRx.tcl 9/5/2006 4:08 PM
JC7CR 500x AsV CuRx.tcl 9/5/2006 4:14 PM
LCS Dup AsV CuRx.tcl 9/5/2006 4:32 PM
JC1LX AsV CuRx MS.tcl 9/5/2006 5:08 PM
JC1LX AsV CuRx (2).tcl 9/5/2006 5:37 PM
JC1LX AsV CuRx MSD.tcl 9/5/2006 6:01 PM
File name:
JC1LX CuRx with1ppbspike.tds
Files of type:
all files (*.*)
Open
Cancel

TraceDetect Nano-Band Explorer

Sample ID: JC7CF

Trace Metals:

As(III): 57.1 ppb

23.1 ppb

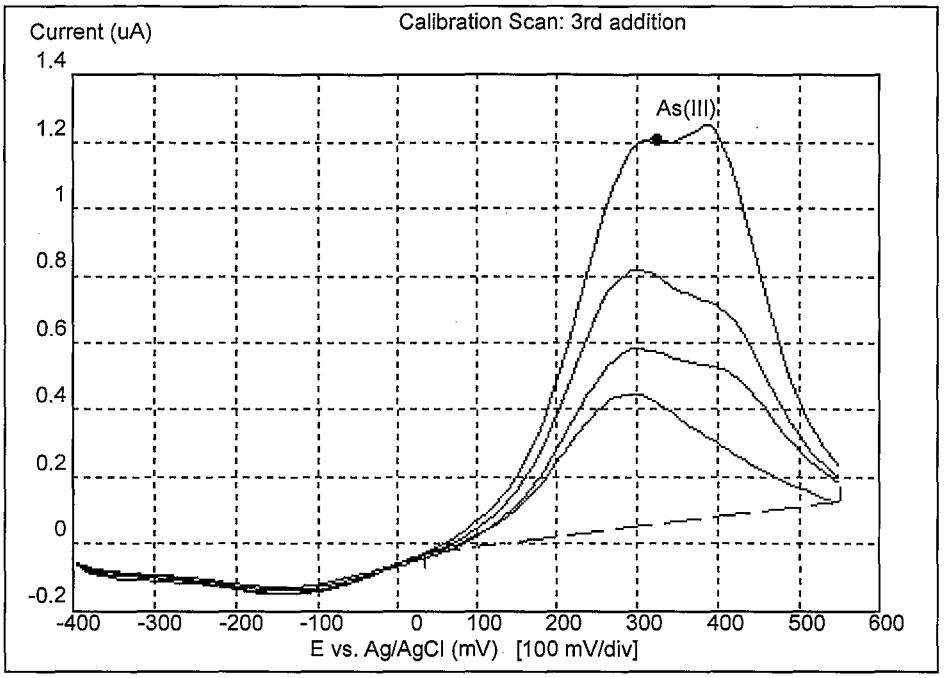
2X

Temperature:

Input 1:

Input 2:

05/Sep/06 11:07:24



Settings:

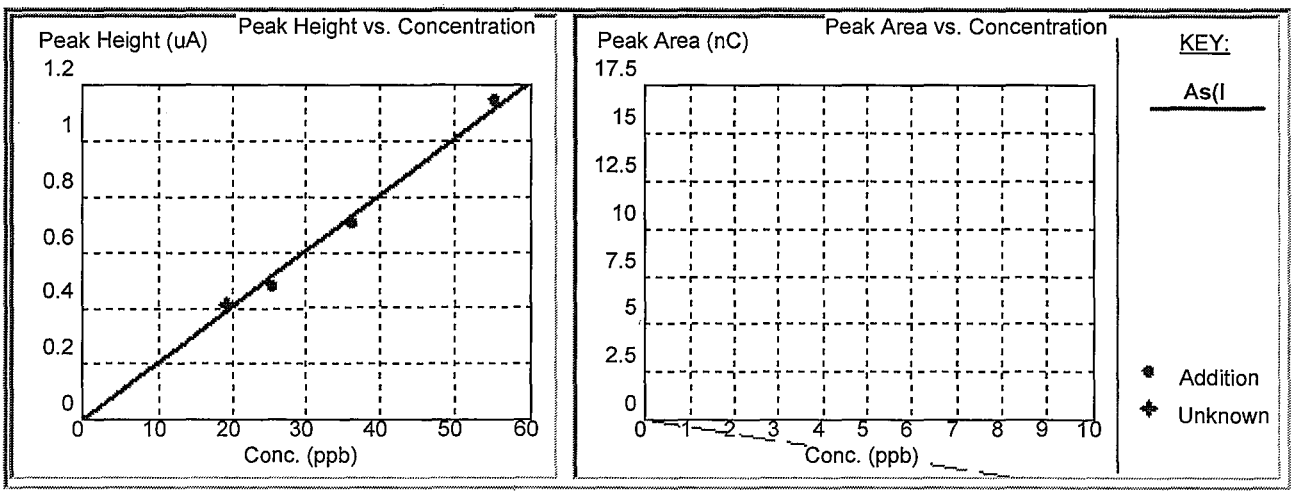
Type:	ASV	Clean Time (S)	0.1	Signal Avg.	8
Waveform:	Staircase	Clean Voltage (mV):	600	Frequency (Hz):	2000
Cell	Three Electrode	Plate Time (S)	80	Start Voltage (mV):	-400
		Plate Voltage (mV)	-400	Stop Voltage (mV):	550
		Range (uA):	12.5	Step Voltage (mV):	5

☑ Background subtraction

Calibration Summary:

Calibration Date: 05/Sep/06 at 10:46:15

JC7CF



Calibration Parameters

Metal	Calib. Mode	Fit Factor	Slope	Zero Offset	Starting Concentration	Concentration in Original Sample
As[III]	**Height**	0.995	0.050 ppb/nA	0 ppt	19 ppb	23 ppb
	Area	0.361	-3 ppb/nC	0 ppt	-38 ppb	-45 ppb

Addition Data for Method of Standard Additions

JC72F

Metal	Unknown Concentration	Concentration in original aliquot	1st Addition	2nd Addition	3rd Addition	Total added concentration
As(III)	19.4 ppb	23.1 ppb	300 uL (5.96 ppb)	540 uL (10.6 ppb)	1.00 mL (19.3 ppb)	35.9 ppb

Starting Volume: 50.000 **mL**

Final Volume: 51.840 **mL**

TraceDetect Nano-Band Explorer

Sample ID: JC7CV

Trace Metals:

As(III): 363 ppb

119 ppb

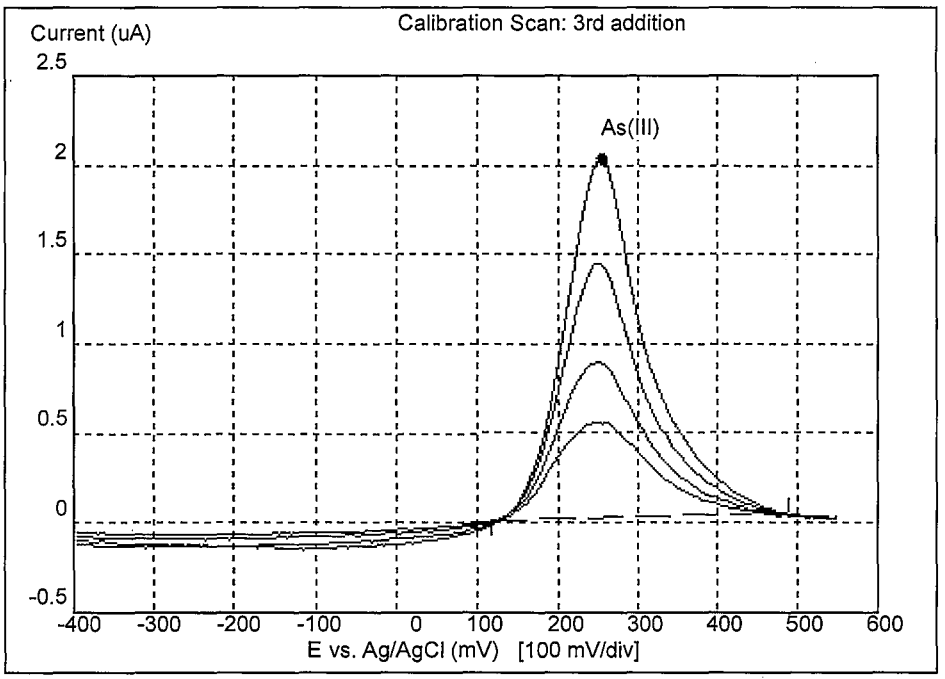
16X

Temperature:

Input 1:

Input 2:

05/Sep/06 11:19:24



Settings:

Type:	ASV	Clean Time (S)	0.1	Signal Avg.	8
Waveform:	Staircase	Clean Voltage (mV):	600	Frequency (Hz):	2000
Cell	Three Electrode	Plate Time (S)	10	Start Voltage (mV):	-400
		Plate Voltage (mV)	-400	Stop Voltage (mV):	550
		Range (uA):	12.5	Step Voltage (mV):	5

☑ Background subtraction

Addition Data for Method of Standard Additions J C7C V

Metal	Unknown Concentration	Concentration in original aliquot	1st Addition	2nd Addition	3rd Addition	Total added concentration
As(III)	100 ppb	119 ppb	3.00 uL (60.0 ppb)	5.00 uL (100 ppb)	5.00 uL (100 ppb)	260 ppb

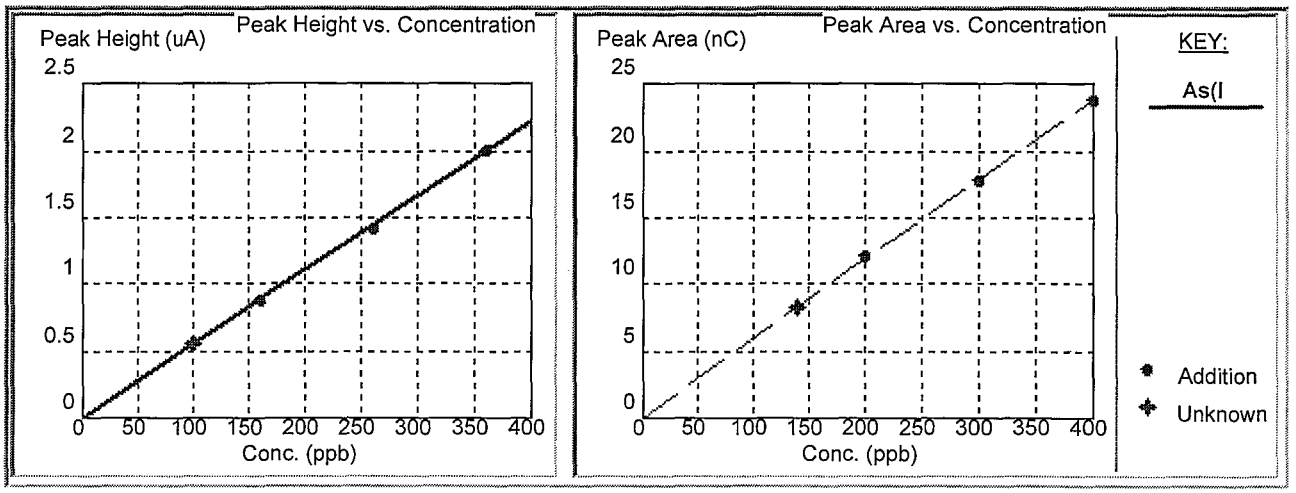
Starting Volume: 50.000 mL

Final Volume: 50.013 mL

Calibration Summary:

JC7CV

Calibration Date: 05/Sep/06 at 11:10:30



Calibration Parameters

Metal	Calib. Mode	Fit Factor	Slope	Zero Offset	Starting Concentration	Concentration in Original Sample
As[III]	**Height**	1.000	0.181 ppb/nA	0 ppt	100 ppb	120 ppb
	Area	1.000	16.7 ppb/nC	0 ppt	140 ppb	170 ppb

TraceDetect Nano-Band Explorer

Sample ID: JC7C5

Trace Metals:

As(III): 45.4 ppb

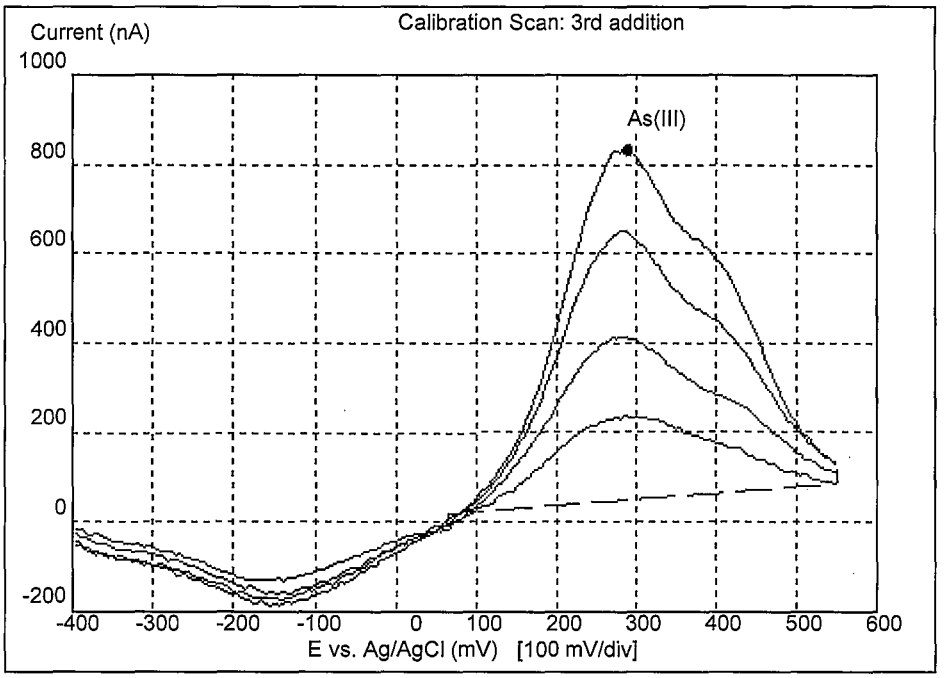
13.1 ppb

Temperature:

Input 1:

Input 2:

05/Sep/06 11:32:07



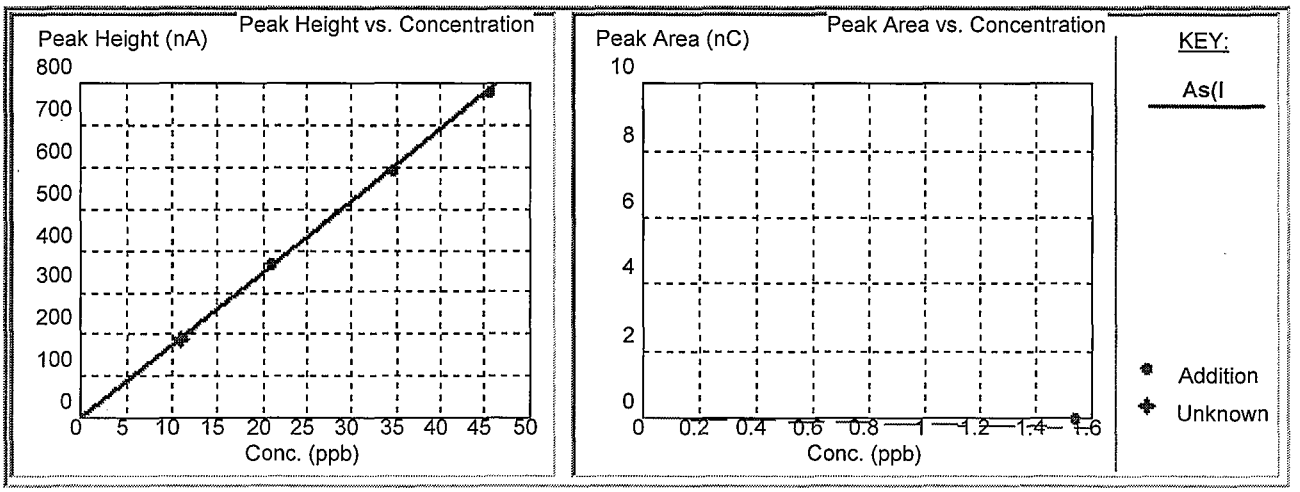
Settings:

Type:	ASV	Clean Time (S)	0.1	Signal Avg.	8
Waveform:	Staircase	Clean Voltage (mV):	600	Frequency (Hz):	2000
Cell	Three Electrode	Plate Time (S)	40	Start Voltage (mV):	-400
☑ Background subtraction		Plate Voltage (mV)	-400	Stop Voltage (mV):	550
		Range (uA):	12.5	Step Voltage (mV):	5

Calibration Summary:

Calibration Date: 05/Sep/06 at 11:21:20

JE7C5



Calibration Parameters

Metal	Calib. Mode	Fit Factor	Slope	Zero Offset	Starting Concentration	Concentration in Original Sample
As[III]	**Height**	1.000	0.058 ppb/nA	0 ppt	11 ppb	13 ppb
	Area	0.518	-5 ppb/nC	0 ppt	-33 ppb	-39 ppb

Addition Data for Method of Standard Additions

JC7C5

Metal	Unknown Concentration	Concentration in original aliquot	1st Addition	2nd Addition	3rd Addition	Total added concentration
As(III)	11.0 ppb	13.1 ppb	500 uL (9.90 ppb)	700 uL (13.7 ppb)	570 uL (11.0 ppb)	34.6 ppb

Starting Volume: 50.000 **mL**

Final Volume: 51.770 **mL**

TraceDetect Nano-Band Explorer

Sample ID: JDD3N 5x

Trace Metals:

As(III): 299 ppb

448 ppb

80x

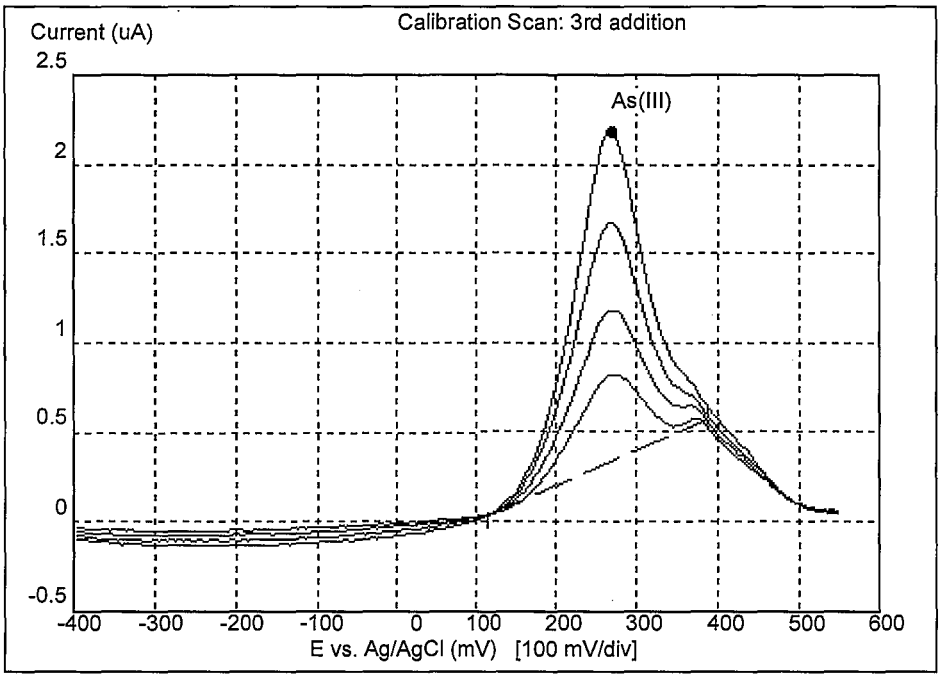
RL=160

Temperature:

Input 1:

Input 2:

05/Sep/06 11:44:59



Settings:

Type:	ASV	Clean Time (S)	0.1	Signal Avg.	8
Waveform:	Staircase	Clean Voltage (mV):	600	Frequency (Hz):	2000
Cell	Three Electrode	Plate Time (S)	10	Start Voltage (mV):	-400
☑ Background subtraction		Plate Voltage (mV)	-400	Stop Voltage (mV):	550
		Range (uA):	12.5	Step Voltage (mV):	5

16
x5
80

Addition Data for Method of Standard Additions

JDD3N 5X

Metal	Unknown Concentration	Concentration in original aliquot	1st Addition	2nd Addition	3rd Addition	Total added concentration
As(III)	75.3 ppb	89.6 ppb	3.00 uL (60.0 ppb)	4.00 uL (80.0 ppb)	4.00 uL (80.0 ppb)	220 ppb

89.6
x5
448.0 ppb

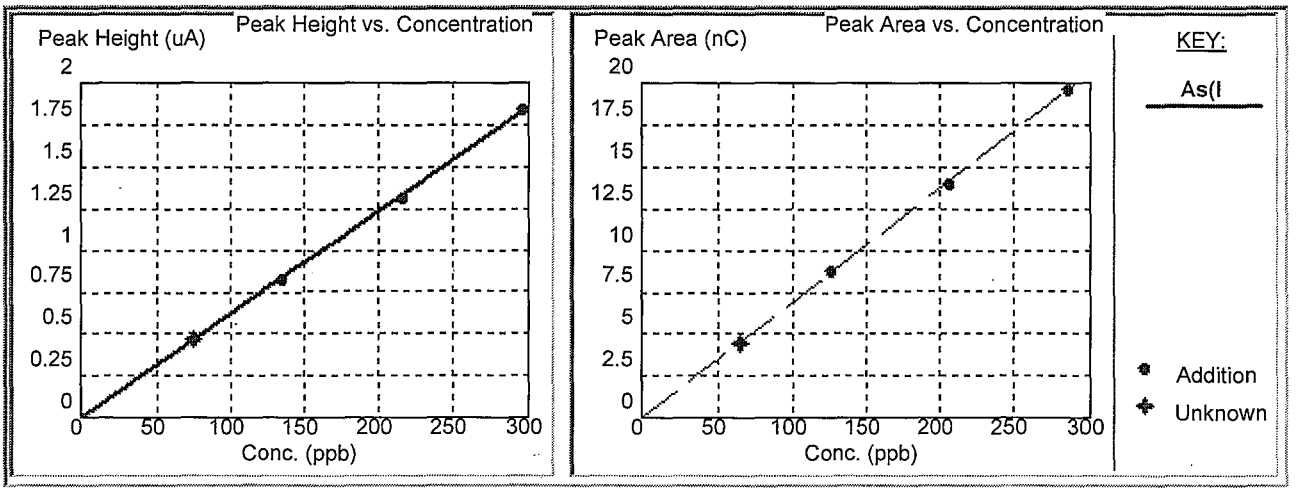
Starting Volume: 50.000 **mL**

Final Volume: 50.011 **mL**

Calibration Summary:

JDD3N 5x

Calibration Date: 05/Sep/06 at 11:45:39



Calibration Parameters

Metal	Calib. Mode	Fit Factor	Slope	Zero Offset	Starting Concentration	Concentration in Original Sample
As[III]	**Height**	1.000	0.161 ppb/nA	0 ppt	75 ppb	90 ppb
	Area	1.000	14.5 ppb/nC	0 ppt	65 ppb	78 ppb

Selected Calibration M

TraceDetect Nano-Band Explorer

Sample ID: JDD18 25x

Trace Metals:

As(III): 346 ppb

2975 ppb

400x dil

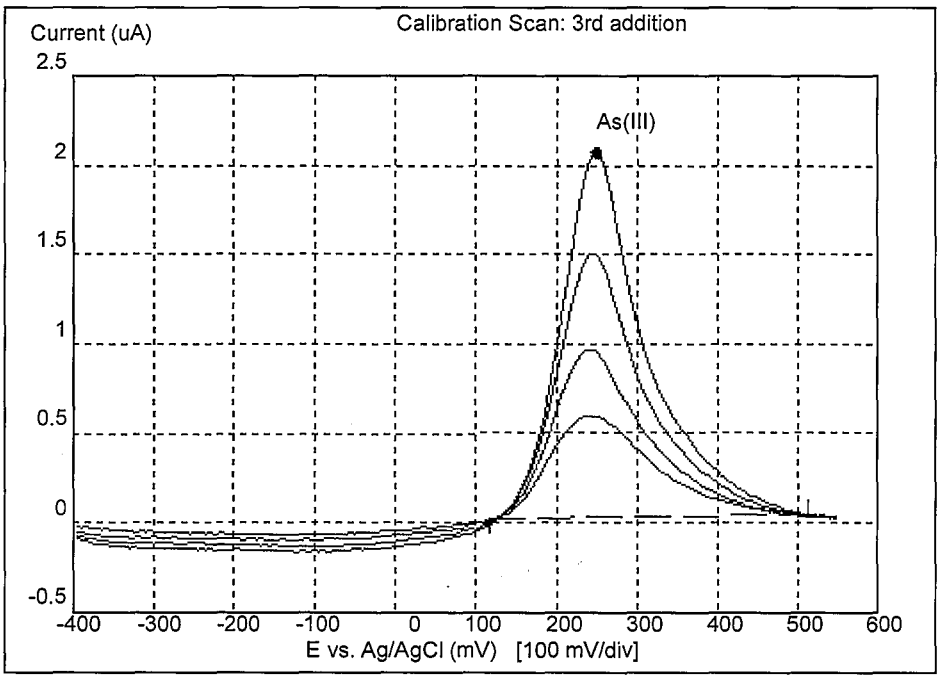
Temperature:

RL2 800ppb

Input 1:

Input 2:

05/Sep/06 12:00:37



Settings:

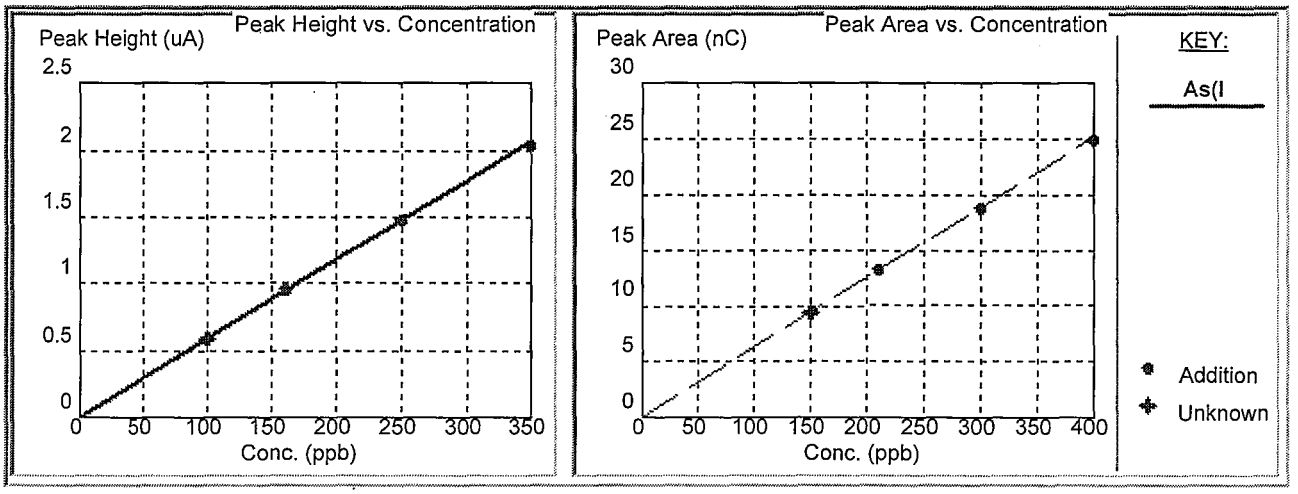
Type:	ASV	Clean Time (S)	0.1	Signal Avg.	8
Waveform:	Staircase	Clean Voltage (mV):	600	Frequency (Hz):	2000
Cell	Three Electrode	Plate Time (S)	10	Start Voltage (mV):	-400
		Plate Voltage (mV)	-400	Stop Voltage (mV):	550
		Range (uA):	12.5	Step Voltage (mV):	5

☑ Background subtraction

Calibration Summary:

JDM1R 25X

Calibration Date: 05/Sep/06 at 11:45:39



Calibration Parameters

Metal	Calib. Mode	Fit Factor	Slope	Zero Offset	Starting Concentration	Concentration in Original Sample
As(III)	**Height**	1.000	0.169 ppb/nA	0 ppt	100 ppb	120 ppb
	Area	1.000	15.9 ppb/nC	0 ppt	150 ppb	180 ppb

Addition Data for Method of Standard Additions

JDD18 25x

Metal	Unknown Concentration	Concentration in original aliquot	1st Addition	2nd Addition	3rd Addition	Total added concentration
As(III)	100 ppb	119 ppb	3.00 uL (60.0 ppb)	4.50 uL (90.0 ppb)	5.00 uL (100 ppb)	250 ppb

x25

2975 ppb

Starting Volume: 50.000 **mL**

Final Volume: 50.013 **mL**

TraceDetect Nano-Band Explorer -

Sample ID: JDJ4V with1ppmspike

Trace Metals:

As(III): 1.50 ppb

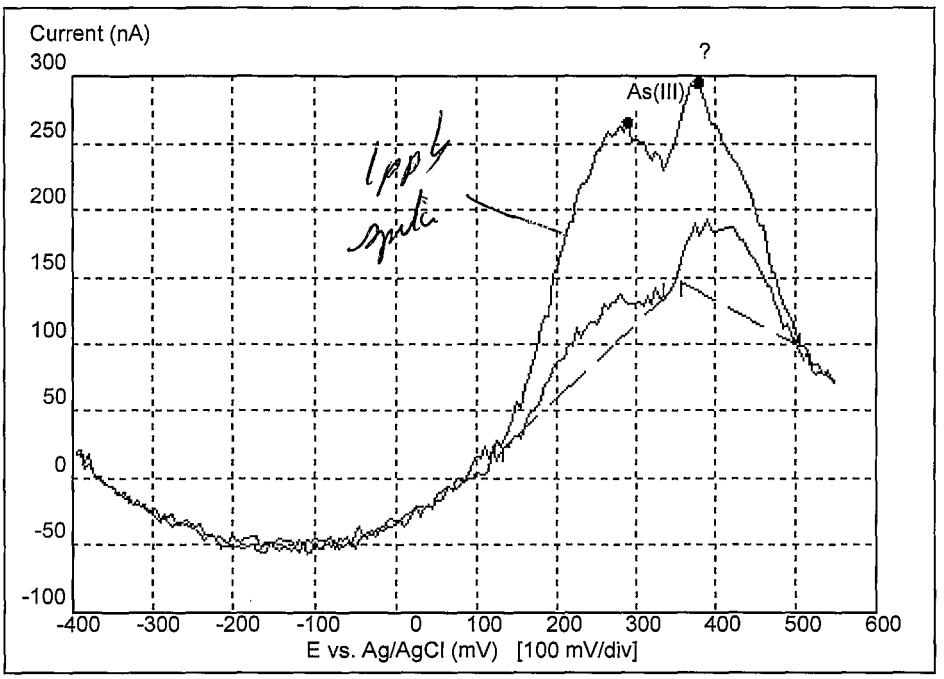
ND

Temperature:

Input 1:

Input 2:

05/Sep/06 12:08:56



Settings:

Type:	ASV	Clean Time (S)	0.1	Signal Avg.	8
Waveform:	Staircase	Clean Voltage (mV):	600	Frequency (Hz):	2000
Cell	Three Electrode	Plate Time (S)	160	Start Voltage (mV):	-400
		Plate Voltage (mV)	-400	Stop Voltage (mV):	550
		Range (uA):	12.5	Step Voltage (mV):	5

☑ Background subtraction

TraceDetect Nano-Band Explorer

Sample ID: JDJ4V MS

Trace Metals:

As(III): 33.8 ppb

10.3 ppb

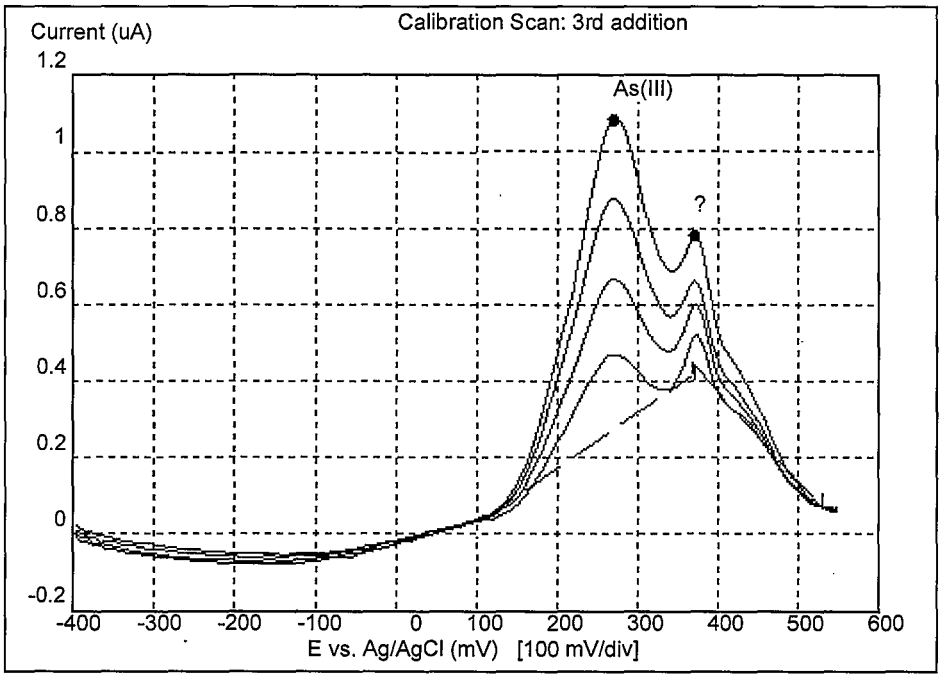
51%

Temperature:

Input 1:

Input 2:

05/Sep/06 13:19:31



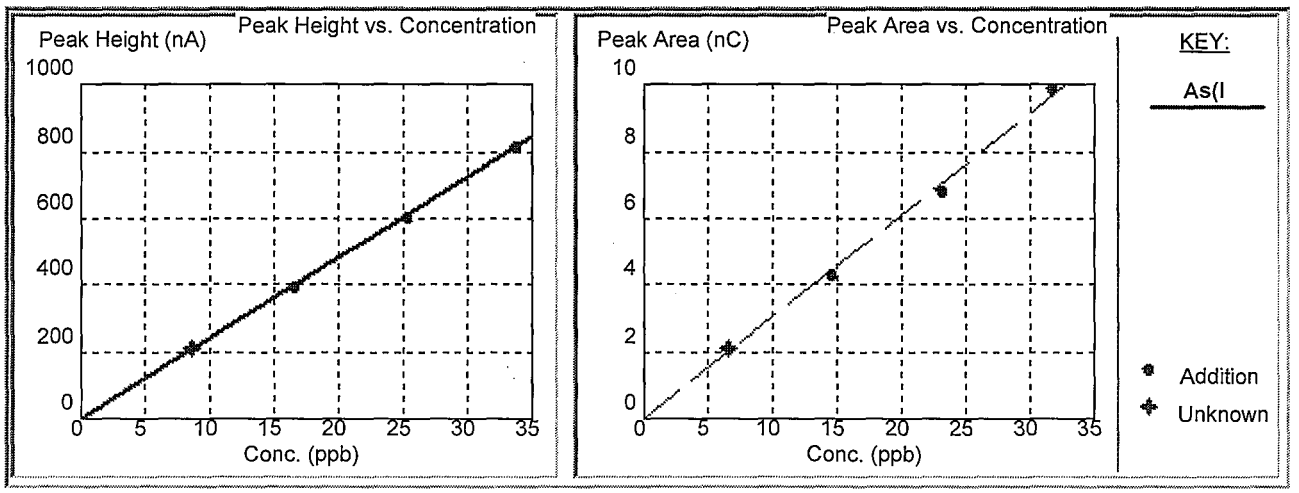
Settings:

Type:	ASV	Clean Time (S)	0.1	Signal Avg.	8
Waveform:	Staircase	Clean Voltage (mV):	600	Frequency (Hz):	2000
Cell	Three Electrode	Plate Time (S)	40	Start Voltage (mV):	-400
☑ Background subtraction		Plate Voltage (mV)	-400	Stop Voltage (mV):	550
		Range (uA):	12.5	Step Voltage (mV):	5

Calibration Summary:

JPJ4V ms

Calibration Date: 05/Sep/06 at 12:55:17



Calibration Parameters

Metal	Calib. Mode	Fit Factor	Slope	Zero Offset	Starting Concentration	Concentration in Original Sample
As(III)	**Height**	1.000	0.041 ppb/nA	0 ppt	8.6 ppb	10 ppb
	Area	0.997	3.28 ppb/nC	0 ppt	6.6 ppb	7.8 ppb

Addition Data for Method of Standard Additions

JDJ4V MSD

Metal	Unknown Concentration	Concentration in original aliquot	1st Addition	2nd Addition	3rd Addition	Total added concentration
As(III)	8.63 ppb	10.3 ppb	400 uL (7.94 ppb)	440 uL (8.65 ppb)	440 uL (8.58 ppb)	25.2 ppb

Starting Volume: 50.000 **mL**

Final Volume: 51.280 **mL**

TraceDetect Nano-Band Explorer

Sample ID: JDJ4V MSD

Trace Metals:

As(III): 42.1 ppb

13.0 ppb

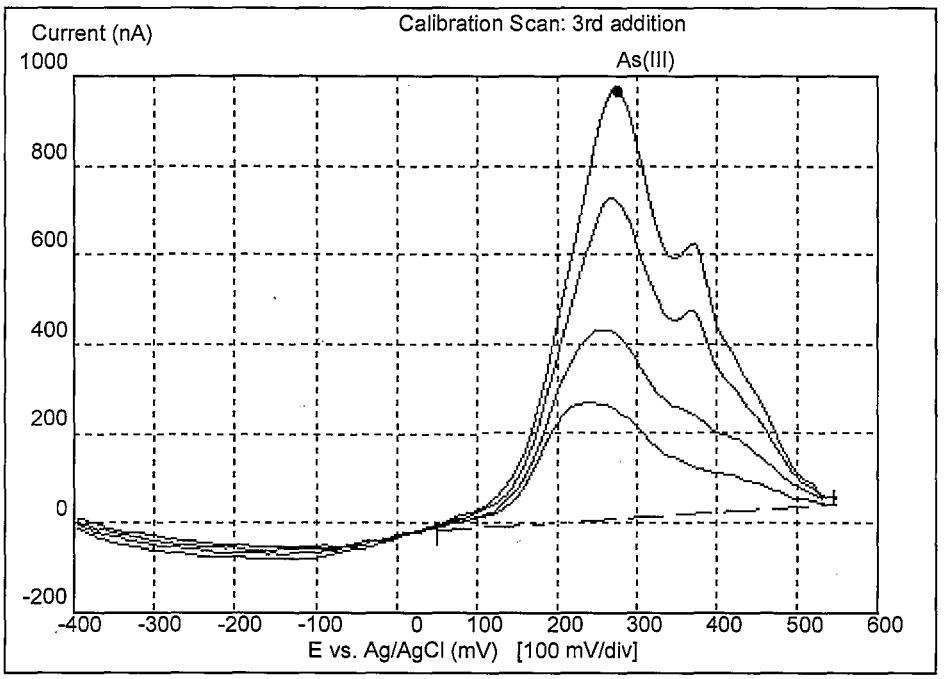
65%

Temperature:

Input 1:

Input 2:

05/Sep/06 13:03:09



Settings:

Type:	ASV	Clean Time (S)	0.1	Signal Avg.	8
Waveform:	Staircase	Clean Voltage (mV):	600	Frequency (Hz):	2000
Cell	Three Electrode	Plate Time (S)	40	Start Voltage (mV):	-400
		Plate Voltage (mV)	-400	Stop Voltage (mV):	550
		Range (uA):	12.5	Step Voltage (mV):	5

☑ Background subtraction

Addition Data for Method of Standard Additions

JDJ4V MSD

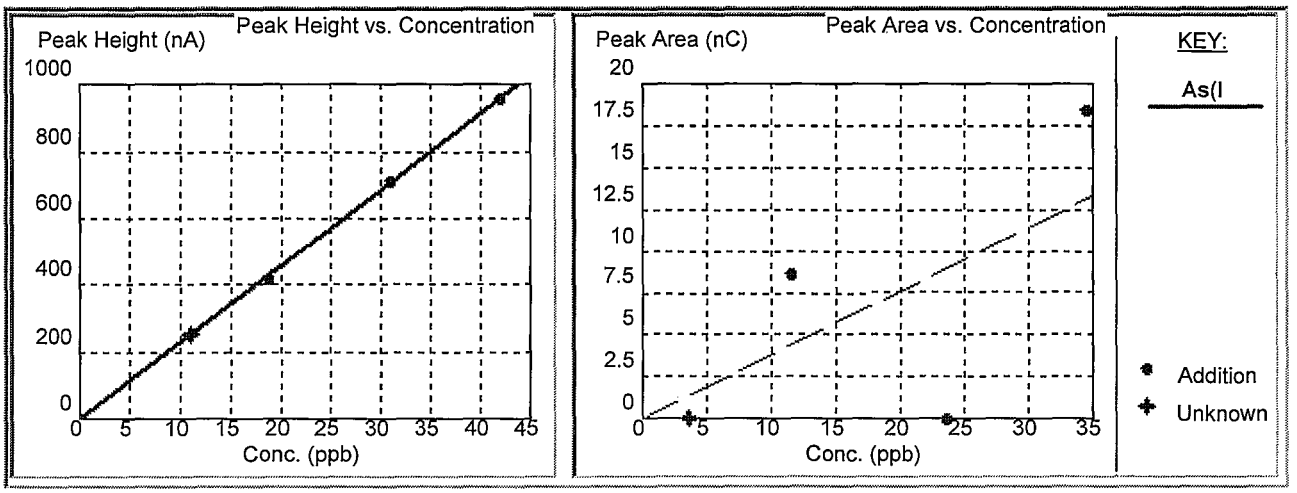
Metal	Unknown Concentration	Concentration in original aliquot	1st Addition	2nd Addition	3rd Addition	Total added concentration
As(III)	10.9 ppb	13.0 ppb	400 uL (7.94 ppb)	610 uL (12.0 ppb)	570 uL (11.1 ppb)	30.9 ppb

Starting Volume: 50.000 mL

Final Volume: 51.580 mL

Calibration Summary: JD J4V MSP

Calibration Date: 05/Sep/06 at 12:55:17



Calibration Parameters

Metal	Calib. Mode	Fit Factor	Slope	Zero Offset	Starting Concentration	Concentration in Original Sample
As(III)	**Height**	0.999	0.044 ppb/nA	0 ppt	11 ppb	13 ppb
	Area	0.457	2.63 ppb/nC	0 ppt	3.6 ppb	4.3 ppb

TraceDetect Nano-Band Explorer

Sample ID: LCS AsIII

Trace Metals:

As(III): 45.6 ppb

14.3 ppb

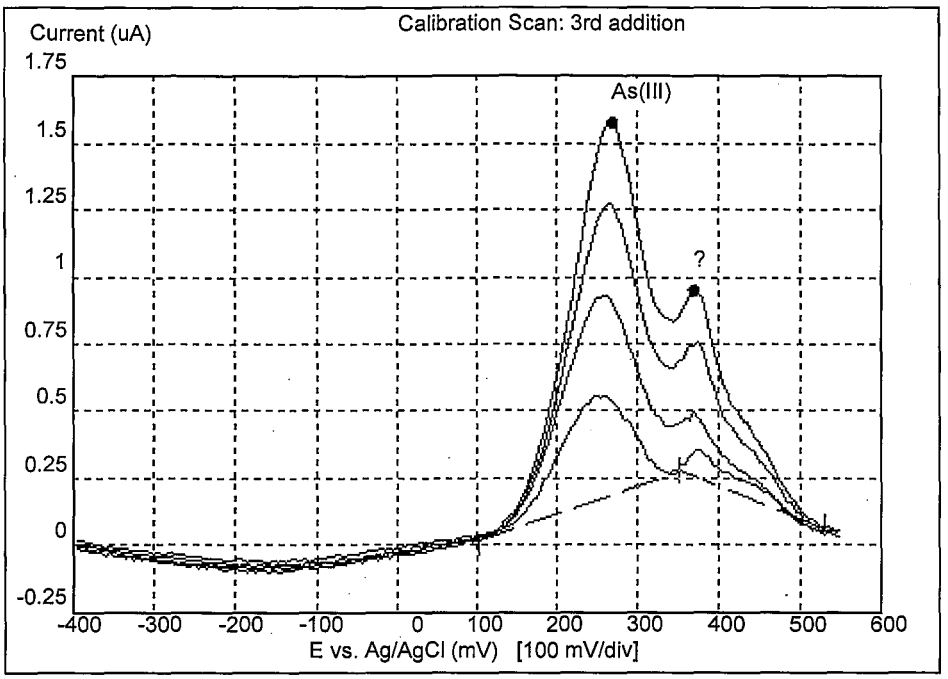
(72%)

Temperature:

Input 1:

Input 2:

05/Sep/06 10:44:30



Settings:

Type:	ASV	Clean Time (S)	0.1	Signal Avg.	8
Waveform:	Staircase	Clean Voltage (mV):	600	Frequency (Hz):	2000
Cell	Three Electrode	Plate Time (S)	40	Start Voltage (mV):	-400
		Plate Voltage (mV)	-400	Stop Voltage (mV):	550
		Range (uA):	12.5	Step Voltage (mV):	5

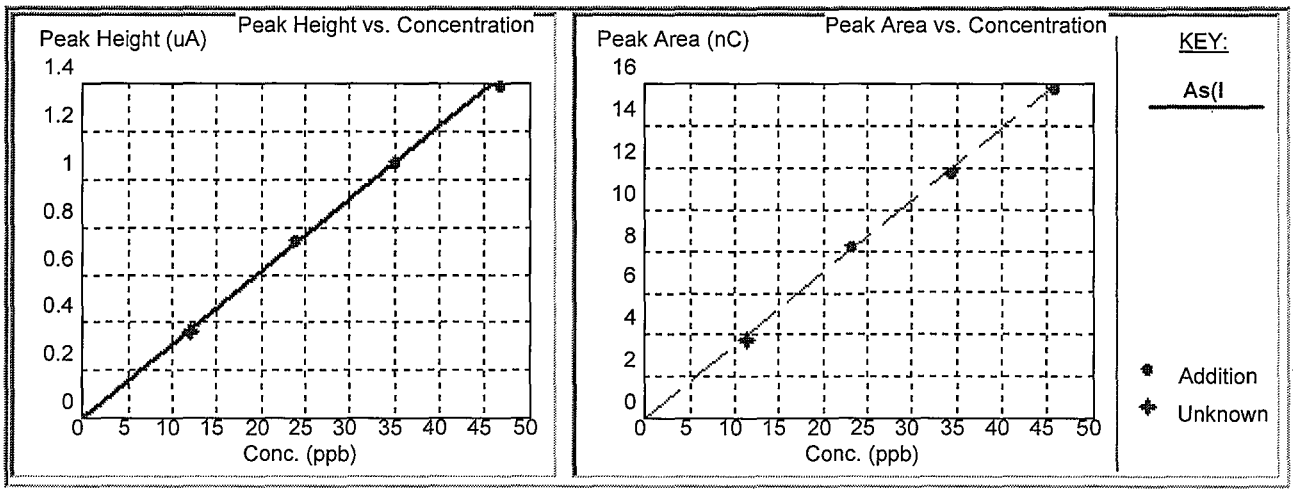
☑ Background subtraction

Calibration Summary:

LCS

As+3

Calibration Date: 05/Sep/06 at 10:36:26



Calibration Parameters

Metal	Calib. Mode	Fit Factor	Slope	Zero Offset	Starting Concentration	Concentration in Original Sample
As[III]	**Height**	0.998	0.033 ppb/nA	0 ppt	12 ppb	14 ppb
	Area	0.999	2.88 ppb/nC	0 ppt	11 ppb	13 ppb

Addition Data for Method of Standard Additions

LCS
As+J

Metal	Unknown Concentration	Concentration in original aliquot	1st Addition	2nd Addition	3rd Addition	Total added concentration
As(III)	12.0 ppb	14.3 ppb	600 uL (11.9 ppb)	570 uL (11.1 ppb)	600 uL (11.6 ppb)	34.6 ppb

Starting Volume: 50.000 **mL**

Final Volume: 51.770 **mL**

TraceDetect Nano-Band Explorer -

Sample ID: Blank with1ppbspike

Trace Metals:

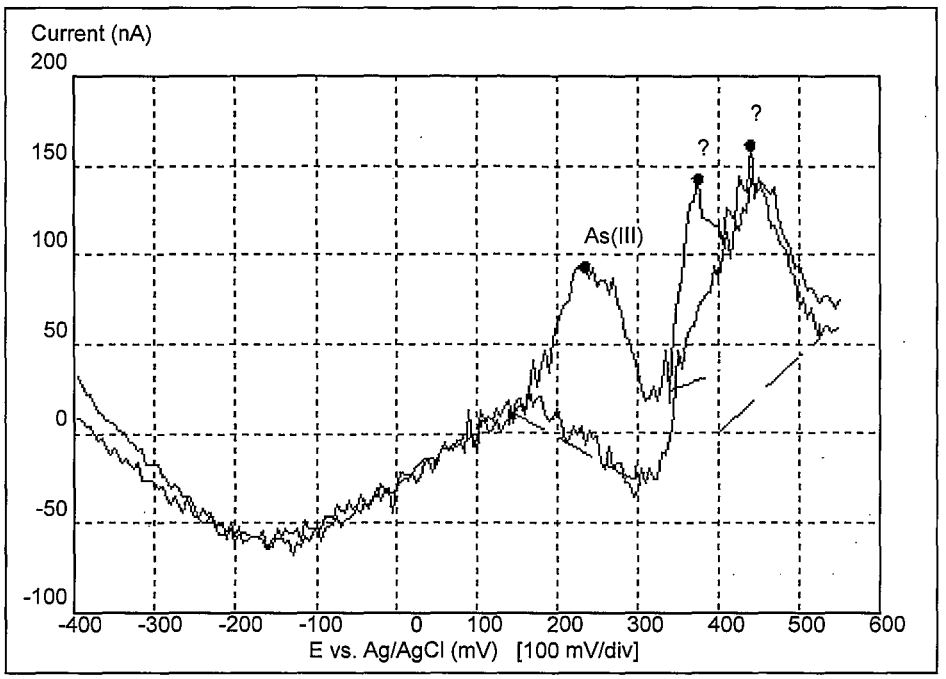
As(III): 104 nA

Temperature:

Input 1:

Input 2:

05/Sep/06 09:48:52



Settings:

Type:	ASV	Clean Time (S)	0.1	Signal Avg.	8
Waveform:	Staircase	Clean Voltage (mV):	600	Frequency (Hz):	2000
Cell	Three Electrode	Plate Time (S)	160	Start Voltage (mV):	-400
☑ Background subtraction		Plate Voltage (mV)	-400	Stop Voltage (mV):	550
		Range (uA):	12.5	Step Voltage (mV):	5

TraceDetect Nano-Band Explorer -

Sample ID: JC1LX CuRx with1ppbspike

Trace Metals:

As(III): 1.15 ppb

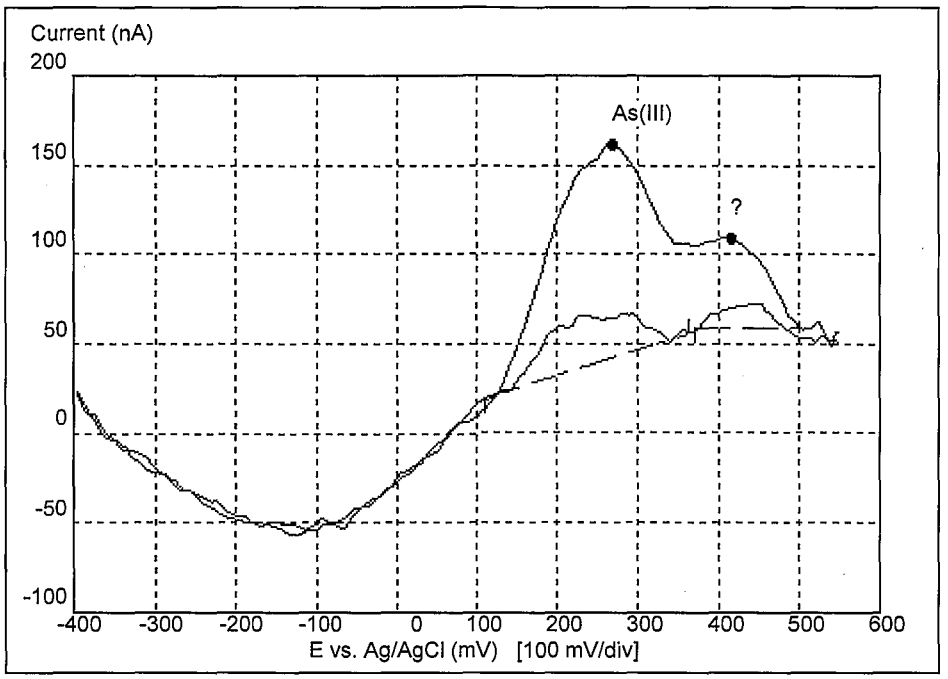
ND

Temperature:

Input 1:

Input 2:

05/Sep/06 13:51:06



Settings:

Type:	ASV	Clean Time (S)	0.1	Signal Avg.	8
Waveform:	Staircase	Clean Voltage (mV):	600	Frequency (Hz):	2000
Cell	Three Electrode	Plate Time (S)	160	Start Voltage (mV):	-400
☑ Background subtraction		Plate Voltage (mV)	-400	Stop Voltage (mV):	550
		Range (uA):	12.5	Step Voltage (mV):	5

TraceDetect Nano-Band Explorer

Sample ID: JC1LX CuRx MS

Trace Metals:

As(III): 47.5 ppb

16.5 ppb

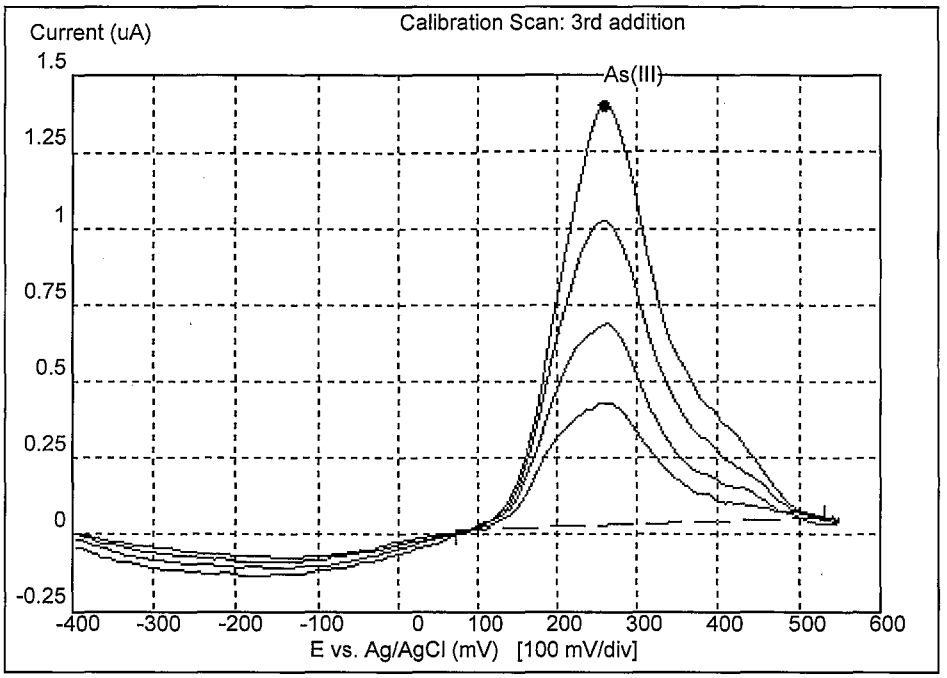
82%

Temperature:

Input 1:

Input 2:

05/Sep/06 14:45:03



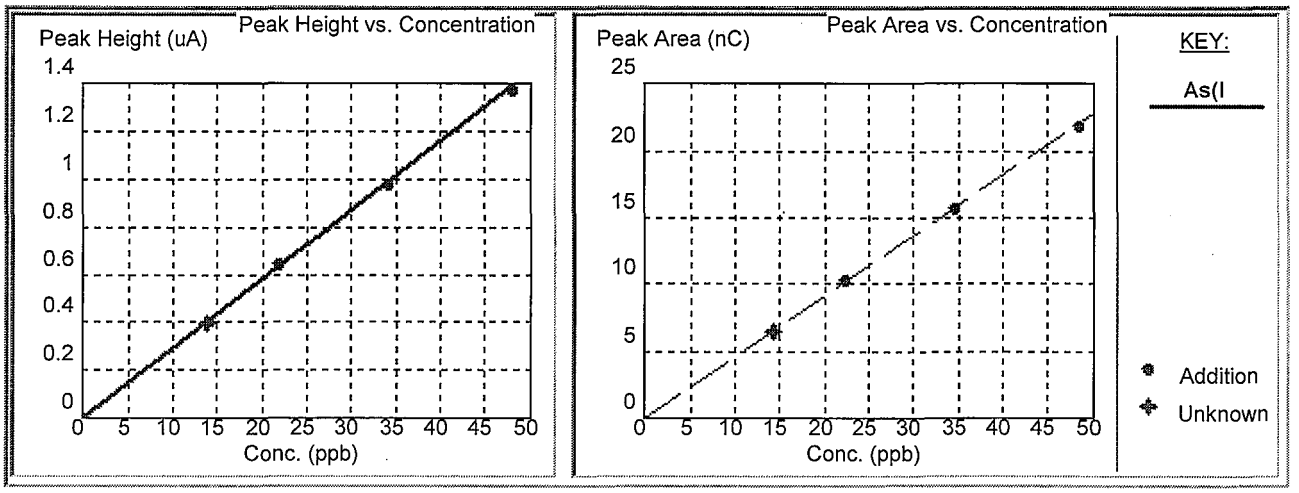
Settings:

Type:	ASV	Clean Time (S)	0.1	Signal Avg.	8
Waveform:	Staircase	Clean Voltage (mV):	600	Frequency (Hz):	2000
Cell	Three Electrode	Plate Time (S)	40	Start Voltage (mV):	-400
☑ Background subtraction		Plate Voltage (mV)	-400	Stop Voltage (mV):	550
		Range (uA):	12.5	Step Voltage (mV):	5

Calibration Summary:

JCILX CuRY MS

Calibration Date: 05/Sep/06 at 13:43:29



Calibration Parameters

Metal	Calib. Mode	Fit Factor	Slope	Zero Offset	Starting Concentration	Concentration in Original Sample
As(III)	**Height**	0.999	0.035 ppb/nA	0 ppt	14 ppb	17 ppb
	Area	1.000	2.19 ppb/nC	0 ppt	14 ppb	17 ppb

Addition Data for Method of Standard Additions

JC 1 Xcury

MS

Metal	Unknown Concentration	Concentration in original aliquot	1st Addition	2nd Addition	3rd Addition	Total added concentration
As(III)	13.9 ppb	16.5 ppb	400 uL (7.94 ppb)	630 uL (12.3 ppb)	710 uL (13.7 ppb)	34.0 ppb

Starting Volume: 50.000 **mL**

Final Volume: 51.740 **mL**

TraceDetect Nano-Band Explorer

Sample ID: JC1LX CuRx MSD

Trace Metals:

As(III): 54.9 ppb

18.4 ppb

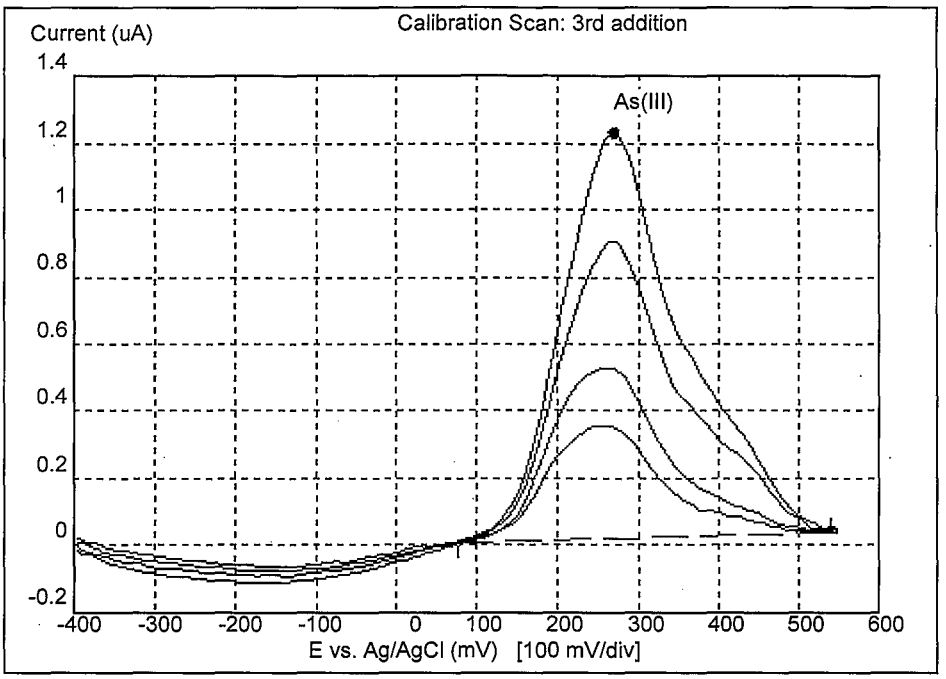
92%

Temperature:

Input 1:

Input 2:

05/Sep/06 14:54:24



Settings:

Type:	ASV	Clean Time (S)	0.1	Signal Avg.	8
Waveform:	Staircase	Clean Voltage (mV):	600	Frequency (Hz):	2000
Cell	Three Electrode	Plate Time (S)	40	Start Voltage (mV):	-400
		Plate Voltage (mV)	-400	Stop Voltage (mV):	550
		Range (uA):	12.5	Step Voltage (mV):	5

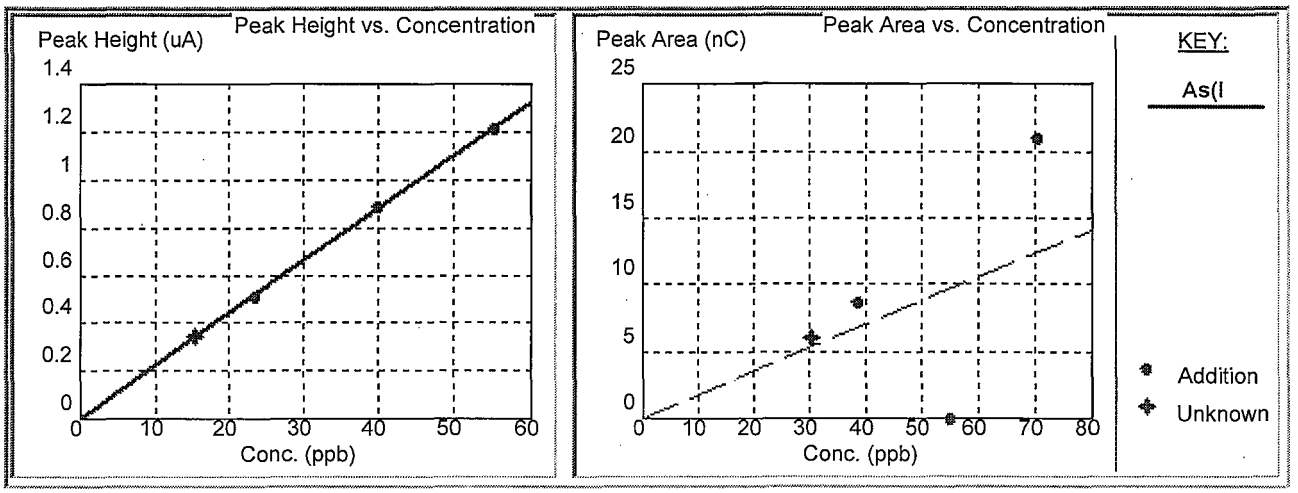
☑ Background subtraction

Calibration Summary:

JCILX Cu Pb

MSD

Calibration Date: 05/Sep/06 at 14:46:18



Calibration Parameters

Metal	Calib. Mode	Fit Factor	Slope	Zero Offset	Starting Concentration	Concentration in Original Sample
As[III]	**Height**	0.999	0.045 ppb/nA	0 ppt	15 ppb	18 ppb
	Area	0.312	5.68 ppb/nC	0 ppt	30 ppb	36 ppb

Addition Data for Method of Standard Additions

Metal	Unknown Concentration	Concentration in original aliquot	1st Addition	2nd Addition	3rd Addition	Total added concentration
As(III)	15.5 ppb	18.4 ppb	400 uL (7.94 ppb)	840 uL (16.4 ppb)	800 uL (15.4 ppb)	39.7 ppb

JCILX
GRY
MSD

Starting Volume: 50.000 mL

Final Volume: 52.040 mL

TraceDetect Nano-Band Explorer

Sample ID: JC7CR 500x CuRx

Trace Metals:

As(III): 744 ppb

135,500 ppb

16000X

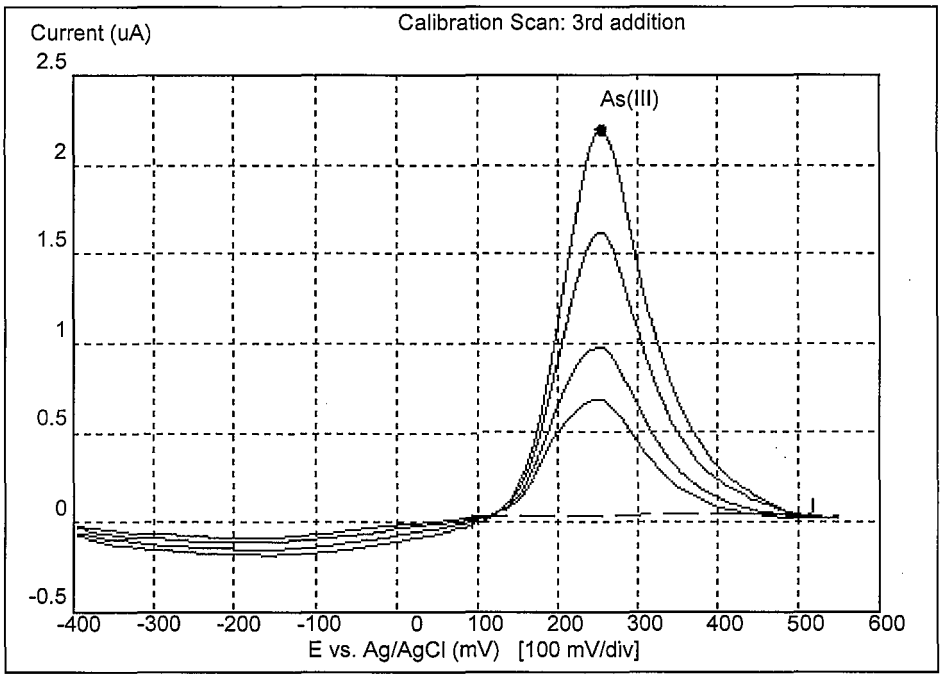
Temperature:

RL = 32000 ppb

Input 1:

Input 2:

05/Sep/06 15:38:36



Settings:

Type:	ASV	Clean Time (S)	0.1	Signal Avg.	8
Waveform:	Staircase	Clean Voltage (mV)	600	Frequency (Hz):	2000
Cell	Three Electrode	Plate Time (S)	5	Start Voltage (mV):	-400
		Plate Voltage (mV)	-400	Stop Voltage (mV):	550
		Range (uA):	12.5	Step Voltage (mV):	5

72X

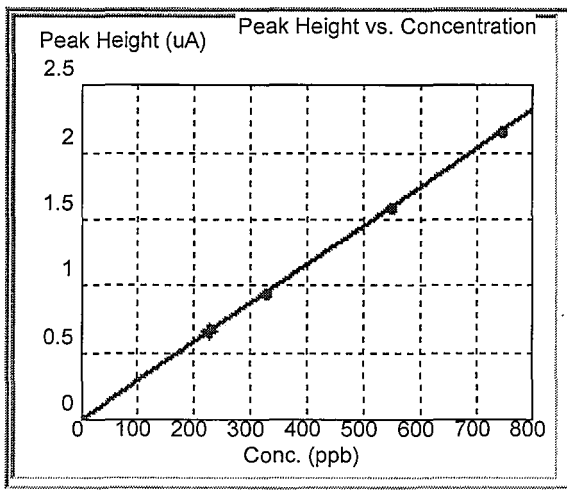
☑ Background subtraction

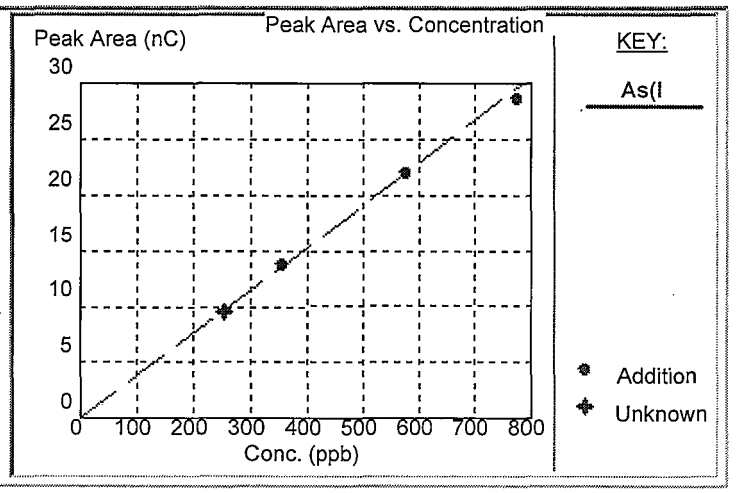
Calibration Summary:

Calibration Date: 05/Sep/06 at 14:55:35

Jc7CR 500X

CuR1





Calibration Parameters

Metal	Calib. Mode	Fit Factor	Slope	Zero Offset	Starting Concentration	Concentration in Original Sample
As[III]	**Height**	1.000	0.345 ppb/nA	0 ppt	230 ppb	270 ppb
	Area	0.997	26.2 ppb/nC	0 ppt	250 ppb	300 ppb

Addition Data for Method of Standard Additions

JC7CK

500 X

Cu RP

Metal	Unknown Concentration	Concentration in original aliquot	1st Addition	2nd Addition	3rd Addition	Total added concentration
As(III)	228 ppb	271 ppb	5.00 uL (100 ppb)	11.0 uL (220 ppb)	10.0 uL (200 ppb)	520 ppb

x500

135,500 ppb

Starting Volume: 50.000 mL

Final Volume: 50.026 mL

TraceDetect Nano-Band Explorer -

Sample ID: Blank CuRx with1ppbspike

Trace Metals:

As(III): 1.26 ppb

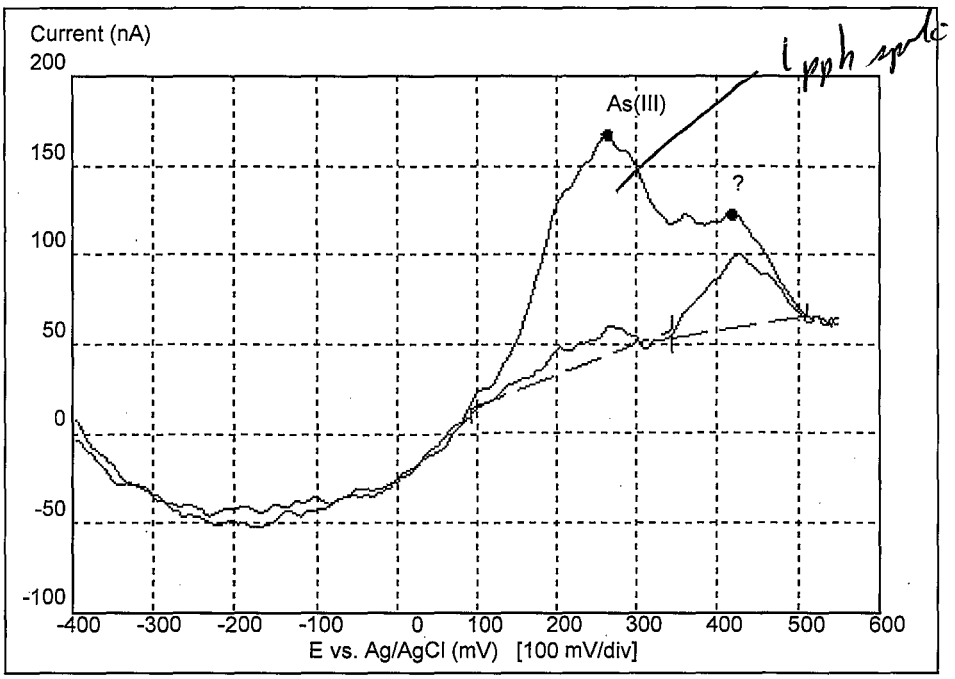
pV

Temperature:

Input 1:

Input 2:

05/Sep/06 13:27:08



Settings:

Type:	ASV	Clean Time (S)	0.1	Signal Avg.	8
Waveform:	Staircase	Clean Voltage (mV):	600	Frequency (Hz):	2000
Cell	Three Electrode	Plate Time (S)	160	Start Voltage (mV):	-400
☑ Background subtraction		Plate Voltage (mV)	-400	Stop Voltage (mV):	550
		Range (uA):	12.5	Step Voltage (mV):	5

TraceDetect Nano-Band Explorer

Sample ID: LCS CuRx

Trace Metals:

As(III): 38.4 ppb

11.8 ppb

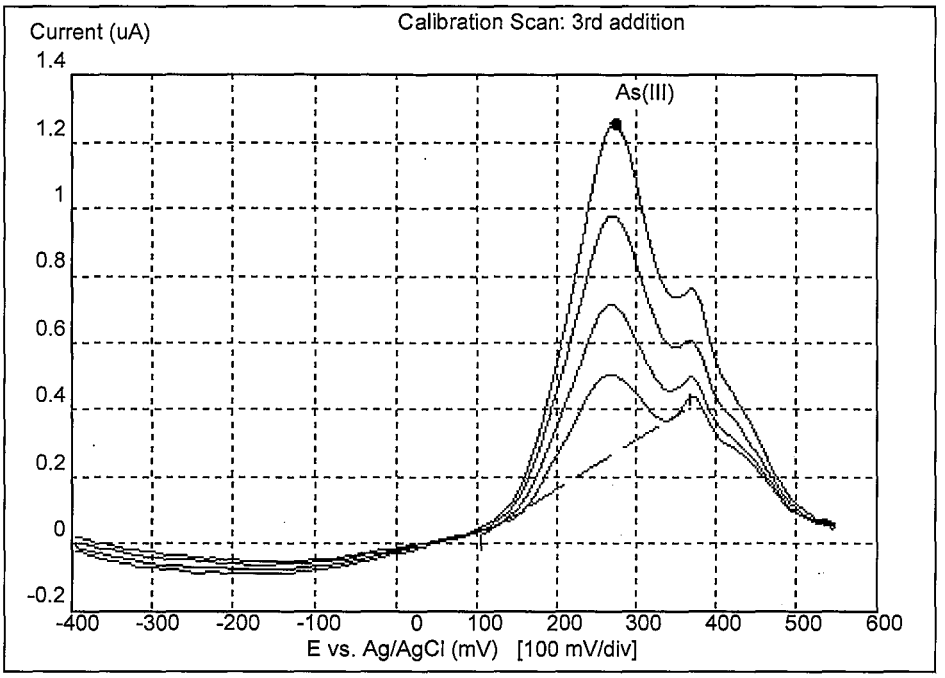
(59%)

Temperature:

Input 1:

Input 2:

05/Sep/06 13:42:02



Settings:

Type:	ASV	Clean Time (S)	0.1	Signal Avg.	8
Waveform:	Staircase	Clean Voltage (mV):	600	Frequency (Hz):	2000
Cell	Three Electrode	Plate Time (S)	40	Start Voltage (mV):	-400
		Plate Voltage (mV)	-400	Stop Voltage (mV):	550
		Range (uA):	12.5	Step Voltage (mV):	5

☑ Background subtraction

LCS Cu Pb

Addition Data for Method of Standard Additions

Metal	Unknown Concentration	Concentration in original aliquot	1st Addition	2nd Addition	3rd Addition	Total added concentration
As(III)	9.93 ppb	11.8 ppb	400 uL (7.94 ppb)	520 uL (10.2 ppb)	520 uL (10.1 ppb)	28.3 ppb

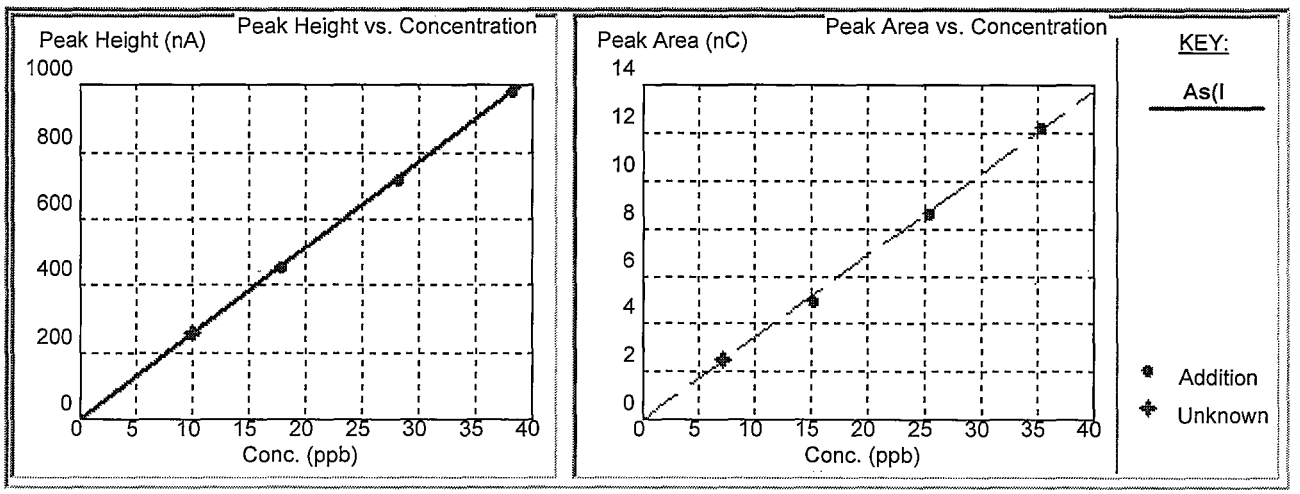
Starting Volume: 50.000 mL

Final Volume: 51.440 mL

Calibration Summary:

LCS Cal Ref

Calibration Date: 05/Sep/06 at 13:21:12



Calibration Parameters

Metal	Calib. Mode	Fit Factor	Slope	Zero Offset	Starting Concentration	Concentration in Original Sample
As[III]	**Height**	1.000	0.039 ppb/nA	0 ppt	9.9 ppb	12 ppb
	Area	0.999	2.90 ppb/nC	0 ppt	7.1 ppb	8.4 ppb

TraceDetect Nano-Band Explorer

Sample ID: JC1LX AsV CuRx (2)

Trace Metals:

As(III+V): 38.2 ppb

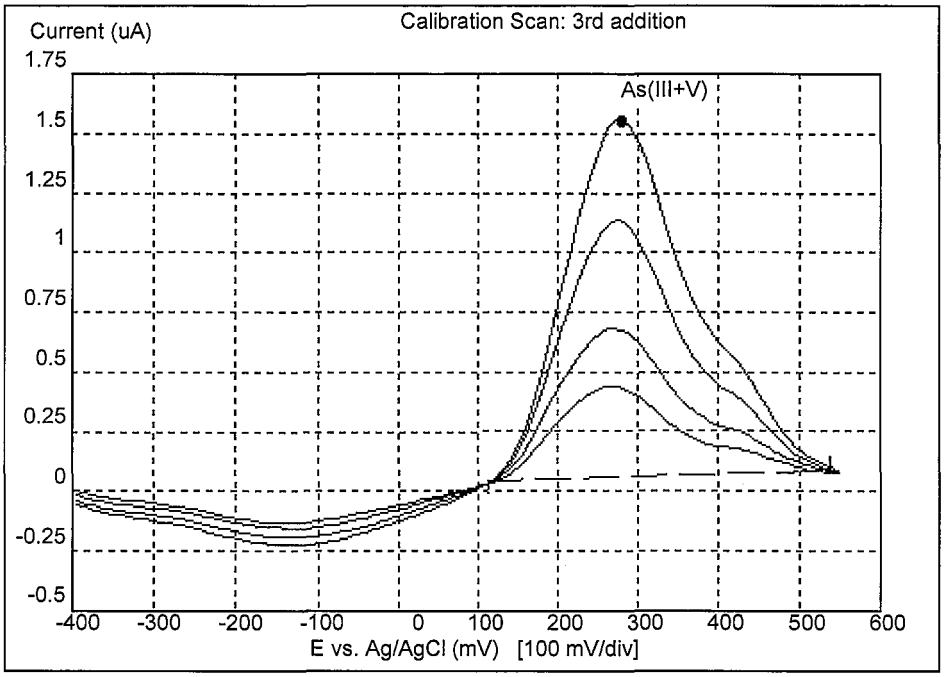
121

Temperature:

Input 1:

Input 2:

05/Sep/06 17:35:49



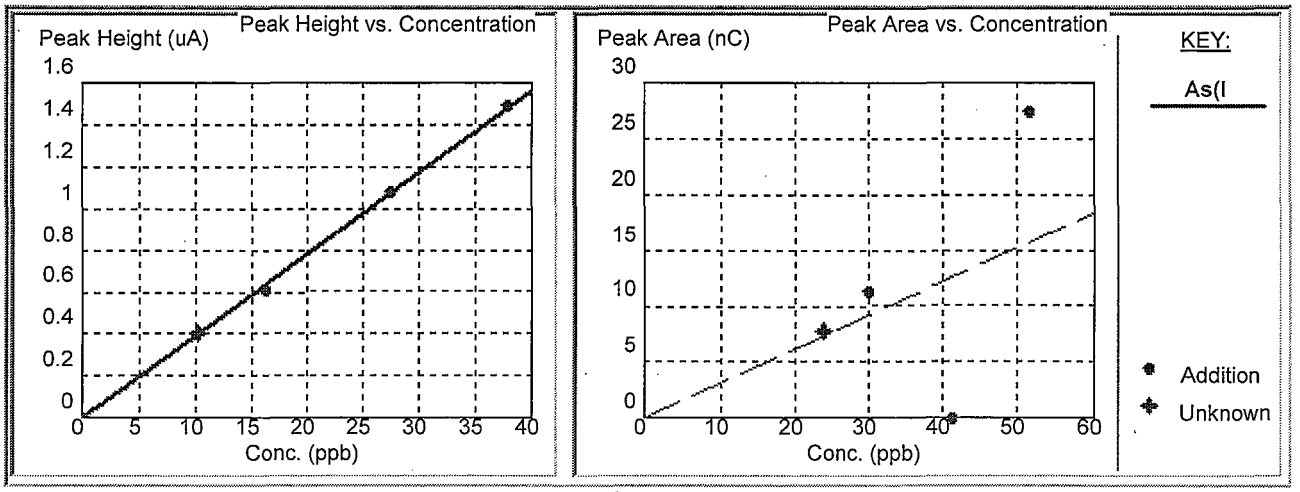
Settings:

Type:	ASV	Clean Time (S)	0.1	Signal Avg.	8
Waveform:	Staircase	Clean Voltage (mV):	600	Frequency (Hz):	2000
Cell	Three Electrode	Plate Time (S)	80	Start Voltage (mV):	-400
☑ Background subtraction		Plate Voltage (mV)	-400	Stop Voltage (mV):	550
		Range (uA):	12.5	Step Voltage (mV):	5

Calibration Summary:

Calibration Date: 05/Sep/06 at 17:08:20

ICILX (2)
AsI
CurRX



Calibration Parameters

Metal	Calib. Mode	Fit Factor	Slope	Zero Offset	Starting Concentration	Concentration in Original Sample
As(III+V)	**Height**	1.000	0.025 ppb/nA	0 ppt	10 ppb	12 ppb
	Area	0.302	3.27 ppb/nC	0 ppt	24 ppb	28 ppb

Addition Data for Method of Standard Additions

Metal	Unknown Concentration	Concentration in original aliquot	1st Addition	2nd Addition	3rd Addition	Total added concentration
As(III+V)	10.2 ppb	12.1 ppb	300 uL (5.96 ppb)	580 uL (11.4 ppb)	530 uL (10.3 ppb)	27.7 ppb

JC 11/X (2)
As ↓
cuPP

As^{+3} = ND
As^{+5} = 12.1

Starting Volume: 50.000 mL

Final Volume: 51.410 mL

TraceDetect Nano-Band Explorer

Sample ID: JC1LX AsV CuRx MS

Trace Metals:

As(III+V): 119 ppb

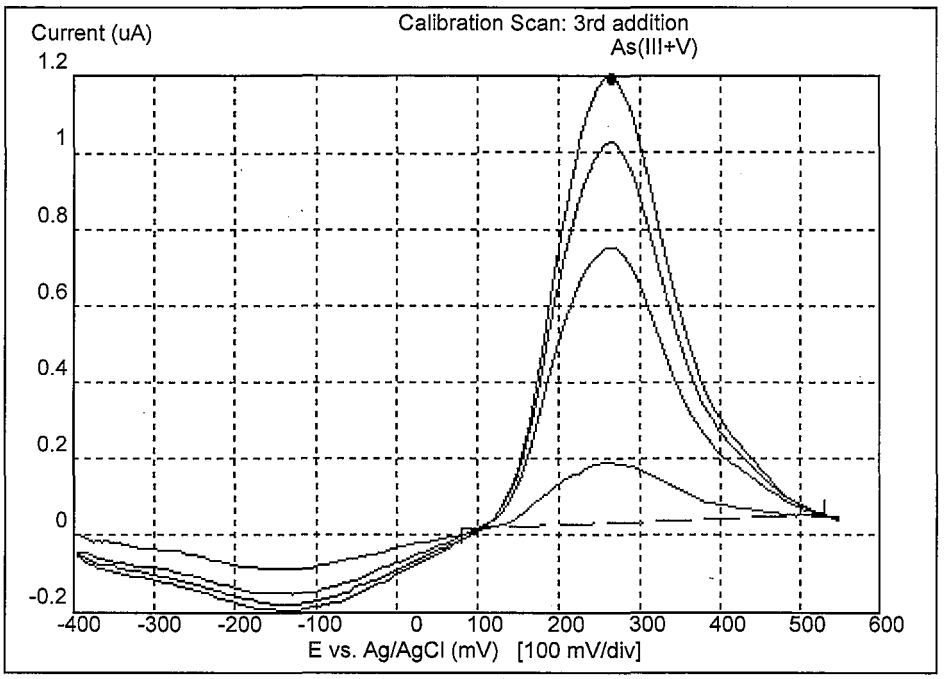
209 ppb

Temperature:

Input 1:

Input 2:

05/Sep/06 17:07:22



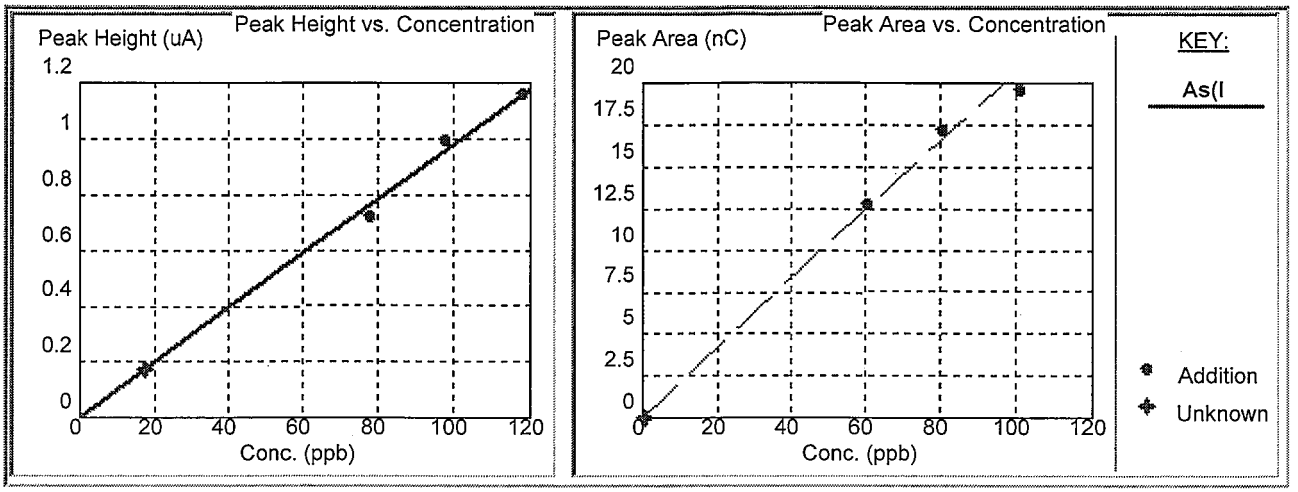
Settings:

Type:	ASV	Clean Time (S)	0.1	Signal Avg.	8
Waveform:	Staircase	Clean Voltage (mV):	600	Frequency (Hz):	2000
Cell	Three Electrode	Plate Time (S)	20	Start Voltage (mV):	-400
☑ Background subtraction		Plate Voltage (mV)	-400	Stop Voltage (mV):	550
		Range (uA):	12.5	Step Voltage (mV):	5

Calibration Summary:

Calibration Date: 05/Sep/06 at 16:47:44

JC ILX AsI
cu Rf
ms



Calibration Parameters

Metal	Calib. Mode	Fit Factor	Slope	Zero Offset	Starting Concentration	Concentration in Original Sample
As(III+V)	**Height**	0.995	0.102 ppb/nA	0 ppt	18 ppb	21 ppb
	Area	0.993	4.84 ppb/nC	0 ppt	420 ppt	500 ppt

Addition Data for Method of Standard Additions

Metal	Unknown Concentration	Concentration in original aliquot	1st Addition	2nd Addition	3rd Addition	Total added concentration
As(III+V)	17.6 ppb	20.9 ppb	3.00 uL (60.0 ppb)	1.00 uL (20.0 ppb)	1.00 uL (20.0 ppb)	100 ppb

ICILX As V
Cu Px
MS

Starting Volume: 50.000 mL

Final Volume: 50.005 mL

TraceDetect Nano-Band Explorer

Sample ID: JC1LX AsV CuRx MSD

Trace Metals:

As(III+V): 65.3 ppb

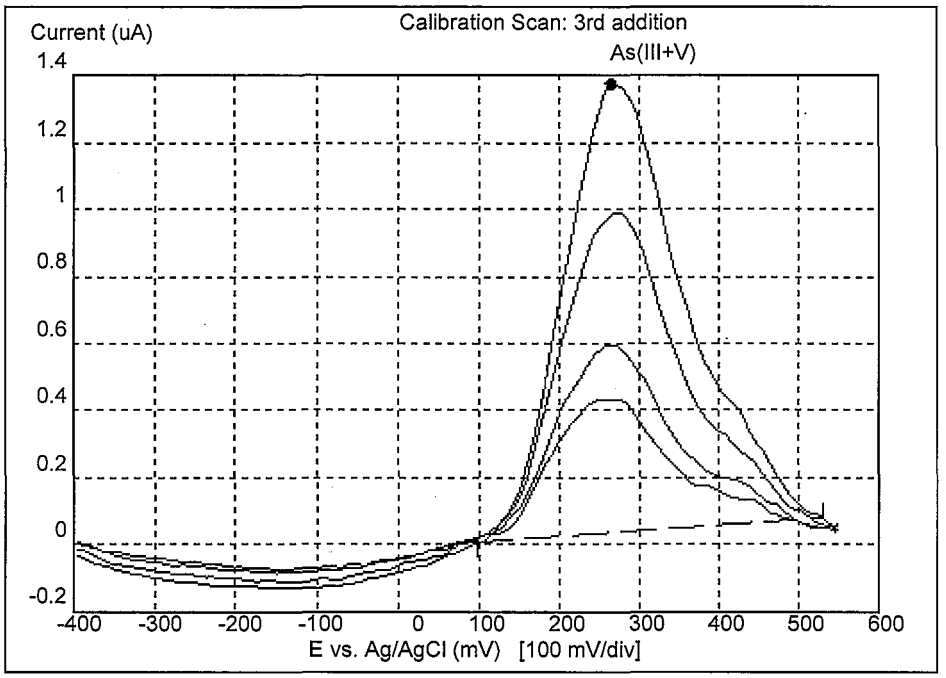
23.2 ppb

Temperature:

Input 1:

Input 2:

05/Sep/06 17:59:55

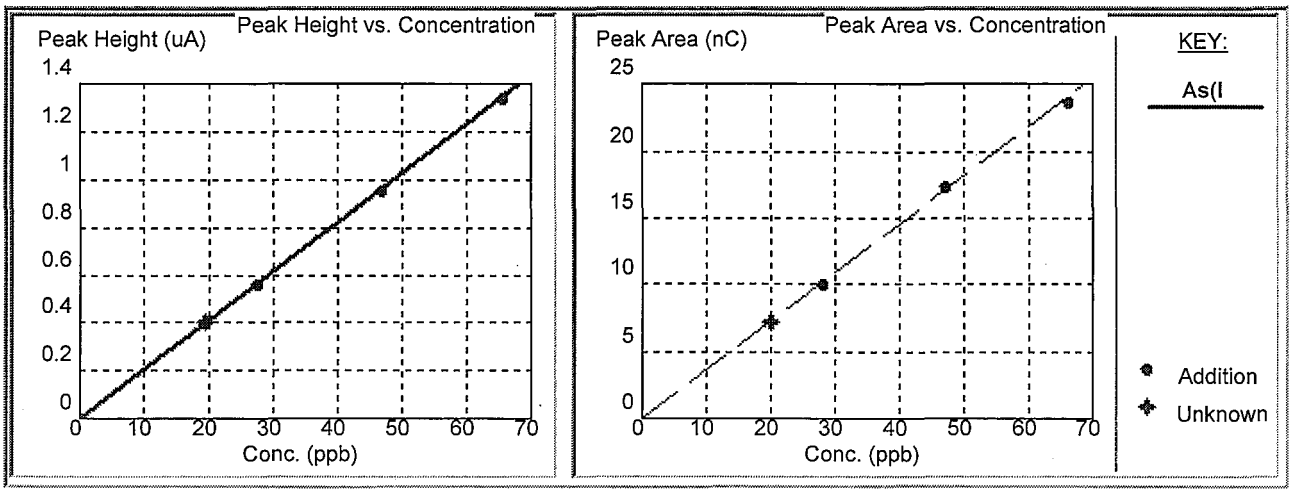


Settings:

Type:	ASV	Clean Time (S)	0.1	Signal Avg.	8
Waveform:	Staircase	Clean Voltage (mV):	600	Frequency (Hz):	2000
Cell	Three Electrode	Plate Time (S)	40	Start Voltage (mV):	-400
☑ Background subtraction		Plate Voltage (mV)	-400	Stop Voltage (mV):	550
		Range (uA):	12.5	Step Voltage (mV):	5

Calibration Summary:

Calibration Date: 05/Sep/06 at 17:52:55



Calibration Parameters

Metal	Calib. Mode	Fit Factor	Slope	Zero Offset	Starting Concentration	Concentration in Original Sample
As[III+V]	**Height**	1.000	0.049 ppb/nA	0 ppt	19 ppb	23 ppb
	Area	0.999	2.76 ppb/nC	0 ppt	20 ppb	24 ppb

Addition Data for Method of Standard Additions

Metal	Unknown Concentration	Concentration in original aliquot	1st Addition	2nd Addition	3rd Addition	Total added concentration
As(III+V)	19.5 ppb	23.2 ppb	400 uL (7.94 ppb)	990 uL (19.3 ppb)	990 uL (18.9 ppb)	46.1 ppb

Starting Volume: 50.000 **mL**

Final Volume: 52.380 **mL**

TraceDetect Nano-Band Explorer

Sample ID: JC7CR 500x AsV CuRx

Trace Metals:

As(III+V): 795 ppb

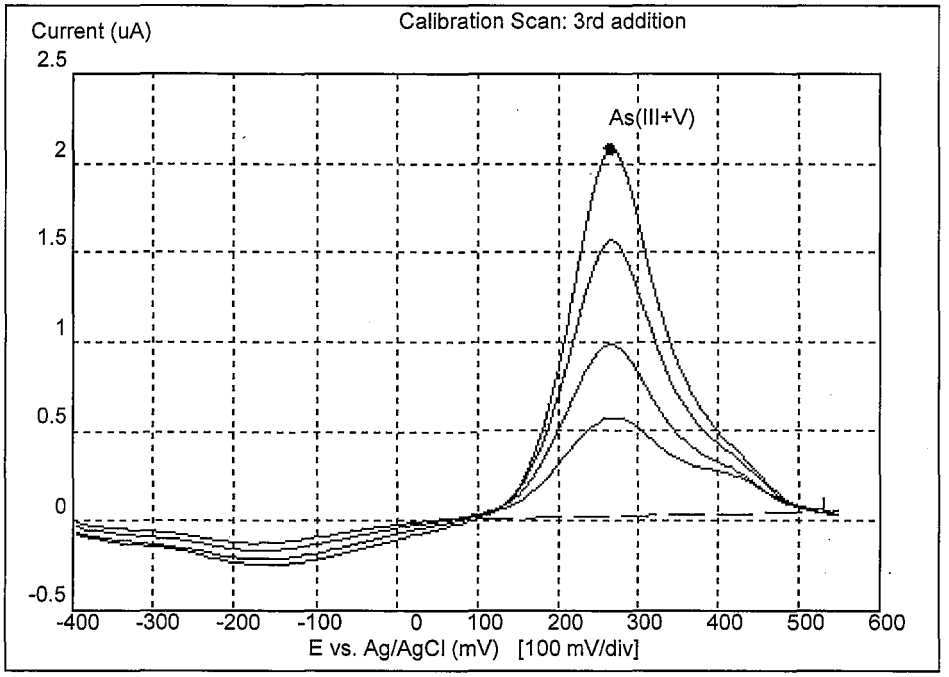
NO G
As+r

Temperature:

Input 1:

Input 2:

05/Sep/06 16:13:42



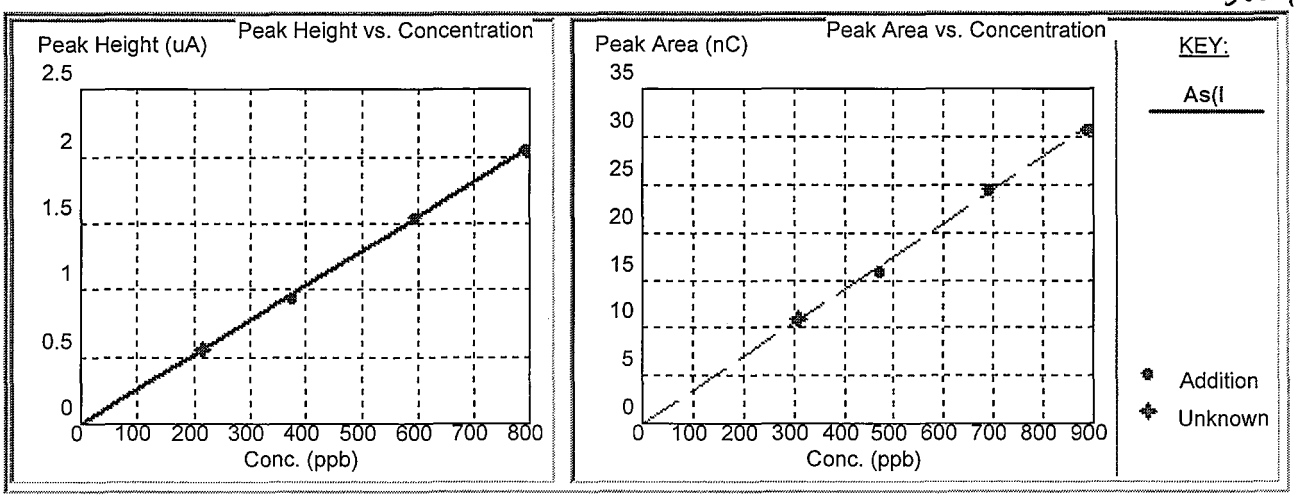
Settings:

Type:	ASV	Clean Time (S)	0.1	Signal Avg.	8
Waveform:	Staircase	Clean Voltage (mV):	600	Frequency (Hz):	2000
Cell	Three Electrode	Plate Time (S)	5	Start Voltage (mV):	-400
☑ Background subtraction		Plate Voltage (mV)	-400	Stop Voltage (mV):	550
		Range (uA):	12.5	Step Voltage (mV):	5

Calibration Summary:

JC7CR As+F
500X
CuRy

Calibration Date: 05/Sep/06 at 16:08:12



Calibration Parameters

Metal	Calib. Mode	Fit Factor	Slope	Zero Offset	Starting Concentration	Concentration in Original Sample
As(III+V)	**Height**	1.000	0.386 ppb/nA	0 ppt	210 ppb	250 ppb
	Area	0.998	28.6 ppb/nC	0 ppt	310 ppb	370 ppb

Addition Data for Method of Standard Additions

Metal	Unknown Concentration	Concentration in original aliquot	1st Addition	2nd Addition	3rd Addition	Total added concentration
As(III+V)	213 ppb	253 ppb	8.00 uL (160 ppb)	11.0 uL (220 ppb)	10.0 uL (200 ppb)	580 ppb

JC7CR SWY
As V GPY

Starting Volume: 50.000 **mL**

Final Volume: 50.029 **mL**

TraceDetect Nano-Band Explorer -

Sample ID: Blank AsV CuRx with1ppbspike

Trace Metals:

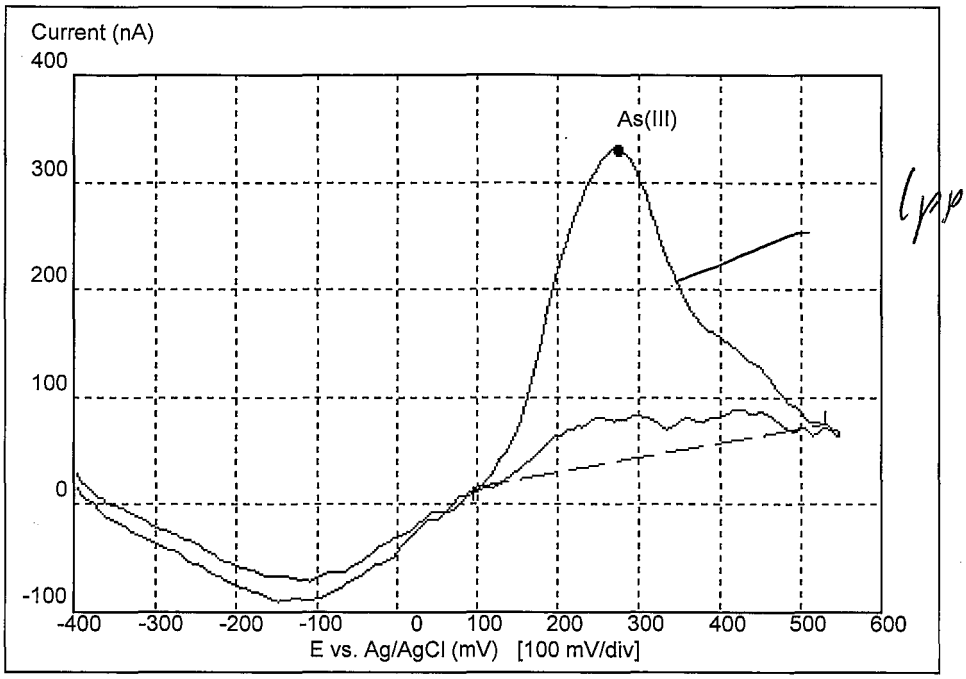
As(III): 3.23 ppb

Temperature:

Input 1:

Input 2:

05/Sep/06 15:23:12



1ppb spike

Settings:

Type:	ASV	Clean Time (S)	0.1	Signal Avg.	8
Waveform:	Staircase	Clean Voltage (mV):	600	Frequency (Hz):	2000
Cell	Three Electrode	Plate Time (S)	180	Start Voltage (mV):	-400
☑ Background subtraction		Plate Voltage (mV)	-400	Stop Voltage (mV):	550
		Range (uA):	12.5	Step Voltage (mV):	5

TraceDetect Nano-Band Explorer

Sample ID: LCS AsV CuRx

Trace Metals:

As(III+V): 54.1 ppb

19.2

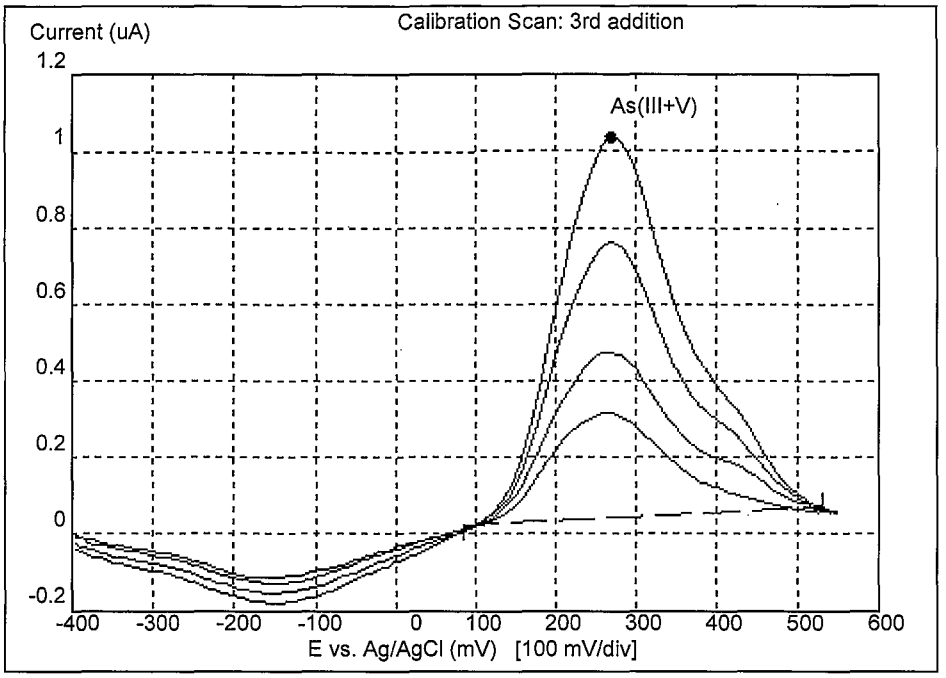
96%

Temperature:

Input 1:

Input 2:

05/Sep/06 15:58:32



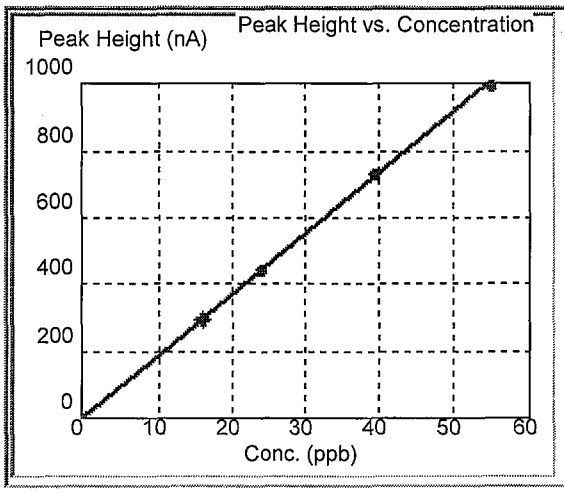
Settings:

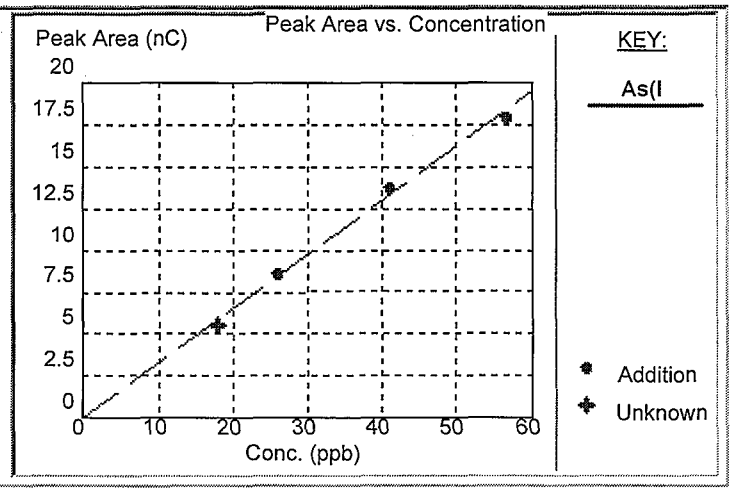
Type:	ASV	Clean Time (S)	0.1	Signal Avg.	8
Waveform:	Staircase	Clean Voltage (mV):	600	Frequency (Hz):	2000
Cell	Three Electrode	Plate Time (S)	40	Start Voltage (mV):	-400
☑ Background subtraction		Plate Voltage (mV)	-400	Stop Voltage (mV):	550
		Range (uA):	12.5	Step Voltage (mV):	5

Calibration Summary:

LCS As V Cu Ru

Calibration Date: 05/Sep/06 at 15:39:46





Calibration Parameters

Metal	Calib. Mode	Fit Factor	Slope	Zero Offset	Starting Concentration	Concentration in Original Sample
As(III+V)	**Height**	0.999	0.054 ppb/nA	0 ppt	16 ppb	19 ppb
	Area	0.995	3.06 ppb/nC	0 ppt	18 ppb	21 ppb

Addition Data for Method of Standard Additions

LCS As V
Cu Pf

Metal	Unknown Concentration	Concentration in original aliquot	1st Addition	2nd Addition	3rd Addition	Total added concentration
As(III+V)	16.1 ppb	19.2 ppb	400 uL (7.94 ppb)	780 uL (15.2 ppb)	810 uL (15.6 ppb)	38.8 ppb

Starting Volume: 50.000 **mL**

Final Volume: 51.990 **mL**

TraceDetect Nano-Band Explorer

Sample ID: LCS Dup AsV CuRx

Trace Metals:

As(III+V): 44.1 ppb

14.3

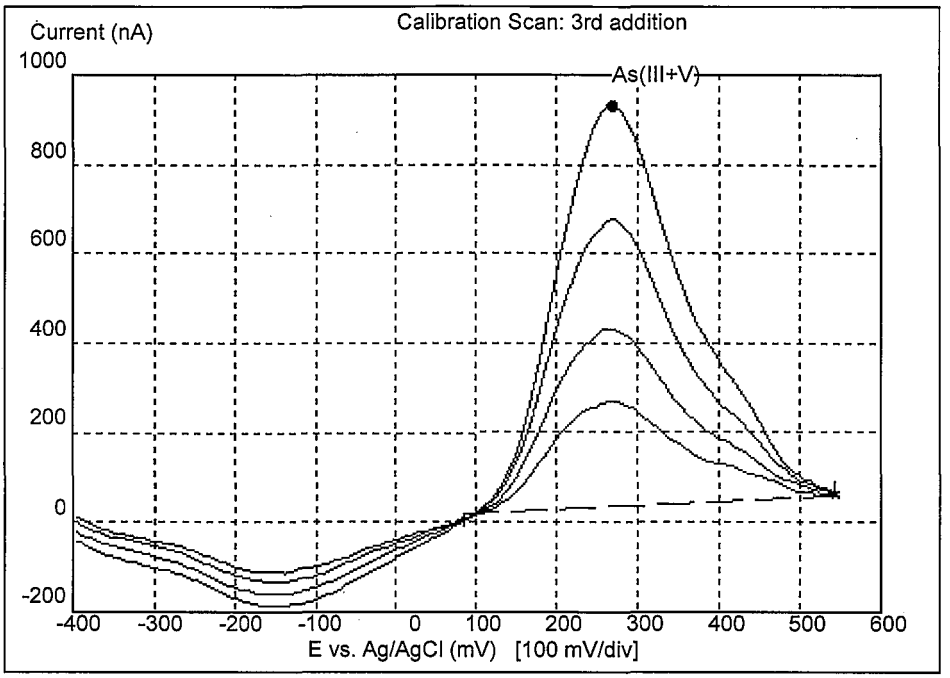
(72%)

Temperature:

Input 1:

Input 2:

05/Sep/06 16:31:13



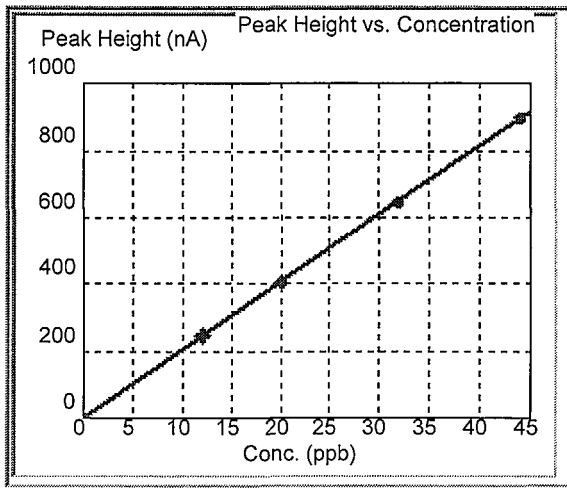
Settings:

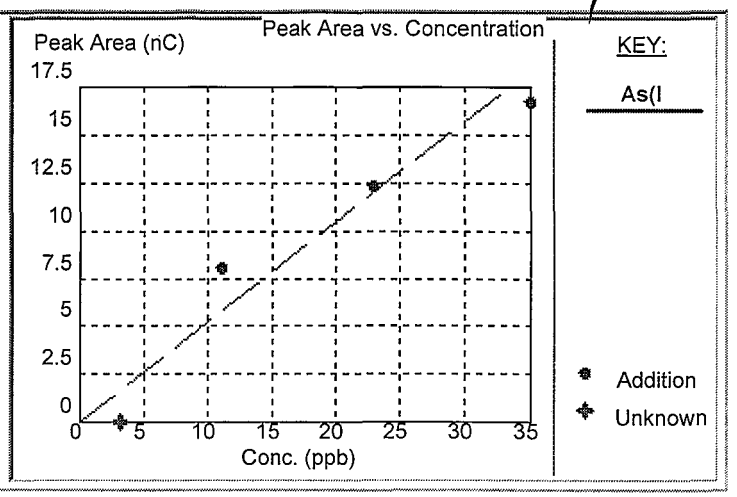
Type:	ASV	Clean Time (S)	0.1	Signal Avg.	8
Waveform:	Staircase	Clean Voltage (mV):	600	Frequency (Hz):	2000
Cell	Three Electrode	Plate Time (S)	40	Start Voltage (mV):	-400
☑ Background subtraction		Plate Voltage (mV)	-400	Stop Voltage (mV):	550
		Range (uA):	12.5	Step Voltage (mV):	5

Calibration Summary:

LCS Dup AsI CuRp

Calibration Date: 05/Sep/06 at 16:14:14





Calibration Parameters

Metal	Calib. Mode	Fit Factor	Slope	Zero Offset	Starting Concentration	Concentration in Original Sample
As(III+V)	**Height**	1.000	0.049 ppb/nA	0 ppt	12 ppb	14 ppb
	Area	0.934	1.91 ppb/nC	0 ppt	3.0 ppb	3.6 ppb

Addition Data for Method of Standard Additions

Metal	Unknown Concentration	Concentration in original aliquot	1st Addition	2nd Addition	3rd Addition	Total added concentration
As(III+V)	12.0 ppb	14.3 ppb	400 uL (7.94 ppb)	610 uL (12.0 ppb)	620 uL (12.0 ppb)	31.9 ppb

LCS Dup
As V
Cu Pb

Starting Volume: 50.000 **mL**

Final Volume: 51.630 **mL**

TraceDetect Nano-Band Explorer

Sample ID: RL Check

Trace Metals:

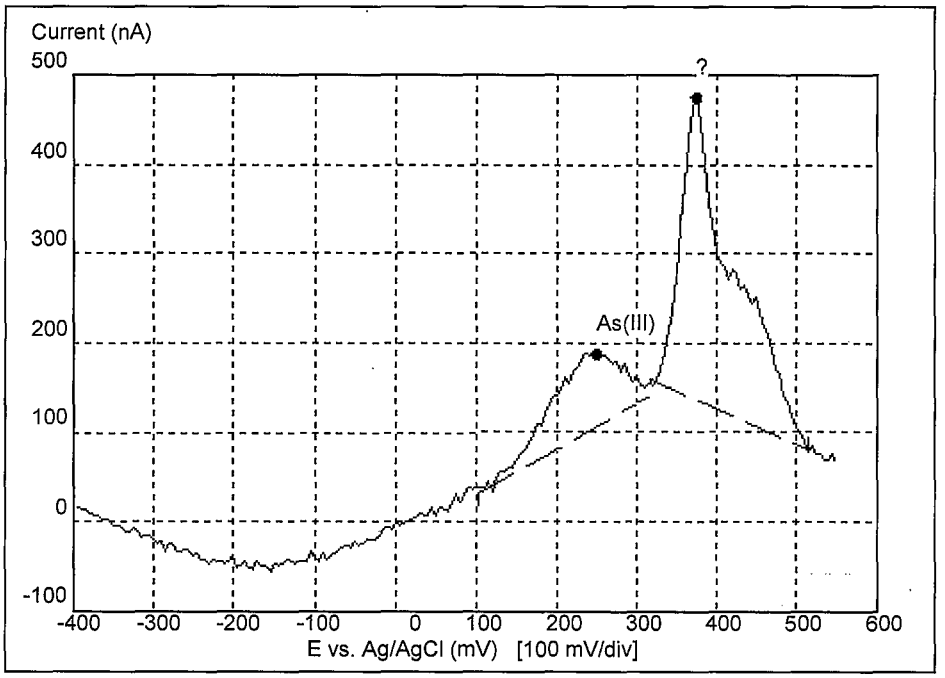
As(III): 82.9 nA

Temperature:

Input 1:

Input 2:

05/Sep/06 10:09:23



Settings:

Type:	ASV	Clean Time (S)	0.1	Signal Avg.	8
Waveform:	Staircase	Clean Voltage (mV):	600	Frequency (Hz):	2000
Cell	Three Electrode	Plate Time (S)	160	Start Voltage (mV):	-400
☑ Background subtraction		Plate Voltage (mV)	-400	Stop Voltage (mV):	550
		Range (uA):	12.5	Step Voltage (mV):	5

TraceDetect Nano-Band Explorer -

Sample ID: MSAVerification Std 20ppb

Trace Metals:

As(III): 550 nA

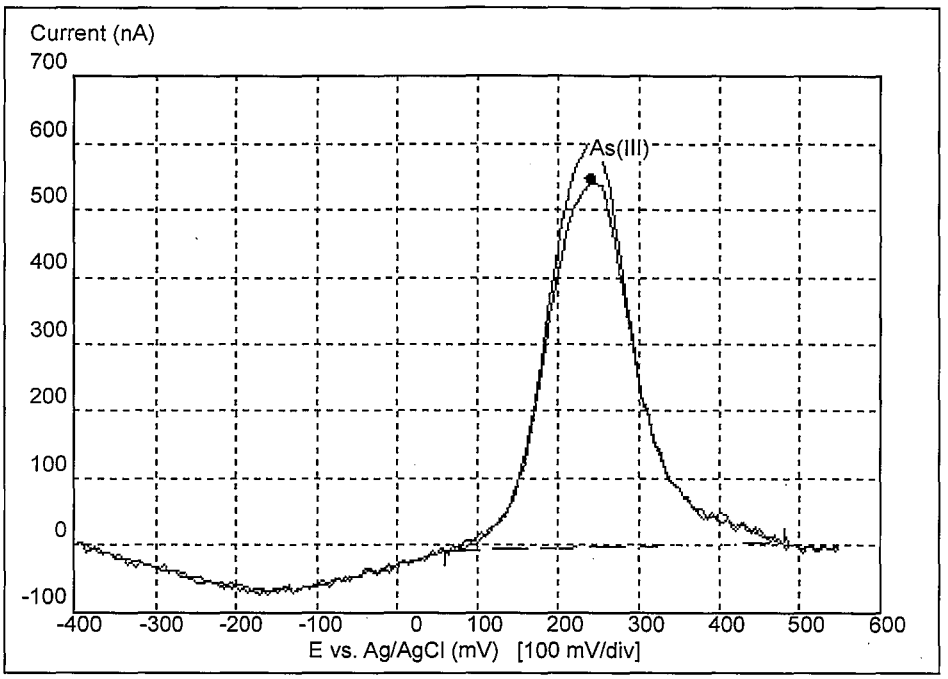
550 / 581 x100% = 95%

Temperature:

Input 1:

Input 2:

05/Sep/06 09:57:44



Settings:

Type:	ASV	Clean Time (S)	0.1	Signal Avg.	8
Waveform:	Staircase	Clean Voltage (mV):	600	Frequency (Hz):	2000
Cell	Three Electrode	Plate Time (S)	40	Start Voltage (mV):	-400
		Plate Voltage (mV)	-400	Stop Voltage (mV):	550
		Range (uA):	12.5	Step Voltage (mV):	5

☑ Background subtraction

TraceDetect Nano-Band Explorer

Sample ID: MSA Working Std 20ppb

Trace Metals:

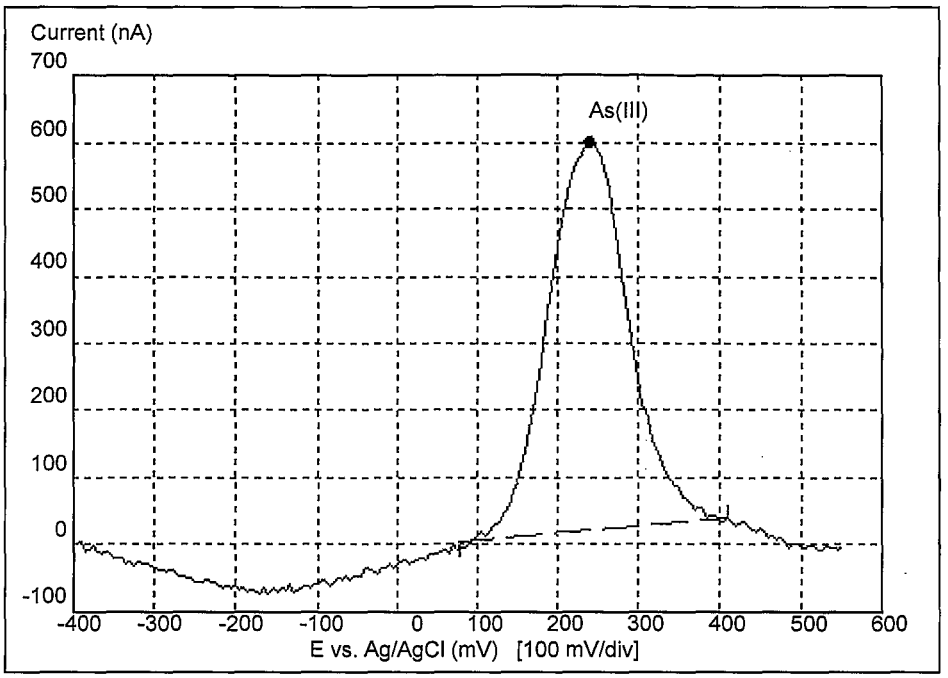
As(III): 581 nA

Temperature:

Input 1:

Input 2:

05/Sep/06 09:54:08



Settings:

Type:	ASV	Clean Time (S)	0.1	Signal Avg.	8
Waveform:	Staircase	Clean Voltage (mV):	600	Frequency (Hz):	2000
Cell	Three Electrode	Plate Time (S)	40	Start Voltage (mV):	-400
☑ Background subtraction		Plate Voltage (mV)	-400	Stop Voltage (mV):	550
		Range (uA):	12.5	Step Voltage (mV):	5

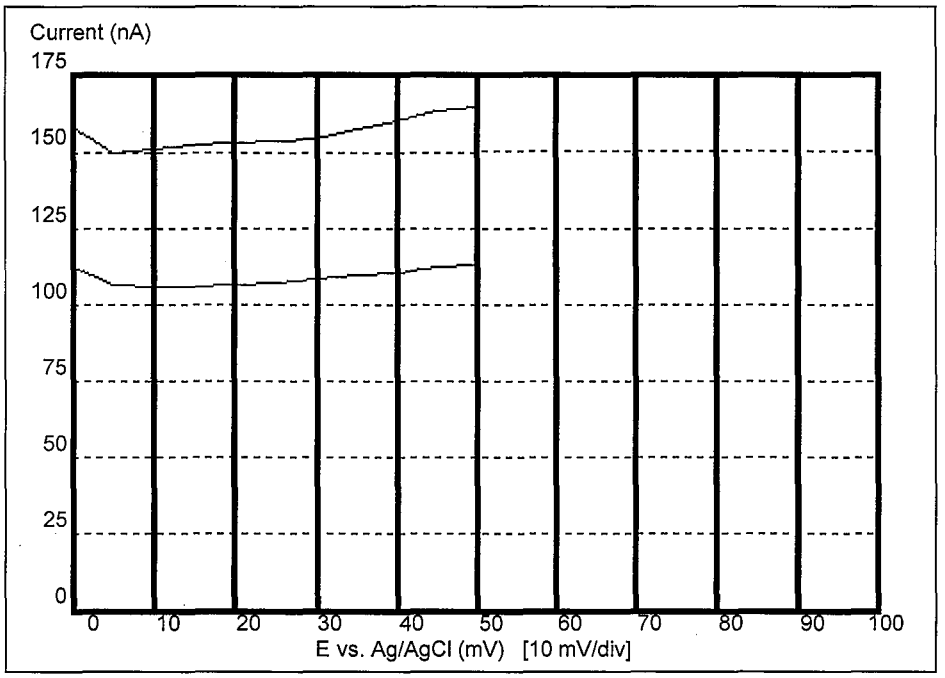
TraceDetect Nano-Band Explorer -

Sample ID: AuPlate(#56)

Trace Metals:

As(III) < 8.0 nA

05/Sep/06 09:34:26



Temperature:

Input 1:

Input 2:

Settings:

Type:	ASV	Clean Time (S)	0	Signal Avg.	16
Waveform:	Sq. Wave	Clean Voltage (mV):	100	Frequency (Hz):	1000
Cell	Three Electrode	Plate Time (S)	55	Start Voltage (mV):	-50
		Plate Voltage (mV)	-50	Stop Voltage (mV):	5
		Range (uA):	1.25	Step Voltage (mV):	5

☐ Background subtraction

TraceDetect Nano-Band Explorer

Sample ID: JC1LX Screen

Trace Metals:

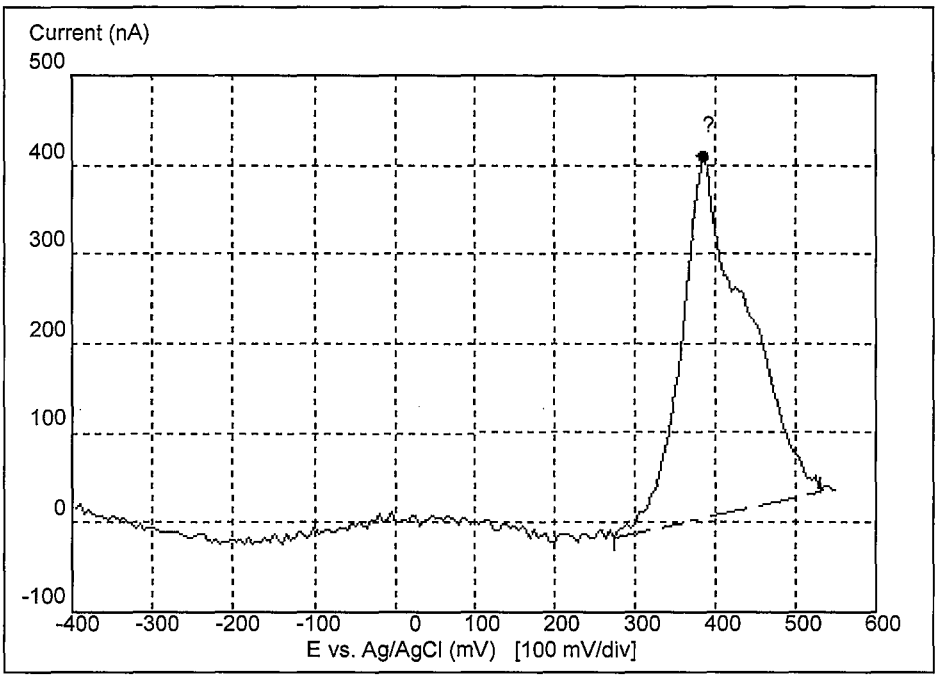
As(III) < 470 ppt

Temperature:

Input 1:

Input 2:

05/Sep/06 10:48:07



Settings:

Type:	ASV	Clean Time (S)	0.1	Signal Avg.	8
Waveform:	Staircase	Clean Voltage (mV):	600	Frequency (Hz):	2000
Cell	Three Electrode	Plate Time (S)	10	Start Voltage (mV):	-400
		Plate Voltage (mV)	-400	Stop Voltage (mV):	550
		Range (uA):	12.5	Step Voltage (mV):	5

☑ Background subtraction

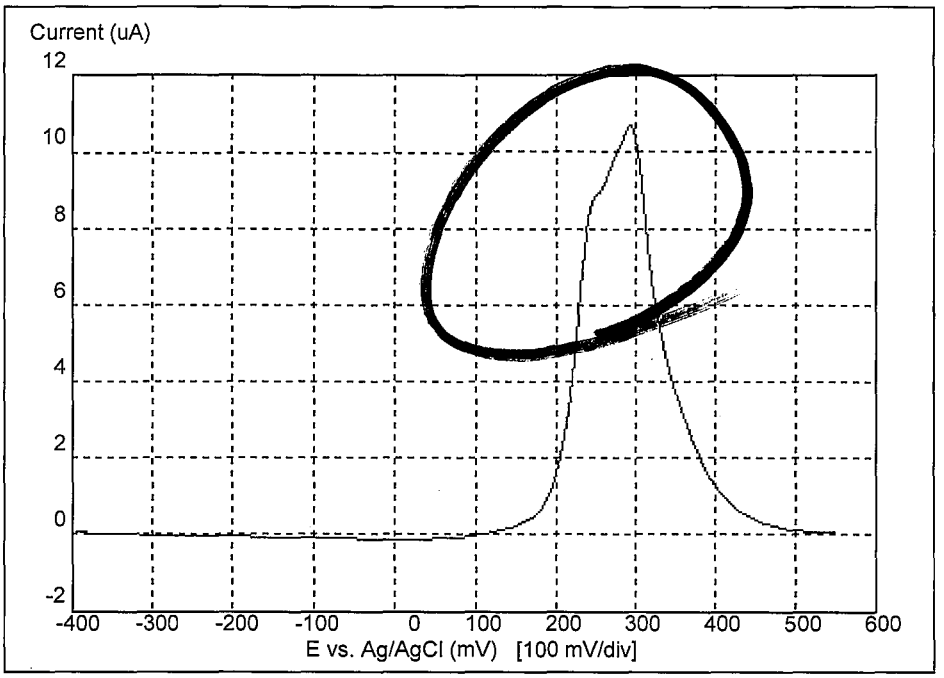
TraceDetect Nano-Band Explorer

Sample ID: JC7CR 10x CuRx

Trace Metals:

As(III) < 2.4 ppb

05/Sep/06 14:04:41



Temperature:

Input 1:

Input 2:

Settings:

Type:	ASV	Clean Time (S)	0.1	Signal Avg.	8
Waveform:	Staircase	Clean Voltage (mV):	600	Frequency (Hz):	2000
Cell	Three Electrode	Plate Time (S)	5	Start Voltage (mV):	-400
☑ Background subtraction		Plate Voltage (mV)	-400	Stop Voltage (mV):	550
		Range (uA):	12.5	Step Voltage (mV):	5

over

even at

10X

STL North Canton Arsenic (III) Data Review Checklist

Run/Project Information

Run Date: 9/6/04 **Analyst:** LFH **Instrument:** _____

Prep Batches Run: 6249409

Methods used: **7063 mod :** NC-WC-000X Rev 1

Review Items

A. Instrument Setup	Yes	No	N/A	2ndLevel
1. Electrode sensitivity check?	✓			X
2. MSA working standard and verification standard within control limits?	✓			X
3. Cleanliness check (ICB) within +/- RL?	✓			X
B. Sample Results				
1. Were non-detect samples verified with single point MSA?	✓			X
2. All samples with As(III) quantified with 3-4 point MSA?	✓			X
3. Sample analyses done within holding time?	✓			X
C. Preparation/Matrix QC				
1. Samples preserved in the field?	✓			X
2. LCS done per prep batch and within QC limits?	✓			X
3. Method blank done per prep batch and < RL?	✓			X
4. MS run at required frequency (1 per 20 samples) and within limits?	✓			X
5. MSD or DU run at required frequency (1 per 20 samples) and RPD within limits?	✓			X
D. Other				
1. Are all nonconformances documented appropriately?			✓	X
2. Current MDL data on file?	✓			X
3. Calculations and Transcriptions checked for error?	✓			X
4. All client/ project specific requirements met?	✓			X
5. Date of analysis verified as correct?	✓			X

Analyst: [signature] **Date:** 9/6/04

Comments:

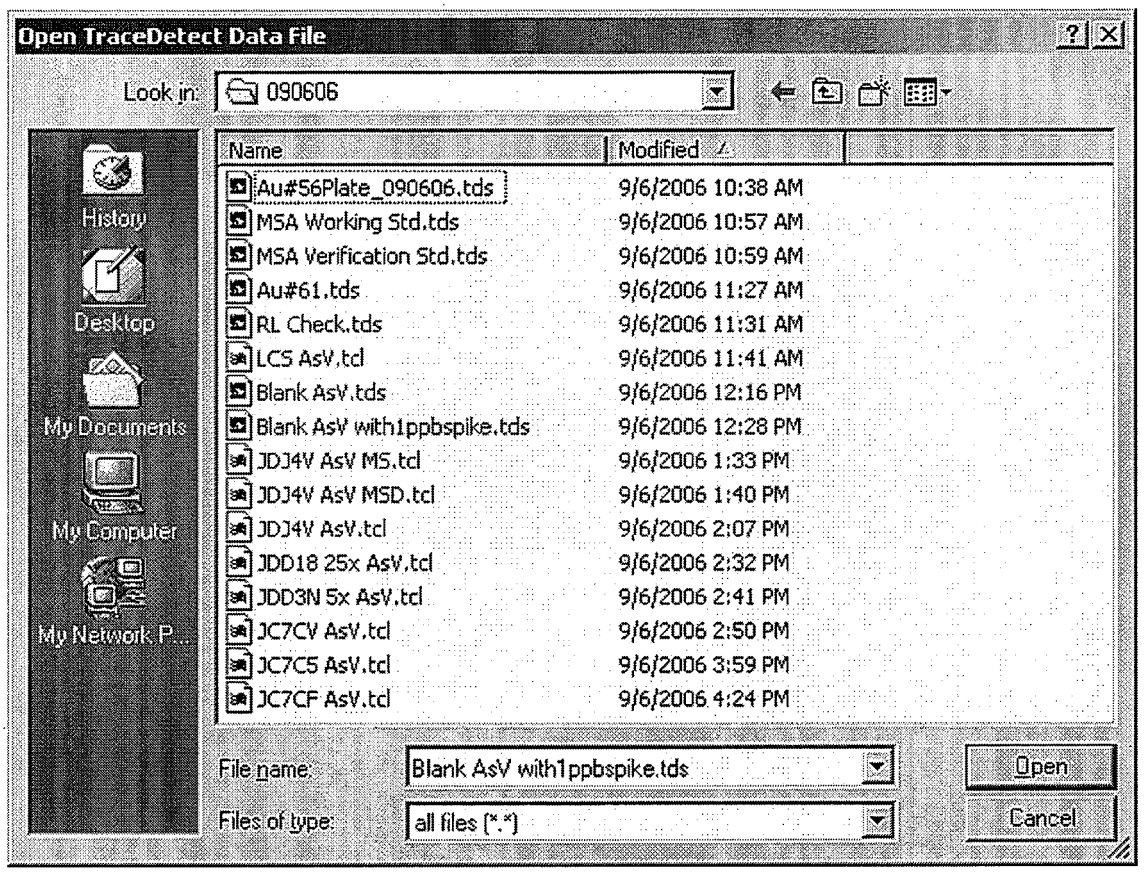
2nd Level Reviewer [signature] **Date:** 9/6/06

Standard, Reagent and Supply Numbers

MSA Working Std AS6054 **MSA Verification Std** AS6053 **MS As(V) Std** AS6055

Au plate soln WR60945 **conc HCl** WR 60283 **Cu Remover** — **C18** —

Acid ext — **Basic ext** —


Open TraceDetect Data File
Look in: 090606
History
Desktop
My Documents
My Computer
My Network P...
Name
Modified
Au#56Plate_090606.tds 9/6/2006 10:38 AM
MSA Working Std.tds 9/6/2006 10:57 AM
MSA Verification Std.tds 9/6/2006 10:59 AM
Au#61.tds 9/6/2006 11:27 AM
RL Check.tds 9/6/2006 11:31 AM
LCS AsV.tcl 9/6/2006 11:41 AM
Blank AsV.tds 9/6/2006 12:16 PM
Blank AsV with1ppbspike.tds 9/6/2006 12:28 PM
JDJ4V AsV MS.tcl 9/6/2006 1:33 PM
JDJ4V AsV MSD.tcl 9/6/2006 1:40 PM
JDJ4V AsV.tcl 9/6/2006 2:07 PM
JDD18 25x AsV.tcl 9/6/2006 2:32 PM
JDD3N 5x AsV.tcl 9/6/2006 2:41 PM
JC7CV AsV.tcl 9/6/2006 2:50 PM
JC7C5 AsV.tcl 9/6/2006 3:59 PM
JC7CF AsV.tcl 9/6/2006 4:24 PM
File name: Blank AsV with1ppbspike.tds
Files of type: all files (*.*)
Open
Cancel

TraceDetect Nano-Band Explorer

Sample ID: JC7CF AsV

Trace Metals:

As(III+V): 90.3 ppb

4.8 G

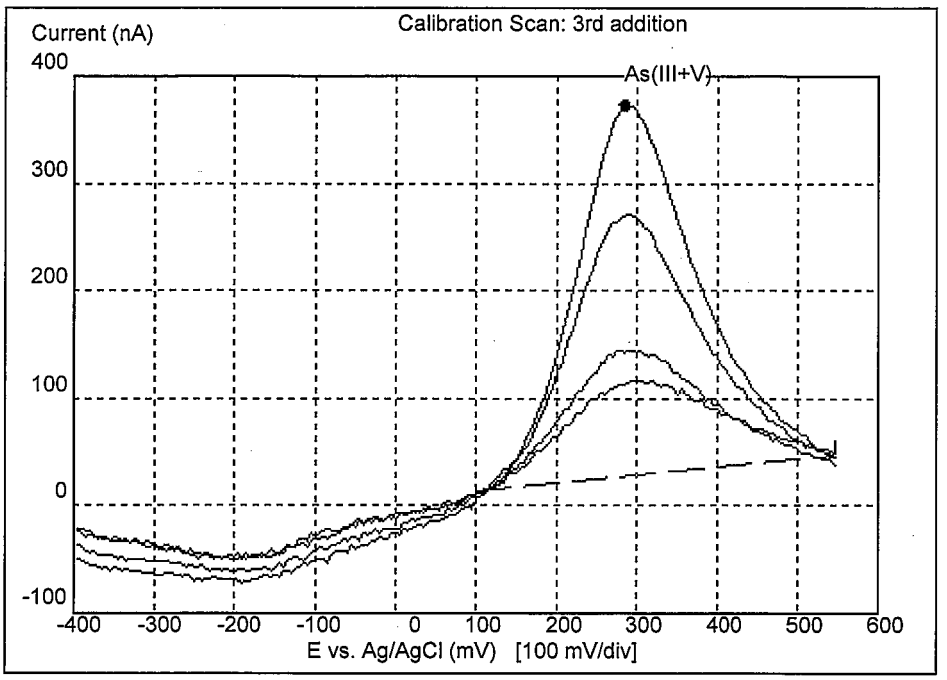
4x

Temperature:

Input 1:

Input 2:

06/Sep/06 16:23:15



Settings:

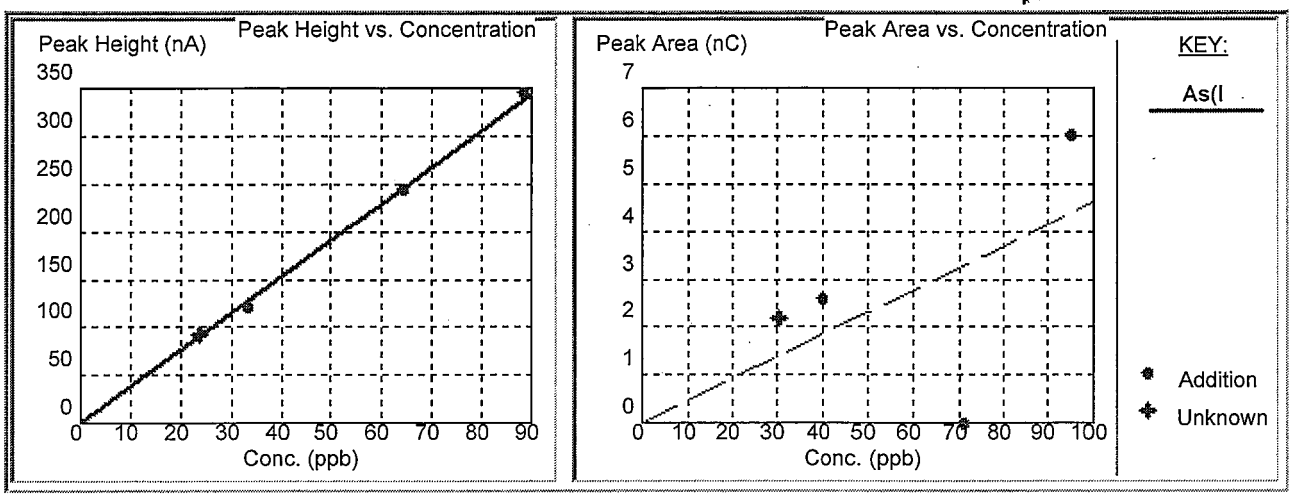
Type:	ASV	Clean Time (S)	0.1	Signal Avg.	8
Waveform:	Staircase	Clean Voltage (mV):	600	Frequency (Hz):	2000
Cell	Three Electrode	Plate Time (S)	40	Start Voltage (mV):	-400
		Plate Voltage (mV)	-400	Stop Voltage (mV):	550
		Range (uA):	12.5	Step Voltage (mV):	5

☑ Background subtraction

Calibration Summary:

JC7CF
AsII

Calibration Date: 06/Sep/06 at 16:13:22



Calibration Parameters

Metal	Calib. Mode	Fit Factor	Slope	Zero Offset	Starting Concentration	Concentration in Original Sample
As(III+V)	**Height**	0.999	0.261 ppb/nA	0 ppt	23 ppb	28 ppb
	Area	0.227	21.6 ppb/nC	0 ppt	30 ppb	36 ppb

Addition Data for Method of Standard Additions

Metal	Unknown Concentration	Concentration in original aliquot	1st Addition	2nd Addition	3rd Addition	Total added concentration
As(III+V)	23.4 ppb	27.9 ppb	500 uL (9.90 ppb)	1.60 mL (30.7 ppb)	1.30 mL (24.3 ppb)	65.0 ppb

JC7CF

AsV

$$\begin{array}{r} -\ 23.1 \\ \hline 4.8 \end{array} \quad \begin{array}{l} As^{+3} \\ As^{+5} \end{array}$$

Starting Volume: 50.000 **mL**

Final Volume: 53.400 **mL**

TraceDetect Nano-Band Explorer

Sample ID: JC7CV AsV

06/Sep/06 14:49:25

Trace Metals:

As(III): 315 ppb

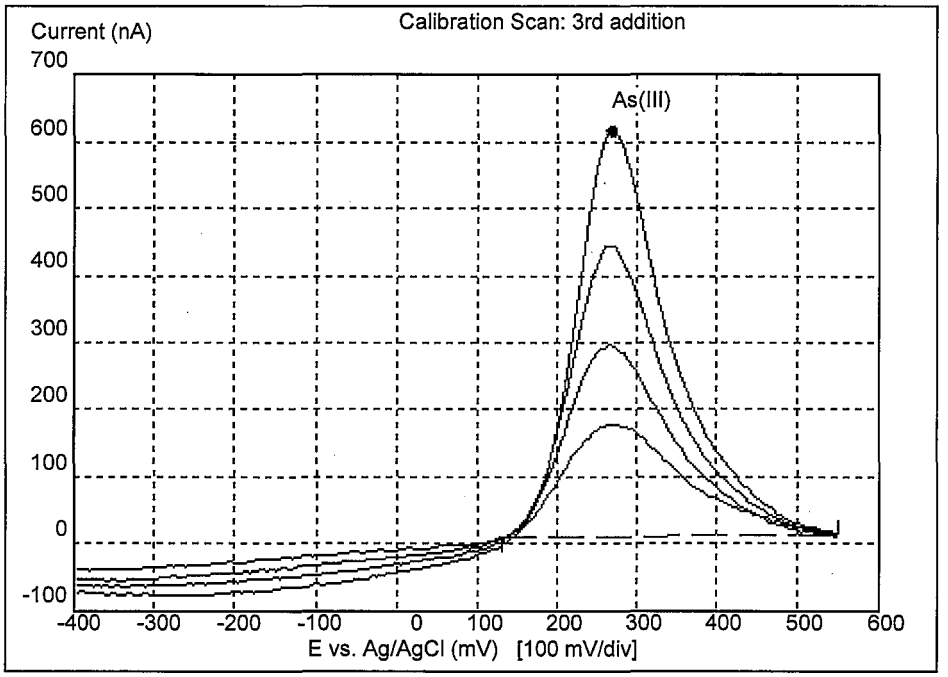
ND G

16X

Temperature:

Input 1:

Input 2:



Settings:

Type:	ASV	Clean Time (S)	0.1	Signal Avg.	8
Waveform:	Staircase	Clean Voltage (mV):	600	Frequency (Hz):	2000
Cell	Three Electrode	Plate Time (S)	10	Start Voltage (mV):	-400
☑ Background subtraction		Plate Voltage (mV)	-400	Stop Voltage (mV):	550
		Range (uA):	12.5	Step Voltage (mV):	5

Addition Data for Method of Standard Additions

Metal	Unknown Concentration	Concentration in original aliquot	1st Addition	2nd Addition	3rd Addition	Total added concentration
As(III)	88.1 ppb	105 ppb	3.00 uL (60.0 ppb)	4.00 uL (80.0 ppb)	4.40 uL (88.0 ppb)	228 ppb

J C7CU As J

$As^{+3} = 119$

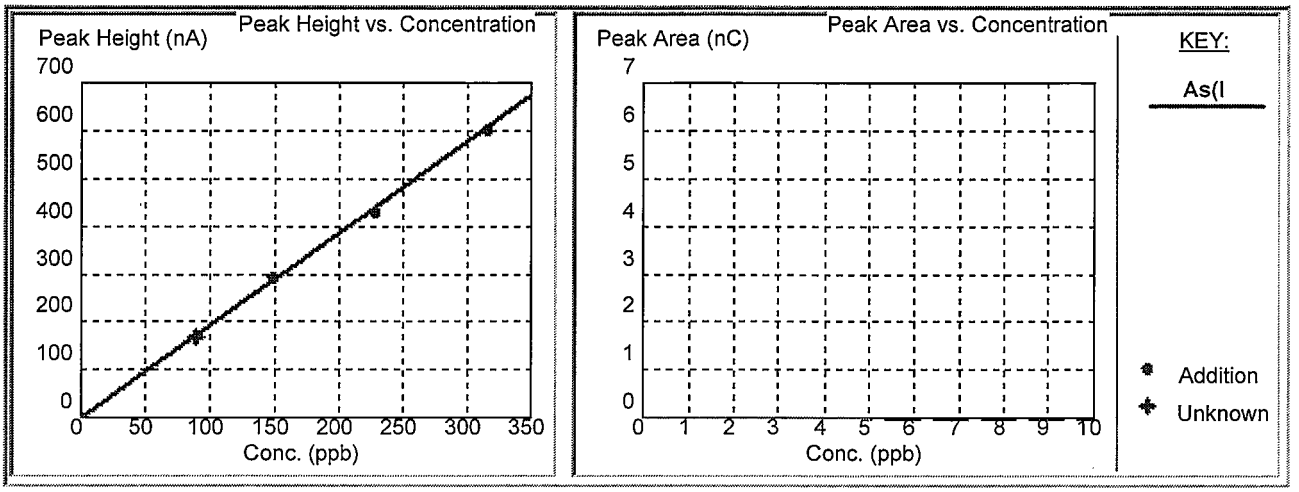
As^{+5} ND

Starting Volume: 50.000 mL

Final Volume: 50.011 mL

Calibration Summary:

Calibration Date: 06/Sep/06 at 14:41:26



Calibration Parameters

Metal	Calib. Mode	Fit Factor	Slope	Zero Offset	Starting Concentration	Concentration in Original Sample
As(III)	**Height**	0.999	0.519 ppb/nA	0 ppt	88 ppb	100 ppb
	Area	0.013	-384 ppb/nC	0 ppt	-1.1 ppm	-1.3 ppm

TraceDetect Nano-Band Explorer

Sample ID: JC7C5 AsV

06/Sep/06 15:58:25

Trace Metals:

As(III+V): 524 nA

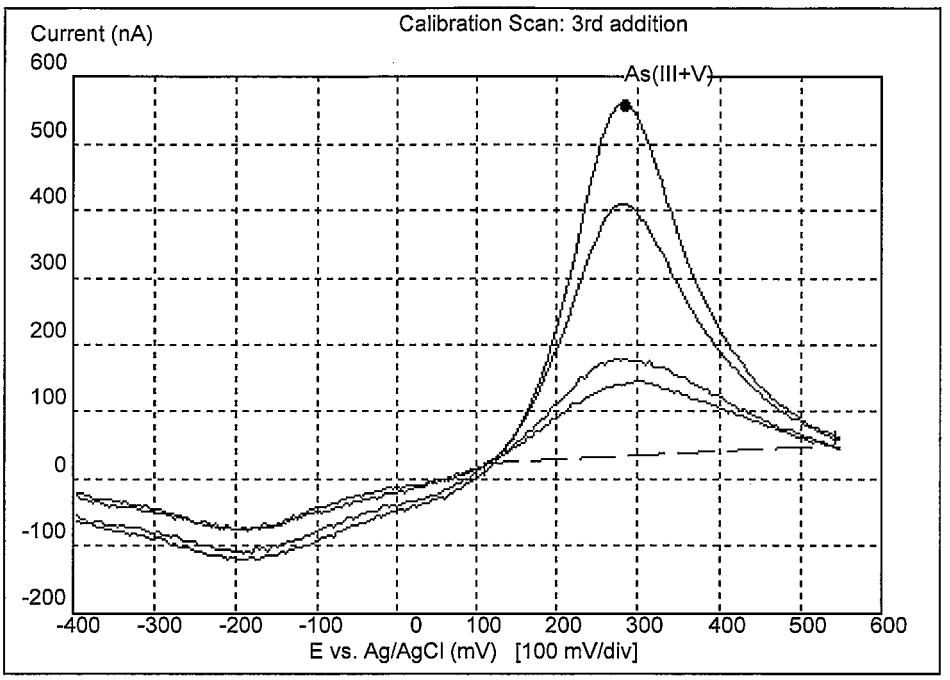
12.7 ppb

4X

Temperature:

Input 1:

Input 2:



Settings:

Type:	ASV	Clean Time (S)	0.1	Signal Avg.	8
Waveform:	Staircase	Clean Voltage (mV):	600	Frequency (Hz):	2000
Cell	Three Electrode	Plate Time (S)	40	Start Voltage (mV):	-400
		Plate Voltage (mV)	-400	Stop Voltage (mV):	550
		Range (uA):	12.5	Step Voltage (mV):	5

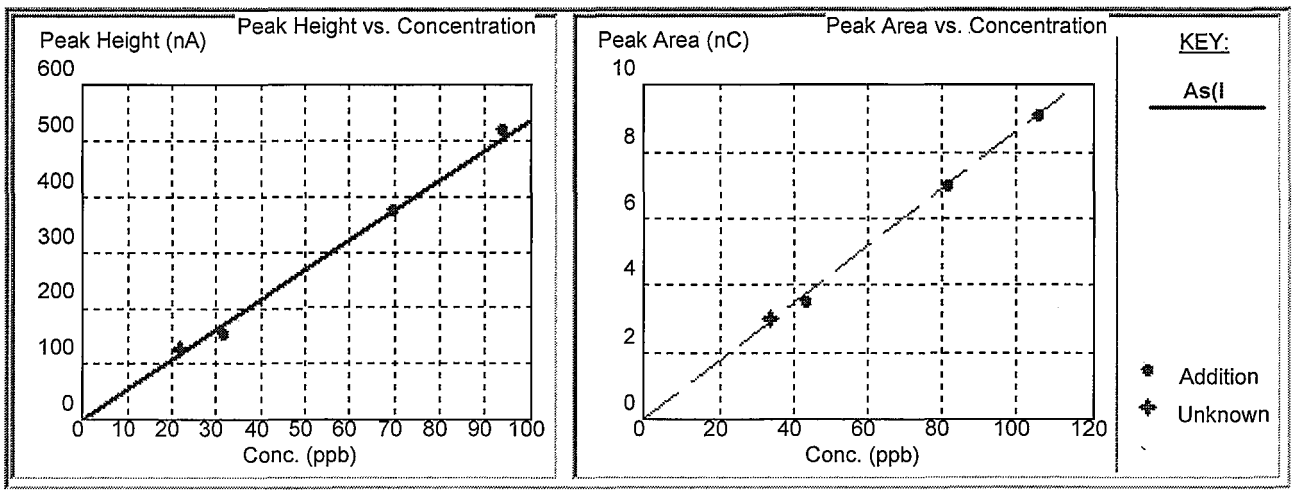
☑ Background subtraction

Calibration Summary:

TC7C5

As I

Calibration Date: 06/Sep/06 at 14:50:00



Calibration Parameters

Metal	Calib. Mode	Fit Factor	Slope	Zero Offset	Starting Concentration	Concentration in Original Sample
As(III+V)	**Height**	0.996	0.186 ppb/nA	0 ppt	22 ppb	26 ppb
	Area	0.998	11.6 ppb/nC	0 ppt	33 ppb	40 ppb

Addition Data for Method of Standard Additions

SC7C5
As V

Metal	Unknown Concentration	Concentration in original aliquot	1st Addition	2nd Addition	3rd Addition	Total added concentration
As(III+V)	21.6 ppb	25.8 ppb	500 uL (9.90 ppb)	2.00 mL (38.1 ppb)	1.30 mL (24.2 ppb)	72.2 ppb

-13.1 As^{+3}

12.7 As^{+5}

Starting Volume: 50.000 **mL**

Final Volume: 53.800 **mL**

TraceDetect Nano-Band Explorer

Sample ID: JDD18 25x AsV

Trace Metals:

As(III): 367 ppb

ND G

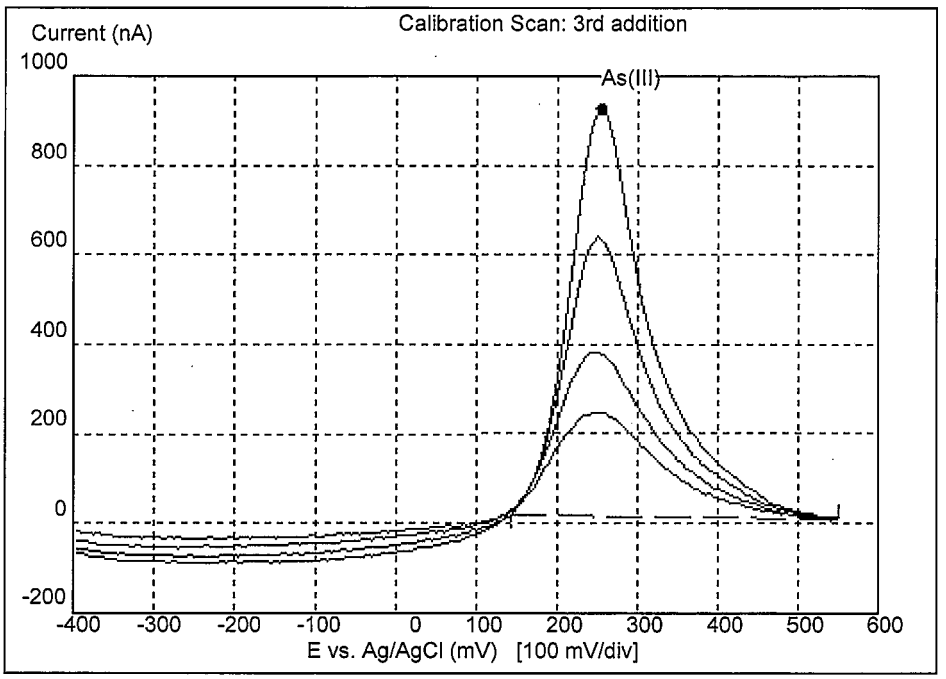
400X

Temperature:

Input 1:

Input 2:

06/Sep/06 14:31:39



Settings:

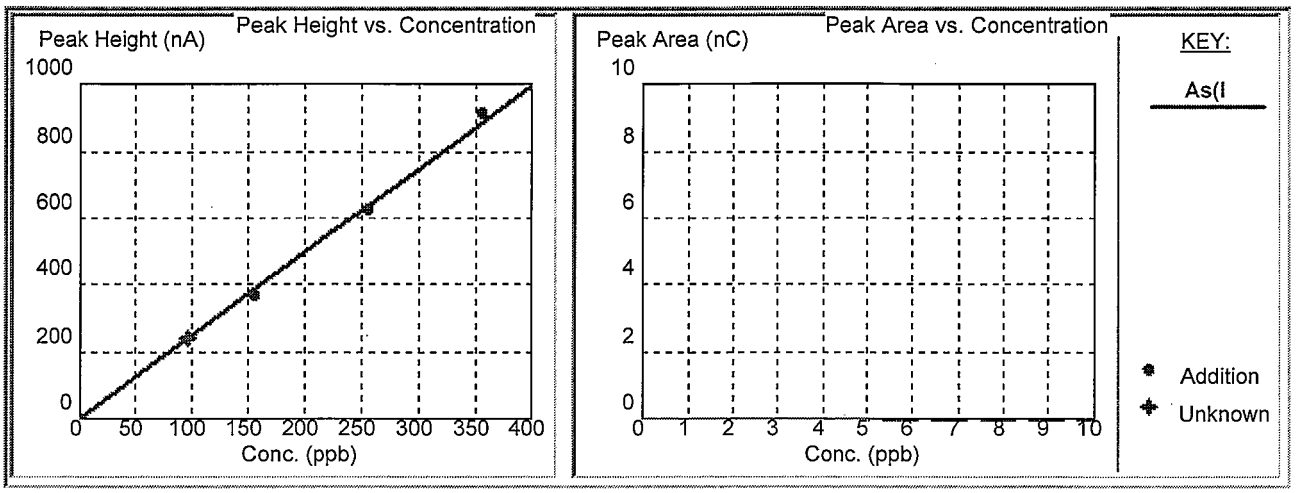
Type:	ASV	Clean Time (S)	0.1	Signal Avg.	8
Waveform:	Staircase	Clean Voltage (mV):	600	Frequency (Hz):	2000
Cell	Three Electrode	Plate Time (S)	10	Start Voltage (mV):	-400
		Plate Voltage (mV)	-400	Stop Voltage (mV):	550
		Range (uA):	12.5	Step Voltage (mV):	5

☑ Background subtraction

Calibration Summary:

JDD18 25x As V

Calibration Date: 06/Sep/06 at 14:07:17



Calibration Parameters

Metal	Calib. Mode	Fit Factor	Slope	Zero Offset	Starting Concentration	Concentration in Original Sample
As[III]	**Height**	0.997	0.401 ppb/nA	0 ppt	95 ppb	110 ppb
	Area	0.168	-112 ppb/nC	0 ppt	-630 ppb	-750 ppb

JDD18 25x

As V

Addition Data for Method of Standard Additions

Metal	Unknown Concentration	Concentration in original aliquot	1st Addition	2nd Addition	3rd Addition	Total added concentration
As(III)	95.3 ppb	113 ppb	3.00 uL (60.0 ppb)	5.00 uL (100 ppb)	5.00 uL (100 ppb)	260 ppb

~~x 400~~ 9/6/06

x25

2825 As(III + V)

As^{+3} = 2925

Starting Volume: 50.000 mL

Final Volume: 50.013 mL

TraceDetect Nano-Band Explorer

Sample ID: JDD3N 5x AsV

Trace Metals:

As(III): 366 ppb

212ppb

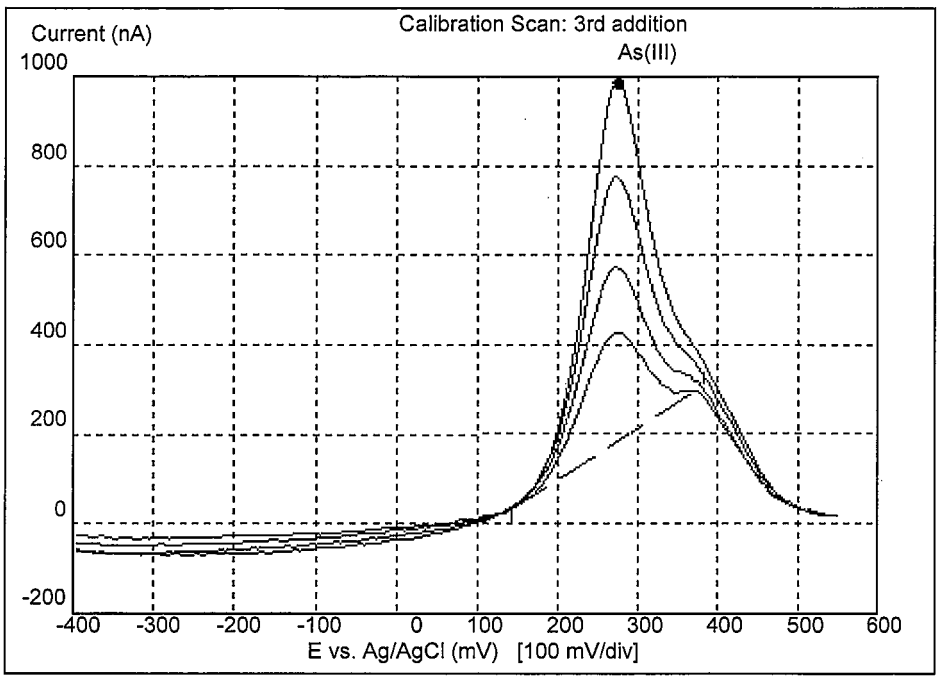
80%

Temperature:

Input 1:

Input 2:

06/Sep/06 14:40:47



Settings:

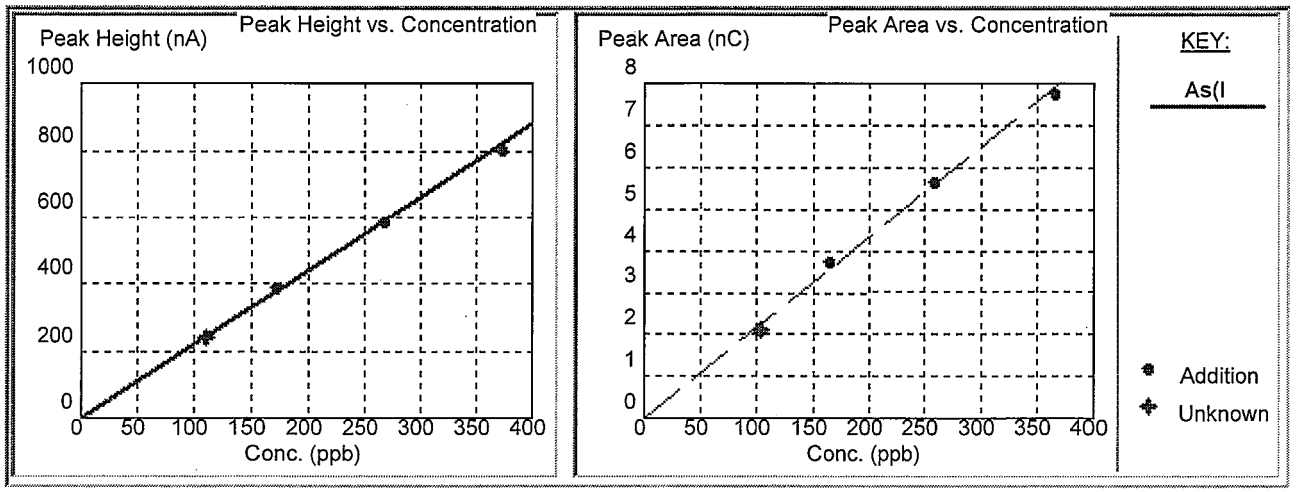
Type:	ASV	Clean Time (S)	0.1	Signal Avg.	8
Waveform:	Staircase	Clean Voltage (mV):	600	Frequency (Hz):	2000
Cell	Three Electrode	Plate Time (S)	10	Start Voltage (mV):	-400
		Plate Voltage (mV)	-400	Stop Voltage (mV):	550
		Range (uA):	12.5	Step Voltage (mV):	5

☑ Background subtraction

Calibration Summary:

IPM 3W Sx Ast

Calibration Date: 06/Sep/06 at 14:32:17



Calibration Parameters

Metal	Calib. Mode	Fit Factor	Slope	Zero Offset	Starting Concentration	Concentration in Original Sample
As(III)	**Height**	0.998	0.454 ppb/nA	0 ppt	110 ppb	130 ppb
	Area	0.996	46.2 ppb/nC	0 ppt	100 ppb	120 ppb

JDD3N As+5
5X

Addition Data for Method of Standard Additions

Metal	Unknown Concentration	Concentration in original aliquot	1st Addition	2nd Addition	3rd Addition	Total added concentration
As(III)	111 ppb	132 ppb	3.00 uL (60.0 ppb)	4.80 uL (96.0 ppb)	5.30 uL (106 ppb)	262 ppb

x5
660 As(III+V)
-448 As(III)
212 As(V)

Starting Volume: 50.000 mL

Final Volume: 50.013 mL

TraceDetect Nano-Band Explorer

Sample ID: JDJ4V AsV

Trace Metals:

As(III): 6.97 ppb

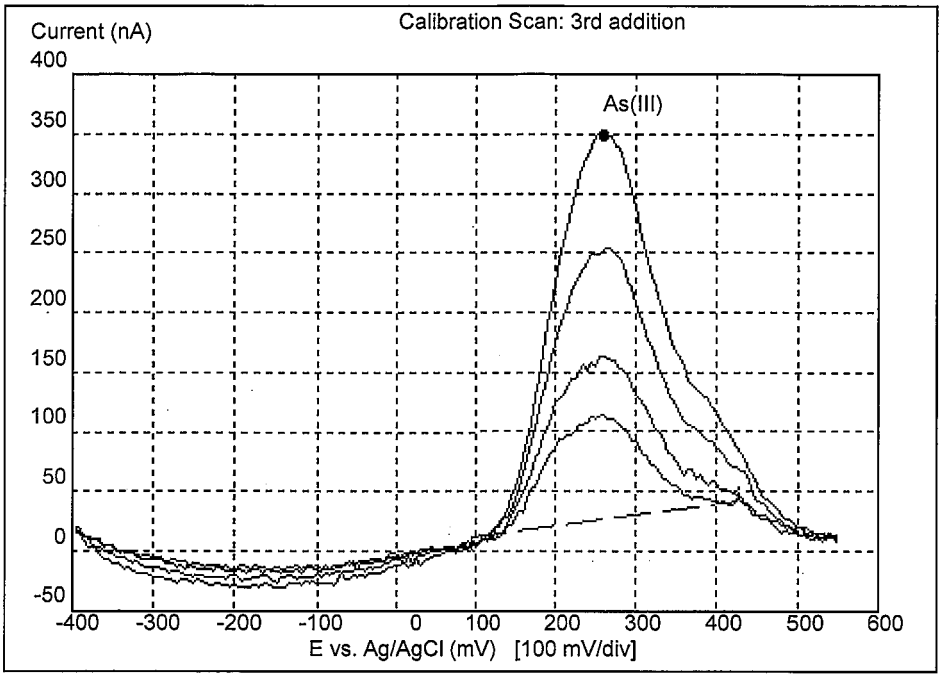
2.34

Temperature:

Input 1:

Input 2:

06/Sep/06 14:03:47



Settings:

Type:	ASV	Clean Time (S)	0.1	Signal Avg.	8
Waveform:	Staircase	Clean Voltage (mV):	600	Frequency (Hz):	2000
Cell	Three Electrode	Plate Time (S)	160	Start Voltage (mV):	-400
		Plate Voltage (mV)	-400	Stop Voltage (mV):	550
		Range (uA):	12.5	Step Voltage (mV):	5

☑ Background subtraction

Addition Data for Method of Standard Additions

Metal	Unknown Concentration	Concentration in original aliquot	1st Addition	2nd Addition	3rd Addition	Total added concentration
As(III)	1.97 ppb	2.34 ppb	50.0 uL (1.00 ppb)	100 uL (1.99 ppb)	100 uL (1.99 ppb)	4.98 ppb

J D JYV
As I

As^{+3} = ND

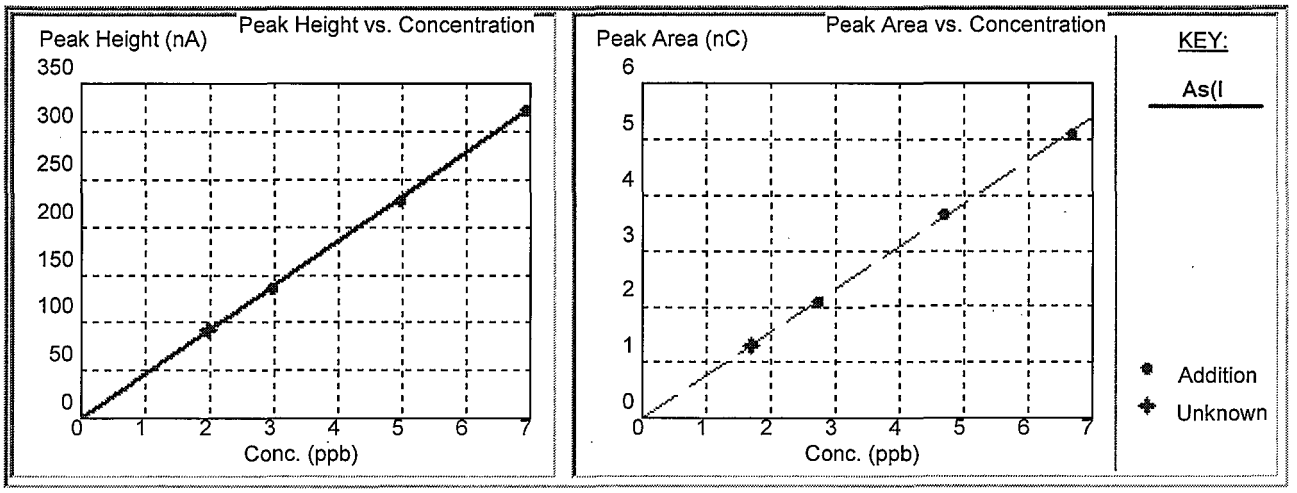
Starting Volume: 50.000 mL

Final Volume: 50.250 mL

Calibration Summary:

JMJHV
AsJ

Calibration Date: 06/Sep/06 at 14:07:17



Calibration Parameters

Metal	Calib. Mode	Fit Factor	Slope	Zero Offset	Starting Concentration	Concentration in Original Sample
As(III)	**Height**	1.000	0.022 ppb/nA	0 ppt	2.0 ppb	2.3 ppb
	Area	0.999	1.29 ppb/nC	0 ppt	1.7 ppb	2.0 ppb

Selected Calibration M

TraceDetect Nano-Band Explorer

Sample ID: JDJ4V AsV MS

Trace Metals:

As(III): 63.7 ppb

24.1 ppb

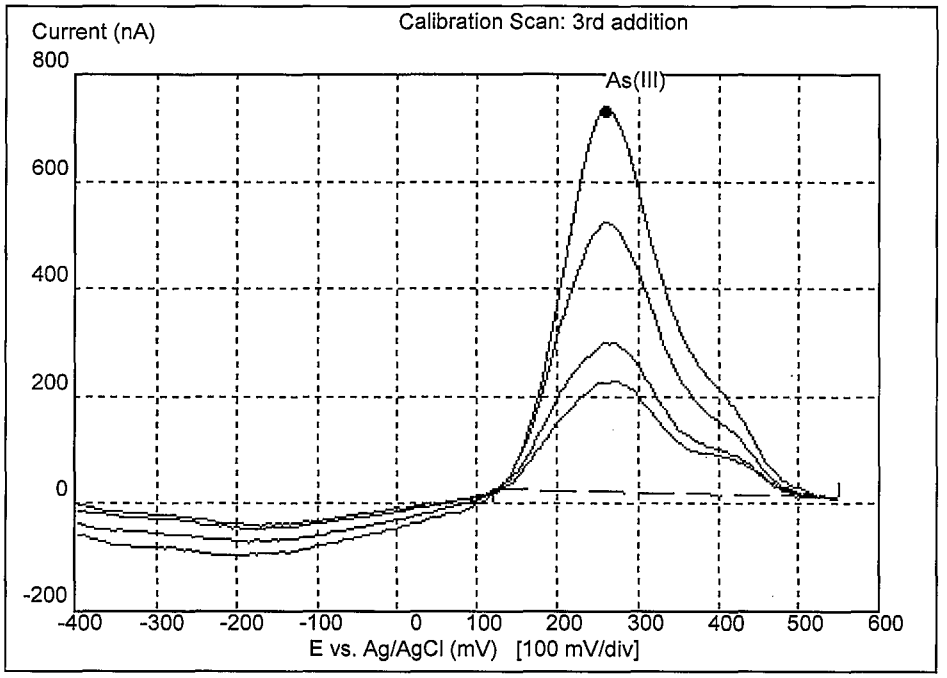
4x

Temperature:

Input 1:

Input 2:

06/Sep/06 13:32:15



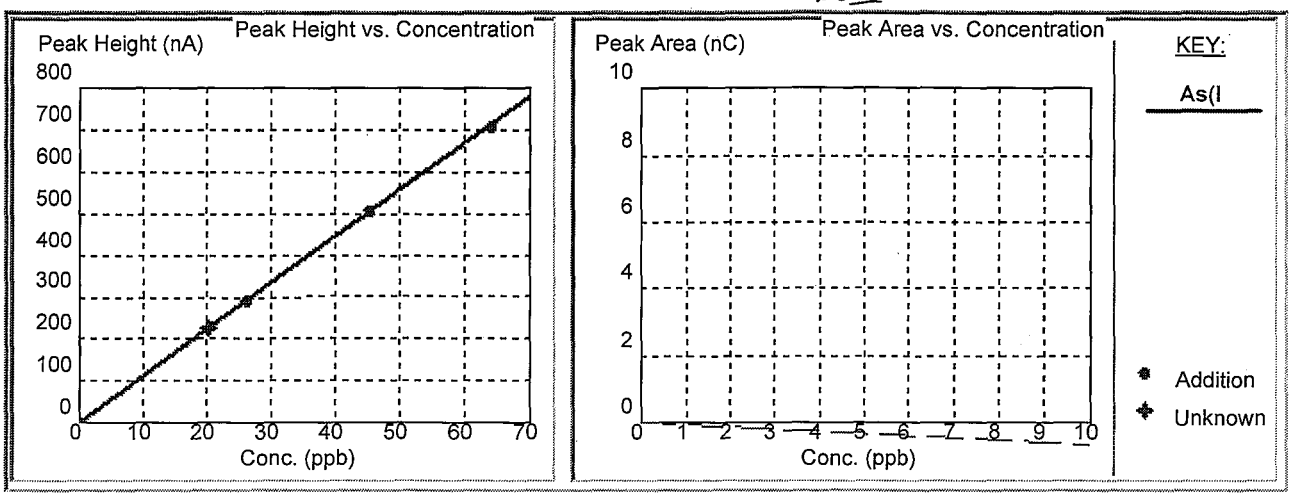
Settings:

Type:	ASV	Clean Time (S)	0.1	Signal Avg.	8
Waveform:	Staircase	Clean Voltage (mV):	600	Frequency (Hz):	2000
Cell	Three Electrode	Plate Time (S)	40	Start Voltage (mV):	-400
☑ Background subtraction		Plate Voltage (mV)	-400	Stop Voltage (mV):	550
		Range (uA):	12.5	Step Voltage (mV):	5

Calibration Summary:

JOJ4V MS
AsV

Calibration Date: 06/Sep/06 at 11:41:08



Calibration Parameters

Metal	Calib. Mode	Fit Factor	Slope	Zero Offset	Starting Concentration	Concentration in Original Sample
As(III)	**Height**	1.000	0.089 ppb/nA	0 ppt	20 ppb	24 ppb
	Area	0.215	-15 ppb/nC	0 ppt	-85 ppb	-100 ppb

Addition Data for Method of Standard Additions

IDJN

As V
MS

Metal	Unknown Concentration	Concentration in original aliquot	1st Addition	2nd Addition	3rd Addition	Total added concentration
As(III)	20.3 ppb	24.1 ppb	300 uL (5.96 ppb)	980 uL (19.1 ppb)	980 uL (18.8 ppb)	43.8 ppb

Starting Volume: 50.000 **mL**

Final Volume: 52.260 **mL**

TraceDetect Nano-Band Explorer

Sample ID: JDJ4V AsV MSD

Trace Metals:

As(III): 68.3 ppb

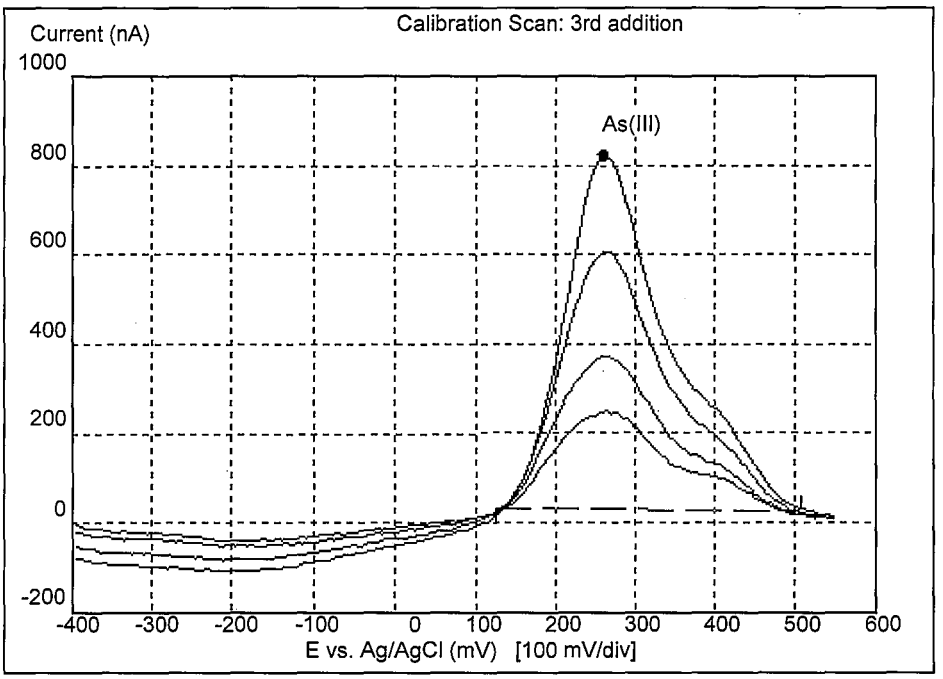
24.5 ppb

Temperature:

Input 1:

Input 2:

06/Sep/06 13:39:31



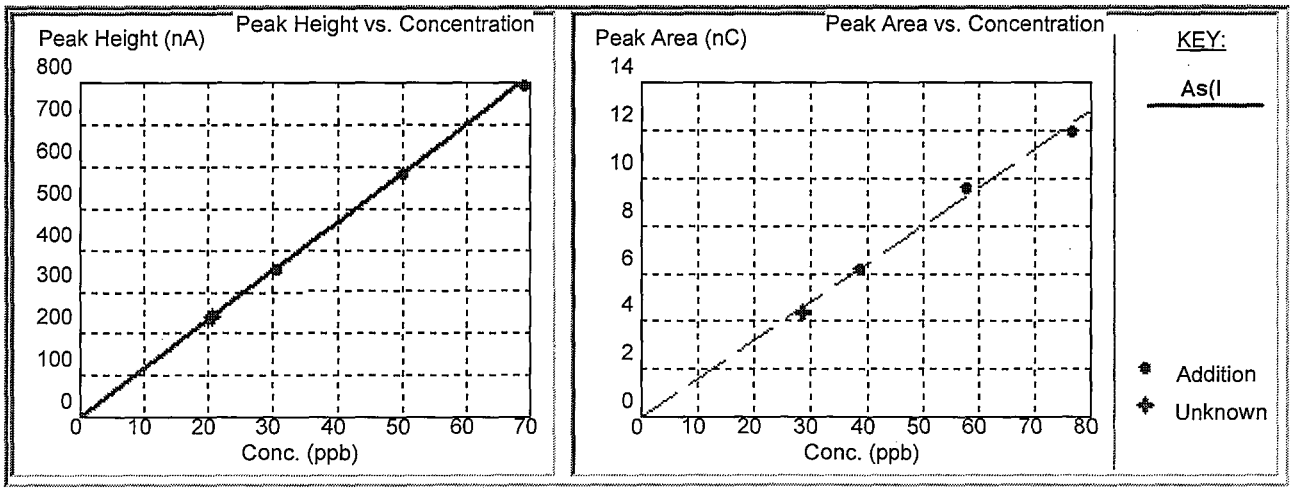
Settings:

Type:	ASV	Clean Time (S)	0.1	Signal Avg.	8
Waveform:	Staircase	Clean Voltage (mV):	600	Frequency (Hz):	2000
Cell	Three Electrode	Plate Time (S)	40	Start Voltage (mV):	-400
☑ Background subtraction		Plate Voltage (mV)	-400	Stop Voltage (mV):	550
		Range (uA):	12.5	Step Voltage (mV):	5

Calibration Summary:

JDJ4V AsI MSD

Calibration Date: 06/Sep/06 at 13:33:23



Calibration Parameters

Metal	Calib. Mode	Fit Factor	Slope	Zero Offset	Starting Concentration	Concentration in Original Sample
As(III)	**Height**	1.000	0.086 ppb/nA	0 ppt	21 ppb	24 ppb
	Area	0.993	6.24 ppb/nC	0 ppt	29 ppb	34 ppb

JDJYU AJJ
MSD

Addition Data for Method of Standard Additions

Metal	Unknown Concentration	Concentration in original aliquot	1st Addition	2nd Addition	3rd Addition	Total added concentration
As(III)	20.6 ppb	24.5 ppb	500 uL (9.90 ppb)	1.00 mL (19.4 ppb)	1.00 mL (19.0 ppb)	48.4 ppb

Starting Volume: 50.000 **mL**

Final Volume: 52.500 **mL**

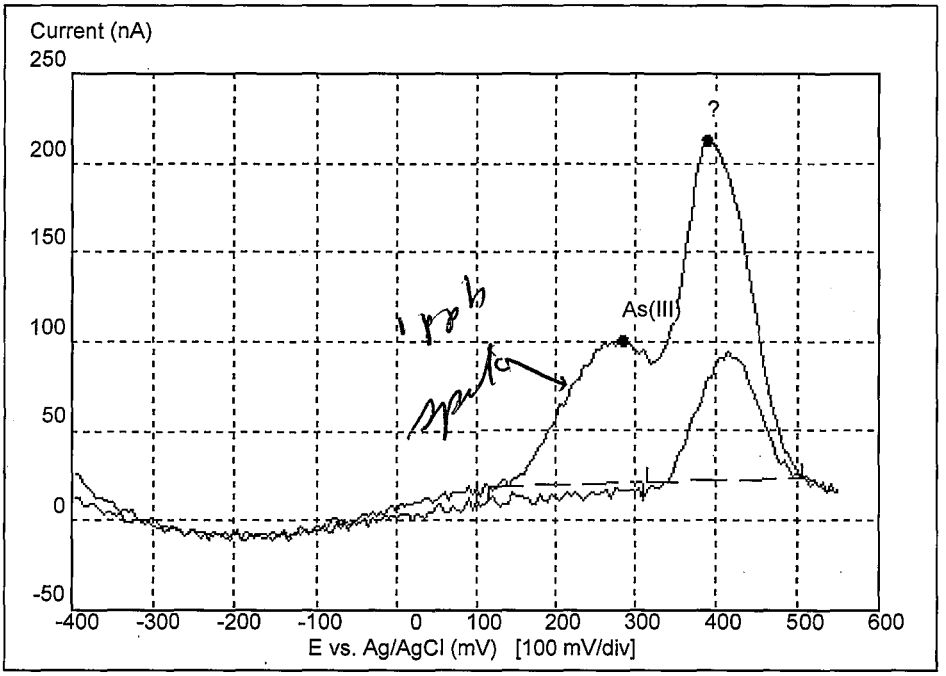
TraceDetect Nano-Band Explorer

Sample ID: Blank AsV with1ppbspike

Trace Metals:

As(III): 1.18 ppb

06/Sep/06 12:23:59



Temperature:

Input 1:

Input 2:

Settings:

Type:	ASV	Clean Time (S)	0.1	Signal Avg.	8
Waveform:	Staircase	Clean Voltage (mV):	600	Frequency (Hz):	2000
Cell	Three Electrode	Plate Time (S)	160	Start Voltage (mV):	-400
☑ Background subtraction		Plate Voltage (mV)	-400	Stop Voltage (mV):	550
		Range (uA):	12.5	Step Voltage (mV):	5

TraceDetect Nano-Band Explorer -

Sample ID: Blank AsV

Trace Metals:

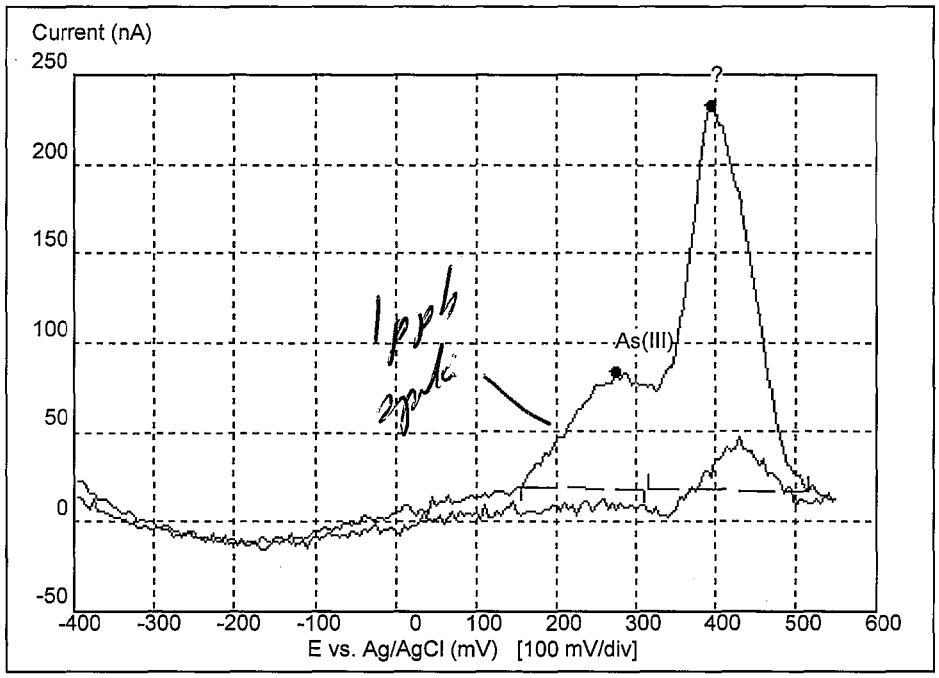
As(III): 962 ppt

Temperature:

Input 1:

Input 2:

06/Sep/06 12:10:19



Settings:

Type:	ASV	Clean Time (S)	0.1	Signal Avg.	8
Waveform:	Staircase	Clean Voltage (mV):	600	Frequency (Hz):	2000
Cell	Three Electrode	Plate Time (S)	160	Start Voltage (mV):	-400
		Plate Voltage (mV)	-400	Stop Voltage (mV):	550
		Range (uA):	12.5	Step Voltage (mV):	5

☑ Background subtraction

TraceDetect Nano-Band Explorer

Sample ID: LCS AsV

Trace Metals:

As(III): 511 nA

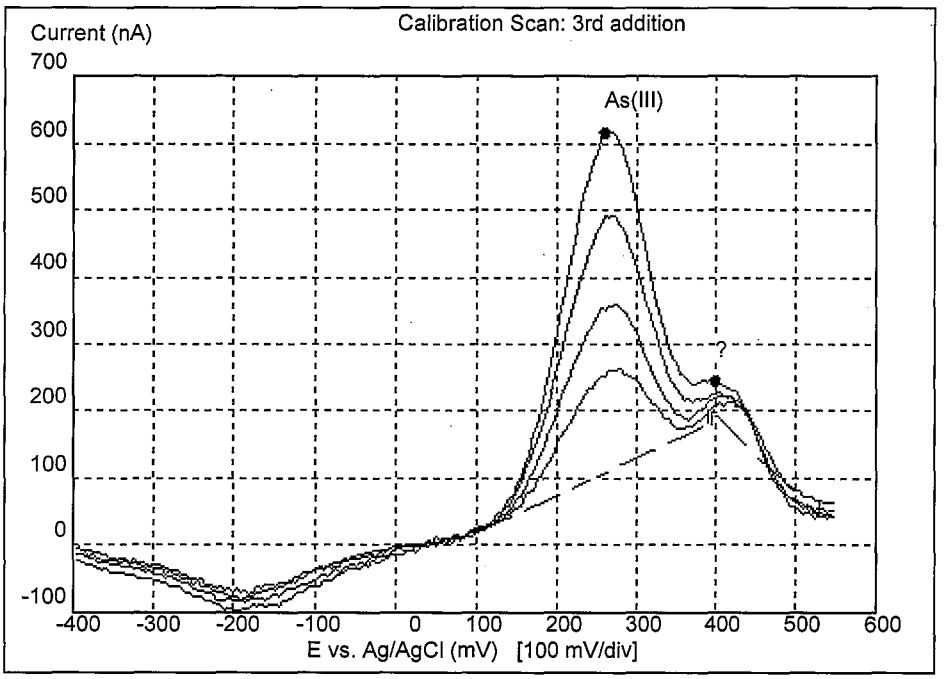
9.83

Temperature:

Input 1:

Input 2:

06/Sep/06 11:39:41



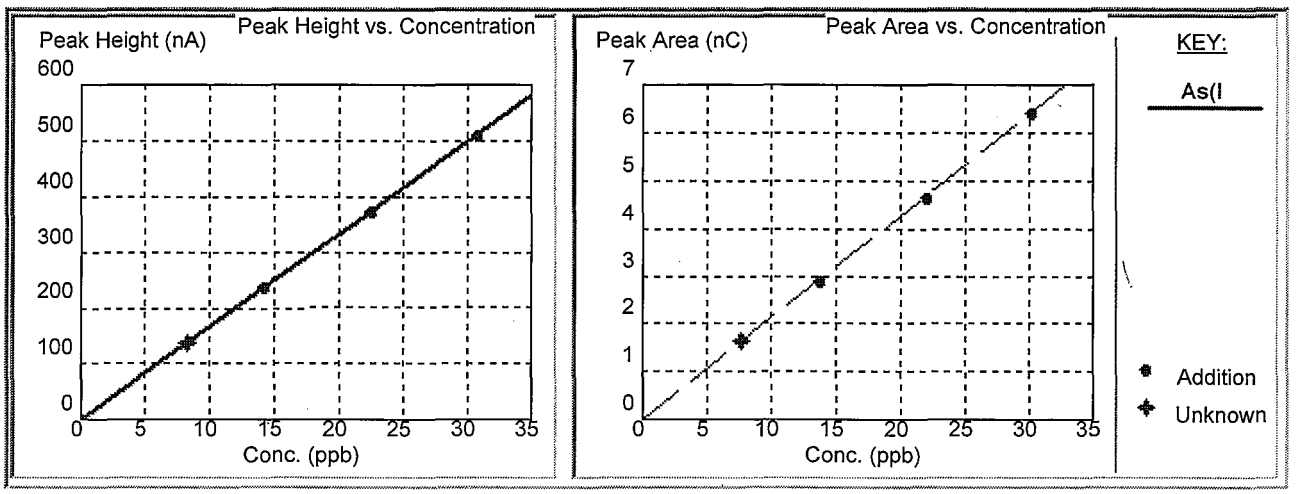
Settings:

Type:	ASV	Clean Time (S)	0.1	Signal Avg.	8
Waveform:	Staircase	Clean Voltage (mV):	600	Frequency (Hz):	2000
Cell	Three Electrode	Plate Time (S)	40	Start Voltage (mV):	-400
☑ Background subtraction		Plate Voltage (mV)	-400	Stop Voltage (mV):	550
		Range (uA):	12.5	Step Voltage (mV):	5

Calibration Summary:

LCS AsV

Calibration Date: 06/Sep/06 at 11:41:08



Calibration Parameters

Metal	Calib. Mode	Fit Factor	Slope	Zero Offset	Starting Concentration	Concentration in Original Sample	
As[III]	**Height**	1.000	0.060 ppb/nA	0 ppt	8.3 ppb	9.8 ppb	Selected Calibration M
	Area	1.000	4.69 ppb/nC	0 ppt	7.7 ppb	9.2 ppb	

LCS As#

Addition Data for Method of Standard Additions

Metal	Unknown Concentration	Concentration in original aliquot	1st Addition	2nd Addition	3rd Addition	Total added concentration
As(III)	8.26 ppb	9.83 ppb	300 uL (5.96 ppb)	420 uL (8.28 ppb)	420 uL (8.21 ppb)	22.5 ppb

Starting Volume: 50.000 mL

Final Volume: 51.140 mL

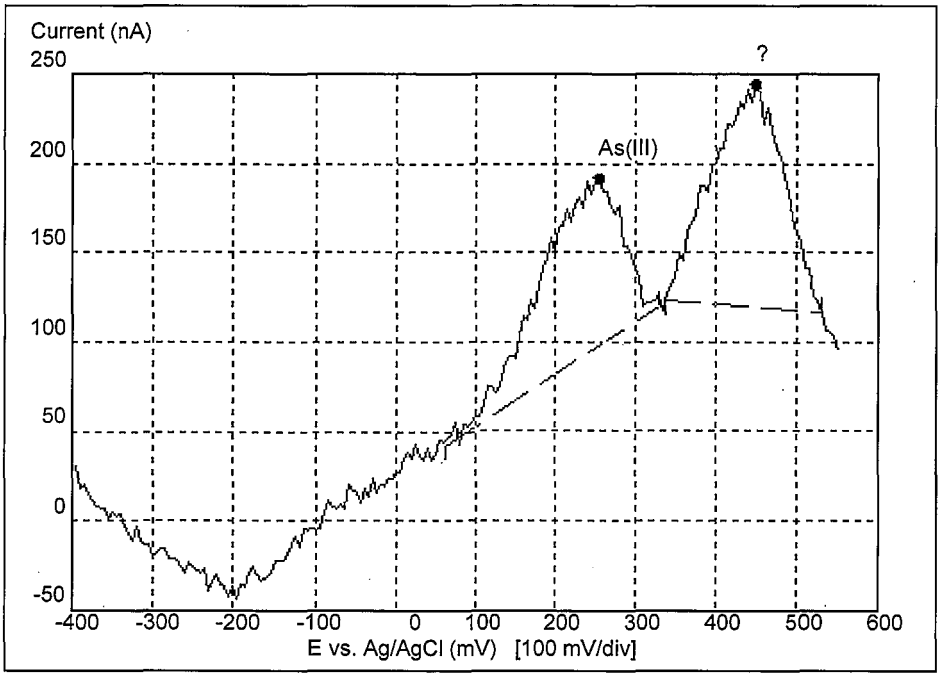
TraceDetect Nano-Band Explorer -

Sample ID: RL Check

Trace Metals:

As(III): 94.1 nA

06/Sep/06 11:28:09



Temperature:

Input 1:

Input 2:

Settings:

Type:	ASV	Clean Time (S)	0.1	Signal Avg.	8
Waveform:	Staircase	Clean Voltage (mV):	600	Frequency (Hz):	2000
Cell	Three Electrode	Plate Time (S)	160	Start Voltage (mV):	-400
		Plate Voltage (mV)	-400	Stop Voltage (mV):	550
		Range (uA):	12.5	Step Voltage (mV):	5

☑ Background subtraction

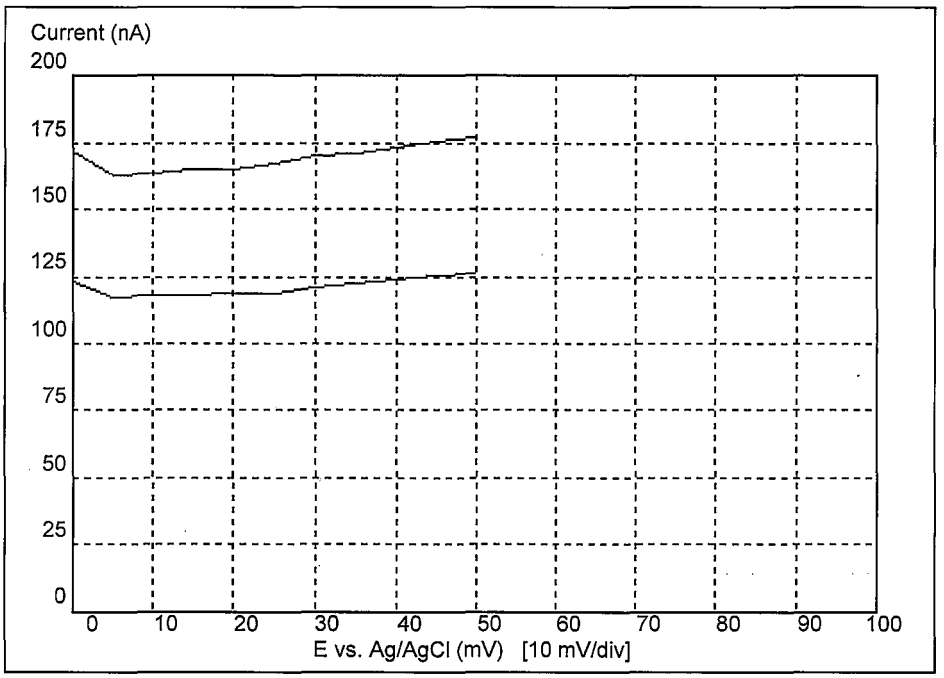
TraceDetect Nano-Band Explorer -

Sample ID: Au#61

Trace Metals:

As(III) < 7.0 nA

06/Sep/06 11:25:00



Temperature:

Input 1:

Input 2:

Settings:

Type:	ASV	Clean Time (S)	0	Signal Avg.	16
Waveform:	Sq. Wave	Clean Voltage (mV):	100	Frequency (Hz):	1000
Cell	Three Electrode	Plate Time (S)	55	Start Voltage (mV):	-50
		Plate Voltage (mV)	-50	Stop Voltage (mV):	5
		Range (uA):	1.25	Step Voltage (mV):	5

☐ Background subtraction

TraceDetect Nano-Band Explorer -

Sample ID: MSA Verification Std

06/Sep/06 10:57:53

Trace Metals:

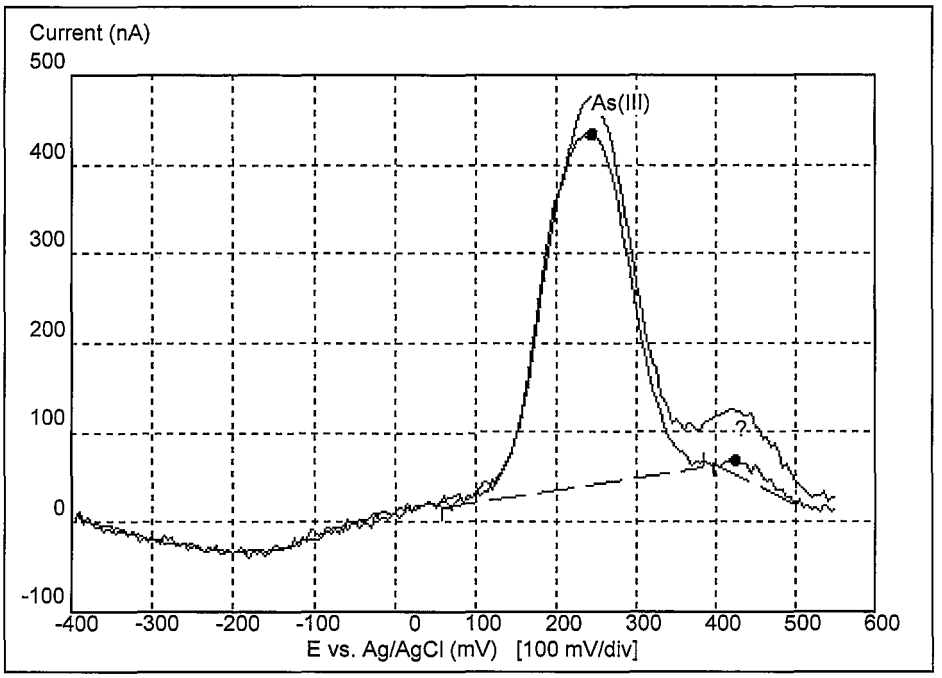
As(III): 394 nA

$\frac{394}{407} \times 100\% = 97\%$

Temperature:

Input 1:

Input 2:



Settings:

Type:	ASV	Clean Time (S)	0.1	Signal Avg.	8
Waveform:	Staircase	Clean Voltage (mV):	600	Frequency (Hz):	2000
Cell	Three Electrode	Plate Time (S)	40	Start Voltage (mV):	-400
☑ Background subtraction		Plate Voltage (mV)	-400	Stop Voltage (mV):	550
		Range (uA):	12.5	Step Voltage (mV):	5

TraceDetect Nano-Band Explorer

Sample ID: MSA Working Std

Trace Metals:

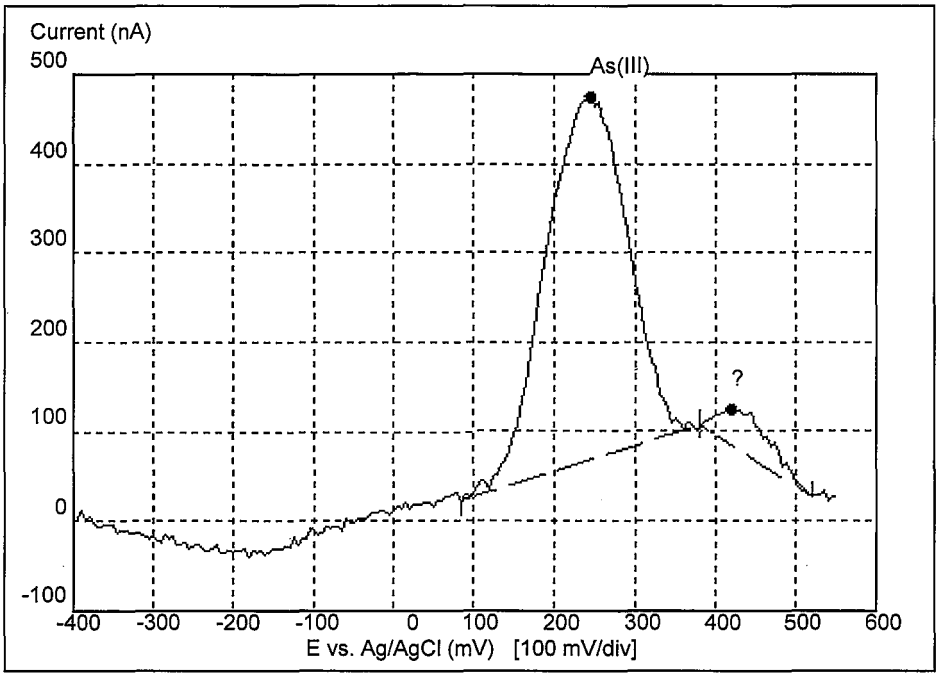
As(III): 407 nA

Temperature:

Input 1:

Input 2:

06/Sep/06 10:55:54



Settings:

Type:	ASV	Clean Time (S)	0.1	Signal Avg.	8
Waveform:	Staircase	Clean Voltage (mV):	600	Frequency (Hz):	2000
Cell	Three Electrode	Plate Time (S)	40	Start Voltage (mV):	-400
☑ Background subtraction		Plate Voltage (mV)	-400	Stop Voltage (mV):	550
		Range (uA):	12.5	Step Voltage (mV):	5

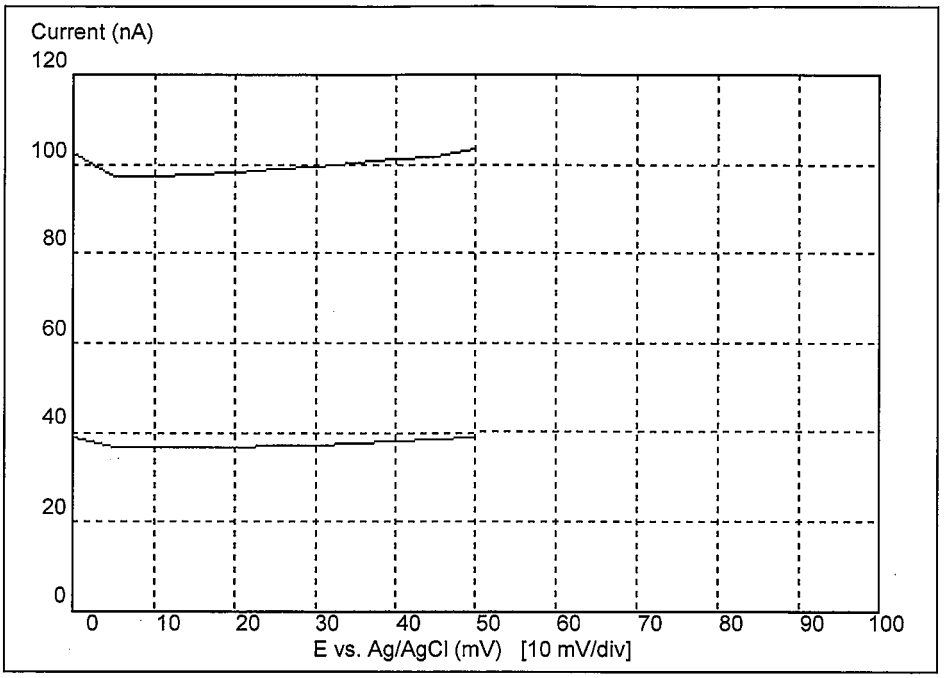
TraceDetect Nano-Band Explorer -

Sample ID: Au#56Plate_090606

Trace Metals:

As(III+V): 10.6 ppb

06/Sep/06 10:33:37



Temperature:

Input 1:

Input 2:

Settings:

Type:	ASV	Clean Time (S)	0	Signal Avg.	16
Waveform:	Sq. Wave	Clean Voltage (mV):	100	Frequency (Hz):	1000
Cell	Three Electrode	Plate Time (S)	55	Start Voltage (mV):	-50
		Plate Voltage (mV)	-50	Stop Voltage (mV):	5
		Range (uA):	1.25	Step Voltage (mV):	5

☐ Background subtraction

STL North Canton

Sample Control Chain of Custody for General Chemistry

Lot Number	Sample	Suffix	Lab ID	Test	Prep Date	Prepared by
A6H290216	1		JDD181AA	Arsenic (III) Speciation by ASV	09/05/06	Loren Hazelwood
A6H290216	1		JDD181AC	Arsenic (V) Speciation by ASV	09/06/06	Loren Hazelwood

END OF REPORT

SEVERN TRENT LABORATORIES, INC.

PRELIMINARY DATA SUMMARY

The results shown below may still require additional laboratory review and are subject to change. Actions taken based on these results are the responsibility of the data user.

CH2M Hill Constructors Inc

Lot #: A6H180299 QUANTA RESOURCES **Date Reported:** 9/05/06

Project Number: 332898.QT.20.24

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
Client Sample ID: MW-107A-081706				
Sample #: 001 Date Sampled: 08/17/06 11:10 Date Received: 08/18/06 Matrix: WATER				
Inorganic Analysis				Reviewed
Arsenic (V) Speciation by ASV	ND G	8000	ug/L	SW846 7063
Arsenic (III) Speciation by ASV	**30700**	**16000**	**ug/L**	**SW846 7063**

G Elevated reporting limit. The reporting limit is elevated due to matrix interference.

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
Client Sample ID: MW-36-081706				
Sample #: 002 Date Sampled: 08/17/06 10:35 Date Received: 08/18/06 Matrix: WATER				
Inorganic Analysis				Reviewed
Arsenic (V) Speciation by ASV	ND G	100	ug/L	SW846 7063
Arsenic (III) Speciation by ASV	ND	2.0	ug/L	SW846 7063

G Elevated reporting limit. The reporting limit is elevated due to matrix interference.

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
Client Sample ID: DUP-081706-GW-B				
Sample #: 003 Date Sampled: 08/17/06 10:35 Date Received: 08/18/06 Matrix: WATER				
Inorganic Analysis				Reviewed
Arsenic (V) Speciation by ASV	ND G	100	ug/L	SW846 7063
Arsenic (III) Speciation by ASV	ND	2.0	ug/L	SW846 7063

G Elevated reporting limit. The reporting limit is elevated due to matrix interference.

Client Sample ID: TB-081706-GW-B
Sample #: 004 Date Sampled: 08/17/06 10:35 Date Received: 08/18/06 Matrix: WATER

(Continued on next page)

SEVERN TRENT LABORATORIES, INC.

PRELIMINARY DATA SUMMARY

The results shown below may still require additional laboratory review and are subject to change. Actions taken based on these results are the responsibility of the data user.

CH2M Hill Constructors Inc PAGE 2

Lot #: A6H180299 QUANTA RESOURCES **Date Reported:** 9/05/06

Project Number: 332898.QT.20.24

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
Client Sample ID: MW-109A-081706				
Sample #: 005 Date Sampled: 08/17/06 17:25 Date Received: 08/18/06 Matrix: WATER				
Inorganic Analysis				Reviewed
Arsenic (V) Speciation by ASV	**174**	**64.0**	**ug/L**	**SW846 7063**
Arsenic (III) Speciation by ASV	**193**	**16.0**	**ug/L**	**SW846 7063**

SEVERN TRENT LABORATORIES, INC.

PRELIMINARY DATA SUMMARY

The results shown below may still require additional laboratory review and are subject to change. Actions taken based on these results are the responsibility of the data user.

CH2M Hill Constructors Inc PAGE 1

Lot #: A6H230148 QUANTA RESOURCES (EDGEWATER) **Date Reported:** 9/05/06

Project Number: 332898.QT.20.24

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
Client Sample ID: MW-111B-082206				
Sample #: 001 Date Sampled: 08/22/06 13:30 Date Received: 08/23/06 Matrix: WATER				
Inorganic Analysis				Reviewed
Arsenic (V) Speciation by ASV	ND G	16000	ug/L	SW846 7063
Arsenic (III) Speciation by ASV	**112000**	**16000**	**ug/L**	**SW846 7063**

G Elevated reporting limit. The reporting limit is elevated due to matrix interference.

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
Client Sample ID: MW-113B-082206				
Sample #: 002 Date Sampled: 08/22/06 15:10 Date Received: 08/23/06 Matrix: WATER				
Inorganic Analysis				Reviewed
Arsenic (V) Speciation by ASV	**9500**	**3200**	**ug/L**	**SW846 7063**
Arsenic (III) Speciation by ASV	**15500**	**8000**	**ug/L**	**SW846 7063**

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
Client Sample ID: EB-082206-GW-B				
Sample #: 003 Date Sampled: 08/22/06 16:30 Date Received: 08/23/06 Matrix: WATER				
Inorganic Analysis				Reviewed
Arsenic (V) Speciation by ASV	ND	2.0	ug/L	SW846 7063
Arsenic (III) Speciation by ASV	ND	2.0	ug/L	SW846 7063

SEVERN TRENT LABORATORIES, INC.

PRELIMINARY DATA SUMMARY

The results shown below may still require additional laboratory review and are subject to change. Actions taken based on these results are the responsibility of the data user.

CH2M Hill Constructors Inc

Lot #: A6H250218 QUANTA RESOURCES (EDGEWATER) **Date Reported:** 9/07/06

Project Number: 332898.QT.20.24

Client Sample ID: MW-C-082406
Sample #: 001 Date Sampled: 08/24/06 09:15 Date Received: 08/25/06 Matrix: WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD	
Inorganic Analysis					Reviewed
Arsenic (V) Speciation by ASV	**4.8 B,G**	**8.0**	**ug/L**	**SW846 7063**	
Arsenic (III) Speciation by ASV	**23.1**	**4.0**	**ug/L**	**SW846 7063**	

B Estimated result. Result is less than RL.

G Elevated reporting limit. The reporting limit is elevated due to matrix interference.

Client Sample ID: MW-A-2-082406
Sample #: 002 Date Sampled: 08/24/06 10:20 Date Received: 08/25/06 Matrix: WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD	
Inorganic Analysis					Reviewed
Arsenic (V) Speciation by ASV	ND G	32000	ug/L	SW846 7063	
Arsenic (III) Speciation by ASV	**136000**	**32000**	**ug/L**	**SW846 7063**	

G Elevated reporting limit. The reporting limit is elevated due to matrix interference.

Client Sample ID: MW-F-082406
Sample #: 003 Date Sampled: 08/24/06 13:45 Date Received: 08/25/06 Matrix: WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD	
Inorganic Analysis					Reviewed
Arsenic (V) Speciation by ASV	ND G	32.0	ug/L	SW846 7063	
Arsenic (III) Speciation by ASV	**119**	**32.0**	**ug/L**	**SW846 7063**	

G Elevated reporting limit. The reporting limit is elevated due to matrix interference.

(Continued on next page)

SEVERN TRENT LABORATORIES, INC.

PRELIMINARY DATA SUMMARY

The results shown below may still require additional laboratory review and are subject to change. Actions taken based on these results are the responsibility of the data user.

CH2M Hill Constructors Inc PAGE 2

Lot #: A6H250218 QUANTA RESOURCES (EDGEWATER) **Date Reported:** 9/07/06

Project Number: 332898.QT.20.24

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
Client Sample ID: MW-L-082406				
Sample #: 004 Date Sampled: 08/24/06 14:30 Date Received: 08/25/06 Matrix: WATER				
Inorganic Analysis				Reviewed
Arsenic (V) Speciation by ASV	**12.7**	**8.0**	**ug/L**	**SW846 7063**
Arsenic (III) Speciation by ASV	**13.1**	**8.0**	**ug/L**	**SW846 7063**
Client Sample ID: MW-B-082406				
Sample #: 005 Date Sampled: 08/24/06 09:50 Date Received: 08/25/06 Matrix: WATER				
Inorganic Analysis				Reviewed
Arsenic (V) Speciation by ASV	**212**	**160**	**ug/L**	**SW846 7063**
Arsenic (III) Speciation by ASV	**448**	**160**	**ug/L**	**SW846 7063**

SEVERN TRENT LABORATORIES, INC.

PRELIMINARY DATA SUMMARY

The results shown below may still require additional laboratory review and are subject to change. Actions taken based on these results are the responsibility of the data user.

CH2M Hill Constructors Inc PAGE 1

Lot #: A6H290216 QUANTA RESOURCES (EDGEWATER) **Date Reported:** 9/07/06

Client Sample ID: MW-114B-082606

Sample #: 001 Date Sampled: 08/26/06 09:05 Date Received: 08/29/06 Matrix: WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD	
Inorganic Analysis					Reviewed
Arsenic (V) Speciation by ASV	ND G	800	ug/L	SW846 7063	
Arsenic (III) Speciation by ASV	**2980**	**800**	**ug/L**	**SW846 7063**	

G Elevated reporting limit. The reporting limit is elevated due to matrix interference.