APR 2 0 2001

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION V

EPA Region 5 Records Ctr.
364217

DATE: April 20, 2001

SUBJECT: Review of Data
Received for Review on April 18, 2001

FROM: Stephen L. Ostrodka, Chief (SMF-4J)
Superfund Field Services Section

TO: Data User: IEPA

The data in this case has not been validated.
We have compiled the CADRE files into a narrative format for the following case:

SITE NAME: Wisconsin Steel

CASE NUMBER: 29118 SDG NUMBER: ME0021

Number and Type of Samples: 19 soils

Sample Numbers: ME0021-39

Laboratory: Compuchem Hrs. for Review: _____

Following are our findings:

CC: Cecilia Moore
Region 5 TPO
Mail Code: SM-5J

RECEIVED
APR 2 6 2001
EPA-BOL-FSRS

Case Number : 29118
Site Name: Wisconsin Steel

SDG Number: ME0021
Laboratory: Compuchem

Below is a summary of the out-of-control audits and the possible effects on the data for this case:

NUMBER (##) MATRIX samples numbered ##, were collected on DATE. The lab received the samples on DATE in good condition. All samples were analyze for metals and cyanide. All samples were analyzed using CLP SOW ILM04.1 analysis procedures.

Mercury analysis was performed using a Cold Vapor AA Technique. Cyanide analysis was performed using the MIDI Distillation procedure. The remaining inorganic analyses were performed using an Inductively Coupled Plasma-Atomic Emission Spectrometric procedure.

Assembled By: ESAT
Date: April 20, 2001

Case Number : 29118
Site Name: Wisconsin Steel

SDG Number: ME0021
Laboratory: Compuchem

1. HOLDING TIME:

Holding Time Report

SDG NO: ME0021

HOLDING TIME CRITERIA

Inorganic

	-- Holding Time --		------- pH -------	
	Primary	Expanded	Primary	Expanded
Metals	180	0	2.0	0.0
Mercury	28	0	2.0	0.0
Cyanide	14	0	12.0	0.0

DC-280: The following inorganic soil samples were reviewed for holding time violations using criteria developed for water samples.

ME0021, ME0021D, ME0021S, ME0022, ME0023, ME0024
ME0025, ME0026, ME0027, ME0028, ME0029, ME0030
ME0031, ME0032, ME0033, ME0034, ME0035, ME0036
ME0037, ME0038, ME0039

2. CALIBRATIONS:

Calibration Report

SDG NO: ME0021

CALIBRATION CRITERIA

Inorganic

Percent Recovery Limits

	--- Primary ---		-- Expanded ---	
	Low	High	Low	High
Cyanide	85.00	115.00	70.00	130.00
AA	90.00	110.00	75.00	125.00
ICP	90.00	110.00	75.00	125.00
Mercury	80.00	120.00	65.00	135.00

No problems found for this qualification.

Assembled By: ESAT
Date: April 20, 2001

Case Number : 29118
Site Name: Wisconsin Steel

SDG Number: ME0021
Laboratory: Compuchem

CRDL Standards Report

SDG NO: ME0021

DC-373: The following inorganic samples are associated with a CRDL standard with low percent recovery.

Selenium
ME0021, PBS02

Zinc
ME0021, ME0022, ME0023, ME0024, ME0025, ME0026
ME0027, ME0028, ME0029, ME0030, ME0031, ME0032
ME0033, ME0034, ME0035, ME0036, ME0037, ME0038
ME0039, PBS02

DC-374: The following inorganic samples are associated with a CRDL standard with high percent recovery.
Hits and non-detects are flagged .

Lead
ME0021, PBS02

Mercury
ME0021, ME0022, ME0023, ME0024, ME0025, ME0026
ME0027, ME0028, ME0029, ME0030, ME0031, ME0032
ME0033, ME0034, ME0035, ME0036, ME0037, ME0038
ME0039, PBS03

3. **BLANKS:**

Laboratory Blanks Report

SDG NO: ME0021

LABORATORY BLANKS CRITERIA

DC-283: The following inorganic samples are associated with a blank analyte with negative concentration whose absolute value is greater than the instrument detection limit (IDL). Professional judgement should be used to qualify the data.

ME0021
Calcium, Copper, Zinc

ME0021D
Calcium, Copper, Zinc

ME0021S
Copper, Zinc

ME0022
Calcium, Copper, Zinc

ME0023

Assembled By: ESAT
Date: April 20, 2001

Calcium, Copper, Zinc

ME0024
Calcium, Copper, Zinc

ME0025
Calcium, Copper, Zinc

ME0026
Calcium, Copper, Zinc

ME0027
Calcium, Copper, Zinc

ME0028
Calcium, Copper, Zinc

ME0029
Calcium, Copper, Zinc

ME0030
Calcium, Copper, Zinc

ME0031
Calcium, Copper, Zinc

ME0032
Calcium, Copper, Zinc

ME0033
Calcium, Copper, Zinc

ME0034
Calcium, Copper, Zinc

ME0035
Calcium, Copper, Zinc

ME0036
Calcium, Copper, Zinc

ME0037
Calcium, Copper, Zinc

ME0038
Calcium, Copper, Zinc

ME0039
Calcium, Copper, Zinc

DC-284: The following inorganic samples are associated with a blank concentration which is greater than the instrument detection limit (IDL). The sample concentration is also greater than the IDL and less than five times the blank concentration. Hits are qualified "J"; non-detects are not flagged.

Beryllium
ME0021, ME0021D, ME0022, ME0023, ME0024, ME0025
ME0026, ME0027, ME0028, ME0029, ME0030, ME0031
ME0032, ME0033, ME0034, ME0035, ME0037, ME0038
ME0039

Sodium
ME0021, ME0021D, ME0022, ME0023, ME0025, ME0026
ME0027, ME0028, ME0029, ME0030, ME0031, ME0032

Assembled By: ESAT
Date: April 20, 2001

ME0033, ME0034, ME0035, ME0036, ME0037, ME0038

Cyanide
ME0021, ME0021D, ME0022, ME0023, ME0025, ME0027
ME0028, ME0029, ME0030, ME0031, ME0032, ME0034
ME0035

DC-338: During review of the following inorganic samples, the reported IDL/default CRDL value was used for cyanide.

ME0021, ME0021D, ME0021S, ME0022, ME0023, ME0024
ME0025, ME0026, ME0027, ME0028, ME0029, ME0030
ME0031, ME0032, ME0033, ME0034, ME0035, ME0036
ME0037, ME0038, ME0039

4. MATRIX SPIKE/MATRIX SPIKE DUPLICATE AND LAB CONTROL SAMPLE:

Matrix Spike Report

SDG NO: ME0021

MATRIX SPIKE CRITERIA

Inorganic

Percent Recovery Limits	
Upper	125.0
Lower	75.0
Extreme lower	30.0

DC-267: The following inorganic samples are associated with a matrix spike recovery which is high (>125%)
Hits are qualified "J" and non-detects are not flagged.

Selenium
ME0021A, ME0036, ME0038, ME0039

DC-268: The following inorganic samples are associated with a matrix spike recovery which is low (30-74 %) indicating that sample results may be biased low.
Hits are qualified "J" and non-detects are qualified "UJ".

Antimony
ME0021, ME0021A, ME0021D, ME0022, ME0023, ME0024
ME0025, ME0026, ME0027, ME0028, ME0029, ME0030
ME0031, ME0032, ME0033, ME0034, ME0035, ME0036
ME0037, ME0038, ME0039

LCS Report

SDG NO: ME0021

Case Number : 29118
Site Name: Wisconsin Steel

SDG Number: ME0021
Laboratory: Compuchem

No problems found for this qualification.

5. LABORATORY AND FIELD DUPLICATE

Duplicates Report

SDG NO: ME0021

DC-256: The following inorganic samples are associated with duplicate results which did not meet relative percent difference (RPD) criteria.
Hits are qualified "J" and non-detects are qualified "UJ".

Aluminum
ME0021, ME0022, ME0023, ME0024, ME0025, ME0026
ME0027, ME0028, ME0029, ME0030, ME0031, ME0032
ME0033, ME0034, ME0035, ME0036, ME0037, ME0038
ME0039

Iron
ME0021, ME0022, ME0023, ME0024, ME0025, ME0026
ME0027, ME0028, ME0029, ME0030, ME0031, ME0032
ME0033, ME0034, ME0035, ME0036, ME0037, ME0038
ME0039

Lead
ME0021, ME0021S, ME0022, ME0023, ME0024, ME0025
ME0026, ME0027, ME0028, ME0029, ME0030, ME0031
ME0032, ME0033, ME0034, ME0035, ME0036, ME0037
ME0038, ME0039

Zinc
ME0021, ME0021S, ME0022, ME0023, ME0024, ME0025
ME0026, ME0027, ME0028, ME0029, ME0030, ME0031
ME0032, ME0033, ME0034, ME0035, ME0036, ME0037
ME0038, ME0039

6. ICP ANALYSIS

ICS Report

SDG NO: ME0021

IC-307: The following inorganic samples have no associated ICS analyses.
Manual review of the data is required.

ME0021
Aluminum, Antimony, Arsenic, Barium
Beryllium, Cadmium, Calcium, Chromium
Cobalt, Copper, Iron, Lead
Magnesium, Manganese, Nickel, Selenium

Assembled By: ESAT
Date: April 20, 2001

Case Number : 29118
Site Name: Wisconsin Steel

Silver, Thallium, Vanadium, Zinc

ME0022
Aluminum, Antimony, Arsenic, Barium
Beryllium, Cadmium, Calcium, Chromium
Cobalt, Copper, Iron, Lead
Magnesium, Manganese, Nickel, Selenium
Silver, Thallium, Vanadium, Zinc

ME0023
Aluminum, Antimony, Arsenic, Barium
Beryllium, Cadmium, Calcium, Chromium
Cobalt, Copper, Iron, Lead
Magnesium, Manganese, Nickel, Selenium
Silver, Thallium, Vanadium, Zinc

ME0024
Aluminum, Antimony, Arsenic, Barium
Beryllium, Cadmium, Calcium, Chromium
Cobalt, Copper, Iron, Lead
Magnesium, Manganese, Nickel, Selenium
Silver, Thallium, Vanadium, Zinc

ME0025
Aluminum, Antimony, Arsenic, Barium
Beryllium, Cadmium, Calcium, Chromium
Cobalt, Copper, Iron, Lead
Magnesium, Manganese, Nickel, Selenium
Silver, Thallium, Vanadium, Zinc

ME0026
Aluminum, Antimony, Arsenic, Barium
Beryllium, Cadmium, Calcium, Chromium
Cobalt, Copper, Iron, Lead
Magnesium, Manganese, Nickel, Selenium
Silver, Thallium, Vanadium, Zinc

ME0027
Aluminum, Antimony, Arsenic, Barium
Beryllium, Cadmium, Calcium, Chromium
Cobalt, Copper, Iron, Lead
Magnesium, Manganese, Nickel, Selenium
Silver, Thallium, Vanadium, Zinc

ME0028
Aluminum, Antimony, Arsenic, Barium
Beryllium, Cadmium, Calcium, Chromium
Cobalt, Copper, Iron, Lead
Magnesium, Manganese, Nickel, Selenium
Silver, Thallium, Vanadium, Zinc

ME0029
Aluminum, Antimony, Arsenic, Barium
Beryllium, Cadmium, Calcium, Chromium
Cobalt, Copper, Iron, Lead
Magnesium, Manganese, Nickel, Selenium
Silver, Thallium, Vanadium, Zinc

ME0030
Aluminum, Antimony, Arsenic, Barium
Beryllium, Cadmium, Calcium, Chromium
Cobalt, Copper, Iron, Lead
Magnesium, Manganese, Nickel, Selenium
Silver, Thallium, Vanadium, Zinc

ME0031

Assembled By: ESAT
Date: April 20, 2001

Case Number : 29118
Site Name: Wisconsin Steel

SDG Number: ME0021
Laboratory: Compuchem

Aluminum, Antimony, Arsenic, Barium
Beryllium, Cadmium, Calcium, Chromium
Cobalt, Copper, Iron, Lead
Magnesium, Manganese, Nickel, Selenium
Silver, Thallium, Vanadium, Zinc

ME0032
Aluminum, Antimony, Arsenic, Barium
Beryllium, Cadmium, Calcium, Chromium
Cobalt, Copper, Iron, Lead
Magnesium, Manganese, Nickel, Selenium
Silver, Thallium, Vanadium, Zinc

ME0033
Aluminum, Antimony, Arsenic, Barium
Beryllium, Cadmium, Calcium, Chromium
Cobalt, Copper, Iron, Lead
Magnesium, Manganese, Nickel, Selenium
Silver, Thallium, Vanadium, Zinc

ME0034
Aluminum, Antimony, Arsenic, Barium
Beryllium, Cadmium, Calcium, Chromium
Cobalt, Copper, Iron, Lead
Magnesium, Manganese, Nickel, Selenium
Silver, Thallium, Vanadium, Zinc

ME0035
Aluminum, Antimony, Arsenic, Barium
Beryllium, Cadmium, Calcium, Chromium
Cobalt, Copper, Iron, Lead
Magnesium, Manganese, Nickel, Selenium
Silver, Thallium, Vanadium, Zinc

ME0036
Aluminum, Antimony, Arsenic, Barium
Beryllium, Cadmium, Calcium, Chromium
Cobalt, Copper, Iron, Lead
Magnesium, Manganese, Nickel, Selenium
Silver, Thallium, Vanadium, Zinc

ME0037
Aluminum, Antimony, Arsenic, Barium
Beryllium, Cadmium, Calcium, Chromium
Cobalt, Copper, Iron, Lead
Magnesium, Manganese, Nickel, Selenium
Silver, Thallium, Vanadium, Zinc

ME0038
Aluminum, Antimony, Arsenic, Barium
Beryllium, Cadmium, Calcium, Chromium
Cobalt, Copper, Iron, Lead
Magnesium, Manganese, Nickel, Selenium
Silver, Thallium, Vanadium, Zinc

ME0039
Aluminum, Antimony, Arsenic, Barium
Beryllium, Cadmium, Calcium, Chromium
Cobalt, Copper, Iron, Lead
Magnesium, Manganese, Nickel, Selenium
Silver, Thallium, Vanadium, Zinc

Serial Dilution Report

Assembled By: ESAT
Date: April 20, 2001

Case Number : 29118
Site Name: Wisconsin Steel

SDG Number: ME0021
Laboratory: Compuchem

SDG NO: ME0021

DC-294: The analyte concentration is high (>50 X the IDL) and serial dilution percent difference is not in criteria (>10%). Hits are qualified "J" and non-detects are qualified "UJ".

Aluminum
ME0021, ME0021D, ME0022, ME0023, ME0024, ME0025
ME0026, ME0027, ME0028, ME0029, ME0030, ME0031
ME0032, ME0033, ME0034, ME0035, ME0036, ME0037
ME0038, ME0039

Barium
ME0021, ME0021D, ME0021S, ME0022, ME0023, ME0024
ME0025, ME0026, ME0027, ME0028, ME0029, ME0030
ME0031, ME0032, ME0033, ME0034, ME0035, ME0036
ME0037, ME0038, ME0039

Calcium
ME0021, ME0021D, ME0022, ME0023, ME0024, ME0025
ME0026, ME0027, ME0028, ME0029, ME0030, ME0031
ME0032, ME0033, ME0034, ME0035, ME0036, ME0037
ME0038, ME0039

Chromium
ME0021, ME0021D, ME0021S, ME0022, ME0023, ME0024
ME0025, ME0026, ME0027, ME0028, ME0029, ME0030
ME0031, ME0032, ME0033, ME0034, ME0035, ME0036
ME0037, ME0038, ME0039

Copper
ME0021, ME0021D, ME0021S, ME0022, ME0023, ME0024
ME0025, ME0026, ME0027, ME0028, ME0029, ME0030
ME0031, ME0032, ME0033, ME0034, ME0035, ME0036
ME0037, ME0038, ME0039

Iron
ME0021, ME0021D, ME0022, ME0023, ME0024, ME0025
ME0026, ME0027, ME0028, ME0029, ME0030, ME0031
ME0032, ME0033, ME0034, ME0035, ME0036, ME0037
ME0038, ME0039

Lead
ME0021, ME0021D, ME0021S, ME0022, ME0023, ME0024
ME0025, ME0026, ME0027, ME0028, ME0029, ME0030
ME0031, ME0032, ME0033, ME0034, ME0035, ME0036
ME0037, ME0038, ME0039

Magnesium
ME0021, ME0021D, ME0022, ME0023, ME0024, ME0025
ME0026, ME0027, ME0028, ME0029, ME0030, ME0031
ME0032, ME0033, ME0034, ME0035, ME0036, ME0037
ME0038, ME0039

Manganese
ME0021, ME0021D, ME0021S, ME0022, ME0023, ME0024
ME0025, ME0026, ME0027, ME0028, ME0029, ME0030
ME0031, ME0032, ME0033, ME0034, ME0035, ME0036
ME0037, ME0038, ME0039

Potassium
ME0021, ME0021D, ME0022, ME0023, ME0024, ME0025
ME0026, ME0027, ME0028, ME0029, ME0030, ME0031

Assembled By: ESAT
Date: April 20, 2001

ME0032, ME0033, ME0034, ME0035, ME0036, ME0037
ME0038, ME0039

Vanadium
ME0021, ME0021D, ME0021S, ME0022, ME0023, ME0024
ME0025, ME0026, ME0027, ME0028, ME0029, ME0030
ME0031, ME0032, ME0033, ME0034, ME0035, ME0036
ME0037, ME0038, ME0039

Zinc
ME0021, ME0021D, ME0021S, ME0022, ME0023, ME0024
ME0025, ME0026, ME0027, ME0028, ME0029, ME0030
ME0031, ME0032, ME0033, ME0034, ME0035, ME0036
ME0037, ME0038, ME0039

7. GFAA ANALYSIS

Furnace AA QC Report

SDG NO: ME0021

No problems found for this qualification.

8. SAMPLE RESULTS

All data, except those qualified above, are acceptable.

Sample Result Verification Report

SDG NO: ME0021

No problems found for this qualification.

Assembled By: ESAT
Date: April 20, 2001

CADRE Data Qualifier Sheet

Qualifiers	Data Qualifier Definitions
U	The analyte was analyzed for, but was not detected above the reported sample quantitation limit.
J	The analyte was positively identified; the associated numerical value is an approximate concentration of the analyte in the sample.
UJ	The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the action limit of quantitation necessary to accurately and precisely measure the analyte in the sample.
R	The data are unusable. (The compound may or may not be present)

Analytical Results (Qualified Data)

Case #: 29118
Site :
Lab :
Reviewer
Date :

SDG : ME0021
WISCONSIN STEEL
LIBRTY

Number of Soil Samples : 19
Number of Water Samples : 0

Sample Number :	ME0021		ME0022		ME0023		ME0024		ME0025	
Sampling Location :	X205		X206		X207		X208		X209	
Matrix	Soil		Soil		Soil		Soil		Soil	
Units	mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg	
Date Sampled	04/03/2001		04/03/2001		04/04/2001		04/03/2001		04/04/2001	
Time Sampled :	15:30		15:40		17:05		17:15		17:35	
%Solids :	39.6		36.3		37.4		51.6		39.9	
Dilution Factor	1.0		1.0		1.0		1.0		1.0	
ANALYTE	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
ALUMINUM	9390	J	8860	J	9810	J	7280	J	8240	J
ANTIMONY	1.3	J	1.4	J	1.3	J	2.4	J	1.4	J
ARSENIC	8.5		7.3		8.3		11.9		7.9	
BARIUM	56.4	J	52.3	J	61.7	J	48.5	J	61.3	J
BERYLLIUM	0.85	J	0.84	J	0.84	J	0.73	J	0.70	J
CADMIUM	0.30	U	0.31	U	0.31	U	0.35		0.71	
CALCIUM	59800	J	49400	J	68800	J	51600	J	72400	J
CHROMIUM	51.9	J	36.6	J	48.8	J	75.6	J	261	J
COBALT	10.5		9.5		11.1		8.4		7.6	
COPPER	63.1	J	47.2	J	55.9	J	99.8	J	79.8	J
IRON	38200	J	29600	J	32200	J	58900	J	38100	J
LEAD	101	J	63.0	J	73.5	J	155	J	114	J
MAGNESIUM	27800	J	22600	J	30700	J	23000	J	28100	J
MANGANESE	1030	J	825	J	1060	J	1300	J	3450	J
MERCURY	0.17		0.15		0.20		0.23		0.23	
NICKEL	32.6		27.6		30.6		38.5		29.9	
POTASSIUM	2250	J	2120	J	2350	J	1480	J	1580	J
SELENIUM	2.4	U	2.4	U	2.4	U	1.7	U	2.3	U
SILVER	0.25	U	0.26	U	0.25	U	0.34		0.33	
SODIUM	379	J	351	J	410	J	54.6	U	171	J
THALLIUM	3.1	U	3.2	U	3.2	U	4.8		2.9	U
VANADIUM	32.8	J	27.8	J	34.0	J	31.0	J	72.8	J
ZINC	247	J	164	J	187	J	426	J	333	J
CYANIDE	0.37	J	0.31	J	0.34	J	1.7		0.40	J

DISCLAIMER: This package has been electronically assessed as an added service to our customer. It has not been either validated or approved by Region 5 and any subsequent use by the data user is strictly at the risk of the data user. Region 5 assumes no responsibility for use of unvalidated data.

Analytical Results (Qualified Data)

Case # 29118 SDG : ME0021
Site : WISCONSIN STEEL
Lab : LIBRTY
Reviewer :
Date :

Sample Number :	ME0026		ME0027		ME0028		ME0029		ME0030	
Sampling Location :	X210		X211		X212		X213		X240	
Matrix :	Soil		Soil		Soil		Soil		Soil	
Units :	mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg	
Date Sampled :	04/04/2001		04/04/2001		04/04/2001		04/04/2001		04/04/2001	
Time Sampled :	17:45		18:15		18:20		09:10		09:10	
%Solids :	54.8		57.8		66.0		45.2		43.8	
Dilution Factor :	1.0		1.0		1.0		1.0		1.0	
ANALYTE	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
ALUMINUM	6380	J	5420	J	4550	J	5180	J	6900	J
ANTIMONY	1.6	J	0.83	UJ	0.72	UJ	1.0	UJ	1.2	J
ARSENIC	10.4		7.0		6.7		6.1		8.2	
BARIUM	45.4	J	35.7	J	31.8	J	32.8	J	42.9	J
BERYLLIUM	0.71	J	0.49	J	0.49	J	0.50	J	0.68	J
CADMIUM	0.20	U	0.20	U	0.17	U	0.25	U	0.27	U
CALCIUM	66700	J	71700	J	70100	J	50700	J	64200	J
CHROMIUM	110	J	36.0	J	38.8	J	44.6	J	56.9	J
COBALT	7.5		6.8		6.1		6.0		7.9	
COPPER	60.6	J	28.8	J	27.8	J	33.5	J	42.2	J
IRON	54000	J	22600	J	20600	J	24600	J	31300	J
LEAD	111	J	46.2	J	45.4	J	48.9	J	62.1	J
MAGNESIUM	27500	J	31700	J	31900	J	22200	J	28400	J
MANGANESE	2130	J	942	J	962	J	937	J	1230	J
MERCURY	0.27		0.10		0.11		0.15		0.17	
NICKEL	30.5		20.9		19.5		19.3		24.2	
POTASSIUM	1270	J	1240	J	987	J	1250	J	1690	J
SELENIUM	1.6	U	1.6	U	1.4	U	2.0	U	2.1	U
SILVER	0.17	U	0.17	U	0.14	U	0.21	U	0.22	U
SODIUM	160	J	310	J	438	J	374	J	367	J
THALLIUM	3.8		2.1	U	1.8	U	2.6	U	2.9	
VANADIUM	48.9	J	22.1	J	20.0	J	25.5	J	33.7	J
ZINC	281	J	105	J	119	J	119	J	159	J
CYANIDE	0.81		0.29	J	0.34	J	0.49	J	0.41	J

Analytical Results (Qualified Data)

Case #: 29118 SDG : ME0021
Site WISCONSIN STEEL
Lab LIBRTY
Reviewer :
Date :

Sample Number :	ME0031		ME0032		ME0033		ME0034		ME0035	
Sampling Location	X214		X215		X216		X229		X230	
Matrix	Soil		Soil		Soil		Soil		Soil	
Units :	mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg	
Date Sampled :	04/04/2001		04/04/2001		04/04/2001		04/04/2001		04/04/2001	
Time Sampled :	09:30		09:45		10:05		10:20		10:30	
% Solids :	39.9		56.9		58.9		50.0		41.2	
Dilution Factor :	1.0		1.0		1.0		1.0		1.0	
ANALYTE	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
ALUMINUM	8130	J	3570	J	4310	J	5230	J	7350	J
ANTIMONY	1.2	UJ	0.85	UJ	0.82	UJ	0.96	UJ	1.9	J
ARSENIC	7.1		6.1		7.1		7.4		11.6	
BARIUM	48.4	J	32.4	J	43.7	J	37.8	J	51.3	J
BERYLLIUM	0.75	J	0.48	J	0.58	J	0.58	J	0.79	J
CADMIUM	0.29	U	0.20	U	0.20	U	0.23	U	0.27	U
CALCIUM	56800	J	74900	J	61500	J	60500	J	80600	J
CHROMIUM	36.4	J	42.4	J	32.0	J	45.4	J	42.3	J
COBALT	8.8		5.1		5.0		6.7		9.2	
COPPER	43.7	J	19.9	J	23.3	J	27.5	J	44.7	J
IRON	24700	J	17700	J	28600	J	33900	J	49100	J
LEAD	57.7	J	28.6	J	49.5	J	47.9	J	73.0	J
MAGNESIUM	26100	J	29300	J	26000	J	27300	J	37800	J
MANGANESE	852	J	976	J	929	J	802	J	1080	J
MERCURY	0.16		0.080		0.080	U	0.090	U	0.18	
NICKEL	25.3		21.5		15.3		27.7		28.4	
POTASSIUM	1990	J	702	J	852	J	1290	J	1700	J
SELENIUM	2.3	U	1.6	U	1.6	U	1.8	U	2.2	U
SILVER	0.24	U	0.17	U	0.16	U	0.19	U	0.22	U
SODIUM	376	J	388	J	264	J	346	J	332	J
THALLIUM	3.0	U	2.1	U	2.1		2.4	U	3.8	
VANADIUM	27.5	J	17.5	J	19.3	J	21.5	J	30.6	J
ZINC	144	J	69.4	J	141	J	142	J	207	J
CYANIDE	0.35	J	0.36	J	1.3		0.56	J	0.74	J

Analytical Results (Qualified Data)

Case #. 29118 SDG : ME0021
Site WISCONSIN STEEL
Lab. : LIBRTY
Reviewer :
Date :

Sample Number :	ME0036		ME0037		ME0038		ME0039		ME0021D	
Sampling Location	X231		X232		X233		X234		X205	
Matrix :	Soil		Soil		Soil		Soil		Soil	
Units	mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg	
Date Sampled :	04/04/2001		04/04/2001		04/04/2001		04/04/2001		04/03/2001	
Time Sampled :	11:05		11:30		12:25		12:35		15:30	
%Solids :	55.2		44.8		49.5		62.6		39.6	
Dilution Factor :	1.0		1.0		1.0		1.0		1.0	
ANALYTE	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
ALUMINUM	15000	J	8050	J	7660	J	7120	J	6390	J
ANTIMONY	3.0	J	2.0	J	2.6	J	2.7	J	1.3	UJ
ARSENIC	9.4		11.8		13.5		85.5		5.9	
BARIUM	188	J	66.6	J	71.6	J	295	J	39.8	J
BERYLLIUM	2.6		0.91	J	0.92	J	0.52	J	0.68	J
CADMIUM	0.22	U	0.26	U	0.24	U	1.4		1.6	
CALCIUM	63300	J	55200	J	52200	J	53500	J	42800	J
CHROMIUM	26.9	J	40.8	J	35.8	J	18.5	J	36.8	J
COBALT	4.3		9.4		9.3		8.5		7.4	
COPPER	34.9	J	55.8	J	57.2	J	89.8	J	42.4	J
IRON	83500	J	61000	J	63800	J	32400	J	26600	J
LEAD	109	J	142	J	133	J	206	J	67.9	J
MAGNESIUM	12400	J	24000	J	22400	J	23100	J	19800	J
MANGANESE	2960	J	1250	J	1320	J	687	J	723	J
MERCURY	0.14		0.14		0.21		1.3		0.22	
NICKEL	17.0		29.3		26.6		21.9		23.1	
POTASSIUM	1110	J	1650	J	1360	J	1570	J	1530	J
SELENIUM	3.4	J	2.1	U	2.5	J	1.8	J	2.4	U
SILVER	0.18	U	0.22	U	0.20	U	1.1		0.25	U
SODIUM	292	J	267	J	166	J	47.6	U	335	J
THALLIUM	8.0		5.4		5.6		3.6		3.1	U
VANADIUM	24.8	J	31.7	J	31.5	J	19.6	J	23.3	J
ZINC	324	J	290	J	377	J	550	J	170	J
CYANIDE	3.4		2.3		2.2		1.3		0.33	J

Analytical Results (Qualified Data)

Case #: 29118 SDG : ME0021
Site WISCONSIN STEEL
Lab. :
Reviewer :
Date :

Sample Number :	ME0021S									
Sampling Location	X205									
Matrix :	Soil									
Units :	mg/Kg									
Date Sampled :	04/03/2001									
Time Sampled :	15:30									
%Solids :	39.6									
Dilution Factor :	1.0									
ANALYTE	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
ALUMINUM										
ANTIMONY	141									
ARSENIC	26.7									
BARIUM	1030	J								
BERYLLIUM	23.5									
CADMIUM	22.8									
CALCIUM										
CHROMIUM	145	J								
COBALT	241									
COPPER	183	J								
IRON										
LEAD	97.3	J								
MAGNESIUM										
MANGANESE	1270	J								
MERCURY	1.5									
NICKEL	262									
POTASSIUM										
SELENIUM	6.5									
SILVER	23.1									
SODIUM										
THALLIUM	25.4									
VANADIUM	271	J								
ZINC	455	J								
CYANIDE	13.1									

USEPA Contract Laboratory Program
Inorganic Traffic Report

Case No:	29118
DAS No:	ME0001
SDG No:	ME0021

L 29

Date Shipped: 4/4/01 Carrier Name: FedEx Airbill: 3497986973 Shipped to: Liberty Analytical 501 Madison Avenue Cary NC 27513 (919) 379-4080	Date Received/Received by: 4/5/01 M. Stan 8:50 Lab Contract No: 68W00082 Unit Price: 77.25 Transfer To: Date Received/Received By: Lab Contract No: Price:	Sampler (Signature): Ted Prescott		
		Relinquished By: Ted Prescott	Date / Time: 04/04/2001 1530	Received By:
		Relinquished By:	Date / Time:	Received By:
		Relinquished By:	Date / Time: 4/5/01 8:50	Received By: Melissa Stan

INORGANIC SAMPLE No.	MATRIX/ SAMPLER	CONC/ TYPE	ANALYSIS/ TURNAROUND	TAG No./ PRESERVATIVE	STATION LOCATION	SAMPLE COLLECT DATE/TIME	ORGANIC SAMPLE No.	FOR LAB USE ONLY Sample Condition On Receipt
ME0016	Sediment/ Ted Prescott	L/G	TM (21)	5-43730 (1)	X228	4/2/01	E0016	Good
ME0017	Sediment/ Ted Prescott	L/G	TM (21)	5-43732 (1)	X201	4/3/01 14:30	E0017	
ME0018	Sediment/ Ted Prescott	L/G	TM (21)	5-43734 (1)	X202	4/3/01 14:45	E0018	
ME0019	Sediment/ Ted Prescott	L/G	TM (21)	5-43736 (1)	X203	4/3/01 15:00	E0019	
ME0020	Sediment/ Ted Prescott	L/G	TM (21)	5-43738 (1)	X204	4/3/01 15:15	E0020	SDG Final Sample
ME0021	Sediment/ Ted Prescott	L/G	TM (21)	5-43740 (1)	X205	4/3/01 15:30	E0021	
ME0022	Sediment/ Ted Prescott	L/G	TM (21)	5-43742 (1)	X206	4/3/01 15:40	E0022	
ME0023	Sediment/ Ted Prescott	L/G	TM (21)	5-43744 (1)	X207	4/4/01 17:05	E0023	
ME0024	Sediment/ Ted Prescott	L/G	TM (21)	5-43746 (1)	X208	4/3/01 17:15	E0024	COPY
ME0025	Sediment/ Ted Prescott	L/G	TM (21)	5-43748 (1)	X209	4/4/01 17:35	E0025	ORIGINAL DOCUMENTS INCLUDED IN CSF- ME0001
ME0026	Sediment/ Ted Prescott	L/G	TM (21)	5-43750 (1)	X210	4/4/01 17:45	E0026	SIGNATURE M. Stan DATE 4/5/01
ME0027	Sediment/ Ted Prescott	L/G	TM (21)	5-43752 (1)	X211	4/4/01 18:15	E0027	
ME0028	Sediment/ Ted Prescott	L/G	TM (21)	5-43754 (1)	X212	4/4/01 18:20	E0028	
ME0029	Sediment/ Ted Prescott	L/G	TM (21)	5-43756 (1)	X213	4/4/01 9:10	E0029	
ME0030	Sediment/ Ted Prescott	L/G	TM (21)	5-43758 (1)	X240	4/4/01 9:10	E0030	

Shipment for Case Complete? Y	Sample(s) to be used for laboratory QC:	Additional Sampler Signature(s):	Cooler Temperature Upon Receipt: 5°C	Chain of Custody Seal Number: 20045-46
Analysis Key: TM = CLP TAL Total Metals	Concentration: L = Low, M = Low/Medium, H = High	Type/Designat: Composite = C, Grab = G		Custody Seal Intact: Y / Shipment Iced: Y

PR provides preliminary results. Requests for preliminary results will increase analytical costs.

Send Copy to: Contract Laboratory Analytical Services Support, 2000 Edmund Halley Dr., Reston, VA. 20191-3436 Phone 703/264-9348 Fax 703/264-9222

TR Number: 5-285846426-040401-0003

USEPA Contract Laboratory Program
Inorganic Traffic Report

8:50

Case No:	29118
DAS No:	
SDG No:	ME0021

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Date Shipped: 4/4/01	Date Received/Received by: 4/5/01 M. Stan	Sampler (Signature): Ted Prescott	
Carrier Name: FedEx	Lab Contract No: 66W00052 Unit Price: 77.25	Relinquished By: Ted Prescott	Date / Time: 15:30 04/04/2001	Received By:
Airbill: 3497986973	Transfer To:	Relinquished By:	Date / Time:	Received By:
Shipped to: Liberty Analytical 501 Madison Avenue Cary NC 27513 (919) 379-4080	Date Received/Received By: Lab Contract No: Price:	Relinquished By:	Date / Time: 4/5/01 8:50	Received By: Melissa Stan

INORGANIC SAMPLE No.	MATRIX/ SAMPLER	CONC/ TYPE	ANALYSIS/ TURNAROUND	TAG No./ PRESERVATIVE	STATION LOCATION	SAMPLE COLLECT DATE/TIME	ORGANIC SAMPLE No.	FOR LAB USE ONLY Sample Condition On Receipt
ME0031	Sediment/ Ted Prescott	L/G	TM (21)	5-43760 (1)	X214	4/4/01 9:30	E0031	Good
ME0032	Sediment/ Ted Prescott	L/G	TM (21)	5-43762 (1)	X215	4/4/01 9:45	E0032	
ME0033	Sediment/ Ted Prescott	L/G	TM (21)	5-43764 (1)	X216	4/4/01 10:05	E0033	
ME0034	Soil/Sediment/ Ted Prescott	L/G	TM (21)	5-43766 (1)	X229	4/4/01 10:20	E0034	
ME0035	Soil/Sediment/ Ted Prescott	L/G	TM (21)	5-43768 (1)	X230	4/4/01 10:30	E0035	
ME0036	Soil/Sediment/ Ted Prescott	L/G	TM (21)	5-43770 (1)	X231	4/4/01 11:05	E0036	
ME0037	Soil/Sediment/ Ted Prescott	L/G	TM (21)	5-43772 (1)	X232	4/4/01 11:30	E0037	
ME0038	Soil/Sediment/ Ted Prescott	L/G	TM (21)	5-43774 (1)	X233	4/4/01 12:25	E0038	
ME0039	Soil/Sediment/ Ted Prescott	L/G	TM (21)	5-43776 (1)	X234	4/4/01 12:35	E0039	SDG Final Sample

ORIGINAL

Shipment for Case Complete? Y	Sample(s) to be used for laboratory QC:	Additional Sampler Signature(s):	Cooler Temperature Upon Receipt: 5°C	Chain of Custody Seal Number: 20045-46
Analysis Key: TM = CLP TAL Total Metals	Concentration: L = Low, M = Low/Medium, H = High	Type/Designat: Composite = C, Grab = G		Custody Seal Intact: Y / Shipment Iced: Y

PR provides preliminary results. Requests for preliminary results will increase analytical costs.

Send Copy to: Contract Laboratory Analytical Services Support, 2000 Edmund Halley Dr., Reston, VA. 20191-3436 Phone 703/264-9348 Fax 703/264-9222

TR Number: 5-285846426-040401-0003

APR 1 8 200:

CompuChem
a Division of Liberty Analytical Corp.
501 Madison Avenue Cary, NC 27513

SDG NARRATIVE
CASE # 29118 SDG # ME0021
CONTRACT # 68W00082

The indicated Sample Delivery Group (SDG) consisting of nineteen (19) soil samples was received into the laboratory information management system (LIMS) on April 5, 2001 intact and in good condition with Chain of Custody (COC) Records in order, unless otherwise noted in any attachments or Quality Assurance Notices. The temperature of the samples upon receipt was 5°C, as determined from the cooler temperature indicator bottle. Sample ID's reported in this data package are noted by the receiving department on the COC if they differ from those listed by the samplers on the COC.

The samples were analyzed, in accordance with EPA CLP Statement of Work (SOW) document ILM04.1, for the complete Inorganic Target Analyte List (TAL). Cyanide analysis was not called for by the Traffic Report, however the samples were originally scheduled for cyanide. The laboratory was instructed to analyze the samples for cyanide. Please refer to the enclosed e-mail correspondence.

The correlation coefficients for the mercury and cyanide analytical runs are confirmed to be ≥ 0.9950.

EQUATIONS FOR SOLID SAMPLE CALCULATIONS:

Equation for obtaining metals sample results in mg/Kg as presented on FORM I data sheets from ICP instrument acquired results in µg/L (ppb).

$$\frac{C \times V}{W \times S}$$

Where

C = concentration (µg/L)

V = final volume in liters after sample preparation

W = weight in grams of wet sample

S = % solids/100

Example: aluminum result µg/L to mg/Kg.

$$\frac{18600.40\ \mu g/L\ (C) \times 0.2\ L\ (V)}{1.0\ g\ (W) \times 0.396\ (S)} = 9394.141\ mg/Kg \text{ reported as } 9390\ mg/Kg$$

Equation for obtaining cyanide sample results in mg/Kg as presented on FORM I data sheets from instrument acquired results in µg/L (ppb).

$$\frac{C \times D \times V}{W \times S}$$

Where

C = concentration of cyanide (µg/L)

W = wet weight of sample

D = dilution factor to bring sample into analysis range

S = % solids/100

V = final volume in liters

Example: cyanide result µg/L to mg/Kg

$$\frac{2.951663\mu g/L\ (C) \times 1\ (D) \times 0.05\ L\ (V)}{1.0g\ (W) \times 0.396\ (S)} = 0.37268\ mg/Kg \text{ reported as } 0.37\ mg/Kg$$

Equation for obtaining mercury sample results in mg/Kg as presented on FORM I data sheets from instrument acquired results in µg/L (ppb).

$$\frac{C \times D \times V}{W \times S}$$

Where

C = concentration (µg/L)

W = wet weight of sample

D = dilution factor to bring sample into analysis range

S = % solids/100

V = final volume in liters

Example: mercury result µg/L to mg/Kg

$$\frac{0.1385\ \mu g/L(C) \times 1\ (D) \times 0.1\ (V)}{0.2\ g\ (W) \times 0.862\ (S)} = 0.1749\ mg/Kg \text{ reported as } 0.17\ mg/Kg$$

SAMPLE IDs:
The following customer IDs are associated with this SDG:
ME0021 ME0022 ME0023 ME0024 ME0025 ME0026 ME0027 ME0028 ME0029 ME0030
ME0031 ME0032 ME0033 ME0034 ME0035 ME0036 ME0037 ME0038 ME0039

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 (LCSS & PBS) 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, CCN = WG9444-1 (ME0021S) was found to be outside CLP control limits for Antimony and Selenium.

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 are outside percentage recovery control limits.

The sample matrix duplicate, CCN = WG9444-2 (ME0021D) was outside CLP control limits for Aluminum, Calcium, Chromium, Copper, Iron, Lead, Magnesium, Manganese and Zinc.

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, CCN = SDIME0021-1 (ME0021L) was performed in accordance with CLP requirements for ICP analysis.

The adjusted sample concentrations were outside CLP control limit for Aluminum, Barium, Calcium, Chromium, Copper, Iron, Lead, Magnesium, Manganese, Potassium, Vanadium and Zinc, which are flagged with an "E" on all associated Form I and Form IX.

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 greater than fifty (50) times their respective Instrument Detection Limit (IDL) in the original sample.

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

The laboratory manager or his designee, as verified by the following signature has authorized release of the data contained in this hard copy data package.

James E. Medlin
James E. Medlin
Senior Chemist
April 17, 2001

U. S. EPA - CLP

COVER PAGE - INORGANIC ANALYSES DATA PACKAGE

APR 1 8 2001

Lab Name: COMPUCHEM Contract: 68W00082

Lab Code: LIBRTY Case No.: 29118 SAS No.: SDG No.: ME0021

SOW No.: ILM04.1

EPA Sample No.	Lab Sample ID.
ME0021	ME0021-1
ME0021D	WG9444-2
ME0021S	WG9444-1
ME0022	ME0021-2
ME0023	ME0021-3
ME0024	ME0021-4
ME0025	ME0021-5
ME0026	ME0021-6
ME0027	ME0021-7
ME0028	ME0021-8
ME0029	ME0021-9
ME0030	ME0021-10
ME0031	ME0021-11
ME0032	ME0021-12
ME0033	ME0021-13
ME0034	ME0021-14
ME0035	ME0021-15
ME0036	ME0021-16
ME0037	ME0021-17
ME0038	ME0021-18
ME0039	ME0021-19

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 : ALUMINUM, BARIUM, CALCIUM, CHROMIUM, COPPER, IRON, POTASSIUM, MAGNESIUM, MANGANESE, LEAD, VANADIUM and ZINC.

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 diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature: James Medlin Name: James Medlin

Date: 4/17/01 Title: Senior Chemist

U. S. EPA - CLP

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

ME0021

Lab Name: COMPUCHEM Contract: 68W00082

Lab Code: LIBRTY Case No.: 29118 SAS No.: SDG No.: ME0021

Matrix (soil/water): SOIL Lab Sample ID: ME0021-1

Level (low/med): LOW Date Received: 04/05/01

% Solids: 39.6

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	9390		*E	P
7440-36-0	Antimony	1.3	B	N	P
7440-38-2	Arsenic	8.5			P
7440-39-3	Barium	56.4	B	E	P
7440-41-7	Beryllium	0.85	B		P
7440-43-9	Cadmium	0.30	U		P
7440-70-2	Calcium	59800		*E	P
7440-47-3	Chromium	51.9		*E	P
7440-48-4	Cobalt	10.5	B		P
7440-50-8	Copper	63.1		*E	P
7439-89-6	Iron	38200		*E	P
7439-92-1	Lead	101		*E	P
7439-95-4	Magnesium	27800		*E	P
7439-96-5	Manganese	1030		*E	P
7439-97-6	Mercury	0.17	B		CV
7440-02-0	Nickel	32.6			P
7440-09-7	Potassium	2250	B	E	P
7782-49-2	Selenium	2.4	U	N	P
7440-22-4	Silver	0.25	U		P
7440-23-5	Sodium	379	B		P
7440-28-0	Thallium	3.1	U		P
7440-62-2	Vanadium	32.8		E	P
7440-66-6	Zinc	247		*E	P
	Cyanide	0.37	B		CA

Color Before: BROWN Clarity Before: Texture: MEDIUM

Color After: YELLOW Clarity After: Artifacts:

Comments:

U. S. EPA - CLP

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

ME0022

Lab Name: COMPUCHEM Contract: 68W00082

Lab Code: LIBERTY Case No.: 29118 SAS No.: SDG No.: ME0021

Matrix (soil/water): SOIL Lab Sample ID: ME0021-2

Level (low/med): LOW Date Received: 04/05/01

% Solids: 36.3

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	8860		*E	P
7440-36-0	Antimony	1.4	B	N	P
7440-38-2	Arsenic	7.3			P
7440-39-3	Barium	52.3	B	E	P
7440-41-7	Beryllium	0.84	B		P
7440-43-9	Cadmium	0.31	U		P
7440-70-2	Calcium	49400		*E	P
7440-47-3	Chromium	36.6		*E	P
7440-48-4	Cobalt	9.5	B		P
7440-50-8	Copper	47.2		*E	P
7439-89-6	Iron	29600		*E	P
7439-92-1	Lead	63.0		*E	P
7439-95-4	Magnesium	22600		*E	P
7439-96-5	Manganese	825		*E	P
7439-97-6	Mercury	0.15	B		CV
7440-02-0	Nickel	27.6			P
7440-09-7	Potassium	2120	B	E	P
7782-49-2	Selenium	2.4	U	N	P
7440-22-4	Silver	0.26	U		P
7440-23-5	Sodium	351	B		P
7440-28-0	Thallium	3.2	U		P
7440-62-2	Vanadium	27.8		E	P
7440-66-6	Zinc	164		*E	P
	Cyanide	0.31	B		CA

Color Before: BROWN Clarity Before: Texture: MEDIUM

Color After: YELLOW Clarity After: Artifacts:

Comments:

U. S. EPA - CLP

1

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

ME0023

Lab Name: COMPUCHEM Contract: 68W00082

Lab Code: LIBRTY Case No.: 29118 SAS No.: SDG No.: ME0021

Matrix (soil/water): SOIL Lab Sample ID: ME0021-3

Level (low/med): LOW Date Received: 04/05/01

% Solids: 37.4

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	9810		*E	P
7440-36-0	Antimony	1.3	B	N	P
7440-38-2	Arsenic	8.3			P
7440-39-3	Barium	61.7	B	E	P
7440-41-7	Beryllium	0.84	B		P
7440-43-9	Cadmium	0.30	U		P
7440-70-2	Calcium	68800		*E	P
7440-47-3	Chromium	48.8		*E	P
7440-48-4	Cobalt	11.1	B		P
7440-50-8	Copper	55.9		*E	P
7439-89-6	Iron	32200		*E	P
7439-92-1	Lead	73.5		*E	P
7439-95-4	Magnesium	30700		*E	P
7439-96-5	Manganese	1060		*E	P
7439-97-6	Mercury	0.20	B		CV
7440-02-0	Nickel	30.6			P
7440-09-7	Potassium	2350	B	E	P
7782-49-2	Selenium	2.4	U	N	P
7440-22-4	Silver	0.25	U		P
7440-23-5	Sodium	410	B		P
7440-28-0	Thallium	3.2	U		P
7440-62-2	Vanadium	34.0		E	P
7440-66-6	Zinc	187		*E	P
	Cyanide	0.34	B		CA

Color Before: BROWN Clarity Before: Texture: MEDIUM

Color After: YELLOW Clarity After: Artifacts:

Comments:

U. S. EPA - CLP

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

ME0024

Lab Name: COMPUCHEM Contract: 68W00082

Lab Code: LIBRTY Case No.: 29118 SAS No.: SDG No.: ME0021

Matrix (soil/water): SOIL Lab Sample ID: ME0021-4

Level (low/med): LOW Date Received: 04/05/01

% Solids: 51.6

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	7280		*E	P
7440-36-0	Antimony	2.4	B	N	P
7440-38-2	Arsenic	11.9			P
7440-39-3	Barium	48.5	B	E	P
7440-41-7	Beryllium	0.73	B		P
7440-43-9	Cadmium	0.35	B		P
7440-70-2	Calcium	51600		*E	P
7440-47-3	Chromium	75.6		*E	P
7440-48-4	Cobalt	8.4	B		P
7440-50-8	Copper	99.8		*E	P
7439-89-6	Iron	58900		*E	P
7439-92-1	Lead	155		*E	P
7439-95-4	Magnesium	23000		*E	P
7439-96-5	Manganese	1300		*E	P
7439-97-6	Mercury	0.23			CV
7440-02-0	Nickel	38.4			P
7440-09-7	Potassium	1480	B	E	P
7782-49-2	Selenium	1.7	U	N	P
7440-22-4	Silver	0.34	B		P
7440-23-5	Sodium	54.6	U		P
7440-28-0	Thallium	4.8			P
7440-62-2	Vanadium	31.0		E	P
7440-66-6	Zinc	426		*E	P
	Cyanide	1.7			CA

Color Before: BROWN Clarity Before: Texture: MEDIUM

Color After: YELLOW Clarity After: Artifacts:

Comments:

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

ME0025

Lab Name: COMPUCHEM Contract: 68W00082

Lab Code: LIBRTY Case No.: 29118 SAS No.: SDG No.: ME0021

Matrix (soil/water): SOIL Lab Sample ID: ME0021-5

Level (low/med): LOW Date Received: 04/05/01

% Solids: 39.9

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	8240		*E	P
7440-36-0	Antimony	1.4	B	N	P
7440-38-2	Arsenic	7.9			P
7440-39-3	Barium	61.3	B	E	P
7440-41-7	Beryllium	0.70	B		P
7440-43-9	Cadmium	0.71	B		P
7440-70-2	Calcium	72400		*E	P
7440-47-3	Chromium	261		*E	P
7440-48-4	Cobalt	7.6	B		P
7440-50-8	Copper	79.8		*E	P
7439-89-6	Iron	38000		*E	P
7439-92-1	Lead	114		*E	P
7439-95-4	Magnesium	28100		*E	P
7439-96-5	Manganese	3450		*E	P
7439-97-6	Mercury	0.23			CV
7440-02-0	Nickel	29.9			P
7440-09-7	Potassium	1580	B	E	P
7782-49-2	Selenium	2.3	U	N	P
7440-22-4	Silver	0.33	B		P
7440-23-5	Sodium	171	B		P
7440-28-0	Thallium	2.9	U		P
7440-62-2	Vanadium	72.8		E	P
7440-66-6	Zinc	332		*E	P
	Cyanide	0.40	B		CA

Color Before: BROWN Clarity Before: Texture: MEDIUM

Color After: YELLOW Clarity After: Artifacts:

Comments:

U. S. EPA - CLP

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

ME0026

Lab Name: COMPUCHEM Contract: 68W00082

Lab Code: LIBRTY Case No.: 29118 SAS No.: SDG No.: ME0021

Matrix (soil/water): SOIL Lab Sample ID: ME0021-6

Level (low/med): LOW Date Received: 04/05/01

% Solids: 54.8

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	6380		*E	P
7440-36-0	Antimony	1.6	B	N	P
7440-38-2	Arsenic	10.4			P
7440-39-3	Barium	45.4	B	E	P
7440-41-7	Beryllium	0.71	B		P
7440-43-9	Cadmium	0.20	U		P
7440-70-2	Calcium	66700		*E	P
7440-47-3	Chromium	110		*E	P
7440-48-4	Cobalt	7.5	B		P
7440-50-8	Copper	60.6		*E	P
7439-89-6	Iron	54000		*E	P
7439-92-1	Lead	111		*E	P
7439-95-4	Magnesium	27500		*E	P
7439-96-5	Manganese	2130		*E	P
7439-97-6	Mercury	0.27			CV
7440-02-0	Nickel	30.4			P
7440-09-7	Potassium	1270	B	E	P
7782-49-2	Selenium	1.6	U	N	P
7440-22-4	Silver	0.17	U		P
7440-23-5	Sodium	160	B		P
7440-28-0	Thallium	3.8			P
7440-62-2	Vanadium	48.9		E	P
7440-66-6	Zinc	281		*E	P
	Cyanide	0.81	B		CA

Color Before: BROWN Clarity Before: Texture: MEDIUM

Color After: YELLOW Clarity After: Artifacts:

Comments:

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

ME0027

Lab Name: COMPUCHEM Contract: 68W00082

Lab Code: LIBRTY Case No.: 29118 SAS No.: SDG No.: ME0021

Matrix (soil/water): SOIL Lab Sample ID: ME0021-7

Level (low/med): LOW Date Received: 04/05/01

% Solids: 57.8

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	5420		*E	P
7440-36-0	Antimony	0.83	U	N	P
7440-38-2	Arsenic	7.0			P
7440-39-3	Barium	35.7	B	E	P
7440-41-7	Beryllium	0.49	B		P
7440-43-9	Cadmium	0.20	U		P
7440-70-2	Calcium	71700		*E	P
7440-47-3	Chromium	36.0		*E	P
7440-48-4	Cobalt	6.8	B		P
7440-50-8	Copper	28.8		*E	P
7439-89-6	Iron	22600		*E	P
7439-92-1	Lead	46.2		*E	P
7439-95-4	Magnesium	31700		*E	P
7439-96-5	Manganese	942		*E	P
7439-97-6	Mercury	0.10	B		CV
7440-02-0	Nickel	20.9			P
7440-09-7	Potassium	1240	B	E	P
7782-49-2	Selenium	1.6	U	N	P
7440-22-4	Silver	0.17	U		P
7440-23-5	Sodium	310	B		P
7440-28-0	Thallium	2.1	U		P
7440-62-2	Vanadium	22.1		E	P
7440-66-6	Zinc	105		*E	P
	Cyanide	0.29	B		CA

Color Before: BROWN Clarity Before: Texture: MEDIUM

Color After: YELLOW Clarity After: Artifacts:

Comments:

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

ME0028

Lab Name: COMPUCHEM Contract: 68W00082

Lab Code: LIBRTY Case No.: 29118 SAS No.: SDG No.: ME0021

Matrix (soil/water): SOIL Lab Sample ID: ME0021-8

Level (low/med): LOW Date Received: 04/05/01

% Solids: 66.0

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	4550		*E	P
7440-36-0	Antimony	0.72	U	N	P
7440-38-2	Arsenic	6.7			P
7440-39-3	Barium	31.8	B	E	P
7440-41-7	Beryllium	0.48	B		P
7440-43-9	Cadmium	0.17	U		P
7440-70-2	Calcium	70100		*E	P
7440-47-3	Chromium	38.8		*E	P
7440-48-4	Cobalt	6.1	B		P
7440-50-8	Copper	27.8		*E	P
7439-89-6	Iron	20600		*E	P
7439-92-1	Lead	45.4		*E	P
7439-95-4	Magnesium	31900		*E	P
7439-96-5	Manganese	962		*E	P
7439-97-6	Mercury	0.11	B		CV
7440-02-0	Nickel	19.5			P
7440-09-7	Potassium	987	B	E	P
7782-49-2	Selenium	1.4	U	N	P
7440-22-4	Silver	0.14	U		P
7440-23-5	Sodium	438	B		P
7440-28-0	Thallium	1.8	U		P
7440-62-2	Vanadium	20.0		E	P
7440-66-6	Zinc	119		*E	P
	Cyanide	0.34	B		CA

Color Before: BROWN Clarity Before: Texture: MEDIUM

Color After: YELLOW Clarity After: Artifacts:

Comments:

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

ME0029

Lab Name: COMPUCHEM Contract: 68W00082

Lab Code: LIBRTY Case No.: 29118 SAS No.: SDG No.: ME0021

Matrix (soil/water): SOIL Lab Sample ID: ME0021-9

Level (low/med): LOW Date Received: 04/05/01

% Solids: 45.2

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	5180		*E	P
7440-36-0	Antimony	1.0	U	N	P
7440-38-2	Arsenic	6.1			P
7440-39-3	Barium	32.8	B	E	P
7440-41-7	Beryllium	0.50	B		P
7440-43-9	Cadmium	0.25	U		P
7440-70-2	Calcium	50700		*E	P
7440-47-3	Chromium	44.6		*E	P
7440-48-4	Cobalt	6.0	B		P
7440-50-8	Copper	33.5		*E	P
7439-89-6	Iron	24600		*E	P
7439-92-1	Lead	48.9		*E	P
7439-95-4	Magnesium	22200		*E	P
7439-96-5	Manganese	937		*E	P
7439-97-6	Mercury	0.15	B		CV
7440-02-0	Nickel	19.2			P
7440-09-7	Potassium	1250	B	E	P
7782-49-2	Selenium	2.0	U	N	P
7440-22-4	Silver	0.21	U		P
7440-23-5	Sodium	374	B		P
7440-28-0	Thallium	2.6	U		P
7440-62-2	Vanadium	25.5		E	P
7440-66-6	Zinc	119		*E	P
	Cyanide	0.49	B		CA

Color Before: BROWN Clarity Before: Texture: MEDIUM

Color After: YELLOW Clarity After: Artifacts:

Comments:

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

ME0030

Lab Name: COMPUCHEM Contract: 68W00082

Lab Code: LIBRTY Case No.: 29118 SAS No.: SDG No.: ME0021

Matrix (soil/water): SOIL Lab Sample ID: ME0021-10

Level (low/med): LOW Date Received: 04/05/01

% Solids: 43.8

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	6900		*E	P
7440-36-0	Antimony	1.2	B	N	P
7440-38-2	Arsenic	8.2			P
7440-39-3	Barium	42.9	B	E	P
7440-41-7	Beryllium	0.68	B		P
7440-43-9	Cadmium	0.26	U		P
7440-70-2	Calcium	64200		*E	P
7440-47-3	Chromium	56.9		*E	P
7440-48-4	Cobalt	7.9	B		P
7440-50-8	Copper	42.2		*E	P
7439-89-6	Iron	31300		*E	P
7439-92-1	Lead	62.1		*E	P
7439-95-4	Magnesium	28400		*E	P
7439-96-5	Manganese	1230		*E	P
7439-97-6	Mercury	0.17	B		CV
7440-02-0	Nickel	24.2			P
7440-09-7	Potassium	1690	B	E	P
7782-49-2	Selenium	2.1	U	N	P
7440-22-4	Silver	0.22	U		P
7440-23-5	Sodium	367	B		P
7440-28-0	Thallium	2.9	B		P
7440-62-2	Vanadium	33.7		E	P
7440-66-6	Zinc	159		*E	P
	Cyanide	0.41	B		CA

Color Before: BROWN Clarity Before: Texture: MEDIUM

Color After: YELLOW Clarity After: Artifacts:

Comments:

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

ME0031

Lab Name: COMPUCHEM Contract: 68W00082

Lab Code: LIBRTY Case No.: 29118 SAS No.: SDG No.: ME0021

Matrix (soil/water): SOIL Lab Sample ID: ME0021-11

Level (low/med): LOW Date Received: 04/05/01

% Solids: 39.9

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	8130		*E	P
7440-36-0	Antimony	1.2	U	N	P
7440-38-2	Arsenic	7.1			P
7440-39-3	Barium	48.4	B	E	P
7440-41-7	Beryllium	0.75	B		P
7440-43-9	Cadmium	0.29	U		P
7440-70-2	Calcium	56800		*E	P
7440-47-3	Chromium	36.4		*E	P
7440-48-4	Cobalt	8.8	B		P
7440-50-8	Copper	43.6		*E	P
7439-89-6	Iron	24700		*E	P
7439-92-1	Lead	57.7		*E	P
7439-95-4	Magnesium	26100		*E	P
7439-96-5	Manganese	852		*E	P
7439-97-6	Mercury	0.16	B		CV
7440-02-0	Nickel	25.3			P
7440-09-7	Potassium	1980	B	E	P
7782-49-2	Selenium	2.3	U	N	P
7440-22-4	Silver	0.24	U		P
7440-23-5	Sodium	376	B		P
7440-28-0	Thallium	3.0	U		P
7440-62-2	Vanadium	27.5		E	P
7440-66-6	Zinc	144		*E	P
	Cyanide	0.35	B		CA

Color Before: BROWN Clarity Before: Texture: MEDIUM

Color After: YELLOW Clarity After: Artifacts:

Comments:

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

ME0032

Lab Name: COMPUCHEM Contract: 68W00082

Lab Code: LIBRTY Case No.: 29118 SAS No.: SDG No.: ME0021

Matrix (soil/water): SOIL Lab Sample ID: ME0021-12

Level (low/med): LOW Date Received: 04/05/01

% Solids: 56.9

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	3570		*E	P
7440-36-0	Antimony	0.85	U	N	P
7440-38-2	Arsenic	6.1			P
7440-39-3	Barium	32.4	B	E	P
7440-41-7	Beryllium	0.48	B		P
7440-43-9	Cadmium	0.20	U		P
7440-70-2	Calcium	74900		*E	P
7440-47-3	Chromium	42.4		*E	P
7440-48-4	Cobalt	5.1	B		P
7440-50-8	Copper	19.9		*E	P
7439-89-6	Iron	17700		*E	P
7439-92-1	Lead	28.6		*E	P
7439-95-4	Magnesium	29300		*E	P
7439-96-5	Manganese	976		*E	P
7439-97-6	Mercury	0.078	B		CV
7440-02-0	Nickel	21.5			P
7440-09-7	Potassium	702	B	E	P
7782-49-2	Selenium	1.6	U	N	P
7440-22-4	Silver	0.17	U		P
7440-23-5	Sodium	388	B		P
7440-28-0	Thallium	2.1	U		P
7440-62-2	Vanadium	17.5		E	P
7440-66-6	Zinc	69.4		*E	P
	Cyanide	0.36	B		CA

Color Before: BROWN Clarity Before: Texture: MEDIUM

Color After: YELLOW Clarity After: Artifacts:

Comments:

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

ME0033

Lab Name: COMPUCHEM Contract: 68W00082

Lab Code: LIBRTY Case No.: 29118 SAS No.: SDG No.: ME0021

Matrix (soil/water): SOIL Lab Sample ID: ME0021-13

Level (low/med): LOW Date Received: 04/05/01

% Solids: 58.9

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	4310		*E	P
7440-36-0	Antimony	0.82	U	N	P
7440-38-2	Arsenic	7.1			P
7440-39-3	Barium	43.7	B	E	P
7440-41-7	Beryllium	0.58	B		P
7440-43-9	Cadmium	0.20	U		P
7440-70-2	Calcium	61500		*E	P
7440-47-3	Chromium	32.0		*E	P
7440-48-4	Cobalt	5.0	B		P
7440-50-8	Copper	23.3		*E	P
7439-89-6	Iron	28600		*E	P
7439-92-1	Lead	49.5		*E	P
7439-95-4	Magnesium	26000		*E	P
7439-96-5	Manganese	928		*E	P
7439-97-6	Mercury	0.077	U		CV
7440-02-0	Nickel	15.3			P
7440-09-7	Potassium	852	B	E	P
7782-49-2	Selenium	1.6	U	N	P
7440-22-4	Silver	0.16	U		P
7440-23-5	Sodium	264	B		P
7440-28-0	Thallium	2.1	B		P
7440-62-2	Vanadium	19.3		E	P
7440-66-6	Zinc	140		*E	P
	Cyanide	1.3			CA

Color Before: BROWN Clarity Before: Texture: MEDIUM

Color After: YELLOW Clarity After: Artifacts:

Comments:

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

ME0034

Lab Name: COMPUCHEM Contract: 68W00082

Lab Code: LIBRTY Case No.: 29118 SAS No.: SDG No.: ME0021

Matrix (soil/water): SOIL Lab Sample ID: ME0021-14

Level (low/med) LOW Date Received: 04/05/01

% Solids: 50.0

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	5230		*E	P
7440-36-0	Antimony	0.96	U	N	P
7440-38-2	Arsenic	7.4			P
7440-39-3	Barium	37.8	B	E	P
7440-41-7	Beryllium	0.58	B		P
7440-43-9	Cadmium	0.23	U		P
7440-70-2	Calcium	60500		*E	P
7440-47-3	Chromium	45.4		*E	P
7440-48-4	Cobalt	6.7	B		P
7440-50-8	Copper	27.5		*E	P
7439-89-6	Iron	33900		*E	P
7439-92-1	Lead	47.9		*E	P
7439-95-4	Magnesium	27300		*E	P
7439-96-5	Manganese	802		*E	P
7439-97-6	Mercury	0.091	U		CV
7440-02-0	Nickel	27.6			P
7440-09-7	Potassium	1290	B	E	P
7782-49-2	Selenium	1.8	U	N	P
7440-22-4	Silver	0.19	U		P
7440-23-5	Sodium	346	B		P
7440-28-0	Thallium	2.4	U		P
7440-62-2	Vanadium	21.5		E	P
7440-66-6	Zinc	142		*E	P
	Cyanide	0.56	B		CA

Color Before: BROWN Clarity Before: Texture: MEDIUM

Color After: YELLOW Clarity After: Artifacts:

Comments:

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

ME0035

Lab Name: COMPUCHEM Contract: 68W00082

Lab Code: LIBRTY Case No.: 29118 SAS No.: SDG No.: ME0021

Matrix (soil/water): SOIL Lab Sample ID: ME0021-15

Level (low/med): LOW Date Received: 04/05/01

% Solids: 41.2

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	7350		*E	P
7440-36-0	Antimony	1.8	B	N	P
7440-38-2	Arsenic	11.6			P
7440-39-3	Barium	51.3	B	E	P
7440-41-7	Beryllium	0.79	B		P
7440-43-9	Cadmium	0.27	U		P
7440-70-2	Calcium	80600		*E	P
7440-47-3	Chromium	42.3		*E	P
7440-48-4	Cobalt	9.2	B		P
7440-50-8	Copper	44.7		*E	P
7439-89-6	Iron	49000		*E	P
7439-92-1	Lead	73.0		*E	P
7439-95-4	Magnesium	37800		*E	P
7439-96-5	Manganese	1080		*E	P
7439-97-6	Mercury	0.18	B		CV
7440-02-0	Nickel	28.4			P
7440-09-7	Potassium	1700	B	E	P
7782-49-2	Selenium	2.2	U	N	P
7440-22-4	Silver	0.22	U		P
7440-23-5	Sodium	332	B		P
7440-28-0	Thallium	3.8	B		P
7440-62-2	Vanadium	30.6		E	P
7440-66-6	Zinc	207		*E	P
	Cyanide	0.74	B		CA

Color Before: BROWN Clarity Before: Texture: MEDIUM

Color After: YELLOW Clarity After: Artifacts:

Comments:

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

ME0036

Lab Name: COMPUCHEM Contract: 68W00082

Lab Code: LIBRTY Case No.: 29118 SAS No.: SDG No.: ME0021

Matrix (soil/water): SOIL Lab Sample ID: ME0021-16

Level (low/med): LOW Date Received: 04/05/01

% Solids: 55.2

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	15000		*E	P
7440-36-0	Antimony	3.0	B	N	P
7440-38-2	Arsenic	9.4			P
7440-39-3	Barium	188		E	P
7440-41-7	Beryllium	2.6			P
7440-43-9	Cadmium	0.22	U		P
7440-70-2	Calcium	63300		*E	P
7440-47-3	Chromium	26.9		*E	P
7440-48-4	Cobalt	4.3	B		P
7440-50-8	Copper	34.8		*E	P
7439-89-6	Iron	83400		*E	P
7439-92-1	Lead	109		*E	P
7439-95-4	Magnesium	12400		*E	P
7439-96-5	Manganese	2960		*E	P
7439-97-6	Mercury	0.14	B		CV
7440-02-0	Nickel	17.0			P
7440-09-7	Potassium	1110	B	E	P
7782-49-2	Selenium	3.4		N	P
7440-22-4	Silver	0.18	U		P
7440-23-5	Sodium	292	B		P
7440-28-0	Thallium	8.0			P
7440-62-2	Vanadium	24.8		E	P
7440-66-6	Zinc	324		*E	P
	Cyanide	3.4			CA

Color Before: BROWN Clarity Before: Texture: MEDIUM

Color After: YELLOW Clarity After: Artifacts:

Comments:

U. S. EPA - CLP

1

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

ME0037

Lab Name: COMPUCHEM Contract: 68W00082

Lab Code: LIBRTY Case No.: 29118 SAS No.: SDG No.: ME0021

Matrix (soil/water): SOIL Lab Sample ID: ME0021-17

Level (low/med): LOW Date Received: 04/05/01

% Solids: 44.8

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	8050		*E	P
7440-36-0	Antimony	2.0	B	N	P
7440-38-2	Arsenic	11.8			P
7440-39-3	Barium	66.6	B	E	P
7440-41-7	Beryllium	0.91	B		P
7440-43-9	Cadmium	0.26	U		P
7440-70-2	Calcium	55200		*E	P
7440-47-3	Chromium	40.8		*E	P
7440-48-4	Cobalt	9.4	B		P
7440-50-8	Copper	55.8		*E	P
7439-89-6	Iron	61000		*E	P
7439-92-1	Lead	142		*E	P
7439-95-4	Magnesium	24000		*E	P
7439-96-5	Manganese	1250		*E	P
7439-97-6	Mercury	0.14	B		CV
7440-02-0	Nickel	29.3			P
7440-09-7	Potassium	1650	B	E	P
7782-49-2	Selenium	2.1	U	N	P
7440-22-4	Silver	0.22	U		P
7440-23-5	Sodium	267	B		P
7440-28-0	Thallium	5.4			P
7440-62-2	Vanadium	31.7		E	P
7440-66-6	Zinc	290		*E	P
	Cyanide	2.3			CA

Color Before: BROWN Clarity Before: Texture: MEDIUM

Color After: YELLOW Clarity After: Artifacts:

Comments:

U. S. EPA - CLP

1

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

ME0038

Lab Name: COMPUCHEM Contract: 68W00082

Lab Code: LIBRTY Case No.: 29118 SAS No.: SDG No.: ME0021

Matrix (soil/water): SOIL Lab Sample ID: ME0021-18

Level (low/med) LOW Date Received: 04/05/01

% Solids: 49.5

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	7660		*E	P
7440-36-0	Antimony	2.6	B	N	P
7440-38-2	Arsenic	13.5			P
7440-39-3	Barium	71.6	B	E	P
7440-41-7	Beryllium	0.92	B		P
7440-43-9	Cadmium	0.24	U		P
7440-70-2	Calcium	52200		*E	P
7440-47-3	Chromium	35.8		*E	P
7440-48-4	Cobalt	9.3	B		P
7440-50-8	Copper	57.2		*E	P
7439-89-6	Iron	63800		*E	P
7439-92-1	Lead	133		*E	P
7439-95-4	Magnesium	22400		*E	P
7439-96-5	Manganese	1320		*E	P
7439-97-6	Mercury	0.21			CV
7440-02-0	Nickel	26.6			P
7440-09-7	Potassium	1360	B	E	P
7782-49-2	Selenium	2.5		N	P
7440-22-4	Silver	0.20	U		P
7440-23-5	Sodium	166	B		P
7440-28-0	Thallium	5.6			P
7440-62-2	Vanadium	31.5		E	P
7440-66-6	Zinc	376		*E	P
	Cyanide	2.2			CA

Color Before: BROWN Clarity Before: Texture: MEDIUM

Color After: YELLOW Clarity After: Artifacts:

Comments:

U. S. EPA - CLP

1

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

ME0039

Lab Name: COMPUCHEM Contract: 68W00082

Lab Code: LIBRTY Case No.: 29118 SAS No.: SDG No.: ME0021

Matrix (soil/water): SOIL Lab Sample ID: ME0021-19

Level (low/med): LOW Date Received: 04/05/01

% Solids: 62.6

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	7120		*E	P
7440-36-0	Antimony	2.7	B	N	P
7440-38-2	Arsenic	85.5			P
7440-39-3	Barium	295		E	P
7440-41-7	Beryllium	0.52	B		P
7440-43-9	Cadmium	1.4	B		P
7440-70-2	Calcium	53400		*E	P
7440-47-3	Chromium	18.5		*E	P
7440-48-4	Cobalt	8.5	B		P
7440-50-8	Copper	89.8		*E	P
7439-89-6	Iron	32400		*E	P
7439-92-1	Lead	206		*E	P
7439-95-4	Magnesium	23100		*E	P
7439-96-5	Manganese	687		*E	P
7439-97-6	Mercury	1.3			CV
7440-02-0	Nickel	21.9			P
7440-09-7	Potassium	1570		E	P
7782-49-2	Selenium	1.8		N	P
7440-22-4	Silver	1.1	B		P
7440-23-5	Sodium	47.6	U		P
7440-28-0	Thallium	3.6			P
7440-62-2	Vanadium	19.6		E	P
7440-66-6	Zinc	550		*E	P
	Cyanide	1.3			CA

Color Before: BROWN Clarity Before: Texture: MEDIUM

Color After: YELLOW Clarity After: Artifacts:

Comments:

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3

BLANKS

Lab Name: COMPUCHEM Contract: 68W00082

Lab Code: LIBRTY Case No.: 29118 SAS No.: SDG NO.: ME0021

Preparation Blank Matrix (soil/water): SOIL

Preparation Blank Concentration Units (ug/L or mg/kg): 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	15.1	U	46.8	B	41.7	B	90.2	B	11.495	B	P
Antimony	2.5	U	2.5	U	2.5	U	2.5	U	0.500	U	P
Arsenic	4.2	U	4.2	U	4.2	U	4.2	U	0.840	U	P
Barium	0.2	U	0.2	U	0.3	B	0.3	B	0.164	B	P
Beryllium	0.1	U	0.1	B	0.2	B	0.3	B	0.076	B	P
Cadmium	0.6	U	0.6	U	0.6	U	0.6	U	0.120	U	P
Calcium	-56.6	B	-20.2	B	-40.6	B	17.6	U	3.520	U	P
Chromium	0.5	U	0.5	U	0.5	U	0.5	U	0.100	U	P
Cobalt	0.7	U	0.7	U	0.7	U	0.7	U	0.140	U	P
Copper	0.7	U	0.7	U	0.7	U	0.7	U	0.140	U	P
Iron	14.2	U	14.2	U	14.2	U	18.1	B	2.840	U	P
Lead	1.7	U	1.7	U	1.7	U	1.7	U	0.344	B	P
Magnesium	8.9	U	41.4	B	15.8	B	77.5	B	3.655	B	P
Manganese	0.1	U	0.2	B	0.9	B	0.3	B	0.151	B	P
Mercury	0.1	U	0.1	U	0.1	U	0.1	U	0.050	U	CV
Nickel	1.3	U	1.3	U	1.3	U	1.3	U	0.260	U	P
Potassium	41.6	U	41.6	U	41.6	U	41.6	U	8.320	U	P
Selenium	4.8	U	4.8	U	4.8	U	4.8	U	0.960	U	P
Silver	0.5	U	0.5	U	0.5	U	0.5	U	0.100	U	P
Sodium	152.1	U	152.1	U	-219.9	B	152.1	U	124.084	B	P
Thallium	6.2	U	6.2	U	6.2	U	6.2	U	1.240	U	P
Vanadium	0.7	U	0.7	U	0.7	U	0.7	U	0.140	U	P
Zinc	-4.4	B	-4.3	B	-3.9	B	-4.1	B	-.424	B	P
Cyanide	0.6	U	0.6	U	0.6	U	0.6	U	0.032	B	CA

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BLANKS

Lab Name: COMPUCHEM Contract: 68W00082

Lab Code: LIBRTY Case No.: 29118 SAS No.: _____ SDG NO.: ME0021

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			39.8	B	91.2	B	79.3	B					P
Antimony			2.5	U	2.5	U	2.5	U					P
Arsenic			4.2	U	4.2	U	4.2	U					P
Barium			0.2	U	0.3	B	0.2	U					P
Beryllium			0.1	B	0.4	B	0.4	B					P
Cadmium			0.6	U	0.6	U	0.6	U					P
Calcium			-45.5	B	-19.5	B	-40.9	B					P
Chromium			0.5	U	0.5	U	0.5	U					P
Cobalt			0.7	U	0.7	U	0.7	U					P
Copper			0.7	U	-1.3	B	-1.3	B					P
Iron			14.2	U	14.2	U	14.2	U					P
Lead			1.7	U	1.7	U	1.7	U					P
Magnesium			20.9	B	48.2	B	17.0	B					P
Manganese			0.1	B	0.2	B	0.1	B					P
Mercury			0.1	U	0.1	U	0.1	U					CV
Nickel			1.3	U	1.3	U	1.3	U					P
Potassium			41.6	U	41.6	U	41.6	U					P
Selenium			4.8	U	4.8	U	4.8	U					P
Silver			0.5	U	0.5	U	0.5	U					P
Sodium			152.1	U	152.1	U	152.1	U					P
Thallium			6.2	U	6.2	U	6.2	U					P
Vanadium			0.7	U	0.7	U	0.7	U					P
Zinc			-4.2	B	-3.5	B	-3.7	B					P
Cyanide			0.6	U	0.6	U	0.6	U					CA

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BLANKS

Lab Name: COMPUCHEM Contract: 68W00082

Lab Code: LIBERTY Case No.: 29118 SAS No.: _____ SDG NO.: ME0021

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			97.6	B	49.9	B	68.8	B			P
Antimony			2.5	U	2.5	U	2.5	U			P
Arsenic			4.2	U	4.2	U	4.2	U			P
Barium			0.2	B	0.2	U	0.2	U			P
Beryllium			0.5	B	0.4	B	0.3	B			P
Cadmium			0.6	U	0.6	U	0.6	U			P
Calcium			-23.1	B	-59.1	B	-32.4	B			P
Chromium			0.5	U	0.5	U	0.5	U			P
Cobalt			0.7	U	0.7	U	0.7	U			P
Copper			-1.2	B	-1.1	B	-.8	B			P
Iron			14.2	U	14.2	U	14.2	U			P
Lead			1.7	U	1.7	U	1.7	U			P
Magnesium			41.7	B	8.9	U	33.6	B			P
Manganese			0.2	B	0.1	U	0.1	B			P
Nickel			1.3	U	1.3	U	1.3	U			P
Potassium			41.6	U	41.6	U	41.6	U			P
Selenium			4.8	U	4.8	U	4.8	U			P
Silver			0.5	U	0.5	U	-.7	B			P
Sodium			152.1	U	152.1	U	152.1	U			P
Thallium			6.2	U	6.2	U	6.2	U			P
Vanadium			0.7	U	0.7	U	0.7	U			P
Zinc			-3.6	B	-4.2	B	-3.9	B			P
Cyanide			0.6	U	0.6	U	0.6	U			CA

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BLANKS

Lab Name: COMPUCHEM Contract: 68W00082

Lab Code: LIBRTY Case No.: 29118 SAS No.: _____ SDG NO.: ME0021

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			73.1	B	92.6	B	63.0	B			P
Antimony			2.5	U	2.5	U	2.5	U			P
Arsenic			4.2	U	4.2	U	4.2	U			P
Barium			0.2	U	0.3	B	0.2	U			P
Beryllium			0.4	B	0.6	B	0.5	B			P
Cadmium			0.6	U	0.6	U	0.6	U			P
Calcium			-37.9	B	-48.6	B	-53.5	B			P
Chromium			0.5	U	0.5	U	0.5	U			P
Cobalt			0.7	U	0.7	U	0.7	U			P
Copper			-1.2	B	-1.2	B	-1.1	B			P
Iron			14.2	U	14.2	U	14.2	U			P
Lead			1.7	U	1.7	U	1.7	U			P
Magnesium			19.9	B	29.4	B	10.5	B			P
Manganese			0.2	B	0.5	B	0.5	B			P
Nickel			1.3	U	1.3	U	1.3	U			P
Potassium			41.6	U	41.6	U	41.6	U			P
Selenium			4.8	U	4.8	U	4.8	U			P
Silver			0.5	U	0.5	U	0.5	U			P
Sodium			152.1	U	164.1	B	152.1	U			P
Thallium			6.2	U	6.2	U	6.2	U			P
Vanadium			0.7	U	0.7	U	0.7	U			P
Zinc			-3.9	B	-4.9	B	-5.0	B			P

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BLANKS

Lab Name: COMPUCHEM Contract: 68W00082

Lab Code: LIBRTY Case No.: 29118 SAS No.: _____ SDG NO.: ME0021

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			39.8	B	99.4	B							P
Antimony			2.5	U	2.5	U							P
Arsenic			4.2	U	4.2	U							P
Barium			0.2	U	0.2	U							P
Beryllium			0.1	U	0.1	U							P
Cadmium			0.6	U	0.6	U							P
Calcium			-43.0	B	-53.8	B							P
Chromium			0.5	U	0.5	U							P
Cobalt			0.7	U	0.7	U							P
Copper			0.7	U	-.8	B							P
Iron			14.2	U	14.2	U							P
Lead			1.7	U	1.7	U							P
Magnesium			22.1	B	10.9	B							P
Manganese			0.4	B	0.4	B							P
Nickel			1.3	U	1.3	U							P
Potassium			41.6	U	41.6	U							P
Selenium			4.8	U	4.8	U							P
Silver			0.5	U	0.5	U							P
Sodium			-175.2	B	-209.5	B							P
Thallium			6.2	U	6.2	U							P
Vanadium			0.7	U	0.7	U							P
Zinc			-5.1	B	-3.4	B							P

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5A

SPIKE SAMPLE RECOVERY

EPA SAMPLE NO.

ME0021S

Lab Name: COMPUCHEM Contract: 68W00082

Lab Code: LIBRTY Case No.: 29118 SAS No.: _____ SDG NO.: ME0021

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

% Solids for Sample: 39.6

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

Analyte	Control Limit %R	Spiked Sample Result (SSR)	C	Sample Result (SR)	C	Spike Added (SA)	%R	Q	M
Antimony	75 - 125	141.3529		1.3217	B	252.53	55.4	N	P
Arsenic	75 - 125	26.6716		8.5328		20.20	89.8		P
Barium	75 - 125	1033.7889		56.4467	B	1010.10	96.8		P
Beryllium	75 - 125	23.5087		0.8548	B	25.25	89.7		P
Cadmium	75 - 125	22.8143		0.3030	U	25.25	90.4		P
Chromium	75 - 125	144.9316		51.9198		101.01	92.1		P
Cobalt	75 - 125	240.6073		10.4744	B	252.53	91.1		P
Copper	75 - 125	183.1855		63.0890		126.26	95.1		P
Lead		97.2646		100.6313		10.10	-33.3		P
Manganese		1267.6793		1028.6283		252.53	94.7		P
Mercury	75 - 125	1.4848		0.1749	B	1.26	104.0		CV
Nickel	75 - 125	261.8129		32.5931		252.53	90.8		P
Selenium	75 - 125	6.4505		2.4242	U	5.05	127.7	N	P
Silver	75 - 125	23.0612		0.2525	U	25.25	91.3		P
Thallium	75 - 125	25.4296		3.1313	U	25.25	100.7		P
Vanadium	75 - 125	271.3077		32.8235		252.53	94.4		P
Zinc	75 - 125	454.9673		247.3930		252.53	82.2		P
Cyanide	75 - 125	13.1318		0.3727	B	12.63	101.0		CA

Comments: _____

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5B

POST DIGEST SPIKE SAMPLE RECOVERY

EPA SAMPLE NO.

ME0021A

Lab Name: COMPUCHEM Contract: 68W00082

Lab Code: LIBRTY Case No.: 29118 SAS No.: SDG NO.: ME0021

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

Concentration Units: ug/L

Analyte	Control Limit %R	Spiked Sample Result (SSR)	C	Sample Result (SR)	C	Spike Added (SA)	%R	Q	M
Antimony		122.89		2.62	B	120.0	100.2		P
Selenium		10.94		4.80	U	10.0	109.4		P

Comments:

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DUPLICATES

EPA SAMPLE NO.

ME0021D

Lab Name: COMPUCHEM Contract: 68W00082

Lab Code: LIBRTY Case No.: 29118 SAS No.: SDG NO.: ME0021

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

% Solids for Sample: 39.6 % Solids for Duplicate: 40.3

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

Analyte	Control Limit	Sample (S)	C	Duplicate (D)	C	RPD	Q	M
Aluminum		9394.1426		6388.3438		38.1	*	P
Antimony		1.3217	B	1.2626	U	200.0		P
Arsenic	5.1	8.5328		5.9361		35.9		P
Barium		56.4467	B	39.8174	B	34.5		P
Beryllium		0.8548	B	0.6815	B	22.6		P
Cadmium		0.3030	U	1.5609	B	200.0		P
Calcium		59813.3320		42794.1250		33.2	*	P
Chromium		51.9198		36.8306		34.0	*	P
Cobalt		10.4744	B	7.3961	B	34.4		P
Copper	12.6	63.0890		42.3723		39.3	*	P
Cyanide		0.3727	B	0.3334	B	11.1		CA
Iron		38224.6445		26628.0059		35.8	*	P
Lead		100.6313		67.9274		38.8	*	P
Magnesium		27766.9395		19772.5313		33.6	*	P
Manganese		1028.6283		723.3030		34.8	*	P
Mercury		0.1749	B	0.2174	B	21.7		CV
Nickel	20.2	32.5931		23.0503		34.3		P
Potassium		2251.0964	B	1534.4309	B	37.9		P
Selenium		2.4242	U	2.4242	U			P
Silver		0.2525	U	0.2525	U			P
Sodium		379.4663	B	334.6578	B	12.5		P
Thallium		3.1313	U	3.1313	U			P
Vanadium	25.3	32.8235		23.2604	B	34.1		P
Zinc		247.3930		169.7641		37.2	*	P

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ICP SERIAL DILUTIONS

EPA SAMPLE NO.

ME0021L

Lab Name: COMPUCHEM Contract: 68W00082

Lab Code: LIBRTY Case No.: 29118 SAS No.: SDG NO.: ME0021

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

Concentration Units: ug/L

Analyte	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	% Difference	Q	M
Aluminum	18600.40		15467.39		16.8	E	P
Antimony	2.62	B	12.50	U	100.0		P
Arsenic	16.89		21.00	U	100.0		P
Barium	111.76	B	94.40	B	15.5	E	P
Beryllium	1.69	B	2.54	B	50.3		P
Cadmium	0.60	U	3.00	U			P
Calcium	118430.40		100077.00		15.5	E	P
Chromium	102.80		88.08		14.3	E	P
Cobalt	20.74	B	17.98	B	13.3		P
Copper	124.92		98.39	B	21.2	E	P
Iron	75684.79		65192.70		13.9	E	P
Lead	199.25		174.22		12.6	E	P
Magnesium	54978.54		45973.87		16.4	E	P
Manganese	2036.68		1772.16		13.0	E	P
Nickel	64.53		55.91	B	13.4		P
Potassium	4457.17	B	3038.75	B	31.8	E	P
Selenium	4.80	U	24.00	U			P
Silver	0.50	U	2.50	U			P
Sodium	751.34	B	1526.36	B	103.2		P
Thallium	6.20	U	31.00	U			P
Vanadium	64.99		57.45	B	11.6	E	P
Zinc	489.84		398.80		18.6	E	P

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INSTRUMENT DETECTION LIMITS (QUARTERLY)

Lab Name: COMPUCHEM Contract: 68W00082

Lab Code: LIBRTY Case No.: 29118 SAS No.: SDG NO.: ME0021

ICP ID Number: P3 Date: 01/15/01

Flame AA ID Number:

Furnace AA ID Number:

Analyte	Wave-length (nm)	Back-ground	CRDL (ug/L)	IDL (ug/L)	M
Aluminum	308.22		200	15.1	P
Antimony	206.84		60	2.5	P
Arsenic	189.04		10	4.2	P
Barium	493.41		200	0.2	P
Beryllium	313.04		5	0.1	P
Cadmium	226.50		5	0.6	P
Calcium	317.93		5000	17.6	P
Chromium	267.72		10	0.5	P
Cobalt	228.62		50	0.7	P
Copper	324.70		25	0.7	P
Iron	271.44		100	14.2	P
Lead	220.35		3	1.7	P
Magnesium	279.08		5000	8.9	P
Manganese	257.61		15	0.1	P
Nickel	231.60		40	1.3	P
Potassium	766.49		5000	41.6	P
Selenium	196.03		5	4.8	P
Silver	328.07		10	0.5	P
Sodium	330.23		5000	152.1	P
Thallium	190.86		10	6.2	P
Vanadium	292.40		50	0.7	P
Zinc	213.86		20	1.1	P

Comments:

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INSTRUMENT DETECTION LIMITS (QUARTERLY)

Lab Name: COMPUCHEM Contract: 68W00082

Lab Code: LIBRTY Case No.: 29118 SAS No.: SDG NO.: ME0021

ICP ID Number: Date: 01/15/01

Flame AA ID Number: V2

Furnace AA ID Number:

Analyte	Wave-length (nm)	Back-ground	CRDL (ug/L)	IDL (ug/L)	M
Mercury	253.70		0.2	0.1	CV

Comments:

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INSTRUMENT DETECTION LIMITS (QUARTERLY)

Lab Name: COMPUCHEM Contract: 68W00082

Lab Code: LIBRTY Case No.: 29118 SAS No.: SDG NO.: ME0021

ICP ID Number: Date: 01/17/01

Flame AA ID Number: C2

Furnace AA ID Number:

Analyte	Wave-length (nm)	Back-ground	CRDL (ug/L)	IDL (ug/L)	M
Cyanide			10	0.6	CA

Comments:

PREPARATION LOG

Lab Name: COMPUCHEM Contract: 68W00082

Lab Code: LIBRTY Case No.: 29118 SAS No.: SDG NO.: ME0021

Method: P

EPA Sample No.	Preparation Date	Weight (grams)	Volume (mL)
LCSS	04/06/01	1.00	200
ME0021	04/06/01	1.00	200
ME0021D	04/06/01	1.00	200
ME0021S	04/06/01	1.00	200
ME0022	04/06/01	1.08	200
ME0023	04/06/01	1.05	200
ME0024	04/06/01	1.08	200
ME0025	04/06/01	1.06	200
ME0026	04/06/01	1.07	200
ME0027	04/06/01	1.04	200
ME0028	04/06/01	1.05	200
ME0029	04/06/01	1.06	200
ME0030	04/06/01	1.03	200
ME0031	04/06/01	1.03	200
ME0032	04/06/01	1.03	200
ME0033	04/06/01	1.04	200
ME0034	04/06/01	1.04	200
ME0035	04/06/01	1.08	200
ME0036	04/06/01	1.01	200
ME0037	04/06/01	1.03	200
ME0038	04/06/01	1.02	200
ME0039	04/06/01	1.02	200
PBS	04/06/01	1.00	200

PREPARATION LOG

Lab Name: COMPUCHEM Contract: 68W00082

Lab Code: LIBRTY Case No.: 29118 SAS No.: SDG NO.: ME0021

Method: CV

EPA Sample No.	Preparation Date	Weight (grams)	Volume (mL)
LCSS	04/06/01	0.20	100
ME0021	04/06/01	0.20	100
ME0021D	04/06/01	0.20	100
ME0021S	04/06/01	0.20	100
ME0022	04/06/01	0.21	100
ME0023	04/06/01	0.26	100
ME0024	04/06/01	0.25	100
ME0025	04/06/01	0.27	100
ME0026	04/06/01	0.21	100
ME0027	04/06/01	0.21	100
ME0028	04/06/01	0.23	100
ME0029	04/06/01	0.23	100
ME0030	04/06/01	0.23	100
ME0031	04/06/01	0.24	100
ME0032	04/06/01	0.23	100
ME0033	04/06/01	0.22	100
ME0034	04/06/01	0.22	100
ME0035	04/06/01	0.21	100
ME0036	04/06/01	0.21	100
ME0037	04/06/01	0.23	100
ME0038	04/06/01	0.21	100
ME0039	04/06/01	0.20	100
PBS	04/06/01	0.20	100

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PREPARATION LOG

Lab Name: COMPUCHEM Contract: 68W00082

Lab Code: LIBRTY Case No.: 29118 SAS No.: SDG NO.: ME0021

Method: CA

EPA Sample No.	Preparation Date	Weight (grams)	Volume (mL)
LCSS	04/10/01	1.00	50
ME0021	04/10/01	1.00	50
ME0021D	04/10/01	1.00	50
ME0021S	04/10/01	1.00	50
ME0022	04/10/01	1.04	50
ME0023	04/10/01	1.01	50
ME0024	04/10/01	1.01	50
ME0025	04/10/01	1.04	50
ME0026	04/10/01	1.02	50
ME0027	04/10/01	1.04	50
ME0028	04/10/01	1.04	50
ME0029	04/10/01	1.02	50
ME0030	04/10/01	1.00	50
ME0031	04/10/01	1.03	50
ME0032	04/10/01	1.04	50
ME0033	04/10/01	1.02	50
ME0034	04/10/01	1.04	50
ME0035	04/10/01	1.04	50
ME0036	04/10/01	1.00	50
ME0037	04/10/01	1.04	50
ME0038	04/10/01	1.04	50
ME0039	04/10/01	1.02	50
PBS	04/10/01	1.00	50