40157

PELA

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TECHNICAL MEMORANDUM NO. 3

FOR REMEDIAL INVESTIGATION/FEASIBILITY STUDY

CITY DISPOSAL CORPORATION LANDFILL

(DUNN LANDFILL)

(PELA Reference No. 495201)

Appendix B.

Results of Analyses of Soil Samples and

Ground-Water Samples - Inorganics Technical Report A

CA1365-CA1370

CA2013

February, 1990

P. E. LaMoreaux & Associates, Inc.

Inorganics Technical Report

for

CITY DISPOSAL CORPORATION LANDFILL

Chain of Custody Data Required for ETC Data Management Summary Reports						
CA1365-CA1370, CA2013	WASTE MANAGEMENT, INC.	405				
ETC Sample No.	*Company*	*Facility*	*Sample Point*	*Date*	*Time*	*Elapsed Hours*

Swep T. Davis

President

U.S. EPA - CLP

COVER PAGE - INORGANIC ANALYSES DATA PACKAGE

Lab Name: ETC CORP. Contract:
Lab Code: Case No.: SAS No.: SDG No.: M750S

SOW No.: 7/87

EPA Sample No.	Lab Sample ID.
S SD1	CA1367
S SD2	CA1368
S SD3	CA1365
S SD4	CA1366
S SD5	CA1370
S SD6	CA1369
S SD7	CA2013

Were ICP interelement corrections applied? Yes/No YES

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

Comments:
Estimated values for Chromium and Vanadium due to the ICP serial dilution not within control limits.

Release of the data contained in this hardcopy data package and in the computer-readable data submitted on floppy diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Lab Manager: [signature]
Date: 12/14/89

ETC

Methodology

for

CLP Analyis of Metals

The determination of metals is performed according to USEPA Contract Laboratory Program (CLP) protocol. These methods are published in the July 1987 Statement of Work, "Inorganic Analysis, Multi-Media/Multi-Concentration," SOW NO. 787.

Antimony, Arsenic, Lead, Selenium, and Thallium are analyzed by graphite furnace atomic absorption. Potassium is determined by flame atomic absorption and total and inorganic mercury by cold vapor atomic absorption. The remaining analytes are determined by inductively coupled plasma emission spectrometry.

Inorganic mercury is determined using modified versions of Method 245.5 (Sediment/Soil) and Method 245.1 (Aqueous) where the potassium permanganate and potassium persulfate oxidation steps are omitted.

CLP MERCURY ANALYSIS

The determination of mercury is performed according to USEPA Contract Laboratory Program (CLP) Protocol. These methods are published in the July 1987 Statement of Work, "Inorganic Analysis, Multi-Media/Concentration," SOW NO. 787.

Total mercury is determined by Method 245.5 (Sediment/Soil) and Method 245.1 (Aqueous). Inorganic mercury is determined by using modified versions of these methods where the potassium permanganate and potassium persulfate oxidation steps are omitted.

METALS IDENTIFICATION CODES

On the following page is a listing of descriptive codes on metals data which can be used for verification purposes. These identify all standards and quality control requirements for each instrument used.

LABELLING CODES FOR ICP ANALYSIS

CBBLK	-	Calibration Verification Blank
SXBLK	-	Standard Blank
SASI514A	-	Standard 1
SBSI514B	-	Standard 2
SCSI514C	-	Standard 3
CSSI514E	-	Standard 4
CSSI514D	-	Standard 5
DW	-	Rinsewater
CSMIDCHK	-	Initial/Continuing Calibration Verification Solution
CSX85INT	-	Interference Check Sample
CSLABCON/CSLABCN2	-	Laboratory Control Samples
RSQXXXXX	-	Method Blank
KKIFBPX	-	Method Blank Spike
RSXXXXXX	-	Sample
KSIFBPX	-	Matrix Spike
QSXXXXXX	-	Duplicate Sample
DSXXXXXX	-	Serial Dilution

LABELLING CODES FOR FLAME AA ANALYSIS

SXBLK	-	Standard Blank
SASI121A	-	Standard 1
SBSI121B	-	Standard 2
SCSI121C	-	Standard 3
SMSI121E	-	Standard 4
SDSI121D	-	Standard 5
CSBLK/CBBLK	-	Calibration Verification Blank
CSFFLMCON	-	Initial/Continuing Calibration Verification Solution
RSQXXXXX	-	Method Blank
KKIFBPX	-	Method Blank Spike
RSQXXXXD	-	Dilution of Method Blank (Used for spike recovery determination)
RSXXXXXX	-	Sample
KSIFBPX	-	Matrix Spike
RSXXXXXD	-	Dilution of Matrix Spiked Sample (Used for spike recovery determination)
QSXXXXXX	-	Duplicate Sample

LABELLING CODES FOR GRAPHITE FURNACE AA ANALYSIS

BLANK	-	Standard Blank
STANDARD 1	-	STD 1
STANDARD 2	-	STD 2
STANDARD 3	-	STD 3
STANDARD 4	-	STD 4
CSBLK/CBBLK	-	Calibration/Verification Blank
CSSTRCON	-	Initial/Continuing Calibration Verification Solution
CSFNLAB/CSFNLAB2	-	Laboratory Control Samples
RSQXXXXX	-	Method Blank
KKIFBFX	-	Method Blank Spike
RSXXXXXX	-	Sample
KSIFBFX	-	Matrix Sample
QSXXXXXX	-	Duplicate Sample

LABELLING CODES FOR MERCURY ANALYSIS

QC-EPA	-	Initial Calibration Verification Solution
BLK	-	Blank
CONTROL	-	Continuing Calibration Verification Solution
QXXX -1,2	-	Method Blank in Duplicate
-A1	-	Method Blank Spike
XXXXXX-1,2	-	Sample in Duplicate
-A1	-	Matrix Spike

KEYS TO ETC REPORTING

ND = Concentration Below IDL
BMDL = Concentration Greater than IDL but Less Than MDL

CLP DATA QUALIFIERS

E - Indicates the reported value is estimated due to the presence of interference.

S - Indicates the reported value was determined by Method of Standard Additions (MSA).

N - Indicates spiked sample recovery is not within control limits.

* - Indicates duplicate analysis is not within control limits.

W - Post digestion spike for Furnace AA analysis is out of control limits (85-115%), while sample absorbance is less than 50% of spike absorbance.

ETC

METALS ANALYSIS DATA

U.S. EPA - CLP

1

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

S SD3

Lab Name: ETC CORP. Contract:

Lab Code: Case No.: SAS No.: SDG No.: M750S

Matrix (soil/water): SOIL Lab Sample ID: CA1365

Level (low/med): LOW Date Received: 09/23/89

% Solids: 82.5

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

CAS No.	Analyte	Concentration	C	M	Q
7429-90-5	Aluminum	7310.0		P	
7440-36-0	Antimony	6.3	U	P	
7440-38-2	Arsenic	2.6		E	
7440-39-3	Barium	118.0		P	
7440-41-7	Beryllium	.4	B	P	
7440-43-9	Cadmium	.3	B	P	
7440-70-2	Calcium	623.0	B	P	
7440-47-3	Chromium	12.6		P	E
7440-48-4	Cobalt	10.1		P	
7440-50-8	Copper	7.8		P	
7439-89-6	Iron	12500.0		P	
7439-92-1	Lead	11.0		F	
7439-95-4	Magnesium	1760.0		P	
7439-96-5	Manganese	1410.0		P	
7439-97-6	Mercury	.04	U	CV	
7440-02-0	Nickel	12.0		P	
7440-09-7	Potassium	626.0	B	P	
7782-49-4	Selenium	.2	B	F	
7440-22-4	Silver	1.0	U	P	
7440-23-5	Sodium	27.7	B	P	
7440-28-0	Thallium	.2	U	F	
7440-62-2	Vanadium	20.9		P	E
7440-66-6	Zinc	39.5		P	
	Cyanide	0.07	U		AS

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments:

FORM I - IN 7/87

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1

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

S SD4

Lab Name: ETC CORP. Contract:

Lab Code: Case No.: SAS No.: SDG No.: M750S

Matrix (soil/water): SOIL Lab Sample ID: CA1366

Level (low/med): LOW Date Received: 09/23/89

% Solids: 80.4

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

CAS No.	Analyte	Concentration	C	M	Q
7429-90-5	Aluminum	6040.0		P	
7440-36-0	Antimony	6.3	U	P	
7440-38-2	Arsenic	1.0	B	F	
7440-39-3	Barium	80.5		P	
7440-41-7	Beryllium	.2	B	P	
7440-43-9	Cadmium	.2	B	P	
7440-70-2	Calcium	1950.0		P	
7440-47-3	Chromium	7.3		P	E
7440-48-4	Cobalt	1.4	U	P	
7440-50-8	Copper	7.4		P	
7439-89-6	Iron	3490.0		P	
7439-92-1	Lead	13.3		F	
7439-95-4	Magnesium	1120.0		P	
7439-96-5	Manganese	112.0		P	
7439-97-6	Mercury	.05	U	CV	
7440-02-0	Nickel	4.8	B	P	
7440-09-7	Potassium	413.0	B	P	
7782-49-4	Selenium	.3	B	F	
7440-22-4	Silver	1.0	U	P	
7440-23-5	Sodium	20.5	B	P	
7440-28-0	Thallium	.2	U	F	
7440-62-2	Vanadium	6.9	B	P	E
7440-66-6	Zinc	21.7		P	
	Cyanide	0.04	U		AS

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: ___

Comments:

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1

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

S SD1

Lab Name: ETC CORP. Contract:
Lab Code: Case No.: SAS No.: SDG No.: M750S

Matrix (soil/water): SOIL Lab Sample ID: CA1367

Level (low/med): LOW Date Received: 09/23/89

% Solids: 73.3

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

CAS No.	Analyte	Concentration	C	M	Q
7429-90-5	Aluminum	7360.0		P	
7440-36-0	Antimony	6.3	U	P	
7440-38-2	Arsenic	.5	B	F	
7440-39-3	Barium	127.0		P	
7440-41-7	Beryllium	.4	B	P	
7440-43-9	Cadmium	.8	B	P	
7440-70-2	Calcium	1840.0		P	
7440-47-3	Chromium	10.4		P	E
7440-48-4	Cobalt	2.4	B	P	
7440-50-8	Copper	13.7		P	
7439-89-6	Iron	3910.0		P	
7439-92-1	Lead	10.9		F	
7439-95-4	Magnesium	948.0	B	P	
7439-96-5	Manganese	147.0		P	
7439-97-6	Mercury	.04	U	CV	
7440-02-0	Nickel	8.7		P	
7440-09-7	Potassium	552.0	B	P	
7782-49-4	Selenium	.4	B	F	
7440-22-4	Silver	1.0	U	P	
7440-23-5	Sodium	22.6	B	P	
7440-28-0	Thallium	.2	U	F	
7440-62-2	Vanadium	8.0	B	P	E
7440-66-6	Zinc	33.8		P	
	Cyanide	0.07	U		AS

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: ___

Comments:

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

S SD2

Lab Name: ETC CORP. Contract:

Lab Code: Case No.: SAS No.: SDG No.: M750S

Matrix (soil/water): SOIL Lab Sample ID: CA1368

Level (low/med): LOW Date Received: 09/23/89

% Solids: 86.0

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

CAS No.	Analyte	Concentration	C	M	Q
7429-90-5	Aluminum	6380.0		P	
7440-36-0	Antimony	6.3	U	P	
7440-38-2	Arsenic	2.3		F	
7440-39-3	Barium	201.0		P	
7440-41-7	Beryllium	.4	B	P	
7440-43-9	Cadmium	.3	B	P	
7440-70-2	Calcium	1480.0		P	
7440-47-3	Chromium	11.6		P	E
7440-48-4	Cobalt	8.1	B	P	
7440-50-8	Copper	9.6		P	
7439-89-6	Iron	11700.0		P	
7439-92-1	Lead	10.1		F	
7439-95-4	Magnesium	1370.0		P	
7439-96-5	Manganese	2010.0		P	
7439-97-6	Mercury	.04	U	CV	
7440-02-0	Nickel	13.2		P	
7440-09-7	Potassium	563.0	B	P	
7782-49-4	Selenium	.2	B	F	
7440-22-4	Silver	1.0	U	P	
7440-23-5	Sodium	22.2	B	P	
7440-28-0	Thallium	.2	U	F	
7440-62-2	Vanadium	24.1		P	E
7440-66-6	Zinc	48.6		P	
	Cyanide	.09	U		AS

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: ___

Comments:

FORM I - IN 7/87

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1

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

S SD6

Lab Name: ETC CORP. Contract:

Lab Code: Case No.: SAS No.: SDG No.: M750S

Matrix (soil/water): SOIL Lab Sample ID: CA1369

Level (low/med): LOW Date Received: 09/23/89

% Solids: 77.3

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

CAS No.	Analyte	Concentration	C	M	Q
7429-90-5	Aluminum	13400.0		P	
7440-36-0	Antimony	7.2	B	P	
7440-38-2	Arsenic	2.7		F	
7440-39-3	Barium	115.0		P	
7440-41-7	Beryllium	.6	B	P	
7440-43-9	Cadmium	.4	B	P	
7440-70-2	Calcium	3430.0		P	
7440-47-3	Chromium	21.8		P	E
7440-48-4	Cobalt	13.3		P	
7440-50-8	Copper	33.2		P	
7439-89-6	Iron	8990.0		P	
7439-92-1	Lead	10.3		F	
7439-95-4	Magnesium	4100.0		P	
7439-96-5	Manganese	590.0		P	
7439-97-6	Mercury	.04	U	CV	
7440-02-0	Nickel	24.5		P	
7440-09-7	Potassium	952.0	B	P	
7782-49-4	Selenium	.3	B	F	W
7440-22-4	Silver	1.0	U	P	
7440-23-5	Sodium	57.2	B	P	
7440-28-0	Thallium	.2	U	F	
7440-62-2	Vanadium	44.3		P	E
7440-66-6	Zinc	47.3		P	
	Cyanide	0.05	U		AS

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: ___

Comments:

FORM I - IN 7/87

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

S SD5

Lab Name: ETC CORP. Contract:
Lab Code: Case No.: SAS No.: SDG No.: M750S

Matrix (soil/water): SOIL Lab Sample ID: CA1370

Level (low/med): LOW Date Received: 09/23/89

% Solids: 80.3

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

CAS No.	Analyte	Concentration	C	M	Q
7429-90-5	Aluminum	13400.0		P	
7440-36-0	Antimony	6.3	U	P	
7440-38-2	Arsenic	1.7	B	F	
7440-39-3	Barium	116.0		P	
7440-41-7	Beryllium	.7	B	P	
7440-43-9	Cadmium	1.0	B	P	
7440-70-2	Calcium	9300.0		P	
7440-47-3	Chromium	19.8		P	E
7440-48-4	Cobalt	5.9	B	P	
7440-50-8	Copper	24.5		P	
7439-89-6	Iron	15200.0		P	
7439-92-1	Lead	11.7		F	
7439-95-4	Magnesium	6330.0		P	
7439-96-5	Manganese	191.0		P	
7439-97-6	Mercury	.06	C	CV	
7440-02-0	Nickel	17.5		P	
7440-09-7	Potassium	905.0	B	P	
7782-49-4	Selenium	.2	B	F	
7440-22-4	Silver	1.0	U	P	
7440-23-5	Sodium	74.2	B	P	
7440-28-0	Thallium	.2	U	F	
7440-62-2	Vanadium	27.6		P	E
7440-66-6	Zinc	50.1		P	
	Cyanide	0.04	U		AS

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: ___

Comments:

FORM I - IN 7/87

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1

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

S SD7

Lab Name: ETC CORP. Contract:
Lab Code: Case No.: SAS No.: SDG No.: M750S

Matrix (soil/water): SOIL Lab Sample ID: CA2013

Level (low/med): LOW Date Received: 09/23/89

% Solids: 83.1

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

CAS No.	Analyte	Concentration	C	M	Q
7429-90-5	Aluminum	11600.0		P	
7440-36-0	Antimony	6.3	U	P	
7440-38-2	Arsenic	6.7		F	
7440-39-3	Barium	122.0		P	
7440-41-7	Beryllium	.6	B	P	
7440-43-9	Cadmium	.6	B	P	
7440-70-2	Calcium	4550.0		P	
7440-47-3	Chromium	17.1		P	
7440-48-4	Cobalt	10.9		P	
7440-50-8	Copper	24.1		P	
7439-89-6	Iron	8410.0		P	
7439-92-1	Lead	10.3		F	
7439-95-4	Magnesium	4490.0		P	
7439-96-5	Manganese	316.0		P	
7439-97-6	Mercury	.05	B	CV	
7440-02-0	Nickel	22.9		P	
7440-09-7	Potassium	582.0	B	P	
7782-49-4	Selenium	.2	B	F	
7440-22-4	Silver	1.0	U	P	
7440-23-5	Sodium	58.3	B	P	
7440-28-0	Thallium	.2	U	F	
7440-62-2	Vanadium	30.4		P	
7440-66-6	Zinc	46.9		P	
	Cyanide	0.07	U		AS

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: ___

Comments:

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2A
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: ETC CORP. Contract:
Lab Code: Case No.: SAS No.: SDG No.: M750S

Initial Calibration Source: LLCALIBSTD

Continuing Calibration Source: LLCALIBSTD

Concentration Units: ug/L

	Initial Calibration			Continuing Calibration					
Analyte	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	M
Aluminum	2500.0	2580.27	103.2	2500.0	2603.21	104.1	2623.93	105.0	P
Antimony	500.0	496.39	99.3	500.0	504.26	100.9	505.76	101.2	P
Arsenic	30.0	28.99	96.6	30.0	27.41	91.4	30.79	102.6	F
Barium	1000.0	1000.64	100.1	1000.0	1011.21	101.1	1023.77	102.4	P
Beryllium	100.0	98.41	98.4	100.0	99.70	99.7	100.56	100.6	P
Cadmium	100.0	104.04	104.0	100.0	105.06	105.1	105.74	105.7	P
Calcium	10000.0	10151.71	101.5	10000.0	10316.05	103.2	10325.87	103.3	P
Chromium	300.0	307.17	102.4	300.0	315.10	105.0	318.69	106.2	P
Cobalt	200.0	210.68	105.3	200.0	213.06	106.5	213.32	106.7	P
Copper	300.0	305.10	101.7	300.0	309.84	103.3	310.91	103.6	P*
Iron	1000.0	1005.05	100.5	1000.0	1011.09	101.1	1019.96	102.0	P
Lead	30.0	29.36	97.9	30.0	29.57	98.6	29.96	99.9	F
Magnesium	10000.0	10175.68	101.8	10000.0	10268.72	102.7	10331.98	103.3	P
Manganese	300.0	307.21	102.4	300.0	309.88	103.3	312.18	104.1	P
Mercury	2.0	1.99	94.0	1.5	1.59	106.0			CV
Nickel	300.0	308.03	102.7	300.0	310.98	103.7	312.93	104.3	P
Potassium	4000.0	4023.12	100.6	4000.0	3963.95	99.1	3985.46	99.6	P
Selenium	30.0	30.18	100.6	30.0	28.57	95.2	29.54	98.5	F
Silver	100.0	101.27	101.3	100.0	102.16	102.2	102.22	102.2	P
Sodium	50000.0	49841.03	99.7	50000.0	50192.32	100.4	50742.21	101.5	P
Thallium	30.0	30.82	102.7	30.0	31.14	103.8	27.28	90.9	F
Vanadium	300.0	307.83	102.6	300.0	310.88	103.6	313.61	104.5	P
Zinc	500.0	512.45	102.5	500.0	519.41	103.9	522.13	104.4	P
Cyanide	50.0	50.60	101.2	100.0	99.50	99.5	101.60	101.6	AS

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

2A
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: ETC CORP. Contract:
Lab Code: Case No.: SAS No.: SDG No.: M750S

Initial Calibration Source: LLCALIBSTD

Continuing Calibration Source: LLCALIBSTD

Concentration Units: ug/L

	Initial Calibration			Continuing Calibration					
Analyte	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	M
Aluminum	2500.0	2580.27	103.2	2500.0	2614.96	104.6			P
Antimony	500.0	496.39	99.3	500.0	508.78	101.8			P
Arsenic	30.0	28.99	96.6						F
Barium	1000.0	1000.64	100.1	1000.0	1018.08	101.8			P
Beryllium	100.0	98.41	98.4	100.0	100.33	100.3			P
Cadmium	100.0	104.04	104.0	100.0	105.69	105.7			P
Calcium	10000.0	10151.71	101.5	10000.0	10298.38	103.0			P
Chromium	300.0	307.17	102.4	300.0	321.11	107.0			P
Cobalt	200.0	210.68	105.3	200.0	215.36	107.7			P
Copper	300.0	305.10	101.7	300.0	309.72	103.2			P
Iron	1000.0	1005.05	100.5	1000.0	1017.50	101.8			P
Lead	30.0	29.36	97.9	30.0	29.96	99.9			F
Magnesium	10000.0	10175.68	101.8	10000.0	10292.08	102.9			P
Manganese	300.0	307.21	102.4	300.0	310.46	103.5			P
Mercury	2.0	1.88	94.0						CV
Nickel	300.0	308.03	102.7	300.0	312.08	104.0			P
Potassium	4000.0	4023.12	100.6	4000.0	3938.85	98.5			P
Selenium	30.0	30.18	100.6						F
Silver	100.0	101.27	101.3	100.0	101.19	101.2			P
Sodium	50000.0	49841.03	99.7	50000.0	50456.89	100.9			P
Thallium	30.0	30.82	102.7						F
Vanadium	300.0	307.83	102.6	300.0	311.84	103.9			P
Zinc	500.0	512.45	102.5	500.0	522.73	104.5			P
Cyanide				100.0	102.50	102.5			

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

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2B
CRDL STANDARD FOR AA AND ICP

Lab Name: ETC CORP. Contract:
Lab Code: Case No.: SAS No.: SDG No.: M750S

AA CRDL Standard Source: LLFNSTD

ICP CRDL Standard Source: LLICPSTD

Concentration Units: ug/L

	CRDL Standard for AA			CRDL Standard for ICP				
				Initial			Final	
Analyte	True	Found	%R	True	Found	%R	Found	%R
Aluminum				500.0	518.99	103.8	503.31	100.7
Antimony				100.0	105.56	105.6	105.22	105.2
Arsenic	10.0	9.93	99.3	50.0	52.96	105.9	50.01	100.0
Barium				200.0	192.84	96.4	197.95	99.0
Beryllium				10.0	9.61	96.1	9.67	96.7
Cadmium				10.0	10.22	102.2	9.19	91.9
Calcium				2000.0	2011.32	100.6	1992.14	99.6
Chromium				30.0	28.51	95.0	28.96	96.5
Cobalt				40.0	38.98	97.4	39.71	99.3
Copper				60.0	62.28	103.8	62.05	103.4
Iron				200.0	205.78	102.9	199.84	99.9
Lead	5.0	3.29	65.9	50.0	52.33	104.7	46.42	92.8
Magnesium				2000.0	2008.25	100.4	2012.00	100.6
Manganese				30.0	29.11	97.0	28.60	95.3
Mercury								
Nickel				60.0	62.71	104.5	60.27	100.5
Potassium	4000.0	4040.0	101.0					
Selenium	5.0	4.82	96.4	100.0	106.75	106.8	91.89	91.9
Silver				20.0	24.98	124.9	21.43	107.1
Sodium				10000.0	9599.72	96.0	9778.23	97.8
Thallium	10.0	9.94	99.4					
Vanadium				60.0	62.68	104.5	60.74	101.2
Zinc				50.0	48.22	96.4	48.76	97.5
Cyanide								

3
BLANKS

Lab Name: ETC CORP. Contract:
Lab Code: Case No.: SAS No.: SDG No.: M750S

Preparation Blank Matrix: (soil/water): SOIL

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

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C	Prepa-ration Blank	C	M
Aluminum	32.5	U	32.5	U	32.5	U	32.5	U	6.502	U	P
Antimony	31.3	U	31.3	U	31.3	U	31.3	U	6.250	U	P
Arsenic	.8	U	-.9	B	.8	U					F
Barium	-3.9	B	-4.4	B	-4.5	B	-4.5	B	-.628	B	P
Beryllium	-.1	B	-.1	B	-.2	B	-.1	B	-.041	B	P
Cadmium	1.0	U	1.0	U	1.0	U	1.0	U	.202	U	P
Calcium	-87.5	B	-89.9	B	-89.7	B	-69.7	B	-5.995	B	P
Chromium	3.8	U	3.8	U	3.8	U	3.8	U	.770	U	P
Cobalt	6.8	U	6.8	U	6.8	U	6.8	U	1.368	U	P
Copper	3.5	U	3.6	B	3.5	U	3.5	U	.698	U	P
Iron	48.2	U	48.2	U	48.2	U	48.2	U	9.642	U	P
Lead	1.1	U	1.1	U	1.1	U	1.1	U			F
Magnesium	-31.0	B	-28.7	B	-35.0	B	-40.4	B	-4.200	B	P
Manganese	1.3	U	-1.3	B	-1.5	B	-1.3	B	.254	U	P
Mercury	.1	U	.1	U					.1	U	CV
Nickel	2.0	U	-2.8	B	-2.6	B	2.0	U	.394	U	P
Potassium	14.5	U	-47.5	B	-82.4	B	-74.4	B	-10.100	B	P
Selenium	.7	U	.7	U	.7	U			.140	U	F
Silver	5.1	U	5.1	U	5.1	U	5.1	U	1.020	U	P
Sodium	-132.5	B	-156.8	B	-160.9	B	-164.7	B	13.608	U	P
Thallium	1.1	U	1.1	U	1.1	U			.220	U	F
Vanadium	3.9	U	3.9	U	3.9	U	3.9	U	.774	U	P
Zinc	3.3	U	3.3	U	3.3	U	3.3	U	.666	U	P
Cyanide	2.9	U	2.9	U	2.9	U	2.9	U	2.9	U	AS

11/30/89

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4

ICP INTERFERENCE CHECK SAMPLE

Lab Name: ETC CORP. Contract:
Lab Code: Case No.: SAS No.: SDG No.: M750S

ICP ID Number: JA9000 ICS Source: LLCALIBSTD

Concentration Units: ug/L

Analyte	True Sol. A	True Sol. AB	Initial Found Sol. A	Initial Found Sol. AB	Initial Found %R	Final Found Sol. A	Final Found Sol. AB	Final Found %R
Aluminum		437000		476646.0	109.1		500084.3	114.4
Antimony								
Arsenic								
Barium		439		444.0	101.1		466.4	106.2
Beryllium		423		431.5	102.0		451.5	106.7
Cadmium		815		875.4	107.4		905.6	111.1
Calcium		461000		436477.5	94.7		452287.6	98.1
Chromium		422		423.5	100.3		453.3	107.4
Cobalt		416		433.1	104.1		450.7	108.3
Copper		468		482.9	103.2		505.5	108.0
Iron		163400		162294.7	99.3		168992.2	103.4
Lead		936		861.7	92.1		886.4	94.7
Magnesium		474000		470909.5	99.3		487460.1	102.8
Manganese		445		467.4	105.0		481.8	108.3
Mercury								
Nickel		839		835.9	99.6		868.3	103.5
Potassium								
Selenium								
Silver		888		857.3	96.5		883.7	99.5
Sodium								
Thallium								
Vanadium		444		483.5	108.9		500.7	112.8
Zinc		889		871.3	98.0		892.0	100.3
Cyanide								

U.S. EPA - CLP

5A
SPIKE SAMPLE RECOVERY

EPA SAMPLE NO.

S SD3

Lab Name: ETC CORP. Contract:
Lab Code: Case No.: SAS No.: SDG No.: M750S

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

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		9114.0488		6956.7334		969.6	222.5		P
Antimony	75-125	85.3230		0.0000	U	121.2	70.4	E	P
Arsenic		9.9406		2.6112		9.7	75.6		F
Barium	75-125	637.4985		118.0463		484.8	107.2		P
Beryllium	75-125	12.1440		.3854	B	12.1	97.0		P
Cadmium	75-125	12.6045		.3369	B	12.1	101.2		P
Calcium	75-125	5502.3643		622.9548	B	4847.9	100.6		P
Chromium	75-125	62.2955		12.6045		48.5	102.5		P
Cobalt	75-125	134.2867		10.1079		121.2	102.5		P
Copper	75-125	68.5977		7.8051		60.6	100.3		P
Iron		12337.9004		11901.5879		484.8	90.0		P
Lead	75-125	14.8346		11.0047		4.8	79.0		F
Magnesium	75-125	6617.3799		1759.7869		4847.9	100.2		P
Manganese		1963.3984		1350.1394		121.2	506.0		P
Mercury		.7455		.0667		.6	113.1		CV
Nickel	75-125	132.5900		11.9985		121.2	99.5		P
Potassium	75-125	5381.1660		625.3788	B	4847.9	98.1		P
Selenium	75-125	2.4143		.1571	B	2.4	93.1		F
Silver	75-125	11.4895		0.0000	U	12.1	94.8		P
Sodium	75-125	9332.2012		27.6330	B	9695.8	96.0		P
Thallium	75-125	10.6654		0.0000	U	12.1	88.0		F
Vanadium	75-125	143.0130		20.8944		121.2	100.8		P
Zinc	75-125	164.3437		39.5104		121.2	103.0		P
Cyanide									

Comments:
Sample S SD5 was spiked for Mercury.

FORM V (PART 1) - IN 7/87

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5B
POST DIGEST SPIKE SAMPLE RECOVERY

EPA SAMPLE NO.
S SD3

Lab Name: ETC CORP. Contract:
Lab Code: Case No.: SAS No.: SDG No.: M750S

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

Concentration Units: ug/L

Analyte	Control Limit %R	Spiked Sample Result (SSR)	C	Sample Result (SR)	C	Spike Added (SA)	%R	Q	M
Aluminum									
Antimony		73.2		38.3		100.0	34.9		P
Arsenic									
Barium									
Beryllium									
Cadmium									
Calcium									
Chromium									
Cobalt									
Copper									
Iron									
Lead									F
Magnesium									
Manganese									P
Mercury									
Nickel									
Potassium									
Selenium									F
Silver									
Sodium									
Thallium									F
Vanadium									
Zinc									
Cyanide									

Comments:

U.S. EPA - CLP

5B

POST DIGEST SPIKE SAMPLE RECOVERY

EPA SAMPLE NO.

S SD4

Lab Name: ETC CORP. Contract:

Lab Code: Case No.: SAS No.: SDG No.: M750S

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

Concentration Units: ug/L

Analyte	Control Limit %R	Spiked Sample Result (SSR)	C	Sample Result (SR)	C	Spike Added (SA)	%R	Q	M
Aluminum									P
Antimony									P
Arsenic		21.70		3.84	B	20.0	89.3		F
Barium									P
Beryllium									P
Cadmium									P
Calcium									P
Chromium									P
Cobalt									P
Copper									P
Iron									P
Lead		35.70		26.70		10.0	90.0		F
Magnesium									P
Manganese									P
Mercury									
Nickel									P
Potassium									P
Selenium		10.90		1.29	B	10.0	96.1		F
Silver									P
Sodium									P
Thallium		21.50		0.00	U	20.0	107.5		F
Vanadium									P
Zinc									P
Cyanide									

Comments:

U.S. EPA - CLP

5B

POST DIGEST SPIKE SAMPLE RECOVERY

EPA SAMPLE NO.

S SD1

Lab Name: ETC CORP. Contract:

Lab Code: Case No.: SAS No.: SDG No.: M750S

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

Concentration Units: ug/L

Analyte	Control Limit %R	Spiked Sample Result (SSR)	C	Sample Result (SR)	C	Spike Added (SA)	%R	Q	M
Aluminum									P
Antimony									P
Arsenic		19.80		1.68	B	20.0	90.6		F
Barium									P
Beryllium									P
Cadmium									P
Calcium									P
Chromium									P
Cobalt									P
Copper									P
Iron									P
Lead		28.50		20.00		10.0	85.0		F
Magnesium									P
Manganese									P
Mercury									
Nickel									P
Potassium									P
Selenium		10.60		1.29	B	10.0	93.1		F
Silver									P
Sodium									P
Thallium		21.50		0.00	U	20.0	107.5		F
Vanadium									P
Zinc									P
Cyanide									

Comments:

U.S. EPA - CLP

5B

POST DIGEST SPIKE SAMPLE RECOVERY

EPA SAMPLE NO.

S SD2

Lab Name: ETC CORP. Contract:

Lab Code: Case No.: SAS No.: SDG No.: M750S

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

Concentration Units: ug/L

Analyte	Control Limit %R	Spiked Sample Result (SSR)	C	Sample Result (SR)	C	Spike Added (SA)	%R	Q	M
Aluminum									P
Antimony									P
Arsenic		27.00		9.72	B	20.0	86.4		F
Barium									P
Beryllium									P
Cadmium									P
Calcium									P
Chromium									P
Cobalt									P
Copper									P
Iron									P
Lead		31.10		21.70		10.0	94.0		F
Magnesium									P
Manganese									P
Mercury									
Nickel									P
Potassium									P
Selenium		9.31		0.00	U	10.0	93.1		F
Silver									P
Sodium									P
Thallium		21.20		0.00	U	20.0	106.0		F
Vanadium									P
Zinc									P
Cyanide									

Comments:

U.S. EPA - CLP

5B

POST DIGEST SPIKE SAMPLE RECOVERY

EPA SAMPLE NO.

S SD6

Lab Name: ETC CORP. Contract:

Lab Code: Case No.: SAS No.: SDG No.: M750S

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

Concentration Units: ug/L

Analyte	Control Limit %R	Spiked Sample Result (SSR)	C	Sample Result (SR)	C	Spike Added (SA)	%R	Q	M
Aluminum									P
Antimony									P
Arsenic		29.20		10.30		20.0	94.5		F
Barium									P
Beryllium									P
Cadmium									P
Calcium									P
Chromium									P
Cobalt									P
Copper									P
Iron									P
Lead		28.70		19.90		10.0	88.0		F
Magnesium									P
Manganese									P
Mercury									
Nickel									P
Potassium									P
Selenium		8.99		1.29	B	10.0	77.0	W	F
Silver									P
Sodium									P
Thallium		21.20		0.00	U	20.0	106.0		F
Vanadium									P
Zinc									P
Cyanide									

Comments:

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5B

POST DIGEST SPIKE SAMPLE RECOVERY

EPA SAMPLE NO.

S SD5

Lab Name: ETC CORP. Contract:

Lab Code: Case No.: SAS No.: SDG No.: M750S

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

Concentration Units: ug/L

Analyte	Control Limit %R	Spiked Sample Result (SSR)	C	Sample Result (SR)	C	Spike Added (SA)	%R	Q	M
Aluminum									P
Antimony									P
Arsenic		25.40		6.79	B	20.0	93.1		F
Barium									P
Beryllium									P
Cadmium									P
Calcium									P
Chromium									P
Cobalt									P
Copper									P
Iron									P
Lead		32.60		23.50		10.0	91.0		F
Magnesium									P
Manganese									P
Mercury									
Nickel									P
Potassium									P
Selenium		9.31		0.00	U	10.0	93.1		F
Silver									P
Sodium									P
Thallium		21.20		0.00	U	20.0	106.0		F
Vanadium									P
Zinc									P
Cyanide									

Comments:

U.S. EPA - CLP

5B
POST DIGEST SPIKE SAMPLE RECOVERY

EPA SAMPLE NO.

S SD7

Lab Name: ETC CORP. Contract:
Lab Code: Case No.: SAS No.: SDG No.: M750S

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

Concentration Units: ug/L

Analyte	Control Limit %R	Spiked Sample Result (SSR)	C	Sample Result (SR)	C	Spike Added (SA)	%R	Q	M
Aluminum									P
Antimony									P
Arsenic		35.40		13.80		20.0	108.0		F
Barium									P
Beryllium									P
Cadmium									P
Calcium									P
Chromium									P
Cobalt									P
Copper									P
Iron									P
Lead		30.40		21.40		10.0	90.0		F
Magnesium									P
Manganese									P
Mercury									
Nickel									P
Potassium									P
Selenium		9.64		0.00	U	10.0	96.4		F
Silver									P
Sodium									P
Thallium		21.80		0.00	U	20.0	109.0		F
Vanadium									P
Zinc									P
Cyanide									

Comments:

U.S. EPA - CLP

6
DUPLICATES

EPA SAMPLE NO.

S SD3

Lab Name: ETC CORP. Contract:
Lab Code: Case No.: SAS No.: SDG No.: M750S

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

% Solids for Sample: 82.5 % Solids for Duplicate: 0

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

Analyte	Control Limit	Sample (S)	C	Duplicate (D)	C	RPD	Q	M
Aluminum		7350.0000		6850.0000		7.0		P
Antimony	14.5	0.0000	U	0.0000	U			P
Arsenic		2.6112		2.7452		5.0		F
Barium	48.5	118.0000		142.0000		18.5		P
Beryllium	1.2	.3860	B	.3940	B	2.1		P
Cadmium	1.2	.3360	B	.5050	B	40.2		P
Calcium	1212.1	623.0000	B	730.0000	B	15.8		P
Chromium	2.4	12.6000		11.5000		9.1		P
Cobalt	12.1	10.1000	B	9.7800	B	3.2		P
Copper	6.1	7.8000		7.9800		2.3		P
Iron		12500.0000		11200.0000		11.0		P
Lead		11.0000		10.6000		3.7		F
Magnesium	1212.1	1760.0000		1570.0000		11.4		P
Manganese		1410.0000		1660.0000		16.3		P
Mercury		.0000	U	.0909	B	50.0		CV
Nickel	9.7	12.0000		12.0000		.0		P
Potassium	1212.1	626.0000	B	634.0000	B	1.3		P
Selenium	1.2	.1570	B	.1570	B	.0		F
Silver	2.4	0.0000	U	0.0000	U			P
Sodium	1212.1	27.7000	B	38.0000	B	31.4		P
Thallium	2.4	0.0000	U	0.0000	U			F
Vanadium	12.1	20.9000		18.6000		11.6		P
Zinc		39.5000		41.1000		4.0		P
Cyanide								

6

DUPLICATES

EPA SAMPLE NO.

Lab Name: ETC CORP Contract: _____ 5505

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: M750S

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

% Solids for Sample: 80% % Solids for Duplicate: 80%

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

Analyte	Control Limit	Sample (S)	C	Duplicate (D)	C	RPD	Q	M
Aluminum								
Antimony								
Arsenic								
Barium								
Beryllium								
Cadmium								
Calcium								
Chromium								
Cobalt								
Copper								
Iron								
Lead								
Magnesium								
Manganese								
Mercury								
Nickel								
Potassium								
Selenium								
Silver								
Sodium								
Thallium								
Vanadium								
Zinc								
Cyanide	10.0	0.04	U	0.04	U	0		A2

7

LABORATORY CONTROL SAMPLE

Lab Name: ETC CORP. Contract:
Lab Code: Case No.: SAS No.: SDG No.: M750S

Solid LCS Source: LLCONTROLSTD

Aqueous LCS Source: _____

Analyte	Aqueous (ug/L) True	Found	%R	Solid (mg/kg) True	Found	C	Limits		%R
Aluminum				500.0	500.1				100.0
Antimony				100.0	96.8				96.8
Arsenic				6.0	5.9				98.3
Barium				200.0	202.1				101.1
Beryllium				20.0	19.4				97.1
Cadmium				20.0	19.3				96.6
Calcium				2000.0	2048.0				102.4
Chromium				60.0	61.2				102.1
Cobalt				40.0	40.6				101.4
Copper				60.0	60.7				101.1
Iron				200.0	197.5				98.8
Lead				6.0	5.4				90.0
Magnesium				2000.0	1938.4				96.9
Manganese				60.0	59.6				99.3
Mercury				.8	.7				87.5
Nickel				60.0	59.8				99.7
Potassium				800.0	721.1	B			90.1
Selenium				6.0	6.0				99.5
Silver				20.0	17.7				88.6
Sodium				10000.0	9746.5				97.5
Thallium				6.0	5.5				92.0
Vanadium				60.0	59.3				98.8
Zinc				100.0	98.4				98.4
Cyanide	100.0	101.30	101.3						

9

ICP SERIAL DILUTIONS

EPA SAMPLE NO.

S SD3

Lab Name: ETC CORP. Contract:

Lab Code: Case No.: SAS No.: SDG No.: M750S

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	3015.74		2962.11		1.8		P
Antimony	20.71	U	0.00	U			NR
Arsenic							
Barium	486.81		462.06		5.1		P
Beryllium	1.59	B	1.93	B	21.5		P
Cadmium	1.39	B	19.31		1292.9		NR
Calcium	2570.19	B	2042.12	B	20.5		P
Chromium	51.98		43.32		16.7	E	P
Cobalt	41.67	B	30.94	B	25.7		NR
Copper	32.18		47.44		47.4		NR
Iron	49093.46		50331.10		2.5		P
Lead							
Magnesium	7260.88		7343.39		1.1		P
Manganese	0.00	U	5693.19				NR
Mercury							
Nickel	49.51		39.36	B	20.5		P
Potassium	2582.56	B	2908.48	B	12.6		P
Selenium							
Silver	1.38	U	19.55				NR
Sodium	114.28	B	0.00	U	100.0		NR
Thallium							
Vanadium	86.22		103.96		20.6	E	P
Zinc	162.96		167.08		2.5		P
Cyanide							

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10
HOLDING TIMES

Lab Name: ETC CORP. Contract:
Lab Code: Case No.: SAS No.: SDG No.: M750S

EPA Sample No.	Matrix	Received	Mercury Prep Date	Mercury Holding Time	Cyanide Prep Date	Cyanide Holding Time
S SD1	SOIL	09/23/89	10/17/89	24	9-27-89	4
S SD2	SOIL	09/23/89	10/17/89	24	9-27-89	4
S SD3	SOIL	09/23/89	10/17/89	24	9-27-89	4
S SD4	SOIL	09/23/89	10/17/89	24	9-27-89	4
S SD5	SOIL	09/23/89	10/17/89	24	9-27-89	4
S SD6	SOIL	09/23/89	10/17/89	24	9-27-89	4
S SD7	SOIL	09/23/89	10/17/89	24	9-27-89	4

11
INSTRUMENT DETECTION LIMITS (QUARTERLY)

Lab Name: ETC CORP. Contract:
Lab Code: Case No.: SAS No.: SDG No.: M750S

ICP ID Number: JA9000 Date: 9/1/89

Flame AA ID Number: PE5100

Furnace AA ID Number: PE5100

Analyte	Wavelength (nm)	Background	CRDL (ug/L)	IDL (ug/L)	M
Aluminum	308.22		200	32.5	P
Antimony	217.58		60	31.3	P
Arsenic	193.70	BZ	10	.8	F
Barium	493.41		200	.9	P
Beryllium	313.04		5	.1	P
Cadmium	228.80		5	1.0	P
Calcium	370.60		5000	20.1	P
Chromium	267.72		10	3.8	P
Cobalt	228.62		50	6.8	P
Copper	324.75		25	3.5	P
Iron	271.44		100	48.2	P
Lead	283.31	BZ	5	1.1	F
Magnesium	279.81		5000	7.3	P
Manganese	257.61		15	1.3	P
Mercury	253.65		.2	.1	CV
Nickel	231.60		40	2.0	P
Potassium	766.49		5000	14.5	A
Selenium	196.03	BZ	5	.7	F
Silver	328.07		10	5.1	P
Sodium	589.59		5000	68.0	P
Thallium	276.79	BZ	10	1.1	F
Vanadium	292.40		50	3.9	P
Zinc	213.86		20	3.3	P
Cyanide			10	2.9	AS

Comments:

12A
ICP INTERELEMENT CORRECTION FACTORS (QUARTERLY)

Lab Name: ETC CORP. Contract:
Lab Code: Case No.: SAS No.: SDG No.: M750S

ICP ID Number: JA9000 Date: 10/06/89

Analyte	Wavelength (nm)	Interelement Correction Factors for: AL	CA	FE	MG	AS
Aluminum	308.22		-.000152			
Antimony	217.58			-.000394		
Arsenic	193.70	.003404		.000424		
Barium	493.41					
Beryllium	313.04					
Cadmium	228.80					.017684
Calcium	370.60			-.000294		
Chromium	267.72					
Cobalt	228.62					
Copper	324.75					
Iron	271.44					
Lead	283.31	-.000331		.000113		
Magnesium	279.81			-.002508		
Manganese	257.61					
Mercury	253.65					
Nickel	231.60					
Potassium	766.49					
Selenium	196.03			.000379	-.000231	
Silver	328.07					
Sodium	589.59				.000250	
Thallium	276.79					
Vanadium	292.40					
Zinc	213.86			.000098		
Cyanide						

Comments:

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12B
ICP INTERELEMENT CORRECTION FACTORS (QUARTERLY)

Lab Name: ETC CORP. Contract:
Lab Code: Case No.: SAS No.: SDG No.: M750S

ICP ID Number: JA9000 Date: 10/06/89

Analyte	Wavelength (nm)	Interelement Correction Factors for: CU	CR	V	TI	NI
Aluminum	308.22			.011469	-.002837	
Antimony	217.58		.010000		.002234	
Arsenic	193.70			.008291		
Barium	493.41					
Beryllium	313.04			-.002575		
Cadmium	228.80					
Calcium	370.60			.003203	-.057936	
Chromium	267.72			-.001400		
Cobalt	228.62				.001202	
Copper	324.75		.006246			
Iron	271.44			.024453		
Lead	283.31					
Magnesium	279.81			-.065530		
Manganese	257.61					
Mercury	253.65					
Nickel	231.60					
Potassium	766.49					
Selenium	196.03					
Silver	328.07					
Sodium	589.59			.001329	.002261	
Thallium	276.79					
Vanadium	292.40				.000353	
Zinc	213.86	.001329				.007914
Cyanide						

Comments:

FORM XII (PART 2) - IN 7/87

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13
ICP LINEAR RANGES (QUARTERLY)

Lab Name: ETC CORP. Contract:
Lab Code: Case No.: SAS No.: SDG No.: M750S

ICP ID Number: JA9000 Date: 9/1/89

Analyte	Integ. Time (Sec.)	Concentration (ug/L)	M
Aluminum	6.0	25000	
Antimony	6.0	5000	
Arsenic	6.0	5000	
Barium	6.0	10000	
Beryllium	6.0	1000	
Cadmium	6.0	1000	
Calcium	6.0	100000	
Chromium	6.0	3000	
Cobalt	6.0	2000	
Copper	6.0	3000	
Iron	6.0	10000	
Lead	6.0	5000	
Magnesium	6.0	100000	
Manganese	6.0	3000	
Mercury			NR
Nickel	6.0	3000	
Potassium			NR
Selenium	6.0	10000	
Silver	6.0	1000	
Sodium	6.0	500000	
Thallium			NR
Vanadium	6.0	3000	
Zinc	6.0	5000	
Cyanide			NR

Comments:

FORM XIII - IN 7/87

ETC

METALS SUBSIDIARY DATA - ICP

Project No.______
Book No.______

TITLE P70057- IFG PE's ; P7005[illegible] - [illegible] (H_2O/[illegible])

From Page No.__

Run A311736
Sequence RSP7057A

DW	DW	OSCA1365 1:5
MIDCHK	RSCA2163	RSC1365
DW	CSLABCON	RSC1365P (Postspike w/ [illegible])
Blank	DW	DW
CXBLK	CBBLK	DW
ASIS14A	CSMIDCHK	CBBLK
SA A	DW	CSMIDCHK
SB B	RSQ70057 (RSQ7057S)	DW 170
CS B	KKIFBPS 140	RSCA1366
SC C 10	RSQ70057 (RSQ7057S)	1367
CS E	RSCA2165	1368
CS D	KSIFBPS	1369
DW	QSCA2165	1370
CBBLK	DW	2013
CSMIDCHK	OSCA2165 1:5	DW - RSGA4315 1:10 K
DW	RSC2165	DW
CSX85INT	RSC2165P (Postspike w/ [illegible])	CBBLK
DW	DW	CSMIDCHK 180
CSCRIA	DW 150	DW
CSCRIB 120	CBBLK	CSCRIA
DW	CSMIDCHK	CSCRIB
CSLABCON	DW	DW
DW	CSLABCON	CSX85INT
RSQ70057 (RSQ7057W)	DW	DW (86)
KKIFBPW	RSQ70050	
RSQ70057 (RSQ7057W)	KKIFBPS	
RSCA2164	RSQ70050	
KSIFBPW	RSCA1365	
QSCA2164	KSIFBPS 160	36
DW 130	QSCA1365	
OSCA2164 1:5	DW	

To Page No.___

Witnessed & Understood by me,	Date	Invented by BR	Date 11/8/89
		Recorded by	

OK.
BR
11/8/89

Element	Standard Regression Data: Corr. Coeff.	Slope	Intercept	Units	Detection Limit Blank Data: Blank Mean	Std. Dev.	MDL
AG	0.99988	994.8	2.59	ug/l	-1.00	-1.00	10.0
AL	0.99988	1012	-0.934	ug/l	-1.00	-1.00	100
AS	1.0000	1009	-11.1	ug/l	-1.00	-1.00	100
B	0.99978	987.6	18.9	ug/l	-1.00	-1.00	20.0
BA	0.99989	980.7	-1.76	ug/l	-1.00	-1.00	20.0
BE	1.0000	971.2	-0.303	ug/l	-1.00	-1.00	1.00
CA	0.99997	981.8	-46.9	ug/l	-1.00	-1.00	200
CD	0.99996	983.7	-1.82	ug/l	-1.00	-1.00	2.00
CO	0.99991	982.4	-2.29	ug/l	-1.00	1.00	20 0
CR	0.99996	970.5	-2.31	ug/l	-1.00	1.00	10.0
CU	0.99999	987.5	-2.03	ug/l	-1.00	-1.00	10.0
FE	1.0000	958.0	6.04	ug/l	-1.00	-1.00	150
K	0.99999	1015	-67.2	ug/l	-1.00	-1.00	500
MG	0.99999	1003	3.95	ug/l	-1.00	-1.00	100
MN	0.99999	972.4	1.32	ug/l	-1.00	-1.00	5.00
MO	0.99999	981.6	0.198	ug/l	-1.00	-1.00	20.0
NA	0.99999	1003	-133	ug/l	-1.00	-1.00	500
NI	0.99995	957.1	-1.62	ug/l	-1.00	-1.00	20.0
PB	0.99999	981.5	-5.13	ug/l	-1.00	-1.00	75.0
SB	0.99992	990.8	3.76	ug/l	-1.00	-1.00	60.0
SE	0.99996	984.4	7.73	ug/l	-1.00	-1.00	100
SN	1.0000	987.4	0.690	ug/l	-1.00	-1.00	50.0
TI	0.99999	975.0	-3.21	ug/l	-1.00	-1.00	50.0
V	0.99999	981.9	-3 69	ug/l	-1.00	-1.00	20.0
ZN	1.0000	978.3	-1.22	ug/l	-1.00	-1.00	20.0

*** Initial and Continuing Calibration Verification and Calib. Blank Data ***

Element: AG Units: ug/l

Position	Sample	Calculated	Expected	% Rec
5	SXBLK	-0.388	0	
7	SASI514A	20.9	20.0	104
8	SBSI514B	39.6	40.0	99.0
10	SCSI514C	200	200	100
9	CSSI514B	40.7	39.6	103
11	CSSI514E	486	500	97.2
12	CSSI514D	994	1000	99.4
15	CSMIDCHK	101	100	101
17	CSX85INT	857	888	96.5
19	CSCRIA	25.0	20.0	125
20	CSCRIB	12.9	0	
22	CSLABCON	92.1	100	92.1
34	CSLABCON	97.3	100	97.3
37	CSMIDCHK	103	100	103
52	CSMIDCHK	102	100	102
54	CSLABCON	88.6	100	88.6
66	CSMIDCHK	102	100	102
80	CSMIDCHK	101	100	101
82	CSCRIA	21.4	20.0	107
83	CSCRIB	9.18	0	
85	CSX85INT	884	888	99.5
14	CBBLK	0.748	-1.00	-74.8
36	CBBLK	0.449	-1.00	-44.9
51	CBBLK	1.26	-1.00	-126
68	CBBLK	-0.148	-1.00	14.8
79	CBBLK	0.817	-1.00	-81.7

Element: AL Units: ug/l

Position	Sample	Calculated	Expected	% Rec
5	SXBLK	-11.1	0	
7	SASI514A	503	500	101
8	SBSI514B	1010	1000	101
10	SCSI514C	5000	5000	100
9	CSSI514B	1020	1010	101
11	CSSI514E	12600	12500	101
12	CSSI514D	25300	25000	101
15	CSMIDCHK	2580	2500	103
17	CSX85INT	477000	437000	109
19	CSCRIA	518	500	104
20	CSCRIB	251	0	
22	CSLABCON	2520	2500	101
34	CSLABCON	2540	2500	102
37	CSMIDCHK	2660	2500	106
52	CSMIDCHK	2600	2500	104
54	CSLABCON	2500	2500	100
66	CSMIDCHK	2620	2500	105
80	CSMIDCHK	2610	2500	104
82	CSCRIA	503	500	101
83	CSCRIB	245	0	
85	CSX85INT	500000	437000	114
14	CBBLK	-3.04	-1.00	304
36	CBBLK	-3.04	-1.00	304
51	CBBLK	1.17	-1.00	-117
68	CBBLK	-3.04	-1.00	304
79	CBBLK	2.86	-1.00	-286

*** Initial and Continuing Calibration Verification and Calib. Blank Data ***

Element: AS Units: ug/l

Position	Sample	Calculated	Expected	% Rec
5	SXBLK	-0.573	0	
7	SASI514A	101	100	101
8	SBSI514B	198	200	99.0
10	SCSI514C	1000	1000	100
9	CSSI514B	183	200	91.4
11	CSSI514E	2260	2500	90.3
12	CSSI514D	4580	5000	91.7
15	CSMIDCHK	484	500	92.7
17	CSX85INT	75.4	0	
19	CSCRIA	106	0	
20	CSCRIB	53.0	50.0	106
22	CSLABCON	438	500	87.3
34	CSLABCON	455	500	91.0
37	CSMIDCHK	482	500	96.4
52	CSMIDCHK	479	500	95.9
54	CSLABCON	440	500	88.0
69	CSMIDCHK	480	500	95.9
80	CSMIDCHK	483	500	96.7
82	CSCRIA	111	0	
83	CSCRIB	50.0	50.0	100
85	CSX85INT	14.5	0	
14	CBBLK	-0.573	-1.00	57.3
36	CBBLK	1.27	-1.00	-127
51	CBBLK	0.31	-1.00	-831
68	CBBLK	5.61	-1.00	-561
79	CBBLK	1.90	-1.00	-190

Element: B Units: ug/l

Position	Sample	Calculated	Expected	% Rec
5	SXBLK	-5.15	0	
7	SASI514A	93.4	100	93.4
8	SBSI514B	214	200	107
10	SCSI514C	988	1000	98.8
9	CSSI514B	207	214	96.7
11	CSSI514E	2370	2500	94.8
12	CSSI514D	4690	5000	93.8
15	CSMIDCHK	475	500	95.0
17	CSX85INT	-380	0	
19	CSCRIA	78.2	0	
20	CSCRIB	34.8	0	
22	CSLABCON	461	500	92.3
34	CSLABCON	462	500	92.4
37	CSMIDCHK	481	500	96.3
52	CSMIDCHK	470	500	94.0
54	CSLABCON	456	500	91.1
69	CSMIDCHK	474	500	94.7
80	CSMIDCHK	471	500	94.2
82	CSCRIA	73.3	0	
83	CSCRIB	27.8	0	
85	CSX85INT	-404	0	
14	CBBLK	-7.49	-1.00	749
36	CBBLK	-18.0	-1.00	1800
51	CBBLK	-19.7	-1.00	1970
68	CBBLK	-18.6	-1.00	1860
79	CBBLK	-22.8	-1.00	2280

*** Initial and Continuing Calibration Verification and Calib. Blank Data ***

Element: BA Units: ug/l

Position	Sample	Calculated	Expected	% Rec
5	SXBLK	-4.14	0	
7	SASI514A	201	200	101
8	SBSI514B	404	400	101
10	SCSI514C	2000	2000	100
9	CSSI514B	403	404	100
11	CSSI514E	4830	5000	98.6
12	CSSI514D	9870	10000	98.7
15	CSMIDCHK	1000	1000	100
17	CSX85INT	444	439	101
19	CSCRIA	193	200	96.4
20	CSCRIB	93.1	0	
22	CSLABCON	992	1000	99.2
34	CSLABCON	988	1000	98.8
37	CSMIDCHK	1030	1000	103
52	CSMIDCHK	1010	1000	101
54	CSLABCON	1010	1000	101
69	CSMIDCHK	1020	1000	102
80	CSMIDCHK	1020	1000	102
82	CSCRIA	198	200	99.0
83	CSCRIB	95.9	0	
85	CSX85INT	466	439	106
14	CBBLK	-3.89	-1.00	389
36	CBBLK	-4.26	-1.00	426
51	CBBLK	-4.42	-1.00	442
68	CBBLK	-4.48	-1.00	448
79	CBBLK	-4.49	-1.00	449

Element: BE Units: ug/l

Position	Sample	Calculated	Expected	% Rec
5	SXBLK	-0.196	0	
7	SASI514A	20.1	20.0	101
8	SBSI514B	40.1	40.0	100
10	SCSI514C	200	200	100
9	CSSI514B	39.8	40.1	99.3
11	CSSI514E	489	500	97.7
12	CSSI514D	956	1000	95.8
15	CSMIDCHK	98.4	100	98.4
17	CSX85INT	431	423	102
19	CSCRIA	10.5	0	
20	CSCRIB	9.81	10.0	98.1
22	CSLABCON	95.0	100	95.0
34	CSLABCON	95.7	100	95.7
37	CSMIDCHK	101	100	101
52	CSMIDCHK	99.7	100	99.7
54	CSLABCON	97.1	100	97.1
69	CSMIDCHK	101	100	101
80	CSMIDCHK	100	100	100
82	CSCRIA	10.9	0	
83	CSCRIB	9.87	10.0	98.7
85	CSX85INT	451	423	107
14	CBBLK	-0.0792	-1.00	7.92
36	CBBLK	-0.138	-1.00	13.8
51	CBBLK	-0.138	-1.00	13.8
68	CBBLK	-0.187	-1.00	18.7
79	CBBLK	-0.138	-1.00	13.8

*** Initial and Continuing Calibration Verification and Calib. Blank Data ***

Element: CA Units: ug/l

Position	Sample	Calculated	Expected	% Rec
5	SXBLK	-82.0	0	
7	SASI514A	2020	2000	101
8	SBSI514B	4080	4000	102
10	SCSI514C	20000	20000	99.9
9	CSSI514B	4130	4080	101
11	CSSI514E	48500	50000	97.1
12	CSSI514D	98100	100000	98.1
15	CSMIDCHK	10200	10000	102
17	CSX85INT	436000	481000	94.7
19	CSCRIA	2010	2000	101
20	CSCRIB	917	0	
22	CSLABCON	9850	10000	98.5
34	CSLABCON	10100	10000	101
37	CSMIDCHK	10400	10000	104
52	CSMIDCHK	10300	10000	103
54	CSLABCON	10200	10000	102
69	CSMIDCHK	10300	10000	103
80	CSMIDCHK	10300	10000	103
82	CSCRIA	1990	2000	99.6
83	CSCRIB	914	0	
85	CSX85INT	452000	481000	98.1
14	CBBLK	-87.5	-1.00	8750
36	CBBLK	-89.1	-1.00	8910
51	CBBLK	-89.9	-1.00	8990
68	CBBLK	-89.7	-1.00	8970
79	CBBLK	-89.7	-1.00	8970

Element: CD Units: ug/l

Position	Sample	Calculated	Expected	% Rec
5	SXBLK	-0.684	0	
7	SASI514A	21.1	20.0	106
8	SBSI514B	39.6	40.0	99.0
10	SCSI514C	200	200	100
9	CSSI514B	41.4	39.6	104
11	CSSI514E	480	500	96.0
12	CSSI514D	959	1000	95.9
15	CSMIDCHK	104	100	104
17	CSX85INT	875	815	107
19	CSCRIA	21.8	0	
20	CSCRIB	10.2	10.0	102
22	CSLABCON	97.4	100	97.4
34	CSLABCON	101	100	101
37	CSMIDCHK	106	100	106
52	CSMIDCHK	105	100	105
54	CSLABCON	96.8	100	96.8
69	CSMIDCHK	108	100	108
80	CSMIDCHK	106	100	106
82	CSCRIA	20.7	0	
83	CSCRIB	9.19	10.0	91.9
85	CSX85INT	908	815	111
14	CBBLK	-0.404	-1.00	40.4
36	CBBLK	-0.346	-1.00	34.6
51	CBBLK	0.107	-1.00	-10.7
68	CBBLK	-0.626	-1.00	62.6
79	CBBLK	-0.482	-1.00	48.2

*** Initial and Continuing Calibration Verification and Calib. Blank Data ***

Element: CO Units: ug/l

Position	Sample	Calculated	Expected	% Rec
5	SXBLK	-3.12	0	
7	SASI514A	41.4	40.0	104
8	SBSI514B	82.3	80.0	103
10	SCSI514C	399	400	99.8
9	CSSI514B	82.4	82.3	100
11	CSSI514E	982	1000	98.2
12	CSSI514D	1960	2000	98.0
15	CSMIDCHK	211	200	105
17	CSX85INT	433	416	104
19	CSCRIA	39.0	40.0	97.4
20	CSCRIB	15.7	0	
22	CSLABCON	202	200	101
34	CSLABCON	208	200	104
37	CSMIDCHK	215	200	108
52	CSMIDCHK	213	200	107
54	CSLABCON	203	200	101
69	CSMIDCHK	213	200	107
80	CSMIDCHK	215	200	108
82	CSCRIA	39.7	40.0	99.3
83	CSCRIB	15.0	0	
85	CSX85INT	451	416	108
14	CBBLK	-1.85	-1.00	185
36	CBBLK	-3.23	-1.00	323
51	CBBLK	-3.73	-1.00	373
68	CBBLK	-3.48	-1.00	348
79	CBBLK	-3.63	-1.00	363

Element: CR Units: ug/l

Position	Sample	Calculated	Expected	% Rec
5	SXBLK	-3.10	0	
7	SASI514A	82.8	80.0	105
8	SBSI514B	121	120	101
10	SCSI514C	600	600	99.8
9	CSSI514B	123	121	102
11	CSSI514E	1460	1500	97.4
12	CSSI514D	2920	3000	97.5
15	CSMIDCHK	307	300	102
17	CSX85INT	423	422	100
19	CSCRIA	59.4	0	
20	CSCRIB	28.5	30.0	95.0
22	CSLABCON	302	300	101
34	CSLABCON	313	300	104
37	CSMIDCHK	326	300	109
52	CSMIDCHK	315	300	105
54	CSLABCON	306	300	102
69	CSMIDCHK	319	300	106
80	CSMIDCHK	321	300	107
82	CSCRIA	61.7	0	
83	CSCRIB	29.0	30.0	96.5
85	CSX85INT	453	422	107
14	CBBLK	-1.71	-1.00	171
36	CBBLK	-2.10	-1.00	210
51	CBBLK	-2.63	-1.00	263
68	CBBLK	-2.54	-1.00	254
79	CBBLK	-3.78	-1.00	378

*** Initial and Continuing Calibration Verification and Calib. Blank Data ***

Element: CU Units: ug/l

Position	Sample	Calculated	Expected	% Rec
5	SXBLK	-1.21	0	
7	SASI514A	60.8	60.0	101
8	SBSI514B	121	120	100
10	SCSI514C	600	600	100
9	CSSI514B	122	121	101
11	CSSI514E	1470	1500	98.3
12	CSSI514D	2930	3000	97.6
15	CSMIDCHK	305	300	102
17	CSX85INT	483	468	103
19	CSCRIA	62.3	60.0	104
20	CSCRIB	31.1	0	
22	CSLABCON	295	300	98.5
34	CSLABCON	298	300	99.4
37	CSMIDCHK	315	300	105
52	CSMIDCHK	310	300	103
54	CSLABCON	303	300	101
69	CSMIDCHK	311	300	104
80	CSMIDCHK	310	300	103
82	CSCRIA	62.0	60.0	103
83	CSCRIB	29.3	0	
85	CSX85INT	506	461	108
14	CBBLK	-0.147	-1.00	14.7
36	CBBLK	-0.147	-1.00	14.7
51	CBBLK	3.64	-1.00	-364
68	CBBLK	-0.0289	-1.00	2.89
78	CBBLK	-0.147	-1.00	14.7

Element: FE Units: ug/l

Position	Sample	Calculated	Expected	% Rec
5	SXBLK	-3.48	0	
7	SASI514A	201	200	101
8	SBSI514B	403	400	101
10	SCSI514C	2000	2000	100
9	CSSI514B	407	403	101
11	CSSI514E	4820	5000	96.3
12	CSSI514D	9540	10000	95.4
15	CSMIDCHK	1010	1000	101
17	CSX85INT	162000	163000	99.3
19	CSCRIA	206	200	103
20	CSCRIB	97.6	0	
22	CSLABCON	966	1000	96.6
34	CSLABCON	984	1000	98.4
37	CSMIDCHK	1030	1000	103
52	CSMIDCHK	1010	1000	101
54	CSLABCON	988	1000	98.8
69	CSMIDCHK	1020	1000	102
80	CSMIDCHK	1020	1000	102
82	CSCRIA	200	200	99.9
83	CSCRIB	98.0	0	
85	CSX85INT	169000	163000	103
14	CBBLK	-2.82	-1.00	282
36	CBBLK	-3.67	-1.00	367
51	CBBLK	-0.0886	-1.00	8.86
68	CBBLK	-3.20	-1.00	320
78	CBBLK	-3.58	-1.00	358

*** Initial and Continuing Calibration Verification and Calib. Blank Data ***

Element: K Units: ug/l

Position	Sample	Calculated	Expected	% Rec
5	SXBLK	-34.0	0	
7	SASI514A	2000	2000	100
8	SBSI514B	4040	4000	101
10	SCSI514C	20000	20000	100
9	CSSI514B	4020	4040	99.4
11	CSSI514E	49600	50000	99.3
12	CSSI514D	99000	100000	99.0
15	CSMIDCHK	4020	4000	101
17	CSX85INT	-139	0	
19	CSCRIA	2030	0	
20	CSCRIB	981	0	
22	CSLABCON	3820	4000	95.5
34	CSLABCON	3940	4000	98.4
37	CSMIDCHK	4110	4000	103
52	CSMIDCHK	3960	4000	99.1
54	CSLABCON	3610	4000	90.1
69	CSMIDCHK	3980	4000	99.8
80	CSMIDCHK	3940	4000	98.5
82	CSCRIA	1880	0	
83	CSCRIB	825	0	
85	CSX85INT	-302	0	
14	CBBLK	-14.3	-1.00	1430
36	CBBLK	-50.2	-1.00	5020
51	CBBLK	-47.5	-1.00	4750
68	CBBLK	-82.4	-1.00	8240
79	CBBLK	-74.4	-1.00	7440

Element: MG Units: ug/l

Position	Sample	Calculated	Expected	% Rec
5	SXBLK	-53.9	0	
7	SASI514A	2020	2000	101
8	SBSI514B	4040	4000	101
10	SCSI514C	20000	20000	100
9	CSSI514B	4050	4040	100
11	CSSI514E	49200	50000	98.5
12	CSSI514D	99200	100000	99.2
15	CSMIDCHK	10200	10000	102
17	CSX85INT	471000	474000	99.3
19	CSCRIA	2010	2000	100
20	CSCRIB	973	0	
22	CSLABCON	9860	10000	98.6
34	CSLABCON	9960	10000	99.6
37	CSMIDCHK	10400	10000	104
52	CSMIDCHK	10300	10000	103
54	CSLABCON	9690	10000	96.9
69	CSMIDCHK	10300	10000	103
80	CSMIDCHK	10300	10000	103
82	CSCRIA	2010	2000	101
83	CSCRIB	954	0	
85	CSX85INT	487000	474000	103
14	CBBLK	-31.0	-1.00	3100
36	CBBLK	-35.5	-1.00	3550
51	CBBLK	-28.7	-1.00	2870
68	CBBLK	-35.0	-1.00	3500
79	CBBLK	-40.4	-1.00	4040

*** Initial and Continuing Calibration Verification and Calib. Blank Data ***

Element: MN Units: ug/l

Position	Sample	Calculated	Expected	% Rec
5	SXBLK	-1.57	0	
7	SASI514A	60.8	60.0	101
8	SBSI514B	121	120	101
10	SCSI514C	600	600	99.9
9	CSSI514B	122	121	101
11	CSSI514E	1450	1500	97.0
12	CSSI514D	2900	3000	98.7
15	CSMIDCHK	307	300	102
17	CSX85INT	487	445	105
19	CSCRIA	60.2	0	
20	CSCRIB	29.1	30.0	97.0
22	CSLABCON	295	300	98.5
34	CSLABCON	300	300	100
37	CSMIDCHK	314	300	105
52	CSMIDCHK	310	300	103
54	CSLABCON	298	300	99.3
69	CSMIDCHK	312	300	104
80	CSMIDCHK	310	300	103
82	CSCRIA	60.6	0	
83	CSCRIB	28.8	30.0	95.3
85	CSX85INT	482	445	108
14	CBBLK	-1.05	-1.00	105
36	CBBLK	-1.50	-1.00	150
51	CBBLK	-1.34	-1.00	134
68	CBBLK	-1.50	-1.00	150
78	CBBLK	-1.34	-1.00	134

Element: MO Units: ug/l

Position	Sample	Calculated	Expected	% Rec
5	SXBLK	-1.42	0	
7	SASI514A	51.2	50.0	102
8	SBSI514B	100	100	100
10	SCSI514C	500	500	100
9	CSSI514B	101	100	101
11	CSSI514E	1210	1250	96.8
12	CSSI514D	2400	2500	96.1
15	CSMIDCHK	253	250	101
17	CSX85INT	2.44	0	
19	CSCRIA	50.6	0	
20	CSCRIB	24.9	0	
22	CSLABCON	245	250	97.9
34	CSLABCON	251	250	100
37	CSMIDCHK	260	250	104
52	CSMIDCHK	258	250	103
54	CSLABCON	248	250	99.4
69	CSMIDCHK	258	250	103
80	CSMIDCHK	259	250	104
82	CSCRIA	52.8	0	
83	CSCRIB	24.9	0	
85	CSX85INT	4.08	0	
14	CBBLK	0.688	-1.00	-68.8
36	CBBLK	0.0826	-1.00	-8.26
51	CBBLK	-0.0424	-1.00	4.24
68	CBBLK	-0.167	-1.00	16.7
78	CBBLK	0.188	-1.00	-18.8

*** Initial and Continuing Calibration Verification and Calib. Blank Data ***

Element: NA Units: ug/l

Position	Sample	Calculated	Expected	% Rec
5	SXBLK	-181	0	
7	SASI514A	10000	10000	100
8	SBSI514B	20200	20000	101
10	SCSI514C	100000	100000	100
9	CSSI514B	20100	20200	99.4
11	CSSI514E	248000	250000	99.3
12	CSSI514D	492000	500000	98.4
15	CSMIDCHK	49800	50000	99.7
17	CSX85INT	-578	0	
19	CSCRIA	9600	10000	96.0
20	CSCRIB	4880	0	
22	CSLABCON	49200	50000	98.4
34	CSLABCON	49300	50000	98.7
37	CSMIDCHK	51600	50000	103
52	CSMIDCHK	50200	50000	100
54	CSLABCON	48700	50000	97.5
69	CSMIDCHK	50700	50000	101
80	CSMIDCHK	50500	50000	101
82	CSCRIA	9780	10000	97.8
83	CSCRIB	4800	0	
85	CSX85INT	-684	0	
14	CBBLK	-132	-1.00	13200
36	CBBLK	-146	-1.00	14600
51	CBBLK	-157	-1.00	15700
68	CBBLK	-181	-1.00	18100
79	CBBLK	-165	-1.00	16500

Element: NI Units: ug/l

Position	Sample	Calculated	Expected	% Rec
5	SXBLK	-3.57	0	
7	SASI514A	62.9	60.0	105
8	SBSI514B	121	120	101
10	SCSI514C	599	600	99.8
9	CSSI514B	125	121	103
11	CSSI514E	1440	1500	96.1
12	CSSI514D	2860	3000	95.5
15	CSMIDCHK	308	300	103
17	CSX85INT	836	830	99.6
19	CSCRIA	62.7	60.0	105
20	CSCRIB	30.7	0	
22	CSLABCON	296	300	98.8
34	CSLABCON	307	300	102
37	CSMIDCHK	316	300	105
52	CSMIDCHK	311	300	104
54	CSLABCON	298	300	99.7
69	CSMIDCHK	313	300	104
80	CSMIDCHK	312	300	104
82	CSCRIA	60.3	60.0	100
83	CSCRIB	27.8	0	
85	CSX85INT	868	830	103
14	CBBLK	-1.39	-1.00	139
36	CBBLK	-1.29	-1.00	129
51	CBBLK	-2.81	-1.00	281
68	CBBLK	-2.58	-1.00	258
79	CBBLK	-1.98	-1.00	98

*** Initial and Continuing Calibration Verification and Calib. Blank Data ***

Element: PB Units: ug/l

Position	Sample	Calculated	Expected	% Rec
5	SXBLK	-8.04	0	
7	SASI514A	108	100	108
8	SBSI514B	201	200	100
10	SCSI514C	888	1000	88.8
9	CSSI514B	212	201	106
11	CSSI514E	2430	2500	97.3
12	CSSI514D	4920	5000	98.4
15	CSMIDCHK	520	500	104
17	CSX85INT	862	838	92.1
19	CSCRIA	110	0	
20	CSCRIB	52.3	50.0	105
22	CSLABCON	497	500	99.4
34	CSLABCON	527	500	105
37	CSMIDCHK	540	500	108
52	CSMIDCHK	534	500	107
54	CSLABCON	508	500	102
69	CSMIDCHK	533	500	107
80	CSMIDCHK	534	500	107
82	CSCRIA	108	0	
83	CSCRIB	46.4	50.0	92.8
85	CSX85INT	886	838	94.7
14	CBBLK	2.00	-1.00	-200
36	CBBLK	-0.514	-1.00	51.4
51	CBBLK	3.20	-1.00	-320
68	CBBLK	-4.91	-1.00	491
79	CBBLK	-3.18	-1.00	318

Element: SB Units: ug/l

Position	Sample	Calculated	Expected	% Rec
5	SXBLK	-7.45	0	
7	SASI514A	106	100	106
8	SBSI514B	202	200	101
10	SCSI514C	888	1000	88.8
9	CSSI514B	208	202	103
11	CSSI514E	2450	2500	97.8
12	CSSI514D	4960	5000	99.2
15	CSMIDCHK	498	500	99.3
17	CSX85INT	51.5	0	
19	CSCRIA	106	100	106
20	CSCRIB	55.8	0	
22	CSLABCON	473	500	94.7
34	CSLABCON	501	500	100
37	CSMIDCHK	515	500	103
52	CSMIDCHK	504	500	101
54	CSLABCON	484	500	96.8
69	CSMIDCHK	506	500	101
80	CSMIDCHK	509	500	102
82	CSCRIA	105	100	105
83	CSCRIB	46.9	0	
85	CSX85INT	70.1	0	
14	CBBLK	-0.416	-1.00	41.6
36	CBBLK	-1.63	-1.00	163
51	CBBLK	3.25	-1.00	-325
68	CBBLK	2.13	-1.00	-213
79	CBBLK	0.704	-1.00	-70.4

*** Initial and Continuing Calibration Verification and Calib. Blank Data ***

Element: SE Units: ug/l

Position	Sample	Calculated	Expected	% Rec
5	SXBLK	-10.6	0	
7	SASI514A	207	200	103
8	SBSI514B	406	400	101
10	SCSI514C	2000	2000	99.9
9	CSSI514B	408	408	101
11	CSSI514E	4940	5000	98.7
12	CSSI514D	9810	10000	98.1
15	CSMIDCHK	1020	1000	102
17	CSX85INT	20.4	0	
19	CSCRIA	205	0	
20	CSCRIB	107	100	107
22	CSLABCON	982	1000	98.2
34	CSLABCON	996	1000	99.6
37	CSMIDCHK	1040	1000	104
52	CSMIDCHK	1040	1000	104
54	CSLABCON	1010	1000	101
69	CSMIDCHK	1040	1000	104
80	CSMIDCHK	1050	1000	105
82	CSCRIA	206	0	
83	CSCRIB	91.9	100	91.8
85	CSX85INT	33.5	0	
14	CBBLK	9.11	-1.00	-911
38	CBBLK	-5.50	-1.00	550
51	CBBLK	-2.95	-1.00	295
68	CBBLK	8.34	-1.00	-834
79	CBBLK	4.48	-1.00	-448

Element: SN Units: ug/l

Position	Sample	Calculated	Expected	% Rec
5	SXBLK	-2.46	0	
7	SASI514A	204	200	102
8	SBSI514B	399	400	99.7
10	SCSI514C	2000	2000	100
9	CSSI514B	405	399	101
11	CSSI514E	4840	5000	96.7
12	CSSI514D	9760	10000	97.6
15	CSMIDCHK	1020	1000	102
17	CSX85INT	-83.3	0	
19	CSCRIA	206	0	
20	CSCRIB	95.1	0	
22	CSLABCON	974	1000	97.4
34	CSLABCON	1010	1000	101
37	CSMIDCHK	1060	1000	106
52	CSMIDCHK	1040	1000	104
54	CSLABCON	1020	1000	102
69	CSMIDCHK	1040	1000	104
80	CSMIDCHK	1050	1000	105
82	CSCRIA	201	0	
83	CSCRIB	94.4	0	
85	CSX85INT	-85.2	0	
14	CBBLK	-1.67	-1.00	167
38	CBBLK	-4.48	-1.00	448
51	CBBLK	1.30	-1.00	-130
68	CBBLK	-5.73	-1.00	573
79	CBBLK	-4.10	-1.00	410

*** Initial and Continuing Calibration Verification and Calib. Blank Data ***

Element: TI Units: ug/l

Position	Sample	Calculated	Expected	% Rec
5	SXBLK	-3.22	0	
7	SASI514A	102	100	102
8	SBSI514B	202	200	101
10	SCSI514C	888	1000	89.8
9	CSSI514B	203	202	101
11	CSSI514E	2480	2500	98.4
12	CSSI514D	4860	5000	97.2
15	CSMIDCHK	493	500	98.6
17	CSX85INT	56.7	0	
19	CSCRIA	96.9	0	
20	CSCRIB	52.0	0	
22	CSLABCON	502	500	100
34	CSLABCON	507	500	101
37	CSMIDCHK	512	500	102
52	CSMIDCHK	499	500	99.8
54	CSLABCON	536	500	107
69	CSMIDCHK	508	500	101
80	CSMIDCHK	503	500	101
82	CSCRIA	98.8	0	
83	CSCRIB	52.7	0	
85	CSX85INT	80.3	0	
14	CBBLK	-3.48	-1.00	348
36	CBBLK	-3.60	-1.00	360
51	CBBLK	-3.76	-1.00	376
68	CBBLK	-3.83	-1.00	383
78	CBBLK	-5.38	-1.00	538

Element: V Units: ug/l

Position	Sample	Calculated	Expected	% Rec
5	SXBLK	-1.36	0	
7	SASI514A	80.9	80.0	101
8	SBSI514B	121	120	101
10	SCSI514C	600	600	100
9	CSSI514B	122	121	101
11	CSSI514E	1470	1500	97.8
12	CSSI514D	2920	3000	97.4
15	CSMIDCHK	308	300	103
17	CSX85INT	484	444	108
19	CSCRIA	82.7	80.0	104
20	CSCRIB	30.7	0	
22	CSLABCON	298	300	98.6
34	CSLABCON	302	300	101
37	CSMIDCHK	316	300	105
52	CSMIDCHK	311	300	104
54	CSLABCON	296	300	98.8
69	CSMIDCHK	314	300	105
80	CSMIDCHK	312	300	104
82	CSCRIA	80.7	80.0	101
83	CSCRIB	28.8	0	
85	CSX85INT	501	444	113
14	CBBLK	0.159	-1.00	-15.9
36	CBBLK	-0.156	-1.00	15.6
51	CBBLK	-0.0771	-1.00	7.71
68	CBBLK	-1.13	-1.00	113
78	CBBLK	-0.882	-1.00	88.2

#	Sample Name	File	Method	Date	Time	OpID	Type	Mode
1	DW	P7057A	ETC1CPA	11/08/89	12:38	RR	S	CONC
2	MTDCHK	P7057A	ETC1CPA	11/08/89	12:41	RR	S	CONC
3	DW	P7057A	ETC1CPA	11/08/89	12:44	RR	S	CONC
4	BLANK	P7057A	ETC1CPA	11/08/89	12:46	RR	S	CONC
5	BBBLK	P7057A	ETC1CPA	11/08/89	12:49	RR	S	CONC
6	BA81514A	P7057A	ETC1CPA	11/08/89	12:51	RR	S	CONC
7	BA81514A	P7057A	ETC1CPA	11/08/89	12:54	RR	S	CONC
8	BB81514B	P7057A	ETC1CPA	11/08/89	12:56	RR	S	CONC
9	CB81514B	P7057A	ETC1CPA	11/08/89	12:59	RR	S	CONC
10	BC81514C	P7057A	ETC1CPA	11/08/89	13:01	RR	S	CONC
11	CB81514E	P7057A	ETC1CPA	11/08/89	13:04	RR	S	CONC
12	CB81514D	P7057A	ETC1CPA	11/08/89	13:06	RR	S	CONC
13	DW	P7057A	ETC1CPA	11/08/89	13:09	RR	S	CONC
14	CBBLK	P7057A	ETC1CPA	11/08/89	13:11	RR	S	CONC
15	CBMTDCHK	P7057A	ETC1CPA	11/08/89	13:14	RR	S	CONC
16	DW	P7057A	ETC1CPA	11/08/89	13:17	RR	S	CONC
17	CB8805INT	P7057A	ETC1CPA	11/08/89	13:19	RR	S	CONC
18	DW	P7057A	ETC1CPA	11/08/89	13:22	RR	S	CONC
19	CBCRTA	P7057A	ETC1CPA	11/08/89	13:24	RR	S	CONC
20	CBCRTB	P7057A	ETC1CPA	11/08/89	13:27	RR	S	CONC
21	DW	P7057A	ETC1CPA	11/08/89	13:29	RR	S	CONC
22	CBCARCON	P7057A	ETC1CPA	11/08/89	13:32	RR	S	CONC
23	DW	P7057A	ETC1CPA	11/08/89	13:34	RR	S	CONC
24	R8907057W	P7057A	ETC1CPA	11/08/89	13:37	RR	S	CONC
25	KKTFBPW	P7057A	ETC1CPA	11/08/89	13:39	RR	S	CONC
26	R8907057W	P7057A	ETC1CPA	11/08/89	13:42	RR	S	CONC
27	R8CA2164	P7057A	ETC1CPA	11/08/89	13:44	RR	S	CONC
28	KKTFBPW	P7057A	ETC1CPA	11/08/89	13:47	RR	S	CONC
29	08CA2164	P7057A	ETC1CPA	11/08/89	13:49	RR	S	CONC
30	DW	P7057A	ETC1CPA	11/08/89	13:52	RR	S	CONC
31	08CA2164	P7057A	ETC1CPA	11/08/89	13:55	RR	S	CONC
32	DW	P7057A	ETC1CPA	11/08/89	13:57	RR	S	CONC
33	R8CA2163	P7057A	ETC1CPA	11/08/89	14:00	RR	S	CONC
34	CBCARCON	P7057A	ETC1CPA	11/08/89	14:02	RR	S	CONC
35	DW	P7057A	ETC1CPA	11/08/89	14:05	RR	S	CONC
36	CBBLK	P7057A	ETC1CPA	11/08/89	14:07	RR	S	CONC
37	CBMTDCHK	P7057A	ETC1CPA	11/08/89	14:10	RR	S	CONC
38	DW	P7057A	ETC1CPA	11/08/89	14:12	RR	S	CONC
39	R8907057S	P7057A	ETC1CPA	11/08/89	14:15	RR	S	CONC
40	KKTFBPS	P7057A	ETC1CPA	11/08/89	14:17	RR	S	CONC
41	R8907057S	P7057A	ETC1CPA	11/08/89	14:20	RR	S	CONC
42	R8CA2165	P7057A	ETC1CPA	11/08/89	14:22	RR	S	CONC
43	KKTFBPS	P7057A	ETC1CPA	11/08/89	14:25	RR	S	CONC
44	08CA2165	P7057A	ETC1CPA	11/08/89	14:27	RR	S	CONC
45	DW	P7057A	ETC1CPA	11/08/89	14:30	RR	S	CONC
46	08CA2165	P7057A	ETC1CPA	11/08/89	14:33	RR	S	CONC
47	[illegible]	P7057A	ETC1CPA	11/08/89	14:35	RR	S	CONC
48	R8CA2165P	P7057A	ETC1CPA	11/08/89	14:38	RR	S	CONC
49	DW	P7057A	ETC1CPA	11/08/89	14:40	RR	S	CONC
50	DW	P7057A	ETC1CPA	11/08/89	14:43	RR	S	CONC
51	CBBLK	P7057A	ETC1CPA	11/08/89	14:45	RR	S	CONC
52	CBMTDCHK	P7057A	ETC1CPA	11/08/89	14:48	RR	S	CONC
53	DW	P7057A	ETC1CPA	11/08/89	14:50	RR	S	CONC

#	Sample Name	File	Method	Date	Time	OpID	Type	Mode
1	DW	P7057A	EPC1CPA	11/08/89	12:38	RR	S	CONC
2	MTDCHK	P7057A	EPC1CPA	11/08/89	12:41	RR	S	CONC
3	DW	P7057A	EPC1CPA	11/08/89	12:44	RR	S	CONC
4	BLANK	P7057A	EPC1CPA	11/08/89	12:46	RR	S	CONC
5	[illegible]	P7057A	EPC1CPA	11/08/89	12:49	RR	S	CONC
6	BA3T514A	P7057A	EPC1CPA	11/08/89	12:51	RR	S	CONC
7	BA3T514A	P7057A	EPC1CPA	11/08/89	12:54	RR	S	CONC
8	BB3T514B	P7057A	EPC1CPA	11/08/89	12:56	RR	S	CONC
9	BB3T514B	P7057A	EPC1CPA	11/08/89	12:59	RR	S	CONC
10	BB3T514C	P7057A	EPC1CPA	11/08/89	13:01	RR	S	CONC
11	BB3T514E	P7057A	EPC1CPA	11/08/89	13:04	RR	S	CONC
12	BB3T514D	P7057A	EPC1CPA	11/08/89	13:06	RR	S	CONC
13	DW	P7057A	EPC1CPA	11/08/89	13:09	RR	S	CONC
14	[illegible]	P7057A	EPC1CPA	11/08/89	13:11	RR	S	CONC
15	[illegible]MTDCHK	P7057A	EPC1CPA	11/08/89	13:14	RR	S	CONC
16	DW	P7057A	EPC1CPA	11/08/89	13:17	RR	S	CONC
17	[illegible]INT	P7057A	EPC1CPA	11/08/89	13:19	RR	S	CONC
18	DW	P7057A	EPC1CPA	11/08/89	13:22	RR	S	CONC
19	CCCRTA	P7057A	EPC1CPA	11/08/89	13:24	RR	S	CONC
20	CCCRTB	P7057A	EPC1CPA	11/08/89	13:27	RR	S	CONC
21	DW	P7057A	EPC1CPA	11/08/89	13:29	RR	S	CONC
22	CCCARCON	P7057A	EPC1CPA	11/08/89	13:32	RR	S	CONC
23	DW	P7057A	EPC1CPA	11/08/89	13:34	RR	S	CONC
24	R307057W	P7057A	EPC1CPA	11/08/89	13:37	RR	S	CONC
25	KETFBPW	P7057A	EPC1CPA	11/08/89	13:39	RR	S	CONC
26	R307057W	P7057A	EPC1CPA	11/08/89	13:42	RR	S	CONC
27	RCCA2164	P7057A	EPC1CPA	11/08/89	13:44	RR	S	CONC
28	KETFBPW	P7057A	EPC1CPA	11/08/89	13:47	RR	S	CONC
29	CCCA2164	P7057A	EPC1CPA	11/08/89	13:49	RR	S	CONC
30	DW	P7057A	EPC1CPA	11/08/89	13:52	RR	S	CONC
31	[illegible]2164	P7057A	EPC1CPA	11/08/89	13:55	RR	S	CONC
32	DW	P7057A	EPC1CPA	11/08/89	13:57	RR	S	CONC
33	RCCA2163	P7057A	EPC1CPA	11/08/89	14:00	RR	S	CONC
34	CCCARCON	P7057A	EPC1CPA	11/08/89	14:02	RR	S	CONC
35	DW	P7057A	EPC1CPA	11/08/89	14:05	RR	S	CONC
36	[illegible]	P7057A	EPC1CPA	11/08/89	14:07	RR	S	CONC
37	[illegible]MTDCHK	P7057A	EPC1CPA	11/08/89	14:10	RR	S	CONC
38	DW	P7057A	EPC1CPA	11/08/89	14:12	RR	S	CONC
39	[illegible]	P7057A	EPC1CPA	11/08/89	14:15	RR	S	CONC
40	[illegible]	P7057A	EPC1CPA	11/08/89	14:17	RR	S	CONC
41	[illegible]	P7057A	EPC1CPA	11/08/89	14:20	RR	S	CONC
42	[illegible]	P7057A	EPC1CPA	11/08/89	14:22	RR	S	CONC
43	[illegible]	P7057A	EPC1CPA	11/08/89	14:25	RR	S	CONC
44	[illegible]	P7057A	EPC1CPA	11/08/89	14:27	RR	S	CONC
45	[illegible]	P7057A	EPC1CPA	11/08/89	14:30	RR	S	CONC
46	[illegible]	P7057A	EPC1CPA	11/08/89	14:33	RR	S	CONC
47	[illegible]	P7057A	EPC1CPA	11/08/89	14:35	RR	S	CONC
48	[illegible]	P7057A	EPC1CPA	11/08/89	14:38	RR	S	CONC
49	[illegible]	P7057A	EPC1CPA	11/08/89	14:40	RR	S	CONC
50	DW	P7057A	EPC1CPA	11/08/89	14:43	RR	S	CONC
51	[illegible]	P7057A	EPC1CPA	11/08/89	14:45	RR	S	CONC
52	[illegible]MTDCHK	P7057A	EPC1CPA	11/08/89	14:48	RR	S	CONC
53	DW	P7057A	EPC1CPA	11/08/89	14:50	RR	S	CONC

#	Sample Name	File	Method	Date	Time	OpID	Type	Mode
54	CBRJARCON	P7057A	ETCICPA	11/08/89	14:53	RR	S	CONC
55	DW	P7057A	ETCICPA	11/08/89	14:55	RR	S	CONC
56	RSQ70050	P7057A	ETCICPA	11/08/89	14:58	RR	S	CONC
57	KKJPBPS	P7057A	ETCICPA	11/08/89	15:01	RR	S	CONC
58	RSQ70050	P7057A	ETCICPA	11/08/89	15:03	RR	S	CONC
59	RSCA1365	P7057A	ETCICPA	11/08/89	15:06	RR	S	CONC
60	KSJPBPS	P7057A	ETCICPA	11/08/89	15:08	RR	S	CONC
61	QSCA1365	P7057A	ETCICPA	11/08/89	15:11	RR	S	CONC
62	DW	P7057A	ETCICPA	11/08/89	15:13	RR	S	CONC
63	DSCA1365	P7057A	ETCICPA	11/08/89	15:16	RR	S	CONC
64	RSC1365	P7057A	ETCICPA	11/08/89	15:18	RR	S	CONC
65	RSC1365P	P7057A	ETCICPA	11/08/89	15:21	RR	S	CONC
66	DW	P7057A	ETCICPA	11/08/89	15:23	RR	S	CONC
67	DW	P7057A	ETCICPA	11/08/89	15:26	RR	S	CONC
68	CBBIJK	P7057A	ETCICPA	11/08/89	15:28	RR	S	CONC
69	CSMIDCIK	P7057A	ETCICPA	11/08/89	15:31	RR	S	CONC
70	DW	P7057A	ETCICPA	11/08/89	15:34	RR	S	CONC
71	RSCA1366	P7057A	ETCICPA	11/08/89	15:36	RR	S	CONC
72	RSCA1367	P7057A	ETCICPA	11/08/89	15:39	RR	S	CONC
73	RSCA1368	P7057A	ETCICPA	11/08/89	15:41	RR	S	CONC
74	RSCA1369	P7057A	ETCICPA	11/08/89	15:44	RR	S	CONC
75	RSCA1370	P7057A	ETCICPA	11/08/89	15:46	RR	S	CONC
76	RSCA2013	P7057A	ETCICPA	11/08/89	15:49	RR	S	CONC
77	DW	P7057A	ETCICPA	11/08/89	15:51	RR	S	CONC
78	DW	P7057A	ETCICPA	11/08/89	15:54	RR	S	CONC
79	CBBIJK	P7057A	ETCICPA	11/08/89	15:56	RR	S	CONC
80	CSMIDCIK	P7057A	ETCICPA	11/08/89	15:59	RR	S	CONC
81	DW	P7057A	ETCICPA	11/08/89	16:02	RR	S	CONC
82	CSCRFA	P7057A	ETCICPA	11/08/89	16:04	RR	S	CONC
83	CSCRFB	P7057A	ETCICPA	11/08/89	16:07	RR	S	CONC
84	DW	P7057A	ETCICPA	11/08/89	16:09	RR	S	CONC
85	CSX05INT	P7057A	ETCICPA	11/08/89	16:12	RR	S	CONC
86	DW	P7057A	ETCICPA	11/08/89	16:14	RR	S	CONC

#	Element:	DW	MIDCHK	DW	BLANK	SXNK	SASI514A
1	Ag3280	-.0008	.0977	-.0033	.0039	-.0030	.0175
2	Al3961	.0142	2.529	.0025	.0025	-.0100	.4921
3	As1936	.0086	.5094	.0025	.0080	.0104	.1067
4	B 2497	-.0080	.4974	-.0287	-.0230	-.0243	.0752
5	Ba4934	.0065	1.031	-.0010	-.0021	.0024	.2046
6	Be3130	.0010	.1032	.0002	.0001	.0001	.0208
7	Ca3179	.0173	10.40	-.0576	-.0427	-.0459	2.087
8	Cd2265	.0030	.1106	.0010	.0011	.0012	.0226
9	Co2286	.0011	.2187	-.0017	.0002	-.0008	.0406
10	Cr2677	.0039	.3206	-.0009	.0005	-.0008	.0643
11	Cu3247	.0040	.3129	.0005	.0002	.0008	.0627
12	Fe2599	-.0012	1.045	-.0105	-.0109	-.0099	.2013
13	K 7664	.1944	4.085	.0256	-.0124	.0327	2.012
14	Mg2790	.0383	10.22	-.0306	-.0408	-.0577	1.983
15	Mn2576	.0005	.3166	-.0020	-.0030	-.0030	.0603
16	Mo2020	.0010	.2638	-.0006	.0000	-.0017	.0525
17	Na5895	.3811	50.25	.0298	.0167	.0275	9.997
18	Ni2316	.0016	.3269	.0000	.0002	-.0020	.0639
19	Pb2203	.0056	.5438	.0002	-.0012	-.0030	.1045
20	Sb2068	.0028	.5070	.0004	-.0087	-.0113	.0954
21	Se1960	.0031	1.034	-.0026	-.0017	-.0186	.1970
22	Si1899	.0100	1.054	-.0056	-.0097	-.0033	.2029
23	Ti3349	.0045	.5113	.0008	.0000	.0000	.1061
24	V 2924	.0067	.3181	.0020	.0024	.0024	.0647
25	Zn2138	.0026	.5281	.0010	.0003	.0005	.1032

#	Element:	SA3I514A	SB3I514B	CS3I514B	SC3I514C	CS3I514E	CS3I514D
1	Ag3280	.0183	.0372	.0384	.1984	.4865	.9977
2	Al3961	.4979	1.000	.9992	4.941	12.30	24.66
3	As1936	.1109	.2090	.2102	1.002	2.473	5.004
4	B 2497	.0755	.1978	.1986	.9909	2.480	4.923
5	Ba4934	.2073	.4133	.4132	2.040	5.027	9.859
6	Be3130	.0210	.0416	.0418	.2062	.5085	.9947
7	Ca3179	2.113	4.208	4.250	20.40	49.50	100.00
8	Cd2265	.0238	.0430	.0449	.2094	.5012	1.000
9	Co2286	.0445	.0861	.0862	.4088	1.002	1.997
10	Cr2677	.0671	.1268	.1293	.6201	1.508	3.015
11	Cu3247	.0637	.1241	.1256	.6094	1.495	2.967
12	Fe2599	.2036	.4145	.4185	2.081	5.022	9.954
13	K 7664	2.041	4.048	4.025	19.77	49.00	97.69
14	Mg2790	2.014	4.027	4.035	19.93	49.11	98.94
15	Mn2576	.0612	.1232	.1242	.6154	1.497	2.986
16	Mo2020	.0530	.1042	.1053	.5195	1.258	2.499
17	Na5895	10.11	20.28	20.18	99.84	247.9	490.9
18	Ni2316	.0674	.1284	.1319	.6280	1.508	2.994
19	Pb2203	.1155	.2099	.2212	1.023	2.481	5.016
20	Sb2068	.1034	.2005	.2072	1.004	2.476	5.024
21	Se1960	.2022	.4044	.4067	2.022	5.002	9.950
22	Si1899	.2098	.4117	.4181	2.067	5.003	10.09
23	Ti3349	.1076	.2106	.2117	1.028	2.526	4.986
24	V 2924	.0657	.1267	.1276	.6146	1.500	2.981

#	Element	[illegible]514A	SBSI514B	CSSI514B	SCSI514C	CSSI514E	CSSI514D
25	Zn2138	.1047	.2065	.2091	1.023	2.480	5.030

#	Element	DW	CBBLK	CSMIDCHK	DW	CSXBSINT	DW
1	Ag3280	.0007	-.0019	.0993	.0001	.8593	.0029
2	Al3961	.0154	-.0021	2.518	-.0021	469.7	.2704
3	As1936	.0122	.0104	.5167	.0098	7.042	.0190
4	B 2497	-.0240	-.0267	.4818	-.0369	.5461	-.0375
5	Ba4934	.0054	-.0022	1.022	-.0014	.4545	.0025
6	Be3130	.0010	.0002	.1027	.0003	.4463	.0006
7	Ca3179	.0101	.0414	10.39	-.0561	444.6	.2419
8	Cd2265	.0030	.0015	.1102	.0023	.9594	.0036
9	Co2286	.0011	.0005	.2168	-.0003	.4432	.0002
10	Cr2677	.0027	.0006	.3189	.0020	.4387	.0001
11	Cu3247	.0053	.0019	.3110	.0035	.4911	.0048
12	Fe2599	-.0010	.0093	1.043	-.0087	169.4	.1192
13	K 7664	.1988	.0521	4.032	.0972	-.0707	.1723
14	Mg2790	.0356	-.0348	10.15	-.0182	469.7	.2430
15	Mn2576	.0006	-.0024	.3151	-.0020	.4799	.0014
16	Mo2020	.0017	.0005	.2624	.0006	.0023	-.0021
17	Na5895	.3739	.0006	49.87	.0294	.2016	.0180
18	Ni2316	.0019	.0002	.3235	.0020	.875	-.0001
19	Pb2203	.0010	.0073	.5349	.0143	.7977	.0031
20	Sb2068	-.0023	.0042	.4996	.0056	-.1112	.0143
21	Se1960	.0026	.0014	1.024	.0111	-.0361	.0047
22	Sn1899	.0057	.0024	1.057	-.0040	.0577	.0092
23	Ti3349	.0043	-.0003	.5090	.0009	.0614	-.0001
24	V 2924	.0070	.0039	.3174	.0051	.5182	.0064
25	Zn2138	.0026	-.0004	.5270	-.0009	.9135	.0005

#	Element	CSCRIA	CSCRIB	DW	CSLABCON	DW	RSQ7057W
1	Ag3280	.0225	.0104	.0005	.0901	.0002	-.0028
2	Al3961	.5071	.2458	-.0054	2.460	-.0075	.0134
3	As1936	.125	.0680	.0166	.4885	.0141	.0080
4	B 2497	.0640	.0180	-.0414	.4674	.0424	.0366
5	Ba4934	.1984	.0968	-.0028	1.013	-.0023	-.0017
6	Be3130	.0206	.0103	.0002	.0991	.0003	.0001
7	Ca3179	2.097	.9815	.0728	10.08	.0692	.0135
8	Cd2265	.0243	.0125	.0027	.1032	.0024	.0014
9	Co2286	.0420	.0183	-.0006	.2082	-.0012	.0010
10	Cr2677	.0636	.0317	-.0017	.3137	-.0004	.0033
11	Cu3247	.0651	.0336	.0045	.3012	.0037	.0016
12	Fe2599	.2085	.0955	.0092	1.003	-.0093	.0070
13	K 7664	2.063	1.033	.1467	3.832	.1193	.0327
14	Mg2790	1.999	.9661	.0435	9.833	.0388	.0124
15	Mn2576	.0606	.0286	.0020	.3030	-.0018	.0029
16	Mo2020	.0524	.0257	-.0014	.2542	.0005	.0021
17	Na5895	9.712	4.780	.0182	49.23	.0127	.0140
18	Ni2316	.0672	.0338	-.0006	.3113	-.0014	.0041
19	Pb2203	.1173	.0585	.0038	.5112	-.0062	.0173
20	Sb2068	.1032	.0527	-.0077	.4765	-.0076	.0043

#	Element	CSCRIA	CSCRIB	DW	CSIABCON	DW	RSQ7057W
21	Be1960	.2005	.1005	-.0163	.9886	-.0118	.0005
22	Bn1899	.2121	.0976	-.0105	1.007	-.0080	.0127
23	Ti3349	.1027	.0567	.0001	.5178	-.0023	.0327
24	V 2924	.0676	.0350	.0056	.3051	.0054	.0024
25	Zn2138	.1037	.0507	-.0017	.5105	-.0014	.0039

#	Element	KKIFBPW	RSQ7057W	RSCA2164	KSIFBPW	QSCA2164	DW
1	Ag3280	.0456	-.0042	-.0028	.0425	-.0019	.0006
2	Al3961	1.878	.0017	.6690	2.521	.6686	.0004
3	As1936	1.857	.0074	.0686	1.865	.0742	.0129
4	B 2497	-.0104	.0374	-.0128	-.0018	-.0143	.0437
5	Ba4934	2.041	.0003	1.517	3.571	1.530	.0016
6	Be3130	.0517	.0001	.0797	.1299	.0805	.0003
7	Ca3179	10.53	.0128	4.506	14.65	4.555	.0668
8	Cd2265	.0551	.0008	.1277	.1781	.1313	.0026
9	Co2286	.5267	.0002	.1329	.6450	.1345	.0002
10	Cr2677	.2106	.0011	.0539	.2605	.0536	.0008
11	Cu3247	.2554	.0011	.1686	.4190	.1716	.0042
12	Fe2599	1.052	.0066	.2289	1.257	.2340	.0052
13	K 7664	19.06	.0168	11.11	30.04	11.11	.1449
14	Mg2790	10.18	-.0371	3.473	13.51	3.503	.0289
15	Mn2576	.5113	-.0027	.1080	.6103	.1106	.0019
16	Mo2020	.0000	.0004	-.0005	.0005	-.0010	.0009
17	Na5895	19.38	.0087	6.978	26.29	6.973	.0163
18	Ni2316	.5255	.0003	.1114	.6191	.1091	.0013
19	Pb2203	.5325	.0040	.0526	.5514	.0423	.0026
20	Sb2068	.4965	-.0085	.0522	.5403	.0476	.0006
21	Be1960	2.021	.0071	.0189	2.034	.0208	.0080
22	Bn1899	.0008	.0098	.0060	.0036	.0083	.0034
23	Ti3349	.0387	.0272	.0195	.0430	.0227	.0023
24	V 2924	.5167	.0021	.1066	.6143	.1105	.0058
25	Zn2138	.5224	.0044	.0674	.5651	.0707	.0004

#	Element	DSCA2164	DW	RSCA2163	CSIABCON	DW	CIBBLK
1	Ag3280	.0005	.0018	-.0053	.0953	.0027	.0021
2	Al3961	.1302	.0071	.0067	2.478	.0067	.0021
3	As1936	.0264	.0202	.0122	.5075	.0214	.0122
4	B 2497	-.0404	.0450	-.0144	.4682	-.0430	.0374
5	Ba4934	.3016	-.0023	.0017	1.010	.0014	.0025
6	Be3130	.0160	.0003	.0000	.0999	.0004	.0002
7	Ca3179	.8544	.0737	.0539	10.33	.0597	.0430
8	Cd2265	.0285	.0022	.0008	.1074	.0031	.0015
9	Co2286	.0251	.0005	.0008	.2139	.0013	.0010
10	Cr2677	.0110	.0010	.0025	.3247	.0026	.0002
11	Cu3247	.0380	.0044	.0004	.3039	.0056	.0019
12	Fe2599	.0387	.0092	-.0041	1.021	.0073	.0101
13	K 7664	2.349	.1361	-.0769	3.948	.1715	.0168
14	Mg2790	.6811	-.0358	-.0353	9.928	-.0087	.0393
15	Mn2576	.0201	.0023	-.0031	.3076	-.0015	.0029
16	Mo2020	.0001	.0006	.0002	.2605	.0016	.0001

#	Element	DSCA2164 DW		RSCA2163	CSLABCON DW		CBBLK
17	Na5895	1.375	.0279	.0093	49.35	.0311	.0125
18	Ni2316	.0222	.0011	.0012	.3222	.0052	.0004
19	Pb2203	.0095	.0099	.0109	.5421	.0218	.0047
20	Sb2068	.0094	-.0028	-.0029	.5039	.0007	-.0054
21	Se1960	.0021	-.0068	-.0007	1.002	-.0066	-.0134
22	Sn1899	.0017	-.0036	.0008	1.049	-.0010	.0053
23	Ti3349	-.0013	-.0019	.0188	.5228	-.0008	.0004
24	V_2924	.0270	.0059	.0016	.3119	.0072	.0036
25	Zn2138	.0134	-.0015	.0108	.5134	-.0007	.0003

#	Element	CSMIDCHK DW		RSQ70573	KKIFBP3	RSQ70573	RSCA2165
1	Ag3280	.1010	.0006	.0045	.0444	.0037	.0361
2	Al3961	2.598	-.0058	.0100	3.740	.0104	47.72
3	As1936	.5363	.0172	.0098	1.900	.0092	1.732
4	B_2497	.4888	-.0445	-.0394	-.0137	.0391	.3358
5	Ba4934	1.056	-.0018	-.0021	2.084	.0001	.7141
6	Be3130	.1058	.0004	.0001	.0522	.0001	.0168
7	Ca3179	10.66	-.0642	-.0006	20.88	.0229	196.2
8	Cd2265	.1126	.0026	.0002	.0549	.0007	.1168
9	Co2286	.2214	-.0003	.0011	.5302	-.0005	.1239
10	Cr2677	.3384	-.0001	.0023	.2145	.0023	36.17
11	Cu3247	.3214	.0039	.0004	.2563	.0012	4.470
12	Fe2599	1.068	-.0085	-.0084	2.084	-.0058	158.1
13	K_7664	4.121	.0981	-.0362	19.15	.0018	5.303
14	Mg2790	10.41	-.0380	-.0249	20.48	-.0097	97.04
15	Mn2576	.3225	-.0019	-.0031	.5082	-.0027	25.50
16	Mo2020	.2705	.0008	.0017	.0012	.0017	.0578
17	Na5895	51.59	.0266	-.0266	39.31	.0247	2.373
18	Ni2316	.3318	-.0001	.0031	.5287	.0025	.1554
19	Pb2203	.5546	.0008	.0086	.5239	.0135	2.702
20	Sb2068	.5188	.0066	-.0003	.5049	.0070	.3024
21	Se1960	1.047	.0146	.0017	2.059	.0076	.0007
22	Sn1899	1.093	-.0006	.0072	.0099	.0070	.3568
23	Ti3349	.5287	-.0019	.0304	.0379	.0319	.4100
24	V_2924	.3260	.0056	.0013	.5236	.0024	.2249
25	Zn2138	.5415	-.0011	.0037	.5212	.0047	3.477

#	Element	KSIFBP3	QSCA2165 DW		DSCA2165	RSC2165	RSC2165P
1	Ag3280	.0730	.0294	.0004	.0088	.0355	.0557
2	Al3961	56.50	44.99	.0296	9.706	46.99	46.96
3	As1936	3.677	1.673	.0147	.3696	1.693	1.777
4	B_2497	.4052	.3340	.0452	.0345	.3280	.4242
5	Ba4934	2.742	.7170	.0023	.1448	.7043	.8958
6	Be3130	.0670	.0167	.0003	.0037	.0165	.0369
7	Ca3179	207.7	192.7	.0796	40.98	194.0	193.6
8	Cd2265	.1694	.1128	.0018	.0260	.1151	.1340
9	Co2286	.6203	.1202	.0013	.0264	.1222	.1608
10	Cr2677	35.56	35.60	.0289	7.644	35.41	34.89
11	Cu3247	4.830	4.592	.0087	.9252	4.412	4.405
12	Fe2599	182.5	155.0	.1269	33.84	155.5	153.3

#	Element	KSIFBPS	QSCA2165	DW	DSCA2165	RSC2165	RSC2165P
13	K_7664	24.64	5.127	.1016	1.187	5.136	7.120
14	Mg2790	114.9	94.98	.0296	19.95	95.44	96.09
15	Mn2576	25.82	25.24	.0178	5.340	25.20	24.97
16	Mo2020	.0700	.0632	.0010	.0126	.0565	.1072
17	Na5895	41.45	2.419	.0290	.4664	2.316	12.52
18	Ni2316	.6437	.1512	.0012	.0338	.1527	.2134
19	Pb2203	3.037	2.570	.0071	.5840	2.672	2.738
20	Sb2068	.6578	.3183	.0063	.0671	.3044	.4075
21	Se1960	1.979	.0031	.0146	.0073	.0042	.2178
22	Sn1899	.4106	.3692	.0055	.0711	.3528	.5608
23	Ti3349	.5682	.4915	.0019	.0799	.4011	.5024
24	V_2924	.7348	.2243	.0050	.0523	.2219	.2805
25	Zn2138	3.862	3.373	.0034	.7336	3.416	3.471

#	Element	DW	DW	CBBLK	CSMLDCHK	DW	CSLABCON
1	Ag3280	.0009	.0000	-.0013	.1002	.0015	.0866
2	Al3961	.0263	.0029	.0021	2.540	.0012	2.438
3	As1936	.0166	.0202	.0202	.5327	.0214	.4916
4	B_2497	.0462	.0465	-.0391	.4769	-.0452	.4615
5	Ba4934	-.0023	-.0028	.0027	1.033	.0015	1.032
6	Be3130	.0003	.0003	.0002	.1040	.0004	.1014
7	Ca3179	.1051	.0668	-.0439	10.56	.0595	10.48
8	Cd2265	.0018	.0021	.0020	.1112	.0023	.1025
9	Co2286	-.0010	-.0009	-.0015	.2192	.0006	.2088
10	Cr2677	.0334	.0018	-.0003	.3270	.0005	.3178
11	Cu3247	.0090	.0051	.0058	.3158	.0050	.3093
12	Fe2599	.1460	.0033	-.0064	1.049	-.0084	1.025
13	K_7664	.0451	.0610	.0194	3.973	.1114	3.620
14	Mg2790	.0291	.0351	.0326	10.24	.0204	9.663
15	Mn2576	.0218	.0012	.0027	.3178	.0019	.3054
16	Mo2020	.0013	.0017	.0002	.2679	.0025	.2581
17	Na5895	.0319	.0324	.0237	50.22	.0252	48.76
18	Ni2316	.0004	.0003	-.0012	.3266	.0026	.3143
19	Pb2203	.0062	.0052	.0086	.5488	.0122	.5224
20	Sb2068	.0101	.0070	-.0005	.5076	.0033	.4872
21	Se1960	.0210	.0160	-.0108	1.048	.0026	1.014
22	Sn1899	.0130	.0053	.0006	1.079	.0033	1.054
23	Ti3349	.0021	.0020	.0006	.5152	.0010	.5529
24	V_2924	.0040	.0049	.0037	.3205	.0061	.3058
25	Zn2138	.0041	.0006	.0020	.5341	.0003	.5063

#	Element	DW	RSQ70050	KKIFBPS	RSQ70050	RSCA1365	KSIFBPS
1	Ag3280	.0010	.0041	.0434	.0013	.0012	.0452
2	Al3961	.0156	.0063	3.679	.0134	28.34	27.68
3	As1936	.0178	.0098	1.888	.0172	.4941	2.419
4	B_2497	.0447	.0421	.0140	.0369	.0469	.0803
5	Ba4934	.0026	.0022	2.058	.0006	.5002	2.688
6	Be3130	.0003	.0001	.0517	.0002	.0023	.0539
7	Ca3179	.0699	.0251	20.62	.0595	2.646	23.18
8	Cd2265	.0024	.0009	.0538	.0015	.0183	.0713

#	Element	DW	RSQ70050	KK1FBP3	RSQ70050	RSCA1365	K31FBP3
9	Co2286	-.0017	.0000	.5255	.0011	.0448	.5659
10	Cr2677	-.0006	.0013	.2098	.0022	.0558	.2668
11	Cu3247	.0048	.0045	.2579	.0042	.0347	.2884
12	Fe2599	-.0091	-.0083	2.044	.0026	51.40	53.12
13	K 7664	.1167	.0212	18.65	.0539	2.613	21.97
14	Mg2790	.0555	.0286	20.22	.0211	7.239	27.19
15	Mn2576	.0020	.0027	.5020	.0018	5.739	8.328
16	Mo2020	.0016	.0005	.0008	.0001	.0022	.0025
17	Na5895	.0055	.1030	38.56	.1698	.2576	38.57
18	Ni2316	.0025	.0011	.5195	.0022	.0534	.5729
19	Pb2203	.0049	.0015	.5230	.0096	.0659	.5603
20	Sb2068	.0137	.0039	.4976	.0044	.0321	.3030
21	Se1960	.0144	.0087	2.030	.0035	.0026	1.996
22	Sn1899	.0091	.0123	.0156	.0104	.0100	.0131
23	Ti3349	.0025	.0321	.0385	.0360	.9321	1.122
24	V 2924	.0060	.0020	.5177	.0044	.0984	.6114
25	Zn2138	.0012	.0026	.5087	.0040	.1733	.7027

#	Element	Q3CA1365	DW	D3CA1365	R3C1365	R3C1365P	DW
1	Ag3280	.0001	.0025	.0013	.0036	.0193	.0010
2	Al3961	26.66	.0250	5.746	28.16	27.83	.0033
3	As1936	.4763	.0208	.1189	.4922	.5848	.0122
4	B 2497	.0391	.0452	.0287	.0430	.1454	.0471
5	Ba4934	.5978	.0018	.0963	.4982	.6923	.0026
6	Be3130	.0023	.0003	.0007	.0022	.0228	.0002
7	Ca3179	3.095	.0636	.4634	2.557	4.641	.0770
8	Cd2265	.0176	.0031	.0059	.0178	.0392	.0017
9	Co2286	.0434	.0018	.0086	.0439	.0878	.0016
10	Cr2677	.0513	.0022	.0113	.0553	.1193	.0007
11	Cu3247	.0354	.0054	.0116	.0327	.0943	.0029
12	Fe2599	46.67	.0353	10.49	50.80	50.01	.0303
13	K 7664	2.645	.1573	.6398	2.535	4.466	.0583
14	Mg2790	6.468	.0177	1.461	7.156	9.036	.0522
15	Mn2576	6.937	.0040	1.169	5.685	5.657	.0015
16	Mo2020	.0013	.0009	.0001	.0013	.0554	.0016
17	Na5895	.2989	.0222	.0292	.2415	10.21	.0302
18	Ni2316	.0535	.0041	.0099	.0514	.1179	.0019
19	Pb2203	.0552	.0115	.0131	.0554	.1703	.0024
20	Sb2068	.0402	.0093	.0141	.0383	.0732	.0143
21	Se1960	.0134	.0080	.0076	.0054	.2248	.0045
22	Sn1899	.0093	.0058	.0008	.0105	.2294	.0123
23	Ti3349	.8461	.0009	.1810	.9255	1.009	.0019
24	V 2924	.0878	.0074	.0250	.0954	.1574	.0042
25	Zn2138	.1796	.0006	.0354	.1716	.2704	.0013

#	Element	DW	C3BEK	C3MEDCHK	DW	R3CA1366	R3CA1367
1	Ag3280	.0021	.0028	.1003	.0003	.0036	.0018
2	Al3961	.0108	.0021	2.560	.0046	23.99	26.22
3	As1936	.0178	.0166	.5333	.0196	.3874	.4291
4	B 2497	.0459	.0379	.4808	.0457	.0111	.0149

#	Element	DW	CBBLK	CSMLDCBK	DW	RSCA1366	RSCA1367
5	Ba4934	-.0021	.0028	1.046	-.0019	.3318	.4760
6	Be3130	.0003	.0001	.1049	.0004	.0013	.0019
7	Ca3179	-.0667	.0437	10.57	-.0652	8.022	6.935
8	Cd2265	.0030	.0012	.1119	.0025	.0070	.0093
9	Co2286	.0023	-.0012	.2195	-.0015	.0056	.0112
10	Cr2677	.0034	-.0002	.3307	-.0003	.0325	.0416
11	Cu3247	.0047	.0020	.3169	.0038	.0324	.0531
12	Fe2599	.0064	-.0096	1.059	-.0091	14.10	15.01
13	K_7664	.1122	-.0150	3.995	.0760	1.701	2.061
14	Mg2790	-.0055	.0388	10.30	-.0336	4.506	3.468
15	Mn2576	-.0017	.0029	.3202	-.0020	.4637	.5528
16	Mo2020	.0025	-.0004	.2680	.0009	.0006	.0019
17	Na5895	-.0262	.0277	50.77	-.0228	.2217	.2208
18	Ni2316	.0060	.0010	.3287	-.0002	.0218	.0351
19	Pb2203	.0248	.0002	.5475	-.0032	.0458	.0643
20	Sb2068	.0112	.0016	.5092	.0005	.0202	.0034
21	Se1960	.0149	.0014	1.047	-.0104	.0160	.0123
22	Sn1899	.0052	.0066	1.076	-.0053	.0058	.0076
23	Ti3349	.0012	.0006	.5222	-.0015	.3613	.3878
24	V 2924	.0065	.0026	.3233	.0056	.0337	.0355
25	Zn2138	-.0006	.0003	.5369	-.0011	.0922	.1298

#	Element	RSCA1368	RSCA1369	RSCA1370	RSCA2013	DW	DW
1	Ag3280	-.0019	.0015	.0010	-.0006	.0017	.0007
2	Al3961	26.83	48.50	52.58	45.63	.0209	.0063
3	As1936	.4781	.8434	.8753	.8122	.0270	.0178
4	B 2497	.0527	.1129	.0920	.1212	.1047	.0464
5	Ba4934	.8852	.4553	.4781	.5174	.1133	.0023
6	Be3130	.0023	.0033	.0035	.0033	.0003	.0002
7	Ca3179	6.533	13.51	38.06	19.28	2.592	.0653
8	Cd2265	.0183	.0288	.0241	.0296	.0026	.0018
9	Co2286	.0377	.0549	.0263	.0485	.0031	.0004
10	Cr2677	.0539	.0893	.0843	.0756	.0031	.0015
11	Cu3247	.0440	.1321	.1017	.1034	.0058	.0036
12	Fe2599	52.10	86.55	63.03	87.22	.1313	.0045
13	K 7664	2.456	1.693	3.647	2.452	13.44	.0574
14	Mg2790	5.895	15.80	25.35	18.63	5.851	.0079
15	Mn2576	8.934	2.346	.7862	3.307	.0056	.0024
16	Mo2020	.0012	.0008	.0008	.0025	.0036	.0005
17	Na5895	.2371	.3767	.4660	.4012	26.45	.0042
18	Ni2316	.0613	.1008	.0751	.1011	.0144	.0016
19	Pb2203	.0658	.0599	.0678	.0581	.0237	.0134
20	Sb2068	.0373	.0585	.0429	.0660	.0063	.0076
21	Se1960	.0038	.0059	.0177	.0101	.0052	.0040
22	Sn1899	.0221	.0189	.0215	.0234	.0038	.0031
23	Ti3349	.8540	.8815	.5668	.8134	.0048	.0019
24	V 2924	.1162	.1895	.1247	.1438	.0070	.0043
25	Zn2138	.2205	.1976	.2138	.2102	.0017	.0011

#	Element	CBRLK	CSMIDCHK	DW	CSCRIA	CSCRIB	DW
1	Ag3280	-.0018	.0992	.0008	.0190	.0066	.0020
2	Al3961	.0038	2.551	.0021	.4917	.2396	.0004
3	As1936	.0129	.5370	.0221	.1299	.0650	.0257
4	B 2497	-.0422	.4782	-.0453	.0591	.0109	.0464
5	Ba4934	-.0028	1.040	-.0013	.2037	.0996	.0023
6	Be3130	.0002	.1047	.0003	.0210	.0104	.0003
7	Ca3179	-.0232	10.54	-.0595	2.077	.9787	-.0722
8	Cd2265	.0014	.1119	.0018	.0234	.0114	.0030
9	Co2286	-.0014	.2216	.0007	.0427	.0176	.0017
10	Cr2677	-.0015	.3332	.0013	.0660	.0322	.0017
11	Cu3247	.0019	.3157	.0039	.0649	.0318	.0048
12	Fe2599	-.0100	1.056	.0089	.2023	.0939	.0087
13	K 7664	-.0071	3.949	.0734	1.920	.8793	.0999
14	Mg2790	-.0443	10.26	.0244	2.003	.9472	.0264
15	Mn2576	-.0027	.3184	-.0019	.0610	.0281	.0024
16	Mo2020	.0000	.2693	.0006	.0547	.0257	.0002
17	Na5895	-.0315	50.48	.0173	9.890	4.920	.0243
18	Ni2316	-.0004	.3278	.0035	.0647	.0305	.0040
19	Pb2203	.0020	.5490	.0101	.1153	.0525	.0158
20	Sb2068	-.0031	.5123	.0021	.1029	.0438	.0026
21	Se1960	-.0033	1.057	-.0002	.2015	.0854	.0017
22	Sn1899	-.0049	1.082	-.0010	.2074	.0970	.0008
23	Ti3349	-.0022	.5193	.0011	.1046	.0573	.0012
24	V 2924	.0029	.3215	.0053	.0656	.0329	.0065
25	Zn2138	-.0008	.5375	-.0008	.1044	.0513	.0010

#	Element	CSX85INT	DW
1	Ag3280	.8859	.0010
2	Al3961	492.8	.2275
3	As1936	7.320	.0184
4	B 2497	.5570	.0460
5	Ba4934	.4774	.0028
6	Be3130	.4669	.0005
7	Ca3179	460.7	.1808
8	Cd2265	.9927	.0026
9	Co2286	.4611	.0012
10	Cr2677	.4695	.0002
11	Cu3247	.5140	.0036
12	Fe2599	176.4	.0998
13	K 7664	.2315	.0689
14	Mg2790	486.2	.2070
15	Mn2576	.4948	.0024
16	Mo2020	.0040	.0018
17	Na5895	.1187	.0343
18	Ni2316	.9090	.0010
19	Pb2203	.8184	.0016
20	Sb2068	.0989	.0096
21	Se1960	.0245	.0045
22	Sn1899	.0626	.0098
23	Ti3349	.0652	.0024
24	V 2924	.5366	.0049
25	Zn2138	.9355	.0009

METALS QC DATA: DUPLICATE/SERIAL DIL/BLANK/MATRIX SPIKE INFORMATION THU, NOV 9, 1989, 6:19 PM PAGE 9

Batch File : BQP7057A Job Id : Q70050 Sequence Pos # : 57 Units : ug/l Spiking Lot Id : IFBPS

Blank/Matrix Spike Information

Element	Pos	Spiked	Unspiked	Added	% Recovery
AG	57	45.6	0	50.0	91.2
AL	57	3780	9.05	4000	94.5
BA	57	2020	0	2000	101
BE	57	48.2	0	50.0	96.4
CA	57	20200	0	20000	101
CD	57	49.5	0	50.0	99.0
CO	57	514	0	500	103
CR	57	201	0	200	101
CU	57	253	2.28	250	100
FE	57	1960	.810	2000	98.0
K	57	18900	0	20000	94.5
MG	57	20300	0	20000	102
MN	57	489	0	500	97.8
NA	57	38500	3.68	40000	96.2
NI	57	496	0	500	99.2
SB	57	498	0	500	99.2
V	57	504	0	500	101
ZN	57	494	2.00	500	98.4

METALS QC DATA: DUPLICATE/SERIAL DIL/BLANK/MATRIX SPIKE INFORMATION THU, NOV 9, 1989, 8:19 PM PAGE 10

Batch File : BQP7057A Job Id : CA1385 Sequence Pos # : 60 Units : ug/l Spiking Lot Id : IFBPS

Blank/Matrix Spike Information

Element	Pos	Spiked	Unspiked	Added	% Recovery
AG	60	47.4	1.38	50.0	92.0
AL	60	37600	28700	4000	223*
BA	60	2630	487	2000	107
BE	60	50.1	1.59	50.0	97.0
CA	60	22700	2570	20000	101
CD	60	52.0	1.39	50.0	101
CO	60	554	41.7	500	102
CR	60	257	52.0	200	103
CU	60	283	32.2	250	100
FE	60	50900	49100	2000	90.3
K	60	22200	2580	20000	98.1
MG	60	27300	7260	20000	100
MN	60	8100	0	500	1620
NA	60	38500	114	40000	96.0
NI	60	547	49.5	500	99.5
SB	60	352	20.7	500	66.3
V	60	590	86.2	500	101
ZN	60	678	183	500	103

* Sample contains more than four times the spike level. R.A. 11/9/89

62

Batch File : BQP7057A Job Id : CA1385 Sequence Pos # : 61 Units : ug/kg

Duplicate Information

Element	Pos	Sample	Replicate	RPD
AG	61	334	655	64.9141
AL	61	6850000	6540000	6.07858
BA	61	118000	142000	18.4615
BE	61	386	394	2.05128
CA	61	623000	730000	15.8187
CD	61	336	505	40.1902
CO	61	10100	9780	3.21932
CR	61	12600	11500	9.12863
CU	61	7800	7980	2.28137
FE	61	11900000	10800000	9.69163
K	61	626000	634000	1.28984
MG	61	1780000	1570000	11.4114
MN	61		1640000	200.000
NA	61	27700	38000	31.3548
NI	61	12000	12000	0
SB	61	5020	1980	86.8572
V	61	20900	18800	11.6456
ZN	61	39500	41100	3.97022

Batch File : BQP7057A Job Id : CA1365 Sequence Pos # : 63 Units : ug/kg

Serial Dilution Info

Element	Pos	Sample	Serial Dil	% Diff
AG	63	334	4740	1319.16
AL	63	6950000	7040000	1.29496
BA	63	118000	112000	5.08475
BE	63	386	469	21.5026
CA	63	623000	495000	20.5458
CD	63	336	4680	1292.86
CO	63	10100	7500	25.7426
CR	63	12600	10500	16.6667
CU	63	7800	11500	47.4359
FE	63	11900000	12200000	2.52101
K	63	626000	705000	12.6198
MG	63	1760000	1780000	1.13636
MN	63		1380000	0
NA	63	27700	-126000	554.874
NI	63	12000	9540	20.5000
SB	63	5020	-12400	347.012
V	63	20900	25200	20.5742
ZN	63	39500	40500	2.53165

TITLE P 70057 - IFB PE's (Soil) ; P-70050 - IFB Soil PE's Project No._____ Book No._____

From Page No.__ Oils.

Raw A3131310
Sequence BSP7057B - Z

DW
MIDCHK
DW
Blank
SXBLK
SACI514A
SA | A
SB | B
CS | B
SC | C | 10
CS | E
CS ↓ D
DW
CABLK
CSMIDCHK
DW
CSXBSINT
DW
CSCRIA
CSCRIB 120
DW
RSCA2165 1:10 Al, Ca, Cu
QSCA2165 ↓
DW
DSCA2165 1:50
DW
RSCA2165 1:25 Cr, Fe, Mn
QSCA2165 ↓
DW
DSCA2165 1:25 Cr, Fe, Mn 130
DW

RSA Al 1:50 ppm
DW
DW
CABLK
CSMIDCHK
DW
RSCA1365 1:10 Al, Fe, Mn
QSCA1365 ↓
DW 140
DSCA1365 1:50 Al, Fe, Mn
DW
RSCA1366 1:10 Fe
1367 1:10 Al, Fe
1368 1:10 Al, Fe, Mn
1369 1:25 Al, Fe
1370 1:10 Al, Fe
2013 1:25 Al, Fe
DW 150 RSGA4287 1:25 k
DW ~~150~~
CABLK
CSMIDCHK
DW
CSCRIA
CSCRIB
DW
CSXBSINT
DW (58) (59)

To Page No.__

Witnessed & Understood by me,	Date	Invented by BR	Date 11/10/89	65
		Recorded by		

OA 11/10/89

Element	Standard Regression Data				Detection Limit Blank Data		
	Corr. Coeff.	Slope	Intercept	Units	Blank Mean	Std. Dev.	MDL
AG	0.99998	981.9	-2.04	ug/l	-1.00	-1.00	10.0
AL	1.0000	1023	5.39	ug/l	-1.00	-1.00	100
AS	0.99999	961.0	-3.58	ug/l	-1.00	-1.00	100
B	0.99999	987.8	-5.32	ug/l	-1.00	-1.00	20.0
BA	1.0000	984.0	-2.15	ug/l	-1.00	-1.00	20.0
BE	1.0000	950.7	-0.0282	ug/l	-1.00	-1.00	1.00
CA	1.0000	955.1	-9.68	ug/l	-1.00	-1.00	200
CD	0.99999	924.4	-2.02	ug/l	-1.00	-1.00	2.00
CO	1.0000	938.7	0.269	ug/l	-1.00	-1.00	20.0
CR	1.0000	948.9	-0.0218	ug/l	-1.00	-1.00	10.0
CU	1.0000	980.1	-1.27	ug/l	-1.00	-1.00	10.0
FE	0.99999	948.2	-4.57	ug/l	-1.00	-1.00	150
K	1.0000	1005	-76.3	ug/l	-1.00	-1.00	50.0
MG	1.0000	990.5	-0.889	ug/l	-1.00	-1.00	100
MN	1.0000	952.1	-1.49	ug/l	-1.00	-1.00	5.00
MO	1.0000	950.0	-0.297	ug/l	-1.00	-1.00	20.0
NA	1.0000	1009	-120	ug/l	-1.00	-1.00	500
NI	1.0000	934.2	-1.07	ug/l	-1.00	-1.00	20.0
PB	0.99998	943.0	-0.926	ug/l	-1.00	.00	75.0
SB	0.99989	971.9	1.18	ug/l	-1.00	-1.00	60.0
SE	1.0000	975.7	-18.1	ug/l	-1.00	-1.00	100
SN	0.99997	951.8	24.2	ug/l	-1.00	-1.00	50.0
TI	1.0000	970.2	0.521	ug/l	-1.00	-1.00	50.0
V	0.99999	981.8	-2.36	ug/l	-1.00	-1.00	20.0
ZN	0.99999	954.5	-1.78	ug/l	-1.00	-1.00	20.0

*** Initial and Continuing Calibration Verification and Calib. Blank Data ***

Element: AG Units: ug/l

Position	Sample	Calculated	Expected	% Rec
5	SXBLK	0.0883	0	
6	SASI514A	19.0	20.0	95.0
8	SBSI514B	41.0	40.0	103
10	SCSI514C	200	200	99.9
9	CSSI514B	43.0	41.0	105
11	CSSI514E	478	500	95.1
12	CSSI514D	980	1000	98.0
15	CSMIDCHK	99.1	100	99.1
17	CSX85INT	904	888	102
19	CSCRIA	21.9	20.0	110
20	CSCRIB	15.9	0	
36	CSMIDCHK	103	100	103
53	CSMIDCHK	98.3	100	98.3
55	CSCRIA	17.4	20.0	86.9
56	CSCRIB	14.7	0	
58	CSX85INT	895	888	101
14	CBBLK	1.11	-1.00	-111
35	CBBLK	3.02	-1.00	-302
52	CBBLK	1.41	-1.00	-141

Element: AS Units: ug/l

Position	Sample	Calculated	Expected	% Rec
5	SXBLK	-0.176	0	
6	SASI514A	97.5	100	97.5
8	SBSI514B	203	200	102
10	SCSI514C	1000	1000	100
9	CSSI514B	193	203	95.0
11	CSSI514E	2200	2500	88.0
12	CSSI514D	4510	5000	90.1
15	CSMIDCHK	450	500	90.0
17	CSX85INT	-106	0	
19	CSCRIA	98.4	0	
20	CSCRIB	51.0	50.0	102
36	CSMIDCHK	463	500	92.6
53	CSMIDCHK	441	500	88.2
55	CSCRIA	87.3	0	
56	CSCRIB	48.7	50.0	97.4
58	CSX85INT	-75.3	0	
14	CBBLK	1.53	-1.00	-153
35	CBBLK	7.20	-1.00	-720
52	CBBLK	-0.176	-1.00	17.6

Element: AL Units: ug/l

Position	Sample	Calculated	Expected	% Rec
5	SXBLK	3.65	0	
6	SASI514A	497	500	99.4
8	SBSI514B	999	1000	99.8
10	SCSI514C	5000	5000	100
9	CSSI514B	1020	998	102
11	CSSI514E	12600	12500	101
12	CSSI514D	26200	25000	105
15	CSMIDCHK	2630	2500	105
17	CSX85INT	531000	437000	121
19	CSCRIA	533	500	107
20	CSCRIB	259	0	
36	CSMIDCHK	2610	2500	104
53	CSMIDCHK	2630	2500	105
55	CSCRIA	501	500	100
56	CSCRIB	283	0	
58	CSX85INT	523000	437000	120
14	CBBLK	-3.78	-1.00	378
35	CBBLK	-9.91	-1.00	991
52	CBBLK	-7.28	-1.00	728

Element: B Units: ug/l

Position	Sample	Calculated	Expected	% Rec
5	SXBLK	-2.87	0	
6	SASI514A	103	100	103
8	SBSI514B	201	200	100
10	SCSI514C	1000	1000	100
9	CSSI514B	195	201	97.0
11	CSSI514E	2350	2500	94.1
12	CSSI514D	4750	5000	95.1
15	CSMIDCHK	488	500	97.5
17	CSX85INT	-410	0	
19	CSCRIA	101	0	
20	CSCRIB	42.4	0	
36	CSMIDCHK	488	500	97.6
53	CSMIDCHK	482	500	96.4
55	CSCRIA	94.8	0	
56	CSCRIB	41.8	0	
58	CSX85INT	-405	0	
14	CBBLK	0.552	-1.00	-55.2
35	CBBLK	-4.84	-1.00	484
52	CBBLK	-5.93	-1.00	593

*** Initial and Continuing Calibration Verification and Calib. Blank Data ***

Element: BA Units: ug/l

Position	Sample	Calculated	Expected	% Rec
5	SXBLK	-2.22	0	
6	SASI514A	200	200	100
8	SBSI514B	402	400	101
10	SCSI514C	2000	2000	100
9	CSSI514B	405	402	101
11	CSSI514E	4940	5000	98.9
12	CSSI514D	9970	10000	99.7
15	CSMIDCHK	1030	1000	103
17	CSX85INT	484	439	110
19	CSCRIA	203	200	101
20	CSCRIB	100	0	
36	CSMIDCHK	1020	1000	102
53	CSMIDCHK	1020	1000	102
55	CSCRIA	199	200	99.3
56	CSCRIB	102	0	
58	CSX85INT	476	439	108
14	CBBLK	-2.12	-1.00	212
35	CBBLK	-2.75	-1.00	275
52	CBBLK	-2.38	-1.00	238

Element: BE Units: ug/l

Position	Sample	Calculated	Expected	% Rec
5	SXBLK	0.0859	0	
6	SASI514A	19.8	20.0	99.1
8	SBSI514B	40.1	40.0	100
10	SCSI514C	200	200	100
9	CSSI514B	40.0	40.1	99.8
11	CSSI514E	485	500	97.1
12	CSSI514D	968	1000	96.8
15	CSMIDCHK	98.3	100	98.3
17	CSX85INT	451	423	107
19	CSCRIA	19.8	0	
20	CSCRIB	10.1	10.0	101
36	CSMIDCHK	98.8	100	98.8
53	CSMIDCHK	97.8	100	97.8
55	CSCRIA	19.5	0	
56	CSCRIB	10.2	10.0	102
58	CSX85INT	447	423	106
14	CBBLK	0.114	-1.00	-11.4
35	CBBLK	0.114	-1.00	-11.4
52	CBBLK	0.114	-1.00	-11.4

Element: CA Units: ug/l

Position	Sample	Calculated	Expected	% Rec
5	SXBLK	-13.3	0	
6	SASI514A	1990	2000	99.7
8	SBSI514B	4020	4000	101
10	SCSI514C	20000	20000	100
9	CSSI514B	4080	4020	101
11	CSSI514E	48200	50000	96.4
12	CSSI514D	98700	100000	98.7
15	CSMIDCHK	10200	10000	102
17	CSX85INT	484000	461000	101
19	CSCRIA	2040	2000	102
20	CSCRIB	1080	0	
36	CSMIDCHK	10300	10000	103
53	CSMIDCHK	10100	10000	101
55	CSCRIA	2090	2000	104
56	CSCRIB	1080	0	
58	CSX85INT	460000	461000	99.7
14	CBBLK	-17.4	-1.00	1740
35	CBBLK	-26.0	-1.00	2600
52	CBBLK	-20.0	-1.00	2000

Element: CD Units: ug/l

Position	Sample	Calculated	Expected	% Rec
5	SXBLK	-0.517	0	
6	SASI514A	20.0	20.0	99.9
8	SBSI514B	40.7	40.0	102
10	SCSI514C	200	200	99.9
9	CSSI514B	41.9	40.7	103
11	CSSI514E	472	50[illegible]	94.4
12	CSSI514D	950	100[illegible]	95.0
15	CSMIDCHK	101	100	101
17	CSX85INT	912	815	112
19	CSCRIA	19.4	0	
20	CSCRIB	11.6	10.0	116
36	CSMIDCHK	104	100	104
53	CSMIDCHK	99.9	100	99.9
55	CSCRIA	18.1	0	
56	CSCRIB	10.8	10.0	108
58	CSX85INT	901	815	111
14	CBBLK	-0.342	-1.00	34.2
35	CBBLK	0.472	-1.00	-47.2
52	CBBLK	-0.342	-1.00	34.2

*** Initial and Continuing Calibration Verification and Calib. Blank Data ***

Element: CO Units: ug/l

Position	Sample	Calculated	Expected	% Rec
5	SXBLK	-0.0878	0	
6	SASI514A	40.4	40.0	101
8	SBSI514B	78.7	80.0	98.6
10	SCSI514C	400	400	100
9	CSSI514B	82.3	79.7	103
11	CSSI514E	958	1000	95.9
12	CSSI514D	1930	2000	98.5
15	CSMIDCHK	205	200	102
17	CSX85INT	446	416	107
19	CSCRIA	38.5	40.0	96.2
20	CSCRIB	19.0	0	
36	CSMIDCHK	207	200	103
53	CSMIDCHK	204	200	102
55	CSCRIA	38.3	40.0	95.8
56	CSCRIB	20.7	0	
58	CSX85INT	439	416	105
14	CBBLK	-0.0690	-1.00	6.90
35	CBBLK	-2.25	-1.00	225
52	CBBLK	-0.0690	-1.00	6.90

Element: CU Units: ug/l

Position	Sample	Calculated	Expected	% Rec
5	SXBLK	-0.315	0	
6	SASI514A	59.4	60.0	99.0
8	SBSI514B	121	120	101
10	SCSI514C	600	600	100
9	CSSI514B	122	121	101
11	CSSI514E	1470	1500	98.0
12	CSSI514D	2990	3000	99.6
15	CSMIDCHK	311	300	104
17	CSX85INT	517	468	110
19	CSCRIA	63.3	60.0	106
20	CSCRIB	35.7	0	
36	CSMIDCHK	311	300	104
53	CSMIDCHK	310	300	103
55	CSCRIA	59.9	60.0	99.8
56	CSCRIB	35.5	0	
58	CSX85INT	511	468	109
14	CBBLK	1.12	-1.00	-112
35	CBBLK	2.66	-1.00	-266
52	CBBLK	1.60	-1.00	-160

Element: CR Units: ug/l

Position	Sample	Calculated	Expected	% Rec
5	SXBLK	0.785	0	
6	SASI514A	59.2	60.0	98.6
8	SBSI514B	120	120	100
10	SCSI514C	600	600	100
9	CSSI514B	122	120	102
11	CSSI514E	1450	1500	96.5
12	CSSI514D	2930	3000	97.5
15	CSMIDCHK	307	300	102
17	CSX85INT	450	422	107
19	CSCRIA	59.6	0	
20	CSCRIB	30.9	30.0	103
36	CSMIDCHK	312	300	104
53	CSMIDCHK	309	300	103
55	CSCRIA	60.9	0	
56	CSCRIB	31.2	30.0	104
58	CSX85INT	445	422	106
14	CBBLK	0.680	-1.00	-68.0
35	CBBLK	-0.990	-1.00	99.0
52	CBBLK	0.0352	-1.00	-3.52

Element: FE Units: ug/l

Position	Sample	Calculated	Expected	% Rec
5	SXBLK	-3.80	0	
6	SASI514A	199	200	99.4
8	SBSI514B	406	400	102
10	SCSI514C	2000	2000	99.9
9	CSSI514B	409	406	101
11	CSSI514E	4820	5000	96.3
12	CSSI514D	9690	10000	96.9
15	CSMIDCHK	1010	1000	101
17	CSX85INT	173000	163000	106
19	CSCRIA	208	200	103
20	CSCRIB	102	0	
36	CSMIDCHK	1010	1000	101
53	CSMIDCHK	999	1000	99.9
55	CSCRIA	196	200	98.2
56	CSCRIB	103	0	
58	CSX85INT	171000	163000	105
14	CBBLK	-3.41	-1.00	341
35	CBBLK	-2.62	-1.00	262
52	CBBLK	-3.70	-1.00	370

*** Initial and Continuing Calibration Verification and Calib. Blank Data ***

Element: K Units: ug/l

Position	Sample	Calculated	Expected	% Rec
5	SXBLK	-4.85	0	
6	SASI514A	1980	2000	99.3
8	SBSI514B	4020	4000	101
10	SCSI514C	20000	20000	100
9	CSSI514B	4100	4020	102
11	CSSI514E	49700	50000	99.4
12	CSSI514D	102000	100000	102
15	CSMIDCHK	4110	4000	103
17	CSX85INT	-128	0	
19	CSCRIA	2080	0	
20	CSCRIB	1220	0	
36	CSMIDCHK	4140	4000	104
53	CSMIDCHK	4070	4000	102
55	CSCRIA	1850	0	
56	CSCRIB	1210	0	
58	CSX85INT	-105	0	
14	CBBLK	26.0	-1.00	-2800
35	CBBLK	63.7	-1.00	-6370
52	CBBLK	38.1	-1.00	-3810

Element: MG Units: ug/l

Position	Sample	Calculated	Expected	% Rec
5	SXBLK	-10.8	0	
6	SASI514A	2010	2000	100
8	SBSI514B	4000	4000	100
10	SCSI514C	20000	20000	100
9	CSSI514B	4050	4000	101
11	CSSI514E	49100	50000	98.2
12	CSSI514D	101000	100000	101
15	CSMIDCHK	10300	10000	103
17	CSX85INT	510000	474000	108
19	CSCRIA	2030	2000	102
20	CSCRIB	1030	0	
36	CSMIDCHK	10200	10000	102
53	CSMIDCHK	10200	10000	102
55	CSCRIA	1960	2000	98.2
56	CSCRIB	1060	0	
58	CSX85INT	505000	474000	106
14	CBBLK	-8.05	-1.00	805
35	CBBLK	-26.7	-1.00	2670
52	CBBLK	-8.03	-1.00	803

Element: MN Units: ug/l

Position	Sample	Calculated	Expected	% Rec
5	SXBLK	-0.882	0	
6	SASI514A	60.0	60.0	99.9
8	SBSI514B	121	120	101
10	SCSI514C	600	600	100
9	CSSI514B	122	121	101
11	CSSI514E	1450	1500	96.5
12	CSSI514D	2930	3000	97.7
15	CSMIDCHK	307	300	102
17	CSX85INT	494	445	111
19	CSCRIA	59.7	0	
20	CSCRIB	31.2	30.0	104
36	CSMIDCHK	309	300	103
53	CSMIDCHK	305	300	102
55	CSCRIA	57.5	0	
56	CSCRIB	31.6	30.0	105
58	CSX85INT	488	445	110
14	CBBLK	-0.806	-1.00	80.6
35	CBBLK	-0.806	-1.00	80.6
52	CBBLK	-0.806	-1.00	80.6

Element: MO Units: ug/l

Position	Sample	Calculated	Expected	% Rec
5	SXBLK	-0.0502	0	
6	SASI514A	50.4	50.0	101
8	SBSI514B	99.8	100	99.8
10	SCSI514C	500	500	100
9	CSSI514B	100	99.6	101
11	CSSI514E	1210	1250	97.0
12	CSSI514D	2450	2500	97.8
15	CSMIDCHK	251	250	100
17	CSX85INT	4.52	0	
19	CSCRIA	49.0	0	
20	CSCRIB	25.2	0	
36	CSMIDCHK	255	250	102
53	CSMIDCHK	251	250	100
55	CSCRIA	48.2	0	
56	CSCRIB	26.3	0	
58	CSX85INT	-0.297	0	
14	CBBLK	0.444	-1.00	-44.4
35	CBBLK	-0.915	-1.00	91.5
52	CBBLK	-0.0502	-1.00	5.02

*** Initial and Continuing Calibration Verification and Calib. Blank Data ***

Element: NA Units: ug/l

Position	Sample	Calculated	Expected	% Rec
5	SXBLK	-103	0	
6	SASI514A	10000	10000	100
8	SBSI514B	20100	20000	100
10	SCSI514C	100000	100000	100
9	CSSI514B	20200	20100	100
11	CSSI514E	250000	250000	99.9
12	CSSI514D	511000	500000	102
15	CSMIDCHK	51400	50000	103
17	CSX85INT	-690	0	
19	CSCRIA	10200	10000	102
20	CSCRIB	5110	0	
36	CSMIDCHK	50400	50000	101
53	CSMIDCHK	50900	50000	102
55	CSCRIA	9830	10000	98.3
56	CSCRIB	5180	0	
58	CSX85INT	-690	0	
14	CBBLK	-81.1	-1.00	8110
35	CBBLK	-99.1	-1.00	9910
52	CBBLK	-110	-1.00	11000

Element: NI Units: ug/l

Position	Sample	Calculated	Expected	% Rec
5	SXBLK	-0.447	0	
6	SASI514A	60.0	60.0	100
8	SBSI514B	121	120	100
10	SCSI514C	800	800	100
9	CSSI514B	122	121	101
11	CSSI514E	1440	1500	95.7
12	CSSI514D	2880	3000	96.0
15	CSMIDCHK	305	300	102
17	CSX85INT	883	836	105
19	CSCRIA	58.1	60.0	96.8
20	CSCRIB	29.6	0	
36	CSMIDCHK	311	300	104
53	CSMIDCHK	303	300	101
55	CSCRIA	58.7	60.0	97.8
56	CSCRIB	29.9	0	
58	CSX85INT	868	836	103
14	CBBLK	-1.29	-1.00	129
35	CBBLK	-3.17	-1.00	317
52	CBBLK	-1.30	-1.00	130

Element: PB Units: ug/l

Position	Sample	Calculated	Expected	% Rec
5	SXBLK	0.837	0	
6	SASI514A	103	100	103
8	SBSI514B	196	200	97.8
10	SCSI514C	1000	1000	100
9	CSSI514B	202	196	103
11	CSSI514E	2380	2500	95.4
12	CSSI514D	4870	5000	97.3
15	CSMIDCHK	502	500	100
17	CSX85INT	807	836	96.9
19	CSCRIA	92.3	0	
20	CSCRIB	52.4	50.0	105
36	CSMIDCHK	519	500	104
53	CSMIDCHK	507	500	101
55	CSCRIA	98.8	0	
56	CSCRIB	55.8	50.0	112
58	CSX85INT	899	836	96.0
14	CBBLK	-1.08	-1.00	108
35	CBBLK	-9.83	-1.00	983
52	CBBLK	-3.77	-1.00	377

Element: SB Units: ug/l

Position	Sample	Calculated	Expected	% Rec
5	SXBLK	4.58	0	
6	SASI514A	104	100	104
8	SBSI514B	190	200	94.9
10	SCSI514C	1000	1000	100
9	CSSI514B	205	190	108
11	CSSI514E	2420	2500	96.7
12	CSSI514D	4970	5000	99.5
15	CSMIDCHK	491	500	98.2
17	CSX85INT	82.7	0	
19	CSCRIA	95.6	100	95.6
20	CSCRIB	53.5	0	
36	CSMIDCHK	495	500	99.1
53	CSMIDCHK	483	500	96.6
55	CSCRIA	96.4	100	96.4
56	CSCRIB	53.7	0	
58	CSX85INT	70.3	0	
14	CBBLK	-0.519	-1.00	51.9
35	CBBLK	-7.52	-1.00	752
52	CBBLK	8.18	-1.00	-818

*** Initial and Continuing Calibration Verification and Calib. Blank Data ***

Element: SE Units: ug/l

Position	Sample	Calculated	Expected	% Rec
5	SXBLK	-0.767	0	
6	SASI514A	203	200	102
8	SBSI514B	398	400	99.4
10	SCSI514C	2000	2000	100
9	CSSI514B	408	398	102
11	CSSI514E	4910	5000	98.2
12	CSSI514D	9970	10000	99.7
15	CSMIDCHK	998	1000	99.8
17	CSX85INT	13.7	0	
19	CSCRIA	181	0	
20	CSCRIB	92.1	100	92.1
36	CSMIDCHK	1020	1000	102
53	CSMIDCHK	1000	1000	100
55	CSCRIA	183	0	
56	CSCRIB	94.6	100	94.6
58	CSX85INT	-4.89	0	
14	CBBLK	-13.4	-1.00	1340
35	CBBLK	-25.1	-1.00	2510
52	CBBLK	-1.00	-1.00	100

Element: SN Units: ug/l

Position	Sample	Calculated	Expected	% Rec
5	SXBLK	7.92	0	
6	SASI514A	198	200	99.1
8	SBSI514B	392	400	98.1
10	SCSI514C	2000	2000	100
9	CSSI514B	412	392	105
11	CSSI514E	4830	5000	96.7
12	CSSI514D	9800	10000	98.0
15	CSMIDCHK	1030	1000	103
17	CSX85INT	-95.8	0	
19	CSCRIA	205	0	
20	CSCRIB	113	0	
36	CSMIDCHK	1050	1000	105
53	CSMIDCHK	1020	1000	102
55	CSCRIA	201	0	
56	CSCRIB	105	0	
58	CSX85INT	-92.0	0	
14	CBBLK	1.10	-1.00	-110
35	CBBLK	2.74	-1.00	-274
52	CBBLK	-0.702	-1.00	70.2

Element: TI Units: ug/l

Position	Sample	Calculated	Expected	% Rec
5	SXBLK	0.744	0	
6	SASI514A	99.2	100	99.2
8	SBSI514B	200	200	100
10	SCSI514C	1000	1000	100
9	CSSI514B	202	200	101
11	CSSI514E	2460	2500	98.5
12	CSSI514D	4980	5000	99.5
15	CSMIDCHK	503	500	101
17	CSX85INT	34.2	0	
19	CSCRIA	101	0	
20	CSCRIB	47.1	0	
36	CSMIDCHK	504	500	101
53	CSMIDCHK	500	500	100
55	CSCRIA	109	0	
56	CSCRIB	47.8	0	
58	CSX85INT	33.9	0	
14	CBBLK	-0.177	-1.00	17.7
35	CBBLK	-1.95	-1.00	195
52	CBBLK	-1.18	-1.00	118

Element: V Units: ug/l

Position	Sample	Calculated	Expected	% Rec
5	SXBLK	0.0291	0	
6	SASI514A	58.8	60.0	98.1
8	SBSI514B	121	120	101
10	SCSI514C	600	600	100
9	CSSI514B	124	121	102
11	CSSI514E	1460	1500	97.3
12	CSSI514D	2960	3000	98.6
15	CSMIDCHK	308	300	103
17	CSX85INT	510	444	115
19	CSCRIA	61.0	60.0	102
20	CSCRIB	35.4	0	
36	CSMIDCHK	312	300	104
53	CSMIDCHK	307	300	102
55	CSCRIA	57.8	60.0	96.4
56	CSCRIB	34.3	0	
58	CSX85INT	505	444	114
14	CBBLK	0.846	-1.00	-84.6
35	CBBLK	2.33	-1.00	-233
52	CBBLK	0.770	-1.00	-77.0

*** *Initial and Continuing Calibration Verification and Calib. Blank Data* ***

Element: ZN Units: ug/l

Position	Sample	Calculated	Expected	% Rec
5	SXBLK	-2.07	0	
6	SASI514A	102	100	102
8	SBSI514B	200	200	100
10	SCSI514C	1000	1000	100
9	CSSI514B	201	200	100
11	CSSI514E	2390	2500	95.6
12	CSSI514D	4880	5000	97.6
15	CSMIDCHK	508	500	102
17	CSX85INT	908	888	102
19	CSCRIA	90.2	0	
20	CSCRIB	54.4	50.0	109
36	CSMIDCHK	513	500	103
53	CSMIDCHK	508	500	101
55	CSCRIA	95.0	0	
56	CSCRIB	55.2	50.0	110
58	CSX85INT	899	888	101
14	CBBLK	-2.27	-1.00	227
35	CBBLK	-2.39	-1.00	239
52	CBBLK	-2.21	-1.00	221

	Standard Regression Data				Detection Limit Blank Data		
Element	Corr. Coeff.	Slope	Intercept	Units	Blank Mean	Std. Dev.	MDL
AG	0.99978	1010	-4.63	ug/l	-1.00	-1.00	10.0
AL	0.99999	1012	19.3	ug/l	-1.00	-1.00	100
AS	0.99850	1087	-35.7	ug/l	-1.00	-1.00	100
B	0.99968	1027	-20.8	ug/l	-1.00	-1.00	20.0
BA	0.99999	995.1	-7.84	ug/l	-1.00	-1.00	20 0
BE	0.99993	978.9	-1.51	ug/l	-1.00	-1.00	1 00
CA	0.99999	990.0	-192	ug/l	-1.00	-1.00	200
CD	0.99971	978.3	-5.03	ug/l	-1.00	-1.00	2 0[illegible]
CO	0.99985	977.7	-3.86	ug/l	-1.00	-1.00	20
CR	0.99999	982.8	-5.37	ug/l	-1.00	-1.00	10.0
CU	0.99997	999.6	-4.28	ug/l	-1.00	-1.00	10.0
FE	0.99988	981.5	-23.3	ug/l	-1.00	-1.00	150
K	1.0000	1012	-109	ug/l	-1.00	-1.00	500
MG	0.99997	1009	-82.4	ug/l	-1.00	-1.00	100
MN	0.99999	985.8	-6.84	ug/l	-1.00	-1.00	5.00
MO	0.99992	978.6	-4.07	ug/l	-1.00	-1.00	20.0
NA	1.0000	1010	-151	ug/l	-1.00	-1.00	500
NI	0.99984	974.9	-7.63	ug/l	-1.00	-1.00	20.0
PB	0.99981	987.7	-12.8	ug/l	-1.00	-1.00	75 0
SB	0.99999	1004	-7.02	ug/l	-1.00	-1.00	60 0
SE	0.99997	993.3	-27.5	ug/l	-1.00	-1.00	100
SN	0.99990	983.9	8.15	ug/l	-1.00	-1.00	50.0
TI	0.99998	984.6	-3.20	ug/l	-1.00	-1.00	50.0
V	0.99994	987.5	-6.48	ug/l	-1.00	-1.00	20.0
ZN	0.99983	997.6	-13.1	ug/l	-1.00	-1.00	20.0

*** Initial and Continuing Calibration Verification and Calib. Blank Data ***

Element: AG Units: ug/l

Position	Sample	Calculated	Expected	% Rec
5	SXBLK	-2.40	0	
6	SASI514A	17.5	20.0	87.4
8	SBSI514B	40.6	40.0	101
10	SCSI514C	207	200	104
11	SMSI514E	497	500	99.4
9	CSSI514B	42.6	40.6	105
12	CSSI514D	1030	1000	103
15	CSMIDCHK	102	100	102
17	CSX85INT	947	888	107
19	CSCRIA	20.5	20.0	103
20	CSCRIB	14.2	0	
36	CSMIDCHK	105	100	105
53	CSMIDCHK	101	100	101
55	CSCRIA	15.8	20.0	78.8
56	CSCRIB	13.0	0	
58	CSX85INT	937	888	106
14	CBBLK	-1.33	-1.00	133
35	CBBLK	0.682	-1.00	-68.2
52	CBBLK	-1.01	-1.00	101

Element: AL Units: ug/l

Position	Sample	Calculated	Expected	% Rec
5	SXBLK	17.6	0	
6	SASI514A	505	500	101
8	SBSI514B	1000	1000	100
10	SCSI514C	4980	5000	99.2
11	SMSI514E	12500	12500	100
9	CSSI514B	1030	1000	102
12	CSSI514D	25900	25000	104
15	CSMIDCHK	2810	2500	105
17	CSX85INT	525000	437000	120
19	CSCRIA	541	500	108
20	CSCRIB	270	0	
36	CSMIDCHK	2590	2500	104
53	CSMIDCHK	2610	2500	104
55	CSCRIA	509	500	102
56	CSCRIB	274	0	
58	CSX85INT	517000	437000	118
14	CBBLK	10.2	-1.00	-1020
35	CBBLK	4.18	-1.00	-418
52	CBBLK	6.78	-1.00	-678

Element: AS Units: ug/l

Position	Sample	Calculated	Expected	% Rec
5	SXBLK	-31.8	0	
6	SASI514A	78.6	100	78.6
8	SBSI514B	198	200	99.0
10	SCSI514C	1100	1000	110
11	SMSI514E	2460	2500	98.2
9	CSSI514B	187	198	94.2
12	CSSI514D	5060	5000	101
15	CSMIDCHK	478	500	95.5
17	CSX85INT	-151	0	
19	CSCRIA	77.5	0	
20	CSCRIB	26.1	50.0	52.1
36	CSMIDCHK	492	500	98.4
53	CSMIDCHK	467	500	93.5
55	CSCRIA	67.1	0	
56	CSCRIB	23.4	50.0	46.9
58	CSX85INT	-117	0	
14	CBBLK	-29.9	-1.00	2990
35	CBBLK	-23.5	-1.00	2350
52	CBBLK	-31.8	-1.00	3180

Element: B Units: ug/l

Position	Sample	Calculated	Expected	% Rec
5	SXBLK	-18.2	0	
6	SASI514A	93.6	100	93.6
8	SBSI514B	198	200	99.0
10	SCSI514C	1050	1000	105
11	SMSI514E	2480	2500	99.2
9	CSSI514B	192	198	96.8
12	CSSI514D	5030	5000	101
15	CSMIDCHK	502	500	100
17	CSX85INT	-450	0	
19	CSCRIA	91.7	0	
20	CSCRIB	29.8	0	
36	CSMIDCHK	503	500	101
53	CSMIDCHK	496	500	99.2
55	CSCRIA	85.4	0	
56	CSCRIB	29.2	0	
58	CSX85INT	-445	0	
14	CBBLK	-14.6	-1.00	1460
35	CBBLK	-20.3	-1.00	2030
52	CBBLK	-21.5	-1.00	2150

*** Initial and Continuing Calibration Verification and Calib. Blank Data ***

Element: BA Units: ug/l

Position	Sample	Calculated	Expected	% Rec
5	SXBLK	-7.91	0	
6	SASI514A	197	200	98.5
8	SBSI514B	401	400	100
10	SCSI514C	2020	2000	101
11	SMSI514E	4980	5000	99.9
9	CSSI514B	403	401	101
12	CSSI514D	10100	10000	101
15	CSMIDCHK	1030	1000	103
17	CSX85INT	484	439	110
19	CSCRIA	199	200	99.7
20	CSCRIB	95.9	0	
36	CSMIDCHK	1020	1000	102
53	CSMIDCHK	1030	1000	103
55	CSCRIA	195	200	97.6
56	CSCRIB	97.7	0	
58	CSX85INT	478	439	108
14	CBBLK	-7.81	-1.00	781
35	CBBLK	-8.44	-1.00	844
52	CBBLK	-8.07	-1.00	807

Element: BE Units: ug/l

Position	Sample	Calculated	Expected	% Rec
5	SXBLK	-1.39	0	
6	SASI514A	18.9	20.0	94.6
8	SBSI514B	39.8	40.0	99.5
10	SCSI514C	204	200	102
11	SMSI514E	498	500	99.6
9	CSSI514B	39.7	39.8	99.6
12	CSSI514D	993	1000	99.3
15	CSMIDCHK	99.7	100	99.7
17	CSX85INT	463	423	109
19	CSCRIA	18.9	0	
20	CSCRIB	8.92	10.0	89.2
36	CSMIDCHK	100	100	100
53	CSMIDCHK	99.2	100	99.2
55	CSCRIA	18.6	0	
56	CSCRIB	8.98	10.0	89.8
58	CSX85INT	459	423	108
14	CBBLK	-1.37	-1.00	137
35	CBBLK	-1.37	-1.00	137
52	CBBLK	-1.37	-1.00	137

Element: CA Units: ug/l

Position	Sample	Calculated	Expected	% Rec
5	SXBLK	-196	0	
6	SASI514A	1890	2000	94.3
8	SBSI514B	3990	4000	99.7
10	SCSI514C	20500	20000	103
11	SMSI514E	49800	50000	99.6
9	CSSI514B	4040	3990	101
12	CSSI514D	102000	100000	102
15	CSMIDCHK	10400	10000	104
17	CSX85INT	481000	461000	104
19	CSCRIA	1930	2000	96.7
20	CSCRIB	933	0	
36	CSMIDCHK	10500	10000	105
53	CSMIDCHK	10300	10000	103
55	CSCRIA	1980	2000	99.1
56	CSCRIB	941	0	
58	CSX85INT	476000	461000	103
14	CBBLK	-200	-1.00	20000
35	CBBLK	-209	-1.00	20900
52	CBBLK	-203	-1.00	20300

Element: CD Units: ug/l

Position	Sample	Calculated	Expected	% Rec
5	SXBLK	-3.43	0	
6	SASI514A	18.3	20.0	91.3
8	SBSI514B	40.1	40.0	100
10	SCSI514C	209	200	104
11	SMSI514E	496	500	99.3
9	CSSI514B	41.4	40.1	103
12	CSSI514D	1000	1000	100
15	CSMIDCHK	104	100	104
17	CSX85INT	962	815	118
19	CSCRIA	17.7	0	
20	CSCRIB	9.36	10.0	93.6
36	CSMIDCHK	108	100	108
53	CSMIDCHK	103	100	103
55	CSCRIA	16.2	0	
56	CSCRIB	8.56	10.0	85.6
58	CSX85INT	950	815	117
14	CBBLK	-3.25	-1.00	325
35	CBBLK	-2.39	-1.00	239
52	CBBLK	-3.25	-1.00	325

*** Initial and Continuing Calibration Verification and Calib. Blank Data ***

Element: CO Units: ug/l

Position	Sample	Calculated	Expected	% Rec
5	SXBLK	-4.23	0	
6	SASI514A	37.9	40.0	94.8
8	SBSI514B	78.9	80.0	98.6
10	SCSI514C	412	400	103
11	SMSI514E	995	1000	99.5
9	CSSI514B	81.6	78.9	103
12	CSSI514D	2010	2000	100
15	CSMIDCHK	209	200	105
17	CSX85INT	461	416	111
19	CSCRIA	36.0	40.0	89.9
20	CSCRIB	15.7	0	
36	CSMIDCHK	211	200	106
53	CSMIDCHK	208	200	104
55	CSCRIA	35.8	40.0	89.5
56	CSCRIB	17.5	0	
58	CSX85INT	453	416	109
14	CBBLK	-4.21	-1.00	421
35	CBBLK	-6.48	-1.00	648
52	CBBLK	-4.21	-1.00	421

Element: CR Units: ug/l

Position	Sample	Calculated	Expected	% Rec
5	SXBLK	-4.53	0	
6	SASI514A	55.9	60.0	93.2
8	SBSI514B	119	120	99.1
10	SCSI514C	618	600	103
11	SMSI514E	1490	1500	99.6
9	CSSI514B	121	119	102
12	CSSI514D	3020	3000	101
15	CSMIDCHK	312	300	104
17	CSX85INT	461	422	109
19	CSCRIA	56.4	0	
20	CSCRIB	26.7	30.0	89.0
36	CSMIDCHK	318	300	106
53	CSMIDCHK	314	300	105
55	CSCRIA	57.7	0	
56	CSCRIB	27.0	30.0	89.9
58	CSX85INT	456	422	108
14	CBBLK	-4.64	-1.00	464
35	CBBLK	-6.37	-1.00	637
52	CBBLK	-5.31	-1.00	531

Element: CU Units: ug/l

Position	Sample	Calculated	Expected	% Rec
5	SXBLK	-3.31	0	
6	SASI514A	57.6	60.0	95.9
8	SBSI514B	121	120	100
10	SCSI514C	609	600	101
11	SMSI514E	1500	1500	99.8
9	CSSI514B	121	121	101
12	CSSI514D	3050	3000	102
15	CSMIDCHK	314	300	105
17	CSX85INT	524	468	112
19	CSCRIA	61.6	60.0	103
20	CSCRIB	33.5	0	
36	CSMIDCHK	314	300	105
53	CSMIDCHK	313	300	104
55	CSCRIA	58.1	60.0	96.8
56	CSCRIB	33.2	0	
58	CSX85INT	519	468	111
14	CBBLK	-1.85	-1.00	185
35	CBBLK	-0.275	-1.00	27.5
52	CBBLK	-1.36	-1.00	136

Element: FE Units: ug/l

Position	Sample	Calculated	Expected	% Rec
5	SXBLK	-22.5	0	
6	SASI514A	188	200	93.8
8	SBSI514B	403	400	101
10	SCSI514C	2050	2000	103
11	SMSI514E	4980	5000	99.6
9	CSSI514B	405	403	101
12	CSSI514D	10000	10000	100
15	CSMIDCHK	1030	1000	103
17	CSX85INT	180000	163000	110
19	CSCRIA	195	200	97.4
20	CSCRIB	87.5	0	
36	CSMIDCHK	1030	1000	103
53	CSMIDCHK	1020	1000	102
55	CSCRIA	185	200	92.6
56	CSCRIB	88.0	0	
58	CSX85INT	177000	163000	109
14	CBBLK	-22.1	-1.00	2210
35	CBBLK	-21.3	-1.00	2130
52	CBBLK	-22.4	-1.00	2240

*** Initial and Continuing Calibration Verification and Calib. Blank Data ***

Element: K Units: ug/l

Position	Sample	Calculated	Expected	% Rec
5	SXBLK	-37.1	0	
6	SASI514A	1970	2000	98.4
8	SBSI514B	4010	4000	100
10	SCSI514C	20100	20000	100
11	SMSI514E	50000	50000	99.9
9	CSSI514B	4090	4010	102
12	CSSI514D	103000	100000	103
15	CSMIDCHK	4110	4000	103
17	CSX85INT	-159	0	
19	CSCRIA	2040	0	
20	CSCRIB	1200	0	
36	CSMIDCHK	4130	4000	103
53	CSMIDCHK	4080	4000	102
55	CSCRIA	1830	0	
56	CSCRIB	1180	0	
58	CSX85INT	-138	0	
14	CBBLK	-3.98	-1.00	398
35	CBBLK	32.0	-1.00	-3200
52	CBBLK	6.16	-1.00	-616

Element: MG Units: ug/l

Position	Sample	Calculated	Expected	% Rec
5	SXBLK	-103	0	
6	SASI514A	1950	2000	97.7
8	SBSI514B	3980	4000	99.6
10	SCSI514C	20300	20000	101
11	SMSI514E	49900	50000	99.8
9	CSSI514B	4030	3980	101
12	CSSI514D	103000	100000	103
15	CSMIDCHK	10300	10000	103
17	CSX85INT	519000	474000	109
19	CSCRIA	1980	2000	99.0
20	CSCRIB	961	0	
36	CSMIDCHK	10300	10000	103
53	CSMIDCHK	10300	10000	103
55	CSCRIA	1910	2000	95.4
56	CSCRIB	988	0	
58	CSX85INT	514000	474000	108
14	CBBLK	-101	-1.00	10100
35	CBBLK	-119	-1.00	11900
52	CBBLK	-99.6	-1.00	9960

Element: MN Units: ug/l

Position	Sample	Calculated	Expected	% Rec
5	SXBLK	-8.21	0	
6	SASI514A	56.8	60.0	94.6
8	SBSI514B	120	120	100
10	SCSI514C	616	600	103
11	SMSI514E	1490	1500	99.6
9	CSSI514B	121	120	101
12	CSSI514D	3030	3000	101
15	CSMIDCHK	313	300	104
17	CSX85INT	508	445	114
19	CSCRIA	56.5	0	
20	CSCRIB	27.0	30.0	90.0
36	CSMIDCHK	315	300	105
53	CSMIDCHK	310	300	103
55	CSCRIA	54.3	0	
56	CSCRIB	27.4	30.0	91.3
58	CSX85INT	500	445	112
14	CBBLK	-6.13	-1.00	613
35	CBBLK	-6.13	-1.00	613
52	CBBLK	-6.13	-1.00	613

Element: MO Units: ug/l

Position	Sample	Calculated	Expected	% Rec
5	SXBLK	-3.81	0	
6	SASI514A	48.2	50.0	96.3
8	SBSI514B	98.9	100	98.9
10	SCSI514C	511	500	102
11	SMSI514E	1250	1250	99.6
9	CSSI514B	99.5	98.8	101
12	CSSI514D	2520	2500	101
15	CSMIDCHK	255	250	102
17	CSX85INT	0.895	0	
19	CSCRIA	46.8	0	
20	CSCRIB	22.2	0	
36	CSMIDCHK	259	250	104
53	CSMIDCHK	255	250	102
55	CSCRIA	45.9	0	
56	CSCRIB	23.3	0	
58	CSX85INT	-4.07	0	
14	CBBLK	-3.30	-1.00	330
35	CBBLK	-4.70	-1.00	470
52	CBBLK	-3.81	-1.00	381

*** Initial and Continuing Calibration Verification and Calib. Blank Data ***

Element: NA Units: ug/l

Position	Sample	Calculated	Expected	% Rec
5	SXBLK	-134	0	
6	SASI514A	10000	10000	100
8	SBSI514B	20100	20000	100
10	SCSI514C	100000	100000	100
11	SMSI514E	250000	250000	100
9	CSSI514B	20200	20100	100
12	CSSI514D	511000	500000	102
15	CSMIDCHK	51400	50000	103
17	CSX85INT	-722	0	
19	CSCRIA	10200	10000	102
20	CSCRIB	5090	0	
36	CSMIDCHK	50500	50000	101
53	CSMIDCHK	50900	50000	102
55	CSCRIA	9810	10000	98.1
56	CSCRIB	5150	0	
58	CSX85INT	-722	0	
14	CBBLK	-112	-1.00	11200
35	CBBLK	-130	-1.00	13000
52	CBBLK	-140	-1.00	14000

Element: NI Units: ug/l

Position	Sample	Calculated	Expected	% Rec
5	SXBLK	-8.98	0	
6	SASI514A	56.1	60.0	93.5
8	SBSI514B	119	120	99.4
10	SCSI514C	619	600	103
11	SMSI514E	1490	1500	99.5
9	CSSI514B	121	119	102
12	CSSI514D	3000	3000	100
15	CSMIDCHK	312	300	104
17	CSX85INT	815	839	109
19	CSCRIA	54.1	60.0	90.1
20	CSCRIB	24.4	0	
36	CSMIDCHK	318	300	106
53	CSMIDCHK	310	300	103
55	CSCRIA	54.8	60.0	91.3
56	CSCRIB	24.6	0	
58	CSX85INT	899	839	107
14	CBBLK	-7.85	-1.00	785
35	CBBLK	-9.81	-1.00	981
52	CBBLK	-7.86	-1.00	786

Element: PB Units: ug/l

Position	Sample	Calculated	Expected	% Rec
5	SXBLK	-10.9	0	
6	SASI514A	98.1	100	98.1
8	SBSI514B	193	200	96.5
10	SCSI514C	1040	1000	104
11	SMSI514E	2490	2500	99.4
9	CSSI514B	200	193	104
12	CSSI514D	5090	5000	102
15	CSMIDCHK	514	500	103
17	CSX85INT	938	836	100
19	CSCRIA	84.9	0	
20	CSCRIB	43.1	50.0	86.1
36	CSMIDCHK	532	500	106
53	CSMIDCHK	519	500	104
55	CSCRIA	89.4	0	
56	CSCRIB	46.6	50.0	93.3
58	CSX85INT	930	836	99.3
14	CBBLK	-12.9	-1.00	1290
35	CBBLK	-22.1	-1.00	2210
52	CBBLK	-15.8	-1.00	1580

Element: SB Units: ug/l

Position	Sample	Calculated	Expected	% Rec
5	SXBLK	-3.51	0	
6	SASI514A	99.3	100	99.3
8	SBSI514B	188	200	93.9
10	SCSI514C	1030	1000	103
11	SMSI514E	2490	2500	99.6
9	CSSI514B	203	188	108
12	CSSI514D	5130	5000	103
15	CSMIDCHK	499	500	99.8
17	CSX85INT	77.1	0	
19	CSCRIA	90.5	100	90.5
20	CSCRIB	47.0	0	
36	CSMIDCHK	503	500	101
53	CSMIDCHK	490	500	98.1
55	CSCRIA	91.3	100	91.3
56	CSCRIB	47.2	0	
58	CSX85INT	64.4	0	
14	CBBLK	-8.78	-1.00	878
35	CBBLK	-18.0	-1.00	1800
52	CBBLK	0.209	-1.00	-20.8

*** Initial and Continuing Calibration Verification and Calib. Blank Data ***

Element: SE Units: ug/l

Position	Sample	Calculated	Expected	% Rec
5	SXBLK	-0.85	0	
6	SASI514A	188	200	93.8
8	SBSI514B	386	400	96.9
10	SCSI514C	2030	2000	101
11	SMSI514E	4980	5000	99.8
9	CSSI514B	404	396	102
12	CSSI514D	10100	10000	101
15	CSMIDCHK	1010	1000	101
17	CSX85INT	4.83	0	
19	CSCRIA	176	0	
20	CSCRIB	84.7	100	84.7
36	CSMIDCHK	1030	1000	103
53	CSMIDCHK	1010	1000	101
55	CSCRIA	177	0	
56	CSCRIB	87.2	100	87.2
58	CSX85INT	-13.8	0	
14	CBBLK	-22.7	-1.00	2270
35	CBBLK	-34.7	-1.00	3470
52	CBBLK	-10.1	-1.00	1010

Element: SN Units: ug/l

Position	Sample	Calculated	Expected	% Rec
5	SXBLK	-8.72	0	
6	SASI514A	188	200	94.0
8	SBSI514B	389	400	97.2
10	SCSI514C	2050	2000	103
11	SMSI514E	4980	5000	99.6
9	CSSI514B	409	389	105
12	CSSI514D	10100	10000	101
15	CSMIDCHK	1050	1000	105
17	CSX85INT	-116	0	
19	CSCRIA	195	0	
20	CSCRIB	100	0	
36	CSMIDCHK	1060	1000	106
53	CSMIDCHK	1040	1000	104
55	CSCRIA	191	0	
56	CSCRIB	92.2	0	
58	CSX85INT	-112	0	
14	CBBLK	-15.8	-1.00	1580
35	CBBLK	-14.1	-1.00	1410
52	CBBLK	-17.6	-1.00	1760

Element: TI Units: ug/l

Position	Sample	Calculated	Expected	% Rec
5	SXBLK	-2.07	0	
6	SASI514A	97.0	100	97.0
8	SBSI514B	199	200	99.8
10	SCSI514C	1010	1000	101
11	SMSI514E	2500	2500	99.8
9	CSSI514B	201	199	101
12	CSSI514D	5050	5000	101
15	CSMIDCHK	507	500	101
17	CSX85INT	90.9	0	
19	CSCRIA	98.3	0	
20	CSCRIB	44.0	0	
36	CSMIDCHK	507	500	101
53	CSMIDCHK	503	500	101
55	CSCRIA	107	0	
56	CSCRIB	44.7	0	
58	CSX85INT	30.6	0	
14	CBBLK	-3.01	-1.00	301
35	CBBLK	-5.71	-1.00	571
52	CBBLK	-4.92	-1.00	492

Element: V Units: ug/l

Position	Sample	Calculated	Expected	% Rec
5	SXBLK	-4.03	0	
6	SASI514A	56.4	60.0	93.9
8	SBSI514B	120	120	100
10	SCSI514C	612	600	102
11	SMSI514E	1500	1500	99.7
9	CSSI514B	123	120	102
12	CSSI514D	3030	3000	101
15	CSMIDCHK	313	300	104
17	CSX85INT	520	444	117
19	CSCRIA	58.5	60.0	97.6
20	CSCRIB	32.3	0	
36	CSMIDCHK	317	300	106
53	CSMIDCHK	312	300	104
55	CSCRIA	55.3	60.0	92.2
56	CSCRIB	31.2	0	
58	CSX85INT	515	444	116
14	CBBLK	-3.19	-1.00	319
35	CBBLK	-1.67	-1.00	167
52	CBBLK	-3.27	-1.00	327

*** Initial and Continuing Calibration Verification and Calib. Blank Data ***

Element: ZN Units: ug/l

Position	Sample	Calculated	Expected	% Rec
5	SXBLK	-13.4	0	
6	SASI514A	95.4	100	95.4
8	SBSI514B	198	200	99.1
10	SCSI514C	1030	1000	103
11	SMSI514E	2480	2500	99.5
9	CSSI514B	199	198	100
12	CSSI514D	5080	5000	102
15	CSMIDCHK	520	500	104
17	CSX85INT	938	889	106
19	CSCRIA	82.4	0	
20	CSCRIB	45.7	50.0	91.3
36	CSMIDCHK	525	500	105
53	CSMIDCHK	517	500	103
55	CSCRIA	88.0	0	
56	CSCRIB	46.5	50.0	93.0
58	CSX85INT	928	889	104
14	CBBLK	-13.6	-1.00	1360
35	CBBLK	-13.7	-1.00	1370
52	CBBLK	-13.5	-1.00	1350

BSP70577 for AI

FILE BSP7057B ▶ A 3/31/10

BATCHES RUN P70057- JEA PE Soil Obj; P70050-SFA Soil Obj

BR 11/10/89

INITIAL / DATE

MAINT ✓BR 11/10/89

MSEQ ✓

AASTD ✓

AARV ✓

AAPSPK ✓

AAMOA

Method: ETCICPA Standard: ICPBLK

Elem	Ag3280	Al3961	As1936	B_2497	Ba4934	Be3130	Ca3179
Avge	.1003	.0014	.0425	.0557	.0003	.0108	.0159
SDev	.0012	.0005	.0003	.0007	.0003	.0001	.0014
%RSD	1.229	36.74	.7409	1.296	87.08	1.332	8.758
#1	.0995	.0012	.0421	.0553	.0004	.0108	.0156
#2	.1018	.0020	.0428	.0565	.0005	.0110	.0174
#3	.0997	.0010	.0425	.0553	.0000	.0108	.0146

Elem	Cd2265	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Mg2790
Avge	.0554	.0005	.0000	.0423	.0566	.2276	.0055
SDev	.0005	.0009	.0005	.0004	.0005	.0008	.0019
%RSD	.9116	173.2	1058.	1.037	.7959	.3601	34.39
#1	.0549	.0000	-.0003	.0424	.0567	.2278	.0040
#2	.0559	.0015	.0006	.0428	.0570	.2284	.0076
#3	.0555	.0000	-.0002	.0419	.0561	.2268	.0049

Elem	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Avge	.0164	.0002	.1940	.0004	.0004	.0013	.0031
SDev	.0002	.0004	.0016	.0010	.0009	.0030	.0010
%RSD	1.322	150.0	.8226	234.5	214.0	242.5	32.77
#1	.0165	.0003	.1926	-.0003	.0000	.0040	.0025
#2	.0165	.0006	.1957	.0015	.0015	.0018	.0043
#3	.0161	-.0001	.1936	.0000	-.0002	-.0020	.0025

Elem	Sr1899	Ti3349	V_2924	Zn2138
Avge	.0056	.0017	.0697	.0009
SDev	.0020	.0002	.0006	.0002
%RSD	36.06	12.83	.8282	21.21
#1	.0077	.0017	.0694	.0009
#2	.0057	.0020	.0704	.0011
#3	.0036	-.0015	.0694	.0007

Method: ETCICPA Standard: ICP9

Elem	Ag3280	Al3961	As1936	B_2497	Ba4934	Be3130	Ca3179
Avge	.6467	2.438	.3951	3.346	7.623	1.342	41.36
SDev	.0039	.015	.0032	.027	.059	.012	.39
%RSD	.5954	.6206	.8155	.7919	.7739	.8987	.9521
#1	.6426	2.423	.3916	3.318	7.558	1.330	40.94
#2	.6503	2.453	.3980	3.371	7.674	1.354	41.73
#3	.6474	2.439	.3956	3.350	7.637	1.342	41.40

Elem	Cd2265	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Mg2790
Avge	.7167	.6039	1.122	1.069	4.090	4.805	16.17
SDev	.0055	.0055	.009	.009	.033	.041	.11
%RSD	.7647	.9106	.8310	.8155	.8112	.8461	.6525
#1	.7116	.5981	1.113	1.059	4.053	4.758	16.05
#2	.7225	.6090	1.132	1.074	4.117	4.830	16.26

#3	.7159	.6048	1.122	1.073	4.099	4.827	16.19

Elem	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Avge	1.558	.8005	97.03	1.314	.7036	2.025	1.804
SDev	.013	.0079	.83	.012	.0071	.017	.021
%RSD	.8285	.9835	.8517	.8999	1.008	.8484	1.168
#1	1.544	.7921	96.08	1.303	.6955	2.011	1.789
#2	1.570	.8077	97.59	1.326	.7089	2.044	1.828
#3	1.561	.8016	97.42	1.313	.7063	2.020	1.796

Elem	Sn1899	Ti3349	V 2924	Zn2138
Avge	1.692	1.495	1.531	2.677
SDev	.017	.012	.013	.026
%RSD	.9921	.8124	.8536	.9881
#1	1.673	1.483	1.517	2.648
#2	1.705	1.507	1.543	2.701
#3	1.698	1.496	1.533	2.682

Method: EECICPA Sample Name: DW Operator: RR
Run Time: 11/10/89 10:35:48
Comment: P70057 LFB SOIL PE DIL.; P70050 LFB SOIL DILS
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3961	As1936	B 2497	Ba4934	Be3130	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0042	.0120	.0112	.0072	.0085	.0009	.0731
SDev	.0021	.0097	.0035	.0041	.0057	.0006	.0558
%RSD	49.99	81.13	31.58	56.77	66.86	64.29	76.39
#1	.0047	.0162	.0112	.0119	.0149	.0016	.1355
#2	.0019	.0009	.0077	.0054	.0067	.0007	.0557
#3	.0060	.0188	.0148	.0043	.0040	.0005	.0280

Elem	Cd2265	Co2286	Cr2677	Cu3247	Fe2599	K 7664	Mg2790
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0022	.0004	.0032	.0039	.0106	.1811	.0673
SDev	.0005	.0009	.0009	.0011	.0074	.0623	.0296
%RSD	22.68	214.1	29.19	27.06	69.92	34.39	44.04
#1	.0026	.0003	.0033	.0045	.0192	.2485	.1013
#2	.0016	.0013	.0022	.0027	.0068	.1256	.0472
#3	.0024	.0004	.0041	.0045	.0059	.1693	.0534

Elem	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0033	.0018	.4264	.0025	.0079	.0011	.0132
SDev	.0018	.0010	.2905	.0016	.0145	.0092	.0142
%RSD	52.93	53.93	68.12	64.34	182.7	815.6	108.0
#1	.0054	.0020	.7513	.0017	.0051	.0071	.0169
#2	.0024	.0008	.3363	.0015	.0056	.0006	.0025
#3	.0022	.0027	.1917	.0044	.0235	.0111	.0252

Elem	Sn1899	Ti3349	V 2924	Zn2138
Units	ppm	ppm	ppm	ppm
Avge	.0105	.0028	.0047	.0038

SDev	.0019	.0028	.0019	.0028
%RSD	18.00	97.84	41.18	75.50
#1	.0093	.0059	.0068	.0070
#2	.0095	.0018	.0029	.0028
#3	.0126	.0007	.0044	.0015

Method: ETCICPA Sample Name: *MIDCHK* Operator: RR
Run Time: 11/10/89 10:38:32
Comment: P70057 IFB SOIL PE DIL.; P70050 IFB SOIL DILS
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3961	As1936	B 2497	Ba4934	Be3130	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.1023	2.545	.5081	.5283	1.051	.1038	10.59
SDev	.0019	.030	.0118	.0055	.010	.0014	.19
%RSD	1.830	1.171	2.323	1.033	.9230	1.324	1.814
#1	.1007	2.512	.4951	.5221	1.040	.1024	10.40
#2	.1044	2.568	.5181	.5323	1.058	.1051	10.79
#3	.1019	2.557	.5110	.5304	1.055	.1041	10.59

Elem	Cd2265	Co2286	Cr2677	Cu3247	Fe2599	K 7664	Mg2790
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.1110	.2187	.3234	.3154	1.064	4.170	10.36
SDev	.0030	.0052	.0068	.0060	.015	.081	.12
%RSD	2.715	2.382	2.112	1.887	1.447	1.933	1.127
#1	.1090	.2141	.3166	.3085	1.047	4.077	10.23
#2	.1145	.2244	.3302	.3195	1.078	4.211	10.45
#3	.1096	.2175	.3234	.3180	1.067	4.222	10.40

Elem	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.3233	.2650	51.43	.3274	.5443	.5136	1.041
SDev	.0047	.0063	.70	.0060	.0178	.0054	.023
%RSD	1.467	2.359	1.355	1.840	3.275	1.043	2.235
#1	.3186	.2589	50.65	.3216	.5330	.5108	1.029
#2	.3281	.2714	51.65	.3336	.5649	.5198	1.068
#3	.3232	.2648	51.99	.3269	.5351	.5102	1.027

Elem	Sb1899	Ti3349	V 2924	Zn2138
Units	ppm	ppm	ppm	ppm
Avge	1.043	.5180	.3211	.5330
SDev	.016	.0062	.0046	.0086
%RSD	1.493	1.194	1.445	1.617
#1	1.030	.5118	.3163	.5245
#2	1.060	.5242	.3255	.5418
#3	1.039	.5180	.3217	.5327

Method: ETCICPA Sample Name: DW Operator: RR
Run Time: 11/10/89 10:41:03
Comment: P70057 IFB SOIL PE DIL.; P70050 IFB SOIL DILS

Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3961	As1936	B 2497	Ba4934	Be3130	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avgo	.0034	.0085	.0041	.0014	.0007	.0002	-.0112
SDev	.0006	.0135	.0035	.0007	.0008	.0001	.0069
%RSD	17.16	157.6	85.71	47.24	111.2	57.74	-61.50
#1	.0040	.0047	.0077	.0006	.0016	.0003	-.0033
#2	.0028	.0222	.0006	.0018	.0005	.0001	-.0141
#3	.0033	-.0081	.0041	.0018	.0000	.0001	-.0162

Elem	Cd2265	Co2286	Cr2677	Cu3247	Fe2599	K 7664	Mg2790
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avgo	.0013	-.0007	-.0005	.0023	.0013	.1047	-.0021
SDev	.0003	.0019	.0004	.0006	.0018	.0114	.0177
%RSD	25.98	-258.3	-83.21	27.35	133.2	10.86	-858.7
#1	.0016	.0002	-.0010	.0030	.0034	.1174	.0178
#2	.0011	.0008	-.0004	.0019	.0003	.1010	-.0162
#3	.0011	-.0029	-.0002	.0019	.0003	.0956	-.0077

Elem	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avgo	.0007	.0003	.0553	.0016	-.0022	-.0023	.0044
SDev	.0004	.0010	.0314	.0017	.0025	.0097	.0042
%RSD	57.73	377.5	56.71	107.3	-114.9	-430.4	96.04
#1	.0012	.0008	.0891	.0003	-.0050	.0090	.0065
#2	.0005	.0004	.0497	.0029	-.0001	-.0086	.0005
#3	.0005	.0012	.0271	.0020	.0015	-.0071	.0072

Elem	Sr1899	Ti3349	V 2924	Zn2138
Units	ppm	ppm	ppm	ppm
Avgo	.0164	.0012	.0030	.0003
SDev	.0049	.0006	.0007	.0007
%RSD	29.89	46.66	21.57	223.3
#1	.0207	-.0006	.0037	.0004
#2	.0111	.0015	.0029	.0003
#3	.0175	-.0016	.0024	-.0011

Method: ICPCICPA Sample Name: BLANK Operator: RR
Run Time: 11/10/89 10:43:34
Comment: P70057 FEB SOIL PE DIL.; P70050 FEB SOIL DIL3
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3961	As1936	B 2497	Ba4934	Be3130	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avgo	.0025	.0068	.0030	.0037	.0000	.0001	.0035
SDev	.0026	.0130	.0108	.0008	.001	.0001	.0071
%RSD	102.2	190.3	366.6	21.53	-2835.	75.00	204.1
#1	.0019	.0094	.0006	.0039	-.0002	.0001	.0010
#2	.0003	.0184	.0065	.0028	.0004	.0000	-.0020
#3	.0053	.0077	.0148	.0043	.0006	.0002	.0115

Elem	Cd2265	Co2286	Cr2677	Cu3247	Fe2599	K 7664	Mg2790

Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0016	-.0025	.0006	.0021	.0013	.1238	-.0139
SDev	.0018	.0034	.0024	.0038	.0013	.0856	.0183
%RSD	110.1	-135.1	405.9	87.05	96.08	69.14	-131.4
#1	.0014	-.0057	-.0016	.0012	.0009	.1092	-.0217
#2	.0001	-.0029	.0002	.0009	.0003	.0464	-.0271
#3	.0035	.0011	.0031	.0041	.0028	.2157	.0070

Elem	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0006	-.0001	.0433	.0005	.0014	-.0027	.0125
SDev	.0005	.0010	.0112	.0043	.0080	.0084	.0087
%RSD	78.06	-755.0	27.11	856.6	553.3	-312.2	69.91
#1	.0005	-.0012	.0316	.0012	-.0019	-.0099	.0113
#2	.0002	.0000	.0387	.0027	-.0043	-.0046	.0044
#3	.0012	.0008	.0536	.0053	.0106	.0065	.0217

Elem	Sn1899	Ti3349	V 2924	Zn2138
Units	ppm	ppm	ppm	ppm
Avge	.0185	.0001	.0022	.0013
SDev	.0025	.0007	.0021	.0002
%RSD	13.53	887.9	93.26	11.75
#1	.0198	-.0002	.0019	.0014
#2	.0200	-.0004	.0003	.0012
#3	.0156	.0009	.0044	.0015

Method: EPICPA Sample Name: SKBLK Operator: RR
Run Time: 11/10/89 10:46:05
Comments: P70057 IFB SOIL PE DIL.; P70050 IFB SOIL DILS
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3961	As1936	B 2497	Ba4934	Be3130	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0022	-.0017	.0035	.0025	-.0001	.0001	-.0038
SDev	.0020	.0100	.0101	.0009	.0004	.0001	.0021
%RSD	87.98	585.8	284.3	34.64	-468.6	75.00	-54.88
#1	.0008	.0068	-.0047	.0020	-.0003	.0000	-.0058
#2	.0044	.0098	.0148	.0035	.0003	.0002	-.0016
#3	.0014	-.0081	.0006	.0020	-.0003	.0001	-.0039

Elem	Cd2265	Co2286	Cr2677	Cu3247	Fe2599	K 7664	Mg2790
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0016	.0004	.0009	.0010	.0008	.0710	.0101
SDev	.0019	.0018	.0012	.0013	.0020	.0367	.0097
%RSD	113.6	474.3	136.3	131.7	238.2	51.74	96.38
#1	.0001	.0015	.0001	.0002	.0003	.0410	-.0201
#2	.0037	-.0005	.0021	.0023	.0031	.1120	.0008
#3	.0011	-.0022	.0005	.0009	-.0003	.0601	.0093

Elem	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0006	.0003	.0174	.0007	.0019	.0035	.0178
SDev	.0005	.0008	.0094	.0031	.0150	.0056	.0087

%RSD	78.06	312.2	53.80	451.5	797.8	159.2	48.71
#1	.0005	-.0004	.0084	-.0003	-.0105	.0031	-.0093
#2	.0012	.0000	.0168	.0041	.0185	.0093	.0266
#3	.0002	.0012	.0271	-.0018	-.0023	-.0019	.0176

Elem	Sb1899	Ti3349	V 2924	Zn2138
Units	ppm	ppm	ppm	ppm
Avge	.0172	.0002	.0025	.0003
SDev	.0086	.0004	.0017	.0004
%RSD	50.11	167.7	68.88	126.3
#1	.0213	.0000	.0016	.0002
#2	.0073	.0007	.0044	.0000
#3	.0229	.0000	.0014	.0007

Method: ETCICPA Sample Name: SAS1514A Operator: RR
Run Time: 11/10/89 10:48:36
Comment: P70057 TFB SOIL PE Dil.; P70050 TFB SOIL DILS
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3961	As1936	B 2497	Ba4934	Be3130	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0219	.4804	.1052	.1114	.2059	.0209	2.099
SDev	.0006	.0046	.0053	.0000	.0010	.0002	.015
%RSD	2.631	.9623	5.056	.0000	.5031	.8995	.7159
#1	.0214	.4856	.1052	.1114	.2057	.0209	2.098
#2	.0218	.4766	.0990	.1114	.2050	.0207	2.084
#3	.0225	.4792	.1105	.1114	.2070	.0211	2.114

Elem	Cd2265	Co2286	Cr2677	Cu3247	Fe2599	K 7664	Mg2790
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0238	.0427	.0624	.0619	.2150	2.052	2.030
SDev	.0003	.0018	.0006	.0004	.0012	.012	.015
%RSD	1.212	4.258	1.025	.5905	.5458	.6002	.7203
#1	.0238	.0412	.0621	.0615	.2142	2.040	2.035
#2	.0236	.0423	.0631	.0619	.2145	2.051	2.013
#3	.0241	.0447	.0619	.0622	.2163	2.065	2.041

Elem	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0645	.0534	10.07	.0654	.1103	.1059	.2267
SDev	.0009	.0012	.06	.0013	.0059	.0086	.0046
%RSD	1.324	2.235	.6251	1.977	5.330	8.085	2.038
#1	.0645	.0547	10.01	.0640	.1105	.1158	.2306
#2	.0637	.0531	10.07	.0666	.1043	.1013	.2278
#3	.0654	.0523	10.14	.0655	.1161	.1007	.2216

Elem	Sb1899	Ti3349	V 2924	Zn2138
Units	ppm	ppm	ppm	ppm
Avge	.1827	.1017	.0636	.1087
SDev	.0048	.0003	.0010	.0009
%RSD	2.633	.2780	1.630	.8270
#1	.1821	.1014	.0635	.1082

#2	.1783	.1019	.0627	.1082
#3	.1878	.1019	.0648	.1098

Method: ETCICPA Sample Name: SA81514A Operator: RR
Run Time: 11/10/89 10:51:07
Comments: P70057 TFB SOIL PE Dil.; P70050 TFB SOIL Dil3
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3961	As1936	B 2497	Ba4934	Be3130	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0221	.4689	.1069	.1133	.2052	.0208	2.092
SDev	.0009	.0059	.0031	.0040	.0021	.0003	.032
%RSD	4.181	1.253	2.871	3.483	1.007	1.376	1.532
#1	.0216	.4638	.1034	.1110	.2034	.0206	2.061
#2	.0216	.4753	.1087	.1110	.2047	.0208	2.089
#3	.0232	.4676	.1087	.1179	.2075	.0212	2.125

Elem	Cd2265	Co2286	Cr2677	Cu3247	Fe2599	K 7664	Mg2790
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0240	.0412	.0621	.0619	.2157	2.038	2.004
SDev	.0006	.0006	.0005	.0011	.0027	.051	.007
%RSD	2.531	1.353	.7822	1.772	1.253	2.479	.3372
#1	.0236	.0418	.0615	.0608	.2138	2.037	1.996
#2	.0238	.0407	.0623	.0619	.2145	1.988	2.005
#3	.0247	.0410	.0624	.0630	.2188	2.089	2.009

Elem	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0646	.0521	10.01	.0632	.0941	.0954	.2089
SDev	.0010	.0009	.16	.0019	.0079	.0075	.0111
%RSD	1.521	1.732	1.596	2.938	8.342	7.847	5.298
#1	.0637	.0515	9.849	.0651	.1020	.1022	.2015
#2	.0645	.0531	10.01	.0631	.0942	.0967	.2035
#3	.0657	.0515	10.17	.0614	.0863	.0874	.2216

Elem	Sn1899	Ti3349	V 2924	Zn2138
Units	ppm	ppm	ppm	ppm
Avge	.1811	.1011	.0642	.1058
SDev	.0035	.0012	.0011	.0013
%RSD	1.942	1.214	1.741	1.239
#1	.1771	.1005	.0635	.1045
#2	.1824	.1002	.0637	.1058
#3	.1838	.1025	.0655	.1071

Method: ETCICPA Sample Name: SB81514B Operator: RR
Run Time: 11/10/89 10:53:37
Comments: P70057 TFB SOIL PE Dil.; P70050 TFB SOIL Dil3
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3961	As1936	B 2497	Ba4934	Be3130	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0448	.9716	.2151	.2330	.4110	.0422	4.222

SDev	.0017	.0139	.0018	.0013	.0048	.0005	.044
%RSD	3.767	1.428	.8242	.6264	1.155	1.097	1.051
#1	.0429	.9677	.2133	.2117	.4097	.0419	4.182
#2	.0461	.9600	.2151	.2129	.4070	.0420	4.213
#3	.0454	.9870	.2168	.2144	.4163	.0427	4.270

Elem	Cd2265	Co2286	Cr2677	Cu3247	Fe2599	K 7664	Mg2790
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0462	.0846	.1264	.1249	.4360	4.075	4.042
SDev	.0013	.0010	.0017	.0030	.0049	.033	.052
%RSD	2.786	1.201	1.338	2.384	1.130	.7994	1.278
#1	.0447	.0835	.1263	.1214	.4286	4.061	4.030
#2	.0466	.0847	.1248	.1262	.4351	4.053	3.997
#3	.0472	.0856	.1282	.1269	.4382	4.113	4.098

Elem	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.1288	.1052	20.03	.1302	.2084	.1941	.4261
SDev	.0011	.0013	.26	.0012	.0002	.0029	.0148
%RSD	.8513	1.194	1.295	.9424	.0987	1.513	3.479
#1	.1277	.1066	19.99	.1292	.2084	.1970	.4200
#2	.1289	.1043	19.79	.1299	.2081	.1912	.4152
#3	.1299	.1047	20.31	.1316	.2085	.1940	.4429

Elem	Sn1899	Ti3349	V 2924	Zn2138
Units	ppm	ppm	ppm	ppm
Avge	.3867	.2056	.1286	.2118
SDev	.0072	.0022	.0022	.0017
%RSD	1.854	1.091	1.674	.8153
#1	.3804	.2046	.1261	.2100
#2	.3851	.2039	.1299	.2118
#3	.3945	.2081	.1297	.2134

Method: ETCICPA Sample Name: C85I5148 Operator: RR
Run Time: 11/10/89 10:56:08
Comments: P70057 TFB SOIL PE DIL.; P70050 TFB SOIL DIL3
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3961	As1936	B 2497	Ba4934	Be3130	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0468	.9810	.2227	.2148	.4133	.0425	4.279
SDev	.0027	.0257	.0108	.0041	.0043	.0007	.116
%RSD	5.788	2.619	4.862	1.922	1.029	1.673	2.708
#1	.0451	.9562	.2204	.2117	.4089	.0420	4.202
#2	.0454	.9793	.2133	.2132	.4136	.0422	4.224
#3	.0499	1.007	.2346	.2195	.4174	.0433	4.413

Elem	Cd2265	Co2286	Cr2677	Cu3247	Fe2599	K 7664	Mg2790
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0476	.0874	.1285	.1258	.4367	4.149	4.086
SDev	.0022	.0045	.0046	.0042	.0096	.092	.079
%RSD	4.701	5.095	3.586	3.349	2.200	2.220	1.937

#1	.0464	.0847	.1259	.1214	.4292	4.107	4.019
#2	.0463	.0849	.1258	.1262	.4333	4.085	4.064
#3	.0502	.0925	.1338	.1298	.4475	4.255	4.173

Elem	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avgs	.1297	.1058	20.13	.1321	.2154	.2105	.4344
SDev	.0027	.0034	.21	.0065	.0200	.0168	.0297
%RSD	2.093	3.196	1.066	4.902	9.272	7.988	6.827

#1	.1277	.1039	19.94	.1278	.2047	.2048	.4180
#2	.1287	.1039	20.08	.1288	.2031	.1974	.4166
#3	.1328	.1097	20.36	.1395	.2384	.2295	.4686

Elem	Sn1899	Ti3349	V 2924	Zn2138
Units	ppm	ppm	ppm	ppm
Avgs	.4079	.2072	.1312	.2133
SDev	.0102	.0034	.0034	.0053
%RSD	2.490	1.653	2.587	2.470

#1	.3996	.2042	.1287	.2094
#2	.4048	.2065	.1299	.2112
#3	.4192	.2109	.1351	.2193

Method: EPCICPA Sample Name: SCS1514C Operator: RR
Run Time: 11/10/89 10:58:39
Comments: P70057 TFB SOIL PE DIL.; P70050 TFB SOIL DILS
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3961	As1936	B 2497	Ba4934	Be3130	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avgs	.2099	4.884	1.044	1.038	2.034	.2104	20.95
SDev	.0034	.025	.010	.011	.019	.0027	.31
%RSD	1.618	.5111	.9351	1.106	.9456	1.303	1.469

#1	.2062	4.865	1.039	1.025	2.013	.2072	20.59
#2	.2128	4.875	1.055	1.044	2.040	.2121	21.16
#3	.2108	4.912	1.037	1.046	2.050	.2118	21.08

Elem	Cd2265	Co2286	Cr2677	Cu3247	Fe2599	K 7664	Mg2790
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avgs	.2184	.4259	.6324	.6133	2.117	19.96	20.19
SDev	.0047	.0051	.0072	.0062	.026	.13	.21
%RSD	2.149	1.197	1.142	1.002	1.229	.6440	1.040

#1	.2132	.4205	.6251	.6064	2.088	19.82	19.95
#2	.2222	.4306	.6396	.6155	2.136	20.06	20.32
#3	.2198	.4265	.6325	.6181	2.128	20.02	20.30

Elem	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avgs	.6315	.5267	99.23	.6433	1.062	1.029	2.069
SDev	.0077	.0061	.62	.0089	.013	.019	.044
%RSD	1.216	1.149	.6244	1.386	1.269	1.892	2.106

#1	.6227	.5198	98.52	.6342	1.047	1.009	2.022
#2	.6365	.5311	99.51	.6521	1.073	1.048	2.108

#3	.6353	.6291	99.66	.6435	1.066	1.030	2.076

Elem	Sn1899	Ti3349	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm
Avge	2.078	1.030	.6263	1.049
SDev	.017	.012	.0080	.015
%RSD	.8157	1.167	1.283	1.387
#1	2.059	1.016	.6170	1.033
#2	2.092	1.037	.6317	1.060
#3	2.082	1.038	.6301	1.056

Method: JTCICPA Sample Name: CSS15146 Operator: RR
Run Time: 11/10/89 11:01:10
Comment: P70057 TFB SOIL PE DIL.; P70050 TFB SOIL DILS
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3961	As1936	B 2497	Ba4934	Be3130	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.4970	12.19	2.516	2.533	5.026	.5156	50.48
SDev	.0031	.10	.022	.020	.032	.0033	.52
%RSD	.6266	.8599	.8571	.7926	.6428	.6418	1.038
#1	.4935	12.08	2.491	2.511	4.992	.5120	49.88
#2	.4981	12.21	2.530	2.540	5.029	.5164	50.75
#3	.4995	12.29	2.526	2.549	5.057	.5185	50.82

Elem	Cd2265	Co2286	Cr2677	Cu3247	Fe2599	K 7664	Mg2790
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.5141	1.022	1.525	1.501	5.096	49.49	49.56
SDev	.0060	.012	.015	.011	.036	.41	.35
%RSD	1.168	1.168	.9713	.7122	.7159	.8301	.6976
#1	.5071	1.008	1.509	1.490	5.054	49.01	49.20
#2	.5173	1.030	1.529	1.504	5.112	49.73	49.61
#3	.5177	1.026	1.538	1.510	5.122	49.72	49.88

Elem	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.524	1.277	247.7	1.538	2.527	2.499	5.045
SDev	.014	.007	1.9	.016	.026	.019	.002
%RSD	.9194	.5332	.7547	1.026	1.024	.7784	.0397
#1	1.508	1.269	245.6	1.520	2.501	2.476	5.044
#2	1.531	1.282	248.7	1.550	2.553	2.512	5.048
#3	1.534	1.280	248.9	1.544	2.528	2.508	5.044

Elem	Sn1899	Ti3349	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm
Avge	5.057	2.538	1.521	2.515
SDev	.084	.021	.012	.023
%RSD	1.658	.8428	.7938	.9270
#1	4.966	2.514	1.507	2.488
#2	5.133	2.545	1.528	2.528
#3	5.074	2.555	1.528	2.528

Method: ETCICPA Sample Name: CSST5140 Operator: RR
Run Time: 11/10/89 11:03:41
Comment: P70057-1EB SOIL PE DIL.; P70050-1EB SOIL DILS
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3961	As1936	B 2497	Ba4934	Be3130	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.022	25.24	5.152	5.115	10.13	1.027	103.3
SDev	.008	.39	.055	.053	.13	.011	.9
%RSD	.7534	1.556	1.069	1.027	1.263	1.039	.8884
#1	1.014	25.02	5.095	5.078	10.04	1.019	102.6
#2	1.023	25.02	5.157	5.092	10.08	1.023	103.0
#3	1.029	25.70	5.204	5.175	10.28	1.039	104.4

Elem	Cd2265	Co2286	Cr2677	Cu3247	Fe2599	K 7664	Mg2790
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.033	2.055	3.083	3.051	10.25	101.6	101.7
SDev	.009	.019	.026	.034	.11	1.3	1.0
%RSD	.8268	.9399	.8440	1.114	1.025	1.289	1.014
#1	1.026	2.040	3.065	3.025	10.17	100.7	101.0
#2	1.029	2.049	3.072	3.039	10.21	101.1	101.3
#3	1.042	2.077	3.113	3.089	10.37	103.1	102.9

Elem	Mo2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	3.085	2.576	506.4	3.085	5.197	5.138	10.22
SDev	.029	.023	6.6	.027	.043	.036	.12
%RSD	.9493	.8873	1.313	.8780	.8307	.7063	1.181
#1	3.062	2.561	501.3	3.066	5.139	5.112	10.14
#2	3.076	2.564	504.0	3.073	5.126	5.123	10.17
#3	3.118	2.602	513.9	3.116	5.206	5.180	10.36

Elem	Sn1899	Ti3349	V 2924	Zn2138
Units	ppm	ppm	ppm	ppm
Avge	10.28	5.129	3.078	5.135
SDev	.11	.056	.031	.041
%RSD	1.080	1.087	.9972	.8018
#1	10.19	5.087	3.054	5.103
#2	10.25	5.108	3.069	5.121
#3	10.41	5.192	3.113	5.182

Method: ETCICPA Sample Name: DW Operator: RR
Run Time: 11/10/89 11:06:12
Comment: P70057 1EB SOIL PE DIL.; P70050 1EB SOIL DILS
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3961	As1936	B 2497	Ba4934	Be3130	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0065	.0043	.0112	.0115	.0078	.0010	.0635
SDev	.0009	.0116	.0064	.0042	.0061	.0006	.0606

%RSD	14.12	272.2	56.93	36.26	78.58	60.44	95.42
#1	.0065	.0175	.0095	.0157	.0147	.0016	.1318
#2	.0074	-.0004	.0183	.0115	.0057	.0008	.0422
#3	.0056	-.0043	.0059	.0073	.0030	.0005	.0165

Elem	Cd2265	Co2286	Cr2677	Cu3247	Fe2599	K 7664	Mg2790
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0030	-.0014	.0023	.0043	.0108	.2130	.0577
SDev	.0007	.0019	.0026	.0004	.0074	.0440	.0629
%RSD	22.11	134.4	110.7	9.897	68.63	20.63	108.9
#1	.0033	.0003	.0053	.0045	.0192	.2594	.1299
#2	.0033	-.0035	.0010	.0045	.0084	.2075	.0286
#3	.0022	-.0011	.0007	.0038	.0050	.1720	.0147

Elem	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0036	.0016	.4307	.0008	-.0045	-.0007	.0049
SDev	.0016	.0027	.2818	.0026	.0032	.0146	.0070
%RSD	45.40	173.2	65.43	343.5	-70.69	-2026.	143.8
#1	.0054	.0047	.7448	.0037	-.0034	.0161	.0058
#2	.0032	.0000	.3472	-.0013	-.0082	-.0105	-.0025
#3	.0022	.0000	.2001	.0001	-.0020	-.0077	.0113

Elem	Sn1899	Ti3349	V 2924	Zn2138
Units	ppm	ppm	ppm	ppm
Avge	.0092	.0023	.0065	.0033
SDev	.0144	.0031	.0012	.0028
%RSD	156.8	136.1	18.09	84.31
#1	.0074	.0058	.0075	.0064
#2	.0186	.0008	.0068	.0023
#3	.0163	.0002	.0052	.0012

Method: EPCICPA Sample Name: CBBLK Operator: RR
Run Time: 11/10/89 11:08:43
Comments: P70057 TFB SOIL PE Dil.; P70050 TFB SOIL DILS
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3961	As1936	B 2497	Ba4934	Be3130	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0033	.0090	.0053	.0061	.0000	.0002	-.0081
SDev	.0020	.0078	.0037	.0018	.0004	.0001	.0048
%RSD	59.61	87.29	69.39	28.87	973.4	34.64	-59.12
#1	.0051	.0004	.0041	.0081	.0004	.0002	-.0028
#2	.0012	.0158	.0024	.0053	-.0001	.0001	-.0121
#3	.0035	.0107	.0095	.0051	.0002	.0001	-.0094

Elem	Cd2265	Co2286	Cr2677	Cu3247	Fe2599	K 7664	Mg2790
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0018	.0004	.0007	.0024	.0012	.1038	-.0082
SDev	.0010	.0014	.0020	.0006	.0012	.0273	.0167
%RSD	54.74	368.9	267.6	22.93	100.0	26.32	-202.2

#1	.0026	.0010	.0024	.0030	.0025	.1311	.0108
#2	.0007	.0004	.0015	.0019	.0000	.0765	.0201
#3	.0022	.0017	.0013	.0023	.0012	.1038	.0155

Elem	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0007	.0008	.0389	.0002	.0002	.0018	.0049
SDev	.0004	.0020	.0172	.0015	.0163	.0052	.0132
%RSD	57.73	250.0	44.24	645.7	9919.	298.6	271.6

#1	.0012	.0027	.0549	.0014	.0172	.0040	.0183
#2	.0005	.0012	.0207	.0006	.0152	.0062	.0081
#3	.0005	.0008	.0413	.0015	.0025	.0031	.0044

Elem	Sr1899	Ti3349	V 2924	Zn2138
Units	ppm	ppm	ppm	ppm
Avge	.0243	.0007	.0033	.0005
SDev	.0008	.0009	.0011	.0005
%RSD	3.103	120.7	32.03	93.85

#1	.0251	.0003	.0042	.0000
#2	.0237	.0010	.0021	.0006
#3	.0262	.0014	.0037	.0010

Method: PTCICPA Sample Name: CSMIDCIK Operator: RR
Run Time: 11/10/89 11:11:15
Comment: P70057 IFB SOIL PE DIL.; P70050 IFB SOIL DIL3
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3961	As1936	B 2497	Ba4934	Be3130	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.1052	2.531	.5187	.5296	1.047	.1045	10.67
SDev	.0009	.039	.0098	.0021	.009	.0004	.04
%RSD	.8230	1.551	1.882	.3999	.8301	.4151	.3825

#1	.1048	2.568	.5181	.5312	1.053	.1047	10.69
#2	.1062	2.535	.5288	.5304	1.051	.1047	10.69
#3	.1046	2.490	.5093	.5272	1.037	.1040	10.62

Elem	Cd2265	Co2286	Cr2677	Cu3247	Fe2599	K 7664	Mg2790
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.1116	.2181	.3233	.3185	1.069	4.168	10.35
SDev	.0018	.0017	.0028	.0022	.004	.053	.10
%RSD	1.601	.7734	.8711	.6915	.3859	1.281	.9322

#1	.1130	.2182	.3257	.3188	1.070	4.173	10.42
#2	.1122	.2197	.3241	.3206	1.073	4.219	10.38
#3	.1096	.2163	.3202	.3162	1.065	4.113	10.24

Elem	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.3245	.2646	51.04	.3280	.5324	.5066	1.039
SDev	.0010	.0026	.68	.0026	.0104	.0105	.009
%RSD	.2999	.9825	1.326	.7879	1.958	2.078	.8898

#1	.3254	.2659	51.24	.3267	.5394	.5130	1.043
#2	.3245	.2663	51.60	.3309	.5374	.5124	1.045
#3	.3235	.2616	50.29	.3263	.5204	.4945	1.028

Elem	Sn1899	Ti3349	V 2924	Zn2138
Units	ppm	ppm	ppm	ppm
Avge	1.055	.5182	.3233	.5364
SDev	.005	.0037	.0014	.0021
%RSD	.4376	.7054	.4372	.3979
#1	1.060	.5210	.3232	.5362
#2	1.050	.5197	.3247	.5386
#3	1.055	.5141	.3219	.5343

Method: EPCICPA Sample Name: DW Operator: RR
Run Time: 11/10/89 11:13:46
Comment: P70057 TPB SOIL PE Dil.; P70050 TPB SOIL DIGS
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3961	As1936	B 2497	Ba4934	Be3130	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0064	.0034	.0118	.0011	.0012	.0003	.0090
SDev	.0027	.0136	.0072	.0008	.0008	.0001	.0100
%RSD	43.39	397.5	60.62	69.39	65.47	30.00	110.9
#1	.0047	.0056	.0077	.0005	.0015	.0003	.0052
#2	.0095	.0111	.0201	.0020	.0018	.0004	.0015
#3	.0051	.0158	.0077	.0009	.0003	.0002	.0203

Elem	Cd2265	Co2286	Cr2677	Cu3247	Fe2599	K 7664	Mg2790
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0025	.0013	.0012	.0038	.0042	.1702	.0023
SDev	.0018	.0034	.0020	.0006	.0020	.0680	.0148
%RSD	69.69	261.2	165.6	16.76	47.04	39.96	636.0
#1	.0011	.0035	.0011	.0034	.0034	.1256	.0008
#2	.0045	.0026	.0033	.0045	.0065	.2485	.0178
#3	.0020	.0031	.0007	.0034	.0028	.1365	.0116

Elem	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0016	.0008	.0783	.0024	.0014	.0021	.0190
SDev	.0005	.0010	.0341	.0039	.0150	.0092	.0126
%RSD	31.22	132.3	43.53	164.8	1032.	446.1	66.56
#1	.0015	.0004	.1084	.0007	.0079	.0034	.0120
#2	.0022	.0020	.0852	.0069	.0187	.0127	.0335
#3	.0012	.0000	.0413	.0004	.0065	.0031	.0113

Elem	Sn1899	Ti3349	V 2924	Zn2138
Units	ppm	ppm	ppm	ppm
Avge	.0243	.0008	.0054	.0003
SDev	.0092	.0011	.0023	.0009
%RSD	37.80	134.0	42.68	266.1
#1	.0179	.0015	.0039	.0001
#2	.0201	.0004	.0080	.0004
#3	.0348	.0015	.0042	.0013

Method: ETCICPA Sample Name: CSX85TNF Operator: RR
Run Time: 11/10/89 11:16:17
Comment: P70057 TFB SOIL PE DIL.; P70050 TFB SOIL DILS
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3961	As1936	B 2497	Ba4934	Be3130	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.9421	517.1	7.548	.6194	.4940	.4763	486.3
SDev	.0048	3.7	.028	.0009	.0030	.0013	3.2
%RSD	.5116	.7179	.3691	.1416	.6158	.2795	.6534
#1	.9417	514.3	7.517	.6199	.4917	.4768	489.5
#2	.9375	515.7	7.553	.6184	.4930	.4748	483.1
#3	.9472	521.3	7.572	.6199	.4975	.4773	486.4

Elem	Cd2265	Co2286	Cr2677	Cu3247	Fe2599	K 7664	Mg2790
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.042	.4750	.4747	.5283	183.3	.0492	514.5
SDev	.007	.0074	.0062	.0035	.7	.0412	2.5
%RSD	.6374	1.551	1.303	.6530	.3655	83.89	.4769
#1	1.049	.4835	.4817	.5256	183.7	.0055	512.7
#2	1.035	.4705	.4699	.5271	182.5	.0546	513.5
#3	1.043	.4710	.4727	.5322	183.7	.0874	517.3

Elem	Mo2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.5207	.0051	.1414	.9461	.8678	.0886	.0210
SDev	.0023	.0048	.0082	.0095	.0348	.0350	.0297
%RSD	.4456	94.52	5.830	1.003	4.013	40.37	141.3
#1	.5210	.0105	.1504	.9567	.9067	.0476	.0120
#2	.5183	.0016	.1343	.9384	.8574	.1053	.0456
#3	.5229	.0031	.1394	.9431	.8394	.1130	.0296

Elem	Sn1899	Ti3349	V 2924	Zn2138
Units	ppm	ppm	ppm	ppm
Avge	.0324	.0347	.5569	.9768
SDev	.0137	.0013	.0022	.0051
%RSD	42.36	3.601	.3973	.5203
#1	.0415	.0358	.5593	.9820
#2	.0391	.0349	.5549	.9719
#3	.0166	.0333	.5565	.9764

Method: ETCICPA Sample Name: DW Operator: RR
Run Time: 11/10/89 11:18:48
Comment: P70057 TFB SOIL PE DIL.; P70050 TFB SOIL DILS
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3961	As1936	B 2497	Ba4934	Be3130	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0069	.5745	.0124	.0006	.0002	.0008	.6475
SDev	.0004	.4811	.0102	.0012	.0007	.0006	.5720
%RSD	5.710	83.75	82.48	183.3	280.9	66.97	88.34

#1	.0074	.5407	.0183	.0009	.0004	.0008	.5971
#2	.0067	1.072	.0183	.0016	.0008	.0014	1.243
#3	.0067	.1111	.0006	.0006	.0005	.0003	.1024

Elem	Cd2265	Co2286	Cr2677	Cu3247	Fe2599	K 7664	Mg2790
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0032	.0015	.0003	.0040	.2810	.1411	.6146
SDev	.0009	.0009	.0011	.0008	.2283	.0079	.5248
%RSD	26.52	58.55	327.9	20.99	81.24	5.587	85.39

#1	.0032	.0009	.0017	.0045	.2774	.1502	.5808
#2	.0041	.0011	.0003	.0045	.5111	.1365	1.155
#3	.0024	.0025	.0003	.0030	.0545	.1365	.1075

Elem	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0016	.0017	.0217	.0008	.0095	.0070	.0025
SDev	.0005	.0008	.0058	.0030	.0133	.0086	.0080
%RSD	31.22	48.04	26.62	354.4	140.6	122.4	314.5

#1	.0015	.0020	.0284	.0003	.0059	.0022	.0032
#2	.0022	.0023	.0187	.0014	.0182	.0148	.0102
#3	.0012	.0008	.0181	.0042	.0161	.0083	.0058

Elem	Sn1899	Ti3349	V 2924	Zn2138
Units	ppm	ppm	ppm	ppm
Avge	.0281	.0019	.0044	.0009
SDev	.0019	.0002	.0007	.0012
%RSD	6.924	11.27	14.80	135.0

#1	.0262	.0016	.0044	.0013
#2	.0279	.0021	.0050	.0019
#3	.0307	.0019	.0037	.0005

Method: EPCICPA Sample Name: CSCRTA Operator: RR
Run Time: 11/10/89 11:21:20
Comment: P70057 TFB SOIL PE Dil.; P70050 TFB SOIL Dil3
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3961	As1936	B 2497	Ba4934	Be3130	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0249	.5091	.1134	.1136	.2084	.0210	2.148
SDev	.0007	.0108	.0107	.0008	.0007	.0001	.007
%RSD	2.949	2.112	9.418	.6962	.3242	.5155	.3122

#1	.0255	.5215	.1123	.1129	.2076	.0210	2.147
#2	.0252	.5035	.1247	.1133	.2088	.0212	2.154
#3	.0241	.5022	.1034	.1145	.2086	.0210	2.141

Elem	Cd2265	Co2286	Cr2677	Cu3247	Fe2599	K 7664	Mg2790
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0233	.0407	.0629	.0659	.2223	2.124	2.055
SDev	.0005	.0031	.0005	.0004	.0045	.026	.007
%RSD	2.046	7.506	.7501	.5545	2.041	1.215	.3577

#1	.0232	.0372	.0623	.0655	.2272	2.095	2.063
#2	.0238	.0425	.0631	.0659	.2216	2.144	2.048

#3	.0228	.0424	.0631	.0663	.2182	2.133	2.055

Elem	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0644	.0519	10.24	.0633	.0988	.0976	.2042
SDev	.0006	.0014	.06	.0006	.0063	.0032	.0066
%RSD	.8726	2.711	.6198	.8799	6.368	3.304	3.241
#1	.0637	.0515	10.19	.0627	.0934	.1013	.2008
#2	.0647	.0535	10.22	.0638	.1057	.0954	.2119
#3	.0647	.0508	10.31	.0634	.0974	.0961	.2001

Elem	Si1899	Ti3349	V 2924	Zn2138
Units	ppm	ppm	ppm	ppm
Avge	.1904	.1031	.0659	.1062
SDev	.0065	.0006	.0004	.0013
%RSD	3.410	.5760	.5951	1.231
#1	.1861	.1024	.0655	.1047
#2	.1979	.1036	.0658	.1072
#3	.1872	.1032	.0663	.1066

Method: ETCICPA Sample Name: CSCRTB Operator: RR
Run Time: 11/10/89 11:23:51
Comment: P70057 TFB SOIL PE DIL.; P70050 TFB SOIL DILS
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3961	As1936	B 2497	Ba4934	Be3130	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0187	.2445	.0614	.0514	.1043	.0108	1.137
SDev	.0031	.0046	.0074	.0008	.0003	.0001	.015
%RSD	16.62	1.891	12.01	1.478	.3159	1.004	1.307
#1	.0168	.2406	.0591	.0514	.1043	.0107	1.126
#2	.0170	.2432	.0555	.0506	.1046	.0107	1.132
#3	.0223	.2496	.0697	.0522	.1039	.0109	1.154

Elem	Cd2265	Co2286	Cr2677	Cu3247	Fe2599	K 7664	Mg2790
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0147	.0200	.0326	.0378	.1129	1.290	1.045
SDev	.0017	.0034	.0029	.0016	.0026	.060	.025
%RSD	11.20	16.77	8.825	4.238	2.334	4.645	2.433
#1	.0134	.0162	.0298	.0367	.1103	1.270	1.022
#2	.0143	.0224	.0325	.0370	.1128	1.243	1.040
#3	.0166	.0215	.0356	.0396	.1156	1.357	1.072

Elem	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0344	.0268	5.188	.0328	.0565	.0540	.1129
SDev	.0001	.0030	.052	.0042	.0188	.0111	.0105
%RSD	.4085	11.12	1.006	12.65	33.22	20.44	9.310
#1	.0343	.0242	5.229	.0287	.0389	.0423	.1008
#2	.0343	.0262	5.207	.0328	.0543	.0556	.1175
#3	.0345	.0301	5.129	.0370	.0763	.0642	.1203

Elem	Si1899	Ti3349	V 2924	Zn2138

Units	ppm	ppm	ppm	ppm
Avge	.0938	.0480	.0393	.0591
SDev	.0078	.0008	.0027	.0006
%RSD	8.279	1.587	6.989	1.032
#1	.0853	.0473	.0378	.0585
#2	.0955	.0478	.0376	.0591
#3	.1005	.0488	.0424	.0597

Method: ETCICPA Sample Name: DW Operator: RR
Run Time: 11/10/89 11:26:22
Comment: P70057 TFB SOIL PE DIL.; P70050 TFB SOIL DIL3
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3961	As1936	B 2497	Ba4934	Be3130	Cd3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0047	.0171	.0100	.0010	-.0003	.0002	-.0226
SDev	.0007	.0100	.0027	.0004	.0004	.0001	.0023
%RSD	14.78	58.58	26.96	37.50	-130.5	28.87	-10.24
#1	.0053	-.0120	.0095	-.0010	.0001	.0002	-.0200
#2	.0040	.0107	.0077	-.0014	-.0006	.0001	-.0245
#3	.0049	-.0286	.0130	.0006	-.0003	.0002	-.0233

Elem	Cd2265	Co2286	Cr2677	Cu3247	Fe2599	K 7664	Mg2790
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0023	-.0012	-.0009	.0035	.0013	.1529	-.0209
SDev	.0002	.0006	.0012	.0004	.0002	.0179	.0107
%RSD	9.362	-46.79	131.5	11.95	13.32	11.71	-51.32
#1	.0022	.0008	.0009	.0038	.0015	.1693	-.0089
#2	.0022	-.0018	-.0021	.0030	.0012	.1557	-.0271
#3	.0026	-.0009	.0003	.0038	.0012	.1338	-.0271

Elem	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0010	-.0013	.0290	.0009	-.0052	-.0067	.0019
SDev	.0006	.0006	.0084	.0007	.0038	.0022	.0140
%RSD	63.30	-45.83	28.89	74.40	-72.97	-32.74	754.1
#1	.0012	.0012	.0342	.0007	-.0064	-.0071	.0134
#2	.0005	.0008	.0194	.0016	-.0083	-.0043	.0058
#3	.0012	.0020	.0336	.0003	.0010	-.0086	.0136

Elem	Sn1899	Ti3349	V 2924	Zn2138
Units	ppm	ppm	ppm	ppm
Avge	.0238	-.0020	.0039	.0009
SDev	.0007	.0005	.0005	.0002
%RSD	2.902	24.51	13.04	28.16
#1	.0230	.0018	.0044	.0007
#2	.0242	.0026	.0039	.0011
#3	.0242	.0017	.0034	.0007

Method: ETCICPA Sample Name: RSCA2165 Operator: RR 100 1/10

Run Time: 11/10/89 11:28:53
Comment: P70057 TFB SOIL PE DIL.; P70050 TFB SOIL DILS
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3961	As1936	B 2497	Ba4934	Be3130	[redacted]179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avgs	.0043	4.607	.1601	.0391	.0720	.0016	19.54
SDev	.0011	.037	.0077	.0012	.0005	.0000	.25
%RSD	24.74	.8117	4.825	3.121	.7541	.0000	1.284
#1	.0031	4.563	.1512	.0377	.0714	.0016	19.25
#2	.0049	4.629	.1654	.0396	.0722	.0016	19.63
#3	.0049	4.627	.1637	.0400	.0725	.0016	19.73

Elem	Cd2265	Co2286	Cr2677	Cu3247	Fe2599	K 7664	Mg2790
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avgs	.0124	.0111	3.624	.4364	16.38	.5516	9.418
SDev	.0003	.0010	.048	.0042	.16	.0261	.053
%RSD	2.338	8.878	1.329	.9656	.9669	4.722	.5591
#1	.0120	.0100	3.570	.4317	16.20	.5243	9.358
#2	.0126	.0116	3.643	.4379	16.45	.5544	9.440
#3	.0124	.0118	3.660	.4397	16.49	.5762	9.456

Elem	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avgs	2.556	.0052	.25	.0148	.2672	.0291	.0049
SDev	.027	.0016	.00	.0010	.0053	.0040	.0053
%RSD	1.054	30.31	1.757	6.826	1.985	13.63	108.2
#1	2.526	.0066	.2466	.0139	.2624	.0337	.0086
#2	2.567	.0055	.2549	.0145	.2729	.0263	.0072
#3	2.576	.0035	.2485	.0159	.2662	.0275	-.0012

Elem	Sn1899	Ti3349	V 2924	Zn2138
Units	ppm	ppm	ppm	ppm
Avgs	.0159	.0804	.0230	.3413
SDev	.0020	.0016	.0012	.0042
%RSD	12.77	1.957	5.029	1.243
#1	.0142	.0791	.0219	.3367
#2	.0182	.0821	.0229	.3423
#3	.0154	.0800	.0242	.3450

Method: ETCICPA Sample Name: QSCA2165 Operator: RR
Run Time: 11/10/89 11:31:24
Comment: P70057 TFB SOIL PE DIL.; P70050 TFB SOIL DILS
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3961	As1936	B 2497	Ba4934	Be3130	[redacted]Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avgs	.0056	4.400	.1666	.0429	.0742	.0018	19.98
SDev	.0014	.021	.0051	.0011	.0004	.0001	.17
%RSD	25.00	.4748	3.071	2.555	.5348	3.093	.8696
#1	.0040	4.390	.1637	.0423	.0741	.0017	19.81
#2	.0063	4.385	.1637	.0423	.0739	.0019	19.96
#3	.0065	4.424	.1725	.0442	.0746	.0018	20.16

Elem	Cd2265	Co2286	Cr2677	Cu3247	Fe2599	K 7664	Mg2790
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avgs	.0128	.0121	3.710	.4647	16.64	.5999	9.579
SDev	.0000	.0010	.027	.0015	.11	.0415	.049
%RSD	.0000	8.329	.7199	.3178	.6364	6.909	.5131
#1	.0128	.0116	3.687	.4638	16.56	.5626	9.552
#2	.0128	.0115	3.704	.4638	16.60	.5926	9.549
#3	.0128	.0133	3.739	.4664	16.76	.6445	9.635

Elem	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avgs	2.608	.0075	.2674	.0157	.2690	.0303	.0088
SDev	.019	.0008	.0111	.0025	.0029	.0040	.0110
%RSD	.7475	10.77	4.155	16.13	1.072	13.27	125.4
#1	2.590	.0066	.2549	.0148	.2663	.0278	.0155
#2	2.605	.0078	.2711	.0138	.2720	.0349	-.0039
#3	2.629	.0082	.2762	.0186	.2686	.0281	.0148

Elem	Sr1899	Ti3349	V 2924	Zn2138
Units	ppm	ppm	ppm	ppm
Avgs	.0158	.0779	.0249	.3589
SDev	.0023	.0007	.0008	.0033
%RSD	14.35	.8975	3.150	.9236
#1	.0163	.0780	.0242	.3564
#2	.0133	.0772	.0247	.3577
#3	.0178	.0786	.0257	.3627

Method: ETCICPA Sample Name: DW Operator: RR
Run Time: 11/10/89 11:33:56
Comment: P70057 TFB SOIL PE DIL.; P70050 TFB SOIL DIES
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3961	As1936	B 2497	Ba4934	Be3130	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avgs	.0059	.0103	.0071	.0006	-.0004	.0002	-.0079
SDev	.0011	.0053	.0010	.0006	.0001	.0001	.0088
%RSD	18.41	52.04	14.43	152.8	-28.00	28.87	-112.1
#1	.0047	.0043	.0059	.0010	-.0005	.0001	.0018
#2	.0063	.0120	.0077	.0001	-.0003	.0002	-.0100
#3	.0067	.0145	.0077	.0003	-.0004	.0002	-.0154

Elem	Cd2265	Co2286	Cr2677	Cu3247	Fe2599	K 7664	Mg2790
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avgs	.0028	.0014	.0027	.0045	.0171	.2039	.0077
SDev	.0003	.0003	.0023	.0000	.0097	.0265	.0152
%RSD	10.18	17.96	83.78	.0000	56.64	13.01	197.0
#1	.0026	.0012	.0053	.0045	.0279	.1748	.0093
#2	.0028	.0015	.0021	.0045	.0146	.2267	.0124
#3	.0032	.0017	.0008	.0045	.0090	.2103	.0201

Elem	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm

Avgo	.0032	.0001	.0196	.0010	.0134	.0029	.0074
SDev	.0011	.0012	.0107	.0020	.0060	.0060	.0142
%RSD	33.82	916.5	54.80	196.4	44.97	207.3	191.5
#1	.0044	.0004	.0097	.0033	.0124	.0065	.0176
#2	.0032	-.0012	.0181	.0005	-.0199	.0062	-.0088
#3	.0022	.0012	.0310	.0002	.0080	.0040	.0134

Elem	Sn1899	Ti3349	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm
Avgo	.0230	.0022	.0054	.0002
SDev	.0052	.0002	.0014	.0001
%RSD	22.47	7.319	26.23	63.10
#1	.0221	.0020	.0039	.0003
#2	.0183	.0023	.0055	.0001
#3	.0285	.0023	.0068	.0001

Method: ICPCPA Sample Name: DSCA2165 Operator: RR

Run Time: 11/10/89 11:36:27

Comment: P70057-TFB SOIL PE DIL.; P70050 TFB SOIL DILS

Mode: CONC Corr. Factor: 1

1/50

Elem	Ag3280	Al3961	As1936	B 2497	Ba4934	Be3130	Ca4179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avgo	.0092	.9716	.0390	.0052	.0145	.0007	4.209
SDev	.0010	.0084	.0057	.0006	.0001	.0000	.037
%RSD	10.81	.8655	14.61	11.18	.8816	.0000	.8894
#1	.0088	.9703	.0325	.0047	.0143	.0007	4.168
#2	.0085	.9805	.0431	.0051	.0146	.0007	4.216
#3	.0104	.9639	.0414	.0058	.0145	.0007	4.242

Elem	Cd2265	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Mg2790
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avgo	.0057	.0025	.7734	.0981	3.494	.4388	2.046
SDev	.0008	.0007	.0032	.0000	.030	.0222	.006
%RSD	13.32	29.60	.4109	.0000	.8710	5.069	.2952
#1	.0056	.0021	.7698	.0981	3.460	.4287	2.040
#2	.0050	.0033	.7743	.0981	3.503	.4233	2.050
#3	.0066	.0020	.7759	.0981	3.519	.4642	2.050

Elem	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avgo	.5494	.0001	.0912	.0029	.0543	.0022	.0039
SDev	.0034	.0013	.0129	.0002	.0039	.0039	.0054
%RSD	.6204	964.4	14.17	6.462	7.218	179.0	137.8
#1	.5456	.0004	.0813	.0027	.0506	.0059	.0005
#2	.5504	.0008	.0865	.0031	.0539	.0019	.0012
#3	.5521	.0016	.1059	.0028	.0584	.0025	.0102

Elem	Sn1899	Ti3349	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm
Avgo	.0153	.0023	.0118	.075
SDev	.0053	.0006	.0014	.001
%RSD	34.55	23.86	11.97	.6239

#1	.0094	.0028	.0111	.0745
#2	.0170	.0017	.0109	.0755
#3	.0196	.0025	.0134	.0751

Method: ETCICPA Sample Name: DW Operator: RR
Run Time: 11/10/89 11:38:58
Comment: P70057 IEB SOIL PE DIL.; P70050 IEB SOIL DILS
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3961	As1936	B 2497	Ba4934	Be3130	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0056	.0141	.0071	.0015	.0004	.0002	.0088
SDev	.0006	.0049	.0057	.0002	.0005	.0001	.0117
%RSD	10.20	34.42	80.36	14.43	114.6	28.87	132.8
#1	.0051	.0120	.0095	.0018	.0000	.0001	.0047
#2	.0063	.0197	.0006	.0014	.0009	.0002	.0154
#3	.0056	.0107	.0112	.0014	.0003	.0002	.0157

Elem	Cd2265	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Mg2790
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0021	.0018	.0012	.0044	.0191	.1666	.0126
SDev	.0006	.0013	.0028	.0002	.0157	.0055	.0221
%RSD	29.22	73.38	240.1	4.811	82.13	3.279	174.9
#1	.0018	.0011	.0040	.0045	.0369	.1611	.0031
#2	.0016	.0033	.0016	.0041	.0133	.1720	.0379
#3	.0028	.0010	.0011	.0045	.0071	.1666	.0031

Elem	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0029	.0009	.0127	.0016	.0078	.0001	.0083
SDev	.0011	.0009	.0063	.0016	.0054	.0119	.0203
%RSD	36.32	98.97	49.39	101.4	68.66	11540.	243.3
#1	.0041	.0004	.0058	.0006	.0038	.0062	.0023
#2	.0024	.0020	.0181	.0035	.0139	.0136	.0317
#3	.0022	.0004	.0142	.0007	.0057	.0077	.0044

Elem	Si1899	Ti3349	V 2924	Zn2138
Units	ppm	ppm	ppm	ppm
Avge	.0245	.0022	.0049	.0003
SDev	.0022	.0004	.0008	.0006
%RSD	9.106	17.20	16.08	220.6
#1	.0270	.0022	.0042	.0004
#2	.0235	.0025	.0047	.0007
#3	.0229	.0018	.0057	.0006

Method: ETCICPA Sample Name: RSCA2165 Operator: RR
Run Time: 11/10/89 11:41:30
Comment: P70057 IEB SOIL PE DIL.; P70050 IEB SOIL DILS
Mode: CONC Corr. Factor: 1

1/25

Elem	Ag3280	Al3961	As1936	B 2497	Ba4934	Be3130	Ca3179

Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0066	1.864	.0768	.0165	.0293	.0009	8.070
SDev	.0019	.010	.0061	.0017	.0006	.0001	.147
%RSD	28.71	.5503	7.994	10.06	1.993	15.80	1.822
#1	.0051	1.854	.0733	.0153	.0287	.0008	7.968
#2	.0060	1.874	.0733	.0157	.0293	.0009	8.003
#3	.0088	1.864	.0839	.0184	.0298	.0011	8.239

Elem	Cd2265	Co2286	Cr2677	Cu3247	Fe2599	K 7664	Mg2790
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0072	.0041	1.488	.1809	6.728	.3914	3.856
SDev	.0008	.0033	.022	.0020	.075	.0514	.054
%RSD	10.96	80.07	1.464	1.113	1.115	13.13	1.396
#1	.0066	.0015	1.473	.1795	6.673	.3577	3.807
#2	.0069	.0030	1.479	.1799	6.698	.3659	3.848
#3	.0081	.0079	1.513	.1832	6.814	.4506	3.914

Elem	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.052	.0010	.1607	.0062	.1145	.0098	.0046
SDev	.013	.0028	.0157	.0033	.0144	.0180	.0102
%RSD	1.192	266.0	9.738	53.06	12.56	184.4	221.1
#1	1.043	-.0020	.1439	.0032	.1026	-.0056	.0009
#2	1.045	.0016	.1633	.0057	.1104	.0053	.0032
#3	1.066	.0035	.1749	.0098	.1305	.0296	.0162

Elem	Sr1899	Ti3349	V 2924	Zn2138
Units	ppm	ppm	ppm	ppm
Avge	.0090	.0276	.0142	.1459
SDev	.0081	.0002	.0022	.0025
%RSD	90.27	.5421	15.65	1.690
#1	.0064	.0275	.0129	.1444
#2	.0181	.0277	.0129	.1445
#3	.0025	.0275	.0168	.1487

Method: ETCTCPA Sample Name: QSCA2165 Operator: RR
Run Time: 11/10/89 13:44:01
Comment: P70057 TFB 30ff PE Dif.; P70050 TFB 30ff DEI3
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3961	As1936	B 2497	Ba4934	Be3130	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0054	1.776	.0685	.0151	.0293	.0008	8.128
SDev	.0022	.005	.0074	.0015	.0004	.0001	.127
%RSD	40.16	.2733	10.77	10.19	1.228	12.00	1.563
#1	.0033	1.774	.0626	.0134	.0291	.0007	8.020
#2	.0076	1.782	.0760	.0165	.0297	.0009	8.268
#3	.0053	1.773	.0662	.0153	.0290	.0008	8.096

Elem	Cd2265	Co2286	Cr2677	Cu3247	Fe2599	K 7664	Mg2790
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0067	.0044	1.518	.1894	6.815	.3450	3.909

SDev	.0012	.0009	.018	.0015	.064	.0633	.037
%RSD	17.29	21.13	1.212	.7717	.9398	18.35	.9497
#1	.0054	.0037	1.502	.1879	6.750	.2867	3.881
#2	.0077	.0054	1.538	.1909	6.878	.4124	3.951
#3	.0069	.0040	1.513	.1894	6.818	.3359	3.896

Elem	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.067	.0035	.1067	.0072	.1141	.0177	.0079
SDev	.011	.0020	.0099	.0022	.0137	.0053	.0095
%RSD	1.007	57.74	9.259	29.91	11.99	29.92	121.3
#1	1.056	.0023	.0955	.0059	.1064	.0120	.0005
#2	1.078	.0059	.1142	.0097	.1299	.0225	.0183
#3	1.066	.0023	.1104	.0060	.1060	.0185	.0058

Elem	Sn1899	Ti3349	V 2924	Zn2138
Units	ppm	ppm	ppm	ppm
Avge	.0011	.0286	.0125	.1450
SDev	.0044	.0001	.0017	.0022
%RSD	395.2	.3749	13.37	1.539
#1	.0010	.0286	.0109	.1434
#2	.0033	.0286	.0142	.1476
#3	.0056	.0288	.0124	.1442

Method: ETCrICPA Sample Name: OW Operator: RR
Run Time: 11/10/89 11:46:33
Comment: P70057 FEB 3011. PE Off.; P70050 FEB 30ff. DIG3
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3961	As1936	B 2497	Ba4934	Be3130	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0040	.0038	.0059	.0011	.0003	.0002	.0144
SDev	.0004	.0131	.0081	.0002	.0001	.0001	.0049
%RSD	8.646	340.5	137.5	19.25	56.69	34.64	33.75
#1	.0044	.0111	.0012	.0010	.0002	.0002	.0088
#2	.0040	.0133	.0041	.0014	.0004	.0001	.0178
#3	.0037	.0094	.0148	.0010	.0001	.0001	.0166

Elem	Cd2265	Co2286	Cr2677	Cu3247	Fe2599	K 7664	Mg2790
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0028	.0010	.0023	.0035	.0094	.1493	.0034
SDev	.0004	.0013	.0019	.0009	.0064	.0265	.0101
%RSD	13.88	128.0	80.00	26.03	68.55	17.77	300.3
#1	.0030	.0000	.0043	.0045	.0167	.1720	.0039
#2	.0024	.0025	.0006	.0027	.0068	.1557	.0131
#3	.0032	.0005	.0021	.0034	.0046	.1202	.0070

Elem	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0017	.0013	.0071	.0003	.0046	.0041	.0250
SDev	.0006	.0015	.0055	.0018	.0043	.0107	.0146
%RSD	37.80	113.6	77.67	561.3	91.52	259.8	58.55

#1	.0024	.0020	.0129	.0010	.0092	.0142	.0127
#2	.0015	.0004	.0019	.0023	.0039	.0071	.0210
#3	.0012	.0023	.0065	.0004	.0008	.0053	.0412

Elem	Sn1899	Ti3349	V .2924	Zn2138
Units	ppm	ppm	ppm	ppm
Avge	.0261	.0020	.0039	.0000
SDev	.0073	.0003	.0011	.0006
%RSD	27.80	13.11	28.43	2183.

#1	.0190	.0018	.0047	.0005
#2	.0335	.0022	.0027	.0001
#3	.0258	.0018	.0044	.0006

Method: EPCICPA Sample Name: DSCA2165 Operator: RR 1/125
Run Time: 11/10/89 11:49:04
Comment: P70057 IFB SOIL PE DIL.; P70050 IFB SOIL DILS
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3961	As1936	B .2497	Ba4934	Be3130	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0064	.3710	.0154	.0006	.0056	.0003	1.673
SDev	.0014	.0077	.0074	.0007	.0002	.0001	.015
%RSD	21.53	2.083	48.04	103.9	3.434	15.75	.9018

#1	.0051	.3791	.0130	.0010	.0058	.0003	1.658
#2	.0063	.3702	.0095	.0010	.0056	.0003	1.688
#3	.0079	.3637	.0236	.0001	.0054	.0004	1.673

Elem	Cd2265	Co2286	Cr2677	Cu3247	Fe2599	K .7664	Mg2790
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0034	.0022	.3117	.0423	1.416	.2776	.8067
SDev	.0003	.0017	.0026	.0011	.024	.0167	.0163
%RSD	8.486	78.15	.8460	2.641	1.689	6.010	2.020

#1	.0032	.0010	.3091	.0410	1.389	.2594	.8051
#2	.0033	.0014	.3143	.0425	1.435	.2813	.8237
#3	.0037	.0042	.3116	.0432	1.424	.2922	.7912

Elem	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.2230	.0012	.0475	.0002	.0201	.0033	.0118
SDev	.0020	.0014	.0043	.0005	.0017	.0073	.0126
%RSD	.8724	115.5	9.038	188.3	8.352	220.7	106.9

#1	.2211	.0004	.0426	.0000	.0208	.0037	.0259
#2	.2250	.0004	.0503	.0008	.0214	.0108	.0079
#3	.2230	.0027	.0497	.0000	.0182	.0028	.0016

Elem	Si1899	Ti3349	V .2924	Zn2138
Units	ppm	ppm	ppm	ppm
Avge	.0245	.0034	.0066	.0296
SDev	.0011	.0005	.0011	.0003
%RSD	4.568	13.32	16.22	.8649

#1	.0258	.0037	.0057	.0298
#2	.0242	.0037	.0062	.0293
#3	.0237	.0029	.0078	.0297

Method: ETCICPA Sample Name: DW Operator: RR
Run Time: 11/10/89 11:51:36
Comment: P70057 IFB SOIL PE DIL.; P70050 IFB SOIL DILS
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3961	As1936	B 2497	Ba4934	Be3130	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avgs	.0054	.0064	.0148	.0014	.0004	.0002	-.0167
SDev	.0019	.0065	.0047	.0010	.0003	.0001	.0037
%RSD	34.15	100.7	31.75	72.16	76.26	34.64	-22.21
#1	.0037	-.0004	.0112	.0022	-.0005	.0001	-.0124
#2	.0051	-.0133	.0130	.0018	-.0008	.0001	-.0187
#3	.0074	-.0056	.0201	.0003	-.0001	.0002	-.0189

Elem	Cd2265	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Mg2790
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avgs	.0025	-.0017	.0006	.0037	.0146	.1393	-.0214
SDev	.0010	.0004	.0017	.0004	.0126	.0570	.0186
%RSD	41.31	-23.41	293.2	11.55	86.66	40.94	-87.15
#1	.0018	-.0021	.0021	.0034	.0291	.1120	-.0193
#2	-.0020	-.0013	-.0013	.0034	.0077	.1010	-.0410
#3	.0037	-.0017	.0010	.0041	.0068	.2048	-.0039

Elem	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avgs	.0016	.0009	-.0103	.0001	-.0034	-.0075	.0016
SDev	.0005	.0008	.0073	.0030	.0127	.0066	.0175
%RSD	31.22	89.21	70.99	2041.	373.2	87.89	1082.
#1	.0022	-.0012	.0052	.0010	-.0071	-.0034	-.0185
#2	.0012	-.0016	.0071	.0036	-.0138	-.0151	.0134
#3	.0015	.0000	.0187	.0021	.0107	-.0040	.0099

Elem	Sn1899	Ti3349	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm
Avgs	.0260	-.0017	.0047	.0004
SDev	.0086	.0003	.0012	.0001
%RSD	32.95	16.29	25.00	16.89
#1	.0259	-.0020	.0044	.0004
#2	.0346	-.0017	.0037	.0004
#3	.0175	-.0015	.0060	.0005

Method: ETCICPA Sample Name: RSALUM50 Operator: RR
Run Time: 11/10/89 11:54:07
Comment: P70057 IFB SOIL PE DIL.; P70050 IFB SOIL DILS
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3961	As1936	B 2497	Ba4934	Be3130	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avgs	.0053	49.86	.7302	.0033	.0004	.0002	-.0269
SDev	.0012	.17	.0067	.0016	.0004	.0001	.0046
%RSD	21.88	.3431	.9189	48.04	104.2	28.87	-17.11

#1	.0051	49.67	.7255	.0028	-.0003	.0002	.0264
#2	.0042	50.00	.7273	.0020	-.0008	.0001	.0318
#3	.0065	49.90	.7379	.0051	.0000	.0002	.0226

Elem	Cd2265	Co2286	Cr2677	Cu3247	Fe2599	K 7664	Mg2790
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0062	-.0019	.0001	-.0041	.0048	.1320	.0183
SDev	.0009	.0005	.0012	.0006	.0007	.0262	.0130
%RSD	13.66	-28.82	-1083.	-15.28	13.58	19.88	71.00

#1	.0062	-.0017	.0011	.0045	.0050	.1365	-.0070
#2	.0054	-.0025	-.0013	.0034	.0040	.1038	-.0325
#3	.0071	-.0015	-.0001	.0045	.0053	.1557	-.0155

Elem	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0024	-.0001	.0303	-.0015	-.0145	.0032	.0069
SDev	.0001	.0002	.0137	.0030	.0054	.0060	.0125
%RSD	5.973	-173.2	45.28	-203.9	-37.52	212.3	180.4

#1	.0024	.0000	.0181	-.0012	-.0147	.0108	-.0060
#2	.0022	-.0004	.0278	.0046	-.0198	.0022	.0190
#3	.0024	.0000	.0452	.0014	-.0090	.0009	.0079

Elem	Sn1899	Ti3349	V 2924	Zn2138
Units	ppm	ppm	ppm	ppm
Avge	.0215	.0068	.0045	-.0003
SDev	.0053	.0008	.0009	.0004
%RSD	24.64	11.08	19.88	-141.6

#1	.0173	.0065	.0044	-.0002
#2	.0275	.0063	.0037	.0007
#3	.0197	.0077	.0055	.0001

Method: ICPICPA Sample Name: DW Operator: RR
Run Time: 11/10/89 11:56:39
Comment: P70057 FEB SOIL PE DIL.; P70050 FEB SOIL DILS
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3961	As1936	B 2497	Ba4934	Be3130	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0047	.0415	.0095	.0020	-.0003	.0001	-.0235
SDev	.0009	.0374	.0031	.0002	.0002	.0000	.0017
%RSD	18.32	90.13	32.48	10.83	-71.19	.0000	-7.183

#1	.0051	.0842	.0130	.0022	.0001	.0001	-.0251
#2	.0053	.0252	.0077	.0022	.0006	.0001	-.0238
#3	.0037	.0150	.0077	.0018	.0003	.0001	-.0217

Elem	Cd2265	Co2286	Cr2677	Cu3247	Fe2599	K 7664	Mg2790
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0016	.0014	-.0012	.0032	.0010	.1165	-.0315
SDev	.0004	.0009	.0009	.0004	.0002	.0155	.0168
%RSD	23.08	63.94	-77.78	13.32	17.32	13.33	-53.44

#1	.0020	-.0011	-.0003	.0034	.0009	.1120	-.0162

#2	.0013	.0025	.0021	.0027	.0012	.1338	.0495
#3	.0016	.0007	.0011	.0034	.0009	.1038	.0286

Elem	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0005	.0013	.0103	.0015	.0039	.0065	.0032
SDev	.0000	.0005	.0089	.0003	.0105	.0057	.0146
%RSD	.0000	34.64	86.60	19.97	272.4	87.29	451.7
#1	.0005	.0008	.0052	.0016	.0047	.0003	.0072
#2	.0005	.0016	.0052	.0017	.0156	.0077	.0130
#3	.0005	.0016	.0207	.0012	.0007	.0114	.0155

Elem	Sn1899	Ti3349	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm
Avge	.0262	.0019	.0035	.0004
SDev	.0027	.0007	.0002	.0003
%RSD	10.46	34.71	4.225	73.81
#1	.0231	.0012	.0034	.0001
#2	.0282	.0025	.0034	.0007
#3	.0274	.0019	.0037	.0005

Method: EPCICPA Sample Name: DW Operator: RR
Run Time: 11/10/89 11:59:11
Comment: P70057 TFB SOIL PE Dil.; P70050 TFB SOIL Dil3
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3961	As1936	B 2497	Ba4934	Be3130	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0059	.0090	.0112	.0018	.0005	.0002	.0234
SDev	.0011	.0085	.0018	.0004	.0002	.0001	.0012
%RSD	18.18	95.12	15.79	21.43	42.11	34.64	5.268
#1	.0056	.0068	.0130	.0018	.0003	.0001	.0220
#2	.0051	.0017	.0095	.0022	.0006	.0001	.0239
#3	.0072	.0184	.0112	.0014	.0007	.0002	.0243

Elem	Cd2265	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Mg2790
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0027	.0017	.0014	.0038	.0020	.1447	.0173
SDev	.0008	.0017	.0008	.0006	.0005	.0492	.0106
%RSD	28.20	98.08	58.32	16.76	24.12	34.01	61.12
#1	.0032	.0007	.0009	.0034	.0015	.1311	.0124
#2	.0018	.0008	.0023	.0036	.0019	.1038	.0101
#3	.0032	.0037	.0009	.0045	.0025	.1994	.0294

Elem	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0012	.0012	.0129	.0020	.0019	.0024	.0028
SDev	.0000	.0017	.0090	.0016	.0061	.0023	.0072
%RSD	.0000	145.3	69.46	79.00	313.1	96.14	260.2
#1	.0012	.0020	.0174	.0007	.0032	.0049	.0086
#2	.0012	.0008	.0026	.0015	.0004	.0015	.0053
#3	.0012	.0023	.0187	.0037	.0087	.0006	.0051

Elem	Sb1899	Tl3349	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm
Avge	.0233	.0020	.0050	.0009
SDev	.0040	.0002	.0008	.0003
%RSD	16.97	11.74	16.35	33.05
#1	.0272	.0017	.0047	.0006
#2	.0193	.0021	.0044	.0012
#3	.0234	.0021	.0060	.0008

Method: ETCICPA Sample Name: CBBLK Operator: RR
Run Time: 11/10/89 12:01:43
Comment: P70057 TFB SOIL PE DIL.; P70050 TFB SOIL DILS
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3961	As1936	B 2497	Ba4934	Be3130	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0053	.0150	.0112	.0005	.0006	.0002	.0171
SDev	.0010	.0111	.0061	.0008	.0005	.0001	.0037
%RSD	18.10	73.90	54.70	150.0	82.51	34.64	21.92
#1	.0042	.0171	.0077	.0003	.0007	.0001	.0184
#2	.0056	.0248	.0077	.0005	.0011	.0001	.0200
#3	.0060	.0030	.0183	.0013	.0001	.0002	.0128

Elem	Cd2265	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Mg2790
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0027	.0027	.0010	.0040	.0021	.1393	.0260
SDev	.0001	.0011	.0025	.0004	.0008	.0142	.0271
%RSD	4.028	42.49	238.7	10.50	37.75	10.19	104.0
#1	.0026	.0025	.0004	.0038	.0012	.1229	.0271
#2	.0028	.0039	.0037	.0038	.0022	.1475	.0526
#3	.0028	.0017	.0011	.0045	.0028	.1475	.0015

Elem	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0007	.0007	.0211	.0022	.0094	.0090	.0072
SDev	.0004	.0012	.0091	.0038	.0139	.0134	.0071
%RSD	57.73	183.3	43.33	167.8	147.4	149.5	98.85
#1	.0005	.0004	.0161	.0005	.0091	.0006	.0102
#2	.0005	.0020	.0155	.0066	.0236	.0244	.0123
#3	.0012	.0004	.0316	.0004	.0043	.0019	.0009

Elem	Sb1899	Tl3349	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm
Avge	.0226	.0026	.0049	.0006
SDev	.0013	.0010	.0009	.0006
%RSD	5.694	37.37	18.48	96.53
#1	.0218	.0025	.0039	.0005
#2	.0241	.0035	.0050	.0013
#3	.0219	.0016	.0057	.0001

Method: EPCICPA Sample Name: CSMIDCIK Operator: RR
Run Time: 11/10/89 12:04:14
Comment: P70057 TPB SOIL PE DIL.; P70050 TPB SOIL DILS
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3961	As1936	B 2497	Ba4934	Be3130	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.1089	2.508	.5317	.5300	1.038	.1051	10.81
SDev	.0028	.021	.0098	.0039	.005	.0008	.16
%RSD	2.524	.8201	1.836	.7312	.5270	.7737	1.443
#1	.1087	2.489	.5252	.5266	1.031	.1046	10.73
#2	.1062	2.506	.5270	.5291	1.042	.1046	10.71
#3	.1117	2.530	.5430	.5342	1.040	.1060	10.99

Elem	Cd2265	Co2286	Cr2677	Cu3247	Fe2599	K 7664	Mg2790
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.1155	.2202	.3291	.3185	1.076	4.194	10.34
SDev	.0025	.0069	.0038	.0031	.012	.045	.08
%RSD	2.130	3.110	1.142	.9621	1.131	1.075	.8215
#1	.1156	.2180	.3252	.3169	1.069	4.181	10.26
#2	.1130	.2147	.3294	.3166	1.069	4.156	10.34
#3	.1179	.2279	.3327	.3221	1.090	4.244	10.43

Elem	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.3269	.2691	50.13	.3339	.5514	.5109	1.063
SDev	.0036	.0048	.33	.0079	.0203	.0166	.018
%RSD	1.101	1.783	.6590	2.377	3.677	3.245	1.731
#1	.3245	.2655	49.84	.3274	.5393	.4997	1.045
#2	.3252	.2671	50.49	.3315	.5402	.5031	1.062
#3	.3310	.2745	50.04	.3427	.5748	.5300	1.081

Elem	Sr1899	Ti3349	V 2924	Zn2138
Units	ppm	ppm	ppm	ppm
Avge	1.074	.5185	.3276	.5417
SDev	.018	.0042	.0045	.0053
%RSD	1.634	.8006	1.377	.9823
#1	1.064	.5152	.3258	.5376
#2	1.064	.5171	.3242	.5398
#3	1.094	.5232	.3327	.5477

Method: EPCICPA Sample Name: DW Operator: RR
Run Time: 11/10/89 12:06:46
Comment: P70057 TPB SOIL PE DIL.; P70050 TPB SOIL DILS
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3961	As1936	B 2497	Ba4934	Be3130	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0078	.0056	.0124	.0006	.0011	.0004	.0077
SDev	.0030	.0141	.0041	.0014	.0008	.0001	.0078
%RSD	38.27	253.8	32.99	227.2	69.17	38.19	101.5
#1	.0076	.0056	.0148	.0013	.0015	.0005	.0021
#2	.0108	.0085	.0148	.0016	.0015	.0004	.0044

#3	.0049	-.0197	.0077	.0010	.0002	.0002	-.0166
Elem	Cd2265	Co2286	Cr2677	Cu3247	Fe2599	K 7664	Mg2790
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0039	-.0010	.0017	.0044	.0052	.2103	.0064
SDev	.0017	.0032	.0027	.0002	.0031	.0656	.0245
%RSD	43.01	-326.2	162.5	4.811	60.70	31.20	380.7
#1	.0045	.0045	-.0002	.0045	.0071	.2321	.0031
#2	.0052	.0017	.0048	.0045	.0068	.2622	.0325
#3	.0020	.0001	.0005	.0041	.0015	.1365	-.0162
Elem	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Be1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0019	.0005	.0833	.0016	.0056	.0018	.0141
SDev	.0006	.0014	.0379	.0040	.0121	.0140	.0261
%RSD	30.12	263.4	45.47	243.4	214.9	800.2	185.1
#1	.0022	.0004	.1194	.0009	.0002	-.0022	-.0046
#2	.0022	.0020	.0865	.0062	.0195	.0173	.0439
#3	.0012	-.0008	.0439	.0004	-.0028	-.0099	.0030
Elem	Sn1899	Ti3349	V 2924	Zn2138			
Units	ppm	ppm	ppm	ppm			
Avge	.0206	.0008	.0071	.0000			
SDev	.0047	.0007	.0024	.0007			
%RSD	22.69	89.92	33.58	2793.			
#1	.0173	.0012	.0078	.0001			
#2	.0260	.0000	.0093	.0008			
#3	.0186	-.0013	.0044	.0006			

Method: ETCICPA Sample Name: RBCA1365 Operator: RR
Run Time: 11/10/89 12:09:17
Comments: P70057 DEB SOIL PE DIL.; P70050 DEB SOIL DILS
Mode: CONC Corr. Factor: 1

1/10

Elem	Ag3280	Al3961	As1936	B 2497	Ba4934	Be3130	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0082	2.960	.0585	.0073	.0511	.0005	.3679
SDev	.0029	.024	.0074	.0014	.0005	.0001	.0065
%RSD	35.72	.8132	12.62	18.65	1.053	18.75	1.777
#1	.0095	2.955	.0609	.0077	.0505	.0005	.3633
#2	.0049	2.986	.0502	.0058	.0516	.0004	.3649
#3	.0104	2.939	.0644	.0085	.0511	.0006	.3753
Elem	Cd2265	Co2286	Cr2677	Cu3247	Fe2599	K 7664	Mg2790
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0057	.0051	.0063	.0135	5.473	.5407	.7585
SDev	.0014	.0032	.0025	.0013	.016	.0724	.0252
%RSD	25.02	61.78	39.93	9.492	.2879	13.39	3.316
#1	.0056	.0029	.0062	.0136	5.461	.5571	.7363
#2	.0043	.0037	.0038	.0122	5.490	.4615	.7533
#3	.0071	.0087	.0089	.0147	5.467	.6035	.7858
Elem	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Be1960

Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avgs	.6117	-.0004	.0772	.0066	.0041	.0061	.0039
SDev	.0017	.0020	.0155	.0034	.0169	.0146	.0233
%RSD	.2783	519.6	20.06	51.62	411.6	240.2	593.3
#1	.6110	-.0016	.0768	.0045	-.0067	-.0170	-.0116
#2	.6137	-.0016	.0620	.0048	-.0046	-.0117	-.0074
#3	.6105	.0020	.0929	.0105	.0236	.0105	.0308

Elem	Sn1899	Ti3349	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm
Avgs	.0238	.0898	.0168	.0184
SDev	.0036	.0007	.0021	.0006
%RSD	15.04	.7545	12.53	3.383
#1	.0267	.0890	.0173	.0186
#2	.0248	.0903	.0145	.0177
#3	.0198	.0901	.0186	.0190

Method: EPCICPA Sample Name: QSCA1365 Operator: RR

Run Time: 11/10/89 12:11:49

Comments: P70057 TFB SOIL PE Dil.; P70050 TFB SOIL DILS

Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3961	As1936	B 2497	Ba4934	Be3130	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avgs	.0082	2.755	.0549	.0061	.0603	.0005	.3457
SDev	.0005	.027	.0062	.0002	.0006	.0000	.0028
%RSD	5.782	.9834	11.33	3.608	.9152	.0000	.8061
#1	.0079	2.737	.0484	.0058	.0598	.0005	.3426
#2	.0088	2.741	.0555	.0062	.0601	.0005	.3466
#3	.0081	2.786	.0609	.0062	.0609	.0005	.3480

Elem	Cd2265	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Mg2790
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avgs	.0047	.0029	.0044	.0086	4.903	.5334	.6657
SDev	.0008	.0019	.0015	.0006	.042	.0252	.0012
%RSD	16.65	63.07	34.62	6.454	.8509	4.729	.1775
#1	.0041	.0046	.0059	.0082	4.862	.5189	.6659
#2	.0056	.0009	.0029	.0093	4.901	.5626	.6644
#3	.0045	.0033	.0042	.0085	4.946	.5189	.6667

Elem	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avgs	.7223	.0009	.0764	.0046	.0020	.0088	.0069
SDev	.0063	.0015	.0142	.0005	.0108	.0074	.0021
%RSD	.8653	162.3	18.64	11.59	546.3	84.73	30.55
#1	.7165	.0016	.0607	.0048	.0063	.0161	.0046
#2	.7214	.0020	.0884	.0040	.0099	.0090	.0074
#3	.7289	.0008	.0800	.0051	.0103	.0012	.0088

Elem	Sn1899	Ti3349	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm
Avgs	.0211	.0797	.0151	.0188
SDev	.0027	.0011	.0010	.0007

%RSD	12.56	1.331	6.417	3.478
#1	.0219	.0791	.0145	.0184
#2	.0233	.0790	.0163	.0184
#3	.0181	.0809	.0147	.0195

Method: EPCICPA Sample Name: DW Operator: RR
Run Time: 11/10/89 12:14:20
Comment: P70057-IFB 30IL PE DIL.; P70050 IFB 30IL DIL3
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3961	As1936	B 2497	Ba4934	Be3130	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0059	-.0034	.0095	.0022	-.0002	.0002	-.0232
SDev	.0025	.0107	.0053	.0004	.0004	.0001	.0055
%RSD	41.66	-312.2	56.25	17.65	-219.3	34.64	-23.73
#1	.0053	.0085	.0041	-.0022	.0001	.0001	-.0213
#2	.0085	-.0068	.0095	-.0018	.0000	.0002	-.0188
#3	.0037	-.0120	.0148	-.0025	-.0006	.0001	-.0293

Elem	Cd2265	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Mg2790
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.0026	.0019	-.0003	.0038	.0119	.1639	-.0137
SDev	.0012	.0006	.0010	.0007	.0084	.0402	.0101
%RSD	47.98	32.25	-401.4	19.35	70.84	24.55	-73.87
#1	.0024	-.0015	.0007	.0038	.0208	.1720	-.0031
#2	.0039	.0017	-.0002	.0045	.0108	.1994	-.0232
#3	.0014	.0027	-.0013	.0030	.0040	.1202	-.0147

Elem	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0024	.0007	.0164	.0017	-.0046	-.0048	.0076
SDev	.0009	.0002	.0116	.0022	.0081	.0039	.0014
%RSD	36.33	34.64	71.09	130.7	-176.4	-81.33	18.92
#1	.0032	-.0004	.0084	.0001	-.0065	-.0068	.0065
#2	.0024	.0008	.0297	.0010	.0043	-.0003	.0072
#3	.0015	-.0008	.0110	.0041	-.0115	-.0074	.0093

Elem	Sn1899	Ti3349	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm
Avge	.0228	.0019	.0043	.0007
SDev	.0072	.0009	.0016	.0006
%RSD	31.64	45.70	36.66	79.93
#1	.0242	.0012	.0039	.0002
#2	.0150	.0016	.0060	.0006
#3	.0293	.0029	.0029	.0014

Method: EPCICPA Sample Name: DSCA1365 Operator: RR
Run Time: 11/10/89 12:16:51
Comment: P70057-IFB 30IL PE DIL.; P70050 IFB 30IL DIL3
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3961	As1936	B 2497	Ba4934	Be3130	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0076	.5668	.0148	.0020	.0097	.0003	.0476
SDev	.0018	.0071	.0018	.0009	.0003	.0001	.0039
%RSD	24.00	1.246	12.00	43.30	3.070	30.00	8.265
#1	.0058	.5587	.0148	.0025	.0093	.0002	.0438
#2	.0076	.5715	.0165	.0025	.0099	.0003	.0474
#3	.0095	.5702	.0130	.0010	.0098	.0004	.0517

Elem	Cd2265	Co2286	Cr2677	Cu3247	Fe2599	K 7664	Mg2790
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0033	.0003	.0010	.0045	1.076	.3477	.1323
SDev	.0011	.0020	.0011	.0000	.009	.0373	.0112
%RSD	31.52	736.2	106.9	.0000	.8362	10.72	8.434
#1	.0024	.0015	.0002	.0045	1.070	.3222	.1230
#2	.0032	.0014	.0015	.0045	1.071	.3304	.1446
#3	.0045	.0021	.0018	.0045	1.086	.3905	.1292

Elem	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.1213	.0009	.0407	.0021	.0004	.0038	.0042
SDev	.0007	.0010	.0140	.0028	.0156	.0103	.0033
%RSD	.5789	107.9	34.38	129.2	3942.	271.6	78.76
#1	.1209	.0008	.0323	.0003	-.0175	.0158	.0067
#2	.1209	.0000	.0329	.0016	.0104	.0025	.0053
#3	.1221	.0020	.0568	.0051	.0083	.0019	.0005

Elem	Si1899	Ti3349	V 2924	Zn2138
Units	ppm	ppm	ppm	ppm
Avge	.0312	.0123	.0086	.0056
SDev	.0075	.0005	.0020	.0005
%RSD	23.89	3.943	23.07	9.001
#1	.0261	.0121	.0070	.0051
#2	.0278	.0128	.0080	.0056
#3	.0398	.0119	.0109	.0061

Method: EPCICPA Sample Name: DW Operator: RR
Run Time: 11/10/89 12:19:22
Comments: P70057 IFB SOIL PE Dil.; P70050 IFB SOIL DIL3
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3961	As1936	B 2497	Ba4934	Be3130	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0053	.0056	.0095	.0020	.0001	.0002	.0187
SDev	.0011	.0068	.0071	.0008	.0004	.0001	.0047
%RSD	19.64	122.1	75.00	39.03	432.7	34.64	25.02
#1	.0044	.0107	.0024	.0029	.0004	.0001	.0223
#2	.0065	.0021	.0095	.0014	.0003	.0002	.0134
#3	.0051	.0081	.0165	.0018	.0002	.0003	.0205

Elem	Cd2265	Co2286	Cr2677	Cu3247	Fe2599	K 7664	Mg2790
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm

Avge	.0026	.0005	.0009	.0037	.0064	.1547	.0000
SDev	.0011	.0002	.0012	.0008	.0034	.0341	.0134
%RSD	43.90	51.96	134.7	20.82	53.08	22.06	2150e6
#1	.0014	.0006	.0000	.0030	.0102	.1202	.0077
#2	.0037	.0002	.0023	.0045	.0053	.1884	.0155
#3	.0026	.0006	.0004	.0034	.0037	.1557	.0077

Elem	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0015	.0021	.0161	.0027	.0057	.0044	.0162
SDev	.0000	.0020	.0129	.0029	.0098	.0063	.0228
%RSD	.0000	94.37	79.90	108.5	170.9	141.2	140.5
#1	.0015	.0000	.0019	.0002	.0020	.0028	.0127
#2	.0015	.0039	.0194	.0056	.0167	.0083	.0405
#3	.0015	.0023	.0271	.0027	.0025	.0077	.0046

Elem	Sn1899	Ti3349	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm
Avge	.0198	.0011	.0046	.0004
SDev	.0034	.0005	.0010	.0001
%RSD	17.24	45.76	22.45	12.25
#1	.0233	.0012	.0037	.0005
#2	.0198	.0006	.0057	.0004
#3	.0164	.0016	.0044	.0005

Method: EPCfCPA Sample Name: RSCA1366 Operator: RR

Run Time: 11/10/89 12:21:54

Comment: P70057 IFR SOIL PE DIL.; P70050 IFR SOIL DILS

Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3961	As1936	B 2497	Ba4934	Be3130	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0082	2.497	.0526	.0009	.0340	.0004	.8819
SDev	.0015	.023	.0057	.0007	.0004	.0001	.0112
%RSD	18.67	.9363	10.84	74.23	1.103	14.43	1.269
#1	.0095	2.476	.0591	.0013	.0337	.0004	.8782
#2	.0065	2.492	.0484	.0001	.0338	.0003	.8731
#3	.0085	2.522	.0502	.0013	.0344	.0004	.8945

Elem	Cd2265	Co2286	Cr2677	Cu3247	Fe2599	K 7664	Mg2790
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0039	.0010	.0037	.0095	1.489	.4397	.4800
SDev	.0008	.0022	.0012	.0006	.010	.0145	.0097
%RSD	19.35	209.6	31.24	5.875	.6611	3.287	2.027
#1	.0047	.0021	.0039	.0096	1.483	.4506	.4788
#2	.0032	.0015	.0025	.0089	1.484	.4233	.4710
#3	.0039	.0025	.0048	.0100	1.501	.4451	.4904

Elem	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0509	.0009	.0723	.0046	.0164	.0022	.0123
SDev	.0009	.0012	.0101	.0022	.0079	.0082	.0083
%RSD	1.678	130.9	14.03	47.66	48.10	378.0	68.00

#1	.0508	.0004	.0813	.0043	.0157	.0040	.0127
#2	.0501	.0012	.0613	.0025	.0088	.0114	.0037
#3	.0518	.0020	.0742	.0069	.0245	.0009	.0204

Elem	Sn1899	Ti3349	V 2924	Zn2138
Units	ppm	ppm	ppm	ppm
Avgs	.0147	.0272	.0108	.0110
SDev	.0091	.0001	.0011	.0004
%RSD	61.68	.5213	9.913	3.202
#1	.0063	.0271	.0116	.0112
#2	.0243	.0273	.0096	.0106
#3	.0135	.0274	.0111	.0112

Method: ETCICPA Sample Name: R3CA1367 Operator: RR 1/10 ✓
Run Time: 11/10/89 12:24:25
Comments: P70057 TFR SOIL PE DIL.; P70050 TFR SOIL DIL3
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3961	As1936	B 2497	Ba4934	Be3130	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avgs	.0072	2.647	.0508	.0004	.0471	.0004	.7157
SDev	.0017	.014	.0062	.0006	.0004	.0001	.0105
%RSD	24.10	.5314	12.25	152.8	.7745	12.37	1.469
#1	.0074	2.663	.0502	.0003	.0475	.0004	.7166
#2	.0088	2.636	.0573	.0001	.0472	.0005	.7256
#3	.0053	2.642	.0449	.0010	.0468	.0004	.7047

Elem	Cd2265	Co2286	Cr2677	Cu3247	Fe2599	K 7664	Mg2790
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avgs	.0035	.0003	.0047	.0105	1.519	.4597	.3455
SDev	.0013	.0021	.0025	.0012	.007	.0511	.0108
%RSD	36.32	644.8	52.30	11.21	.4628	11.12	3.137
#1	.0032	.0017	.0053	.0100	1.521	.4806	.3488
#2	.0049	.0021	.0069	.0118	1.524	.4970	.3542
#3	.0024	.0014	.0020	.0096	1.511	.4014	.3333

Elem	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avgs	.0575	.0004	.0695	.0051	.0101	.0038	.0056
SDev	.0005	.0014	.0162	.0029	.0177	.0125	.0113
%RSD	.8808	346.4	23.36	57.31	175.1	329.3	203.2
#1	.0576	.0004	.0762	.0047	.0091	.0022	.0155
#2	.0579	.0004	.0813	.0082	.0284	.0046	.0079
#3	.0569	.0020	.0510	.0024	.0071	.0182	.0067

Elem	Sn1899	Ti3349	V 2924	Zn2138
Units	ppm	ppm	ppm	ppm
Avgs	.0240	.0273	.0092	.0134
SDev	.0062	.0002	.0021	.0005
%RSD	25.73	.8570	22.28	3.824
#1	.0270	.0273	.0091	.0135
#2	.0169	.0271	.0114	.0139

#3	.0281	.0276	.0073	.0129

Method: ETCICPA Sample Name: RSCA1368 Operator: RR
Run Time: 11/10/89 12:26:57
Comment: P70057 TFB SOIL PE DIL.; P70050 TFB SOIL DILS
Mode: CONC Corr. Factor: 1

1/10

Elem	Ag3280	Al3961	As1936	B 2497	Ba4934	Be3130	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0071	2.694	.0555	.0063	.0871	.0004	.6764
SDev	.0014	.022	.0092	.0006	.0006	.0001	.0088
%RSD	19.44	.8135	16.58	9.165	.6648	12.37	1.305
#1	.0085	2.717	.0662	.0070	.0877	.0005	.6862
#2	.0058	2.673	.0502	.0058	.0869	.0004	.6741
#3	.0069	2.691	.0502	.0062	.0866	.0004	.6690

Elem	Cd2265	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Mg2790
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0045	.0032	.0054	.0097	5.304	.4906	.5973
SDev	.0004	.0007	.0007	.0008	.034	.0320	.0163
%RSD	8.451	21.35	11.91	8.660	.6375	6.523	2.720
#1	.0049	.0038	.0062	.0107	5.342	.5271	.6133
#2	.0045	.0033	.0052	.0093	5.288	.4670	.5979
#3	.0041	.0024	.0049	.0093	5.280	.4779	.5808

Elem	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.9084	.0001	.0706	.0053	.0014	.0032	.0111
SDev	.0057	.0015	.0071	.0020	.0104	.0099	.0147
%RSD	.6296	1136.	10.07	37.76	718.6	308.7	132.0
#1	.9150	.0008	.0787	.0063	.0130	.0077	.0280
#2	.9058	.0012	.0671	.0066	.0013	.0059	.0037
#3	.9045	.0016	.0658	.0030	.0073	.0114	.0016

Elem	Sn1899	Ti3349	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm
Avge	.0219	.0780	.0178	.0236
SDev	.0014	.0009	.0008	.0008
%RSD	6.625	1.119	4.327	3.223
#1	.0229	.0789	.0186	.0245
#2	.0202	.0778	.0170	.0230
#3	.0224	.0772	.0178	.0233

Method: ETCICPA Sample Name: RSCA1369 Operator: RR
Run Time: 11/10/89 12:29:29
Comment: P70057 TFB SOIL PE DIL.; P70050 TFB SOIL DILS
Mode: CONC Corr. Factor: 1

1/25

Elem	Ag3280	Al3961	As1936	B 2497	Ba4934	Be3130	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0057	2.033	.0343	.0025	.0183	.0003	11.9506
SDev	.0009	.013	.0047	.0004	.0002	.0000	.0006

%RSD	15.14	.6211	13.68	17.32	.8708	.0000	.1073
#1	.0051	2.037	.0378	.0020	.0182	.0003	.5499
#2	.0067	2.044	.0360	.0028	.0181	.0003	.5508
#3	.0053	2.019	.0289	.0028	.0185	.0003	.5510

Elem	Cd2265	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Mg2790
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avgs	.0036	.0006	.0024	.0094	3.679	.4023	.6587
SDev	.0006	.0009	.0017	.0002	.022	.0069	.0043
%RSD	15.19	137.8	71.64	2.249	.6006	1.708	.6467
#1	.0030	.0017	.0025	.0093	3.688	.4014	.6543
#2	.0039	.0003	.0006	.0096	3.695	.3960	.6628
#3	.0039	.0000	.0040	.0093	3.653	.4096	.6590

Elem	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avgs	.1003	.0005	.0353	.0029	.0039	.0037	.0067
SDev	.0007	.0015	.0105	.0030	.0134	.0076	.0052
%RSD	.7001	283.9	29.74	101.9	344.6	204.3	77.64
#1	.1007	.0012	.0316	.0015	.0035	.0040	.0037
#2	.1007	.0016	.0471	.0009	.0174	.0111	.0037
#3	.0995	.0012	.0271	.0063	.0093	.0040	.0127

Elem	Sn1899	Ti3349	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm
Avgs	.0239	.0273	.0124	.0073
SDev	.0043	.0006	.0003	.0003
%RSD	17.78	2.325	2.069	3.485
#1	.0215	.0272	.0121	.0075
#2	.0239	.0267	.0124	.0070
#3	.0214	.0280	.0127	.0075

Method: EPCICPA Sample Name: RSCA1370 Operator: RR 1/10 ✓
Run Time: 11/10/89 12:32:00
Comment: P70057 TFB SOIL PE DIL.; P70050 TFB SOIL DIL3
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3961	As1936	B_2497	Ba4934	Be3130	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avgs	.0059	5.299	.0874	.0098	.0473	.0005	3.889
SDev	.0010	.017	.0071	.0006	.0004	.0001	.020
%RSD	17.57	.3201	8.108	5.951	.8759	10.19	.5209
#1	.0058	5.287	.0874	.0096	.0472	.0005	3.865
#2	.0069	5.293	.0945	.0104	.0470	.0006	3.902
#3	.0049	5.319	.0803	.0092	.0478	.0005	3.898

Elem	Cd2265	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Mg2790
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avgs	.0043	.0014	.0071	.0144	6.468	.5799	2.589
SDev	.0006	.0016	.0013	.0013	.021	.0329	.022
%RSD	13.98	112.2	17.76	9.167	.3253	5.678	.8536

#1	.0039	.0025	.0083	.0140	6.445	.5762	2.587
#2	.0050	.0004	.0058	.0158	6.475	.6144	2.568
#3	.0041	.0022	.0072	.0133	6.485	.5489	2.612

Elem	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0812	.0012	.0843	.0066	.0035	.0062	.0021
SDev	.0009	.0014	.0026	.0007	.0076	.0105	.0135
%RSD	1.053	120.2	3.093	10.13	220.1	170.2	650.1

#1	.0803	.0000	.0871	.0073	.0017	.0031	-.0081
#2	.0820	-.0027	.0820	.0059	-.0031	.0176	.0116
#3	.0812	-.0008	.0839	.0065	.0118	-.0040	.0134

Elem	Sn1899	Ti3349	V 2924	Zn2138
Units	ppm	ppm	ppm	ppm
Avge	.0206	.0496	.0176	.0216
SDev	.0046	.0005	.0013	.0002
%RSD	22.15	.9252	7.473	1.119

#1	.0248	.0493	.0173	.0214
#2	.0158	.0494	.0191	.0214
#3	.0211	.0501	.0165	.0218

Method: EPCICPA Sample Name: RSCA2013 Operator: RR 1/25

Run Time: 11/10/89 12:34:32

Comment: P70057 DFB SOIL PE OIL.; P70050 DFB SOIL DIGS

Mode: CONC Corr. Factors: 1

Elem	Ag3280	Al3961	As1936	B 2497	Ba4934	Be3130	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0062	1.888	.0349	.0024	.0208	.0004	.7967
SDev	.0004	.006	.0087	.0004	.0003	.0001	.0126
%RSD	5.657	.3112	25.08	15.79	1.551	14.43	1.586

#1	.0058	1.882	.0289	.0024	.0204	.0003	.7889
#2	.0063	1.890	.0307	.0020	.0209	.0004	.7898
#3	.0065	1.894	.0449	.0028	.0210	.0004	.8112

Elem	Cd2265	Co2286	Cr2677	Cu3247	Fe2599	K 7664	Mg2790
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0033	.0005	.0024	.0093	3.700	.3259	.7698
SDev	.0010	.0033	.0011	.0004	.039	.0129	.0262
%RSD	29.95	621.1	42.96	3.947	1.065	3.960	3.400

#1	.0030	.0033	.0015	.0093	3.672	.3113	.7409
#2	.0026	.0025	.0036	.0089	3.683	.3304	.7765
#3	.0045	.0024	.0023	.0096	3.745	.3359	.7920

Elem	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.1396	.0004	.0454	.0031	.0021	.0135	.0046
SDev	.0017	.0010	.0065	.0025	.0158	.0073	.0198
%RSD	1.207	264.6	14.31	80.50	739.7	53.92	427.7

#1	.1386	.0012	.0394	.0003	.0201	.0210	.0247
#2	.1386	.0008	.0445	.0050	.0097	.0130	-.0039
#3	.1416	.0008	.0523	.0041	.0040	.0065	.0148

Elem	Sn1899	Ti3349	V 2924	Zn2138
Units	ppm	ppm	ppm	ppm
Avge	.0241	.0262	.0118	.0082
SDev	.0050	.0007	.0010	.0005
%RSD	20.55	2.729	8.786	6.087
#1	.0245	.0254	.0109	.0077
#2	.0190	.0265	.0116	.0084
#3	.0289	.0267	.0129	.0086

Method: ETCrCPA Sample Name: RSGA4287 1:25 Operator: RR
Run Time: 11/10/89 12:37:04
Comments: P70057 TFB SOIL PE DIL.; P70050 TFB SOIL DILS
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3961	As1936	B 2497	Ba4934	Be3130	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0080	.2334	.0301	.1869	.1292	.0003	35.38
SDev.	.0014	.0208	.0027	.0004	.0012	.0000	.10
%RSD	17.22	8.933	8.985	.2347	.9340	.0000	.2822
#1	.0079	.2107	.0307	.1866	.1289	.0003	35.26
#2	.0095	.2518	.0325	.1874	.1281	.0003	35.43
#3	.0067	.2377	.0272	.1866	.1305	.0003	35.44

Elem	Cd2265	Co2286	Cr2677	Cu3247	Fe2599	K 7664	Mg2790
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0075	.0003	.0012	.0096	15.75	8.149	14.19
SDev	.0006	.0017	.0015	.0007	.06	.107	.09
%RSD	7.563	512.5	128.0	7.595	.3752	1.316	.6496
#1	.0075	.0012	.0013	.0089	15.70	8.124	14.20
#2	.0081	.0014	.0026	.0104	15.73	8.056	14.09
#3	.0069	.0017	.0004	.0096	15.81	8.266	14.27

Elem	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.1755	.0000	25.58	.0057	.0066	.0202	.0025
SDev	.0009	.0016	.40	.0006	.0029	.0064	.0094
%RSD	.4866	6815e6	1.558	11.14	44.49	31.90	370.3
#1	.1746	.0000	25.59	.0060	.0036	.0145	.0025
#2	.1763	.0016	25.17	.0061	.0094	.0188	.0134
#3	.1756	.0016	25.97	.0050	.0067	.0272	.0032

Elem	Sn1899	Ti3349	V 2924	Zn2138
Units	ppm	ppm	ppm	ppm
Avge	.0196	.0031	.0109	.0073
SDev	.0042	.0004	.0005	.0001
%RSD	21.29	14.38	4.879	1.593
#1	.0227	.0026	.0104	.0072
#2	.0149	.0031	.0114	.0074
#3	.0213	.0035	.0111	.0075

Method: ETCTCPA Sample Name: DW Operator: RR
Run Time: 11/10/89 12:39:35
Comment: P70057 TFB SOIL PE DIL.; P70050 TFB SOIL DILS
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3961	As1936	B 2497	Ba4934	Be3130	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0055	.0128	.0110	.0022	-.0001	.0002	.0449
SDev	.0024	.0187	.0089	.0011	.0006	.0001	.0369
%RSD	43.77	145.7	75.50	52.94	472.1	42.86	82.23
#1	.0031	-.0325	.0024	-.0033	-.0007	.0001	.0834
#2	.0056	.0107	.0130	.0022	-.0002	.0002	.0413
#3	.0079	.0047	.0201	-.0010	.0005	.0003	.0099

Elem	Cd2265	Co2286	Cr2677	Cu3247	Fe2599	K 7664	Mg2790
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0025	-.0009	.0001	.0034	.0382	.1447	.0075
SDev	.0013	.0037	.0028	.0013	.0268	.0673	.0153
%RSD	49.94	397.5	2509.	38.63	70.05	46.49	204.4
#1	.0014	.0046	-.0024	.0019	.0679	.0737	-.0062
#2	.0022	.0010	-.0003	.0038	.0310	.1529	.0046
#3	.0039	.0028	.0031	.0045	.0158	.2075	.0240

Elem	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0013	-.0004	.0620	.0004	.0000	-.0056	.0127
SDev	.0001	.0024	.0176	.0048	.014	.0162	.0186
%RSD	10.83	624.5	28.36	1204.	6213e6	291.0	146.5
#1	.0012	-.0031	.0807	-.0053	-.0129	-.0232	.0023
#2	.0012	.0004	.0594	.0003	-.0027	-.0022	.0016
#3	.0015	.0016	.0458	.0044	.0156	.0086	.0342

Elem	Sn1899	Ti3349	V 2924	Zn2138
Units	ppm	ppm	ppm	ppm
Avge	.0208	-.0017	.0042	-.0006
SDev	.0056	.0013	.0021	.0006
%RSD	26.81	74.52	48.98	93.54
#1	.0269	.0029	.0021	.0011
#2	.0194	-.0018	.0042	-.0007
#3	.0160	.0004	.0062	.0000

Method: ETCTCPA Sample Name: DW Operator: RR
Run Time: 11/10/89 12:42:06
Comment: P70057 TFB SOIL PE DIL.; P70050 TFB SOIL DILS
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3961	As1936	B 2497	Ba4934	Be3130	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0057	.0107	.0124	.0019	-.0001	.0002	.0185
SDev	.0021	.0034	.0045	.0008	.0003	.0001	.0042
%RSD	37.17	31.75	35.95	41.63	321.9	28.87	22.92

#1	.0051	.0133	.0130	.0022	.0000	.0002	-.0170
#2	.0081	-.0068	.0165	.0010	.0001	.0002	-.0152
#3	.0040	-.0120	.0077	.0025	-.0004	.0001	-.0233

Elem	Cd2265	Co2286	Cr2677	Cu3247	Fe2599	K 7664	Mg2790
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avgs	.0023	.0008	.0023	.0038	.0035	.1575	.0013
SDev	.0010	.0007	.0015	.0006	.0015	.0474	.0075
%RSD	44.66	78.76	71.48	16.76	41.70	32.13	582.8

#1	.0018	-.0001	.0035	.0034	.0040	.1365	.0077
#2	.0035	-.0011	.0021	.0045	.0046	.1994	.0031
#3	.0016	-.0013	.0005	.0034	.0019	.1065	-.0070

Elem	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avgs	.0011	.0005	.0185	.0006	.0105	.0061	.0088
SDev	.0005	.0008	.0169	.0020	.0065	.0053	.0137
%RSD	48.04	156.1	91.26	320.6	61.40	87.53	155.8

#1	.0012	.0012	.0207	.0009	.0157	.0120	-.0005
#2	.0015	.0008	.0342	.0024	.0126	.0019	.0245
#3	.0005	-.0004	.0006	.0015	.0033	.0043	.0023

Elem	Sg1899	Ti3349	V 2924	Zn2138
Units	ppm	ppm	ppm	ppm
Avgs	.0200	.0014	.0046	.0005
SDev	.0062	.0003	.0022	.0003
%RSD	31.26	24.21	47.90	56.62

#1	.0271	.0016	.0042	.0005
#2	.0173	.0010	.0070	.0003
#3	.0155	.0016	.0027	.0008

Method: ETCICP8 Sample Name: CBBLK Operator: RR
Time: 11/10/89 12:44:38
Comment: P70057 TFB SOIL PE DIL.; P70050 TFB SOIL DILS
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3961	As1936	B 2497	Ba4934	Be3130	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avgs	.0036	.0124	.0035	.0006	.0002	.0002	-.0108
SDev	.0016	.0071	.0021	.0007	.0000	.0001	.0043
%RSD	45.28	56.97	57.74	103.9	12.06	34.64	-39.43

#1	.0053	.0056	.0059	.0003	.0002	.0002	.0061
#2	.0021	.0197	.0024	.0014	.0003	.0001	.0143
#3	.0033	.0120	.0024	.0003	.0002	.0001	.0122

Elem	Cd2265	Co2286	Cr2677	Cu3247	Fe2599	K 7664	Mg2790
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avgs	.0018	.0004	.0001	.0029	.0009	.1138	.0072
SDev	.0010	.0004	.0013	.0011	.0012	.0414	.0190
%RSD	51.72	120.5	2131.	36.08	133.3	36.35	263.0

#1	.0028	.0000	.0016	.0041	.0022	.1611	-.0147
#2	.0009	.0009	.0007	.0023	.0009	.0956	-.0178

#3	.0018	.0002	.0007	.0023	-.0003	.0847	-.0186
Elem	Mo2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avgs	.0007	.0003	.0108	-.0002	-.0030	.0072	.0176
SDev	.0004	.0010	.0101	.0019	.0059	.0090	.0070
%RSD	57.73	377.5	93.79	772.9	-194.5	124.4	40.06
#1	.0012	.0012	.0200	.0007	.0035	.0170	.0238
#2	.0005	.0004	.0000	.0018	-.0080	-.0006	.0190
#3	.0005	-.0008	.0123	.0019	-.0046	.0053	.0099
Elem	Sn1899	Ti3349	V 2924	Zn2138			
Units	ppm	ppm	ppm	ppm			
Avgs	.0262	-.0018	.0033	-.0005			
SDev	.0067	.0001	.0012	.0002			
%RSD	25.53	-5.527	35.60	-45.28			
#1	.0273	-.0018	.0044	-.0007			
#2	.0323	-.0018	.0021	.0003			
#3	.0191	-.0016	.0032	-.0005			

Method: EPCICPA Sample Name: CSMTDCHK Operator: RR
Run Time: 11/10/89 12:47:10
Comment: P70057 TFB SOIL PE DIL.; P70050 TFB SOIL DILS
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3961	As1936	B 2497	Ba4934	Be3130	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avgs	.1044	2.528	.5093	.5237	1.042	.1039	10.62
SDev	.0017	.013	.0081	.0019	.003	.0003	.05
%RSD	1.580	.5005	1.595	.3651	.3048	.2904	.4242
#1	.1026	2.542	.5022	.5217	1.045	.1036	10.57
#2	.1058	2.522	.5075	.5240	1.039	.1041	10.66
#3	.1048	2.519	.5181	.5255	1.043	.1041	10.63
Elem	Cd2265	Co2286	Cr2677	Cu3247	Fe2599	K 7664	Mg2790
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avgs	.1105	.2171	.3255	.3178	1.061	4.123	10.31
SDev	.0018	.0001	.0017	.0002	.003	.013	.01
%RSD	1.632	.0534	.5347	.0664	.2380	.3059	.0938
#1	.1094	.2170	.3267	.3177	1.058	4.115	10.32
#2	.1126	.2172	.3261	.3177	1.062	4.115	10.30
#3	.1096	.2170	.3235	.3180	1.062	4.137	10.31
Elem	Mo2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avgs	.3221	.2646	50.55	.3257	.5379	.4980	1.045
SDev	.0007	.0020	.23	.0020	.0058	.0120	.012
%RSD	.2180	.7427	.4589	.6132	1.072	2.409	1.174
#1	.3213	.2667	50.80	.3236	.5442	.5016	1.051
#2	.3225	.2644	50.34	.3261	.5364	.5078	1.053
#3	.3225	.2628	50.51	.3275	.5330	.4846	1.031
Elem	Sn1899	Ti3349	V 2924	Zn2138			

Units	ppm	ppm	ppm	ppm
Avgs	1.048	.5146	.3223	.5335
SDev	.011	.0013	.0016	.0024
%RSD	1.025	.2501	.4866	.4444
#1	1.044	.5160	.3209	.5308
#2	1.060	.5134	.3240	.5354
#3	1.039	.5144	.3219	.5343

Method: ETCICPA Sample Name: DW Operator: RR
Run Time: 11/10/89 12:49:41
Comments: P70057 IFB SOIL PE Dil.; P70050 IFB SOIL DILS
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3961	As1936	B 2497	Ba4934	Be3130	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avgs	.0054	.0068	.0089	.0011	.0010	.0003	.0105
SDev	.0031	.0068	.0101	.0014	.0008	.0001	.0079
%RSD	57.68	99.22	113.7	126.2	73.68	30.00	75.14
#1	.0033	.0009	.0006	.0018	.0016	.0003	.0064
#2	.0090	.0094	.0201	.0005	.0014	.0004	.0055
#3	.0040	.0120	.0059	.0022	.0002	.0002	.0196

Elem	Cd2265	Co2286	Cr2677	Cu3247	Fe2599	K 7664	Mg2790
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avgs	.0021	.0010	.0002	.0033	.0027	.1338	.0005
SDev	.0018	.0004	.0016	.0013	.0024	.0663	.0062
%RSD	84.47	44.35	985.8	39.02	88.13	49.53	1203.
#1	.0009	.0015	.0003	.0019	.0022	.0983	.0000
#2	.0041	.0009	.0015	.0045	.0053	.2103	.0054
#3	.0013	.0006	.0016	.0034	.0006	.0928	.0070

Elem	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avgs	.0015	.0007	.0667	.0006	.0062	.0033	.0231
SDev	.0006	.0008	.0315	.0043	.0128	.0031	.0114
%RSD	36.46	124.9	47.19	726.9	207.2	94.84	49.39
#1	.0012	.0016	.0904	.0003	.0028	.0049	.0162
#2	.0022	.0004	.0787	.0050	.0209	.0003	.0169
#3	.0012	.0000	.0310	.0036	.0005	.0053	.0363

Elem	Sn1899	Ti3349	V 2924	Zn2138
Units	ppm	ppm	ppm	ppm
Avgs	.0244	.0007	.0046	.0000
SDev	.0015	.0006	.0026	.0004
%RSD	6.304	86.23	57.02	2516.
#1	.0261	.0010	.0024	.0002
#2	.0230	.0000	.0075	.0003
#3	.0242	.0012	.0039	.0005

Method: ETCICPA Sample Name: CSCRTA Operator: RR

Run Time: 11/10/89 12:52:13
Comment: P70057 IFB SOIL PE DIL.; P70050 IFB SOIL DILS
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3961	As1936	B 2497	Ba4934	Be3130	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avgs	.0202	.4770	.1034	.1074	.2040	.0207	2.197
SDev	.0020	.0180	.0099	.0016	.0018	.0002	.053
%RSD	9.804	3.767	9.545	1.473	.8812	.9419	2.415
#1	.0191	.4715	.1016	.1061	.2019	.0206	2.159
#2	.0191	.4625	.0945	.1069	.2049	.0207	2.174
#3	.0225	.4971	.1140	.1091	.2051	.0210	2.257

Elem	Cd2265	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Mg2790
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avgs	.0218	.0406	.0642	.0624	.2125	1.915	1.984
SDev	.0020	.0026	.0024	.0012	.0050	.062	.042
%RSD	9.271	6.363	3.799	1.884	2.371	3.252	2.140
#1	.0207	.0389	.0620	.0619	.2086	1.860	1.945
#2	.0205	.0392	.0638	.0615	.2107	1.903	1.978
#3	.0241	.0435	.0668	.0637	.2182	1.983	2.029

Elem	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avgs	.0621	.0510	9.864	.0640	.1033	.0984	.2056
SDev	.0015	.0008	.028	.0054	.0111	.0100	.0108
%RSD	2.393	1.593	.2831	8.372	10.75	10.17	5.239
#1	.0608	.0508	9.840	.0591	.0951	.0920	.2049
#2	.0618	.0504	9.895	.0632	.0989	.0933	.1952
#3	.0637	.0519	9.856	.0697	.1160	.1100	.2167

Elem	Sr1899	Ti3349	V 2924	Zn2138
Units	ppm	ppm	ppm	ppm
Avgs	.1863	.1116	.0626	.1017
SDev	.0104	.0013	.0032	.0021
%RSD	5.600	1.145	5.124	2.071
#1	.1844	.1105	.0604	.0999
#2	.1770	.1113	.0612	.1013
#3	.1976	.1130	.0663	.1040

Method: EPCICPA Sample Name: CSCRTB Operator: RR
Run Time: 11/10/89 12:54:44
Comment: P70057 IFB SOIL PE DIL.; P70050 IFB SOIL DILS
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3961	As1936	B 2497	Ba4934	Be3130	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avgs	.0175	.2483	.0591	.0508	.1061	.0109	1.145
SDev	.0014	.0071	.0064	.0017	.0011	.0002	.022
%RSD	7.969	2.875	10.82	3.374	1.039	1.800	1.952
#1	.0168	.2419	.0520	.0491	.1048	.0106	1.125
#2	.0191	.2560	.0644	.0525	.1065	.0110	1.169
#3	.0165	.2471	.0609	.0506	.1069	.0109	1.140

Elem	Cd2265	Co2286	Cr2677	Cu3247	Fe2599	K 7664	Mg2790
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avgs	.0139	.0218	.0329	.0375	.1134	1.278	1.071
SDev	.0010	.0020	.0022	.0015	.0025	.040	.015
%RSD	7.183	8.980	6.650	3.936	2.169	3.104	1.433
#1	.0132	.0201	.0313	.0367	.1116	1.240	1.068
#2	.0151	.0239	.0354	.0392	.1162	1.319	1.088
#3	.0135	.0215	.0321	.0367	.1125	1.275	1.058

Elem	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avgs	.0348	.0280	5.252	.0331	.0601	.0543	.1154
SDev	.0006	.0016	.071	.0012	.0078	.0058	.0123
%RSD	1.850	5.639	1.355	3.628	12.94	10.65	10.69
#1	.0343	.0277	5.194	.0318	.0585	.0500	.1251
#2	.0355	.0297	5.231	.0341	.0686	.0608	.1196
#3	.0345	.0266	5.331	.0334	.0533	.0519	.1015

Elem	Sn1899	Ti3349	V 2924	Zn2138
Units	ppm	ppm	ppm	ppm
Avgs	.0855	.0487	.0382	.0600
SDev	.0068	.0008	.0013	.0011
%RSD	7.988	1.677	3.318	1.806
#1	.0866	.0478	.0373	.0588
#2	.0916	.0495	.0396	.0609
#3	.0781	.0488	.0376	.0603

Method: ETCICPA Sample Name: DW Operator: RR
Run Time: 11/10/89 12:57:16
Comments: P70057 TFB SOIL PE DIL.; P70050 TFB SOIL DILS
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3961	As1936	B 2497	Ba4934	Be3130	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avgs	.0032	.0068	.0012	.0027	-.0002	.0002	-.0219
SDev	.0021	.0059	.0057	.0004	.0001	.0001	.0043
%RSD	64.42	85.92	482.2	16.50	55.11	34.64	19.44
#1	.0013	.0056	-.0030	.0029	-.0003	.0001	-.0268
#2	.0031	.0133	-.0013	-.0029	-.0002	.0001	-.0190
#3	.0053	.0017	.0077	.0022	-.0001	.0002	-.0200

Elem	Cd2265	Co2286	Cr2677	Cu3247	Fe2599	K 7664	Mg2790
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avgs	.0015	.0017	.0008	.0028	.0002	.1165	-.0088
SDev	.0005	.0015	.0009	.0006	.0012	.0452	.0085
%RSD	31.46	91.71	111.7	19.92	567.9	38.82	97.19
#1	.0011	.0014	.0019	.0023	-.0003	.0737	-.0031
#2	.0014	.0033	-.0003	.0027	-.0006	.1320	-.0186
#3	.0020	.0003	.0002	.0034	.0015	.1639	-.0046

Elem	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm

Avge	.0005	.0003	.0148	.0024	.0006	.0030	.0116
SDev	.0000	.0009	.0028	.0022	.0097	.0056	.0004
%RSD	.0000	346.4	18.95	89.53	1739.	187.7	3.464
#1	.0005	.0008	.0136	.0047	.0108	.0022	.0120
#2	.0005	.0008	.0129	.0003	.0006	.0022	.0113
#3	.0005	.0008	.0181	.0023	.0085	.0090	.0113

Elem	Sn1899	Ti3349	V 2924	Zn2138
Units	ppm	ppm	ppm	ppm
Avge	.0237	.0018	.0034	.0009
SDev	.0011	.0003	.0009	.0004
%RSD	4.509	17.22	27.04	40.44
#1	.0244	.0022	.0027	.0011
#2	.0225	.0016	.0032	.0005
#3	.0243	.0016	.0044	.0011

Method: ETCICPA Sample Name: CSX85INT Operator: RR
Run Time: 11/10/89 12:59:47
Comment: P70057 IFB SOIL PE Dil.; P70050 IFB SOIL DILS
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3961	As1936	B 2497	Ba4934	Be3130	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.9323	509.9	7.474	.6134	.4860	.4717	481.3
SDev	.0071	2.6	.054	.0034	.0018	.0024	4.1
%RSD	.7607	.5016	.7260	.5560	.3728	.4997	.8546
#1	.9268	509.5	7.445	.6108	.4866	.4720	479.8
#2	.9298	507.6	7.441	.6121	.4860	.4693	478.3
#3	.9403	512.7	7.537	.6172	.4875	.4740	486.0

Elem	Cd2265	Co2286	Cr2677	Cu3247	Fe2599	K 7664	Mg2790
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.029	.4670	.4695	.5230	180.9	.0282	509.6
SDev	.008	.0026	.0026	.0034	1.0	.0232	2.2
%RSD	.8134	.5484	.5504	.6403	.5518	82.31	.4336
#1	1.026	.4668	.4720	.5201	180.7	.0519	508.7
#2	1.022	.4645	.4668	.5223	180.0	.0273	508.0
#3	1.038	.4696	.4696	.5267	181.9	.0055	512.1

Elem	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.5147	.0000	.1349	.9303	.8610	.0990	.0393
SDev	.0032	.0049	.0050	.0098	.0027	.0475	.0355
%RSD	.6292	10e9	3.737	1.055	.3146	47.97	90.31
#1	.5139	.0051	.1381	.9301	.8641	.0451	.0102
#2	.5120	.0004	.1291	.9206	.8595	.1174	.0289
#3	.5183	.0047	.1375	.9402	.8594	.1347	.0789

Elem	Sn1899	Ti3349	V 2924	Zn2138
Units	ppm	ppm	ppm	ppm
Avge	.0341	.0344	.5512	.9662
SDev	.0104	.0004	.0038	.0072
%RSD	30.39	1.278	.6864	.7419

#1	.0454	.0345	.5483	.9640
#2	.0250	.0347	.5498	.9604
#3	.0320	.0339	.5554	.9743

Method: ETCICPA Sample Name: DW Operator: RR
Run Time: 11/10/89 13:02:19
Comment: P70057 FEB SOIL PE DIL.; P70050 FEB SOIL DILS
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3961	As1936	B 2497	Ba4934	Be3130	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avgs	.0072	.2996	.0142	.0011	.0002	.0005	.3184
SDev	.0015	.2067	.0045	.0012	.0005	.0003	.2288
%RSD	20.06	68.98	31.46	107.2	232.0	56.25	71.86
#1	.0081	.5163	.0183	.0006	.0007	.0008	.5642
#2	.0081	.2778	.0148	.0003	.0003	.0005	.2793
#3	.0056	.1047	.0095	.0025	.0003	.0002	.1117

Elem	Cd2265	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Mg2790
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avgs	.0028	.0000	.0007	.0043	.1485	.1748	.3112
SDev	.0013	.001	.0008	.0004	.1039	.0402	.2262
%RSD	47.73	1815.	119.7	9.897	69.98	23.02	72.70
#1	.0037	.0002	.0016	.0045	.2613	.1830	.5538
#2	.0033	.0006	.0002	.0045	.1274	.2103	.2738
#3	.0013	.0005	.0002	.0038	.0567	.1311	.1060

Elem	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avgs	.0014	.0004	.0161	.0019	.0003	.0005	.0065
SDev	.0001	.0004	.0057	.0018	.0049	.0081	.0042
%RSD	10.19	100.0	35.55	98.38	1867.	1565.	64.29
#1	.0015	.0000	.0181	.0038	.0032	.0037	.0106
#2	.0015	.0004	.0207	.0018	.0019	.0086	.0023
#3	.0012	.0008	.0097	.0001	.0059	.0065	.0065

Elem	Sn1899	Ti3349	V 2924	Zn2138
Units	ppm	ppm	ppm	ppm
Avgs	.0020	.0022	.0050	.0003
SDev	.0009	.0005	.0012	.0011
%RSD	1.799	23.81	23.70	373.3
#1	.0032	.0016	.0052	.0014
#2	.0019	.0025	.0060	.0002
#3	.0020	.0025	.0037	.0007

ETC

METALS SUBSIDIARY DATA - GRAPHITE FURNACE AA

FURNANCE LOG

BATCH: Q M 70050 **MATRIX:** Soil

SAMPLE #	AS	SE	TL	PB		
FNLAB	✓ AA	✓ CA	✓ F	✓ BB		
Q70050	✓ AA	✓ CA	✓ F	✓ BB		
CA1365	✓ AA	✓ CA	✓ F	✓ EA		
CA1366	✓ CB	✓ CA	✓ F	✓ SB		
CA1367	✓ CB	✓ CA	✓ F	✓ EA		
CA1368	✓ CB	✓ CA	✓ F	✓ EA		
CA1369	✓ CB	✓ CA	✓ F	✓ EA		
CA1370	✓ CB	✓ CA	✓ F	✓ EA		
CA2013	✓ SA	✓ CA	✓ F	✓ EA		

Project No._____
Book No._____ TITLE QM 70050

From Page No.__

Raw:

Seq:	BSF750AA	BSF750CA	BSF750CB	BSF750BB
	As	Se	As	Pb
Blk				
Std				
CSBRA				
Blk				
Control	✓	✓	✓	✓
FNLAB	✓	✓		✓
Q70050	✓	✓		✓
IFBFS	✓	✓		✓
Q70050	✓	✓		✓
CA1365	✓	✓		RR 1/2
IFBFS	✓	✓		↓
CA~~70050~~ 1365	✓	✓		↓
CA1366	✗ not used	✓	✓	RR 1/5
CA1367	✗ ↓	✓	✓	RR 1/5
CA1368	✗ ↓	✓	✓	RR 1/5
Blk				
Control		✓		
CA1369	RR ↓	✓	✓	RR 1/5
CA1370		✓	✓	RR 1/5
CA2013		✓	✓	RR 1/5
Blk			RR	
Control		✓	✓	

133

To Page No.__

Witnessed & Understood by me,	Date	Invented by	Date
			11/8/89

Regression analysis Degree
Data file: P750AA Started on 110689 at 162804
Element: As

Std points

#	Rep1 ABS	Rep2 ABS	Aver ABS	CONC (ug/l)
1	0.001	0.001	0.001	0.00
2	0.051	0.054	0.053	10.00
3	0.115	0.107	0.111	20.00
4	0.215	0.219	0.217	40.00

Coeff 1 = -0.105482
Coeff 2 = 184.350596
Coeff of correlation (1st degree) : 0.999853

Pos	Name	Rep1 ABS	Rep2 ABS	Aver ABS	RStd Dev	Calc conc ug/l		
1	Blank	-0.002	-0.004	-0.003	61.1	-0.659		
5	CSSISTRD	0.311	0.321	0.316	2.1	58.149		
	CSSISTRD	0.399	0.391	0.395	1.4	72.713	%rec=	72.82
6	CSCRA	0.027	0.027	0.027	0.3	4.872		
6	CSCRA	0.121	0.125	0.123	2.2	22.570	%rec=	88.49
7	CBBLK	0.001	0.001	0.001	14.6	0.079		
7	CBBLK	0.097	0.098	0.098	0.3	17.961	%rec=	89.41
8	CSSTRCON	0.158	0.162	0.160	1.5	29.391		
8	CSSTRCON	0.252	0.256	0.254	1.0	46.720	%rec=	86.64
9	CSFNLAB	0.144	0.142	0.143	0.8	26.257		
9	CSFNLAB	0.239	0.237	0.238	0.5	43.770	%rec=	87.57
10	RSQ70050	0.001	-0.000	0.000	572.0	-0.105		
10	RSQ70050	0.096	0.095	0.096	0.7	17.592	%rec=	87.96
11	KKIFBFS	0.177	0.178	0.177	0.5	32.525		
11	KKIFBFS	0.265	0.273	0.269	2.1	49.485	%rec=	84.80
12	RSQ70050	0.002	0.003	0.002	20.2	0.263		
12	RSQ70050	0.095	0.096	0.095	0.8	17.408	%rec=	85.72
13	RSCA1365	0.058	0.059	0.059	1.5	10.771		
13	RSCA1365	0.148	0.150	0.149	1.1	27.363	%rec=	82.96
14	KSIFBFS	0.223	0.224	0.223	0.1	41.005		
	KSIFBFS	0.309	0.303	0.306	1.3	56.306	%rec=	76.51
15	QSCA1365	0.062	0.062	0.062	0.1	11.324		
15	QSCA1365	0.150	0.151	0.150	0.4	27.547	%rec=	81.11
16	RSCA1366 not used	0.023	0.023	0.023	2.6	4.135		
16	RSCA1366	0.112	0.112	0.112	0.2	20.542	%rec=	82.04
17	RSCA1367	0.014	0.013	0.014	4.7	2.475		
17	RSCA1367	0.104	0.107	0.105	2.3	19.251	%rec=	83.88
18	RSCA1368	0.054	0.052	0.053	2.6	9.665		
18	RSCA1368	0.143	0.142	0.143	0.6	26.257	%rec=	82.96
19	CBBLK	0.001	0.002	0.001	25.9	0.079		
19	CBBLK	0.093	0.095	0.094	1.3	17.223	%rec=	85.72
20	CSSTRCON	0.156	0.156	0.156	0.1	28.653		
20	CSSTRCON	0.251	0.250	0.250	0.3	45.982	%rec=	86.64
21	RSCA1369 zero	0.111	0.114	0.112	2.1	20.542		
21	RSCA1369	0.195	0.193	0.194	0.8	35.659	%rec=	75.58
22	RSCA1370	0.072	0.003	0.037	129.8	6.715		
22	RSCA1370	0.001	0.000	0.001	88.9	0.079	%rec=	-33.13
23	RSCA2013	0.003	0.000	0.002	133.1	0.383		
23	RSCA2013	0.002	0.252	01@0.252	01008	184.245	%rec=	919.91

Element	Standard Regression Data				Detection Limit Blank Data		
	Corr. Coeff.	Slope	Intercept	Units	Blank Mean	Std. Dev.	MDL
AS	0.99812	198.4	-0.676	ug/l	-1.00	-1.00	10.0

*** Initial and Continuing Calibration Verification and Calib Blank Data ***

Element: AS Units: ug/l

Position	Sample	Calculated	Expected	% Rec
1	SXBLK	-0.873	0	
2	SASISTRA	9.93	10.0	99.3
3	SBSISTRB	20.5	20.0	103
4	SCSISTRC	42.1	40.0	105
6	SDSISTRD	58.3	60.0	97.1
8	CSCRA	4.04	10.0	40.4
12	CSSTRCON	29.0	30.0	96.6
34	CSSTRCON	27.4	30.0	91.4
10	CBBLK	-0.480	-1.00	48.0
32	CBBLK	-0.873	-1.00	87.3

Standard Regression Data				Detection Limit Blank Data			
Element	Corr. Coeff.	Slope	Intercept	Units	Blank Mean	Std. Dev.	MDL
SE	0.99985	321.0	-0.316	ug/l	-1.00	-1.00	5.00

*** Initial and Continuing Calibration Verification and Calib Blank Data ***

Element: SE Units: ug/l

Position	Sample	Calculated	Expected	% Rec
1	SXBLK	-0.316	0	
2	SASISTRA	10.3	10.0	103
3	SBSISTRB	20.2	20.0	101
4	SCSISTRC	39.8	40.0	99.5
6	CSSISTRD	54.9	60.0	91.5
8	CSCRA	4.82	5.00	96.4
12	CSSTRCON	30.2	30.0	101
14	CSFNLAB	29.9	30.0	99.5
36	CSSTRCON	28.6	30.0	95.2
40	CSSTRCON	29.5	30.0	98.5
10	CBBLK	0.326	-1.00	-32.6
34	CBBLK	-0.316	-1.00	31.6
44	CBBLK	-0.637	-1.00	63.7

Regression analysis Degree: 1
Data file: P750CB started on 081888 at 111506
Element: As

Std pos

#	Rep1 ABS	Rep2 ABS	Aver ABS	CONC (ug/l)
1	-0.000	-0.002	-0.001	0.00
2	0.056	0.051	0.054	10.00
3	0.107	0.108	0.108	20.00
4	0.215	0.222	0.218	40.00

Coeff 1 = 0.182957
Coeff 2 = 182.765631
Coeff of correlation (1st degree) 0.999995

Pos	Name	Rep1 ABS	Rep2 ABS	Aver ABS	RStd Dev	Calc conc ug/l	
1	Blank	0.004	-0.001	0.001	211.0	0.363	
5	CSSISTRD	0.299	0.302	0.300	0.7	55.013	
5	CSSISTRD	0.388	0.388	0.388	0.1	71.096	%rec= 80 43
6	CSCRA	0.023	0.021	0.024	12.4	4.569	
6	CSCRA	0.119	0.122	0.121	1.9	22.298	%rec= 88 64
7	CBBLK	-0.001	0.002	0.001	359.6	0.366	
7	CBBLK	0.091	0.099	0.095	5.6	17.546	%rec= 85 90
8	CSSTRCON	0.151	0.151	0.151	0.3	27.781	
8	CSSTRCON	0.251	0.240	0.245	3.0	44.961	%rec= 85 00
13	RSCA1365	0.061	0.059	0.060	2.9	11.149	
13	RSCA1365	0.146	0.149	0.147	1.8	27.050	%rec= 79 50
14	KSIFBFS	0.218	0.222	0.220	----	40.391	
14	KSIFBFS	0.310	0.313	0.311	0.6	57.023	%rec= 83 10
15	QSCA1365	0.061	0.062	0.061	2.2	11.332	
15	QSCA1365	0.146	0.150	0.148	2.1	27.232	%rec= 79 00
16	RSCA1366	0.021	0.025	0.023	10.0	4.387	
16	RSCA1366	0.113	0.114	0.114	0.6	21.018	%rec= 83 10
17	RSCA1367	0.012	0.012	0.012	4.4	2.376	
17	RSCA1367	0.102	0.106	0.104	2.5	19.191	%rec= 84 07
18	RSCA1368	0.055	0.052	0.053	4.0	9.870	
18	RSCA1368	0.141	0.140	0.141	1.0	25.953	%rec= 80 43
32	RSCA1369	0.057	0.055	0.056	2.7	10.418	
32	RSCA1369	0.153	0.152	0.152	0.4	27.963	%rec= 87 73
33	RSCA1370	0.037	0.039	0.038	3.8	7.128	
33	RSCA1370	0.131	0.134	0.133	1.7	24.491	%rec= 83 81
34	RSCA2013	0.059	0.061	0.060	1.9	11.149	
34	RSCA2013	0.149	0.144	0.146	2.7	26.867	%rec= 79 59
35	CBBLK	-0.002	-0.000	-0.001	133.6	0.000	
35	CBBLK	0.086	0.092	0.089	5.4	16.449	%rec= 82 24
36	CSSTRCON	0.147	0.140	0.143	3.2	26.318	
36	CSSTRCON	0.233	0.239	0.236	2.1	43.316	%rec= 84 00

Regression analysis Degree: 1
Data file: P750CA Started on 081888 at 111506
Element: Se

Std points

#	Rep1 ABS	Rep2 ABS	Aver ABS	CONC (ug/l)
1	-0.001	0.001	-0.000	0.00
2	0.032	0.035	0.033	10.00
3	0.066	0.063	0.064	20.00
4	0.125	0.125	0.125	40.00

Coeff 1 = -0.315703
Coeff 2 = 321.003652
Coeff of correlation (1st degree) 0.999849

Pos	Name	Rep1 ABS	Rep2 ABS	Aver ABS	Rstd Dev	Calc conc ug/l	
1	Blank	0.003	-0.001	0.001	289.2	0.305	
5	CSSISTRD	0.167	0.178	0.172	4.3	54.897	
5	CSSISTRD	0.201	0.204	0.202	1.1	64.527	%rec= 96.30
6	CSCRA	0.016	0.016	0.016	3.3	4.820	
6	CSCRA	0.045	0.046	0.046	2.4	14.450	%rec= 96.30
7	CBBLK	0.001	0.003	0.002	61.3	0.326	
7	CBBLK	0.030	0.032	0.031	5.2	9.635	%rec= 93.00
8	CSSTRCON	0.095	0.094	0.095	0.9	30.180	
8	CSSTRCON	0.125	0.121	0.123	2.8	39.168	%rec= 99.89
9	CSFNLAB	0.091	0.097	0.094	4.4	29.859	
9	CSFNLAB	0.128	0.125	0.126	----	40.131	%rec= 102.78
10	RSQ70050	0.002	0.002	0.002	23.8	0.325	
10	RSQ70050	0.033	0.032	0.032	0.4	9.956	%rec= 99.00
11	KKIFBFS	0.030	0.032	0.031	4.0	9.635	
11	KKIFBFS	0.062	0.061	0.061	0.6	19.363	%rec= 96.30
12	RSQ70050	-0.001	-0.001	-0.001	10.1	-0.637	
12	RSQ70050	0.030	0.031	0.031	1.7	9.335	%rec= 93.00
13	RSCA1365	0.003	0.004	0.003	28.4	0.647	
13	RSCA1365	0.031	0.031	0.031	0.8	9.335	%rec= 93.33
14	KSIFBFS	0.032	0.032	0.032	0.2	9.956	
14	KSIFBFS	0.058	0.060	0.059	1.7	18.824	%rec= 91.07
15	QSCA1365	0.004	0.003	0.003	19.8	0.647	
15	QSCA1365	0.032	0.034	0.033	4.8	10.277	%rec= 99.31
16	RSCA1366	0.005	0.004	0.005	11.2	1.289	
16	RSCA1366	0.034	0.035	0.035	3.1	10.910	%rec= 98.31
17	RSCA1367	0.003	0.007	0.005	47.4	1.289	
17	RSCA1367	0.033	0.035	0.034	3.8	10.598	%rec= 99.31
18	RSCA1368	0.004	0.003	0.003	26.9	0.647	
18	RSCA1368	0.031	0.028	0.030	7.6	9.314	%rec= 89.77
19	CBBLK	0.002	-0.001	0.000	321.6	-0.313	
19	CBBLK	0.028	0.031	0.030	6.7	9.314	%rec= 93.14
20	CSSTRCON	0.092	0.089	0.090	1.8	28.575	
20	CSSTRCON	0.120	0.121	0.120	1.0	38.305	%rec= 99.70
21	RSCA1369	0.005	0.005	0.005	7.1	1.289	
21	RSCA1369	0.029	0.028	0.029	1.8	8.993	%rec= 77.14
22	RSCA1370	0.003	0.003	0.003	3.0	0.647	
22	RSCA1370	0.030	0.029	0.030	2.1	9.314	%rec= 93.07
23	RSCA2013	0.002	0.003	0.003	43.1	0.647	
23	RSCA2013	0.030	0.032	0.031	4.1	9.635	%rec= 99.78
24	CBBLK	0.000	-0.001	-0.000	211.3	-0.307	
24	CBBLK	0.032	0.031	0.031	3.8	9.635	%rec= 93.00
25	CSSTRCON	0.014	0.013	0.013	2.1	2.018	
25	CSSTRCON	0.121	0.120	0.121	0.4	38.636	%rec= 91.33

Regression analysis Degree: 1
Data file: P750BB started on 110689 at 202401
Element: Pb

Std points

#	Rep1 ABS	Rep2 ABS	Aver ABS	CONC (ug/l)
1	0.001	0.001	0.001	0.00
2	0.069	0.069	0.069	10.00
3	0.130	0.129	0.129	20.00
4	0.247	0.252	0.250	40.00

Coeff 1 = -0.634426
Coeff 2 = 161.553902
Coeff of correlation (1st degree) : 0.999663

Pos	Name	Rep1 ABS	Rep2 ABS	Aver ABS	RStd Dev	Calc conc ug/l	
1	Blank	0.000	0.003	0.001	126.8	-0.473	
5	CSSISTRD	0.342	0.342	0.342	0.1	54.617	use D as blank
5	CSSISTRD	0.381	0.381	0.381	0.0	60.918	%rec= 63.01
6	CSCRA	0.031	0.032	0.031	2.4	4.374	
6	CSCRA	0.085	0.085	0.085	0.5	13.098	%rec= 87.24
7	CBBLK	0.000	0.002	0.001	105.6	-0.473	
7	CBBLK	0.056	0.055	0.055	1.5	8.251	%rec= 82.51
8	CSSTRCON	0.184	0.185	0.184	0.5	29.091	
8	CSSTRCON	0.231	0.228	0.229	0.9	36.361	%rec= 72.70
9	CSFNLAB	0.171	0.171	0.171	0.1	26.991	
9	CSFNLAB	0.216	0.219	0.218	1.1	34.584	%rec= 75.93
10	RSQ70050	0.007	0.010	0.009	19.4	0.820	
10	RSQ70050	0.062	0.059	0.061	2.8	9.220	%rec= 84.01
11	KKIFBFS	0.108	0.110	0.109	1.1	16.975	
11	KKIFBFS	0.157	0.158	0.157	0.5	24.730	%rec= 77.55
12	RSQ70050	0.002	0.002	0.002	18.9	-0.311	
12	RSQ70050	0.055	0.054	0.055	1.3	8.251	%rec= 82.51
	RSCA1365	0.265	0.267	0.266	0.3	42.339	ee ½
	RSCA1365	0.310	0.311	0.310	0.2	49.447	%rec= 71.08
14	KSIFBFS	0.342	0.343	0.342	0.2	54.617	
14	KSIFBFS	0.387	0.386	0.386	0.1	61.725	%rec= 71.08
15	QSCA1365	0.253	0.253	0.253	0.1	40.239	
15	QSCA1365	0.299	0.299	0.299	0.0	47.670	%rec= 74.31
16	RSCA1366	0.298	0.305	0.302	1.6	48.155	ee ½
16	RSCA1366	0.350	0.351	0.350	0.3	55.909	%rec= 77.55
17	RSCA1367	0.247	0.245	0.246	0.4	39.108	ee ½
17	RSCA1367	0.292	0.290	0.291	0.3	46.378	%rec= 72.70
18	RSCA1368	0.264	0.267	0.266	0.9	42.339	ee ½
18	RSCA1368	0.313	0.311	0.312	0.3	49.770	%rec= 74.31
19	CBBLK	0.000	-0.001	-0.001	200.5	-0.796	
19	CBBLK	0.057	0.057	0.057	0.1	8.574	%rec= 85.74
20	CSSTRCON	0.168	0.171	0.170	1.3	26.830	
20	CSSTRCON	0.219	0.217	0.218	0.8	34.584	%rec= 77.55
21	RSCA1369	0.233	0.233	0.233	0.0	37.008	ee ½
21	RSCA1369	0.280	0.281	0.281	0.2	44.762	%rec= 77.55
22	RSCA1370	0.283	0.286	0.284	0.8	45.247	ee ½
22	RSCA1370	0.326	0.329	0.327	0.6	52.194	%rec= 69.47
23	RSCA2013	0.252	0.257	0.254	1.3	40.400	ee ½
23	RSCA2013	0.301	0.299	0.300	0.6	47.832	%rec= 74.31
24	CBBLK	-0.001	-0.002	-0.002	32.3	-0.958	
24	CBBLK	0.058	0.056	0.057	2.5	8.574	%rec= 85.74
25	CSSTRCON	0.188	0.187	0.187	0.5	29.576	
25	CSSTRCON	0.231	0.236	0.234	1.4	37.169	%rec= 75.93

Raw:
Seq: BGF7050F

Il

Blk
~~Std~~
CSCRA
Blk
Control ✓
FULAB ✓
Q70050 ✓
IFBFS ✓
Q70050 ✓
CA1365 ✓
IFBFS ✓
CA1365 ✓
CA1366 ✓
CA1367 ✓
CA1368 ✓
~~CA~~ Blk
Control ✓
CA1369 ✓
CA1370 ✓
CA2013 ✓
Blk
Control ✓

RA 11/29/89

142

To Page N

Witnessed & Understood by me,	Date	Invented by	Date
		Recorded by	

BR
11/10/88

Element	Standard Regression Data				Detection Limit Blank Data		
	Corr. Coeff.	Slope	Intercept	Units	Blank Mean	Std. Dev.	MDL
TL	0.997	21.2	-0.662	ug/l	-1.00	-1.00	10.0

*** Initial and Continuing Calibration Verification and Calib. Blank Data ***

Element: TL Units: ug/l

Position	Sample	Calculated	Expected	% Rec
1	SXBLK	[illegible]	0	
2	SASISTRA	[illegible]	10.0	99.4
3	SBSISTRB	[illegible]	20.0	106
4	SCSISTRC	[illegible]	40.0	106
6	SDSISTRD	[illegible]	60.0	96.3
8	CSCRA	4.80	10.0	48.0
12	CSSTRCON	30.8	30.0	103
14	CSFNLAB	27.8	30.0	92.0
36	CSSTRCON	31.1	30.0	104
46	CSSTRCON	27.3	30.0	90.9
10	CBBLK	-0.983	-1.00	98.3
34	CBBLK	-0.340	-1.00	34.0
44	CBBLK	-0.340	-1.00	34.0

Regression analysis Degree: 1
Data file: P7050F started on 110989 at 190607
Element: TI

Std points

#	Rep1 ABS	Rep2 ABS	Aver ABS	CONC (ug/l)
1	-0.002	-0.001	-0.002	0.00
2	0.034	0.033	0.033	10.00
3	0.066	0.069	0.068	20.00
4	0.135	0.132	0.134	40.00

Coeff 1 = 0.357894
Coeff 2 = 294.285078
Coeff of correlation (1st degree) : 0.999864

Pos	Name	Rep1 ABS	Rep2 ABS	Aver ABS	RStd Dev	Calc conc ug/l	
1	Blank	0.000	0.002	0.001	93.9	0.652	
	CSSISTRD	0.181	0.182	0.182	0.5	53.918	
	CSSISTRD	0.239	0.239	0.239	0.3	70.692 %rec=	83.87
6	CSCRA	0.016	0.017	0.017	3.4	5.361	
6	CSCRA	0.084	0.083	0.084	0.4	25.078 %rec=	98.59
7	CBBLK	-0.000	-0.002	-0.001	120.9	0.064	
7	CBBLK	0.068	0.069	0.068	0.8	20.369 %rec=	101.53
8	CSSTRCON	0.099	0.097	0.098	1.3	29.198	
8	CSSTRCON	0.159	0.161	0.160	0.8	47.444 %rec=	91.23
9	CSFNLAB	0.089	0.086	0.088	2.1	26.255	
9	CSFNLAB	0.151	0.152	0.151	0.7	44.795 %rec=	92.70
10	RSQ70050	-0.000	-0.000	-0.000	12.0	0.358	
10	RSQ70050	0.068	0.065	0.067	3.1	20.075 %rec=	98.59
11	KKIFBFS	0.138	0.137	0.137	0.3	40.675	
11	KKIFBFS	0.195	0.193	0.194	0.5	57.449 %rec=	83.87
12	RSQ70050	0.001	-0.001	-0.000	464.6	0.358	
12	RSQ70050	0.066	0.068	0.067	1.7	20.075 %rec=	98.59
13	RSCA1365	0.003	0.003	0.003	18.7	1.241	
13	RSCA1365	0.066	0.068	0.067	2.1	20.075 %rec=	94.17
4	KSIFBFS	0.139	0.139	0.139	0.1	41.264	
4	KSIFBFS	0.192	0.197	0.195	1.6	57.743 %rec=	82.40
15	QSCA1365	0.002	0.002	0.002	18.1	0.946	
15	QSCA1365	0.066	0.068	0.067	1.3	20.075 %rec=	95.64
16	RSCA1366	0.001	0.002	0.002	46.4	0.946	
16	RSCA1366	0.069	0.069	0.069	0.6	20.664 %rec=	98.59
17	RSCA1367	0.002	0.000	0.001	77.2	0.652	
17	RSCA1367	0.070	0.069	0.069	0.9	20.664 %rec=	100.06
18	RSCA1368	0.001	0.002	0.001	74.8	0.652	
18	RSCA1368	0.069	0.067	0.068	1.9	20.369 %rec=	98.59
19	CBBLK	0.001	0.001	0.001	25.4	0.652	
19	CBBLK	0.067	0.067	0.067	0.3	20.075 %rec=	97.11
20	CSSTRCON	0.099	0.099	0.099	0.0	29.492	
20	CSSTRCON	0.160	0.158	0.159	0.7	47.149 %rec=	88.29
21	RSCA1369	0.001	0.001	0.001	20.5	0.652	
21	RSCA1369	0.069	0.068	0.068	1.5	20.369 %rec=	98.59
22	RSCA1370	0.002	0.002	0.002	1.5	0.946	
22	RSCA1370	0.068	0.068	0.068	0.2	20.369 %rec=	97.11
23	RSCA2013	0.002	0.003	0.002	7.6	0.946	
23	RSCA2013	0.070	0.070	0.070	0.3	20.958 %rec=	100.06
24	CBBLK	0.000	0.001	0.001	74.0	0.652	
24	CBBLK	0.068	0.068	0.068	0.8	20.369 %rec=	98.59
25	CSSTRCON	0.087	0.088	0.087	1.3	25.961	
25	CSSTRCON	0.149	0.151	0.150	1.1	44.501 %rec=	92.70
25	CSSTRCON	0.109	0.115	0.115	0.0	34.201 %rec=	-51.50

om Page No.

Raw:
Seq: BSF750EA

Pb

BIK
Std
CSCEA
BIK
Control
CA1365 ½ ✓
IFBFS ✓
CA1365 ✓
CA1367 ✓
CA1368 ✓
CA1376 ✓
CA2013 ✓
CA1366 ER
BIK
Control

Raw:
Seq: BSF750SB

Pb

BIK
Std
CSCEA
BIK
Control ✓
CA1366 ½ ✓
CA1366 ½ not needed
BIK
Control ✓

R A
1 1/2 9/64

To Page No.

Standard Regression Data					Detection Limit Blank Data		
Element	Corr. Coeff.	Slope	Intercept	Units	Blank Mean	Std. Dev.	MDL
PB	0.99989	213.6	-0.979	ug/l	-1.00	-1.00	5.00

*** Initial and Continuing Calibration Verification and Calib. Blank Data ***

Element: PB Units: ug/l

Position	Sample	Calculated	Expected	% Rec
1	SXBLK	-0.124	0	
2	SASISTRA	9.92	10.0	99.2
3	SBSISTRB	20.4	20.0	102
4	SCSISTRC	39.8	40.0	99.6
6	CSSISTRD	57.3	60.0	95.6
8	CSCRA	3.29	5.00	65.9
12	CSSTRCON	29.4	30.0	97.9
34	CSSTRCON	29.6	30.0	98.6
10	CBBLK	-0.124	-1.00	12.4
32	CBBLK	-0.765	-1.00	76.5

Regression analysis Degree: 1
Data file: P750EA started on 110989 at 192301
Element: Pb

Std points

#	Rep1 ABS	Rep2 ABS	Aver ABS	CONC (ug/l)
1	0.004	0.005	0.004	0.00
2	0.052	0.049	0.051	10.00
3	0.101	0.098	0.100	20.00
4	0.189	0.193	0.191	40.00

Coeff 1 = -0.978663
Coeff 2 = 213.626167
Coeff of correlation (1st degree) : 0.999885

Pos	Name	Rep1 ABS	Rep2 ABS	Aver ABS	RStd Dev	Calc conc ug/l	
1	Blank	0.007	0.005	0.006	25.9	0.303	
	CSSISTRD	0.277	0.269	0.273	2.1	57.341	
5	CSSISTRD	0.304	0.301	0.302	0.7	63.536 %rec=	61.95
6	CSCRA	0.021	0.019	0.020	5.5	3.294	
6	CSCRA	0.064	0.067	0.066	2.6	13.121 %rec=	98.27
7	CBBLK	0.002	0.005	0.004	51.6	-0.124	
7	CBBLK	0.051	0.051	0.051	1.0	9.916 %rec=	99.16
8	CSSTRCON	0.145	0.139	0.142	3.2	29.356	
8	CSSTRCON	0.176	0.176	0.176	0.1	36.620 %rec=	72.63
10	RSCA1365 RD	0.111	0.111	0.111	0.3	22.734	
10	RSCA1365	0.155	0.151	0.153	2.2	31.706 %rec=	89.72
11	KSIFBFS	0.150	0.146	0.148	1.9	30.638	
11	KSIFBFS	0.187	0.183	0.185	1.5	38.542 %rec=	79.04
12	QSCA1365	0.109	0.105	0.107	3.0	21.879	
12	QSCA1365	0.145	0.150	0.147	2.5	30.424 %rec=	85.45
13	RSCA1367	0.097	0.098	0.098	0.3	19.957	
13	RSCA1367	0.138	0.137	0.138	0.4	28.502 %rec=	85.45
14	RSCA1368	0.105	0.107	0.106	1.1	21.666	
14	RSCA1368	0.151	0.150	0.150	0.5	31.065 %rec=	94.00
	RSCA1369	0.099	0.098	0.098	1.0	19.957	
15	RSCA1369	0.138	0.139	0.139	0.6	28.715 %rec=	87.59
16	RSCA1370	0.117	0.113	0.115	2.4	23.588	
16	RSCA1370	0.158	0.157	0.157	0.7	32.561 %rec=	89.72
17	RSCA2013	0.107	0.103	0.105	2.5	21.452	
17	RSCA2013	0.149	0.146	0.147	1.2	30.424 %rec=	89.72
18	RSCA1366	0.127	0.126	0.126	0.7	25.938	
18	RSCA1366	[illegible]	0.166	0.164	1.5	34.056 %rec=	81.13
19	CBBLK	[illegible]	0.000	0.001	74.9	-0.765	
19	CBBLK	[illegible]	0.049	0.050	1.3	9.703 %rec=	97.03
20	CSSTRCON	0.143	0.143	0.143	0.3	29.570	
20	CSSTRCON	0.179	0.183	0.181	1.7	37.688 %rec=	81.18

om Page No. _____

Raw:
Seq: BSF750FA

Pb

BIK
Std
CSCRA
BIK
Control
CA1365 ½ ✓
IFBFS ✓
CA1365 ✓
CA1367 ✓
CA1368 ✓
CA1376 ✓
CA2013 ✓
CA1366 ✓ RR
BIK
Control

Raw:
Seq: BSF750SB

Pb

BIK
Std
CSCRA
BIK
Control ✓
CA1366 ½ ✓
CA1366 ½ not needed
BIK
Control ✓

R A 11/29/89

tnessed & Understood by me,	Date	Invented by	Date	150
		Recorded by		

Standard Regression Data					Detection Limit Blank Data		
Element	Corr. Coeff.	Slope	Intercept	Units	Blank Mean	Std. Dev.	MDL
PB	0.99982	272.3	-0.538	ug/l	-1.00	-1.00	5.00

*** Initial and Continuing Calibration Verification and Calib. Blank Data ***

Element: PB Units: ug/l

Position	Sample	Calculated	Expected	% Rec
1	SXBLK	-0.266	0	
2	SASISTRA	10.1	10.0	101
3	SBSISTRB	20.4	20.0	102
4	SCSISTRC	39.8	40.0	99.4
6	CSSISTRD	58.6	60.0	94.4
8	CSCRA	4.64	5.00	92.7
12	CSSTRCON	30.0	30.0	99.8
20	CSSTRCON	30.0	30.0	99.9
10	CBBLK	-0.538	-1.00	53.8
18	CBBLK	-0.810	-1.00	81.0

Regression analysis Degree: 1
Data file: P75088 started on 081888 at 142149
Element: Pb

Std points

#	Rep1 ABS	Rep2 ABS	Aver ABS	CONC (ug/l)
1	0.002	0.000	0.001	0.00
2	0.040	0.039	0.039	10.00
3	0.076	0.078	0.077	20.00
4	0.148	0.148	0.148	40.00

Coeff 1 = -0.538193
Coeff 2 = 272.274605

Coeff of correlation (1st degree) : 0.999818

Pos	Name	Rep1 ABS	Rep2 ABS	Aver ABS	RStd Dev	Calc conc ug/l	
1	Blank	0.001	0.002	0.001	72.7	-0.266	
5	CSSISTRD	0.210	0.210	0.210	0.0	56.639	
5	CSSISTRD	0.241	0.242	0.241	0.4	65.080	%rec= 84.41
5	CSCRA	0.020	0.019	0.019	3.4	4.635	
6	CSCRA	0.054	0.055	0.054	1.8	14.165	%rec= 95.30
7	CBBLK	-0.000	-0.000	-0.000	100.0	-0.538	
7	CBBLK	0.035	0.037	0.036	4.1	9.264	%rec= 92.64
9	CSSTRCON	0.111	0.112	0.112	0.9	29.957	
8	CSSTRCON	0.145	0.147	0.146	1.0	39.214	%rec= 92.57
11	RSCA1366/2	0.100	0.100	0.100	0.3	26.689	
11	RSCA1366	0.133	0.133	0.133	0.1	35.674	%rec= 89.85
12	RSCA1366/5	0.042	0.042	0.042	0.2	10.897	not included
1	RSCA1366	0.077	0.076	0.076	1.5	20.155	%rec= 92.57
13	CBBLK	-0.002	-0.000	-0.001	100.1	-0.810	
13	CBBLK	0.035	0.036	0.036	2.1	9.264	%rec= 92.64
14	CSSTRCON	0.113	0.112	0.112	0.4	29.957	
14	CSSTRCON	0.148	0.148	0.147	1.0	39.486	%rec= 95.30

METALS QC DATA DUPLICATE/SERIAL DIL/BLANK/MATRIX SPIKE INFORMATION WED. NOV 15. 1989. 5:12 PM PAGE 1

Batch File BQF750CA Job Id Q70050 Sequence Pos # 57 Units : ug/l Spiking Lot Id : IFBPS

Blank/Matrix Spike Information

Element	Pos	Spiked	Unspiked	Added	% Recovery
SE	18	9.64	0	10.0	96.4

Batch File *BQF7050F* *Job Id* *Q70050* *Sequence Pos #* : 57 *Units* : *ug/l* *Spiking Lot Id* : *IFBPS*

Blank/Matrix Spike Information

Element	Pos	Spiked	Unspiked	Added	% Recovery
TL	18	43.3	0	50.0	86.6

SS

METALS QC DATA: DUPLICATE/SERIAL DIL/BLANK/MATRIX SPIKE INFORMATION WED. NOV 15, 1989, 5:12 PM PAGE 2

Batch File : BQF750CA Job Id : CA1365 Sequence Pos # : 60 Units : ug/l Spiking Lot Id : IFBPS

Blank/Matrix Spike Information

Element	Pos	Spiked	Unspiked	Added	% Recovery
SE	24	9.96	.648	10.0	93.1

Batch File : BQF750CA Job Id : CA1365 Sequence Pos # : 61 Units : ug/kg

Duplicate Information

Element	Pos	Sample	Replicate	RPD
SE	26	157	157	0

METALS QC DATA: DUPLICATE/SERIAL DIL/BLANK/MATRIX SPIKE INFORMATION WED. NOV 15. 1989. 5:12 PM PAGE 5

Batch File : BQF7050F Job Id : CA1365 Sequence Pos # : 60 Units : ug/l Spiking Lot Id : IFBPS

Blank/Matrix Spike Information

Element	Pos	Spiked	Unspiked	Added	% Recovery
TL	24	44.0	.302	50.0	87.4

Batch File : BQF7050F Job Id : CA1365 Sequence Pos # : 61 Units : ug/kg

Duplicate Information

Element	Pos	Sample	Replicate	RPD
TL	20	73.2	-3.84	222.145

Batch File : BQF750EA Job Id : CA1365 Sequence Pos # : 60 Units : ug/l Spiking Lot Id : IFBPS

Blank/Matrix Spike Information

Element	Pos	Spiked	Unspiked	Added	% Recovery
PB	16	30.6	22.7	10.0	79.1

METALS QC DATA: DUPLICATE/SERIAL DIL/BLANK/MATRIX SPIKE INFORMATION WED. NOV 15. 1989. 5:12 PM PAGE 8

Batch File : BQF750EA Job Id : CA1365 Sequence Pos 8 : 61 Units : ug/kg

Duplicate Information

Element	Pos	Sample	Replicate	RPD
PB	18	11000	10600	3.70370

ETC

METALS SUBSIDIARY DATA - MERCURY

From Page No.

BLK	CA1963-1
0.2 ppb	-A1
0.5	-2
1.0	CA1949-1
2.0	-2
5.0	CA1950-1
10.0	-2
BLK	CA1951-1
QCEPA	-2
Control	CA1952-1
Q70050-1	-2
-A1	CA1953-1
-2	-2
CA1370-1	CA1954-1
-A1	-2
-2	CA1964-1
CA1365-1	-2
-2	CA1965-1
CA1366-1	-2
-2	BLK
CA1367-1	Control
-2	HA1168-1
CA1368-1	-2
-2	BLK
CA1369-1	Control
-2	BLK
CA2013-1	0.2 ppb
-2	0.5
BLK	1.0
Control	2.0
Q70053-1	5.0
-A1	10.0
-2	

To Page No.

Witnessed & Understood by me,	Date	Invented by	Date 10/26/89
		Recorded by O.A.	

ETC CORP — **A A Laboratory**

Mercury Analysis — **Page :** Pg. 70050, 70053 — **Matrix :** Soil — **Analyst :** R.R.

CALC. BY: R.A 10/11/89 DATE

REV BY: DATE

Standards Run

Blank	1.0	1.0	
0.2 ppb	4.0	4.0	
0.5 ppb	7.0	8.0	
1.0 ppb	15.0	13.0	
2.0 ppb	27.0	26.0	
5.0 ppb	59.0	60.0	
10.0ppb	100.0		

MDL

IDL = 0.09 ug/L

FOR WATER, MDL = 0.20 ug/L

FOR SOILS, IDL = 36 ug/kg

MDL = Dilution Factor x 0.20 ug/kg

(% Solids Conversion FACTOR)

Sample / QC ID	Rep 1 Peak Height	Rep 2 Peak Height	Calculated ug/L	Average ug/L	Volumes Initial	Volumes Final	%	Reported Value ug/kg	MDL ug/kg
BLK	2.0			0.07	0.25	100			
QCEPA-8	25.0			1.88					
Control	21.5			1.59					
Q70050-1,2	0	0		-0.07			400	- ND	80
-A1	15.0			1.07					
CA1370-1,2	2.0	3.0	.07/.15	.11			498	55	100
-A1	17.0			1.23					
CA1365-1,2	2.0	2.0		0.07			485	ND	97
CA1366-1,2	2.5	2.0	.11/.07	0.09			498	45	100
CA1367-1,2	2.0	2.0		0.07	↓	↓	545	ND	109

ETC CORP **A A Laboratory** (2)

Mercury Analysis **Page :** 70050, 70053 **Matrix :** Soil **Analyst :** R.R

Samples / QC ID	Rep 1	Rep 2	Rep 3	Calc [ ]	Volumes Init.	Volumes Final	D F	Reported Value ug/kg	MDL ug/kg
CA1368-1,2	2.0	2.0		0.07	0.25	100	465	ND	93
CA1369-1,2	2.0	2.0		0.07			517	ND	103
CA2013-1,2	3.0	2.0	.15 / 0.09	0.11			481	53	96
BIK	1.0			0				/	
Control	21.5			1.59				/	
Q70053-1,2	0	1.0	.09 / .00	0			400	ND	
-A1	16.0			1.15					
CA1963-1,2	2.0	2.0		0.07			428	ND	86
-A1	17.0			1.23					
CA1949-1,2	3.0	2.0	.15 / .07	0.11			430	47	86
CA1950-1,2	7.0	6.0	.45 / .37	0.41			453	186	91
CA1951-1,2	5.0	4.0	.30 / .22	0.26			481	125	96
CA1952-1,2	3.0	4.0	.15 / .22	0.19			466	89	93
CA1953-1,2	2.0	1.5	0.07 / 0.09	0.06			431	ND	86
CA1954-1,2	2.0	~~3.0~~ 1.0	0.07 / 0.0	0.04			430	ND	86
CA1964-1,2	~~3~~ 2.0	3.0		0.15			430	65	86
CA1965-1,2	2.0	2.0		0.07			427	ND	85
BIK	1.0			0				/	
Control	18.0			1.31	↓	↓		/	

ETC CORP **A A Laboratory** (3)

Mercury Analysis **Page :** 70050, 70053 **Matrix :** **Analyst :** E.A.

Samples / QC ID	Rep 1	Rep 2	Rep 3	Calc [ ]	Volumes Init.	Volumes Final	D F	Reported Value ug/kg	MDL ug/kg
HA1168-1,2	12.0	11.0	0.83/0.76	0.80	0.25	100			
BLK	1.0			0				/	
Control	21.0			1.55				/	

Mercury: Duplicate, Spike and Calibration Data

Page: 70050, 70053

Analyst: R.R.

Date: 10/17/89

Reviewed: _____

	QC Spike	QC Spike	Matrix Spike	Matrix Spike	Matrix Spike
Sample #	Q70050	Q70053	CA1370	CA1963	
Sample conc, ug/l	ND	ND	ND	ND	
Duplicate conc, ug/l	ND	ND	.15	ND	
RPD	NC	NC	72	NC	
Spike Added, ug/l	1.00	1.00	1.00	1.00	
Spike Spl Conc, ug/l	1.07	1.15	1.23-.11=1.12	1.23	
% Recovery	107.0	115.0	112.0	123	

ICV (QC)

ID Number	EPA-6
Known Conc, ug/l	2.00
Calculated Conc, ug/l	1.88
% Recovery	94.0

CCV (Control)

ID Number		AA-59-14
Known Conc, ug/l		1.50
Calculated Conc, ug/l:		—
		% Recovery
Blank	ND	
Control	1.59	106.0
Blank	ND	
Control	1.59	106.0
Blank	ND	
Control	1.31	87.3
Blank		
Control		
Blank		
Control		

ICB (Blank)

Calculated Conc, ug/l ND

REGRESSION ANALYSIS - Degree: 2

User Name: RA P70050,70053

Date: 10/17/89

Known Data Points

Point	X	Y
1	1.000	0.000
2	1.000	0.000
3	4.000	.200
4	4.000	.200
5	7.000	.500
6	8.000	.500
7	15.000	1.000
8	13.000	1.000
9	27.000	2.000
10	26.000	2.000
11	59.000	5.000
12	60.000	5.000

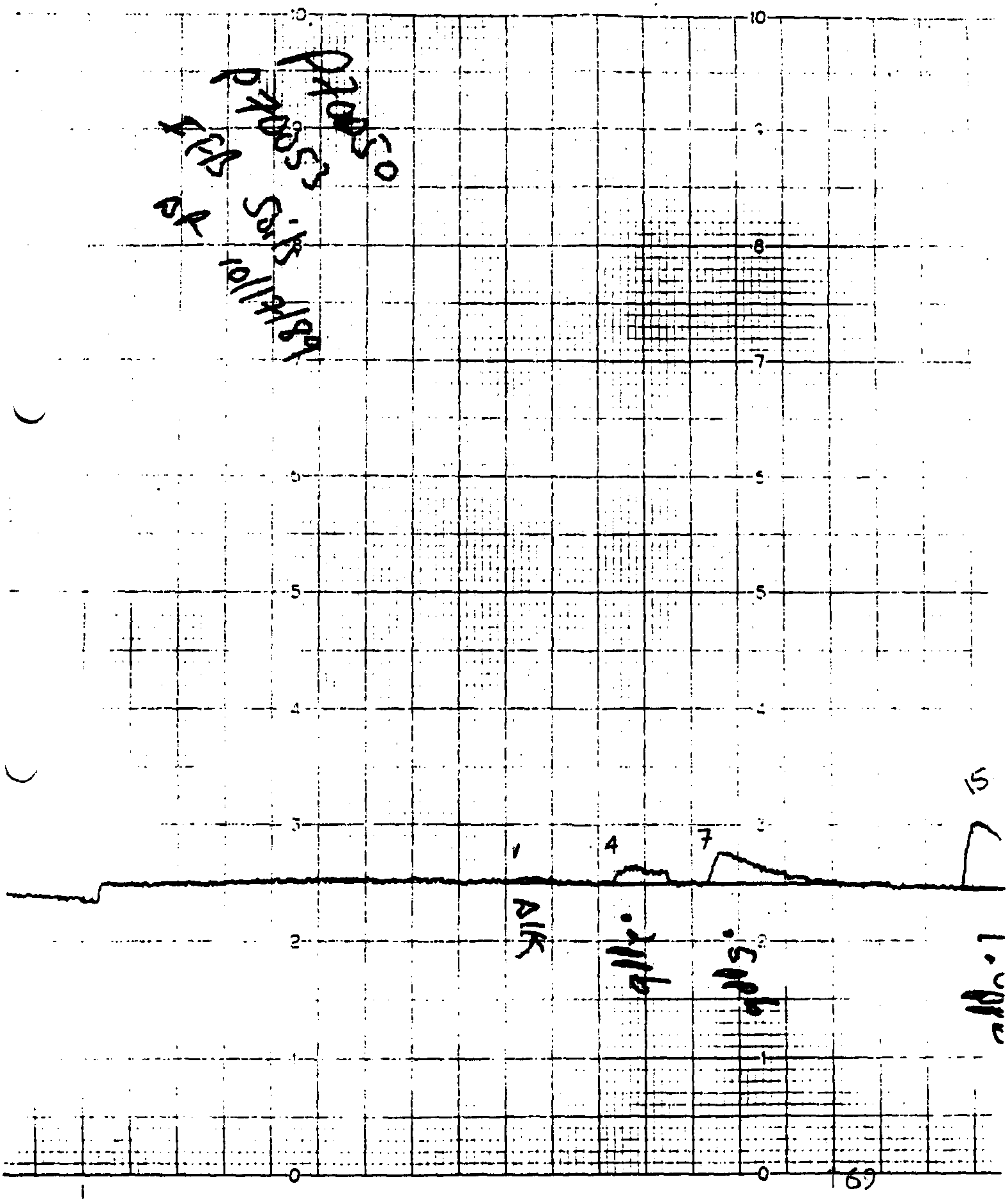
Y-Intercept: -.07400

Degree 1 Coefficient: .07309
Degree 2 Coefficient: .00020
Coefficient of Correlation: .99964

Interpolation Data Points

Point	X	Y (Calculated)
1	0.000	-.074
2	2.000	.073
3	25.000	1.881
4	21.500	1.592
5	15.000	1.068
6	3.000	.147
7	17.000	1.228
8	2.500	.110
9	1.000	-.001
10	16.000	1.148
11	17.000	1.228
12	7.000	.448
13	6.000	.372
14	5.000	.297
15	4.000	.222
16	3.000	.147
17	1.500	.036
18	18.000	1.308
19	12.000	.832
20	11.000	.755
21	21.000	1.551

e.a. 10/17/89



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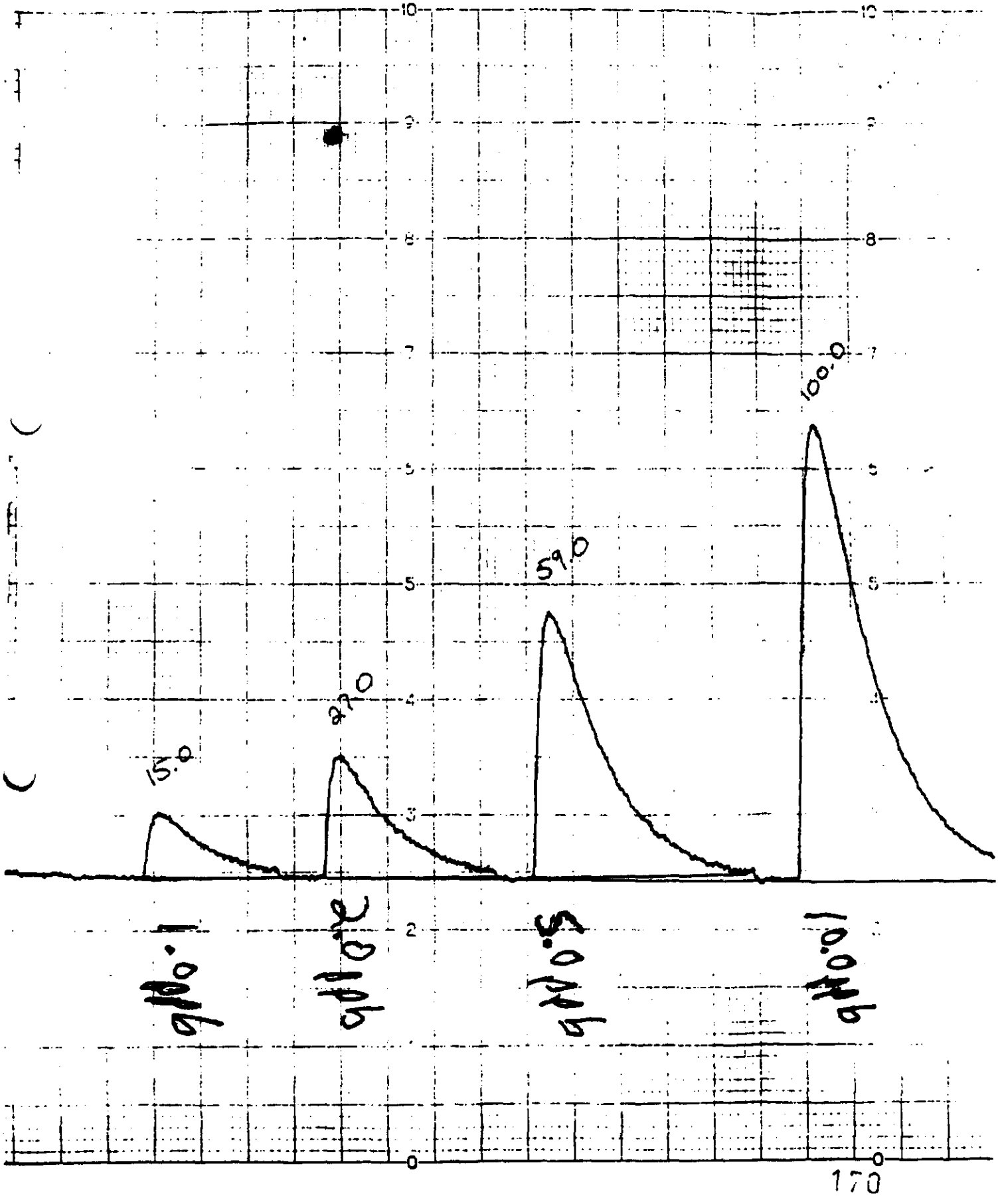
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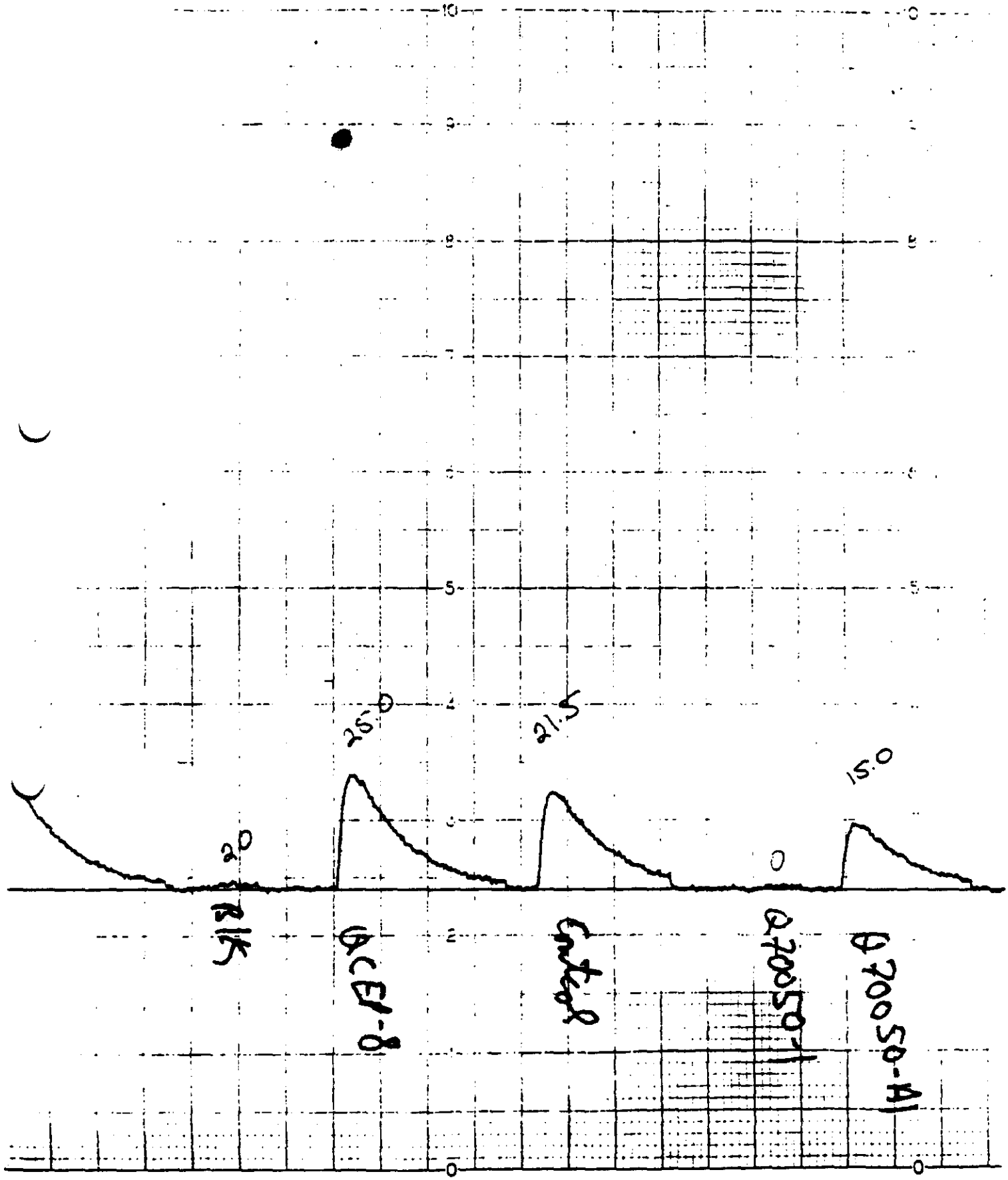
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ACEP-8
Control
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Q70050-A1

10
9
8
7
6
5
4
3
2
1
0
C.0
17.0
3.0
0
2.0
2.0
2.0
2.5
G20050-A1
G20050-2
CA1320-1
CA1320-A1
CA1360-1
CA1365-2
CA1366-1

(A2013-4
(A2013-1
(A1369-4
(A1369-1
(A1368-4
(A1368-1
(A1367-4
(A1367-1
(A1366-4
0.2
0.3
0.4
0.5
0.6
0.7
0.8
0.9
1.0
0
0
5
6
7
8
9
10

10
9
8
7
6
5
4
3
2
1
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(A1963-M
(A1963-1
Q70053-2
Q70053-M
Q70053-1
Control
AIK

CA1952-1
CA1951-2
CA1951-1
CA1950-2
CA1950-1
CA1949-2
CA1949-1
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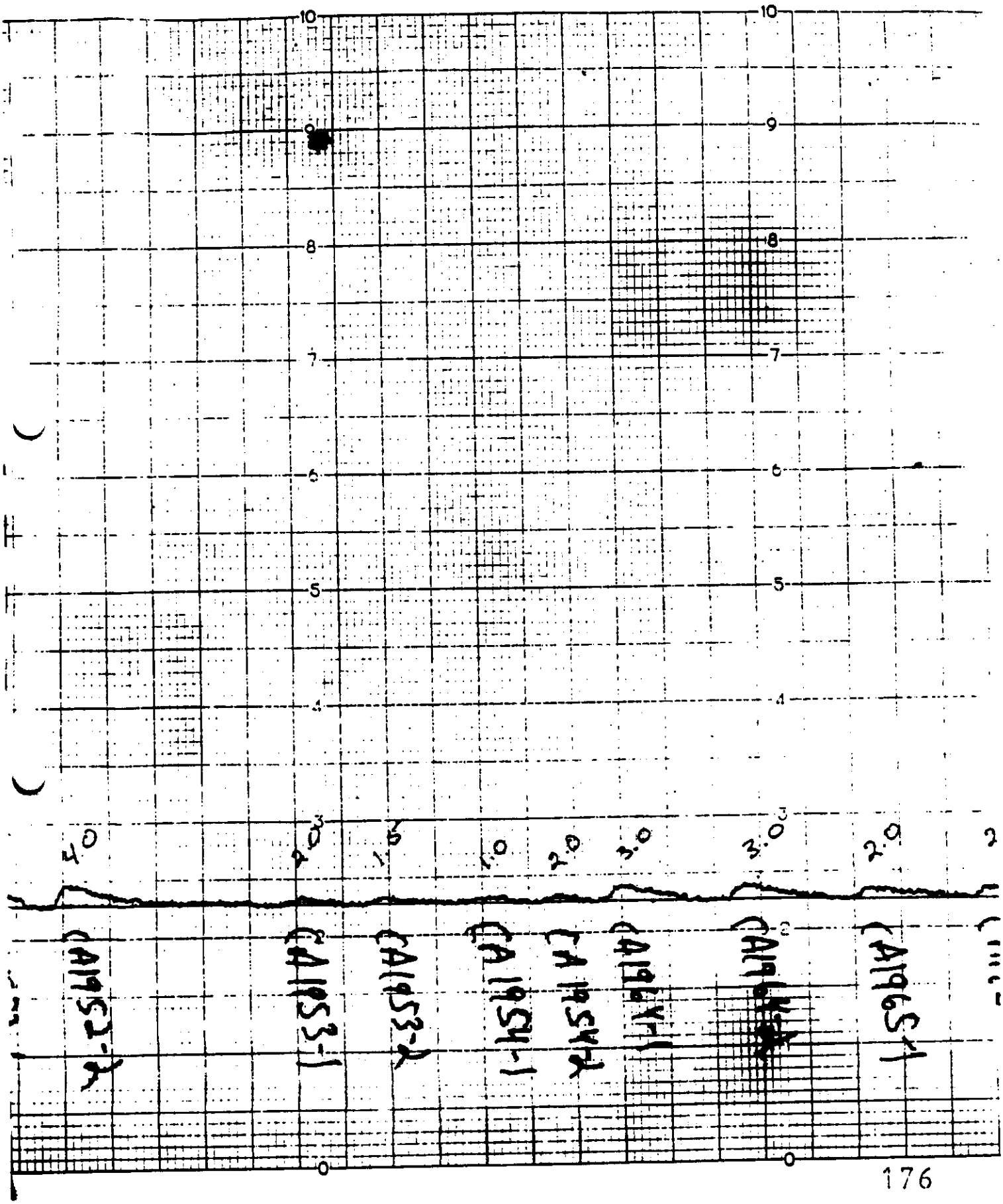
0.3
0.2
0.1
0
10
9
8
7
6
5
4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9
8
7
6
5
4
3
2
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2.0
1.5
1.0
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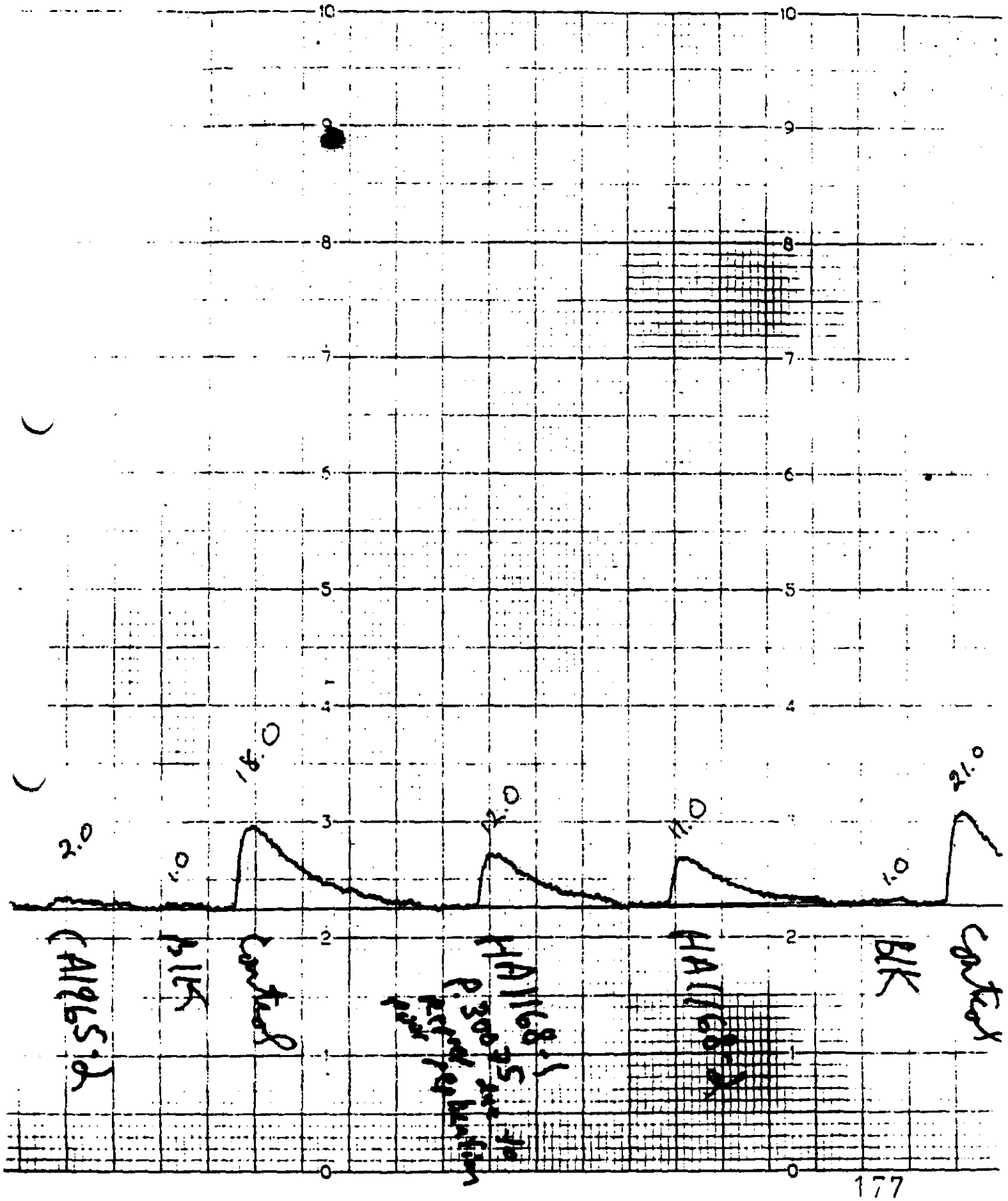
2.0
CA1953-2
CA1953-1
CA1953-2
CA1954-1
CA1954-2
CA1954-1
CA1965-1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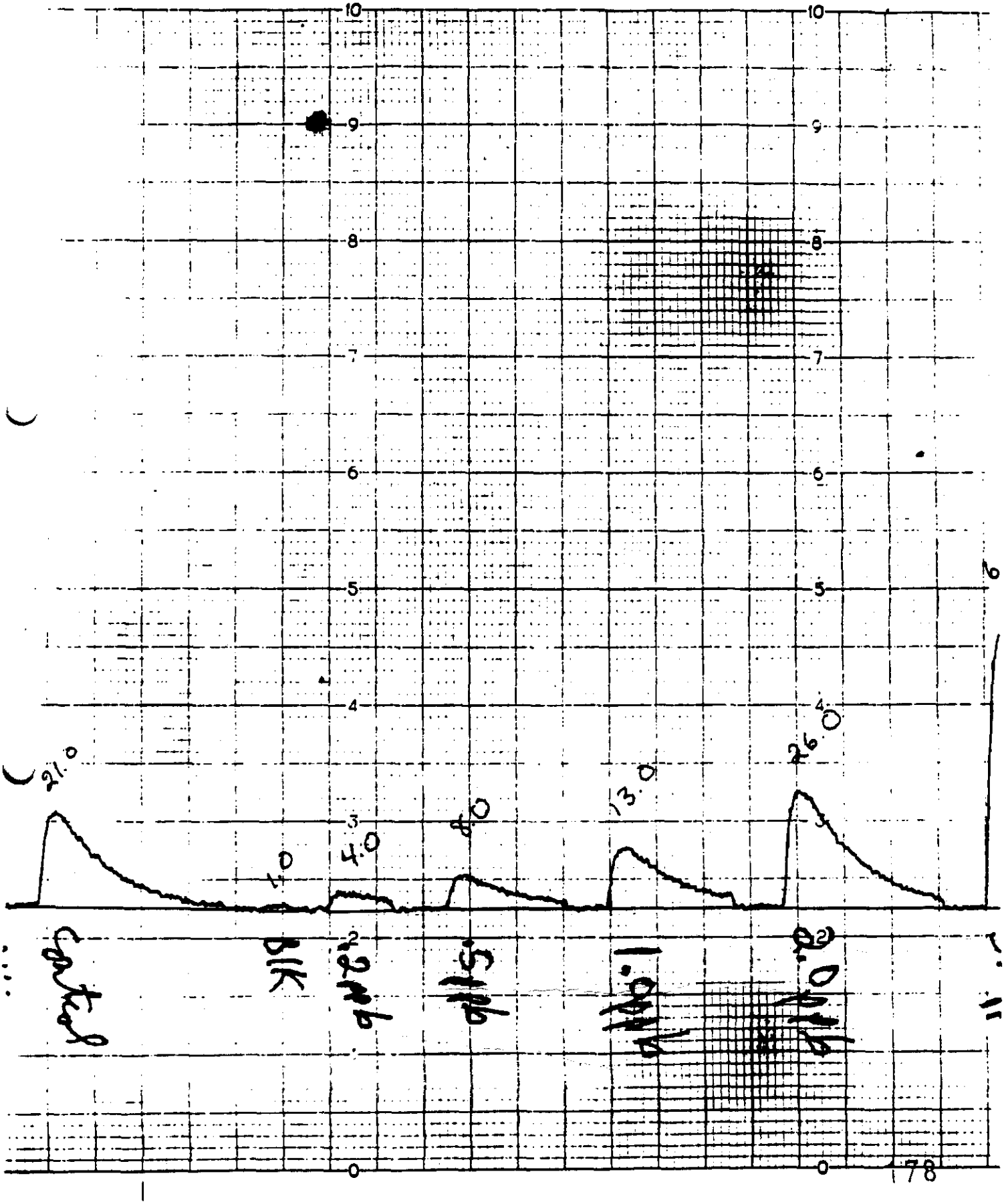
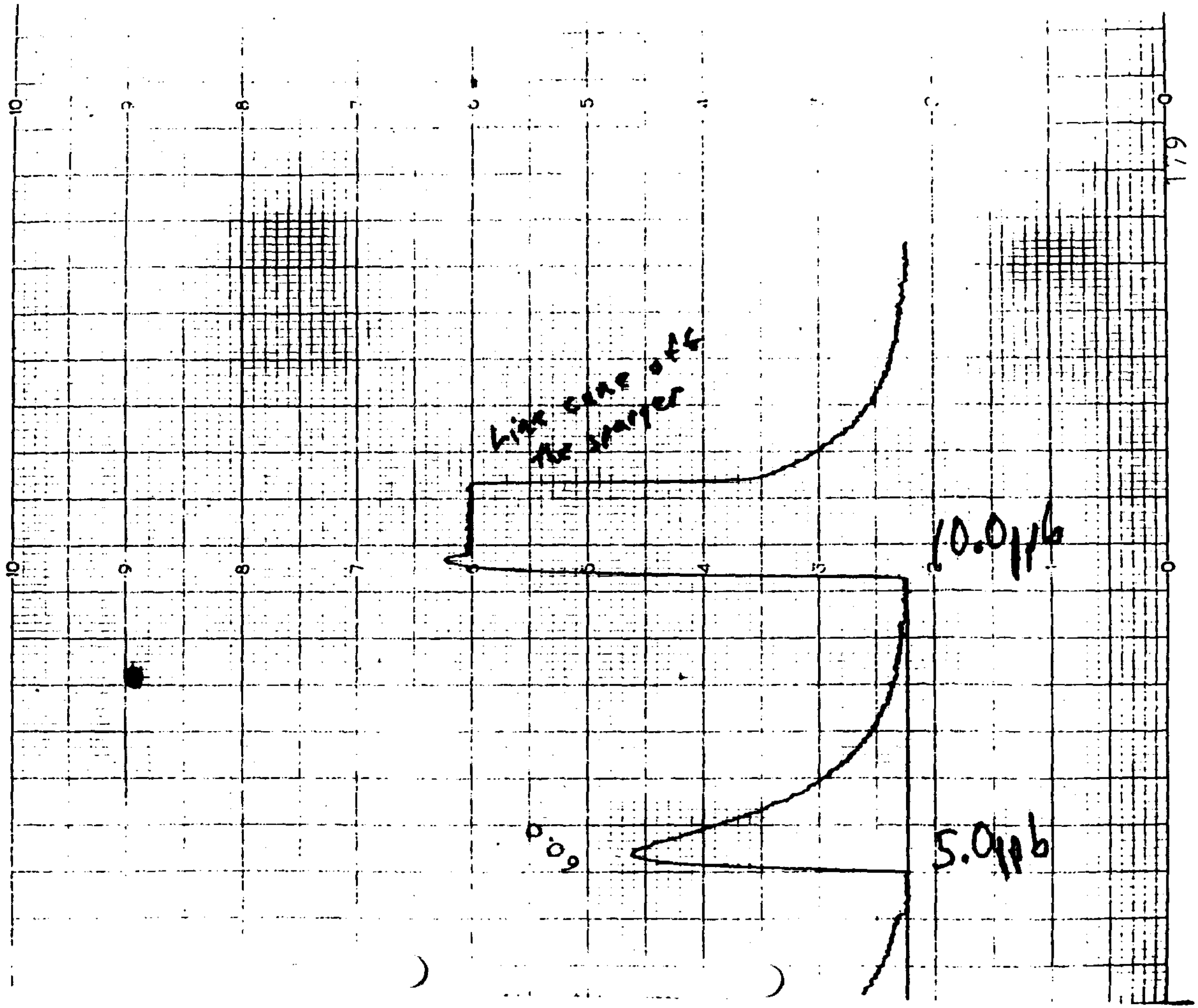
1.0
18.0
2.0
11.0
1.0
21.0
BLK
Control
HALIBUT
HALIBUT
BLK
Control


10
9
8
7
6
5
4
3
2
1
0
21.0
7.0
4.0
8.0
13.0
26.0
Control
BIK
2 mg/kg
5 mg/kg
10 mg/kg
20 mg/kg



10.0 ppb
5.0 ppb
Line came off the sparger

CYANIDE DATA

7C, 25S, I, 11S, I, 12S, I, 10S, I, & 5S, I, E

QW7004Y
QW7005

CLP CW - 10-5-89 Q. Brace.

1) 250
2) 250
3) 200
4) 150
5) 100
6) 50
7) 25
8) 10
9) W
10) 250
11) 200
12) 150
13) 100
14) 50
15) 25
16) 10
17) MB
18) MB BLANK
19) SB ⇒ 50
20) EZA 9/27 ⇒ 200
21) STO 9/27 ⇒ 200
22) CA932
23) Op
24) Spk
25) CA957

26) CA934
27) CA933
28) CA975
29) CA956
30) CA938
31) CA939
32) W
33) CLB
34) CLV
35) CA955
36) CA1368
37) CA1370
38) Op
39) CA1367
40) CA2013
41) CA1365
42) CA1369
43) CA1366
44) W
45) CLB
46) CLV
47) CA1372
48) CA1372 Op
49) CA1371 Op
50) CA1371 Spk

51) CA1373
52) CA1375
53) CA1376
54) CA1377
55) CA1378
56) CA1382
57) W
58) CLB
59) CLV
60) CA1379
61) CA1380
62) CA1381
63) CA2061
64) CA2066
65) CA1979 (FB.)
66) CA1894
67) CA1893
68) HA1164
69) CCB
70) CCV
71) BLANK 10/4
72) STO 10/4
73) EZA 10/4
74) W
75) CCB
76) CCV

QTC04056

CLP CYANIDE LOG

Date: Oct. 5, 1989 Analyst: CBrace

Batch: QW70074 Page: 1 of 4
QW70075

Cup #	ETC ID	WT/ Vol	Instr. Conc.	Dil.	Liquid x (0.5)	Soil Wet Wt. x (.25)/wt	%R	%Solid	Final Conc-
1	250 Primer		246.7				98.7		247
2	250		248.5				99.4		249
3	200		201.2				100.6		201
4	150		150.2				100.1		150
5	100		100.9				100.9		101
6	50		50.5				101.0		50.5
7	25		25.3				101.2		25.3
8	10		8.61				86.1		8.6
9	WASH		-.134						-
10	250		248.7				99.5		249
11	200		200.9				100.5		201
12	150		149.1				99.4		149
13	100		98.9				98.9		99
14	50		50.6				101.2		50.6
15	25		25.2				100.8		25.2
16	10		8.48				84.8		8.5
17	Method Blank		-.201						
18	Blank 9/27	500 ml	1.34		0.67				0.67
19	Spiked Blank	[illegible]	50.6				101.2		50.6
20	EPA 9/27	500 ml	202.6		101.3		101.3		101
21	STD 9/27	500 ml	202.1		101.1		101.1		101
22	CA 1932	5.02 g	5.08			0.25		79	0.20
23	CA1932 DUP.	4.98 g	3.62			0.18		79	0.14
24	CA 932 SPK	5.13 g	93.8			4.57	86.4 91.4	79	3.6

mdl = 0.6
mdl = 0.6
mdl = 0.6

11/19/89

CLP CYANIDE LOG

Date: 10-5-89 Analyst: Base

Batch: QW70074 Page: 2 of 4
QW70075

Cup #	ETC ID	WT/ Vol	Instr. Conc.	Dil.	Liquid x (0.5)	Soil Wet Wt. x (.25)/wt	%R	%Solid	Final Conc-	
25	CA 1957	4.98 g	2.98			0.15		88	0.13	mdl=0.6
26	CA 1934	5.00 g	1.79			0.09		84	0.08	mdl=0.6
27	CA 1933	4.96 g	6.58			0.33		81	0.27	mdl=0.6
28	CA 1935	4.99 g	2.72			0.14		84	0.12	mdl=0.6
29	CA 1956	5.00 g	8.22			0.41		80	0.33	mdl=0.6
30	CA 1938	5.02 g	1.75			0.09		93	0.08	mdl=0.5
31	CA 1939	5.02 g	4.46			0.22		84	0.18	mdl=0.6
32	WASH		-.0512							
33	CCB		-.0759							
34	CCV		99.5				99.5		99.5	
35	CA 1955	5.06 g	1.24			0.06		94	0.06	mdl=0.5
36	CA 1368	4.96 g	2.26			0.11		86	0.09	mdl=0.6
37	CA 1370	5.16 g	1.13			0.05		80	0.04	mdl=0.6
38	CA 1370 Dup	5.14 g	1.10			0.05		80	0.04	mdl=0.6
39	CA 1367	4.98 g	1.79			0.09		73	0.07	mdl=0.7
40	CA 2013	5.00 g	1.57			0.08		83	0.07	mdl=0.6
41	CA 1365	4.91 g	1.55			0.08		83	0.07	mdl=0.6
42	CA 1369	4.98 g	1.33			0.07		77	0.05	mdl=0.7
43	CA 1366	5.17 g	1.11			0.05		80	0.04	mdl=0.6
44	WASH		-.0224							
45	CCB		-.372							
46	CCV		101.6				101.6		102	
47	CA 1372	500 mls	1.14		0.57				0.57	
48	CA 1372 Dup.	500 mls	1.51		0.76				0.76	

CLP CYANIDE LOG

Date: Oct. 5, 1989 — Analyst: A Bracco

Batch: QW70074 / QW70075 — Page: 3 of 4

10/17/89

Cup #	ETC ID	WT/ Vol	Instr. Conc.	Dil.	Liquid x (0.5)	Soil Wet Wt. x (.25)/wt	%R	%Solid	Final Conc-
49	CA 1371	500 mls	0.960		0.48				0.48
50	CA 1371 SPK	500 mls	81.4		40.7		81.4		40.7
51	CA 1373	500 mls	1.11		0.56				0.56
52	CA 1375	500 mls	1.67		0.84				0.84
53	CA 1376	500 mls	1.77		0.89				0.89
54	CA 1377	500 mls	1.81		0.91				0.91
55	CA 1378	500 mls	3.15		1.58				~~1.58~~ 1.6 (initialed 10/13/89)
56	CA 1382	500 mls	.267		0.13				0.13
57	WASH		.242						
58	CCB		.0871						
59	CCV		102.5				102.5		103
60	CA 1379	500 mls	2.64		1.32				1.3
61	CA 1380	500 mls	1.77		0.89				0.89
62	CA 1381	500 mls	2.14		1.07				1.1
63	CA 2065	500 mls	1.85		0.98				0.98
64	CA 2066	500 mls	2.02		1.01				1.0
65	CA 1979	500 mls	1.93		0.97				0.97
66	CA 1894	500 mls	1.58		0.69				0.69
67	CA 1893	500 mls	1.30		0.65				0.65
* 68	HA 1164	5.00 g	0.361			0.02		88.5	0.02 mdl = 0.06
69	CCB		0.271						
70	CCV		101.5				101.5		102
71	BLK 10-4	500 mls	1.59		0.80				0.80
72	STD 10-4	500 mls	202.2		101.1		101.1		101

* Read for APDS Group.

CLP CYANIDE LOG

Date: 10-5-89 Analyst: Q. Blaca

Batch: QW70074 Page: 4 of 4
QW70075 10/17/89

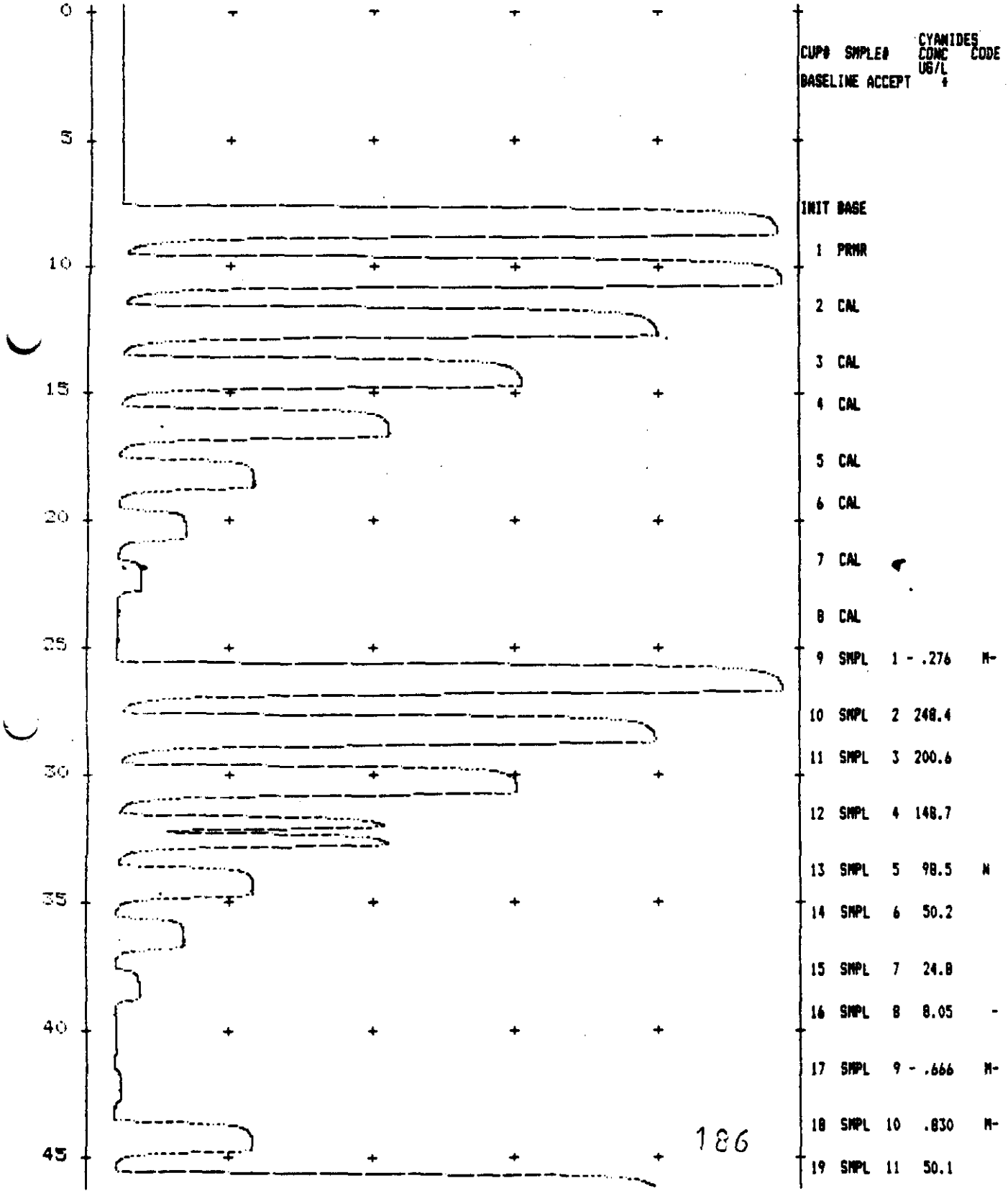
Cup #	ETC ID	WT/ Vol	Instr. Conc.	Dil.	Liquid x (0.5)	Soil Wet Wt. x (.25)/wt	%R	%Solid	Final Conc-
73	ERA 16-4	500 mL	202.7		101.4		101.4		101
74	WASH		0.342						
75	CCB		0.513						
76	CCV		99.1				99.1		99.1

Point skip is 4; can save 16 hours.

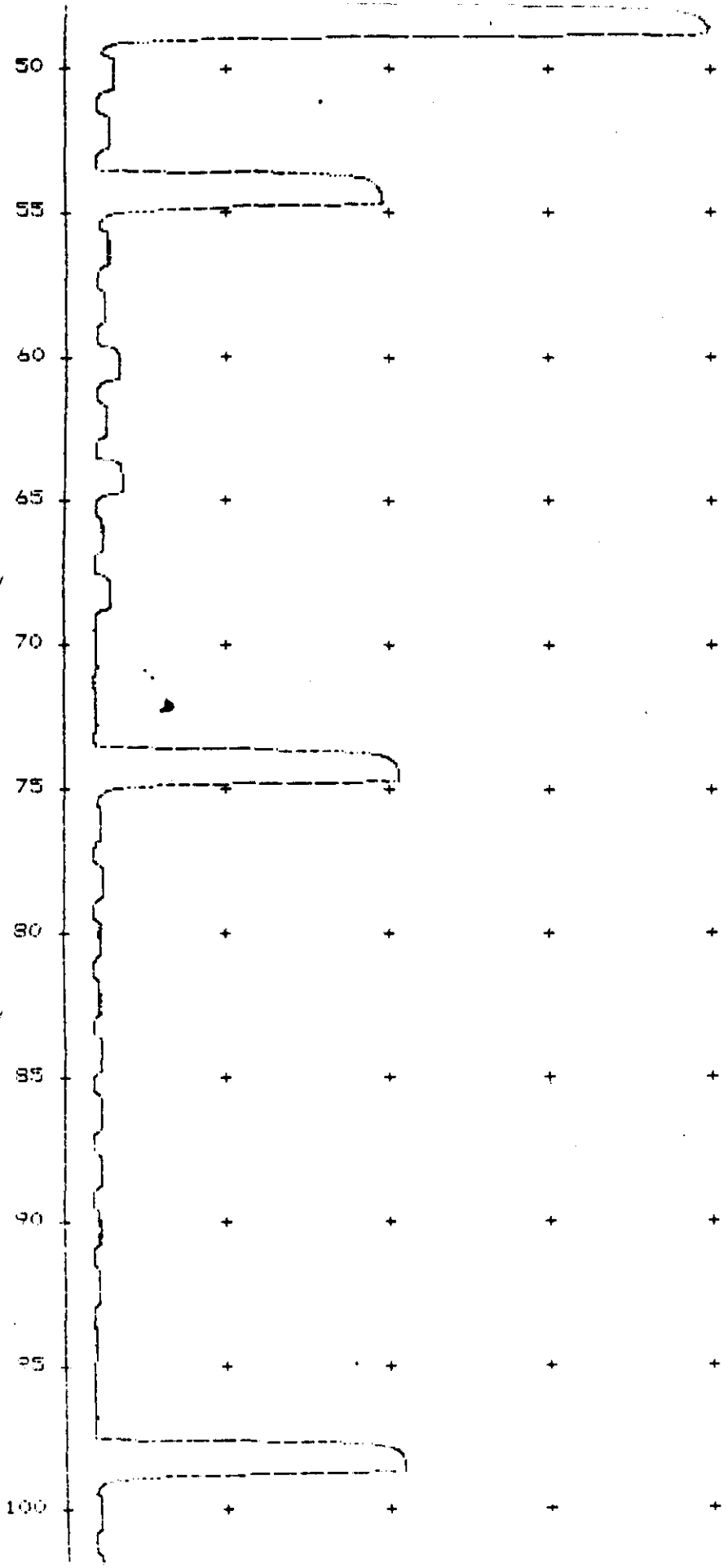
Point skip is 4; can save 16 hours.

Point skip is 4; can save 16 hours.

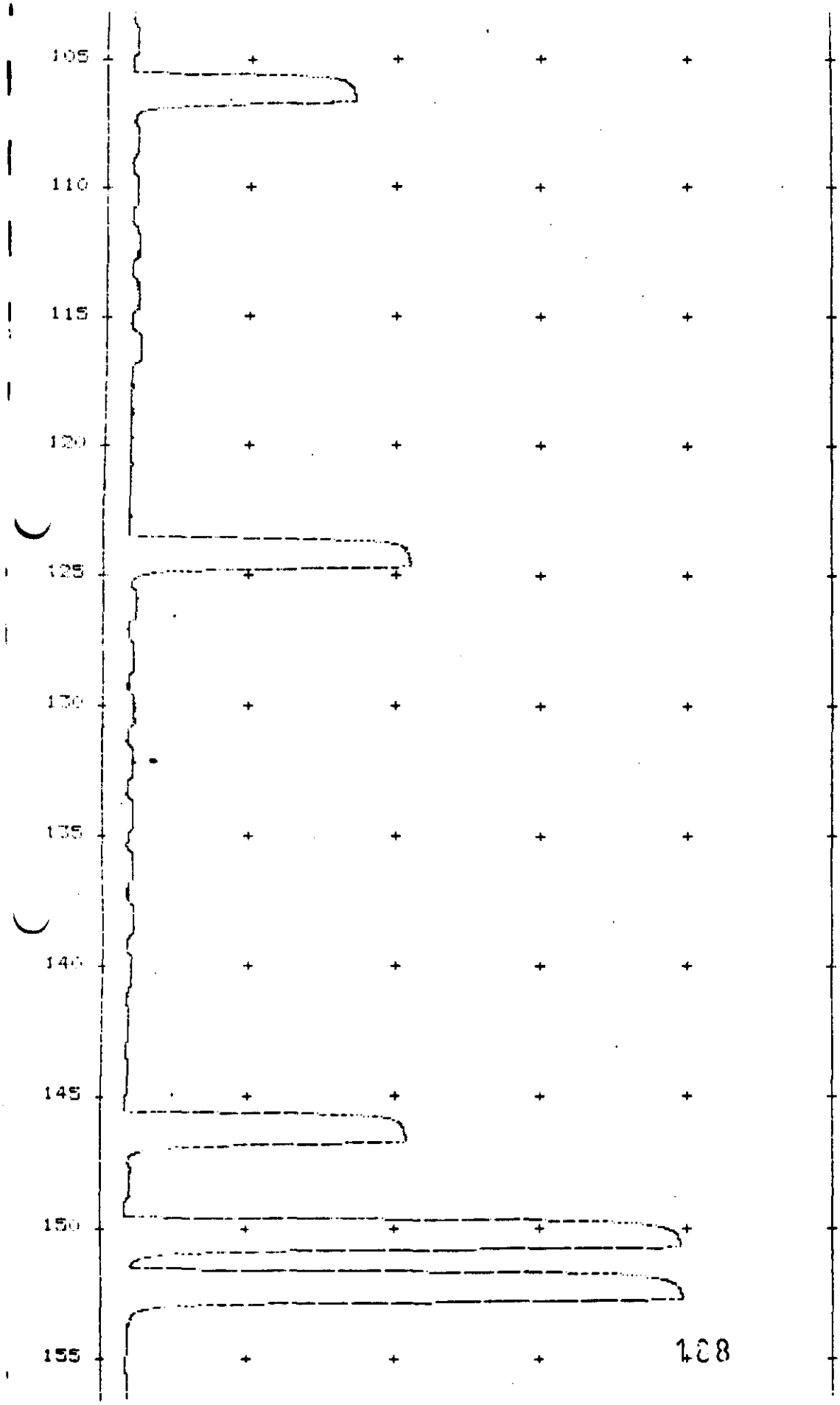
Point skip is 4; can save 16 hours.



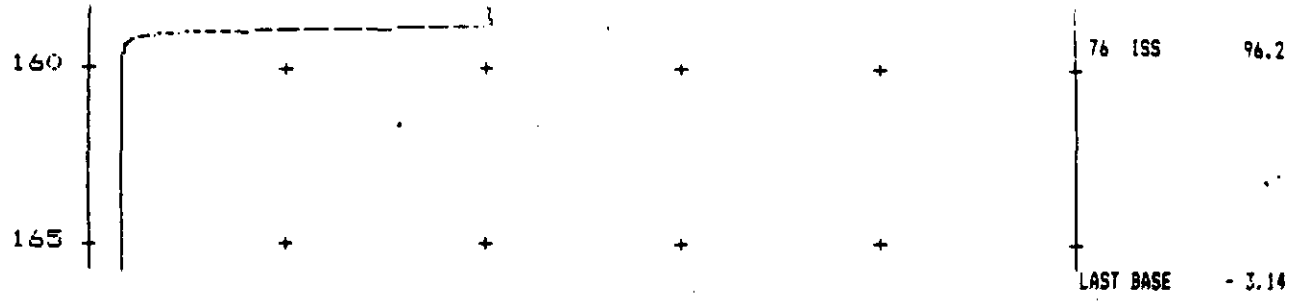
CUP#	SMPLE#	CYANIDES CONC UG/L	CODE
BASELINE ACCEPT		#	
INIT	BASE		
1	PRMR		
2	CAL		
3	CAL		
4	CAL		
5	CAL		
6	CAL		
7	CAL		
8	CAL		
9	SMPL 1	- .276	M-
10	SMPL 2	248.4	
11	SMPL 3	200.6	
12	SMPL 4	148.7	
13	SMPL 5	98.5	N
14	SMPL 6	50.2	
15	SMPL 7	24.8	
16	SMPL 8	8.05	-
17	SMPL 9	- .666	M-
18	SMPL 10	.830	M-
19	SMPL 11	50.1	



21	SMPL	13	201.4	
22	SMPL	14	4.41	M-
23	SMPL	15	2.91	M-
24	SMPL	16	93.0	
25	SMPL	17	2.20	M-
26	SMPL	18	.960	M-
27	SMPL	19	5.71	M-
28	SMPL	20	1.81	M-
29	SMPL	21	7.27	-
30	SMPL	22	.765	M-
31	SMPL	23	3.43	M-
32	SMPL	24	- 1.12	M-
33	SMPL	25	- 1.19	M-
34	ISS		98.3	
35	SMPL	26	.0491	M-
36	SMPL	27	1.02	M-
37	SMPL	28	- .146	M-
38	SMPL	29	- .211	M-
39	SMPL	30	.439	M-
40	SMPL	31	.179	M-
41	SMPL	32	.114	M-
42	SMPL	33	- .146	M-
43	SMPL	34	- .406	M-
44	SMPL	35	- 1.58	M-
45	SMPL	36	- 1.97	M-
46	ISS		99.9	
47	SMPL	37	- .536	M-



48 SMPL 38 - .211 M-
49 SMPL 39 - .796 M-
50 SMPL 40 79.6
51 SMPL 41 - .731 M-
52 SMPL 42 - .211 M-
53 SMPL 43 - .146 M-
54 SMPL 44 - .146 M-
55 SMPL 45 1.15 M-
56 SMPL 46 - 1.77 M-
57 SMPL 47 - 1.84 M-
58 SMPL 48 - 2.03 M-
59 ISS 100.3
60 SMPL 49 .439 M-
61 SMPL 50 - .471 M-
62 SMPL 51 - .146 M-
63 SMPL 52 - .471 M-
64 SMPL 53 - .341 M-
65 SMPL 54 - .471 M-
66 SMPL 55 - .861 M-
67 SMPL 56 - 1.19 M-
68 SMPL 57 - 2.16 M-
69 SMPL 58 - 2.29 M-
70 ISS 98.8
71 SMPL 59 - 1.06 M-
72 SMPL 60 199.4
73 SMPL 61 199.8
74 SMPL 62 - 2.42 M-



INTERSAMPLE STANDARDS:
CYANIDES
MEAN= 98.7
S.D.= 1.63
%CV = 1.65

SAMPLES:
CYANIDES
MEAN= 28.7
S.D.= 65.2
%CV =227.3

TEST COMPLETE

TECHNICON AUTOANALYZER COMPUTER

OPERATOR:ANGIEB DATE:10-3-89

CUP#	SMPLE#		CYANIDES CONC UG/L	CODE
INIT	BASE		- .171	
1	PRMR		246.7	250
2	CAL		248.5	250
3	CAL		201.2	200
4	CAL		150.2	150
5	CAL		100.9	100
6	CAL		50.5	50
7	CAL		25.3	25
8	CAL		8.61	10
9	SMPL	1	- .134	50 M-
10	SMPL	2	248.7	250
11	SMPL	3	200.9	200
12	SMPL	4	149.1	150
13	SMPL	5	98.9	100 N
14	SMPL	6	50.6	50
15	SMPL	7	25.2	25
16	SMPL	8	8.48	10 -
17	SMPL	9	- .201	50 (MB)
18	SMPL	10	1.34	BLANK 9/27
19	SMPL	11	50.6	50
20	SMPL	12	202.6	EZA 9/27
21	SMPL	13	202.1	200 9/27
22	SMPL	14	5.08	CA1932 M
23	SMPL	15	3.62	DUP M-
24	SMPL	16	98.8	SPL
25	SMPL	17	2.98	CA1967
26	SMPL	18	1.79	CA1934
27	SMPL	19	6.58	CA1923
28	SMPL	20	2.72	CA1975 M
29	SMPL	21	8.22	CA1956
30	SMPL	22	1.75	CA1938
31	SMPL	23	4.16	A 10:30

3	CAL		201.2	200
4	CAL		150.2	150
5	CAL		100.9	100
6	CAL		50.5	50
7	CAL		25.3	25
8	CAL		8.61	10
9	SMPL	1	- .134	W M-
10	SMPL	2	248.7	250
11	SMPL	3	200.9	200
12	SMPL	4	149.1	150
13	SMPL	5	98.9	100 N
14	SMPL	6	50.6	50
15	SMPL	7	25.2	25
16	SMPL	8	8.48	10 -
17	SMPL	9	- .201	W(MB)
18	SMPL	10	1.34	BLANK 9/27
19	SMPL	11	50.6	50
20	SMPL	12	202.6	EZA 9/27
21	SMPL	13	202.1	200 9/27
22	SMPL	14	5.08	CA1932
23	SMPL	15	3.62	Dup M-
24	SMPL	16	93.8	Spk
25	SMPL	17	2.98	CA1957
26	SMPL	18	1.79	CA1934
27	SMPL	19	6.58	CA1923
28	SMPL	20	2.72	CA1925
29	SMPL	21	8.22	CA1956
30	SMPL	22	1.75	CA1938
31	SMPL	23	4.46	CA1989
32	SMPL	24	-.0512	W M-
33	SMPL	25	-.0759	CCB M-
34	ISS		99.5	CCV
35	SMPL	26	1.24	CA1955
36	SMPL	27	2.26	CA1368
37	SMPL	28	1.13	CA1370
38	SMPL	29	1.10	Dup M-
39	SMPL	30	1.79	CA1367
40	SMPL	31	1.57	CA2018
41	SMPL	32	1.55	CA1366
42	SMPL	33	1.33	CA1369
43	SMPL	34	1.11	CA1366
44	SMPL	35	-.0224	W M-
45	SMPL	36	- .372	CCB M-
46	ISS		101.6	CCV
47	SMPL	37	1.14	CA1372
48	SMPL	38	1.51	Dup M-
49	SMPL	39	.960	CA1371 Dup
50	SMPL	40	81.4	CA1371 Spk
51	SMPL	41	1.11	CA1373
52	SMPL	42	1.67	CA1375
53	SMPL	43	1.77	CA1376
54	SMPL	44	1.81	CA1377
55	SMPL	45	3.15	CA1378
56	SMPL	46	.267	CA1382
57	SMPL	47	.242	W M-
58	SMPL	48	.0871	CCB M-
59	ISS		102.5	CCV
60	SMPL	49	2.64	CA1379
61	SMPL	50	1.77	CA1380
62	SMPL	51	2.14	CA1381
63	SMPL	52	1.85	CA2065
64	SMPL	53	2.02	CA2066
65	SMPL	54	1.93	CA1379 (FB)
66	SMPL	55	1.38	CA1374
67	SMPL	56	1.30	CA1453

31	SMPL	23	+.46	CA 1484
32	SMPL	24	-.0512	W M-
33	SMPL	25	-.0759	CCB M-
34	ISS		99.5	CCV
35	SMPL	26	1.24	CA 1485
36	SMPL	27	2.26	CA 1368
37	SMPL	28	1.13	CA 1370
38	SMPL	29	1.10	Dup M-
39	SMPL	30	1.79	CA 1367
40	SMPL	31	1.57	CA 2013
41	SMPL	32	1.55	CA 1366
42	SMPL	33	1.33	CA 1369
43	SMPL	34	1.11	CA 1366
44	SMPL	35	-.0224	W M-
45	SMPL	36	- .372	CCB M-
46	ISS		101.6	CCV
47	SMPL	37	1.14	CA 1372
48	SMPL	38	1.51	Dup M-
49	SMPL	39	.960	CA 1371 Dup
50	SMPL	40	81.4	CA 1371 Spk
51	SMPL	41	1.11	CA 1373
52	SMPL	42	1.67	CA 1375
53	SMPL	43	1.77	CA 1376
54	SMPL	44	1.81	CA 1377
55	SMPL	45	3.15	CA 1378
56	SMPL	46	.267	CA 1382
57	SMPL	47	.242	W M-
58	SMPL	48	.0871	CCB M-
59	ISS		102.5	CCV
60	SMPL	49	2.64	CA 1379
61	SMPL	50	1.77	CA 1380
62	SMPL	51	2.14	CA 1381
63	SMPL	52	1.85	CA 2006
64	SMPL	53	2.02	CA 2006
65	SMPL	54	1.93	CA 1379 (FB)
66	SMPL	55	1.58	CA 1384
67	SMPL	56	1.30	CA 1383
68	SMPL	57	.361	HA 1464
69	SMPL	58	.271	CCB M-
70	ISS		101.5	CCV
71	SMPL	59	1.59	BLK 10-4
72	SMPL	60	202.2	STD 10-4
73	SMPL	61	202.7	ERA 10-4
74	SMPL	62	.342	W M-
75	SMPL	63	.513	CCB M-
76	ISS		99.1	CCV
LAST	BASE		- .171	

INTERSAMPLE STANDARDS:
CYANIDES
MEAN=100.8
S.D.= 1.48
%CV = 1.47
CF (%) 0

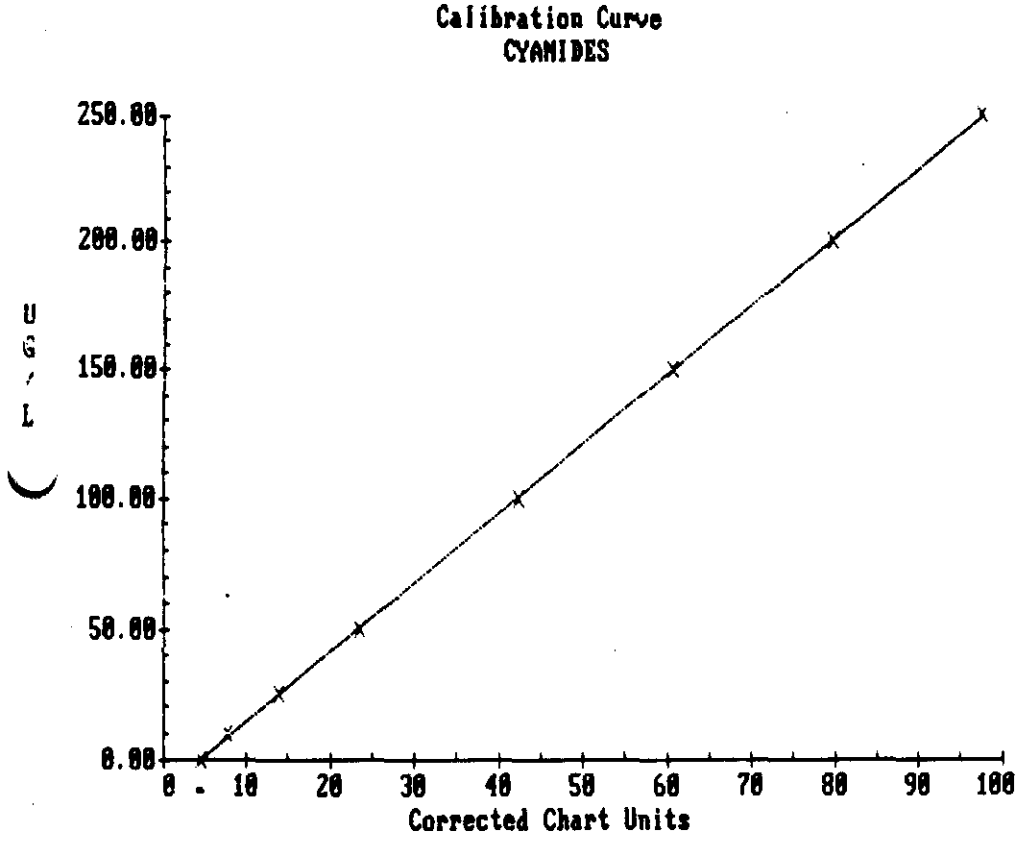
SAMPLES:
CYANIDES
MEAN= 30.2
S.D.= 65.0
%CV =215.7

BASE DRIFT CORRECTION
CARRYOVER CORRECTION

TECHNICON AUTOANALYZER COMPUTER

QW70074-75 10/5/89

COMMAND(PROGRAM,LIST,MATH,CONTROL,RUN)
Chart saved to file .



PERCENT SOLIDS LOGS

Metals Batch:QM70050

% Solids Determination Worksheet

Sample	Cup Wt	Cup Wt + Wet Smpl	Cup Wt + Dry Smpl	Wet Smpl Wt	Dry Smpl Wt	% Solids*	Cnvrsn Factor+
CA1368	12.25	18.98	18.04	6.730	5.790	86.0	1.162
CA1369	9.84	15.44	14.17	5.600	4.330	77.3	1.293
CA1370	10.66	15.90	14.87	5.240	4.210	80.3	1.245
CA1365	11.09	16.07	15.20	4.980	4.110	82.5	1.212
CA1366	24.97	31.03	29.84	6.060	4.870	80.4	1.244
CA1367	24.21	29.95	28.42	5.740	4.210	73.3	1.363
CA2013	79.70	86.68	85.50	6.980	5.800	83.1	1.203

* %Solids = Dry Smpl Wt / Wet Smpl Wt * 100.0
+ Cnvrsn Factor = 100.0 / % Solids
All weights are in grams (G)
Note: Perform one % Solids Determination per 20 samples in duplicate

Performed By R. Abernathy
Date 10/12/89

DIGESTION LOGS

SAMPLE PREPARATION LOG - METALS

BATCH #: QM 70050

SAMPLE NUMBER	FLAME/ICAP INITIAL	FLAME/ICAP FINAL	FURNANCE INITIAL	FURNANCE FINAL	MERCURY INITAL	MERCURY FINAL
CA1365	1.0 gm	200	1.0 gm	200	.25g	100
CA1366	↓	↓	↓	↓	↓	↓
CA1367						
CA1368						
CA1369						
CA1370						
CA2013						
QC -1					↓	↓
QC -2						
QC -3						
QC -A1						
QC -A2						
SPIKES	FLAME/ICAP: CA1365		FURNANCE: CA1365		MERCURY: CA 1370	
ANALYST/ DATE:	Bob Rouse (R.R) 11/16/89		Bob Rouse (R.R) 11/16/89		Bob Rouse 10/13/89	

[illegible]

PREPARED BY [illegible]

DATE 10/19/89

SAMPLES SPIKED CA7053-A1
CA1963-A1
CA7035-A1
CA137[illegible]-A1

AMOUNT SPIKED [illegible]

(1 ml SPIKE FOR EVERYTHING)

VERIFIED BY [illegible]

REAGENTS FOR MERCURY :	DATE MADE :	ANALYST
Potassium Persulfate 5% ($K_2S_2O_8$): Dissolve 50g Potassium Persulfate in 1 liter of H_2O		
Sodium Chloride - Hydroxylamine Hydrochloride 12% Dissolve 120g NaCl 120g NH_2OH HCl in 1 liter of H_2O		
Potassium Permanganate 5% Dissolve 50g $KMnO_4$ in 1 liter of H_2O.		
10% Stannous Chloride in 0.5N Sulfuric Acid : Dissolve 100g $SnCl_2$ 14 ml H_2SO_4 in 1 liter of H_2O		
NOTE : 10% STANNOUS CHLORIDE IS TO BE MADE FRESH DAILY		

ETC

IFB / TSK4 - FURNACE SPIKES - WATERS / SOILS

Batch# Q70050

Matrix:

Water _____ Add Acid First

Stock	Added to -Al		Reference Number
IFB FN A	1.0 ml	_____	AA - -
IFB FN B	2.0 ml	_____	AA - -
IFB FN C	1.0 ml	_____	AA - -

Soil ✓ Add Acid First

Stock	Added to -Al		Reference Number
IFB FN A	2.0 ml	✓	AA - 89 - 7
IFB FN B	4.0 ml	✓	AA - 89 - 14
IFB FN C	2.0 ml	✓	AA - 89 - 9

Samples Spiked:

Q Q 70050-A1 CA1365-A1 _____

Q _____ _____ _____

Spiked By/Date [signature] 11/6/89

Verified By/Date S.Vajda 11 06 89

IFB FN A

Stock (ppm)	ml Added	Final Vol
Sb(1000)	1.0	200ml
Se(100) *	2.0	2%
Tl(1000)	1.0	HNO3
Cd(100) *	1.0	

IFB FN B

Stock (ppm)	ml Added	Final Vol
AS(1000)	0.4	200ml 2% HNO3

IFB FN C

Stock (ppm)	ml Added	Final Vol
Pb(1000)	0.4	200ml 2% HNO3

* Prepare fresh in 2% HNO3

Add Acid First

Stock			Added to -A1		Reference Number
IFBICPA			8.0 ml	✓	ICP- 89 - 13
IFBICPB			4.0 ml	✓	ICP- 89 - 5
IFBICPC			4.0 ml	✓	ICP- 89 - 6
10 ppm	Ag	*	1.0 ml	✓	
10 ppm	Cr	*	4.0 ml	✓	
100 ppm	Mn	*	1.0 ml	✓	
1000 ppm	K		4.0 ml	✓	
100 ppm	Zn	*	1.0 ml	✓	
100 ppm	Ni	*	1.0 ml	✓	

* Prepare Fresh in 2% HNO3

Samples Spiked:

Q Q70050-A1 CA1365-A1

Q

Spiked By/Date Bob Reigi 11/6/89

Verified By/Date S.Vayda 11/06/89

Preparation of Solutions Add Acid First

IFBICPA

Stock (ppm)	ml Added	Final Vol
Al(10000)	2.0	200ml
Ca(10000)	10.0	2%
Fe(5000)	2.0	HNO3
Mg(20000)	5.0	
Na(20000)	10.0	

IFBICPB

Stock (ppm)	ml Added	Final Vol
Ba(5000)	4.0	200ml
Be(1000)	0.5	2%
Cd(1000)	0.5	HNO3
Co(1000)	5.0	
Cu(1000)	2.5	
V (1000)	5.0	

IFBICPC

Stock (ppm)	ml Added	Final Vol
Sb(1000)	5.0	200ml
As(1000)	20.0	2%
Pb(1000)	5.0	HNO3
Se(1000)	20.0	
Tl(1000)	20.0	

ETC

CYANIDE DISTILLATION LOG

BATCH QW70074

Sample #	Date	Initial Wt. (g)/Volume (ml)	Final Volume (ml)
CA1957	9-27-89	4.98 g	250mL
CA1932		5.02 g	
CA1934		5.00 g	
CA1933		4.96 g	
CA1975		4.99 g	
CA1956		5.00 g	
CA1938		5.02 g	
CA1939		5.02 g	
CA1955		5.06 g	
CA1368		4.96 g	
CA1370		5.16 g	
CA1367		4.98 g	
CA2013		5.00 g	
CA1365		4.91 g	
CA1369		4.98 g	
CA1366	↓	5.17 g	↓
		GC SAMPLES	
Method Blank	9-27-89	500mL DI+OH	250mL
Dig. Std.		10mL → Wk. Std. → 500mL	
Lab Control #4920		250µl #4920 → 500mL	
CA1934 Dup.		4.98g Sample.	
CA1932 Spike		5.13g + 5mL Wk. Std.	
CA1370 Dup.		5.14g Sample.	

Analyst/Date [illegible] 9/27/89.

ETC

CHAIN OF CUSTODY LOGS

ENVIRONMENTAL TESTING and CERTIFICATION Seal No. 015478 ETC Job # CA1365

CHAIN OF CUSTODY FORM (CC1)

ORIGINAL Date Sealed 89/07/28 By: SC

Company: PELA Attn.: DAN GREEN

Facility/Site: CITY DISPOSAL C/O HOLIDAY INN MADISON SMITH EAST Phone: (414) 631 - 3150

Address: 190//EXIT 12 AND 18 EAST, MADISON, WI 53704

SAMPLE IDENTIFICATION

Facility: 499 (Facility/Site Code) Downslope 3-18 (Optional Sample Point Descriptions)

Sample Point: SS D3 (Source Code (from below) / Your Sample Point ID (left justify)) 890928 (Start Date (YY/MM/DD)) 1050 (Start Time (2400 hr. clock)) 5 (Elapsed Hours (composite))

Source Codes:
Well (W) Outfall (O) Bottom Sediment (B) Surface Impoundment (I) Leachate Collection Sys. (C) Other (X)
Soil (S) River/Stream (R) Generation Point (G) Treatment Facility (T) Lake/Ocean (L) Specify

SHUTTLE CONTENTS

BOTTLE No	Type	Size	Preserv.	ANALYSIS	SAMPLER Filt. (Y/N)	SAMPLER Observations	LAB Observations
2	VOA	40	NONE	VOLATILES		✓	✓
1	CONU	1000	NONE	PST/PCB/BNA		✓	✓
1	METS	250	NONE	METAL (SOIL)		✓	✓
1	CONU	125	NONE	CY/T		✓	✓
1	TB	40	GC/MS	TRIP BLANK		12 mm diameter air bubble	✓

CHAIN OF CUSTODY CHRONICLE

1. Shuttle Opened By: (print) DAN GREEN Date: 8-6-89 Time: 14:50
   Signature: [signature] Seal #: 015486 1 Intact:

2. I have received these materials in good condition from the above person.
   Name: CLAYTON LINDSEY Signature: [signature]
   Date: 8-5-89 Time: 10:00am Remarks: OK

3. I have received these materials in good condition from the above person.
   Name: JEFF ENGLAND Signature: [signature]
   Date: 22Sep89 Time: 1039 Remarks: OK

4. Shuttle Sealed By: (print) JEFF ENGLAND Date: 22Sep89 Time: 1218
   Signature: [signature] Seal #: 0154862 Intact: OK

LAB USE ONLY Opened By: [signature] Date: 9/25/89 Time: 10:45
SHUTTLE # 938 TEMP. °C 5 SEAL # 0154862 COND. intact TO2

ETC

FIELD PARAMETER FORM (CC2)

Form 0002
Sample Management
08/94

ETC JOB # CA1305

Sample Point 5 SD3
Source Code | Sample Point I.D.

FIELD PROCEDURES

PURGE DATE (YY MM DD)	START PURGE (2400 Hr Clock)	ELAPSED HRS	WATER VOL IN CASING (Gallons)	VOLUME PURGED (Gallons)
891091222		.5		

SAMPLING METHOD:

Sampler Type [X] A-Submersible Pump, B-ISCO, C-Bladder Pump, D-Dipper/Bottle, E-Bailer, F-Scoop/Shovel — X-Other: PUSH TUBE (SPECIFY OTHER)

Sampler Material [B] A-Teflon, B-Metal, C-PVC, D-Plastic — X-Other: (SPECIFY OTHER)

Tubing Material [ ] A-Teflon, B-Tygon, C-Polyethylene, D-Silicon — X-Other: (SPECIFY OTHER)

Sample Composited [Y/N]
Procedure/Proportions

FIELD MEASUREMENTS

Well Elevation (ft/msl)
Depth to Ground water (ft)
Groundwater Elevation (ft msl)
Well Depth (ft)
Sample Depth (non-well) (ft) 1.5.0

1st	pH (STD)	1st	spec. cond. umhos/cm at 25 °C	(other parameter)	value	units
2nd	pH (STD)	2nd	spec. cond. umhos/cm at 25 °C	(other parameter)	value	units
3rd	pH (STD)	3rd	spec. cond. umhos/cm at 25 °C	(other parameter)	value	units
4th	pH (STD)	4th	spec. cond. umhos/cm at 25 °C	(other parameter)	value	units

Sample Temp (°C)
Turbidity NTU

FIELD COMMENTS

Sample Appearance: Silt/Clay Yellowish Brown
Weather Conditions: Sunny, Light Breeze, 66° F
Other:

FILTERING: Use Chain of Custody (CC1) to indicate which bottles were filtered

Sampler: (Print) JEFF ENGLAND Employer: PELA

I certify that sampling procedures were in accordance with applicable EPA state and corporate protocols.

2-24-89 (Date) (Signature)

203

ENVIRONMENTAL TESTING and CERTIFICATION Seal No. 0154861 ETC Job # CA1366

CHAIN OF CUSTODY FORM (CC1) ORIGINAL Date Sealed 89/07/28 By: SC

Company: PELA Attn.: DAN GREEN

Facility/Site: CITY DISPOSAL Phone: (414) 631 - 3150

Address: C/O HOLIDAY INN MADISON SMITH EAST 190//EXIT 12 AND 18 EAST, MADISON, WI 53704

SAMPLE IDENTIFICATION

Facility: 499 (Facility/Site Code) Bottom of Slope vicinity B-15 (Optional Sample Point Description)

Sample Point: GWSD1 (Source Code from below; Your Sample Point ID left justify) 890922 (Start Date YY/MM/DD) 1145 (Start Time 2400 hr clock) 4 (Elapsed Hours composite)

Source Codes:
Well (W) Outfall (O) Bottom Sediment (B) Surface Impoundment (I) Leachate Collection Sys. (C) Other (X)
Soil (S) River/Stream (R) Generation Point (G) Treatment Facility (T) Lake/Ocean (L) Specify

SHUTTLE CONTENTS

BOTTLE ID	Type	Size	Preserv.	ANALYSIS	SAMPLER FIL (Y/N)	SAMPLER Observations	LAB Observations
2	VOA	40	NONE	VOLATILES		✓	✓
1	CONU	1000	NONE	PST/PCB/BNA		✓	✓
1	METS	250	NONE	METAL (SOIL)		✓	✓
1	CONU	125	NONE	CY/T		✓	✓

CHAIN OF CUSTODY CHRONICLE

1. Shuttle Opened By: (print) DAN GREEN Date: 8-5-89 Time: 14:50
   Signature: [signature] Seal #: 0154861 Intact:

2. I have received these materials in good condition from the above person.
   Name: CLAYTON LINDSEY Signature: [signature]
   Date: 8-5-89 Time: 10:00 Am Remarks: ok.

3. I have received these materials in good condition from the above person.
   Name: JEFF ENGLAND Signature: [signature]
   Date: 22Sep89 Time: 1039 Remarks: OK 204

4. Shuttle Sealed By: (print) JEFF ENGLAND Date: 22Sep89 Time: 1218
   Signature: [signature] Seal #: 054862 Intact: OK

LAB USE ONLY Opened By: [signature] Date: 9/25/89 Time: 10:45
BOTTLE # 938 TEMP. °C 5 SEAL # 0154862 COND. intact

ETC

FIELD PARAMETER FORM (CC2)

Form 0002
Sample Management
06/88

ETC JOB # CA1366

Sample Point LSI (Source Code) LSID4 (Sample Point I.D)

FIELD PROCEDURES

PURGE DATE (YY MM DD)	START PURGE (2400 Hr Clock)	ELAPSED HRS	WATER VOL IN CASING (Gallons)	VOLUME PURGED (Gallons)
890822		1.5		

SAMPLING METHOD:

Sampler Type [X] A-Submersible Pump, B-ISCO, C-Bladder Pump, D-Dipper/Bottle, E-Bailer, F-Scoop/Shovel — X-Other PUSH TUBE (SPECIFY OTHER)

Sampler Material [B] A-Teflon, B-Metal, C-PVC, D-Plastic — X-Other (SPECIFY OTHER)

Tubing Material [ ] A-Teflon, B-Tygon, C-Polyethylene, D-Silicon — X-Other (SPECIFY OTHER)

Sample Composited [Y/N] (Procedure/Proportions)

FIELD MEASUREMENTS

Well Elevation (ft/msl)

Depth to Ground water (ft)

Groundwater Elevation (ft msl)

Well Depth (ft)

Sample Depth (non-well) (ft) 2.50

	ph	(STD)	spec. cond.	um/om at 25°C	(other parameter)	value	units
1st			1st				
2nd			2nd				
3rd			3rd				
4th			4th				

Sample Temp (°C)

Turbidity NTU

FIELD COMMENTS

Sample Appearance: Clay Bluish white / silt Brown

Weather Conditions: Sunny, Light Breeze, 66°F, starting to cloud over

Other:

FILTERING: Use Chain of Custody (CC1) to indicate which bottles were filtered

Sampler: (Print) JEFF ENGLAND Employer: PELA

I certify that sampling procedures were in accordance with applicable EPA state and corporate protocols.

(Date) 22Sep89 (Signature)

205

ENVIRONMENTAL TESTING and CERTIFICATION

Seal No. 0154859 ETC Job # CA1367

CHAIN OF CUSTODY FORM (CC1) ORIGINAL Date Sealed 89/07/28 By: SC

Company: PELA Attn.: DAN GREEN

Facility/Site: CITY DISPOSAL C/O HOLIDAY INN MADISON SMITH EAST Phone: (414) 631 - 3150

Address: 190//EXIT 12 AND 18 EAST, MADISON, WI 53704

SAMPLE IDENTIFICATION

Facility: 499 (Facility/Site Code) | MIDWAY Between B7R and B-14 (Optional Sample Point Descriptions)

Sample Point: SS-SD (Source Code from below) | (Your Sample Point ID left justify) | 890912Z (Start Date YY/MM/DD) | 0839 (Start Time 2400 hr. clock) | 5 (Elapsed Hours composite)

Source Codes:

Well (W) Outfall (O) Bottom Sediment (B) Surface Impoundment (I) Leachate Collection Sys. (C) Other (X)

Soil (S) River/Stream (R) Generation Point (G) Treatment Facility (T) Lake/Ocean (L) Specify

SHUTTLE CONTENTS

BOTTLE No	Type	Size	Preserv.	ANALYSIS	SAMPLER Filt. (Y/N)	SAMPLER Observations	LAB Observations
2	VOA	40	NONE	VOLATILES		✓	✓
1	CONU	1000	NONE	PST/PCB/BNA		✓	✓
1	METS	250	NONE	METAL (SOIL)		✓	✓
1	CONU	125	NONE	CY/T		✓	✓
1	TB	40	GC/MS	TRIP BLANK		✓	✓

CHAIN OF CUSTODY CHRONICLE

1. Shuttle Opened By: (print) DAN GREEN Date: 8-5-89 Time: 15:30
   Signature: [signature] Seal #: 0154859 Intact: ✓

2. I have received these materials in good condition from the above person.
   Name: CLAYTON LINDSEY Signature: [signature]
   Date: 8-5-89 Time: 10:00am Remarks: OK

3. I have received these materials in good condition from the above person.
   Name: JEFFERY ENGLAND Signature: [signature]
   Date: 22Sep89 Time: 0800 Remarks: OK 206

4. Shuttle Sealed By: (print) JEFF ENGLAND Date: 22Sep89 Time: 1026
   Signature: [signature] Seal #: 0154860 Intact: OK

LAB USE ONLY Opened By: [signature] Date: 9/25/89 Time: [illegible]

SHUTTLE # 155 TEMP. °C 18° SEAL # 0154860 COND. Intact

ETC

FIELD PARAMETER FORM (CC2)

Form 0002
Sample Management
08/88

ETC JOB # CA1367

Sample Point LS | LSD1
(Source Code | Sample Point I.D.)

FIELD PROCEDURES

SAMPLING DATE (YY MM DD)	START PURGE (2400 Hr Clock)	ELAPSED HRS	WATER VOL. IN CASING (Gallons)	VOLUME PURGED (Gallons)
890912		15		

SAMPLING METHOD:

Sampler Type [X] A-Submersible Pump, B-ISCO, C-Bladder Pump, D-Dipper/Bottle, E-Bailer, F-Scoop/Shovel, X-Other PUSH TUBE (SPECIFY OTHER)

Sampler Material [B] A-Teflon, B-Metal, C-PVC, D-Plastic, X-Other (SPECIFY OTHER)

Tubing Material [ ] A-Teflon, B-Tygon, C-Polyethylene, D-Silicon, X-Other (SPECIFY OTHER)

Sample Composited [Y] (Procedure/Proportions)

FIELD MEASUREMENTS

Well Elevation (ft/msl)

Depth to Ground water (ft)

Groundwater Elevation (ft msl)

Well Depth (ft)

Sample Depth (non-well) (ft) 1.50

	pH	(STD)		spec. cond.	umhos at 25° C	(other parameter)	value	units
1st			1st					
2nd			2nd					
3rd			3rd					
4th			4th					

Sample Temp (°C)

Turbidity NTU

FIELD COMMENTS

Sample Appearance: Dusky Brown Silt/Clay with Rootlets

Weather Conditions: Sunny, Light Breeze & 66° F

Other:

FILTERING: Use Chain of Custody (CC1) to indicate which bottles were filtered

Sampler: (Print) JEFFREY ENGLAND Employer: PELA

I certify that sampling procedures were in accordance with applicable EPA state and corporate protocols.

22Sep89 (Date) (Signature)

207

ENVIRONMENTAL TESTING and CERTIFICATION

Seal No. 0154859 ETC Job # CA1368

CHAIN OF CUSTODY FORM (CC1) ORIGINAL

Date Sealed 89/07/28 By:

Company: PELA Attn.: DAN GREEN

Facility/Site: CITY DISPOSAL Phone: (414) 631 - 3150

Address: C/O HOLIDAY INN MADISON SMITH EAST 190//EXIT 12 AND 18 EAST, MADISON, WI 53704

SAMPLE IDENTIFICATION

Facility: 495 (Facility/Site Code) (Optional Sample Point Description)

Sample Point: | Source Code (from below) | Your Sample Point ID (left justify) | Start Date (YY/MM/DD) | Start Time (2400 hr. clock) | Elapsed Hours (composite) |
|---|---|---|---|---|
| | SHD2 | 890912 | 0950 | 5 |

Source Codes:

Well (W) Outfall (O) Bottom Sediment (B) Surface Impoundment (I) Leachate Collection Sys. (C) Other (X)

Soil (S) River/Stream (R) Generation Point (G) Treatment Facility (T) Lake/Ocean (L) Specify

SHUTTLE CONTENTS

BOTTLE No.	Type	Size	Preserv.	ANALYSIS	SAMPLER Fill (Y/N)	SAMPLER Observations	LAB Observations
2	VOA	40	NONE	VOLATILES		✓	✓
1	CONU	1000	NONE	PST/PCB/BNA		✓	✓
1	METS	250	NONE	METAL(SOIL)		✓	✓
1	CONU	125	NONE	CY/T		✓	✓

CHAIN OF CUSTODY CHRONICLE

1. Shuttle Opened By: (print) DAN GREEN Date: 8-5-89 Time: 15:30
   Signature: Dan Green Seal #: 0154859 Intact: —

2. I have received these materials in good condition from the above person.
   Name: CLAYTON LINDSEY Signature: Clayton Lindsey
   Date: 08-5-89 Time: 10:00 Remarks: OK

3. I have received these materials in good condition from the above person.
   Name: JEFF ENGLAND Signature:
   Date: 22Sep89 Time: 0800 Remarks: 208

4. Shuttle Sealed By: (print) JEFF ENGLAND Date: 22Sep89 Time: 1626
   Signature: Seal #: 0154860 Intact: OK

LAB USE ONLY Opened By: Date: 9/25/89 Time: 1200

SHUTTLE # 55 TEMP. °C 10° SEAL # 0154860 COND. Intact

ETC FIELD PARAMETER FORM (CC2)

Form 0002
Sample Management
06/88

ETC JOB # CA1368

Sample Point SJ SJD2
(Source Code) (Sample Point I.D.)

FIELD PROCEDURES

*PURGE DATE (YY MM DD)	START PURGE (2400 Hr Clock)	ELAPSED HRS	WATER VOL IN CASING (Gallons)	VOLUME PURGED (Gallons)
891019122		1.5		

SAMPLING METHOD:

Sampler Type [X] A-Submersible Pump, B-ISCO, C-Bladder Pump, D-Dipper/Bottle, E-Bailer, F-Scoop/Shovel, X-Other PUSH TUBE (SPECIFY OTHER)

Sampler Material [B] A-Teflon, B-Metal, C-PVC, D-Plastic, X-Other (SPECIFY OTHER)

Tubing Material [ ] A-Teflon, B-Tygon, C-Polyethylene, D-Silicon, X-Other (SPECIFY OTHER)

Sample Composited [YA%]
Procedure/Proportions

FIELD MEASUREMENTS

Well Elevation (ft/msl)
Depth to Ground water (ft)
Groundwater Elevation (ft msl)

Well Depth (ft)
Sample Depth (non-well) (ft) 1150

	pH	(STD)		spec. cond.	um/cm at 25°C	(other parameter)	value	units
1st			1st					
2nd			2nd					
3rd			3rd					
4th			4th					

Sample Temp (°C)
Turbidity NTU

FIELD COMMENTS

Sample Appearance:
Weather Conditions: Sunny, Light Breeze & 66°F
Other:

FILTERING: Use Chain of Custody (CC1) to indicate which bottles were filtered

Sampler: JEFF ENGLAND (Print) Employer: PETA

I certify that sampling procedures were in accordance with applicable EPA state and corporate protocols.

22Sep89 (Date) (Signature)

209

ENVIRONMENTAL TESTING and CERTIFICATION Seal No. 0162695 ETC Job # CA1369

CHAIN OF CUSTODY FORM (CC1) ORIGINAL Date Sealed 89/07/28 By: KC

Company: PELA Attn.: DAN GREEN

Facility/Site: CITY DISPOSAL ~~C/O HOLIDAY INN MADISON SMITH EAST~~ Phone: (414) 631 - 3150

Address: 190//EXIT 12 AND 18 EAST, MADISON, WI 53704

SAMPLE IDENTIFICATION

Facility: 405 (Facility/Site Code) West Ditch Location (Optional Sample Point Description)

Sample Point: SHSDa (Source Code from below; Your Sample Point ID left justify) | 890922 (Start Date YY/MM/DD) | 1445 (Start Time 2400 hr. clock) | 3 (Elapsed Hours composite)

Source Codes:
Well (W) Outfall (O) Bottom Sediment (B) Surface Impoundment (I) Leachate Collection Sys. (C) Other (X)
Soil (S) River/Stream (R) Generation Point (G) Treatment Facility (T) Lake/Ocean (L) Specify

SHUTTLE CONTENTS

BOTTLE No.	Type	Size	Preserv.	ANALYSIS	SAMPLER Filt. (Y/N)	SAMPLER Observations	LAB Observations
2	VOA	40	NONE	VOLATILES		✓	✓
1	TB	40	GC/MS	TRIP BLANK		✓	✓
1	CONU	1000	NONE	PST/PCB/BNA		✓	✓
1	METS	250	NONE	METAL(SOIL)		✓	✓
1	CYAN	125	NaOH	CY/T		✓	✓ Reid
1	CONU	125	NONE	CY/T		✓	only (1) 125 ml. (1) Empty for Cyan.

CHAIN OF CUSTODY CHRONICLE

1. Shuttle Opened By: (print) CLAYTON LINDSEY Date: 9/15/89 Time: 8:00 am
   Signature: Seal #: 0162695 Intact: O.K.

2. I have received these materials in good condition from the above person.
   Name: JEFF ENGLAND Signature:
   Date: 22Sep89 Time: 1343 Remarks: OK

3. I have received these materials in good condition from the above person.
   Name: Signature:
   Date: Time: Remarks: 210

4. Shuttle Sealed By: (print) JEFF ENGLAND Date: 22Sep89 Time: 1520
   Signature: Seal #: 0158652 Intact: OK

LAB USE ONLY Opened By: Kim Crawford Date: 9/25/89 Time: 11:00
SHUTTLE # 841 TEMP. °C 8° SEAL # 0158652 COND. intact

ENVIRONMENTAL TESTING and CERTIFICATION

FIELD PARAMETER FORM (CC2)

ETC JOB # CA1369

Sample Point 15 SD6 (Source Code / Sample Point I.D.)

FIELD PROCEDURES

PURGE DATE (YY MM DD)	START PURGE (2400 Hr Clock)	ELAPSED HRS	WATER VOL. IN CASING (Gallons)	VOLUME PURGED (Gallons)
891012		3		

SAMPLING METHOD:

Sampler Type [X] — A-Submersible Pump, B-ISCO, C-Bladder Pump, D-Dipper/Bottle, E-Bailer, F-Scoop/Shovel, X-Other PUSH TUBE (SPECIFY OTHER)

Sampler Material [B] — A-Teflon, B-Metal, C-PVC, D-Plastic, X-Other (SPECIFY OTHER)

Tubing Material [ ] — A-Teflon, B-Tygon, C-Polyethylene, D-Silicon, X-Other (SPECIFY OTHER)

Sample Composited [Y/N] (Procedure/Proportions)

FIELD MEASUREMENTS

Well Elevation (ft/msl)

Depth to Ground water (ft)

Groundwater Elevation (ft msl)

Well Depth (ft)

Sample Depth (non-well) (ft) 150

	ph	(STD)	spec. cond.	um/cm at 25° C	(other parameter)	value	units
1st		(STD)	1st	um/cm at 25° C			
2nd		(STD)	2nd	um/cm at 25°C			
3rd		(STD)	3rd	um/cm at 25°C			
4th		(STD)	4th	um/cm at 25°C			

Sample Temp (°C) Turbidity NTU

FIELD COMMENTS

Sample Appearance: GREYISH ORANGE CLAY

Weather Conditions: OVERCAST, moderate WIND, ~64° F

Other:

FILTERING: Use Chain of Custody (CC1) to indicate which bottles were filtered

Sampler: (Print) JEFF ENGLAND Employer: PELA

I certify that sampling procedures were in accordance with applicable EPA state and corporate protocols.

(Date) 22Sep89 (Signature)

211

ORIGINAL

ENVIRONMENTAL TESTING and CERTIFICATION

Seal No. 0162695 ETC Job # CA1370

CHAIN OF CUSTODY FORM (CC1)

ORIGINAL Date Sealed 89/07/28 By: KC

Company: PELA Attn.: DAN GREEN

Facility/Site: CITY DISPOSAL C/O HOLIDAY INN MADISON SMITH EAST Phone: (414) 631 - 3150

Address: 190//EXIT 12 AND 18 EAST, MADISON, WI 53704

SAMPLE IDENTIFICATION

Facility: 405 (Facility/Site Code) EAST Ditch Location (Optional Sample Point Description)

Sample Point: SWSD5 (Source Code (from below), Your Sample Point ID (left justify)) 890922 (Start Date (YY/MM/DD)) 1315 (Start Time (2400 hr clock)) 15 (Elapsed Hours (composite))

Source Codes:
Well (W) Soil (S) Outfall (O) River/Stream (R) Bottom Sediment (B) Generation Point (G) Surface Impoundment (I) Treatment Facility (T) Leachate Collection Sys. (C) Lake/Ocean (L) Other (X) Specify

SHUTTLE CONTENTS

BOTTLE				ANALYSIS	SAMPLER		LAB
No	Type	Size	Preserv.		Fill. (Y/N)	Observations	Observations
4	VOA	40	NONE	VOLATILES		✓	✓
2	CONU	1000	NONE	PST/PCB/BNA		✓	✓
2	METS	250	NONE	METAL(SOIL)		✓	✓
2	CONU	125	NONE	CY/T		✓	✓

CHAIN OF CUSTODY CHRONICLE

1. Shuttle Opened By: (print) CLAYTON LINDSEY Date: 9/15/89 Time: 8:00AM
Signature: Clayton Lindsey Seal #: 0162695 Intact: OK.

2. I have received these materials in good condition from the above person.
Name: JEFF ENGLAND Signature:
Date: 22sep89 Time: 1343 Remarks: OK

3. I have received these materials in good condition from the above person.
Name: Signature:
Date: Time: Remarks: 212

4. Shuttle Sealed By: (print) JEFF ENGLAND Date: 22sep89 Time: 1520
Signature: Seal #: 0158652 Intact: OK

LAB USE ONLY Opened By: Kim Crawford Date: 9/25/89 Time: 11:00
SHUTTLE # 841 TEMP. °C 8° SEAL # 0158652 COND. intact

ENVIRONMENTAL TESTING and CERTIFICATION

FIELD PARAMETER FORM (CC2)

ETC JOB # CA1370

Sample Point LS | LSP15 (Source Code | Sample Point I.D.)

FIELD PROCEDURES

PURGE DATE (YY MM DD)	START PURGE (2400 Hr Clock)	ELAPSED HRS	WATER VOL. IN CASING (Gallons)	VOLUME PURGED (Gallons)
89 09 22		.5		

SAMPLING METHOD:

Sampler Type [X] A-Submersible Pump, B-ISCO, C-Bladder Pump, D-Dipper/Bottle, E-Bailer, F-Scoop/Shovel, X-Other PUSH TUBE (SPECIFY OTHER)

Sampler Material [B] A-Teflon, B-Metal, C-PVC, D-Plastic, X-Other (SPECIFY OTHER)

Tubing Material [ ] A-Teflon, B-Tygon, C-Polyethylene, D-Silicon, X-Other (SPECIFY OTHER)

Sample Composited [YES] (Procedure/Proportions)

FIELD MEASUREMENTS

Well Elevation (ft/msl)

Depth to Ground water (ft)

Groundwater Elevation (ft msl)

Well Depth (ft)

Sample Depth (non-well) (ft) 1.50

	pH	(STD)	spec. cond.	um/cm at 25°C	(other parameter)	value	units
1st			1st				
2nd			2nd				
3rd			3rd				
4th			4th				

Sample Temp (°C)

Turbidity NTU

FIELD COMMENTS

Sample Appearance: Light Gray mottled CLAY

Weather Conditions: Overcast, Slight Breeze & 65°F

Other:

FILTERING: Use Chain of Custody (CC1) to indicate which bottles were filtered

Sampler: (Print) JEFF ENGLAND Employer: PELA

I certify that sampling procedures were in accordance with applicable EPA state and corporate protocols.

22 Sep 89 (Date) (Signature)

213

ORIGINAL

ENVIRONMENTAL TESTING and CERTIFICATION

Seal No. 0158651 ETC Job # CA2013

CHAIN OF CUSTODY FORM (CC1) ORIGINAL

Date Sealed 89/09/21 By: KC

Company: PELA Attn.: CLAYTON LINDSEY

Facility/Site: CITY DISPOSAL ~~C/O HOLIDAY INN MADISON SMITH EAST~~ Phone: (414) 631 - 3150

Address: 1902/EXIT 12 AND 18 EAST, MADISON, WI 53704

SAMPLE IDENTIFICATION

Facility: 495 (Facility/Site Code) | 800 N 900 E (Optional Sample Point Descriptions)

Sample Point: GWSD7 (Source Code (from below) / Your Sample Point ID (left justify)) | 890922 (Start Date (YY/MM/DD)) | 1510 (Start Time (2400 hr clock)) | 15 (Elapsed Hours (composite))

Source Codes:

Well (W) Outfall (O) Bottom Sediment (B) Surface Impoundment (I) Leachate Collection Sys. (C) Other (X)

Soil (S) River/Stream (R) Generation Point (G) Treatment Facility (T) Lake/Ocean (L) Specify

SHUTTLE CONTENTS

BOTTLE No	Type	Size	Preserv.	ANALYSIS	SAMPLER FIL (Y/N)	SAMPLER Observations	LAB Observations
2	VOA	40	NONE	VOLATILES		✓	✓
~~1~~	~~TB~~	~~40~~	~~GC/MS~~	TRIP BLANK TB NOT sent out			—
1	EXT	1000	none	EXT/MS/GC		✓	✓
1	MET	500	~~HNO3~~	METALS (Soil) NO Preserv.		✓	✓
1	CONU	125	NONE	CYANIDE		✓	✓
				~~- DID NOT USE Sent Back in Shuttle -~~			
				NOTE: BOTTLES HAD ± 1/4 oz OF WATER INSIDE.			
				R. WALLA OF ETC WAS INFORMED. SAID WATER			
				FROM CLEANING BOTTLES. LAB WATER.			

CHAIN OF CUSTODY CHRONICLE

1. Shuttle Opened By: (print) CLAYTON LINDSEY Date: 9-22-89 Time: 11:00 AM
   Signature: Clayton Lindsey Seal #: 0158651 Intact: ok

2. I have received these materials in good condition from the above person.
   Name: JEFF ENGLAND Signature:
   Date: 22Sep89 Time: 1220 Remarks: OK

3. I have received these materials in good condition from the above person.
   Name: Signature:
   Date: Time: Remarks:

4. Shuttle Sealed By: (print) JEFF ENGLAND Date: 22Sep89 Time: 1620
   Signature: Seal #: 0167696 Intact: ok

LAB USE ONLY Opened By: Ben Crawford Date: 9/25/89 Time: 11:05

SHUTTLE # 1194 TEMP. °C 70 SEAL # 0167696 COND. ~~Broken~~ OK

ENVIRONMENTAL TESTING and CERTIFICATION

FIELD PARAMETER FORM (CC2)

ETC JOB # CA [redacted]228 2013

Sample Point 151 SID7 (Source Code / Sample Point I.D.)

FIELD PROCEDURES

PURGE DATE (YY MM DD)	START PURGE (2400 Hr Clock)	ELAPSED HRS	WATER VOL. IN CASING (Gallons)	VOLUME PURGED (Gallons)
890922		1.5		

SAMPLING METHOD:

Sampler Type [X] A-Submersible Pump, B-ISCO, C-Bladder Pump, D-Dipper/Bottle, E-Bailer, F-Scoop/Shovel, X-Other PUSH TUBE (SPECIFY OTHER)

Sampler Material [B] A-Teflon, B-Metal, C-PVC, D-Plastic, X-Other (SPECIFY OTHER)

Tubing Material [ ] A-Teflon, B-Tygon, C-Polyethylene, D-Silicon, X-Other (SPECIFY OTHER)

Sample Composited [Y/N] (Procedure/Proportions)

FIELD MEASUREMENTS

Well Elevation (ft/msl)

Depth to Ground water (ft)

Groundwater Elevation (ft msl)

Well Depth (ft)

Sample Depth (non-well) (ft) 11.50

	ph	(STD)	spec. cond.	um/cm at 25° C	(other parameter)	value	units
1st	4	(STD)		um/cm at 25° C			
2nd		(STD)		um/cm at 25°C			
3rd		(STD)		um/cm at 25°C			
4th		(STD)		um/cm at 25°C			

Sample Temp (°C)

Turbidity NTU

FIELD COMMENTS

Sample Appearance: Dusky Yellow Clay

Weather Conditions: OVERCAST, MODERATE BREEZE | 64° F

Other:

FILTERING: Use Chain of Custody (CC1) to indicate which bottles were filtered

Sampler: (Print) JEFF [redacted] ENGLAND Employer: PELA

I certify that sampling procedures were in accordance with applicable EPA state and corporate protocols.

(Date) 22 Sep 89 (Signature)

215

ORIGINAL

ETC

LOG LINK 100192

LABORATORY CHRONICLE: Metals Department

SAMPLES

CA1365 – CA1370

CA2013

	CHEMIST	DATE
Hg Prep	Bob Royce	10/17/89
AA Prep	Bob Royce (e.a.)	11/6/89
ICAP Prep	Bob Royce (e.a.)	11/6/89
Boron Prep		

Lab Supervisor R. Abernathy Date 11/29/89