111229

CASE NARRATIVE ANALYTICAL DOCUMENTATION

The degradation value of Endrin in the Confirmation Column (RTX-35) is not a accurate value. The value is approximately one-third higher. It could not be determined because the fact that 4,4'-DDT and Endrin aldehyde co-elute in this column.

AR302516

2E
WATER PESTICIDE SURROGATE RECOVERY

Lab Name: Canonie Environmental Contract: _____

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: _____

	EPA SAMPLE NO.	S1 (DBC) #	OTHER
01	PBLK1	104	
02	MW-17G MS	97.3	
03	MW-17G MSD	114	
04	MW-17G	80.0	
05	MW-18G	92.9	
06	PBLK2	104	
07	MW-23G	79.9	
08	MW-22G	92.3	
09	MW-21G	69.6	
10	MW-19G	89.5	
11	MW-20G	90.9	
12	MW-24G	104	
13	MW-25G	118	
14			
15			
16			
17			
18			
19			
20			
21			
22			
23			
24			
25			
26			
27			
28			
29			
30			

ADVISORY QC LIMITS (24-154)

S1 (DBC) = Dibutylchlorendate

Column to be used to flag recovery values

* Values outside of QC limits

D Surrogates diluted out

page __ of __

FORM II PEST-1 AR302517 1/87 Rev.

3E

WATER PESTICIDE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Cronic Environmental Contract: _____

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix Spike - EPA Sample No.: MW-17G

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC #	QC. LIMITS REC.
gamma-BHC (Lindane)	0.200	0	0.181	90.5	56-123
Heptachlor	0.200	0	0.191	95.5	40-131
Aldrin	0.200	0	0.169	84.5	40-120
Dieldrin	0.500	0	0.464	92.8	52-126
Endrin	0.500	0	0.469	93.8	56-121
4,4'-DDT	0.500	0	0.510	102	38-127

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
gamma-BHC (Lindane)	0.200	0.187	93.5	3.3	15	56-123
Heptachlor	0.200	0.198	99.0	3.6	20	40-131
Aldrin	0.200	0.174	87.0	2.9	22	40-120
Dieldrin	0.500	0.498	99.6	7.1	18	52-126
Endrin	0.500	0.511	102	8.6	21	56-121
4,4'-DDT	0.500	0.593	119	15.	27	38-127

Column to be used to flag recovery and RPD values with an asterisk

values outside of QC limits

0 out of 6 outside limits

Recovery: 0 out of 12 outside limits

COMMENTS: _____

FORM III PEST-1 AR302518 8/87 Rev.

4C

PESTICIDE METHOD BLANK SUMMARY

Lab Name: Canonie Environmental Contract: _____

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: _____

Lab Sample ID: 7647 Blank Lab File ID: _____

Matrix:(soil/water) WATER Level:(low/med) LOW

Date Extracted: 9-19-89 Extraction: (SepF/Cont/Sonc) Cont

Date Analyzed (1): 10-6-89 Date Analyzed (2): 9-19-89

Time Analyzed (1): 3:12 Time Analyzed (2): 3:12

Instrument ID (2): 32 Instrument ID (2): 32

GC Column ID (1): RTX-5 GC Column ID (1): RTX-35

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED 1	DATE ANALYZED 2
01	MW-17G MS	7647 844085 MS	10-6-89	10-6-89
02	MW-17G MSD	7647 844085 MSD		
03	MW-17G	7647 844085		
04	MW-18G	7647 844086		
05				
06				
07				
08				
09				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				
23				
24				
25				
26				

MF S: _____

e __ of __

FORM IV PEST AR302519 1/87 Rev.

4C

PESTICIDE METHOD BLANK SUMMARY

Name: Canonie Environmental Contract: _____

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: _____

Lab Sample ID: 7663 Blank Lab File ID: _____

Matrix: (soil/water) WATER Level: (low/med) LOW

Date Extracted: 9-22-89 Extraction: (SepF/Cont/Sonc) Cont

Date Analyzed (1): 10-6-89 Date Analyzed (2): 10-6-89

Time Analyzed (1): 7:09 Time Analyzed (2): 7:09

Instrument ID (2): 32 Instrument ID (2): 32

GC Column ID (1): RTX-5 GC Column ID (1): RTX-35

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED 1	DATE ANALYZED 2
01	MW-23G	7663 844166	10-6-89	10-6-89
02	MW-22G	7663 844168		
03	MW-21G	7663 844169		
04	MW-19G	7663 844171		
05	MW-20G	7663 844172		
06	MW-24G	7671 844237		
07	MW-25G	7671 844238		
08				
09				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				
23				
24				
25				
26				

Comments: _____

AR302520

FORM IV PEST 1/87 Rev.

8D

PESTICIDE EVALUATION STANDARDS SUMMARY

Lab Name: Canonie Environmental Contract: _____

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: _____

Instrument ID: 32 GC Column ID: RTX-5

Dates of Analyses: 10-5-89 to 10-6-89

Evaluation Check for Linearity

PESTICIDE	CALIBRATION FACTOR EVAL MIX A	CALIBRATION FACTOR EVAL MIX B	CALIBRATION FACTOR EVAL MIX C	%RSD (</= 10.0%)
Aldrin	13400	13160	12150	1.7
Endrin	6130	6000	5605	4.6
4,4'-DDT	4950	5040	4810	2.0
DBC	4020	3740	3610	4.8

(1) If > 10.0% RSD, plot a standard curve [illegible] for each pesticide in that [illegible]

01	INITIAL EVAL MIX A				
02	EVAL MIX B				
03	EVAL MIX B				
04	EVAL MIX B				
05	EVAL MIX B				
06	EVAL MIX B				
07	EVAL MIX B				
08	EVAL MIX B				
09	EVAL MIX B				
10	EVAL MIX B				
11	EVAL MIX B				
12	EVAL MIX B				
13	EVAL MIX B				
14	EVAL MIX B				

(2) See form instructions.

AR 302521

8D

PESTICIDE EVALUATION STANDARDS SUMMARY

Lab Name: Cyanamid Environmental Contract: _____

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: _____

Instrument ID: 32 GC Column ID: RTX-35

Dates of Analyses: 10-5-89 to 10-6-89

Evaluation Check for Linearity

PESTICIDE	CALIBRATION FACTOR EVAL MIX A	CALIBRATION FACTOR EVAL MIX B	CALIBRATION FACTOR EVAL MIX C	%RSD (<= 10.0%)
Aldrin	16100	16[illegible]	15030	6.6
Endrin	6680	6[illegible]	6720	0.6
4,4'-DDT	6500	6900	7[illegible]0	[illegible]
DBC	4240	4130	4405	1.7

(1) If > 10.0% RSD, plot a standard [illegible]
for each sample in that set [illegible]

Evaluation [illegible]
(Percent Recovery) [illegible]

		DATE ANALYZED				
	INITIAL					
01	EVAL MIX [illegible]					
02	EVAL MIX [illegible]					
03	EVAL MIX [illegible]					
04	EVAL MIX [illegible]					
05	EVAL MIX B					
06	EVAL MIX B					
07	EVAL MIX B					
08	EVAL MIX B					
09	EVAL MIX B					
10	EVAL MIX B					
11	EVAL MIX B					
12	EVAL MIX B					
13	EVAL MIX B					
14	EVAL MIX B					

(2) See form instructions.

R302522

PESTICIDE EVALUATION STANDARDS SUMMARY
Evaluation of Retention Time Shift for Dibutylchlorendata

ıb Name: Canonie Enviromental Contract: _____

(:ode: _____ Case No.: _____ SAS No.: _____ SDG No.: _____

nstrument ID: 32 GC Column ID: RTX-5

ıtes of Analyses: 10-5-89 to 10-6-89

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	% D
01	EVALA	EVALA	10-5-89	18:38	—
02	EVALB	EVALB		19:07	0.04
03	EVALC	EVALC		19:51	0.07
04	INDA	INDA		20:14	0.07
05	INDB	INDB		21:16	0.04
06	TOXAPH	TOXAPH		21:35	0.07
07	AR1016	AR1016		22:15	0.07
08	AR1221	AR1221		23:14	[illegible]
09	AR1232	AR1232		23:54	[illegible]
10	AR1242	AR1242	10-[illegible]-89	[illegible]	[illegible]
11	AR1248	AR1248		[illegible]	0.01
12	AR1254	AR1254			
13	AR1260	AR1260			
14	[illegible]	[illegible]			
15	[illegible]	[illegible]			
16	[illegible]	[illegible]			
17	[illegible]	[illegible]			
18	[illegible]	[illegible]			
19	[illegible]	[illegible]			
20	[illegible]	[illegible]			
21	[illegible]	[illegible]			
22	[illegible]	[illegible]			
23	[illegible]	[illegible]			
24	[illegible]	[illegible]			
25	[illegible]	[illegible]			
26	[illegible]	[illegible]			
27	[illegible]	[illegible]			
28	[illegible]	[illegible]			
29	EVALA	EVALA		15:31	0.04
30	INDA	INDA		16:10	0.07
31	INDB	INDB		16:50	0.07
32					
33					
34					
35					
36					
37					
38					
39					
40					

AR 302523

8E

PESTICIDE EVALUATION STANDARDS SUMMARY

Evaluation of Retention Time Shift for Dibutylchlorendate

Lab Name: Canonie Enviromental Contract: _____

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: _____

Instrument ID: 32 GC Column ID: RTX-35

Dates of Analyses: 10-5-89 to 10-6-89

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	% D	*
01	EVALA	EVALA	10-5-89	14:38	—	
02	EVALB	EVALB		15:17	0.04	
03	EVALC	EVALC		15:57	0.07	
04	INDA	INDA		18:18	0.07	
05	INDB	INDB		19:16	0.11	
06	TOXAPH	TOXAPH		21:55	0.11	
07	AR1016	AR1016		22:35	0.11	
08	AR1221	AR1221		23:14	0.16	
09	AR1232	AR1232		[illegible]	0.21	
10	AR1242	AR1242		[illegible]	[illegible]	
11	AR1248	AR1248				
12	AR1254	[illegible]				
13	AR1260	[illegible]				
14	PBC	[illegible]				
15	MW-[illegible]	[illegible]				
16	MW-[illegible]	[illegible]				
17	[illegible]	[illegible]				
18	[illegible]	[illegible]				
19	[illegible]	[illegible]				
20	[illegible]	[illegible]				
21	[illegible]	[illegible]				
22	[illegible]	[illegible]				
23	[illegible]	[illegible]				
24	[illegible]	[illegible]				
25	[illegible]	[illegible]				
26	MW-206	7663 844172		12:32	0	
27	MW-246	7671 844237		14:12	0	
28	MW-256	7671 844238		14:51	0.14	
29	EVALB	EVALB		15:31	0	
30	INDA	INDA		16:10	0.04	
31	INDB	INDB		16:50	0.07	
32						
33						
34						
35						
36						
37						
38						

* Values outside of QC limits (0.0% for packed columns, 0.3% for capillary columns)

Page ___ of ___

FORM VIII PEST-2

AR302524

PESTICIDE/PCB STANDARDS SUMMARY

Lab Name: Cantnic Environmental Contract: _____

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: _____

Instrument ID: 32 GC Column ID: Rtx-5

DATE(S) OF ANALYSIS	FROM: 10-5-89	DATE OF ANALYSIS	10-6-89
	TO: 10-6-89	TIME OF ANALYSIS	12:52
TIME(S) OF ANALYSIS	FROM: 21:16	EPA SAMPLE NO. (STANDARD)	IVDA
	TO: 2:32		

COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALIBRATION FACTOR	RT	CALIBRATION FACTOR	QNT Y/N	%D
alpha-BHC	11.08	10.97	11.19	18300	[illegible]	[illegible]		
beta-BHC	12.05	11.92	12.14	5100	[illegible]	[illegible]		
delta-BHC	13.23	13.15	13.33	13150	[illegible]	[illegible]		
gamma-BHC	12.36	12.25	12.47	15150	[illegible]	14550	Y	[illegible]
Heptachlor	15.50	15.39	15.61	11650	[illegible]	12650	Y	[illegible]
Aldrin	17.06	16.94	17.18	13400	[illegible]	13850	Y	[illegible]
Hept. epoxide	18.93	18.73	19.13	10750	[illegible]	11700	Y	[illegible]
Endosulfan I	20.45	20.32	20.44	9850	[illegible]	7800	Y	[illegible]
Dieldrin	21.55	21.45	21.65	8750	[illegible]	[illegible]	[illegible]	[illegible]
4,4'-DDE	[illegible]	[illegible]	[illegible]	[illegible]				
Endrin	[illegible]	[illegible]	[illegible]	[illegible]				
Endosulfan II	[illegible]	[illegible]	[illegible]	[illegible]				
4,4'-DDD	[illegible]	[illegible]	[illegible]	[illegible]				
Endo. sulfate	[illegible]	[illegible]	[illegible]	[illegible]				
4,4'-DDT	[illegible]	[illegible]	[illegible]	[illegible]				
Methoxychlor	[illegible]	[illegible]	[illegible]	[illegible]				
Endrin ketone	[illegible]	[illegible]	[illegible]	[illegible]				
a. chlordane	[illegible]	[illegible]	[illegible]	[illegible]				
g. chlordane	[illegible]	[illegible]	[illegible]	[illegible]				
Toxaphene	[illegible]	[illegible]	[illegible]	[illegible]				
Aroclor-1016	[illegible]	[illegible]	[illegible]	[illegible]				
Aroclor-1221	[illegible]	[illegible]	[illegible]	[illegible]				
Aroclor-1232	[illegible]	[illegible]	[illegible]	[illegible]				
Aroclor-1242	[illegible]	[illegible]	[illegible]	[illegible]				
Aroclor-1248	[illegible]	[illegible]	[illegible]	[illegible]				
Aroclor-1254	21.85	[illegible]	21.95	394				
Aroclor-1260	27.37	[illegible]	27.47	419				

Under QNT Y/N enter Y if quantitation was performed, N if not performed. %D must be less than or equal to 15.0% for quantitation, and less than or equal to [illegible] for confirmation.

Note: - Determined that no compounds were found above the CRQL [illegible] for quantitation, and therefore it cannot be [illegible] the [illegible] criteria.

For multicomponent [illegible] of the component [illegible] Identification [illegible]

Page [illegible] of [illegible]

AR 302525

PESTICIDE/PCB STANDARDS SUMMARY

Lab Name: Canonie Environmental Contract: _____

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: _____

Instrument ID: 32 GC Column ID: RTX-5

DATE(S) OF ANALYSIS FROM: 10-5-89 TO: 10-6-89
TIME(S) OF ANALYSIS FROM: 21:16 TO: 2:32

DATE OF ANALYSIS 10-6-89
TIME OF ANALYSIS 16:10
EPA SAMPLE NO. (STANDARD) IND1

COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALIBRATION FACTOR	RT	CALIBRATION FACTOR	QNT Y/N	%D
alpha-BHC	11.08	10.97	11.19	12300				
beta-BHC	12.03	11.92	12.14	5100				
delta-BHC	13.23	13.13	13.33	13350				
gamma-BHC	12.36	12.25	12.47	15550	12.31	15850	Y	[illegible]
Heptachlor	15.50	15.39	15.61	11650	15.46	12150	Y	[illegible]
Aldrin	17.06	16.94	17.18	13400	17.02	13400	Y	[illegible]
Hept. epoxide	18.82	18.73	18.93	18750	18.77	11250	Y	[illegible]
Endosulfan I	20.45	20.32	20.49	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Dieldrin	21.65	21.55	21.65	[illegible]				
4,4'-DDE	[illegible]	[illegible]	[illegible]	[illegible]				
Endrin	[illegible]	[illegible]	[illegible]	[illegible]				
Endosulfan II	[illegible]	[illegible]	[illegible]	[illegible]				
4,4'-DDD	[illegible]	[illegible]	[illegible]	[illegible]				
Endrin sulfate	[illegible]	[illegible]	[illegible]	[illegible]				
4,4'-DDT	[illegible]	[illegible]	[illegible]	[illegible]				
Methoxychlor	[illegible]	[illegible]	[illegible]	[illegible]				
Endrin ketone	[illegible]	[illegible]	[illegible]	[illegible]				
a- Chlordane	[illegible]	[illegible]	[illegible]	[illegible]				
g- Chlordane	[illegible]	[illegible]	[illegible]	[illegible]				
Toxaphene	[illegible]	[illegible]	[illegible]	[illegible]				
Aroclor-1016	[illegible]	[illegible]	[illegible]	[illegible]				
Aroclor-1221	[illegible]	[illegible]	[illegible]	[illegible]				
Aroclor-1232	[illegible]	[illegible]	[illegible]	[illegible]				
Aroclor-1242	[illegible]	[illegible]	[illegible]	[illegible]				
Aroclor-1248	[illegible]	[illegible]	[illegible]	[illegible]				
Aroclor-1254	21.75	21.65	21.85	277				
Aroclor-1260	27.37	27.26	27.48	419				

Under QNT Y/N: enter Y if quantitation was performed, N if not performed. %D must be less than or equal to 15.0% for quantitation, and less than or equal to 20.0% for confirmation.

Note: Determining that no compounds were [illegible] quantitation, and therefore at least one [illegible]

For multicomponent analytes, the [illegible] of the component should be used [illegible] identification of such analytes is [illegible]

[illegible] FORM [illegible]

AR302526

PESTICIDE/PCB STANDARDS SUMMARY

Lab Name: Cannic Environmental Contract: _____

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: _____

Instrument ID: 32 GC Column ID: RTX-5

DATE(S) OF ANALYSIS	FROM: 10-5-89	DATE OF ANALYSIS	10-6-89
	TO: 10-6-89	TIME OF ANALYSIS	16:50
TIME(S) OF ANALYSIS	FROM: 21:16	EPA SAMPLE NO. (STANDARD)	INDB
	TO: 2:32		

COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALIBRATION FACTOR	RT	CALIBRATION FACTOR	QNT Y/N	%D
alpha-BHC	11.06	10.99	11.14	18300	11.08	18150	Y	0.82
beta-BHC	12.03	11.92	12.14	5100	12.03	4790	Y	6.3
delta-BHC	13.25	13.13	13.33	13950	13.22	13550	Y	2.9
gamma-BHC	12.36	12.25	12.47	15150	[illegible]	[illegible]	[illegible]	[illegible]
Heptachlor	15.50	15.39	15.61	11650	[illegible]	[illegible]	[illegible]	[illegible]
Aldrin	17.06	16.94	17.18	13400	[illegible]	[illegible]	[illegible]	[illegible]
Hept. epoxide	18.85	18.73	18.93	10750	[illegible]	[illegible]	[illegible]	[illegible]
Endosulfan I	20.45	20.32	20.44	9950	[illegible]	[illegible]	[illegible]	[illegible]
Dieldrin	21.55	[illegible]	21.65	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
4,4'-DDE	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Endrin	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Endosulfan II	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
4,4'-DDD	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Endosulfan sulfate	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
4,4'-DDT	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Methoxychlor	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Endrin ketone	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
a-Chlordane	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
g-Chlordane	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Toxaphene	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Aroclor-1016	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Aroclor-1221	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Aroclor-1232	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Aroclor-1242	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Aroclor-1248	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Aroclor-1254	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Aroclor-1260	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

Under QNT Y/N enter Y if quantitation was performed, N if not performed. %D must be less than or equal to 15.0% for quantitation and less than or equal to 20.0% for confirmation.

Note: Determining that [illegible] quantitation, and there [illegible]

For multicomponent [illegible] of the component should [illegible] identification of such [illegible]

AR302527

PESTICIDE/PCB STANDARDS SUMMARY

Lab Name: Canonie Environmental Contract: _____

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: _____

Instrument ID: 32 GC Column ID: RTX-35

DATE(S) OF ANALYSIS FROM: 10-5-89 TO: 10-6-89
TIME(S) OF ANALYSIS FROM: 20:36 TO: 2:32

DATE OF ANALYSIS 10-6-89
TIME OF ANALYSIS 12:52
EPA SAMPLE NO. (STANDARD) INDA

COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALIBRATION FACTOR	RT	CALIBRATION FACTOR	QNT Y/N	%D
alpha-BHC	12.84	12.73	12.95	22950				
beta-BHC	15.03	14.94	15.12	6850				
delta-BHC	16.74	16.63	16.85	16100				
gamma-BHC	14.66	14.56	14.76	18350				
Heptachlor	16.63	16.52	16.74	12500		14830	N	[illegible]
Aldrin	19.21	19.10	19.32	15058		13600	N	[illegible]
Hept. epoxide	20.79	20.69	20.87	12100		16650	N	[illegible]
Endosulfan I	22.39	22.28	22.50	10350		19150	N	[illegible]
Dieldrin	23.66	23.56	23.76	[illegible]		[illegible]	[illegible]	[illegible]
4,4'-DDE	23.41	23.30	23.51	[illegible]				
Endrin	23.49	23.39	23.59	[illegible]				
Endosulfan II	24.22	24.12	24.32	[illegible]				
4,4'-DDD	24.81	24.71	24.91	[illegible]				
Endo. sulfate	24.56	24.46	[illegible]	[illegible]				
4,4'-DDT	25.32	25.23	[illegible]	[illegible]				
Methoxychlor	26.19	26.09	[illegible]	[illegible]				
Endrin ketone	[illegible]	[illegible]	[illegible]	[illegible]				
a, Chlordane	[illegible]	[illegible]	[illegible]	[illegible]				
g, Chlordane	[illegible]	[illegible]	[illegible]	[illegible]				
Toxaphene	[illegible]	[illegible]	[illegible]	[illegible]				
Aroclor-1016	[illegible]	[illegible]	[illegible]	[illegible]				
Aroclor-1221	[illegible]	[illegible]	[illegible]	[illegible]				
Aroclor-1232	[illegible]	[illegible]	[illegible]	[illegible]				
Aroclor-1242	16.78	[illegible]	[illegible]	[illegible]				
Aroclor-1248	16.48	16.38	16.58	508				
Aroclor-1254	16.96	16.86	17.06	421				
Aroclor-1260	23.96	23.86	24.06	341				
	29.05	28.95	29.15	536				

Under QNT Y/N: Enter Y if quantitation was performed, N if not performed.
%D must be less than or equal to 15.0% for quantitation, and less than or equal to 20.0% for confirmation.

Note: Determining that no compound [illegible] quantitation, and therefore at least one [illegible]

For multicomponent analytes, the [illegible] component should be [illegible] identification of such analyte [illegible]

AR 302528

PESTICIDE/PCB STANDARDS SUMMARY

Lab Name: Canonie Environmental Contract: _____

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: _____

Instrument ID: 32 GC Column ID: RTX-35

DATE(S) OF ANALYSIS FROM: 10-5-89 TO: 10-6-89		DATE OF ANALYSIS 10-6-89
TIME(S) OF ANALYSIS FROM: 20:56 TO: 2:32		TIME OF ANALYSIS 16:10
		EPA SAMPLE NO. (STANDARD) INDA

COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALIBRATION FACTOR	RT	CALIBRATION FACTOR	QNT Y/N	%D
alpha-BHC	12.84	12.73	12.95	2850				
beta-BHC	15.05	14.94	15.16	6850				
delta-BHC	16.74	16.63	16.85	16100				
gamma-BHC	14.66	14.56	14.76	18350	14.63	18950	Y	[illegible]
Heptachlor	16.63	16.52	16.74	12500	16.60	13000	Y	[illegible]
Aldrin	18.21	18.10	18.32	16050	[illegible]	15900	Y	[illegible]
Hept. epoxide	20.79	20.69	20.89	17100	[illegible]	17550	Y	[illegible]
Endosulfan I	22.39	22.28	22.50	10250	[illegible]	[illegible]	[illegible]	[illegible]
Dieldrin	23.46	23.35	23.76	[illegible]				
4,4'-DDE	[illegible]	[illegible]	[illegible]	[illegible]				
Endrin	[illegible]	[illegible]	[illegible]	[illegible]				
Endosulfan II	[illegible]	[illegible]	[illegible]	[illegible]				
4,4'-DDD	[illegible]	[illegible]	[illegible]	[illegible]				
Endo. sulfate	[illegible]	[illegible]	[illegible]	[illegible]				
4,4'-DDT	[illegible]	[illegible]	[illegible]	[illegible]				
Methoxychlor	[illegible]	[illegible]	[illegible]	[illegible]				
Endrin ketone	[illegible]	[illegible]	[illegible]	[illegible]				
a. Chlordane	[illegible]	[illegible]	[illegible]	[illegible]				
g. Chlordane	[illegible]	[illegible]	[illegible]	[illegible]				
Toxaphene	[illegible]	[illegible]	[illegible]	[illegible]				
Aroclor-1016	16.48	[illegible]	[illegible]	[illegible]				
Aroclor-1221	17.52	[illegible]	[illegible]	[illegible]				
Aroclor-1232	[illegible]	[illegible]	[illegible]	[illegible]				
Aroclor-1242	[illegible]	[illegible]	16.58	508				
Aroclor-1248	[illegible]	[illegible]	16.56	423				
Aroclor-1254	23.86	23.86	24.06	341				
Aroclor-1260	28.95	28.95	29.15	536				
	[illegible]	[illegible]	[illegible]	[illegible]				

Under QNT Y/N: Enter Y if quantitation was performed, N if not performed. %D must be less than or equal to 15.0% for quantitation, and less than or equal to 20.0% for confirmation.

Note: Determining what the compound [illegible] quantitation, and therefore at least [illegible]

For multicomponent [illegible] of the compound [illegible] Identification [illegible]

Page [illegible] of [illegible]

R302529

PESTICIDE/PCB STANDARDS SUMMARY

Lab Name: Canonie Environmental Contract: _____

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: _____

Instrument ID: 32 GC Column ID: RTX-35

DATE(S) OF ANALYSIS FROM: 10-5-89 TO: 10-6-89

TIME(S) OF ANALYSIS FROM: 20:56 TO: 2:32

DATE OF ANALYSIS 10-6-89

TIME OF ANALYSIS 16:50

EPA SAMPLE NO. (STANDARD) IND B

COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALIBRATION FACTOR	RT	CALIBRATION FACTOR	QNT Y/N	%D
alpha-BHC	12.84	12.73	12.95	22850	12.86	22400	N	2.0
beta-BHC	15.03	14.94	15.16	6850	15.07	6700	N	2.2
delta-BHC	16.74	16.63	16.85	16100	16.76	15450	N	4.0
gamma-BHC	14.66	14.56	14.78	13750				
Heptachlor	16.63	16.52	16.74	12508				
Aldrin	18.21	18.10	18.32	16050	18.21	15200	N	5.3
Hept. epoxide	20.79	20.69	20.89	12100				
Endosulfan I	22.39	22.28	22.50	14408				
Dieldrin	23.66	23.56	23.76	[illegible]				
4,4'-DDE	23.12	23.02	23.22	[illegible]				
Endrin	24.44	24.34	24.54	[illegible]				
Endosulfan II	25.65	25.55	25.75	[illegible]				
4,4'-DDD	25.[illegible]	[illegible]	25.[illegible]	[illegible]				
Endo. sulfate	27.[illegible]	[illegible]	[illegible]	[illegible]				
4,4'-DDT	28.[illegible]	[illegible]	[illegible]	[illegible]				
Methoxychlor	29.[illegible]	[illegible]	[illegible]	[illegible]				
Endrin ketone	[illegible]	[illegible]	[illegible]	[illegible]				
a-Chlordane	[illegible]	[illegible]	[illegible]	[illegible]				
g-Chlordane	[illegible]	[illegible]	[illegible]	[illegible]				
Toxaphene	[illegible]	[illegible]	[illegible]	[illegible]				
Aroclor-1016	[illegible]	[illegible]	[illegible]	[illegible]				
Aroclor-1221	[illegible]	[illegible]	[illegible]	[illegible]				
Aroclor-1232	12.52	[illegible]	[illegible]	[illegible]				
Aroclor-1242	16.46	[illegible]	[illegible]	[illegible]				
Aroclor-1248	16.48	16.38	16.58	[illegible]				
Aroclor-1254	16.46	16.36	16.56	508				
Aroclor-1260	23.96	23.86	24.06	432				
	29.05	28.95	29.15	341				
				536				

Under QNT Y/N: Enter Y if quantitation was performed, N if not performed. %D must be less than or equal to 15.0% for quantitation, and less than or equal to 20.0% for confirmation.

Note: Determining that no compounds were found above the [illegible] is a form of quantitation, and therefore at least one column must [illegible] criteria.

For multicomponent analytes, the single largest peak [illegible] of the component should be used to establish [illegible] identification of such analytes is based primarily on [illegible] of _____ of _____

FORM IX PEST

AR302530

PESTICIDE/PCB IDENTIFICATION

EPA SAMPL

Name: Canonie Environmental Contract: MW-18G

Lab Code: Case No.: SAS No.: SDG No.:

GC Column ID (1): RTX-5 GC Column ID (2): RTX-35

Instrument ID (1): 32 Instrument ID (2): 32

Lab Sample ID: 7647 844086

Lab File ID: (only if confirmed by GC/MS)

	PESTICIDE/PCB	RETENTION TIME		RT WINDOW OF STANDARD FROM	TO	QUANT? (Y/N)	GC/MS? (Y/N)
01	beta-BHC	Column 1	11.96	[illegible]	[illegible]	Y	[illegible]
02		Column 2	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
03		Column 1					
04		Column 2					
05							
06							
07							
08							
09		Column 1					
10		Column 2					
11		Column 1					
12		Column 2					

Comments:

AR302531

PESTICIDE/PCB IDENTIFICATION

EPA SAMPLE

Lab Name: Canonie Environmental Contract: _____

MW-24G

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: _____

GC Column ID (1): Rtx-5 GC Column ID (2): Rtx-35

Instrument ID (1): 32 Instrument ID (2): 32

Lab Sample ID: 7671 844237

Lab File ID: — (only if confirmed by GC/MS)

	PESTICIDE/PCB		RETENTION TIME	RT WINDOW OF STANDARD FROM	TO	QUANT? (Y/N)	GC/MS? (Y/N)
01	beta-BHC	Column 1	12.04	11.92	12.16	Y	N
02		Column 2	15.10	14.92	15.12	N	N
03		Column 1					
04		Column 2					
05		Column 1					
06		Column 2					
07		Column 1					
08		Column 2					
09		Column 1					
10		Column 2					
11		Column 1					
12		Column 2					

Comments: _____

FORM I PEST

AR302532

PESTICIDE/PCB IDENTIFICATION

EPA SAMPLE N

MW-25G

Lab Name: Canonie Environmental Contract: _____

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: _____

GC Column ID (1): RTX-5 GC Column ID (2): RTX-35

Instrument ID (1): 32 Instrument ID (2): 32

Lab Sample ID: 7671 844238

Lab File ID: — (only if confirmed by GC/MS)

	PESTICIDE/PCB	RETENTION TIME		RT WINDOW OF STANDARD From	TO	QUANT? (Y/N)	GC/MS? (Y/N)
01	beta-BHC	Column 1	12.04	11.92	12.14	Y	N
02		Column 2	15.09	14.94	15.16	N	N
03		Column 1					
04		Column 2					
05		Column 1					
06		Column 2					
07		Column 1					
08		Column 2					
09		Column 1					
10		Column 2					
11		Column 1					
12		Column 2					

Comments: _____

FORM X PEST

AR302533

1D

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE N

PBLK1

ab Name: Canonie Environmental Contract: _____

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix: (soil/water) WATER Lab Sample ID: 7647 BlnK

Sample wt/vol: 1000 (g/mL) mL Lab File ID: _____

Level: (low/med) LOW Date Received: —

% Moisture: not dec. — dec. _____ Date Extracted: 9-14-89

Extraction: (SepF/Cont/Sonc) Cont Date Analyzed: 10-6-89

GPC Cleanup: (Y/N) N pH: 7.0 Dilution Factor: 1

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
319-84-6	alpha-BHC	0.05	U
319-85-7	beta-BHC	[illegible]	U
319-86-8	delta-BHC	[illegible]	U
58-89-9	gamma-BHC (Lindane)	[illegible]	U
76-44-8	Heptachlor	[illegible]	U
309-00-2	Aldrin	[illegible]	U
1024-57-3	Heptachlor epoxide	[illegible]	U
959-98-8	Endosulfan I	[illegible]	U
60-57-1	Dieldrin	[illegible]	U
72-55-9	4,4'-DDE	[illegible]	U
72-20-8	Endrin	[illegible]	U
33213-65-9	Endosulfan II	[illegible]	U
72-54-8	4,4'-DDD	[illegible]	U
1031-07-8	Endosulfan sulfate	[illegible]	U
50-29-3	4,4'-DDT	[illegible]	U
72-43-5	Methoxychlor	[illegible]	U
53494-70-5	Endrin Ketone	0.10	U
5103-71-9	alpha-Chlordane	0.5	U
5103-74-2	gamma-Chlordane	0.5	U
8001-35-2	Toxaphene	1.0	U
12674-11-2	Aroclor-1016	0.5	U
11104-28-2	Aroclor-1221	0.5	U
11141-16-5	Aroclor-1232	0.5	U
53469-21-9	Aroclor-1242	0.5	U
12672-29-6	Aroclor-1248	0.5	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	1.0	U

AR 302534

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

PBLK2

Lab Name: Canonie Environmental Contract: _____

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix: (soil/water) WATER Lab Sample ID: 7663 Blank

Sample wt/vol: 1000 (g/mL) mL Lab File ID: —

Level: (low/med) LOW Date Received: —

% Moisture: not dec. _____ dec. _____ Date Extracted: 9-22-89

Extraction: (SepF/Cont/Sonc) Cont Date Analyzed: 10-6-89

GPC Cleanup: (Y/N) N pH: 7.0 Dilution Factor: 1

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
319-84-6	alpha-BHC	0.05	U
319-85-7	beta-BHC	[illegible]	U
319-86-8	delta-BHC	[illegible]	U
58-89-9	gamma-BHC (Lindane)	[illegible]	U
76-44-8	Heptachlor	[illegible]	U
309-00-2	Aldrin	[illegible]	U
1024-57-3	Heptachlor epoxide	[illegible]	U
959-98-8	Endosulfan I	[illegible]	U
60-57-1	Dieldrin	[illegible]	U
72-55-9	4,4'-DDE	[illegible]	U
72-20-8	Endrin	[illegible]	U
33213-65-9	Endosulfan II	[illegible]	U
72-54-8	4,4'-DDD	[illegible]	U
1031-07-8	Endosulfan sulfate	[illegible]	U
50-29-3	4,4'-DDT	[illegible]	U
72-43-5	Methoxychlor	[illegible]	U
53494-70-5	Endrin Ketone	0.10	U
5103-71-9	alpha-Chlordane	0.5	U
5103-74-2	gamma-Chlordane	0.5	U
8001-35-2	Toxaphene	1.0	U
12674-11-2	Aroclor-1016	0.5	U
11104-28-2	Aroclor-1221	0.5	U
11141-16-5	Aroclor-1232	0.5	U
53469-21-9	Aroclor-1242	0.5	U
12672-29-6	Aroclor-1248	0.5	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	1.0	U
[illegible]	[illegible]	[illegible]	U

AR 302535

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-17G MS

Lab Name: Canonie Environmental Contract: _____

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix: (soil/water) WATER Lab Sample ID: 7647 844085 MS

Sample wt/vol: 500 (g/mL) mL Lab File ID: —

Level: (low/med) LOW Date Received: 9-18-89

% Moisture: not dec. — dec. _____ Date Extracted: 9-19-89

Extraction: (SepF/Cont/Sonc) Cont Date Analyzed: 10-6-89

GPC Cleanup: (Y/N) N pH: 7.0 Dilution Factor: 1

CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L

CAS NO.	COMPOUND		Q
319-84-6	alpha-BHC	0.05	U
319-85-7	beta-BHC	0.05	U
319-86-8	delta-BHC	[illegible]	U
58-89-9	gamma-BHC (Lindane)	[illegible]	U
76-44-8	Heptachlor	[illegible]	U
309-00-2	Aldrin	[illegible]	U
1024-57-3	Heptachlor epoxide	[illegible]	U
959-98-8	Endosulfan I	[illegible]	U
60-57-1	Dieldrin	[illegible]	U
72-55-9	4,4'-DDE	[illegible]	U
72-20-8	Endrin	[illegible]	U
33213-65-9	Endosulfan II	[illegible]	U
72-54-8	4,4'-DDD	[illegible]	U
1031-07-8	Endosulfan sulfate	[illegible]	U
50-29-3	4,4'-DDT	[illegible]	U
72-43-5	Methoxychlor	[illegible]	U
53494-70-5	Endrin ketone	0.10	U
5103-71-9	alpha-Chlordane	0.5	U
5103-74-2	gamma-Chlordane	0.5	U
8001-35-2	Toxaphene	1.0	U
12674-11-2	Aroclor-1016	0.5	U
11104-28-2	Aroclor-1221	0.5	U
11141-16-5	Aroclor-1232	0.5	U
53469-21-9	Aroclor-1242	0.5	U
12672-29-6	Aroclor-1248	0.5	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	1.0	U

AR302536

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-17G MSD

ab Name: Canonie Environmental Contract: _____

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix: (soil/water) WATER Lab Sample ID: 7647 844085 MSD

Sample wt/vol: 500 (g/mL) mL Lab File ID: —

Level: (low/med) LOW Date Received: 9-18-89

% Moisture: not dec. — dec. _____ Date Extracted: 9-19-89

Extraction: (SepF/Cont/Sonc) Cont Date Analyzed: 10-6-89

GPC Cleanup: (Y/N) N pH: 7.0 Dilution Factor: 1

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
319-84-6	alpha-BHC	0.05	U
319-85-7	beta-BHC	0.05	U
319-86-8	delta-BHC	0.05	U
58-89-9	gamma-BHC (Lindane)	[illegible]	U
76-44-8	Heptachlor	0.10	U
309-00-2	Aldrin	0.05	U
1024-57-3	Heptachlor epoxide	0.05	U
959-98-8	Endosulfan I	0.05	U
60-57-1	Dieldrin	0.10	U
72-55-9	4,4'-DDE	0.10	U
72-20-8	Endrin	0.10	U
33213-65-9	Endosulfan II	0.10	U
72-54-8	4,4'-DDD	0.10	U
1031-07-8	Endosulfan sulfate	0.10	U
50-29-3	4,4'-DDT	0.10	U
72-43-5	Methoxychlor	0.5	U
53494-70-5	Endrin ketone	0.10	U
5103-71-9	alpha-Chlordane	0.5	U
5103-74-2	gamma-Chlordane	0.5	U
8001-35-2	Toxaphene	1.0	U
12674-11-2	Aroclor-1016	0.5	U
11104-28-2	Aroclor-1221	0.5	U
11141-16-5	Aroclor-1232	0.5	U
53469-21-9	Aroclor-1242	0.5	U
12672-29-6	Aroclor-1248	0.5	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	1.0	U

R302537

SECTION 4

INORGANIC DATA SUPPORT DOCUMENTATION

PROJECT NAME: Canonie - Delta Quarry

SUPPORT DOCUMENTATION FOR THE REVIEW OF INORGANIC ANALYTICAL DATA PACKAGE

TYPE OF ANALYSIS: Metals

CONTRACT LABORATORY: Canonie Environmental

REVIEWER: Ruth Forman

REVIEW DATE: 11/9/89

APPLICABLE SAMPLE NO's.: MW-1 through MW-8, Trip Blank, MW-10 through MW-17, RW-20

THE FOLLOWING TABLE INDICATES AREAS WHICH WERE EXAMINED IN DETAIL, THE IDENTIFIED PROBLEM AREAS, AND SUPPORT DOCUMENTATION ATTACHMENTS:

	AREAS EXAMINED IN DETAIL — CHECK (✓) IF YES OR FOOTNOTE LETTER FOR COMMENTS BELOW					PROBLEM AREAS IDENTIFIED — CHECK (✓) IF YES OR FOOTNOTE NUMBER FOR COMMENTS BELOW					SUPPORT DOCUMENTATION ATTACHMENTS — CHECK (✓) IF YES OR IDENTIFY ATTACHMENT NO.				
	ALL APPLICABLE ANALYSES	ICP OR A.A. METALS	FURNACE METALS	COLD VAPOR MERCURY	CYANIDE	ALL APPLICABLE ANALYSES	ICP OR A.A. METALS	FURNACE METALS	COLD VAPOR MERCURY	CYANIDE	ALL APPLICABLE ANALYSES	ICP OR A.A. METALS	FURNACE METALS	COLD VAPOR MERCURY	CYANIDE
HOLDING TIMES	✓										✓				
BLANK ANALYSIS RESULTS	✓						✓		✓		✓				
MATRIX SPIKES (PRE-DIGESTION)	✓						not performed.								
DUPLICATES	✓										✓				
QUANTITATION OF RESULTS	✓						✓				✓				
DETECTION LIMITS/SENSITIVITY	✓										✓				
INITIAL CALIBRATIONS	✓										✓				
CONTINUING CALIBRATIONS	✓										✓				
LABORATORY CONTROL STANDARDS	✓						✓				✓				
ICP LINEAR RANGE ANALYSIS	✓										✓				
ICP INTERFERENCE CHECKS	✓										✓				
ICP SERIAL DILUTIONS	✓						✓				✓				
GFAA POST-DIGESTION SPIKES	✓										✓				
GFAA DUPLICATE BURNS	✓										✓				
GFAA STANDARD ADDITIONS	✓														
OTHERS CRDL STD's							✓								

COMMENTS:

AR302540

BLANK ANALYSIS RESULTS FOR INORGANICS

PARAMETER	TYPE/ MATRIX	SAMPLE #	SOURCE	CONTAMINANT (CONCENTRATION)
Metals	IC / Aq	Initial Calibration	Canonie	0.7 ug/l Mercury
Metals	CC / Aq	Continuing Calibration	Canonie	147.4 ug/l aluminum
				1.9 ug/l cadmium
				5.5 ug/l chromium
				3.47 ug/l cobalt
				71.16 ug/l magnesium
				0.65 ug/l mercury
				1.4 ug/l manganese
				7.95 ug/l silver
Metals	FB / Aq	MW-8	unknown	61 ug/l aluminum
				46 ug/l barium
				211 ug/l calcium
				0.3 ug/l lead
				0.47 ug/l mercury
				7.7 ug/l silver
				1230 ug/l sodium
Metals	TB / Aq	Travel Blank	unknown	34 ug/l aluminum
				42 ug/l barium
				99 ug/l calcium
				0.4 ug/l lead
				0.51 ug/l mercury
Metals	FB	MW-15	unknown.	Al 58 ug/l
				Ba 50
				Ca 442
				Co 4.2, Pb 0.5, Mg 122, Na 1250
Metals	FB	MW-6	Unknown.	Al (42 ug/l)
				Ba (42 ug/l)
				Ca (87.9)
				Pb (0.5). Na (1060 ug/l).

LABORATORY REPORTED FIELD BLANK IS COMPARED WITH THE SAMPLE DATA IN A TABULATION FORM WITHIN THE SAMPLE ANALYTICAL DATA SUMMARY.

COMMENTS :

(1) RESULT REPORTED BY THE LABORATORY AND CONFIRMED BY REVIEWER

(2) RESULT INFERED FROM INSTRUMENT PRINTOUTS AND/OR SUPPORTING DATA

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: CANONIE ENVIRONMENTAL Contract: _____

Lab Code: _____ Case No.: 7[illegible]7471 SAS No.: _____ SDG No.: [illegible]

Initial Calibration Source: _____

Continuing Calibration Source: 3-2046, 3-1957; I0689-019, I-0688-029, 3-1879

Concentration Units: ug/L

Analyte	Initial Calibration True	Initial Calibration Found	Initial Calibration %R(1)	Continuing Calibration True	Continuing Calibration Found	Continuing Calibration %R(1)	Continuing Calibration Found	Continuing Calibration %R(1)	M
Aluminum	50000.0	48077.34	96.2	50000.0	46973.68	93.9	47322.56	94.6	P
Antimony	1000.0	1036.7	103.7	1000.0	1025.39	102.5	1031.20	103.2	P
Arsenic	25.0	26.4	105.6	25.0	25.0	100.0	26.5	106.0	F
Barium	1000.0	1016.99	101.7	1000.0	1010.62	101.1	988.67	98.9	P
Beryllium	1000.0	993.21	99.3	1000.0	982.15	98.2	974.07	97.4	P
Cadmium	1000.0	1006.72	100.7	1000.0	999.56	100.0	995.04	99.5	P
Calcium	50000.0	50852.02	101.7	50000.0	49995.18	100.0	50320.34	100.6	P
Chromium	1000.0	1012.69	101.3	1000.0	998.05	99.8	991.28	99.1	P
Cobalt	1000.0	1022.04	102.2	1000.0	1005.22	100.5	1000.19	100.0	P
Copper	1000.0	1019.88	102.0	1000.0	1008.12	100.8	986.67	98.7	P
Iron 2599	1000.0	1011.46	101.1	1000.0	999.24	99.9	991.18	99.1	P
Lead	10.0	9.87	98.7	10.0	10.35	103.5	10.00	100.0	
Magnesium	50000.0	49730.51	99.5	50000.0	49263.04	98.5	49434.08	98.9	P
Manganese	1000.0	1009.64	101.0	1000.0	999.65	100.0	991.84	99.2	P
Mercury	5.0	5.34	106.8	5.0	5.26	105.2	4.72	94.4	CV
Nickel	1000.0	1001.97	100.2	1000.0	1006.02	100.6	997.21	99.7	P
Potassium	50000.0	48335.19	96.7	50000.0	47666.60	95.3	48169.24	96.3	P
Selenium	10.0	9.72	97.2	10.0	9.73	97.3	10.13	101.3	F
Silver	1000.0	1068.80	106.8	1000.0	1021.11	102.1	1050.30	105.0	P
Sodium	50000.0	50237.47	100.4	50000.0	49106.45	98.2	49550.09	99.1	P
Thallium	25.0	26.4	105.6	25.0	26.6	106.4	26.3	105.2	F
Vanadium	1000.0	1015.81	101.6	1000.0	998.8	99.9	989.39	98.9	P
Zinc	1000.0	998.44	99.8	1000.0	989.4	98.9	979.89	98.0	P
Cyanide	200.0	180	90.0	200.0	180	90.0			C
IRON 2714	50000.0	51454.54	102.9	50000.0	50713.02	101.4	51126.57	102.3	P

(1) Control Limits: Mercury 80-120; Other Metals 90-110; Cyanide 85-115

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: CANONIE ENVIRONMENTAL Contract: _____

Lab Code: _____ Case No.: [illegible] SAS No.: _____ SDG No.: [illegible]

Initial Calibration Source: _____

Continuing Calibration Source: 3-2046, 3-1957, I0689019, I0688-029, 3-1977

Concentration Units: ug/L

Analyte	Initial Calibration True	Initial Calibration Found	Initial Calibration %R(1)	Continuing Calibration True	Continuing Calibration Found	Continuing Calibration %R(1)	Continuing Calibration Found	Continuing Calibration %R(1)	M
Aluminum	50000.0			50000.0	47323.65	94.6	46834.54	93.7	P
Antimony	1000.0			1000.0	1025.38	102.5	1012.19	101.2	P
Arsenic	25.0			25.0	25.4	101.6			F
Barium	1000.0			1000.0	1004.72	100.4	995.04	99.5	P
Beryllium	1000.0			1000.0	988.10	98.8	973.67	97.3	P
Cadmium	1000.0			1000.0	1004.83	100.5	995.98	99.6	P
Calcium	50000.0			50000.0	50748.12	101.5	49514.57	99.0	P
Chromium	1000.0			1000.0	999.21	99.9	981.71	98.2	P
Cobalt	1000.0			1000.0	1011.42	101.1	993.57	99.4	P
Copper	1000.0			1000.0	1000.99	100.0	988.83	99.0	P
Iron 2599	1000.0			1000.0	1000.61	100.0	981.82	98.2	P
Lead				10.0	10.04	100.4	9.74	97.4	
Magnesium	50000.0			50000.0	49558.64	99.1	48453.66	96.9	P
Manganese	1000.0			1000.0	1006.12	100.6	991.33	99.1	P
Mercury	5.0			5.0	5.14	102.8	5.10	102.0	CV
Nickel	1000.0			1000.0	1013.33	101.3	994.92	99.5	P
Potassium	50000.0			50000.0	48312.21	96.6	47062.74	94.1	P
Selenium	10.0			10.0	9.53	95.3	9.86	98.6	F
Silver	1000.0			1000.0	1012.95	101.3	992.54	99.2	P
Sodium	50000.0			50000.0	49225.85	98.4	48669.53	97.3	P
Thallium	25.0			25.0	27.3	109.2	26.6	106.4	F
Vanadium	1000.0			1000.0	999.01	99.9	980.09	98.0	P
Zinc	1000.0			1000.0	990.36	99.0	976.62	97.7	P
Cyanide	200.0	219	109.5	200.0	222	111.0	222	111.0	C
IRON 2714	50000.0			50000.0	51635.26	103.3	50645.95	101.2	P

(1) Control Limits: Mercury 80-120; Other Metals 90-110; Cyanide 85-115

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: CANONIE ENVIRONMENTAL Contract: _____

Lab Code: _____ Case No.: [illegible] SAS No.: _____ SDG No.: [illegible]

Initial Calibration Source: _____

Continuing Calibration Source: I 0689 019, 3-2046, 3-1857

Concentration Units: ug/L

Analyte	Initial Calibration True	Initial Calibration Found	Initial Calibration %R(1)	Continuing Calibration True	Continuing Calibration Found	Continuing Calibration %R(1)	Continuing Calibration Found	Continuing Calibration %R(1)	M
Aluminum	50000.0			50000.0	46604.47	93.2	46519.43	93.0	P
Antimony	1000.0			1000.0	1020.38	102.0	998.38	99.8	P
Arsenic	25.0	24.9	99.6	25.0	27.1	108.4	24.6	98.4	F
Barium	1000.0			1000.0	996.69	99.7	986.31	98.6	P
Beryllium	1000.0			1000.0	962.01	96.2	953.01	95.3	P
Cadmium	1000.0			1000.0	994.29	99.4	973.01	97.3	P
Calcium	50000.0			50000.0	48402.95	96.8	48248.22	96.5	P
Chromium	1000.0			1000.0	970.54	97.0	965.64	96.6	P
Cobalt	1000.0			1000.0	983.05	98.3	959.32	95.9	P
Copper	1000.0			1000.0	990.22	99.0	978.42	97.8	P
Iron 2599	1000.0			1000.0	979.41	97.9	968.44	96.8	P
Lead				10.0	9.63	96.3	956.36	95.6	
Magnesium	50000.0			50000.0	48424.28	96.8	48479.53	96.9	P
Manganese	1000.0			1000.0	985.20	98.5	957.41	95.7	P
Mercury	5.0	5.57	111.4	5.0	5.26	105.2			CV
Nickel	1000.0			1000.0	990.87	99.1	965.23	96.5	P
Potassium	50000.0			50000.0	46232.22	92.5	45828.23	91.6	P
Selenium	10.0	10.85	108.5	10.0	10.72	107.2	10.90	109.0	F
Silver	1000.0			1000.0	1007.92	100.8	958.63	95.9	P
Sodium	50000.0			50000.0	49480.43	98.0	49681.25	99.4	P
Thallium	25.0			25.0	27.4	109.6	101.12	101.4	F
Vanadium	1000.0			1000.0	973.07	97.3	976.99	97.7	P
Zinc	1000.0			1000.0	973.07	97.3	951.45	95.1	P
Cyanide	200.0			200.0					C
IRON 2714	50000.0			50000.0	49719.71	99.4	49539.79	99.1	P

(1) Control Limits: Mercury 80-120; Other Metals 90-110; Cyanide 85-115

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2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: CANONIE ENVIRONMENTAL Contract: _____

Lab Code: _____ Case No.: 7467/471 SAS No.: _____ SDG No.: MW.

Initial Calibration Source: _____

Continuing Calibration Source: I 0689019, 3-2096, 3-1957

Concentration Units: ug/L

Analyte	Initial Calibration True	Initial Calibration Found	Initial Calibration %R(1)	Continuing Calibration True	Continuing Calibration Found	Continuing Calibration %R(1)	Continuing Calibration Found	Continuing Calibration %R(1)	M
Aluminum				50000.0	45864.03	91.7	45659.50	91.3	P
Antimony				1000.0	976.99	97.7	983.29	98.3	P
Arsenic				25.0	24.7	98.8	24.8	99.2	E
Barium				1000.0	947.25	98.7	994.57	99.5	P
Beryllium				1000.0	946.53	94.6	944.52	94.4	P
Cadmium				1000.0	962.46	96.2	963.22	96.3	P
Calcium				50000.0	47514.28	95.0	46944.02	93.9	P
Chromium				1000.0	958.59	95.9	954.46	95.5	P
Cobalt				1000.0	950.05	95.0	948.59	94.8	P
Copper				1000.0	980.98	98.1	986.42	98.6	P
Iron 2599				1000.0	965.53	96.6	963.63	96.4	P
Lead	10.0	10.57	105.7	10.0	10.75	107.5	10.44	104.4	E
Magnesium				50000	47596.04	95.2	47073.38	94.1	P
Manganese				1000.0	950.69	95.1	947.25	94.8	P
Mercury									
Nickel				1000.0	949.91	99.0	946.56	94.7	P
Potassium				50000	45707.58	91.4			P
Selenium									
Silver				1000.0	948.27	94.8			P
Sodium				50000.0	44934.58	89.9	48714.55	97.4	P
Thallium	25.0	26.20	104.8	25.0	24.60	98.4			P
Vanadium				1000.0	972.91	97.3	973.73	97.4	P
Zinc				1000.0	944.53	94.5	943.56	94.4	P
Cyanide									
Iron 2714				50000	48878.71	97.8	48267.75	96.5	P

(1) Control Limits: Mercury 80-120; Other Metals 90-110; Cyanide 85-115

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U.S. EPA - CLP

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: CANONIE ENVIRONMENTAL Contract: _____

Lab Code: _____ Case No.: [illegible] SAS No.: _____ SDG No.: [illegible]

Initial Calibration Source: _____

Continuing Calibration Source: I0689019, 3-2046, 3-1957

Concentration Units: ug/L

Analyte	Initial Calibration True	Initial Calibration Found	Initial Calibration %R(1)	Continuing Calibration True	Continuing Calibration Found	Continuing Calibration %R(1)	Continuing Calibration Found	Continuing Calibration %R(1)	M
Aluminum				50000.0	46026.49	92.0	45354.46	90.7	P
Antimony				1000.0	967.55	96.8	972.84	97.4	P
Arsenic				25.0	24.7	98.8			E
Barium				1000.0	990.08	99.0	985.83	98.6	P
Beryllium				1000.0	937.53	93.8	945.09	94.5	P
Cadmium				1000.0	953.42	95.3	959.45	95.9	P
Calcium				50000.0	46770.13	93.5	47012.92	94.0	P
Chromium				1000.0	944.83	94.5	952.82	95.8	P
Cobalt				1000.0	936.15	93.6	946.98	94.7	
Copper				1000.0	983.44	98.3	984.31	98.4	
Iron 2599				1000.0	957.72	95.8	973.40	97.3	P
Lead	10.0	10.34	103.4	10.0	10.69	106.9	10.60	106.0	E
Magnesium				50000.0	47115.40	94.2	47542.09	95.1	P
Manganese				1000.0	937.76	93.8	945.15	94.5	P
Mercury									
Nickel				1000.0	938.98	93.9	943.12	94.3	P
Potassium				50000.0			45707.29	91.4	P
Selenium									
Silver									
Sodium				50000.0	49396.23	98.8	48436.28	97.7	P
Thallium									
Vanadium				1000.0	965.08	96.5	972.97	97.8	P
Zinc				1000.0	936.55	93.6	944.62	94.5	P
Cyanide									
Eio- 2714				50000.0	48209.32	96.4	48104.85	96.2	P

(1) Control Limits: Mercury 80-120; Other Metals 90-110; Cyanide 85-115

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AR302546

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: CANONIE ENVIRONMENTAL Contract: _____

Lab Code: _____ Case No.: 7462 7421 SAS No.: _____ SDG No.: [illegible]

Initial Calibration Source: _____

Continuing Calibration Source: 3-2046, 3-1957, I 0089-019

Concentration Units: ug/L

Analyte	Initial Calibration True	Initial Calibration Found	Initial Calibration %R(1)	Continuing Calibration True	Continuing Calibration Found	Continuing Calibration %R(1)	Continuing Calibration Found	Continuing Calibration %R(1)	M
Aluminum	50000.0	48932.17	97.9	50000.0	48179.95	96.4	48196.89	96.4	P
Antimony	1000.0	1006.45	100.6	1000.0	994.58	99.4	963.32	96.3	P
Arsenic	25.0			25.0					F
Barium	1000.0	1043.27	104.3	1000.0	1039.07	103.9	1025.77	102.6	P
Beryllium	1000.0	1033.40	103.3	1000.0	1022.18	102.2	1005.23	100.5	P
Cadmium	1000.0	1045.84	104.6	1000.0	1030.22	103.0	1008.89	100.9	P
Calcium	50000.0	52707.35	105.4	50000.0	51911.48	103.8	50842.56	101.7	P
Chromium	1000.0	1031.93	103.2	1000.0	1014.44	101.4	996.85	99.7	P
Cobalt	1000.0	1018.19	101.8	1000.0	1003.04	100.3	968.22	96.8	P
Copper	1000.0	1017.66	101.8	1000.0	1007.41	100.7	991.51	99.2	P
Iron 2599	1000.0	1058.75	105.9	1000.0	1016.62	101.7	987.92	98.8	P
Lead				10.0	10.42	104.2	10.99	109.9	P
Magnesium	50000.0	52114.55	104.2	50000.0	51605.44	103.2	50990.02	102.0	P
Manganese	1000.0	1025.90	102.6	1000.0	1015.03	101.5	985.27	98.5	P
Mercury	5.0			5.0					CV
Nickel	1000.0	1059.39	105.9	1000.0	1046.83	104.7	1018.01	101.8	P
Potassium	50000.0	48950.76	97.9	50000.0	48398.45	96.8	47055.17	94.1	P
Selenium	10.0			10.0					F
Silver	1000.0	1027.48	102.8	1000.0	994.12	99.4	1017.36	101.7	P
Sodium	50000.0	51455.99	102.9	50000.0	50983.86	102.0	51661.30	103.3	P
Thallium	25.0			25.0					F
Vanadium	1000.0	1017.62	101.8	1000.0	1012.85	101.3	999.71	100.0	P
Zinc	1000.0	1028.10	102.8	1000.0	1005.48	100.5	972.73	97.3	P
Cyanide	200.0			200.0					C
IRON 2714	50000.0	53561.22	107.1	50000.0	53004.69	106.0	52251.33	104.5	P

(1) Control Limits: Mercury 80-120; Other Metals 90-110; Cyanide 85-115

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: CANONIE ENVIRONMENTAL Contract: _____

Lab Code: _____ Case No.: 7407471 SAS No.: _____ SDG No.: MW1

Initial Calibration Source: _____

Continuing Calibration Source: 3-2046, 3-1957

Concentration Units: ug/L

Analyte	Initial Calibration True	Initial Calibration Found	Initial Calibration %R(1)	Continuing Calibration True	Continuing Calibration Found	Continuing Calibration %R(1)	Continuing Calibration Found	Continuing Calibration %R(1)	M
Aluminum	50000.0			50000.0	47955.98	95.9	47494.54	95.0	P
Antimony	1000.0			1000.0	0962.06	96.2	0950.18	95.0	P
Arsenic	25.0			25.0					F
Barium	1000.0			1000.0	1038.66	103.9	1033.24	103.3	P
Beryllium	1000.0			1000.0	0999.91	100.0	0993.33	99.3	P
Cadmium	1000.0			1000.0	1001.65	100.2	0998.41	99.8	P
Calcium	50000.0			50000.0	49876.98	99.8	49511.93	99.0	P
Chromium	1000.0			1000.0	0986.76	98.7	0980.78	98.1	P
Cobalt	1000.0			1000.0	0954.69	95.5	0946.53	94.6	P
Copper	1000.0			1000.0	0999.26	99.9	0994.78	99.5	P
Iron 2599	1000.0			1000.0	0998.83	99.9	1007.26	100.7	P
d									
Magnesium	50000.0			50000.0	5013339	100.3	49595.87	99.2	P
Manganese	1000.0			1000.0	0976.98	97.7	0969.27	96.9	P
Mercury	5.0			5.0					CV
Nickel	1000.0			1000.0	1009.25	100.9	1008.94	100.9	P
Potassium	50000.0			50000.0	46143.70	92.3	45489.45	*91.0	P
Selenium	10.0			10.0					F
Silver	1000.0			1000.0	0968.41	96.8	0984.62	98.5	P
Sodium	50000.0			50000.0	51384.93	102.8	50806.86	101.7	P
Thallium	25.0			25.0					F
Vanadium	1000.0			1000.0	0993.55	99.4	0990.31	99.0	P
Zinc	1000.0			1000.0	0966.84	96.7	0959.34	95.9	P
Cyanide	200.0			200.0					C
IRON 2714	50000.0			50000.0	51485.51	103.0	50997.29	102.0	P

(1) Control Limits: Mercury 80-120; Other Metals 90-110; Cyanide 85-115

* Potassium data not used from this ccv on.

FORM II (PART 1) - IN 7/87

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: CANONIE ENVIRONMENTAL Contract: _____

Lab Code: _____ Case No.: 2462 2471 SAS No.: _____ SDG No.: [illegible]

Initial Calibration Source: _____

Continuing Calibration Source: 3-2046 3-1957

Concentration Units: ug/L

Analyte	Initial Calibration True	Initial Calibration Found	Initial Calibration %R(1)	Continuing Calibration True	Continuing Calibration Found	Continuing Calibration %R(1)	Continuing Calibration Found	Continuing Calibration %R(1)	M
Aluminum	50000.0			50000.0	46095.98	92.2	46028.53	92.0	P
Antimony	1000.0			1000.0	0928.35	92.8	0901.44	90.1	P
Arsenic	25.0			25.0					F
Barium	1000.0			1000.0	0975.15	97.5	0977.48	97.7	P
Beryllium	1000.0			1000.0	0951.28	95.1	0951.49	95.2	P
Cadmium	1000.0			1000.0	0970.03	97.0	0958.99	95.9	P
Calcium	50000.0			50000.0	48592.84	97.2	48111.43	96.2	P
Chromium	1000.0			1000.0	0948.55	94.8	0941.75	94.2	P
Cobalt	1000.0			1000.0	0915.16	91.5	0907.61	90.8	P
Copper	1000.0			1000.0	0946.29	94.6	0950.77	95.1	P
Iron 2599	1000.0			1000.0	0960.94	96.0	0958.62	95.9	P
Lead									
Magnesium	50000.0			50000.0	48396.16	96.8	48306.63	96.6	P
Manganese	1000.0			1000.0	0935.11	93.5	0924.75	92.5	P
Mercury	5.0			5.0					CV
Nickel	1000.0			1000.0	0970.76	92.1	0949.35	94.9	P
Potassium	50000.0			50000.0	44384.54	*88.8	44475.77	*90.0	P
Selenium	10.0			10.0					F
Silver	1000.0			1000.0	0948.20	94.8	1002.97	100.3	P
Sodium	50000.0			50000.0	49136.99	98.3	49306.80	98.6	P
Thallium	25.0			25.0					F
Vanadium	1000.0			1000.0	0953.65	95.4	0955.27	95.5	P
Zinc	1000.0			1000.0	0929.07	92.9	0921.85	92.2	P
Cyanide	200.0			200.0					C
IRON 2714	50000.0			50000.0	49766.59	99.5	49446.76	98.9	P

(1) Control Limits: Mercury 80-120; Other Metals 90-110; Cyanide 85-115

* Potassium not used from this set of data.

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: CANONIE ENVIRONMENTAL Contract: _____

Lab Code: _____ Case No.: 7462/471 SAS No.: _____ SDG No.: M6611

Initial Calibration Source: _____

Continuing Calibration Source: 3-2046 3-1957

Concentration Units: ug/L

Analyte	Initial Calibration True	Initial Calibration Found	Initial Calibration %R(1)	Continuing Calibration True	Continuing Calibration Found	Continuing Calibration %R(1)	Continuing Calibration Found	Continuing Calibration %R(1)	M
Aluminum	50000.0			50000.0	47165.93	94.3	46401.17	92.8	P
Antimony	1000.0			1000.0	0924.57	92.4	0920.19	92.0	P
Arsenic	25.0			25.0					F
Barium	1000.0			1000.0	0996.85	99.7	1003.84	100.4	P
Beryllium	1000.0			1000.0	0957.01	95.7	0958.87	95.9	P
Cadmium	1000.0			1000.0	0972.70	97.3	0963.75	96.4	P
Calcium	50000.0			50000.0	48280.10	96.6	47753.67	95.5	P
Chromium	1000.0			1000.0	0946.68	94.7	0946.46	94.6	P
Cobalt	1000.0			1000.0	0917.59	91.8	0915.19	91.5	P
Copper	1000.0			1000.0	0967.08	96.7	0975.43	97.5	P
Iron 2599	1000.0			1000.0	0967.34	96.7	0965.10	96.5	P
Lead									
Magnesium	50000.0			50000.0	48444.29	96.9	47755.71	95.5	P
Manganese	1000.0			1000.0	0937.93	93.8	0936.19	93.6	P
Mercury	5.0			5.0					CV
Nickel	1000.0			1000.0	0971.03	97.1	0962.54	96.2	P
Potassium	50000.0			50000.0	45161.04	*90.3	44460.12	*89.9	P
Selenium	10.0			10.0					F
Silver	1000.0			1000.0	1024.70	102.5	1027.45	102.7	P
Sodium	50000.0			50000.0	50648.17	101.3	49714.80	99.4	P
Thallium	25.0			25.0					F
Vanadium	1000.0			1000.0	0958.35	95.8	0960.62	96.1	P
Zinc	1000.0			1000.0	0934.00	93.4	0933.72	93.4	P
Cyanide	200.0			200.0					C
IRON 2714	50000.0			50000.0	49891.01	99.8	49248.27	98.5	P

(1) Control Limits: Mercury 80-120; Other Metals 90-110; Cyanide 85-115

* Potassium data not used.

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2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: CANONIE ENVIRONMENTAL Contract: _____

Lab Code: _____ Case No.: 7412471 SAS No.: _____ SDG No.: M1U1

Initial Calibration Source: _____

Continuing Calibration Source: 3-2046 3-1957

Concentration Units: ug/L

Analyte	Initial Calibration True	Initial Calibration Found	Initial Calibration %R(1)	Continuing Calibration True	Continuing Calibration Found	Continuing Calibration %R(1)	Continuing Calibration Found	Continuing Calibration %R(1)	M
Aluminum	50000.0			50000.0	45406.94	90.8			P
Antimony	1000.0			1000.0	0908.93	90.9			P
Arsenic	25.0			25.0					F
Barium	1000.0			1000.0	0983.31	98.3			P
Beryllium	1000.0			1000.0	0945.84	94.6			P
Cadmium	1000.0			1000.0	0960.89	96.0			P
Calcium	50000.0			50000.0	47129.90	94.2			P
Chromium	1000.0			1000.0	0938.79	93.9			P
Cobalt	1000.0			1000.0	0911.58	91.2			P
Copper	1000.0			1000.0	0961.37	96.1			P
Iron 2599	1000.0			1000.0	0958.58	95.8			P
Lead									
Magnesium	50000.0			50000.0	47688.06	95.4			P
Manganese	1000.0			1000.0	0928.06	92.8			P
Mercury	5.0			5.0					CV
Nickel	1000.0			1000.0	0951.70	95.2			P
Potassium	50000.0			50000.0	44117.27	88.2			P
Selenium	10.0			10.0					F
Silver	1000.0			1000.0	0963.80	96.4			P
Sodium	50000.0			50000.0	45541.55	91.2			P
Thallium	25.0			25.0					F
Vanadium	1000.0			1000.0	0952.35	95.2			P
Zinc	1000.0			1000.0	0928.69	92.9			P
Cyanide	200.0			200.0					C
IRON 2714	50000.0			50000.0	48497.96	97.0			P

(1) Control Limits: Mercury 80-120; Other Metals 90-110; Cyanide 85-115

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CRDL STANDARD FOR AA AND ICP

Name: CANONIE ENVIRONMENTAL Contract: _____

Lab Code: _____ Case No.: 74272721 SAS No.: _____ SDG No.: MW1

AA CRDL Standard Source: I 0789004

ICP CRDL Standard Source: 3 1991

Concentration Units: ug/L

Analyte	CRDL Standard for AA True	Found	%R	CRDL Standard for ICP True	Initial Found	%R	Final Found	%R
Aluminum				400.0	441.58	110.4		
Antimony				120.0	122.27	101.89		
Arsenic	20.0	20.8	104.0					
Barium				400.0	404.05	101.0		
Beryllium				10.0	10.89	108.9		
Cadmium				10.0	11.71	117.1		
Calcium				10000.0	10314.32	103.1		
Chromium				20.0	24.08	120.4		
Cobalt				100.0	107.97	108.0		
Copper				50.0	55.07	110.1		
Iron				200.0	208.27	104.1		
Lead	10.0	10.37	103.7					
Magnesium				10000.0	9913.41	99.1		
Manganese				30.0	31.64	105.5		
Mercury								
Nickel				80.0	76.49	95.6		
Potassium				10000.0	7698.58	77.0		
Selenium	10.0	8.93	89.3					
Silver				20.0	6.66	33.3		
Sodium				10000.0	10247.89	102.5		
Thallium	20.0	24.3	121.5					
Vanadium				100.0	102.51	102.5		
Zinc				40.0	41.83	104.6		

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AR302552

44

CRDL STANDARD FOR AA AND ICP

Lab Name: CANONIE ENVIRONMENTAL Contract: _____

Lab Code: _____ Case No.: 761471 SAS No.: _____ SDG No.: 1001

AA CRDL Standard Source: E 0789004

ICP CRDL Standard Source: 31991

Concentration Units: ug/L

Analyte	CRDL Standard for AA True	Found	%R	CRDL Standard for ICP True	Initial Found	%R	Final Found	%R
Aluminum				400.0	446.83	111.7		
Antimony				120.0	122.19	101.8		
Arsenic	20.0	22.3	111.5					
Barium				400.0	415.49	103.9		
Beryllium				10.0	12.22	122.2		
Cadmium				10.0	12.42	124.2		
Calcium				10000.0	10707.72	100.8		
Chromium				20.0	24.86	124.3		
Cobalt				100.0	109.43	109.4		
Copper				50.0	53.35	106.5		
Iron				200.0	217.16	108.6		
Lead	10.0	10.34	103.4					
Magnesium				10000.0	10407.46	104.1		
Manganese				30.0	32.31	107.7		
Mercury								
Nickel				80.0	90.19	112.7		
Potassium				10000.0	7900.01	79.0		
Selenium	10.0	10.72	107.2					
Silver				20.0	9.86	49.3		
Sodium				10000.0	10577.14	105.7		
Thallium	20.0	19.43	97.2					
Vanadium				100.0	103.06	103.1		
Zinc				40.0	43.30	104.2		

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AR302553

2B

CRDL STANDARD FOR AA AND ICP

Lab Name: CANONIE ENVIRONMENTAL Contract: _____

Lab Code: _____ Case No.: 7462471 SAS No.: _____ SDG No.: MW1

AA CRDL Standard Source: I 0789004

ICP CRDL Standard Source: _____

Concentration Units: ug/L

Analyte	CRDL Standard for AA True	Found	%R	CRDL Standard for ICP True	Initial Found	%R	Final Found	%R
Aluminum				400.0				
Antimony				120.0				
Arsenic	20.0			400.0				
Barium				10.0				
Beryllium				10.0				
Cadmium				10000.0				
Calcium				20.0				
Chromium				100.0				
Cobalt				50.0				
Copper				200.0				
Iron								
Lead	10.0	10.46	104.6	10000.0				
Magnesium				30.0				
Manganese								
Mercury				80.0				
Nickel				10000.0				
Potassium								
Selenium	10.0			20.0				
Silver				10000.0				
Sodium								
Thallium	20.0			100.0				
Vanadium				40.0				
Zinc								

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FORM II (PART 2) - IN

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: CANONIE ENVIRONMENTAL Contract: _____

Lab Code: _____ Case No.: 7462 7471 SAS No.: _____ SDG No.: 6001

Initial Calibration Source: _____

Continuing Calibration Source: S-2046, S-1957, I 0089-019

Concentration Units: ug/L

Analyte	Initial Calibration True	Initial Calibration Found	Initial Calibration %R(1)	Continuing Calibration True	Continuing Calibration Found	Continuing Calibration %R(1)	Continuing Calibration Found	Continuing Calibration %R(1)	M
Aluminum	50000.0	48932.17	97.9	50000.0	48179.95	96.4	48146.89	96.4	P
Antimony	1000.0	1006.45	100.6	1000.0	994.58	99.4	963.32	96.3	P
Arsenic	25.0			25.0					F
Barium	1000.0	1043.27	104.3	1000.0	1039.07	103.9	1025.77	102.6	P
Beryllium	1000.0	1033.40	103.3	1000.0	1022.18	102.2	1005.23	100.5	P
Cadmium	1000.0	1045.84	104.6	1000.0	1030.22	103.0	1008.59	100.9	P
Calcium	50000.0	52707.35	105.4	50000.0	51911.48	103.8	50842.56	101.7	P
Chromium	1000.0	1031.93	103.2	1000.0	1014.44	101.4	996.85	99.7	P
Cobalt	1000.0	1018.19	101.8	1000.0	1003.04	100.3	968.22	96.8	P
Copper	1000.0	1017.66	101.8	1000.0	1007.41	100.7	991.51	99.2	P
Iron 2599	1000.0	1058.75	105.9	1000.0	1016.62	101.7	987.92	98.8	P
Lead				10.0	10.42	104.2	10.99	109.9	P
Magnesium	50000.0	52114.55	104.2	50000.0	51605.44	103.2	50990.02	102.0	P
Manganese	1000.0	1025.90	102.6	1000.0	1015.03	101.5	985.27	98.5	P
Mercury	5.0			5.0					CV
Nickel	1000.0	1059.39	105.9	1000.0	1046.83	104.7	1018.01	101.8	P
Potassium	50000.0	48950.76	97.9	50000.0	48398.45	96.8	47055.17	94.1	P
Selenium	10.0			10.0					F
Silver	1000.0	1027.48	102.8	1000.0	994.12	99.4	1017.36	101.7	P
Sodium	50000.0	51455.99	102.9	50000.0	50983.86	102.0	51661.30	103.3	P
Thallium	25.0			25.0					F
Vanadium	1000.0	1017.62	101.8	1000.0	1012.85	101.3	999.71	100.0	P
Zinc	1000.0	1028.10	102.8	1000.0	1005.48	100.5	972.73	97.3	P
Cyanide	200.0			200.0					C
IRON 2714	50000.0	53561.22	107.1	50000.0	53004.69	106.0	52251.33	104.5	P

(1) Control Limits: Mercury 80-120; Other Metals 90-110; Cyanide 85-115

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: CANONIE ENVIRONMENTAL Contract: _____

Lab Code: _____ Case No.: 7407471 SAS No.: _____ SDG No.: M601

Initial Calibration Source: _____

Continuing Calibration Source: 3-2046, 3-1957

Concentration Units: ug/L

Analyte	Initial Calibration True	Initial Calibration Found	Initial Calibration %R(1)	Continuing Calibration True	Continuing Calibration Found	Continuing Calibration %R(1)	Continuing Calibration Found	Continuing Calibration %R(1)	M
Aluminum	50000.0			50000.0	47955.98	95.9	47494.54	95.0	P
Antimony	1000.0			1000.0	0962.06	96.2	0950.18	95.0	P
Arsenic	25.0			25.0					F
Barium	1000.0			1000.0	1038.60	103.9	1033.24	103.3	P
Beryllium	1000.0			1000.0	0999.91	100.0	0993.33	99.3	P
Cadmium	1000.0			1000.0	1001.65	100.2	0998.41	99.8	P
Calcium	50000.0			50000.0	49876.99	99.8	49511.93	99.0	P
Chromium	1000.0			1000.0	0986.76	94.7	0980.78	98.1	P
Cobalt	1000.0			1000.0	0954.69	95.5	0946.53	94.6	P
Copper	1000.0			1000.0	0999.26	99.9	0994.78	99.5	P
Iron 2599	1000.0			1000.0	0998.83	99.9	1007.26	100.7	P
Lead									
Magnesium	50000.0			50000.0	50133.39	100.3	49595.87	99.2	P
Manganese	1000.0			1000.0	0976.98	97.7	0969.27	96.9	P
Mercury	5.0			5.0					CV
Nickel	1000.0			1000.0	1009.25	100.9	1008.94	100.9	P
Potassium	50000.0			50000.0	46143.70	92.3	45489.45	*91.0	P
Selenium	10.0			10.0					F
Silver	1000.0			1000.0	0968.41	96.8	0984.62	98.5	P
Sodium	50000.0			50000.0	51384.93	102.8	50866.86	101.7	P
Thallium	25.0			25.0					F
Vanadium	1000.0			1000.0	0993.55	99.4	0990.31	99.0	P
Zinc	1000.0			1000.0	0966.84	96.7	0959.34	95.9	P
Cyanide	200.0			200.0					C
IRON 2714	50000.0			50000.0	51485.51	103.0	50997.29	102.0	P

(1) Control Limits: Mercury 80-120; Other Metals 90-110; Cyanide 85-115

* Potassium data not used from this ccv on.

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2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: CANONIE ENVIRONMENTAL Contract: _____

Lab Code: _____ Case No.: 7467 7471 SAS No.: _____ SDG No.: MW1

Initial Calibration Source: _____

Continuing Calibration Source: 3-2046 3-1957

Concentration Units: ug/L

Analyte	Initial Calibration True	Initial Calibration Found	Initial Calibration %R(1)	Continuing Calibration True	Continuing Calibration Found	Continuing Calibration %R(1)	Continuing Calibration Found	Continuing Calibration %R(1)	M
Aluminum	50000.0			50000.0	46095.98	92.2	46028.53	92.0	P
Antimony	1000.0			1000.0	0928.35	92.8	0901.44	90.1	P
Arsenic	25.0			25.0					F
Barium	1000.0			1000.0	0975.15	97.5	0977.48	97.7	P
Beryllium	1000.0			1000.0	0951.28	95.1	0951.49	95.2	P
Cadmium	1000.0			1000.0	0970.03	97.0	0958.99	95.9	P
Calcium	50000.0			50000.0	48592.84	97.2	48111.43	96.2	P
Chromium	1000.0			1000.0	0948.55	94.8	0941.75	94.2	P
Cobalt	1000.0			1000.0	0915.16	91.5	0907.61	90.8	P
Copper	1000.0			1000.0	0946.29	94.6	0950.77	95.1	P
Iron 2599	1000.0			1000.0	0960.94	96.0	0958.62	95.9	P
Lead									
Magnesium	50000.0			50000.0	48396.16	96.8	48306.63	96.6	P
Manganese	1000.0			1000.0	0935.11	93.5	0924.75	92.5	P
Mercury	5.0			5.0					CV
Nickel	1000.0			1000.0	0970.76	97.1	0949.35	94.9	P
Potassium	50000.0			50000.0	44384.54	*88.8	44475.77	*90.0	P
Selenium	10.0			10.0					F
Silver	1000.0			1000.0	0948.20	94.8	1002.97	100.3	P
Sodium	50000.0			50000.0	49136.99	98.3	49306.80	98.6	P
Thallium	25.0			25.0					F
Vanadium	1000.0			1000.0	0953.65	95.4	0955.27	95.5	P
Zinc	1000.0			1000.0	0929.07	92.9	0921.85	92.2	P
Cyanide	200.0			200.0					C
IRON 2714	50000.0			50000.0	49766.59	99.5	49446.76	98.9	P

(1) Control Limits: Mercury 80-120; Other Metals 90-110; Cyanide 85-115

* Potassium not used from this set of data.

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AR302557

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2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: CANONIE ENVIRONMENTAL Contract: _____

Lab Code: _____ Case No.: 7767 7771 SAS No.: _____ SDG No.: A1601

Initial Calibration Source: _____

Continuing Calibration Source: 3-2046, 3-1957

Concentration Units: ug/L

Analyte	Initial Calibration True	Initial Calibration Found	Initial Calibration %R(1)	Continuing Calibration True	Continuing Calibration Found	Continuing Calibration %R(1)	Continuing Calibration Found	Continuing Calibration %R(1)	M
Aluminum	50000.0			50000.0	47165.93	94.3	46401.17	92.8	P
Antimony	1000.0			1000.0	924.57	92.4	920.19	92.0	P
Arsenic	25.0			25.0					F
Barium	1000.0			1000.0	996.85	99.7	1003.84	100.4	P
Beryllium	1000.0			1000.0	957.01	95.7	958.87	95.9	P
Cadmium	1000.0			1000.0	972.70	97.3	963.75	96.4	P
Calcium	50000.0			50000.0	48280.10	96.6	47753.67	95.5	P
Chromium	1000.0			1000.0	946.68	94.7	946.46	94.6	P
Cobalt	1000.0			1000.0	917.59	91.8	915.19	91.5	P
Copper	1000.0			1000.0	967.08	96.7	975.43	97.5	P
Iron 2599	1000.0			1000.0	967.34	96.7	965.10	96.5	P
Lead									
Magnesium	50000.0			50000.0	48444.29	96.9	47755.71	95.5	P
Manganese	1000.0			1000.0	937.93	93.8	936.19	93.6	P
Mercury	5.0			5.0					CV
Nickel	1000.0			1000.0	971.03	97.1	962.54	96.2	P
Potassium	50000.0			50000.0	45161.04	*90.3	44460.12	*89.9	P
Selenium	10.0			10.0					F
Silver	1000.0			1000.0	1024.70	102.5	1027.45	102.7	P
Sodium	50000.0			50000.0	50648.17	101.3	49714.80	99.4	P
Thallium	25.0			25.0					F
Vanadium	1000.0			1000.0	958.35	95.8	960.62	96.1	P
Zinc	1000.0			1000.0	934.00	93.4	933.72	93.4	P
Cyanide	200.0			200.0					C
IRON 2714	50000.0			50000.0	49891.01	99.8	49248.27	98.5	P

(1) Control Limits: Mercury 80-120; Other Metals 90-110; Cyanide 85-115

* Potassium Data not used.

FORM II (PART 1) - IN 7/87

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: CANONIE ENVIRONMENTAL Contract: _____

Lab Code: _____ Case No.: 7412471 SAS No.: _____ SDG No.: MLV1

Initial Calibration Source: _____

Continuing Calibration Source: 3-2046, 3-1957

Concentration Units: ug/L

Analyte	Initial Calibration True	Initial Calibration Found	Initial Calibration %R(1)	Continuing Calibration True	Continuing Calibration Found	Continuing Calibration %R(1)	Continuing Calibration Found	Continuing Calibration %R(1)	M
Aluminum	50000.0			50000.0	45406.94	90.8			P
Antimony	1000.0			1000.0	0908.95	90.9			P
Arsenic	25.0			25.0					F
Barium	1000.0			1000.0	0983.31	98.3			P
Beryllium	1000.0			1000.0	0945.84	94.6			P
Cadmium	1000.0			1000.0	0960.89	96.0			P
Calcium	50000.0			50000.0	47129.90	94.2			P
Chromium	1000.0			1000.0	0938.79	93.9			P
Cobalt	1000.0			1000.0	0911.58	91.2			P
Copper	1000.0			1000.0	0961.37	96.1			P
Iron 2599	1000.0			1000.0	0958.58	95.8			P
Lead									
Magnesium	50000.0			50000.0	47688.04	95.4			P
Manganese	1000.0			1000.0	0928.06	92.8			P
Mercury	5.0			5.0					CV
Nickel	1000.0			1000.0	0951.70	95.2			P
Potassium	50000.0			50000.0	44117.27	88.2			P
Selenium	10.0			10.0					F
Silver	1000.0			1000.0	0963.80	96.4			P
Sodium	50000.0			50000.0	45541.55	91.2			P
Thallium	25.0			25.0					F
Vanadium	1000.0			1000.0	0952.35	95.2			P
Zinc	1000.0			1000.0	0928.69	92.9			P
Cyanide	200.0			200.0					C
IRON 2714	50000.0			50000.0	48497.96	97.0			P

(1) Control Limits: Mercury 80-120; Other Metals 90-110; Cyanide 85-115

FORM II (PART 1) - IN 7/87

AR302559

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CRDL STANDARD FOR AA AND ICP

Name: CANONIE ENVIRONMENTAL Contract: _____

Lab Code: _____ Case No.: 7467,7471 SAS No.: _____ SDG No.: MW1

AA CRDL Standard Source: I 0789004

ICP CRDL Standard Source: 3 1991

Concentration Units: ug/L

Analyte	CRDL Standard for AA True	Found	%R	CRDL Standard for ICP True	Initial Found	%R	Final Found	%R
Aluminum				400.0	441.58	110.4		
Antimony				120.0	122.27	101.89		
Arsenic	20.0	20.8	104.0					
Barium				400.0	404.05	101.0		
Beryllium				10.0	10.49	104.9		
Cadmium				10.0	11.71	117.1		
Calcium				10000.0	10314.32	103.1		
Chromium				20.0	24.08	120.4		
Cobalt				100.0	107.97	108.0		
Copper				50.0	55.07	110.1		
Iron				200.0	208.27	104.1		
Lead	10.0	10.37	103.7					
Magnesium				10000.0	9913.41	99.1		
Manganese				30.0	31.64	105.5		
Mercury								
Nickel				80.0	26.49	95.6		
Potassium				10000.0	2698.58	27.0		
Selenium	10.0	8.93	89.3	20.0	6.66	33.3		
Silver				10000.0	10247.89	102.5		
Sodium								
Thallium	20.0	24.3	121.5	100.0	102.51	102.5		
Vanadium				40.0	41.83	104.6		
Zinc								

7/87

FORM II (PART 2) - IN

AR302560

44

CRDL STANDARD FOR AA AND ICP

Lab Name: CANONIE ENVIRONMENTAL Contract: _____

Lab Code: _____ Case No.: 746/471 SAS No.: _____ SDG No.: MUV1

AA CRDL Standard Source: E 0789004

ICP CRDL Standard Source: 31991

Concentration Units: ug/L

Analyte	CRDL Standard for AA True	Found	%R	CRDL Standard for ICP True	Initial Found	%R	Final Found	%R
Aluminum				400.0	446.83	111.7		
Antimony				120.0	122.19	101.8		
Arsenic	20.0	22.3	111.5					
Barium				400.0	415.49	103.9		
Beryllium				10.0	12.22	122.2		
Cadmium				10.0	12.42	124.2		
Calcium				10000.0	10207.72	100.8		
Chromium				20.0	24.86	124.3		
Cobalt				100.0	109.43	109.4		
Copper				50.0	53.25	106.5		
Iron				200.0	217.16	108.6		
Lead	10.0	10.34	103.4					
Magnesium				10000.0	10407.46	104.1		
Manganese				30.0	32.31	107.7		
Mercury								
Nickel				80.0	90.19	112.7		
Potassium				10000.0	7900.01	79.0		
Selenium	10.0	10.72	107.2					
Silver				20.0	9.86	49.3		
Sodium				10000.0	10577.14	105.7		
Thallium	20.0	19.43	97.2					
Vanadium				100.0	103.06	103.1		
Zinc				40.0	43.30	108.2		

FORM II (PART 2) - IN 7/87

AR302561

45

CRDL STANDARD FOR AA AND ICP

Lab Name: CANONIE ENVIRONMENTAL Contract: _____

Lab Code: _____ Case No.: 7462471 SAS No.: _____ SDG No.: MW1

AA CRDL Standard Source: I 0789004

ICP CRDL Standard Source: _____

Concentration Units: ug/L

Analyte	CRDL Standard for AA True	Found	%R	CRDL Standard for ICP True	Initial Found	%R	Final Found	%R
Aluminum				400.0				
Antimony				120.0				
Arsenic	20.0			400.0				
Barium				10.0				
Beryllium				10.0				
Cadmium				10000.0				
Calcium				20.0				
Chromium				100.0				
Cobalt				50.0				
Copper				200.0				
Iron								
Lead	10.0	10.46	104.6	10000.0				
Magnesium				30.0				
Manganese								
Mercury				80.0				
Nickel				10000.0				
Potassium								
Selenium	10.0			20.0				
Silver				10000.0				
Sodium								
Thallium	20.0			100.0				
Vanadium				40.0				
Zinc								

U.S. EPA - CLP

3
BLANKS

Lab Name: CANONIE ENVIRONMENTAL Contract: _____

Lab Code: _____ Case No.: [illegible] SAS No.: _____ SDG No.: [illegible]

Preparation Blank Matrix (soil/water): _____

Preparation Blank Concentration Units (ug/L or mg/kg): ug/L

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C	Prepa-ration Blank	C	M
Aluminum	27	U	27	U	284		44.34	B			P
Antimony	20	U	20	U	20	U	20	U			P
Arsenic	1.1	U	1.1	U	1.1	U	1.1	U			F
Barium	1.2	U	1.2	U	1.2	U	1.2	U			P
Beryllium	1.3	U	1.3	U	1.3	U	1.3	U			P
Cadmium	1.6	U	1.6	U	1.6	U	1.6	U			P
Calcium	61.	U	61.	U	61	U	61	U			P
Chromium	2.2	U	2.2	U	2.2	U	3.96	B			P
Cobalt	2.0	U	2.0	U	2.0	U	2.0	U			P
Copper	4.2	U	4.2	U	4.2	U	4.2	U			P
Iron	57.	U	57	U	57	U	57	U			P
Lead	0.2	U	0.2	U	0.2	U	0.2	U			F
Magnesium	53.	U	53	U	53	U	53	U			P
Manganese	1.4	U	1.4	U	4.35	B	1.4	U			P
Mercury	0.41		0.64		0.36		0.65				CV
Nickel	3.5	U	3.5	U	3.5	U	3.5	U			P
Potassium	2607.	U	2607	U	2607	U	2607	U			P
Selenium	1.3	U	1.3	U	1.3	U	1.3	U			F
Silver	6.2	U	6.2	U	6.2	U	6.2	U			P
Sodium	1052.	U	1052	U	1052	U	1052	U			P
Thallium	2.2	U	2.2	U	2.2	U	2.2	U			F
Vanadium	2.3	U	2.3	U	2.3	U	2.3	U			P
Zinc	2.4	U	2.4	U	2.4	U	2.4	U			P
Cyanide	2.5	U	2.5	U							C

FORM III - IN 7/87

U.S. EPA - CLP

3
BLANKS

Lab Name: CANONIE ENVIRONMENTAL Contract: _____

Lab Code: _____ Case No.: [illegible] SAS No.: _____ SDG No.: [illegible]

Preparation Blank Matrix (soil/water): _____

Preparation Blank Concentration Units (ug/L or mg/kg): _____

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C	Prepa-ration Blank	C	M
Aluminum			44.56	B	27	U	27	U			P
Antimony			20	U	20	U	20	U			P
Arsenic	1.1	U	1.1	U	1.1	U	1.1	U			F
Barium			1.2	U	1.2	U	1.2	U			P
Beryllium			1.3	U	1.3	U	1.3	U			P
Cadmium			1.6	U	1.6	U	1.6	U			P
Calcium			61	U	61	U	61	U			P
Chromium			2.42	B	2.2	U	2.2	U			P
Cobalt			2.0	U	2.0	U	2.13	B			P
Copper			4.2	U	4.2	U	4.2	U			P
Iron			57	U	57	U	57	U			P
Lead			0.2	U	0.2	U					F
Magnesium			53	U	53	U	53	U			P
Manganese			1.4	U	1.4	U	1.4	U			P
Mercury			0.32								CV
Nickel			3.5	U	3.5	U	3.5	U			P
Potassium			-3007.86	B	-3148.17	B	-2694.75	B			P
Selenium			1.3	U							F
Silver			6.2	U	6.2	U	10.05				P
Sodium			1052	U	1052	U	1052	U			P
Thallium			2.2	U	2.2	U					F
Vanadium			2.3	U	2.3	U	2.3	U			P
Zinc			2.4	U	2.4	U	2.4	U			P
Cyanide	7.5	U	7.5	U	7.5	U					C

FORM III - IN 7/87

AR302564

U.S. EPA - CLP

3

BLANKS

Lab Name: CANONIE ENVIRONMENTAL Contract: _____

Lab Code: _____ Case No.: [illegible] SAS No.: _____ SDG No.: MW1

Preparation Blank Matrix (soil/water): _____

Preparation Blank Concentration Units (ug/L or mg/kg): _____

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C	Preparation Blank	C	M
Aluminum			27	U	27	U	27	U			P
Antimony			20	U	20	U	20	U			P
Arsenic			1.1	U	1.1	U					F
Barium			1.2	U	1.2	U	1.2	U			P
Beryllium			1.3	U	1.3	U	1.3	U			P
Cadmium			1.6	U	1.6	U	1.6	U			P
Calcium			61	U	61	U	61	U			P
Chromium			2.2	U	2.2	U	2.2	U			P
Cobalt			2.0	U	2.0	U	2.0	U			P
Copper			4.2	U	4.2	U	4.2	U			P
Iron			57	U	57	U	57	U			P
Lead	0.2	U	0.2	U	0.2	U					F
Magnesium			53	U	53	U	53	U			P
Manganese			1.4	U	1.4	U	1.4	U			P
Mercury	0.70		0.39								CV
Nickel			3.5	U	3.5	U	3.5	U			P
Potassium			-2694.84	B	-3144.58	B	-3231.04	B			P
Selenium	1.3	U	1.3	U	1.3	U					F
Silver			7.85	B	6.2	U	6.2	U			P
Sodium			1052	U	1052	U	1052	U			P
Thallium	2.2	U	2.2	U	2.2	U					F
Vanadium			2.3	U	2.3	U	2.3	U			P
Zinc			2.6	U	2.6	U	2.6	U			P
Cyanide											C

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3
BLANKS

Lab Name: CANONIE ENVIRONMENTAL Contract: _____

Lab Code: _____ Case No.: [illegible] SAS No.: _____ SDG No.: [illegible]

Preparation Blank Matrix (soil/water): _____

Preparation Blank Concentration Units (ug/L or mg/kg): _____

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C	Preparation Blank	C	M
Aluminum			27	U							P
Antimony			20	U							P
Arsenic											P
Barium			1.2	U							P
Beryllium			1.3	U							P
Cadmium			1.6	U							P
Calcium			61	U							P
Chromium			2.2	U							P
Cobalt			2.0	U							P
Copper			4.2	U							P
Iron			57	U							P
Lead	0.2	U	0.2	U	0.2	U	0.2	U			P
Magnesium			53	U							P
Manganese			1.4	U							P
Mercury											P
Nickel			3.5	U							CV
Potassium			-2702.03	B							P
Selenium											P
Silver			6.2	U							P
Sodium			1052	U							P
Thallium											P
Vanadium			2.3	U							P
Zinc			2.6	U							P
Cyanide											C

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AR302566

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U.S. EPA - CLP

3
BLANKS

Lab Name: CANONIE ENVIRONMENTAL Contract: _____

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: _____

Preparation Blank Matrix (soil/water): _____

Preparation Blank Concentration Units (ug/L or mg/kg): _____

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C	Prepa-ration Blank	C	M
Aluminum	27	u	27	u	27	u	27	u			P
Antimony	20	u	20	u	20	u	20	u			P
Arsenic											F
Barium	1.2	u	1.2	u	1.2	u	1.2	u			P
Beryllium	1.3	u	1.3	u	1.3	u	1.3	u			P
Cadmium	1.6	u	1.6	u	1.6	u	1.6	u			P
Calcium	61	u	61	u	61	u	61	u			P
Chromium	2.2	u	2.2	u	2.2	u	2.2	u			P
Cobalt	2.0	u	2.0	u	2.0	u	2.0	u			P
Copper	4.2	u	4.2	u	4.2	u	4.2	u			P
Iron	57	u	57	u	57	u	57	u			P
Lead			0.2	u							F
Magnesium	53	u	53	u	53	u	53	u			P
Manganese	1.4	u	1.4	u	1.4	u	1.4	u			P
Mercury											CV
Nickel	3.5	u	3.5	u	3.5	u	3.5	u			P
Potassium	2607.	u	2607	u	2607	u	-3384.41	B			P
Selenium											F
Silver	6.2	u	6.2	u	7.95	B	6.2	u			P
Sodium	1052	u	1052	u	1052	u	1052	u			P
Thallium											F
Vanadium	2.3	u	2.3	u	2.3	u	2.3	u			P
Zinc	7.6	u	7.6	u	7.6	u	7.6	u			P
Cyanide											C

FORM III - IN 7/87

AR302567

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U.S. EPA - CLP

3
BLANKS

Lab Name: CALGON ENVIRONMENTAL Contract: _____

Lab Code: _____ Case No.: [illegible] SAS No.: _____ SDG No.: [illegible]

Preparation Blank Matrix (soil/water): _____

Preparation Blank Concentration Units (ug/L or mg/kg): _____

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C	Prepa-ration Blank	C	M
Aluminum			27	U	27	U	27	U			P
Antimony			20	U	20	U	20	U			P
Arsenic											
Barium			1.2	U	1.2	U	1.2	U			P
Beryllium			1.3	U	1.3	U	1.3	U			P
Cadmium			1.6	U	1.9	B	1.6	U			P
Calcium			61	U	61	U	61	U			P
Chromium			2.2	U	2.3	U	3.02	B			P
Cobalt			2.6	B	2.0	U	3.47	B			P
Copper			4.2	U	4.2	U	4.2	U			P
Iron			57	U	57	U	57	U			P
Lead											
Magnesium			53	U	53	U	53	U			P
Manganese			1.4	U	1.4	U	1.4	U			P
Mercury											
Nickel			3.5	U	3.5	U	3.5	U			P
Potassium			-3255.58	B	-2802.93	B	-2959.62	B			P
Selenium											
Silver			6.2	U	7.95	B	6.2	U			P
Sodium											
Thallium											
Vanadium			2.3	U	2.3	U	2.3	U			P
Zinc			7.6	U	7.6	U	7.6	U			P
Cyanide											

FORM III - IN 7/87

AR302568

U.S. EPA - CLP

3
BLANKS

Lab Name: CANONIE ENVIRONMENTAL Contract: _____

Lab Code: _____ Case No.: 7467,7471 SAS No.: _____ SDG No.: [illegible]

Preparation Blank Matrix (soil/water): _____

Preparation Blank Concentration Units (ug/L or mg/kg): _____

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C	Prepa-ration Blank	C	M
Aluminum			27	u	27	u	147.4	B			P
Antimony			20	u	20	u	20	u			P
Arsenic											
Barium			1.2	u	1.2	u	1.2	u			P
Beryllium			1.3	u	1.3	u	1.3	u			P
Cadmium			1.6	u	1.6	u	1.6	u			P
Calcium			61	u	61	u	44	u			P
Chromium			2.2	u	2.2	u	8.5	B			P
Cobalt			2.0	u	2.0	u	2.4	B			P
Copper			4.2	u	4.2	u	4.2	u			P
Iron			57	u	57	u	57	u			P
Lead											
Magnesium			53	u	53	u	2446	B			P
Manganese			1.4	u	1.4	u	1.4	B			P
Mercury											
Nickel			-4.69	B	3.5	u	3.5	u			P
Potassium			-412.954	B	-3544.58	B	-4839.08	B			P
Selenium											
Silver			6.2	u	6.2	u	6.2	u			P
Sodium											
Thallium											
Vanadium			2.3	u	2.3	u	2.3	u			P
Zinc			7.6	u	7.6	u	7.6	u			P
Cyanide											

FORM III - IN 7/87

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AR302569

U.S. EPA - CLP

3
BLANKS

Lab Name: CANONIE ENVIRONMENTAL Contract: _____

Lab Code: _____ Case No.: [illegible] SAS No.: _____ SDG No.: [illegible]

Preparation Blank Matrix (soil/water): _____

Preparation Blank Concentration Units (ug/L or mg/kg): _____

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C	Preparation Blank	C	M
Aluminum			27	U							P
Antimony			20	U							P
Arsenic											F
Barium			1.3	U							P
Beryllium			1.3	U							P
Cadmium			1.6	U							P
Calcium			61	U							P
Chromium			2.2	U							P
Cobalt			2.0	U							P
Copper			4.2	U							P
Iron			57	U							P
Lead											F
Magnesium			53	U							P
Manganese			1.4	U							P
Mercury											CV
Nickel			3.5	U							P
Potassium			-3266.03	B							P
Selenium											F
Silver			6.2	U							P
Sodium											P
Thallium			2.3	U							F
Vanadium			2.6	U							P
Zinc											P
Cyanide											C

FORM III - IN 7/87

AR302570

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U.S. EPA - CLP

ICP INTERFERENCE CHECK SAMPLE

Lab Name: CANONIE ENVIRONMENTAL Contract: _____

Lab Code: _____ Case No: [illegible] SAS No.: _____ SDG No.: [illegible]

ICP ID Number: TJA61 ICS Source: I 0889 015
I 0889 024
I 0889 031

Concentration Units: ug/L

Analyte	True Sol. A	True Sol. AB	Initial Found Sol. A	Initial Found Sol. AB	%R	Final Found Sol. A	Final Found Sol. AB	%R
Aluminum	476000	476000	485752.96	483 141.14	101.5	475455.21	473908.35	99.6
Antimony								
Arsenic								
Barium		494		461.09	93.3		454.09	91.9
Beryllium		461		466.51	101.2		456.06	98.9
Cadmium		942		943.82	100.2		930.97	98.8
Calcium	475000	475000	485197.79	483 666.25	101.8	467563.44	466891.38	98.3
Chromium		411		418.23	101.8		409.08	99.5
Cobalt		448		458.38	102.3		443.30	99.0
Copper		463		469.31	101.4		460.02	99.4
Iron	187000	187000	189655.70	188672.48	100.9	185300.10	184706.20	98.8
Lead		851		833.00	97.9		847.46	99.6
Magnesium	512000	512000	532707.45	518256.95	101.2	516984.00	505 032.24	98.6
Manganese		442		444.82	100.6		438.12	99.1
Mercury								
Nickel		849		842.88	99.3		846.06	99.6
Potassium								
Selenium								
Silver		900		923.05	102.6		819.33	91.0
Sodium								
Thallium								
Vanadium		450		458.77	101.9		446.92	99.3
Zinc		1068		1084.36	101.5		1060.16	99.3

FORM IV - IN 7/87

U.S. EPA - CLP

4

ICP INTERFERENCE CHECK SAMPLE

Lab Name: CANONIE ENVIRONMENTAL Contract: _____

Lab Code: _____ Case No: [illegible] SAS No.: _____ SDG No.: [illegible]

ICP ID Number: TJA61 ICS Source: I 0889015
I 0881024
I 0889031

Concentration Units: ug/L

Analyte	True Sol. A	True Sol. AB	Initial Found Sol. A	Initial Found Sol. AB	%R	Final Found Sol. A	Final Found Sol. AB	%R
Aluminum	476000	476000				464720.09	457753.08	96.2
Antimony								
Arsenic								
Barium		494					442.82	89.6
Beryllium		461					445.61	96.7
Cadmium		942					890.82	94.6
Calcium	475000	475000				451677.73	451442.87	95.0
Chromium		411					397.79	96.8
Cobalt		448					426.04	95.1
Copper		463					450.55	97.3
Iron	187000	187000				179010.66	178072.79	95.2
Lead		851					683.16	80.3
Magnesium	512000	512000				507474.62	493706.03	96.5
Manganese		442					411.16	93.0
Mercury								
Nickel		849					784.49	92.4
Potassium								
Selenium								
Silver		900					837.03	93.0
Sodium								
Thallium								
Vanadium		450					435.66	96.8
Zinc		1068					1025.12	96.0

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ICP INTERFERENCE CHECK SAMPLE

Lab Name: CANONIE ENVIRONMENTAL Contract: _____

Lab Code: _____ Case No: [illegible] SAS No.: _____ SDG No.: [illegible]

ICP ID Number: TJA61 ICS Source: I 0989015
I 0989024
I 0989031

Concentration Units: ug/L

Analyte	True Sol. A	True Sol. AB	Initial Found Sol. A	Initial Found Sol. AB	%R	Final Found Sol. A	Final Found Sol. AB	%R
Aluminum	476000	476000	497927.82	496683.38	104.3	473774.62	464112.76	97.5
Antimony								
Arsenic								
Barium		494		475.23	96.2		448.64	90.8
Beryllium		461		488.37	105.9		448.50	97.3
Cadmium		942		984.77	104.5		912.03	96.8
Calcium	475000	475000	500436.67	500384.55	105.3	452146.36	451026.18	95.0
Chromium		411		431.68	105.0		396.54	96.5
Cobalt		448		464.29	103.6		420.34	93.8
Copper		463		475.96	102.8		450.25	97.2
Iron	187000	187000	196824.67	196495.98	105.1	180821.16	179086.07	95.8
Lead		851		895.75	105.3		733.66	86.2
Magnesium	512000	512000	556153.32	542369.81	108.6	510855.40	495091.33	96.7
Manganese		442		457.85	103.6		411.57	93.1
Mercury								
Nickel		849		891.78	105.0		809.05	95.3
Potassium								
Selenium								
Silver		900		847.51	94.2		828.97	92.1
Sodium								
Thallium								
Vanadium		450		473.67	105.3		437.44	97.2
Zinc		1068		1114.59	104.4		1022.22	95.7

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5A
SPIKE SAMPLE RECOVERY

EPA SAMPLE NO.

Lab Name: CANONIE ENVIRONMENTAL Contract: _____ MW1

Lab Code: _____ Case No.: 742747 SAS No.: _____ SDG No.: MW1

Matrix (soil/water): WATER Level (low/med): Low

Concentration Units (ug/L or mg/kg dry weight): ug/L

Analyte	Control Limit %R	Spiked Sample Result (SSR)	C	Sample Result (SR)	C	Spike Added (SA)	%R	Q	M
Aluminum	75-125								P
Antimony	75-125								P
Arsenic									F
Barium	75-125								P
Beryllium	75-125								P
Cadmium	75-125								P
Calcium									P
Chromium	75-125								P
Cobalt	75-125								P
Copper	75-125								P
Iron									P
Lead									
Magnesium									P
Manganese	75-125								P
Mercury	75-125	5.56		0.80		5.0	94.8		CV
Nickel	75-125								P
Potassium									P
Selenium									F
Silver	75-125								P
Sodium									P
Thallium									F
Vanadium	75-125								P
Zinc	75-125								P
Cyanide	75-125	181		7.5	u	200	90.5		C

Comments:

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AR302574

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5B

POST DIGEST SPIKE SAMPLE RECOVERY

EPA SAMPLE NO.

MW1A

Lab Name: CANONIE ENVIR. SVC Contract: -

Lab Code: - Case No.: 26722 SAS No.: - SDG No.: -MW1

Matrix (soil/water): WATER Level (low/med): LOW

Concentration Units (ug/L or mg/kg dry weight): UG/L

Analyte	Control Limit %R	Spiked Sample Result (SSR)	C	Sample Result (SR)	C	Spike Added (SA)	%R	Q	M
Aluminum	75-125	1950		37	B	2,000.0	95.8		P
Antimony	75-125	484		20	U	500.0	96.8		P
Arsenic	75-125	*N/A	*N/A	1.1	U	20.0	*N/A	*N/A	F
Barium	75-125	2090		75	B	2,000.0	101.1		P
Beryllium	75-125	52		1.3	U	50.0	104.0		P
Cadmium	75-125	50		1.6	U	50.0	100.0		P
Calcium		50400		55100					NR
Chromium	75-125	186		2.2	U	200.0	93.0		P
Cobalt	75-125	520		2	U	500.0	104.0		P
Copper	75-125	251		4.2	U	250.0	100.4		P
Iron	75-125	1000		57	U	1,000.0	100.0		P
Lead	75-125	*N/A	*N/A	0.2	U	20.0	*N/A	*N/A	F
Magnesium		3260	B	3580	B				NR
Manganese	75-125	492		1.4	U	500.0	98.4		P
Mercury									CV
Nickel	75-125	492		3.5	U	500.0	98.4		P
Potassium		2610	U	2610	U				NR
Selenium	75-125	*N/A	*N/A	1.3	U	10.0	*N/A	*N/A	F
Silver	75-125	40		6.2	U	50.0	80.0		P
Sodium		2070	B	2220	B				NR
Thallium	75-125	*N/A	*N/A	2.2	U	50.0	*N/A	*N/A	F
Vanadium	75-125	502		2.3	U	500.0	100.4		P
Zinc	75-125	500		7.6	U	500.0	100.0		P
Cyanide									C

Comments: Since client requested DISSOLVED METALS, this is a post spike.

THE FLAG *NA MEANS NOT APPLICABLE

%R= ((SSR-(SR X DIL FACTOR)) X 100)/SA

DILUTION FACTOR: 0.91

The client asked for CLP protocol. The designation of "dissolved" does not alter the laboratory from adhering to the protocol (viz., sample prep!)

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AR302575

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5B
POST DIGEST SPIKE SAMPLE RECOVERY

EPA SAMPLE NO.

MW1

Lab Name CANONIE ENVIR. SVC
Lab Code: - Case No.: -747,7471
Matrix (soil/water): WATER

Contract: -
SAS No.: -

SDG No.: - MW1
Level (low/med): LOW

Concentration Units: ug/L

Analyte	Control Limit %R	Spiked Sample Result (SSR)	C	Sample Result (SR)	C	Spike Added (SA)	%R	Q	M
Aluminum						2,000.0			P
Antimony						500.0			P
Arsenic		21.00		1.10	U	20.0	105.0		F
Barium						2,000.0			P
Beryllium						50.0			P
Cadmium						50.0			P
Calcium									NR
Chromium						200.0			P
Cobalt						500.0			P
Copper						250.0			P
Iron						1,000.0			P
Lead		19.00		0.20	U	20.0	95.0		F
Magnesium									NR
Manganese						500.0			P
Mercury									CV
Nickel						500.0			P
Potassium									NR
Selenium		8.50		1.30	U	10.0	85.0		F
Silver						50.0			P
Sodium									NR
Thallium		51.00		2.20	U	50.0	102.0		F
Vanadium						500.0			P
Zinc						500.0			P
Cyanide									C

Comments:

THE FLAG #NA MEANS NOT APPLICABLE
% RECOVERY= (SSR-(SR X GFAA DILUT. FACTOR)) X100/SA

GFAA DILUT. FACTOR: 0.9
ICP DILUTION FACTOR: 0.9

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U.S. EPA - CLP

5B
POST DIGEST SPIKE SAMPLE RECOVERY

EPA SAMPLE NO.

MW2

Lab Name CANONIE ENVIR. SVC Contract: -
Lab Code: - Case No.: -74-7 7471 SAS No.: - SDG No.: -MW1
Matrix (soil/water): WATER Level (low/med): LOW

Concentration Units: ug/L

Analyte	Control Limit %R	Spiked Sample Result (SSR)	C	Sample Result (SR)	C	Spike Added (SA)	%R	Q	M
Aluminum						2,000.0			P
Antimony						500.0			P
Arsenic		21.00		1.10	U	20.0	105.0		F
Barium						2,000.0			P
Beryllium						50.0			P
Cadmium						50.0			P
Calcium									NR
Chromium						200.0			P
Cobalt						500.0			P
Copper						250.0			P
Iron						1,000.0			P
Lead		20.00		0.30	B	20.0	98.7		F
Magnesium									NR
Manganese						500.0			P
Mercury									CY
Nickel						500.0			P
Potassium									NR
Selenium		8.50		1.30	U	10.0	85.0		F
Silver						50.0			P
Sodium									NR
Thallium		49.00		2.20	U	50.0	98.0		F
Vanadium						500.0			P
Zinc						500.0			P
Cyanide									C

Comments:

THE FLAG #NA MEANS NOT APPLICABLE
% RECOVERY= (SSR-(SR X GFAA DILUT. FACTOR)) X100/SA

GFAA DILUT. FACTOR: 0.9
ICP DILUTION FACTOR: 0.9

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AR302577

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5B
POST DIGEST SPIKE SAMPLE RECOVERY

EPA SAMPLE NO.

MW3

Lab Name CANONIE ENVIR. SVC Contract: -
Lab Code: - Case No.: -7467 7471 SAS No.: - SDG No.: - MW1
Matrix (soil/water): WATER Level (low/med): LOW

Concentration Units: ug/L

Analyte	Control Limit %R	Spiked Sample Result (SSR)	C	Sample Result (SR)	C	Spike Added (SA)	%R	Q	M
Aluminum						2,000.0			P
Antimony						500.0			P
Arsenic		22.00		1.10	U	20.0	110.0		F
Barium						2,000.0			P
Beryllium						50.0			P
Cadmium						50.0			P
Calcium									NR
Chromium						200.0			P
Cobalt						500.0			P
Copper						250.0			P
Iron						1,000.0			P
Lead		21.00		0.80	B	20.0	101.4		F
Magnesium									NR
Manganese						500.0			P
Mercury									CV
Nickel						500.0			P
Potassium									NR
Selenium		8.90		1.30	U	10.0	89.0		F
Silver						50.0			P
Sodium									NR
Thallium		52.00		2.20	U	50.0	104.0		F
Vanadium						500.0			P
Zinc						500.0			P
Cyanide									C

Comments:

THE FLAG *NA MEANS NOT APPLICABLE
% RECOVERY= (SSR-(SR X GFAA DILUT. FACTOR)) X100/SA

GFAA DILUT. FACTOR: 0.9
ICP DILUTION FACTOR: 0.9

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5B
POST DIGEST SPIKE SAMPLE RECOVERY

EPA SAMPLE NO.

MW5

Lab Name CANONIE ENVIR. SVC Contract: -
Lab Code: - Case No.: - 7467 7471 SAS No.: - SDG No.: - MW1
Matrix (soil/water): WATER Level (low/med): LOW

Concentration Units: ug/L

Analyte	Control Limit %R	Spiked Sample Result (SSR)	C	Sample Result (SR)	C	Spike Added (SA)	%R	Q	M
Aluminum						2,000.0			P
Antimony						500.0			P
Arsenic		21.00		1.10	U	20.0	105.0		F
Barium						2,000.0			P
Beryllium						50.0			P
Cadmium						50.0			P
Calcium									NR
Chromium						200.0			P
Cobalt						500.0			P
Copper						250.0			P
Iron						1,000.0			P
Lead		20.00		1.40	B	20.0	93.7		F
Magnesium									NR
Manganese						500.0			P
Mercury									CV
Nickel						500.0			P
Potassium									NR
Selenium		9.00		1.30	U	10.0	90.0		F
Silver						50.0			P
Sodium									NR
Thallium		46.00		2.20	U	50.0	92.0		F
Vanadium						500.0			P
Zinc						500.0			P
Cyanide									C

Comments:

THE FLAG *NA MEANS NOT APPLICABLE
% RECOVERY= (SSR-(SR X GFAA DILUT. FACTOR)) X100/SA

GFAA DILUT. FACTOR: 0.9
ICP DILUTION FACTOR: 0.9

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5B
POST DIGEST SPIKE SAMPLE RECOVERY

EPA SAMPLE NO.

MW6

Lab Name CANONIE ENVIR. SVC Contract: -
Lab Code: - Case No.: - 7467 7471 SAS No.: - SDG No.: - MW1
Matrix (soil/water): WATER Level (low/med): LOW

Concentration Units: ug/L

Analyte	Control Limit %R	Spiked Sample Result (SSR)	C	Sample Result (SR)	C	Spike Added (SA)	%R	Q	M
Aluminum						2,000.0			P
Antimony						500.0			P
Arsenic		23.00		1.10	U	20.0	115.0		F
Barium						2,000.0			P
Beryllium						50.0			P
Cadmium						50.0			P
Calcium									NR
Chromium						200.0			P
Cobalt						500.0			P
Copper						250.0			P
Iron						1,000.0			P
Lead		21.00		0.30	B	20.0	103.7		F
Magnesium									NR
Manganese						500.0			P
Mercury									CV
Nickel						500.0			P
Potassium									NR
Selenium		8.40		1.30	U	10.0	84.0		F
Silver						50.0			P
Sodium									NR
Thallium		46.00		2.20	U	50.0	92.0		F
Vanadium						500.0			P
Zinc						500.0			P
Cyanide									C

Comments:

THE FLAG *NA MEANS NOT APPLICABLE
% RECOVERY= (SSR-(SR X GFAA DILUT. FACTOR)) X100/SA
GFAA DILUT. FACTOR: 0.9
ICP DILUTION FACTOR: 0.9

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5B
POST DIGEST SPIKE SAMPLE RECOVERY

EPA SAMPLE NO.

MW7

Lab Name CANONIE ENVIR. SVC Contract: -
Lab Code: - Case No.: - 7462 7421 SAS No.: - SDG No.: - MW1
Matrix (soil/water): WATER Level (low/med): LOW

Concentration Units: ug/L

Analyte	Control Limit %R	Spiked Sample Result (SSR)	C	Sample Result (SR)	C	Spike Added (SA)	%R	Q	M
Aluminum						2,000.0			P
Antimony						500.0			P
Arsenic		23.00		1.10	U	20.0	115.0		F
Barium						2,000.0			P
Beryllium						50.0			P
Cadmium						50.0			P
Calcium									NR
Chromium						200.0			P
Cobalt						500.0			P
Copper						250.0			P
Iron						1,000.0			P
Lead		21.00		0.20	B	20.0	104.1		F
Magnesium									NR
Manganese						500.0			P
Mercury									CV
Nickel						500.0			P
Potassium									NR
Selenium		8.50		1.30	U	10.0	85.0		F
Silver						50.0			P
Sodium									NR
Thallium		47.00		2.20	U	50.0	94.0		F
Vanadium						500.0			P
Zinc						500.0			P
Cyanide									C

Comments:

THE FLAG *NA MEANS NOT APPLICABLE
% RECOVERY= (SSR-(SR X GFAA DILUT. FACTOR)) X100/SA

GFAA DILUT. FACTOR: 0.9
ICP DILUTION FACTOR: 0.9

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5B
POST DIGEST SPIKE SAMPLE RECOVERY

EPA SAMPLE NO.

MW8

Lab Name CANONIE ENVIR. SVC Contract: -
Lab Code: - Case No.: - 7467 7471 SAS No.: - SDG No.: - MW1
Matrix (soil/water): WATER Level (low/med): LOW

Concentration Units: ug/L

Analyte	Control Limit %R	Spiked Sample Result (SSR)	C	Sample Result (SR)	C	Spike Added (SA)	%R	Q	M
Aluminum						2,000.0			P
Antimony						500.0			P
Arsenic		23.00		1.10	U	20.0	115.0		F
Barium						2,000.0			P
Beryllium						50.0			P
Cadmium						50.0			P
Calcium									NR
Chromium						200.0			P
Cobalt						500.0			P
Copper						250.0			P
Iron						1,000.0			P
Lead		22.00		0.30	B	20.0	108.7		F
Magnesium									NR
Manganese						500.0			P
Mercury									CV
Nickel						500.0			P
Potassium									NR
Selenium		9.70		1.30	U	10.0	97.0		F
Silver						50.0			P
Sodium									NR
Thallium		47.00		2.20	U	50.0	94.0		F
Vanadium						500.0			P
Zinc						500.0			P
Cyanide									C

Comments:

THE FLAG *NA MEANS NOT APPLICABLE
% RECOVERY= (SSR-(SR X GFAA DILUT. FACTOR)) X100/SA

GFAA DILUT. FACTOR: 0.9
ICP DILUTION FACTOR: 0.9

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5B
POST DIGEST SPIKE SAMPLE RECOVERY

EPA SAMPLE NO.

TRIP BLK

Lab Name CANONIE ENVIR. SVC Contract: -
Lab Code: - Case No.: - 7467 7471 SAS No.: - SDG No.: - MW1
Matrix (soil/water): WATER Level (low/med): LOW

Concentration Units: ug/L

Analyte	Control Limit %R	Spiked Sample Result (SSR)	C	Sample Result (SR)	C	Spike Added (SA)	%R	Q	M
Aluminum						2,000.0			P
Antimony						500.0			P
Arsenic		22.00		1.10	U	20.0	110.0		F
Barium						2,000.0			P
Beryllium						50.0			P
Cadmium						50.0			P
Calcium									NR
Chromium						200.0			P
Cobalt						500.0			P
Copper						250.0			P
Iron						1,000.0			P
Lead		21.00		0.40	B	20.0	103.2		F
Magnesium									NR
Manganese						500.0			P
Mercury									CV
Nickel						500.0			P
Potassium									NR
Selenium		9.70		1.30	U	10.0	97.0		F
Silver						50.0			P
Sodium									NR
Thallium		47.00		2.20	U	50.0	94.0		F
Vanadium						500.0			P
Zinc						500.0			P
Cyanide									C

Comments:

THE FLAG #NA MEANS NOT APPLICABLE
% RECOVERY= (SSR-(SR X GFAA DILUT. FACTOR)) X100/SA

GFAA DILUT. FACTOR: 0.9
ICP DILUTION FACTOR: 0.9

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6
DUPLICATES

EPA SAMPLE NO.

MW1A

Lab Name: CANONIE ENVIR. SVC Contract: -
Lab Code: - Case No.: [illegible] SAS No.: - SDG - MW1A
Matrix (soil/water): WATER Level (low/med): LOW
% Solids for Sample: 0 % Solids for Duplicate: 0
Concentration Units (ug/L or mg/kg dry weight): UG/L

Analyte	Control Limit	Sample (S)	C	Duplicate (D)	C	RPD	Q	M
Aluminum	200	37	B	37	B			P
Antimony	60	20	U	20	U			P
Arsenic	10	1.1	U	1.1	U			F
Barium	200	75	B	72	B	4.1		P
Beryllium	5	1.3	U	1.3	U			P
Cadmium	5	1.6	U	1.6	U			P
Calcium		55100		55300		0.4		P
Chromium	10	2.2	U	2.2	U			P
Cobalt	50	2	U	2	U			P
Copper	25	4.2	U	4.2	U			P
Iron	100	57	U	57	U			P
Lead	5	0.2	U	0.3	B	200.0		F
Magnesium	5000	3580	B	3580	B			P
Manganese	15	1.4	U	1.4	U			P
Mercury	0.2	0.82		0.39		71.1	*	CV
Nickel	40	3.5	U	3.5	U			P
Potassium	5000	2610	U	2610	U			P
Selenium	5	1.3	U	1.3	U			F
Silver	10	6.2	U	6.2	U			P
Sodium	5000	2220	B	2170	B	2.3		P
Thallium	10	2.2	U	2.2	U			F
Vanadium	50	2.3	U	2.3	U			P
Zinc	20	7.6	U	7.6	U			P
Cyanide *	75-125	181		172		5.1		C

Comments: * USED SPIKE and SPIKE DUPLICATE for Cyanide

THE FLAG "*NA" MEANS NOT APPLICABLE

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7

LABORATORY CONTROL SAMPLE

Lab Name: CANONIE ENVIRONMENTAL Contract: -

Lab Code: - Case No.: [illegible] SAS No.: - SDG No.: [illegible]

Solid LCS Source:

Aqueous LCS Source: I 0789 005

Analyte	Aqueous (ug/L) True	Found	%R	Solid (mg/kg) True	Found	C	Limits		%R
Aluminum	2000.0	1960.75	98.0						
Antimony	500.0	494.34	99.7						
Arsenic	20.0	20.4	102.0						
Barium	2000.0	2026.90	101.3						
Beryllium	50.0	52.17	104.3						
Cadmium	50.0	49.33	98.7						
Calcium									
Chromium	200.0	193.86	96.9						
Cobalt	500.0	545.77	109.2						
Copper	250.0	251.20	100.5						
Iron	1000.0	1010.34	101.0						
Lead	20.0	20.09	100.4						
Magnesium									
Manganese	500.0	507.53	101.5						
Mercury	5.0	5.12	102.4						
Nickel	500.0	510.23	102.0						
Potassium									
Selenium	10.0	9.43	94.3						
Silver	50.0	45.74	91.5						
Sodium									
Thallium	50.0	53.4	106.8						
Vanadium	500.0	504.52	100.9						
Zinc	500.0	505.43	101.1						
Cyanide	200.0	186	93.0						

FORM VII - IN 7/87

AR302585

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U.S. EPA - CLP

7

LABORATORY CONTROL SAMPLE

Lab Name: CANONIE ENVIRONMENTAL Contract: -

Lab Code: - Case No.: [illegible] SAS No.: - SDG No.: [illegible]

Solid LCS Source: _____

Aqueous LCS Source: I 0789005

Analyte	Aqueous (ug/L) True	Found	%R	Solid (mg/kg) True	Found	C	Limits		%R
Aluminum	2000.0	1959.22	98.0						
Antimony	500.0	496.18	99.2						
Arsenic	20.0	19.5	97.5						
Barium	2000.0	2136.94	106.8						
Beryllium	50.0	53.61	107.2						
Cadmium	50.0	49.52	99.0						
Calcium									
Chromium	200.0	194.76	97.4						
Cobalt	500.0	526.19	105.2						
Copper	250.0	249.08							
Iron	1000.0	1009.32							
Lead	20.0	19.36	96.8						
Magnesium									
Manganese	500.0	500.00	100.0						
Mercury	5.0	5.26	105.2						
Nickel	500.0	518.22	103.6						
Potassium									
Selenium	10.0								
Silver	50.0	54.08	108.2						
Sodium									
Thallium	50.0								
Vanadium	500.0	510.60	102.1						
Zinc	500.0	486.61	97.3						
Cyanide	200.0	226.	113.0						

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ICP SERIAL DILUTIONS

EPA SAMPLE NO.

MW1

Lab Name: CANONIE ENVIRONMENTAL Contract: _____

Lab Code: _____ Case No.: 7757747 SAS No.: _____ SDG No.: MW1

Matrix (soil/water): _____ Level (low/med): _____

Concentration Units: ug/L

Analyte	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	% Difference	Q	M
Aluminum	37	B	27	U			
Antimony	20	U	20	U			P
Arsenic							
Barium	75	B	245				
Beryllium	1.3	U	1.3	U			P
Cadmium	1.6	U	1.0	U			P
Calcium	55100	U	55500				P
Chromium	2.2	U	2.2	U			P
Cobalt	2	U	2	U			P
Copper	4.2	U	4.2	U			P
Iron	57	U	57	U			P
Lead							
Magnesium	3580	B	3650	B			
Manganese	1.4	U	1.4	U			P
Mercury							
Nickel	3.5	U	3.5	U			P
Potassium	2607	U	2607	U			P
Selenium							
Silver	6.2	U	6.2	U			P
Sodium	2220	B	5650				P
Thallium							
Vanadium	2.3	U	2.3	U			P
Zinc	7.6	U	7.6	U			P

FORM IX - IN 7/87

U.S. EPA - CLP

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HOLDING TIMES

Lab Name: CANONIE ENVIRONMENTAL Contract: _____

Lab Code: _____ Case No.: 7487 7471 SAS No.: _____ SDG No.: MW1

EPA Sample No.	Matrix	Date Received	Mercury Prep Date	Mercury Holding Time	Cyanide Prep Date	Cyanide Holding Time
MW1	WATER	8/18/89	8/28/89	10	8/26/89	8
MW1 A	WATER					
MW1 O	WATER		8/30/89			
MW1 L	WATER					
MW1 S	WATER		8/28/89		8/26/89	
MW1 SD	WATER				8/26/89	
MW2	WATER	8/18/89	8/28/89	10	8/26/89	8
MW3	WATER	8/18/89	8/28/89	10	8/26/89	8
MW4	WATER	8/21/89	8/28/89	10	9/1/89	11
MW5	WATER	8/21/89	8/28/89	10	9/1/89	11
MW6	WATER	8/21/89	8/28/89	10	9/1/89	11
MW7	WATER	8/21/89	8/28/89	10	9/1/89	11
MW8	WATER	8/21/89	8/28/89	10	9/1/89	11
Trip/Travel/Blank	WATER	8/21/89	8/28/89	10	9/1/89	11

FORM X - IN 7/87

INSTRUMENT DETECTION LIMITS (QUARTERLY)

Lab Name: CANONIE ENVIRONMENTAL Contract: _____

Lab Code: _____ Case No.: 7157471 SAS No.: _____ SDG No.: MLL1

ICP ID Number: TJA61-46782 Date: 7-17-89

Flame AA ID Number: _____

Furnace AA ID Number: _____

Analyte	Wave-length (nm)	Back-ground	CRDL (ug/L)	IDL (ug/L)	M
Aluminum	308.22		200	27	P
Antimony	206.83		60	20	P
Arsenic	193.70		10	17	P
Barium	493.41		200	1.2	P
Beryllium	313.04		5	1.3	P
Cadmium	228.80		5	1.6	P
Calcium	317.93		5000	61.	P
Chromium	267.72		10	2.2	P
Cobalt	228.62		50	2.0	P
Copper	324.75		25	4.2	P
Iron	259.94		100	57	P
Lead	220.35		5	24	P
Magnesium	279.08		5000	53	P
Manganese	257.61		15	1.4	P
Mercury	253.		0.2	0.24	CV
Nickel	231.60		40	3.5	P
Potassium	766.49		5000	2607	P
Selenium	196.03		5	26	P
Silver	328.07		10	6.2	P
Sodium	588.99		5000	1052	P
Thallium	190.86		10	14	P
Vanadium	292.40		50	2.3	P
Zinc	213.86		20	7.6	P
MOLYBDENUM	202.03			2.4	P

Comments: IDL VALUES DERIVED BY 3X STANDARD DEVIATION OF NONCONSECUTIVE DI WATER READINGS WITH A MINIMUM OF 15 REPLICATES.
MERCURY RAN BY CV ON AA 1475.

U.S. EPA - CLP

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INSTRUMENT DETECTION LIMITS (QUARTERLY)

Lab Name: CANONIE ENVIRONMENTAL Contract: _____

Lab Code: _____ Case No.: 7467 7471 SAS No.: _____ SDG No.: MW1

ICP ID Number: TJA61-46782 Date: 7-17-89

Flame AA ID Number: _____

Furnace AA ID Number: #12809-1273

Analyte	Wave-length (nm)	Back-ground	CRDL (ug/L)	IDL (ug/L)	M
Aluminum			200		
Antimony			60		
Arsenic	193.70	BZ	10	1.0	F
Barium			200		
Beryllium			5		
Cadmium			5		
Calcium			5000		
Chromium			10		
Cobalt			50		
Copper			25		
Iron	271.40		100	81	P
Lead	283.30	BZ	5	0.2	F
Magnesium			5000		
Manganese			15		
Mercury			0.2		
Nickel			40		
Potassium			5000		
Selenium	196.00	BZ	5	1.3	F
Silver			10		
Sodium			5000		
Thallium	276.80	BZ	10	0.9	F
Vanadium			50		
Zinc			20		
Cyanide			10	7.5	C

Comments:

Cyanide ran by C_4 manual spectrophotometric method

FORM XI - IN 7/87

AR302590

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INSTRUMENT DETECTION LIMITS (QUARTERLY)

Lab Name: CANONIE ENVIRONMENTAL Contract: _____

Lab Code: _____ Case No.: 2462/2471 SAS No.: _____ SDG No.: MW1

ICP ID Number: _____ Date: 7-89

Flame AA ID Number: _____

Furnace AA ID Number: #2Z709-2117

Analyte	Wave-length (nm)	Back-ground	CRDL (ug/L)	IDL (ug/L)	M
Aluminum			200		
Antimony			60		
Arsenic	193.70	BZ	10	1.1	F
Barium			200		
Beryllium			5		
Cadmium			5		
Calcium			5000		
Chromium			10		
Cobalt			50		
Copper			25		
Iron			100		
Lead	283.30	BZ	5	0.2	F
Magnesium			5000		
Manganese			15		
Mercury			0.2		
Nickel			40		
Potassium			5000		
Selenium	196.00	BZ	5	1.0	F
Silver			10		
Sodium			5000		
Thallium	276.80	BZ	10	2.2	F
Vanadium			50		
Zinc			20		

Comments:

FORM XI - IN 7/87

U.S. EPA - CLP

12A

ICP INTERELEMENT CORRECTION FACTORS (QUARTERLY)

Lab Name: CANONIE ENVIRONMENTAL Contract: _____

Lab Code: _____ Case No.: 7467 7471 SAS No.: _____ SDG No.: MW1

ICP ID Number: TJA61-46782 Date: 1-89

Analyte	Wave-length (nm)	Interelement Correction Factors for: Al	Ca	Fe	Mg	Ti
Aluminum	308.22					
Antimony	206.83			0.05	0.026	1.566
Arsenic	193.70	0.147		-2.92	-0.04	-0.23
Barium	493.41	0	0.002	0.005	0.002	
Beryllium	313.04			0		0.02
Cadmium	228.80	0		0.001	0	-0.01
Calcium	317.93					
Chromium	267.72	0.002				0.073
Cobalt	228.62	0.036	0.002	0.068	0.005	1.53
Copper	324.75	0.002	0.004	-0.22	0.009	0.395
Iron	259.94					
Lead	220.35	-2.05		0.074	0.026	0.728
Magnesium	279.08					
Manganese	257.61	0.014		-0.16	0.013	
Mercury						
Nickel	231.60	0.503	0.006	0.023		-0.02
Potassium	766.49	-1.32	-4.85	-0.99	-0.5	-7.5
Selenium	196.03	0.062		-0.66	-0.04	-0.27
Silver	328.07			-0.19		0.025
Sodium	588.99	0.028	0.1	0.007		0.725
Thallium	190.86	0.061		-0.26	0.064	-5.16
Vanadium	292.40		0.004	-0.02	0.004	0.293
Zinc	213.86	0.001	0.004	0.072	0.019	0.067
MOLYBDENUM	202.03	0.0006	0.002	-0.05		0.017

Comments:

ABOVE FACTORS ARE FACTOR X1000

FORM XII (PART 1) - IN 7/87

U.S. EPA - CLP

12A

ICP INTERELEMENT CORRECTION FACTORS (QUARTERLY)

Lab Name: CANONIE ENVIRONMENTAL Contract: _____

Lab Code: _____ Case No.: 217221 SAS No.: _____ SDG No.: MW1

ICP ID Number: TJA61-46782 Date: 1-89

Analyte	Wave-length (nm)	Interelement Correction Factors for: Al	Ca	Fe	Mg	Ti
Aluminum						
Antimony						
Arsenic						
Barium						
Beryllium						
Cadmium						
Calcium						
Chromium						
Cobalt						
Copper						
Iron						
Lead						
Magnesium						
Manganese						
Mercury						
Nickel						
Potassium						
Selenium						
Silver						
Sodium						
Thallium						
Vanadium						
Zinc						
TITANIUM	334.94	0.016		0.007	0.03	

Comments: ABOVE FACTORS ARE FACTOR X1000

FORM XII (PART 1) - IN 7/87

AR302593

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U.S. EPA - CLP

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ICP LINEAR RANGES (QUARTERLY)

Lab Name: CANONIE ENVIRONMENTAL Contract: _____

Lab Code: _____ Case No.: [illegible] SAS No.: _____ SDG No.: [illegible]

ICP ID Number: TJA61-46782 Date: 7-89

Analyte	Integ. Time (Sec.)	Concentration (ug/L)	M
Aluminum			P
Antimony			P
Arsenic			P
Barium			P
Beryllium			P
Cadmium			P
Calcium			P
Chromium			P
Cobalt			P
Copper			P
Iron 271.40	7.0	1000000	P
Lead			P
Magnesium			P
Manganese			P
Mercury			NR
Nickel			P
Potassium			P
Selenium			P
Silver			P
Sodium			P
Thallium			P
Vanadium			P
Zinc			P
TITANIUM	7.0	50000	P

Comments:

FORM XIII - IN 7/87

AR302594

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CANONIE ENVIRONMENTAL SERVICES
ALKALINITY WORKSHEET

DATE 8-22-89
ANALYST JWC
TITRANT CODE S 20634
TITRANT NORM .02
0.02N NaOH CODE# 3 2096C

REF# 1-0949-013
REF TV .05 N

LAB ID	LP#	ALIQ ml	INIT pH	BURET READINGS, ml INIT	BURET READINGS, ml @ pH 8.2	BURET READINGS, ml @ pH 4.5	NET VOL., ml @ pH 8.2	NET VOL., ml @ pH 4.5	CALCULATIONS	EXPRESSED AS CaCO3, mg/L OH-	CO3	HCO3	TOTAL ALK
BLANK		25	5.3	0.0	—	0.05	–	0.05				2	2
0.02N NaOH 3 2096C		—	12.0	0.0	24.4	25.0	24.4	25.0	H_2SO_4 25.0(.02)100 / NaOH 25.0(.02) = 100%				
1-0949-013		10	11.0	0.0	11.5	23.2	11.5	23.2	H_2SO_4 23.2(.02)100 / Ref 10 (.05) = 92.8				
843249A	7467	25	7.8	0.0	—	3.3	—	3.3	132			130	130
843249A RP			7.8	0.0	–	3.35	–	3.35	134 RPD: 1.5%			130	130
843250A			7.8	0.0		3.3		3.3				130	130
843251A			4.1									0	0
pH 4 Buffer 3-2047			4.05										
843254A	7471		6.5	0.0	–	0.2	–	0.2				8	8
843254A RP			6.4	0.2		0.4		0.2	RPD = 0%			8	8
843255A			4.3									0	0
843260			7.6	0.0	—	3.1	—	3.1				120	120
843261A			7.8	0.0	–	1.9	–	1.9				76	76
843262A			5.9	0.0	–	0.05	–	0.05				2	2
843263A			5.2	0.0	–	0.05	–	0.05				2	2
3-2096C		—	12.0	0.0	24.4	25.0		25.0	H_2SO_4 25.0(.02)100 / NaOH 25.0(.02) = 100%				

BLANK ANALYSIS RESULTS FOR INORGANICS

PARAMETER	TYPE/ MATRIX	SAMPLE #	SOURCE	CONTAMINANT (CONCENTRATION)
Metals	IC / Aq	Initial Calibration	Canonic	23.8 ug/l antimony
				0.26 ug/l lead
				8 ug/l cyanide
Metals	CC / Aq	Continuing Calibration	Canonic	147.4 ug/l aluminum
				1.9 ug/l cadmium
				97.5 ug/l calcium
				5.5 ug/l chromium
				3.5 ug/l cobalt
				71.2 ug/l magnesium
				4.7 ug/l nickel
				4839 ug/l potassium
				8 ug/l silver
Metals	FB / Aq	MW-15	unknown	53 ug/l aluminum
				50 ug/l barium
				442 ug/l calcium
				2.8 ug/l cobalt
				0.5 ug/l lead
				122 ug/l magnesium
				1250 ug/l sodium
Metals	TB / Aq	MW-16	unknown	42 ug/l aluminum
				42 ug/l barium
				87.9 ug/l calcium
				0.5 ug/l lead
				1060 ug/l sodium

LABORATORY REPORTED FIELD BLANK IS COMPARED WITH THE SAMPLE DATA IN A TABULATION FORM WITHIN THE SAMPLE ANALYTICAL DATA SUMMARY.

COMMENTS:

(1) RESULT REPORTED BY THE LABORATORY AND CONFIRMED BY REVIEWER

(2) RESULT INFERED FROM INSTRUMENT PRINTOUTS AND/OR SUPPORTING DATA

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: CANONIE ENVIRONMENTAL Contract: _____

Lab Code: _____ Case No.: 7492/9 SAS No.: _____ SDG No.: MW 10

Initial Calibration Source: _____

Continuing Calibration Source: 3-2037, 3-2031, I 0989012, I 0689019

Concentration Units: ug/L

Analyte	Initial Calibration True	Initial Calibration Found	Initial Calibration %R(1)	Continuing Calibration True	Continuing Calibration Found	Continuing Calibration %R(1)	Continuing Calibration Found	Continuing Calibration %R(1)	M
Aluminum	50000.0	48932.17	97.9	50000.0	48179.95	96.4	48196.89	96.4	P
Antimony	1000.0	1006.45	100.6	1000.0	994.58	99.4	963.32	96.3	P
Arsenic	25.0	24.6	98.4	25.0	27.1	108.4	25.6	102.4	F
Barium	1000.0	1043.27	104.3	1000.0	1039.07	103.9	1025.77	102.6	P
Beryllium	1000.0	1033.40	103.3	1000.0	1022.18	102.2	1005.23	100.5	P
Cadmium	1000.0	1045.84	104.6	1000.0	1030.22	103.0	1008.89	100.9	P
Calcium	50000.0	52707.35	105.4	50000.0	51911.48	103.8	50842.56	101.7	P
Chromium	1000.0	1031.93	103.2	1000.0	1014.44	101.4	996.85	99.7	P
Cobalt	1000.0	1018.19	101.8	1000.0	1003.04	100.3	968.22	96.8	P
Copper	1000.0	1017.60	101.8	1000.0	1007.41	100.7	991.51	99.2	P
Iron 2599	1000.0	1058.75	105.9	1000.0	1016.62	101.7	987.92	98.8	P
Lead	10.0	10.18	101.8	10.0	9.97	99.7	10.24	102.4	P
Magnesium	50000.0	52114.55	104.2	50000.0	51605.44	103.2	50990.02	102.0	P
Manganese	1000.0	1025.90	102.6	1000.0	1015.03	101.5	985.27	98.5	P
Mercury	5.0	5.22	104.1	5.0	5.05	101.0	5.26	105.2	CV
Nickel	1000.0	1059.39	105.9	1000.0	1046.83	104.6	1018.01	101.8	P
Potassium	50000.0	48950.76	97.9	50000.0	48398.45	96.8	47055.17	94.1	P
Selenium	10.0	10.03	100.3	10.0	10.04	100.4	10.09	100.9	F
Silver	1000.0	1027.48	102.8	1000.0	994.12	99.4	1017.36	101.7	P
Sodium	50000.0	51455.79	102.9	50000.0	50983.86	102.0	51661.30	103.3	P
Thallium	25.0	24.24	97.0	25.0	23.54	94.2	24.29	97.2	F
Vanadium	1000.0	1028.10	102.8	1000.0	1012.85	101.3	999.71	100.0	P
Zinc	1000.0	1018.48	101.8	1000.0	1006.48	100.6	972.73	97.3	P
Cyanide	200.0	219.	109.5	200.0	222.	111.0	222.	111.0	C
IRON 2714	50000.0	53561.22	107.1	50000.0	53004.69	106.0	52251.35	104.5	P

(1) Control Limits: Mercury 80-120; Other Metals 90-110; Cyanide 85-115

AR302597

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: CANONIE ENVIRONMENTAL Contract: _____

Lab Code: _____ Case No.: 7492/9 SAS No.: _____ SDG No.: MW 10

Initial Calibration Source: _____

Continuing Calibration Source: 3-2037, 3-2031, I0989012, I0689019.

Concentration Units: ug/L

Analyte	Initial Calibration True	Initial Calibration Found	Initial Calibration %R(1)	Continuing Calibration True	Continuing Calibration Found	Continuing Calibration %R(1)	Continuing Calibration Found	Continuing Calibration %R(1)	M
Aluminum	50000.0			50000.0	47955.98	95.9	47494.56	95.0	P
Antimony	1000.0			1000.0	962.06	96.2	950.18	95.0	P
Arsenic	25.0			25.0	25.7	102.8			F
Barium	1000.0			1000.0	1038.60	103.9	1033.24	103.3	P
Beryllium	1000.0			1000.0	999.91	100.0	993.33	99.3	P
Cadmium	1000.0			1000.0	1001.65	100.2	998.41	99.8	P
Calcium	50000.0			50000.0	49876.95	99.8	49511.93	99.0	P
Chromium	1000.0			1000.0	986.76	98.7	980.78	98.1	P
Cobalt	1000.0			1000.0	954.69	95.5	946.53	94.6	P
Copper	1000.0			1000.0	999.26	99.9	994.78	99.5	P
Iron 2599	1000.0			1000.0	998.83	99.9	1007.26	100.7	P
Lead				10.0	10.67	106.7	10.73	107.3	
Magnesium	50000.0			50000.0	50133.39	100.3	49595.87	99.2	P
Manganese	1000.0			1000.0	976.98	97.7	969.27	96.9	P
Mercury	5.0	4.66	93.2	5.0	4.49	89.8	4.44	88.0	CV
Nickel	1000.0			1000.0	1009.25	100.9	1008.98	100.9	P
Potassium	50000.0			50000.0	46143.70	92.3	45489.45	91.0	P
Selenium	10.0			10.0	9.73	97.3			F
Silver	1000.0			1000.0	968.41	96.8	984.62	98.5	P
Sodium	50000.0			50000.0	51384.93	102.8	50866.86	101.7	P
Thallium	25.0	25.33	101.3	25.0	25.31	101.2	24.28	97.1	F
Vanadium	1000.0			1000.0	993.55	99.4	990.31	99.0	P
Zinc	1000.0			1000.0	966.84	96.7	959.34	95.9	P
Cyanide	100.0	94.9	94.9	100.0	92.2	92.2			C
IRON 2714	50000.0			50000.0	51485.51	103.0	50997.29	102.0	P

(1) Control Limits: Mercury 80-120; Other Metals 90-110; Cyanide 85-115

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: CANONIE ENVIRONMENTAL Contract: _____

Lab Code: _____ Case No.: 7492/9 SAS No.: _____ SDG No.: MW 10

Initial Calibration Source: _____

Continuing Calibration Source: 3-2037, 3-2031, I0989012, I0689019

Concentration Units: ug/L

Analyte	Initial Calibration True	Initial Calibration Found	Initial Calibration %R(1)	Continuing Calibration True	Continuing Calibration Found	Continuing Calibration %R(1)	Continuing Calibration Found	Continuing Calibration %R(1)	M
Aluminum	50000.0			50000.0	46095.98	92.2	46028.53	92.0	P
Antimony	1000.0			1000.0	928.35	92.8	901.44	90.1	P
Arsenic	25.0	23.9	95.6	25.0	24.1	96.4	24.6	98.4	F
Barium	1000.0			1000.0	975.15	97.5	977.48	97.7	P
Beryllium	1000.0			1000.0	951.28	95.1	951.49	95.2	P
Cadmium	1000.0			1000.0	970.03	97.0	958.99	95.9	P
Calcium	50000.0			50000.0	48592.84	97.2	48111.43	96.2	P
Chromium	1000.0			1000.0	948.55	94.8	941.75	94.2	P
Cobalt	1000.0			1000.0	915.16	91.5	907.61	90.8	P
Copper	1000.0			1000.0	946.29	94.6	950.77	95.1	P
Iron 2599	1000.0			1000.0	960.94	96.1	958.62	95.9	P
Lead				10.0	10.63	106.3			P
Magnesium	50000.0			50000.0	48396.16	96.8	48306.63	96.6	P
Manganese	1000.0			1000.0	935.11	93.5	924.75	92.5	P
Mercury	5.0			5.0	4.74	94.8			CV
Nickel	1000.0			1000.0	970.76	97.1	949.35	94.9	P
Potassium	50000.0			50000.0	44384.54	*88.8	44475.77	*90.0	P
Selenium	10.0	10.08	100.8	10.0	10.50	105.0	9.83	98.3	F
Silver	1000.0			1000.0	948.20	94.8	947.09	94.7	P
Sodium	50000.0			50000.0	49136.99	98.3	49306.80	98.6	P
Thallium	25.0			25.0	25.59	102.4	26.52	106.1	F
Vanadium	1000.0			1000.0	953.65	95.4	955.27	95.5	P
Zinc	1000.0			1000.0	929.07	92.9	921.85	92.2	P
Cyanide	200.0			200.0					C
IRON 2714	50000.0			50000.0	49766.59	99.5	49446.76	98.9	P

(1) Control Limits: Mercury 80-120; Other Metals 90-110; Cyanide 85-115

* Potassium not used on this ICP run. OK

FORM II (PART 1) - IN 7/87

AR302599

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: CANONIE ENVIRONMENTAL Contract: _____

Lab Code: _____ Case No.: 7492/9 SAS No.: _____ SDG No.: 1770 10

Initial Calibration Source: _____

Continuing Calibration Source: 3-2037, 3-2031
I0989012

Concentration Units: ug/L

Analyte	Initial Calibration True	Initial Calibration Found	Initial Calibration %R(1)	Continuing Calibration True	Continuing Calibration Found	Continuing Calibration %R(1)	Continuing Calibration Found	Continuing Calibration %R(1)	M
Aluminum	50000.0			50000.0	47165.93	94.3	46401.17	92.8	P
Antimony	1000.0			1000.0	924.57	92.4	920.19	92.0	P
Arsenic	25.0			25.0	25.6	102.4	24.9	99.6	F
Barium	1000.0			1000.0	996.85	99.7	1003.84	100.4	P
Beryllium	1000.0			1000.0	957.01	95.7	958.87	95.9	P
Cadmium	1000.0			1000.0	972.70	97.3	963.75	96.4	P
Calcium	50000.0			50000.0	48280.10	96.6	47753.67	95.5	P
Chromium	1000.0			1000.0	946.68	94.7	946.46	94.6	P
Cobalt	1000.0			1000.0	917.59	91.8	915.19	91.5	P
Copper	1000.0			1000.0	967.08	96.7	975.43	97.5	P
Iron 2599	1000.0			1000.0	967.34	96.7	965.10	96.5	P
Lead	10.0	10.70	107.0	10.0	10.72	107.2	10.15	101.5	F
Magnesium	50000.0			50000.0	48444.29	96.9	47755.71	95.5	P
Manganese	1000.0			1000.0	937.93	93.8	936.19	93.6	P
Mercury	5.0			5.0					CV
Nickel	1000.0			1000.0	971.03	97.1	962.54	96.3	P
Potassium	50000.0			50000.0	45161.04	*90.3	44460.12	*88.9	P
Selenium	10.0			10.0	10.52	105.2	10.43	104.3	F
Silver	1000.0			1000.0	1024.70	102.5	1027.45	102.7	P
Sodium	50000.0			50000.0	50648.17	101.3	49714.80	99.4	P
Thallium	25.0			25.0					F
Vanadium	1000.0			1000.0	958.35	95.8	960.62	96.1	P
Zinc	1000.0			1000.0	934.00	93.4	933.72	93.4	P
Cyanide	200.0			200.0					C
IRON 2714	50000.0			50000.0	49891.01	99.8	49248.27	98.5	P

(1) Control Limits: Mercury 80-120; Other Metals 90-110; Cyanide 85-115

* Potassium not used on this run.

FORM II (PART 1) - IN 7/87

AR302600

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: CANONIE ENVIRONMENTAL Contract: _____

Lab Code: _____ Case No.: 7492/9 SAS No.: _____ SDG No.: 17700 10

Initial Calibration Source: _____

Continuing Calibration Source: 3-2037, 3-2031, I0989012

Concentration Units: ug/L

Analyte	Initial Calibration True	Initial Calibration Found	Initial Calibration %R(1)	Continuing Calibration True	Continuing Calibration Found	Continuing Calibration %R(1)	Continuing Calibration Found	Continuing Calibration %R(1)	M
Aluminum	50000.0			50000.0	45406.96	90.8			P
Antimony	1000.0			1000.0	908.95	90.9			P
Arsenic	25.0			25.0					F
Barium	1000.0			1000.0	983.31	98.3			P
Beryllium	1000.0			1000.0	945.84	94.6			P
Cadmium	1000.0			1000.0	960.89	96.1			P
Calcium	50000.0			50000.0	47129.90	94.2			P
Chromium	1000.0			1000.0	938.79	93.9			P
Cobalt	1000.0			1000.0	911.58	91.2			P
Copper	1000.0			1000.0	961.37	96.1			P
Iron 2599	1000.0			1000.0	958.58	95.8			P
Lead									
Magnesium	50000.0			50000.0	47688.06	95.4			P
Manganese	1000.0			1000.0	928.06	92.8			P
Mercury	5.0			5.0					CV
Nickel	1000.0			1000.0	951.70	95.2			P
Potassium	50000.0			50000.0	44117.27	88.2			P
Selenium	10.0			10.0					F
Silver	1000.0			1000.0	963.80	96.4			P
Sodium	50000.0			50000.0	48841.55	97.7			P
Thallium	25.0			25.0					F
Vanadium	1000.0			1000.0	952.35	95.2			P
Zinc	1000.0			1000.0	928.69	92.9			P
Cyanide	200.0			200.0					C
IRON 2714	50000.0			50000.0	48497.96	97.0			P

(1) Control Limits: Mercury 80-120; Other Metals 90-110; Cyanide 85-115

* potassium not used on this run.

FORM II (PART 1) - IN 7/87

AR302601

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2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: CANONIE ENVIRONMENTAL Contract: _____

Lab Code: _____ Case No.: 7492/9 SAS No.: _____ SDG No.: mw/10

Initial Calibration Source: _____

Continuing Calibration Source: 3-2032, 3-2031, I 0989012

Concentration Units: ug/L

Analyte	Initial Calibration True	Initial Calibration Found	Initial Calibration %R(1)	Continuing Calibration True	Continuing Calibration Found	Continuing Calibration %R(1)	Continuing Calibration Found	Continuing Calibration %R(1)	M
Aluminum	50000.0	48296.41	96.5	50000.0	48045.36	96.1	48704.85	97.4	P
Antimony	1000.0	996.33	99.6	1000.0	992.73	99.3	1016.32	101.6	P
Arsenic	25.0			25.0					F
Barium	1000.0	1004.50	100.4	1000.0	1007.30	100.7	1021.71	102.2	P
Beryllium	1000.0	986.85	98.7	1000.0	996.63	99.7	1006.77	100.7	P
Cadmium	1000.0	1004.44	100.4	1000.0	1017.24	101.7	1035.88	103.6	P
Calcium	50000.0	50671.32	101.3	50000.0	51008.10	102.0	51401.40	102.8	P
Chromium	1000.0	1001.61	100.2	1000.0	1003.45	100.3	1004.41	100.4	P
Cobalt	1000.0	1005.11	100.5	1000.0	1012.68	101.3	1020.24	102.0	P
Copper	1000.0	1014.11	101.4	1000.0	1014.11	101.4	1018.98	101.9	P
Iron 2599	1000.0	997.03	99.7	1000.0	1016.63	101.7	1008.19	100.8	P
Lead									
Magnesium	50000.0	49269.30	98.5	50000.0	49894.00	99.8	50040.68	100.1	P
Manganese	1000.0	1005.28	100.5	1000.0	1013.88	101.4	1030.02	103.0	P
Mercury	5.0			5.0					CV
Nickel	1000.0	1001.14	100.1	1000.0	1027.68	102.8	1051.04	105.1	P
Potassium	50000.0	48900.85	97.8	50000.0	49435.58	98.9	49932.38	99.9	P
Selenium	10.0			10.0					F
Silver	1000.0	1100.58	110.1	1000.0	1027.91	102.8	1004.24	100.4	P
Sodium	50000.0	50986.61	102.0	50000.0	50653.87	101.3	51186.70	102.4	P
Thallium	25.0			25.0					F
Vanadium	1000.0	997.59	99.8	1000.0	994.96	99.5	994.04	99.4	P
Zinc	1000.0	1002.05	100.2	1000.0	1011.01	101.1	1023.40	102.3	P
Cyanide	200.0			200.0					C
IRON 2714	50000.0	51425.81	102.8	50000.0	51995.23	104.0	52578.33	105.2	P

(1) - Control Limits: Mercury 80-120; Other Metals 90-110; Cyanide 85-115

used Potassium from this run

FORM II (PART 1) - IN 7/87

AR302602

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: CANONIE ENVIRONMENTAL Contract: _____

Lab Code: _____ Case No.: 7492/9 SAS No.: _____ SDG No.: mw/10

Initial Calibration Source: _____

Continuing Calibration Source: 3-2032, 3-2031, I0989012

Concentration Units: ug/L

Analyte	Initial Calibration True	Initial Calibration Found	Initial Calibration %R(1)	Continuing Calibration True	Continuing Calibration Found	Continuing Calibration %R(1)	Continuing Calibration Found	Continuing Calibration %R(1)	M
Aluminum	50000.0			50000.0	47544.71	95.1	47722.79	95.4	P
Antimony	1000.0			1000.0	998.93	99.9	982.45	98.2	P
Arsenic	25.0			25.0					F
Barium	1000.0			1000.0	972.68	97.3	1009.70	101.0	P
Beryllium	1000.0			1000.0	973.61	97.3	1020.89	102.1	P
Cadmium	1000.0			1000.0	1013.76	101.4	1030.51	103.0	P
Calcium	50000.0			50000.0	50400.31	100.8	51500.77	103.00	P
Chromium	1000.0			1000.0	967.66	96.8	1017.98	101.8	P
Cobalt	1000.0			1000.0	986.70	98.7	1008.38	100.8	P
Copper	1000.0			1000.0	974.56	97.5	1006.22	100.6	P
Iron 2599	1000.0			1000.0	961.11	96.1	1010.57	101.0	P
Lead									
Magnesium	50000.0			50000.0	48926.46	97.8	50331.95	100.7	P
Manganese	1000.0			1000.0	995.76	99.6	1012.22	101.2	P
Mercury	5.0			5.0					CV
Nickel	1000.0			1000.0	1033.72	103.3	1043.44	104.3	P
Potassium	50000.0			50000.0	48709.31	97.4	48111.73	96.2	P
Selenium	10.0			10.0					F
Silver	1000.0			1000.0	1057.20	105.7	1095.00	109.5	P
Sodium	50000.0			50000.0	49437.30	98.9	50974.96	101.9	P
Thallium	25.0			25.0					F
Vanadium	1000.0			1000.0	952.11	95.2	1014.81	101.5	P
Zinc	1000.0			1000.0	990.35	99.0	1011.01	101.1	P
Cyanide	200.0			200.0					C
IRON 2714	50000.0			50000.0	51828.18	103.6	52664.37	105.3	P

(1) Control Limits: Mercury 80-120; Other Metals 90-110; Cyanide 85-115

Used Potassium from this run

FORM II (PART 1) - IN 7/87

AR302603

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: CANONIE ENVIRONMENTAL Contract: _____

Lab Code: _____ Case No.: 7492/9 SAS No.: _____ SDG No.: MW.0

Initial Calibration Source: _____

Continuing Calibration Source: 3-2037, 3-2031, I 0989012

Concentration Units: ug/L

Analyte	Initial Calibration True	Initial Calibration Found	Initial Calibration %R(1)	Continuing Calibration True	Continuing Calibration Found	Continuing Calibration %R(1)	Continuing Calibration Found	Continuing Calibration %R(1)	M
Aluminum	50000.0			50000.0	48009.70	96.0	47284.57	94.6	P
Antimony	1000.0			1000.0	989.12	98.9	985.01	98.5	P
Arsenic	25.0			25.0					F
Barium	1000.0			1000.0	1023.71	102.4	1022.51	102.2	P
Beryllium	1000.0			1000.0	1026.59	102.6	1025.99	102.6	P
Cadmium	1000.0			1000.0	1042.52	104.2	1048.21	104.8	P
Calcium	50000.0			50000.0	51068.32	102.1	50858.36	101.7	P
Chromium	1000.0			1000.0	1013.69	101.4	1010.84	101.0	P
Cobalt	1000.0			1000.0	1004.03	100.4	999.37	99.9	P
Copper	1000.0			1000.0	1013.58	101.4	1008.47	100.8	P
Iron 2599	1000.0			1000.0	1007.12	100.7	1009.97	101.0	P
Lead									
Magnesium	50000.0			50000.0	50041.93	100.1	50373.66	100.7	P
Manganese	1000.0			1000.0	1016.68	101.7	1015.75	101.6	P
Mercury	5.0			5.0					CV
Nickel	1000.0			1000.0	1055.44	105.5	1060.62	106.1	P
Potassium	50000.0			50000.0	47351.58	94.7	47150.96	94.3	P
Selenium	10.0			10.0					F
Silver	1000.0			1000.0	1028.45	102.8	986.40	98.6	P
Sodium	50000.0			50000.0	51393.06	102.8	50930.50	101.9	P
Thallium	25.0			25.0					F
Vanadium	1000.0			1000.0	1013.36	101.3	1009.16	100.9	P
Zinc	1000.0			1000.0	1014.52	101.4	1010.93	101.1	P
Cyanide	200.0			200.0					C
IRON 2714	50000.0			50000.0	52490.26	105.0	52219.90	104.4	P

(1) Control Limits: Mercury 80-120; Other Metals 90-110; Cyanide 85-115

used potassium from this run

FORM II (PART 1) - IN 7/87

AR302604

CRDL STANDARD FOR AA AND ICP

Lab Name: CANONIE ENVIRONMENTAL Contract: _____

Lab Code: _____ Case No.: 7492/9 SAS No.: _____ SDG No.: 111W10

AA CRDL Standard Source: I0789004

ICP CRDL Standard Source: 3-1991

Concentration Units: ug/L

Analyte	CRDL Standard for AA True	Found	%R	CRDL Standard for ICP True	Initial Found	%R	Final Found	%R
Aluminum				400.0	446.83	111.7	456.81	114.2
Antimony				120.0	122.19	101.8	124.10	103.4
Arsenic	20.0	22.2	111.0					
Barium				400.0	415.49	103.9	394.49	98.6
Beryllium				10.0	12.22	122.2	11.86	118.6
Cadmium				10.0	12.42	124.2	12.22	122.2
Calcium				10000.0	10707.72	107.1	9673.21	96.7
Chromium				20.0	24.86	124.3	22.45	112.2
Cobalt				100.0	109.43	109.4	99.70	99.7
Copper				50.0	53.25	106.5	51.84	103.7
Iron 2599				200.0	217.16	108.6	205.76	102.9
Lead	10.0	10.42	104.2					
Magnesium				10000.0	10407.46	104.1	9511.09	95.1
Manganese				30.0	32.31	107.7	29.67	98.9
Mercury								
Nickel				80.0	90.19	112.7	80.80	101.0
Potassium				10000.0	7900.01	79.0	5592.99	55.9
Selenium	10.0	10.71	107.1					
Silver				20.0	9.86	49.3	4.04	20.2
Sodium				10000.0	10577.14	105.8	10216.13	102.2
Thallium	20.0	19.78	98.9					
Vanadium				100.0	103.06	103.1	98.37	98.4
Zinc				40.0	43.30	108.3	40.57	101.4

FORM II (PART 2) - IN 7/87

AR302605

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CRDL STANDARD FOR AA AND ICP

For K only

Lab Name: CANONIE ENVIRONMENTAL Contract: _____

Lab Code: _____ Case No.: 7492/9 SAS No.: _____ SDG No.: MW10

AA CRDL Standard Source: I0789004

ICP CRDL Standard Source: 3-1991

Concentration Units: ug/L

Analyte	CRDL Standard for AA True	Found	%R	CRDL Standard for ICP True	Initial Found	%R	Final Found	%R
Aluminum				400.0	460.28	115.1	477.00	119.2
Antimony				120.0	130.98	109.2	122.25	101.9
Arsenic	20.0							
Barium				400.0	406.60	101.6	408.20	102.0
Beryllium				10.0	10.89	108.9	10.67	106.7
Cadmium				10.0	12.20	122.0	11.10	111.0
Calcium				10000.0	10370.43	103.7	10392.77	103.9
Chromium				20.0	22.74	113.7	22.61	113.0
Cobalt				100.0	105.29	105.3	104.80	104.8
Copper				50.0	53.24	106.5	51.30	102.6
Iron 2599				200.0	207.60	103.8	210.01	105.0
Lead	10.0							
Magnesium				10000.0	9874.49	98.7	10000.14	100.0
Manganese				30.0	31.84	106.1	31.70	105.7
Mercury								
Nickel				80.0	79.71	99.6	81.63	102.0
Potassium				10000.0	7999.00	80.0	7087.65	70.9
Selenium	10.0							
Silver				20.0	13.91	69.6	7.78	38.9
Sodium				10000.0	10528.19	105.3	10572.95	105.7
Thallium	20.0							
Vanadium				100.0	102.04	102.0	102.04	102.0
Zinc				40.0	50.87	127.1	44.71	111.8

FORM II (PART 2) - IN 7/87

CRDL STANDARD FOR AA AND ICP

Lab Name: CANONIE ENVIRONMENTAL Contract: _____

Lab Code: _____ Case No.: 7492/c SAS No.: _____ SDG No.: mw10

AA CRDL Standard Source: I0789004

ICP CRDL Standard Source: 3-1991

Concentration Units: ug/L

Analyte	CRDL Standard for AA			CRDL Standard for ICP				
	True	Found	%R	True	Initial Found	%R	Final Found	%R
Aluminum				400.0				
Antimony				120.0				
Arsenic	20.0	19.6	98.0					
Barium				400.0				
Beryllium				10.0				
Cadmium				10.0				
Calcium				10000.0				
Chromium				20.0				
Cobalt				100.0				
Copper				50.0				
Iron				200.0				
Lead	10.0	14.06	140.6					
Magnesium				10000.0				
Manganese				30.0				
Mercury								
Nickel				80.0				
Potassium				10000.0				
Selenium	10.0	9.51	95.1					
Silver				20.0				
Sodium				10000.0				
Thallium	20.0	20.81	104.0					
Vanadium				100.0				
Zinc				40.0				

FORM II (PART 2) - IN 7/87

AR302607

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U.S. EPA - CLP

3
BLANKS

Lab Name: CANONIE ENVIRONMENTAL Contract: _____

Lab Code: _____ Case No.: 7492/9 SAS No.: _____ SDG No.: mu 1c

Preparation Blank Matrix (soil/water): WATER

Preparation Blank Concentration Units (ug/L or mg/kg): MG/L

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C	Preparation Blank	C	M
Aluminum	27	U	27	U	27.	U	27.	U			P
Antimony	23.8	B	20	U	20.	U	20.	U			P
Arsenic	1.1	U	1.1	U	1.1	U					F
Barium	1.2	U	1.2	U	1.2	U	1.2	U			P
Beryllium	1.3	U	1.3	U	1.3	U	1.3	U			P
Cadmium	1.6	U	1.6	U	1.6	U	1.6	U			P
Calcium	61.	U	61.	U	61.	U	61.	U			P
Chromium	2.2	U	2.2	U	2.2	U	2.2	U			P
Cobalt	2.0	U	2.0	U	2.0	U	2.0	U			P
Copper	4.2	U	4.2	U	4.2	U	4.2	U			P
Iron 2599	57.	U	57.	U	57	U	57.	U			P
Lead	.2	U	.2	U	.2	U	.2	U			F
Magnesium	53.	U	53.	U	53.	U	53.	U			P
Manganese	1.4	U	1.4	U	1.4	U	1.4	U			P
Mercury	.24	U	.24	U	.24	U	.24	U			CV
Nickel	3.5	U	3.5	U	3.5	U	3.5	U			P
Potassium	2607	U	2607.	U	2607.	U	3384.4	B			P
Selenium	1.3	U	1.3	U	1.3	U					F
Silver	6.2	U	6.2	U	8.0	B	6.2	U			P
Sodium	1052	U	1052	U	1052	U	1052	U			P
Thallium	2.2	U	2.2	U	2.2	U	2.2	U			F
Vanadium	2.3	U	2.3	U	2.3	U	2.3	U			P
Zinc	7.6	U	7.6	U	7.6	U	7.6	U			P
Cyanide	7.5.	U									C
IRON 2714	81.	U	81.	U	81.	U	81.	U			

U.S. EPA - CLP

3
BLANKS

Lab Name: CANONIE ENVIRONMENTAL Contract: _____

Lab Code: _____ Case No.: 7492/4 SAS No.: _____ SDG No.: mw1

Preparation Blank Matrix (soil/water): WATER

Preparation Blank Concentration Units (ug/L or mg/kg): µg/L

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C	Prepa-ration Blank	C	M
Aluminum			27.	U	27.	U	27.	U			P
Antimony			20.	U	20.	U	20.	U			P
Arsenic	1.1	U	1.1	U	1.1	U	1.1	U			F
Barium			1.2	U	1.2	U	1.2	U			P
Beryllium			1.3	U	1.3	U	1.3	U			P
Cadmium			1.6	U	1.9	B	1.6	U			P
Calcium			61.	U	61.	U	61.	U			P
Chromium			2.2	U	2.2	U	3.1	B			P
Cobalt			2.6	B	2.0	U	3.5	B			P
Copper			4.2	U	4.2	U	4.2	U			P
Iron 2599			57.	U	57.	U	57.	U			P
Lead			.2	U	.2	U					P
Magnesium			53.	U	53.	U	53.	U			F
Manganese			1.4	U	1.4	U	1.4	U			P
Mercury			.24	U							P
Nickel			35	U	35	U	35	U			CV
Potassium			3255.0	B	2803.0	B	2960.0	B			P
Selenium	1.3	U	1.3	U	1.3	U	1.3	U			P
Silver			6.2	U	8.0	B	6.2	U			F
Sodium			1052.	U	1052.	U	1052.	U			P
Thallium			2.2	U	2.2	U					P
Vanadium			2.3	U	2.3	U	2.3	U			F
Zinc			7.6	U	7.6	U	7.6	U			P
Cyanide	8.	B	7.5	U							P
IRON 2714			81.	U	81.	U	81.	U			P

FORM III - IN 7/87

AR302609

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U.S. EPA - CLP

3
BLANKS

Lab Name: CANONIE ENVIRONMENTAL Contract: _____

Lab Code: _____ Case No.: 7492/9 SAS No.: _____ SDG No.: [illegible]

Preparation Blank Matrix (soil/water): _____

Preparation Blank Concentration Units (ug/L or mg/kg): ug/L

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C	Prepa-ration Blank	C	M
Aluminum			27.	U	27.	U	147.4	B			P
Antimony			20.	U	20.	U	20.	U			P
Arsenic											F
Barium			1.2	U	1.2	U	1.2	U			P
Beryllium			1.3	U	1.3	U	1.3	U			P
Cadmium			1.6	U	1.6	U	1.6	U			P
Calcium			61.	U	61	U	97.5	B			P
Chromium			2.2	U	2.2	U	5.3	B			P
Cobalt			2.0	U	2.0	U	2.4	B			P
Copper			4.2	U	4.2	U	4.2	U			P
Iron 2599			57.	U	57.	U	57.	U			P
Lead	.26	B	.2	U	.2	U					F
Magnesium			53.	U	53	U	71.2	B			P
Manganese			1.4	U	1.4	U	1.4	U			P
Mercury											CV
Nickel			4.7	B	3.5	U	3.5	U			P
Potassium			4130.	B	3544.58	B	4839.1	B			P
Selenium											F
Silver			6.2	U	6.2	U	6.2	U			P
Sodium			1052.	U	1052.	U	1052.	U			P
Thallium											F
Vanadium			2.3	U	2.3	U	2.3	U			P
Zinc			7.6	U	7.6	U	7.6	U			P
Cyanide											C
IRON 2714			81.	U	81.	U	81.	U			

AR302610

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U.S. EPA - CLP

3
BLANKS

Lab Name: CANONIE ENVIRONMENTAL Contract: _____

Lab Code: _____ Case No.: 7492/9 SAS No.: _____ SDG No.: MW11

Preparation Blank Matrix (soil/water): _____

Preparation Blank Concentration Units (ug/L or mg/kg): ug/L

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C	Preparation Blank	C	M
Aluminum			27.	U							P
Antimony			20.	U							P
Arsenic											F
Barium			1.2	U							P
Beryllium			1.3	U							P
Cadmium			1.6	U							P
Calcium			61.	U							P
Chromium			2.2	U							P
Cobalt			2.0	U							P
Copper			4.2	U							P
Iron 2599			57.	U							P
Lead											F
Magnesium			53.	U							P
Manganese			1.4	U							P
Mercury											CV
Nickel			3.5	U							P
Potassium			3266.0	B							P
Selenium											F
Silver			6.2	U							P
Sodium			1052.	U							P
Thallium											F
Vanadium			2.3	U							P
Zinc			7.6	U							P
Cyanide											C
IRON 2714			81.	U							

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3
BLANKS

Lab Name: CANONIE ENVIRONMENTAL Contract: _____

Lab Code: _____ Case No.: 7492/9 SAS No.: _____ SDG No.: MW10

Preparation Blank Matrix (soil/water): WATER

Preparation Blank Concentration Units (ug/L or mg/kg): ug/L

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C	Preparation Blank	C	M
Aluminum	27.	U	33.1	B	27.	U	27.	U			
Antimony	20.	U	20.	U	20.	U	20.	U			
Arsenic											
Barium	1.2	U	1.2	U	1.2	U	1.2	U			
Beryllium	1.3	U	1.3	U	1.3	U	1.3	U			
Cadmium	1.6	U	1.6	U	1.6	U	1.6	U			
Calcium	61.	U	61.	U	61.	U	61.	U			
Chromium	2.2	U	2.2	U	2.2	U	2.2	U			
Cobalt	2.0	U	2.0	U	2.0	U	2.0	U			
Copper	4.2	U	4.2	U	4.2	U	4.2	U			
Iron 2599	57.	U	57.	U	57.	U	57.	U			
Lead											
Magnesium	53.	U	53.	U	53.	U	53.	U			
Manganese	1.4	U	1.4	U	1.4	U	1.4	U			
Mercury											
Nickel	3.5	U	4.3	B	4.3	U	4.3	U			
Potassium	2607.	U	2607.	U	2607.	U	2607.	U			
Selenium											
Silver	6.2	U	6.2	U	6.2	U	6.2	U			
Sodium	1052.	U	1052.	U	1052.	U	1052.	U			
Thallium											
Vanadium	2.3	U	2.3	U	2.3	U	2.3	U			
Zinc	7.6	U	7.6	U	7.6	U	7.6	U			
Cyanide											
Tin 2714	81.	U	81.	U	81.	U	81.	U			

FORM III - IN 7/87

AR302612

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U.S. EPA - CLP

3
BLANKS

Lab Name: CANONIE ENVIRONMENTAL Contract: _____

Lab Code: _____ Case No.: 7492/9 SAS No.: _____ SDG No.: MW 1

Preparation Blank Matrix (soil/water): _____

Preparation Blank Concentration Units (ug/L or mg/kg): ug/L

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C	Preparation Blank	C	M
Aluminum			27.	U	27.	U	27.	U			P
Antimony			20.	U	20.	U	20.	U			P
Arsenic											F
Barium			1.2	U	1.2	U	1.2	U			P
Beryllium			1.3	U	1.3	U	1.3	U			P
Cadmium			1.6	U	1.6	U	1.6	U			P
Calcium			61.	U	61.	U	61.	U			P
Chromium			2.2	U	2.2	U	2.2	U			P
Cobalt			2.0	U	2.0	U	2.0	U			P
Copper			4.2	U	4.2	U	4.2	U			P
Iron 2599			57.	U	57.	U	57.	U			P
Lead											F
Magnesium			53.	U	53.	U	53.	U			P
Manganese			1.4	U	1.4	U	1.4	U			P
Mercury											CV
Nickel			3.5	U	3.5	U	3.5	U			P
Potassium			2607.	U	2607.	U	2607.	U			P
Selenium											F
Silver			6.2	U	6.2	U	6.2	U			P
Sodium			1052.	U	1052.	U	1052.	U			P
Thallium											F
Vanadium			2.3	U	2.3	U	2.3	U			P
Zinc			7.6	U	7.6	U	7.6	U			P
Cyanide											C
(LRW) 2714			81.	U	81.	U	81.	U			

AR302613

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U.S. EPA - CLP

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ICP INTERFERENCE CHECK SAMPLE

Lab Name: CANONIE ENVIRONMENTAL Contract: _____

Lab Code: _____ Case No: 7492/9 SAS No.: _____ SDG No.: [illegible]

ICP ID Number: TJA61 ICS Source: I0889015, I0889024, I0889031

Concentration Units: ug/L

Analyte	True Sol. A	True Sol. AB	Initial Found Sol. A	Initial Found Sol. AB	%R	Final Found Sol. A	Final Found Sol. AB	%R
Aluminum	476000	476000	497927.82	496683.38	104.3	473774.62	464112.76	97.5
Antimony								
Arsenic								
Barium		494		475.23	96.2		448.64	90.8
Beryllium		461		488.37	105.9		448.50	97.3
Cadmium		942		984.77	104.5		912.03	96.8
Calcium	475000	475000	500436.67	500384.55	105.3	452146.30	451026.18	94.9
Chromium		411		431.68	105.0		396.54	96.5
Cobalt		448		464.29	103.6		420.34	93.8
Copper		463		475.96	102.8		450.25	97.2
Iron	187000	187000	196824.67	196495.98	105.1	180821.16	179086.07	95.9
Lead		851		895.75	105.3		733.66	86.2
Magnesium	512000	512000	556153.32	542369.81	105.9	510855.49	495091.33	96.7
Manganese		442		457.85	103.6		411.57	93.1
Mercury								
Nickel		849		891.78	105.0		809.05	95.3
Potassium								
Selenium								
Silver		900		847.51	94.2		828.97	92.1
Sodium								
Thallium								
Vanadium		450		473.67	105.3		437.44	97.2
Zinc		1068		1114.59	104.4		1022.22	95.7

FORM IV - IN 7/87

AR302614

U.S. EPA - CLP

ICP INTERFERENCE CHECK SAMPLE

Lab Name: CANONIE ENVIRONMENTAL Contract: _____

Lab Code: _____ Case No: 7492/9 SAS No.: _____ SDG No.: 177U1C

ICP ID Number: TJA61 ICS Source: IC89015, IC89T024, IC89031

Concentration Units: ug/L

Analyte	True Sol. A	True Sol. AB	Initial Found Sol. A	Initial Found Sol. AB	%R	Final Found Sol. A	Final Found Sol. AB	%R
Aluminum	476000	476000	490111.48	483981.53	101.1	484675.99	482243.43	101.3
Antimony								
Arsenic								
Barium		494		461.98	93.5		469.95	95.1
Beryllium		461		467.20	101.3		483.29	104.8
Cadmium		942		951.33	101.1		976.49	103.7
Calcium	475000	475000	489456.54	488617.55	102.9	490891.05	491471.52	103.4
Chromium		411		417.82	101.6		423.11	102.9
Cobalt		448		455.67	101.7		452.05	100.9
Copper		463		465.58	100.6		464.04	100.2
Iron 2714	187000	187000	190152.54	189165.13	101.2	193034.23	193105.40	103.3
Lead		851		913.73	107.4		855.57	100.5
Magnesium	512000	512000	529090.69	514949.82	100.6	537163.03	525156.25	102.6
Manganese		442		449.38	101.7		451.96	102.2
Mercury								
Nickel		849		850.29	100.1		879.51	103.6
Potassium								
Selenium								
Silver		900		909.29	101.0		789.83	87.7
Sodium								
Thallium								
Vanadium		450		457.73	101.7		465.49	103.4
Zinc		1068		1094.31	102.5		1096.41	102.7

FORM IV - IN 7/87

AR302615

U.S. EPA - CLP

5A
SPIKE SAMPLE RECOVERY

EPA SAMPLE NO.

KW17D

Lab Name: CANONIE ENVIRONMENTAL Contract: _____

Lab Code: _____ Case No.: 7492/9 SAS No.: _____ SDG No.: KW17

Matrix (soil/water): WATER Level (low/med): LOW

Concentration Units (ug/L or mg/kg dry weight): ug/L

Analyte	Control Limit %R	Spiked Sample Result (SSR)	C	Sample Result (SR)	C	Spike Added (SA)	%R	Q	M
Aluminum	75-125								P
Antimony	75-125								P
Arsenic									F
Barium	75-125								P
Beryllium	75-125								P
Cadmium	75-125								P
Calcium									P
Chromium	75-125								P
Cobalt	75-125								P
Copper	75-125								P
Iron									P
Lead									
Magnesium									P
Manganese	75-125								P
Mercury	75-125								CV
Nickel	75-125								P
Potassium									P
Selenium									F
Silver	75-125								P
Sodium									P
Thallium									F
Vanadium	75-125								P
Zinc	75-125								P
Cyanide	75-125	229		7.5	ug	200	114.5		C

Comments:

FORM V (PART 1) - IN 7/87

AR302616

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U.S. EPA - CLP

5A

SPIKE SAMPLE RECOVERY

EPA SAMPLE NO.

MW10

Lab Name: CANONIE ENVIRONMENTAL Contract: _____

Lab Code: _____ Case No.: 7492/9 SAS No.: _____ SDG No.: MW10

Matrix (soil/water): WATER Level (low/med): low

Concentration Units (ug/L or mg/kg dry weight): ug/L

Analyte	Control Limit %R	Spiked Sample Result (SSR)	C	Sample Result (SR)	C	Spike Added (SA)	%R	Q	M
Aluminum	75-125								P
Antimony	75-125								P
Arsenic									F
Barium	75-125								P
Beryllium	75-125								P
Cadmium	75-125								P
Calcium									P
Chromium	75-125								P
Cobalt	75-125								P
Copper	75-125								P
Iron									P
Lead									
Magnesium									P
Manganese	75-125								P
Mercury	75-125	5.08		0.34		5.0	101.6		CV
Nickel	75-125								P
Potassium									P
Selenium									F
Silver	75-125								P
Sodium									P
Thallium									F
Vanadium	75-125								P
Zinc	75-125								P
Cyanide	75-125								C

Comments:

FORM V (PART 1) - IM 7/87

AR302617

U.S. EPA - CLP

5B
POST DIGEST SPIKE SAMPLE RECOVERY

EPA SAMPLE NO.

MW-10

Lab Name CANONIE ENVIR. SVC Contract: DELTA QUARRY
Lab Code: - Case No.: 7492/9 SAS No.: - SDG No.: - MW10
Matrix (soil/water): WATER Level (low/med): LOW

Concentration Units: ug/L

Analyte	Control Limit %R	Spiked Sample Result (SSR)	C	Sample Result (SR)	C	Spike Added (SA)	%R	Q	M
Aluminum		190		27	u	2,000.0	95.0		P
Antimony		487		20	u	500.0	97.4		P
Arsenic		25.00		6.00	B	20.0	98.0		F
Barium		2310		424		2,000.0	96.2		P
Beryllium		51		1.3	u	50.0	102.0		P
Cadmium		50		1.6	u	50.0	100.0		P
Calcium		178000		196000					NR
Chromium		180		2.2	u	200.0	90.0		P
Cobalt		496		6.3	B	500.0	98.1		P
Copper		238		4.2	u	250.0	95.2		P
Iron		6470		6080		1,000.0	93.2		P
Lead		16.00		0.30	B	20.0	78.7		F
Magnesium		17200		19000					NR
Manganese		1990		1670		500.0	94.1		P
Mercury									CV
Nickel		485		3.5	u	500.0	97.6		P
Potassium		2607	u	2607	u				NR
Selenium		6.56		1.30	U	10.0	65.6		F
Silver		42		6.2	u	50.0	89.0		P
Sodium		14700		16200					NR
Thallium		48.00		2.20	U	50.0	96.0		F
Vanadium		485		2.		500.0	97.0		P
Zinc		488				500.0	95.2		P
Cyanide									C

Comments:

THE FLAG *NA MEANS NOT APPLICABLE
% RECOVERY= (SSR-(SR X GFAA DILUT. FACTOR)) X100/SA

GFAA DILUT. FACTOR: 0.9
ICP DILUTION FACTOR: 0.9

CLP IN. VER 1.0 10/1/89

U.S. EPA - CLP

5B
POST DIGEST SPIKE SAMPLE RECOVERY

EPA SAMPLE NO.

MW-11

Lab Name CANONIE ENVIR. SVC Contract: DELTA QUARRY
Lab Code: - Case No.: 7492/9 SAS No.: - SDG No.: - MW10
Matrix (soil/water): WATER Level (low/med): LOW

Concentration Units: ug/L

Analyte	Control Limit %R	Spiked Sample Result (SSR)	C	Sample Result (SR)	C	Spike Added (SA)	%R	Q	M
Aluminum						2,000.0			P
Antimony						500.0			P
Arsenic		23.00		4.10	B	20.0	96.5		F
Barium						2,000.0			P
Beryllium						50.0			P
Cadmium						50.0			P
Calcium									NR
Chromium						200.0			P
Cobalt						500.0			P
Copper						250.0			P
Iron						1,000.0			P
Lead		15.00		0.20	B	20.0	74.1		F
Magnesium									NR
Manganese						500.0			P
Mercury									CV
Nickel						500.0			P
Potassium									NR
Selenium		6.40		1.50	B	10.0	50.5		F
Silver						50.0			P
Sodium									NR
Thallium		42.00		2.20	U	50.0	84.0		F
Vanadium						500.0			P
Zinc						500.0			P
Cyanide									C

Comments:

THE FLAG #NA MEANS NOT APPLICABLE
% RECOVERY= (SSR-(SR X GFAA DILUT. FACTOR)) X100/SA
GFAA DILUT. FACTOR: 0.9
ICP DILUTION FACTOR: 0.9

CLP IN. VER 1.0 10/1/89

AR302619

U.S. EPA - CLP

5B
POST DIGEST SPIKE SAMPLE RECOVERY

EPA SAMPLE NO.

MW-12

Lab Name CANONIE ENVIR. SVC Contract: DELTA QUARRY
Lab Code: - Case No.: 7492/9 SAS No.: - SDG No.: - MW10
Matrix (soil/water): WATER Level (low/med): LOW

Concentration Units: ug/L

Analyte	Control Limit %R	Spiked Sample Result (SSR)	C	Sample Result (SR)	C	Spike Added (SA)	%R	Q	M
Aluminum						2,000.0			P
Antimony						500.0			P
Arsenic		19.00		1.10	U	20.0	95.0		F
Barium						2,000.0			P
Beryllium						50.0			P
Cadmium						50.0			P
Calcium									NR
Chromium						200.0			P
Cobalt						500.0			P
Copper						250.0			P
Iron						1,000.0			P
Lead		17.00		0.40	B	20.0	83.2		F
Magnesium									NR
Manganese						500.0			P
Mercury									CV
Nickel						500.0			P
Potassium									NR
Selenium		7.20		1.30	U	10.0	72.0		F
Silver						50.0			P
Sodium									NR
Thallium		51.00		2.20	U	50.0	102.0		F
Vanadium						500.0			P
Zinc						500.0			P
Cyanide									C

Comments:

THE FLAG #NA MEANS NOT APPLICABLE
% RECOVERY= (SSR-(SR X GFAA DILUT. FACTOR)) X100/SA

GFAA DILUT. FACTOR: 0.9
ICP DILUTION FACTOR: 0.9

CLP IN. VER 1.0 10/1/89

AR302620

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U.S. EPA - CLP

5B
POST DIGEST SPIKE SAMPLE RECOVERY

EPA SAMPLE NO.

MW-13

Lab Name CANONIE ENVIR. SVC Contract: DELTA QUARRY
Lab Code: - Case No.: 7492/9 SAS No.: - SDG No.: - MW13
Matrix (soil/water): WATER Level (low/med): LOW

Concentration Units: ug/L

Analyte	Control Limit %R	Spiked Sample Result (SSR)	C	Sample Result (SR)	C	Spike Added (SA)	%R	Q	M
Aluminum						2,000.0			P
Antimony						500.0			P
Arsenic		18.00		1.10	U	20.0	90.0		F
Barium						2,000.0			P
Beryllium						50.0			P
Cadmium						50.0			P
Calcium									NR
Chromium						200.0			P
Cobalt						500.0			P
Copper						250.0			P
Iron						1,000.0			P
Lead		19.41				20.0	95.3		F
Magnesium									NR
Manganese						500.0			P
Mercury									CV
Nickel						500.0			P
Potassium									NR
Selenium		6.90		1.30	U	10.0	69.0		F
Silver						50.0			P
Sodium									NR
Thallium		55.00		2.20	U	50.0	110.0		F
Vanadium						500.0			P
Zinc						500.0			P
Cyanide									C

Comments:

THE FLAG *NA MEANS NOT APPLICABLE
% RECOVERY= (SSR-(SR X GFAA DILUT. FACTOR)) X100/SA

GFAA DILUT. FACTOR: 0.9
ICP DILUTION FACTOR: 0.9

CLP IN. VER 1.0 10/1/89

AR302621

U.S. EPA - CLP

5B
POST DIGEST SPIKE SAMPLE RECOVERY

EPA SAMPLE NO.

MW-14

Lab Name CANONIE ENVIR. SVC Contract: DELTA QUARRY
Lab Code: - Case No.: 7492/9 SAS No.: - SDG No.: -MW10
Matrix (soil/water): WATER Level (low/med): LOW

Concentration Units: ug/L

Analyte	Control Limit %R	Spiked Sample Result (SSR)	C	Sample Result (SR)	C	Spike Added (SA)	%R	Q	M
Aluminum						2,000.0			P
Antimony						500.0			P
Arsenic		21.00		1.60	B	20.0	97.8		F
Barium						2,000.0			P
Beryllium						50.0			P
Cadmium						50.0			P
Calcium									NR
Chromium						200.0			P
Cobalt						500.0			P
Copper						250.0			P
Iron						1,000.0			P
Lead		16.00		0.40	B	20.0	78.2		F
Magnesium									NR
Manganese						500.0			P
Mercury									CV
Nickel						500.0			P
Potassium									NR
Selenium		12.00		3.50	B	10.0	88.5		F
Silver						50.0			P
Sodium									NR
Thallium		50.00		2.20	U	50.0	100.0		F
Vanadium						500.0			P
Zinc						500.0			P
Cyanide									C

Comments:

THE FLAG *NA MEANS NOT APPLICABLE
% RECOVERY= (SSR-(SR X GFAA DILUT. FACTOR)) X100/SA

GFAA DILUT. FACTOR: 0.9
ICP DILUTION FACTOR: 0.9

CLP IN. VER 1.0 10/1/89

U.S. EPA - CLP

5B
POST DIGEST SPIKE SAMPLE RECOVERY

EPA SAMPLE NO.

MW-15

Lab Name CANONIE ENVIR. SVC Contract: DELTA QUARRY
Lab Code: - Case No.: 7492/9 SAS No.: - SDG No.: -MW10
Matrix (soil/water): WATER Level (low/med): LOW

Concentration Units: ug/L

Analyte	Control Limit %R	Spiked Sample Result (SSR)	C	Sample Result (SR)	C	Spike Added (SA)	%R	Q	M
Aluminum						2,000.0			P
Antimony						500.0			P
Arsenic		19.00		1.10	U	20.0	95.0		F
Barium						2,000.0			P
Beryllium						50.0			P
Cadmium						50.0			P
Calcium									NR
Chromium						200.0			P
Cobalt						500.0			P
Copper						250.0			P
Iron						1,000.0			P
Lead		19.00		0.50	B	20.0	92.8		F
Magnesium									NR
Manganese						500.0			P
Mercury									CY
Nickel						500.0			P
Potassium									NR
Selenium		10.00		1.30	U	10.0	100.0		F
Silver						50.0			P
Sodium									NR
Thallium		54.00		2.20	U	50.0	108.0		F
Vanadium						500.0			P
Zinc						500.0			P
Cyanide									C

Comments:

THE FLAG *NA MEANS NOT APPLICABLE
% RECOVERY= (SSR-(SR X GFAA DILUT. FACTOR)) X100/SA

GFAA DILUT. FACTOR: 0.9
ICP DILUTION FACTOR: 0.9

CLP IN. YER 1.0 10/1/89

AR302623

U.S. EPA - CLP

5B
POST DIGEST SPIKE SAMPLE RECOVERY

EPA SAMPLE NO.

MW-16

Lab Name CANONIE ENVIR. SVC Contract: DELTA QUARRY
Lab Code: - Case No.: 7492/9 SAS No.: - SDG No.: -MW10
Matrix (soil/water): WATER Level (low/med): LOW

Concentration Units: ug/L

Analyte	Control Limit %R	Spiked Sample Result (SSR)	C	Sample Result (SR)	C	Spike Added (SA)	%R	Q	M
Aluminum						2,000.0			P
Antimony						500.0			P
Arsenic		20.00		1.10	U	20.0	100.0		F
Barium						2,000.0			P
Beryllium						50.0			P
Cadmium						50.0			P
Calcium									NR
Chromium						200.0			P
Cobalt						500.0			P
Copper						250.0			P
Iron						1,000.0			P
Lead		20.00		0.50	B	20.0	97.8		F
Magnesium									NR
Manganese						500.0			P
Mercury									CV
Nickel						500.0			P
Potassium									NR
Selenium		10.00		1.30	U	10.0	100.0		F
Silver						50.0			P
Sodium									NR
Thallium		54.00		2.20	U	50.0	108.0		F
Vanadium						500.0			P
Zinc						500.0			P
Cyanide									C

Comments:

THE FLAG #NA MEANS NOT APPLICABLE
% RECOVERY= (SSR-(SR X GFAA DILUT. FACTOR)) X100/SA

GFAA DILUT. FACTOR: 0.9
ICP DILUTION FACTOR: 0.9

CLP IN. VER 1.0 10/1/89

AR302624

U.S. EPA - CLP

5B
POST DIGEST SPIKE SAMPLE RECOVERY

EPA SAMPLE NO.

A.W-20

Lab Name CANONIE ENVIR. SVC Contract: DELTA QUARRY
Lab Code: - Case No.: 7492/9 SAS No.: - SDG No.: - uw10
Matrix (soil/water): WATER Level (low/med): LOW

Concentration Units: ug/L

Analyte	Control Limit %R	Spiked Sample Result (SSR)	C	Sample Result (SR)	C	Spike Added (SA)	%R	Q	M
Aluminum						2,000.0			P
Antimony						500.0			P
Arsenic		19.00		2.10	B	20.0	85.6		F
Barium						2,000.0			P
Beryllium						50.0			P
Cadmium						50.0			P
Calcium									NR
Chromium						200.0			P
Cobalt						500.0			P
Copper						250.0			P
Iron						1,000.0			P
Lead		19.00		0.40	B	20.0	93.2		F
Magnesium									NR
Manganese						500.0			P
Mercury									CV
Nickel						500.0			P
Potassium									NR
Selenium		8.90		1.30	U	10.0	89.0		F
Silver						50.0			P
Sodium									NR
Thallium		51.00		2.20	U	50.0	102.0		F
Vanadium						500.0			P
Zinc						500.0			P
Cyanide									C

Comments:

THE FLAG *NA MEANS NOT APPLICABLE
% RECOVERY= (SSR-(SR X GFAA DILUT. FACTOR)) X100/SA

GFAA DILUT. FACTOR: 0.9
ICP DILUTION FACTOR: 0.9

CLP IN. VER 1.0 10/1/89

AR302625

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U.S. EPA - CLP

6
DUPLICATES

EPA SAMPLE NO.

MW-10

Lab Name: CANONIE ENVIR. SVC Contract: DELTA QUARRY
Lab Code: - Case No.: 7492/9 SAS No.: - SDG MW10
Matrix (soil/water): WATER Level (low/med): LOW
% Solids for Sample: 0 % Solids for Duplicate: 0
Concentration Units (ug/L or mg/kg dry weight): UG/L

Analyte	Control Limit	Sample (S)	C	Duplicate (D)	C	RPD	Q	M
Aluminum	200	27	U	27	U			P
Antimony	60	20	U	20	U			P
Arsenic	10	6	B	1.1	U	200.0		F
Barium	200	424		432		1.9		P
Beryllium	5	1.3	U	1.3	U			P
Cadmium	5	1.6	U	1.6	U			P
Calcium		196000		196000				P
Chromium	10	2.2	U	2.2	U			P
Cobalt	50	6.3	B	5.4	B	15.4		P
Copper	25	4.2	U	4.2	U			P
Iron		6080		6090		0.2		P
Lead	5	0.3	U	0.3	B	200.0		F
Magnesium	5000	19000		19000				P
Manganese		1670		1670				P
Mercury	0.2	5.08		5.27		3.7		CV
Nickel	40	3.5	U	3.8	B	200.0		P
Potassium	5000	2610	U	2610	U			P
Selenium	5	1.3	U	1.3	U			F
Silver	10	6.2	U	6.2	U			P
Sodium	5000	16200		16200				P
Thallium	10	2.2	U	2.2	U			F
Vanadium	50	2.3	U	2.3	U			P
Zinc	20	13	B	13	B			P
Cyanide								C

Comments: Hg used spike and spike duplicate.

THE FLAG "*NA" MEANS NOT APPLICABLE

AR302626

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DUPLICATES

EPA SAMPLE NO.

RW 17D

Lab Name: CANONIE ENVIRONMENTAL Contract: _____

Lab Code: _____ Case No.: 7492/9 SAS No.: _____ SDG No.: MW10

Matrix (soil/water): WATER Level (low/med): LOW

% Solids for Sample: 0.0 % Solids for Duplicate: 0.0

Concentration Units (ug/L or mg/kg dry weight): _____

Analyte	Control Limit	Sample (S)	C	Duplicate (D)	C	RPD	Q	M
Aluminum								P
Antimony								P
Arsenic								F
Barium								P
Beryllium								P
Cadmium								P
Calcium								P
Chromium								P
Cobalt								P
Copper								P
Iron								P
Lead								
Magnesium								P
Manganese								P
Mercury								CV
Nickel								P
Potassium								P
Selenium								
Silver								P
Sodium								P
Thallium								F
Vanadium								P
Zinc								P
Cyanide		229		228		0.4		C

CN used spike and spiked duplicate.

AR302627

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LABORATORY CONTROL SAMPLE

Lab Name: CANONIE ENVIRONMENTAL Contract: -

Lab Code: - Case No.: 7492/9 SAS No.: - SDG No.: MW-C

Solid LCS Source:

Aqueous LCS Source: I0889031, I0889015, 3-19717, 3-1875, I0789005

Analyte	Aqueous (ug/L) True	Found	%R	Solid (mg/kg) True	Found	C	Limits		%R
Aluminum	2000.0	1959.22	98.0						
Antimony	500.0	496.18	99.2						
Arsenic	20.0	20.5	102.5						
Barium	2000.0	2136.94	106.8						
Beryllium	50.0	53.61	107.2						
Cadmium	50.0	49.52	99.0						
Calcium									
Chromium	200.0	194.76	97.4						
Cobalt	500.0	526.19	105.2						
Copper	250.0	249.08	99.6						
Iron	1000.0	1009.32	100.9						
Lead	20.0	15.80	79.0						
Magnesium									
Manganese	500.0	500.	100.0						
Mercury	5.0	5.12	102.4						
Nickel	500.0	518.22	103.6						
Potassium									
Selenium	10.0	10.59	105.9						
Silver	50.0	58.74	117.5						
Sodium									
Thallium	50.0	49.43	98.9						
Vanadium	500.0	510.60	102.1						
Zinc	500.0	486.61	97.3						
Cyanide	200.0	226.	113.						

Hg and CN are digested LCS. all others are post LCS.

FORM VII - IN 7/87

AR302628

U.S. EPA - CLP

7

LABORATORY CONTROL SAMPLE

Lab Name: CANONIE ENVIRONMENTAL Contract: -

Lab Code: - Case No.: 7492/9 SAS No.: - SDG No.: IMW 1C

Solid LCS Source: _____

Aqueous LCS Source: 3-197117, 3-1875, I 0789-005

Analyte	Aqueous (ug/L) True	Found	%R	Solid (mg/kg) True	Found	C	Limits		%R
Aluminum	2000.0								
Antimony	500.0								
Arsenic	20.0	18.0	90.0						
Barium	2000.0								
Beryllium	50.0								
Cadmium	50.0								
Calcium									
Chromium	200.0								
Cobalt	500.0								
Copper	250.0								
Iron	1000.0								
Lead	20.0	21.46	107.3						
Magnesium									
Manganese	500.0								
Mercury	5.0	4.57	91.4						
Nickel	500.0								
Potassium									
Selenium	10.0	10.26	102.6						
Silver	50.0								
Sodium									
Thallium	50.0	50.26	100.5						
Vanadium	500.0								
Zinc	500.0								
Cyanide	100.0	87.8	87.8						

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LABORATORY CONTROL SAMPLE

Lab Name: CANONIE ENVIRONMENTAL Contract: -

Lab Code: - Case No.: 7492/9 SAS No.: - SDG No.: mw 10

Solid LCS Source:

Aqueous LCS Source: I 0889031 I 0889015

Analyte	Aqueous (ug/L) True	Found	%R	Solid (mg/kg) True	Found	C	Limits		%R
Aluminum	2000.0	2019.11	101.0						
Antimony	500.0	499.83	100.0						
Arsenic	20.0								
Barium	2000.0	2091.04	104.6						
Beryllium	50.0	53.19	106.4						
Cadmium	50.0	47.08	94.2						
Calcium									
Chromium	200.0	195.95	98.0						
Cobalt	500.0	541.15	108.2						
Copper	250.0	251.77	100.7						
Iron 2599	1000.0	1010.00	101.0						
Lead	20.0								
Magnesium									
Manganese	500.0	510.11	102.0						
Mercury									
Nickel	500.0	528.07	105.6						
Potassium									
Selenium	10.0								
Silver	50.0	77.7	155.4						
Sodium									
Thallium	50.0								
Vanadium	500.0	514.61	102.9						
Zinc	500.0	498.49	99.7						
Cyanide									

FORM VII - IN 7/87

AR302630

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U.S. EPA - CLP

9

ICP SERIAL DILUTIONS

EPA SAMPLE NO.

MW-10

Lab Name CANONIE ENVIR. SVC Contract: DELTA QUARRY

Lab Code: - Case 7492/9 SAS No.: - SDG MW10

Matrix (soil/wate WATER Level (LOW

Concentration Units: ug/L

Analyte	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	% Difference	Q	M
Aluminum	27	U	149	B			NR
Antimony	20	U	20	U			NR
Arsenic							
Barium	424		611		44.1	E	P
Beryllium	1.3	U	3.4	B			NR
Cadmium	1.6	U	8.6				NR
Calcium	196000		204000		4.1		P
Chromium	2.2	U	2.3	B			NR
Cobalt	6.3	B	8.9	B	41.3		NR
Copper	4.2	U	4.6	B			NR
Iron	6080		6310		3.8		P
Lead							
Magnesium	19000		19800		4.2		P
Manganese	1670		1770		6.0		P
Mercury							
Nickel	3.5	U	6	B			NR
Potassium	2610	U	3370	B			NR
Selenium							
Silver	6.2	U	63				NR
Sodium	16200		20600		27.2		P
Thallium							
Vanadium	2.3	U	2.4	B			NR
Zinc	13	B	27		107.7		NR

Comments:

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HOLDING TIMES

Lab Name: CANONIE ENVIRONMENTAL Contract: _____

Lab Code: _____ Case No.: 7492/9 SAS No.: _____ SDG No.: MW 1L

EPA Sample No.	Matrix	Date Received	Mercury Prep Date	Mercury Holding Time	Cyanide Prep Date	Cyanide Holding Time
MW 10	WATER	8/24/89	8/25/89	1		
MW 10A	WATER	8/24/89			9/1/89	7
MW 10D	WATER	8/24/89			9/1/89	7
MW 10L	WATER	8/24/89			9/1/89	7
MW 10S	WATER	8/24/89	8/25/89	1		
MW 10SD	WATER	8/24/89	8/25/89	1		
MW 11	WATER	8/24/89	8/25/89	1	9/1/89	7
MW 12	WATER	8/25/89	9/5/89	11	9/5/89	11
MW 13	WATER	8/25/89	9/5/89	11	9/5/89	11
MW 14	WATER	8/25/89	9/5/89	11	9/5/89	11
MW 15	WATER	8/25/89	9/5/89	11	9/5/89	11
MW 16	WATER	8/25/89	9/5/89	11	9/5/89	11
RW 17D	WATER	8/24/89			9/1/89	7
RW 17DS	WATER	8/24/89			9/1/89	7
RW 17DSD	WATER	8/24/89			9/1/89	7
RW 20	WATER	8/25/89	9/5/89	11	9/5/89	11

INSTRUMENT DETECTION LIMITS (QUARTERLY)

Lab Name: CANONIE ENVIRONMENTAL Contract: _____

Lab Code: _____ Case No.: 7492/9 SAS No.: _____ SDG No.: MW10

ICP ID Number: TJA61-46782 Date: 7-17-89

Flame AA ID Number: _____

Furnace AA ID Number: _____

Analyte	Wave-length (nm)	Back-ground	CRDL (ug/L)	IDL (ug/L)	M
Aluminum	308.22		200	27	P
Antimony	206.83		60	20	P
Arsenic	193.70		10	17	P
Barium	493.41		200	1.2	P
Beryllium	313.04		5	1.3	P
Cadmium	228.80		5	1.6	P
Calcium	317.93		5000	61.	P
Chromium	267.72		10	2.2	P
Cobalt	228.62		50	2.0	P
Copper	324.75		25	4.2	P
Iron	259.94		100	57	P
Lead	220.35		5	24	P
Magnesium	279.08		5000	53	P
Manganese	257.61		15	1.4	P
Mercury	253.		0.2	0.24	CV
Nickel	231.60		40	3.5	P
Potassium	766.49		5000	2607	P
Selenium	196.03		5	26	P
Silver	328.07		10	6.2	P
Sodium	588.99		5000	1052	P
Thallium	190.86		10	14	P
Vanadium	292.40		50	2.3	P
Zinc	213.86		20	7.6	P
MOLYBDENUM	202.03			2.4	P

Comments: IDL VALUES DERIVED BY 3X STANDARD DEVIATION OF NONCONSECUTIVE DI WATER READINGS WITH A MINIMUM OF 15 REPLICATES.
MERCURY RAN BY CV ON AA 1475.

AR302633

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INSTRUMENT DETECTION LIMITS (QUARTERLY)

Lab Name: CANONIE ENVIRONMENTAL Contract: _____

Lab Code: _____ Case No.: 7492/9 SAS No.: _____ SDG No.: MW10

ICP ID Number: TJA61-46782 Date: 7-17-89

Flame AA ID Number: _____

Furnace AA ID Number: #12809-1273

Analyte	Wave-length (nm)	Back-ground	CRDL (ug/L)	IDL (ug/L)	M
Aluminum			200		
Antimony			60		
Arsenic	193.70	BZ	10	1.0	F
Barium			200		
Beryllium			5		
Cadmium			5		
Calcium			5000		
Chromium			10		
Cobalt			50		
Copper			25		
Iron	271.40		100	81	P
Lead	283.30	BZ	5	0.2	F
Magnesium			5000		
Manganese			15		
Mercury			0.2		
Nickel			40		
Potassium			5000		
Selenium	196.00	BZ	5	1.3	F
Silver			10		
Sodium			5000		
Thallium	276.80	BZ	10	0.9	F
Vanadium			50		
Zinc			20		
Cyanide			10	7.5	C

Comments:

Cyanide ran by C, manual spectrophotometric method

FORM XI - IN 7/87

AR302634

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U.S. EPA - CLP

12A

ICP INTERELEMENT CORRECTION FACTORS (QUARTERLY)

Lab Name: CANONIE ENVIRONMENTAL Contract: _____

Lab Code: _____ Case No.: 7492/9 SAS No.: _____ SDG No.: MW10

ICP ID Number: TJA61-46782 Date: 1-89

Analyte	Wave-length (nm)	Interelement Correction Factors for: Al	Ca	Fe	Mg	_____
Aluminum	308.22					
Antimony	206.83			0.05	0.026	1.566
Arsenic	193.70	0.147		-2.92	-0.04	-0.23
Barium	493.41	0	0.002	0.005	0.002	
Beryllium	313.04			0		0.02
Cadmium	228.80	0		0.001	0	-0.01
Calcium	317.93					
Chromium	267.72	0.002				0.073
Cobalt	228.62	0.036	0.002	0.068	0.005	1.53
Copper	324.75	0.002	0.004	-0.22	0.009	0.395
Iron	259.94					
Lead	220.35	-2.05		0.074	0.026	0.728
Magnesium	279.08					
Manganese	257.61	0.014		-0.16	0.013	
Mercury						
Nickel	231.60	0.503	0.006	0.023		-0.02
Potassium	766.49	-1.32	-4.85	-0.99	-0.5	-7.5
Selenium	196.03	0.062		-0.66	-0.04	-0.27
Silver	328.07			-0.19		0.025
Sodium	588.99	0.028	0.1	0.007		0.725
Thallium	190.86	0.061		-0.26	0.064	-5.16
Vanadium	292.40		0.004	-0.02	0.004	0.293
Zinc	213.86	0.001	0.004	0.072	0.019	0.067
MOLYBDENUM	202.03	0.0006	0.002	-0.05		0.017

Comments:

ABOVE FACTORS ARE FACTOR X1000

FORM XII (PART 1) - IN 7/87

AR302635

U.S. EPA - CLP

12A

ICP INTERELEMENT CORRECTION FACTORS (QUARTERLY)

Lab Name: CANONIE ENVIRONMENTAL Contract: _____

Lab Code: _____ Case No.: 7492/9 SAS No.: _____ SDG No.: MW 10

ICP ID Number: TJA61-46782 Date: 1-89

Analyte	Wave-length (nm)	Interelement Correction Factors for: Al	Ca	Fe	Mg	Ti
Aluminum						
Antimony						
Arsenic						
Barium						
Beryllium						
Cadmium						
Calcium						
Chromium						
Cobalt						
Copper						
Iron						
Lead						
Magnesium						
Manganese						
Mercury						
Nickel						
Potassium						
Selenium						
Silver						
Sodium						
Thallium						
Vanadium						
Zinc						
TITANIUM	334.94	0.016		0.007	0.03	

Comments: ABOVE FACTORS ARE FACTOR X1000

FORM XII (PART 1) - IN 7/87

AR302636

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U.S. EPA - CLP

13

ICP LINEAR RANGES (QUARTERLY)

Lab Name: CANONIE ENVIRONMENTAL Contract: _____

Lab Code: _____ Case No.: 7492/9 SAS No.: _____ SDG No.: 177UC1C

ICP ID Number: TJA61-46782 Date: 7-89

Analyte	Integ. Time (Sec.)	Concentration (ug/L)	M
Aluminum	7.0	1000000	P
Antimony	7.0	50000	P
Arsenic	7.0	50000	P
Barium	7.0	50000	P
Beryllium	7.0	50000	P
Cadmium	7.0	25000	P
Calcium	7.0	500000	P
Chromium	7.0	50000	P
Cobalt	7.0	50000	P
Copper	7.0	50000	P
Iron	7.0	50000	P
Lead	7.0	50000	P
Magnesium	7.0	500000	P
Manganese	7.0	50000	P
Mercury			NR
Nickel	7.0	25000	P
Potassium	7.0	500000	P
Selenium	7.0	50000	P
Silver	7.0	50000	P
Sodium	7.0	500000	P
Thallium	7.0	50000	P
Vanadium	7.0	50000	P
Zinc	7.0	50000	P
MOLYBDENUM	7.0	50000	P

Comments:

FORM XIII - IN 7/87

AR302637

U.S. EPA - CLP

13

ICP LINEAR RANGES (QUARTERLY)

Lab Name: CANONIE ENVIRONMENTAL Contract: _____

Lab Code: _____ Case No.: 74929 SAS No.: _____ SDG No.: DDWIC

ICP ID Number: TJA61-46782 Date: 7-89

Analyte	Integ. Time (Sec.)	Concentration (ug/L)	M
Aluminum			P
Antimony			P
Arsenic			P
Barium			P
Beryllium			P
Cadmium			P
Calcium			P
Chromium			P
Cobalt			P
Copper			P
Iron 271.40	7.0	1000000	P
Lead			P
Magnesium			P
Manganese			P
Mercury			NR
Nickel			P
Potassium			P
Selenium			P
Silver			P
Sodium			P
Thallium			P
Vanadium			P
Zinc			P
TITANIUM	7.0	50000	P

Comments:

FORM XIII - IN 7/87

AR302638

73

Client: Delta Quarry
Sample ID: MW-10 A THRU H
Matrix: WATER
Lab ID: 843369-SA-A
Project #: 88-033.03

Date Reported: 10/16/1989
QC Batch # : I82689JMCI
Date Sampled : 8/22/1989
Date Received: 8/24/1989
LP #: 7492

Test Description: Inorganic Analysis

Analyte	Result*	Reporting Limit	Units	Method
Alkalinity, bicarb. (as CaCO3)	480.	5.0	mg/L	SM 403
Alkalinity, carb. (as CaCO3)	ND	5.0	mg/L	
Alkalinity, hydrox. (as CaCO3)	ND	5.0	mg/L	
Alkalinity, total (CaCO3)	480.	5.0	mg/L	
Cyanide, total	ND	0.010	mg/L	EPA 335.2
Total Hardness (as CaCO3)	560.	10.	mg/L	SM 314A

Tested By : GCZ
Validated By: TLH

* ND indicates a compound was not detected at a concentration level greater than the reporting limit.

Client: Delta Quarry
Sample ID: MW-11 A THRU H
Matrix: WATER
Lab ID: 843370-SA-A
Project #: 88-033.03

Date Reported: 10/16/1[illegible]
QC Batch # : I826893[illegible]
Date Sampled : 8/22/1989
Date Received: 8/24/1989
LP #: 7492

Test Description: Inorganic Analysis

Analyte	Result*	Reporting Limit	Units	Method
Alkalinity, bicarb. (as CaCO3)	580.	5.0	mg/L	SM 403
Alkalinity, carb. (as CaCO3)	ND	5.0	mg/L	
Alkalinity, hydrox. (as CaCO3)	ND	5.0	mg/L	
Alkalinity, total (CaCO3)	580.	5.0	mg/L	
Cyanide, total	ND	0.010	mg/L	EPA 335.2
Total Hardness (as CaCO3)	510.	10.	mg/L	SM 314A

Tested By : GCZ
Validated By: TLH

* ND indicates a compound was not detected at a concentration level greater than the reporting limit.

E 8[illegible]-80
YST J[illegible]
ANT CODE 5-2056D
ANT NORM 0.0200N H_2SO_4
N NaOH CODE# 3-2096C

CANONIE ENVIRONMENTAL SERVICES
ALKALINITY [illegible] HEET

REF# I-0889-013
REF TV 2500

ID	LP#	ALIQ ml	INIT pH	BURET READINGS, ml INIT	@ pH 8.2	@ pH 4.5	NET VOL., ml @ pH 8.2	@ pH 4.5	CALCULATIONS	EXPRESSED AS CaCO3, mg/L OH-	CO3	HCO3	TOTAL ALK
K		25ml	6.37	10.0	—	10.05	—	0.05					
N NaOH		25ml	12.18	10.0	34.25	34.8	24.25	24.8	99.2%				
N		10ml	11.11	10.0	21.75	33.5	11.75	23.5	94.0%	0	2350	0	2350 (94%)
QA	7492	25ml	6.98	10.0	—	21.9	—	11.9	11.9×40			476	476
QAdup			6.96	10.0	—	21.9	—	11.9				476	476
QA			6.98	10.0	—	24.6	—	14.6				584	584 } ave. 58
QAdup			6.98	10.0	—	24.5	—	14.5				580	580
H			12.19	10.0	34.6	35.1	34.6	25.1	100.4%				
N													
							I-8268	5MC1					

AR302611

LPO 7472

UNITS: ~~MG/KG~~ UG/L

COMPOUND	LAB ID	SP VAL CONC	DF	OB VAL	MS	MSD	MS %REC	MSD %REC	RPD	I
O & G										
MBAS										
FLUORIDE										
CR +6										
CHLORIDE										
SULFATE										
PO4										
NO2-N										
NO3-N										
TKN										
NH3-N										
pH										
ALK	843369A		1	476 / 476					0.00	ORIGINAL
TDS										
TSS										
CN										
REC. CN-										
REC. S-2										
ODOR										
COLOR										
FREE CL-										
D.O.										
COD										
TLFE										
A MIS										
F. COND										

COMMENTS:

AR302642

Carlo 4/27

Final Report

Client: Delta Quarry
Sample ID: MW-12 A THRU H
Matrix: WATER
Lab ID: 843418-SA-E
Project #: 88-033.03

Date Reported: 10/16/198
QC Batch # : I083089JG
Date Sampled : 8/24/198
Date Received: 8/25/198
LP #: 7499

Test Description: Inorganic Analysis

Analyte	Result*	Reporting Limit	Units	Method
Alkalinity, bicarb. (as CaCO3)	130.	5.0	mg/L	SM 403
Alkalinity, carb. (as CaCO3)	ND	5.0	mg/L	
Alkalinity, hydrox. (as CaCO3)	ND	5.0	mg/L	
Alkalinity, total (CaCO3)	130.	5.0	mg/L	
Cyanide, total	0.010	0.010	mg/L	EPA 335.2
Total Hardness (as CaCO3)	180.	35.	mg/L	SM 314A

Tested By : SJS
Validated By: TLH

* ND indicates a compound was not detected at a concentration level greater than the reporting limit.

Client: Delta Quarry
Sample ID: MW-13 A THRU H
Matrix: WATER
Lab ID: 843419-SA-F
Project #: 88-033.03

Date Reported: 10/16/1989
QC Batch # : I083089J
Date Sampled : 8/24/19
Date Received: 8/25/1989
LP #: 7499

Test Description: Inorganic Analysis

Analyte	Result *	Reporting Limit	Units	Method
Alkalinity, bicarb. (as CaCO3)	130.	5.0	mg/L	SM 403
Alkalinity, carb. (as CaCO3)	ND	5.0	mg/L	
Alkalinity, hydrox. (as CaCO3)	ND	5.0	mg/L	
Alkalinity, total (CaCO3)	130.	5.0	mg/L	
Cyanide, total	0.01	0.010	mg/L	EPA 335.2
Total Hardness (as CaCO3)	178.	35.	mg/L	SM 314A

Tested By : SJS
Validated By: TLH

* ND indicates a compound was not detected at a concentration level greater than the reporting limit.

Client: Delta Quarry
Sample ID: MW-14 A THRU H
Matrix: WATER
Lab ID: 843420-SA-A
Project #: 88-033.03

Date Reported: 10/16/1989
QC Batch # : I083089JG2
Date Sampled : 8/24/1989
Date Received: 8/25/1989
LP #: 7499

Test Description: Inorganic Analysis

Analyte	Result*	Reporting Limit	Units	Method
Alkalinity, bicarb. (as CaCO3)	64.	5.0	mg/L	SM 403
Alkalinity, carb. (as CaCO3)	ND	5.0	mg/L	
Alkalinity, hydrox. (as CaCO3)	ND	5.0	mg/L	
Alkalinity, total (CaCO3)	64.	5.0	mg/L	
Cyanide, total	0.010	0.010	mg/L	EPA 335.2
Total Hardness (as CaCO3)	70.	35.	mg/L	SM 314A

Tested By : SJS
Validated By: TLH

* ND indicates a compound was not detected at a concentration level greater than the reporting limit.

Client: Delta Quarry
Sample ID: MW-15 A THRU H
Matrix: WATER
Lab ID: 843421-SA-A
Project #: 88-033.03

Date Reported: 10/16/1989
QC Batch # : I08308[illegible]
Date Sampled : 8/24/1989
Date Received: 8/25/1989
LP #: 7499

Test Description: Inorganic Analysis

Analyte	Result*	Reporting Limit	Units	Method
Alkalinity, bicarb. (as CaCO3)	ND	5.0	mg/L	SM 403
Alkalinity, carb. (as CaCO3)	ND	5.0	mg/L	
Alkalinity, hydrox. (as CaCO3)	ND	5.0	mg/L	
Alkalinity, total (CaCO3)	ND	5.0	mg/L	
Cyanide, total	0.010	0.010	mg/L	EPA 335.2
Total Hardness (as CaCO3)	ND	35.	mg/L	SM 314A

Tested By : SJS
Validated By: TLH

* ND indicates a compound was not detected at a concentration level greater than the reporting limit.

Client: Delta Quarry
Sample ID: MW-16 A THRU H
Matrix: WATER
Lab ID: 843422-SA-A
Project #: 88-033.03

Date Reported: 10/16/1989
QC Batch # : I083089JG2
Date Sampled : 8/24/1989
Date Received: 8/25/1989
LP #: 7499

Test Description: Inorganic Analysis

Analyte	Result	Reporting Limit	Units	Method
Alkalinity, bicarb. (as CaCO3)	ND	5.0	mg/L	SM 403
Alkalinity, carb. (as CaCO3)	ND	5.0	mg/L	
Alkalinity, hydrox. (as CaCO3)	ND	5.0	mg/L	
Alkalinity, total (CaCO3)	ND	5.0	mg/L	
Cyanide, total	0.010	0.010	mg/L	EPA 335.2
Total Hardness (as CaCO3)	ND	35.	mg/L	SM 314A

sted By : SJS
idated By: TLH

D indicates a compound was not detected at a concentration level ater than the reporting limit.

AR302647

Client: Delta Quarry
Sample ID: ~~MW-20 A-THRU H~~ RW-20 PTG 10/25/89
Matrix: WATER
Lab ID: 843423-SA-A
Project #: 88-033.03

Date Reported: 10/16/198[illegible]
QC Batch # : I083089J[illegible]
Date Sampled : 8/23/198[illegible]
Date Received: 8/25/1989
LP #: 7499

Test Description: Inorganic Analysis

Analyte	Result	Reporting Limit	Units	Method
Alkalinity, bicarb. (as CaCO3)	48.	5.0	mg/L	SM 403
Alkalinity, carb. (as CaCO3)	ND	5.0	mg/L	
Alkalinity, hydrox. (as CaCO3)	ND	5.0	mg/L	
Alkalinity, total (CaCO3)	48.	5.0	mg/L	
Cyanide, total	0.01[illegible]	0.010	mg/L	EPA 335.2
Total Hardness (as CaCO3)	45.	35.	mg/L	SM 314A

Tested By : SJS
Validated By: TLH

* ND indicates a compound was not detected at a concentration level greater than the reporting limit.

Client: Delta Quarry
Sample ID: MW1A-H
Matrix: WATER
Lab ID: 843249-SA-A
Project #: 88-033.03

Date Reported: 10/12/1989
QC Batch # : I082289JG2
Date Sampled : 8/16/1989
Date Received: 8/18/1989
LP #: 7467

Test Description: Inorganic Analysis

Analyte	Result*	Reporting Limit	Units	Method
Alkalinity, bicarb. (as CaCO3)	130.	5.0	mg/L	SM 403
Alkalinity, carb. (as CaCO3)	ND	5.0	mg/L	
Alkalinity, hydrox. (as CaCO3)	ND	5.0	mg/L	
Alkalinity, total (CaCO3)	130.	5.0	mg/L	
Cyanide, total	ND	0.010	mg/L	EPA 335.2
Total Hardness (as CaCO3)	140.	10.	mg/L	SM 314A

Tested By : RDJ
Validated By: SJS

* ND indicates a compound was not detected at a concentration level greater than the reporting limit.

Canonie Environmental

AR302649

Client: Delta Quarry
Sample ID: MW2A-H
Matrix: WATER
Lab ID: 843250-SA-A
Project #: 88-033.03

Date Reported: 10/12/1989
QC Batch # : I082289JG3
Date Sampled : 8/16/1[illegible]
Date Received: 8/18/1[illegible]
LP #: 7467

Test Description: Inorganic Analysis

Analyte	Result*	Reporting Limit	Units	Method
Alkalinity, bicarb. (as CaCO3)	130.	5.0	mg/L	SM 403
Alkalinity, carb. (as CaCO3)	ND	5.0	mg/L	
Alkalinity, hydrox. (as CaCO3)	ND	5.0	mg/L	
Alkalinity, total (CaCO3)	130.	5.0	mg/L	
Cyanide, total	ND	0.010	mg/L	EPA 335.2
Total Hardness (as CaCO3)	135.	10.	mg/L	SM 314A

Tested By : RDJ
Validated By: SJS

* ND indicates a compound was not detected at a concentration level greater than the reporting limit.

CanonieEnvironmental

Client: Delta Quarry
Sample ID: MW3A-H
Matrix: WATER
Lab ID: 843251-SA-A
Project #: 88-033.03

Date Reported: 10/12/1989
QC Batch # : I082289JG3
Date Sampled : 8/16/1989
Date Received: 8/18/1989
LP #: 7467

Test Description: Inorganic Analysis

Analyte	Result*	Reporting Limit	Units	Method
Alkalinity, bicarb. (as CaCO3)	ND	5.0	mg/L	SM 403
Alkalinity, carb. (as CaCO3)	ND	5.0	mg/L	
Alkalinity, hydrox. (as CaCO3)	ND	5.0	mg/L	
Alkalinity, total (CaCO3)	ND	5.0	mg/L	
Cyanide, total	ND	0.010	mg/L	EPA 335.2
Total Hardness (as CaCO3)	ND	10.	mg/L	SM 314A

Tested By : RDJ
Validated By: SJS

* ND indicates a compound was not detected at a concentration level greater than the reporting limit.

Client: Delta Quarry
ample ID: MW4A-H
atrix: WATER
Lab ID: 843258-SA-A
Project #: 88-033.03

Date Reported: 10/12/1989
QC Batch # : I082289JG
Date Sampled : 8/17/198
Date Received: 8/21/1989
LP #: 7471

Test Description: Inorganic Analysis

Analyte	Result*	Reporting Limit	Units	Method
Alkalinity, bicarb. (as CaCO3)	8.0	5.0	mg/L	SM 403
Alkalinity, carb. (as CaCO3)	ND	5.0	mg/L	
Alkalinity, hydrox. (as CaCO3)	ND	5.0	mg/L	
Alkalinity, total (CaCO3)	8.0	5.0	mg/L	
Cyanide, total	ND	0.010	mg/L	EPA 335.2
Total Hardness (as CaCO3)	ND	40.	mg/L	SM 314A

Tested By : GCZ
lidated By: TLH

* ND indicates a compound was not detected at a concentration level greater than the reporting limit.

Canonie Environmental

Client: Delta Quarry
Sample ID: MW5A-H
Matrix: WATER
Lab ID: 843259-SA-A
Project #: 88-033.03

Date Reported: 10/12/1989
QC Batch # : I082289JG3
Date Sampled : 8/17/1989
Date Received: 8/21/1989
LP #: 7471

Test Description: Inorganic Analysis

Analyte	Result*	Reporting Limit	Units	Method
Alkalinity, bicarb. (as CaCO3)	ND	5.0	mg/L	SM 403
Alkalinity, carb. (as CaCO3)	ND	5.0	mg/L	
Alkalinity, hydrox. (as CaCO3)	ND	5.0	mg/L	
Alkalinity, total (CaCO3)	ND	5.0	mg/L	
Cyanide, total	ND	0.010	mg/L	EPA 335.2
Total Hardness (as CaCO3)	ND	40.	mg/L	SM 314A

Tested By : GCZ
Validated By: TLH

* ND indicates a compound was not detected at a concentration level greater than the reporting limit.

CanonieEnvironmental

Client: Delta Quarry
Sample ID: MW6A-H
Matrix: WATER
Lab ID: 843260-SA-A
Project #: 88-033.03

Date Reported: 10/12/1989
QC Batch # : I082289JG3
Date Sampled : 8/17/1
Date Received: 8/21/19
LP #: 7471

Test Description: Inorganic Analysis

Analyte	Result*	Reporting Limit	Units	Method
Alkalinity, bicarb. (as CaCO3)	120.	5.0	mg/L	SM 403
Alkalinity, carb. (as CaCO3)	ND	5.0	mg/L	
Alkalinity, hydrox. (as CaCO3)	ND	5.0	mg/L	
Alkalinity, total (CaCO3)	120.	5.0	mg/L	
Cyanide, total	ND	0.010	mg/L	EPA 335.2
Total Hardness (as CaCO3)	210.	40.	mg/L	SM 314A

Tested By : GCZ
Validated By: TLH

* ND indicates a compound was not detected at a concentration level greater than the reporting limit.

CanonieEnvironmental

Client: Delta Quarry
Sample ID: MW7A-H
Matrix: WATER
Lab ID: 843261-SA-A
Project #: 88-033.03

Date Reported: 10/12/1989
QC Batch # : I082289JG3
Date Sampled : 8/18/1989
Date Received: 8/21/1989
LP #: 7471

Test Description: Inorganic Analysis

Analyte	Result*	Reporting Limit	Units	Method
Alkalinity, bicarb. (as CaCO3)	76.	5.0	mg/L	SM 403
Alkalinity, carb. (as CaCO3)	ND	5.0	mg/L	
Alkalinity, hydrox. (as CaCO3)	ND	5.0	mg/L	
Alkalinity, total (CaCO3)	76.	5.0	mg/L	
Cyanide, total	ND	0.010	mg/L	EPA 335.2
Total Hardness (as CaCO3)	290.	40.	mg/L	SM 314A

Tested By : GCZ
Validated By: TLH

* ND indicates a compound was not detected at a concentration level greater than the reporting limit.

CanonieEnvironmental

Client: Delta Quarry
Sample ID: MW8A-H
Matrix: WATER
Lab ID: 843262-SA-A
Project #: 88-033.03

Date Reported: 10/12/1989
QC Batch # : I082289JG3
Date Sampled : 8/18/1
Date Received: 8/21/1
LP #: 7471

Test Description: Inorganic Analysis

Analyte	Result*	Reporting Limit	Units	Method
Alkalinity, bicarb. (as CaCO3)	ND	5.0	mg/L	SM 403
Alkalinity, carb. (as CaCO3)	ND	5.0	mg/L	
Alkalinity, hydrox. (as CaCO3)	ND	5.0	mg/L	
Alkalinity, total (CaCO3)	ND	5.0	mg/L	
Cyanide, total	ND	0.010	mg/L	EPA 335.2
Total Hardness (as CaCO3)	ND	40.	mg/L	SM 314A

Tested By : GCZ
Validated By: TLH

* ND indicates a compound was not detected at a concentration level greater than the reporting limit.

CanonieEnvironmental

Client: Delta Quarry
Sample ID: TRIP/TRAVEL BLANK
Matrix: WATER
Lab ID: 843263-SA-A
Project #: 88-033.03

Date Reported: 10/12/1989
QC Batch # : I082289JG3
Date Sampled : 8/18/1989
Date Received: 8/21/1989
LP #: 7471

Test Description: Inorganic Analysis

Analyte	Result*	Reporting Limit	Units	Method
Alkalinity, bicarb. (as CaCO3)	ND	5.0	mg/L	SM 403
Alkalinity, carb. (as CaCO3)	ND	5.0	mg/L	
Alkalinity, hydrox. (as CaCO3)	ND	5.0	mg/L	
Alkalinity, total (CaCO3)	ND	5.0	mg/L	
Cyanide, total	ND	0.010	mg/L	EPA 335.2
Total Hardness (as CaCO3)	ND	40.	mg/L	SM 314A

Tested By : GCZ
Validated By: TLH

* ND indicates a compound was not detected at a concentration level greater than the reporting limit.

CanonieEnvironmental

LP# 7448, 7456, 7467, 7471 UNITS: ~~MG/KG~~ MG/L

COMPOUND	LAB ID	SP VAL CONC	DF	DF	MS	MSD	MS %REC	MSD %REC	RPD	I	STD
O & G											
MBAS											
FLUORIDE											
CR +6											
CHLORIDE											
SULFATE											
PO4											
NO2-N											
ALK-	843163A			440/440					0.0	JWG	3-2096
TKN											
ALK	843200A			190/190					0.0	JWG	3-2096
pH											
ALK	843249A			130/130					0.0	JWG	3-2096
TDS											
ALK	843258A			8/8					0.0	JWG	3-2096
CN											
REC. CN-											
REC. S-2											
ODOR											
COLOR											
FREE CL-											
D.O.											
COD											
TCRE											
& MCE											
SP. COND											

COMMENTS:

AR302658

CANONIE ENVIRONMENTAL SERVICES
ALKALINITY WORKSHEET

DATE 8-22-89
ANALYST JWG
TITRANT CODE S-2056D
TITRANT NORM .02
0.02N NaOH CODE# 3-2096C

REF# I-0889-013
REF TV .05 N

LAB ID	LP#	ALIQ ml	INIT pH	BURET READINGS, ml INIT	BURET READINGS, ml @ pH 8.2	BURET READINGS, ml @ pH 4.5	NET VOL., ml @ pH 8.2	NET VOL., ml @ pH 4.5	CALCULATIONS	EXPRESSED AS CaCO3, mg/L OH-	CO3	HCO3	TOTAL ALK
BLANK		25	5.2	0.0	–	0.05		0.05					2
0.02N NaOH 3-2096C		1	12.0	0.0	24.4	24.4	24.4	24.4	H_2SO_4 24.4 (.02)(50) / NaOH 25 (.02) = 99%				
I-0889-013		10	11.0	0.0	11.7	23.2	11.7	23.2	H_2SO_4 23.2 (.02)(50) / Ref 10 (.05) = 92.8				
843163A	7448	25	6.9	0.0	–	11.0	–	11.0				440	440
843163A DUP			6.9	0.0	–	11.0	–	11.0	RPD=0			440	440
843164A			7.1	0.0	–	9.7	–	9.7				390	390
843165A			7.5	0.0	–	7.4	–	7.4				300	300
843166A			6.6	0.0	–	2.6	–	2.6				100	100
843167A			7.2	0.0	–	3.1	–	3.1				120	120
843168A			7.6	0.0	–	6.0	–	6.0				240	240
843169A			5.5	0.0	–	0.1	–	0.1				4	4
843170A			5.3	0.0	–	0.1	–	0.1				4	4
843171A			5.3	0.0	–	0.05	–	0.05				2	2
3-2096C		1	12.0	0.0	24.6	25.0	24.6	25.0	H_2SO_4 24.6 (.02)(50) / NaOH 25 (.02) = 1				

Calibration ... Burette

CANONIE ENVIRONMENTAL SERVICES
ALKALINITY WORKSHEET

DATE 8-22-87
ANALYST JWG
TITRANT CODE 3-2092B
TITRANT NORM .02
0.02N NaOH CODE# 3-2096C

REF# I-0389-013
REF TV .05 N

LAB ID	LP#	ALIQ ml	INIT pH	BURET READINGS, ml INIT	BURET READINGS, ml @ pH 8.2	BURET READINGS, ml @ pH 4.5	NET VOL., ml @ pH 8.2	NET VOL., ml @ pH 4.5	CALCULATIONS	EXPRESSED AS CaCO3, mg/L OH-	CO3	HCO3	TOTAL ALK
BLANK		25	5.1	0.0	–	0.05	–	0.05				2	2
0.02N NaOH 3-2096C		↓	12.0	0.0	24.7	25.0	24.7	25.0	H_2SO_4 25.0(.02) / NaOH 25.0(.02) = 100%				
I-0389-013		10	11.0	0.0	11.6	23.1	11.6	23.1	H_2SO_4 23.1(.02) / Ref TA (.02) = 92.4				
843200A	7458	25	7.2	0.0	–	4.8	–	4.8	192			190	190
843200A DUP		↓	7.2	0.0	–	4.7	–	4.7	188 RPD = 2.1%			190	190
843201A			7.4	0.0	–	5.0	–	5.0				200	200
843202A			6.0	0.0	–	0.6	–	0.6				24	24
843203A			6.1	0.0	–	0.5	–	0.5				20	20
843204A			6.8	0.0	–	1.7	–	1.7				68	68
843205A			7.4	0.0	–	3.1	–	3.1				120	120
843206A			7.3	0.0	–	2.5	–	2.5				100	100
843207A			7.6	0.0	–	8.5	–	8.5				340	340
843208A			7.8	0.0	–	4.8	–	4.8				190	190
843209A	↓		5.5	0.0	–	0.05	–	0.05				2	2
3-2096C		↓	12.0	0.0	24.7	25.0	24.7	25.0	H_2SO_4 25.0(.02) / NaOH 25.0(.02) = 100%				

A-8300

CANONIE ENVIRONMENTAL SERVICES
ALKALINITY WORKSHEET

DATE 8-30-89
ANALYST LWG
TRANT CODE S-2056D
TRANT NORM 0.02
02N NaOH CODE# 2-2096C

REF# I-0889-013
REF TV .05 N

B ID	LP#	ALIQ ml	INIT pH	BURET READINGS, ml INIT	@ pH 8.2	@ pH 4.5	NET VOL., ml @ pH 8.2	@ pH 4.5	CALCULATIONS	EXPRESSED AS CaCO3, mg/L OH-	CO3	HCO3	TOTAL ALK
ANK		25	5.0	0.0	-	0.05	-	0.05				2	2
02N NaOH 2-2096			11.9	0.0	24.7	25.2	24.7	25.2	$\frac{H_2SO_4}{NaOH}\ \frac{25.2(ml)}{25} = 101\%$				
0889-013		10	11.0	0.0	11.9	23.3	11.9	23.3	$\frac{H_2SO_4}{N_2CO_3}\ \frac{23.3(ml)}{10(.05)} = 93\%$				
3418E	7499	25	6.8	0.0	-	3.3	-	3.3				130	130
3418E DUP			6.8	0.0	-	3.3	-	3.3	RPD=0			130	130
3419F			6.8	0.0	-	3.2	-	3.2				130	130
3420A			6.6	0.0	-	1.6	-	1.6				64	64
3421A			5.1	0.0	-	0.05	-	0.05				2	2
3422A			5.0	0.0	-	0.05	-	0.05				2	2
3423A			6.8	0.0	-	1.2	-	1.2				48	48
3424A	7523		6.4	0.0	-	4.4	-	4.4				180	180
3425A	7515		8.2	0.0	-	5.0	-	5.0				200	200
2-2096C			12.0	0.0	24.7	25.2	24.7	25.2	$\frac{H_2SO_4}{NaOH}\ \frac{25.2(ml)}{25} = 101\%$				

AR 302661

ANALYSIS: 1(e)6

LPC 7499, 7515, 7523

MATRIX: SOIL/WA

UNITS: MG/KG DET UG/L

COMPOUND	LAB ID	SP VAL CONC	DF	DF	MS	MSD	MS %REC	MSD %REC	RPD	I	STD
O & G											
MBAS											
FLUORIDE											
CR +6											
CHLORIDE											
SULFATE											
PO4											
NO2-N											
NO3-N											
TKN											
NH3-N											
PH											
ALK	843418E			132/132							
TS									0.0		2-0889
TSS											
CN											
REC. CN-											
REC. S-2											
FLOR											
CHLOR											
TOTAL CL-											
C.O.											
COD											
TLFE											
TDS											
SP. COND											

COMMENTS:

AR302662

SECTION 5

CHAIN-OF-CUSTODIES

PROJ. NO: 88-033-03
PROJECT NAME: Delta Quarries
L.P. NO: 7471
SAMPLERS: (Signature)

Water

DATE	SAMPLE I.D.	NO. OF CONTAINERS	ALKALINITY	TAL FILTERED METALS	TAL TOTAL METALS	CYANIDE	TCL BNA EPA 625	TCL VO EPA 624	TCL OCPS TPCBS EPA 608	RADIUM ALPHA & BETA			REMARKS
8/17/89	TRIP BLANK	1	X								843203	A	Liter plastic
	TRIP BLANK	1		X								B	500 ml plastic w/HNO3
	TRIP Blank	1			X							C	500 ml plastic w/HNO3
	TRIP Blank	1				X						D	Glass Liter w/NaOH
	TRAVEL Blank	3					X					E F G	Glass Liter
	Trip Blank	3						X				H I J	40 ml vials
	Travel Blank	3							X			K L M	Glass Liter
	Trip Blank	1								X		N	500 ml plastic w/HNO3

AR302665

Relinquished by: (Signature)	Date/Time	Received by: (Signature)
Relinquished by (Signature)	Date/Time	Received by: (Signature)
Relinquished by (Signature)	Date/Time 8/18/89 7:00	Received for Laboratory by: (Signature) Marie Schmelzle

Remarks: Custody Seal intact

Canonie Environmental, 212 Frank West Circle, Suite A, Stockton, CA 95206

No 13920

PROJ NO: [illegible]

PROJECT NAME: Delta Quarries

P.O. NO.:

SAMPLERS: (Signature) Timothy J Kelly

DATE	SAMPLE I.D.	NO. OF CONTAINERS	Alkalinity	TAL Filtered Water	TAL Total Metals Water	Cyanide	TCL VOCs EPA 624	TCL OCP's + PCB's EPA 608	Gross Alpha + Beta					REMARKS
8/18	MW-9A-> 11	14	✓	→	→	→	→	→	→					

AR302966

Relinquished by (Signature)	Date/Time	Received by: (Signature)
Timothy J Kelly	8/18 17:23	
Relinquished by (Signature)	Date/Time	Received by: (Signature)
Relinquished by (Signature)	Date/Time	Received for Laboratory by: (Signature)

Remarks

Per Tim Kelly This chain is for the Trip Blanks or Travel Blanks.

Canonie Environmental, 212 Frank West Circle, Suite A, Stockton, CA 95206

№ 13658

PROJ. NO: 77-1.33-1.3 | PROJECT NAME: Delta Quarries

L.P. NO: ~~7497~~ | SAMPLERS: (Signature) Philip J. Hunsinger

DATE: 7/19/2

DATE	SAMPLE I.D.		NO. OF CONTAINERS	TCL VOC EPA 524.2	Gross Alpha	TCL B/N & EPA 625	TCL Cyanide EPA							REMARKS
														water
8-1-89	PT 1A	~~843343A~~		1				843345A						40ml vials
	PT 1B	~~44A B~~		1				46 A						
	PT 2A	~~45A,B~~		2				47 A,B						
	PT 2B	~~46 A,B~~		2				48 A B						
	PT 3A	~~47 A,B~~		2				49 A B						
	PT 3B	~~48 A,B~~		2				50 A B						
8/22/89	PT 4A	~~49 A,B~~		2				51 A B						
	PT 4B	~~50,A,B~~		2				52 A B						
	PT 5A	~~51A~~		1				53 A						
	PT 5B	~~50A~~		1				54 A						
	RW 1F	~~53 A,B,C~~		3				55 A B C						
	RW 2F	~~54 A,B,C~~		3				56 A B C						
	RW 1,2,3,5,6,7,8,9 - H	~~55A-62A~~			8			57A → 64A						500ml plastic / HNO_3
	RW 1E	~~843363A~~				1		65A						glass liters
	RW 2E	~~64A~~				1		66A						
	RW 1G	~~65A~~					1	67A						
	RW 1D	~~66A~~					1	68A						/ NaOH

AR302861

Relinquished by: (Signature)	Date/Time	Received by: (Signature)
Philip J. Hunsinger	8-3/89 16:40	
Relinquished by: (Signature)	Date/Time	Received by (Signature)
Relinquished by: (Signature)	8/24/89 Date/Time 9:30	Received for Laboratory by: (Signature) Cheryl Hatten

Remarks

Canonie Environmental, 212 Frank West Circle, Suite A, Stockton, CA 95206

№ 654

PROJ. NO. 88-033-03 | PROJECT NAME: Delta Quarries

L.P. NO. 7492 | SAMPLERS: (Signature)

Pg 2 of 3

DATE	SAMPLE I.D.		NO. OF CONTAINERS	Alkalinity	TAL Filtered metals	TAL TOT metals + TOT Hard	Cyanide	TCL BNA 625	TCL VO 624	Gross Alpha + Beta	REMARKS
0-2389	MW-10 A	843369A	1	X							water
	B	B	1		X						Plastic liter
	C	C	1			X					500 ml plastic / HNO_3
	D	D	1				X				" " "
	E	E, F, G	3					X			glass liter / NaOH
	F	H, I, J	3						X		glass liter
	G	K, L, M	3							X	40 ml vials
	H	N	1							X	glass liter
											500 ml plastic / HNO_3

AR302668

Relinquished by: (Signature)	Date/Time	Received by: (Signature)
Relinquished by: (Signature)	Date/Time	Received by: (Signature)
Relinquished by (Signature)	Date/Time 8/21/89 9:30	Received for Laboratory by: (Signature)

Remarks

Canonie Environmental, 212 Frank West Circle, Suite A, Stockton, CA 95206

No 14244

PROJ NO	PROJECT NAME															
88-033-03	Delta Quarries															
L.P. NO	SAMPLERS: (Signature)															
~~1497~~	Kirsten Underwood															
~~DATE~~ 1492	SAMPLE I.D.															
8/23/89	MW-10	~~843367~~			14											
		~~843371A 843369A~~														
	MW 10A	843369A	~~843371A~~		1	X							~~A 843369A~~			Plastic liter
	MW 10B	B	~~72A~~		1		X						B	~~70A~~	~~B~~	500ml plastic / HNO_3
	MW 10C	C	~~73A~~		1			X					~~C~~	~~71A~~	~~C~~	" " "
	10D	D	~~74A~~		1				X				~~D~~	~~72A~~		glass liter / NaOH
	10E	E,F,G	~~75A~~		3					X			~~E F G~~	~~73A~~	~~B C~~	glass liter
	10F	H,I,J	~~76A~~		3						X		~~I~~	~~74A~~	~~B C~~	40 ml vials
	10G	K,L,M	~~77A~~		3							X		~~75A~~	~~B C~~	glass liter
	10H	N	~~78A~~		1								X	~~76A~~		500ml plastic / HNO_3

Pg 2 of 3

REMARKS

water

Relinquished by: (Signature)	Date/Time	Received by: (Signature)
Kirsten Underwood	8/23/89 10:10	
Relinquished by: (Signature)	Date/Time	Received by: (Signature)
Relinquished by: (Signature)	Date/Time	Received for Laboratory by: (Signature)
	8/24/89 9:30	Cheryl Hutton

Remarks

Canonie[illegible]onmental, 212 Frank West Circle, Suite A, Stockton, CA 95206

AR302569

No 13656

PROJ. NO: 88-033-03
PROJECT NAME: Delta Quarries
L.P. NO.: ~~7191~~ 7192
SAMPLERS: (Signature) Kristen J. Underwood

Pg 3 of 3

DATE	SAMPLE I.D.	NO. OF CONTAINERS	Alkalinity	TAL Filtered Mets	TAL Tot. Metals	Cyanide	TCL B/N/A EPA 625	TCL VO EPA 624	TCL OCPs + PCBs	Gross Alpha + Beta				REMARKS
8/23/89	MW-11 A thru H	14	✓ →											Water
	MW11-A ~~843378A~~	1	X						843370		A			plastic liter
	B ~~79A~~	1		X							B			500 ml plastic / HNO_3
	C ~~80A~~	1			X						C			" " "
	D ~~81A~~	1				X					D			glass liter / NaOH
	E, ~~F, G~~ ~~82A,B,C~~	3					X				E	F	G	glass liter
	~~H~~ F ~~83A,B,C~~	3						X			H	I	J	40 ml vials
	G ~~84A,B,C~~	3							X		K	L	M	glass liter
	H ~~85A~~	1								X		N		500 ml plastic / HNO_3

Relinquished by: (Signature)	Date/Time	Received by: (Signature)
Kristen J. Underwood	8/23/89 13:20	
Relinquished by: (Signature)	Date/Time	Received by: (Signature)
Relinquished by: (Signature)	Date/Time	Received for Laboratory by: (Signature)
	8/24/89 9:30	

Remarks

Canonie Environmental, 212 Frank West Circle, Suite A, Stockton, CA 95206

AR302670

№ 13877

843163; 843171-M

Pg 1 of 5

PROJ NO. 88-033-CB

PROJECT NAME: DeLta Quarries Landfill

L.P. NO. 7448

SAMPLERS: (Signature)

DATE	SAMPLE I.D.	NO. OF CONTAINERS	ALKALINITY	GROSS ALPHA + BETA	TRL METALS + TOTAL HARDN.	TCL B/N/A EPA 625	TCL VOL ORG EPA 624	TCL OCPs + PCBs EPA 608	CYANIDE				REMARKS
8/14/89	RW 1A -	1	X							843163	A		Liter plastic
	RW 1B	1		X							B		500 ml plastic w/HNO3 Filtered
	RW 1C	1		X							C		500 ml plastic w/HNO3
	RW 1D	1					X				D		Glass Liters w/NaOH
	RW 1E	2			X						EF		Glass Liters ~~1 Bottom Sample~~
	RW 1F	3				X					GHI		40 ml vials ~~Bottom Bubbles~~
	RW 1G	3					X				JKL		Glass Liters
8/14/89	RW 2A	1	X							843164	A		plastic Liter
	RW 2B	1		X							B		500 ml plastic w/HNO3 Filtered
	RW 2C	1		X							C		500 ml plastic w/HNO3
	RW 2D	1					X				D		Glass Liter w/NaOH
	RW 2E	2			X						EF		Glass Liter ~~1 Bottom~~
	RW 2F	3				X					GHI		40 ml vials ~~all Bottom Bubbles~~
	RW 2G	3					X				JKL		Glass Liters

AR302571

Relinquished by (Signature)	Date/Time	Received by: (Signature)
Relinquished by (Signature)	Date/Time	Received by: (Signature)
Relinquished by (Signature)	Date/Time 8/15/89 9:00	Received for Laboratory by: (Signature) Marie Adamek

Remarks: Custody seals intact

Canonie Environmental, 212 Frank West Circle, Suite A, Stockton, CA 95206

№ 1278

L.P. NO. | SAMPLERS: (Signature) Kristen L. Underwood | ... LANDFILL

DATE	SAMPLE I.D	NO. OF CONTAINERS	Alkalinity	Gross Alpha + Beta	TAL Metals + Total Hard.	Cyanide	TCL B/N/A EPA 625	TCL Vol. Org. EPA 624	TCL OCP's + PCB's EPA 6..					REMARKS
8/14/89	RW-1A thru E	13	✓	✓	✓	✓	✓	✓	✓					

Relinquished by: (Signature)	Date/Time	Received by: (Signature)
Kristen L. Underwood	8/14/89 13:45	
Relinquished by: (Signature)	Date/Time	Received by: (Signature)
Relinquished by: (Signature)	Date/Time	Received for Laboratory by: (Signature)

Remarks

I-CHEM RESEARCH
CHEM
(800) 443-1689 (800) 553-3696
SITE NAME: Delta Quarries
DATE: 8/14
ANALYSIS: RW-1E
TIME: 1320
PRESERVATIVE: —
SPECIALTY CLEANED CONTAINER

Canonie Environmental, 212 Frank West Circle, Suite A, Stockton, CA 95206

№ 13677

SAMPLER

AR302672

PROJ NO	PROJECT NAME																
88-033-03	Canonie - Delta Quarries Landfill																
LP NO	SAMPLERS (Signature) Kirsten J. Underwood																
DATE	SAMPLE I D	NO. OF CONTAINERS	ANALYSIS: Alkalinity	Filtered Metal	Total Metals + Tot Hex	Cyanide	TCL B/N/A EPA 625	TCL VO EPA 624	TCL OCP's + PCB's EPA 608								REMARKS
8/14	RW-2A thru 6	13	✓					✓									

AR302673

Relinquished by: (Signature)	Date/Time	Received by: (Signature)
Kirsten J. Underwood	8/14/89 14:20	
Relinquished by (Signature)	Date/Time	Received by: (Signature)
Relinquished by (Signature)	Date/Time	Received for Laboratory by: (Signature)

Remarks

Canonie Environmental, 212 Frank West Circle, Suite A, Stockton, CA 95206

№ 13851

PROJ. NO. 88-033-03 | PROJECT NAME Delta Quarrie Landfill

L.P. NO. 7448 | SAMPLERS: (Signature)

Pg 2 of 5

DATE	SAMPLE I.D.	NO. OF CONTAINERS	ANALYSIS: ALKALINITY	GROSS ALPHA + BETA	TOTAL METALS + TOTAL HARDNESS	TCL B/N/A EPA 625	TCL VOL EPA 624	TCL ACID + PCB's EPA 608	CYANIDE						REMARKS
8/14/89	RW - 3A	1	X								8931	4SA			Liter plastic
	RW - 3B	1			X							B			500 ml plastic w/HNO3 fixed
	RW - 3C	1			X							C			500 ml plastic w/HNO3
	RW - 3D	1							X			D			Glass Liter w/NaOH
	RW - 3E	3				X					E	F	G		Glass Liters
	RW - 3F	3					X				H	I	J		40 ml vials
	RW - 3G	3						X			K	L	M		Glass Liters
8/14/89	RW 4A		X												~~[illegible]~~
	RW 4B														
	RW 4C														
	RW 4D							X							
	RW - 4E					X									
	RW - 4F						X								
	RW 4G							X							

BR302674

Relinquished by: (Signature)	Date/Time	Received by: (Signature)
Relinquished by: (Signature)	Date/Time	Received by: (Signature)
Relinquished by (Signature)	Date/Time 8/15/89 9:00	Received for Laboratory by. (Signature) Marie Sobernick

Remarks: Custody Seal intact

Canonie Environmental, 212 Frank West Circle, Suite A, Stockton, CA 95206

№ 13879

PROJ NO.	PROJECT NAME
88-033-03	Delta Quarries Landfill
L.P. NO	SAMPLERS. (Signature) Kirsten J. Underwood

DATE	SAMPLE I.D.	NO. OF CONTAINERS	Alkalinity	Filtered TAL Metals + Tot Hard.	TAL Metals + Tot Hard.	Cyanide	TCL B/N/A EPA 625	TCL VO EPA 624	TCL OCP's + PCB's						REMARKS
8/14/89	RW-3A thru G	13	✓	→											

AR302675

Relinquished by: (Signature)	Date/Time	Received by: (Signature)
Kirsten J. Underwood	8/14/89 15:15	
Relinquished by: (Signature)	Date/Time	Received by: (Signature)
Relinquished by: (Signature)	Date/Time	Received for Laboratory by: (Signature)

Remarks

Canonie Environmental, 212 Frank West Circle, Suite A, Stockton, CA 95206

№ 19948

PROJ. NO	PROJECT NAME															
88-033-05	Delta Quarries															
L.P. NO.	SAMPLERS: (Signature) Kristin J. Underwood															
DATE	SAMPLE I.D.	NO. OF CONTAINERS	ANALYSIS: Alkalinity	TAL Filtered Metals	TAL Total Metals	Cyanide	TCL B/N/A EPA 625	TCL VO EPA 624	TCL OCP's + PCB's EPA 608							REMARKS
8/14/89	RW-4A thru 5	13	✓	✓	✓	✓	✓	✓	✓							

R3026776

Relinquished by: (Signature)	Date/Time	Received by: (Signature)
Kristin J. Underwood	8/14/89 18:20	
Relinquished by: (Signature)	Date/Time	Received by: (Signature)
Relinquished by: (Signature)	Date/Time	Received for Laboratory by: (Signature)

Remarks

Canonie Environmental, 212 Frank West Circle, Suite A, Stockton, CA 95206

№ 13672

PROJ. NO: 88-033-03

PROJECT NAME: Delta Quarrie

L.P. NO: 7448

SAMPLERS. (Signature)

Pg 3 of 5

DATE	SAMPLE I.D.	NO. OF CONTAINERS	ALKALINITY	GROSS ALPHA + BETA	TOTAL METALS + TOTAL HARDNESS	TCL B/N/A EPA 625	TCL VOL ORS EPA 624	TCL OCPs + PCBs EPA 608	CYANIDE					REMARKS
8/14/89	RW 5A-	1	X							843166	A			Liter plastic
	RW-5B	1		X							B			500 ml plastic w/HNO3 filtered
	RW-5C	1		X							C			500 ml plastic w/HNO3
	RW-5D	1						X			D			Glass liter w/NaOH
	RW-5E	3			X						E	F	G	Glass liters
	RW-5F	3				X					H	I	J	40 ml vials
	RW-5G	3					X				K	L	M	Glass liters
8/14/89	RW 6A	1	X							843167	A			Plastic liter
	RW 6B	1		X							B			500 ml plastic w/HNO3
	RW 6C	1		X							C			500 ml plastic w/HNO3
	RW 6D	1						X			D			Glass liter w/NaOH
	RW-6E	3			X						E	F	G	Glass liter
	RW-6F	3				X					H	I	J	40 ml vials
	RW-6G	3					X				K	L	M	Glass liters

AR302677

Relinquished by: (Signature)	Date/Time	Received by: (Signature)
Relinquished by: (Signature)	Date/Time	Received by (Signature)
Relinquished by (Signature)	Date/Time 8/15/89 9:00	Received for Laboratory by. (Signature) Marie Schenleck

Remarks: Custody Seal intact

Canonie Environmental, 212 Frank West Circle, Suite A, Stockton, CA 95206

№ 19680

PROJ. NO.	PROJECT NAME		NO. OF CONTAINERS	ANALYSIS: Alkalinity	TPAL Filtered	TPAL Metals + Total Hardness	Cyanide	TCL B/N/A EPA 625	TCL VO EPA 624	TCL OCP's + PCB's, Ether					REMARKS
88 03303	Delta Quarries														
L.P. NO.	SAMPLERS: (Signature) Kristin J Underwood														
DATE	SAMPLE I.D.														
8/14/89	RW-5A thru G		13	✓											

AR302678

Relinquished by: (Signature)	Date/Time	Received by: (Signature)
Kristin J Underwood	8/14/89 15:55 HLW	
Relinquished by: (Signature)	Date/Time	Received by: (Signature)
Relinquished by: (Signature)	Date/Time	Received for Laboratory by: (Signature)

Remarks

Canonie Environmental, 212 Frank West Circle, Suite A, Stockton, CA 95206

№ 13949

PROJ NO.	PROJECT NAME	NO. OF CONTAINERS	Alkalinity	TAL Filtered Metals + Tot Hardn.	TAL Metals + Tot Hardn.	Cyanide	TCL B/N/A EPA 625	TCL VO EPA 624	TCL OCP's + PCB's EPA 608	REMARKS
88 [illegible] 03	Delta Quarries									
L.P. NO.	SAMPLERS: (Signature) Kristen L Underwood									
DATE	SAMPLE I.D.									
8/14/89	RW-6A thru 6G	13	✓	→	→	→	→	→	→	All sample container labels have "15:30" - incorrectly labelled - should be 16:10 KLU

Relinquished by: (Signature)	Date/Time	Received by: (Signature)
Kristen L Underwood	8/14/89 16:30	
Relinquished by: (Signature)	Date/Time	Received by: (Signature)
Relinquished by: (Signature)	Date/Time	Received for Laboratory by: (Signature)

Remarks

Canonie Environmental, 212 Frank West Circle, Suite A, Stockton, CA 95206

AR302679

№ [illegible]350

PROJ NO. 88-033-C3 | PROJECT NAME: Delta Quarries

L.P. NO. 7448 | SAMPLERS: (Signature)

Pg 4 of 5

DATE	SAMPLE I.D.	NO. OF CONTAINERS	ALKALINITY	GROSS ALPHA + BETA	TAL METALS + TOTAL HARDNESS	TCL B/N/A EPA625	TCL VOL OPS EPA624	TCL OCPS + PCBS EPA608	CYANIDE					REMARKS
8/14/89	RW-7A	1	X								843	1608	A	Liter plastic
	RW-7B	1		X									B	500 ml plastic w/HNO3 filtered
	RW-7C	1		X									C	500 ml plastic w/HNO3
	RW-7D	1						X					D	Glass Liter w/NaOH
	RW-7E	3			X						E	F	G	Glass Liters
	RW-7F	3				X					H	I	J	40 ml vials on ice air Bubble
	RW-7G	3					X				K	L	M	Glass Liters
8/14/89	RW 8A	1	X								843	1608	A	Liter plastic
	RW 8B	1		X									B	500 ml plastic w/HNO3
	RW-8C	2		X								C	D	500 ml plastic w/HNO3
	RW-8D	1						X					E	Glass Liter w/NaOH
	RW-8E	3			X							F	G H	Glass Liter
	RW-8F	3				X						I	J K	40 ml vials
	RW-8G	3					X					L	M N	Glass Liter

AR302680

Relinquished by (Signature)	Date/Time	Received by: (Signature)
Relinquished by: (Signature)	Date/Time	Received by: (Signature)
Relinquished by: (Signature)	Date/Time 8/15/89 9:00	Received for Laboratory by: (Signature) Marie Edwards

Remarks: Custody seal intact

Canonie Environmental, 212 Frank West Circle, Suite A, Stockton, CA 95206

№ 13881

PROJ. NO.	SUBJECT NAME	NO. OF CONTAINERS	ANALYSIS: Alkalinity	TRL Filtered Metals + Turb	TRL Total Metals	Cyanide	TCL BNA EPA 625	TCL VO EPA 624	TCL OCP's + PCB's EPA 608					REMARKS
88-033-03	Delta Quarries													
L.P. NO.	SAMPLERS: (Signature) Kristen J. Underwood													
DATE	SAMPLE I.D.													
8/14	RW-7A thru G	13	✓	✓	✓	✓	✓	✓	✓					

AR302681

Relinquished by: (Signature)	Date/Time	Received by: (Signature)
Kristen J. Underwood	8/14/89 17:05	
Relinquished by (Signature)	Date/Time	Received by: (Signature)
Relinquished by (Signature)	Date/Time	Received for Laboratory by: (Signature)

Remarks

Canonie Environmental, 212 Frank West Circle, Suite A, Stockton, CA 95206

№ 13678

PROJ. NO. 88-033-03

PROJECT NAME: Delta Quarries

L.P. NO.

SAMPLERS: (Signature) Kirby Young

DATE	SAMPLE I.D.	NO. OF CONTAINERS	Alkalinity	TAL Filtered Mic	TAL Tot Metals & Tot Hg	Cyanide	TCL B/N/A EPA 625	TCL VO EPA 624	TCL OCP's + PCB's EPA 608						REMARKS
8/14/89	RW-8A thru G	13	✓	→	→	→	→	→							

AR302982

Relinquished by: (Signature)	Date/Time	Received by: (Signature)
Kirby Young	8/14/89 18:00	
Relinquished by: (Signature)	Date/Time	Received by: (Signature)
Relinquished by: (Signature)	Date/Time	Received for Laboratory by: (Signature)

Remarks

Canonie Environmental, 212 Frank West Circle, Suite A, Stockton, CA 95206

№ 13671

PROJ NO: 88-033-03
PROJECT NAME: Delta Quarry
L.P. NO: 7448
SAMPLERS (Signature):

Pg 5 of 5

DATE	SAMPLE I.D.	NO. OF CONTAINERS	ALKALINITY	GROSS ALPHA+Beta	TOTAL METALS + TOTAL HARDNESS	TCL 8/8/A EPA 624	TCL VOL GRS	TCL SEMI VOL GRS EPA 625	CYANIDE				REMARKS
8/14	RW-9A	1	X							843101	A		plastic liter
	RW-9B	1		X							B		500 ml plastic w/HNO3 filtered
	RW-9C			X							C		missing.
	RW-9D	1						X			D		Glass liter w/NaOH
	RW-9E	3			X						E F	G	Glass liter
	RW-9F	3				X					H I	J	40 ml vials
	RW-9G	3					X				K L	M	Glass liter
8/14	Trip Blank A	1	X							843101	A		Liter plastic
	Trip Blank B	1		X							B		500 ml plastic w/HNO3 filtered
	Trip Blank C	1		X							C		500 ml plastic w/HNO3 1
	Travel Blank E	3			X						D E F		Glass liters
	Trip Blank F	2				X					G H		40 ml vials one broken
	Travel Blank G	3					X				I J K		Glass liters
	Trip Blank D	2						X			L M		Glass liters w/NaOH

AR302583

Relinquished by: (Signature)	Date/Time	Received by: (Signature)
Relinquished by: (Signature)	Date/Time	Received by: (Signature)
Relinquished by (Signature)	Date/Time 8/15/89 9:00	Received for Laboratory by: (Signature) Marie Schenlach

Remarks: Custody Seal intact

Canonie Environmental, 212 Frank West Circle, Suite A, Stockton, CA 95206

№ 13884

PROJ. NO.	PROJECT NAME
88-033-03	Delta Quarries
L.P. NO.	SAMPLERS: (Signature) Kristen J Underwood

DATE	SAMPLE I.D.	NO. OF CONTAINERS	Alkalinity	TAL Filtered Mu.	TAL Tot Metals + Total	Cyanide	TCL B/N/A EPA 625	TCL VO EPA 624	TCL OCP's + PCB's EPA 608					REMARKS
8/14/89	RW-9A thru G	13	↓	→	→	→	→	→						

AR302684

Relinquished by: (Signature)	Date/Time	Received by: (Signature)
Kristen J Underwood	8/14/89 17:	
Relinquished by: (Signature)	Date/Time	Received by: (Signature)
Relinquished by: (Signature)	Date/Time	Received for Laboratory by: (Signature)

Remarks

Canonie Environmental, 212 Frank West Circle, Suite A, Stockton, CA 95206

№ 13669

PROJ NO: 88-03-03

PROJECT NAME: Delta Quarries

L.P NO: 7458

SAMPLERS: (Signature)

Water PS 1645

DATE	SAMPLE I.D.	NO. OF CONTAINERS	ALKALINITY	TAL FILTERED MET	TAL TOT METALS	CYANIDE	TCL BNA EPA	TCL VO EPA624	TCL OCPST EPA8	GROSS ALPHA BETA				REMARKS
8/5/89	RW 10 A-	1	X								893001		A	Liter plastic
	RW 10-B	1		X									B	500 ml plastic w/HNO3 filtered
	RW 10-C	1			X								C	500 ml plastic w/HNO3
	RW 10-D	1				X							D	Glass liter w/NaOH
	RW 10-E	3					X					E F	G	Glass liter
	RW 10-F	3						X				H I	J	40 ml vials 2 glass bottles
	RW 10-G	3							X			K L	M	Glass liters
✓	RW 10-H	1								X			N	500 ml plastic w/HNO3
8/5/89	RW-11 A	1	X								893001		A	Liter plastic
	RW 11-B	1		X									B	500 ml plastic w/HNO3 filtered
	RW 11-C	1			X								C	500 ml plastic w/HNO3
	RW 11-D	1				X							D	Glass liter w/NaOH
	RW 11-E	3					X					E F	G	Glass liter
	RW 11-F	3						X				H I	J	40 ml vials
	RW 11-G	3							X			K L	M	Glass liters
✓	RW 11-H	1								X			N	500 ml plastic w/HNO3

Relinquished by: (Signature)	Date/Time	Received by: (Signature)
Relinquished by: (Signature)	Date/Time	Received by: (Signature)
Relinquished by: (Signature)	Date/Time 8/6/89 1:00	Received for Laboratory by: (Signature) Marie Schenlock

Remarks: Custody Seal intact

Canonie Environmental, 212 Frank West Circle, Suite A, Stockton, CA 95206

HP 92685

No 1[illegible]86

DELTA ANCHOR BUSINESS FORMS ... 1-0951 Form No. 0001

PROJ. NO.	PROJECT NAME	NO. OF CONTAINERS	ANALYSIS: Alkalinity	TAL Filtered Metals	TAL Tot Metals	Cyanide Tot. Hard	TCL B/N/A EPA 625	TCL VO EPA 624	TCL OCPs + PCBs EPA 608	Gross Alpha + Beta	REMARKS
88-033-03	Delta Quarries										
L.P. NO.	SAMPLERS: (Signature) Kristen Underwood										
DATE	SAMPLE I.D.	KLU									
KLU 8/15/89	RW-10A thru ~~B~~ KLU H	14 ~~13~~	✓	→	→	→	→	→	→	→	

AR302686

Relinquished by: (Signature)	Date/Time	Received by: (Signature)
Kristen L Underwood	8/15/89 09:35	
Relinquished by: (Signature)	Date/Time	Received by: (Signature)
Relinquished by: (Signature)	Date/Time	Received for Laboratory by: (Signature)

Remarks

DELTA ANCHOR BUSINESS FORMS (2' '-0051 Form No 0001

PROJ. NO.	PROJECT NAME																		
88-033-03	Delta Quarries																		
L.P. NO.	SAMPLERS: (Signature) Kristen J. Underwood																		
DATE	SAMPLE I.D.	NO. OF CONTAINERS	ANALYSIS: Alkalinity	TAL Filtered Metals	TAL Tot Metals + Tot. Hard.	Cyanide	TCL B/N/A Ext.	TCL VO EPA 624	TCL ACP's + PCBs EPA 608	Gross Alpha + Beta	EPA 625								REMARKS
8/15/89	RW-11A thru ~~G~~ H KLU	13	✓	✓	✓	✓	✓	✓	✓	✓									

AR302687

Relinquished by: (Signature)	Date/Time	Received by: (Signature)
Kristen J. Underwood	8/15/89 10:20	
Relinquished by: (Signature)	Date/Time	Received by: (Signature)
Relinquished by:	Date/Time	Received for Laboratory by: (Signature)

Remarks

PROJ. NO. 88-033 | PROJECT NAME: Delta Quarries

L.P. NO. 17458 | SAMPLERS: (Signature)

PG 2 of 5

DATE	SAMPLE I.D.	NO. OF CONTAINERS	ALKALINITY	TAL FILTERED METALS	TCT METALS	CYANIDE	TCL BNA EPA 625	TCL VOA EPA 624	TCL CCPS EPA 608	GROSS ALPHA			REMARKS
8-15-89	RW-12A	1	X								8-15-89	A	Liter Plastic
	RW-12B	1		X								B	500 ml plastic
	RW-12C	1			X							C	500 ml plastic w/HNO3
	RW-12D	1				X						D	Glass Liter w/NaOH
	RW-12E	3					X					E F G	Glass Liter
	RW-12F	3						X				H I J	40 ml vials
	RW-12G	2							X			K L	Glass Liter ONE Broken
	RW-12-H	1								X		M	500 ml plastic w/HNO3
8-15-89	RW-13A	1	X								8-15-89	A	Plastic Liter
	RW-13B	1		X								B	500 ml plastic w/HNO3
	RW-13C	1			X							C	500 ml plastic w/HNO3
	RW-13D	1				X						D	Glass Liter w/NaOH
	RW-13E	3					X					E F G	Glass Liter
	RW-13F	3						X				H I J	40 ml vials
	RW-13G	3							X			K L	Glass Liter
	RW-13H	1								X		M	500 ml plastic w/HNO3

BR30268 8

Relinquished by: (Signature)	Date/Time	Received by: (Signature)
Relinquished by: (Signature)	Date/Time	Received by: (Signature)
Relinquished by: (Signature)	Date/Time 8/16/89 9:00	Received for Laboratory by: (Signature) Marie Alderlect

Remarks: Custody Seal intact

Canonie Environmental, 212 Frank West Circle, Suite A, Stockton, CA 95206

№ 13889

PROJ NO.	PROJECT NAME	NO. OF CONTAINERS	ANALYSIS: Alkalinity	TAL Filtered Metals	TAL Tot Metals & Tot Hard.	Cyanide	TCL BN/A EPA 625	TCL VO EPA 624	TCL OCP's + PCB's EPA 608	Gross Alpha + Beta	REMARKS
L.P NO.	SAMPLERS: (Signature) Kristen J Underwood										
DATE	SAMPLE I.D.										
8/15/89	RW-12 A thru H	14	✓	✓	✓	✓	✓	✓	✓	✓	

Relinquished by: (Signature)	Date/Time	Received by: (Signature)
Kristen J Underwood	8/15/89 11:15	
Relinquished by: (Signature)	Date/Time	Received by: (Signature)
Relinquished by (Signature)	Date/Time	Received for Laboratory by: (Signature)

Remarks

Canonie Environmental, 212 Frank West Circle, Suite A, Stockton, CA 95206

№ 13975

AR302009

DELTA ANCHOR BUSINESS FORMS / 941-0951 Form No. 0001

PROJ. NO.	PROJECT NAME	NO. OF CONTAINERS	ANALYSIS: Alkalinity	TAL Filtered Metals	TAL Tot Metals + Tot Hard	Cyanide	TCL B/N/A EPA 625	TCL VO EPA 624	TCL OCP's + PCB's	Gross Alpha + Beta	REMARKS
88 0?-03	Delta Quarries										
L.P. NO.	SAMPLERS: (Signature) Kristin J Underwood										
DATE	SAMPLE I.D.										
8/15/89	RW-13 A1 thru H	14	✓	→	→	→	→	→	→	→	

Relinquished by: (Signature)	Date/Time	Received by: (Signature)
Kristin J. Underwood	8/15/89 11:20	
Relinquished by: (Signature)	Date/Time	Received by: (Signature)
Relinquished by: (Signature)	Date/Time	Received for Laboratory by: (Signature)

Remarks

AR302690

PROJ NO. 88-033-03

PROJECT NAME: Delta Quarries

L.P. NO. 7458

SAMPLERS: (Signature)

NO 3045

DATE	SAMPLE I.D.	NO. OF CONTAINERS	ALKALINITY	THL FILTERED	THL TOT METALS	CYANIDE TOT (HHG)	TCL BN/A EPA 625	TCL VO EPA 624	TCL CCPS + PBS & EPA 8	GROSS ALPHA RADIO			REMARKS
8-15-89	RW-14A	1	X								8035	A	500 ml plastic
	RW-14B	1		X								B	500 ml plastic w/ HNO3
	RW-14C	1			X							C	500 ml plastic w/HNO3
	RW-14D	1				X						D	Glass Liter w/NaOH
	RW-14E	3					X				E	F G	Glass Liter
	RW-14F	3						X			H	I J	40 ml vials
	RW-14G	3							X		K	L M	Glass Liters
	RW-14H	1								X		N	500 ml plastic w/HNO3
8-15-89	RW-15A	1	X								8035	A	Liter plastic
	RW-15B	1		X								B	500 ml plastic w/HNO3
	RW-15C	1			X							C	500 ml plastic w/HNO3
	RW-15D	1				X						D	Glass Liter w/NaOH
	RW-15E	3					X				E	F G	Glass Liters
	RW-15F	3						X			H	I J	40 ml vials
	RW-15G	3							X		K	L M	Glass Liters
	RW-15-H	1								X		N	500 ml plastic w/HNO3

HR 0269

Relinquished by: (Signature)	Date/Time	Received by: (Signature)
Relinquished by: (Signature)	Date/Time	Received by: (Signature)
Relinquished by: (Signature)	Date/Time 8/16/89 1:00	Received for Laboratory by: (Signature) Dave Schwerdt

Remarks

Kristy Deal contact

Canonie Environmental, 212 Frank West Circle, Suite A, Stockton, CA 95206

No 1290

PROJ. NO.	PROJECT NAME	NO. OF CON-TAINERS	ANALYSIS: Alkalinity	TAL Filtered Metals	TAL Tot Metals Erd Tot Hard	Cyanide	TCL B/N/A EPA 625	TCL VO EPA 624	TCL OCPS + PCB's EPA 608	Gross Alpha + Beta	REMARKS
88-033-03	Delta Quarries										
L.P. NO.	SAMPLERS: (Signature) Kristen J. Underwood										
DATE	SAMPLE I.D.										
8/15/89	RW-14 A thru H	14	✓	✓	✓	✓	✓	✓	✓	✓	

Relinquished by: (Signature)	Date/Time	Received by: (Signature)
Kristen J. Underwood	8/15/89 12:10	
Relinquished by: (Signature)	Date/Time	Received by: (Signature)
Relinquished by: (Signature)	Date/Time	Received for Laboratory by: (Signature)

Remarks

AR302692

DELTA ANCHOR BUSINESS FORMS (20° 1-0951 Form No 0001

PROJ. NO.	PROJECT NAME	NO. OF CONTAINERS	ANALYSIS: Alkalinity	TAL Filtered Metals	TAL Total Metals Tot Hard	Cyanide	TCL B/N/A EPA 625	TCL VO EPA 624	TCL OCP's + PCB's EPA 608	Gross Alpha + Beta	REMARKS
88-033-03	Delta Quarries										
L.P. NO.	SAMPLERS: (Signature) Kirsten J. Underwood										
DATE	SAMPLE I.D										
8/15/89	RW-15 A thru H	14	✓	✓	✓	✓	✓	✓	✓	✓	

BR302693

Relinquished by: (Signature)	Date/Time	Received by: (Signature)
Kirsten J. Underwood	8/15/89 12:40	
Relinquished by: (Signature)	Date/Time	Received by: (Signature)
Relinquished by: (Signature)	Date/Time	Received for Laboratory by: (Signature)

Remarks

PROJ NO. 88-0303-03 | PROJECT NAME Delta Quarries

L.P. NO. 7458 | SAMPLERS: (Signature)

18 4 of 5

DATE	SAMPLE I.D.	NO. OF CONTAINERS	Alkalinity	TAL	TAL Filtered Metals	TCL Total Metals	Cyanide	TCL	BNA	TCL VO EPA 624	TCL OC Pesticides EPA 608	Gross Alpha Beta		REMARKS
8-15-89	RW-16A	1	X										842-200 A	Liter plastic
	RW-16B	1		X									B	500 ml plastic w/HNO3
	RW-16C	1			X								C	500 ml plastic w/HNO3
	RW-16D	1				X							D	Glass liter w/seal
	RW-16E	3					X						E F G	Glass liters
	RW-16F	3						X					H I J	4 ml vials w/ca Bottles
	RW-16G	3							X				K L M	Glass liters
✓	RW-16H	1								X			N	500 ml plastic w/HNO3
8-15-89	RW-17A	1	X										842-200 A	Liter plastic
	RW-17B	1		X									B	500 ml plastic w/HNO3
	RW-17C	1			X								C	500 ml plastic w/HNO3
	RW-17D	1				X							D	Broken Bottle
	RW-17E	3					X						D E F	Glass liters
	RW-17F	3						X					G H I	4 ml vials
	RW-17G	3							X				J K L	Glass liters
✓	RW-17H	1								X			M	500 ml plastic w/HNO3

BR30291

Relinquished by: (Signature)	Date/Time	Received by: (Signature)
Relinquished by: (Signature)	Date/Time	Received by: (Signature)
Relinquished by: (Signature)	Date/Time 8/16/89 9:00	Received for Laboratory by: (Signature) [illegible]

Remarks: Sensitive Dod contact

Canonie Environmental, 212 Frank West Circle, Suite A, Stockton, CA 95206

№ 13891

DELTA ANCHOR BUSINESS FORMS (2 1-0951 Form No 0001

PROJ. NO.	PROJECT NAME	NO. OF CONTAINERS	ANALYSIS: Alkalinity	TAL Filtered Metals	TAL Tot Metals + Tot Hard	Cyanide	TCL B/N/A EPA 625	TCL VO EPA 624	TCL OCP's + PCB's EPA 608	Gross Alpha + Beta	REMARKS
88-033-03	Delta Quarries										
L.P. NO.	SAMPLERS. (Signature) Kristen L Underwood										
DATE	SAMPLE I.D.										
8/15/89	RW-16 A thru H	14	✓	→	→	→	→	→	→	→	

AR302695

Relinquished by (Signature)	Date/Time	Received by: (Signature)
Kristen L Underwood	8/15/89 14.40	
Relinquished by: (Signature)	Date/Time	Received by: (Signature)
Relinquished by (Signature)	Date/Time	Received for Laboratory by: (Signature)

Remarks

PROJ. NO. 88-03[illegible] | PROJECT NAME: Delta Quarries

L.P. NO.

SAMPLERS: (Signature) Kristen J. Underwood

DATE	SAMPLE I.D.	NO. OF CONTAINERS	Alkalinity	TAL Filtered Metals	TAL Tot Metals + Tot Hardness	Cyanide	TCL BNA EPA 625	TCL VO EPA 624	TCL OCPs + PCBs EPA 608	Gross Alpha + Beta	REMARKS
8/15/89	RW-17A thru H	14									

Relinquished by: (Signature) Kristen J. Underwood — Date/Time 8/15/89 15:20 — Received by: (Signature) kv

Relinquished by: (Signature) — Date/Time — Received by: (Signature)

Relinquished by: (Signature) — Date/Time — Received for Laboratory by: (Signature)

Remarks

Canonie Environmental, 212 Frank West Circle, Suite A, Stockton, CA 95206

№ 13663

RETURN THIS COPY TO [illegible]

H3026998

PROJ NO: 88C33-C

PROJECT NAME: Della Quarries

L.P. NO: 7458

SAMPLERS: (Signature)

PAGE 5 OF 5

DATE	SAMPLE I.D.	NO. OF CONTAINERS	ANALYSIS: Vol Halogenated	TPH Purgeable	TPH Extractable	TCL Volatiles	TCL Semivolatiles	TCL Pesticides/PCBs	TCL Metals	CRCS, Reactivity, Ignitability, Corrosivity			REMARKS
8-15-89	RW-18A	1	X								8/22/89	A	Plastic liter
	RW-18B	1		X								B	500 ml plastic w/HNO3
	RW-18C	1			X							C	500 ml plastic w/HNO3
	RW-18D	1				X						D	Glass liter w/NaOH
	RW-18E	3					X				EFG		Glass liter
	RW-18F	3						X			HIJ		40 ml vials w/HCl
	RW-18G	3							X		KLM		Glass liter
	RW-18H	1								X		N	500 ml plastic w/HNO3
8-15-89	RW-19A	1	X								8/13/89	A	Plastic liter
	RW-19B	1		X								B	500 ml plastic w/HNO3
	RW-19C	1			X							C	500 ml plastic w/HNO3
	RW-19D	1				X						D	Glass liter w/NaOH
	RW-19E	3					X				EFG		Glass liter
	RW-19F	3						X			HIJ		40 ml vials
	RW-19G	3							X		KLM		Glass liter
	RW-19H	1								X		N	500 ml plastic w/HNO3

AR302697

Relinquished by: (Signature)	Date/Time	Received by: (Signature)
Relinquished by: (Signature)	Date/Time	Received by: (Signature)
Relinquished by: (Signature)	Date/Time 8/15/89 9:00	Received for Laboratory by: (Signature) Marie Holcomb

Remarks: Duplicate was infant

Canonie Environmental, 212 Frank West Circle, Suite A, Stockton, CA 95206

№ 392

DELTA ANCHOR BUSINESS FORMS 1-0951 Form No 0001

PROJ. NO.	PROJECT NAME	NO. OF CONTAINERS	ANALYSIS: Alkalinity	TAL Filtered Metals	TAL Tot Metals + Tot Hard	Cyanide	TCL BN/A EPA 625	TCL VO EPA 624	TCL OCP's + PCB's EPA 608	Gross Alpha + Beta					REMARKS
88-033-03	Delta Quarries														
L.P. NO.	SAMPLERS: (Signature) Kristen J. Underwood														
DATE	SAMPLE I.D.														
8/15	RW-18 A thru H	14	✓	✓	✓	✓	✓	✓	✓	✓					

AR302688

Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Remarks
Kristen J. Underwood	8/15/89		
Relinquished by: (Signature)	Date/Time	Received by: (Signature)	
Relinquished by: (Signature)	Date/Time	Received for Laboratory by: (Signature)	

PROJ. NO.	PROJECT NAME	NO. OF CONTAINERS	ANALYSIS: Alkalinity	TAL Filtered Metals	TAL Tot Metals + Tot Hard	Cyanide	TCL B/N/A EPA 625	TCL V/O EPA 624	TCL OCP's + PCB's EPA 608	Gross Alpha + Beta				REMARKS
88-033-03	Delta Quarries													
L.P. NO.	SAMPLERS: (Signature) Kristen J Underwood													
DATE	SAMPLE I.D.													
8/15/89	RW-19A thru H (Field Blank)	14	✓	→	→	→	→	→	→	→				

Relinquished by: (Signature)	Date/Time	Received by: (Signature)
Kristen J Underwood	8/15/89 16:35	
Relinquished by: (Signature)	Date/Time	Received by: (Signature)
Relinquished by: (Signature)	Date/Time	Received for Laboratory by: (Signature)

Remarks

AR302699

PROJ. NO. 88-0132-

PROJECT NAME: Delta Chemical

L.P. NO. 71467

SAMPLERS: (Signature)

Pg 2 of 2

DATE	SAMPLE I.D.		NO. OF CONTAINERS	ALKALINITY	THC FILTERED	THC TOT TC	CYANIDE	TCL BTEX	TCL VOC	TCL SVOC					REMARKS
8/16/89	MW 3-A	843251 A	1	X											water
	MW 3-B	B	1		X										Plastic liter
	MW 3-C	C	1			X									500 ml plastic/HNO3
	MW 3-D	D	1				X								500 ml plastic/HNO3
	MW 3-E	E, F, G	3					X							glass liter/NaOH
	MW 3-F	H, I, J	3						X						glass liter
	MW 3-G	K, L, M	3							X					40ml vials
	MW 3-H	N	1								X				glass liter
															500 ml plastic

Relinquished by: (Signature)	Date/Time	Received by: (Signature)
Relinquished by: (Signature)	Date/Time	Received by: (Signature)
Relinquished by: (Signature)	Date/Time 8/18/89 9:20	Received for Laboratory by: (Signature)

Remarks: Custody Seal intact

Canonie Environmental, 212 Frank West Circle, Suite A, Stockton, CA 95206

№ 13913

AR302700

PROJ. NO.	PROJECT NAME		NO. OF CONTAINERS	Alkalinity	TAL Filtered Metals	TAL Tot Metals	Cyanide	TCL B/N/A EPA 625	TCL VO EPA 624	TCL OCP's + PCB's	Gross Alpha + Beta				REMARKS
58-033-03	Delta Quarries														
L.P. NO.	SAMPLERS: (Signature)														
DATE	SAMPLE I.D.														
8/12	MW-3A → H		14	✓	—	—	—	—	—	—	✓				

Relinquished by: (Signature)	Date/Time	Received by: (Signature)
[signature]	8/12 7:49	
Relinquished by: (Signature)	Date/Time	Received by: (Signature)
Relinquished by: (Signature)	Date/Time	Received for Laboratory by: (Signature)

Remarks

Canonie Environmental, 212 Frank West Circle, Suite A, Stockton, CA 95206

AR302701

№ 854

PROJ. NO. 88-033-C

PROJECT NAME: Delta Quarries

L.P. NO. 7467

SAMPLERS: (Signature)

84-3249 A

25/N

DATE	SAMPLE I.D.		NO. OF CONTAINERS	ALKALINITY	TAL FILTERED	THI TOTAL	CYANIDE	TCL	TCL VOA	TCL VOA EPA	TCL SEMI-VOLS	GLASS HYDROCARBON				REMARKS
8/16/89	MW-1 A	84-3249 A	1	X												Water
	MW-1 B	B	1		X											liter plastic
	MW-1 C	C	1			X										500ml plastic / HNO_3
	MW-1 D	D	1				X									" " / HNO_3
	MW-1 E	E,F,G	3					X								glass liter / NaOH
	MW-1 F	H,I,J	3						X							" "
	MW-1 G	K,L,M	3							X						40ml vials
	MW-1 H	N	1								X					glass liter
																500ml plastic / HNO_3
	MW-2 A	84-3250 A	1	X												
	MW-2 B	B	1		X											Plastic liter
	MW-2 C	C	1			X										500ml plastic / HNO_3
	MW-2 D	D	1				X									500ml plastic / HNO_3
	MW-2 E	E,F,G	3					X								liter glass / NaOH
	MW-2 F	H,I,J	3						X							liter glass
	MW-2 G	K,L,M	3							X						40ml vials
	MW-2 H	N	1								X					glass liter
																500ml plastic

Relinquished by: (Signature)	Date/Time	Received by: (Signature)
Relinquished by: (Signature)	Date/Time	Received by: (Signature)
Relinquished by: (Signature)	Date/Time	Received for Laboratory by: (Signature)
	8/18/89 9:00	

Remarks: Quarry Dust Extract

Canonie Environmental, 212 Frank West Circle, Suite A, Stockton, CA 95206

№ 13912

PROJ. NO.	PROJECT NAME	NO. OF CONTAINERS	ANALYSIS: Alkalinity	TAL Filtered metals	TAL Total metals	Cyanide	TCL BNA EPA 625	TCL VO EPA 624	TCL OCP's + PCB's EPA 608	Gross Alpha & beta	REMARKS
88-033-03	Delta Quarries										
L.P. NO.	SAMPLERS: (Signature)										
DATE	SAMPLE I.D.										
8-16	MW4 A → H	14	✓	→	→	→	→	→	→	→	

Relinquished by: (Signature)	Date/Time	Received by: (Signature)
[signature]	8/17 7 45	
Relinquished by: (Signature)	Date/Time	Received by: (Signature)
Relinquished by: (Signature)	Date/Time	Received for Laboratory by: (Signature)

Remarks

Canonie Environmental, 212 Frank West Circle, Suite A, Stockton, CA 95206

No 13934

AR302103

PROJ. NO. 88-033-03

PROJECT NAME

L.P. NO.

SAMPLERS: (Signature)

DATE	SAMPLE I.D.	NO. OF CONTAINERS	Alkalinity	TAL Filtered Metals + Tot Hg	TAL Tot Metals + Cyanide	TCL B/N/A EPA 625	TCL VO EPA 624	TCL OCP's + PCB's EPA 608	Gross Alpha + Beta					REMARKS
8/16	MW#2 1 → 4	14	✓					✓						

Relinquished by: (Signature) — Date/Time 8/17 7:45 — Received by: (Signature)

Relinquished by: (Signature) — Date/Time — Received by: (Signature)

Relinquished by: (Signature) — Date/Time — Received for Laboratory by: (Signature)

Remarks

Canonie Environmental, 212 Frank West Circle, Suite A, Stockton, CA 95206

AR302704

№ 13666