UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION III
OFFICE OF ANALYTICAL SERVICES AND QUALITY ASSURANCE
201 DEFENSE HIGHWAY
SUITE 200
ANNAPOLIS, MARYLAND 21401

MAY 31 1996

114281

DATE : May 21, 1996

SUBJECT: Region III Data QA Review

FROM : Cynthia E. Caporale, Caporale
Region III ESAT RPO (3EP20)

TO : Chris Corbett
Regional Project Manager (3HW24)

Attached is the inorganic data validation report for the Keystone Sanitation Site (DAS # R3231) completed by the Region III Environmental Services Assistance Team (ESAT) contractor under the direction of Region III ESD.

If you have any questions regarding this review, please call me at (410) 573-2732.

Attachment

cc: Russ Sloboda, Brown & Root Env./Halliburton NUS, Wayne, Pa.

WA File: 0396004 TDF: 427

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ENVIRONMENTAL SYSTEMS & TECHNOLOGIES

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DATE: May 17, 1996

SUBJECT: Inorganic Data Validation (IM2 Level)
DAS: R3231
Site: Keystone Sanitation

FROM: Kenneth W. Curry KWC — Inorganic Data Reviewer
Mahboobeh Mecanic MM — Senior Oversight Chemist

TO: Cynthia E. Caporale
ESAT Regional Project Officer

THROUGH: Dale S. Boshart DSB
ESAT Team Manager

OVERVIEW

The sample set for DAS R3231 consisted of thirty-five (35) aqueous samples analyzed for metals and nine (9) aqueous samples analyzed for chloride by Compuchem Environmental Corporation (COMPU). The samples were analyzed for metals according to the Contract Laboratory Program (CLP) Statement of Work (SOW) ILM03.0 and for chloride in accordance with EPA Method 325.2. Two (2) field duplicate pairs and two (2) aqueous field blanks were included in this sample set. The samples were analyzed through the Delivery of Analytical Services (DAS) program.

SUMMARY

The lead (Pb) analyte Ten Day Chemical Health Advisory Limit of 20 µg/L was exceeded for sample 2310313R46 (Station Number RW-46). The Regional Project Manager (RPM) was notified by facsimile.

All samples were successfully analyzed for all Target Analyte List (TAL) analytes under three (3) Sample Delivery Groups (SDGs). Nine (9) of the samples were analyzed for chloride and the results reported in a separate SDG. Although the Chain of Custody (COC) indicated that all samples were to be analyzed for chloride, no chloride data were included for two (2) SDGs.

The field blanks were used to qualify the positive results for blank contamination in their respective SDGs.

Areas of concern with respect to data usability are listed below.

The data in this case have been impacted by outliers present in laboratory and field blanks, Contract Required Detection Limit (CRDL) standards, matrix spike, analytical spike, and serial dilution analyses. The details of these outliers are discussed under "Minor Problems"; the specific samples affected are outlined on "Table 1A" and the qualified analytical results for all samples are summarized on the Data Summary Forms (DSFs).

MINOR ISSUES

The field (FB), preparation (PB) and continuing calibration (CCB) blanks had reported results greater than the Instrument Detection Limit (IDL) for the analytes listed below. The reported results in the affected samples which are less than five times (< 5x) the blank concentration may be biased high and have been qualified "B".

SDG #	Blank	Affected Analytes
RW02M	FB	aluminum (Al), barium (Ba), iron (Fe), potassium (K), sodium (Na)
	PB	Al, Ba, chromium (Cr), Fe, manganese (Mn), Na
	CCB	beryllium (Be), magnesium (Mg)
RW05M	PB	Al, Cr, Fe, Mn
	CCB	Ba, selenium (Se)
26	FB	antimony (Sb)
	PB	Ba, copper (Cu), Fe, Mn, nickel (Ni), Na, zinc (Zn),
	CCB	Sb, Ba

The recovery of the CRDL standard, which is analyzed to verify linearity near the detection limit, was high for the Pb analyte in all three (3) SDGs and for the selenium (Se) analyte in SDGs RW02M and RW05M. The high recoveries may indicate positive biases for results detected near the detection limit due to an unstable baseline. The reported results for these analytes in the affected samples which are less than 2XCRDL may be biased high and have been qualified "K", unless superseded by the "B" qualifier.

The recovery of the CRDL standard was low for the silver (AG) and Zn analytes in all three (3) SDGs and for the selenium (Se) analyte in SDG 26. The low recoveries may indicate negative biases for results detected near the detection limit due to an unstable

baseline. The reported results for these analytes in the affected samples which are less than 2XCRDL and the quantitation limits may be biased low and have been qualified "L" and "UL", respectively, unless superseded by the "B" qualifier.

The matrix spike recovery was low for the thallium (Tl) analyte in all three (3) SDGs. The quantitation limits and reported results for this analyte may be biased low and have been qualified "UL" and L, respectively.

The analytical spike recovery was low for the thallium (Tl) analyte for all samples, except RW2FB, in all three (3) SDGs. The quantitation limits and reported results for this analyte may be biased low and have been previously qualified "UL" and L, respectively, because of a low matrix spike recovery for this analyte.

The percent difference (%D) for the ICP serial dilution analyses, performed for SDGs RW02M and 26, was outside the control limit for the potassium (K) analyte. The reported results for this analyte in the affected samples are estimated and have been qualified "J", unless superseded by the "B" qualifier.

NOTE

The laboratory used the station numbers as the sample numbers on all forms when identifying the samples in all three (3) SDGs. The station numbers were also used by the validator on the data summary forms (DSFs).

The results for the field duplicate pairs, RW-46/RW46D and RW-60/RW60D, were within the control limits (20% RPD, ± CRDL) except for the Al analyte in the analyses of RW-60/RW-60D. No data were qualified.

Sample RW-13 was incorrectly identified as an additional sample RW-04 on the Form Is and in the analytical run log submitted for this case. All forms were corrected during the validation process.

Several samples in all SDGs were analyzed at a 10X dilution for the thallium analyte to reduce interferences. The Tl quantitation limits for these samples are elevated and are marked on the DSFs with a plus sign (+).

Samples RW-29 and RW-45, in SDG RW05M, were reanalyzed for Tl at a 10X dilution to reduce interferences but were not reported on the Form Is and analytical run log as such. The results from the 10X dilution were reported on the DSFs and the Form Is and the analytical run log was corrected to reflect this change.

The samples were analyzed using the procedures in the ILM03.0 Statement of Work (SOW) instead of SOW ILC01.0 as requested in the DAS request.

The data were reviewed in accordance with the National Functional Guidelines for Evaluating Inorganic Analyses, with modifications for use within Region III and those requested in the DAS.

INFORMATION REGARDING REPORT CONTENT

Table 1A is a summary of qualifiers added to the results from the laboratory during validation.

ATTACHMENTS

TABLE 1A	SUMMARY OF QUALIFIERS ON DATA SUMMARY FORMS AFTER DATA VALIDATION
TABLE 1B	CODES USED IN COMMENTS COLUMN
TABLE 2	GLOSSARY OF DATA QUALIFIER CODES
TABLE 3	DATA SUMMARY FORMS
APPENDIX A	RESULTS REPORTED BY LABORATORY FORM Is
APPENDIX B	SUPPORT DOCUMENTATION

DCN: R3231.IM2

TABLE 1A
SUMMARY OF QUALIFIERS ON DATA SUMMARY FORM AFTER DATA VALIDATION

NALYTE	SDG	SAMPLES AFFECTED	POSITIVE VALUES	NON-DETECTED VALUES	BIAS	COMMENTS*
l	RW02M	All Samples except RW2FB, RW-60	B		High	FB (144µg/L)
		RW2FB	B		High	PB (30.8µg/L)
	RW05M	All Samples	B		High	PB (31.74µg/L)
b	26	RW-01	B		High	FB (2.5µg/L)
		RW26FB	B		High	CCB(2.8µg/L)
a	RW02M	RW-23	B		High	FB (0.57µg/L)
		RW2FB	B		High	PB (0.339µg/L)
	RW05M	RW-45	B		High	CCB(0.60µg/L)
	26	RW-31, RW-48,	B		High	PB (0.795µg/L)
		RW26FB	B		High	CCB(0.3µg/L)
e	RW02M	RW-12, RW-16, RW-23, RW-60, RW-60D, RW2FB	B		High	CCB(0.40µg/L)
r	RW02M	All Samples Except RW-11, RW-13, RW-23, RW-60	B		High	PB (0.971µg/L)
	RW05M	RW-15, RW-30, RW-46, RW-57, RW-59	B		High	PB (1.014µg/L)
u	26	RW-01	B		High	PB (0.848µg/L)
e	RW02M	All Sample Except RW-02, RW2FB	B		High	FB (46.0µg/L)
		RW2FB	B		High	PB (35.5µg/L)

*ee explanation of Comments on Table 1B.

TABLE 1A
SUMMARY OF QUALIFIERS ON DATA SUMMARY FORM AFTER DATA VALIDATION

ANALYTE	SDG	SAMPLES AFFECTED	POSITIVE VALUES	NON-DETECTED VALUES	BIAS	COMMENTS*
Fe	RW05M	RW-05, RW-15, RW-45, RW-57	B		High	PB (13.62µg/L)
	26	All Samples Except RW-01, RW-09, RW26FB	B		High	PB (23.07µg/L)
Pb	RW02M	RW-02, RW-03, RW-13, RW-16, Rw-60D, RW-67	K		High	CRH(112.8%)
	RW05M	RW-05, RW-15 RW-59	K		High	CRH(112.8%)
	26	RW-07, RW-09, RW-10, R[illegible]-26, RW-31, R[illegible]36	K		High	CRH(113.8%,122%)
Mg	RW02M	RW2FB	B		High	CCB(12.4µg/L)
Mn	RW02M	RW-02, RW-03 RW-23, RW2FB	B		High	PB (0.40 [illegible]/L)
	RW05M	RW-05, RW-15	B		High	PB (0.290µg/L)
	26	RW-31	B		High	PB (0.216µg/L)
Ni	26	All Samples Except RW26FB, RW-36	B		High	PB (2.16µg/L)
K	RW02M	All Samples Except RW-02, RW-11, RW-12, RW-60	J			ISD(16.9%)
		RW-02, RW-11, RW-12, RW-60	B		High	FB (103µg/L) ISD(16.9%)
	26	All Samples Except RW26FB	J			ISD(24.8%)

TABLE 1A
SUMMARY OF QUALIFIERS ON DATA SUMMARY FORM AFTER DATA VALIDATION

NALYTE	SDG	SAMPLES AFFECTED	POSITIVE VALUES	NON-DETECTED VALUES	BIAS	COMMENTS*
e	RW02M	RW-23, RW-60, RW-60D, RW-67	K		High	CRH(116.3%,115%)
	RW05M	Rw-29, RW-57	B		High	CCB(3.3µg/L) CRH(116%-115%)
		RW-30	K		High	CRH(116%-115%)
	26	All Samples		UL	Low	CRL(50.2%-87.1%)
g	RW02M	All Samples		UL	Low	CRL(59.3%,60.7%)
	RW05M	All Samples		UL	Low	CRL(59.3%,60.7%)
	26	All Samples		UL	Low	CRL(58.7%,60.4%)
	RW02M	RW-12, RW-13	B		High	FB (951µg/L)
		RW2FB	B		High	PB (241.7µg/L)
	26	RW26FB	B		High	PB (560.4µg/L)
l	RW02M	All Samples Except RW2FB		UL	Low	MSL(41.3%) ANL(16.5%-34.6%)
		RW2FB		UL	Low	MSL(41.3%)
	RW05M	All Samples	L	UL	Low	MSL(38.1%) ANL(40.5%-71.4%)
	26	All Samples		UL	Low	MSL(32.6%) ANL(23.7%-81.0%)

See explanation of Comments on Table 1B.

TABLE 1A
SUMMARY OF QUALIFIERS ON DATA SUMMARY FORM AFTER DATA VALIDATION

ANALYTE	SDG	SAMPLES AFFECTED	POSITIVE VALUES	NON-DETECTED VALUES	BIAS	COMMENTS*
Zn	RW02M	RW-03, RW-11 RW-13, RW-23, RW-60, RW-60D, RW-67, RW2FB	L	UL	Low	CRL(82.5%-84.7%)
	RW05M	All Samples Except RW-15	L	UL	Low	CRL(84.1%,84.7%)
	26	All Samples Except RW-10, RW-36, RW-68, RW26FB	B		High	PB (11.24µg/L) CRL(83.1%,82.5%)
		RW26FB		UL	Low	CRL(83.1%,82.5%)

* See explanation of Comments on Table 1B.

TABLE 1B
CODES USED IN COMMENTS COLUMN

FB = The field blank had a result > IDL (the result is in parenthesis). The reported results which are < 5x the blank concentration may be biased high.

PB = The preparation blank had a result > IDL (the result is in parenthesis). The reported results which are < 5x the blank concentration may be biased high.

CCB = The continuing calibration blank had a result > IDL (the result is in parenthesis). The reported results which are < 5x the blank concentration may be biased high.

CRH = The CRDL standard recovery was high (>110%) [% recovery is in parenthesis]. The reported results which are <2XCRDL may be biased high.

ISD = The percent difference (%D) for the ICP serial dilution analysis exceeded the control limit (10%) [% recovery is in parenthesis]. The reported results are estimated.

CRL = The CRDL standard recovery was low (<90%) [% recovery is in parenthesis]. The reported results which are <2XCRDL and the quantitation limits may be biased low.

MSL = The matrix spike (MS) recovery was low (<75%) [% recovery is in parenthesis]. The reported results and quantitation limits may be biased low.

ANL = The analytical spike recovery was low (<85%) [% recovery is in parenthesis]. The reported results and quantitation limits may be biased low.

TABLE 2

GLOSSARY OF DATA QUALIFIER CODES (INORGANIC)

CODES RELATED TO IDENTIFICATION
(confidence concerning presence or absence of analytes):

U = Not detected. The associated number indicates approximate sample concentration necessary to be detected.

(NO CODE) = Confirmed identification.

B = Not detected substantially above the level reported in laboratory or field blanks.

R = Unusable result. Analyte may or may not be present in the sample. Supporting data necessary to confirm result.

CODES RELATED TO QUANTITATION
(can be used for both positive results and sample quantitation limits):

J = Analyte Present. Reported value may not be accurate or precise.

K = Analyte present. Reported value may be biased high. Actual value is expected to be lower.

L = Analyte present. Reported value may be biased low. Actual value is expected to be higher.

[] = Analyte present. As values approach the IDL the quantitation may not be accurate.

UJ = Not detected, quantitation limit may be inaccurate or imprecise.

UL = Not detected, quantitation limit is probably higher.

OTHER CODES

Q = No analytical result.

DATA SUMMARY FOR INORGANICS

Table 3

WATER SAMPLES

(ug/L)

Site Name: Keystone Sanitation

DAS #: R5231 Sampling Date(s): 3/11/96

SDG #: RW02N

* Due to dilution, sample quantitation limit is affected. See dilution table for specifics.

	Station Number	RW-02		RW-03		RW-04		RW-11		RW-12		RW-13		RW-14		RW-16		RW-23		RW-60	
	Dilution Factor	1.0		1.0		1.0		1.0		1.0		1.0		1.0		1.0		1.0		1.0	
	Location	KS-RW-02		KS-RW-03		KS-RW-04		KS-RW-11		KS-RW-12		KS-RW-13		KS-RW-14		KS-RW-16		KS-RW-23		KS-RW-60	
												[redacted]								Sample is a Field Dup. RW-60D	
CRDL	ANALYTE																				
200	Aluminum	(141)	B	(145)	B	(160)	B	(84.3)	B	(112)	B	(180)	B	(166)	B	313	B	(151)	B	1670	
60	Antimony					(2.3)															
10	*Arsenic																				
200	Barium	(32.4)		(51.5)		(74.5)		(9.4)		(37.6)		(34.9)		(12.4)		(76.6)		(2.1)	B	(28.7)	
5	Beryllium									(0.31)	B					(1.1)	B	(0.30)	B	(0.31)	B
5	*Cadmium																				
5000	Calcium	23600		25200		18000		7470		8150		(3740)		(4580)		7050		10600		17300	
10	*Chromium	(0.97)	B	(1.1)	B	(1.6)	B			(0.70)	B	(5.0)		(0.81)	B	(1.8)	B				
50	Cobalt											(1.7)									
25	Copper	27.6		(19.1)		211		344		542		262		371		(15.7)		83.6		48.1	
100	Iron	305		(85.2)	B	143	B	(78.9)	B	(49.3)	B	196	B	(57.8)	B	(45.6)	B	(36.0)	B	(72.6)	B
3	*Lead	(1.6)	K	(2.1)	K	6.3		7.1		8.7		5.8	K	10.4		(2.8)	K			7.0	
5000	Magnesium	7240		6110		8870		(3610)		(2740)		(2440)		5210		6280		4230		5450	
15	Manganese	(1.1)	B	(1.2)	B	(4.6)		(10.8)		(8.9)		(7.1)		(4.9)		(4.7)		(0.74)	B	(6.6)	
0.2	Mercury																				
40	*Nickel	(1.2)				(5.6)		(2.7)		(4.5)		(4.0)		(5.4)		(4.5)		(2.1)		(1.8)	
5000	Potassium	(486)	B	6440	J	(1090)	J	(443)	B	(494)	B	(1000)	J	(622)	J	(1380)	J	(620)	J	(513)	B
5	Selenium																	(3.2)	K	5.5	K
10	Silver		UL		UL		UL		UL		UL		UL		UL		UL		UL		UL
5000	Sodium	9930		16300		19800		5030		(3900)	B	(4440)	B	5730		7260		(4760)		8590	
10	Thallium		UL+		UL+		UL+		UL+		UL+		UL+		UL+		UL+		UL+		UL+
50	Vanadium											(0.64)									
20	Zinc	65.7		(3.8)	L	204		31.8	L	77.8		(11.2)	L	87.0		52.9		(17.0)	L	29.3	L
10	*Cyanide		Q		Q		Q		Q		Q		Q		Q		Q		Q		Q

CRDL = Contract Required Detection Limit

*Action Level Exists

SEE NARRATIVE FOR CODE DEFINITIONS

revised 07/90

AR320034

DATA SUMMARY FORM: INORGANICS
Table 3
WATER SAMPLES
(ug/L)

Site Name: Keystone Sanitation

DAS #: R3231 Sampling Date(s): 3/11/96

SDG #: RW02N

+ Due to dilution, sample quantitation limit is affected. See dilution table for specifics.

	Station Number	RW-60D		RW-67		RW2FB															
	Dilution Factor	1.0		1.0		1.0															
	Location	KS-RW-60D		KS-RW-67		KS-RW-02-FB															
		SAMPLE IS A FIELD DUP. OF RW-60				SAMPLE IS A FIELD BLANK.															
CRDL	ANALYTE																				
200	Aluminum	[125]	B	[136]	B	[144]	B														
60	Antimony																				
10	*Arsenic																				
200	Barium	[28.1]		[32.9]		[0.57]	B														
5	Beryllium	[0.39]	B			[0.37]	B														
5	*Cadmium																				
5000	Calcium	17100		18300																	
10	*Chromium	[1.2]	B	[0.91]	B	[0.82]	B														
50	Cobalt																				
25	Copper	43.0		48.2																	
100	Iron	[79.6]	B	[86.6]	B	[46.0]	B														
3	*Lead	5.8	K	3.4	K																
5000	Magnesium	5340		6390		[12.0]	B														
15	Manganese	[6.4]		[9.0]		[0.33]	B														
0.2	Mercury																				
40	*Nickel	[1.9]		[2.5]																	
5000	Potassium	[528]	J	[884]	J	[103]	J														
5	Selenium	[3.0]	K	[3.4]	K																
10	Silver		UL		UL		UL														
5000	Sodium	8580		13100		[951]	B														
10	Thallium		UL+		UL+		UL														
50	Vanadium																				
20	Zinc	28.5	L	29.4	L		UL														
10	*Cyanide		Q		Q		Q														

CRDL = Contract Required Detection Limit

*Action Level Exists

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DATA SUMMARY FORM: INORGANICS

Table 3

WATER SAMPLES

(ug/L)

Site Name: Keystone Sanitation

DAS #: R5231 Sampling Date(s): 3/13/96

SDG #: RW05R

+ Due to dilution, sample quantitation limit is affected. See dilution table for specifics.

CRDL	ANALYTE	RW-05		RW-06		RW-15		RW-17		RW-20		RW-29		RW-30		RW-45		RW-46		RW-46D	
	Station Number	RW-05		RW-06		RW-15		RW-17		RW-20		RW-29		RW-30		RW-45		RW-46		RW-46D	
	Dilution Factor	1.0		1.0		1.0		1.0		1.0		1.0		1.0		1.0		1.0		1.0	
	Location	KS-RW-05		KS-RW-06		KS-RW-15		KS-RW-17		KS-RW-20		KS-RW-29		KS-RW-30		KS-RW-45		KS-RW-46		KS-RW-46D	
																		SAMPLE IS A FIELD DUP. OF RW-46D		SAMPLE IS A FIELD DUP. OF RW-46	
200	Aluminum	(131)	B	(112)	B	(148)	B	(83.7)	B	(82.8)	B	(94.3)	B	(129)	B	(108)	B	(119)	B	(130)	B
60	Antimony																				
10	*Arsenic																				
200	Barium	(8.8)		941		(4.3)		(5.6)		(48.1)		(120)		(65.1)		(2.5)	B	(5.3)		(7.5)	
5	Beryllium																				
5	*Cadmium																				
5000	Calcium	20900		19400		(3410)		10300		13200		29200		18700		14700		9080		9500	
10	*Chromium					(1.0)	B							(1.0)	B			(1.0)	B		
50	Cobalt																				
25	Copper	48.8		(10.7)		600		152		239		(8.7)		44.1		129		221		221	
100	Iron	(62.1)	B	(84.0)		(65.0)	B			107				(77.8)		(23.5)	B	108		105	
3	*Lead	(2.7)	K			5.7	K	11.1		8.1						9.7		20.1		18.8	
5000	Magnesium	(2400)		(2960)		(1360)		(4250)		6820		7010		5030		5160		5790		6030	
15	Manganese	(0.63)	B	(14.6)		(1.0)	B	(2.3)		19.1				(3.5)		(5.6)		20.6		21.5	
0.2	Mercury																				
40	*Nickel	(1.1)				(1.3)		(1.7)		(3.9)				(2.0)		(3.7)		(2.8)		(2.6)	
5000	Potassium	(296)		(691)		(463)		(913)		(1040)		(460)		(460)		(740)		(634)		(655)	
5	Selenium											(3.8)	B	(3.9)	K						
10	Silver		UL		UL		UL		UL		UL		UL		UL		UL		UL		UL
5000	Sodium	7260		30700		(3910)		7500		5560		8200		(4160)		7170		10600		11200	
10	Thallium		UL+		UL+		UL		UL+		UL+		UL+		UL		UL+		UL+	(23.2)	L+
50	Vanadium																				
20	Zinc	(8.0)	L	(4.1)	L	49.6		(4.5)	L	30.0	L		UL	(12.1)	L	(15.3)	L	34.9	L	33.7	L
10	*Cyanide		Q		Q		Q		Q		Q		Q		Q		Q		Q		Q

CRDL = Contract Required Detection Limit

*Action Level Exists

SEE NARRATIVE FOR CODE DEFINITIONS

revised 07/90

DATA SUMMARY FORM: INORGANICS
Table 3
WATER SAMPLES
(ug/L)

Site Name: Keystone Sanitation

DAS #: R3231 Sampling Date(s): 3/13/96

SDG #: RW05M

+ Due to dilution, sample quantitation limit is affected. See dilution table for specifics.

CRDL	ANALYTE												
	Sample No.	RW-57		RW-59									
	Dilution Factor	1.0		1.0									
	Location	KS-RW-57		KS-RW-59									
200	Aluminum	[126]	B	[112]	B								
60	Antimony												
10	*Arsenic												
200	Barium	[28.4]		[26.1]									
5	Beryllium												
5	*Cadmium												
5000	Calcium	11700		9300									
10	*Chromium	[1.1]	B	[0.84]	B								
50	Cobalt												
25	Copper	[9.5]		51.8									
100	Iron	[38.2]	B	102									
3	*Lead			[2.4]	K								
5000	Magnesium	[3540]		[4150]									
15	Manganese	128		[5.9]									
0.2	Mercury												
40	*Nickel	[1.7]		[2.9]									
5000	Potassium	[809]		[968]									
5	Selenium	[3.3]	B										
10	Silver		UL		UL								
5000	Sodium	8110		7940									
10	Thallium		UL+		UL+								
50	Vanadium												
20	Zinc	[13.9]	L	[12.7]	L								
10	*Cyanide		Q		Q								

CRDL = Contract Required Detection Limit

*Action Level Exists

SEE NARRATIVE FOR CODE DEFINITIONS

revised 07/90

AR320037

DATA SUMMARY FORM - INORGANICS

Table 3

WATER SAMPLES

(ug/L)

Site Name: Keystone Sanitation

DAS #: R5231 Sampling Date(s): 3/19/96

SDG #: 26

* Due to dilution, sample quantitation limit is affected. See dilution table for specifics.

CRDL	Station Number	RW-01		RW-07		RW-09		RW-10		RW-26		RW-31		RW-36		RW-48		RW-68		RW26FB	
	Dilution Factor	1.0		1.0		1.0		1.0		1.0		1.0		1.0		1.0		1.0		1.0	
	Location	KS-RW-01		KS-RW-07		KS-RW-09		KS-RW-10		KS-RW-26		KS-RW-31		KS-RW-36		KS-RW-48		KS-RW-68		KS-RW-26-FB	
	[redacted]																			SAMPLE IS A FIELD BLANK.	
CRDL	ANALYTE																				
200	Aluminum	(119)		(109)		(124)		(121)		(98.0)		(150)		(118)		(114)		(111)		—	
60	Antimony	(2.9)	B																	(2.5)	B
10	*Arsenic																				
200	Barium	(38.5)		(32.1)		(30.0)		(79.7)		(125)		(0.88)	B	(114)		(0.39)	B	(116)		(0.67)	B
5	Beryllium																				
5	*Cadmium																				
5000	Calcium	5290		6810		(3880)		7820		7990		(2480)		11800				27900			
10	*Chromium	(1.1)						(2.9)						(0.89)				(0.84)			
50	Cobalt			(0.72)		(2.9)		(0.86)						(4.1)							
25	Copper	(1.3)	B	354		34.8		111		92.0		(13.6)		367		(0.3)		29.1			
100	Iron	140		(79.4)	B			103	B	(47.3)	B	(80.3)	B	(66.5)	B	(18.0)	B	(41.4)	B		
3	*Lead			4.8	K	(2.9)	K	(2.5)	K	5.5	K	(1.8)	K	5.6	K						
5000	Magnesium	(5270)		(4580)		(3780)		6360		(3960)		(1850)		7050		(16.4)		6570			
15	Manganese	(4.7)		(2.9)		15.3		(11.2)		(13.5)		(0.57)	B	36.1				(1.1)			
0.2	Mercury																				
40	*Nickel	(1.9)	B	(4.1)	B	(3.4)	B	(7.7)	B	(1.9)	B	(1.5)	B	(14.0)		(3.0)	B	(2.6)	B		
5000	Potassium	(975)	J	(776)	J	(702)	J	(1230)	J	(554)	J	(410)	J	(1990)	J	(224)	J	(806)	J		
5	Selenium		UL		UL		UL		UL		UL		UL		UL		UL		UL		UL
10	Silver		UL		UL		UL		UL		UL		UL		UL		UL		UL		UL
5000	Sodium	5410		5410		6400		7260		5510		7940		107000		99700		11500		(425)	B
10	Thallium		UL+		UL+		UL+		UL+		UL+		UL+		UL+		UL+		UL+		UL
50	Vanadium																				
20	Zinc	(16.5)	B	39.8	B	40.1	B	199		35.2	B	21.7	B	94.2		(17.4)	B	92.1			UL
10	*Cyanide		Q		Q		Q		Q		Q		Q		Q		Q		Q		Q

CRDL = Contract Required Detection Limit

*Action Level Exists

SEE NARRATIVE FOR CODE DEFINITIONS

revised 07/90

AR320038

DATA SUMMARY FORM: INORGANICS
Table 3
WATER SAMPLES
(mg/L)

Site Name: Keystone Sanitation

SAS #: R3231 Sampling Date(s): 3/19/96

SDG #: 60

* Due to dilution, sample quantitation limit is effected. See dilution table for specifics.

	Station Number	RW-01	RW-07	RW-09	RW-10	RW-26	RW-31	RW-36	RW-48	RW-68	
	Dilution Factor	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
	Location	KS-RW-01	KS-RW-07	KS-RW-09	KS-RW-10	KS-RW-26	KS-RW-31	KS-RW-36	KS-RW-48	KS-RW-68	
DL	ANALYTE										
3	Chloride	7.38	9.72	9.50	13.8	11.4		210	98.8	17.4	

DL = DETECTION LIMIT

	Station Number										
	Dilution Factor										
	Location										
DL	ANALYTE										
3	Chloride										

DL = DETECTION LIMIT

AR320039

APPENDIX A

RESULTS REPORTED BY LABORATORY

FORM Is

SDG RW02M

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INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

RW-02

ıb Name: COMPUCHEM_ENV._CORP._____ Contract: ILM03.0___

ıb Code: COMPU_ Case No.: R3231_ SAS No.: _____ SDG No.: RW02M_

ıtrix (soil/water): WATER Lab Sample ID: 790567

ɜvel (low/med): LOW__ Date Received: 03/14/96

Solids: __0.0

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum_	141	B		P
7440-36-0	Antimony_	1.8	U		P
7440-38-2	Arsenic__	3.0	U		P
7440-39-3	Barium__	32.4	B		P
7440-41-7	Beryllium	0.30	U		P
7440-43-9	Cadmium__	0.20	U		P
7440-70-2	Calcium__	23600			P
7440-47-3	Chromium_	0.97	B		P
7440-48-4	Cobalt___	0.50	U		P
7440-50-8	Copper___	27.6			P
7439-89-6	Iron____	305			P
7439-92-1	Lead____	1.6	B		P
7439-95-4	Magnesium	7240			P
7439-96-5	Manganese	1.1	B		P
7439-97-6	Mercury__	0.20	U		CV
7440-02-0	Nickel___	1.2	B		P
7440-09-7	Potassium	486	B	E	P
7782-49-2	Selenium_	2.6	U		P
7440-22-4	Silver___	0.70	U		P
7440-23-5	Sodium___	9930			P
7440-28-0	Thallium_	19.0	U	EN	F
7440-62-2	Vanadium_	0.60	U		P
7440-66-6	Zinc____	65.7			P
	Cyanide__				NR

ɔlor Before: COLORLESS Clarity Before: CLEAR_ Texture: _____

ɔlor After: COLORLESS Clarity After: CLEAR_ Artifacts: _____

ɔmments:

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AR320042

5

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INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

RW-03

Lab Name: COMPUCHEM_ENV._CORP._____ Contract: ILM03.0___

Lab Code: COMPU_ Case No.: R3231_ SAS No.: _____ SDG No.: RW02M_

Matrix (soil/water): WATER Lab Sample ID: 790568

Level (low/med): LOW__ Date Received: 03/14/96

% Solids: __0.0

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum_	145	B		P_
7440-36-0	Antimony_	1.8	U		P_
7440-38-2	Arsenic__	3.0	U		P_
7440-39-3	Barium___	51.5	B		P_
7440-41-7	Beryllium	0.30	U		P_
7440-43-9	Cadmium__	0.20	U		P_
7440-70-2	Calcium__	25200			P_
7440-47-3	Chromium_	1.1	B		P_
7440-48-4	Cobalt___	0.50	U		P_
7440-50-8	Copper___	19.1	B		P_
7439-89-6	Iron____	85.2	B		P_
7439-92-1	Lead____	2.1	B		P_
7439-95-4	Magnesium	6110			P_
7439-96-5	Manganese	1.2	B		P_
7439-97-6	Mercury__	0.20	U		CV
7440-02-0	Nickel___	1.0	U		P_
7440-09-7	Potassium	6440		E	P_
7782-49-2	Selenium_	2.6	U		P_
7440-22-4	Silver___	0.70	U		P_
7440-23-5	Sodium___	16300			P_
7440-28-0	Thallium_	19.0	U	EN	F_
7440-62-2	Vanadium_	0.60	U		P_
7440-66-6	Zinc____	3.8	B		P_
	Cyanide__				NR

Color Before: COLORLESS Clarity Before: CLEAR_ Texture: _____

Color After: COLORLESS Clarity After: CLEAR_ Artifacts: _____

Comments:

AR320043

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INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

RW-13 ~~RW-04~~ Rwc 4/29/96

ab Name: COMPUCHEM_ENV._CORP._____ Contract: ILM03.0___

ab Code: COMPU_ Case No.: R3231_ SAS No.: _____ SDG No.: RW02M_

atrix (soil/water): WATER Lab Sample ID: 790579

evel (low/med): LOW__ Date Received: 03/14/96

Solids: __0.0

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum_	180	B		P_
7440-36-0	Antimony_	1.8	U		P_
7440-38-2	Arsenic__	3.0	U		P_
7440-39-3	Barium___	34.9	B		P_
7440-41-7	Beryllium	0.30	U		P_
7440-43-9	Cadmium__	0.20	U		P_
7440-70-2	Calcium__	3740	B		P_
7440-47-3	Chromium_	5.0	B		P_
7440-48-4	Cobalt___	1.7	B		P_
7440-50-8	Copper___	262			P_
7439-89-6	Iron____	196			P_
7439-92-1	Lead____	5.8			P_
7439-95-4	Magnesium	2440	B		P_
7439-96-5	Manganese	7.1	B		P_
7439-97-6	Mercury__	0.20	U		CV
7440-02-0	Nickel___	4.0	B		P_
7440-09-7	Potassium	1000	B	E	P_
7782-49-2	Selenium_	2.6	U		P_
7440-22-4	Silver___	0.70	U		P_
7440-23-5	Sodium___	4440	B		P_
7440-28-0	Thallium_	19.0	U	EN	F_
7440-62-2	Vanadium_	0.64	B		P_
7440-66-6	Zinc____	11.2	B		P_
	Cyanide__				NR

olor Before: COLORLESS Clarity Before: CLEAR_ Texture: _____

olor After: COLORLESS Clarity After: CLEAR_ Artifacts: _____

omments:

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INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

RW-14

Lab Name: COMPUCHEM_ENV._CORP._____ Contract: ILM03.0___

Lab Code: COMPU_ Case No.: R3231_ SAS No.: _____ SDG No.: RW02M_

Matrix (soil/water): WATER Lab Sample ID: 790580

Level (low/med): LOW__ Date Received: 03/14/96

% Solids: __0.0

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum_	166	B		P_
7440-36-0	Antimony_	1.8	U		P_
7440-38-2	Arsenic__	3.0	U		P_
7440-39-3	Barium___	12.4	B		P_
7440-41-7	Beryllium	0.30	U		P_
7440-43-9	Cadmium__	0.20	U		P_
7440-70-2	Calcium__	4580	B		P_
7440-47-3	Chromium_	0.81	B		P_
7440-48-4	Cobalt___	0.50	U		P_
7440-50-8	Copper___	371			P_
7439-89-6	Iron____	57.8	B		P_
7439-92-1	Lead____	10.4			P_
7439-95-4	Magnesium	5210			P_
7439-96-5	Manganese	4.9	B		P_
7439-97-6	Mercury__	0.20	U		CV
7440-02-0	Nickel___	5.4	B		P_
7440-09-7	Potassium	622	B	E	P_
7782-49-2	Selenium_	2.6	U		P_
7440-22-4	Silver___	0.70	U		P_
7440-23-5	Sodium___	5730			P_
7440-28-0	Thallium_	19.0	U	EN	F_
7440-62-2	Vanadium_	0.60	U		P_
7440-66-6	Zinc____	87.0			P_
	Cyanide__				NR

Color Before: COLORLESS Clarity Before: CLEAR_ Texture: _____

Color After: COLORLESS Clarity After: CLEAR_ Artifacts: _____

Comments:

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INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

RW-04

ıb Name: COMPUCHEM_ENV._CORP._____ Contract: ILM03.0___

ıb Code: COMPU_ Case No.: R3231_ SAS No.: _____ SDG No.: RW02M_

ıtrix (soil/water): WATER Lab Sample ID: 790569

ıvel (low/med): LOW__ Date Received: 03/14/96

Solids: __0.0

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum_	160	B		P_
7440-36-0	Antimony_	2.3	B		P_
7440-38-2	Arsenic__	3.0	U		P_
7440-39-3	Barium___	74.5	B		P_
7440-41-7	Beryllium	0.30	U		P_
7440-43-9	Cadmium__	0.20	U		P_
7440-70-2	Calcium__	18000			P_
7440-47-3	Chromium_	1.6	B		P_
7440-48-4	Cobalt___	0.50	U		P_
7440-50-8	Copper___	211			P_
7439-89-6	Iron____	143			P_
7439-92-1	Lead____	6.3			P_
7439-95-4	Magnesium	8870			P_
7439-96-5	Manganese	4.6	B		P_
7439-97-6	Mercury__	0.20	U		CV
7440-02-0	Nickel___	5.6	B		P_
7440-09-7	Potassium	1090	B	E	P_
7782-49-2	Selenium_	2.6	U		P_
7440-22-4	Silver___	0.70	U		P_
7440-23-5	Sodium___	19800			P_
7440-28-0	Thallium_	19.0	U	EN	F_
7440-62-2	Vanadium_	0.60	U		P_
7440-66-6	Zinc____	204			P_
	Cyanide__				NR

ɔlor Before: COLORLESS Clarity Before: CLEAR_ Texture: _____

ɔlor After: COLORLESS Clarity After: CLEAR_ Artifacts: _____

ɔmments:

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8

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INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

RW-11

Lab Name: COMPUCHEM_ENV._CORP._____ Contract: ILM03.0___

Lab Code: COMPU_ Case No.: R3231_ SAS No.: _____ SDG No.: RW02M_

Matrix (soil/water): WATER Lab Sample ID: 790577

Level (low/med): LOW__ Date Received: 03/14/96

% Solids: __0.0

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum_	84.3	B		P_
7440-36-0	Antimony_	1.8	U		P_
7440-38-2	Arsenic__	3.0	U		P_
7440-39-3	Barium___	9.4	B		P_
7440-41-7	Beryllium	0.30	U		P_
7440-43-9	Cadmium__	0.20	U		P_
7440-70-2	Calcium__	7470			P_
7440-47-3	Chromium_	0.70	U		P_
7440-48-4	Cobalt___	0.50	U		P_
7440-50-8	Copper___	344			P_
7439-89-6	Iron____	78.9	B		P_
7439-92-1	Lead____	7.1			P_
7439-95-4	Magnesium	3610	B		P_
7439-96-5	Manganese	10.8	B		P_
7439-97-6	Mercury__	0.20	U		CV
7440-02-0	Nickel___	2.7	B		P_
7440-09-7	Potassium	443	B	E	P_
7782-49-2	Selenium_	2.6	U		P_
7440-22-4	Silver___	0.70	U		P_
7440-23-5	Sodium___	5030			P_
7440-28-0	Thallium_	19.0	U	EN	F_
7440-62-2	Vanadium_	0.60	U		P_
7440-66-6	Zinc____	31.8			P_
	Cyanide__				NR

Color Before: COLORLESS Clarity Before: CLEAR_ Texture: _____

Color After: COLORLESS Clarity After: CLEAR_ Artifacts: _____

Comments:

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AR320047

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INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

RW-12

ıb Name: COMPUCHEM_ENV._CORP._____ Contract: ILM03.0___

ıb Code: COMPU_ Case No.: R3231_ SAS No.: _____ SDG No.: RW02M_

ıtrix (soil/water): WATER Lab Sample ID: 790578

ıvel (low/med): LOW__ Date Received: 03/14/96

Solids: __0.0

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum_	112	B		P
7440-36-0	Antimony_	1.8	U		P
7440-38-2	Arsenic__	3.0	U		P
7440-39-3	Barium___	37.6	B		P
7440-41-7	Beryllium	0.31	B		P
7440-43-9	Cadmium__	0.20	U		P
7440-70-2	Calcium__	8150			P
7440-47-3	Chromium_	0.70	B		P
7440-48-4	Cobalt___	0.50	U		P
7440-50-8	Copper___	542			P
7439-89-6	Iron____	49.3	B		P
7439-92-1	Lead____	8.7			P
7439-95-4	Magnesium	2740	B		P
7439-96-5	Manganese	8.9	B		P
7439-97-6	Mercury__	0.20	U		CV
7440-02-0	Nickel___	4.5	B		P
7440-09-7	Potassium	494	B	E	P
7782-49-2	Selenium_	2.6	U		P
7440-22-4	Silver___	0.70	U		P
7440-23-5	Sodium___	3900	B		P
7440-28-0	Thallium_	19.0	U	EN	F
7440-62-2	Vanadium_	0.60	U		P
7440-66-6	Zinc____	77.8			P
	Cyanide__				NR

ɔlor Before: COLORLESS Clarity Before: CLEAR_ Texture: _____

ɔlor After: COLORLESS Clarity After: CLEAR_ Artifacts: _____

ɔmments:

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10

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INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

RW-16

ıb Name: COMPUCHEM_ENV._CORP._____ Contract: ILM03.0___

ıb Code: COMPU_ Case No.: R3231_ SAS No.: _____ SDG No.: RW02M_

ıtrix (soil/water): WATER Lab Sample ID: 790582

ıvel (low/med): LOW__ Date Received: 03/14/96

Solids: __0.0

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum_	313			P_
7440-36-0	Antimony_	1.8	U		P_
7440-38-2	Arsenic__	3.0	U		P_
7440-39-3	Barium___	76.6	B		P_
7440-41-7	Beryllium	1.1	B		P_
7440-43-9	Cadmium__	0.20	U		P_
7440-70-2	Calcium__	7050			P_
7440-47-3	Chromium_	1.8	B		P_
7440-48-4	Cobalt___	0.50	U		P_
7440-50-8	Copper___	15.7	B		P_
7439-89-6	Iron____	45.6	B		P_
7439-92-1	Lead____	2.8	B		P_
7439-95-4	Magnesium	6280			P_
7439-96-5	Manganese	4.7	B		P_
7439-97-6	Mercury__	0.20	U		CV
7440-02-0	Nickel___	4.5	B		P_
7440-09-7	Potassium	1380	B	E	P_
7782-49-2	Selenium_	2.6	U		P_
7440-22-4	Silver___	0.70	U		P_
7440-23-5	Sodium___	7260			P_
7440-28-0	Thallium_	19.0	U	EN	F_
7440-62-2	Vanadium_	0.60	U		P_
7440-66-6	Zinc____	52.9			P_
	Cyanide__				NR

ɔlor Before: COLORLESS Clarity Before: CLEAR_ Texture: _____

ɔlor After: COLORLESS Clarity After: CLEAR_ Artifacts: _____

ɔmments:

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12

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INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

RW-23

Lab Name: COMPUCHEM_ENV._CORP._____ Contract: ILM03.0___

Lab Code: COMPU_ Case No.: R3231_ SAS No.: _____ SDG No.: RW02M_

Matrix (soil/water): WATER Lab Sample ID: 790583

Level (low/med): LOW__ Date Received: 03/14/96

% Solids: __0.0

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum_	151	B		P_
7440-36-0	Antimony_	1.8	U		P_
7440-38-2	Arsenic__	3.0	U		P_
7440-39-3	Barium__	2.1	B		P_
7440-41-7	Beryllium	0.30	B		P_
7440-43-9	Cadmium__	0.20	U		P_
7440-70-2	Calcium__	10600			P_
7440-47-3	Chromium_	0.70	U		P_
7440-48-4	Cobalt___	0.50	U		P_
7440-50-8	Copper___	83.6			P_
7439-89-6	Iron____	36.0	B		P_
7439-92-1	Lead____	1.6	U		P_
7439-95-4	Magnesium	4230	B		P_
7439-96-5	Manganese	0.74	B		P_
7439-97-6	Mercury__	0.20	U		CV
7440-02-0	Nickel___	2.1	B		P_
7440-09-7	Potassium	620	B	E	P_
7782-49-2	Selenium_	3.2	B		P_
7440-22-4	Silver___	0.70	U		P_
7440-23-5	Sodium___	4760	B		P_
7440-28-0	Thallium_	19.0	U	EN	F_
7440-62-2	Vanadium_	0.60	U		P_
7440-66-6	Zinc____	17.0	B		P_
	Cyanide__				NR

Color Before: COLORLESS Clarity Before: CLEAR_ Texture: _____

Color After: COLORLESS Clarity After: CLEAR_ Artifacts: _____

Comments:

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1

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

RW-60

ab Name: COMPUCHEM_ENV._CORP._____ Contract: ILM03.0___

ab Code: COMPU_ Case No.: R3231_ SAS No.: _____ SDG No.: RW02M_

atrix (soil/water): WATER Lab Sample ID: 790584

evel (low/med): LOW__ Date Received: 03/14/96

Solids: __0.0

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum_	1670			P_
7440-36-0	Antimony_	1.8	U		P_
7440-38-2	Arsenic__	3.0	U		P_
7440-39-3	Barium__	28.7	B		P_
7440-41-7	Beryllium	0.31	B		P_
7440-43-9	Cadmium__	0.20	U		P_
7440-70-2	Calcium__	17300			P_
7440-47-3	Chromium_	0.70	U		P_
7440-48-4	Cobalt___	0.50	U		P_
7440-50-8	Copper___	48.1			P_
7439-89-6	Iron____	72.6	B		P_
7439-92-1	Lead____	7.0			P_
7439-95-4	Magnesium	5450			P_
7439-96-5	Manganese	6.6	B		P_
7439-97-6	Mercury__	0.20	U		CV
7440-02-0	Nickel___	1.8	B		P_
7440-09-7	Potassium	513	B	E	P_
7782-49-2	Selenium_	5.5			P_
7440-22-4	Silver___	0.70	U		P_
7440-23-5	Sodium___	8590			P_
7440-28-0	Thallium_	19.0	U	EN	F_
7440-62-2	Vanadium_	0.60	U		P_
7440-66-6	Zinc____	29.3			P_
	Cyanide__				NR

olor Before: COLORLESS Clarity Before: CLEAR_ Texture: _____

olor After: COLORLESS Clarity After: CLEAR_ Artifacts: _____

omments:

FORM I - IN ILM03.0

AR320051

14

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INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

RW60D

Lab Name: COMPUCHEM_ENV._CORP._____ Contract: ILM03.0___

Lab Code: COMPU_ Case No.: R3231_ SAS No.: _____ SDG No.: RW02M_

Matrix (soil/water): WATER Lab Sample ID: 790585

Level (low/med): LOW__ Date Received: 03/14/96

% Solids: __0.0

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum_	125	B		P
7440-36-0	Antimony_	1.8	U		P
7440-38-2	Arsenic__	3.0	U		P
7440-39-3	Barium___	28.1	B		P
7440-41-7	Beryllium	0.39	B		P
7440-43-9	Cadmium__	0.20	U		P
7440-70-2	Calcium__	17100			P
7440-47-3	Chromium_	1.2	B		P
7440-48-4	Cobalt___	0.50	U		P
7440-50-8	Copper___	43.0			P
7439-89-6	Iron____	79.6	B		P
7439-92-1	Lead____	5.8			P
7439-95-4	Magnesium	5340			P
7439-96-5	Manganese	6.4	B		P
7439-97-6	Mercury__	0.20	U		CV
7440-02-0	Nickel___	1.9	B		P
7440-09-7	Potassium	528	B	E	P
7782-49-2	Selenium_	3.0	B		P
7440-22-4	Silver___	0.70	U		P
7440-23-5	Sodium___	8580			P
7440-28-0	Thallium_	19.0	U	EN	F
7440-62-2	Vanadium_	0.60	U		P
7440-66-6	Zinc____	28.5			P
	Cyanide__				NR

Color Before: COLORLESS Clarity Before: CLEAR_ Texture: _____

Color After: COLORLESS Clarity After: CLEAR_ Artifacts: _____

Comments:

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1

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

RW-67

ab Name: COMPUCHEM_ENV._CORP. Contract: ILM03.0

ab Code: COMPU Case No.: R3231 SAS No.: SDG No.: RW02M

atrix (soil/water): WATER Lab Sample ID: 790586

evel (low/med): LOW Date Received: 03/14/96

Solids: 0.0

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	136	B		P
7440-36-0	Antimony	1.8	U		P
7440-38-2	Arsenic	3.0	U		P
7440-39-3	Barium	32.9	B		P
7440-41-7	Beryllium	0.30	U		P
7440-43-9	Cadmium	0.20	U		P
7440-70-2	Calcium	18300			P
7440-47-3	Chromium	0.91	B		P
7440-48-4	Cobalt	0.50	U		P
7440-50-8	Copper	48.2			P
7439-89-6	Iron	86.6	B		P
7439-92-1	Lead	3.4			P
7439-95-4	Magnesium	6390			P
7439-96-5	Manganese	9.0	B		P
7439-97-6	Mercury	0.20	U		CV
7440-02-0	Nickel	2.5	B		P
7440-09-7	Potassium	884	B	E	P
7782-49-2	Selenium	3.4	B		P
7440-22-4	Silver	0.70	U		P
7440-23-5	Sodium	13100			P
7440-28-0	Thallium	19.0	U	EN	F
7440-62-2	Vanadium	0.60	U		P
7440-66-6	Zinc	29.4			P
	Cyanide				NR

olor Before: COLORLESS Clarity Before: CLEAR Texture:

olor After: COLORLESS Clarity After: CLEAR Artifacts:

omments:

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15

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INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

RW2FB

Lab Name: COMPUCHEM_ENV._CORP._____ Contract: ILM03.0___

Lab Code: COMPU_ Case No.: R3231_ SAS No.: _____ SDG No.: RW02M_

Matrix (soil/water): WATER Lab Sample ID: 790587

Level (low/med): LOW__ Date Received: 03/14/96

% Solids: __0.0

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum_	144	B		P_
7440-36-0	Antimony_	1.8	U		P_
7440-38-2	Arsenic__	3.0	U		P_
7440-39-3	Barium___	0.57	B		P_
7440-41-7	Beryllium	0.37	B		P_
7440-43-9	Cadmium__	0.20	U		P_
7440-70-2	Calcium__	5.3	U		P_
7440-47-3	Chromium_	0.82	B		P_
7440-48-4	Cobalt___	0.50	U		P_
7440-50-8	Copper___	0.70	U		P_
7439-89-6	Iron____	46.0	B		P_
7439-92-1	Lead____	1.6	U		P_
7439-95-4	Magnesium	12.0	B		P_
7439-96-5	Manganese	0.33	B		P_
7439-97-6	Mercury__	0.20	U		CV
7440-02-0	Nickel___	1.0	U		P_
7440-09-7	Potassium	103	B	E	P_
7782-49-2	Selenium_	2.6	U		P_
7440-22-4	Silver___	0.70	U		P_
7440-23-5	Sodium___	951	B		P_
7440-28-0	Thallium_	1.9	U	N	P_
7440-62-2	Vanadium_	0.60	U		P_
7440-66-6	Zinc____	3.2	U		P_
	Cyanide__				NR

Color Before: COLORLESS Clarity Before: CLEAR_ Texture: _____

Color After: COLORLESS Clarity After: CLEAR_ Artifacts: _____

Comments:

SDG RW05M

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INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

RW-05

Lab Name: COMPUCHEM_ENV._CORP._____ Contract: ILM03.0___

Lab Code: COMPU_ Case No.: R3231_ SAS No.: _____ SDG No.: RW05M_

Matrix (soil/water): WATER Lab Sample ID: 790912

Level (low/med): LOW__ Date Received: 03/15/96

% Solids: __0.0

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum_	131	B		P
7440-36-0	Antimony_	1.8	U		P
7440-38-2	Arsenic__	3.0	U		P
7440-39-3	Barium___	8.8	B		P
7440-41-7	Beryllium	0.30	U		P
7440-43-9	Cadmium__	0.20	U		P
7440-70-2	Calcium__	20900			P
7440-47-3	Chromium_	0.70	U		P
7440-48-4	Cobalt___	0.50	U		P
7440-50-8	Copper___	48.8			P
7439-89-6	Iron____	62.1	B		P
7439-92-1	Lead____	2.7	B		P
7439-95-4	Magnesium	2400	B		P
7439-96-5	Manganese	0.63	B		P
7439-97-6	Mercury__	0.20	U		CV
7440-02-0	Nickel___	1.1	B		P
7440-09-7	Potassium	296	B		P
7782-49-2	Selenium_	2.6	U		P
7440-22-4	Silver___	0.70	U		P
7440-23-5	Sodium___	7260			P
7440-28-0	Thallium_	19.0	U	WN	F
7440-62-2	Vanadium_	0.60	U		P
7440-66-6	Zinc____	8.0	B		P
	Cyanide__				NR

Color Before: COLORLESS Clarity Before: CLEAR_ Texture: _____

Color After: COLORLESS Clarity After: CLEAR_ Artifacts: _____

Comments:

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AR320056 5

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1
INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

RW-06

Lab Name: COMPUCHEM ENV. CORP. Contract: ILM03.0

Lab Code: COMPU Case No.: R3231 SAS No.: SDG No.: RW05M

Matrix (soil/water): WATER Lab Sample ID: 790916

Level (low/med): LOW Date Received: 03/15/96

% Solids: 0.0

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	112	B		P
7440-36-0	Antimony	1.8	U		P
7440-38-2	Arsenic	3.0	U		P
7440-39-3	Barium	941			P
7440-41-7	Beryllium	0.30	U		P
7440-43-9	Cadmium	0.20	U		P
7440-70-2	Calcium	19400			P
7440-47-3	Chromium	0.70	U		P
7440-48-4	Cobalt	0.50	U		P
7440-50-8	Copper	10.7	B		P
7439-89-6	Iron	84.0	B		P
7439-92-1	Lead	1.6	U		P
7439-95-4	Magnesium	2960	B		P
7439-96-5	Manganese	14.6	B		P
7439-97-6	Mercury	0.20	U		CV
7440-02-0	Nickel	1.0	U		P
7440-09-7	Potassium	691	B		P
7782-49-2	Selenium	2.6	U		P
7440-22-4	Silver	0.70	U		P
7440-23-5	Sodium	30700			P
7440-28-0	Thallium	19.0	U	WN	F
7440-62-2	Vanadium	0.60	U		P
7440-66-6	Zinc	4.1	B		P
	Cyanide				NR

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

AR320057

AR320057

6

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1
INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

RW-15

Lab Name: COMPUCHEM_ENV._CORP._____ Contract: ILM03.0___

Lab Code: COMPU_ Case No.: R3231_ SAS No.: _____ SDG No.: RW05M_

Matrix (soil/water): WATER Lab Sample ID: 790917

Level (low/med): LOW__ Date Received: 03/15/96

% Solids: __0.0

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum_	148	B		P_
7440-36-0	Antimony_	1.8	U		P_
7440-38-2	Arsenic__	3.0	U		P_
7440-39-3	Barium___	4.3	B		P_
7440-41-7	Beryllium	0.30	U		P_
7440-43-9	Cadmium__	0.20	U		P_
7440-70-2	Calcium__	3410	B		P_
7440-47-3	Chromium_	1.0	B		P_
7440-48-4	Cobalt___	0.50	U		P_
7440-50-8	Copper___	600			P_
7439-89-6	Iron____	65.0	B		P_
7439-92-1	Lead____	5.7			P_
7439-95-4	Magnesium	1360	B		P_
7439-96-5	Manganese	1.0	B		P_
7439-97-6	Mercury__	0.20	U		CV
7440-02-0	Nickel___	1.3	B		P_
7440-09-7	Potassium	463	B		P_
7782-49-2	Selenium_	2.6	U		P_
7440-22-4	Silver___	0.70	U		P_
7440-23-5	Sodium___	3910	B		P_
7440-28-0	Thallium_	1.9	U	WN	P_
7440-62-2	Vanadium_	0.60	U		P_
7440-66-6	Zinc____	49.6			P_
	Cyanide__				NR

Color Before: COLORLESS Clarity Before: CLEAR_ Texture: _____

Color After: COLORLESS Clarity After: CLEAR_ Artifacts: _____

Comments:

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7

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1

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

RW-17

Lab Name: COMPUCHEM_ENV._CORP._____ Contract: ILM03.0___

Lab Code: COMPU_ Case No.: R3231_ SAS No.: _____ SDG No.: RW05M_

Matrix (soil/water): WATER Lab Sample ID: 790918

Level (low/med): LOW__ Date Received: 03/15/96

% Solids: __0.0

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum_	83.7	B		P_
7440-36-0	Antimony_	1.8	U		P_
7440-38-2	Arsenic__	3.0	U		P_
7440-39-3	Barium___	5.6	B		P_
7440-41-7	Beryllium	0.30	U		P_
7440-43-9	Cadmium__	0.20	U		P_
7440-70-2	Calcium__	10300			P_
7440-47-3	Chromium_	0.70	U		P_
7440-48-4	Cobalt___	0.50	U		P_
7440-50-8	Copper___	152			P_
7439-89-6	Iron____	10.9	U		P_
7439-92-1	Lead____	11.1			P_
7439-95-4	Magnesium	4250	B		P_
7439-96-5	Manganese	2.3	B		P_
7439-97-6	Mercury__	0.20	U		CV
7440-02-0	Nickel___	1.7	B		P_
7440-09-7	Potassium	913	B		P_
7782-49-2	Selenium_	2.6	U		P_
7440-22-4	Silver___	0.70	U		P_
7440-23-5	Sodium___	7500			P_
7440-28-0	Thallium_	19.0	U	WN	F_
7440-62-2	Vanadium_	0.60	U		P_
7440-66-6	Zinc____	4.5	B		P_
	Cyanide__				NR

Color Before: COLORLESS Clarity Before: CLEAR_ Texture: _____

Color After: COLORLESS Clarity After: CLEAR_ Artifacts: _____

Comments:

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1
INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

RW-20

Lab Name: COMPUCHEM_ENV._CORP._____ Contract: ILM03.0___

Lab Code: COMPU_ Case No.: R3231_ SAS No.: _____ SDG No.: RW05M_

Matrix (soil/water): WATER Lab Sample ID: 790919

Level (low/med): LOW__ Date Received: 03/15/96

% Solids: __0.0

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum_	82.8	B		P_
7440-36-0	Antimony_	1.8	U		P_
7440-38-2	Arsenic__	3.0	U		P_
7440-39-3	Barium___	48.1	B		P_
7440-41-7	Beryllium	0.30	U		P_
7440-43-9	Cadmium__	0.20	U		P_
7440-70-2	Calcium__	13200			P_
7440-47-3	Chromium_	0.70	U		P_
7440-48-4	Cobalt___	0.50	U		P_
7440-50-8	Copper___	239			P_
7439-89-6	Iron____	107			P_
7439-92-1	Lead____	8.1			P_
7439-95-4	Magnesium	6820			P_
7439-96-5	Manganese	19.1			P_
7439-97-6	Mercury__	0.20	U		CV
7440-02-0	Nickel___	3.9	B		P_
7440-09-7	Potassium	1040	B		P_
7782-49-2	Selenium_	2.6	U		P_
7440-22-4	Silver___	0.70	U		P_
7440-23-5	Sodium___	5560			P_
7440-28-0	Thallium_	19.0	U	WN	F_
7440-62-2	Vanadium_	0.60	U		P_
7440-66-6	Zinc____	30.0			P_
	Cyanide__				NR

Color Before: COLORLESS Clarity Before: CLEAR_ Texture: _____

Color After: COLORLESS Clarity After: CLEAR_ Artifacts: _____

Comments:

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INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

RW-29

Lab Name: COMPUCHEM_ENV._CORP._____ Contract: ILM03.0___

Lab Code: COMPU_ Case No.: R3231_ SAS No.: _____ SDG No.: RW05M_

Matrix (soil/water): WATER Lab Sample ID: 790920

Level (low/med): LOW__ Date Received: 03/15/96

% Solids: __0.0

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum_	94.3	B		P
7440-36-0	Antimony_	1.8	U		P
7440-38-2	Arsenic__	3.0	U		P
7440-39-3	Barium___	120	B		P
7440-41-7	Beryllium	0.30	U		P
7440-43-9	Cadmium__	0.20	U		P
7440-70-2	Calcium__	29200			P
7440-47-3	Chromium_	0.70	U		P
7440-48-4	Cobalt___	0.50	U		P
7440-50-8	Copper___	8.7	B		P
7439-89-6	Iron_____	10.9	U		P
7439-92-1	Lead_____	1.6	U		P
7439-95-4	Magnesium	7010			P
7439-96-5	Manganese	0.20	U		P
7439-97-6	Mercury__	0.20	U		CV
7440-02-0	Nickel___	1.0	U		P
7440-09-7	Potassium	460	B		P
7782-49-2	Selenium_	3.8	B		P
7440-22-4	Silver___	0.70	U		P
7440-23-5	Sodium___	8200			P
7440-28-0	Thallium_	~~1.9~~ 19.0	U	W HN	F
7440-62-2	Vanadium_	0.60	U		P
7440-66-6	Zinc_____	3.2	U		P
	Cyanide__				NR

07 (D.V) 5/9/96

Color Before: COLORLESS Clarity Before: CLEAR_ Texture: _____

Color After: COLORLESS Clarity After: CLEAR_ Artifacts: _____

Comments:

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INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

RW-30

Lab Name: COMPUCHEM_ENV._CORP._____ Contract: ILM03.0___

Lab Code: COMPU_ Case No.: R3231_ SAS No.: _____ SDG No.: RW05M_

Matrix (soil/water): WATER Lab Sample ID: 790921

Level (low/med): LOW__ Date Received: 03/15/96

% Solids: __0.0

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum_	129	B		P_
7440-36-0	Antimony_	1.8	U		P_
7440-38-2	Arsenic__	3.0	U		P_
7440-39-3	Barium___	65.1	B		P_
7440-41-7	Beryllium	0.30	U		P_
7440-43-9	Cadmium__	0.20	U		P_
7440-70-2	Calcium__	18700			P_
7440-47-3	Chromium_	1.0	B		P_
7440-48-4	Cobalt___	0.50	U		P_
7440-50-8	Copper___	44.1			P_
7439-89-6	Iron____	77.8	B		P_
7439-92-1	Lead____	1.6	U		P_
7439-95-4	Magnesium	5030			P_
7439-96-5	Manganese	3.5	B		P_
7439-97-6	Mercury__	0.20	U		CV
7440-02-0	Nickel___	2.0	B		P_
7440-09-7	Potassium	460	B		P_
7782-49-2	Selenium_	3.9	B		P_
7440-22-4	Silver___	0.70	U		P_
7440-23-5	Sodium___	4160	B		P_
7440-28-0	Thallium_	1.9	U	WN	F_
7440-62-2	Vanadium_	0.60	U		P_
7440-66-6	Zinc____	12.1	B		P_
	Cyanide__				NR

Color Before: COLORLESS Clarity Before: CLEAR_ Texture: _____

Color After: COLORLESS Clarity After: CLEAR_ Artifacts: _____

Comments:

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1

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

RW-45

Lab Name: COMPUCHEM_ENV._CORP._____ Contract: ILM03.0___

Lab Code: COMPU_ Case No.: R3231_ SAS No.: _____ SDG No.: RW05M_

Matrix (soil/water): WATER Lab Sample ID: 790922

Level (low/med): LOW__ Date Received: 03/15/96

% Solids: __0.0

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum_	108	B		P_
7440-36-0	Antimony_	1.8	U		P_
7440-38-2	Arsenic__	3.0	U		P_
7440-39-3	Barium___	2.5	B		P_
7440-41-7	Beryllium	0.30	U		P_
7440-43-9	Cadmium__	0.20	U		P_
7440-70-2	Calcium__	14700			P_
7440-47-3	Chromium_	0.70	U		P_
7440-48-4	Cobalt___	0.50	U		P_
7440-50-8	Copper___	129			P_
7439-89-6	Iron____	23.5	B		P_
7439-92-1	Lead____	9.7			P_
7439-95-4	Magnesium	5160			P_
7439-96-5	Manganese	5.6	B		P_
7439-97-6	Mercury__	0.20	U		CV
7440-02-0	Nickel___	3.7	B		P_
7440-09-7	Potassium	740	B		P_
7782-49-2	Selenium_	2.6	U		P_
7440-22-4	Silver___	0.70	U		P_
7440-23-5	Sodium___	7170			P_
7440-28-0	Thallium_	19.0 ~~1.9~~	U	W EN	F_
7440-62-2	Vanadium_	0.60	U		P_
7440-66-6	Zinc____	15.3	B		P_
	Cyanide__				NR

D.V 5/9/96

Color Before: COLORLESS Clarity Before: CLEAR_ Texture: _____

Color After: COLORLESS Clarity After: CLEAR_ Artifacts: _____

Comments:

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AR320063

12

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1
INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

RW-46

Lab Name: COMPUCHEM_ENV._CORP._____ Contract: ILM03.0___

Lab Code: COMPU_ Case No.: R3231_ SAS No.: _____ SDG No.: RW05M_

Matrix (soil/water): WATER Lab Sample ID: 790923

Level (low/med): LOW__ Date Received: 03/15/96

% Solids: __0.0

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum_	119	B		P_
7440-36-0	Antimony_	1.8	U		P_
7440-38-2	Arsenic__	3.0	U		P_
7440-39-3	Barium___	5.3	B		P_
7440-41-7	Beryllium	0.30	U		P_
7440-43-9	Cadmium__	0.20	U		P_
7440-70-2	Calcium__	9080			P_
7440-47-3	Chromium_	1.0	B		P_
7440-48-4	Cobalt___	0.50	U		P_
7440-50-8	Copper___	221			P_
7439-89-6	Iron____	108			P_
7439-92-1	Lead____	20.1			P_
7439-95-4	Magnesium	5790			P_
7439-96-5	Manganese	20.6			P_
7439-97-6	Mercury__	0.20	U		CV
7440-02-0	Nickel___	2.8	B		P_
7440-09-7	Potassium	634	B		P_
7782-49-2	Selenium_	2.6	U		P_
7440-22-4	Silver___	0.70	U		P_
7440-23-5	Sodium___	10600			P_
7440-28-0	Thallium_	19.0	U	WN	F_
7440-62-2	Vanadium_	0.60	U		P_
7440-66-6	Zinc____	34.9			P_
	Cyanide__				NR

Color Before: COLORLESS Clarity Before: CLEAR_ Texture: _____

Color After: COLORLESS Clarity After: CLEAR_ Artifacts: _____

Comments:

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1

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

RW46D

Lab Name: COMPUCHEM_ENV._CORP._____ Contract: ILM03.0___

Lab Code: COMPU_ Case No.: R3231_ SAS No.: _____ SDG No.: RW05M_

Matrix (soil/water): WATER Lab Sample ID: 790924

Level (low/med): LOW__ Date Received: 03/15/96

% Solids: __0.0

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum_	130	B		P_
7440-36-0	Antimony_	1.8	U		P_
7440-38-2	Arsenic__	3.0	U		P_
7440-39-3	Barium___	7.5	B		P_
7440-41-7	Beryllium	0.30	U		P_
7440-43-9	Cadmium__	0.20	U		P_
7440-70-2	Calcium__	9500			P_
7440-47-3	Chromium_	0.70	U		P_
7440-48-4	Cobalt___	0.50	U		P_
7440-50-8	Copper___	221	_		P_
7439-89-6	Iron____	105	_		P_
7439-92-1	Lead____	18.8	_		P_
7439-95-4	Magnesium	6030	_		P_
7439-96-5	Manganese	21.5			P_
7439-97-6	Mercury__	0.20	U		CV
7440-02-0	Nickel___	2.6	B		P_
7440-09-7	Potassium	655	B		P_
7782-49-2	Selenium_	2.6	U		P_
7440-22-4	Silver___	0.70	U		P_
7440-23-5	Sodium___	11200			P_
7440-28-0	Thallium_	23.2	B	WN	F_
7440-62-2	Vanadium_	0.60	U		P_
7440-66-6	Zinc____	33.7	_		P_
	Cyanide__		_		NR
			_		

Color Before: COLORLESS Clarity Before: CLEAR_ Texture: _____

Color After: COLORLESS Clarity After: CLEAR_ Artifacts: _____

Comments:

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1
INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

RW-57

Lab Name: COMPUCHEM_ENV._CORP._____ Contract: ILM03.0___

Lab Code: COMPU_ Case No.: R3231_ SAS No.: _____ SDG No.: RW05M_

Matrix (soil/water): WATER Lab Sample ID: 790925

Level (low/med): LOW__ Date Received: 03/15/96

% Solids: __0.0

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum_	126	B		P
7440-36-0	Antimony_	1.8	U		P
7440-38-2	Arsenic__	3.0	U		P
7440-39-3	Barium___	28.4	B		P
7440-41-7	Beryllium	0.30	U		P
7440-43-9	Cadmium__	0.20	U		P
7440-70-2	Calcium__	11700			P
7440-47-3	Chromium_	1.1	B		P
7440-48-4	Cobalt___	0.50	U		P
7440-50-8	Copper___	9.5	B		P
7439-89-6	Iron____	38.2	B		P
7439-92-1	Lead____	1.6	U		P
7439-95-4	Magnesium	3540	B		P
7439-96-5	Manganese	128			P
7439-97-6	Mercury__	0.20	U		CV
7440-02-0	Nickel___	1.7	B		P
7440-09-7	Potassium	809	B		P
7782-49-2	Selenium_	3.3	B		P
7440-22-4	Silver___	0.70	U		P
7440-23-5	Sodium___	8110			P
7440-28-0	Thallium_	19.0	U	WN	P
7440-62-2	Vanadium_	0.60	U		P
7440-66-6	Zinc____	13.9	B		P
_____	Cyanide__				NR

Color Before: COLORLESS Clarity Before: CLEAR_ Texture: _____

Color After: COLORLESS Clarity After: CLEAR_ Artifacts: _____

Comments:

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1

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

RW-59

Lab Name: COMPUCHEM_ENV._CORP._____ Contract: ILM03.0___

Lab Code: COMPU_ Case No.: R3231_ SAS No.: _____ SDG No.: RW05M_

Matrix (soil/water): WATER Lab Sample ID: 790926

Level (low/med): LOW__ Date Received: 03/15/96

% Solids: __0.0

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum_	112	B		P
7440-36-0	Antimony_	1.8	U		P
7440-38-2	Arsenic__	3.0	U		P
7440-39-3	Barium___	26.1	B		P
7440-41-7	Beryllium	0.30	U		P
7440-43-9	Cadmium__	0.20	U		P
7440-70-2	Calcium__	9300			P
7440-47-3	Chromium_	0.84	B		P
7440-48-4	Cobalt___	0.50	U		P
7440-50-8	Copper___	51.8			P
7439-89-6	Iron____	102			P
7439-92-1	Lead____	2.4	B		P
7439-95-4	Magnesium	4150	B		P
7439-96-5	Manganese	5.9	B		P
7439-97-6	Mercury__	0.20	U		CV
7440-02-0	Nickel___	2.9	B		P
7440-09-7	Potassium	968	B		P
7782-49-2	Selenium_	2.6	U		P
7440-22-4	Silver___	0.70	U		P
7440-23-5	Sodium___	7940			P
7440-28-0	Thallium_	19.0	U	WN	F
7440-62-2	Vanadium_	0.60	U		P
7440-66-6	Zinc____	12.7	B		P
	Cyanide__				NR

Color Before: COLORLESS Clarity Before: CLEAR_ Texture: _____

Color After: COLORLESS Clarity After: CLEAR_ Artifacts: _____

Comments:

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SDG 26

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1

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

RW-01

Lab Name: COMPUCHEM_ENV._CORP._____ Contract: ILM03.0___

Lab Code: COMPU_ Case No.: R3231_ SAS No.: _____ SDG No.: 26____

Matrix (soil/water): WATER Lab Sample ID: 792523

Level (low/med): LOW__ Date Received: 03/21/96

% Solids: __0.0

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum_	119	B		P
7440-36-0	Antimony_	2.9	B		P
7440-38-2	Arsenic__	3.0	U		P
7440-39-3	Barium___	38.5	B		P
7440-41-7	Beryllium	0.30	U		P
7440-43-9	Cadmium__	0.20	U		P
7440-70-2	Calcium__	5290			P
7440-47-3	Chromium_	1.1	B		P
7440-48-4	Cobalt___	0.50	U		P
7440-50-8	Copper___	1.3	B		P
7439-89-6	Iron_____	140			P
7439-92-1	Lead_____	1.6	U		P
7439-95-4	Magnesium	3270	B		P
7439-96-5	Manganese	4.7	B		P
7439-97-6	Mercury__	0.20	U		CV
7440-02-0	Nickel___	1.9	B		P
7440-09-7	Potassium	975	B	E	P
7782-49-2	Selenium_	2.6	U		P
7440-22-4	Silver___	0.70	U		P
7440-23-5	Sodium___	5410			P
7440-28-0	Thallium_	19.0	U	WN	F
7440-62-2	Vanadium_	0.60	U		P
7440-66-6	Zinc____	16.5	B		P
	Cyanide__				NR

Color Before: COLORLESS Clarity Before: CLEAR_ Texture: _____

Color After: COLORLESS Clarity After: CLEAR_ Artifacts: _____

Comments:

Duplicate_(RW-01D)

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1

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

RW-07

Lab Name: COMPUCHEM_ENV._CORP._____ Contract: ILM03.0___

Lab Code: COMPU_ Case No.: R3231_ SAS No.: _____ SDG No.: 26____

Matrix (soil/water): WATER Lab Sample ID: 792524

Level (low/med): LOW__ Date Received: 03/21/96

% Solids: __0.0

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum_	109	B		P
7440-36-0	Antimony_	1.8	U		P
7440-38-2	Arsenic__	3.0	U		P
7440-39-3	Barium___	32.1	B		P
7440-41-7	Beryllium	0.30	U		P
7440-43-9	Cadmium__	0.20	U		P
7440-70-2	Calcium__	6810			P
7440-47-3	Chromium_	0.70	U		P
7440-48-4	Cobalt___	0.72	B		P
7440-50-8	Copper___	354			P
7439-89-6	Iron_____	79.4	B		P
7439-92-1	Lead_____	4.8			P
7439-95-4	Magnesium	4580	B		P
7439-96-5	Manganese	2.9	B		P
7439-97-6	Mercury__	0.20	U		CV
7440-02-0	Nickel___	4.1	B		P
7440-09-7	Potassium	776	B	E	P
7782-49-2	Selenium_	2.6	U		P
7440-22-4	Silver___	0.70	U		P
7440-23-5	Sodium___	5410			P
7440-28-0	Thallium_	19.0	U	WN	F
7440-62-2	Vanadium_	0.60	U		P
7440-66-6	Zinc_____	39.8			P
	Cyanide__				NR

Color Before: COLORLESS Clarity Before: CLEAR_ Texture: _____

Color After: COLORLESS Clarity After: CLEAR_ Artifacts: _____

Comments:

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1
INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

RW-09

Lab Name: COMPUCHEM_ENV._CORP._____ Contract: ILM03.0___

Lab Code: COMPU_ Case No.: R3231_ SAS No.: _____ SDG No.: 26____

Matrix (soil/water): WATER Lab Sample ID: 792525

Level (low/med): LOW__ Date Received: 03/21/96

% Solids: __0.0

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum_	124	B		P
7440-36-0	Antimony_	1.8	U		P
7440-38-2	Arsenic__	3.0	U		P
7440-39-3	Barium___	30.0	B		P
7440-41-7	Beryllium	0.30	U		P
7440-43-9	Cadmium__	0.20	U		P
7440-70-2	Calcium__	3880	B		P
7440-47-3	Chromium_	0.70	U		P
7440-48-4	Cobalt___	2.9	B		P
7440-50-8	Copper___	34.8			P
7439-89-6	Iron____	10.9	U		P
7439-92-1	Lead____	2.9	B		P
7439-95-4	Magnesium	3780	B		P
7439-96-5	Manganese	15.3			P
7439-97-6	Mercury__	0.20	U		CV
7440-02-0	Nickel___	5.4	B		P
7440-09-7	Potassium	702	B	E	P
7782-49-2	Selenium_	2.6	U		P
7440-22-4	Silver___	0.70	U		P
7440-23-5	Sodium___	6400			P
7440-28-0	Thallium_	19.0	U	WN	F
7440-62-2	Vanadium_	0.60	U		P
7440-66-6	Zinc____	40.1			P
	Cyanide__				NR

Color Before: COLORLESS Clarity Before: CLEAR_ Texture: _____

Color After: COLORLESS Clarity After: CLEAR_ Artifacts: _____

Comments:

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1

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

RW-10

Lab Name: COMPUCHEM_ENV._CORP._____ Contract: ILM03.0___

Lab Code: COMPU_ Case No.: R3231_ SAS No.: _____ SDG No.: 26____

Matrix (soil/water): WATER Lab Sample ID: 792526

Level (low/med): LOW__ Date Received: 03/21/96

% Solids: __0.0

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum_	121	B		P
7440-36-0	Antimony_	1.8	U		P
7440-38-2	Arsenic__	3.0	U		P
7440-39-3	Barium___	79.7	B		P
7440-41-7	Beryllium	0.30	U		P
7440-43-9	Cadmium__	0.20	U		P
7440-70-2	Calcium__	7820			P
7440-47-3	Chromium_	2.9	B		P
7440-48-4	Cobalt___	0.86	B		P
7440-50-8	Copper___	111			P
7439-89-6	Iron____	103			P
7439-92-1	Lead____	2.5	B		P
7439-95-4	Magnesium	6360			P
7439-96-5	Manganese	11.2	B		P
7439-97-6	Mercury__	0.20	U		CV
7440-02-0	Nickel___	7.7	B		P
7440-09-7	Potassium	1230	B	E	P
7782-49-2	Selenium_	2.6	U		P
7440-22-4	Silver___	0.70	U		P
7440-23-5	Sodium___	7260			P
7440-28-0	Thallium_	19.0	U	WN	P
7440-62-2	Vanadium_	0.60	U		P
7440-66-6	Zinc____	199			P
	Cyanide__				NR

Color Before: COLORLESS Clarity Before: CLEAR_ Texture: _____

Color After: COLORLESS Clarity After: CLEAR_ Artifacts: _____

Comments:

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1

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

RW-26

Lab Name: COMPUCHEM_ENV._CORP._____ Contract: ILM03.0___

Lab Code: COMPU_ Case No.: R3231_ SAS No.: _____ SDG No.: 26____

Matrix (soil/water): WATER Lab Sample ID: 792527

Level (low/med): LOW__ Date Received: 03/21/96

% Solids: __0.0

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum_	98.0	B		P
7440-36-0	Antimony_	1.8	U		P
7440-38-2	Arsenic__	3.0	U		P
7440-39-3	Barium___	125	B		P
7440-41-7	Beryllium	0.30	U		P
7440-43-9	Cadmium__	0.20	U		P
7440-70-2	Calcium__	7990			P
7440-47-3	Chromium_	0.70	U		P
7440-48-4	Cobalt___	0.50	U		P
7440-50-8	Copper___	92.0			P
7439-89-6	Iron____	47.3	B		P
7439-92-1	Lead____	5.5			P
7439-95-4	Magnesium	3960	B		P
7439-96-5	Manganese	13.5	B		P
7439-97-6	Mercury__	0.20	U		CV
7440-02-0	Nickel___	1.9	B		P
7440-09-7	Potassium	554	B	E	P
7782-49-2	Selenium_	2.6	U		P
7440-22-4	Silver___	0.70	U		P
7440-23-5	Sodium___	5510			P
7440-28-0	Thallium_	19.0	U	WN	F
7440-62-2	Vanadium_	0.60	U		P
7440-66-6	Zinc____	35.2			P
	Cyanide__				NR

Color Before: COLORLESS Clarity Before: CLEAR_ Texture: _____

Color After: COLORLESS Clarity After: CLEAR_ Artifacts: _____

Comments:

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INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

RW-31

Lab Name: COMPUCHEM_ENV._CORP._____ Contract: ILM03.0___

Lab Code: COMPU_ Case No.: R3231_ SAS No.: _____ SDG No.: 26____

Matrix (soil/water): WATER Lab Sample ID: 792532

Level (low/med): LOW__ Date Received: 03/21/96

% Solids: __0.0

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum_	150	B		P
7440-36-0	Antimony_	1.8	U		P
7440-38-2	Arsenic__	3.0	U		P
7440-39-3	Barium___	0.86	B		P
7440-41-7	Beryllium	0.30	U		P
7440-43-9	Cadmium__	0.20	U		P
7440-70-2	Calcium__	2480	B		P
7440-47-3	Chromium_	0.70	U		P
7440-48-4	Cobalt___	0.50	U		P
7440-50-8	Copper___	13.6	B		P
7439-89-6	Iron_____	80.3	B		P
7439-92-1	Lead_____	1.8	B		P
7439-95-4	Magnesium	1850	B		P
7439-96-5	Manganese	0.57	B		P
7439-97-6	Mercury__	0.20	U		CV
7440-02-0	Nickel___	1.5	B		P
7440-09-7	Potassium	410	B	E	P
7782-49-2	Selenium_	2.6	U		P
7440-22-4	Silver___	0.70	U		P
7440-23-5	Sodium___	7940			P
7440-28-0	Thallium_	19.0	U	WN	P
7440-62-2	Vanadium_	0.60	U		P
7440-66-6	Zinc_____	21.7			P
	Cyanide__				NR

Color Before: COLORLESS Clarity Before: CLEAR_ Texture: _____

Color After: COLORLESS Clarity After: CLEAR_ Artifacts: _____

Comments:

FORM I - IN ILM03.0

AR320074

10

U.S. EPA - CLP

1

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

RW-36

Lab Name: COMPUCHEM_ENV._CORP. Contract: ILM03.0

Lab Code: COMPU Case No.: R3231 SAS No.: SDG No.: 26

Matrix (soil/water): WATER Lab Sample ID: 792533

Level (low/med): LOW Date Received: 03/21/96

% Solids: 0.0

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	118	B		P
7440-36-0	Antimony	1.8	U		P
7440-38-2	Arsenic	3.0	U		P
7440-39-3	Barium	114	B		P
7440-41-7	Beryllium	0.30	U		P
7440-43-9	Cadmium	0.20	U		P
7440-70-2	Calcium	11000			P
7440-47-3	Chromium	0.89	B		P
7440-48-4	Cobalt	4.1	B		P
7440-50-8	Copper	367			P
7439-89-6	Iron	66.5	B		P
7439-92-1	Lead	5.6			P
7439-95-4	Magnesium	7050			P
7439-96-5	Manganese	36.1			P
7439-97-6	Mercury	0.20	U		CV
7440-02-0	Nickel	14.0	B		P
7440-09-7	Potassium	1990	B	E	P
7782-49-2	Selenium	2.6	U		P
7440-22-4	Silver	0.70	U		P
7440-23-5	Sodium	107000			P
7440-28-0	Thallium	19.0	U	EN	F
7440-62-2	Vanadium	0.60	U		P
7440-66-6	Zinc	94.2			P
	Cyanide				NR

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

U.S. EPA - CLP

1
INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

RW-48

Lab Name: COMPUCHEM_ENV._CORP._____ Contract: ILM03.0___

Lab Code: COMPU_ Case No.: R3231_ SAS No.: _____ SDG No.: 26____

Matrix (soil/water): WATER Lab Sample ID: 792534

Level (low/med): LOW__ Date Received: 03/21/96

% Solids: __0.0

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum_	114	B		P
7440-36-0	Antimony_	1.8	U		P
7440-38-2	Arsenic__	3.0	U		P
7440-39-3	Barium___	0.39	B		P
7440-41-7	Beryllium	0.30	U		P
7440-43-9	Cadmium__	0.20	U		P
7440-70-2	Calcium__	5.3	U		P
7440-47-3	Chromium_	0.70	U		P
7440-48-4	Cobalt___	0.50	U		P
7440-50-8	Copper___	8.3	B		P
7439-89-6	Iron_____	18.0	B		P
7439-92-1	Lead____	1.6	U		P
7439-95-4	Magnesium	16.4	B		P
7439-96-5	Manganese	0.20	U		P
7439-97-6	Mercury__	0.20	U		CV
7440-02-0	Nickel___	3.0	B		P
7440-09-7	Potassium	224	B	E	P
7782-49-2	Selenium_	2.6	U		P
7440-22-4	Silver___	0.70	U		P
7440-23-5	Sodium___	99700			P
7440-28-0	Thallium_	19.0	U	EN	F
7440-62-2	Vanadium_	0.60	U		P
7440-66-6	Zinc_____	17.4	B		P
	Cyanide__				NR

Color Before: COLORLESS Clarity Before: CLEAR_ Texture: _____

Color After: COLORLESS Clarity After: CLEAR_ Artifacts: _____

Comments:

U.S. EPA - CLP

1

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

RW-68

Lab Name: COMPUCHEM_ENV._CORP._____ Contract: ILM03.0___

Lab Code: COMPU_ Case No.: R3231_ SAS No.: _____ SDG No.: 26____

Matrix (soil/water): WATER Lab Sample ID: 792535

Level (low/med): LOW__ Date Received: 03/21/96

% Solids: __0.0

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum_	111	B		P
7440-36-0	Antimony_	1.8	U		P
7440-38-2	Arsenic__	3.0	U		P
7440-39-3	Barium___	116	B		P
7440-41-7	Beryllium	0.30	U		P
7440-43-9	Cadmium__	0.20	U		P
7440-70-2	Calcium__	27900			P
7440-47-3	Chromium_	0.84	B		P
7440-48-4	Cobalt___	0.50	U		P
7440-50-8	Copper___	29.1			P
7439-89-6	Iron____	41.4	B		P
7439-92-1	Lead____	1.6	U		P
7439-95-4	Magnesium	6570			P
7439-96-5	Manganese	1.1	B		P
7439-97-6	Mercury__	0.20	U		CV
7440-02-0	Nickel___	2.6	B		P
7440-09-7	Potassium	806	B	E	P
7782-49-2	Selenium_	2.6	U		P
7440-22-4	Silver___	0.70	U		P
7440-23-5	Sodium___	11500			P
7440-28-0	Thallium_	19.0	U	WN	F
7440-62-2	Vanadium_	0.60	U		P
7440-66-6	Zinc____	92.1			P
	Cyanide__				NR

Color Before: COLORLESS Clarity Before: CLEAR_ Texture: _____

Color After: COLORLESS Clarity After: CLEAR_ Artifacts: _____

Comments:

U.S. EPA - CLP

1

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

RW26FB

Lab Name: COMPUCHEM_ENV._CORP._____ Contract: ILM03.0___

Lab Code: COMPU_ Case No.: R3231_ SAS No.: _____ SDG No.: 26____

Matrix (soil/water): WATER Lab Sample ID: 792531

Level (low/med): LOW__ Date Received: 03/21/96

% Solids: __0.0

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum_	21.3	U		P_
7440-36-0	Antimony_	2.5	B		P_
7440-38-2	Arsenic__	3.0	U		P_
7440-39-3	Barium___	0.67	B		P_
7440-41-7	Beryllium	0.30	U		P_
7440-43-9	Cadmium__	0.20	U		P_
7440-70-2	Calcium__	5.3	U		P_
7440-47-3	Chromium_	0.70	U		P_
7440-48-4	Cobalt___	0.50	U		P_
7440-50-8	Copper___	0.70	U		P_
7439-89-6	Iron____	10.9	U		P_
7439-92-1	Lead____	1.6	U		P_
7439-95-4	Magnesium	9.1	U		P_
7439-96-5	Manganese	0.20	U		P_
7439-97-6	Mercury__	0.20	U		CV
7440-02-0	Nickel___	1.0	U		P_
7440-09-7	Potassium	14.4	U	E	P_
7782-49-2	Selenium_	2.6	U		P_
7440-22-4	Silver___	0.70	U		P_
7440-23-5	Sodium___	425	B		P_
7440-28-0	Thallium_	1.9	U	WN	F_
7440-62-2	Vanadium_	0.60	U		P_
7440-66-6	Zinc____	3.2	U		P_
	Cyanide__				NR

Color Before: COLORLESS Clarity Before: CLEAR_ Texture: _____

Color After: COLORLESS Clarity After: CLEAR_ Artifacts: _____

Comments:

CHLORIDE ANALYSIS

SUMMARY REPORT

ITEM NO.	SAMPLE IDENTIFIER	COMPUCHEM NUMBER	CONCENTRATION (mg/L)	REPORTING LIMIT (mg/L)
1.	RW-01	792536	7.38	3
2.	RW-07	792540	9.72	3
3.	RW-09	792541	9.50	3
4.	RW-10	792542	13.0	3
5.	RW-26	792543	11.4	3
6.	RW-31	792544	BRL	3
7.	RW-36	792545	210	3
8.	RW-48	792546	90.8	3
9.	RW-68	792547	17.4	3

BRL = BELOW REPORTING LIMIT

Reviewed by/ID#: [illegible] / 1262 Date: 3/29/96

Reviewed by/ID#: [illegible] / 1990 Date: 3/30/96

5

SDG 60

APPENDIX B

SUPPORT DOCUMENTATION

DAS file

DAS Number:R3231

RSCC Date: 02/02/96

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION III
DELIVERY OF ANALYTICAL SERVICES MASTER FORM

Site: KEYSTONE SANITATION			Data Validation Level: IMII	
Latitude: 30°43'30" North		Longitude: 77°02'25" West	Altitude: 243.84 meters	
Address: Union Township, Adams County, Pennsylvania 17331				
EPA Program: Superfund			Type of Activity: fundlead RI/FS	
EPA Account Number: 6TFA03N9L9			PRP Lab:	
Prepared by: Russell Sloboda			Phone Number: 610-971-0900	Fax No: 610-971-9715
EPA RPM: Christopher Corbett			Phone Number: 215-597-9800 (3HW24)	Fax No: 215-597-9890
Site Leader: William Wentworth			Phone Number: 610-971-0900	Fax No: 610-971-9715
EPA CO contact: David Senderling			Phone Number: 215-597-9800	Fax No: 215-597-9890
Contract Type: ARCS		Prime: Halliburton NUS Corporation	Sub:	
Concentration level:	Number of Samples:	Method Number:	Parameter:	Matrix:
LC	35	ILC01.0 Low Concentration SOW	CLP TAL metals	Aq
LC	35	EPA method 325	chloride	Aq
Entered 3-25-96 JTS		Screens 14561 + 14562.		
Additional Comments: . Chloride may be analyzed by either 325.1, 325.2, or 325.3.				
Required TAT: 35 days			Carrier: Federal Express	
Date Cancelled/Extended:		Reason:		
Sampling Dates	From: February 21, 1996	To: March 7, 1996	Shipping Dates	From: February 21, 1996 To: March 7, 1996

1. Special/additional technical instructions: (if outside protocol requirements, specify compound names, CAS numbers, detection limits,

AR320082

2. QC requirements: (specify method specific criteria for matrix spikes, duplicates,calibration, dilutions, performance evaluation material, laboratory control samples, detection or quantitation limits, method blanks, surrogates, internal standards, etc.) Any additional QC not stipulated in the method requirements are considered to be billable items.

QC TYPE	FREQUENCY	ACCEPTANCE LIMITS

All TAL metals QC requirements and corrective actions are as per ILC01.0 low concentration SOW. Chloride QC requirements are as per the established Region III DAS QA/QC checklist criteria (a copy of applicable pages can be furnished upon request).

Request reviewer:

(Name) (Affiliation) (Date)

RevMAS1.das

ENVIRONMENTAL PROTECTION AGENCY
Office of Enforcement

RE 3
Curtis Bldg., 6th & Walnut Sts.
Philadelphia, Pennsylvania 19106

CHAIN OF CUSTODY RECORD

PROJ. NO.: 0986
PROJECT NAME: K.S.
SAMPLERS: (Signature) Sidney J Cuman

COMPUCHEM
3306 CHAPEL HILL/NELSON HWY
RESEARCH TRIANGLE PARK, NC 27709
ATTN: RICHARD BLOOM
(919) 406-2401
DAS R3231

STA. NO.	DATE	TIME	COMP.	GRAB	STATION LOCATION	NO. OF CONTAINERS	LOW CONC. TAL METALS 1-L POLY	CHLORIDE 1-L POLY					EPA#	TAG#	REMARKS
RW-02	3/11/96	0845		X	KS-RW-02	2	1	1					2310311R02	3-1084878 AND 3-1084879	
RW-67	3/11/96	0935		X	KS-RW-67	2	1	1					2310311R67	~~3-1085706 AND 3-1085707~~ 3-1084937 AND 3-1084938	
RW-60	3/11/96	1025		X	KS-RW-60	2	1	1					2310311R60	3-1084930 AND 3-1084931	DUPLICATE OF RW-60D
RW-60D	3/11/96	1025		X	KS-RW-60D	2	1	1					2310311R60D	3-1084945 AND 3-1084946	DUPLICATE OF RW-60
RW-12	3/11/96	1125		X	KS-RW-12	2	1	1					2310311R12	3-2205906 AND 3-2205907	
RW-13	3/11/96	1150		X	KS-RW-13	6	3	3					2310311R13	3-2205923 THRU 3-2205928	MS/MSD
RW-14	3/11/96	0950		X	KS-RW-14	2	1	1					2310311R14	3-2205934 AND 3-2205935	
RW-16	3/11/96	0915		X	KS-RW-16	2	1	1					2310311R16	3-2205942 AND 3-2205943	
RW-04	3/11/96	1340		X	KS-RW-04	2	1	1					2310311R04	3-1085706 AND 3-1085707	
RW-11	3/11/96	1400		X	KS-RW-11	2	1	1					2310311R11	3-1085748 AND 3-1085749	
RW-23	3/11/96	1535		X	KS-RW-23	2	1	1					2310311R23	3-1084909 AND 3-1084910	
RW-02-FB	3/11/96	1100		X	KS-RW-02-FB	1	1						231031102F	3-1085606 AND 3-1085607	FIELD BLANK
RW-03	3/11/96	1430		X	KS-RW-03	2	1	1					2310311R03	3-1084895 AND 3-1084900	

Temp = 2/10 °C ph = OK

Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
Sidney J Cuman	3/12/96 1200				
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) RBloom/GE	Date / Time 3/14/96 0930	Remarks FED EX AIRBILL # 4405012640 DO QC 2310311R13	Orig w/ RW-02

COPY

Distribution: Original Accompanies Shipment; Copy to Coordinator Field Files

AR320084

ENVIRONMENTAL PROTECTION AGENCY
Office of Enforcement

REGION 3
Curtis Bldg., 6th & Walnut Sts.
Philadelphia, Pennsylvania 19106

CHAIN OF CUSTODY RECORD

PROJ. NO.: 0986
PROJECT NAME: K.S.
SAMPLERS: (Signature) [signature]

COMPUCHEM
3306 EAST CHAPEL HILL/NELSON HIGHWAY
RESEARCH TRIANGLE PARK, NC 27709
ATTN: RICHARD BLOOM
(919) 406-2401
DAS 3231

STA. NO.	DATE	TIME	COMP.	GRAB	STATION LOCATION	NO. OF CONTAINERS	LOW CONC TAL METALS 1-L POLY	CHLORIDE 1-L POLY					EPA#	TAG#	REMARKS
RW-06	3/13/96	0835		X	KS-RW-06	2	1	1					2310313R06	3-1085720 AND 3-1085721	
RW-29	3/13/96	0900		X	KS-RW-29	2	1	1					2310313R29	3-1085627 AND 3-1085628	
RW-57	3/13/96	0850		X	KS-RW-57	2	1	1					2310313R57	3-1084806 AND 3-1084807	
RW-15	3/13/96	0935		X	KS-RW-15	2	1	1					2310313R15	3-1085613 AND 3-1085614	
RW-30	3/13/96	0915		X	KS-RW-30	4 ~~2~~	3	1					2310313R30	~~3-1085630 THRU 3-1085641 THRU 3-1085645~~ MS/MSD	
RW-17	3/13/96	1020		X	KS-RW-17	2	1	1					2310313R17	3-2205949 AND 3-2205950	
RW-20	3/13/96	1055		X	KS-RW-20	2	1	1					2310313R20	3-1085620 AND 3-1085621	
RW-05	3/13/96	1710		X	KS-RW-05	2	1	1					2310313R05	3-1085713 AND 3-1085714	
RW-46	3/13/96	1805		X	KS-RW-46	2	1	1					2310313R46	3-1084916 AND 3-1084917	DUPLICATE OF RW-46D
RW-46D	3/13/96	1805		X	KS-RW-46D	2	1	1					2310313R46D	3-1084923 AND 3-1084924	DUPLICATE OF RW-46
RW-45	3/13/96	1040		X	KS-RW-45	2	1	1					2310313R45	3-1084823 AND 3-1084824	
RW-59	3/13/96	1130		X	KS-RW-59	2	1	1					2310313R59	3-1084816 AND 3-1084817	

COPY orig w/RW05

Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
[signature]	3/14/96 1150				
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)	Date / Time	Remarks	
		[signature]	3/15/96 0930	FED EX AIRBILL # 4405012636 DO QC 2310313R30	

Distribution: Original Accompanies Shipment; Copy to Coordinator [illegible] Files

AR320085

ENVIRON[illegible]AL PROTECTION AGENCY
[illegible]e of Enforcement

RE[illegible]3
Curtis Bldg., [illegible] Walnut Sts.
Philadelphia, Pennsylvania 19106

CHAIN OF CUSTODY RECORD

PROJ. NO.	PROJECT NAME
0986	K.S.

SAMPLERS: (Signature) Bill Wentworth Sidney Cunn

COMPUCHEM
3306 E. CHAPEL HILL/NELSON HWY.
RESEARCH TRIANGLE PARK, NC 27709
ATTN RICHARD BLOOM
(919) 406-2401

REMARKS
DAS R3231

STA. NO.	DATE	TIME	COMP.	GRAB	STATION LOCATION	NO. OF CONTAINERS	LOW CONC. TAL METALS 1-L POLY	CHLORIDE 1-L POLY					EPA#	TAG#	
RW-26-FB	3/19/96	1050		X	KS-RW-26-FB	1	1						2310319 26F	3-1085798	FIELD BLANK
RW-07	3/19/96	0930		X	KS-RW-07	2	1	1					2310319R07	3-1085734 AND 3-1085735	
RW-09	3/19/96	0930		X	KS-RW-09	2	1	1					2310319R09	3-1084864 AND 3-1084865	
RW-10	3/19/96	1020		X	KS-RW-10	2	1	1					2310319R10	3-1085741 AND 3-1085742	
RW-26	3/19/96	0905		X	KS-RW-26	2	1	1					2310319R26	3-1084844 AND 3-1084845	
RW-48	3/19/96	0945		X	KS-RW-48	2	1	1					2310319R48	3-1084830 AND 3-1084831	
~~RW-55~~	~~3/19/96~~			~~X~~	~~KS-RW-55~~	~~2~~	~~1~~	~~1~~					~~2310319R55~~	~~3-1084837 AND 3-1084838~~	NC
RW-36	3/19/96	1325		X	KS-RW-36	2	1	1					2310319R36	3-1085791 AND 3-1085792	
RW-68	3/19/96	1040		X	KS-RW-68	2	1	1					2310319R68	3-1085766 AND 3-1085767	
RW-31	3/19/96	1100		X	KS-RW-31	2	1	1					2310319R31	3-1085754 AND 3-1085755	
RW-01	3/19/96	1400		X	KS-RW-01	2	1	1					2310319R01	3-1084871 AND 3-1084872	

Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
Sidney Cunn	3/20/96 1115				
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)	Date / Time	Remarks	
		[signature]	3/21/96 0930	FED EX AIRBILL # 4405012625 [signature]	

Distribution: Original Accompanies Shipment; Copy to Coordinator Field Files

3.16092

AR320086

(1)

EPA SAMPLE SHIPPING LOG

(REQUIRED FOR ALL SAMPLES SENT THROUGH THE CONTRACT LAB PROGRAM)

PROJECT SITE NAME: KEYSTONE SANITATION ; EPA PROJ. OFFICER: CHRIS CORBETT
RAS NO. _____ ; ~~SAS~~ DAS NO. R3231 ; TASK OR SET NO. _____
PROJECT SITE LEADER: SIDNEY J. CURRAN ; PHONE NO. (410) 437-8832
PROJECT SAMPLE COORDINATOR: SIDNEY J. CURRAN ; PHONE NO. (410) 437-8832

QC SAMPLE INFORMATION AND/OR COMMENTS	CONC. (LOW/ MED./ HIGH)	SAMPLE PHASE (AQ/ SOL.)	TYPE OF REQUEST (ORG.DIO. OR INOR) SAS	EPA SAMPLE NO.	ORGANICS OR INORGANICS: LAB NAME	DATE SHIPPED	DATA RECEIVED (XX-OUT ITEMS NOT REQUESTED): VOA	BNA	PEST	TCDD	METALS	CN
(2)	(3)	(4)	(5)	(6)	(7)	(8)	←			(9)		→
	LOW	AQ	INOR	23103 R02	RW-02							
	↓	↓	↓	23103 11R67	RW-67							
DUPLICATE OF 23103 11 60 D				23103 11R60	RW-60							
DUPLICATE OF 23103 11R60				23103 11 60D	RW-60D							
				23103 11R12	RW-12							
DO QC				23103 11R13	RW-13							
				23103 11R14	RW-14							
				23103 11R16	RW-16							
				23103 11R04	RW-04							
				23103 11R11	RW-11							
				23103 11R23	RW-23							
FIELD BLANK				23103 11 02F	RW2FB							
	↓	↓	↓	23103 11R03	RW-03							

~~SAS~~ DAS REQUEST (DETAILS REQUIRED)

(10) (1) LOW CONCENTRATION TAL METALS
(2) CHLORIDE

LAB NAME	~~SAS~~ DAS REQUEST (ITEMIZE)	DATE SHIPPED	DATA REC'D.
(11)	(12)	(13)	
COMPU	(1)(2)	03/12/96	✓
↓	(1)(2)	↓	✓
	(1)(2)		✓
	(1)(2)		✓
	(1)(2)		✓
	(1)(2)	NO results for this sample	
	(1)(2)		✓
	(1)(2)		✓
	(1)(2)		✓ 2 Form I's w/ different sample ID nos.
	(1)(2)		✓
	(1)(2)		✓
	(1)		✓
	(1)(2)	↓	✓

MAR 1996 RECEIVED

FINAL SAMPLING: YES ☐ : NO ☒ - E... SHIPPING DATE:

AR320087

PAGE 1 OF 2 (1)

EPA SAMPLE SHIPPING LOG

(REQUIRED FOR ALL SAMPLES SENT THROUGH THE CONTRACT LAB PROGRAM)

PROJECT SITE NAME: KEYSTONE SANITATION ; EPA PROJ. OFFICER: CHRIS CORBETT
RAS NO. _____ ; ~~SAS~~ DAS NO. R3231 ; TASK OR SET NO. _____
PROJECT SITE LEADER: SIDNEY J. CURRAN ; PHONE NO. (410) 433-8832
PROJECT SAMPLE COORDINATOR: SIDNEY J. CURRAN ; PHONE NO. (410) 433-8832

~~SAS~~ DAS REQUEST (DETAILS REQUIRED)
(10) (1) LOW CONCENTRATION TAL METALS
(2) CHLORIDE

QC SAMPLE INFORMATION AND/OR COMMENTS	CONC. (LOW/MED./HIGH)	SAMPLE PHASE (AQ/SOL.)	TYPE OF REQUEST (ORG. DIO. OR INOR) SAS	EPA SAMPLE NO.	ORGANICS OR INORGANICS: LAB NAME	DATE SHIPPED	DATA RECEIVED (XX-OUT ITEMS NOT REQUESTED): VOA	BNA	PEST	TCDD	METALS	CN	LAB NAME	~~SAS~~ DAS REQUEST (ITEMIZE)	DATE SHIPPED	DATA REC'D.
(2)	(3)	(4)	(5)	(6)	(7)	(8)	←			(9)		→	(11)	(12)	(15)	rec'd metals 4-12-96 JS
	LOW	AQ	INOR	2310311R02									COMPU	(1)(2)	03/12/96	✓
	↓	↓	↓	2310311R67									↓	(1)(2)	↓	✓
DUPLICATE OF 2310311 60D				2310311R60										(1)(2)		✓
DUPLICATE OF 2310311R60				2310311 60D										(1)(2)		✓
				2310311R12										(1)(2)		✓
DO QC				2310311R13										(1)(2)		*
				2310311R14										(1)(2)		✓
				2310311R16										(1)(2)		✓
				2310311R04										(1)(2)		✓ *
				2310311R11										(1)(2)		✓
				2310311R23										(1)(2)		✓
FIELD BLANK				2310311 02F										(1)		✓
	↓	↓	↓	2310311R03									↓	(1)(2)	↓	✓
															rec'd JS metals 4-12-96	

* There were no analytical results for 2310311R13. There were 2 form I's for 2310311R04 with different lab sample #'s. Lab reviewer informed via DC-2 of these problems

FINAL SAMPLING: YES ☐ ; NO ☒ ; FINAL SHIPPING DATE: _____ (14)

REVISION 02/90

AR320088

EPA SAMPLE SHIPPING LOG

(1) (REQUIRED FOR ALL SAMPLES SENT THROUGH THE CONTRACT LAB PROGRAM)

PROJECT SITE NAME: KEYSTONE SANITATION ; EPA PROJ. OFFICER: CHRIS CORDETT
RAS NO. ; ~~SAS~~ DAS NO. R3231 ; TASK OR SET NO.
PROJECT SITE LEADER: STANLEY J. CURRAN ; PHONE NO. (410) 433-8832
PROJECT SAMPLE COORDINATOR: STANLEY J. CURRAN ; PHONE NO. (410) 433-8832

~~SAS~~ DAS REQUEST (DETAILS REQUIRED)
(10) (1) LOW CONCENTRATION TAL METALS
(2) CHLORIDE

QC SAMPLE INFORMATION AND/OR COMMENTS	CONC. (LOW/MED./HIGH)	SAMPLE PHASE (AQ/SOL.)	TYPE OF REQUEST (ORG.DIO. OR INOR) SAS	EPA SAMPLE No.	ORGANICS OR INORGANICS: LAB NAME	DATE SHIPPED	DATA RECEIVED (XX-OUT ITEMS NOT REQUESTED): VOA	BNA	PEST	TCDD	METALS	CN	LAB NAME	~~SAS~~ DAS REQUEST (ITEMIZE)	DATE SHIPPED	DATA REC'D.
(2)	(3)	(4)	(5)	(6)	(7)	(8)	←			(9)		→	(11)	(12)	(13)	
	LOW	AQ	INOR	231031 3R06	RW06								COMPU	(1)(2)	3/14/96	✓
				231031 3R29	RW29									(1)(2)		✓
				231031 3A57	RW57									(1)(2)		✓
				231031 3R15	RW15									(1)(2)		✓
DO QC				231031 3R30	RW30									(1)(2)		✓
				231031 3R17	RW17									(1)(2)		✓
				231031 3R20	RW20									(1)(2)		✓
				231031 3R05	RW05									(1)(2)		✓
DUPLICATE OF 231031 346 D				231031 3R46	RW46									(1)(2)		✓
DUPLICATE OF 231031 3R46				231031 346D	RW46D									(1)(2)		✓
				231031 3R45	RW45									(1)(2)		✓
				231031 3R59	RW59									(1)(2)		✓
																JB 4-12-96

MAR 1996

FINAL SAMPLING: YES ☐ ; NO ☒ : F SHIPPING DATE:

AR320089

PAGE 1 OF 1 (1)

EPA SAMPLE SHIPPING LOG

(REQUIRED FOR ALL SAMPLES SENT THROUGH THE CONTRACT LAB PROGRAM)

PROJECT SITE NAME: KEYSTONE SANITATION; EPA PROJ. OFFICER: CHRIS CORBETT
RAS NO. ____; ~~SAS~~ QAS NO. R3231; TASK OR SET NO. ____
PROJECT SITE LEADER: SIDNEY J. CURRAN; PHONE NO. (410) 433-8832
PROJECT SAMPLE COORDINATOR: SIDNEY J. CURRAN; PHONE NO. (410) 433-8832

~~SAS~~ QAS REQUEST (DETAILS REQUIRED) (10)
(1) LOW CONCENTRATION TAL METALS
(2) CHLORIDE

QC SAMPLE INFORMATION AND/OR COMMENTS	CONC. (LOW/ MED./ HIGH)	SAMPLE PHASE (AQ/ SOL.)	TYPE OF REQUEST (ORG.DIO. OR INOR) SAS	EPA SAMPLE NO.	ORGANICS OR INORGANICS: LAB NAME	DATE SHIPPED	DATA RECEIVED (XX-OUT ITEMS NOT REQUESTED): VOA	BNA	PEST	TCDD	METALS	CN	LAB NAME	~~SAS~~ QAS REQUEST (ITEMIZE)	DATE SHIPPED	DATA REC'D.
(2)	(3)	(4)	(5)	(6)	(7)	(8)	←			(9)		→	(11)	(12)	(13)	
FIELD BLANK	LOW	AQ	INOR	2310319R0F	RW-26								COMPU	(1)	3/20/96	rec'd JB Metals 4-12-96
				2310319R07	RW-07									(1)(2)		✓ ✓
				2310319R09	RW-09									(1)(2)		✓ ✓
				2310319R10	RW-10									(1)(2)		✓ ✓
				2310319R26	RW-26									(1)(2)		✓ ✓
				2310319R48	RW-48									(1)(2)		✓ ✓
				2310319R36	RW-36									(1)(2)		✓ ✓
				2310319R68	RW-68									(1)(2)		✓ ✓
				2310319R31	RW31									(1)(2)		✓ ✓
				2310319R01	RW01									(1)(2)		✓ ✓
																rec'd JB 4-12-96 chloride

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FINAL SAMPLING: YES ☒; NO ☐; FINAL SHIPPING DATE: 3/20/96 (14)

REVISION

AR320090

PAGE 1 OF 1

EPA SAMPLE SHIPPING LOG

(1) (REQUIRED FOR ALL SAMPLES SENT THROUGH THE CONTRACT LAB PROGRAM)

PROJECT SITE NAME: KEYSTONE SANITATION; EPA PROJ. OFFICER: CHRIS CORBETT
RAS NO. ____; ~~SAS~~ DAS NO. R3231; TASK OR SET NO. ____
PROJECT SITE LEADER: SIDNEY J. CURRAN; PHONE NO. (410) 433-8832
PROJECT SAMPLE COORDINATOR: SIDNEY J. CURRAN; PHONE NO. (410) 433-8832

~~SAS~~ DAS REQUEST (DETAILS REQUIRED)
(10) (1) LOW CONCENTRATION TAL METALS
(2) CHLORIDE

QC SAMPLE INFORMATION AND/OR COMMENTS	CONC. (LOW/ MED./ HIGH)	SAMPLE PHASE (AQ/ SOL.)	TYPE OF REQUEST (ORG, DIO, OR INOR) SAS	EPA SAMPLE NO.	ORGANICS OR INORGANICS: LAB NAME	DATE SHIPPED	DATA RECEIVED (XX-OUT ITEMS NOT REQUESTED): VOA	BNA	PEST	TCDD	METALS	CN	LAB NAME	~~SAS~~ DAS REQUEST (ITEMIZE)	DATE SHIPPED	DATA REC'D.
(2)	(3)	(4)	(5)	(6)	(7)	(8)	←			(9)		→	(11)	(12)	(13)	
FIELD BLANK	LOW	AQ	INOR	23103192LF									COMPU	(1)	3/20/96	
				23103192A07	R07									(1)(2)		✓
				23103192R09	R09									(1)(2)		✓
				23103192R10	R10									(1)(2)		✓
				23103192R26	R26									(1)(2)		✓
				23103192R48	R48									(1)(2)		✓
				23103192R36	R36									(1)(2)		✓
				23103192R68	R68									(1)(2)		✓
				23103192R31	R31									(1)(2)		✓
				23103192R01	R01									(1)(2)		✓

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FINAL SAMPLING: YES ☒; NO ☐ FINAL SHIPPING DATE: 3/20/96 REVISION

AR320091

SDG RW02M

COMPUCHEM
ENVIRONMENTAL
CORPORATION

R3231
SDG RW02M

01/APR/96

4
APR 1996

WESTON
5 UNDERWOOD COURT
DELRAN, NJ 08075-1229

Subject: Report of Data - Account Number# 705038 Order# 32043

Enclosed are the results of analytical work performed in accordance with the referenced account number.

This report covers 13 sample(s) appearing on the attached listing.

Thank you for selecting CompuChem Environmental for your sample analysis. If you should have questions or require additional analytical services please contact your representative at 1-919-406-1600.

Sincerely,

Report Preparation
CompuChem Laboratories, Inc.

Attachment

COMPUCHEM
ENVIRONMENTAL
CORPORATION

01/APR/96

WESTON
5 UNDERWOOD COURT
DELRAN, NJ 08075-1229

ACCOUNT #: 705038

CC#	SAMPLE-ID	RECEIPT DATE
790567	C#R3231-RW-02	3/14/96
790568	C#R3231-RW-03	3/14/96
790569	C#R3231-RW-04	3/14/96
790577	C#R3231-RW-11	3/14/96
790578	C#R3231-RW-12	3/14/96
790579	C#R3231-RW-13	3/14/96
790580	C#R3231-RW-14	3/14/96
790582	C#R3231-RW-16	3/14/96
790583	C#R3231-RW-23	3/14/96
790584	C#R3231-RW-60	3/14/96
790585	C#R3231-RW60D	3/14/96
790586	C#R3231-RW-67	3/14/96
790587	C#R3231-RW2FB	3/14/96

TOTAL NUMBER OF SAMPLES = 13

COMPUCHEM
ENVIRONMENTAL
CORPORATION

3306 Chapel Hill/Nelson Highway P.O. Box 14998
Research Triangle Park, NC 27709-4998
(919) 406-1600

INORGANIC CASE SUMMARY NARRATIVE
CASE # R3231 SDG # RW02M
CONTRACT # ILM03.0

The indicated Sample Delivery Group (SDG) consisting of thirteen water samples was received into the laboratory management system (LMS) on March 14, 1996 intact, at a temperature of 4 (+/-2) degrees Celcius, with proper documentation, in sealed shipping containers, unless otherwise noted in any attachments or Quality Assurance Notices. The samples were analyzed, in accordance with EPA CLP Statement of Work (SOW) ILM03.0 for the metallic analytes contained in the Inorganic Target Analyte List.

SAMPLE IDs:

The following customer IDs are associated with this SDG:

RW-02, RW-03, RW-04, ~~RW-04~~ RW13, RW-11, RW-12, RW-14, RW-16, RW-23, RW-60, RW-67, RW2RB, RW60D

INSTRUMENTAL QUALITY CONTROL:

All calibration verification solutions (ICV & CCV), blanks (ICB, CCB) and interference check samples (ICSA & ICSAB) associated with this data were confirmed to be within EPA CLP allowable limits.

SAMPLE PREPARATION QUALITY CONTROL:

The sample preparation procedure verifications (LCS & PB) were found to be within acceptable ranges and all field samples were prepared and analyzed within the contract specified holding times.

MATRIX RELATED QUALITY CONTROL:

The sample matrix spike, RW-13S, was found to be outside CLP control limits for thallium. The reported concentrations for these analytes are flagged with an "N" on all associated Form 1 and on Form 5a.

An "N" indicates a matrix-related interference in the sample preparation procedure &/or analysis for the

flagged analyte. This is normally the consequence of a relatively high anionic content in the sample or (for some sediments) an inconsistent sample matrix relative to that analyte.

CLP control limits for matrix spike recoveries are set at 75% to 125% of the analyte quantity added unless original sample concentrations exceed the true values of these "spikes" by a factor of four or more; in this case affected analytes are not flagged even if recoveries fall outside percentage recovery control limits.

The sample matrix duplicate, RW-13D, was within CLP control limits for all requested analytes.

CLP control limits for duplicate determinations are +/- 20% Relative Percent Difference (RPD) for concentrations greater than or equal to five times the CRDL in both the original and duplicate samples, and +/- the CRDL for concentrations less than five times the CRDL. The RPD is not calculated if both the original and duplicate values fall below the IDL.

A five-fold serial dilution of sample RW-13L was performed in accordance with CLP requirements for ICP analysis. The adjusted sample concentrations were outside of CLP control limits for potassium, resulting in the application of an "E" flag on all associated Form 1, the Cover Page and Form 9.

An "E" indicates that a chemical or physical interference effect was encountered during the analysis of the flagged analyte. As a result of this interference, all values for the analyte in the same matrix must be considered to be estimated quantities.

CLP control limits for serial dilution are defined as a deviation less than or equal to 10% in the dilution-adjusted concentrations from the original values for all analyte concentrations with values greater than fifty (50) times their respective Instrument Detection Limit (IDL) in the original sample.

Analyte results obtained by graphite furnace are flagged with "E" on a sample specific basis if the analytical spike recovery associated with the sample is not within acceptable ranges after two successive dilutions. An

"E" flag appears on a sample specific basis in the Form 1 for thallium in all samples except RW2FB.

Release of the data contained in this hard copy data package has been authorized by the laboratory Manager or his designee, as verified by the following signature.

Jeanne Alston
Final Technical Reviewer
March 31, 1996

Note: This report is paginated for reference and accountability.

U.S. EPA - CLP

COVER PAGE - INORGANIC ANALYSES DATA PACKAGE

Lab Name: COMPUCHEM_ENV._CORP._____ Contract: ILM03.0___

Lab Code: COMPU_ Case No.: R3231 SAS No.: _____ SDG No.:RW02M_

SOW No.: ILM03.0

EPA Sample No.	Lab Sample ID
RW-02	790567
RW-03	790568
RW-04	790579
RW-13D	790571
RW-13S	790570
RW-04	790569
RW-11	790577
RW-12	790578
RW-14	790580
RW-16	790582
RW-23	790583
RW-60	790584
RW-67	790586
RW2FB	790587
RW60D	790585

APR 1996 RECEIVED

Were ICP interelement corrections applied ? Yes/No YES

Were ICP background corrections applied ? Yes/No YES
If yes - were raw data generated before application of background corrections ? Yes/No NO_

Comments:
THE FOLLOWING ANALYTES HAVE BEEN FLAGGED WITH AN "E" TO INDICATE SERIAL DILUTION RESULTS WHICH ARE NOT WITHIN CONTROL LIMITS:
POTASSIUM

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on floppy diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature: Jeanne C. [illegible] Name: Mark Ross

Date: March 31 1996 Title: Inorganic Div. Manager

U.S. EPA - CLP

2B
CRDL STANDARD FOR AA AND ICP

Lab Name: COMPUCHEM_ENV._CORP._____ Contract: ILM03.0___

Lab Code: COMPU_ Case No.: R3231_ SAS No.: _____ SDG No.: RW02M_

AA CRDL Standard Source: SPEX_____

ICP CRDL Standard Source: SPEX_____

Concentration Units: ug/L

Analyte	CRDL Standard for AA			CRDL Standard for ICP				
					Initial		Final	
	True	Found	%R	True	Found	%R	Found	%R
Aluminum								
Antimony				120.0	124.00	103.3	123.20	102.7
Arsenic				20.0	19.75	98.7	19.98	99.9
Barium								
Beryllium				10.0	10.21	102.1	10.47	104.7
Cadmium				10.0	10.67	106.7	10.66	106.6
Calcium								
Chromium				20.0	20.29	101.4	20.65	103.2
Cobalt				100.0	103.10	103.1	102.20	102.2
Copper				50.0	53.38	106.8	53.85	107.7
Iron								
Lead				6.0	6.77	112.8	6.40	106.7
Magnesium								
Manganese				30.0	31.15	103.8	31.07	103.6
Mercury	0.2	0.21	105.0					
Nickel				80.0	83.74	104.7	83.84	104.8
Potassium								
Selenium				10.0	11.63	116.3	11.50	115.0
Silver				20.0	11.86	59.3	12.15	60.7
Sodium								
Thallium	10.0	9.25	92.5					
Vanadium				100.0	103.60	103.6	104.50	104.5
Zinc				40.0	33.64	84.1	33.89	84.7

AR320099

U.S. EPA - CLP

2B
CRDL STANDARD FOR AA AND ICP

Lab Name: COMPUCHEM_ENV._CORP._____ Contract: ILM03.0___

Lab Code: COMPU_ Case No.: R3231_ SAS No.: _____ SDG No.: RW02M_

AA CRDL Standard Source: SPEX_____

ICP CRDL Standard Source: SPEX_____

Concentration Units: ug/L

Analyte	CRDL Standard for AA			CRDL Standard for ICP				
					Initial		Final	
	True	Found	%R	True	Found	%R	Found	%R
Aluminum								
Antimony								
Arsenic								
Barium								
Beryllium								
Cadmium								
Calcium								
Chromium								
Cobalt								
Copper								
Iron								
Lead								
Magnesium								
Manganese								
Mercury								
Nickel								
Potassium								
Selenium								
Silver								
Sodium								
Thallium	10.0	10.41	104.1					
Vanadium								
Zinc				40.0	33.24	83.1	33.01	82.5

AR320100

U.S. EPA - CLP

3
BLANKS

Lab Name: COMPUCHEM_ENV._CORP._____ Contract: ILM03.0___

Lab Code: COMPU_ Case No.: R3231_ SAS No.: _____ SDG No.: RW02M_

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	Prepa-ration Blank	C	M
Aluminum	21.3	U	21.3	U	21.3	U	21.3	U	30.840	B	P
Antimony	1.8	U	1.8	U	1.8	U	1.8	U	1.800	U	P
Arsenic	3.0	U	3.0	U	3.0	U	3.0	U	3.000	U	P
Barium	0.1	U	0.1	U	0.1	B	0.6	B	0.339	B	P
Beryllium	0.3	U	0.3	U	0.3	U	0.3	U	0.300	U	P
Cadmium	0.2	U	0.2	U	0.3	B	0.2	U	0.200	U	P
Calcium	-56.8	B	-45.1	B	-50.2	B	-49.6	B	-55.210	B	P
Chromium	0.7	U	0.7	U	0.7	U	0.7	U	0.971	B	P
Cobalt	0.5	U	0.5	U	0.5	U	0.5	U	0.500	U	P
Copper	0.7	U	0.7	U	0.7	U	0.7	U	0.890	B	P
Iron	10.9	U	10.9	U	10.9	U	10.9	U	35.510	B	P
Lead	1.6	U	1.6	U	1.6	U	1.6	U	1.600	U	P
Magnesium	9.1	U	12.5	B	9.1	U	9.1	U	9.100	U	P
Manganese	0.2	U	0.2	U	0.2	U	0.2	U	0.408	B	P
Mercury	0.2	U	0.2	U	0.2	U	0.2	U	0.200	U	CV
Nickel	1.0	U	1.0	U	1.0	U	1.0	U	1.000	U	P
Potassium	18.6	B	14.4	U	16.1	B	14.4	U	14.400	U	P
Selenium	2.6	U	2.6	U	2.6	U	3.3	B	2.600	U	P
Silver	0.7	U	0.7	U	0.7	U	0.7	U	0.700	U	P
Sodium	212.0	U	212.0	U	212.0	U	212.0	U	241.700	B	P
Thallium	1.9	U	1.9	U	1.9	U	1.9	U	1.900	U	F
Vanadium	0.6	U	0.6	U	0.6	U	0.6	U	0.600	U	P
Zinc	-4.6	B	-4.5	B	-4.5	B	-4.6	B	3.200	U	P
Cyanide											NR

U.S. EPA - CLP

3
BLANKS

Lab Name: COMPUCHEM_ENV._CORP._____ Contract: ILM03.0___

Lab Code: COMPU_ Case No.: R3231_ SAS No.: _____ SDG No.: RW02M_

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	Prepa-ration Blank	C	M
Aluminum			21.3	U	21.3	U					P
Antimony			1.8	U	1.8	U					P
Arsenic			3.0	U	3.0	U					P
Barium			0.3	B	0.2	B					P
Beryllium			0.4	B	0.4	B					P
Cadmium			0.2	U	0.2	B					P
Calcium			-49.2	B	-44.0	B					P
Chromium			0.7	U	0.7	U					P
Cobalt			0.5	U	0.5	U					P
Copper			0.7	U	0.7	U					P
Iron			10.9	U	10.9	U					P
Lead			1.6	U	1.6	U					P
Magnesium			9.1	U	12.4	B					P
Manganese			0.2	U	0.2	U					P
Mercury			0.2	U	0.2	U	0.2	U			CV
Nickel			1.0	U	1.0	U					P
Potassium			14.4	U	14.4	U					P
Selenium			2.6	U	2.6	U					P
Silver			0.7	U	0.7	U					P
Sodium			212.0	U	212.0	U					P
Thallium	1.9	U	1.9	U	1.9	U	1.9	U			F
Vanadium			0.6	U	0.6	U					P
Zinc			-4.4	B	-4.3	B			-4.202	B	P
Cyanide											NR

U.S. EPA - CLP

5A
SPIKE SAMPLE RECOVERY

EPA SAMPLE NO.

RW-13S

Lab Name: COMPUCHEM_ENV._CORP._____ Contract: ILM03.0___

Lab Code: COMPU_ Case No.: R3231_ SAS No.: _____ SDG No.: RW02M_

Matrix (soil/water): WATER_ Level (low/med): LOW___

% Solids for Sample: __0.0

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	2150.0000		179.8000	B	2000.00	98.5		P
Antimony	75-125	512.1000		1.8000	U	500.00	102.4		P
Arsenic	75-125	1931.0000		3.0000	U	2000.00	96.5		P
Barium	75-125	2143.0000		34.8700	B	2000.00	105.4		P
Beryllium	75-125	51.2100		0.3000	U	50.00	102.4		P
Cadmium	75-125	52.4400		0.2000	U	50.00	104.9		P
Calcium									NR
Chromium	75-125	213.6000		4.9660	B	200.00	104.3		P
Cobalt	75-125	510.5000		1.7200	B	500.00	101.8		P
Copper	75-125	538.3000		262.1000		250.00	110.5		P
Iron	75-125	1250.0000		195.6000		1000.00	105.4		P
Lead	75-125	527.3000		5.7770		500.00	104.3		P
Magnesium									NR
Manganese	75-125	504.1000		7.0710	B	500.00	99.4		P
Mercury	75-125	0.9910		0.2000	U	1.00	99.1		CV
Nickel	75-125	523.1000		4.0170	B	500.00	103.8		P
Potassium									NR
Selenium	75-125	1995.0000		2.6000	U	2000.00	99.7		P
Silver	75-125	52.3800		0.7000	U	50.00	104.8		P
Sodium									NR
Thallium	75-125	20.6300		19.0000	U	50.00	41.3	N	F
Vanadium	75-125	525.2000		0.6390	B	500.00	104.9		P
Zinc	75-125	519.9000		11.2500	B	500.00	101.7		P
Cyanide									NR

Comments:

U.S. EPA - CLP

9

ICP SERIAL DILUTION

EPA SAMPLE NO.

RW-13L

Lab Name: COMPUCHEM_ENV._CORP._____ Contract: ILM03.0___

Lab Code: COMPU_ Case No.: R3231_ SAS No.: _____ SDG No.: RW02M_

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

Concentration Units: ug/L

Analyte	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	% Difference	Q	M
Aluminum	179.80	B	406.75	B	126.2		P
Antimony	1.80	U	9.00	U			P
Arsenic	3.00	U	15.00	U			P
Barium	34.87	B	34.96	B	0.3		P
Beryllium	0.30	U	1.50	U			P
Cadmium	0.20	U	1.00	U			P
Calcium	3737.00	B	3409.50	B	8.8		P
Chromium	4.97	B	4.85	B	2.4		P
Cobalt	1.72	B	2.50	U	100.0		P
Copper	262.10		265.50		1.3		P
Iron	195.60		202.30	B	3.4		P
Lead	5.78		8.00	U	100.0		P
Magnesium	2443.00	B	2342.00	B	4.1		P
Manganese	7.07	B	7.53	B	6.5		P
Mercury							NR
Nickel	4.02	B	5.59	B	39.1		P
Potassium	1003.00	B	1172.50	B	16.9	E	P
Selenium	2.60	U	14.66	B			P
Silver	0.70	U	3.50	U			P
Sodium	4445.00	B	6155.00	B	38.5		P
Thallium							NR
Vanadium	0.64	B	3.00	U	100.0		P
Zinc	11.25	B	16.00	U	100.0		P

U.S. EPA - CLP

14

ANALYSIS RUN LOG

Lab Name: COMPUCHEM_ENV._CORP._____ Contract: ILM03.0___

Lab Code: COMPU_ Case No.: R3231_ SAS No.: _____ SDG No.:RW02M_

Instrument ID Number: ICP3_____ Method: P_

Start Date: 03/25/96 End Date: 03/25/96

EPA Sample No.	D/F	Time	% R	Analytes																							
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
S0	1.00	0947		X	X	X	X	X	X	X	X	X	X	X	X	X	X	-	X	X	X	X	X	X	X	X	-
S	1.00	0953							X		X		X		X			-	X		X	X		X		X	-
S	1.00	0957		X	-	-	-	-		X		-		X		X	-	-		-			-		-		-
S	1.00	1002			-	X	X	X	-		-	X	-		-		X	-	-	-	-	-		-	X	-	-
S	1.00	1005		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	X	-	-	-	-
S	1.00	1010		-	X	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ICV	1.00	1010		X		-	X	X	X	X	X	X	X	X	-	X	X	-	X	X	-	X	X	-	X	X	-
ICV	1.00	1016		-	X	X	-	-	-	-	-	-	-	-	X	-	-	-	-	-	X	-	-	-	-	-	-
V	1.00	1021																									
CB	1.00	1027		X	X	X	X	X	X	X	X	X	X	X	X	X	X	-	X	X	X	X	X	-	X	X	-
ICSA	1.00	1032		X	X	X	X	X	X	X	X	X	X	X	X	X	X	-	X	X	X	X	X	-	X	X	-
ICSAB	1.00	1038		X	X	X	X	X	X	X	X	X	X	X	X	X	X	-	X	X	X	X	X	-	X	X	-
CRI	1.00	1043			X	X		X	X		X	X	X		X		X	-	X		X	X		-	X	X	-
CCV	1.00	1049		X	X	X	X	X	X	X	X	X	X	X	X	X	X	-	X	X	X	X	X	-	X	X	-
CCB	1.00	1054		X	X	X	X	X	X	X	X	X	X	X	X	X	X	-	X	X	X	X	X	-	X	X	-
ZZZZZZ	1.00	1100		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	1105		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	1111		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	1116		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	1122		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	5.00	1128		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	1133		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	1139		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	1144		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	1150																									
CCV	1.00	1155		X	X	X	X	X	X	X	X	X	X	X	X	X	X	-	X	X	X	X	X	-	X	X	-
CCB 2	1.00	1201		X	X	X	X	X	X	X	X	X	X	X	X	X	X	-	X	X	X	X	X	-	X	X	-
ZZZZZZ	1.00	1207		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	1212		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	1218		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	1223		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	1229		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

AR320105

U.S. EPA - CLP

14

ANALYSIS RUN LOG

Lab Name: COMPUCHEM_ENV._CORP._____ Contract: ILM03.0___

Lab Code: COMPU_ Case No.: R3231_ SAS No.: _____ SDG No.:RW02M_

Instrument ID Number: ICP3_____ Method: P_

Start Date: 03/25/96 End Date: 03/25/96

EPA Sample No.	D/F	Time	% R	Analytes																							
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
ZZZZZZ	1.00	1234		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	1240		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PBW	1.00	1245		X	X	X	X	X	X	X	X	X	X	X	X	X	X	-	X	X	X	X	X	-	X	X	-
LCSW	1.00	1251		X	X	X	X	X	X	X	X	X	X	X	X	X	X	-	X	X	X	X	X	-	X	X	-
RW-04 /5	1.00	1256		X	X	X	X	X	X	X	X	X	X	X	X	X	X	-	X	X	X	X	X	-	X	X	-
CCV	1.00	1301		X	X	X	X	X	X	X	X	X	X	X	X	X	X	-	X	X	X	X	X	-	X	X	-
CCB	1.00	1307		X	X	X	X	X	X	X	X	X	X	X	X	X	X	-	X	X	X	X	X	-	X	X	-
RW-13D	1.00	1312		X	X	X	X	X	X	X	X	X	X	X	X	X	X	-	X	X	X	X	X	-	X	X	-
RW-13S	1.00	1318		X	X	X	X	X	X	-	X	X	X	X	X	-	X	-	X	-	X	X	-	-	X	X	-
RW-13L	5.00	1323		X	X	X	X	X	X	X	X	X	X	X	X	X	X	-	X	X	X	X	X	-	X	X	-
RW-02	1.00	1329		X	X	X	X	X	X	X	X	X	X	X	X	X	X	-	X	X	X	X	X	-	X	X	-
RW-03	1.00	1334		X	X	X	X	X	X	X	X	X	X	X	X	X	X	-	X	X	X	X	X	-	X	X	-
RW-04	1.00	1340		X	X	X	X	X	X	X	X	X	X	X	X	X	X	-	X	X	X	X	X	-	X	X	-
RW-11	1.00	1345		X	X	X	X	X	X	X	X	X	X	X	X	X	X	-	X	X	X	X	X	-	X	X	-
RW-12	1.00	1351		X	X	X	X	X	X	X	X	X	X	X	X	X	X	-	X	X	X	X	X	-	X	X	-
RW-14	1.00	1356		X	X	X	X	X	X	X	X	X	X	X	X	X	X	-	X	X	X	X	X	-	X	X	-
RW-16	1.00	1402		X	X	X	X	X	X	X	X	X	X	X	X	X	X	-	X	X	X	X	X	-	X	X	-
CCV	1.00	1407		X	X	X	X	X	X	X	X	X	X	X	X	X	X	-	X	X	X	X	X	-	X	X	-
CCB	1.00	1413		X	X	X	X	X	X	X	X	X	X	X	X	X	X	-	X	X	X	X	X	-	X	X	-
RW-23	1.00	1418		X	X	X	X	X	X	X	X	X	X	X	X	X	X	-	X	X	X	X	X	-	X	X	-
RW-60	1.00	1424		X	X	X	X	X	X	X	X	X	X	X	X	X	X	-	X	X	X	X	X	-	X	X	-
RW60D	1.00	1429		X	X	X	X	X	X	X	X	X	X	X	X	X	X	-	X	X	X	X	X	-	X	X	-
RW-67	1.00	1434		X	X	X	X	X	X	X	X	X	X	X	X	X	X	-	X	X	X	X	X	-	X	X	-
RW2FB	1.00	1440		X	X	X	X	X	X	X	X	X	X	X	X	X	X	-	X	X	X	X	X	-	X	-	-
ZZZZZZ	1.00	1445		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RW-13A	1.00	1451																									
ICSA	1.00	1456		X	X	X	X	X	X	X	X	X	X	X	X	X	X	-	X	X	X	X	X	-	X	X	-
ICSAB	1.00	1502		X	X	X	X	X	X	X	X	X	X	X	X	X	X	-	X	X	X	X	X	-	X	X	-
CRI	1.00	1507			X	X		X	X		X	X	X		X		X	-	X		X	X		-	X	X	-
CCV	1.00	1513		X	X	X	X	X	X	X	X	X	X	X	X	X	X	-	X	X	X	X	X	-	X	X	-
CCB	1.00	1522		X	X	X	X	X	X	X	X	X	X	X	X	X	X	-	X	X	X	X	X	-	X	X	-
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FORM XIV - IN ILM0

AR320106

U.S. EPA - CLP

14

ANALYSIS RUN LOG

Lab Name: COMPUCHEM_ENV._CORP._____ Contract: ILM03.0___

Lab Code: COMPU_ Case No.: R3231_ SAS No.: _____ SDG No.:RW02M_

Instrument ID Number: ICP3_____ Method: P_

Start Date: 03/29/96 End Date: 03/29/96

EPA Sample No.	D/F	Time	% R	Analytes																							
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
S0	1.00	2019		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-
S	1.00	2025		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-
S	1.00	2029		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
S	1.00	2034		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
S	1.00	2037		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
S	1.00	2042		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ICV	1.00	2043		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-
ICV	1.00	2048		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ICV	1.00	2054		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CCB	1.00	2059		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-
ICSA	1.00	2104		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-
ICSAB	1.00	2110		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-
CRI 3	1.00	2115		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-
CCV	1.00	2121		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-
CCB	1.00	2126		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-
ZZZZZZ	1.00	2132		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	2137		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	2212		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PBW	1.00	2217		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-
LCSW	1.00	2223		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-
RW2FB	1.00	2228		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-
ICSA	1.00	2234		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-
ICSAB	1.00	2240		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-
CRI 4	1.00	2246		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-
CCV	1.00	2251		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-
CCB	1.00	2257		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-
				-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
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				-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
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FORM XIV - IN ILM03.0

U.S. EPA - CLP

14

ANALYSIS RUN LOG

Lab Name: COMPUCHEM_ENV._CORP._____ Contract: ILM03.0___

Lab Code: COMPU_ Case No.: R3231_ SAS No.: _____ SDG No.:RW02M_

Instrument ID Number: V2_____ Method: CV

Start Date: 03/25/96 End Date: 03/25/96

EPA Sample No.	D/F	Time	% R	Analytes																								
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
S0	1.00	1004		-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-	-	-	-
S0.2	1.00	1006		-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-	-	-	-
S0.5	1.00	1009		-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-	-	-	-
S1	1.00	1011		-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-	-	-	-
S5	1.00	1014		-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-	-	-	-
S10	1.00	1016		-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-	-	-	-
ICV	1.00	1019		-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-	-	-	-
ICB	1.00	1021		-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-	-	-	-
CRA	1.00	1023		-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-	-	-	-
CCV	1.00	1026		-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-	-	-	-
CCB	1.00	1028		-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	1031		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	1033		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	1035		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	1038		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	1040		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	1042		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	1045		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	1047		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	1049		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	1052		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CCV	1.00	1054		-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-	-	-	-
CCB	1.00	1056		-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	1059		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	1101		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	1104		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	1106		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	1108		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	1111		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PBW	1.00	1113		-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-	-	-	-
LCSW	1.00	1115		-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-	-	-	-
RW-04 RW-13	1.00	1118		-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-	-	-	-

FORM XIV - IN ILM0

(J.V.) 5/9/96

64

AR320108

U.S. EPA - CLP

14

ANALYSIS RUN LOG

Lab Name: COMPUCHEM_ENV._CORP._____ Contract: ILM03.0___

Lab Code: COMPU_ Case No.: R3231_ SAS No.: _____ SDG No.:RW02M_

Instrument ID Number: V2_____ Method: CV

Start Date: 03/25/96 End Date: 03/25/96

EPA Sample No.	D/F	Time	% R	Analytes																								
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
				-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RW-13D	1.00	1120		-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-	-	-	-
CCV	1.00	1122		-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-	-	-	-
CCB	1.00	1125		-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-	-	-	-
RW-13S	1.00	1127		-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-	-	-	-
RW-02	1.00	1129		-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-	-	-	-
RW-03	1.00	1132		-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-	-	-	-
RW-04	1.00	1134		-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-	-	-	-
RW-11	1.00	1136		-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-	-	-	-
RW-12	1.00	1139		-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-	-	-	-
RW-14	1.00	1141		-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-	-	-	-
RW-16	1.00	1143		-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-	-	-	-
RW-23	1.00	1146		-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-	-	-	-
RW-60	1.00	1148		-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-	-	-	-
CCV	1.00	1151		-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-	-	-	-
CCB	1.00	1153		-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-	-	-	-
RW60D	1.00	1155		-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-	-	-	-
RW-67	1.00	1158		-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-	-	-	-
RW2FB	1.00	1200		-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	1202		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	1205		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	1207		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	1209		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	1212		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	1214		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CCV	1.00	1217		-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-	-	-	-
CCB	1.00	1219		-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-	-	-	-
CCV	1.00	1221		-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-	-	-	-
CCB	1.00	1224		-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-	-	-	-
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FORM XIV - IN ILM03.0

AR320109

68

U.S. EPA - CLP

14

ANALYSIS RUN LOG

Lab Name: COMPUCHEM_ENV._CORP._____ Contract: ILM03.0___

Lab Code: COMPU_ Case No.: R3231_ SAS No.: _____ SDG No.:RW02M_

Instrument ID Number: A8_____ Method: F_

Start Date: 03/26/96 End Date: 03/26/96

EPA Sample No.	D/F	Time	% R	Analytes																							
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
S0	1.00	1105		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-
S10	1.00	1109		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-
S30	1.00	1112		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-
S60	1.00	1115		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-
ICV	1.00	1119		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-
ICB	1.00	1123		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-
CRA	1.00	1126		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-
CCV	1.00	1130		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-
CCB	1.00	1133		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-
ZZZZZZ	1.00	1136		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	1140		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PBW	1.00	1144		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-
PBWA	1.00	1147	91.3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-
LCSW	1.00	1151		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
LCSWA	1.00	1155	68.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RW-04 B	1.00	1158		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RW-04A BA	1.00	1202	32.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RW-13D	1.00	1205		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-
RW-13DA	1.00	1209	46.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-
CCV	1.00	1212		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-
CCB	1.00	1215		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-
RW-13S	1.00	1219		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-
RW-13SA	1.00	1223	54.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-
RW-02	1.00	1226		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RW-02A	1.00	1230	31.3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RW-03	1.00	1233		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RW-03A	1.00	1236	20.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RW-04	1.00	1240		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RW-04A	1.00	1243	15.9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RW-11	1.00	1247		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RW-11A	1.00	1250	38.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CCV	1.00	1254		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-

FORM XIV - IN ILM[illegible]0

AR320110 66

U.S. EPA - CLP

14

ANALYSIS RUN LOG

Lab Name: COMPUCHEM_ENV._CORP._____ Contract: ILM03.0___

Lab Code: COMPU_ Case No.: R3231_ SAS No.: _____ SDG No.:RW02M_

Instrument ID Number: A8_____ Method: F_

Start Date: 03/26/96 End Date: 03/26/96

EPA Sample No.	D/F	Time	% R	Analytes																							
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
CCB	1.00	1257		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-

FORM XIV - IN ILM03.0

AR320111

67

U.S. EPA - CLP

14

ANALYSIS RUN LOG

Lab Name: COMPUCHEM_ENV._CORP._____ Contract: ILM03.0___

Lab Code: COMPU_ Case No.: R3231_ SAS No.: _____ SDG No.:RW02M_

Instrument ID Number: A8_____ Method: F_

Start Date: 03/27/96 End Date: 03/27/96

EPA Sample No.	D/F	Time	% R	Analytes																							
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
S0	1.00	0743		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-
S10	1.00	0747		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-
S30	1.00	0750		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-
S60	1.00	0754		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-
ICV	1.00	0758		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-
ICB	1.00	0801		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-
CRA	1.00	0804		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-
CCV	1.00	0808		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-
CCB	1.00	0811		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-
RW-12	1.00	0815		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RW-12A	1.00	0818	24.9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RW-14	1.00	0822		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RW-14A	1.00	0825	27.3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RW-16	1.00	0829		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RW-16A	1.00	0833	19.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RW-23	1.00	0836		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RW-23A	1.00	0840	36.7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	0843		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	0847		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CCV	1.00	0850		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-
CCB	1.00	0853		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-
RW-60	1.00	0857		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RW-60A	1.00	0901	19.4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RW60D	1.00	0904		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RW60DA	1.00	0908	24.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RW-67	1.00	0911		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RW-67A	1.00	0915	13.7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RW2FB	1.00	0919		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-
RW2FBA	1.00	0923	86.9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-
ZZZZZZ	1.00	0926		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	0929		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CCV	1.00	0933		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-

FORM XIV - IN ILM0

U.S. EPA - CLP

14

ANALYSIS RUN LOG

Lab Name: COMPUCHEM_ENV._CORP._____ Contract: ILM03.0___

Lab Code: COMPU_ Case No.: R3231_ SAS No.: _____ SDG No.:RW02M_

Instrument ID Number: A8_____ Method: F_

Start Date: 03/27/96 End Date: 03/27/96

EPA Sample No.	D/F	Time	% R	Analytes																							
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
CCB	1.00	0936		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-
ZZZZZZ	1.00	0940		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	0944		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	0947		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	0951		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	0954		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	0958		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	1001		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	1005		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	1008		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	1012		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CCV	1.00	1015		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-
CCB	1.00	1019		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-
ZZZZZZ	1.00	1022		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	1026		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	1029		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	1033		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	1036		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	1040		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	1043		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	1047		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	1050		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	1054		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CCV	1.00	1057		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-
CCB	1.00	1100		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-
ZZZZZZ	1.00	1104		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	1108		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	1111		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	1115		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	1118		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	1122		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	1125		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

FORM XIV - IN ILM03.0

U.S. EPA - CLP

14

ANALYSIS RUN LOG

Lab Name: COMPUCHEM_ENV._CORP._____ Contract: ILM03.0___

Lab Code: COMPU_ Case No.: R3231_ SAS No.: _____ SDG No.:RW02M_

Instrument ID Number: A8_____ Method: F_

Start Date: 03/27/96 End Date: 03/27/96

EPA Sample No.	D/F	Time	% R	Analytes																								
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
ZZZZZZ	1.00	1129		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CCV	1.00	1133		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-
CCB	1.00	1136		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-

FORM XIV - IN ILM03.0

AR320114 MO

U.S. EPA - CLP

14

ANALYSIS RUN LOG

Lab Name: COMPUCHEM_ENV._CORP._____ Contract: ILM03.0___

Lab Code: COMPU_ Case No.: R3231_ SAS No.: _____ SDG No.:RW02M_

Instrument ID Number: A8_____ Method: F_

Start Date: 03/27/96 End Date: 03/27/96

EPA Sample No.	D/F	Time	% R	Analytes																							
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
S0	1.00	1342		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-
S10	1.00	1345		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-
S30	1.00	1349		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-
S60	1.00	1352		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-
ICV	1.00	1356		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-
ICB	1.00	1400		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-
CRA	1.00	1403		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-
CCV	1.00	1406		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-
CB	1.00	1410		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-
ZZZZZZ	1.00	1413		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	1417		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	1420		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	1424		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	1428		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	1431		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	1435		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	1438		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	1442		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	1445		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CCV	1.00	1448		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-
CCB	1.00	1452		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-
ZZZZZZ	1.00	1455		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	1459		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	1502		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	1506		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	1509		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	1513		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	1516		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	1520		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	1523		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	1527		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CCV	1.00	1530		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-

U.S. EPA - CLP

14

ANALYSIS RUN LOG

Lab Name: COMPUCHEM_ENV._CORP._____ Contract: ILM03.0___

Lab Code: COMPU_ Case No.: R3231_ SAS No.: _____ SDG No.:RW02M_

Instrument ID Number: A8_____ Method: F_

Start Date: 03/27/96 End Date: 03/27/96

EPA Sample No.	D/F	Time	% R	Analytes																								
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
CCB	1.00	1533		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-
ZZZZZZ	1.00	1537		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	1541		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	1544		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	1548		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	1551		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	1555		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	1558		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	1602		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	1605		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	1608		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CCV	1.00	1612		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-
CCB	1.00	1615		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-
ZZZZZZ	1.00	1619		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	1622		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	1626		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	1630		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	1633		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	1637		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	1640		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	1644		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	1648		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	1651		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CCV	1.00	1654		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-
CCB	1.00	1658		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-
RW-~~04~~ 17	Ker 10.00	1701		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-
RW-~~04A~~ 13A	4/04/96 10.00	1705	26.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-
RW-02	10.00	1709		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-
RW-02A	10.00	1712	23.7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-
RW-03	10.00	1716		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-
RW-03A	10.00	1720	20.4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-
RW-04	10.00	1723		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-

FORM XIV - IN ILM03.0

U.S. EPA - CLP

14

ANALYSIS RUN LOG

Lab Name: COMPUCHEM_ENV._CORP._____ Contract: ILM03.0___

Lab Code: COMPU_ Case No.: R3231_ SAS No.: _____ SDG No.:RW02M_

Instrument ID Number: A8_____ Method: F_

Start Date: 03/27/96 End Date: 03/27/96

EPA Sample No.	D/F	Time	% R	Analytes																								
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
RW-04A	10.00	1727	16.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-
ZZZZZZ	1.00	1730		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	1734		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CCV	1.00	1737		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-
CCB	1.00	1740		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-
RW-11	10.00	1744		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-
RW-11A	10.00	1748	34.6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-
RW-12	10.00	1751		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-
-12A	10.00	1755	32.7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-
-14	10.00	1758		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-
RW-14A	10.00	1802	27.8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-
RW-16	10.00	1805		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-
RW-16A	10.00	1809	30.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-
ZZZZZZ	1.00	1812		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	1816		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CCV	1.00	1819		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-
CCB	1.00	1822		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-
RW-23	10.00	1826		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-
RW-23A	10.00	1830	33.8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-
RW-60	10.00	1833		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-
RW-60A	10.00	1837	29.3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-
RW60D	10.00	1840		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-
RW60DA	10.00	1844	32.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-
RW-67	10.00	1847		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-
RW-67A	10.00	1851	26.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-
ZZZZZZ	1.00	1854		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	1858		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CCV	1.00	1901		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-
CCB	1.00	1904		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-
				-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
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				-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

FORM XIV - IN ILM03.0

AR320117

17

U.S. EPA - CLP

14

ANALYSIS RUN LOG

Lab Name: COMPUCHEM_ENV._CORP._____ Contract: ILM03.0___

Lab Code: COMPU_ Case No.: R3231_ SAS No.: _____ SDG No.:RW02M_

Instrument ID Number: A8_____ Method: F_

Start Date: 03/28/96 End Date: 03/28/96

EPA Sample No.	D/F	Time	% R	Analytes																								
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
S0	1.00	1003		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-
S10	1.00	1006		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-
S30	1.00	1010		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-
S60	1.00	1013		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-
ICV	1.00	1017		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-
ICB	1.00	1021		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-
CRA	1.00	1024		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-
CCV	1.00	1027		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-
CCB	1.00	1031		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-
ZZZZZZ	1.00	1034		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	1038		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	1041		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	1045		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	1048		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	1052		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
LCSW	1.00	1056		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-
LCSWA	1.00	1059	86.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-
ZZZZZZ	1.00	1103		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	1106		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CCV	1.00	1109		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-
CCB	1.00	1113		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-
				-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
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				-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

FORM XIV - IN ILM03.0

U.S. EPA - CLP

13
PREPARATION LOG

Lab Name: COMPUCHEM_ENV._CORP._____ Contract: ILM03.0___

Lab Code: COMPU_ Case No.:_R3231_ SAS No.: _____ SDG No.:RW02M_

Method: P_

EPA Sample No.	Preparation Date	Weight (gram)	Volume (mL)
LCSW	03/24/96		100
PBW	03/24/96		100
RW-02	03/24/96		100
RW-03	03/24/96		100
RW-04	03/24/96		100
~~RW-04~~ RW13	03/24/96		100
RW-11	03/24/96		100
RW-12	03/24/96		100
RW-13D	03/24/96		100
RW-13S	03/24/96		100
RW-14	03/24/96		100
RW-16	03/24/96		100
RW-23	03/24/96		100
RW-60	03/24/96		100
RW-67	03/24/96		100
RW2FB	03/24/96		100
RW60D	03/24/96		100

mm (0.1) 5/7/96

FORM XIII - IN ILM03.0

AR320119

5

U.S. EPA - CLP

13
PREPARATION LOG

Lab Name: COMPUCHEM_ENV._CORP._____ Contract: ILM03.0___

Lab Code: COMPU_ Case No.:_R3231_ SAS No.: _____ SDG No.:RW02M_

Method: P_

EPA Sample No.	Preparation Date	Weight (gram)	Volume (mL)
LCSW	03/29/96		100
PBW	03/29/96		100
RW2FB	03/29/96		100

FORM XIII - IN ILM03.0

AR320120

U.S. EPA - CLP

13
PREPARATION LOG

Lab Name: COMPUCHEM_ENV._CORP._____ Contract: ILM03.0___

Lab Code: COMPU_ Case No.:_R3231_ SAS No.: _____ SDG No.:RW02M_

Method: F_

EPA Sample No.	Preparation Date	Weight (gram)	Volume (mL)
LCSW	03/24/96		100
PBW	03/24/96		100
RW-02	03/24/96		100
RW-03	03/24/96		100
RW-04	03/24/96		100
RW-~~04~~ 13	03/24/96		100
RW-11	03/24/96		100
RW-12	03/24/96		100
RW-13D	03/24/96		100
RW-13S	03/24/96		100
RW-14	03/24/96		100
RW-16	03/24/96		100
RW-23	03/24/96		100
RW-60	03/24/96		100
RW-67	03/24/96		100
RW2FB	03/24/96		100
RW60D	03/24/96		100

(RW) 5/7/96

FORM XIII - IN ILM03.0

U.S. EPA - CLP

13
PREPARATION LOG

Lab Name: COMPUCHEM_ENV._CORP._____ Contract: ILM03.0___

Lab Code: COMPU_ Case No.:_R3231_ SAS No.: _____ SDG No.:RW02M_

Method: CV

EPA Sample No.	Preparation Date	Weight (gram)	Volume (mL)
LCSW	03/24/96		100
PBW	03/24/96		100
RW-02	03/24/96		100
RW-03	03/24/96		100
RW-04	03/24/96		100
RW-~~04~~ 13	03/24/96		100
RW-11	03/24/96		100
RW-12	03/24/96		100
RW-13D	03/24/96		100
RW-13S	03/24/96		100
RW-14	03/24/96		100
RW-16	03/24/96		100
RW-23	03/24/96		100
RW-60	03/24/96		100
RW-67	03/24/96		100
RW2FB	03/24/96		100
RW60D	03/24/96		100

mm (D.V.) 5/9/96

FORM XIII - IN ILM03.0

AR320122

60

U.S. EPA - CLP

10

Instrument Detection Limits (Quarterly)

Lab Name: COMPUCHEM_ENV._CORP._____ Contract: ILM03.0___

Lab Code: COMPU_ Case No.: R3231_ SAS No.: _____ SDG No.: RW02M_

ICP ID Number: _____ Date: 01/15/96

Flame AA ID Number : V2_____

Furnace AA ID Number : _____

Analyte	Wave-length (nm)	Back-ground	CRDL (ug/L)	IDL (ug/L)	M
Aluminum			200		NR
Antimony			60		NR
Arsenic			10		NR
Barium			200		NR
Beryllium			5		NR
Cadmium			5		NR
Calcium			5000		NR
Chromium			10		NR
Cobalt			50		NR
Copper			25		NR
Iron			100		NR
Lead			3		NR
Magnesium			5000		NR
Manganese			15		NR
Mercury	253.70		0.2	0.2	CV
Nickel			40		NR
Potassium			5000		NR
Selenium			5		NR
Silver			10		NR
Sodium			5000		NR
Thallium			10		NR
Vanadium			50		NR
Zinc			20		NR

Comments:

AR320123

U.S. EPA - CLP

10

Instrument Detection Limits (Quarterly)

Lab Name: COMPUCHEM_ENV._CORP._____ Contract: ILM03.0___

Lab Code: COMPU_ Case No.: R3231_ SAS No.: _____ SDG No.: RW02M_

ICP ID Number: _____ Date: 01/15/96

Flame AA ID Number : _____

Furnace AA ID Number : A8_____

Analyte	Wave-length (nm)	Back-ground	CRDL (ug/L)	IDL (ug/L)	M
Aluminum			200		NR
Antimony			60		NR
Arsenic			10		NR
Barium			200		NR
Beryllium			5		NR
Cadmium			5		NR
Calcium			5000		NR
Chromium			10		NR
Cobalt			50		NR
Copper			25		NR
Iron			100		NR
Lead			3		NR
Magnesium			5000		NR
Manganese			15		NR
Mercury			0.2		NR
Nickel			40		NR
Potassium			5000		NR
Selenium			5		NR
Silver			10		NR
Sodium			5000		NR
Thallium	276.80	BS	10	1.9	F
Vanadium			50		NR
Zinc			20		NR

Comments:

U.S. EPA - CLP

10

Instrument Detection Limits (Quarterly)

Lab Name: COMPUCHEM_ENV._CORP._____ Contract: ILM03.0___

Lab Code: COMPU_ Case No.: R3231_ SAS No.: _____ SDG No.: RW02M_

ICP ID Number: ICP3_____ Date: 01/15/96

Flame AA ID Number : _____

Furnace AA ID Number : _____

Analyte	Wave-length (nm)	Back-ground	CRDL (ug/L)	IDL (ug/L)	M
Aluminum	308.21		200	21.3	P
Antimony	206.84		60	1.8	P
Arsenic	189.04		10	3.0	P
Barium	493.41		200	0.1	P
Beryllium	313.04		5	0.3	P
Cadmium	226.50		5	0.2	P
Calcium	317.93		5000	5.3	P
Chromium	267.72		10	0.7	P
Cobalt	228.62		50	0.5	P
Copper	324.70		25	0.7	P
Iron	271.44		100	10.9	P
Lead	220.35		3	1.6	P
Magnesium	279.08		5000	9.1	P
Manganese	257.61		15	0.2	P
Mercury			0.2		NR
Nickel	231.60		40	1.0	P
Potassium	766.49		5000	14.4	P
Selenium	196.03		5	2.6	P
Silver	328.07		10	0.7	P
Sodium	330.23		5000	212.0	P
Thallium			10		NR
Vanadium	292.40		50	0.6	P
Zinc	213.86		20	3.2	P

Comments:

SDG RW05M

COMPUCHEM
ENVIRONMENTAL
CORPORATION

R3231
SDG RW05M

01/APR/96

APR 11 1996

WESTON
5 UNDERWOOD COURT
DELRAN, NJ 08075-1229

Subject: Report of Data - Account Number# 705038 Order# 32043

Enclosed are the results of analytical work performed in accordance with the referenced account number.

This report covers 12 sample(s) appearing on the attached listing.

Thank you for selecting CompuChem Environmental for your sample analysis. If you should have questions or require additional analytical services please contact your representative at 1-919-406-1600.

Sincerely,

Richard L Bloom

Report Preparation
CompuChem Laboratories, Inc.

Attachment

AR320127

COMPUCHEM
ENVIRONMENTAL
CORPORATION

01/APR/96

WESTON
5 UNDERWOOD COURT
DELRAN, NJ 08075-1229

ACCOUNT #: 705038

CC#	SAMPLE-ID	RECEIPT DATE
790912	C#R3231-RW-05	3/15/96
790916	C#R3231-RW-06	3/15/96
790917	C#R3231-RW-15	3/15/96
790918	C#R3231-RW-17	3/15/96
790919	C#R3231-RW-20	3/15/96
790920	C#R3231-RW-29	3/15/96
790921	C#R3231-RW-30	3/15/96
790922	C#R3231-RW-45	3/15/96
790923	C#R3231-RW-46	3/15/96
790924	C#R3231-RW46D	3/15/96
790925	C#R3231-RW-57	3/15/96
790926	C#R3231-RW-59	3/15/96

TOTAL NUMBER OF SAMPLES = 12

COMPUCHEM
ENVIRONMENTAL
CORPORATION

3306 Chapel Hill/Nelson Highway P.O. Box 14998
Research Triangle Park, NC 27709-4998
(919) 406-1600

INORGANIC CASE SUMMARY NARRATIVE
CASE # R3231 SDG # RW05M
CONTRACT # ILM03.0

The indicated Sample Delivery Group (SDG) consisting of twelve water samples was received into the laboratory management system (LMS) on March 15, 1996 intact, at a temperature of 4 (+/-2) degrees Celcius, with proper documentation, in sealed shipping containers, unless otherwise noted in any attachments or Quality Assurance Notices. The samples were analyzed, in accordance with EPA CLP Statement of Work (SOW) ILM03.0 for the metallic analytes contained in the Inorganic Target Analyte List.

SAMPLE IDs:

The following customer IDs are associated with this SDG:

RW-05, RW-06, RW-15, RW-17, RW-20, RW-29, RW-30, RW-45, RW-46, RW-57, RW-59, RW46D

INSTRUMENTAL QUALITY CONTROL:

All calibration verification solutions (ICV & CCV), blanks (ICB, CCB) and interference check samples (ICSA & ICSAB) associated with this data were confirmed to be within EPA CLP allowable limits.

SAMPLE PREPARATION QUALITY CONTROL:

The sample preparation procedure verifications (LCS & PB) were found to be within acceptable ranges and all field samples were prepared and analyzed within the contract specified holding times.

MATRIX RELATED QUALITY CONTROL:

The sample matrix spike, RW-30S(790913), was found to be outside CLP control limits for thallium. The reported concentrations for these analytes are flagged with an "N" on all associated Form 1 and on Form 5a.

An "N" indicates a matrix-related interference in the sample preparation procedure &/or analysis for the

flagged analyte. This is normally the consequence of a relatively high anionic content in the sample or (for some sediments) an inconsistent sample matrix relative to that analyte.

CLP control limits for matrix spike recoveries are set at 75% to 125% of the analyte quantity added unless original sample concentrations exceed the true values of these "spikes" by a factor of four or more; in this case affected analytes are not flagged even if recoveries fall outside percentage recovery control limits.

Post-digestion spikes are mandatory for analytes demonstrating unsatisfactory matrix spike recoveries during ICP analysis (excluding silver). The results of such spikes are presented on Form 5b.

Unsatisfactory recovery of post-digestion spikes of this type do not have bearing upon the aforementioned "N" flags, but may indicate interference during analysis &/or a solution matrix which is hostile to the analyte in question.

Satisfactory recovery of an analyte in a post-preparation spike of this type implies interference by the required preparation procedure or in the sample matrix itself. Lack of uniformity for an analyte in sediments will also result in satisfactory recovery of post-digestion spikes after failure in the related matrix spike.

The sample matrix duplicate, RW-30D(790914), was within CLP control limits for all requested analytes.

CLP control limits for duplicate determinations are +/- 20% Relative Percent Difference (RPD) for concentrations greater than or equal to five times the CRDL in both the original and duplicate samples, and +/- the CRDL for concentrations less than five times the CRDL. The RPD is not calculated if both the original and duplicate values fall below the IDL.

A five-fold serial dilution of sample RW-30L was performed in accordance with CLP requirements for ICP analysis. The adjusted sample concentrations were inside CLP control limits for all requested analytes.

CLP control limits for serial dilution are defined as a deviation less than or equal to 10% in the dilution-

adjusted concentrations from the original values for all analyte concentrations with values greater than fifty (50) times their respective Instrument Detection Limit (IDL) in the original sample.

Release of the data contained in this hard copy data package has been authorized by the laboratory Manager or his designee, as verified by the following signature.

Jeanne Alston
Final Technical Reviewer
March 29, 1996

Note: This report is paginated for reference and accountability.

U.S. EPA - CLP

COVER PAGE - INORGANIC ANALYSES DATA PACKAGE

Lab Name: COMPUCHEM_ENV._CORP._____ Contract: ILM03.0___

Lab Code: COMPU_ Case No.: R3231 SAS No.: _____ SDG No.:RW05M_

SOW No.: ILM03.0

EPA Sample No.	Lab Sample ID
_RW-05_____	__790912_____
_RW-06_____	__790916_____
_RW-15_____	__790917_____
_RW-17_____	__790918_____
_RW-20_____	__790919_____
_RW-29_____	__790920_____
_RW-30_____	__790921_____
_RW-30D_____	__790914_____
_RW-30S_____	__790913_____
_RW-45_____	__790922_____
_RW-46_____	__790923_____
_RW-57_____	__790925_____
_RW-59_____	__790926_____
_RW46D_____	__790924_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

APR 1996

Were ICP interelement corrections applied ? Yes/No YES

Were ICP background corrections applied ? Yes/No YES
If yes - were raw data generated before application of background corrections ? Yes/No NO_

Comments:

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on floppy diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature: Joanne C. Castrofa Name: Mark Roos

Date: March 29, 1996 Title: Inorganic Div. Manager

U.S. EPA - CLP

2B
CRDL STANDARD FOR AA AND ICP

Lab Name: COMPUCHEM_ENV._CORP._____ Contract: ILM03.0___

Lab Code: COMPU_ Case No.: R3231_ SAS No.: _____ SDG No.: RW05M_

AA CRDL Standard Source: SPEX_____

ICP CRDL Standard Source: SPEX_____

Concentration Units: ug/L

Analyte	CRDL Standard for AA			CRDL Standard for ICP				
					Initial		Final	
	True	Found	%R	True	Found	%R	Found	%R
Aluminum								
Antimony				120.0	124.00	103.3	123.20	102.7
Arsenic				20.0	19.75	98.7	19.98	99.9
Barium								
Beryllium				10.0	10.21	102.1	10.47	104.7
Cadmium				10.0	10.67	106.7	10.66	106.6
Calcium								
Chromium				20.0	20.29	101.4	20.65	103.2
Cobalt				100.0	103.10	103.1	102.20	102.2
Copper				50.0	53.38	106.8	53.85	107.7
Iron								
Lead				6.0	6.77	112.8	6.40	106.7
Magnesium								
Manganese				30.0	31.15	103.8	31.07	103.6
Mercury	0.2	0.21	105.0					
Nickel				80.0	83.74	104.7	83.84	104.8
Potassium								
Selenium				10.0	11.63	116.3	11.50	115.0
Silver				20.0	11.86	59.3	12.15	60.7
Sodium								
Thallium	10.0	10.41	104.1					
Vanadium				100.0	103.60	103.6	104.50	104.5
Zinc				40.0	33.64	84.1	33.89	84.7

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2B
CRDL STANDARD FOR AA AND ICP

Lab Name: COMPUCHEM_ENV._CORP._____ Contract: ILM03.0___

Lab Code: COMPU_ Case No.: R3231_ SAS No.: _____ SDG No.: RW05M_

AA CRDL Standard Source: SPEX_____

ICP CRDL Standard Source: _____

Concentration Units: ug/L

Analyte	CRDL Standard for AA			CRDL Standard for ICP				
					Initial		Final	
	True	Found	%R	True	Found	%R	Found	%R
Aluminum_								
Antimony_								
Arsenic__								
Barium__								
Beryllium								
Cadmium__								
Calcium__								
Chromium_								
Cobalt___								
Copper___								
Iron____								
Lead____								
Magnesium								
Manganese								
Mercury__								
Nickel___								
Potassium								
Selenium_								
Silver___								
Sodium___								
Thallium_	10.0	10.43	104.3					
Vanadium_								
Zinc____								

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3
BLANKS

Lab Name: COMPUCHEM_ENV._CORP._____ Contract: ILM03.0___

Lab Code: COMPU_ Case No.: R3231_ SAS No.: _____ SDG No.: RW05M_

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	Prepa-ration Blank	C	M
Aluminum	21.3	U	21.3	U	21.3	U	21.3	U	31.740	B	P
Antimony	1.8	U	1.8	U	1.8	U	1.8	U	1.800	U	P
Arsenic	3.0	U	3.0	U	3.0	U	3.0	U	3.000	U	P
Barium	0.1	U	0.1	U	0.1	B	0.6	B	0.173	B	P
Beryllium	0.3	U	0.3	U	0.3	U	0.3	U	0.300	U	P
Cadmium	0.2	U	0.2	U	0.3	B	0.2	U	0.343	B	P
Calcium	-56.8	B	-45.1	B	-50.2	B	-49.6	B	-54.820	B	P
Chromium	0.7	U	0.7	U	0.7	U	0.7	U	1.014	B	P
Cobalt	0.5	U	0.5	U	0.5	U	0.5	U	0.500	U	P
Copper	0.7	U	0.7	U	0.7	U	0.7	U	0.700	U	P
Iron	10.9	U	10.9	U	10.9	U	10.9	U	13.620	B	P
Lead	1.6	U	1.6	U	1.6	U	1.6	U	1.600	U	P
Magnesium	9.1	U	12.5	B	9.1	U	9.1	U	9.100	U	P
Manganese	0.2	U	0.2	U	0.2	U	0.2	U	0.290	B	P
Mercury	0.2	U	0.2	U	0.2	U	0.2	U	0.200	U	CV
Nickel	1.0	U	1.0	U	1.0	U	1.0	U	1.000	U	P
Potassium	18.6	B	14.4	U	16.1	B	14.4	U	23.020	B	P
Selenium	2.6	U	2.6	U	2.6	U	3.3	B	2.600	U	P
Silver	0.7	U	0.7	U	0.7	U	0.7	U	0.700	U	P
Sodium	212.0	U	212.0	U	212.0	U	212.0	U	212.000	U	P
Thallium	1.9	U	1.9	U	1.9	U	1.9	U	1.900	U	F
Vanadium	0.6	U	0.6	U	0.6	U	0.6	U	0.600	U	P
Zinc	-4.6	B	-4.5	B	-4.5	B	-4.6	B	3.200	U	P
Cyanide											NR

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5A
SPIKE SAMPLE RECOVERY

EPA SAMPLE NO.

RW-30S

Lab Name: COMPUCHEM_ENV._CORP._____ Contract: ILM03.0___

Lab Code: COMPU_ Case No.: R3231_ SAS No.: _____ SDG No.: RW05M_

Matrix (soil/water): WATER_ Level (low/med): LOW___

% Solids for Sample: __0.0

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	2193.0000		128.7000	B	2000.00	103.2		P
Antimony	75-125	527.2000		1.8000	U	500.00	105.4		P
Arsenic	75-125	1994.0000		3.0000	U	2000.00	99.7		P
Barium	75-125	2209.0000		65.1000	B	2000.00	107.2		P
Beryllium	75-125	52.2400		0.3000	U	50.00	104.5		P
Cadmium	75-125	52.8600		0.2000	U	50.00	105.7		P
Calcium									NR
Chromium	75-125	211.8000		1.0050	B	200.00	105.4		
Cobalt	75-125	518.1000		0.5000	U	500.00	103.6		
Copper	75-125	309.4000		44.1500		250.00	106.1		P
Iron	75-125	1180.0000		77.8400	B	1000.00	110.2		P
Lead	75-125	530.7000		1.6000	U	500.00	106.1		P
Magnesium									NR
Manganese	75-125	508.4000		3.5310	B	500.00	101.0		P
Mercury	75-125	1.0060		0.2000	U	1.00	100.6		CV
Nickel	75-125	526.4000		2.0480	B	500.00	104.9		P
Potassium									NR
Selenium	75-125	2077.0000		3.9500	B	2000.00	103.7		P
Silver	75-125	52.0700		0.7000	U	50.00	104.1		P
Sodium									NR
Thallium	75-125	19.0700		1.9000	U	50.00	38.1	N	P
Vanadium	75-125	532.5000		0.6000	U	500.00	106.5		P
Zinc	75-125	526.9000		12.0700	B	500.00	103.0		P
Cyanide									NR

Comments:

FORM V (Part 1) - IN ILM02

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14

ANALYSIS RUN LOG

Lab Name: COMPUCHEM_ENV._CORP._____ Contract: ILM03.0___

Lab Code: COMPU_ Case No.: R3231_ SAS No.: _____ SDG No.:RW05M_

Instrument ID Number: ICP3_____ Method: P_

Start Date: 03/25/96 End Date: 03/25/96

EPA Sample No.	D/F	Time	% R	Analytes																							
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
S0	1.00	0947		X	X	X	X	X	X	X	X	X	X	X	X	X	X	-	X	X	X	X	X	-	X	X	-
S	1.00	0953							X		X		X		X			-	X		X	X		-		X	-
S	1.00	0957		X	-	-	-	-		X		-		X		X	-	-		-			-	-	-		-
S	1.00	1002			-	X	X	X	-		-	X	-		-		X	-	-	-	-	-	-	-	X	-	-
S	1.00	1005		-	-				-	-	-		-	-	-	-		-	-	X	-	-	X	-		-	-
S	1.00	1010		-	X	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-	-		-	-	-	-
ICV	1.00	1010		X		-	X	X	X	X	X	X	X	X	-	X	X	-	X	X	-	X	X	-	X	X	-
ICV	1.00	1016		-	X	X	-	-	-	-	-	-	-	-	X	-	-	-	-	-	X	-	-	-	-	-	-
ICV	1.00	1021																									
ICB	1.00	1027		X	X	X	X	X	X	X	X	X	X	X	X	X	X	-	X	X	X	X	X	-	X	X	-
ICSA	1.00	1032		X	X	X	X	X	X	X	X	X	X	X	X	X	X	-	X	X	X	X	X	-	X	X	-
ICSAB	1.00	1038		X	X	X	X	X	X	X	X	X	X	X	X	X	X	-	X	X	X	X	X	-	X	X	-
CRI 1	1.00	1043			X	X		X	X		X	X	X		X		X	-	X		X	X		-	X	X	-
CCV 1	1.00	1049		X	X	X	X	X	X	X	X	X	X	X	X	X	X	-	X	X	X	X	X	-	X	X	-
CCB 1	1.00	1054		X	X	X	X	X	X	X	X	X	X	X	X	X	X	-	X	X	X	X	X	-	X	X	-
PBW	1.00	1100		X	X	X	X	X	X	X	X	X	X	X	X	X	X	-	X	X	X	X	X	-	X	X	-
LCSW	1.00	1105		X	X	X	X	X	X	X	X	X	X	X	X	X	X	-	X	X	X	X	X	-	X	X	-
RW-30	1.00	1111		X	X	X	X	X	X	X	X	X	X	X	X	X	X	-	X	X	X	X	X	-	X	X	-
RW-30D	1.00	1116		X	X	X	X	X	X	X	X	X	X	X	X	X	X	-	X	X	X	X	X	-	X	X	-
RW-30S	1.00	1122		X	X	X	X	X	X		X	X	X	X	X		X	-	X		X	X		-	X	X	-
RW-30L	5.00	1128		X	X	X	X	X	X	X	X	X	X	X	X	X	X	-	X	X	X	X	X	-	X	X	-
RW-05	1.00	1133		X	X	X	X	X	X	X	X	X	X	X	X	X	X	-	X	X	X	X	X	-	X	X	-
RW-06	1.00	1139		X	X	X	X	X	X	X	X	X	X	X	X	X	X	-	X	X	X	X	X	-	X	X	-
RW-15	1.00	1144		X	X	X	X	X	X	X	X	X	X	X	X	X	X	-	X	X	X	X	X	-	X	X	-
RW-17	1.00	1150		X	X	X	X	X	X	X	X	X	X	X	X	X	X	-	X	X	X	X	X	-	X	X	-
CCV	1.00	1155		X	X	X	X	X	X	X	X	X	X	X	X	X	X	-	X	X	X	X	X	-	X	X	-
CCB 2	1.00	1201		X	X	X	X	X	X	X	X	X	X	X	X	X	X	-	X	X	X	X	X	-	X	X	-
RW-20	1.00	1207		X	X	X	X	X	X	X	X	X	X	X	X	X	X	-	X	X	X	X	X	-	X	X	-
RW-29	1.00	1212		X	X	X	X	X	X	X	X	X	X	X	X	X	X	-	X	X	X	X	X	-	X	X	-
RW-45	1.00	1218		X	X	X	X	X	X	X	X	X	X	X	X	X	X	-	X	X	X	X	X	-	X	X	-
RW-46	1.00	1223		X	X	X	X	X	X	X	X	X	X	X	X	X	X	-	X	X	X	X	X	-	X	X	-
RW46D	1.00	1229		X	X	X	X	X	X	X	X	X	X	X	X	X	X	-	X	X	X	X	X	-	X	X	-

FORM XIV - IN ILM03.0

AR320137 51

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14

ANALYSIS RUN LOG

Lab Name: COMPUCHEM_ENV._CORP._____ Contract: ILM03.0___

Lab Code: COMPU_ Case No.: R3231_ SAS No.: _____ SDG No.:RW05M_

Instrument ID Number: ICP3_____ Method: P_

Start Date: 03/25/96 End Date: 03/25/96

EPA Sample No.	D/F	Time	% R	Analytes																							
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
RW-57	1.00	1234		X	X	X	X	X	X	X	X	X	X	X	X	X	X	_	X	X	X	X	X	_	X	X	_
RW-59	1.00	1240		X	X	X	X	X	X	X	X	X	X	X	X	X	X	_	X	X	X	X	X	_	X	X	_
ZZZZZZ	1.00	1245		_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
ZZZZZZ	1.00	1251		_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
ZZZZZZ	1.00	1256		_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
CCV	1.00	1301		X	X	X	X	X	X	X	X	X	X	X	X	X	X	_	X	X	X	X	X	_	X	X	_
CCB 3	1.00	1307		X	X	X	X	X	X	X	X	X	X	X	X	X	X	_	X	X	X	X	X	_	X	X	_
ZZZZZZ	1.00	1312		_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
ZZZZZZ	1.00	1318		_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
ZZZZZZ	5.00	1323		_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
ZZZZZZ	1.00	1329		_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
ZZZZZZ	1.00	1334		_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
ZZZZZZ	1.00	1340		_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
ZZZZZZ	1.00	1345		_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
ZZZZZZ	1.00	1351		_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
ZZZZZZ	1.00	1356		_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
ZZZZZZ	1.00	1402		_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
CCV	1.00	1407		X	X	X	X	X	X	X	X	X	X	X	X	X	X	_	X	X	X	X	X	_	X	X	_
CCB	1.00	1413		X	X	X	X	X	X	X	X	X	X	X	X	X	X	_	X	X	X	X	X	_	X	X	_
ZZZZZZ	1.00	1418		_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
ZZZZZZ	1.00	1424		_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
ZZZZZZ	1.00	1429		_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
ZZZZZZ	1.00	1434		_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
ZZZZZZ	1.00	1440		_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
RW-30A	1.00	1445		_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
ZZZZZZ	1.00	1451		_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
ICSA	1.00	1456		X	X	X	X	X	X	X	X	X	X	X	X	X	X	_	X	X	X	X	X	_	X	X	_
ICSAB	1.00	1502		X	X	X	X	X	X	X	X	X	X	X	X	X	X	_	X	X	X	X	X	_	X	X	_
CRI 1	1.00	1507		_	X	X	_	X	X	_	X	X	X	_	X	_	X	_	X	_	X	X	_	_	X	X	_
CCV	1.00	1513		X	X	X	X	X	X	X	X	X	X	X	X	X	X	_	X	X	X	X	X	_	X	X	_
CCB	1.00	1522		X	X	X	X	X	X	X	X	X	X	X	X	X	X	_	X	X	X	X	X	_	X	X	_
				_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
				_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_

FORM XIV - IN IV .0

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14

ANALYSIS RUN LOG

Lab Name: COMPUCHEM_ENV._CORP._____ Contract: ILM03.0___

Lab Code: COMPU_ Case No.: R3231_ SAS No.: _____ SDG No.:RW05M_

Instrument ID Number: A8_____ Method: F_

Start Date: 03/27/96 End Date: 03/27/96

EPA Sample No.	D/F	Time	% R	Analytes																							
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
S0	1.00	0743		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-
S10	1.00	0747		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-
S30	1.00	0750		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-
S60	1.00	0754		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-
ICV	1.00	0758		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-
ICB	1.00	0801		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-
CRA	1.00	0804		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-
CCV	1.00	0808		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-
CCB	1.00	0811		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-
ZZZZZZ	1.00	0815		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	0818		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	0822		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	0825		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	0829		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	0833		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	0836		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	0840		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	0843		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	0847		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CCV	1.00	0850		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-
CCB	1.00	0853		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-
ZZZZZZ	1.00	0857		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	0901		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	0904		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	0908		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	0911		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	0915		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	0919		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	0923		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	0926		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	0929		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CCV	1.00	0933		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-

FORM XIV - IN ILM03.0

U.S. EPA - CLP

14

ANALYSIS RUN LOG

Lab Name: COMPUCHEM_ENV._CORP._____ Contract: ILM03.0___

Lab Code: COMPU_ Case No.: R3231_ SAS No.: _____ SDG No.:RW05M_

Instrument ID Number: A8_____ Method: F_

Start Date: 03/27/96 End Date: 03/27/96

EPA Sample No.	D/F	Time	% R	Analytes																							
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
CCB	1.00	0936		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-
PBW	1.00	0940		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PBWA	1.00	0944	69.7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
LCSW	1.00	0947		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-
LCSWA	1.00	0951	65.4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-
RW-30	1.00	0954		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-
RW-30A	1.00	0958	40.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-
RW-30D	1.00	1001		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RW-30DA	1.00	1005	37.8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	1008		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	1012		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CCV	1.00	1015		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-
CCB	1.00	1019		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-
RW-30S	1.00	1022		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-
RW-30SA	1.00	1026	56.9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-
RW-05	1.00	1029		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RW-05A	1.00	1033	30.3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RW-06	1.00	1036		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RW-06A	1.00	1040	3.9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RW-15	1.00	1043		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-
RW-15A	1.00	1047	43.4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-
ZZZZZZ	1.00	1050		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	1054		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CCV	1.00	1057		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-
CCB	1.00	1100		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-
RW-17	1.00	1104		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RW-17A	1.00	1108	16.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RW-20	1.00	1111		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RW-20A	1.00	1115	35.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RW-29	1.00	1118		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-
RW-29A	1.00	1122	26.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-
RW-45	1.00	1125		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-

FORM XIV - IN II 0

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5/9/96

AR320140

54

U.S. EPA - CLP

14

ANALYSIS RUN LOG

Lab Name: COMPUCHEM_ENV._CORP._____ Contract: ILM03.0___

Lab Code: COMPU_ Case No.: R3231_ SAS No.: _____ SDG No.:RW05M_

Instrument ID Number: A8_____ Method: F_

Start Date: 03/27/96 End Date: 03/27/96

EPA Sample No.	D/F	Time	% R	Analytes																								
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
RW-45A	1.00	1129	28.0																					X			
CCV	1.00	1133																						X			
CCB	1.00	1136																						X			

FORM XIV - IN ILM03.0

(D.I) 5/2/96

U.S. EPA - CLP

14

ANALYSIS RUN LOG

Lab Name: COMPUCHEM_ENV._CORP._____ Contract: ILM03.0___

Lab Code: COMPU_ Case No.: R3231_ SAS No.: _____ SDG No.:RW05M_

Instrument ID Number: A8_____ Method: F_

Start Date: 03/28/96 End Date: 03/28/96

EPA Sample No.	D/F	Time	% R	Analytes																								
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
S0	1.00	1003		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-
S10	1.00	1006		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-
S30	1.00	1010		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-
S60	1.00	1013		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-
ICV	1.00	1017		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-
ICB	1.00	1021		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-
CRA	1.00	1024		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-
CCV	1.00	1027		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-
CCB	1.00	1031		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-
ZZZZZZ	1.00	1034		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	1038		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PBW	1.00	1041		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-
PBWA	1.00	1045	97.9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-
ZZZZZZ	1.00	1048		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	1052		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	1056		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	1059		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	1103		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	1106		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CCV	1.00	1109		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-
CCB	1.00	1113		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-
RW-30D	10.00	1116		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-
RW-30DA	10.00	1120	78.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-
RW-05	10.00	1123		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-
RW-05A	10.00	1127	65.8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-
RW-06	10.00	1130		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-
RW-06A	10.00	1134	42.4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-
RW-17	10.00	1137		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-
RW-17A	10.00	1141	62.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-
ZZZZZZ	1.00	1144		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	1148		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CCV	1.00	1151		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-

FORM XIV - IN II .0

AR320142

56

U.S. EPA - CLP

14

ANALYSIS RUN LOG

Lab Name: COMPUCHEM_ENV._CORP._____ Contract: ILM03.0___

Lab Code: COMPU_ Case No.: R3231_ SAS No.: _____ SDG No.:RW05M_

Instrument ID Number: A8_____ Method: F_

Start Date: 03/28/96 End Date: 03/28/96

EPA Sample No.	D/F	Time	% R	Analytes																							
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	C N
CCB	1.00	1154		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-
RW-20	10.00	1158		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-
RW-20A	10.00	1202	69.4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-
~~ZZZZZZ~~ RW29	10.00	1205		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-
~~ZZZZZZ~~ RW29A	10.00	1209	61.6%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-
~~ZZZZZZ~~ RW45	10.00	1212		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-
~~ZZZZZZ~~ RW45A	10.00	1216	66.6%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-
ZZZZZZ	10.00	1219		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	10.00	1223		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	1226		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	1229		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CCV	1.00	1233		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-
CCB	1.00	1236		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-
ZZZZZZ	10.00	1240		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	10.00	1244		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	10.00	1247		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	10.00	1251		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	10.00	1254		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	10.00	1258		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	10.00	1301		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	10.00	1305		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	1309		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	1312		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CCV	1.00	1315		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-
CCB	1.00	1319		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-
ZZZZZZ	1.00	1322		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	1326		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	1330		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	1334		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	1337		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	1341		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	1344		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

U.S. EPA - CLP

14

ANALYSIS RUN LOG

Lab Name: COMPUCHEM_ENV._CORP._____ Contract: ILM03.0___

Lab Code: COMPU_ Case No.: R3231_ SAS No.: _____ SDG No.:RW05M_

Instrument ID Number: A8_____ Method: F_

Start Date: 03/28/96 End Date: 03/28/96

EPA Sample No.	D/F	Time	% R	Analytes																							
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
ZZZZZZ	1.00	1348		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	1351		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	1355		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CCV	1.00	1358		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-
CCB	1.00	1402		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-
ZZZZZZ	1.00	1405		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	1409		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RW-46	1.00	1412		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RW-46A	1.00	1416	27.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RW-46	10.00	1419		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-
RW-46A	10.00	1423	60.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-
RW46D	1.00	1427		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RW46DA	1.00	1430	33.4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	1433		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	1437		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CCV	1.00	1440		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-
CCB	1.00	1444		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-
RW46D	10.00	1447		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-
RW46DA	10.00	1451	49.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-
RW-57	1.00	1454		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RW-57A	1.00	1458	36.7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RW-57	10.00	1501		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-
RW-57A	10.00	1505	71.4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-
RW-59	1.00	1508		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RW-59A	1.00	1512	38.6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	1516		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	1519		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CCV	1.00	1522		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-
CCB	1.00	1526		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-
RW-59	10.00	1531		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-
RW-59A	10.00	1535	65.9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-
ZZZZZZ	1.00	1539		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

FORM XIV - IN II 0

AR320144

58

U.S. EPA - CLP

14

ANALYSIS RUN LOG

Lab Name: COMPUCHEM_ENV._CORP._____ Contract: ILM03.0___

Lab Code: COMPU_ Case No.: R3231_ SAS No.: _____ SDG No.:RW05M_

Instrument ID Number: A8_____ Method: F_

Start Date: 03/28/96 End Date: 03/28/96

EPA Sample No.	D/F	Time	% R	Analytes																								
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
ZZZZZZ	1.00	1542		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CCV	1.00	1546		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-
CCB	1.00	1549		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-

FORM XIV - IN ILM03.0

U.S. EPA - CLP

14

ANALYSIS RUN LOG

Lab Name: COMPUCHEM_ENV._CORP._____ Contract: ILM03.0___

Lab Code: COMPU_ Case No.: R3231_ SAS No.: _____ SDG No.:RW05M_

Instrument ID Number: V2_____ Method: CV

Start Date: 03/25/96 End Date: 03/25/96

EPA Sample No.	D/F	Time	% R	Analytes																								
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
S0	1.00	1004		-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-	-	-	-
S0.2	1.00	1006		-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-	-	-	-
S0.5	1.00	1009		-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-	-	-	-
S1	1.00	1011		-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-	-	-	-
S5	1.00	1014		-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-	-	-	-
S10	1.00	1016		-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-	-	-	-
ICV	1.00	1019		-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-	-	-	-
ICB	1.00	1021		-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-	-	-	-
CRA	1.00	1023		-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-	-	-	-
CCV	1.00	1026		-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-	-	-	-
CCB	1.00	1028		-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-	-	-	-
PBW	1.00	1031		-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-	-	-	-
LCSW	1.00	1033		-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-	-	-	-
RW-30	1.00	1035		-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-	-	-	-
RW-30D	1.00	1038		-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-	-	-	-
RW-30S	1.00	1040		-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-	-	-	-
RW-05	1.00	1042		-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-	-	-	-
RW-06	1.00	1045		-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-	-	-	-
RW-15	1.00	1047		-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-	-	-	-
RW-17	1.00	1049		-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-	-	-	-
RW-20	1.00	1052		-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-	-	-	-
CCV	1.00	1054		-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-	-	-	-
CCB	1.00	1056		-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-	-	-	-
RW-29	1.00	1059		-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-	-	-	-
RW-45	1.00	1101		-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-	-	-	-
RW-46	1.00	1104		-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-	-	-	-
RW46D	1.00	1106		-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-	-	-	-
RW-57	1.00	1108		-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-	-	-	-
RW-59	1.00	1111		-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	1113		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	1115		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	1118		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

FORM XIV - IN ILM 0

U.S. EPA - CLP

14

ANALYSIS RUN LOG

Lab Name: COMPUCHEM_ENV._CORP._____ Contract: ILM03.0___

Lab Code: COMPU_ Case No.: R3231_ SAS No.: _____ SDG No.:RW05M_

Instrument ID Number: V2_____ Method: CV

Start Date: 03/25/96 End Date: 03/25/96

EPA Sample No.	D/F	Time	% R	Analytes																							
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
ZZZZZZ	1.00	1120		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CCV	1.00	1122		-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-	-	-	-
CCB	1.00	1125		-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	1127		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	1129		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	1132		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	1134		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	1136		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	1139		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	1141		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	1143		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	1146		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	1148		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CCV	1.00	1151		-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-	-	-	-
CCB	1.00	1153		-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	1155		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	1158		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	1200		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	1202		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	1205		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	1207		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	1209		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	1212		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	1214		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CCV	1.00	1217		-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-	-	-	-
CCB	1.00	1219		-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-	-	-	-
CCV	1.00	1221		-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-	-	-	-
CCB	1.00	1224		-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-	-	-	-
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				-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Background Pk Area (A-s): -0.003 Background Pk Height (A): 0.005
Blank Corrected Pk Area (A-s): 0.002
Concentration (ug/L): 1.03

Mean Conc (ug/L): 0.61 SD: 0.587 RSD(%): 96

T1 ID: 790919 1:10 Seq. No.: 00035 A/S Pos.: 14 Date: 03/28/96

RW-20

Replicate 1 Time: 12:00
Peak Area (A-s): 0.029 Peak Height (A): 0.041
Background Pk Area (A-s): 0.016 Background Pk Height (A): 0.029
Blank Corrected Pk Area (A-s): 0.029
Concentration (ug/L): 13.96

Replicate 2 Time: 12:02
Peak Area (A-s): 0.028 Peak Height (A): 0.043
Background Pk Area (A-s): 0.016 Background Pk Height (A): 0.030
Blank Corrected Pk Area (A-s): 0.029
Concentration (ug/L): 13.78

Mean Conc (ug/L): 13.87 SD: 0.127 RSD(%): 0.92

Recovery is 66.3% T1-69.4% "W"

T1 ID: 790920 1:10 Seq. No.: 00036 A/S Pos.: 15 Date: 03/28/96

RW-29

Replicate 1 Time: 12:03
Peak Area (A-s): 0.001 Peak Height (A): 0.010
Background Pk Area (A-s): -0.003 Background Pk Height (A): 0.008
Blank Corrected Pk Area (A-s): 0.002
Concentration (ug/L): 1.00

Replicate 2 Time: 12:05
Peak Area (A-s): 0.005 Peak Height (A): 0.011
Background Pk Area (A-s): -0.006 Background Pk Height (A): 0.006
Blank Corrected Pk Area (A-s): 0.005
Concentration (ug/L): 2.60

Mean Conc (ug/L): 1.80 SD: 1.130 RSD(%): 62.69

T1 ID: 790920 1:10 Seq. No.: 00037 A/S Pos.: 15 Date: 03/28/96

RW-29A

Replicate 1 Time: 12:07
Peak Area (A-s): 0.028 Peak Height (A): 0.041
Background Pk Area (A-s): 0.014 Background Pk Height (A): 0.027
Blank Corrected Pk Area (A-s): 0.028
Concentration (ug/L): 13.40

Replicate 2 Time: 12:09
Peak Area (A-s): 0.023 Peak Height (A): 0.043
Background Pk Area (A-s): 0.017 Background Pk Height (A): 0.030
Blank Corrected Pk Area (A-s): 0.024
Concentration (ug/L): 11.27

Mean Conc (ug/L): 12.33 SD: 1.507 RSD(%): 12.22

T1-61.6% "W"

Recovery is 52.6%

Tl ID: 790922 1:10 Seq. No.: 00038 A/S Pos.: 16 Date: 03/28/9

RW-45

Replicate 1 Time: 12:10
Peak Area (A-s): 0.002 Peak Height (A): 0.012
Background Pk Area (A-s): -0.003 Background Pk Height (A): 0.010
Blank Corrected Pk Area (A-s): 0.003
Concentration (ug/L): 1.22

Replicate 2 Time: 12:12
Peak Area (A-s): -0.003 Peak Height (A): 0.010
Background Pk Area (A-s): 0.002 Background Pk Height (A): 0.009
Blank Corrected Pk Area (A-s): -0.002
Concentration (ug/L): -0.99

Mean Conc (ug/L): 0.12 SD: 1.564 RSD(%): 1319.3

Tl ID: 790922 1:10 Seq. No.: 00039 A/S Pos.: 16 Date: 03/28/9

RW-45 A

Replicate 1 Time: 12:14
Peak Area (A-s): 0.024 Peak Height (A): 0.041
Background Pk Area (A-s): 0.018 Background Pk Height (A): 0.030
Blank Corrected Pk Area (A-s): 0.025
Concentration (ug/L): 11.73

Replicate 2 Time: 12:16
Peak Area (A-s): 0.031 Peak Height (A): 0.045
Background Pk Area (A-s): 0.016 Background Pk Height (A): 0.030
Blank Corrected Pk Area (A-s): 0.031
Concentration (ug/L): 14.94

Mean Conc (ug/L): 13.33 SD: 2.268 RSD(%): 17.01

Recovery is 66.1% T1-66.6% "W"

Tl ID: 792523 1:10 Seq. No.: 00040 A/S Pos.: 17 Date: 03/28/9

Replicate 1 Time: 12:17
Peak Area (A-s): 0.004 Peak Height (A): 0.011
Background Pk Area (A-s): -0.002 Background Pk Height (A): 0.007
Blank Corrected Pk Area (A-s): 0.005
Concentration (ug/L): 2.22

Replicate 2 Time: 12:19
Peak Area (A-s): -0.001 Peak Height (A): 0.008
Background Pk Area (A-s): -0.001 Background Pk Height (A): 0.009
Blank Corrected Pk Area (A-s): -0.000
Concentration (ug/L): -0.04

Mean Conc (ug/L): 1.09 SD: 1.595 RSD(%): 146.48

Tl ID: 792523 1:10 Seq. No.: 00041 A/S Pos.: 17 Date: 03/28/9

Replicate 1 Time: 12:21

U.S. EPA - CLP

13
PREPARATION LOG

Lab Name: COMPUCHEM_ENV._CORP._____ Contract: ILM03.0___

Lab Code: COMPU_ Case No.:_R3231_ SAS No.: _____ SDG No.:RW05M_

Method: P_

EPA Sample No.	Preparation Date	Weight (gram)	Volume (mL)
LCSW	03/24/96		100
PBW	03/24/96		100
RW-05	03/24/96		100
RW-06	03/24/96		100
RW-15	03/24/96		100
RW-17	03/24/96		100
RW-20	03/24/96		100
RW-29	03/24/96		100
RW-30	03/24/96		100
RW-30D	03/24/96		100
RW-30S	03/24/96		100
RW-45	03/24/96		100
RW-46	03/24/96		100
RW-57	03/24/96		100
RW-59	03/24/96		100
RW46D	03/24/96		100

FORM XIII - IN ILM03.0

U.S. EPA - CLP

13
PREPARATION LOG

Lab Name: COMPUCHEM_ENV._CORP._____ Contract: ILM03.0___

Lab Code: COMPU_ Case No.:_R3231_ SAS No.: _____ SDG No.:RW05M_

Method: F_

EPA Sample No.	Preparation Date	Weight (gram)	Volume (mL)
LCSW	03/24/96		100
PBW	03/24/96		100
RW-05	03/24/96		100
RW-06	03/24/96		100
RW-15	03/24/96		100
RW-17	03/24/96		100
RW-20	03/24/96		100
RW-29	03/24/96		100
RW-30	03/24/96		100
RW-30D	03/24/96		100
RW-30S	03/24/96		100
RW-45	03/24/96		100
RW-46	03/24/96		100
RW-57	03/24/96		100
RW-59	03/24/96		100
RW46D	03/24/96		100

FORM XIII - IN ILM03.0

U.S. EPA - CLP

13
PREPARATION LOG

Lab Name: COMPUCHEM_ENV._CORP._____ Contract: ILM03.0___

Lab Code: COMPU_ Case No.:_R3231_ SAS No.: _____ SDG No.:RW05M_

Method: CV

EPA Sample No.	Preparation Date	Weight (gram)	Volume (mL)
LCSW	03/24/96		100
PBW	03/24/96		100
RW-05	03/24/96		100
RW-06	03/24/96		100
RW-15	03/24/96		100
RW-17	03/24/96		100
RW-20	03/24/96		100
RW-29	03/24/96		100
RW-30	03/24/96		100
RW-30D	03/24/96		100
RW-30S	03/24/96		100
RW-45	03/24/96		100
RW-46	03/24/96		100
RW-57	03/24/96		100
RW-59	03/24/96		100
RW46D	03/24/96		100

FORM XIII - IN ILM03.0

U.S. EPA - CLP

10

Instrument Detection Limits (Quarterly)

Lab Name: COMPUCHEM_ENV._CORP._____ Contract: ILM03.0___

Lab Code: COMPU_ Case No.: R3231_ SAS No.: _____ SDG No.: RW05M_

ICP ID Number: _____ Date: 01/15/96

Flame AA ID Number : V2_____

Furnace AA ID Number : _____

Analyte	Wave-length (nm)	Back-ground	CRDL (ug/L)	IDL (ug/L)	M
Aluminum			200		NR
Antimony			60		NR
Arsenic			10		NR
Barium			200		NR
Beryllium			5		NR
Cadmium			5		NR
Calcium			5000		NR
Chromium			10		NR
Cobalt			50		NR
Copper			25		NR
Iron			100		NR
Lead			3		NR
Magnesium			5000		NR
Manganese			15		NR
Mercury	253.70		0.2	0.2	CV
Nickel			40		NR
Potassium			5000		NR
Selenium			5		NR
Silver			10		NR
Sodium			5000		NR
Thallium			10		NR
Vanadium			50		NR
Zinc			20		NR

Comments:

U.S. EPA - CLP

10

Instrument Detection Limits (Quarterly)

Lab Name: COMPUCHEM_ENV._CORP._____ Contract: ILM03.0___

Lab Code: COMPU_ Case No.: R3231_ SAS No.: _____ SDG No.: RW05M_

ICP ID Number: _____ Date: 01/15/96

Flame AA ID Number : _____

Furnace AA ID Number : A8_____

Analyte	Wave-length (nm)	Back-ground	CRDL (ug/L)	IDL (ug/L)	M
Aluminum			200		NR
Antimony			60		NR
Arsenic			10		NR
Barium			200		NR
Beryllium			5		NR
Cadmium			5		NR
Calcium			5000		NR
Chromium			10		NR
Cobalt			50		NR
Copper			25		NR
Iron			100		NR
Lead			3		NR
Magnesium			5000		NR
Manganese			15		NR
Mercury			0.2		NR
Nickel			40		NR
Potassium			5000		NR
Selenium			5		NR
Silver			10		NR
Sodium			5000		NR
Thallium	276.80	BS	10	1.9	F
Vanadium			50		NR
Zinc			20		NR

Comments:

FORM X - IN ILM03

U.S. EPA - CLP

10

Instrument Detection Limits (Quarterly)

Lab Name: COMPUCHEM_ENV._CORP._____ Contract: ILM03.0___

Lab Code: COMPU_ Case No.: R3231_ SAS No.: _____ SDG No.: RW05M_

ICP ID Number: ICP3_____ Date: 01/15/96

Flame AA ID Number : _____

Furnace AA ID Number : _____

Analyte	Wave-length (nm)	Back-ground	CRDL (ug/L)	IDL (ug/L)	M
Aluminum	308.21		200	21.3	P
Antimony	206.84		60	1.8	P
Arsenic	189.04		10	3.0	P
Barium	493.41		200	0.1	P
Beryllium	313.04		5	0.3	P
Cadmium	226.50		5	0.2	P
Calcium	317.93		5000	5.3	P
Chromium	267.72		10	0.7	P
Cobalt	228.62		50	0.5	P
Copper	324.70		25	0.7	P
Iron	271.44		100	10.9	P
Lead	220.35		3	1.6	P
Magnesium	279.08		5000	9.1	P
Manganese	257.61		15	0.2	P
Mercury			0.2		NR
Nickel	231.60		40	1.0	P
Potassium	766.49		5000	14.4	P
Selenium	196.03		5	2.6	P
Silver	328.07		10	0.7	P
Sodium	330.23		5000	212.0	P
Thallium			10		NR
Vanadium	292.40		50	0.6	P
Zinc	213.86		20	3.2	P

Comments:

SDG 26

COMPUCHEM
ENVIRONMENTAL
CORPORATION

R3231
SDG 26

01/APR/96

WESTON
5 UNDERWOOD COURT
DELRAN, NJ 08075-1229

Subject: Report of Data - Account Number# 705038 Order# 32043

Enclosed are the results of analytical work performed in accordance with the referenced account number.

This report covers 10 sample(s) appearing on the attached listing.

Thank you for selecting CompuChem Environmental for your sample analysis. If you should have questions or require additional analytical services please contact your representative at 1-919-406-1600.

Sincerely,

Report Preparation
CompuChem Laboratories, Inc.

Attachment

COMPUCHEM
ENVIRONMENTAL
CORPORATION

01/APR/96

WESTON
5 UNDERWOOD COURT
DELRAN, NJ 08075-1229

ACCOUNT #: 705038

CC#	SAMPLE-ID	RECEIPT DATE
792523	C#R3231-RW-01	3/21/96
792524	C#R3231-RW-07	3/21/96
792525	C#R3231-RW-09	3/21/96
792526	C#R3231-RW-10	3/21/96
792527	C#R3231-RW-26	3/21/96
792531	C#R3231-RW26FB	3/21/96
792532	C#R3231-RW-31	3/21/96
792533	C#R3231-RW-36	3/21/96
792534	C#R3231-RW-48	3/21/96
792535	C#R3231-RW-68	3/21/96

TOTAL NUMBER OF SAMPLES = 10

COMPUCHEM
ENVIRONMENTAL
CORPORATION

3306 Chapel Hill/Nelson Highway P.O. Box 14998
Research Triangle Park, NC 27709-4998
(919) 406-1600

INORGANIC CASE SUMMARY NARRATIVE
CASE # R3231 SDG # 26
CONTRACT # ILM03.0

The indicated Sample Delivery Group (SDG) consisting of ten water samples was received into the laboratory management system (LMS) on March 21, 1996 intact, at a temperature of 4 (+/-2) degrees Celcius, with proper documentation, in sealed shipping containers, unless otherwise noted in any attachments or Quality Assurance Notices. The samples were analyzed, in accordance with EPA CLP Statement of Work (SOW) ILM03.0 for the metallic analytes contained in the Inorganic Target Analyte List.

SAMPLE IDs:

The following customer IDs are associated with this SDG:

RW-01, RW-73, RW-09, RW-10, RW-26, RW-31, RW-36, RW-48, RW-68, RW26FB

INSTRUMENTAL QUALITY CONTROL:

All calibration verification solutions (ICV & CCV), blanks (ICB, CCB) and interference check samples (ICSA & ICSAB) associated with this data were confirmed to be within EPA CLP allowable limits.

SAMPLE PREPARATION QUALITY CONTROL:

The sample preparation procedure verifications (LCS & PB) were found to be within acceptable ranges and all field samples were prepared and analyzed within the contract specified holding times.

MATRIX RELATED QUALITY CONTROL:

The sample matrix spike, RW-01S, was found to be outside CLP control limits for thallium. The reported concentrations for these analytes are flagged with an "N" on all associated Form 1 and on Form 5a.

An "N" indicates a matrix-related interference in the sample preparation procedure &/or analysis for the

AR320159

flagged analyte. This is normally the consequence of a relatively high anionic content in the sample or (for some sediments) an inconsistent sample matrix relative to that analyte.

CLP control limits for matrix spike recoveries are set at 75% to 125% of the analyte quantity added unless original sample concentrations exceed the true values of these "spikes" by a factor of four or more; in this case affected analytes are not flagged even if recoveries fall outside percentage recovery control limits.

The sample matrix duplicate, RW-01D, was within CLP control limits for all requested analytes.

CLP control limits for duplicate determinations are +/- 20% Relative Percent Difference (RPD) for concentrations greater than or equal to five times the CRDL in both the original and duplicate samples, and +/- the CRDL for concentrations less than five times the CRDL. The RPD is not calculated if both the original and duplicate values fall below the IDL.

A five-fold serial dilution of sample RW-01L was performed in accordance with CLP requirements for ICP analysis. The adjusted sample concentrations were outside of CLP control limits for potassium resulting in the application of an "E" flag on all associated Form 1, the Cover Page and Form 9.

An "E" indicates that a chemical or physical interference effect was encountered during the analysis of the flagged analyte. As a result of this interference, all values for the analyte in the same matrix must be considered to be estimated quantities.

CLP control limits for serial dilution are defined as a deviation less than or equal to 10% in the dilution-adjusted concentrations from the original values for all analyte concentrations with values greater than fifty (50) times their respective Instrument Detection Limit (IDL) in the original sample.

A "W" flag appears on a sample specific basis in the Form 1 for thallium in all samples except RW-36 and RW-48.

AR320160

This qualifier flag indicates that a slight matrix related interference is present for the analyte as determined by analytical spike recovery that is outside of the 85% to 115% CLP acceptability limits in samples which exhibit relatively low concentrations of the analyte.

Analyte results obtained by graphite furnace are flagged with "E" on a sample specific basis if the analytical spike recovery associated with the sample is not within acceptable ranges after two successive dilutions. An "E" flag appears on a sample specific basis in the Form 1 for thallium in samples RW-36 and RW-48.

Release of the data contained in this hard copy data package has been authorized by the laboratory Manager or his designee, as verified by the following signature.

Jeanne Alston
Final Technical Reviewer
March 31, 1996

Note: This report is paginated for reference and accountability.

AR320161

U.S. EPA - CLP

COVER PAGE - INORGANIC ANALYSES DATA PACKAGE

Lab Name: COMPUCHEM_ENV._CORP._____ Contract: ILM03.0___

Lab Code: COMPU_ Case No.: R3231 SAS No.: _____ SDG No.:26____

SOW No.: ILM03.0

EPA Sample No.	Lab Sample ID
RW-01	792523
RW-01D	792529
RW-01S	792528
RW-07	792524
RW-09	792525
RW-10	792526
RW-26	792527
RW-31	792532
RW-36	792533
RW-48	792534
RW-68	792535
RW26FB	792531

APR 1996 REC...

Were ICP interelement corrections applied ? Yes/No YES

Were ICP background corrections applied ? Yes/No YES
If yes - were raw data generated before application of background corrections ? Yes/No NO_

Comments:
THE FOLLOWING ANALYTES HAVE BEEN FLAGGED WITH AN "E" TO INDICATE SERIAL DILUTION RESULTS WHICH ARE NOT WITHIN CONTROL LIMITS:
POTASSIUM

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on floppy diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature: [signature] Name: Mark Ross

Date: March 30, 1996 Title: Inorganic Div. Mgr.

U.S. EPA - CLP

2B
CRDL STANDARD FOR AA AND ICP

Lab Name: COMPUCHEM_ENV._CORP._____ Contract: ILM03.0___

Lab Code: COMPU_ Case No.: R3231_ SAS No.: _____ SDG No.: 26____

AA CRDL Standard Source: SPEX_____

ICP CRDL Standard Source: SPEX_____

Concentration Units: ug/L

Analyte	CRDL Standard for AA			CRDL Standard for ICP				
					Initial		Final	
	True	Found	%R	True	Found	%R	Found	%R
Aluminum								
Antimony				120.0	121.30	101.1	120.70	100.6
Arsenic				20.0	18.50	92.5	18.90	94.5
Barium								
Beryllium				10.0	10.08	100.8	10.08	100.8
Cadmium				10.0	10.23	102.3	10.16	101.6
Calcium								
Chromium				20.0	20.15	100.7	19.99	99.9
Cobalt				100.0	103.00	103.0	102.70	102.7
Copper				50.0	52.47	104.9	52.63	105.3
Iron								
Lead				6.0	6.83	113.8	7.35	122.5
Magnesium								
Manganese				30.0	31.95	106.5	31.78	105.9
Mercury	0.2	0.24	120.0					
Nickel				80.0	80.68	100.8	80.19	100.2
Potassium								
Selenium				10.0	8.46	84.6	9.29	92.9
Silver				20.0	12.04	60.2	12.08	60.4
Sodium								
Thallium	10.0	10.17	101.7					
Vanadium				100.0	104.20	104.2	104.20	104.2
Zinc				40.0	33.16	82.9	32.84	82.1

U.S. EPA - CLP

2B
CRDL STANDARD FOR AA AND ICP

Lab Name: COMPUCHEM_ENV._CORP._____ Contract: ILM03.0___

Lab Code: COMPU_ Case No.: R3231_ SAS No.: _____ SDG No.: 26___

AA CRDL Standard Source: SPEX_____

ICP CRDL Standard Source: SPEX_____

Concentration Units: ug/L

Analyte	CRDL Standard for AA True	Found	%R	CRDL Standard for ICP Initial True	Initial Found	%R	Final Found	%R
Aluminum								
Antimony				120.0	122.90	102.4	123.80	103.2
Arsenic				20.0	20.78	103.9	21.60	108.0
Barium								
Beryllium				10.0	10.05	100.5	10.07	10[illegible]
Cadmium				10.0	10.02	100.2	10.03	[illegible].3
Calcium								
Chromium				20.0	20.06	100.3	20.47	102.3
Cobalt				100.0	102.80	102.8	102.90	102.9
Copper				50.0	50.88	101.8	51.13	102.3
Iron								
Lead				6.0	6.52	108.7	6.96	116.0
Magnesium								
Manganese				30.0	31.86	106.2	31.87	106.2
Mercury								
Nickel				80.0	81.08	101.3	80.32	100.4
Potassium								
Selenium				10.0	5.02	50.2	8.71	87.1
Silver				20.0	11.75	58.7	11.98	59.9
Sodium								
Thallium	10.0	10.43	104.3					
Vanadium				100.0	103.80	103.8	103.70	103.7
Zinc				40.0	33.24	83.1	33.01	82.5

U.S. EPA - CLP

3
BLANKS

Lab Name: COMPUCHEM_ENV._CORP._____ Contract: ILM03.0___

Lab Code: COMPU_ Case No.: R3231_ SAS No.: _____ SDG No.: 26____

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	Prepa-ration Blank	C	M
Aluminum	21.3	U	21.3	U	21.3	U	21.3	U	21.300	U	P
Antimony	1.8	U	1.8	U	1.8	U	1.8	U	1.800	U	P
Arsenic	3.0	U	3.0	U	3.0	U	3.0	U	3.000	U	P
Barium	0.1	U	0.1	U	0.3	B	0.1	B	0.795	B	P
Beryllium	0.3	U	0.3	U	0.3	U	0.3	U	0.300	U	P
Cadmium	0.2	B	0.2	U	0.2	B	0.2	U	0.200	U	P
Calcium	-59.1	B	-54.0	B	-54.3	B	-54.0	B	-47.580	B	P
Chromium	0.7	U	0.7	U	0.7	U	0.7	U	0.700	U	P
Cobalt	0.5	U	0.5	U	0.5	U	0.5	U	0.500	U	P
Copper	0.7	U	0.7	U	0.7	U	0.7	U	0.848	B	P
Iron	10.9	U	10.9	U	10.9	U	10.9	U	23.070	B	P
Lead	1.6	U	1.6	U	1.6	U	1.6	U	1.600	U	P
Magnesium	9.1	U	9.1	U	9.1	U	9.1	U	9.100	U	P
Manganese	0.2	U	0.2	U	0.2	U	0.2	U	0.216	B	P
Mercury	0.2	U	0.2	U	0.2	U	0.2	U	0.200	U	CV
Nickel	1.0	U	1.0	U	1.0	U	1.0	U	2.167	B	P
Potassium	14.4	U	14.4	U	14.4	U	14.4	U	14.400	U	P
Selenium	2.6	U	2.6	U	2.6	U	2.6	U	2.600	U	P
Silver	0.7	U	0.7	U	0.7	U	0.7	U	0.700	U	P
Sodium	212.0	U	212.0	U	212.0	U	212.2	B	212.000	U	P
Thallium	1.9	U	1.9	U	1.9	U	1.9	U	1.900	U	F
Vanadium	0.6	U	0.6	U	0.6	U	0.6	U	0.600	U	P
Zinc	-4.7	B	-4.6	B	-4.3	B	-4.5	B	11.240	B	P
Cyanide											NR

U.S. EPA - CLP

3
BLANKS

Lab Name: COMPUCHEM_ENV._CORP._____ Contract: ILM03.0___

Lab Code: COMPU_ Case No.: R3231_ SAS No.: _____ SDG No.: 26____

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	Prepa-ration Blank	C	M
Aluminum	21.3	U	21.3	U	21.3	U	21.3	U	21.300	U	P
Antimony	1.8	U	1.8	U	1.8	U	1.8	U	1.800	U	
Arsenic	3.0	U	3.0	U	3.0	U	3.0	U	3.000	U	
Barium	0.1	U	0.1	U	0.3	B	0.1	B	0.795	B	P
Beryllium	0.3	U	0.3	U	0.3	U	0.3	U	0.300	U	P
Cadmium	0.2	B	0.2	U	0.2	B	0.2	U	0.200	U	P
Calcium	-59.1	B	-54.0	B	-54.3	B	-54.0	B	-47.580	B	P
Chromium	0.7	U	0.7	U	0.7	U	0.7	U	0.700	U	P
Cobalt	0.5	U	0.5	U	0.5	U	0.5	U	0.500	U	P
Copper	0.7	U	0.7	U	0.7	U	0.7	U	0.848	B	P
Iron	10.9	U	10.9	U	10.9	U	10.9	U	23.070	B	P
Lead	1.6	U	1.6	U	1.6	U	1.6	U	1.600	U	P
Magnesium	9.1	U	9.1	U	9.1	U	9.1	U	9.100	U	P
Manganese	0.2	U	0.2	U	0.2	U	0.2	U	0.216	B	P
Mercury	0.2	U	0.2	U	0.2	U	0.2	U	0.200	U	CV
Nickel	1.0	U	1.0	U	1.0	U	1.0	U	2.167	B	P
Potassium	14.4	U	14.4	U	14.4	U	14.4	U	14.400	U	P
Selenium	2.6	U	2.6	U	2.6	U	2.6	U	2.600	U	P
Silver	0.7	U	0.7	U	0.7	U	0.7	U	0.700	U	P
Sodium	212.0	U	212.0	U	212.0	U	212.2	B	212.000	U	P
Thallium	1.9	U	1.9	U	1.9	U	1.9	U	1.900	U	F
Vanadium	0.6	U	0.6	U	0.6	U	0.6	U	0.600	U	P
Zinc	-4.7	B	-4.6	B	-4.3	B	-4.5	B	11.240	B	P
Cyanide											NR

U.S. EPA - CLP

3
BLANKS

Lab Name: COMPUCHEM_ENV._CORP._____ Contract: ILM03.0___

Lab Code: COMPU_ Case No.: R3231_ SAS No.: _____ SDG No.: 26____

Preparation Blank Matrix (soil/water): WATER

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

RW26FB

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1 4	C	2 5	C	3 6	C	Prepa-ration Blank	C	M
Aluminum			21.3	U	21.3	U	21.3	U	23.350	B	P
Antimony			2.1	B	1.8	U	1.8	U	1.800	U	P
Arsenic			3.0	U	-3.2	B	3.0	U	-4.554	B	P
Barium			0.3	B	0.1	U	0.1	B	0.100	U	P
Beryllium			0.3	U	0.3	U	0.3	U	0.300	U	P
Cadmium			0.3	B	0.2	U	0.2	B	-0.701	B	P
Calcium			-47.2	B	-56.3	B	-48.8	B	-54.910	B	P
Chromium			0.7	U	0.7	U	0.7	U	0.700	U	P
Cobalt			0.5	U	0.5	U	0.5	U	0.500	U	P
Copper			0.7	U	0.7	U	0.7	U	24.490	B	P
Iron			10.9	U	10.9	U	10.9	U	14.090	B	P
Lead			1.6	U	1.6	U	1.6	U	1.673	B	P
Magnesium			9.4	B	9.1	U	11.1	B	9.100	U	P
Manganese			0.2	B	0.2	U	0.2	U	0.200	U	P
Mercury			0.2	U	0.2	U	0.2	U			CV
Nickel			1.0	U	1.0	U	1.0	U	1.000	U	P
Potassium			14.4	U	14.4	U	14.4	U	14.400	U	P
Selenium			2.6	U	2.6	U	2.6	U	-3.478	B	P
Silver			0.7	U	0.7	U	0.7	U	0.700	U	P
Sodium			212.0	U	212.0	U	212.0	U	560.400	B	P
Thallium			1.9	U	1.9	U					F
Vanadium			0.6	U	0.6	U	0.6	U	0.600	U	P
Zinc			-4.2	B	-4.6	B	-4.5	B	-3.379	B	P
Cyanide											NR

U.S. EPA - CLP

3
BLANKS

Lab Name: COMPUCHEM_ENV._CORP._____ Contract: ILM03.0___

Lab Code: COMPU_ Case No.: R3231_ SAS No.: _____ SDG No.: 26____

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	25.8	B	21.3	U	21.3	U					P
Antimony	1.8	U	1.8	U	2.8	B					
Arsenic	3.0	U	3.0	U	4.0	B					
Barium	0.1	U	0.3	B	0.2	B					P
Beryllium	0.3	U	0.3	U	0.3	U					P
Cadmium	1.3	B	0.3	B	0.2	U					P
Calcium	11.3	B	-38.9	B	-49.2	B					P
Chromium	0.7	U	0.7	U	0.7	U					P
Cobalt	0.5	U	0.5	U	0.5	U					P
Copper	0.7	U	0.7	U	0.7	U					P
Iron	10.9	U	10.9	U	10.9	U					P
Lead	1.6	U	1.6	U	1.6	U					P
Magnesium	9.1	U	24.0	B	14.4	B					P
Manganese	0.2	U	0.3	B	0.2	U					P
Mercury											NR
Nickel	1.0	U	1.0	U	1.0	U					P
Potassium	14.4	U	16.7	B	14.4	U					P
Selenium	-4.6	B	-3.7	B	2.6	U					P
Silver	0.7	U	0.7	U	0.7	U					P
Sodium	212.0	U	212.0	U	212.0	U					P
Thallium	1.9	U	1.9	U	1.9	U	1.9	U			P
Vanadium	0.6	U	0.6	U	0.6	U					P
Zinc	-3.3	B	-4.4	B	-4.3	B					P
Cyanide											NR

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5A
SPIKE SAMPLE RECOVERY

EPA SAMPLE NO.

RW-01S

Lab Name: COMPUCHEM_ENV._CORP._____ Contract: ILM03.0___

Lab Code: COMPU_ Case No.: R3231_ SAS No.: _____ SDG No.: 26___

Matrix (soil/water): WATER_ Level (low/med): LOW___

% Solids for Sample: __0.0

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	2238.0000		119.4000	B	2000.00	105.9		P
Antimony	75-125	505.0000		2.9290	B	500.00	100.4		P
Arsenic	75-125	1994.0000		3.0000	U	2000.00	99.7		P
Barium	75-125	2102.0000		38.5300	B	2000.00	103.2		P
Beryllium	75-125	50.8700		0.3000	U	50.00	101.7		P
Cadmium	75-125	50.1000		0.2000	U	50.00	100.2		P
Calcium									NR
Chromium	75-125	201.7000		1.1500	B	200.00	100.3		P
Cobalt	75-125	508.8000		0.5000	U	500.00	101.8		P
Copper	75-125	253.5000		1.3240	B	250.00	100.9		P
Iron	75-125	1268.0000		139.7000		1000.00	112.8		P
Lead	75-125	501.2000		1.6000	U	500.00	100.2		P
Magnesium									NR
Manganese	75-125	513.3000		4.7180	B	500.00	101.7		P
Mercury	75-125	0.8930		0.2000	U	1.00	89.3		CV
Nickel	75-125	499.8000		1.9200	B	500.00	99.6		P
Potassium									NR
Selenium	75-125	1942.0000		2.6000	U	2000.00	97.1		P
Silver	75-125	50.6700		0.7000	U	50.00	101.3		P
Sodium									NR
Thallium	75-125	16.3000		19.0000	U	50.00	32.6	N	F
Vanadium	75-125	525.3000		0.6000	U	500.00	105.1		P
Zinc	75-125	506.0000		16.5500	B	500.00	97.9		P
Cyanide									NR

Comments:

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9

ICP SERIAL DILUTION

EPA SAMPLE NO.

RW-01L

Lab Name: COMPUCHEM_ENV._CORP._____ Contract: ILM03.0___

Lab Code: COMPU_ Case No.: R3231_ SAS No.: _____ SDG No.: 26____

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

Concentration Units: ug/L

Analyte	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	% Difference	Q	M
Aluminum	119.40	B	538.50	B	351.0		P
Antimony	2.93	B	9.00	U	100.0		P
Arsenic	3.00	U	15.00	U			P
Barium	38.53	B	40.02	B	3.9		P
Beryllium	0.30	U	1.50	U			P
Cadmium	0.20	U	1.00	U			P
Calcium	5291.00		5020.00	B	5.1		P
Chromium	1.15	B	3.50	U	100.0		P
Cobalt	0.50	U	2.50	U			P
Copper	1.32	B	3.50	U	100.0		P
Iron	139.70		132.85	B	4.9		P
Lead	1.60	U	8.00	U			P
Magnesium	3270.00	B	3287.00	B	0.5		P
Manganese	4.72	B	5.05	B	7.0		P
Mercury							NR
Nickel	1.92	B	10.29	B	435.9		P
Potassium	974.60	B	1216.00	B	24.8	E	P
Selenium	2.60	U	13.00	U			P
Silver	0.70	U	3.50	U			P
Sodium	5413.00		8565.00	B	58.2		P
Thallium							NR
Vanadium	0.60	U	3.00	U			P
Zinc	16.55	B	16.00	U	100.0		P

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14

ANALYSIS RUN LOG

Lab Name: COMPUCHEM_ENV._CORP._____ Contract: ILM03.0___

Lab Code: COMPU_ Case No.: R3231_ SAS No.: _____ SDG No.:26____

Instrument ID Number: ICP3_____ Method: P_

Start Date: 03/28/96 End Date: 03/28/96

EPA Sample No.	D/F	Time	% R	Analytes																								
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
SO	1.00	0948		X	X	X	X	X	X	X	X	X	X	X	X	X	X	-	X	X	X	X	X	X	X	X	-
S	1.00	0953							X		X		X		X			-	X		X	X		X		X	-
S	1.00	0957		X	-	-	-	-		X		-		X		X	-	-		-			-		-		-
S	1.00	1003		-	-	X	X	X	-	-	-	X	-	-	-	-	X	-	-	-	-	-	-	-	X	-	-
S	1.00	1006		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	X	-	-	-	-
S	1.00	1011			X	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ICV	1.00	1011		X		-	X	X	X	X	X	X	X	X	-	X	X	-	X	X	-	X	X	-	X	X	-
ICV	1.00	1017		-	X	X	-	-	-	-	-	-	-	-	X	-	-	-	-	-	X	-	-	-	-	-	-
ICV	1.00	1022																									
ICB 1	1.00	1028		X	X	X	X	X	X	X	X	X	X	X	X	X	X	-	X	X	X	X	X	-	X	X	-
ICSA	1.00	1033		X	X	X	X	X	X	X	X	X	X	X	X	X	X	-	X	X	X	X	X	-	X	X	-
ICSAB	1.00	1039		X	X	X	X	X	X	X	X	X	X	X	X	X	X	-	X	X	X	X	X	-	X	X	-
CRI I	1.00	1044			X	X		X	X		X	X	X		X		X	-	X		X	X		-	X	X	-
CCV	1.00	1050		X	X	X	X	X	X	X	X	X	X	X	X	X	X	-	X	X	X	X	X	-	X	X	-
CCB 1	1.00	1055		X	X	X	X	X	X	X	X	X	X	X	X	X	X	-	X	X	X	X	X	-	X	X	-
ZZZZZZ	1.00	1101		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	1106		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	1112		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	1117		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	1122		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	5.00	1128		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	1133		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	1139		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	1144																									
PBW I	1.00	1150		X	X	X	X	X	X	X	X	X	X	X	X	X	X	-	X	X	X	X	X	-	X	X	-
CCV	1.00	1155		X	X	X	X	X	X	X	X	X	X	X	X	X	X	-	X	X	X	X	X	-	X	X	-
CCB 2	1.00	1201		X	X	X	X	X	X	X	X	X	X	X	X	X	X	-	X	X	X	X	X	-	X	X	-
LCSW	1.00	1206		X	X	X	X	X	X	X	X	X	X	X	X	X	X	-	X	X	X	X	X	-	X	X	-
RW-01	1.00	1212		X	X	X	X	X	X	X	X	X	X	X	X	X	X	-	X	X	X	X	X	-	X	X	-
RW-01D	1.00	1217		X	X	X	X	X	X	X	X	X	X	X	X	X	X	-	X	X	X	X	X	-	X	X	-
RW-01S	1.00	1223		X	X	X	X	X	X		X	X	X	X	X		X	-	X		X	X		-	X	X	-
RW-01L	5.00	1228		X	X	X	X	X	X	X	X	X	X	X	X	X	X	-	X	X	X	X	X	-	X	X	-

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14

ANALYSIS RUN LOG

Lab Name: COMPUCHEM_ENV._CORP._____ Contract: ILM03.0___

Lab Code: COMPU_ Case No.: R3231_ SAS No.: _____ SDG No.:26____

Instrument ID Number: ICP3_____ Method: P_

Start Date: 03/28/96 End Date: 03/28/96

EPA Sample No.	D/F	Time	% R	Analytes																							
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
RW-07	1.00	1234		X	X	X	X	X	X	X	X	X	X	X	X	X	X	_	X	X	X	X	X	_	X	X	_
RW-09	1.00	1239		X	X	X	X	X	X	X	X	X	X	X	X	X	X	_	X	X	X	X	X	_	X	X	_
RW-10	1.00	1245		X	X	X	X	X	X	X	X	X	X	X	X	X	X	_	X	X	X	X	X	_	X	X	_
RW-26	1.00	1250		X	X	X	X	X	X	X	X	X	X	X	X	X	X	_	X	X	X	X	X	_	X	X	_
RW26FB	1.00	1255																									
CCV	1.00	1301		X	X	X	X	X	X	X	X	X	X	X	X	X	X	_	X	X	X	X	X	_	X	X	_
CCB	1.00	1306		X	X	X	X	X	X	X	X	X	X	X	X	X	X	_	X	X	X	X	X	_	X	X	_
RW-31	1.00	1312		X	X	X	X	X	X	X	X	X	X	X	X	X	X	_	X	X	X	X	X	_	X	[illegible]	_
RW-36	1.00	1317		X	X	X	X	X	X	X	X	X	X	X	X	X	X	_	X	X	X	X	X	_	X	[illegible]	_
RW-48	1.00	1323		X	X	X	X	X	X	X	X	X	X	X	X	X	X	_	X	X	X	X	X	_	X	X	_
RW-68	1.00	1328		X	X	X	X	X	X	X	X	X	X	X	X	X	X	_	X	X	X	X	X	_	X	X	_
ZZZZZZ	1.00	1334		_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
ZZZZZZ	1.00	1339		_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
ZZZZZZ	1.00	1345		_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
ZZZZZZ	1.00	1350		_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
ZZZZZZ	1.00	1356		_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
ZZZZZZ	5.00	1401																									
CCV	1.00	1407		X	X	X	X	X	X	X	X	X	X	X	X	X	X	_	X	X	X	X	X	_	X	X	_
CCB4	1.00	1412		X	X	X	X	X	X	X	X	X	X	X	X	X	X	_	X	X	X	X	X	_	X	X	_
ZZZZZZ	1.00	1418		_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
ZZZZZZ	1.00	1423		_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
ZZZZZZ	1.00	1428		_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
ZZZZZZ	1.00	1434		_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
ZZZZZZ	1.00	1439		_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
RW-01A	1.00	1445		_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
ZZZZZZ	1.00	1450		_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
ZZZZZZ	1.00	1456		_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
CCV	1.00	1501		X	X	X	X	X	X	X	X	X	X	X	X	X	X	_	X	X	X	X	X	_	X	X	_
CCB5	1.00	1507		X	X	X	X	X	X	X	X	X	X	X	X	X	X	_	X	X	X	X	X	_	X	X	_
ICSA	1.00	1512		X	X	X	X	X	X	X	X	X	X	X	X	X	X	_	X	X	X	X	X	_	X	X	_
ICSAB	1.00	1518		X	X	X	X	X	X	X	X	X	X	X	X	X	X	_	X	X	X	X	X	_	X	X	_
CRI	1.00	1523		_	X	X	_	X	X	_	X	X	X	_	X	_	X	_	X	_	X	X	_	_	X	X	_

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54

AR320172

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14

ANALYSIS RUN LOG

Lab Name: COMPUCHEM_ENV._CORP._____ Contract: ILM03.0___

Lab Code: COMPU_ Case No.: R3231_ SAS No.: _____ SDG No.:26____

Instrument ID Number: ICP3_____ Method: P_

Start Date: 03/28/96 End Date: 03/28/96

EPA Sample No.	D/F	Time	% R	Analytes																								
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
CCV	1.00	1529		X	X	X	X	X	X	X	X	X	X	X	X	X	X	_	X	X	X	X	X	_	X	X	_
CCB 6	1.00	1534		X	X	X	X	X	X	X	X	X	X	X	X	X	X	_	X	X	X	X	X	_	X	X	_

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55

AR320173

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14
ANALYSIS RUN LOG

Lab Name: COMPUCHEM_ENV._CORP._____ Contract: ILM03.0___

Lab Code: COMPU_ Case No.: R3231_ SAS No.: _____ SDG No.:26____

Instrument ID Number: ICP3_____ Method: P_

Start Date: 03/29/96 End Date: 03/29/96

EPA Sample No.	D/F	Time	% R	Analytes																								
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
S0	1.00	2019		X	X	X	X	X	X	X	X	X	X	X	X	X	X	-	X	X	X	X	X	X	X	X	-
S	1.00	2025			-	-	-	-	X		X	-	X		X		-	-	X	-	X	X	-	X	-	X	-
S	1.00	2029		X	-	-	-	-	-	X	-	-	-	X	-	X	-	-	-	-	-	-	-	-	-	-	-
S	1.00	2034		-	-	X	X	X	-	-	-	X	-	-	-	-	X	-	-	-	-	-	-	-	X	-	-
S	1.00	2037		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	X	-	-	-	-
S	1.00	2042			X	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ICV	1.00	2043		X		-	X	X	X	X	X	X	X	X	-	X	X	-	X	X	-	X	X	-	X	X	-
ICV	1.00	2048		-	X	X	-	-	-	-	-	-	-	-	X	-	-	-	-	-	X	-	-	-	-	-	-
ICV	1.00	2054																									-
ICB 1	1.00	2059		X	X	X	X	X	X	X	X	X	X	X	X	X	X	-	X	X	X	X	X	-	X	X	-
ICSA	1.00	2104		X	X	X	X	X	X	X	X	X	X	X	X	X	X	-	X	X	X	X	X	-	X	X	-
ICSAB	1.00	2110		X	X	X	X	X	X	X	X	X	X	X	X	X	X	-	X	X	X	X	X	-		X	-
CRI 2	1.00	2115			X	X		X	X		X	X	X		X		X	-	X		X	X		-		X	-
CCV	1.00	2121		X	X	X	X	X	X	X	X	X	X	X	X	X	X	-	X	X	X	X	X	-	X	X	-
CCB 1	1.00	2126		X	X	X	X	X	X	X	X	X	X	X	X	X	X	-	X	X	X	X	X	-	X	X	-
PBW 2	1.00	2132		X	X	X	X	X	X	X	X	X	X	X	X	X	X	-	X	X	X	X	X	-	X	X	-
LCSW	1.00	2137		X	X	X	X	X	X	X	X	X	X	X	X	X	X	-	X	X	X	X	X	-	X	X	-
RW26FB	1.00	2212		X	X	X	X	X	X	X	X	X	X	X	X	X	X	-	X	X	X	X	X	-	X	X	-
ZZZZZZ	1.00	2217		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	2223		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	2228																									-
ICSA	1.00	2234		X	X	X	X	X	X	X	X	X	X	X	X	X	X	-	X	X	X	X	X	-	X	X	-
ICSAB	1.00	2240		X	X	X	X	X	X	X	X	X	X	X	X	X	X	-	X	X	X	X	X	-	X	X	-
CRI 1	1.00	2246			X	X		X	X		X	X	X		X		X	-	X		X	X		-	X	X	-
CCV	1.00	2251		X	X	X	X	X	X	X	X	X	X	X	X	X	X	-	X	X	X	X	X	-	X	X	-
CCB 2	1.00	2257		X	X	X	X	X	X	X	X	X	X	X	X	X	X	-	X	X	X	X	X	-	X	X	-
				-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
				-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
				-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
				-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
				-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
				-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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56

AR320174

U.S. EPA - CLP

14

ANALYSIS RUN LOG

Lab Name: COMPUCHEM_ENV._CORP._____ Contract: ILM03.0___

Lab Code: COMPU_ Case No.: R3231_ SAS No.: _____ SDG No.:26____

Instrument ID Number: V2_____ Method: CV

Start Date: 03/26/96 End Date: 03/26/96

EPA Sample No.	D/F	Time	% R	Analytes																							
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
S0	1.00	1014		-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-	-	-	-
S0.2	1.00	1017		-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-	-	-	-
S0.5	1.00	1019		-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-	-	-	-
S1	1.00	1022		-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-	-	-	-
S5	1.00	1024		-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-	-	-	-
S10	1.00	1026		-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-	-	-	-
ICV	1.00	1029		-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-	-	-	-
ICB	1.00	1031		-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-	-	-	-
CRA	1.00	1034		-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-	-	-	-
CCV	1.00	1036		-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-	-	-	-
CCB	1.00	1038		-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	1041		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	5.00	1043		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	1045		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	1048		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	1050		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	1052		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	1055		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	1057		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	1059		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	1102		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CCV	1.00	1104		-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-	-	-	-
CCB	1.00	1106		-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	1109		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	1111		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	5.00	1114		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	1116		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PBW	1.00	1118		-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-	-	-	-
LCSW	1.00	1121		-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-	-	-	-
RW-01	1.00	1123		-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-	-	-	-
RW-01D	1.00	1125		-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-	-	-	-
RW-01S	1.00	1128		-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-	-	-	-

U.S. EPA - CLP

14

ANALYSIS RUN LOG

Lab Name: COMPUCHEM_ENV._CORP._____ Contract: ILM03.0___

Lab Code: COMPU_ Case No.: R3231_ SAS No.: _____ SDG No.:26____

Instrument ID Number: V2_____ Method: CV

Start Date: 03/26/96 End Date: 03/26/96

EPA Sample No.	D/F	Time	% R	Analytes																							
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
RW-07	1.00	1130		-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-	-	-	-
CCV	1.00	1132		-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-	-	-	-
CCB	1.00	1135		-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-	-	-	-
RW-09	1.00	1137		-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-	-	-	-
RW-10	1.00	1140		-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-	-	-	-
RW-26	1.00	1142		-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-	-	-	-
RW26FB	1.00	1144		-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-	-	-	-
RW-31	1.00	1147		-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-	-	-	-
RW-36	1.00	1149		-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-	-	-	-
RW-48	1.00	1151		-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-	-	-	-
RW-68	1.00	1154		-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	1156		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	1158		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CCV	1.00	1201		-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-	-	-	-
CCB	1.00	1203		-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	1205		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	1208		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	1210		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	1212		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	1215		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	1217		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	1220		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	1222		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	1224		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CCV	1.00	1227		-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-	-	-	-
CCB	1.00	1229		-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-	-	-	-
CCV	1.00	1231		-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-	-	-	-
CCB	1.00	1234		-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-	-	-	-
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FORM XIV - IN ILM03.0

U.S. EPA - CLP

14

ANALYSIS RUN LOG

Lab Name: COMPUCHEM_ENV._CORP._____ Contract: ILM03.0___

Lab Code: COMPU_ Case No.: R3231_ SAS No.: _____ SDG No.:26____

Instrument ID Number: A8_____ Method: F_

Start Date: 03/27/96 End Date: 03/27/96

EPA Sample No.	D/F	Time	% R	Analytes																							
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
S0	1.00	1342		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-
S10	1.00	1345		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-
S30	1.00	1349		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-
S60	1.00	1352		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-
ICV	1.00	1356		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-
ICB	1.00	1400		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-
CRA	1.00	1403		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-
CCV	1.00	1406		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-
CCB	1.00	1410		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-
ZZZZZZ	1.00	1413		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	1417		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PBW	1.00	1420		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-
PBWA	1.00	1424	76.4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-
LCSW	1.00	1428		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-
LCSWA	1.00	1431	63.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-
RW-01	1.00	1435		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RW-01A	1.00	1438	25.9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	1442		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	1445		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CCV	1.00	1448		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-
CCB	1.00	1452		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-
RW-01D	1.00	1455		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RW-01DA	1.00	1459	28.6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RW-01S	1.00	1502		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-
ZZZZZZ	1.00	1506		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RW-07	1.00	1509		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RW-07A	1.00	1513	29.7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RW-09	1.00	1516		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RW-09A	1.00	1520	24.4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	1523		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	1527		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CCV	1.00	1530		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-

U.S. EPA - CLP

14

ANALYSIS RUN LOG

Lab Name: COMPUCHEM_ENV._CORP._____ Contract: ILM03.0___

Lab Code: COMPU_ Case No.: R3231_ SAS No.: _____ SDG No.:26____

Instrument ID Number: A8_____ Method: F_

Start Date: 03/27/96 End Date: 03/27/96

EPA Sample No.	D/F	Time	% R	AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
				Analytes																							
CCB	1.00	1533		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-
RW-10	1.00	1537		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RW-10A	1.00	1541	25.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RW-26	1.00	1544		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RW-26A	1.00	1548	35.9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RW26FB	1.00	1551		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-
RW26FBA	1.00	1555	81.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-
RW-31	1.00	1558		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RW-31A	1.00	1602	26.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	1605		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	1608		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CCV	1.00	1612		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-
CCB	1.00	1615		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-
RW-36	1.00	1619		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RW-36A	1.00	1622	-0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RW-48	1.00	1626		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RW-48A	1.00	1630	9.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RW-68	1.00	1633		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RW-68A	1.00	1637	32.7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	1640		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	1644		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	1648		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	1651		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CCV	1.00	1654		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-
CCB	1.00	1658		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-
				-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
				-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
				-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
				-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
				-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
				-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
				-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

FORM XIV - IN

58

AR320178

U.S. EPA - CLP

14

ANALYSIS RUN LOG

Lab Name: COMPUCHEM_ENV._CORP._____ Contract: ILM03.0___

Lab Code: COMPU_ Case No.: R3231_ SAS No.: _____ SDG No.:26____

Instrument ID Number: A8_____ Method: F_

Start Date: 03/28/96 End Date: 03/28/96

EPA Sample No.	D/F	Time	% R	Analytes																								
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
S0	1.00	1003		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-
S10	1.00	1006		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-
S30	1.00	1010		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-
S60	1.00	1013		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-
ICV	1.00	1017		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-
ICB	1.00	1021		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-
CRA	1.00	1024		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-
CCV	1.00	1027		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-
CCB	1.00	1031		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-
ZZZZZZ	1.00	1034		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	1038		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	1041		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	1045		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	1048		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	1052		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	1056		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	1059		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	1103		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	1106		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CCV	1.00	1109		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-
CCB	1.00	1113		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-
ZZZZZZ	1.00	1116		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	1120		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	1123		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	1127		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	1130		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	1134		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	1137		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	1141		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	1144		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	1148		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CCV	1.00	1151		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-

FORM XIV - IN ILM03.0

59

AR320179

U.S. EPA - CLP

14

ANALYSIS RUN LOG

Lab Name: COMPUCHEM_ENV._CORP._____ Contract: ILM03.0___

Lab Code: COMPU_ Case No.: R3231_ SAS No.: _____ SDG No.:26____

Instrument ID Number: A8_____ Method: F_

Start Date: 03/28/96 End Date: 03/28/96

EPA Sample No.	D/F	Time	% R	Analytes																							
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
CCB	1.00	1154		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-
ZZZZZZ	1.00	1158		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	1202		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	1205		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	1209		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	1212		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	1216		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RW-01	10.00	1219		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-
RW-01A	10.00	1223	66.9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-
ZZZZZZ	1.00	1226		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	1229		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CCV	1.00	1233		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-
CCB	1.00	1236		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-
RW-01D	10.00	1240		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-
RW-01DA	10.00	1244	57.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-
RW-07	10.00	1247		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-
RW-07A	10.00	1251	57.9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-
RW-09	10.00	1254		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-
RW-09A	10.00	1258	63.7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-
RW-10	10.00	1301		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-
RW-10A	10.00	1305	66.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-
ZZZZZZ	1.00	1309		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZZZZZZ	1.00	1312		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CCV	1.00	1315		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-
CCB	1.00	1319		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-
RW-26	10.00	1322		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-
RW-26A	10.00	1326	61.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-
RW-31	10.00	1330		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-
RW-31A	10.00	1334	65.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-
RW-36	10.00	1337		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-
RW-36A	10.00	1341	23.7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-
RW-48	10.00	1344		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-

FORM XIV - IN IL 0

60

AR320180

U.S. EPA - CLP

14

ANALYSIS RUN LOG

Lab Name: COMPUCHEM_ENV._CORP._____ Contract: ILM03.0___

Lab Code: COMPU_ Case No.: R3231_ SAS No.: _____ SDG No.:26____

Instrument ID Number: A8_____ Method: F_

Start Date: 03/28/96 End Date: 03/28/96

EPA Sample No.	D/F	Time	% R	Analytes																								
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
RW-48A	10.00	1348	27.4																					X			
ZZZZZZ	1.00	1351																									
ZZZZZZ	1.00	1355																									
CCV	1.00	1358																						X			
CCB	1.00	1402																						X			
RW-68	10.00	1405																						X			
RW-68A	10.00	1409	58.6																					X			
ZZZZZZ	1.00	1412																									
ZZZZZZ	1.00	1416																									
ZZZZZZ	1.00	1419																									
ZZZZZZ	1.00	1423																									
ZZZZZZ	1.00	1427																									
ZZZZZZ	1.00	1430																									
ZZZZZZ	1.00	1433																									
ZZZZZZ	1.00	1437																									
CCV	1.00	1440																						X			
CCB	1.00	1444																						X			

U.S. EPA - CLP

13

PREPARATION LOG

Lab Name: COMPUCHEM_ENV._CORP._____ Contract: ILM03.0___

Lab Code: COMPU_ Case No.:_R3231_ SAS No.: _____ SDG No.:26____

Method: P_

EPA Sample No.	Preparation Date	Weight (gram)	Volume (mL)
LCSW	03/25/96		100
PBW	03/25/96		100
RW-01	03/25/96		100
RW-01D	03/25/96		100
RW-01S	03/25/96		100
RW-07	03/25/96		100
RW-09	03/25/96		100
RW-10	03/25/96		100
RW-26	03/25/96		100
RW-31	03/25/96		100
RW-36	03/25/96		100
RW-48	03/25/96		100
RW-68	03/25/96		100

FORM XIII - IN ILM03.0

U.S. EPA - CLP

13
PREPARATION LOG

Lab Name: COMPUCHEM_ENV._CORP._____ Contract: ILM03.0___

Lab Code: COMPU_ Case No.:_R3231_ SAS No.: _____ SDG No.:26____

Method: P_

EPA Sample No.	Preparation Date	Weight (gram)	Volume (mL)
LCSW	03/29/96		100
PBW	03/29/96		100
RW26FB	03/29/96		100

FORM XIII - IN ILM03.0

U.S. EPA - CLP

13
PREPARATION LOG

Lab Name: COMPUCHEM_ENV._CORP._____ Contract: ILM03.0___

Lab Code: COMPU_ Case No.:_R3231_ SAS No.: _____ SDG No.:26____

Method: F_

EPA Sample No.	Preparation Date	Weight (gram)	Volume (mL)
LCSW	03/25/96		100
PBW	03/25/96		100
RW-01	03/25/96		100
RW-01D	03/25/96		100
RW-01S	03/25/96		100
RW-07	03/25/96		100
RW-09	03/25/96		100
RW-10	03/25/96		100
RW-26	03/25/96		100
RW-31	03/25/96		100
RW-36	03/25/96		100
RW-48	03/25/96		100
RW-68	03/25/96		100
RW26FB	03/25/96		100

FORM XIII - IN ILM03.0

U.S. EPA - CLP

13
PREPARATION LOG

Lab Name: COMPUCHEM_ENV._CORP._____ Contract: ILM03.0___

Lab Code: COMPU_ Case No.:_R3231_ SAS No.: _____ SDG No.:26____

Method: CV

EPA Sample No.	Preparation Date	Weight (gram)	Volume (mL)
PBW	03/25/96		100
RW-01	03/25/96		100
RW-01D	03/25/96		100
RW-01S	03/25/96		100
RW-07	03/25/96		100
RW-09	03/25/96		100
RW-10	03/25/96		100
RW-26	03/25/96		100
RW-31	03/25/96		100
RW-36	03/25/96		100
RW-48	03/25/96		100
RW-68	03/25/96		100
RW26FB	03/25/96		100

FORM XIII - IN ILM03.0

50

AR320185

U.S. EPA - CLP

10

Instrument Detection Limits (Quarterly)

Lab Name: COMPUCHEM_ENV._CORP._____ Contract: ILM03.0___

Lab Code: COMPU_ Case No.: R3231_ SAS No.: _____ SDG No.: 26___

ICP ID Number: _____ Date: 01/15/96

Flame AA ID Number : V2_____

Furnace AA ID Number : _____

Analyte	Wave-length (nm)	Back-ground	CRDL (ug/L)	IDL (ug/L)	M
Aluminum			200		NR
Antimony			60		NR
Arsenic			10		NR
Barium			200		NR
Beryllium			5		NR
Cadmium			5		NR
Calcium			5000		NR
Chromium			10		NR
Cobalt			50		NR
Copper			25		NR
Iron			100		NR
Lead			3		NR
Magnesium			5000		NR
Manganese			15		NR
Mercury	253.70		0.2	0.2	CV
Nickel			40		NR
Potassium			5000		NR
Selenium			5		NR
Silver			10		NR
Sodium			5000		NR
Thallium			10		NR
Vanadium			50		NR
Zinc			20		NR

Comments:

U.S. EPA - CLP

10
Instrument Detection Limits (Quarterly)

Lab Name: COMPUCHEM ENV. CORP. Contract: ILM03.0

Lab Code: COMPU Case No.: R3231 SAS No.: SDG No.: 26

ICP ID Number: Date: 01/15/96

Flame AA ID Number :

Furnace AA ID Number : A8

Analyte	Wave-length (nm)	Back-ground	CRDL (ug/L)	IDL (ug/L)	M
Aluminum			200		NR
Antimony			60		NR
Arsenic			10		NR
Barium			200		NR
Beryllium			5		NR
Cadmium			5		NR
Calcium			5000		NR
Chromium			10		NR
Cobalt			50		NR
Copper			25		NR
Iron			100		NR
Lead			3		NR
Magnesium			5000		NR
Manganese			15		NR
Mercury			0.2		NR
Nickel			40		NR
Potassium			5000		NR
Selenium			5		NR
Silver			10		NR
Sodium			5000		NR
Thallium	276.80	BS	10	1.9	F
Vanadium			50		NR
Zinc			20		NR

Comments:

U.S. EPA - CLP

10

Instrument Detection Limits (Quarterly)

Lab Name: COMPUCHEM_ENV._CORP._____ Contract: ILM03.0___

Lab Code: COMPU_ Case No.: R3231_ SAS No.: _____ SDG No.: 26____

ICP ID Number: ICP3_____ Date: 01/15/96

Flame AA ID Number : _____

Furnace AA ID Number : _____

Analyte	Wave-length (nm)	Back-ground	CRDL (ug/L)	IDL (ug/L)	M
Aluminum	308.21		200	21.3	P
Antimony	206.84		60	1.8	P
Arsenic	189.04		10	3.0	P
Barium	493.41		200	0.1	P
Beryllium	313.04		5	0.3	P
Cadmium	226.50		5	0.2	P
Calcium	317.93		5000	5.3	P
Chromium	267.72		10	0.7	P
Cobalt	228.62		50	0.5	P
Copper	324.70		25	0.7	P
Iron	271.44		100	10.9	P
Lead	220.35		3	1.6	P
Magnesium	279.08		5000	9.1	P
Manganese	257.61		15	0.2	P
Mercury			0.2		NR
Nickel	231.60		40	1.0	P
Potassium	766.49		5000	14.4	P
Selenium	196.03		5	2.6	P
Silver	328.07		10	0.7	P
Sodium	330.23		5000	212.0	P
Thallium			10		NR
Vanadium	292.40		50	0.6	P
Zinc	213.86		20	3.2	P

Comments:

SDG 60

To: Cindy Caporale, RPO

From: Judy Snyder, ESAT

Date: April 16, 1996

Re: Missing data, R3231

WA 0396005

On April 12, EPA received data from Compuchem Labs forwarded from Marian Murphy for DAS R3231 for the Keystone Sanitation site. The DAS requests and the Chain of Custodies all state that samples were to be analyzed for total metals and chloride. During the log-in process, it was noted that analytical results for chloride were present for only nine samples. Twenty-four samples which should have had chloride results did not have them. ESAT contacted sampler Sid Curran to inquire if the parameters had been changed, but Sid stated that that was not the case, and the chloride data should have been present. Attached are copies of the shipping logs and COC's. Please let me know the resolution of this problem, so that it can be placed with the data and recorded in the database. Thank you.

COMPUCHEM
ENVIRONMENTAL
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CHLORIDE

To determine the concentration of chloride in aqueous samples, CompuChem employs Lachat QuickChem AE Method No. 10-117-07-1-B, based on EPA Method 325.2, Methods For Chemical Analysis Of Water And Wastes, EPA 600/4-79-020, Revised March 1983. This is an EPA approved method as indicated in 40 CFR part 136, October 8, 1991. "Guidelines Establishing Test Procedures for Analysis of Pollutants Under Clean Water Act; Final Rule and Technical Amendments."

Method Summary

Thiocyanate ion is liberated from mercuric thiocyanate by the formation of soluble mercuric chloride. In the presence of ferric ions, free thiocyanate ions form ferric thiocyanate which absorbs at 480 nm. The absorbance of the ferric thiocyanate is proportional to the chloride concentration. The calibration curve is non-linear, and is segmented to compensate.

2

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NOTICE

Unless noted by Quality Assurance Notices included in this report of data, all Quality Control Requirements associated with the preparation and analyses of these samples have been met.

Release of the analytical data contained in this data package has been authorized by the Laboratory Manager or his designee, as verified by the following signature.

3/30/94
Date

Mark Ross, Manager
Inorganics Laboratory

ANALYTICAL REPORT OF DATA - CASE # R3231-60

SUBMITTED TO:
Attn Marian Murphy
Weston
5 Underwood Court
Delran, NJ 08075-1229

LABORATORY CHRONICLE - CHLORIDE ANALYSIS

ITEM NO.	SAMPLE IDENTIFIER	COMPUCHEM NUMBER	DATE SAMPLE RECEIVED	DATE ANALYSIS COMPLETED
1.	RW-01	792536	03/21/96	03/28/96
2.	RW-07	792540	03/21/96	03/28/96
3.	RW-09	792541	03/21/96	03/28/96
4.	RW-10	792542	03/21/96	03/28/96
5.	RW-26	792543	03/21/96	03/28/96
6.	RW-31	792544	03/21/96	03/28/96
7.	RW-36	792545	03/21/96	03/28/96
8.	RW-48	792546	03/21/96	03/28/96
9.	RW-68	792547	03/21/96	03/28/96

4

COMPUCHEM
ENVIRONMENTAL
CORPORATION

3306 Chapel Hill/Nelson Highway P.O. Box 14998
Research Triangle Park, NC 27709-4998
(919) 406-1600

March 30, 1996

Attn Marian Murphy
Weston
5 Underwood Court
Delran, NJ 08075-1229

Dear Attn Murphy:

We at CompuChem are pleased to provide our report for the analysis you requested. Data for the following samples are enclosed:

Client ID Number	CompuChem ID Number	Analysis Code	Case Number	Description of Work Requested
RW-01	792536	1194	R3231-60	Chloride
RW-07	792540			
RW-09	792541			
RW-10	792542			
RW-26	792543			
RW-31	792544			
RW-36	792545			
RW-48	792546			
RW-68	792547			

Thank you for selecting CompuChem Environmental for your sample analysis. If you have any questions concerning this report or the analytical methods employed, please contact your Sales Representative at 919-406-1600.

Sincerely,

Linda Jones
Wet Chem/OC Supervisor

CHLORIDE ANALYSIS

QUALITY CONTROL REPORT

CASE: R3231-60
MATRIX: WATER

ORIG. SAMPLE COMPUCHEM #: 792536
MATRIX SPIKE (MS) COMPUCHEM #: 792537
MATRIX SPIKE DUPLICATE (MSD) COMPUCHEM #: 792538

SPIKE ADDED (mg/L)	SAMPLE CONC. (mg/L)	MS CONC. (mg/L)	MS % RECOVERY	MSD CONC. (mg/L)	MSD % RECOVERY	RPD
100.0	7.383	107.5	100	107.2	100	0

BLANK SPIKE (BS) COMPUCHEM #: 792539

SPIKE ADDED (mg/L)	BS CONC. (mg/L)	BS % RECOVERY
139.5	148.1	106

COMPUCHEM #	QC TYPE	AMOUNT DETECTED (mg/L)
PBW	METHOD BLANK	BRL

The reporting limit for Chloride is 3 mg/L.

BRL = BELOW REPORTING LIMIT
RPD = RELATIVE PERCENT DIFFERENCE

#3

CHLORIDE ANALYSIS

SUMMARY REPORT

	ITEM NO.	SAMPLE IDENTIFIER	COMPUCHEM NUMBER	CONCENTRATION (mg/L)	REPORTING LIMIT (mg/L)
2310319R01	1.	RW-01	792536	7.38	3
2310319R07	2.	RW-07	792540	9.72	3
2310319R09	3.	RW-09	792541	9.50	3
2310319R10	4.	RW-10	792542	13.0	3
2310319R26	5.	RW-26	792543	11.4	3
2310319R31	6.	RW-31	792544	BRL	3
2310319R36	7.	RW-36	792545	210	3
2310319R48	8.	RW-48	792546	90.8	3
2310319R68	9.	RW-68	792547	17.4	3

BRL = BELOW REPORTING LIMIT

Reviewed by/ID#: [illegible] / 1262 Date: 3/29/96

Reviewed by/ID#: [illegible] / [illegible] Date: 3/30/96

5