Ref 25

LPC# 199 801 0003 Madison County
Chemetco - Hartford
ILD 048 843 809
SF/HRS

Waste Samples
Volume I

EPA Region 5 Records Ctr.
347277

Analytical Results

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

Prepared by:
Office of Site Evaluation
Division of Remediation Management
Bureau of Land

ESAT Controlled Number: ESAT5.17.00091 CM 7/7/08

DATE: July 7, 2008

IEPA
Attn: Mr. Mark Wagner
1001 North Grand Avenue East
P.O. Box 19276
Springfield, IL 62794-9276

SITE NAME: Chemetco (IL)

Case	Lab	Samples	SDG	Matrix
37448	Data Chem	9	ME00E9	soil

Upon receipt of data, please check each package for completeness and note any missing deliverables below.

Send this form back to Sylvia Griffin, Data Management Coordinator after filling in the blanks below.

Data Received by:_____ Date:_____

PROBLEMS:

Please indicate if data is complete, and note if there are any deliverables missing from the cases noted above.

_____

_____

Received by Data Management Coordinator, CRL for file.

Signature:_____ Date:_____

FROM: **U.S. EPA - Region 5**
Sylvia Griffin
Central Regional Laboratory
536 S. Clark, 10th Floor
Chicago, IL 60605

Sent By: Pat Johnson
Data Coordinator
ESAT Region 5 **TechLaw**

Controlled Document

ESAT5.15.00033

acl 7-7-08

Regional Transmittal Form

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION V

DATE: 6/6/08

SUBJECT: Review of Data
Received for review on 5/30/08

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

TO: Data User: IEPA

We have reviewed the data by CADRE for the following case:

SITE NAME: Chemetco (IL)

CASE NUMBER: 37448 **SDG NUMBER:** ME00E9

Number and Type of Samples: 9 soils

Sample Numbers: ME00E9, F0-F7

Laboratory: DataChem **Hrs. for Review:** ~~18~~ 26 +2

Following are our findings:

CC: Howard Pham
Region 5 TOPO
Mail Code: SRT-4J

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

Nine (9) soil samples, numbered ME00E9, F0-F7, were collected on May 6-7, 2008. The lab received the samples on May 8, 2008 in good condition. All samples were analyzed for metals and cyanide. All samples were analyzed using the CLP SOW ILM05.4 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 Spectroscopy (ICP-AES) procedure.

Five prepped sample weights (LCS-S, ME00E9, ME00F1, ME00F5 and ME00F7D) were rounded incorrectly for mercury. Reported weights are listed as 0.20g; actual weights should have been reported as 0.21g. Reported results were corrected for this discrepancy. Three prepped sample weights (ME00F1, ME00F4 and ME00F6) were rounded incorrectly for ICP. Reported weights are listed as 1.00g; actual weights should have been reported as 1.01g for ME00F1 and ME00F4 and 0.99g for ME00F6. Reported results were corrected for these discrepancies.

No raw data for percent solids was provided. Percent solids data were presented on a computer generated spreadsheet.

Multiple dilutions were performed for multiple ICP elements for all samples. Some interfering elements were present at concentrations where significant interelement interferences were present. Initial values for some elements were negative where the absolute value was greater than the CRQL. Where appropriate, reported results were changed to diluted values where the level if interference was reduced. See Section 6 ICP Analysis for specifics.

1. HOLDING TIME:

The inorganic soil samples were reviewed for holding time violations using criteria developed for water samples. No defects were found.

2. CALIBRATIONS:

No defects were found for the calibration or the CRQL standard.

3. BLANKS:

The following inorganic samples are associated with an ICB/CCB or preparation blank concentration which is greater than the method detection limit (MDL). The sample result is greater than the MDL.

Hits less than the CRQL are qualified "U". The sample result is raised to the CRQL. Hits greater than the CRQL but less than 5 times the blank are qualified "U" and reported at the sample value.

Antimony
ME00F6

Mercury
ME00F4, ME00F5, ME00F6

Vanadium
ME00F0, ME00F1, ME00F2, ME00F7

The following inorganic samples are associated with a negative ICB/CCB or preparation blank concentration whose absolute value is greater than the method detection limit (MDL). The sample result is also greater than the MDL.

Hits less than 5 times the blank are qualified "J-".

Thallium
ME00F4

The following inorganic samples are associated with a negative ICB/CCB or preparation blank concentration whose absolute value is greater than the method detection limit (MDL). The sample result is also greater than the MDL. The samples are also associated with a positive ICSA (see Section 6 ICP Analysis).

Hits less than 5 times the blank AND less than 10 times the ICSA are qualified "J".

Arsenic
ME00F4

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

The following inorganic samples are associated with a matrix spike recovery which is high (>125%) indicating that sample results may be biased high. The post spike was not performed or not required.

Hits are qualified "J+"; non-detects are not qualified.

Mercury
ME00E9, ME00F0, ME00F1, ME00F2, ME00F3, ME00F7

The following inorganic samples are associated with a matrix spike recovery which is low (30-74%) indicating that sample results may be biased low. The required post spike was performed and results were greater than or equal to 75%.
Hits are qualified "J" and non-detects are qualified "UJ".

Antimony
ME00E9, ME00F0, ME00F1, ME00F2, ME00F3, ME00F4, ME00F5, ME00F6, ME00F7

Beryllium
ME00E9, ME00F0, ME00F1, ME00F2, ME00F3, ME00F4, ME00F5, ME00F6, ME00F7

Chromium
ME00E9, ME00F0, ME00F1, ME00F2, ME00F3, ME00F4, ME00F5, ME00F6, ME00F7

Selenium
ME00E9, ME00F0, ME00F1, ME00F2, ME00F3, ME00F4, ME00F5, ME00F6, ME00F7

Cyanide
ME00E9, ME00F0, ME00F1, ME00F2, ME00F3, ME00F4, ME00F5, ME00F6, ME00F7

The following inorganic samples are associated with a matrix spike recovery which is low (30-74%) indicating that sample results may be biased low. No post spike was required.
Hits are qualified "J-" and non-detects are qualified "UJ".

Silver
ME00E9, ME00F0, ME00F1, ME00F2, ME00F3, ME00F7

The following inorganic samples are associated with a matrix spike recovery which is low (30-74%) indicating that sample results may be biased low. No post spike was required. The samples are also associated with a positive ICSA (see Section 6 ICP Analysis).
Hits are qualified "J".

Silver
ME00F4, ME00F5, ME00F6

The following inorganic samples are associated with a matrix spike recovery which is extremely low (<30%) indicating that sample results may be biased low. The required post spike was performed and results were less than 75%.
Hits are qualified "J-" and non-detects are qualified "R".

Thallium
ME00E9, ME00F0, ME00F3, ME00F6

The following inorganic samples are associated with a matrix spike recovery which is extremely low (<30%) indicating that sample results may be biased low. The required post spike was performed and results were less than 75%. The samples are also associated with a positive ICSA (see Section 6 ICP Analysis).
Hits are qualified "J".

Thallium
ME00F1, ME00F2, ME00F4, ME00F5, ME00F7

No defects were found for the laboratory control sample.

5. LABORATORY AND FIELD DUPLICATE:

No defects were found for the laboratory duplicate samples. No samples were identified as field duplicates.

6. ICP ANALYSIS:

The following inorganic samples are associated with an ICP serial dilution percent difference which is not in control.
Hits are qualified "J" and non-detects are qualified "UJ".

Antimony
ME00E9, ME00F0, ME00F1, ME00F2, ME00F3, ME00F4, ME00F5, ME00F6, ME00F7

The following inorganic sample results are affected by an interference check "A" sample (ICSA) for which false positive concentration values greater than the MDL were obtained. The sample contains Al, Ca, Fe, or Mg at a level comparable to the ICSA.
Hits less than 10 times the value of the ICSA are qualified "J+"; non-detects are not qualified. Hits greater than 10 times the ICSA are not qualified.

Arsenic
ME00F5

The following inorganic sample results are affected by an interference check "A" sample (ICSA) for which false positive concentration values greater than the MDL were obtained. The sample contains Al, Ca, Fe, or Mg at a level comparable to the ICSA. The samples are also associated with a low matrix spike (see Section 4 Matrix Spike).
Hits less than 10 times the value of the ICSA are qualified "J"; non-detects are not qualified here.

Silver
ME00F4, ME00F5, ME00F6

Thallium
ME00F1, ME00F2, ME00F4, ME00F5, ME00F7

The following results are affected by an interference check "A" sample (ICSA) for which false positive concentration values greater than the MDL were obtained. The sample contains Al, Ca, Fe or Mg at a level comparable to that of the ICSA. The samples are also associated with a negative ICB/CCB or preparation blank concentration whose absolute value is greater than the MDL (see Section 3 Blanks).

Hits less than 10 times the absolute value of the ICSA AND less than 5 times the blank value are qualified "J".

Arsenic
ME00F4

The following results are affected by an interference check "A" sample (ICSA) for which false negative concentration values greater than the absolute value of the MDL were obtained. The sample contains Al, Ca, Fe or Mg at a level comparable to that of the ICSA.

Hits less than 10 times the absolute value of the ICSA are qualified "J-", non-detects are qualified "UJ". Hits greater than 10 times the ICSA are not qualified.

Vanadium
ME00F0, ME00F1, ME00F2, ME00F3, ME00F4, ME00F5, ME00F6, ME00F7

The following inorganic samples are associated with negative sample results whose absolute values are greater than the CRQL, indicating interference. The sample result was NOT changed to the diluted result because it was less the MDL and the matrix spike qualification would still be qualified "R" (see Section 4 Matrix Spike).

Non-detects are qualified "R".

Thallium
ME00F6

The following inorganic samples are associated with negative sample results whose absolute values are greater than the CRQL, indicating interference. Dilutions performed for other elements were no longer greater than the CRQL. Undiluted results would have been considered rejected "R"; reported results were changed to diluted values by this reviewer. Detection limits for reported results are elevated.

Non-detects are qualified "U".

Antimony
ME00F5

Thallium
ME00F4, ME00F5, ME00F7

7. SAMPLE RESULTS:

The following inorganic samples have analyte concentrations reported above the method detection limit (MDL) but below the quantitation limit (CRQL).

Results are qualified "J".

Potassium
ME00F0, ME00F1, ME00F2, ME00F3

Sodium
ME00F1, ME00F2

Thallium
ME00F4, ME00F5, ME00F7

All data, except those qualified above, are acceptable.

CADRE ILM05.4 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 result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample.
J+	The result is an estimated quantity, but the result may be biased high.
J-	The result is an estimated quantity, but the result may be biased low.
R	The data are unusable. The sample results are rejected due to serious deficiencies in meeting Quality Control (QC) criteria. The analyte may or may not be present in the sample.
UJ	The analyte was analyzed for, but not detected. The reported quantitation limit is approximate and may be inaccurate or imprecise.

Analytical Results (Qualified Data)

Case #: 37448 SDG : ME00E9
Site : CHEMETCO
Lab DATAC
Reviewer : S CONNET
Date 06/09/2008

Number of Soil Samples : 9
Number of Water Samples : 0

Sample Number :	ME00E9		ME00F0		ME00F1		ME00F2		ME00F3	
Sampling Location :	X301		X302		X303		X304		X305	
Matrix :	Soil		Soil		Soil		Soil		Soil	
Units :	mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg	
Date Sampled :	5/6/2008		5/6/2008		5/6/2008		5/6/2008		5/6/2008	
Time Sampled :										
%Solids :	90.2		79.4		48.5		47.6		64.9	
Dilution Factor :	1.0		1.0		1.0		1.0		1.0	
ANALYTE	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
ALUMINUM	6450		7800		7790		8190		8460	
ANTIMONY	42.1	J	199	J	612	J	636	J	534	J
ARSENIC	21.6		31.9		194		206		147	
BARIUM	718		528		5750		6110		1290	
BERYLLIUM	18.0	J	20.9	J	23.1	J	22.3	J	32.2	J
CADMIUM	208		234		3500		3660		3180	
CALCIUM	129000		44000		21500		21800		29400	
CHROMIUM	64.1	J	65.8	J	51.9	J	54.8	J	73.7	J
COBALT	51.1		38.1		42.3		43.8		91.8	
COPPER	33100		145000		91700		91900		108000	
IRON	66700		49100		19600		20600		29100	
LEAD	11500		23300		120000		123000		139000	
MAGNESIUM	10300		6300		2880		2980		3360	
MANGANESE	1080		1340		944		982		1020	
MERCURY	0.78	J+	2.3	J+	27.3	J+	28.9	J+	21.0	J+
NICKEL	981		1280		3870		3940		6090	
POTASSIUM	589		491	J	257	J	294	J	291	J
SELENIUM	4.5	J	5.5	J	29.0	J	31.1	J	23.3	J
SILVER	28.6	J-	61.0	J-	80.9	J-	82.6	J-	94.3	J-
SODIUM	1260		864		529	J	536	J	1160	
THALLIUM	2.8	R	3.1	R	5.5	J	6.4	J	8.3	J-
VANADIUM	13.4		6.3	UJ	10.2	UJ	10.5	UJ	8.9	
ZINC	30700		56500		214000		223000		247000	
CYANIDE	2.8	UJ	3.1	UJ	5.2	UJ	5.3	UJ	3.9	UJ

Analytical Results (Qualified Data)

Case #: 37448 SDG ME00E9
Site : CHEMETCO
Lab. : DATAC
Reviewer S CONNET
Date 06/09/2008

Sample Number :	ME00F4		ME00F5		ME00F6		ME00F7			
Sampling Location	X306		X307		X308		X309			
Matrix :	Soil		Soil		Soil		Soil			
Units :	mg/Kg		mg/Kg		mg/Kg		mg/Kg			
Date Sampled	5/6/2008		5/6/2008		5/6/2008		5/6/2008			
Time Sampled :										
%Solids :	97.8		97.3		96.0		98.6			
Dilution Factor :	1.0		1.0		1.0		1.0			
ANALYTE	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
ALUMINUM	17800		15800		7250		9550			
ANTIMONY	6.1	UJ	12.3	UJ	6.3	UJ	50.6	J		
ARSENIC	1.0	J	4.7	J+	7.4		43.3			
BARIUM	1110		934		507		2190			
BERYLLIUM	109	J	78.3	J	52.3	J	33.0	J		
CADMIUM	12.0		32.2		42.9		441			
CALCIUM	9150		11600		11500		20500			
CHROMIUM	296	J	180	J	97.8	J	126	J		
COBALT	172		165		135		110			
COPPER	8910		4140		8550		38400			
IRON	251000		248000		183000		186000			
LEAD	10100		11300		8190		27900			
MAGNESIUM	3920		4060		4000		3900			
MANGANESE	2900		2770		2010		1980			
MERCURY	0.10	U	0.098	U	0.12	U	1.2	J+		
NICKEL	975		554		546		1050			
POTASSIUM	1550		1150		597		692			
SELENIUM	4.8	J	5.1	J	3.8	J	6.3	J		
SILVER	9.8	J	7.9	J	9.3	J	37.2	J-		
SODIUM	5690		5910		1830		2410			
THALLIUM	0.85	J	3.7	J	2.6	R	6.1	J		
VANADIUM	5.1	UJ	5.1	UJ	5.3	UJ	5.1	UJ		
ZINC	67200		79100		67000		81400			
CYANIDE	2.6	UJ	2.6	UJ	2.6	UJ	2.5	UJ		

JSEPA Contract Laboratory Program
Inorganic Traffic Report & Chain of Custody Recor

Case No: 37448
DAS No:
SDG No: ME00E9

L

Date Shipped:	5/7/2008
Carrier Name:	UPS
Airbill:	1Z6215892210027210
Shipped to:	DataChem Laboratories, Inc. 960 West LeVoy Drive Salt Lake City UT 84123 (801) 266-7700

Chain of Custody Record

Relinquished By	(Date / Time)	Received By	(Date / Time)
1 [signature]	5/7/08 1200	[signature]	5/8/08 1105
2			
3			
4			

Sampler Signature: [signature]

For Lab Use Only

Lab Contract No: EPW06054
Unit Price: N/A
Transfer To: [signature] 5/8/08
Lab Contract No:
Unit Price:

INORGANIC SAMPLE No.	MATRIX/ SAMPLER	CONC/ TYPE	ANALYSIS/ TURNAROUND	TAG No./ PRESERVATIVE/ Bottles	STATION LOCATION	SAMPLE COLLECT DATE/TIME	ORGANIC SAMPLE No.	FOR LAB USE ONLY Sample Condition On Receipt
ME00E4	Soil/Sediment/ Jerry Willman	L/G	ICP, Hg,CN (21)	5-303513 (Ice Only) (1)	X101	S: 5/6/2008 10:55		
ME00E5	Soil/Sediment/ Jerry Willman	L/G	ICP, Hg,CN (21)	5-303514 (Ice Only) (1)	X102	S: 5/6/2008 11:20		
ME00E6	Soil/Sediment/ Jerry Willman	L/G	ICP, Hg,CN (21)	5-303515 (Ice Only) (1)	X103	S: 5/6/2008 12:00		
ME00E7	Soil/Sediment/ Jerry Willman	L/G	ICP, Hg,CN (21)	5-303516 (Ice Only) (1)	X104	S: 5/6/2008 12:05		
ME00E9	Waste/ Jerry Willman	L/G	ICP, Hg,CN (21)	5-303518 (Ice Only) (1)	X301	S: 5/6/2008 12:25		
ME00F0	Waste/ Jerry Willman	L/G	ICP, Hg,CN (21)	5-303519 (Ice Only) (1)	X302	S: 5/6/2008 12:30		
ME00F1	Waste/ Jerry Willman	L/G	ICP, Hg,CN (21)	5-303520 (Ice Only) (1)	X303	S: 5/6/2008 13:30		
ME00F2	Waste/ Jerry Willman	L/G	ICP, Hg,CN (21)	5-303521 (Ice Only) (1)	X304	S: 5/6/2008 13:30		
ME00F3	Waste/ Jerry Willman	L/G	ICP, Hg,CN (21)	5-303522 (Ice Only) (1)	X305	S: 5/6/2008 13:40		
ME00F4	Waste/ Jerry Willman	L/G	ICP, Hg,CN (21)	5-303523 (Ice Only) (1)	X306	S: 5/6/2008 13:50		

[signature] 5/8/08

Shipment for Case Complete?N	Sample(s) to be used for laboratory QC:	Additional Sampler Signature(s):	Cooler Temperature Upon Receipt: 4	Chain of Custody Seal Number: 89335
Analysis Key:	Concentration: L = Low, M = Low/Medium, H = High	Type/Designate: Composite = C, Grab = G		Custody Seal Intact? Y / Shipment Iced? YES

ICP, Hg,CN = CLP ICP Metals, Hg, CN

TR Number: 5-162075208-050708-0001

PR provides preliminary results. Requests for preliminary results will increase analytical costs.
Send Copy to: Sample Management Office, Attn: Heather Bauer, CSC, 15000 Conference Center Dr., Chantilly, VA 20151-3819; Phone 703/818-4200; Fax 703/818-4602

JSEPA Contract Laboratory Program
Inorganic Traffic Report & Chain of Custody Record

Case No: 37448
DAS No:
SDG No: ME00F9

L

Date Shipped: 5/7/2008
Carrier Name: UPS
Airbill: 1Z0215092210027210
Shipped to: DataChem Laboratories, Inc
960 West LeVoy Drive
Salt Lake City UT 84123
(801) 266-7700

Chain of Custody Record

Sampler Signature:

Relinquished By	(Date / Time)	Received By	(Date / Time)
1			
2			
3			
4			

For Lab Use Only

Lab Contract No:
Unit Price:
Transfer To:
Lab Contract No:
Unit Price:

INORGANIC SAMPLE No.	MATRIX/ SAMPLER	CONC/ TYPE	ANALYSIS/ TURNAROUND	TAG No./ PRESERVATIVE/ Bottles	STATION LOCATION	SAMPLE COLLECT DATE/TIME	ORGANIC SAMPLE No.	FOR LAB USE ONLY Sample Condition On Receipt
ME00F5	Waste/ Jerry Willman	L/G	ICP, Hg,CN (21)	5-303524 (Ice Only) (1)	X307	S: 5/6/2008 14:30		
ME00F6	Waste/ Jerry Willman	L/G	ICP, Hg,CN (21)	5-303525 (Ice Only) (1)	X308	S: 5/6/2008 14:40		
ME00F7	Waste/ Jerry Willman	L/G	ICP, Hg,CN (21)	5-303526 (Ice Only) (1)	X309	S: 5/6/2008 14:45		
ME00F8	Soil/Sediment/ Jerry Willman	L/G	ICP, Hg,CN (21)	5-303527 (Ice Only) (1)	X105	S: 5/6/2008 15:10		
ME00F9	Soil/Sediment/ Jerry Willman	L/G	ICP, Hg,CN (21)	5-303528 (Ice Only) (1)	X106	S: 5/6/2008 15:15		
ME00G0	Soil/Sediment/ Jerry Willman	L/G	ICP, Hg,CN (21)	5-303529 (Ice Only) (1)	X107	S: 5/7/2008 9:20		
ME00G1	Soil/Sediment/ Jerry Willman	L/G	ICP, Hg,CN (21)	5-303530 (Ice Only) (1)	X108	S: 5/7/2008 9:30		

Shipment for Case Complete?N	Sample(s) to be used for laboratory QC:	Additional Sampler Signature(s):	Cooler Temperature Upon Receipt: 4	Chain of Custody Seal Number: 89335
Analysis Key:	Concentration: L = Low, M = Low/Medium, H = High	Type/Designate: Composite = C, Grab = G		Custody Seal Intact? Y Shipment Iced? YES

ICP, Hg,CN = CLP ICP Metals, Hg, CN

TR Number: 5-162075208-050708-0001

PR provides preliminary results. Requests for preliminary results will increase analytical costs.
Send Copy to: Sample Management Office, Attn: Heather Bauer, CSC, 15000 Conference Center Dr., Chantilly, VA 20151-3819; Phone 703/818-4200; Fax 703/818-4602

DATA CHEM LABORATORIES, INC.

SDG NARRATIVE

Case #: 37448
SDG#: ME00E9
Contract #: EP-W-06-054
DCL Set ID#: 8129031
May 28, 2008

General Information

The nine samples in this SDG were analyzed by methodologies contained in ILM05.4. All concentration, analytical, and method qualifiers are defined in the SOW.

Holding Times

All samples were prepared and analyzed within method required holding times.

Initial and Continuing Calibration

All initial and continuing calibration verification and blank analyses were performed within the designated frequency and recoveries of the verifications and concentrations of the blanks met method acceptance criteria.

Interference Check Sample Analysis

Results for the interference check samples met method acceptance criteria.

Preparation Blanks

The absolute values of all analyte concentrations in the preparation blanks were lower than the Contract Required Quantitation Limits.

Laboratory Control Sample Analysis

Results for the analysis of the LCS met method acceptance criteria.

Matrix Spike Analysis

All matrix spike recoveries were within the limits of 75-125% with the exceptions of antimony, beryllium, chromium, mercury, selenium, silver, thallium and cyanide.

Matrix Duplicate Analysis

All matrix duplicate results met method criteria with the exceptions of antimony, copper and nickel.

Serial Dilution

ICP-AES Serial Dilution results met method acceptance criteria with the exception of antimony.

Miscellaneous Comments

All calibration data is linear, please see raw data.
Cooler temps were at 4 °C at time of receipt.

Issues – The TR/COC did not designate laboratory QC, we selected sample ME00F7 for this SDG.

Example Equations

Method HS1: $C \times DF \times \frac{Vf}{Wi} \div S = Concentration(\mu g/g) = Concentration\ (mg/Kg)$

960 West LeVoy Drive • Salt Lake City, Utah 84123-2502 • (800) 356-9135 • (801) 266-7700 • Fax (801) 268-9992
www.datachem.com

Method CS2: $C \times DF \times \frac{Vf}{Wi} \div S = Concentration(\mu g/g) = Concentration\ (mg/Kg)$

Method DS2: $C \times DF \times \frac{Vf}{Wi} \div S = Concentration(\mu g/g) = Concentration\ (mg/Kg)$

C = Instrument value in µg/L (The average of all replicate integrations).
Vf = Final digestion volume (L)
Wi = Initial digestion Weight (g)
DF = Dilution Factor
S = % Solids/100

USEPA - CLP

COVER PAGE

Lab Name: DATACHEM LABORATORIES Contract: EP-W-06-054

Lab Code: DATAC Case No.: 37448 NRAS No.: _____ SDG No.: ME00E9

SOW No.: ILM05.4

EPA Sample No.	Lab Sample ID
ME00E9	8129031001
ME00F0	8129031002
ME00F1	8129031003
ME00F2	8129031004
ME00F3	8129031005
ME00F4	8129031006
ME00F5	8129031007
ME00F6	8129031008
ME00F7	8129031009
ME00F7D	8129031011
ME00F7S	8129031010

		ICP-AES	ICP-MS
Were ICP-AES and ICP-MS Interelement corrections applied?	(Yes/No)	YES	NO
Were ICP-AES and ICP-MS background corrections applied?	(Yes/No)	YES	NO
If yes - were raw data generated before application of background corrections?	(Yes/No)	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 diskette (or via an alternate means of electronic transmission, if approved in advance by USEPA) has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature: _____ Name: Neil Edwards

Date: 05/28/2008 Title: Chemist

USEPA - CLP

3-IN
BLANKS

Lab Name: DATACHEM LABORATORIES Contract: EP-W-06-054

Lab Code: DATAC Case No.: 37448 NRAS No.: _____ SDG No.: ME00E9

Preparation Blank Matrix (soil/water): SOIL

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

	Initial Calibration Blank (ug/L)		Continuing Calibration Blank (ug/L)						Preparation Blank		
Analyte		C	1	C	2	C	3	C		C	M
Aluminum	200.000	U	200.000	U	200.000	U	200.000	U	20.000	U	P
Antimony	60.000	U	60.000	U	2.160	J	60.000	U	6.000	U	P
Arsenic	10.000	U	10.000	U	10.000	U	10.000	U	-0.258	J	P
Barium	200.000	U	200.000	U	0.438	J	200.000	U	20.000	U	P
Beryllium	5.000	U	5.000	U	5.000	U	0.151	J	0.500	U	P
Cadmium	5.000	U	0.192	J	1.425	J	0.328	J	0.500	U	P
Calcium	5000.000	U	5000.000	U	5000.000	U	5000.000	U	500.000	U	P
Chromium	10.000	U	1.023	J	10.000	U	10.000	U	1.000	U	P
Cobalt	0.462	J	1.163	J	1.013	J	0.716	J	5.000	U	P
Copper	25.000	U	25.000	U	34.146		25.000	U			P
Iron	100.000	U	100.000	U	100.000	U	100.000	U	10.000	U	P
Lead	-2.275	J	10.000	U	36.565		2.100	J			P
Magnesium	5000.000	U	5000.000	U	5000.000	U	5000.000	U	500.000	U	P
Manganese	15.000	U	15.000	U	15.000	U	15.000	U	1.500	U	P
Mercury	0.200	U	0.035	J	0.055	J	0.046	J	0.100	U	CV
Nickel	40.000	U	40.000	U	2.110	J	40.000	U	4.000	U	P
Potassium	5000.000	U	5000.000	U	5000.000	U	5000.000	U	500.000	U	P
Selenium	35.000	U	-2.668	J	35.000	U	35.000	U	3.500	U	P
Silver	-0.292	J	10.000	U	-0.802	J	0.868	J	1.000	U	P
Sodium	5000.000	U	5000.000	U	5000.000	U	5000.000	U	500.000	U	P
Thallium	25.000	U	25.000	U	-0.986	J	25.000	U	2.500	U	P
Vanadium	50.000	U	1.001	J	0.863	J	50.000	U	5.000	U	P
Zinc	60.000	U	60.000	U	77.328		13.953	J			P
Cyanide	-3.210	J	-2.136	J	10.000	U	1.983	J	2.500	U	AS

USEPA - CLP

3-IN
BLANKS

Lab Name: DATACHEM LABORATORIES Contract: EP-W-06-054

Lab Code: DATAC Case No.: 37448 NRAS No.: _____ SDG No.: ME00E9

Preparation Blank Matrix (soil/water): SOIL

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

	Initial Calibration Blank (ug/L)		Continuing Calibration Blank (ug/L)						Preparation Blank		
Analyte		C	1	C	2	C	3	C		C	M
Aluminum			200.000	U	34.019	J					P
Antimony			60.000	U	60.000	U					P
Arsenic			10.000	U	10.000	U					P
Barium			200.000	U	0.615	J					P
Beryllium			0.139	J	0.181	J					P
Cadmium			0.178	J	0.184	J					P
Calcium			5000.000	U	32.514	J					P
Chromium			10.000	U	10.000	U					P
Cobalt			0.784	J	0.614	J					P
Copper			25.000	U	25.000	U					P
Iron			100.000	U	13.863	J					P
Lead			-1.662	J	-1.602	J					P
Magnesium			5000.000	U	5000.000	U					P
Manganese			0.331	J	0.695	J					P
Mercury			0.200	U							CV
Nickel			40.000	U	40.000	U					P
Potassium			5000.000	U	5000.000	U					P
Selenium			35.000	U	35.000	U					P
Silver			0.493	J	0.298	J					P
Sodium			5000.000	U	5000.000	U					P
Thallium			25.000	U	-0.892	J					P
Vanadium			50.000	U	1.431	J					P
Zinc			9.449	J	5.156	J					P
Cyanide			10.000	U							AS

USEPA - CLP

3-IN
BLANKS

Lab Name: DATACHEM LABORATORIES Contract: EP-W-06-054

Lab Code: DATAC Case No.: 37448 NRAS No.: _____ SDG No.: ME00E9

Preparation Blank Matrix (soil/water): SOIL

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

Analyte	Initial Calibration Blank (ug/L)		Continuing Calibration Blank (ug/L)						Preparation Blank		
		C	1	C	2	C	3	C		C	M
Aluminum											NR
Antimony											NR
Arsenic											NR
Barium											NR
Beryllium											NR
Cadmium	0.092	J	0.154	J	0.109	J	0.157	J			P
Calcium											NR
Chromium											NR
Cobalt											NR
Copper	25.000	U	25.000	U	25.000	U	25.000	U	0.862	J	P
Iron											NR
Lead	10.000	U	10.000	U	10.000	U	1.860	J	0.579	J	P
Magnesium											NR
Manganese											NR
Mercury											NR
Nickel											NR
Potassium											NR
Selenium	35.000	U	35.000	U	35.000	U	35.000	U			P
Silver											NR
Sodium											NR
Thallium											NR
Vanadium											NR
Zinc	60.000	U	60.000	U	60.000	U	60.000	U	1.211	J	P
Cyanide											NR

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3-IN
BLANKS

Lab Name: DATACHEM LABORATORIES Contract: EP-W-06-054

Lab Code: DATAC Case No.: 37448 NRAS No.: _____ SDG No.: ME00E9

Preparation Blank Matrix (soil/water): SOIL

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

	Initial Calibration Blank (ug/L)		Continuing Calibration Blank (ug/L)						Preparation Blank		
Analyte		C	1	C	2	C	3	C		C	M
Aluminum											NR
Antimony											NR
Arsenic											NR
Barium											NR
Beryllium											NR
Cadmium			0.312	J	0.146	J	0.165	J			P
Calcium											NR
Chromium											NR
Cobalt											NR
Copper			25.000	U	25.000	U	25.000	U			P
Iron											NR
Lead			10.000	U							P
Magnesium											NR
Manganese											NR
Mercury											NR
Nickel											NR
Potassium											NR
Selenium											NR
Silver											NR
Sodium											NR
Thallium											NR
Vanadium											NR
Zinc			12.010	J	60.000	U	60.000	U			P
Cyanide											NR

USEPA - CLP

3-IN
BLANKS

Lab Name: DATACHEM LABORATORIES Contract: EP-W-06-054

Lab Code: DATAC Case No.: 37448 NRAS No.: _____ SDG No.: ME00E9

Preparation Blank Matrix (soil/water): SOIL

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

	Initial Calibration Blank (ug/L)		Continuing Calibration Blank (ug/L)						Preparation Blank		
Analyte		C	1	C	2	C	3	C		C	M
Aluminum											NR
Antimony											NR
Arsenic											NR
Barium											NR
Beryllium											NR
Cadmium											NR
Calcium											NR
Chromium											NR
Cobalt											NR
Copper	25.000	U	25.000	U	25.000	U	2.931	J			P
Iron											NR
Lead	10.000	U	1.282	J	1.684	J	10.000	U			P
Magnesium											NR
Manganese											NR
Mercury											NR
Nickel											NR
Potassium											NR
Selenium											NR
Silver											NR
Sodium											NR
Thallium											NR
Vanadium											NR
Zinc	60.000	U	60.000	U	60.000	U	8.833	J			P
Cyanide											NR

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3-IN
BLANKS

Lab Name: DATACHEM LABORATORIES Contract: EP-W-06-054

Lab Code: DATAC Case No.: 37448 NRAS No.: _____ SDG No.: ME00E9

Preparation Blank Matrix (soil/water): SOIL

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

	Initial Calibration Blank (ug/L)		Continuing Calibration Blank (ug/L)						Preparation Blank		
Analyte		C	1	C	2	C	3	C		C	M
Aluminum											NR
Antimony											NR
Arsenic											NR
Barium											NR
Beryllium											NR
Cadmium											NR
Calcium											NR
Chromium											NR
Cobalt											NR
Copper			25.000	U							P
Iron											NR
Lead											NR
Magnesium											NR
Manganese											NR
Mercury											NR
Nickel											NR
Potassium											NR
Selenium											NR
Silver											NR
Sodium											NR
Thallium											NR
Vanadium											NR
Zinc			60.000	U							P
Cyanide											NR

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3-IN
BLANKS

Lab Name: DATACHEM LABORATORIES Contract: EP-W-06-054

Lab Code: DATAC Case No.: 37448 NRAS No.: _____ SDG No.: ME00E9

Preparation Blank Matrix (soil/water): SOIL

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

	Initial Calibration Blank (ug/L)		Continuing Calibration Blank (ug/L)						Preparation Blank		
Analyte		C	1	C	2	C	3	C		C	M
Aluminum											NR
Antimony											NR
Arsenic											NR
Barium											NR
Beryllium											NR
Cadmium											NR
Calcium											NR
Chromium											NR
Cobalt											NR
Copper	25.000	U	25.000	U	2.767	J	25.000	U			P
Iron											NR
Lead											NR
Magnesium											NR
Manganese											NR
Mercury											NR
Nickel											NR
Potassium											NR
Selenium											NR
Silver											NR
Sodium											NR
Thallium											NR
Vanadium											NR
Zinc	60.000	U	60.000	U	3.374	J	60.000	U			P
Cyanide											NR

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4A-IN
ICP-AES INTERFERENCE CHECK SAMPLE

Lab Name: DATACHEM LABORATORIES Contract: EP-W-06-054

Lab Code: DATAC Case No.: 37448 NRAS No.: _____ SDG No.: ME00E9

ICP-AES Instrument ID: ICP07 ICS Source: EPA(1206)

Concentration Units: ug/L

Analyte	True		Initial Found				Final Found			
	Sol. A	Sol. AB	Sol. A	%R	Sol. AB	%R	Sol. A	%R	Sol. AB	%R
Aluminum	244000		254000	104			251000	103		
Antimony	0.0		-1.1				0.50			
Arsenic	0.0		6.2				5.2			
Barium	2.0		2.5	125			2.4	120		
Beryllium	0.0		0.47				0.57			
Cadmium	0.0		-0.58				-0.35			
Calcium	235000		250000	106			253000	108		
Chromium	43.0		49.1	114			49.1	114		
Cobalt	4.0		3.1	78			3.3	83		
Copper	23.0		24.6	107			33.8	147		
Iron	95600		99100	104			98600	103		
Lead	10.0		10.1	101			20.4	204		
Magnesium	248000		268000	108			269000	109		
Manganese	19.0		19.8	104			20.0	105		
Nickel	21.0		24.8	118			26.1	124		
Potassium	0.0		-8.2				-28.2			
Selenium	0.0		-0.076				-3.6			
Silver	0.0		14.5				14.7			
Sodium	0.0		834.				824.			
Thallium	0.0		4.9				4.4			
Vanadium	0.0		-3.9				-3.5			
Zinc	28.0		34.9	125			81.6	291		

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4A-IN
ICP-AES INTERFERENCE CHECK SAMPLE

Lab Name: DATACHEM LABORATORIES Contract: EP-W-06-054

Lab Code: DATAC Case No.: 37448 NRAS No.: _____ SDG No.: ME00E9

ICP-AES Instrument ID: ICP07 ICS Source: EPA(1206)

Concentration Units: ug/L

Analyte	True		Initial Found				Final Found			
	Sol. A	Sol. AB	Sol. A	%R	Sol. AB	%R	Sol. A	%R	Sol. AB	%R
Aluminum	244000						253000	104		
Antimony	0.0						0.50			
Arsenic	0.0						6.5			
Barium	2.0						2.5	125		
Beryllium	0.0						0.52			
Cadmium	0.0						-0.39			
Calcium	235000						255000	109		
Chromium	43.0						50.5	117		
Cobalt	4.0						3.1	78		
Copper	23.0						26.8	117		
Iron	95600						99000	104		
Lead	10.0						11.1	111		
Magnesium	248000						271000	109		
Manganese	19.0						20.0	105		
Nickel	21.0						25.5	121		
Potassium	0.0						-29.5			
Selenium	0.0						-2.2			
Silver	0.0						15.1			
Sodium	0.0						837.			
Thallium	0.0						3.3			
Vanadium	0.0						-4.1			
Zinc	28.0						42.1	150		

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4A-IN
ICP-AES INTERFERENCE CHECK SAMPLE

Lab Name: DATACHEM LABORATORIES Contract: EP-W-06-054

Lab Code: DATAC Case No.: 37448 NRAS No.: _____ SDG No.: ME00E9

ICP-AES Instrument ID: ICP07 ICS Source: EPA(1206)

Concentration Units: ug/L

Analyte	True		Initial Found				Final Found			
	Sol. A	Sol. AB	Sol. A	%R	Sol. AB	%R	Sol. A	%R	Sol. AB	%R
Aluminum	244000		255000	104			257000	105		
Antimony										
Arsenic										
Barium										
Beryllium										
Cadmium	0.0		-0.47				-0.23			
Calcium	235000		253000	108			254000	108		
Chromium										
Cobalt										
Copper	23.0		25.3	110			26.0	113		
Iron	95600		99700	104			99900	104		
Lead										
Magnesium	248000		270000	109			271000	109		
Manganese										
Nickel										
Potassium										
Selenium										
Silver										
Sodium										
Thallium										
Vanadium										
Zinc	28.0		39.8	142			44.8	160		

USEPA - CLP

4A-IN
ICP-AES INTERFERENCE CHECK SAMPLE

Lab Name: DATACHEM LABORATORIES Contract: EP-W-06-054

Lab Code: DATAC Case No.: 37448 NRAS No.: _____ SDG No.: ME00E9

ICP-AES Instrument ID: ICP07 ICS Source: EPA(1206)

Concentration Units: ug/L

Analyte	True		Initial Found				Final Found			
	Sol. A	Sol. AB	Sol. A	%R	Sol. AB	%R	Sol. A	%R	Sol. AB	%R
Aluminum	244000						257000	105		
Antimony										
Arsenic										
Barium										
Beryllium										
Cadmium	0.0						-0.43			
Calcium	235000						254000	108		
Chromium										
Cobalt										
Copper	23.0						25.5	111		
Iron	95600						99300	104		
Lead										
Magnesium	248000						270000	109		
Manganese										
Nickel										
Potassium										
Selenium										
Silver										
Sodium										
Thallium										
Vanadium										
Zinc	28.0						54.9	196		

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4A-IN
ICP-AES INTERFERENCE CHECK SAMPLE

Lab Name: DATACHEM LABORATORIES Contract: EP-W-06-054

Lab Code: DATAC Case No.: 37448 NRAS No.: _____ SDG No.: ME00E9

ICP-AES Instrument ID: ICP07 ICS Source: EPA(1206)

Concentration Units: ug/L

Analyte	True		Initial Found				Final Found			
	Sol. A	Sol. AB	Sol. A	%R	Sol. AB	%R	Sol. A	%R	Sol. AB	%R
Aluminum	244000						256000	105		
Antimony										
Arsenic										
Barium										
Beryllium										
Cadmium	0.0						-0.43			
Calcium	235000						257000	109		
Chromium										
Cobalt										
Copper	23.0						25.4	110		
Iron	95600						99000	104		
Lead										
Magnesium	248000						269000	109		
Manganese										
Nickel										
Potassium										
Selenium										
Silver										
Sodium										
Thallium										
Vanadium										
Zinc	28.0						37.7	135		

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4A-IN
ICP-AES INTERFERENCE CHECK SAMPLE

Lab Name: DATACHEM LABORATORIES Contract: EP-W-06-054

Lab Code: DATAC Case No.: 37448 NRAS No.: _____ SDG No.: ME00E9

ICP-AES Instrument ID: ICP07 ICS Source: EPA(1206)

Concentration Units: ug/L

Analyte	True		Initial Found				Final Found			
	Sol. A	Sol. AB	Sol. A	%R	Sol. AB	%R	Sol. A	%R	Sol. AB	%R
Aluminum	244000		254000	104			256000	105		
Antimony										
Arsenic										
Barium										
Beryllium										
Cadmium										
Calcium	235000		254000	108			256000	109		
Chromium										
Cobalt										
Copper	23.0		24.2	105			24.4	106		
Iron	95600		100000	105			100000	105		
Lead	10.0		14.4	144			12.4	124		
Magnesium	248000		272000	110			273000	110		
Manganese										
Nickel										
Potassium										
Selenium										
Silver										
Sodium										
Thallium										
Vanadium										
Zinc	28.0		36.0	129			36.3	130		

USEPA - CLP

4A-IN
ICP-AES INTERFERENCE CHECK SAMPLE

Lab Name: DATACHEM LABORATORIES Contract: EP-W-06-054

Lab Code: DATAC Case No.: 37448 NRAS No.: _____ SDG No.: ME00E9

ICP-AES Instrument ID: ICP07 ICS Source: EPA(1206)

Concentration Units: ug/L

Analyte	True		Initial Found				Final Found			
	Sol. A	Sol. AB	Sol. A	%R	Sol. AB	%R	Sol. A	%R	Sol. AB	%R
Aluminum	244000						252000	103		
Antimony										
Arsenic										
Barium										
Beryllium										
Cadmium										
Calcium	235000						257000	109		
Chromium										
Cobalt										
Copper	23.0						24.7	107		
Iron	95600						99100	104		
Lead	10.0						16.2	162		
Magnesium	248000						272000	110		
Manganese										
Nickel										
Potassium										
Selenium										
Silver										
Sodium										
Thallium										
Vanadium										
Zinc	28.0						40.7	145		

USEPA - CLP

4A-IN
ICP-AES INTERFERENCE CHECK SAMPLE

Lab Name: DATACHEM LABORATORIES Contract: EP-W-06-054

Lab Code: DATAC Case No.: 37448 NRAS No.: _____ SDG No.: ME00E9

ICP-AES Instrument ID: ICP07 ICS Source: EPA(1206)

Concentration Units: ug/L

Analyte	True		Initial Found				Final Found			
	Sol. A	Sol. AB	Sol. A	%R	Sol. AB	%R	Sol. A	%R	Sol. AB	%R
Aluminum	244000		257000	105			248000	102		
Antimony										
Arsenic										
Barium										
Beryllium										
Cadmium										
Calcium	235000		251000	107			227000	97		
Chromium										
Cobalt										
Copper	23.0		25.3	110			25.4	110		
Iron	95600		100000	105			93400	98		
Lead	10.0		19.4	194			16.8	168		
Magnesium	248000		269000	109			246000	99		
Manganese										
Nickel										
Potassium										
Selenium	0.0		0.24				2.8			
Silver										
Sodium										
Thallium										
Vanadium										
Zinc	28.0		35.3	126			36.3	130		

USEPA - CLP

5A-IN
MATRIX SPIKE SAMPLE RECOVERY

EPA Sample No.

ME00F7S

Lab Name: DATACHEM LABORATORIES Contract: EP-W-06-054

Lab Code: DATAC Case No.: 37448 NRAS No.: _____ SDG No.: ME00E9

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

% Solids for Sample: 98.6

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
Aluminum									NR
Antimony	75-125	64.1494		50.5997		20.28	67	N	P
Arsenic		49.1792		43.3276		8.11	72		P
Barium		2271.8053		2190.3651		405.68	20		P
Beryllium	75-125	39.3249		33.0284		10.14	62	N	P
Cadmium		409.7194		441.0784		10.14	-309		P
Calcium									NR
Chromium	75-125	153.7424		126.4571		40.57	67	N	P
Cobalt	75-125	225.9162		110.0676		101.42	114		P
Copper		42790.3990		38371.1968		50.71	8715		P
Iron									NR
Lead		27265.0439		27884.3813		4.06	-15255		P
Magnesium									NR
Manganese		1866.2272		1977.0791		101.42	-109		P
Mercury	75-125	1.9760		1.2391		0.51	144	N	CV
Nickel		1275.2874		1049.7972		101.42	222		P
Potassium									NR
Selenium	75-125	13.4689		6.2709		10.14	71	N	P
Silver	75-125	43.8262		37.2224		10.14	65	N	P
Sodium									NR
Thallium	75-125	4.8711		2.5355	U	10.14	48	N	P
Vanadium	75-125	99.4604		0.1583	J	101.42	98		P
Zinc		72518.2556		81419.5406		101.42	-8777		P
Cyanide	75-125	1.7670	J	2.5355	U	5.07	35	N	AS

Comments:

USEPA - CLP

5B-IN

POST-DIGESTION SPIKE SAMPLE RECOVERY

EPA Sample No.

ME00F7A

Lab Name: DATACHEM LABORATORIES Contract: EP-W-06-054

Lab Code: DATAC Case No.: 37448 NRAS No.: _____ SDG No.: ME00E9

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

% Solids for Sample: 98.6

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									NR
Antimony		1559.27		498.91		998.00	106		P
Arsenic									NR
Barium									NR
Beryllium		904.00		325.66		651.00	89		P
Cadmium									NR
Calcium									NR
Chromium		4511.67		1246.87		2490.00	131		P
Cobalt									NR
Copper									NR
Iron									NR
Lead									NR
Magnesium									NR
Manganese									NR
Mercury									NR
Nickel									NR
Potassium									NR
Selenium		231.46		61.83		124.00	137		P
Silver									NR
Sodium									NR
Thallium		25.00	U	25.00	U	50.00	0		P
Vanadium									NR
Zinc									NR
Cyanide		107.45		50.00	U	100.00	107		AS

Comments:

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6-IN
DUPLICATES

EPA Sample No.

ME00F7D

Lab Name: DATACHEM LABORATORIES Contract: EP-W-06-054

Lab Code: DATAC Case No.: 37448 NRAS No.: _____ SDG No.: ME00E9

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

% Solids for Sample: 98.6 % Solids for Duplicate: 98.7

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

Analyte	Control Limit	Sample (S)	C	Duplicate (D)	C	RPD	Q	M
Aluminum		9547.9378		9509.3982		0		P
Antimony		50.5997		64.9922		25	*	P
Arsenic		43.3276		42.7836		1		P
Barium		2190.3651		2150.3043		2		P
Beryllium		33.0284		32.3874		2		P
Cadmium		441.0784		454.3543		3		P
Calcium		20464.1650		22035.8350		7		P
Chromium		126.4571		131.4469		4		P
Cobalt		110.0676		110.7573		1		P
Copper		38371.1968		47171.7377		21	*	P
Iron		186020.9601		175567.9513		6		P
Lead		27884.3813		27982.0825		0		P
Magnesium		3901.6903		3865.6525		1		P
Manganese		1977.0791		2054.6991		4		P
Mercury		1.2391		1.3412		8		CV
Nickel		1049.7972		1472.3462		34	*	P
Potassium	507.099	691.6633		660.5713		5		P
Selenium	3.550	6.2709		6.4196		2		P
Silver		37.2224		35.7847		4		P
Sodium	507.099	2414.5030		2291.0412		5		P
Thallium		2.5355	U	2.5355	U			P
Vanadium		0.1583	J	0.3171	J	67		P
Zinc		81419.5406		81694.3884		0		P
Cyanide		2.5355	U	2.5355	U			AS

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8-IN

ICP-AES and ICP-MS SERIAL DILUTIONS

EPA Sample No.

ME00F7L

Lab Name: DATACHEM LABORATORIES Contract: EP-W-06-054

Lab Code: DATAC Case No.: 37448 NRAS No.: _____ SDG No.: ME00E9

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	94142.67		92581.67		2		P
Antimony	498.91		398.77		20	E	P
Arsenic	427.21		420.04		2		P
Barium	21597.00		21895.00		1		P
Beryllium	325.66		335.37		3		P
Cadmium	4349.03		4186.40		4		P
Calcium	201776.67		210408.33		4		P
Chromium	1246.87		1147.15		8		P
Cobalt	1085.27		1027.72		5		P
Copper	18917.00		19604.50		4		P
Iron	183416.67		191905.00		5		P
Lead	27494.00		27045.50		2		P
Magnesium	38470.67		39068.83		2		P
Manganese	19494.00		20238.00		4		P
Nickel	10351.00		10009.00		3		P
Potassium	6819.80		6593.00	J	3		P
Selenium	61.83		53.03	J	14		P
Silver	367.01		380.01		4		P
Sodium	23807.00		22883.50	J	4		P
Thallium	25.00	U	51.38	J			P
Vanadium	1.56	J	250.00	U	100		P
Zinc	8027.97		8158.17		2		P

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9-IN
METHOD DETECTION LIMITS (ANNUALLY)

Lab Name: DATACHEM LABORATORIES Contract: EP-W-06-054

Lab Code: DATAC Case No.: 37448 NRAS No.: _____ SDG No.: ME00E9

Instrument Type: CV Instrument ID: AACV01 Date: 01/11/2008

Preparation Method: CS1

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

Analyte	Wavelength /Mass	CRQL	MDL
Aluminum			
Antimony			
Arsenic			
Barium			
Beryllium			
Cadmium			
Calcium			
Chromium			
Cobalt			
Copper			
Iron			
Lead			
Magnesium			
Manganese			
Mercury	253.70	0.1	0.012
Nickel			
Potassium			
Selenium			
Silver			
Sodium			
Thallium			
Vanadium			
Zinc			
Cyanide			

Comments:

USEPA - CLP

9-IN
METHOD DETECTION LIMITS (ANNUALLY)

Lab Name: DATACHEM LABORATORIES Contract: EP-W-06-054

Lab Code: DATAC Case No.: 37448 NRAS No.: _____ SDG No.: ME00E9

Instrument Type: P Instrument ID: ICP07 Date: 01/12/2008

Preparation Method: NP1

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

Analyte	Wavelength /Mass	CRQL	MDL
Aluminum	308.22	200	20.0
Antimony	206.83	60	1.8
Arsenic	189.04	10	1.5
Barium	455.40	200	0.33
Beryllium	313.11	5.0	0.089
Cadmium	214.44	5.0	0.084
Calcium	317.93	5000	5.9
Chromium	205.55	10	0.73
Cobalt	228.62	50	0.32
Copper	324.75	25	2.6
Iron	259.94	100	9.0
Lead	220.35	10	0.94
Magnesium	279.08	5000	26.7
Manganese	257.61	15	0.26
Mercury			
Nickel	231.60	40	1.7
Potassium	766.49	5000	80.4
Selenium	196.09	35	2.6
Silver	328.07	10	0.28
Sodium	589.59	5000	41.6
Thallium	190.86	25	0.77
Vanadium	292.40	50	0.40
Zinc	206.20	60	2.7
Cyanide			

Comments:

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9-IN
METHOD DETECTION LIMITS (ANNUALLY)

Lab Name: DATACHEM LABORATORIES Contract: EP-W-06-054

Lab Code: DATAC Case No.: 37448 NRAS No.: _____ SDG No.: ME00E9

Instrument Type: P Instrument ID: ICP07 Date: 01/05/2008

Preparation Method: HS1

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

Analyte	Wavelength /Mass	CRQL	MDL
Aluminum	308.22	20	4.1
Antimony	206.83	6.0	0.33
Arsenic	189.04	1.0	0.25
Barium	455.40	20	0.12
Beryllium	313.11	0.5	0.012
Cadmium	214.44	0.5	0.011
Calcium	317.93	500	10.7
Chromium	205.55	1.0	0.46
Cobalt	228.62	5.0	0.064
Copper	324.75	2.5	0.45
Iron	259.94	10	4.1
Lead	220.35	1.0	0.22
Magnesium	279.08	500	5.8
Manganese	257.61	1.5	0.062
Mercury			
Nickel	231.60	4.0	0.33
Potassium	766.49	500	4.2
Selenium	196.09	3.5	0.26
Silver	328.07	1.0	0.047
Sodium	589.59	500	3.7
Thallium	190.86	2.5	0.17
Vanadium	292.40	5.0	0.063
Zinc	206.20	6.0	0.34
Cyanide			

Comments:

FORM IX-IN ILM07.4

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9-IN
METHOD DETECTION LIMITS (ANNUALLY)

Lab Name: DATACHEM LABORATORIES Contract: EP-W-06-054

Lab Code: DATAC Case No.: 37448 NRAS No.: _____ SDG No.: ME00E9

Instrument Type: AS Instrument ID: WET01 Date: 01/10/2008

Preparation Method: NP1

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

Analyte	Wavelength /Mass	CRQL	MDL
Aluminum			
Antimony			
Arsenic			
Barium			
Beryllium			
Cadmium			
Calcium			
Chromium			
Cobalt			
Copper			
Iron			
Lead			
Magnesium			
Manganese			
Mercury			
Nickel			
Potassium			
Selenium			
Silver			
Sodium			
Thallium			
Vanadium			
Zinc			
Cyanide	570.00	10	1.6

Comments:

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9-IN
METHOD DETECTION LIMITS (ANNUALLY)

Lab Name: DATACHEM LABORATORIES Contract: EP-W-06-054

Lab Code: DATAC Case No.: 37448 NRAS No.: _____ SDG No.: ME00E9

Instrument Type: AS Instrument ID: WET01 Date: 01/09/2008

Preparation Method: DS2

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

Analyte	Wavelength /Mass	CRQL	MDL
Aluminum			
Antimony			
Arsenic			
Barium			
Beryllium			
Cadmium			
Calcium			
Chromium			
Cobalt			
Copper			
Iron			
Lead			
Magnesium			
Manganese			
Mercury			
Nickel			
Potassium			
Selenium			
Silver			
Sodium			
Thallium			
Vanadium			
Zinc			
Cyanide	570.00	2.5	0.91

Comments:

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12-IN
PREPARATION LOG

Lab Name: DATACHEM LABORATORIES Contract: EP-W-06-054

Lab Code: DATAC Case No.: 37448 NRAS No.: _____ SDG No.: ME00E9

Preparation Method: CS1

EPA Sample No.	Preparation Date	Weight (gram)	Volume (mL)
S0	05/20/2008	0.20	100
S0.2/CRI	05/20/2008	0.20	100
S0.5	05/20/2008	0.20	100
S1.0	05/20/2008	0.20	100
S10	05/20/2008	0.20	100
S5.0	05/20/2008	0.20	100
ICB	05/20/2008	0.20	100
ICV	05/20/2008	0.20	100
CCB	05/20/2008	0.20	100
CCV	05/20/2008	0.20	100
PBS	05/20/2008	0.20	100
LCSS	05/20/2008	0.20	100
ME00E9	05/20/2008	0.20	100
ME00F0	05/20/2008	0.20	100
ME00F1	05/20/2008	0.20	100
ME00F2	05/20/2008	0.20	100
ME00F3	05/20/2008	0.20	100
ME00F4	05/20/2008	0.20	100
ME00F5	05/20/2008	0.20	100
ME00F6	05/20/2008	0.20	100
ME00F7	05/20/2008	0.20	100
ME00F7D	05/20/2008	0.20	100
ME00F7S	05/20/2008	0.20	100

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12-IN
PREPARATION LOG

Lab Name: DATACHEM LABORATORIES Contract: EP-W-06-054

Lab Code: DATAC Case No.: 37448 NRAS No.: _____ SDG No.: ME00E9

Preparation Method: DS2

EPA Sample No.	Preparation Date	Weight (gram)	Volume (mL)
ICV	05/15/2008	1.00	50
PBS	05/15/2008	1.00	50
LCSS	05/15/2008	1.00	50
ME0CE9	05/15/2008	1.00	50
ME0CF0	05/15/2008	1.00	50
ME0CF1	05/15/2008	1.00	50
ME0CF2	05/15/2008	1.00	50
ME0CF3	05/15/2008	1.00	50
ME0CF4	05/15/2008	1.00	50
ME0CF5	05/15/2008	1.00	50
ME0CF6	05/15/2008	1.00	50
ME0CF7	05/15/2008	1.00	50
ME0CF7D	05/15/2008	1.00	50
ME0CF7S	05/15/2008	1.00	50
MIDRANGE	05/15/2008	1.00	50

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12-IN
PREPARATION LOG

Lab Name: DATACHEM LABORATORIES Contract: EP-W-06-054

Lab Code: DATAC Case No.: 37448 NRAS No.: _____ SDG No.: ME00E9

Preparation Method: HS1

EPA Sample No.	Preparation Date	Weight (gram)	Volume (mL)
PBS	05/20/2008	1.00	100
LCSS	05/20/2008	1.00	100
ME00E9	05/20/2008	1.00	100
ME00F0	05/20/2008	1.00	100
ME00F1	05/20/2008	1.00	100
ME00F2	05/20/2008	1.00	100
ME00F3	05/20/2008	1.00	100
ME00F4	05/20/2008	1.00	100
ME00F5	05/20/2008	1.00	100
ME00F6	05/20/2008	1.00	100
ME00F7	05/20/2008	1.00	100
ME00F7D	05/20/2008	1.00	100
ME00F7S	05/20/2008	1.00	100

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13-IN
ANALYSIS RUN LOG

Lab Name: DATACHEM LABORATORIES Contract: EP-W-06-054

Lab Code: DATAC Case No.: 37448 NRAS No.: _____ SDG No.: ME00E9

Instrument ID: ICP07 Analysis Method: P

Start Date: 05/22/2008 End Date: 05/22/2008

EPA Sample No.	D/F	Time	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	1.0	0913	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X			
S1500	1.0	0918			X		X	X						X						X	X		X					
S10000	1.0	0923		X		X				X	X	X				X		X						X	X			
S50000	1.0	0928	X						X				X		X				X			X						
ICV	1.0	0933	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X			
ICB	1.0	0938	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X			
CRII	1.0	0943	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X			
ICSAI	1.0	0948	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X			
ICSABI	1.0	0953	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X			
CCV	1.0	0957	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X			
CCB	1.0	1002	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X			
PBS	1.0	1007	X	X	X	X	X	X	X	X	X		X		X	X		X	X	X	X	X	X	X				
LCSS	1.0	1012	X	X	X	X	X	X	X	X	X		X		X	X		X	X	X	X	X	X	X				
ME00F7	1.0	1017	X	X	X	X	X	X	X	X	X				X	X		X	X	X	X	X	X	X				
ME00F7S	1.0	1023		X	X	X	X	X		X	X					X		X		X	X		X	X				
ME00F7D	1.0	1028	X	X	X	X	X	X	X	X	X				X	X		X	X	X	X	X	X	X				
ME00F7L	5.0	1033	X	X	X	X	X	X	X	X	X				X	X		X	X	X	X	X	X	X				
ME00E9	1.0	1038	X	X	X	X	X	X		X	X				X	X		X	X	X	X	X	X	X				
ME00F0	1.0	1043	X	X	X	X	X	X	X	X	X				X	X		X	X	X	X	X	X	X				
ME00F1	1.0	1048	X	X	X	X	X		X	X	X		X		X	X		X	X	X	X	X	X	X				
ME00F2	1.0	1054	X	X	X	X	X		X	X	X		X		X	X		X	X	X	X	X	X	X				
CCV2	1.0	1059	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X			
CCB2	1.0	1104	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X			
ME00F3	1.0	1109	X	X	X	X	X		X	X	X		X		X	X		X	X	X	X	X	X	X				
ME00F4	1.0	1114	X	X	X	X	X	X	X	X	X				X	X		X	X	X	X	X	X	X				
ME00F5	1.0	1119	X	X	X	X	X	X	X	X	X				X	X		X	X	X	X	X	X	X				
ME00F6	1.0	1148	X	X	X	X	X	X	X	X	X				X	X		X	X	X	X	X	X	X				
ME00F7A	1.0	1153		X			X			X													X					
ZZZZZZ	1.0	1158																										
CRIF	1.0	1203	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X			
ICSAF	1.0	1208	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X			
ICSABF	1.0	1213	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X			
CCV3	1.0	1218	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X			
CCB3	1.0	1223	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X			
ME00E9	4.0	1228							X				X															
ME00F0	2.0	1233											X															

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13-IN
ANALYSIS RUN LOG

Lab Name: DATACHEM LABORATORIES Contract: EP-W-06-054

Lab Code: DATAC Case No.: 37448 NRAS No.: _____ SDG No.: ME00E9

Instrument ID: ICP07 Analysis Method: P

Start Date: 05/22/2008 End Date: 05/22/2008

EPA Sample No.	D/F	Time	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		
MEC0F4	10.	1238																										
MEC0F5	10.	1243																										
MEC0F6	10.	1248											X															
MEC0F7	10.	1252											X															
MEC0F7D	10.	1258											X															
MEC0F7L	50.	1303											X															
ME00F4	20.	1307											X															
ME00F5	20.	1312											X															
CCV4	1.0	1317	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X			
CCB4	1.0	1322	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X			
ZZZZZZ	1.0	1327																										
ZZZZZZ	1.0	1332																										
ZZZZZZ	1.0	1337																										
CRIF2	1.0	1342	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X			
ICSAF2	1.0	1347	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X			
ICSABF2	1.0	1352	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X			
CCV5	1.0	1357	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X			
CCB5	1.0	1401	X	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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13-IN
ANALYSIS RUN LOG

Lab Name: DATACHEM LABORATORIES Contract: EP-W-06-054

Lab Code: DATAC Case No.: 37448 NRAS No.: _____ SDG No.: ME00E9

Instrument ID: ICP07 Analysis Method: P

Start Date: 05/22/2008 End Date: 05/22/2008

EPA Sample No.	D/F	Time	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	1.0	1546						X				X													X			
S1500	1.0	1551						X																				
S10000	1.0	1556										X													X			
S50000	1.0	1601																										
ICV2	1.0	1606						X				X													X			
ICB2	1.0	1611						X				X													X			
CRI2	1.0	1616						X				X													X			
ICSAI2	1.0	1621	X					X	X			X	X		X										X			
ICSABI2	1.0	1626	X					X	X			X	X		X										X			
CCV6	1.0	1631						X				X													X			
CCB6	1.0	1635						X				X													X			
PBS	1.0	1640										X	~~X~~	~~X~~											X			
LCSS	1.0	1645										X													X			
ME00E9	40.	1650										~~X~~		~~X~~											X			
ME00F0	50.	1655										X													X			
ME00F1	50.	1700																										
ME00F2	50.	1705																										
ME00F3	50.	1710										X																
ME00F4	100	1715																							X			
ME00F5	100	1720																							X			
ME00F6	100	1725																							X			
CCV7	1.0	1730						X				X													X			
CCB7	1.0	1734						X				X													X			
ME00F7	100	1739																							X			
ME00F7D	100	1744																							X			
ME00F7L	500	1749																							X			
ME00E9	10.	1754																										
ME00F1	20.	1759										X																
ME00F2	20.	1804										X																
ME00F3	20.	1809																										
CRI3	1.0	1814						X				X													X			
ICSAF3	1.0	1819	X					X	X			X	X		X										X			
ICSABF3	1.0	1824	X					X	X			X	X		X										X			
CCV8	1.0	1829						X				X													X			
CCB8	1.0	1833						X				X													X			
ME00F7	20.	1838										X																

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13-IN
ANALYSIS RUN LOG

Lab Name: DATACHEM LABORATORIES Contract: EP-W-06-054

Lab Code: DATAC Case No.: 37448 NRAS No.: _____ SDG No.: ME00E9

Instrument ID: ICP07 Analysis Method: P

Start Date: 05/22/2008 End Date: 05/22/2008

EPA Sample No.	D/F	Time	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		
ME00F7D	20.	1843										X																
ME00F7L	100	1848										X																
ME00F5	20.	1853																										
ME00F7	10.	1858																										
ME00F7D	10.	1903																										
ME00E9	4.0	1908																										
ME00F0	5.0	1913																										
ME00F1	4.0	1918						X																				
ZZZZZZ	1.0	1923																										
CCV9	1.0	1928						X				X													X			
CCB9	1.0	1933						X				X													X			
ME00F2	4.0	1938						X																				
ME00F3	4.0	1943						X																				
ME00F4	4.0	1948										X																
ME00F5	2.0	1953										X																
ME00F6	2.0	1958																										
ZZZZZZ	1.0	2003																										
CRIF4	1.0	2008						X				X													X			
ICSAF4	1.0	2013	X					X	X			X	X		X										X			
ICSABF4	1.0	2018	X					X	X			X	X		X										X			
CCV10	1.0	2023						X				X													X			
CCB10	1.0	2027						X				X													X			
ME00F1	100	2032																										
ME00F2	100	2037																										
ME00F3	200	2042																										
ME00F7L	10.	2047																										
ME00E9	20.	2052										X																
CRIF5	1.0	2057						X				X													X			
ICSAF5	1.0	2102	X					X	X			X	X		X										X			
ICSABF5	1.0	2107	X					X	X			X	X		X										X			
CCV11	1.0	2112						X				X													X			
CCB11	1.0	2116						X				X													X			

FORM XIII-IN ILM05.4

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13-IN
ANALYSIS RUN LOG

Lab Name: DATACHEM LABORATORIES Contract: EP-W-06-054

Lab Code: DATAC Case No.: 37448 NRAS No.: _____ SDG No.: ME00E9

Instrument ID: ICP07 Analysis Method: P

Start Date: 05/23/2008 End Date: 05/23/2008

EPA Sample No.	D/F	Time	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	1.0	1201										X		X											X			
S1500	1.0	1206												X														
S10000	1.0	1210										X													X			
S50000	1.0	1215																										
ICV3	1.0	1220										X		X											X			
ICB3	1.0	1225										X		X											X			
CRI3	1.0	1230										X		X											X			
ICSAI3	1.0	1235	X						X			X	X	X	X										X			
ICSABI3	1.0	1240	X						X			X	X	X	X										X			
CCV12	1.0	1245										X		X											X			
CCB12	1.0	1250										X		X											X			
ME00F1	100	1255																							X			
ME00F2	100	1300																							X			
ME00F3	200	1305																							X			
ZZZZZZ	1.0	1310																										
CRIF6	1.0	1315										X		X											X			
ICSAF6	1.0	1320	X						X			X	X	X	X										X			
ICSABF6	1.0	1325	X						X			X	X	X	X										X			
CCV13	1.0	1330										X		X											X			
CCB13	1.0	1334										X		X											X			
PBS	1.0	1339												X														
LCSS	1.0	1344												X														
ME00F4	4.0	1349												X														
ME00F5	4.0	1354												X														
ME00F6	4.0	1359										X																
ME00F6	2.0	1404												X														
ME00E9	4.0	1409												X														
ME00F0	5.0	1414												X														
ME00F1	20.	1419												X														
ZZZZZZ	1.0	1424																										
CCV14	1.0	1429										X		X											X			
CCB14	1.0	1434										X		X											X			
ME00F2	20.	1439												X														
ME00F3	20.	1444												X														
ME00F7	10.	1449												X														
ME00F7D	10.	1454												X														

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13-IN
ANALYSIS RUN LOG

Lab Name: DATACHEM LABORATORIES Contract: EP-W-06-054

Lab Code: DATAC Case No.: 37448 NRAS No.: _____ SDG No.: ME00E9

Instrument ID: ICP07 Analysis Method: P

Start Date: 05/23/2008 End Date: 05/23/2008

EPA Sample No.	D/F	Time	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		
ME00F7L	50.	1459												X														
ZZZZZZ	1.0	1504																										
CRIF7	1.0	1509										X		X											X			
ICSAF7	1.0	1514	X						X			X	X	X	X										X			
ICSABF7	1.0	1519	X						X			X	X	X	X										X			
CCV15	1.0	1524										X		X											X			
CCB15	1.0	1528										X		X											X			

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13-IN
ANALYSIS RUN LOG

Lab Name: DATACHEM LABORATORIES Contract: EP-W-06-054

Lab Code: DATAC Case No.: 37448 NRAS No.: _____ SDG No.: ME00E9

Instrument ID: ICP07 Analysis Method: P

Start Date: 05/27/2008 End Date: 05/27/2008

EPA Sample No.	D/F	Time	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	1.0	1520										X		X						X					X			
S1500	1.0	1525												X						X								
S10000	1.0	1530										X													X			
S50000	1.0	1535																										
ICV4	1.0	1540										X		X						X					X			
ICB4	1.0	1544										X		X						X					X			
CRI4	1.0	1549										X		X						X					X			
ICSAI4	1.0	1554	X						X			X	X	X	X					X					X			
ICSABI4	1.0	1559	X						X			X	X	X	X					X					X			
CCV16	1.0	1604										X		X						X					X			
CCB16	1.0	1609										X		X						X					X			
ME00F7S	100	1614																							X			
ME00F7S	20.	1619										X																
ME00F7S	10.	1624												X														
ME00F7A	1.0	1629																		X								
ZZZZZZ	1.0	1634																										
ZZZZZZ	1.0	1639																										
ZZZZZZ	1.0	1644																										
ZZZZZZ	1.0	1649																										
ZZZZZZ	1.0	1654																										
CCV17	1.0	1659										X		X						X					X			
CCB17	1.0	1704										X		X						X					X			
CRIF8	1.0	1709										X		X						X					X			
ICSAF8	1.0	1714	X						X			X	X	X	X					X					X			
ICSABF8	1.0	1719	X						X			X	X	X	X					X					X			
CCV18	1.0	1724										X		X						X					X			
CCB18	1.0	1728										X		X						X					X			

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13-IN
ANALYSIS RUN LOG

Lab Name: DATACHEM LABORATORIES Contract: EP-W-06-054

Lab Code: DATAC Case No.: 37448 NRAS No.: _____ SDG No.: ME00E9

Instrument ID: AACV01 Analysis Method: CV

Start Date: 05/21/2008 End Date: 05/21/2008

EPA Sample No.	D/F	Time	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	1.0	1044															X											
S0.2	1.0	1045															X											
S0.5	1.0	1047															X											
S1.0	1.0	1048															X											
S5.0	1.0	1050															X											
S10	1.0	1051															X											
ICV	1.0	1053															X											
ICB	1.0	1054															X											
CRIF	1.0	1056															X											
CCV	1.0	1057															X											
CCB	1.0	1059															X											
PBS	1.0	1100															X											
LCSS	1.0	1102															X											
ME00E9	1.0	1103															X											
ME00F0	1.0	1104															X											
ME00F1	1.0	1106																										
ME00F2	1.0	1107																										
ME00F3	1.0	1109																										
CCV2	1.0	1110															X											
CCB2	1.0	1112															X											
ME00F4	1.0	1113															X											
ME00F5	1.0	1115															X											
ME00F6	1.0	1116															X											
ME00F7	1.0	1118															X											
ME00F7S	1.0	1119															X											
ME00F7D	1.0	1121															X											
CRIF	1.0	1122															X											
CCV3	1.0	1124															X											
CCB3	1.0	1125															X											
ME00F1	10.	1131															X											
ME00F2	10.	1132															X											
ME00F3	10.	1134															X											
CRIF2	1.0	1135															X											
CCV4	1.0	1137															X											
CCB4	1.0	1138															X											

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13-IN
ANALYSIS RUN LOG

Lab Name: DATACHEM LABORATORIES Contract: EP-W-06-054

Lab Code: DATAC Case No.: 37448 NRAS No.: _____ SDG No.: ME00E9

Instrument ID: WET01 Analysis Method: AS

Start Date: 05/20/2008 End Date: 05/20/2008

EPA Sample No.	D/F	Time	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	1.0	1056																								X		
S10	1.0	1059																								X		
S50	1.0	1059																								X		
S100	1.0	1100																								X		
S200	1.0	1100																								X		
S300	1.0	1103																								X		
S400	1.0	1103																								X		
ICV	1.0	1104																								X		
ICB	1.0	1104																								X		
CRII	1.0	1107																								X		
CCV1	1.0	1107																								X		
CCB1	1.0	1108																								X		
MIDRANGE	1.0	1108																								X		
LCSS	1.0	1111																								X		
PBS	1.0	1111																								X		
ME00E9	1.0	1112																								X		
ME00F0	1.0	1113																								X		
ME00F1	1.0	1115																								X		
ME00F2	1.0	1116																								X		
ME00F3	1.0	1117																								X		
ME00F4	1.0	1117																								X		
CCV2	1.0	1120																								X		
CCB2	1.0	1120																								X		
ME00F5	1.0	1121																								X		
ME00F6	1.0	1121																								X		
ME00F7	1.0	1124																								X		
ME00F7D	1.0	1124																								X		
ME00F7S	1.0	1125																								X		
CRIF	1.0	1125																								X		
CCV3	1.0	1128																								X		
CCB3	1.0	1128																								X		
ME00F7A	1.0	1204																								X		
CRIF2	1.0	1205																								X		
CCV4	1.0	1206																								X		
CCB4	1.0	1206																								X		

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION V
ESD Central Regional Laboratory
Data Tracking Form for Contract Samples

Sample Delivery Group: MED0E9 CERCLIS No: ILD048843809

Case No: 37448 Site Name/Location: Chemetco (IL)

Contractor or EPA Lab: DataChem Data User: IEPA

No. of Samples: 9 Date Sampled or Date Received: 30 May 08

Have Chain-of-Custody records been received? Yes ✓ No ____
Have traffic reports or packing lists been received? Yes ✓ No ____
If no, are traffic report or packing list numbers written on the Chain-of-Custody Record?
Yes ____ No ____
If no, which traffic report or packing list numbers are missing?

Are basic data forms in? Yes ✓ No ____
No of samples claimed: 9 No. of samples received: ____

Received by: pdavis Date: 30 May 08

Received by LSSS: pdavis Date: 3 June 08

Review started: 6-3-08 Reviewer Signature: [signature]

Total time spent on review: ~~18~~ 26 +2 Date review completed: 6-9-08

Copied by: A. C. Harvey Date: 7-7-08

Mailed to user by: Cheryl Moelle Date: 7/7/08

DATA USER:
Please fill in the blanks below and return this form to:
Sylvia Griffin, Data Mgmt. Coordinator, Region V, ML-10C

Data received by: ____ Date: ____

Data review received by: ____ Date: ____

Inorganic Data Complete	[ ] Suitable for Intended Purpose [ ] ✓ if OK
Organic Data Complete	[ ] Suitable for Intended Purpose [ ] ✓ if OK
Dioxin data Complete	[ ] Suitable for Intended Purpose [ ] ✓ if OK
SAS Data Complete	[ ] Suitable for Intended Purpose [ ] ✓ if OK

PROBLEMS: Please indicate reasons why data are not suitable for your uses.

Received by Data Mgmt. Coordinator for Files. Date: ____