



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION III
ENVIRONMENTAL SCIENCE CENTER
701 MAPES ROAD
FORT MEADE, MARYLAND 20755-5350



SDMS DocID 2060860

DATE : July 8, 2005

SUBJECT: Region III Data QA Review

FROM : Khin-Cho Thaung **KCT**
Region III ESAT RPO (3EA21)

TO : Christian Matta
Regional Project Manager (3HS23)

Attached is the inorganic data validation report for the Big John Salvage-Hoult Road Site (Case#: 34031; SDG#: MC1AR0, MC1AS4, MC1AW5) completed by the Region III Environmental Services Assistance Team (ESAT) contractor under the direction of Region III EAID.

If you have any questions regarding this review, please call me at (410) 305-2743.

Attachments

cc: Tad Yancheski (TETRA)

TO File #: 0023 TDF#: 0578

ANALYTICAL SERVICES AND QUALITY ASSURANCE BRANCH



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AR119204

DATE: June 14, 2005

SUBJECT: Inorganic Data Validation (IM2 Level)
Case: 34031
SDGs: MC1AR0, MC1AS4 and MC1AW5
Site: Big John Salvage - Hoult Road

FROM: Donald M. Brown ^{Dmb}
Inorganic Data Reviewer

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Senior Oversight Chemist

TO: Khin-Cho Thaung
ESAT Region 3 Project Officer

OVERVIEW

Case 34031, Sample Delivery Groups (SDGs) MC1AR0, MC1AS4 and MC1AW5, consisted of forty-seven (47) filtrate aqueous samples analyzed for dissolved metals. All samples were analyzed by Ceimic Corporation (CEIMIC). The sample set contained three (3) filtrate rinsate blanks and five (5) field duplicate pairs. Samples were analyzed in accordance with Contract Laboratory Program (CLP) Statement of Work (SOW) ILM05.3 through Routine Analytical Services (RAS) program.

SUMMARY

All samples were successfully analyzed for all Target Analyte List (TAL) parameters with the exception of silver (Ag) in SDGs MC1AS4 and MC1AW5. Areas of concern with respect to data usability are listed below.

Rinsate blanks were utilized to evaluate sample results for field contamination based on corresponding sampling dates and/or corresponding samplers for this case.

Data in this case have been impacted by outliers present in the laboratory and rinsate blanks as well as the continuing calibration verification and laboratory control sample analyses. Details of these outliers are discussed under "Major and Minor Problems"; specific samples affected are outlined in "Table 1A" and qualified analytical results for all samples are summarized on the Data Summary Forms (DSFs).

The CCV standard recovery was slightly low (<90%) for Na in SDG MC1AR0. Positive results reported for this analyte in affected samples in this SDG may be biased low and have been qualified "L" on the DSFs.

NOTES

Reported results between MDLs and Contract Required Quantitation Limits (CRQLs) were qualified "J" on the DSFs unless superseded by "B".

The Chain of Custody (CoC) Records list all samples in this data set (SDGs MC1AR0, MC1AS4 and MC1AW5) for total metals, dissolved metals and cyanide analyses. However, the SDG Narratives explain that these SDGs report the results for dissolved metals analysis only. The total metals and cyanide analyses results are provided in separate SDGs.

For the samples in this data set, the sampler assigned the same EPA sample numbers for both total and dissolved metals analyses. The SDG Narratives explain that the Sample Management Office (SMO) has assigned new CLP sample identification (ID) numbers for the dissolved metals portion of the sample IDs listed on the CoC Records.

One (1) of the CCV standard recoveries (CCV05) was high (>110%) for Sb and selenium (Se) in the second analytical run of SDG MC1AS4; however, the samples affected (MC1AX8, MC1AX9, MC1AW2 and MC1AW4) had non-detected results for these analytes in this SDG. Therefore, data were not qualified due to this outlier.

One (1) of the CRQL check standard recoveries (CRI04) was low (<70%) for Fe in the second analytical run of SDG MC1AS4. The laboratory did not reanalyze this CRQL check standard for this analyte; however, the sample associated with this check standard (MC1AW4) had a reported result greater than two times the CRQL (>2XCRQL). Therefore, no data were qualified based on this finding.

Reported results for field duplicate pairs MC1AR1/MC1AR7, MC1AS2/MC1AT9, MC1AT3/MC1AT8, MC1AW3/MC1AX6 and MC1AW7/MC1AX5 were within 20% RPD, \pm CRQL for all analytes.

Data for Case 34031, SDGs MC1AR0, MC1AS4 and MC1AW5, were reviewed in accordance with National Functional Guidelines for Evaluating Inorganic Analyses with Modification for use within Region III.

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

Case 34031, SDG MC1AR0

<u>ANALYTE</u>	<u>SAMPLES AFFECTED</u>	<u>POSITIVE VALUES</u>	<u>NON- DETECTED VALUES</u>	<u>BIAS</u>	<u>COMMENTS*</u>
Sb	MC1AR0, MC1AR1, MC1AR2, MC1AR5, MC1AR6		UL	Low	CBN (-3.912 J µg/L)
As	MC1AR6, MC1AR9	J			>MDL<CRQL CVH (117%)
	MC1AR4, MC1AS2	K		High	CVH (117%)
Be	MC1AR0, MC1AR1, MC1AR2, MC1AR3, MC1AR4, MC1AR5, MC1AR6, MC1AR7, MC1AS0, MC1AS2		UL	Low	CBN (-0.119 J µg/L)
	MC1AS1, MC1AS3, MC1AS5, MC1AS6, MC1AT3, MC1AT4, MC1AT5, MC1AT8, MC1AT9		UL	Low	CBN (-0.129 J µg/L)
Ca	MC1AR0, MC1AS2, MC1AT3, MC1AT8, MC1AT9	B		High	RB (344 J µg/L)
Cu	MC1AR3, MC1AR6, MC1AR7, MC1AS1, MC1AS5, MC1AS6, MC1AT5	B		High	RB (2.7 J µg/L)

* See explanation of comments in Table 1B

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

Case 34031, SDG MC1AR0

<u>ANALYTE</u>	<u>SAMPLES AFFECTED</u>	<u>POSITIVE VALUES</u>	<u>NON- DETECTED VALUES</u>	<u>BIAS</u>	<u>COMMENTS*</u>
Ag	MC1AS1, MC1AS3, MC1AS5, MC1AS6, MC1AT3, MC1AT4, MC1AT5, MC1AT8, MC1AT9		UL	Low	CBN (-1.536 J µg/L)
Na	MC1AR2	J			>MDL<CRQL CVL (89.6%)
	MC1AR0, MC1AR1, MC1AR3, MC1AR4, MC1AR5, MC1AR6, MC1AR7, MC1AR9, MC1AS0, MC1AS2	L		Low	CVL (89.6%)
Zn	MC1AR9, MC1AS0	B		High	RB (22.0 J µg/L) CVH (111%)

* See explanation of comments in Table 1B

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

Case 34031, SDG MC1AS4

<u>ANALYTE</u>	<u>SAMPLES AFFECTED</u>	<u>POSITIVE VALUES</u>	<u>NON- DETECTED VALUES</u>	<u>BIAS</u>	<u>COMMENTS*</u>
Cu	MC1AS4, MC1AS7, MC1AS8, MC1AS9, MC1AT0, MC1AT1, MC1AT2, MC1AT6, MC1AT7, MC1AW4	B		High	RB (2.7 J µg/L)
	MC1AW2, MC1AW3, MC1AX3, MC1AX6	B		High	RB (2.5 J µg/L)
	MC1AW7, MC1AX0, MC1AX5	B		High	RB (2.1 J µg/L)
Fe	MC1AS4, MC1AS7, MC1AS8, MC1AT0, MC1AT1, MC1AT2, MC1AT6, MC1AT7		UL	Low	CBN (-37.704 J µg/L)
	MC1AX1, MC1AX3		UL	Low	CBN (-26.108 J µg/L)
	MC1AX9		UL	Low	CBN (-25.283 J µg/L)
Pb	MC1AW2, MC1AX8, MC1AX9		UL	Low	CBN (-3.101 J µg/L)
	MC1AW4		UL	Low	CBN (-3.218 J µg/L)
Mg	MC1AT0, MC1AT1, MC1AT2	B		High	RB (50.9 J µg/L)
	MC1AX8, MC1AX9		UL	Low	CBN (-33.846 J µg/L)

* See explanation of comments in Table 1B

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

Case 34031, SDG MC1AS4

<u>ANALYTE</u>	<u>SAMPLES AFFECTED</u>	<u>POSITIVE VALUES</u>	<u>NON- DETECTED VALUES</u>	<u>BIAS</u>	<u>COMMENTS*</u>
Na	MC1AX8, MC1AX9	J			>MDL<CRQL CBN (-209.084 J µg/L)
Zn	MC1AT7	B		High	RB (22.0 J µg/L)
	MC1AW2, MC1AW3, MC1AX3, MC1AX6	B		High	RB (16.4 J µg/L)

* See explanation of comments in Table 1B

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

Case 34031, SDG MC1AW5

<u>ANALYTE</u>	<u>SAMPLES AFFECTED</u>	<u>POSITIVE VALUES</u>	<u>NON- DETECTED VALUES</u>	<u>BIAS</u>	<u>COMMENTS*</u>
Zn	MC1AW6, MC1AX4	B		High	RB (22.0 J µg/L)

* See explanation of comments in Table 1B

Appendix A

Glossary of Data Qualifier Codes

ORIGINAL

Appendix B

Data Summary Forms

DATA SUMMARY FORM: INORGANIC

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ORIGINAL

Case #: 34031

SDG : MC1AR0

Number of Soil Samples : 0

Site :

BIG JOHN SALVAGE HOULT RD

Number of Water Samples : 20

Lab. :

CEIMIC

ALL DISSOLVED METALS

Sample Number :		MC1AR0		MC1AR1		MC1AR2		MC1AR3		MC1AR4	
Sampling Location : Prefix : BJS-		MW04C-0405		MW06C-0405		MW11B-0405		MW12B-0405		MW12C-0405	
Field QC :				Dup of MC1AR7							
Matrix :		Water		Water		Water		Water		Water	
Units :		ug/L		ug/L		ug/L		ug/L		ug/L	
Date Sampled :		4/11/2005		4/12/2005		4/11/2005		4/11/2005		4/11/2005	
Time Sampled :		12:50		13:00		12:30		11:10		10:15	
Dilution Factor :		1.0		1.0		1.0		1.0		1.0	
ANALYTE	CRQL	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
ALUMINUM	200	68.7	J								
ANTIMONY	60		UL		UL		UL				
*ARSENIC	10									12.6	K
BARIUM	200	17.6	J	79.5	J	31.3	J	338		367	
BERYLLIUM	5		UL		UL		UL		UL		UL
*CADMIUM	5										
CALCIUM	5000	680	B	2510	J	88200		39600		16100	
*CHROMIUM	10										
COBALT	50										
*COPPER	25							1.8	B		
IRON	100					19.8	B	141	B	422	
*LEAD	10										
MAGNESIUM	5000	120	B	509	J	16700		9010		4570	J
MANGANESE	15	1.1	B	5.5	B	1.3	B	302		1.18	
MERCURY	0.2										
*NICKEL	40										
POTASSIUM	5000	446	B	726	J	1340	J	2250	J	1860	J
SELENIUM	35										
SILVER	10		UL		UL		UL		UL		UL
SODIUM	5000	176000	L	327000	L	4080	J	88100	L	523000	L
THALLIUM	25										
VANADIUM	50										
ZINC	60										

CRQL = Contract Required Quantitation Limit

*Action Level Exists

SEE NARRATIVE FOR CODE DEFINITIONS

To calculate sample quantitation limits: (CRQL * Dilution Factor)

Revised 09/99

Prefix : All sample locations are prefixed BJS-

DATA SUMMARY FORM: INORGANIC

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ORIGINAL

Case #: 34031

SDG : MC1AR0

Site :

BIG JOHN SALVAGE HOULT RD

Lab. :

CEIMIC

ALL DISSOLVED METALS

Sample Number :		MC1AR5		MC1AR6		MC1AR7		MC1AR9		MC1AS0	
Sampling Location : Prefix : BJS-		MW17B-0405		MW17C-0405		MW18-0405		MW01A1-0405		MW01A2-0405	
Field QC :						Dup of MC1AR1					
Matrix :		Water		Water		Water		Water		Water	
Units :		ug/L		ug/L		ug/L		ug/L		ug/L	
Date Sampled :		4/12/2005		4/12/2005		4/12/2005		4/13/2005		4/13/2005	
Time Sampled :		09:40		09:00		12:15		11:10		10:15	
Dilution Factor :		1.0		1.0		1.0		1.0		1.0	
ANALYTE	CRQL	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
ALUMINUM	200			468		51.4	J				
ANTIMONY	60		UL		UL						
*ARSENIC	10			8.5	J			7.9	J		
BARIUM	200	39.1	J	29.4	J	80.1	J	70.1	J	111	J
BERYLLIUM	5		UL		UL		UL	0.55	J		UL
CADMIUM	5										
CALCIUM	5000	20600		3660	J	2480	J	7230		37800	
CHROMIUM	10			2.0	J					8.0	J
COBALT	50							28.6	J	90.4	
COPPER	25			3.0	B	2.1	B				
IRON	100			523				9540		3110	
LEAD	10										
MAGNESIUM	5000	5870		890	J	476	J	7600		13200	
MANGANESE	15	17.5	B	19.7	B	5.4	B	430		16000	
MERCURY	0.2										
NICKEL	40			4.4	J			37.8	J	26.5	J
POTASSIUM	5000	1360	J	3370	J	828	J	935	J	2200	J
SELENIUM	35										
SILVER	10		UL		UL		UL		UL		UL
SODIUM	5000	86800	L	219000	L	316000	L	21900	L	15400	L
THALLIUM	25										
VANADIUM	50			3.3	J						
ZINC	60							10.0	B	24.1	B

CRQL = Contract Required Quantitation Limit

*Action Level Exists

SEE NARRATIVE FOR CODE DEFINITIONS

To calculate sample quantitation limits: (CRQL * Dilution Factor)

Revised 09/99

Prefix : All sample locations are prefixed BJS-

DATA SUMMARY FORM: INORGANIC

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ORIGINAL

Case #: 34031

SDG : MC1AR0

Site :

BIG JOHN SALVAGE HOULT RD

Lab. :

CEIMIC

ALL DISSOLVED METALS

Sample Number :		MC1AS1		MC1AS2		MC1AS3		MC1AS5		MC1AS6	
Sampling Location : Prefix : BJS-		MW01B-0405		MW01C-0405		MW03B-0405		MW05B-0405		MW05C-0405	
Field QC :				Dup of MC1AT9							
Matrix :		Water		Water		Water		Water		Water	
Units :		ug/L		ug/L		ug/L		ug/L		ug/L	
Date Sampled :		4/13/2005		4/13/2005		4/12/2005		4/12/2005		4/12/2005	
Time Sampled :		12:00		08:55		15:25		12:20		17:00	
Dilution Factor :		1.0		1.0		1.0		1.0		1.0	
ANALYTE	CRQL	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
ALUMINUM	200									81.5	J
ANTIMONY	60										
*ARSENIC	10			47.5	K						
BARIUM	200	349		53.0	J	46.1	J	300		60.1	J
BERYLLIUM	5		UL		UL		UL		UL		UL
*CADMIUM	5										
CALCIUM	5000	73000		1380	B	93100		42800		2020	J
*CHROMIUM	10										
COBALT	50										
COPPER	25	2.0	B					1.7	B	1.8	B
IRON	100	3490				630					
LEAD	10										
MAGNESIUM	5000	10500		305	J	19000		6310		279	J
MANGANESE	15	308		5.1	B	84.1		58.6		1.8	B
MERCURY	0.2	0.085	B					0.029	B	0.059	B
*NICKEL	40										
POTASSIUM	5000	1410	J	486	B	1540	J	1500	J	683	J
SELENIUM	35										
SILVER	10		UL		UL		UL		UL		UL
SODIUM	5000	29600		146000	L	45500		55600		193000	
THALLIUM	25										
VANADIUM	50									2.0	J
ZINC	60										

CRQL = Contract Required Quantitation Limit

*Action Level Exists

SEE NARRATIVE FOR CODE DEFINITIONS

To calculate sample quantitation limits: (CRQL * Dilution Factor)

Revised 09/99

Prefix : All sample locations are prefixed BJS-

DATA SUMMARY FORM: INORGANIC

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ORIGINAL

Case #: 34031

SDG : MC1AR0

Site :

BIG JOHN SALVAGE HOULT RD

Lab. :

CEIMIC

ALL DISSOLVED METALS

Sample Number :		MC1AT3		MC1AT4		MC1AT5		MC1AT8		MC1AT9	
Sampling Location : Prefix : BJS-		MW10C-0405		MW15B-0405		MW15C-0405		MW19-0405		MW20-0405	
Field QC :		Dup of MC1AT8						Dup of MC1AT3		Dup of MC1AS2	
Matrix :		Water		Water		Water		Water		Water	
Units :		ug/L		ug/L		ug/L		ug/L		ug/L	
Date Sampled :		4/13/2005		4/12/2005		4/12/2005		4/13/2005		4/13/2005	
Time Sampled :		08:45		16:15		17:00		08:00		09:20	
Dilution Factor :		1.0		1.0		1.0		1.0		1.0	
ANALYTE	CRQL	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
ALUMINUM	200										
ANTIMONY	60										
*ARSENIC	10	5.9	J							49.3	
BARIUM	200	307	J	105	J	342	J	316	J	558	J
BERYLLIUM	5		UL		UL		UL		UL		UL
CADMIUM	5										
CALCIUM	5000	1100	B	81400		4930	J	1140	B	1430	B
*CHROMIUM	10										
COBALT	50										
COPPER	25					1.7	B				
IRON	100	19.1	B	638				20.5	B		
*LEAD	10										
MAGNESIUM	5000	248	B	18400		1030	J	272	J	300	J
MANGANESE	15	0.81	B	93.2		7.2	B	1.1	B	4.8	B
MERCURY	0.2			0.084	B	0.12	B				
*NICKEL	40					5.4	J				
POTASSIUM	5000	544	B	1600	J	962	J	608	B	593	B
SELENIUM	35										
SILVER	10		UL		UL		UL		UL		UL
SODIUM	5000	282000		165000		185000		295000		149000	
THALLIUM	25										
VANADIUM	50										
ZINC	60										

CRQL = Contract Required Quantitation Limit

*Action Level Exists

SEE NARRATIVE FOR CODE DEFINITIONS

To calculate sample quantitation limits: (CRQL * Dilution Factor)

Revised 09/99

Prefix : All sample locations are prefixed BJS-

ORIGINAL

DATA SUMMARY FORM: INORGANIC

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Case #: 34031

SDG: MC1AS4

Number of Soil Samples: 0

Site:

BIG JOHN SALVAGE HOULT RD

Number of Water Samples: 20

Lab:

CEIMIC

ALL DISSOLVED METALS

Sample Number :		MC1AS4		MC1AS7		MC1AS8		MC1AS9		MC1AT0	
Sampling Location : Prefix : BJS-		MW03C-0405		MW06B-0405		MW07B-0405		MW07C-0405		MW09B-0405	
Matrix :		Water		Water		Water		Water		Water	
Units :		ug/L		ug/L		ug/L		ug/L		ug/L	
Date Sampled :		4/12/2005		4/12/2005		4/13/2005		4/13/2005		4/13/2005	
Time Sampled :		16:15		13:30		15:45		14:30		11:15	
Dilution Factor :		1.0		1.0		1.0		1.0		1.0	
ANALYTE	CRQL	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
ALUMINUM	200			86.1	J						
ANTIMONY	60										
*ARSENIC	10										
BARIUM	200	43.3	J	68.3	J	17.9	J	160	J	63.4	J
BERYLLIUM	5		UL		UL		UL		UL		UL
CADMIUM	5										
CALCIUM	5000	37700		13500		2280	J	32200		996	B
CHROMIUM	10										
COBALT	50										
COPPER	25	2.7	B	2.4	B	2.1	B	2.5	B	2.2	B
IRON	100		UL		UL		UL	9380			UL
LEAD	10										
MAGNESIUM	5000	7330		2540	J	498	J	6430		156	B
MANGANESE	15	166		134		12.7	B	514		2.8	B
MERCURY	0.2					0.015	B				
*NICKEL	40			4.8	J						
POTASSIUM	5000	2450	J	1750	J	996	J	1410	J	631	B
SELENIUM	35										
SILVER	10		R		R		R		R		R
SODIUM	5000	201000		174000		206000		199000		199000	
THALLIUM	25										
VANADIUM	50	2.8	J	2.8	J	2.4	J			2.8	J
ZINC	60										

CRQL = Contract Required Quantitation Limit

*Action Level Exists

SEE NARRATIVE FOR CODE DEFINITIONS

To calculate sample quantitation limits: (CRQL * Dilution Factor)

Revised 09/99

Prefix: All sample locations are prefixed BJS-

DATA SUMMARY FORM: INORGANIC

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ORIGINAL

Case #: 34031

SDG : MC1AS4

Site :

BIG JOHN SALVAGE HOULT RD

Lab. :

CEIMIC

ALL DISSOLVED METALS

Sample Number :		MC1AT1		MC1AT2		MC1AT6		MC1AT7		MC1AW2	
Sampling Location : Prefix : BJS-		MW09C-0405		MW10B-0405		MW16B-0405		MW16C-0405		MW02A-0405	
Matrix :		Water		Water		Water		Water		Water	
Units :		ug/L		ug/L		ug/L		ug/L		ug/L	
Date Sampled :		4/13/2005		4/13/2005		4/13/2005		4/13/2005		4/14/2005	
Time Sampled :		12:05		13:05		16:10		14:30		08:10	
Dilution Factor :		1.0		1.0		1.0		1.0		1.0	
ANALYTE	CRQL	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
ALUMINUM	200			62.8	J			53.2	J		
ANTIMONY	60										UL
*ARSENIC	10			8.1	J						
BARIUM	200	90.3	J	22.2	J	42.9	J	197	J	179	J
BERYLLIUM	5		UL		UL		UL		UL		UL
*CADMIUM	5										
CALCIUM	5000	1350	B	1260	B	1820	J	2530	J	39200	
*CHROMIUM	10										
COBALT	50									9.2	J
COPPER	25	3.5	B	2.2	B	2.2	B	3.0	B	2.7	B
IRON	100		UL		UL		UL		UL	9580	
LEAD	10										UL
MAGNESIUM	5000	228	B	182	B	428	J	560	J	11700	
MANGANESE	15	1.8	B	1.7	B	5.6	B	5.8	B	1390	
MERCURY	0.2	0.016	B								
*NICKEL	40									11.5	J
POTASSIUM	5000	893	B	1090	J	883	B	1300	J	2800	J
SELENIUM	35										
SILVER	10		R		R		R		R		R
SODIUM	5000	303000		259000		115000		114000		40100	
THALLIUM	25										
VANADIUM	50	3.4	J	5.3	J	2.2	J	2.7	J		
ZINC	60							8.5	B	19.6	B

CRQL = Contract Required Quantitation Limit

*Action Level Exists

SEE NARRATIVE FOR CODE DEFINITIONS

To calculate sample quantitation limits: (CRQL * Dilution Factor)

Revised 09/99

Prefix : All sample locations are prefixed BJS-

DATA SUMMARY FORM: INORGANIC

Page 7 of 10

ORIGINAL

Case #: 34031

SDG : MC1AS4

Site :

BIG JOHN SALVAGE HOULT RD

Lab. :

CEIMIC

ALL DISSOLVED METALS

Sample Number :		MC1AW3		MC1AW4		MC1AW7		MC1AX0		MC1AX1	
Sampling Location : Prefix : BJS-		MW03A-0405		MW04A-0405		MW08A-0405		MW13A-0405		MW13B-0405	
Field QC :		Dup of MC1AX6		Water		Dup of MC1AX5		Water		Water	
Matrix :		Water		Water		Water		Water		Water	
Units :		ug/L		ug/L		ug/L		ug/L		ug/L	
Date Sampled :		4/14/2005		4/13/2005		4/14/2005		4/14/2005		4/14/2005	
Time Sampled :		13:15		17:45		12:00		14:50		13:30	
Dilution Factor :		1.0		1.0		1.0		1.0		1.0	
ANALYTE	CRQL	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
ALUMINUM	200			59.2	J	97.2	J	195	J		
ANTIMONY	60				UL						
*ARSENIC	10	23.4									
BARIUM	200	107	J	140	J	41.4	J	125	J	422	
BERYLLIUM	5		UL		UL	0.65	J	0.20	J		UL
*CADMIUM	5					0.40	J	0.71	J		
CALCIUM	5000	30800		20900		3860	J	4900	J	39000	
*CHROMIUM	10	2.1	J	1.9	J			1.5	J		
COBALT	50	4.3	J	1.2	J	10.8	J	17.2	J		
COPPER	25	2.8	B	2.9	B	3.0	B	4.1	B		
IRON	100	40400		39700		64.4	J	279			UL
*LEAD	10				UL						
MAGNESIUM	5000	12600		8420		4210	J	4440	J	7890	
MANGANESE	15	3830		3700		354		594		371	
MERCURY	0.2										
*NICKEL	40	9.1	J			15.9	J	23.8	J		
POTASSIUM	5000	1790	J	2050	J	2190	J	2030	J	2260	J
SELENIUM	35										
SILVER	10		R		R		R		R		R
SODIUM	5000	19200		20000		13400		2240	J	32400	
THALLIUM	25										
VANADIUM	50										
ZINC	60	14.3	B			25.9	J	42.9	J		

CRQL = Contract Required Quantitation Limit

*Action Level Exists

SEE NARRATIVE FOR CODE DEFINITIONS

To calculate sample quantitation limits: (CRQL * Dilution Factor)

Revised 09/99

Prefix : All sample locations are prefixed BJS-

DATA SUMMARY FORM: INORGANIC

Page 8 of 10

ORIGINAL

Case #: 34031

SDG : MC1AS4

Site :

BIG JOHN SALVAGE HOULT RD

Lab. :

CEIMIC

ALL DISSOLVED METALS

Sample Number :		MC1AX3		MC1AX5		MC1AX6		MC1AX8		MC1AX9	
Sampling Location : Prefix : BJS-		MW14C-0405		MW21-0405		MW22-0405		GWEQ-02		GWEQ-03	
Field QC :				Dup of MC1AW7		Dup of MC1AW3		Rinsate Blank		Rinsate Blank	
Matrix :		Water		Water		Water		Water		Water	
Units :		ug/L		ug/L		ug/L		ug/L		ug/L	
Date Sampled :		4/14/2005		4/14/2005		4/14/2005		4/14/2005		4/14/2005	
Time Sampled :		11:30		11:40		13:00		14:30		15:45	
Dilution Factor :		1.0		1.0		1.0		1.0		1.0	
ANALYTE	CRQL	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
ALUMINUM	200	46.3	J	102	J						
ANTIMONY	60								UL		UL
*ARSENIC	10	7.3	J			20.6					
BARIUM	200	87.9	J	41.5	J	96.0	J	0.57	J	1.0	J
BERYLLIUM	5		UL	0.66	J		UL		UL		UL
*CADMIUM	5			0.47	J						
CALCIUM	5000	2660	J	3850	J	31500		211	B	279	B
*CHROMIUM	10					3.4	J				
COBALT	50			10.6	J	5.0	J		UL		UL
COPPER	25	3.9	B	4.1	B	3.4	B	2.5	J	2.1	J
IRON	100		UL	55.9	J	38100		110			UL
*LEAD	10								UL		UL
MAGNESIUM	5000	441	J	4160	J	12800			UL		UL
MANGANESE	15	26.1	B	343		4070		8.0	J	1.7	B
MERCURY	0.2										
*NICKEL	40			17.3	J	8.4	J				
POTASSIUM	5000	1460	J	2130	J	1750	J	288	B	264	B
SELENIUM	35	10.5	J								
SILVER	10		R		R		R		R		R
SODIUM	5000	314000		13200		18500		173	J	142	J
THALLIUM	25										
VANADIUM	50	0.9	J								
ZINC	60	7.6	B	27.4	J	14.2	B	16.4	J		

CRQL = Contract Required Quantitation Limit

*Action Level Exists

SEE NARRATIVE FOR CODE DEFINITIONS

To calculate sample quantitation limits: (CRQL * Dilution Factor)

Revised 09/99

Prefix : All sample locations are prefixed BJS-

DATA SUMMARY FORM: INORGANIC

Page 9 of 10

ORIGINAL

Case #: 34031

SDG : MC1AW5

Number of Soil Samples : 0

Site :

BIG JOHN SALVAGE HOULT RD

Number of Water Samples : 7

Lab. :

CEIMIC

ALL DISSOLVED METALS

Sample Number :		MC1AW5		MC1AW6		MC1AW8		MC1AW9		MC1AX2	
Sampling Location : Prefix : BJS-		MW05A-0405		MW06A-0405		MW08B-0405		MW08C-0405		MW14B-0405	
Matrix :		Water		Water		Water		Water		Water	
Units :		ug/L		ug/L		ug/L		ug/L		ug/L	
Date Sampled :		4/13/2005		4/13/2005		4/14/2005		4/14/2005		4/14/2005	
Time Sampled :		18:50		19:45		10:30		09:25		10:50	
Dilution Factor :		1.0		1.0		1.0		1.0		1.0	
ANALYTE	CRQL	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
ALUMINUM	200		UL		UL	72.2	J	58.5	J		UL
ANTIMONY	60										
*ARSENIC	10	19.2						6.1	J		
BARIUM	200	139	J	244		342		188	J	65.0	J
BERYLLIUM	5		UL		UL		UL		UL		UL
CADMIUM	5										
CALCIUM	5000	13000		26000		40700		8420		47800	
CHROMIUM	10	2.3	J	2.5	J						
COBALT	50	2.8	B	10.7	J			0.69	B	0.66	B
COPPER	25	4.1	B	2.8	B	2.3	B	2.4	B	2.3	B
IRON	100	25200		19400		34.0	B	66.4	B	32.2	B
LEAD	10					2.0	J	2.0	J		
MAGNESIUM	5000	8650		9410		7200		1360	J	9270	
MANGANESE	15	3530		2330		44.9		14.4	J	107	
MERCURY	0.2										
NICKEL	40	4.1	J	10.7	J						
POTASSIUM	5000	1650	J	1600	J	2130	J	1120	B	1980	J
SELENIUM	35										
SILVER	10		R		R		R		R		R
SODIUM	5000	40500		28800		36300		153000		23600	
THALLIUM	25										
VANADIUM	50										
ZINC	60			11.7	B						

CRQL = Contract Required Quantitation Limit

*Action Level Exists

SEE NARRATIVE FOR CODE DEFINITIONS

To calculate sample quantitation limits: (CRQL * Dilution Factor)

Revised 09/99

Prefix : All sample locations are prefixed BJS-

DATA SUMMARY FORM: INORGANIC

Page 10 of 10

Case #: 34031

SDG : MC1AW5

Site :

BIG JOHN SALVAGE HOULT RD

Lab. :

CEIMIC

ALL DISSOLVED METALS

Sample Number :		MC1AX4		MC1AX7							
Sampling Location : Prefix : BJS-		MW15A-0405		GWEQ-01							
Field QC :				Rinsate Blank							
Matrix :		Water		Water							
Units :		ug/L		ug/L							
Date Sampled :		4/13/2005		4/13/2005							
Time Sampled :		19:05		16:45							
Dilution Factor :		1.0		1.0							
ANALYTE	CRQL	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
ALUMINUM	200		UL		UL						
ANTIMONY	60										
*ARSENIC	10	10.5									
BARIUM	200	67.6	J	0.88	B						
BERYLLIUM	5		UL		UL						
CADMIUM	5										
CALCIUM	5000	37900		344	B						
CHROMIUM	10	3.4	J								
COBALT	50	28.8	J								
COPPER	25	2.5	B	2.7	B						
IRON	100	1630		70.6	B						
LEAD	10										
MAGNESIUM	5000	14500		50.9	J						
MANGANESE	15	6150		5.8	B						
MERCURY	0.2										
NICKEL	40	15.6	J								
POTASSIUM	5000	1470	J	130	B						
SELENIUM	35										
SILVER	10		R		R						
SODIUM	5000	13400		689	J						
THALLIUM	25										
VANADIUM	50										
ZINC	60	12.4	B	22.0	J						

CRQL = Contract Required Quantitation Limit

*Action Level Exists

SEE NARRATIVE FOR CODE DEFINITIONS

To calculate sample quantitation limits: (CRQL * Dilution Factor)

Revised 09/99

Prefix : All sample locations are prefixed BJS-

Appendix C

Chain-of-Custody Records



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

Case No: 34031

DAS No:

ORIGINAL

Region: 3	Date Shipped: 4/12/2005	Chain of Custody Record		Sampler Signature:
Project Code: T47121.0103	Carrier Name: FedEx	Relinquished By	(Date / Time)	Received By (Date / Time)
Account Code: 2005T03W302DD2C	Airbill: [REDACTED]	1		
CERCLIS ID: WVD054827944	Shipped to: Ceimic Corporation 10 Dean Knauss Drive Narragansett RI 02882 (401) 782-8900	2		
Spill ID:		3		
Site Name/State: Big John Salvage CLP 34031/WV		4		
Project Leader: Tad Yancheski				
Action: Remedial Investigation				
Sampling Co: Tetra Tech, Inc.				

INORGANIC SAMPLE No.	MATRIX/ SAMPLER	CONC/ TYPE	ANALYSIS/ TURNAROUND	TAG No./ PRESERVATIVE/ Bottles	STATION LOCATION	SAMPLE COLLECT DATE/TIME	ORGANIC SAMPLE No.	QC Type
MC0016	Ground Water/ Dennis	/G	(21) DM (21) [REDACTED] (HNO3)	[REDACTED]	BJS-MW02B-0405	S: 4/12/2005 10:35	C0016	--
MC1A07	Ground Water/ Dennis	/G	(21) DM (21) [REDACTED] (HNO3)	[REDACTED]	BJS-MW02C-0405	S: 4/12/2005 9:05	C0017	--
MC1A08	Ground Water/ Dennis	/G	(21) DM (21) [REDACTED] (HNO3)	[REDACTED]	BJS-MW04B-0405	S: 4/11/2005 10:40	C0022	--
MC1A09	Ground Water/ Vadim Petrov	/G	(21) DM (21) [REDACTED] (HNO3)	[REDACTED]	BJS-MW04C-0405	S: 4/11/2005 12:50	C0023	--
MC0023	Ground Water/ Vadim Petrov	/G	CN (21) [REDACTED] (21) TM [REDACTED] (HNO3), 873 (HNO3), 880 (NaOH) (3)	[REDACTED]	BJS-MW17B-0405	S: 4/12/2005 9:40	C0055	--
MC0055	Ground Water/ Vadim Petrov	/G	CN (21) [REDACTED] (21) TM [REDACTED] (HNO3), 1221 (HNO3), 1228 (NaOH) (3)	[REDACTED]	BJS-MW17C-0405	S: 4/12/2005 9:00	C0056	--
MC0056	Ground Water/ Vadim Petrov	/G	CN (21) [REDACTED] (21) TM [REDACTED] (HNO3), 1231 (HNO3), 1238 (NaOH) (3)	[REDACTED]				

SDG MC1A07 5-3-05 DM, Ng JTS

SDG MC0023 4-29-05 TM, CN, Ng JTS

MC1A09 Rec'd 4-27-05 JTS DM, Ng

MC0023 Rec'd 4-28-05 JTS TM, Ng, CN

Shipment for Case Complete? N	Sample(s) to be used for laboratory QC:	Additional Sampler Signature(s):	Chain of Custody Seal Number:
Analysis Key: CN = Cyanide, DM = CLP TAL Dissolved Metals, TM = CLP TAL Total Metals	Concentration: L = Low, M = Low/Medium, H = High	Type/Designate: Composite = C, Grab = G	Shipment Iced? _____

TR Number: 3-035066262-041205-0009

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

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

Case No: 34031

DAS No:

R

Region: 3	Date Shipped: 4/12/2005	Chain of Custody Record	Sampler Signature:
Project Code: T47121.0103	Carrier Name: FedEx	Relinquished By (Date / Time)	Received By (Date / Time)
Account Code: 2005T03W302DD2C	Airbill: 8483 3674 4357	1	
CERCLIS ID: WVD054827944	Shipped to: Ceimic Corporation 10 Dean Knauss Drive Narragansett RI 02882 (401) 782-8900	2	
Spill ID:		3	
Site Name/State: Big John Salvage CLP 34031/WV		4	
Project Leader: Tad Yancheski			
Action: Remedial Investigation			
Sampling Co: Tetra Tech, Inc.			

INORGANIC SAMPLE No.	MATRIX/ SAMPLER	CONC/ TYPE	ANALYSIS/ TURNAROUND	TAG No./ PRESERVATIVE/ Bottles	STATION LOCATION	SAMPLE COLLECT DATE/TIME	ORGANIC SAMPLE No.	QC Type
MC0030 MCIAR1	Ground Water/ Dennis Anderson	/G	CN (21), DM (21), TM (21)	928 (HNO3), 929 (HNO3), 936 (NaOH) (3)	BJS-MW06C-0405	S: 4/12/2005 13:00	C0030	--
MC0041 MCIAR2	Ground Water/ Dennis Anderson	/G	CN (21), DM (21), TM (21)	1038 (HNO3), 1039 (HNO3), 1040 (HNO3), 1041 (HNO3), 1060 (NaOH), 1061 (NaOH)	BJS-MW11B-0405	S: 4/11/2005 12:30	C0041	MS/MSD
MC0043 MCIAR3	Ground Water/ Dennis Anderson	/G	CN (21), DM (21), TM (21)	1072 (HNO3), 1073 (HNO3), 1080 (NaOH) (3)	BJS-MW12B-0405	S: 4/11/2005 11:10	C0043	--
MC0044 MCIAR4	Ground Water/ Dennis Anderson	/G	CN (21), DM (21), TM (21)	1082 (HNO3), 1083 (HNO3), 1090 (NaOH) (3)	BJS-MW12C-0405	S: 4/11/2005 10:15	C0044	--
MC0057 MCIAR7	Ground Water/ Dennis Anderson	/G	CN (21), DM (21), TM (21)	1240 (HNO3), 1241 (HNO3), 1248 (NaOH) (3)	BJS-MW18-0405	S: 4/12/2005 12:15	C0057	Field Duplicate

SDG MC0023 4-29-05 TM, CN, Hg JTS

Shipment for Case Complete? N	Sample(s) to be used for laboratory QC: MC0041	Additional Sampler Signature(s):	Chain of Custody Seal Number:
Analysis Key:	Concentration: L = Low, M = Low/Medium, H = High	Type/Designate: Composite = C, Grab = G	Shipment Iced? _____
CN = Cyanide, DM = CLP TAL Dissolved Metals, TM = CLP TAL Total Metals			

TR Number: 3-035066262-041205-0011

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

REGION 3 AR119226



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

Case No: 34031

DAS No:

R

ORIGINAL

Region: 3	Date Shipped: 4/13/2005	Chain of Custody Record	Sampler Signature:
Project Code: T47121.0103	Carrier Name: FedEx	Relinquished By (Date / Time)	Received By (Date / Time)
Account Code: 2005T03W302DD2C	Airbill: 8483 3674 4405	1	
CERCLIS ID: WVD054827944	Shipped to: Ceimic Corporation 10 Dean Knauss Drive Narragansett RI 02882 (401) 782-8900	2	
Spill ID:		3	
Site Name/State: Big John Salvage CLP 34031/WV		4	
Project Leader: Tad Yancheski			
Action: Remedial Investigation			
Sampling Co: Tetra Tech, Inc.			

INORGANIC SAMPLE No.	MATRIX/ SAMPLER	CONC/ TYPE	ANALYSIS/ TURNAROUND	TAG No/ PRESERVATIVE/ Bottles	STATION LOCATION	SAMPLE COLLECT DATE/TIME	ORGANIC SAMPLE No.	QC Type
MC0011	Ground Water/ Vadim Petrov	/G	CN (21), (21), TM (21)	(HNO3), 761 (HNO3), 768 (NaOH) (3)	BJS-MW01A1-0405	S: 4/13/2005 11:10	C0011	--
MC0012	Ground Water/ Vadim Petrov	/G	CN (21), (21), TM (21)	(HNO3), 770 (HNO3), 778 (NaOH) (3)	BJS-MW01A2-0405	S: 4/13/2005 10:15	C0012	--
MC0014	Ground Water/ Vadim Petrov	/G	CN (21), (21), TM (21)	(HNO3), 789 (HNO3), 796 (NaOH) (3)	BJS-MW01C-0405	S: 4/13/2005 8:55	C0014	--
MC0039	Ground Water/ Dennis Anderson	/G	CN (21), (21), TM (21)	(HNO3), 1019 (HNO3), 1026 (NaOH) (3)	BJS-MW10C-0405	S: 4/13/2005 8:45	C0039	--
MC0058	Ground Water/ Dennis Anderson	/G	CN (21), (21), TM (21)	(HNO3), 1251 (HNO3), 1258 (NaOH) (3)	BJS-MW19-0405	S: 4/13/2005 8:00	C0058	Field Duplicate
MC0059	Ground Water/ Vadim Petrov	/G	CN (21), (21), TM (21)	(HNO3), 1261 (HNO3), 1268 (NaOH) (3)	BJS-MW20-0405	S: 4/13/2005 9:20	C0059	Field Duplicate

SDG MC0023 4-29-05 TM, CN, Hg JTS

SDG MC1ARD 5-3-05 DM, Hg JTS

Shipment for Case Complete? N	Sample(s) to be used for laboratory QC:	Additional Sampler Signature(s):	Chain of Custody Seal Number:
Analysis Key:	Concentration: L = Low, M = Low/Medium, H = High	Type/Designate: Composite = C, Grab = G	Shipment Iced? _____
CN = Cyanide, DM = CLP TAL Dissolved Metals, TM = CLP TAL Total Metals			

TR Number: 3-035066262-041305-0009

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

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

Case No: 34031

DAS No:

R

Region: 3	Date Shipped: 4/13/2005	Chain of Custody Record		Sampler Signature:
Project Code: T47121.0103	Carrier Name: FedEx	Relinquished By	(Date / Time)	Received By
Account Code: 2005T03W302DD2C	Airbill: 8483 3674 4368			
CERCLIS ID: WV054827944	Shipped to: Ceimic Corporation	1		
Spill ID:	10 Dean Knauss Drive	2		
Site Name/State: Big John Salvage CLP 34031/WV	Narragansett RI 02882	3		
Project Leader: Tad Yancheski	(401) 782-8900	4		
Action: Remedial Investigation				
Sampling Co: Tetra Tech, Inc.				

INORGANIC SAMPLE No.	MATRIX/ SAMPLER	CONC/ TYPE	ANALYSIS/ TURNAROUND	TAG No./ PRESERVATIVE/ Bottles	STATION LOCATION	SAMPLE COLLECT DATE/TIME		ORGANIC SAMPLE No.	QC Type
MC0013 MCIAS1	Ground Water/ Vadim Petrov	/G	CN (21), DM (21), TM (21)	779 (HNO3), 780 (HNO3), 787 (NaOH) (3)	BJS-MW01B-0405	S: 4/13/2005	12:00	C0013	--
MC0028 MCIAS7	Ground Water/ Dennis Anderson	/G	CN (21), DM (21), TM (21)	917 (HNO3), 918 (HNO3), 925 (NaOH) (3)	BJS-MW06B-0405	S: 4/12/2005	13:30	C0028	--
MC0036 MCIAT0	Ground Water/ Dennis Anderson	/G	CN (21), DM (21), TM (21)	988 (HNO3), 989 (HNO3), 996 (NaOH) (3)	BJS-MW09B-0405	S: 4/13/2005	11:15	C0036	--
MC0037 MCIAT1	Ground Water/ Dennis Anderson	/G	CN (21), DM (21), TM (21)	1006 (NaOH), 998 (HNO3), 999 (HNO3) (3)	BJS-MW09C-0405	S: 4/13/2005	12:05	C0037	--
MC0054 MCIAT7	Ground Water/ Vadim Petrov	/G	CN (21), DM (21), TM (21)	1196 (HNO3), 1197 (HNO3), 1198 (HNO3), 1199 (HNO3), 1218 (NaOH), 1219 (NaOH) (6)	BJS-MW16C-0405	S: 4/13/2005	14:30	C0054	MS/MSD

Shipment for Case Complete? N	Sample(s) to be used for laboratory QC: MC0054	Additional Sampler Signature(s):	Chain of Custody Seal Number:
Analysis Key: CN = Cyanide, DM = CLP TAL Dissolved Metals, TM = CLP TAL Total Metals	Concentration: L = Low, M = Low/Medium, H = High	Type/Designate: Composite = C, Grab = G	Shipment Iced? _____

TR Number: 3-035066262-041305-0012

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

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AR119228

F2V5.1.047 Page 1 of 1

ORIGINAL



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

Case No: 34031

DAS No:

R

Region: 3	Date Shipped: 4/13/2005	Chain of Custody Record	Sampler Signature:
Project Code: T47121.0103	Carrier Name: FedEx	Relinquished By (Date / Time)	Received By (Date / Time)
Account Code: 2005T03W302DD2C	Airbill: 8483 3674 4416	1	
CERCLIS ID: WV054827944	Shipped to: Ceimic Corporation 10 Dean Knauss Drive Narragansett RI 02882 (401) 782-8900	2	
Spill ID:		3	
Site Name/State: Big John Salvage CLP 34031/WV		4	
Project Leader: Tad Yancheski			
Action: Remedial Investigation			
Sampling Co: Tetra Tech, Inc.			

INORGANIC SAMPLE No.	MATRIX/ SAMPLER	CONC/ TYPE	ANALYSIS/ TURNAROUND	TAG No./ PRESERVATIVE/ Bottles	STATION LOCATION	SAMPLE COLLECT DATE/TIME	ORGANIC SAMPLE No.	QC Type
MC0019 <i>MC1A53</i>	Ground Water/ Vadim Petrov	/G	CN (21), DM (21), TM (21)	836 (HNO3), 837 (HNO3), 844 (NaOH) (3)	BJS-MW03B-0405	S: 4/12/2005 15:25	C0019	--
MC0025 <i>MC1A55</i>	Ground Water/ Vadim Petrov	/G	CN (21), DM (21), TM (21)	890 (HNO3), 891 (HNO3), 898 (NaOH) (3)	BJS-MW05B-0405	S: 4/12/2005 12:20	C0025	--
MC0026 <i>MC1A56</i>	Ground Water/ Vadim Petrov	/G	CN (21), DM (21), TM (21)	899 (HNO3), 900 (HNO3), 907 (NaOH) (3)	BJS-MW05C-0405	S: 4/12/2005 17:00	C0026	--
MC0051 <i>MC1A74</i>	Ground Water/ Dennis Anderson	/G	CN (21), DM (21), TM (21)	1166 (HNO3), 1167 (HNO3), 1174 (NaOH) (3)	BJS-MW15B-0405	S: 4/12/2005 16:15	C0051	--
MC0052 <i>MC1A75</i>	Ground Water/ Dennis Anderson	/G	CN (21), DM (21), TM (21)	1176 (HNO3), 1177 (HNO3), 1184 (NaOH) (3)	BJS-MW15C-0405	S: 4/12/2005 17:00	C0052	--
MC0188	Field QC/ Dennis Anderson	/G	CN (21), DM (21), TM (21)	4241 (HNO3), 4242 (HNO3), 4249 (NaOH) (3)	EQ-SD1-0405	S: 4/11/2005 14:30	C0188	Rinsate
MC0189	Field QC/ Dennis Anderson	/G	CN (21), DM (21), TM (21)	4250 (HNO3), 4251 (HNO3), 4258 (NaOH) (3)	EQ-SW1-0405	S: 4/11/2005 14:00	C0189	Rinsate

SDG MC0023, TM, CN, Hg 4-29-05 JTS

Shipment for Case Complete? N	Sample(s) to be used for laboratory QC:	Additional Sampler Signature(s):	Chain of Custody Seal Number:
Analysis Key: CN = Cyanide, DM = CLP TAL Dissolved Metals, TM = CLP TAL Total Metals	Concentration: L = Low, M = Low/Medium, H = High	Type/Designate: Composite = C, Grab = G	Shipment Iced? _____

TR Number: 3-035066262-041305-0004

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

Case No: 34031

DAS No:

R

Region: 3	Date Shipped: 4/13/2005	Chain of Custody Record	Sampler Signature:	
Project Code: T47121.0103	Carrier Name: FedEx		Relinquished By (Date / Time)	Received By (Date / Time)
Account Code: 2005T03W302DD2C	Airbill: 8483 3674 4346		1	
CERCLIS ID: WVD054827944	Shipped to: Ceimic Corporation 10 Dean Knauss Drive Narragansett RI 02882 (401) 782-8900		2	
Spill ID:			3	
Site Name/State: Big John Salvage CLP 34031/WW		4		
Project Leader: Tad Yancheski				
Action: Remedial Investigation				
Sampling Co: Tetra Tech, Inc.				

INORGANIC SAMPLE No.	MATRIX/ SAMPLER	CONC/ TYPE	ANALYSIS/ TURNAROUND	TAG No/ PRESERVATIVE/ Bottles	STATION LOCATION	SAMPLE COLLECT DATE/TIME		ORGANIC SAMPLE No.	QC Type
MC0020 MCIAS4	Ground Water/ Vadim Petrov	/G	CN (21), DM (21), TM (21)	845 (HNO3), 846 (HNO3), 853 (NaOH) (3)	BJS-MW03C-0405	S: 4/12/2005	16:15	C0020	--
MC0031 MCIAS8	Ground Water/ Dennis Anderson	/G	CN (21), DM (21), TM (21)	938 (HNO3), 939 (HNO3), 946 (NaOH) (3)	BJS-MW07B-0405	S: 4/13/2005	15:45	C0031	--
MC0032 MCIAS9	Ground Water/ Dennis Anderson	/G	CN (21), DM (21), TM (21)	948 (HNO3), 949 (HNO3), 956 (NaOH) (3)	BJS-MW07C-0405	S: 4/13/2005	14:30	C0032	--
MC0038 MCIAT2	Ground Water/ Dennis Anderson	/G	CN (21), DM (21), TM (21)	1008 (HNO3), 1009 (HNO3), 1016 (NaOH) (3)	BJS-MW10B-0405	S: 4/13/2005	13:05	C0038	--
MC0053 MCIAT6	Ground Water/ Vadim Petrov	/G	CN (21), DM (21), TM (21)	1186 (HNO3), 1187 (HNO3), 1194 (NaOH) (3)	BJS-MW16B-0405	S: 4/13/2005	16:10	C0053	--
MC0196	Field QC/ Vadim Petrov	/G	CN (21), TM (21)	4332 (HNO3), 4338 (NaOH) (2)	BJS-FB01-045	S: 4/13/2005	16:15	C0196	--

Shipment for Case Complete? N	Sample(s) to be used for laboratory QC:	Additional Sampler Signature(s):	Chain of Custody Seal Number:
Analysis Key:	Concentration: L = Low, M = Low/Medium, H = High	Type/Designate: Composite = C, Grab = G	Shipment Iced? _____
CN = Cyanide, DM = CLP TAL Dissolved Metals, TM = CLP TAL Total Metals			

TR Number: 3-035066262-041305-0016

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ORIGINAL



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

Case No: 34031

DAS No:

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Region: 3	Date Shipped: 4/14/2005	Chain of Custody Record	Sampler Signature:
Project Code: T47121.0103	Carrier Name: FedEx		
Account Code: 2005T03W302DD2C	Airbill: 8483 3674 4380	Relinquished By (Date / Time)	Received By (Date / Time)
CERCLIS ID: WVD054827944	Shipped to: Ceimic Corporation 10 Dean Knauss Drive Narragansett RI 02882 (401) 782-8900	1	
Spill ID:		2	
Site Name/State: Big John Salvage CLP 34031/WV		3	
Project Leader: Tad Yancheski		4	
Action: Remedial Investigation			
Sampling Co: Tetra Tech, Inc.			

INORGANIC SAMPLE No.	MATRIX/ SAMPLER	CONC/ TYPE	ANALYSIS/ TURNAROUND	TAG No/ PRESERVATIVE/ Bottles	STATION LOCATION	SAMPLE COLLECT DATE/TIME		ORGANIC SAMPLE No.	QC Type
MC0015 MC1AW2	Ground Water/ Dennis Anderson	/G	CN (21), DM (21), TM (21)	797 (HNO3), 798 (HNO3), 806 (NaOH) (3)	BJS-MW02A-0405	S: 4/14/2005	8:10	C0015	--
MC0021 MC1AW4	Ground Water/ Vadim Petrov	/G	CN (21), DM (21), TM (21)	854 (HNO3), 855 (HNO3), 862 (NaOH) (3)	BJS-MW04A-0405	S: 4/13/2005	17:45	C0021	--
MC0024 MC1AW5	Ground Water/ Vadim Petrov	/G	CN (21), DM (21), TM (21)	881 (HNO3), 882 (HNO3), 889 (NaOH) (3)	BJS-MW05A-0405	S: 4/13/2005	18:50	C0024	--
MC0027 MC1AW6	Ground Water/ Vadim Petrov	/G	CN (21), DM (21), TM (21)	908 (HNO3), 909 (HNO3), 916 (NaOH) (3)	BJS-MW06A-0405	S: 4/13/2005	19:45	C0027	--
MC0050 MC1AX4	Ground Water/ Dennis Anderson	/G	CN (21), DM (21), TM (21)	1156 (HNO3), 1157 (HNO3), 1164 (NaOH) (3)	BJS-MW15A-0405	S: 4/13/2005	19:05	C0050	--
MC0195 MC1AX7	Field QC/ Dennis Anderson	/G	CN (21), DM (21), TM (21)	4316 (HNO3), 4317 (HNO3), 4323 (NaOH) (3)	BJS-GWEQ-01	S: 4/13/2005	16:45	C0195	Rinsate

Shipment for Case Complete? N	Sample(s) to be used for laboratory QC:	Additional Sampler Signature(s):	Chain of Custody Seal Number:
Analysis Key:	Concentration: L = Low, M = Low/Medium, H = High	Type/Designate: Composite = C, Grab = G	Shipment Iced? _____
CN = Cyanide, DM = CLP TAL Dissolved Metals, TM = CLP TAL Total Metals			

TR Number: 3-035066262-041405-0027

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

Case No: 34031

DAS No:

R

Region: 3	Date Shipped: 4/14/2005	Chain of Custody Record	Sampler Signature:	
Project Code: T47121.0103	Carrier Name: FedEx		Relinquished By (Date / Time)	Received By (Date / Time)
Account Code: 2005T03W302DD2C	Airbill: 8483 3674 4390		1	
CERCLIS ID: WVD054827944	Shipped to: Ceimic Corporation 10 Dean Knauss Drive Narragansett RI 02882 (401) 782-8900		2	
Spill ID:			3	
Site Name/State: Big John Salvage CLP 34031/WW		4		
Project Leader: Tad Yancheski				
Action: Remedial Investigation				
Sampling Co: Tetra Tech, Inc.				

INORGANIC SAMPLE No.	MATRIX/ SAMPLER	CONC/ TYPE	ANALYSIS/ TURNAROUND	TAG No./ PRESERVATIVE/ Bottles	STATION LOCATION	SAMPLE COLLECT DATE/TIME		ORGANIC SAMPLE No.	QC Type
MC0018 MC1AW3	Ground Water/ Dennis Anderson	/G	CN (21), DM (21), TM (21)	827 (HNO3), 828 (HNO3), 835 (NaOH) (3)	BJS-MW03A-0405	S: 4/14/2005	13:15	C0018	--
MC0033 MC1AW7	Ground Water/ Vadim Petrov	/G	CN (21), DM (21), TM (21)	958 (HNO3), 959 (HNO3), 966 (NaOH) (3)	BJS-MW08A-0405	S: 4/14/2005	12:00	C0033	--
MC0046 MC1AX1	Ground Water/ Vadim Petrov	/G	CN (21), DM (21), TM (21)	1102 (HNO3), 1103 (HNO3), 1110 (NaOH) (3)	BJS-MW13B-0405	S: 4/14/2005	13:30	C0046	--
MC0061 MC1AX5	Ground Water/ Vadim Petrov	/G	CN (21), DM (21), TM (21)	1280 (HNO3), 1281 (HNO3), 1288 (NaOH) (3)	BJS-MW21-0405	S: 4/14/2005	11:40	C0061	Field Duplicate
MC0062 MC1AX6	Ground Water/ Dennis Anderson	/G	CN (21), DM (21), TM (21)	1290 (HNO3), 1291 (HNO3), 1298 (NaOH) (3)	BJS-MW22-0405	S: 4/14/2005	13:00	C0062	Field Duplicate

Shipment for Case Complete? N	Sample(s) to be used for laboratory QC:	Additional Sampler Signature(s):	Chain of Custody Seal Number:
Analysis Key: CN = Cyanide, DM = CLP TAL Dissolved Metals, TM = CLP TAL Total Metals	Concentration: L = Low, M = Low/Medium, H = High	Type/Designate: Composite = C, Grab = G	Shipment Iced? _____

TR Number: 3-035066262-041405-0010

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

Case No: 34031

DAS No:

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Region: 3 Project Code: T47121.0103 Account Code: 2005T03W302DD2C CERCLIS ID: WVD054827944 Spill ID: Site Name/State: Big John Salvage CLP 34031/WV Project Leader: Tad Yancheski Action: Remedial Investigation Sampling Co: Tetra Tech, Inc.	Date Shipped: 4/14/2005 Carrier Name: FedEx Airbill: 8483 3674 4379 Shipped to: Ceimic Corporation 10 Dean Knauss Drive Narragansett RI 02882 (401) 782-8900	Chain of Custody Record <table border="1"><tr><td>Relinquished By</td><td>(Date / Time)</td><td>Received By</td><td>(Date / Time)</td></tr><tr><td>1</td><td></td><td></td><td></td></tr><tr><td>2</td><td></td><td></td><td></td></tr><tr><td>3</td><td></td><td></td><td></td></tr><tr><td>4</td><td></td><td></td><td></td></tr></table>	Relinquished By	(Date / Time)	Received By	(Date / Time)	1				2				3				4				Sampler Signature:
Relinquished By	(Date / Time)	Received By	(Date / Time)																				
1																							
2																							
3																							
4																							

INORGANIC SAMPLE No.	MATRIX/ SAMPLER	CONC/ TYPE	ANALYSIS/ TURNAROUND	TAG No./ PRESERVATIVE/ Bottles	STATION LOCATION	SAMPLE COLLECT DATE/TIME		ORGANIC SAMPLE No.	QC Type
MC0034 <i>MCI AW8</i>	Ground Water/ Vadim Petrov	/G	CN (21), <u>DM</u> (21), TM (21)	968 (HNO3), 969 (HNO3), 976 (NaOH) (3)	BJS-MW08B-0405	S: 4/14/2005	10:30	C0034	--
MC0035 <i>MCI AW9</i>	Ground Water/ Vadim Petrov	/G	CN (21), <u>DM</u> (21), TM (21)	978 (HNO3), 979 (HNO3), 986 (NaOH) (3)	BJS-MW08C-0405	S: 4/14/2005	9:25	C0035	--
MC0048 <i>MCI AX2</i>	Ground Water/ Dennis Anderson	/G	CN (21), <u>DM</u> (21), TM (21)	1122 (HNO3), 1123 (HNO3), 1124 (HNO3), 1125 (HNO3), 1144 (NaOH), 1145 (NaOH) (6)	BJS-MW14B-0405	S: 4/14/2005	10:50	C0048	MS/MSD
MC0049 <i>MCI AX3</i>	Ground Water/ Dennis Anderson	/G	<u>DM</u> TM (21)	1147 (HNO3) (1)	BJS-MW14C-0405	S: 4/14/2005	11:30	C0049	--
MC01A1	Field QC/ Vadim Petrov	/G	CN (21), TM (21)	4387 (HNO3), 4396 (NaOH) (2)	BJS-FBO2-045	S: 4/14/2005	9:15	C01A1	--
MC01A2	Field QC/ Dennis Anderson	/G	CN (21), TM (21)	4398 (HNO3), 4406 (NaOH) (2)	BJS-FBO3-045	S: 4/14/2005	9:50	C01A2	--

Shipment for Case Complete? N	Sample(s) to be used for laboratory QC: MC0048	Additional Sampler Signature(s):	Chain of Custody Seal Number:
Analysis Key:	Concentration: L = Low, M = Low/Medium, H = High	Type/Designate: Composite = C, Grab = G	Shipment Iced? _____
CN = Cyanide, DM = CLP TAL Dissolved Metals, TM = CLP TAL Total Metals			

TR Number: 3-035066262-041405-0003

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

Case No: 34031

DAS No:

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Region: 3	Date Shipped: 4/14/2005	Chain of Custody Record	Sampler Signature:
Project Code: T47121.0103	Carrier Name: FedEx	Relinquished By (Date / Time)	Received By (Date / Time)
Account Code: 2005T03W302DD2C	Airbill: 8511 7210 0648	1	
CERCLIS ID: WVD054827944	Shipped to: Ceimic Corporation 10 Dean Knauss Drive Narragansett RI 02882 (401) 782-8900	2	
Spill ID:		3	
Site Name/State: Big John Salvage CLP 34031/WV		4	
Project Leader: Tad Yancheski			
Action: Remedial Investigation			
Sampling Co: Tetra Tech, Inc.			

INORGANIC SAMPLE No.	MATRIX/ SAMPLER	CONC/ TYPE	ANALYSIS/ TURNAROUND	TAG No/ PRESERVATIVE/ Bottles	STATION LOCATION	SAMPLE COLLECT DATE/TIME		ORGANIC SAMPLE No.	QC Type
MC0045 MC1AX0	Ground Water/ Vadim Petrov	/G	CN (21), DM (21), TM (21)	1092 (HNO3), 1093 (HNO3), 1100 (NaOH) (3)	BJS-MW13A-0405	S: 4/14/2005	14:50	C0045	--
MC0049 MC1AX3	Ground Water/ Dennis Anderson	/G	DM (21)	1146 (HNO3) (1)	BJS-MW14C-0405	S: 4/14/2005	11:30	C0049	--
MC01A3 MC1AX8	Field QC/ Dennis Anderson	/G	CN (21), DM (21), TM (21)	4427 (HNO3), 4428 (HNO3), 4435 (NaOH) (3)	BJS-GWEQ-02	S: 4/14/2005	14:30	C01A3	Rinsate
MC01A4 MC1AX9	Field QC/ Vadim Petrov	/G	CN (21), DM (21), TM (21)	4436 (HNO3), 4437 (HNO3), 4444 (NaOH) (3)	BJS-GWEQ-03	S: 4/14/2005	15:45	C01A4	Rinsate

Shipment for Case Complete? N	Sample(s) to be used for laboratory QC:	Additional Sampler Signature(s):	Chain of Custody Seal Number:
Analysis Key: CN = Cyanide, DM = CLP TAL Dissolved Metals, TM = CLP TAL Total Metals	Concentration: L = Low, M = Low/Medium, H = High	Type/Designate: Composite = C, Grab = G	Shipment Iced? _____

TR Number: 3-035066262-041405-0014

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U.S EPA Region III Analytical Request Form

RAS CASE #: CT3328 34031		DAS #:		NSF #:	
Date: 3/7/2005		QAPP/SAP: YES		Data Validation Level: M3 & IM2	
Site: BIG JOHN SALVAGE - Hoult Road					
Address: 900 HOULT RD		City: FAIRMONT		State: WV	
Latitude: 39° 29' 54"		Longitude: -80° 7' 12"			
Program: SUPERFUND		CERCLIS#: WVD054827944		Activity: RI/FS	
Account #: 05T03 N302DD2C0371LA00		Operable Unit:		Spill ID: 0358	
Preparer: KYLE SWARTZWELDER		Phone: 302-738-7551		Fax: 302-454-5988	
OSC/RPM: CHRISTIAN MATTA 34523		Phone: 215-814-2317		Fax: 215-814-3002	
Site Leader: TAD YANCHESKI		Phone: 302-738-7551		Fax: 302-454-5988	
EPA CO: JIM CLARK		Contract Type: RACS		Prime: TT/BV	
Analytical TAT: 14 days 14/16		Analytical + Validation TAT: 30 days			
Ship Date From: 4/3/05		Ship Date To: 4/15/05			
Samples	Method	Parameter	Matrix		
46	OLM04.3 LIBRTY	TCL - SVOCs, PEST/PCBS ONLY	SOIL	23362, 23354	
132	ILM05.3 CHEM	ICP-AES TAL+Hg+CN	SOIL	23363	
86	OLM04.3 LIBRTY	TCL	SOIL	23364	
123	OLM04.3 LIBRTY	TCL	AQ	23365	
123 } 246	ILM05.3 CHEM	ICP-AES TAL+HG+CN	AQ	23366	
123	ILM05.3	ICP-AES TAL+HG-DM	AQ		
14	OLC03.2 A4	TCL	AQ	23367	
14	ILM05.3 DATA	ICP-MS TAL+HG+CN	AQ	23368	
114	OLM04.3	TCL	SEDIMENT		
114	ILM05.3	ICP-AES TAL+HG+CN	SEDIMENT		

Instruction: See Big John Salvage - Hoult Road Site Final Ri/Fs Work Plan - February 2005, Section 4.4 (Identification Of Potential Sampling Approaches And Appropriate Analytical Methods) For A Complete Listing Of All Proposed Analytical Methods.

Please Provide Electronic Data Deliverables For All Data

Big John Salvage – Case 34031 duplicate pairs

SamplesDuplicates

C0018 / MC0018	C0062 / MC0062
C0014 / MC0014	C0059 / MC0059
C0033 / MC0033	C0061 / MC0061
C0030 / MC0030	C0057 / MC0057
C0039 / MC0039	C0058 / MC0058
C0001 / MC0001	C00G1 / MC00G1
C0002 / MC0002	C00G2 / MC00G2
C00F9 / MC00F9	C00G4 / MC00G4
C00E7 / MC00E7	C00G5 / MC00G5
C00B2 / MC00B2	C00C4 / MC00C4
C00A1 / MC00A1	C00C5 / MC00C5
C0093 / MC0093	C00C6 / MC00C6
C0077 / MC0077	C00C7 / MC00C7
C0182 / MC0182	C00C8 / MC00C8
C0086 / MC0086	C00C9 / MC00C9
C0066 / MC0066	C00D0 / MC00D0
C00L9 / MC00L9	C0155 / MC0155 (BJS-SW-WT3-1-0405)
C0111 / MC0111	C0135 / MC0135 (" 2 ")
C0112 / MC0112	C0156 / MC0156 (" 3 ")
C00L1 / MC00L1	C0153 / MC0153
C0104 / MC0104	C0134 / MC0134
C0105 / MC0105	C0154 / MC0154

Appendix D

Laboratory Case Narrative

When ICP-AES raw data have been reprocessed in an SDG, the words "Reprocessed on" followed by the date and time of reprocessing will sometimes be printed in the header of each standard and sample raw data report. The word "Reprocessed" is used when the original sequence data is regenerated after it was collected and processed with incorrect information (such as sample information, standard nomenclature) or settings (such as background correction, internal standard, dilution factor, QC concentration, wrong IEC table, etc.)

QA/QC Samples:

Matrix spike and duplicate analysis – as well as ICP fivefold serial dilution – were performed on sample MC1AR2, as indicated on the Traffic Reports / Chains of Custody for sample MC0041. A post-digestion spike was not required for this SDG.

Observations:

A "U" flag in the C column on the Form IA-IN or any other form indicates that the concentration of that analyte in the sample is undetected at the experimentally-determined method detection limit (MDL). If any analyte is detected at a concentration between the Contract Required Quantitation Limit (CRQL) and the MDL, a "J" flag is shown in the C column on the form.

The "N", "*" and "E" qualifiers do not apply to this SDG. No analyte is detected in any sample in this SDG at a concentration exceeding the experimentally-determined linear range of the ICP-AES instrument, or the high calibration point of the CVAA instrument.

Due to a software limitation, please note that all ICP-AES target analytes are reported on the Form IIB-IN for the CRQL Check (CRI) standard, even though seven target analytes (Al, Ba, Ca, Fe, Mg, K, Na) do not require such monitoring.

Deviations from Contract:

Arsenic and Zinc responses are high (117 and 111%, respectively) in one of the ICP-AES Continuing Calibration Verification [CCV] standards.

End of SDG Narrative.

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 has been authorized by the Laboratory Manager or his designee, as verified by the following signature.



Ryan Montalbano
Supervisor, Inorganic Laboratories

04/29/2005

Date

When ICP-AES and CVAA raw data have been reprocessed in an SDG, the words "Reprocessed on" followed by the date and time of reprocessing will sometimes be printed in the header of each standard and sample raw data report. The word "Reprocessed" is used when the original sequence data is regenerated after it was collected and processed with incorrect information (such as sample information, standard nomenclature) or settings (such as background correction, internal standard, dilution factor, QC concentration, wrong IEC table, etc.)

QA/QC Samples:

Matrix spike and duplicate analysis – as well as ICP fivefold serial dilution – were performed on sample MC1AT7, as indicated on the Traffic Reports / Chains of Custody for sample MC0054. A post-digestion spike was not required for this SDG.

Observations:

A "U" flag in the C column on the Form IA-IN or any other form indicates that the concentration of that analyte in the sample is undetected at the experimentally-determined method detection limit (MDL). If any analyte is detected at a concentration between the Contract Required Quantitation Limit (CRQL) and the MDL, a "J" flag is shown in the C column on the form.

The "N", "*" and "E" qualifiers do not apply to this SDG. No analyte is detected in any sample in this SDG at a concentration exceeding the experimentally-determined linear range of the ICP-AES instrument, or the high calibration point of the CVAA instrument.

Due to a software limitation, please note that all ICP-AES target analytes are reported on the Form IIB-IN for the CRQL Check (CRI) standard, even though seven target analytes (Al, Ba, Ca, Fe, Mg, K, Na) do not require such monitoring.

Deviations from Contract:

Three Continuing Calibration Verification [CCV] standards had high response for Antimony (111%, 112%, 111%) and one CCV standard had a high response for Selenium (111%).

End of SDG Narrative.

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 has been authorized by the Laboratory Manager or his designee, as verified by the following signature.



Ryan Montalbano
Supervisor, Inorganic Laboratories

05/17/2005

Date

QA/QC Samples:

Matrix spike and duplicate analysis – as well as ICP fivefold serial dilution – were performed on sample MC1AX2, as indicated on the Traffic Reports / Chains of Custody for sample MC0048. A post-digestion spike was not required for this SDG.

Observations:

A "U" flag in the C column on the Form IA-IN or any other form indicates that the concentration of that analyte in the sample is undetected at the experimentally-determined method detection limit (MDL). If any analyte is detected at a concentration between the Contract Required Quantitation Limit (CRQL) and the MDL, a "J" flag is shown in the C column on the form.

The "N", "*" and "E" qualifiers do not apply to this SDG. No analyte is detected in any sample in this SDG at a concentration exceeding the experimentally-determined linear range of the ICP-AES instrument, or the high calibration point of the CVAA instrument.


Due to a software limitation, please note that all ICP-AES target analytes are reported on the Form IIB-IN for the CRQL Check (CRI) standard, even though seven target analytes (Al, Ba, Ca, Fe, Mg, K, Na) do not require such monitoring.

Deviations from Contract:

None.

End of SDG Narrative.

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 has been authorized by the Laboratory Manager or his designee, as verified by the following signature.


Ryan Montalbano
Supervisor, Inorganic Laboratories

05/12/2005

Date

ORIGINAL

delivery. NOTE: Regardless of content, this e-mail shall not operate to bind CSC to any order or other contract unless pursuant to explicit written agreement or government initiative expressly permitting the use of e-mail for such purpose.

-----Original Message-----

From: Ryan Montalbano [mailto:rmontalbano@ceimic.com]
Sent: Thursday, April 21, 2005, 11:45 AM
To: 'Benhoff, Michael'
Subject: Case 34031 Incorrect/duplicated sample numbers (Thu. 04/14/05)
Importance: High

Hi Mike.

For samples received on Thursday 04/14/05 for Case 34031, the sampler continued to use the same sample ID's for the TM and DM samples. The ID's for this shipment are as follows: MC0011-MC0014, MC0019-MC0020, MC0025-MC0026, MC0028, MC0031-MC0032, MC0036-MC0039, MC0051-MC0054, MC0058-MC0059, and MC0188-MC0189. Please provide new IDs for the DM analysis.

Thanks! -Ryan

Ryan Montalbano
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Thanks! -Ryan

Ryan Montalbano
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ORIGINAL

-----Original Message-----

From: Ryan Montalbano [mailto:rmontalbano@ceimic.com]
Sent: Thursday, April 21, 2005 6:19 PM
To: 'Benhoff, Michael'
Subject: Case 34031 Incorrect/duplicated sample numbers (Fri. 04/15/05)

Hi Mike.

For samples received on Friday 04/15/05 for Case 34031, the sampler continued to use the same sample ID's for the TM and DM samples. The ID's for this shipment are as follows: MC0015, MC0018, MC0021, MC0024, MC0027, MC0033-MC0035, MC0045-MC0046, MC0048-MC0050, MC0061, MC0062, MC0195, MC01A3, MC01A4. Please provide new IDs for the DM analysis.

This appears to be the final shipment for this Case (it is not scheduled for the week of 04/17), although the TRs do NOT indicate Case Complete.

Thanks! -Ryan

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