

INORGANIC DATA

CLIENT:
PROJECT ID:
SDG#:
IEA ID:

ROUX ASSOCIATES
AMTRAK SUNNYSIDE
Z0148
30930-0148

METALS DATA

CLIENT:
PROJECT ID:
SDG#:
IEA ID:

ROUX ASSOCIATES
AMTRAK SUNNYSIDE
Z0148
30930-0148

1454

U.S. EPA - CLP

EPA SAMPLE NO.

1
INORGANIC ANALYSIS DATA SHEET

MW-45

Lab Name: IEA

Contract:

Lab Code: IEA

Case No.: 0148

SAS No.:

SDG No.: Z0148

Matrix (soil/water): WATER

Lab Sample ID: Z14809

Level (low/med): LOW

Date Received: 02/10/93

% Solids: 0.0

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

CAS No.	Analyte	Concentration	C	Q	IM
7429-90-5	Aluminum	1030			IF
7440-36-0	Antimony	21.0	U		IF
7440-38-2	Arsenic	1.0	U		IF
7440-39-3	Barium	67.5	B		IF
7440-41-7	Beryllium	1.0	U		IF
7440-43-9	Cadmium	2.0	U		IF
7440-70-2	Calcium	47600			IF
7440-47-3	Chromium	3.0	U		IF
7440-48-4	Cobalt	3.0	U		IF
7440-50-8	Copper	31.2			IF
7439-89-6	Iron	1760			IF
7439-92-1	Lead	2.2	B		IF
7439-95-4	Magnesium	12500			IF
7439-96-5	Manganese	142			IF
7439-97-6	Mercury	0.20	U		ICV
7440-02-0	Nickel	21.0	U		IF
7440-09-7	Potassium	2950	B		IF
7782-49-2	Selenium	2.0	U		IF
7440-22-4	Silver	3.0	U		IF
7440-23-5	Sodium	14700			IF
7440-28-0	Thallium	2.0	UIW		IF
7440-62-2	Vanadium	6.0	U		IF
7440-66-6	Zinc	27.8			IF
	Cyanide				INR

Color Before: COLORLESS

Clarity Before: CLEAR

Texture:

Color After: COLORLESS

Clarity After: CLEAR

Artifacts:

Comments:

1455

U.S. EPA - CLP

EPA SAMPLE NO.

1
INORGANIC ANALYSIS DATA SHEET

MHW-1

Lab Name: IEA

Contract:

Lab Code: IEA

Case No.: 0148

SAS No.:

SDS No.: Z0148

Matrix (soil/water): WATER

Lab Sample ID: Z14810

Level (low/med): LOW

Date Received: 02/10/93

% Solids: 0.0

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

CAS No.	Analyte	Concentration	C	D	M
7429-90-5	Aluminum	131	B		F
7440-36-0	Antimony	21.0	U		F
7440-38-2	Arsenic	5.0	B		F
7440-39-3	Barium	150	B		F
7440-41-7	Beryllium	1.0	U		F
7440-43-9	Cadmium	2.0	U		F
7440-70-2	Calcium	52300			F
7440-47-3	Chromium	7.6	B		F
7440-48-4	Cobalt	3.0	U		F
7440-50-8	Copper	50.6			F
7439-89-6	Iron	33000			F
7439-92-1	Lead	15.1			F
7439-95-4	Magnesium	16000			F
7439-96-5	Manganese	1670			F
7439-97-6	Mercury	1.6			CV
7440-02-0	Nickel	21.0	U		F
7440-09-7	Potassium	4940	B		F
7782-49-2	Selenium	2.0	U		F
7440-22-4	Silver	3.0	U		F
7440-23-5	Sodium	90000			F
7440-28-0	Thallium	2.0	UIW		F
7440-62-2	Vanadium	6.0	U		F
7440-66-6	Zinc	75.5			F
	Cyanide				NR

Color Before: YELLOW

Clarity Before: CLOUDY

Texture:

Color After: YELLOW

Clarity After: CLEAR

Artifacts:

Comments:

1456

U.S. EPA - CLP

EPA SAMPLE NO.

1
INORGANIC ANALYSIS DATA SHEET

NW-43

Lab Name: IEA

Contract:

Lab Code: IEA

Case No.: 0148

SAS No.:

SDG No.: Z0148

Matrix (soil/water): WATER

Lab Sample ID: Z14811

Level (low/med): LOW

Date Received: 02/10/93

% Solids: 0.0

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

CAS No.	Analyte	Concentration	U	Q	IM
7429-90-5	Aluminum	4420			F
7440-36-0	Antimony	21.0	U		F
7440-38-2	Arsenic	1.2	B		F
7440-39-3	Barium	142	B		F
7440-41-7	Beryllium	1.0	U		F
7440-43-9	Cadmium	2.0	U		F
7440-70-2	Calcium	29800			F
7440-47-3	Chromium	3.0	U		F
7440-48-4	Cobalt	5.6	B		F
7440-50-8	Copper	46.2			F
7439-89-6	Iron	8410			F
7439-92-1	Lead	5.4			F
7439-95-4	Magnesium	15000			F
7439-96-5	Manganese	3470			F
7439-97-6	Mercury	0.20	U		CV
7440-02-0	Nickel	21.0	U		F
7440-09-7	Potassium	1590	B		F
7782-49-2	Selenium	2.0	U		F
7440-22-4	Silver	3.0	U		F
7440-23-5	Sodium	213000			F
7440-28-0	Thallium	2.0	U	W	F
7440-62-2	Vanadium	6.0	U		F
7440-66-6	Zinc	55.1			F
	Cyanide				NR

Color Before: YELLOW

Clarity Before: CLOUDY

Texture:

Color After: YELLOW

Clarity After: CLEAR

Artifacts:

Comments:

1457

U.S. EPA - CLP

EPA SAMPLE NO.

1
INORGANIC ANALYSIS DATA SHEET

MW-44

Lab Name: IEA

Contract:

Lab Code: IEA

Case No.: 0148

SAS No.:

SDS No.: Z0148

Matrix (soil/water): WATER

Lab Sample ID: Z14812

Level (low/med): LOW

Date Received: 02/10/93

% Solids: 0.0

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	3260			F
7440-36-0	Antimony	21.0	U		F
7440-38-2	Arsenic	2.0	B/W		F
7440-39-3	Barium	207			F
7440-41-7	Beryllium	1.0	U		F
7440-43-9	Cadmium	2.0	U		F
7440-70-2	Calcium	148000			F
7440-47-3	Chromium	9.3	B		F
7440-48-4	Cobalt	3.4	B		F
7440-50-8	Copper	43.0			F
7439-89-6	Iron	8930			F
7439-92-1	Lead	5.7			F
7439-95-4	Magnesium	49800			F
7439-96-5	Manganese	1750			F
7439-97-6	Mercury	0.20	U		CV
7440-02-0	Nickel	21.0	U		F
7440-09-7	Potassium	7470			F
7782-49-2	Selenium	2.0	U/W		F
7440-22-4	Silver	3.0	U		F
7440-23-5	Sodium	91900			F
7440-28-0	Thallium	2.0	U		F
7440-62-2	Vanadium	9.2	B		F
7440-66-6	Zinc	36.3			F
	Cyanide				NR

Color Before: YELLOW

Clarity Before: CLOUDY

Texture:

Color After: COLORLESS

Clarity After: CLEAR

Artifacts:

Comments:

U.S. EPA - CLF

EPA SAMPLE NO.

INORGANIC ANALYSIS DATA SHEET

MW-46

Lab Name: IEA

Contract:

Lab Code: IEA

Case No.: 0148

SAS No.:

SDG No.: Z0145

Matrix (soil/water): WATER

Lab Sample ID: Z14813

Level (low/med): LOW

Date Received: 02/10/93

% Solids: 0.0

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

CAS No.	Analyte	Concentration	C	Q	IM
7429-90-5	Aluminum	80000			P
7440-36-0	Antimony	21.0	U		P
7440-38-2	Arsenic	10.9			P
7440-39-3	Barium	1030			P
7440-41-7	Beryllium	3.7	B		P
7440-43-9	Cadmium	4.4	B		P
7440-70-2	Calcium	57000			P
7440-47-3	Chromium	146			P
7440-48-4	Cobalt	111			P
7440-50-8	Copper	421			P
7439-89-6	Iron	152000			P
7439-92-1	Lead	165			P
7439-95-4	Magnesium	47200			P
7439-96-5	Manganese	9410			P
7439-97-6	Mercury	0.40			CV
7440-02-0	Nickel	186			P
7440-09-7	Potassium	19800			P
7782-49-2	Selenium	2.0	U	W	P
7440-22-4	Silver	3.0	U		P
7440-23-5	Sodium	41400			P
7440-28-0	Thallium	2.0	U		P
7440-62-2	Vanadium	205			P
7440-66-6	Zinc	676			P
	Cyanide				NR

Color Before: DRANGE

Clarity Before: OPAGUE

Texture:

Color After: YELLOW

Clarity After: CLEAR

Artifacts:

Comments:

1453

U.S. EPA - CLP

EPA SAMPLE NO.

INORGANIC ANALYSIS DATA SHEET

MW-35

Lab Name: IEA

Contract:

Lab Code: IEA

Case No.: 0148

SAS No.:

SDG No.: Z0148

Matrix (soil/water): WATER

Lab Sample ID: Z14814

Level (low/med): LOW

Date Received: 02/10/93

% Solids: 0.0

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	9210			IF
7440-36-0	Antimony	21.0	U		IF
7440-38-2	Arsenic	16.5			IF
7440-39-3	Barium	696			IF
7440-41-7	Beryllium	1.0	U		IF
7440-43-9	Cadmium	2.0	U		IF
7440-70-2	Calcium	65300			IF
7440-47-3	Chromium	27.8			IF
7440-48-4	Cobalt	6.2	B		IF
7440-50-8	Copper	114			IF
7439-89-6	Iron	45200			IF
7439-92-1	Lead	207			IF
7439-95-4	Magnesium	15100			IF
7439-96-5	Manganese	1280			IF
7439-97-6	Mercury	0.49			ICV
7440-02-0	Nickel	22.6	B		IF
7440-09-7	Potassium	6180			IF
7782-49-2	Selenium	2.0	U	W	IF
7440-22-4	Silver	3.0	U		IF
7440-23-5	Sodium	131000			IF
7440-28-0	Thallium	2.0	U		IF
7440-62-2	Vanadium	51.4			IF
7440-66-6	Zinc	153			IF
	Cyanide				NR

Color Before: BROWN

Clarity Before: CLOUDY

Texture:

Color After: YELLOW

Clarity After: CLEAR

Artifacts:

Comments:

1400

U.S. EPA - CLF

EPA SAMPLE NO.

1
INORGANIC ANALYSIS DATA SHEET

PHW-2

Lab Name: IEA

Contract:

Lab Code: IEA

Case No.: 0148

SAS No.:

SDS No.: Z0148

Matrix (soil/water): WATER

Lab Sample ID: Z14816

Level (low/med): LOW

Date Received: 02/10/93

% Solids: 0.0

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	501			IF
7440-36-0	Antimony	21.0	U		IF
7440-38-2	Arsenic	2.8	B		IF
7440-39-3	Barium	154	B		IF
7440-41-7	Beryllium	1.0	U		IF
7440-43-9	Cadmium	7.8			IF
7440-70-2	Calcium	8380			IF
7440-47-3	Chromium	34.0			IF
7440-48-4	Cobalt	3.0	U		IF
7440-50-8	Copper	94.5			IF
7439-89-6	Iron	15300			IF
7439-92-1	Lead	21.6	S		IF
7439-95-4	Magnesium	2010	B		IF
7439-96-5	Manganese	175			IF
7439-97-6	Mercury	2.0			CV
7440-02-0	Nickel	21.0	U		IF
7440-09-7	Potassium	2660	B		IF
7782-49-2	Selenium	2.0	U		IF
7440-22-4	Silver	3.0	U		IF
7440-23-5	Sodium	12800			IF
7440-28-0	Thallium	2.0	U		IF
7440-62-2	Vanadium	6.0	U		IF
7440-66-6	Zinc	130			IF
	Cyanide				NR

Color Before: COLORLESS

Clarity Before: CLOUDY

Texture:

Color After: YELLOW

Clarity After: CLEAR

Artifacts:

Comments:

1461

U.S. EPA - CLP

EPA SAMPLE NO.

1
INORGANIC ANALYSIS DATA SHEET

REPLICATE

Lab Name: IEA

Contract:

Lab Code: IEA

Case No.: 0148

SAS No.:

SDG No.: Z0148

Matrix (soil/water): WATER

Lab Sample ID: Z14817

Level (low/med): LOW

Date Received: 02/10/93

% Solids: 0.0

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	872			F
7440-36-0	Antimony	21.0	U		F
7440-38-2	Arsenic	1.2	B		F
7440-39-3	Barium	66.0	B		F
7440-41-7	Beryllium	1.0	U		F
7440-43-9	Cadmium	2.0	U		F
7440-70-2	Calcium	47700			F
7440-47-3	Chromium	3.0	U		F
7440-48-4	Cobalt	3.0	U		F
7440-50-8	Copper	19.1	B		F
7439-89-6	Iron	1570			F
7439-92-1	Lead	2.2	B		F
7439-95-4	Magnesium	12400			F
7439-96-5	Manganese	126			F
7439-97-6	Mercury	0.20	U		CV
7440-02-0	Nickel	21.0	U		F
7440-09-7	Potassium	3040	B		F
7782-49-2	Selenium	2.0	U		F
7440-22-4	Silver	3.0	U		F
7440-23-5	Sodium	14700			F
7440-28-0	Thallium	2.0	U		F
7440-62-2	Vanadium	6.0	U		F
7440-66-6	Zinc	20.3			F
	Cyanide				NR

Color Before: COLORLESS

Clarity Before: CLOUDY

Texture:

Color After: COLORLESS

Clarity After: CLEAR

Artifacts:

Comments:

1462

U.S. EPA - CLP

EPA SAMPLE NO.

1

INORGANIC ANALYSIS DATA SHEET

MW-1

Lab Name: IEA

Contract:

Lab Code: IEA

Case No.: 0148

SAS No.:

SDG No.: Z0148

Matrix (soil/water): WATER

Lab Sample ID: Z14816

Level (low/med): LOW

Date Received: 02/10/93

% Solids: 0.0

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	12100			IF
7440-36-0	Antimony	21.0	U		IF
7440-38-2	Arsenic	2.7	B		IF
7440-39-3	Barium	246			IF
7440-41-7	Beryllium	1.0	U		IF
7440-43-9	Cadmium	2.0	U		IF
7440-70-2	Calcium	127000			IF
7440-47-3	Chromium	18.5			IF
7440-48-4	Cobalt	11.1	B		IF
7440-50-8	Copper	63.0			IF
7439-89-6	Iron	22900			IF
7439-92-1	Lead	17.2			IF
7439-95-4	Magnesium	51900			IF
7439-96-5	Manganese	914			IF
7439-97-6	Mercury	0.20	U		ICV
7440-02-0	Nickel	38.6	B		IF
7440-09-7	Potassium	8060			IF
7782-49-2	Selenium	2.0	U		IF
7440-22-4	Silver	3.0	U		IF
7440-23-5	Sodium	6680			IF
7440-28-0	Thallium	2.0	U		IF
7440-62-2	Vanadium	28.5	B		IF
7440-66-6	Zinc	98.0			IF
	Cyanide				NR

Color Before: BROWN

Clarity Before: CLOUDY

Texture:

Color After: YELLOW

Clarity After: CLEAR

Artifacts:

Comments:

1403

U.S. EPA - CLF

EPA SAMPLE NO.

1
INORGANIC ANALYSIS DATA SHEET

MW-47

Lab Name: IEA

Contract:

Lab Code: IEA

Case No.: 0148

SAS No.:

SDS No.: Z0148

Matrix (soil/water): WATER

Lab Sample ID: Z14820

Level (low/med): LOW

Date Received: 02/10/93

% Solids: 0.0

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

CAS No.	Analyte	Concentration	C	G	M
7429-90-5	Aluminum	7660			IF
7440-36-0	Antimony	21.0	U		IF
7440-38-2	Arsenic	2.1	B	W	IF
7440-39-3	Barium	87.6	B		IF
7440-41-7	Beryllium	1.0	U		IF
7440-43-9	Cadmium	2.2	B		IF
7440-70-2	Calcium	83800			IF
7440-47-3	Chromium	17.4			IF
7440-48-4	Cobalt	5.8	B		IF
7440-50-8	Copper	38.8			IF
7439-89-6	Iron	9890			IF
7439-92-1	Lead	10.8			IF
7439-95-4	Magnesium	28000			IF
7439-96-5	Manganese	135			IF
7439-97-6	Mercury	0.20	U		ICV
7440-02-0	Nickel	21.1	B		IF
7440-09-7	Potassium	7160			IF
7782-49-2	Selenium	2.0	U		IF
7440-22-4	Silver	3.0	U		IF
7440-23-5	Sodium	61900			IF
7440-28-0	Thallium	2.0	U		IF
7440-62-2	Vanadium	47.0	B		IF
7440-66-6	Zinc	53.0			IF
	Cyanide				INR

Color Before: BROWN

Clarity Before: CLOUDY

Texture:

Color After: YELLOW

Clarity After: CLEAR

Artifacts:

Comments:

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: IEA

Contract:

Lab Code: IEA

Case No.: 0148

SAS No.:

SDG No.: Z0148

Initial Calibration Source: INORG. VENT.

Continuing Calibration Source: INORG. VENT.

Concentration Units: ug/L

Analyte	Initial Calibration			Continuing Calibration					M
	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	
Aluminum	5000.0	5125.69	102.5	5000.0	5297.24	105.9	5157.55	103.2	P
Antimony	5000.0	4972.02	99.4	5000.0	5111.32	102.2	5045.40	100.9	P
Arsenic	50.0	52.00	104.0	50.0	52.20	104.4	48.90	97.8	F
Barium	5000.0	5120.39	102.4	5000.0	5168.23	103.4	5128.71	102.6	P
Beryllium	125.0	125.01	100.0	125.0	126.08	100.9	125.38	100.3	P
Cadmium	1250.0	1290.47	103.2	1250.0	1300.07	104.0	1285.65	102.9	P
Calcium	12500.0	12683.50	101.5	12500.0	12824.43	102.6	12673.37	101.4	P
Chromium	500.0	502.05	100.4	500.0	504.68	100.9	503.80	100.8	P
Cobalt	1250.0	1271.95	101.8	1250.0	1283.27	102.7	1275.97	102.1	P
Copper	625.0	623.52	99.8	625.0	635.63	101.7	619.38	99.1	P
Iron	2500.0	2511.67	100.5	2500.0	2579.44	103.2	2515.99	100.6	P
Lead	50.0	51.40	102.8	50.0	50.00	100.0	53.50	107.0	F
Magnesium	12500.0	12624.39	101.0	12500.0	12742.61	101.9	12656.11	101.2	P
Manganese	1250.0	1278.51	102.3	1250.0	1291.01	103.3	1280.64	102.5	P
Mercury	5.0	4.88	97.6	5.0	4.76	95.2	4.82	96.4	CV
Nickel	1250.0	1257.02	100.6	1250.0	1258.99	100.7	1262.20	101.0	P
Potassium	12500.0	12179.29	97.4	12500.0	12536.74	100.3	12905.51	103.2	P
Selenium	50.0	52.10	104.2	50.0	50.90	101.8	51.10	102.2	F
Silver	625.0	585.86	93.7	625.0	591.90	94.7	591.75	94.7	F
Sodium	12500.0	12844.95	102.8	12500.0	12934.60	103.5	12878.87	103.0	P
Thallium	50.0	50.50	101.0	50.0	46.50	93.0	46.00	92.0	F
Vanadium	1250.0	1271.39	101.7	1250.0	1285.58	102.8	1282.63	102.6	P
Zinc	1250.0	1282.08	102.6	1250.0	1295.51	103.6	1288.75	103.1	P
Cyanide									NR

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

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: IEA

Contract:

Lab Code: IEA

Case No.: 0148

SAS No.:

SDG No.: Z0148

Initial Calibration Source: INORG. VENT.

Continuing Calibration Source: INORG. VENT.

Concentration Units: ug/L

Analyte	Initial Calibration			Continuing Calibration					M
	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	
Aluminum				5000.0	5184.08	103.7	5256.86	105.1	P
Antimony				5000.0	5023.05	100.5	5101.12	102.0	P
Arsenic				50.0	52.00	104.0	48.30	96.6	F
Barium				5000.0	5131.83	102.6	5178.63	103.6	P
Beryllium				125.0	126.24	101.0	127.06	101.6	P
Cadmium				1250.0	1294.33	103.5	1301.80	104.1	P
Calcium				12500.0	12682.61	101.5	12888.10	103.1	P
Chromium				500.0	504.46	100.9	507.52	101.5	P
Cobalt				1250.0	1280.69	102.5	1293.81	103.5	P
Copper				625.0	618.79	99.0	621.74	99.5	P
Iron				2500.0	2521.47	100.9	2599.80	104.0	P
Lead				50.0	53.70	107.4	54.60	109.2	F
Magnesium				12500.0	12706.41	101.7	12799.42	102.4	P
Manganese				1250.0	1279.30	102.3	1289.95	103.2	P
Mercury				5.0	4.76	95.2	4.82	96.4	CV
Nickel				1250.0	1246.12	99.7	1262.39	101.0	P
Potassium				12500.0	12329.22	98.6	12784.63	102.3	P
Selenium				50.0	49.60	99.2	53.50	107.0	F
Silver				625.0	594.39	95.1	598.34	95.7	P
Sodium				12500.0	12976.00	103.8	13077.02	104.6	P
Thallium				50.0	46.20	92.4	45.80	91.6	F
Vanadium				1250.0	1284.51	102.8	1287.19	103.0	P
Zinc				1250.0	1295.82	103.7	1309.33	104.7	P
Cyanide									NR

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

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: IEA Contract:
 Lab Code: IEA Case No.: 0148 SAS No.: SDG No.: Z0148
 Initial Calibration Source: INORG. VENT.
 Continuing Calibration Source: INORG. VENT.

Concentration Units: ug/L

Analyte	Initial Calibration			Continuing Calibration					M
	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	
Aluminum									NR
Antimony					51.10	102.2	60.2 74.10		NR
Arsenic				50.0	47.38	94.8	46.20	92.4	F
Barium									NR
Beryllium									NR
Cadmium									NR
Calcium									NR
Chromium									NR
Cobalt									NR
Copper									NR
Iron									NR
Lead				50.0	50.90	101.8			F
Magnesium									NR
Manganese									NR
Mercury	5.0	4.97	99.4	5.0	4.86	97.2	4.86	97.2	CV
Nickel									NR
Potassium									NR
Selenium				50.0	53.60	107.2			F
Silver									NR
Sodium									NR
Thallium				50.0	51.20	102.4			F
Vanadium									NR
Zinc									NR
Cyanide									NR

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

2A
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: IEA Contract:
 Lab Code: IEA Case No.: 0148 SAS No.: SDG No.: Z0148
 Initial Calibration Source: INORG. VENT.
 Continuing Calibration Source: INORG. VENT.

Concentration Units: ug/L

Analyte	Initial Calibration			Continuing Calibration					M
	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	
Aluminum									NR
Antimony									NR
Arsenic	50.0	52.20	104.4	50.0	47.30	94.6	46.20	92.4	F
Barium									NR
Beryllium									NR
Cadmium									NR
Calcium									NR
Chromium									NR
Cobalt									NR
Copper									NR
Iron									NR
Lead	50.0	48.00	96.0	50.0	48.30	96.6	49.10	98.2	F
Magnesium									NR
Manganese									NR
Mercury				5.0	4.97	99.4	4.86	97.2	CV
Nickel									NR
Potassium									NR
Selenium									NR
Silver									NR
Sodium									NR
Thallium									NR
Vanadium									NR
Zinc									NR
Cyanide									NR

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

2B

CRDL STANDARD FOR AA AND ICP

Lab Name: IEA

Contract:

Lab Code: IEA

Case No.: 0148

SAS No.:

SDG No.: Z0148

AA CRDL Standard Source: INORG. VENT.

ICP CRDL Standard Source: INORG. VENT.

Concentration Units: ug/L

Analyte	CRDL Standard for AA			CRDL Standard for ICP				
	True	Found	%R	True	Initial Found	%R	Final Found	%R
Aluminum				400.0	420.49	105.1	410.78	102.7
Antimony				120.0	104.21	86.8	92.37	77.0
Arsenic	10.0	10.00	100.0					
Barium				400.0	410.31	102.6	400.95	100.2
Beryllium				10.0	9.95	99.5	9.92	99.2
Cadmium				10.0	12.76	127.6	12.12	121.2
Calcium					7.55		11.96	
Chromium				20.0	21.43	107.2	18.58	92.9
Cobalt				100.0	101.51	101.5	98.31	98.3
Copper				50.0	55.67	111.7	48.19	96.4
Iron				200.0	161.67	80.8	202.28	101.1
Lead	3.0	3.10	103.3					
Magnesium					1.52		12.42	
Manganese				30.0	32.46	108.2	31.92	106.4
Mercury								
Nickel				80.0	89.56	112.0	78.49	98.1
Potassium					-622.45		-293.93	
Selenium	5.0	5.60	112.0					
Silver				20.0	21.09	105.4	21.77	108.8
Sodium					3.38		-3.52	
Thallium	10.0	9.10	91.0					
Vanadium				100.0	103.85	103.8	100.89	100.9
Zinc				40.0	41.59	104.0	41.64	104.1

CRDL STANDARD FOR AA AND ICF

Lab Name: IEA

Contract:

Lab Code: IEA

Case No.: 0148

SAS No.:

SDG No.: Z0148

AA CRDL Standard Source: INORG. VENT.

ICP CRDL Standard Source:

Concentration Units: ug/L

Analyte	CRDL Standard for AA			CRDL Standard for ICF				
	True	Found	%R	True	Initial Found	%R	Final Found	%R
Aluminum								
Antimony								
Arsenic	10.0	10.80	108.0					
Barium								
Beryllium								
Cadmium								
Calcium								
Chromium								
Cobalt								
Copper								
Iron								
Lead	3.0	3.60	120.0					
Magnesium								
Manganese								
Mercury								
Nickel								
Potassium								
Selenium	5.0	5.60	112.0					
Silver								
Sodium								
Thallium	10.0	10.40	104.0					
Vanadium								
Zinc								

U.S. EPA - OLP

2B

CRDL STANDARD FOR AA AND ICP

Lab Name: IEA

Contract:

Lab Code: IEA

Case No.: 0148

SAS No.:

SDS No.: Z0148

AA CRDL Standard Source: INORG. VENT.

ICP CRDL Standard Source:

Concentration Units: ug/L

Analyte	CRDL Standard for AA			CRDL Standard for ICP				
	True	Found	%R	True	Initial Found	%R	Final Found	%R
Aluminum								
Antimony								
Arsenic	10.0	9.70	97.0					
Barium								
Beryllium								
Cadmium								
Calcium								
Chromium								
Cobalt								
Copper								
Iron								
Lead	3.0	2.90	96.7					
Magnesium								
Manganese								
Mercury								
Nickel								
Potassium								
Selenium								
Silver								
Sodium								
Thallium								
Vanadium								
Zinc								

U.S. EPA - DLP

3
BLANKS

Lab Name: IEA

Contract:

Lab Code: IEA

Case No.: 0148

SAS No.:

SDG No.: Z0148

Preparation Blank Matrix (soil/water): WATER

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

Analyte	Initial Calib. Blank (ug/L)	Continuing Calibration Blank (ug/L)						Preparation Blank		C	M
		1	C	2	C	3	C	C	M		
Aluminum	22.0 U	104.9 B		22.0 U		22.0 U		22.000 U		F	
Antimony	-29.9 B	-26.5 B		21.0 U		-27.8 B		-23.850 B		F	
Arsenic	1.0 U	1.0 U		1.0 U		1.0 U		1.000 U		F	
Barium	6.0 U	6.0 U		6.0 U		6.0 U		6.000 U		F	
Beryllium	1.0 U	1.0 U		1.0 U		1.0 U		1.000 U		F	
Cadmium	2.0 U	2.0 U		2.0 U		2.0 U		2.000 U		F	
Calcium	11.0 U	15.0 B		11.0 U		11.0 U		12.290 B		F	
Chromium	3.0 U	3.0 U		3.0 U		3.0 U		-3.060 B		F	
Cobalt	3.0 U	3.0 U		3.0 U		3.0 U		3.000 U		F	
Copper	-4.7 B	3.0 U		-5.0 B		-5.0 B		-4.430 B		F	
Iron	82.0 U	82.0 U		82.0 U		82.0 U		82.000 U		F	
Lead	1.0 U	1.0 U		1.0 U		1.0 U		1.000 U		F	
Magnesium	23.0 U	27.4 B		23.0 U		23.0 U		23.000 U		F	
Manganese	1.0 U	2.4 B		1.0 U		1.0 U		5.320 B		F	
Mercury	0.2 U	0.2 U		0.2 U		0.2 U		0.200 U		CV	
Nickel	21.0 U	21.0 U		21.0 U		21.0 U		21.000 U		F	
Potassium	626.0 U	626.0 U		626.0 U		626.0 U		626.000 U		F	
Selenium	2.0 U	2.0 U		2.0 U		2.0 U		2.000 U		F	
Silver	3.0 U	3.0 U		3.0 U		3.0 U		3.000 U		F	
Sodium	29.0 U	29.0 U		29.0 U		29.0 U		29.000 U		F	
Thallium	2.0 U	2.0 U		2.0 U		2.0 U		2.000 U		F	
Vanadium	6.0 U	6.0 U		6.0 U		6.0 U		6.000 U		F	
Zinc	4.0 U	4.0 U		4.0 U		4.0 U		4.000 U		F	
Cyanide										NR	

3
BLANKS

Lab Name: IEA

Contract:

Lab Code: IEA

Case No.: 0148

SAS No.:

SDS No.: Z0148

Preparation Blank Matrix (soil/water): WATER

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

Analyte	Initial Calib. Blank (ug/L)	Continuing Calibration Blank (ug/L)						Preparation Blank		M
		1	C	2	C	3	C	C	M	
Aluminum		22.0	U							F
Antimony		21.0	U							F
Arsenic		1.0	U							F
Barium		6.0	U							F
Beryllium		1.0	U							F
Cadmium		2.0	U							F
Calcium		11.0	U							F
Chromium		3.0	U							F
Cobalt		3.0	U							F
Copper		-6.8	B							F
Iron		82.0	U							F
Lead		1.0	U							F
Magnesium		23.0	U							F
Manganese		1.0	U							F
Mercury		0.2	U	0.2	U			0.200	U	CV
Nickel		21.0	U							F
Potassium		626.0	U							F
Selenium		2.0	U							F
Silver		3.0	U							F
Sodium		29.0	U							F
Thallium		2.0	U							F
Vanadium		6.0	U							F
Zinc		4.0	U							F
Cyanide										NR

3
BLANKS

Lab Name: IEA

Contract:

Lab Code: IEA

Case No.: 0148

SAS No.:

SDG No.: Z0148

Preparation Blank Matrix (soil/water): WATER

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

Analyte	Initial Calib. Blank (ug/L)		Continuing Calibration Blank (ug/L)						Preparation Blank		M
		C	1	C	2	C	3	C	C		
Aluminum											NR
Antimony											NR
Arsenic	1.3	B	1.0	U	1.3	B	1.0	B			F
Barium											NR
Beryllium											NR
Cadmium											NR
Calcium											NR
Chromium											NR
Cobalt											NR
Copper											NR
Iron											NR
Lead	1.0	U	1.0	U	1.0	U	1.0	U			F
Magnesium											NR
Manganese											NR
Mercury	0.2	U	0.2	U	0.2	U	0.2	U			CV
Nickel											NR
Potassium											NR
Selenium	2.0	U	2.0	U	2.0	U	2.0	U			F
Silver											NR
Sodium											NR
Thallium	2.0	U	2.0	U	2.0	U	2.0	U			F
Vanadium											NR
Zinc											NR
Cyanide											NR

U.S. EPA - CLP

3
BLANKS

Lab Name: IEA

Contract:

Lab Code: IEA

Case No.: 014B

SAS No.:

SDG No.: Z014B

Preparation Blank Matrix (soil/water): WATER

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

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L)						Prepa- ration Blank	C	M
			1	C	2	C	3	C			
Aluminum										NR	
Antimony										NR	
Arsenic	1.0	U	1.0	U	-1.6	B				F	
Barium										NR	
Beryllium										NR	
Cadmium										NR	
Calcium										NR	
Chromium										NR	
Cobalt										NR	
Copper										NR	
Iron										NR	
Lead	1.0	U	1.0	U	1.0	U				F	
Magnesium										NR	
Manganese										NR	
Mercury			0.2	U						CV	
Nickel										NR	
Potassium										NR	
Selenium										NR	
Silver										NR	
Sodium										NR	
Thallium										NR	
Vanadium										NR	
Zinc										NR	
Cyanide										NR	

U.S. EPA - CLP

4

ICP INTERFERENCE CHECK SAMPLE

Lab Name: IEA

Contract:

Lab Code: IEA

Case No.: 0148

SAS No.:

SDS No.: Z0148

ICP ID Number: JA61

ICS Source: EPA-LV87

Concentration Units: ug/L

Analyte	True		Initial Found			Final Found		
	Sol. A	Sol. AB	Sol. A	Sol. AB	%R	Sol. A	Sol. AB	%R
Aluminum	500000	500000	491564	505428.8	101.1	501579	487404.7	97.5
Antimony			-14	-41.4		-43	-24.4	
Arsenic								
Barium		500	-5	504.0	100.8	-5	484.5	96.9
Beryllium		500	14	516.4	103.3	7	495.6	99.1
Cadmium		1000	3	981.2	98.1	4	947.7	94.8
Calcium	500000	500000	462978	474570.3	94.9	467563	456749.7	91.3
Chromium		500	-5	442.2	88.4	-6	437.5	87.5
Cobalt		500	0	463.5	92.7	-1	451.6	90.3
Copper		500	-2	483.4	96.7	-10	456.4	91.3
Iron	200000	200000	179810	184209.2	92.1	182119	177615.9	88.8
Lead								
Magnesium	500000	500000	487428	499984.6	100.0	493849	480159.8	96.0
Manganese		500	-1	474.2	94.8	-3	454.2	90.8
Mercury								
Nickel		1000	-10	889.4	88.9	-1	857.1	85.7
Potassium			311	-529.6		-363	-151.9	
Selenium								
Silver		1000	0	941.9	94.2	-1	913.6	91.4
Sodium			-33	11.8		-16	18.9	
Thallium								
Vanadium		500	-2	485.1	97.0	-2	463.9	92.8
Zinc		1000	-1	965.4	96.5	1	941.1	94.1

SA
SPIKE SAMPLE RECOVERY

EPA SAMPLE NO.

MW-455

Lab Name: IEA

Contract:

Lab Code: IEA

Case No.: 0148

SAS No.:

SDG No.: Z0148

Matrix (soil/water): WATER
% Solids for Sample: 0.0

Level (low/med): LOW

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

Analyte	Control Limit %R	Spiked Sample Result (SSR)	Sample Result (SR)	Spike Added (SA)	%R	Q/M
Aluminum	75-125	2971.0100	1031.2200	2000.00	97.0	F
Antimony	75-125	488.0500	21.0000	500.00	97.6	F
Arsenic	75-125	36.5000	1.0000	40.00	91.2	F
Barium	75-125	1982.4200	67.5400	2000.00	95.7	F
Beryllium	75-125	48.7700	1.0000	50.00	97.5	F
Cadmium	75-125	45.4000	2.0000	50.00	90.8	F
Calcium						NR
Chromium	75-125	197.8100	3.0000	200.00	98.9	F
Cobalt	75-125	485.7000	3.0000	500.00	97.1	F
Copper	75-125	273.3200	31.2300	250.00	96.8	F
Iron	75-125	2594.5100	1759.7000	1000.00	83.5	F
Lead	75-125	23.7000	2.2000	20.00	107.5	F
Magnesium						NR
Manganese	75-125	612.5000	141.9200	500.00	94.1	F
Mercury	75-125	0.9900	0.2000	1.00	99.0	CV
Nickel	75-125	471.2600	21.0000	500.00	94.3	F
Potassium						NR
Selenium	75-125	10.1000	2.0000	10.00	101.0	F
Silver	75-125	41.4200	3.0000	50.00	82.8	F
Sodium						NR
Thallium	75-125	43.3000	2.0000	50.00	86.6	F
Vanadium	75-125	476.2000	6.0000	500.00	95.2	F
Zinc	75-125	506.1900	27.7700	500.00	95.7	F
Cyanide						NR

Comments:

1478

U.S. EPA - CLP

5B
POST DIGEST SPIKE SAMPLE RECOVERY

EPA SAMPLE NO.

A

Lab Name: IEA

Contract:

Lab Code: IEA

Case No.: 0148

SAS No.:

SDG No.: Z0148

Matrix (soil/water):

Level (low/med):

Concentration Units: ug/L

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

Comments:

U.S. EPA - CLP

e
DUPLICATES

EPA SAMPLE NO.

NW-45 D

Lab Name: IEA

Contract:

Lab Code: IEA

Case No.: 0148

SAS No.:

SDS No.: Z0148

Matrix (soil/water): WATER

Level (low/med): LOW

% Solids for Sample: 0.0

% Solids for Duplicate: 0.0

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

Analyte	Control Limit	Sample (S)	C	Duplicate (D)	C	RPD	D/M
Aluminum	200.0	1031.2200		932.7200		10.0	F
Antimony		21.0000	U	21.0000	U		F
Arsenic		1.0000	U	1.0000	U		F
Barium		67.5400	B	67.5500	B	0.0	F
Beryllium		1.0000	U	1.0000	U		F
Cadmium		2.0000	U	2.0000	U		F
Calcium		47610.1200		47419.5200		0.4	F
Chromium		3.0000	U	3.0400	B	200.0	F
Cobalt		3.0000	U	3.0000	U		F
Copper	25.0	31.2300		26.2100		17.5	F
Iron		1759.7000		1646.0000		6.7	F
Lead		2.2000	B	2.7000	B	20.4	F
Magnesium	5000.0	12506.2000		12405.2300		0.8	F
Manganese		141.9200		136.8600		3.6	F
Mercury		0.2000	U	0.2000	U		CV
Nickel		21.0000	U	21.0000	U		F
Potassium		2946.1500	B	3228.4500	B	9.1	F
Selenium		2.0000	U	2.0000	U		F
Silver		3.0000	U	3.0000	U		F
Sodium	5000.0	14739.2700		14704.6100		0.2	F
Thallium		2.0000	U	2.0000	U		F
Vanadium		6.0000	U	6.0000	U		F
Zinc	20.0	27.7700		23.9000		15.0	F
Cyanide							NR

U.S. EPA - DLP

7

LABORATORY CONTROL SAMPLE

Lab Name: IEA

Contract:

Lab Code: IEA

Case No.: 0148

SAS No.:

SDG No.: Z0148

Solid LCS Source:

Aqueous LCS Source: INORG. VENT.

Analyte	Aqueous (ug/L)			Solid (mg/kg)				%R
	True	Found	%R	True	Found	C	Limits	
Aluminum	3750.0	3918.47	104.5					
Antimony	500.0	527.70	105.5					
Arsenic	50.0	52.40	104.8					
Barium	300.0	313.04	104.3					
Beryllium	100.0	95.85	95.8					
Cadmium	300.0	311.93	104.0					
Calcium	18750.0	19209.15	102.4					
Chromium	300.0	296.20	98.7					
Cobalt	300.0	313.72	104.6					
Copper	300.0	336.90	112.3					
Iron	15625.0	16017.95	102.5					
Lead	50.0	54.70	109.4					
Magnesium	9375.0	9619.73	102.6					
Manganese	200.0	206.21	103.1					
Mercury								
Nickel	300.0	309.30	103.1					
Potassium	20000.0	20930.95	104.7					
Selenium	25.0	26.50	106.0					
Silver	300.0	279.69	93.2					
Sodium	3125.0	3266.89	104.5					
Thallium	50.0	48.10	96.2					
Vanadium	300.0	309.29	103.1					
Zinc	300.0	330.05	110.0					
Cyanide								

1482

U.S. EPA - CLP

7
ICP SERIAL DILUTIONS

EPA SAMPLE NO.

MW-45 L

Lab Name: IEA

Contract:

Lab Code: IEA

Case No.: 0148

SAS No.:

SDG No.: Z0148

Matrix (soil/water): WATER

Level (low/med): LOW

Concentration Units: ug/L

Analyte	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	% Differ- ence	Q/M
Aluminum	79951.69		83344.85		4.2	P
Antimony	21.00	U	105.00	U		P
Arsenic						F
Barium	1031.43		1052.95		2.1	P
Beryllium	3.73	B	5.00	U	100.0	P
Cadmium	4.39	B	10.00	U	100.0	P
Calcium	56995.39		59809.35		4.9	P
Chromium	146.21		151.15		3.4	P
Cobalt	111.04		125.65	B	13.2	P
Copper	420.68		380.00		9.7	P
Iron	151865.87		160177.65		5.5	P
Lead						F
Magnesium	47203.43		49316.50		4.5	P
Manganese	9406.47		9848.30		4.7	P
Mercury						CV
Nickel	186.21		207.75		11.6	P
Potassium	19764.12		19385.85	B	1.9	P
Selenium						F
Silver	3.00	U	15.00	U		P
Sodium	41400.15		42648.15		3.0	P
Thallium						F
Vanadium	204.72		257.15		25.6	P
Zinc	695.72		743.00		6.8	P

U.S. EPA - CLP

10

INSTRUMENT DETECTION LIMITS (QUARTERLY)

Lab Name: IEA

Contract:

Lab Code: IEA

Case No.: 0148

SAS No.:

SDG No.: Z0148

ICP ID Number:

Date: 01/15/93

Flame AA ID Number:

Furnace AA ID Number: 3030

Analyte	Wave-length (nm)	Back-ground	CRDL (ug/L)	IDL (ug/L)	M
Aluminum			200.0		
Antimony			60.0		
Arsenic			10.0		
Barium			200.0		
Beryllium			5.0		
Cadmium			5.0		
Calcium			5000.0		
Chromium			10.0		
Cobalt			50.0		
Copper			25.0		
Iron			100.0		
Lead	283.30	BZ	3.0	1.0	F
Magnesium			5000.0		
Manganese			15.0		
Mercury			0.2		
Nickel			40.0		
Potassium			5000.0		
Selenium			5.0		
Silver			10.0		
Sodium			5000.0		
Thallium			10.0		
Vanadium			50.0		
Zinc			20.0		

Comments:

U.S. EPA - CLP

10

INSTRUMENT DETECTION LIMITS (QUARTERLY)

Lab Name: IEA

Contract:

Lab Code: IEA

Case No.: 0148

SAS No.:

SDS No.: Z0148

ICP ID Number:

Date: 01/15/93

Flame AA ID Number:

Furnace AA ID Number: 5100

Analyte	Wave-length (nm)	Back-ground	CRDL (ug/L)	IDL (ug/L)	M
Aluminum			200.0		
Antimony			60.0		
Arsenic	193.70	BZ	10.0	1.0	F
Barium			200.0		
Beryllium			5.0		
Cadmium			5.0		
Calcium			5000.0		
Chromium			10.0		
Cobalt			50.0		
Copper			25.0		
Iron			100.0		
Lead	283.30	BZ	3.0	1.0	F
Magnesium			5000.0		
Manganese			15.0		
Mercury			0.2		
Nickel			40.0		
Potassium			5000.0		
Selenium	196.00	BZ	5.0	1.0	F
Silver			10.0		
Sodium			5000.0		
Thallium	276.80	BZ	10.0	2.0	F
Vanadium			50.0		
Zinc			20.0		

Comments:

U.S. EPA - CLP

10

INSTRUMENT DETECTION LIMITS (QUARTERLY)

Lab Name: IEA

Contract:

Lab Code: IEA

Case No.: 0148

SAS No.:

SDG No.: Z0148

ICP ID Number:

Date: 01/15/93

Flame AA ID Number:

Furnace AA ID Number: 5100N

Analyte	Wave-length (nm)	Back-ground	CRDL (ug/L)	IDL (ug/L)	M
Aluminum			200.0		
Antimony			60.0		
Arsenic	193.70	BZ	10.0	1.0	F
Barium			200.0		
Beryllium			5.0		
Cadmium			5.0		
Calcium			5000.0		
Chromium			10.0		
Cobalt			50.0		
Copper			25.0		
Iron			100.0		
Lead	283.30	BZ	3.0	1.0	F
Magnesium			5000.0		
Manganese			15.0		
Mercury			0.2		
Nickel			40.0		
Potassium			5000.0		
Selenium	196.00	BZ	5.0	2.0	F
Silver			10.0		
Sodium			5000.0		
Thallium	276.80	BZ	10.0	2.0	F
Vanadium			50.0		
Zinc			20.0		

Comments:

U.S. EPA - CLP

10

INSTRUMENT DETECTION LIMITS (QUARTERLY)

Lab Name: IEA

Contract:

Lab Code: IEA

Case No.: 0148

SAS No.:

SDG No.: Z0148

ICP ID Number:

JA61

Date:

01/15/93

Flame AA ID Number:

Furnace AA ID Number:

Analyte	Wave-length (nm)	Back-ground	CRDL (ug/L)	IDL (ug/L)	M
Aluminum	308.21		200.0	22.0	F
Antimony	206.83		60.0	21.0	F
Arsenic	193.60		10.0	24.0	F
Barium	493.40		200.0	6.0	F
Beryllium	234.86		5.0	1.0	F
Cadmium	228.80		5.0	2.0	F
Calcium	317.93		5000.0	11.0	F
Chromium	267.70		10.0	3.0	F
Cobalt	228.61		50.0	3.0	F
Copper	324.75		25.0	3.0	F
Iron	271.44		100.0	82.0	F
Lead	220.35		3.0	13.0	F
Magnesium	279.07		5000.0	23.0	F
Manganese	257.61		15.0	1.0	F
Mercury			0.2		
Nickel	231.60		40.0	21.0	F
Potassium	766.49		5000.0	626.0	F
Selenium	196.02		5.0	41.0	F
Silver	328.06		10.0	3.0	F
Sodium	589.59		5000.0	29.0	F
Thallium			10.0		
Vanadium	292.40		50.0	6.0	F
Zinc	213.85		20.0	4.0	F

Comments:

U.S. EPA - CLP

10

INSTRUMENT DETECTION LIMITS (QUARTERLY)

Lab Name: IEA

Contract:

Lab Code: IEA

Case No.: 0148

SAS No.:

SDS No.: Z0148

ICP ID Number:

Date: 01/15/93

Flame AA ID Number: HG4

Furnace AA ID Number:

Analyte	Wave-length (nm)	Back-ground	CRDL (ug/L)	IDL (ug/L)	M
Aluminum			200.0		
Antimony			60.0		
Arsenic			10.0		
Barium			200.0		
Beryllium			5.0		
Cadmium			5.0		
Calcium			5000.0		
Chromium			10.0		
Cobalt			50.0		
Copper			25.0		
Iron			100.0		
Lead			3.0		
Magnesium			5000.0		
Manganese			15.0		
Mercury	253.70		0.2	0.2	CV
Nickel			40.0		
Potassium			5000.0		
Selenium			5.0		
Silver			10.0		
Sodium			5000.0		
Thallium			10.0		
Vanadium			50.0		
Zinc			20.0		

Comments:

11A
ICP INTERELEMENT CORRECTION FACTORS (ANNUALLY)

Lab Name: IEA

Contract:

Lab Code: IEA

Case No.: 0148

SAS No.:

SDS No.: Z0148

ICP ID Number: JA61

Date: 10/12/92

Analyte	Wave-length (nm)	Interelement Correction Factors for:				
		Al	Ca	Fe	Mg	AS
Aluminum	308.20	0.0000000	0.0000000	0.0000000	0.0000000	0.0043692
Antimony	206.80	0.0000000	0.0002125	0.0000000	0.0000000	0.0002609
Arsenic						
Barium	493.40	0.0000000	0.0001065	0.0000000	0.0000000	0.0000000
Beryllium	234.80	0.0000000	0.0000000	0.0000000	0.0000000	0.0003637
Cadmium	228.80	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Calcium	317.90	0.0000137	0.0000000	0.0000000	0.0000740	0.0000000
Chromium	267.70	-0.0000500	0.0006192	0.0048207	-0.0009110	0.0015046
Cobalt	228.60	-0.0093620	0.0004280	0.0886160	-0.0018060	0.0004774
Copper	324.70	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Iron	271.40	0.0000000	0.0001135	0.0000000	0.0003658	0.0005056
Lead	220.30	0.0000000	0.0000853	0.0000000	0.0000000	0.0000000
Magnesium	279.00	0.0000000	0.0000167	0.0000000	0.0000000	0.0000000
Manganese	257.60	0.0010337	0.0001842	0.0000000	-0.0065040	0.0001778
Mercury						
Nickel	231.60	0.0000000	0.0002940	0.0000000	0.0000000	0.0007547
Potassium	766.40	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Selenium						
Silver	328.00	0.0000000	0.0001647	0.0000000	0.0000000	0.0000000
Sodium	589.50	0.0000000	0.0000133	0.0000000	0.0000000	0.0000000
Thallium						
Vanadium	292.40	-0.0293900	0.0005782	0.1299630	0.0000000	0.0151567
Zinc	213.80	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000

Comments:

118

ICP INTERELEMENT CORRECTION FACTORS (ANNUALLY)

Lab Name: IEA

Contract:

Lab Code: IEA

Case No.: 0148

SAS No.:

SDS No.: IC148

ICP ID Number: JA61

Date: 10/12/92

Analyte	Wave-length (nm)	Interelement Correction Factors for:				
		NI	CO	CD	MN	CR
Aluminum	308.20	0.0000000	0.0000000	0.0000000	0.0000100	0.0000000
Antimony	206.80	0.0002631	0.0000000	0.0000000	0.0000000	0.0000000
Arsenic						
Barium	493.40	0.0000000	0.0007612	0.0000000	0.0000120	0.0000000
Beryllium	234.80	0.0000619	0.0000000	0.0062204	0.0000000	0.0001735
Cadmium	228.80	0.0000000	0.0000882	0.0000000	0.0000000	0.0000524
Calcium	317.90	0.0000000	0.0000000	0.0000000	0.0000000	0.0000047
Chromium	267.70	0.0001348	0.0002854	0.0000000	0.0000215	0.0000000
Cobalt	228.60	-0.0010400	0.0000000	-0.0059020	0.0000178	0.0000687
Copper	324.70	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Iron	271.40	-0.0000110	0.0000510	-0.0000590	-0.0000110	0.0000000
Lead	220.30	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Magnesium	279.00	0.0000000	0.0000000	0.0000000	0.0000175	0.0000000
Manganese	257.60	0.0000000	0.0000000	0.0000150	0.0000000	0.0000000
Mercury						
Nickel	231.60	0.0000000	0.0003488	-0.0004890	0.0000000	0.0000000
Potassium	766.40	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Selenium						
Silver	328.00	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Sodium	589.50	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Thallium						
Vanadium	292.40	0.0000000	0.0000000	0.0003358	0.0000000	0.0004363
Zinc	213.80	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000

Comments:

U.S. EPA - CLP

118

ICP INTERELEMENT CORRECTION FACTORS (ANNUALLY)

Lab Name: IEA

Contract:

Lab Code: IEA

Case No.: 0148

SAS No.:

SDS No.: 20148

ICP ID Number: JA61

Date: 10/12/92

Analyte	Wave-length (nm)	Interelement Correction Factors for:				
		BA	MO	TI	V	CU
Aluminum	308.20	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Antimony	206.80	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Arsenic						
Barium	493.40	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Beryllium	234.80	0.0000900	0.0000000	0.0000000	0.0000000	0.0000000
Cadmium	228.80	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Calcium	317.90	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Chromium	267.70	0.0000000	0.0001000	0.0002727	-0.0040160	0.0000000
Cobalt	228.60	0.0000000	0.0000296	0.0000301	0.0000000	0.0000000
Copper	324.70	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Iron	271.40	0.0000330	-0.0000840	0.0000000	0.0000000	0.0000622
Lead	220.30	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Magnesium	279.00	0.0000000	0.0000000	0.0000587	0.0000000	0.0000000
Manganese	257.60	0.0000000	0.0000000	0.0000000	-0.0001030	0.0000000
Mercury						
Nickel	231.60	0.0000000	-0.0001000	0.0000000	0.0000000	0.0000000
Potassium	766.40	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Selenium						
Silver	328.00	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Sodium	589.50	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Thallium						
Vanadium	292.40	0.0000000	0.0007328	0.0000000	0.0000000	-0.0003100
Zinc	213.80	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000

Comments:

11B
ICP INTERELEMENT CORRECTION FACTORS (ANNUALLY)

Lab Name: IEA

Contract:

Lab Code: IEA

Case No.: 0148

SAS No.:

SDS No.: Z0145

ICP ID Number: JA61

Date: 10/12/92

Analyte	Wave-length (nm)	Interelement Correction Factors for:				
		ZN	SN	PB	SB	AG
Aluminum	308.20	0.0000000	-0.0000240	0.0008419	0.0000321	0.0000000
Antimony	206.80	0.0000917	-0.0028620	-0.0003090	0.0000000	0.0000000
Arsenic						
Barium	493.40	0.0000329	0.0000000	0.0000000	0.0000000	0.0000000
Beryllium	234.80	0.0000000	0.0001207	0.0000000	-0.0004830	0.0000000
Cadmium	228.80	0.0000181	0.0000000	0.0000000	0.0000000	0.0000000
Calcium	317.90	0.0000000	0.0000000	0.0000000	0.0000407	0.0000000
Chromium	267.70	0.0000000	-0.0000700	-0.0003260	0.0111425	0.0000000
Cobalt	228.60	0.0001712	0.0000442	-0.0111250	0.0000000	0.0000000
Copper	324.70	0.0036296	0.0000000	0.0000000	0.0000000	0.0000000
Iron	271.40	0.0000780	-0.0001090	0.0001530	0.0002426	0.0000000
Lead	220.30	0.0000000	-0.0002550	0.0000000	0.0000000	0.0000000
Magnesium	279.00	0.0000000	-0.0000240	0.0000282	0.0001961	0.0000000
Manganese	257.60	0.0002572	0.0009730	0.0000000	0.0000000	0.0001163
Mercury						
Nickel	231.60	0.0039690	-0.0001500	0.0003939	-0.0018120	0.0001087
Potassium	766.40	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Selenium						
Silver	328.00	0.0002484	0.0000000	0.0000000	0.0000000	0.0000000
Sodium	589.50	0.0000183	0.0000000	0.0000000	0.0000000	0.0000000
Thallium						
Vanadium	292.40	-0.0086950	0.0000657	0.0000000	-0.0026250	0.0052588
Zinc	213.80	0.0000000	0.0000000	0.0000000	0.0004341	0.0000000

Comments:

ICP INTERELEMENT CORRECTION FACTORS (ANNUALLY)

Lab Name: IEA

Contract:

Lab Code: IEA

Case No.: 0148

SAS No.:

SDS No.: Z0148

ICP ID Number: JA61

Date: 10/12/92

Analyte	Wave-length (nm)	Interelement Correction Factors for:			
		BE	NA	SE	K
Aluminum	308.20	0.0000000	0.0000000	0.0000690	0.0000000
Antimony	206.80	0.0000000	0.0002550	0.0000000	0.0000000
Arsenic					
Barium	493.40	0.0000247	0.0000000	0.0000000	0.0000000
Beryllium	234.80	0.0000000	0.0000000	0.0000000	0.0000000
Cadmium	228.80	0.0000087	0.0000000	0.0000000	0.0000000
Calcium	317.90	0.0000000	0.0001027	-0.0000390	0.0000000
Chromium	267.70	0.0000000	0.0000000	0.0000000	0.0000000
Cobalt	228.60	0.0000340	0.0000000	0.0012407	0.0000000
Copper	324.70	0.0000000	0.0000000	0.0005270	0.0000000
Iron	271.40	0.0006640	0.0000000	-0.0010570	0.0000000
Lead	220.30	0.0000000	0.0000000	0.0006565	0.0000000
Magnesium	279.00	0.0000000	0.0000000	-0.0000450	-0.0010040
Manganese	257.60	0.0000000	0.0000000	0.0000000	0.0000000
Mercury					
Nickel	231.60	0.0000256	0.0000000	0.0000000	0.0000000
Potassium	766.40	0.0000000	0.0004939	-0.0000530	0.0000000
Selenium					
Silver	328.00	0.0000000	0.0000000	-0.0003010	0.0000000
Sodium	589.50	0.0000000	0.0000000	-0.0000290	0.0000000
Thallium					
Vanadium	292.40	0.0000000	0.0000000	0.0003517	0.0000000
Zinc	213.80	0.0000000	0.0000000	-0.0005750	0.0000000

Comments:

ICP
ICP LINEAR RANGES (QUARTEALY)

Lab Name: IEA

Contract:

Lab Code: IEA

Case No.: 0145

SAS No.:

SDB No.: 70145

ICP ID Number: JA61

Date: 10/15/92

Analyte	Integ. Time (Sec.)	Concentration (ug/L)	M
Aluminum	6.00	1000000.0	___
Antimony	6.00	100000.0	___
Arsenic	6.00	100000.0	___
Barium	6.00	100000.0	___
Beryllium	6.00	100000.0	___
Cadmium	6.00	100000.0	___
Calcium	6.00	1000000.0	___
Chromium	6.00	200000.0	___
Cobalt	6.00	100000.0	___
Copper	6.00	100000.0	___
Iron	6.00	1000000.0	___
Lead	6.00	100000.0	___
Magnesium	6.00	1000000.0	___
Manganese	6.00	100000.0	___
Mercury			NR
Nickel	6.00	100000.0	___
Potassium	6.00	1000000.0	___
Selenium	6.00	100000.0	___
Silver	6.00	100000.0	___
Sodium	6.00	1000000.0	___
Thallium			NR
Vanadium	6.00	100000.0	___
Zinc	6.00	100000.0	___

Comments:

U.S. EPA - CLP

14

ANALYSIS RUN LOG

Lab Name: IEA Contract: SAS No.: 506 No.: 20148
 Lab Code: IEA Case No.: 0148 Method: F
 Instrument ID Number: JA61 End Date: 03/02/93
 Start Date: 03/02/93

EPA Sample No.	D/F	Time	% R	Analytes															
				A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	
S	1.00	1604		X	X	X	X	X	X	X	X	X	X	X	X	X			
S	1.00	1610		X	X	X	X	X	X	X	X	X	X	X	X	X			
S	1.00	1616		X	X	X	X	X	X	X	X	X	X	X	X	X			
S	1.00	1621		X	X	X	X	X	X	X	X	X	X	X	X	X			
S	1.00	1627		X	X	X	X	X	X	X	X	X	X	X	X	X			
S	1.00	1633		X	X	X	X	X	X	X	X	X	X	X	X	X			
SO	1.00	1638		X	X	X	X	X	X	X	X	X	X	X	X	X			
ICV1	1.00	1831		X	X	X	X	X	X	X	X	X	X	X	X	X			
ICV1	1.00	1837		X	X	X	X	X	X	X	X	X	X	X	X	X			
ICB	1.00	1843		X	X	X	X	X	X	X	X	X	X	X	X	X			
CRI	1.00	1849		X	X	X	X	X	X	X	X	X	X	X	X	X			
ICSA	1.00	1856		X	X	X	X	X	X	X	X	X	X	X	X	X			
ICSA B	1.00	1902		X	X	X	X	X	X	X	X	X	X	X	X	X			
CCV1	1.00	1908		X	X	X	X	X	X	X	X	X	X	X	X	X			
CCV1	1.00	1914		X	X	X	X	X	X	X	X	X	X	X	X	X			
CCB1	1.00	1920		X	X	X	X	X	X	X	X	X	X	X	X	X			
PBW	1.00	1926		X	X	X	X	X	X	X	X	X	X	X	X	X			
Z14810	1.00	1932		X	X	X	X	X	X	X	X	X	X	X	X	X			
Z14811	1.00	1938		X	X	X	X	X	X	X	X	X	X	X	X	X			
Z14812	1.00	1944		X	X	X	X	X	X	X	X	X	X	X	X	X			
Z14813	1.00	1950		X	X	X	X	X	X	X	X	X	X	X	X	X			
Z14809	1.00	1956		X	X	X	X	X	X	X	X	X	X	X	X	X			
Z14809D	1.00	2002		X	X	X	X	X	X	X	X	X	X	X	X	X			
Z14809S	1.00	2008		X	X	X	X	X	X	X	X	X	X	X	X	X			
LCSW	1.00	2014		X	X	X	X	X	X	X	X	X	X	X	X	X			
PBW	1.00	2020		X	X	X	X	X	X	X	X	X	X	X	X	X			
CCV2	1.00	2026		X	X	X	X	X	X	X	X	X	X	X	X	X			
CCV2	1.00	2032		X	X	X	X	X	X	X	X	X	X	X	X	X			
CCB2	1.00	2038		X	X	X	X	X	X	X	X	X	X	X	X	X			
Z14814	1.00	2044		X	X	X	X	X	X	X	X	X	X	X	X	X			
Z14816	1.00	2050		X	X	X	X	X	X	X	X	X	X	X	X	X			
Z14817	1.00	2057		X	X	X	X	X	X	X	X	X	X	X	X	X			

U.S. EPA - DLF

14
ANALYSIS RUN LOG

Lab Name: IEA Contract:
 Lab Code: IEA Case No.: 0148 SAS No.: SDG No.: Z0148
 Instrument ID Number: JA61 Method: P
 Start Date: 03/02/93 End Date: 03/02/93

EPA Sample No.	D/F	Time	% R	Analytes																											
				A	I	S	A	B	B	B	C	C	C	C	C	D	F	F	I	M	M	H	N	K	S	A	I	N	I	V	I
Z14818	1.00	2103		X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Z14820	1.00	2109		X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
ZZZZZZ	1.00	2115																													
ZZZZZZ	1.00	2121																													
ZZZZZZ	1.00	2127																													
ZZZZZZ	1.00	2133																													
ZZZZZZ	1.00	2139																													
CCV3	1.00	2145			X																										
CCV3	1.00	2151		X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
CCB3	1.00	2157		X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Z14813L	5.00	2203		X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
ZZZZZZ	1.00	2209																													
CR1	1.00	2215		X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
ICSA	1.00	2221		X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
ICSAB	1.00	2228		X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
CCV4	1.00	2234			X																										
CCV4	1.00	2240		X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
CCB4	1.00	2246		X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X

14
ANALYSIS RUN LOG

Lab Name: IEA Contract:
 Lab Code: IEA Case No.: 0148 SAS No.: SDG No.: Z0148
 Instrument ID Number: 5100 Method: F
 Start Date: 02/20/93 End Date: 02/20/93

EPA Sample No.	D/F	Time	% R	Analytes																					
				A	S	A	B	B	C	C	C	C	C	F	I	M	H	N	K	S	A	I	N	I	V
50	1.00	0143																							X
53	1.00	0148																							X
550	1.00	0153																							X
S100	1.00	0158																							X
ICV3	1.00	0204																							X
ICE3	1.00	0209																							X
CRA2	1.00	0214																							X
CCV5	1.00	0219																							X
CCB7	1.00	0224																							X
Z14812	1.00	0230																							X
Z14812A	1.00	0236	94.0																						X
Z14813	1.00	0241																							
Z14813A	1.00	0247	66.5																						
Z14814	1.00	0253																							
Z14814A	1.00	0259	-46.0																						
Z14816	1.00	0304																							
Z14816A	1.00	0310	83.5																						
Z14817	1.00	0316																							X
Z14817A	1.00	0322	98.5																						X
CCV6	1.00	0327																							X
CCB8	1.00	0333																							X
Z14818	1.00	0338																							X
Z14818A	1.00	0343	96.5																						X
Z14820	1.00	0349																							X
Z14820A	1.00	0355	97.5																						X
ZZZZZ	1.00	0400																							
ZZZZZ	1.00	0406																							
ZZZZZ	1.00	0411																							
ZZZZZ	1.00	0417																							
ZZZZZ	1.00	0422																							
ZZZZZ	1.00	0428																							
CCV7	1.00	0434																							X

METALS RAW DATA

CLIENT:
PROJECT ID:
SDG#:
IEA ID:

ROUX ASSOCIATES
AMTRAK SUNNYSIDE
Z0148
30930-0148

Table Name: A030293

Autosampler Type: TYPE 222

Sample Positions: 216/240

QC Positions: 0/14

Sets: 1

1523

Rinse Station location is rack -1, pos. -1.

---- Racks ----

Rack #	Type	Usage	#Pos Left	Analyses/Pos
1	Small Tubes	Samples	36	1
2	Small Tubes	Samples	60	1
3	Small Tubes	Samples	60	1
4	Small Tubes	Samples	45	1
5	Large Tubes	STD/QC/BLANK	0	10

*Diane Abate
3/2/93*

---- Sample Sets ----

Set #	Description	Method	#Pos	Rack #	Start Pos
1		IEACT2	24	1	1

J148

Rack #1

Pos	Row	Col	Sample Name	Set #	#Used	Type
1	1	1	1.0001.000100	1	-NA-	Sample
2	1	2	1.0001.000714810 (MHW-1)	1	-NA-	Sample
3	1	3	1.0001.000714811 (MW-43)	1	-NA-	Sample
4	1	4	1.0001.000714812 (MW-44)	1	-NA-	Sample
5	2	1	1.0001.000714813 (MW-46)	1	-NA-	Sample
6	2	2	1.0001.000714809 (MW-45)	1	-NA-	Sample
7	2	3	1.0001.000714809D (MW-45D)	1	-NA-	Sample
8	2	4	1.0001.000714809S (MW-45B)	1	-NA-	Sample
9	3	1	1.0001.000LCSW	1	-NA-	Sample
10	3	2	RINSE 1.0001.000PBW	1	-NA-	Sample
11	3	3	1.0001.000714814 (MW-35)	1	-NA-	Sample
12	3	4	1.0001.000714816 (MHW-2)	1	-NA-	Sample
13	4	1	1.0001.000714817 (REPLICATE)	1	-NA-	Sample
14	4	2	1.0001.000714818 (MW-1)	1	-NA-	Sample
15	4	3	1.0001.000714820 (MW-47)	1	-NA-	Sample
16	4	4	1.0001.000714821	1	-NA-	Sample
17	5	1	1.0001.000714822	1	-NA-	Sample
18	5	2	1.0001.000714823	1	-NA-	Sample
19	5	3	1.0001.000714827	1	-NA-	Sample
20	5	4	RINSE	1	-NA-	Sample
21	6	1	1.0005.000714813L (MW-46L)	1	-NA-	Sample
22	6	2	RINSE	1	-NA-	Sample
23	6	3	Sample 23	1	-NA-	Sample
24	6	4	Sample 24 not run due	1/3	-NA-	Sample
(25...60			Not Used)			

not used due 3/2

ICV1, CCV1, CCV1

CCV2

CCV3

CRIF, CCV4

Rack #2

1524

Pos	Row	Col	Sample Name	Set #	#Used	Type
(1...60)			Not Used)			

Rack #3

Pos	Row	Col	Sample Name	Set #	#Used	Type
(1...60)			Not Used)			

Rack #4

Pos	Row	Col	Sample Name	Set #	#Used	Type
(1...45)			Not Used)			
46	12	2	CCB4	--NA--	1	QC Standard
47	12	3	CCV4	--NA--	1	QC Standard
48	12	4	CCV4A	--NA--	1	QC Standard
49	13	1	ICSA8F	--NA--	1	QC Standard
50	13	2	ICSAF	--NA--	1	QC Standard
51	13	3	CRIF	--NA--	1	QC Standard
52	13	4	CCB3	--NA--	1	QC Standard
53	14	1	CCV3	--NA--	1	QC Standard
53	14	1	CCV3	--NA--	1	QC Standard
55	14	3	CCV3A	--NA--	1	QC Standard
56	14	4	CCB2	--NA--	1	QC Standard
57	15	1	CCV2	--NA--	1	QC Standard
58	15	2	CCV2A	--NA--	1	QC Standard
59	15	3	CCB1	--NA--	1	QC Standard
60	15	4	CCV1	--NA--	1	QC Standard

Rack #5

Pos	Row	Col	Sample Name	Set #	#Used	Type
1	1	1	STD2	--NA--	1	Standard
2	1	2	STD3	--NA--	1	Standard
3	2	1	STD4	--NA--	1	Standard
4	2	2	STD5	--NA--	1	Standard
5	3	1	STD6	--NA--	1	Standard
6	3	2	STD7	--NA--	1	Standard
7	4	1	STD1	--NA--	1	Standard
8	4	2	ICV1	--NA--	1	QC Standard
9	5	1	ICV1A	--NA--	1	QC Standard
10	5	2	ICB	--NA--	1	QC Standard
11	6	1	CR11	--NA--	1	QC Standard
12	6	2	ICSAI	--NA--	1	QC Standard
13	7	1	ICSARI	--NA--	1	QC Standard
14	7	2	CCV1A	--NA--	1	QC Standard

Standardization Rot.

Tue 03-02-93 04:10:22 PM

page 1

Standard: STD2

Std. pupped 3/2 dml

Elem	AG3280	AL3082	BA4934	BE2348	CA3179	CD2288	CI2286
Avg	3.3598	.01611	.00000	.00600	.00089	.00033	.00067
SDev	.0031	.00043	.00017	.00000	.00010	.00017	.00058
%RSD	.09312	3.9165	.00000	.00000	10.825	50.000	86.603

#1	3.3615	.01567	.00000	.00600	.00083	.00050	.00100
#2	3.3617	.01583	.00017	.00600	.00100	.00017	.00100
#3	3.3562	.01683	-.00017	.00600	.00083	.00033	.00000

Elem	CR2677	CU3247	FE2714	K 7664	MG2790	MN2576	NA5895
Avg	.00050	.00256	-.00050	.04783	.00044	.00011	.00750
SDev	.00029	.00019	.00060	.00388	.00042	.00010	.00319
%RSD	57.735	7.5307	-120.19	8.1193	94.373	86.603	42.572

#1	.00033	.00267	.00000	.04467	.00000	.00017	.00600
#2	.00083	.00267	-.00033	.05217	.00050	.00000	.01117
#3	.00033	.00233	-.00117	.04667	.00083	.00017	.00533

Elem	NI2316	PS2203	SB2068	SE1960	V 2924	ZN2138	TI3349
Avg	-.00078	.00044	.00311	.00517	.00028	.00122	.00061
SDev	.00025	.00118	.00207	.00477	.00026	.00010	.00019
%RSD	-32.733	266.05	66.552	92.317	91.652	7.8730	31.492

#1	-.00100	.00067	.00550	.00067	.00033	.00117	.00083
#2	-.00050	.00150	.00183	.00467	.00050	.00133	.00050
#3	-.00083	-.00083	.00200	.01017	.00000	.00117	.00050

Elem	MO2020	SN1899	AS1936
Avg	-.00006	.00022	-.00339
SDev	.00010	.00042	.00107
%RSD	-173.21	188.75	-31.619

#1	.00000	.00067	-.00383
#2	-.00017	.00017	-.00417
#3	.00000	-.00017	-.00217

1526

IntStd	1	2	3	4	5	6	7
Mode	Time	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	---	---	---	---	---	---	---
WavLen	---	---	---	---	---	---	---
Avge	6000	---	---	---	---	---	---
SDev	.0000000	---	---	---	---	---	---
ZRSD	.0000000	---	---	---	---	---	---
#1	6000	---	---	---	---	---	---
#2	6000	---	---	---	---	---	---
#3	6000	---	---	---	---	---	---

Standard: STD3

1527

Std prepped 3/2 dna

Elem	A63280	AL3082	BA4934	BE2348	CA3179	CO2288	DU2285
Avgc	.00044	.01756	.00017	.00922	1.2654	.00006	.00144
SDev	.00026	.00162	.00017	.00010	.0101	.00019	.00019
%RSD	57.282	9.2208	100.00	1.0434	.80012	346.41	13.323
#1	.00050	.01933	.00033	.00933	1.2643	-.00017	.00133
#2	.00017	.01717	.00017	.00917	1.2558	.00017	.00133
#3	.00067	.01617	.00000	.00917	1.2760	.00017	.00167

Elem	CR2677	CU3247	FE2714	K 7664	MG2790	MN2576	NA5895
Avgc	.00044	.00950	.18156	1.0122	.50828	.00006	2.1585
SDev	.00026	.00029	.00192	.0040	.00460	.00010	.0167
%RSD	57.282	3.0387	1.0560	.39528	.90536	173.21	.77504
#1	.00050	.00983	.18150	1.0168	.50717	.00000	2.1588
#2	.00067	.00933	.17967	1.0097	.50433	.00017	2.1427
#3	.00017	.00933	.18350	1.0102	.51333	.00000	2.1760

Elem	NI2316	PG2203	SB2068	SE1960	V 2924	ZN2138	TI3349
Avgc	-.00161	.00094	.00100	.00594	.00017	.00567	.00044
SDev	.00199	.00111	.00232	.00270	.00017	.00044	.00010
%RSD	-123.42	117.50	231.54	45.411	100.00	7.7816	21.651
#1	-.00100	.00217	-.00167	.00767	.00033	.00617	.00050
#2	-.00383	.00067	.00217	.00733	.00017	.00550	.00050
#3	.00000	.00000	.00250	.00283	.00000	.00533	.00033

Elem	MO2020	SN1899	AS1936
Avgc	.00006	-.00022	-.00178
SDev	.00010	.00079	.00236
%RSD	173.21	-354.44	-133.02
#1	.00000	.00067	.00033
#2	.00017	-.00083	-.00133
#3	.00000	-.00050	-.00433

IntStd	1	2	3	4	5	6	7
Mode	Time	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	---	---	---	---	---	---	---
Wavlen	---	---	---	---	---	---	---
Avge	6000	---	---	---	---	---	---
SDev	.0000000	---	---	---	---	---	---
%RSD	.0000000	---	---	---	---	---	---
#1	6000	---	---	---	---	---	---
#2	6000	---	---	---	---	---	---
#3	6000	---	---	---	---	---	---

Standard: STD4

Std prep'd 3/2 dne

Elem	AG3280	AL3082	BA4934	BE2348	CA3177	CO2288	CO2286
Avgc	-.01256	.01000	.00000	4.4721	.00339	.04006	.01533
SDev	.00042	.00145	.00000	.0402	.00019	.00051	.00033
%RSD	-3.3406	14.530	.00000	.89849	5.6789	1.2712	2.1739
#1	-.01217	.01100	.00000	4.4257	.00350	.03950	.01533
#2	-.01300	.00833	.00000	4.4945	.00317	.04050	.01567
#3	-.01250	.01067	.00000	4.4960	.00350	.04017	.01500

Elem	CR2677	CU3247	FE2714	K 7664	MG2790	MN2576	NA5895
Avgc	2.5324	.00728	.03267	.04744	-.01000	-.00044	.04800
SDev	.0255	.00059	.00174	.00102	.00087	.00010	.00117
%RSD	1.0052	8.0425	5.3267	2.1464	-8.6603	-21.651	2.4306
#1	2.5032	.00733	.03350	.04767	-.00900	-.00033	.04883
#2	2.5493	.00667	.03067	.04633	-.01050	-.00050	.04850
#3	2.5448	.00783	.03383	.04833	-.01050	-.00050	.04667

Elem	NI2316	PB2203	SB2068	SE1960	V 2924	ZN2138	TI3349
Avgc	3.1102	.00161	.00822	2.1386	2.0696	-.00922	2.3524
SDev	.0270	.00026	.00323	.0133	.0177	.00010	.0263
%RSD	.86787	15.802	39.323	.63006	.85644	-1.0434	1.1391
#1	3.0790	.00183	.00450	2.1237	2.0492	-.00917	2.3218
#2	3.1260	.00133	.01033	2.1423	2.0807	-.00917	2.3717
#3	3.1255	.00167	.00983	2.1498	2.0790	-.00933	2.3638

Elem	MO2020	SN1899	AS1936
Avgc	.82683	.00189	1.6392
SDev	.00736	.00039	.0238
%RSD	.89035	20.377	1.4529
#1	.81833	.00233	1.6137
#2	.83100	.00167	1.6430
#3	.83117	.00167	1.6608

IntStd	1	2	3	4	5	6	7
Mode	Time	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	---	---	---	---	---	---	---
Wavlen	---	---	---	---	---	---	---
Avge	6000	---	---	---	---	---	---
SDev	.0000000	---	---	---	---	---	---
%RSD	.0000000	---	---	---	---	---	---
#1	6000	---	---	---	---	---	---
#2	6000	---	---	---	---	---	---
#3	6000	---	---	---	---	---	---

Standard: STD5

1531

std prepped 3/2 dma

Elem	AG3280	AL3082	BA4934	BE2348	CA3179	CD2288	CD2286
Avgc	-.00006	.00128	1.0683	.00733	.00128	2.7896	5.5382
SDev	.00054	.00142	.0037	.00017	.00035	.0047	.0204
%RSD	-964.37	110.93	.34547	2.2727	27.152	.16903	.36886
#1	.00017	.00267	1.0725	.00750	.00117	2.7950	5.5555
#2	.00033	-.00017	1.0667	.00733	.00100	2.7868	5.5353
#3	-.00067	.00135	1.0657	.00717	.00167	2.7868	5.5147

Elem	CR2677	CU3247	FE2714	K 7664	MG2790	MN2576	NA5895
Avgc	.00089	1.8819	.01528	.04522	-.00439	2.0873	.00856
SDev	.00026	.0013	.00095	.00310	.00077	.0069	.00184
%RSD	28.641	.07158	6.2032	6.8488	-17.540	.32848	21.458
#1	.00067	1.8822	.01633	.04433	-.00483	2.0933	.01067
#2	.00117	1.8805	.01450	.04267	-.00483	2.0887	.00733
#3	.00083	1.8832	.01500	.04867	-.00350	2.0798	.00767

Elem	NI2316	PS2203	SB2068	SE1960	V 2924	ZN2138	TI3349
Avgc	-.00189	1.1317	-.00083	.01283	.00000	2.8754	.00133
SDev	.00144	.0041	.00101	.00133	.00017	.0069	.00000
%RSD	-76.074	.36203	-121.66	10.390	.00000	.24125	.00000
#1	-.00033	1.1313	-.00150	.01417	.00017	2.8760	.00133
#2	-.00217	1.1360	-.00133	.01283	-.00017	2.8820	.00133
#3	-.00317	1.1278	.00033	.01150	.00000	2.8682	.00133

Elem	MO2020	SN1899	AS1936
Avgc	.00072	-.00033	-.00250
SDev	.00010	.00060	.00376
%RSD	13.323	-180.28	-150.26
#1	.00067	-.00050	-.00450
#2	.00083	.00033	.00183
#3	.00067	-.00083	-.00483

1532

IntStd	1	2	3	4	5	6	7
Mode	Time	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	---	---	---	---	---	---	---
Wavlen	---	---	---	---	---	---	---
Avge	6000	---	---	---	---	---	---
SDev	.0000000	---	---	---	---	---	---
%RSD	.0000000	---	---	---	---	---	---
#1	6000	---	---	---	---	---	---
#2	6000	---	---	---	---	---	---
#3	6000	---	---	---	---	---	---

Standards: STD6

Std Prepped 3/2 dna

Elem	AG3280	AL3082	BA4934	BE2348	CA3179	CO2288	CO2286
Avge	.00017	.01683	.00017	.00600	.00222	.00089	.00267
SDev	.00000	.00197	.00000	.00000	.00026	.00035	.00100
%RSD	.00000	11.673	.00000	.00000	11.456	39.031	37.500
#1	.00017	.01850	.00017	.00600	.00200	.00117	.00267
#2	.00017	.01733	.00017	.00600	.00250	.00100	.00367
#3	.00017	.01467	.00017	.00600	.00217	.00050	.00167

Elem	CR2677	CU3247	FE2714	K 7664	MG2790	MN2576	NA5395
Avge	.00128	.02100	.00022	.04917	.00033	.00078	.01306
SDev	.00113	.00176	.00130	.00665	.00044	.00010	.00174
%RSD	88.785	8.3616	582.56	13.521	132.29	12.372	13.287
#1	.00167	.02283	-.00083	.05433	.00017	.00083	.01250
#2	.00000	.02083	.00167	.05150	.00083	.00083	.01167
#3	.00217	.01933	-.00017	.04167	.00000	.00067	.01500

Elem	NI2316	PB2203	SB2068	SE1960	V 2924	ZN2138	TI3349
Avge	.00006	.00256	1.3885	.00517	.00044	.01883	.00050
SDev	.00193	.00117	.0113	.00145	.00019	.00285	.00000
%RSD	3477.1	45.807	.81649	28.122	43.301	15.122	.00000
#1	.00033	.00367	1.3833	.00450	.00067	.02183	.00050
#2	.00183	.00133	1.3807	.00417	.00033	.01850	.00050
#3	-.00200	.00267	1.4015	.00683	.00033	.01617	.00050

Elem	MO2020	SN1899	AS1936
Avge	.00022	1.1719	-.00267
SDev	.00019	.0128	.00164
%RSD	86.603	1.0893	-61.555
#1	.00000	1.1595	-.00400
#2	.00033	1.1712	-.00317
#3	.00033	1.1850	-.00083

1534

IntStd	1	2	3	4	5	6	7
Mode	Time	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	---	---	---	---	---	---	---
Wavlen	---	---	---	---	---	---	---
Avge	6000	---	---	---	---	---	---
SDev	.0000000	---	---	---	---	---	---
%RSD	.0000000	---	---	---	---	---	---
#1	6000	---	---	---	---	---	---
#2	6000	---	---	---	---	---	---
#3	6000	---	---	---	---	---	---

Standard: BT07

1535

Std. prepped 3/2 dma

Elem	AR3280	AL3082	BA4934	BE2348	CA3179	CD2288	DD2284
Avg	-.00017	2.0941	.00006	.00600	.00178	.00044	.00122
SDev	.00017	.0024	.00010	.00000	.00019	.00042	.00084
%RSD	-100.00	.11597	173.21	.00000	10.825	94.373	68.635
#1	-.00033	2.0913	.00017	.00600	.00167	.00050	.00200
#2	.00000	2.0960	.00000	.00600	.00167	.00000	.00033
#3	-.00017	2.0948	.00000	.00600	.00200	.00083	.00133

Elem	DR2677	DJ3247	FE2714	K 7664	MB2790	MN2576	NA5895
Avg	.00056	.01422	.00044	.04606	-.00006	.00028	.00678
SDev	.00096	.00063	.00026	.00211	.00051	.00010	.00107
%RSD	173.21	4.4366	57.282	4.5822	-916.52	34.641	15.809
#1	.00000	.01467	.00050	.04367	.00050	.00033	.00800
#2	.00000	.01450	.00067	.04767	-.00017	.00033	.00633
#3	.00167	.01350	.00017	.04683	-.00050	.00017	.00600

Elem	NI2316	PE2203	SB2068	SE1960	V 2924	ZN2138	TI3349
Avg	.00056	.00178	.00189	.00628	.00033	.01061	.00028
SDev	.00111	.00134	.00069	.00351	.00033	.00067	.00019
%RSD	199.75	75.195	36.735	55.963	100.00	6.3478	69.282
#1	.00083	.00050	.00267	.01033	.00067	.01133	.00017
#2	.00150	.00167	.00167	.00433	.00000	.01050	.00017
#3	-.00067	.00317	.00133	.00417	.00033	.01000	.00050

Elem	MO2020	SN1899	AS1936
Avg	.00011	-.00028	.00383
SDev	.00026	.00048	.00289
%RSD	229.13	-173.21	75.432
#1	-.00017	-.00083	.00450
#2	.00033	.00000	.00633
#3	.00017	.00000	.00067

1536

IntStd	1	2	3	4	5	6	7
Mode	Time	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	---	---	---	---	---	---	---
Wavlen	--	---	---	---	---	---	---
Avge	6000	---	---	---	---	---	---
SDev	.0000000	---	---	---	---	---	---
%RSD	.0000000	---	---	---	---	---	---
#1	6000	---	---	---	---	---	---
#2	6000	---	---	---	---	---	---
#3	6000	---	---	---	---	---	---

Standard: STD1

1537

Std prepped 3/2 done

Elem	AG3280	AL3082	BA4934	BE2348	CA3179	CD2288	CO2286
Avg	-.00078	.01228	.00000	.00600	.00022	-.00011	.00144
SDev	.00035	.00010	.00000	.00000	.00026	.00019	.00117
%RSD	-44.607	.78373	.00000	.00000	114.56	-173.21	81.043
#1	-.00050	.01217	.00000	.00600	.00000	.00000	.00133
#2	-.00067	.01233	.00000	.00600	.00050	.00000	.00267
#3	-.00117	.01233	.00000	.00600	.00017	-.00033	.00033

Elem	CR2677	CU3247	FE2714	K 7654	MB2790	MN2576	NA5895
Avg	.00061	.00217	.00067	.04839	.00011	.00000	.00806
SDev	.00035	.00029	.00088	.00303	.00063	.00000	.00364
%RSD	56.773	13.323	132.29	6.2506	567.89	.00000	45.155
#1	.00033	.00200	.00133	.05183	-.00017	.00000	.00733
#2	.00050	.00250	.00100	.04717	.00083	.00000	.01200
#3	.00100	.00200	-.00033	.04617	-.00033	.00000	.00483

Elem	NI2316	PB2203	SB2068	SE1960	V 2924	ZN2138	TI3349
Avg	-.00100	.00000	.00328	.00922	.00000	.00100	.00033
SDev	.00202	.00076	.00350	.00134	.00000	.00029	.00000
%RSD	-202.07	7873e6	106.70	14.495	.00000	28.868	.00000
#1	-.00283	-.00017	-.00067	.01050	.00000	.00117	.00033
#2	.00117	-.00067	.00600	.00933	.00000	.00117	.00033
#3	-.00133	.00083	.00450	.00783	.00000	.00067	.00033

Elem	MO2020	SN1899	AS1936
Avg	.00011	-.00017	-.00728
SDev	.00010	.00029	.00204
%RSD	86.603	-173.21	-27.985
#1	.00000	.00000	-.00683
#2	.00017	-.00050	-.00550
#3	.00017	.00000	-.00950

1533

IntStd	1	2	3	4	5	6	7
Mode	Time	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	---	---	---	---	---	---	---
Wavlen	---	---	---	---	---	---	---
Avge	6000	---	---	---	---	---	---
SDev	.0000000	---	---	---	---	---	---
%RSD	.0000000	---	---	---	---	---	---
#1	6000	---	---	---	---	---	---
#2	6000	---	---	---	---	---	---
#3	6000	---	---	---	---	---	---

Method: IFACT2 Sample Name: JCV1
 Run Time: 03/02/93 18:31:38
 Comment: 70148
 Mode: CONC Corr. Factor: 1

Operator: DMA

1530

Elem	A63280	AL3082	BA4934	BE2348	CA3179	CD2288	CD2286
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.58587	5.1257	5.1204	.12501	12.684	1.2905	1.2720
SDev	.00570	.0090	.0087	.00036	.040	.0091	.0068
%RSD	.97216	.17618	.16964	.28936	.31707	.70329	.53356
#1	.58006	5.1175	5.1188	.12466	12.644	1.2806	1.2677
#2	.58609	5.1243	5.1126	.12499	12.681	1.2923	1.2683
#3	.59145	5.1353	5.1298	.12539	12.725	1.2985	1.2798
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.625	5.0000	5.0000	.125	12.500	1.2500	1.2500
Range	10.000	10.000	10.000	10.000	10.000	10.000	10.000

Elem	CR2677	CU3247	FE2714	K 7664	MG2790	MN2576	NA5895
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.50206	.62352	2.5117	12.179	12.624	1.2785	12.845
SDev	.00001	.00266	.0377	.363	.064	.0040	.109
%RSD	.00143	.42663	1.5026	2.9814	.50473	.31411	.85227
#1	.50206	.62086	2.4748	12.179	12.554	1.2748	12.742
#2	.50206	.62351	2.5502	11.816	12.640	1.2780	12.833
#3	.50205	.62618	2.5100	12.542	12.679	1.2828	12.960
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.5	.625	2.5000	12.500	12.500	1.2500	12.500
Range	10.000	10.000	10.000	10.000	10.000	10.000	10.000

Elem	NI2316	PB2203	PB2068	SE1960	V 2924	ZN2138	TI3349
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.2570	2.5311	-.01789	2.4831	1.2714	1.2821	.00027
SDev	.0049	.0076	.01818	.0471	.0093	.0052	.00041
%RSD	.38700	.30046	-101.61	1.8951	.72777	.40806	155.52
#1	1.2551	2.5354	-.03699	2.4288	1.2746	1.2771	.00051
#2	1.2534	2.5223	-.01591	2.5106	1.2610	1.2816	.00050
#3	1.2626	2.5355	-.00078	2.5100	1.2786	1.2875	-.00021
Errors	QC Pass	QC Pass	NOCHECK	QC Pass	QC Pass	QC Pass	NOCHECK
Value	1.2500	2.5000	<i>not 3/3</i>	2.5000	1.2500	1.2500	
Range	10.000	10.000		10.000	10.000	10.000	

1540

Elem	MD2020	SN1899	AS1936
Units	ppm	ppm	ppm
Avg	.00066	.00150	2.5536
SDev	.00233	.00414	.0249
%RSD	352.50	407.75	.97505
#1	.00200	.00570	2.5310
#2	.00202	.00435	2.5497
#3	-.00203	-.00554	2.5803
Errors	NOCHECK	NOCHECK	QC Pass
Value			2.5000
Range			10.000

IntStd	1	2	3	4	5	6	7
Mode	Time	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	---	---	---	---	---	---	---
Wavelength	---	---	---	---	---	---	---
Avg	6000	---	---	---	---	---	---
SDev	.0000000	---	---	---	---	---	---
%RSD	.0000000	---	---	---	---	---	---
#1	6000	---	---	---	---	---	---
#2	6000	---	---	---	---	---	---
#3	6000	---	---	---	---	---	---

THIS PAGE LEFT INTENTIONALLY BLANK

Method: JEACT2

Sample Name: ICV11

Operator: DMA

Run Time: 03/02/93 18:37:43

Comment: 70148

Mode: CONC Corr. Factor: 1

*DMA
3/3*

Elem	AG3280	AL3082	BA4934	BE2348	CA3179	CD2288	CD2286
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00181	.02275	.00156	-.00009	.00948	.00158	-.00121
SDev	.00086	.00407	.00000	.00021	.00151	.00029	.00228
%RSD	47.533	17.900	.02312	-247.34	15.950	18.428	-189.18
#1	.00231	.01863	.00156	.00004	.00774	.00170	-.00382
#2	.00229	.02284	.00156	-.00033	.01036	.00179	-.00020
#3	.00081	.02678	.00156	.00003	.01035	.00125	.00040
Errors Value Range	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK

Elem	CR2677	CU3247	FE2714	K 7664	MG2790	MN2576	NA5895
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00087	.02838	-.05856	-.14984	.00876	.00160	-.00769
SDev	.00460	.00307	.01054	.17997	.01001	.00000	.00198
%RSD	526.24	10.825	-18.003	-120.10	114.16	.04164	-25.821
#1	-.00110	.03015	-.06416	-.00577	-.00215	.00160	-.00697
#2	.00614	.03015	-.06513	-.09220	.01751	.00160	-.00616
#3	-.00242	.02483	-.04640	-.35157	.01093	.00160	-.00993
Errors Value Range	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK

Elem	NI2316	PB2203	*SR2068	SE1960	V 2924	ZN2138	TI3349
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00477	.00685	4.9720	-.01521	.00241	.01071	.00094
SDev	.00814	.01439	.0294	.01194	.00242	.00130	.00041
%RSD	170.80	209.99	.59064	-78.487	100.46	12.143	43.153
#1	.01210	-.00290	4.9387	-.02147	.00000	.01221	.00071
#2	.00619	.02337	4.9834	-.02273	.00484	.00974	.00141
#3	-.00399	.00008	4.9940	-.00144	.00240	.00997	.00071
Errors Value Range	NOCHECK	NOCHECK	QC Pass 5.0000 10.000	NOCHECK	NOCHECK	NOCHECK	NOCHECK

Elem	M02020	SN1899	AS1936
Units	ppm	ppm	ppm
Avgc	-.00068	.00241	.03193
SDev	.00117	.00216	.00324
%RSD	-171.88	89.842	16.394
#1	.00067	.00278	.0375
#2	-.00135	.00008	.03120
#3	-.00135	.00436	.02710
Errors Value Range	NOCHECK	NOCHECK	NOCHECK

IntStd	1	2	3	4	5	6	7
Mode	Time	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	---	---	---	---	---	---	---
WavLen	---	---	---	---	---	---	---
Avgc	6000	---	---	---	---	---	---
SDev	.0000000	---	---	---	---	---	---
%RSD	.0000000	---	---	---	---	---	---
#1	6000	---	---	---	---	---	---
#2	6000	---	---	---	---	---	---
#3	6000	---	---	---	---	---	---

1545

Elem	M02020	SN1899	AS1936
Units	ppm	ppm	ppm
Avg	0.00067	0.00528	0.02988
SDev	.00534	.00783	.00521
%RSD	791.70	-148.20	17.422

#1	0.00673	0.00582	0.03470
#2	0.00336	0.00280	0.03059
#3	0.00134	0.01232	0.02436

Errors	QC Fail	QC Fail	QC Fail
Value	.00000	.00000	.00000
Range	10.000	10.000	10.000

IntStd	1	2	3	4	5	6	7
Mode	Time	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	---	---	---	---	---	---	---
Wavlen	---	---	---	---	---	---	---
Avg	6000	---	---	---	---	---	---
SDev	.0000000	---	---	---	---	---	---
%RSD	.0000000	---	---	---	---	---	---
#1	6000	---	---	---	---	---	---
#2	6000	---	---	---	---	---	---
#3	6000	---	---	---	---	---	---

1547

Elem	MD2020	SN1899	AS1936
Units	ppm	ppm	ppm
Avg	0.00330	0.02535	0.07022
SDev	.00117	.00213	.00933
%RSD	35.287	8.3977	13.294
#1	0.00263	0.02583	0.07960
#2	0.00263	0.02720	0.07011
#3	0.00465	0.02302	0.06074
Errors	QC Fail	QC Fail	QC Fail
Value	.02800	.03800	.04800
Range	20.000	20.000	20.000

IntStd	1	2	3	4	5	6	7
Mode	Time	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	--	--	--	--	--	--	--
Wavlen	--	--	--	--	--	--	--
Avg	6000	--	--	--	--	--	--
SDev	.0000000	--	--	--	--	--	--
%RSD	.0000000	--	--	--	--	--	--
#1	6000	--	--	--	--	--	--
#2	6000	--	--	--	--	--	--
#3	6000	--	--	--	--	--	--

Method: JEACT2 Sample Name: JCSAI
 Run Time: 03/02/93 18:56:01
 Comment: Z0148
 Mode: CONC Corr. Factor: 1

Operator: DMA

1545

Elem	AG3280	AL3092	BA4934	BE2348	CA3179	CO2288	CR2286
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avgc	.00051	491.56	-.00541	.01447	462.98	.00267	-.00051
SDev	.00223	1.49	.00090	.00208	1.06	.00130	.00140
%RSD	439.24	.30385	-16.560	14.372	.22861	48.690	-276.01
#1	.00281	490.44	-.00438	.01674	463.33	.00415	.00029
#2	-.00164	490.99	-.00593	.01401	461.79	.00170	.00031
#3	.00036	493.26	-.00594	.01265	463.82	.00217	-.00212
Errors	NOCHECK	QC Pass	NOCHECK	NOCHECK	QC Pass	NOCHECK	NOCHECK
Value		500.00			500.00		
Range		20.000			20.000		

X.FE=0.000080413
avg = 0.00006036

Elem	CR2677	CU3247	FE2714	K 7664	MG2790	MN2576	NA5895
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avgc	-.00491	-.00202	179.81	.31071	487.43	-.00136	-.03290
SDev	.00213	.00051	.21	.38445	1.05	.00045	.00236
%RSD	-43.329	-24.962	.11711	123.73	.21593	-33.244	-7.1845
#1	-.00338	-.00144	179.94	.65658	487.49	-.00187	-.03259
#2	-.00401	-.00231	179.57	.37879	486.35	-.00107	-.03540
#3	-.00734	-.00232	179.92	-.10323	488.45	-.00113	-.03070
Errors	NOCHECK	NOCHECK	QC Pass	NOCHECK	QC Pass	NOCHECK	NOCHECK
Value			200.00		500.00		
Range			20.000		20.000		

Elem	NI2316	PB2203	SB2068	SE1960	V 2924	ZN2138	TI3349
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avgc	-.00999	.01920	-.01418	.03049	-.00189	-.00138	-.00971
SDev	.00509	.00645	.01957	.04338	.00203	.00135	.00042
%RSD	-50.925	33.577	-137.99	142.26	-107.32	-97.523	-4.2953
#1	-.01516	.01188	-.02478	-.00976	-.00001	-.00057	-.01019
#2	-.00499	.02169	-.02616	.07643	-.00162	-.00294	-.00941
#3	-.00982	.02403	.00840	.02481	-.00404	-.00063	-.00953
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK
Value							
Range							

1549

Elem	MD2020	SN1899	AS1936
Units	ppm	ppm	ppm
Avgc	-.00641	-.00371	.02577
SDev	.01007	.01737	.00398
%RSD	-157.02	-468.02	34.848
#1	-.00640	.01610	.01787
#2	.00365	-.01090	.02391
#3	-.01649	-.01633	.03554
Errors Value Range	NOCHECK	NOCHECK	NOCHECK

IntStd	1	2	3	4	5	6	7
Mode	Time	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	---	---	---	---	---	---	---
WavLen	---	---	---	---	---	---	---
Avgc	6000	---	---	---	---	---	---
SDev	.0000000	---	---	---	---	---	---
%RSD	.0000000	---	---	---	---	---	---
#1	6000	---	---	---	---	---	---
#2	6000	---	---	---	---	---	---
#3	6000	---	---	---	---	---	---

Method: IFACT2 Sample Name: JCSADJ
 Run Time: 03/02/93 19:02:07
 Comment: Z0148
 Mode: CONC Corr. Factor: 1

Operator: DMA

1550

Elem	A63280	AL3082	BA4934	BE2348	CA3179	CD2238	CO2286
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.94193	505.43	.50403	.51645	474.57	.98118	.46333
SDev	.00349	2.52	.00156	.00205	1.26	.01002	.00137
%RSD	.37012	.49792	.30876	.39601	.26469	1.0211	.29542
#1	.93794	502.85	.50405	.51471	473.12	.97008	.46367
#2	.94346	507.88	.50557	.51592	475.37	.98392	.46210
#3	.94438	505.55	.50246	.51870	475.22	.98955	.46483
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	1.0000	500.00	.5	.5	500.00	1.0000	.5
Range	20.000	20.000	20.000	20.000	20.000	20.000	20.000

Elem	CR2677	CU3247	FE2714	K 7664	MG2790	MN2576	NA5995
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.44221	.48344	184.21	-.52961	499.98	.47423	.01178
SDev	.00688	.00174	.51	.41343	1.80	.00117	.01258
%RSD	1.5546	.35952	.27871	-78.063	.35992	.24708	106.82
#1	.43760	.48171	183.63	-.11103	497.91	.47295	-.00126
#2	.45011	.48518	184.62	-.93768	501.08	.47526	.02384
#3	.43892	.48343	184.37	-.54011	500.97	.47448	.01275
Errors	QC Pass	QC Pass	QC Pass	NOCHECK	QC Pass	QC Pass	NOCHECK
Value	.5	.5	200.00		500.00	.5	
Range	20.000	20.000	20.000		20.000	20.000	

Elem	NI2316	PB2203	SB2068	SE1960	V 2924	ZN2138	TI3349
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.88938	.96289	-.04141	-.01191	.48507	.96536	-.01011
SDev	.00458	.00446	.00972	.00814	.00785	.00326	.00036
%RSD	.51466	.46331	-23.466	-68.313	1.6177	.33796	-3.5903
#1	.89367	.95792	-.05248	-.01892	.48960	.96175	-.01022
#2	.88456	.96635	-.03742	-.01381	.47601	.96624	-.00970
#3	.88992	.96421	-.03432	-.00299	.48961	.96810	-.01040
Errors	QC Pass	QC Pass	NOCHECK	NOCHECK	QC Pass	QC Pass	NOCHECK
Value	1.0000	1.0000			.5	1.0000	
Range	20.000	20.000			20.000	20.000	

1551

Elem	M02020	SN1899	AS1936
Units	ppm	ppm	ppm
Avgc	-.00704	-.00946	.02800
SDev	.00653	.01005	.02992
%RSD	-97.747	-106.28	106.87
#1	-.01449	-.01155	.05977
#2	-.00229	-.01830	.00036
#3	-.00434	.00148	.02396
Errors Value Range	NOCHECK	NOCHECK	NOCHECK

IntStd	1	2	3	4	5	6	7
Mode	Time	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	---	---	---	---	---	---	---
WavLen	---	---	---	---	---	---	---
Avgc	6000	---	---	---	---	---	---
SDev	.0000000	---	---	---	---	---	---
%RSD	.0000000	---	---	---	---	---	---
#1	6000	---	---	---	---	---	---
#2	6000	---	---	---	---	---	---
#3	6000	---	---	---	---	---	---

Method: JEACT2

Sample Name: CDV11 *unc 313*

Operator: DMA

1552

Run Time: 03/02/93 19:08:11

Comment: 7014R

Mode: CONC Corr. Factor: 1

Elem	AG3280	AL3082	BA4934	BE2348	CA3179	CD2288	CO2286
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avgc	.00099	.07238	.00000	.00000	.07227	.00101	-.00322
SDev	.00115	.03644	.00000	.00000	.01914	.00156	.00209
%RSD	116.38	50.204	-295.84	-299.96	26.485	154.86	-64.911
#1	.00232	.10990	.00000	.00001	.09073	.00165	-.00442
#2	.00032	.07075	.00000	-.00002	.07357	.00215	-.00081
#3	.00033	.03709	.00000	.00000	.05251	-.00077	-.00442
Errors Value Range	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK

Elem	CR2677	CU3247	FE2714	K 7664	MG2790	MN2576	NA5895
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avgc	-.00241	.02867	.00637	-.13824	.08091	.00053	-.00799
SDev	.00000	.00285	.01885	.17746	.00684	.00046	.01384
%RSD	-.03766	9.9419	295.85	-128.37	8.4476	86.731	-173.19
#1	-.00241	.03192	-.00870	-.09213	.08636	.00000	.00782
#2	-.00241	.02749	.02751	.01161	.08312	.00080	-.01793
#3	-.00241	.02660	.00031	-.33421	.07324	.00080	-.01386
Errors Value Range	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK

Elem	NI2316	PB2203	*SB2068	SE1940	V 2924	ZN2138	TI3349
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avgc	.00330	.00973	5.1113	-.02026	.00053	.01689	.00023
SDev	.00728	.00422	.0167	.03329	.00123	.00229	.00041
%RSD	220.50	43.406	.32760	-164.28	233.39	13.550	176.08
#1	.01098	.00726	5.1306	-.05858	-.00081	.01917	.00070
#2	.00241	.01461	3.0999	-.00377	.00160	.01690	.00000
#3	-.00349	.00732	5.1035	.00155	.00079	.01459	.00000
Errors Value Range	NOCHECK	NOCHECK	QC Pass 5.0000 10.000	NOCHECK	NOCHECK	NOCHECK	NOCHECK

1553

Elem	MD2020	SN1899	A61936
Units	ppm	ppm	ppm
Avg	-.00067	-.00380	.02928
SDev	.00117	.00373	.02359
%RSD	-173.55	-98.342	80.587
#1	-.00134	-.00516	.04116
#2	.00067	.00043	.00210
#3	-.00134	-.00666	.04456
Errors Value Range	NOCHECK	NOCHECK	NOCHECK

IntStd	1	2	3	4	5	6	7
Mode	Time	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	---	---	---	---	---	---	---
WavLen	---	---	---	---	---	---	---
Avg	6000	---	---	---	---	---	---
SDev	.0000000	---	---	---	---	---	---
%RSD	.0000000	---	---	---	---	---	---
#1	6000	---	---	---	---	---	---
#2	6000	---	---	---	---	---	---
#3	6000	---	---	---	---	---	---

Method: IFACTP Sample Name: COV1
 Run Time: 03/02/93 19:14:16
 Comment: 70148
 Mode: CONC Corr. Factor: 1

Operator: DMA

1554

Elem	Al3280	Al3082	BA4934	BE2340	CA3179	CO2288	CO2286
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.59191	5.2972	5.1682	.12609	12.824	1.3001	1.2833
SDev	.00100	.1422	.0281	.00066	.066	.0033	.0054
%RSD	.16804	2.6845	.54365	.52228	.51405	.25525	.41911
#1	.59191	5.1619	5.1360	.12532	12.760	1.2965	1.2774
#2	.59091	5.2845	5.1812	.12646	12.821	1.3007	1.2846
#3	.59290	5.4454	5.1875	.12647	12.892	1.3030	1.2879
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.625	5.0000	5.0000	.125	12.500	1.2500	1.2500
Range	10.000	10.000	10.000	10.000	10.000	10.000	10.000

Elem	CR2677	CU3247	FE2714	K 7664	MG2790	MN2576	NA5895
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.50468	.63564	2.5794	12.537	12.743	1.2910	12.935
SDev	.00114	.01243	.0237	.292	.082	.0051	.163
%RSD	.22611	1.9547	.91980	2.3262	.64677	.39251	1.2593
#1	.50600	.62352	2.6016	12.335	12.673	1.2852	12.749
#2	.50402	.63505	2.5823	12.404	12.722	1.2939	13.001
#3	.50402	.64835	2.5544	12.871	12.833	1.2939	13.054
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.5	.625	2.5000	12.500	12.500	1.2500	12.500
Range	10.000	10.000	10.000	10.000	10.000	10.000	10.000

Elem	NI2316	PB2203	SB2068	SE1960	V 2924	ZN2138	TI3349
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.2590	2.5524	-.01883	2.3423	1.2856	1.2955	.00002
SDev	.0083	.0256	.02193	.0239	.0012	.0067	.00041
%RSD	.66099	1.0035	-116.44	.94080	.09304	.51818	1984.7
#1	1.2658	2.5602	-.03269	2.5147	1.2842	1.2917	.00050
#2	1.2615	2.5238	.00645	2.3568	1.2866	1.2916	-.00021
#3	1.2497	2.5732	-.03026	2.5054	1.2858	1.3033	-.00022
Errors	QC Pass	QC Pass	NOCHECK	QC Pass	QC Pass	QC Pass	NOCHECK
Value	1.2500	2.5000		2.5000	1.2500	1.2500	
Range	10.000	10.000		10.000	10.000	10.000	

1555

Elem	M02020	SN1899	AS1936
Units	ppm	ppm	ppm
Avg	.00200	-.00227	2.5990
SDev	.00000	.00786	.0462
%RSD	.17716	-345.71	1.7781
#1	.00201	-.00987	2.5512
#2	.00200	.00582	2.6434
#3	.00200	-.00277	2.6025
Errors Value	NOCHECK	NOCHECK	QC Pass
Range			2.5000
			10.000

IntStd	1	2	3	4	5	6	7
Mode	Time	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	---	---	---	---	---	---	---
Wavlen	---	---	---	---	---	---	---
Avg	6000	---	---	---	---	---	---
SDev	.0000000	---	---	---	---	---	---
%RSD	.0000000	---	---	---	---	---	---
#1	6000	---	---	---	---	---	---
#2	6000	---	---	---	---	---	---
#3	6000	---	---	---	---	---	---

1557

Elem	M02020	SN1899	AS1936
Units	ppm	ppm	ppm
Avge	0.00067	0-.00763	0.02702
SDev	.00349	.00993	.00609
%RSD	517.57	-130.15	22.522
#1	0.00471	0-.01710	0.02298
#2	0-.00134	0-.00851	0.02406
#3	0-.00134	0.00271	0.03402
Errors	QC Fail	QC Fail	QC Fail
Value	.00000	.00000	.00000
Range	10.000	10.000	10.000

IntStd	1	2	3	4	5	6	7
Mode	Time	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	---	---	---	---	---	---	---
Wavelength	---	---	---	---	---	---	---
Avge	6000	---	---	---	---	---	---
SDev	.0000000	---	---	---	---	---	---
%RSD	.0000000	---	---	---	---	---	---
#1	6000	---	---	---	---	---	---
#2	6000	---	---	---	---	---	---
#3	6000	---	---	---	---	---	---

1559

Elem	MD2020	SN1899	AS1936
Units	ppm	ppm	ppm
Avg	1-.00194	.00748	.03915
SDev	.00114	.00367	.02099
%RSD	58.995	49.081	53.580
#1	1-.00062	.00354	.01948
#2	1-.00261	.01081	.03675
#3	1-.00258	.00810	.06122
Errors	LC Low	LC Pass	LC Pass
High	100.00	100.00	100.00
Low	.00000	.00000	.00000

IntStd	1	2	3	4	5	6	7
Mode	Time	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	---	---	---	---	---	---	---
Waven	---	---	---	---	---	---	---
Avg	6000	---	---	---	---	---	---
SDev	.0000000	---	---	---	---	---	---
%RSD	.0000000	---	---	---	---	---	---
#1	6000	---	---	---	---	---	---
#2	6000	---	---	---	---	---	---
#3	6000	---	---	---	---	---	---

1561

Elem	MD2020	SN1899	AS1936
Units	ppm	ppm	ppm
Avgc	.00071	1-.00261	.02013
SDev	.00308	.00520	.00747
%RSD	435.45	-237.87	37.118
#1	.00138	.00451	.01896
#2	L-.00265	L-.00683	.01331
#3	.00339	L-.00550	.02811
Errors	LC Pass	LC Low	LC Pass
High	100.00	100.00	100.00
Low	.00000	.00000	.00000

IntStd	1	2	3	4	5	6	7
Mode	Time	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	--	--	--	--	--	--	--
Wavlen	--	--	--	--	--	--	--
Avgc	6000	--	--	--	--	--	--
SDev	.0000000	--	--	--	--	--	--
%RSD	.0000000	--	--	--	--	--	--
#1	6000	--	--	--	--	--	--
#2	6000	--	--	--	--	--	--
#3	6000	--	--	--	--	--	--

1563

Elem	MO2020	SN1899	AS1936
Units	ppm	ppm	ppm
Avg	.00814	L-.00021	.03163
SDev	.00117	.00143	.00992
%RSD	14.324	-681.48	31.377
#1	.00747	.00122	.03000
#2	.00746	L-.00022	.02262
#3	.00949	L-.00163	.04226
Errors	LC Pass	LC Low	LC Pass
High	100.00	100.00	100.00
Low	.00000	.00000	.00000

IntStd	1	2	3	4	5	6	7
Mode	Time	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	---	---	---	---	---	---	---
Wavlen	---	---	---	---	---	---	---
Avg	6000	---	---	---	---	---	---
SDev	.0000000	---	---	---	---	---	---
%RSD	.0000000	---	---	---	---	---	---
#1	6000	---	---	---	---	---	---
#2	6000	---	---	---	---	---	---
#3	6000	---	---	---	---	---	---

1505

Elem	MD2020	SN1899	AS1936
Units	ppm	ppm	ppm
Avgc	L-.00219	.00388	.07328
SDev	.00121	.00514	.00754
%RSD	-55.342	132.49	10.286
#1	L-.00292	.00935	.07114
#2	L-.00286	.00255	.08166
#3	L-.00079	L-.00047	.06704
Errors	LC Low	LC Pass	LC Pass
High	100.00	100.00	100.00
Low	.00000	.00000	.00000

IntStd	1	2	3	4	5	6	7
Mode	Time	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	--	---	---	---	---	---	---
Wavlen	---	---	---	---	---	---	---
Avgc	6000	---	---	---	---	---	---
SDev	.0000000	---	---	---	---	---	---
%RSD	.0000000	---	---	---	---	---	---
#1	6000	---	---	---	---	---	---
#2	6000	---	---	---	---	---	---
#3	6000	---	---	---	---	---	---

1567

Elem	M02020	SN1899	AS1936
Units	ppm	ppm	ppm
Avgc	.01629	L-.00646	.02619
SDev	.00233	.00361	.01560
%RSD	14.282	-55.822	59.568
#1	.01495	L-.00262	.02413
#2	.01494	L-.00978	.04272
#3	.01897	L-.00697	.01173
Errors	LC Pass	LC Low	LC Pass
High	100.00	100.00	100.00
Low	.00000	.00000	.00000

IntStd	1	2	3	4	5	6	7
Mode	Time	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	--	--	--	--	--	--	--
Wavlen	--	--	--	--	--	--	--
Avgc	6000	--	--	--	--	--	--
SDev	.0000000	--	--	--	--	--	--
%RSD	.0000000	--	--	--	--	--	--
#1	6000	--	--	--	--	--	--
#2	6000	--	--	--	--	--	--
#3	6000	--	--	--	--	--	--

1569

Elem	M02070	BN1899	AS1936
Units	ppm	ppm	ppm
Avge	.00014	L-.00357	.01946
SDev	.00303	.00925	.00407
%RSD	2722.5	-259.22	20.895
#1	.00283	L-.01255	.01541
#2	L-.00323	L-.00407	.02355
#3	.00082	.00592	.01243
Errors	LC Pass	LC Low	LC Pass
High	100.00	100.00	100.00
Low	.00000	.00000	.00000

IntStd	1	2	3	4	5	6	7
Mode	Time	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	---	---	---	---	---	---	---
NavLen	---	---	---	---	---	---	---
Avge	6000	---	---	---	---	---	---
SDev	.0000000	---	---	---	---	---	---
%RSD	.0000000	---	---	---	---	---	---
#1	6000	---	---	---	---	---	---
#2	6000	---	---	---	---	---	---
#3	6000	---	---	---	---	---	---

1571

Elem	M02020	SN1899	AS1936
Units	ppm	ppm	ppm
Avg	.47261	1.2074	1.9474
SDev	.00403	.0148	.0196
%RSD	.85295	1.2222	1.0061
#1	.46858	1.1953	1.9483
#2	.47664	1.2027	1.9273
#3	.47261	1.2239	1.9665
Errors	I.C. Pass	I.C. Pass	I.C. Pass
High	100.00	100.00	100.00
Low	.00000	.00000	.00000

IntStd	1	2	3	4	5	6	7
Mode	Time	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	---	---	---	---	---	---	---
Wavlen	---	---	---	---	---	---	---
Avg	6000	---	---	---	---	---	---
SDev	.0000000	---	---	---	---	---	---
%RSD	.0000000	---	---	---	---	---	---
#1	6000	---	---	---	---	---	---
#2	6000	---	---	---	---	---	---
#3	6000	---	---	---	---	---	---

1573

Elem	MD7070	SN1899	AS1936
Units	ppm	ppm	ppm
Avgc	1-.00023	1-.00578	1.0923
SDev	.00202	.00371	.0235
ZRSD	-863.89	-98.799	2.3310
#1	1-.00024	.00081	1.0429
#2	1-.00275	1-.00910	1.1080
#3	.00179	1-.00905	1.1060
Errors	LC Low	LC Low	LC Pass
High	100.00	100.00	100.00
Low	.00000	.00000	.00000

IntStd	1	2	3	4	5	6	7
Mode	Time	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	--	--	--	--	--	--	--
Wavlen	--	--	--	--	--	--	--
Avgc	6000	--	--	--	--	--	--
SDev	.0000000	--	--	--	--	--	--
ZRSD	.0000000	--	--	--	--	--	--
#1	6000	--	--	--	--	--	--
#2	6000	--	--	--	--	--	--
#3	6000	--	--	--	--	--	--

1575

Elem	M02020	SN1899	051936
Units	ppm	ppm	ppm
Avgc	.00135	.00277	.03118
SDev	.00308	.00553	.00920
%RSD	228.70	204.08	29.510
#1	.00470	.00274	.02645
#2	.00067	L-.00287	.04179
#3	L-.00134	.00843	.02531
Errors	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00
Low	.00000	.00000	.00000

IntStd	1	2	3	4	5	6	7
Mode	Time	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	---	---	---	---	---	---	---
WavLen	---	---	---	---	---	---	---
Avgc	6000	---	---	---	---	---	---
SDev	.0000000	---	---	---	---	---	---
%RSD	.0000000	---	---	---	---	---	---
#1	6000	---	---	---	---	---	---
#2	6000	---	---	---	---	---	---
#3	6000	---	---	---	---	---	---

Method: IFACT2

Sample Name: CCV21 *and 3/3*

Operator: BMA

Run Time: 03/02/93 20:26:43

Comment: 70148

1576

Mode: CONC Corr. Factor: 1

Elem	AG3280	AL3082	BA4934	BE2348	CA3179	CO2288	CO2286
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avgc	.00231	.02885	.00104	-.00011	.01341	-.00087	-.00040
SDev	.00049	.00371	.00238	.00021	.00404	.00076	.00035
%RSD	21.376	12.847	228.88	-198.74	30.110	-86.480	-85.890
#1	.00181	.03313	-.00156	-.00035	.00901	-.00129	-.00020
#2	.00232	.02667	.00156	.00003	.01428	-.00133	-.00080
#3	.00280	.02675	.00312	.00000	.01695	.00000	-.00021
Errors Value Range	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK

Elem	CR2677	CU3247	FE2714	K 7664	MG2790	MN2576	NA5895
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avgc	.00044	.00976	-.02767	-.04034	.00108	.00106	.01145
SDev	.00494	.00000	.02419	.33348	.01184	.00092	.01527
%RSD	1131.9	.01169	-87.427	-826.60	1098.8	86.638	133.33
#1	-.00242	.00976	-.03693	.20172	-.01205	.00000	.02563
#2	-.00241	.00976	-.04538	-.42073	.01093	.00159	.01344
#3	.00614	.00975	-.00022	.09798	.00436	.00160	-.00471
Errors Value Range	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK

Elem	NI2316	PB2203	*SB2068	SE1960	V 2924	ZN2138	TI3349
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avgc	.00207	.00202	5.0454	-.01230	.00054	.00377	.00047
SDev	.00382	.00604	.0758	.04326	.00124	.00137	.00041
%RSD	184.55	299.08	1.5024	-351.73	231.17	36.306	86.596
#1	.00620	.00879	4.9634	-.00906	.00079	.00299	.00071
#2	.00133	-.00281	5.1129	.02923	-.00081	.00297	.00000
#3	-.00133	.00008	5.0599	-.05708	.00163	.00535	.00071
Errors Value Range	NOCHECK	NOCHECK	QC Pass 5.0000 10.000	NOCHECK	NOCHECK	NOCHECK	NOCHECK

1577

Elem	M02020	SN1859	AS1936
Units	ppm	ppm	ppm
Avg	-.00135	.00357	.03878
SDev	.00000	.00812	.00589
%RSD	-.04944	227.67	15.195
#1	-.00135	.01279	.04050
#2	-.00135	.00045	.04362
#3	-.00135	-.00253	.03222
Errors Value Range	NOCHECK	NOCHECK	NOCHECK

IntStd	1	2	3	4	5	6	7
Mode	Time	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	---	---	---	---	---	---	---
Wavlen	---	---	---	---	---	---	---
Avg	6000	---	---	---	---	---	---
SDev	.0000000	---	---	---	---	---	---
%RSD	.0000000	---	---	---	---	---	---
#1	6000	---	---	---	---	---	---
#2	6000	---	---	---	---	---	---
#3	6000	---	---	---	---	---	---

Method: IFACT2 Sample Name: CDV2
 Run Time: 03/02/93 20:32:47
 Comment: Z014R
 Mode: CDNC Corr. Factor: 1

Operator: DMA

1578

Elem	AG3280	AL3082	BA4934	BE2348	CA3179	CD2288	CO2286
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.59176	5.1576	5.1287	.12538	12.673	1.2857	1.2760
SDev	.00228	.0017	.0065	.00002	.017	.0037	.0012
%RSD	.38464	.03254	.12664	.01219	.13576	.28625	.09569
#1	.59045	5.1561	5.1360	.12537	12.665	1.2850	1.2747
#2	.59438	5.1572	5.1285	.12538	12.662	1.2824	1.2771
#3	.59043	5.1594	5.1266	.12540	12.693	1.2896	1.2762
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.625	5.0000	5.0000	.125	12.500	1.2500	1.2500
Range	10.000	10.000	10.000	10.000	10.000	10.000	10.000

Elem	CR2677	CU3247	FE2714	K 7664	M62790	MN2576	NA5895
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.50381	.61939	2.5160	12.906	12.636	1.2806	12.879
SDev	.00266	.00103	.0234	.413	.020	.0009	.056
%RSD	.52778	.16564	.93034	3.2013	.15575	.07209	.43377
#1	.50666	.61820	2.5380	13.355	12.636	1.2812	12.890
#2	.50336	.61998	2.5136	12.819	12.636	1.2812	12.818
#3	.50140	.61998	2.4914	12.542	12.676	1.2796	12.928
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.5	.625	2.5000	12.500	12.500	1.2500	12.500
Range	10.000	10.000	10.000	10.000	10.000	10.000	10.000

Elem	NI2316	PB2203	SB2068	SE1960	V 2924	ZN2138	TI3349
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.2622	2.5471	-.02622	2.5530	1.2826	1.2888	.00026
SDev	.0109	.0039	.03168	.0469	.0032	.0023	.00041
%RSD	.86590	.15171	-120.84	1.8351	.24969	.17806	155.70
#1	1.2502	2.5442	-.04908	2.5731	1.2794	1.2864	-.00021
#2	1.2647	2.5456	-.03953	2.4995	1.2858	1.2888	.00050
#3	1.2717	2.5515	.00995	2.5845	1.2826	1.2910	.00050
Errors	QC Pass	QC Pass	NOCHECK	QC Pass	QC Pass	QC Pass	NOCHECK
Value	1.2500	2.5000	<i>done</i>	2.5000	1.2500	1.2500	
Range	10.000	10.000	<i>3/3</i>	10.000	10.000	10.000	

1573

Elem	M02020	5N1899	AS1936
Units	ppm	ppm	ppm
Avg	-.00002	-.00182	2.5932
SDev	.00202	.00224	.0288
%RSD	-11235.	-127.91	1.1098
#1	-.00002	-.00425	2.5678
#2	-.00204	-.00139	2.5873
#3	.00200	.00017	2.6243
Errors	NOCHECK	NOCHECK	QC Pass
Value			2.5000
Range			10.000

IntStd	1	2	3	4	5	6	7
Mode	Time	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	--	---	---	---	---	---	---
Wavlen	--	---	---	---	---	---	---
Avg	6000	---	---	---	---	---	---
SDev	.0000000	---	---	---	---	---	---
%RSD	.0000000	---	---	---	---	---	---
#1	6000	---	---	---	---	---	---
#2	6000	---	---	---	---	---	---
#3	6000	---	---	---	---	---	---

1581

Elem	MD2020	SN1899	AS193A
Units	ppm	ppm	ppm
Avg	0.00134	0.00089	0.03017
SDev	.00308	.00783	.01307
ZRSD	229.04	879.75	43.326

#1	0.00470	0.00848	0.01512
#2	0-.00134	0-.00716	0.03873
#3	0.00067	0.00135	0.03665

Errors	QC Fail	QC Fail	QC Fail
Value	.00000	.00000	.00000
Range	10.000	10.000	10.000

IntStd	1	2	3	4	5	6	7
Mode	Time	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	---	---	---	---	---	---	---
Wavlen	---	---	---	---	---	---	---
Avg	6000	---	---	---	---	---	---
SDev	.0000000	---	---	---	---	---	---
ZRSD	.0000000	---	---	---	---	---	---
#1	6000	---	---	---	---	---	---
#2	6000	---	---	---	---	---	---
#3	6000	---	---	---	---	---	---

Elem	M02020	SN1899	AS193A
Units	ppm	ppm	ppm
Avg	.01183	.01906	.06333
SDev	.00303	.00803	.01105
%RSD	25.998	42.418	17.454
#1	.01450	.02568	.07606
#2	.00847	.01005	.05622
#3	.01253	.02144	.05770
Errors	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00
Low	.00000	.00000	.00000

IntStd	1	2	3	4	5	6	7
Mode	Time	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	---	---	---	---	---	---	---
WavLen	---	---	---	---	---	---	---
Avg	6000	---	---	---	---	---	---
SDev	.0000000	---	---	---	---	---	---
%RSD	.0000000	---	---	---	---	---	---
#1	6000	---	---	---	---	---	---
#2	6000	---	---	---	---	---	---
#3	6000	---	---	---	---	---	---

1585

Elem	M02020	SN1899	081936
Units	ppm	ppm	ppm
Avg	.02213	.00431	.03253
SDev	.00202	.00280	.01374
%RSD	9.1310	64.928	42.232
#1	.02011	.00433	.02269
#2	.02214	.00150	.04823
#3	.02415	.00709	.02568
Errors	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00
Low	.00000	.00000	.00000

IntStd	1	2	3	4	5	6	7
Mode	Time	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	---	---	---	---	---	---	---
Wavlen	---	---	---	---	---	---	---
Avg	6000	---	---	---	---	---	---
SDev	.0000000	---	---	---	---	---	---
%RSD	.0000000	---	---	---	---	---	---
#1	6000	---	---	---	---	---	---
#2	6000	---	---	---	---	---	---
#3	6000	---	---	---	---	---	---

1537

Elem	MO2020	SN1899	AS1936
Units	ppm	ppm	ppm
Avgc	.01627	L-.01016	.03179
SDev	.00233	.00454	.00830
%RSD	14.341	-44.713	26.103

#1	.01492	L-.00833	.02708
#2	.01493	L-.01534	.04137
#3	.01897	L-.00682	.02692

Errors	LC Pass	LC Low	LC Pass
High	100.00	100.00	100.00
Low	.00000	.00000	.00000

IntStd	1	2	3	4	5	6	7
Mode	Time	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	---	---	---	---	---	---	---
Wavlen	---	---	---	---	---	---	---
Avgc	6000	---	---	---	---	---	---
SDev	.0000000	---	---	---	---	---	---
%RSD	.0000000	---	---	---	---	---	---
#1	6000	---	---	---	---	---	---
#2	6000	---	---	---	---	---	---
#3	6000	---	---	---	---	---	---

1589

Elem	MD2020	SN1899	AS1936
Units	ppm	ppm	ppm
Avg	.01200	L-.00584	.04732
SDev	.00309	.00287	.02029
%RSD	25.788	-49.136	42.869
#1	.01265	L-.00907	.04210
#2	.00863	L-.00487	.06971
#3	.01471	L-.00358	.03016
Errors	LC Pass	LC Low	LC Pass
High	100.00	100.00	100.00
Low	.00000	.00000	.00000

IntStd	1	2	3	4	5	6	7
Mode	Time	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	---	---	---	---	---	---	---
Wavlen	---	---	---	---	---	---	---
Avg	6000	---	---	---	---	---	---
SDev	.0000000	---	---	---	---	---	---
%RSD	.0000000	---	---	---	---	---	---
#1	6000	---	---	---	---	---	---
#2	6000	---	---	---	---	---	---
#3	6000	---	---	---	---	---	---

1591

Elem	MD2020	SN1899	AS1936
Units	ppm	ppm	ppm
Avgc	.00080	.00205	.01678
SDev	.00117	.00645	.00733
ZRSD	147.10	314.61	43.642
#1	.00147	.00061	.01308
#2	LC-.00056	LC-.00356	.01205
#3	.00147	.00711	.02522
Errors	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00
Low	.00000	.00000	.00000

IntStd	1	2	3	4	5	6	7
Mode	Time	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	---	---	---	---	---	---	---
Wavlen	---	---	---	---	---	---	---
Avgc	6000	---	---	---	---	---	---
SDev	.0000000	---	---	---	---	---	---
ZRSD	.0000000	---	---	---	---	---	---
#1	6000	---	---	---	---	---	---
#2	6000	---	---	---	---	---	---
#3	6000	---	---	---	---	---	---

Method: JFAC12

Sample Name: CCV31 *done 3/3*

Operator: DMA

Run Time: 03/02/93 21:45:23

1592

Comment: 70148

Mode: CONC Corr. Factor: 1

Elem	Al3280	Al3082	BA4934	BE2348	CA3179	CO2288	CO2286
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00067	.01199	.00000	.00002	.00819	.00061	-.00121
SDev	.00172	.01760	.00000	.00003	.00496	.00106	.00092
%RSD	-258.57	146.84	185.46	188.18	60.585	172.54	-76.549
#1	-.00165	-.00539	.00000	.00004	.00251	.00002	-.00140
#2	.00132	.02981	.00000	-.00002	.01167	-.00002	-.00202
#3	-.00166	.01154	.00000	.00003	.01038	.00183	-.00020
Errors Value Range	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK

Elem	CR2677	CU3247	FE2714	K 7664	MG2790	MN2576	NA5895
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00044	.00443	-.02454	-.51294	-.00213	.00080	.00573
SDev	.00494	.00177	.04552	.51009	.00986	.00080	.01760
%RSD	1119.1	39.933	-185.47	-99.444	-463.66	99.875	307.29
#1	-.00241	.00266	-.05516	-1.0259	-.01195	.00000	-.01348
#2	.00615	.00520	.02777	-.00576	.00777	.00160	.02106
#3	-.00241	.00444	-.04624	-.50718	-.00220	.00080	.00961
Errors Value Range	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK

Elem	NI2316	PB2203	*SB2068	SE1960	V 2924	ZN2138	TI3349
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00458	-.00090	5.0231	-.01899	.00054	.00068	.00071
SDev	.00424	.00856	.0440	.01934	.00092	.00003	.00142
%RSD	92.746	-954.79	.87639	-101.98	170.85	4.0586	199.74
#1	-.00024	-.00428	4.9923	-.04022	-.00001	.00071	-.00071
#2	.00619	-.00725	5.0034	-.01436	.00002	.00066	.00212
#3	.00778	.00884	5.0735	-.00238	.00159	.00067	.00071
Errors Value Range	NOCHECK	NOCHECK	QC Pass 5.0000 10.000	NOCHECK	NOCHECK	NOCHECK	NOCHECK

1593

Elem	MD2020	SN1899	AS193A
Units	ppm	ppm	ppm
Avg	.00202	-.00973	.03026
SDev	.00309	.00412	.00265
%RSD	153.01	-62.894	8.7684
#1	.00269	-.01266	.02934
#2	.00471	-.00270	.03325
#3	-.00135	-.01384	.02818
Errors Value Range	NOCHECK	NOCHECK	NOCHECK

IntStd	1	2	3	4	5	6	7
Mode	Time	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	---	---	---	---	---	---	---
Wavlen	---	---	---	---	---	---	---
Avg	6000	---	---	---	---	---	---
SDev	.0000000	---	---	---	---	---	---
%RSD	.0000000	---	---	---	---	---	---
#1	6000	---	---	---	---	---	---
#2	6000	---	---	---	---	---	---
#3	6000	---	---	---	---	---	---

Method: IFACT2 Sample Name: CDV3
 Run Time: 03/02/93 21:51:29
 Comment: 70148
 Mode: CONC Corr. Factor: 1

Operator: DMA

1594

Elem	AG3280	AL3082	BA4934	BE2348	CA3179	CD2288	CO2286
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.59439	5.1841	5.1318	.12625	12.683	1.2943	1.2807
SDev	.00258	.0129	.0119	.00023	.032	.0041	.0016
%RSD	.43316	.24832	.23219	.18449	.25218	.31403	.12548
#1	.59142	5.1748	5.1344	.12610	12.656	1.2936	1.2819
#2	.59589	5.1787	5.1188	.12513	12.673	1.2907	1.2813
#3	.59587	5.1988	5.1422	.12652	12.718	1.2987	1.2789
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.625	5.0000	5.0000	.125	12.500	1.2500	1.2500
Range	10.000	10.000	10.000	10.000	10.000	10.000	10.000

Elem	CR2677	CU3247	FE2714	K 7664	MG2790	MN2576	NA5895
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.50446	.61880	2.5215	12.329	12.706	1.2793	12.976
SDev	.00076	.00103	.0383	.335	.024	.0012	.008
%RSD	.15031	.16579	1.5195	2.7134	.18709	.09535	.06546
#1	.50534	.61820	2.5644	12.127	12.679	1.2796	12.981
#2	.50402	.61820	2.5093	12.715	12.718	1.2780	12.966
#3	.50402	.61998	2.4907	12.145	12.722	1.2804	12.981
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.5	.625	2.5000	12.500	12.500	1.2500	12.500
Range	10.000	10.000	10.000	10.000	10.000	10.000	10.000

Elem	NI2316	PB2203	SB2068	SE1960	V 2924	ZN2138	TI3349
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.2461	2.5573	-.01306	2.5273	1.2845	1.2958	.00002
SDev	.0179	.0067	.01021	.0080	.0012	.0026	.00108
%RSD	1.4403	.26226	-78.214	.31562	.09536	.20246	4692.3
#1	1.2358	2.5588	-.01026	2.5285	1.2842	1.2964	-.00092
#2	1.2358	2.5632	-.00454	2.5345	1.2834	1.2929	-.00021
#3	1.2669	2.5500	-.02438	2.5187	1.2858	1.2981	.00120
Errors	QC Pass	QC Pass	NOCHECK	QC Pass	QC Pass	QC Pass	NOCHECK
Value	1.2500	2.5000	<i>done</i>	2.5000	1.2500	1.2500	
Range	10.000	10.000	3/3	10.000	10.000	10.000	

1595

Elem	MD2020	SN1899	AS1936
Units	ppm	ppm	ppm
Avg	-.00069	-.00698	2.6288
SDev	.00116	.00425	.0156
%RSD	-167.75	-60.856	.59275
#1	-.00204	-.00271	2.6388
#2	-.00002	-.01121	2.6368
#3	-.00002	-.00702	2.6108
Errors	NOCHECK	NOCHECK	QC Pass
Value			2.5000
Range			10.000

IntStd	1	2	3	4	5	6	7
Mode	Time	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	---	---	---	---	---	---	---
Wavlen	---	---	---	---	---	---	---
Avg	6000	---	---	---	---	---	---
SDev	.0000000	---	---	---	---	---	---
%RSD	.0000000	---	---	---	---	---	---
#1	6000	---	---	---	---	---	---
#2	6000	---	---	---	---	---	---
#3	6000	---	---	---	---	---	---

1597

Elem	M02020	SN1899	AS1936
Units	ppm	ppm	ppm
Avgc	Q-.00135	Q.00087	Q.04051
SDev	.00000	.01137	.01052
%RSD	-.19172	1309.3	25.962
#1	Q-.00135	Q-.00006	Q.04502
#2	Q-.00135	Q.01267	Q.02849
#3	Q-.00134	Q-.01001	Q.04802
Errors	QC Fail	QC Fail	QC Fail
Value	.00000	.00000	.00000
Range	10.000	10.000	10.000

IntStd	1	2	3	4	5	6	7
Mode	Time	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	--	---	---	---	---	---	---
Wavlen	---	---	---	---	---	---	---
Avgc	6000	---	---	---	---	---	---
SDev	.0000000	---	---	---	---	---	---
%RSD	.0000000	---	---	---	---	---	---
#1	6000	---	---	---	---	---	---
#2	6000	---	---	---	---	---	---
#3	6000	---	---	---	---	---	---

Method: IFACT2 Sample Name: 1.0005.0007148131 Operator: DMA
 Run Time: 03/02/93 22:03:40
 Comment: 70148 (mw-46L) 1533
 Mode: CONC Corr. Factor: 1

Elem	Al3082	BA4934	BE2348	CA3179	CD2288	CO2286
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	16.669	21060	200235	11.962	200141	202514
SDev	.021	.00090	.00019	.029	.00152	.00105
%RSD	.12491	.42858	8.2482	.23921	108.08	4.1711
#1	16.690	.20956	.00218	11.983	LC-.00029	.02393
#2	16.648	.21112	.00230	11.929	.00187	.02575
#3	16.670	.21112	.00256	11.973	.00264	.02574
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	1000.0	100.00	1000.0	100.00	100.00
Low	.00000	.00000	.00000	.00000	.00000	.00000
RPD=	4.2	2.1	0.4282	4.9	59810	125.7

Elem	CR2677	CU3247	FE2714	K 7664	MG2790	MN2576	NA5895
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.07601	32.036	3.8772	9.8633	1.9697	8.5296	
SDev	.00102	.104	.4333	.0133	.0072	.0281	
%RSD	1.3433	.32431	11.176	.13444	.36786	.32996	
#1	.07541	32.100	3.4622	9.8513	1.9779	8.5098	
#2	.07542	31.916	3.8426	9.8775	1.9643	8.5619	
#3	.07718	32.091	4.3267	9.8611	1.9667	8.5172	
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	
High	200.00	100.00	1000.0	1000.0	100.00	1000.0	
Low	.00000	.00000	.00000	.00000	.00000	.00000	
RPD=	3.4	9.7	5.5	1.9	4.5	4.7	

Elem	NI2316	PB2203	SB2068	SE1960	V 2924	ZN2138	TI3349
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04856	LC-.02651	LC-.02435	.05143	.14861	.81238	
SDev	.00088	.00440	.02435	.00001	.00088	.00123	
%RSD	1.8053	-16.607	-99.992	.00995	.59247	.15118	
#1	.04755	LC-.02450	LC-.02075	.05144	.14878	.81309	
#2	.04909	LC-.02346	LC-.00200	.05143	.14765	.81096	
#3	.04904	LC-.03155	LC-.05030	.05143	.14939	.81309	
Errors	LC Pass	LC Pass	LC Low	LC Low	LC Pass	LC Pass	
High	100.00	100.00	100.00	100.00	100.00	100.00	
Low	.00000	.00000	.00000	.00000	.00000	.00000	
RPD=	11.6	209.8	257.15	743.05	25.6	6.8	

1599

Elem	MD2020	SN1899	AS1936
Units	ppm	ppm	ppm
Avg	1-.00071	.00589	.03247
SDev	.00403	.00491	.00891
%RSD	-568.06	83.323	27.439
#1	1-.00474	.00873	.02581
#2	.00332	.00022	.04259
#3	1-.00070	.00872	.02900
Errors	LC Low	LC Pass.	LC Pass.
High	100.00	100.00	100.00
Low	.00000	.00000	.00000

IntStd	1	2	3	4	5	6	7
Mode	Time	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	---	---	---	---	---	---	---
Wavlen	---	---	---	---	---	---	---
Avg	6000	---	---	---	---	---	---
SDev	.0000000	---	---	---	---	---	---
%RSD	.0000000	---	---	---	---	---	---
#1	6000	---	---	---	---	---	---
#2	6000	---	---	---	---	---	---
#3	6000	---	---	---	---	---	---

1601

Elem	M02020	SN1899	AS1936
Units	ppm	ppm	ppm
Avg	0.00264	0.02248	0.07168
SDev	.00201	.00571	.00868
%RSD	76.436	25.385	12.107
#1	0.00465	0.02576	0.07866
#2	0.00264	0.02579	0.06196
#3	0.00062	0.01589	0.07441
Errors	QC Fail	QC Fail	QC Fail
Value	.02800	.03800	.04800
Range	20.000	20.000	20.000

IntStd	1	2	3	4	5	6	7
Mode	Time	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	--	--	--	--	--	--	--
Wavlen	--	--	--	--	--	--	--
Avg	6000	--	--	--	--	--	--
SDev	.0000000	--	--	--	--	--	--
%RSD	.0000000	--	--	--	--	--	--
#1	6000	--	--	--	--	--	--
#2	6000	--	--	--	--	--	--
#3	6000	--	--	--	--	--	--

Method: IEACT2 Sample Name: 10SAF

Operator: DMA

Run Time: 03/02/93 22:21:56

1602

Comment: 70148

Mode: CONC Corr. Factor: 1

Elem	AB3280	AL3082	BA4934	BE2348	CA3179	CD2288	CO2286
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00131	501.58	-.00497	.00733	467.56	.00358	-.00123
SDev	.00225	4.74	.00088	.00126	3.81	.00016	.00117
%RSD	-171.24	.94451	-17.759	17.163	.81315	4.5257	-94.789
#1	-.00365	507.05	-.00451	.00616	471.93	.00370	.00007
#2	.00084	493.78	-.00441	.00718	464.91	.00339	-.00217
#3	-.00113	498.90	-.00599	.00866	465.84	.00363	-.00160
Errors Value	NOCHECK	QC Pass 500.00	NOCHECK	NOCHECK	QC Pass 500.00	NOCHECK	NOCHECK
Range		20.000			20.000		

X_{Fe} = 0.000040248

Elem	CR2677	CU3247	FE2714	K 7664	MG2790	MN2576	NA5895
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00559	-.01044	182.12	-.36289	493.85	-.00261	-.01641
SDev	.00099	.00011	1.72	.17568	4.51	.00053	.01356
%RSD	-17.792	-1.0431	.94200	-48.410	.91229	-20.219	-82.597
#1	-.00472	-.01057	184.07	-.55936	499.02	-.00299	-.02117
#2	-.00667	-.01036	180.86	-.30841	490.74	-.00201	-.00112
#3	-.00537	-.01040	181.43	-.22091	491.79	-.00282	-.02695
Errors Value	NOCHECK	NOCHECK	QC Pass 200.00	NOCHECK	QC Pass 500.00	NOCHECK	NOCHECK
Range			20.000		20.000		

Elem	NI2316	PB2203	SB2068	SE1960	V 2924	ZN2138	TI3349
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00138	.01312	-.04264	.01583	-.00162	.00058	-.00938
SDev	.00220	.01515	.04550	.02710	.00321	.00037	.00033
%RSD	-159.20	115.41	-106.72	171.20	-197.63	64.639	-3.5051
#1	.00098	.02167	-.09144	-.01254	.00159	.00026	-.00945
#2	-.00337	.02207	-.00139	.01857	-.00163	.00048	-.00967
#3	-.00175	-.00436	-.03508	.04145	-.00483	.00099	-.00902
Errors Value	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK
Range							

1603

Elem	M02020	SN1899	AS1936
Units	ppm	ppm	ppm
Avgc	-.00489	.00253	.01522
SDev	.00827	.00874	.02897
%RSD	-120.07	344.59	189.69
#1	.00201	.00711	-.01459
#2	-.00834	.00804	.03975
#3	-.01434	-.00737	.02249
Errors Value Range	NOCHECK	NOCHECK	NOCHECK

IntStd	1	2	3	4	5	6	7
Mode	Time	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	---	---	---	---	---	---	---
Wavlen	---	---	---	---	---	---	---
Avgc	6000	---	---	---	---	---	---
SDev	.0000000	---	---	---	---	---	---
%RSD	.0000000	---	---	---	---	---	---
#1	6000	---	---	---	---	---	---
#2	6000	---	---	---	---	---	---
#3	6000	---	---	---	---	---	---

Method: JEAC12 Sample Name: ICSABF
 Run Time: 03/02/93 22:28:01
 Comment: 70148
 Mode: CONC Corr. Factor: 1

Operator: PMA

1604

Elem	AG3280	AL3082	BA4934	BE2348	CA3179	CO2288	CR2286
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avgc	.91361	487.40	.48449	.49557	456.75	.94775	.45164
SDev	.00255	.50	.00238	.00123	.51	.00230	.00415
%RSD	.27867	.10325	.49124	.24870	.11242	.24269	.91924
#1	.91080	487.25	.48396	.49425	457.33	.94658	.45253
#2	.91427	487.97	.48709	.49669	456.56	.95040	.44712
#3	.91576	486.99	.48241	.49577	456.36	.94627	.45528
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	1.0000	500.00	.5	.5	500.00	1.0000	.5
Range	20.000	20.000	20.000	20.000	20.000	20.000	20.000

Elem	CR2677	CU3247	FE2714	K 7664	MG2790	MN2576	NA5895
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avgc	.43749	.45636	177.62	-.15187	480.16	.45419	.01887
SDev	.00380	.00309	.30	.42123	.24	.00137	.01598
%RSD	.86892	.67714	.16865	-277.37	.04947	.30244	84.685
#1	.43969	.45279	177.92	.16489	479.96	.45340	.03370
#2	.43310	.45813	177.61	-.62990	480.42	.45577	.02095
#3	.43968	.45815	177.32	.00942	480.10	.45339	.00195
Errors	QC Pass	QC Pass	QC Pass	NOCHECK	QC Pass	QC Pass	NOCHECK
Value	.5	.5	200.00		500.00	.5	
Range	20.000	20.000	20.000		20.000	20.000	

Elem	NI2316	PB2203	SB2068	SE1960	V 2924	ZN2138	TI3349
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avgc	.85713	.94651	-.02440	.06049	.46393	.94108	-.00942
SDev	.00794	.02236	.03081	.02428	.00002	.00239	.00082
%RSD	.92578	2.3619	-126.29	40.138	.00323	.25429	-8.7185
#1	.85337	.94759	.00204	.08596	.46394	.94069	-.00988
#2	.86624	.92363	-.05823	.05792	.46391	.93890	-.00990
#3	.85177	.96831	-.01699	.03760	.46393	.94364	-.00847
Errors	QC Pass	QC Pass	NOCHECK	NOCHECK	QC Pass	QC Pass	NOCHECK
Value	1.0000	1.0000			.5	1.0000	
Range	20.000	20.000			20.000	20.000	

1685

File#	M02020	SN1899	AS1936
Units	ppm	ppm	ppm
Avg	-.00960	-.00488	.06336
SDev	.00585	.00920	.02411
%RSD	-60.886	-188.41	38.058

#1	-.00285	.00562	.06420
#2	-.01296	-.00874	.08704
#3	-.01299	-.01152	.03884

Errors	NOCHECK	NOCHECK	NOCHECK
Value			
Range			

IntStd	1	2	3	4	5	6	7
Mode	Time	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	---	---	---	---	---	---	---
Waylen	---	---	---	---	---	---	---
Avg	6000	---	---	---	---	---	---
SDev	.0000000	---	---	---	---	---	---
%RSD	.0000000	---	---	---	---	---	---
#1	6000	---	---	---	---	---	---
#2	6000	---	---	---	---	---	---
#3	6000	---	---	---	---	---	---

Method: JEACT2

Sample Name: DCV4 *1 ml 3/3*

Operator: DMA

Run Time: 03/02/93 22:34:06

1606

Comment: 70148

Mode: CONC Corr. Factor: 1

Elem	AL3280	AL3082	BA4934	BE2348	CA3179	CO2288	CO2286
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00001	.16339	.00000	-.00005	.16097	.00148	-.00221
SDev	.00077	.09680	.00000	.00001	.10569	.00029	.00070
%RSD	-7017.1	59.246	-24.390	-24.398	65.637	19.363	-31.497
#1	-.00016	.09154	.00000	-.00004	.08542	.00179	-.00261
#2	-.00069	.27346	.00000	-.00006	.28175	.00122	-.00141
#3	.00083	.12516	.00000	-.00005	.11575	.00143	-.00262
Errors Value Range	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK

Elem	CR2677	CU3247	FE2714	K 7664	MG2790	MN2576	NA5895
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00044	.00798	.07363	-.13816	.16180	.00080	-.01683
SDev	.00494	.00000	.01796	.37571	.10228	.00000	.00192
%RSD	1135.3	.00642	24.390	-271.94	63.214	.41292	-11.412
#1	-.00241	.00798	.05553	-.28231	.10275	.00080	-.01781
#2	-.00242	.00798	.09144	-.42045	.27991	.00079	-.01461
#3	.00614	.00798	.07392	.28828	.10275	.00080	-.01806
Errors Value Range	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK

Elem	NI2316	PB2203	*SB2068	SE1960	V 2924	ZN2138	TI3349
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00098	.00528	5.1011	-.03714	.00214	.00613	.00046
SDev	.00656	.00084	.0723	.02190	.00370	.00147	.00041
%RSD	-667.55	15.820	1.4179	-58.957	172.60	24.064	87.597
#1	-.00243	.00585	5.1835	-.05946	-.00001	.00766	-.00001
#2	-.00669	.00567	5.0717	-.01569	.00641	.00599	.00069
#3	.00618	.00432	5.0482	-.03628	.00002	.00473	.00070
Errors Value Range	NOCHECK	NOCHECK	QC Pass 5.0000 10.000	NOCHECK	NOCHECK	NOCHECK	NOCHECK

1007

Elem	MO2020	SN1899	AS1936
Units	ppm	ppm	ppm
Avgc	-1.00134	-1.00098	.02401
SDev	.00000	.00300	.01029
%RSD	-1.13453	-305.59	42.858
#1	-1.00134	.00207	.03088
#2	-1.00134	-1.00390	.02897
#3	-1.00134	-1.00113	.01218
Errors Value Range	NOCHECK	NOCHECK	NOCHECK

IntStd	1	2	3	4	5	6	7
Mode	Time	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	---	---	---	---	---	---	---
Wavlen	---	---	---	---	---	---	---
Avgc	6000	---	---	---	---	---	---
SDev	.0000000	---	---	---	---	---	---
%RSD	.0000000	---	---	---	---	---	---
#1	6000	---	---	---	---	---	---
#2	6000	---	---	---	---	---	---
#3	6000	---	---	---	---	---	---

Method: IFACT2 Sample Name: CCV4
Run Time: 03/02/93 22:40:12
Comment: 70148
Mode: CONC Corr. Factor: 1

Operator: DHA

1638

Elem	AG3280	AL3082	BA4934	BE2348	CA3179	CO2288	CO2286
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avgc	.59834	5.2569	5.1786	.12707	12.888	1.3018	1.2938
SDcv	.00098	.0319	.0179	.00078	.032	.0031	.0030
%RSD	.16362	.60724	.34657	.61176	.24560	.23691	.23300
#1	.59736	5.2317	5.1968	.12649	12.855	1.2983	1.2927
#2	.59835	5.2461	5.1610	.12676	12.891	1.3033	1.2915
#3	.59932	5.2928	5.1781	.12795	12.918	1.3039	1.2972
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.625	5.0000	5.0000	.125	12.500	1.2500	1.2500
Range	10.000	10.000	10.000	10.000	10.000	10.000	10.000

Elem	CR2677	CU3247	FE2714	K 7664	MS2790	MN2576	NA5895
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avgc	.50753	.62175	2.5998	12.785	12.799	1.2900	13.077
SDcv	.00447	.00178	.0755	.509	.036	.0014	.045
%RSD	.88109	.28605	2.9034	3.9848	.28336	.10697	.34667
#1	.50599	.62175	2.5357	12.197	12.761	1.2908	13.097
#2	.50402	.61997	2.6830	13.096	12.804	1.2884	13.025
#3	.51256	.62352	2.5807	13.061	12.833	1.2907	13.109
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.5	.625	2.5000	12.500	12.500	1.2500	12.500
Range	10.000	10.000	10.000	10.000	10.000	10.000	10.000

Elem	NI2316	PB2203	SB2068	SE1960	V 2924	ZN2138	TI3349
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avgc	1.2624	2.5783	-.02455	2.5712	1.2872	1.3093	-.00093
SDcv	.0094	.0166	.01980	.0517	.0025	.0037	.00071
%RSD	.74736	.64291	-80.645	1.9914	.19161	.28275	-76.218
#1	1.2636	2.5734	-.00479	2.5501	1.2851	1.3109	-.00163
#2	1.2524	2.5646	-.04438	2.5340	1.2866	1.3051	-.00022
#3	1.2711	2.5967	-.07147	2.6296	1.2899	1.3120	-.00093
Errors	QC Pass	QC Pass	NOCHECK	QC Pass	QC Pass	QC Pass	NOCHECK
Value	1.2500	2.5000		2.5000	1.2500	1.2500	
Range	10.000	10.000		10.000	10.000	10.000	

done
3/8

1609

Elem	MO2020	SN1897	AS1936
Units	ppm	ppm	ppm
Avg	-.00069	-.00842	2.6724
SDev	.00421	.01232	.0160
%RSD	-611.71	-146.27	.59740
#1	-.00204	-.02255	2.6540
#2	.00403	.00004	2.6827
#3	-.00405	-.00275	2.6904
Errors	NOCHECK	NOCHECK	QC Pass
Value			2.5000
Range			10.000

IntStd	1	2	3	4	5	6	7
Mode	Time	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	---	---	---	---	---	---	---
Wavlen	---	---	---	---	---	---	---
Avg	6000	---	---	---	---	---	---
SDev	.0000000	---	---	---	---	---	---
%RSD	.0000000	---	---	---	---	---	---
#1	6000	---	---	---	---	---	---
#2	6000	---	---	---	---	---	---
#3	6000	---	---	---	---	---	---

1611

Elem	MD2020	SN1899	AS1936
Units	ppm	ppm	ppm
Avg	0-.00135	0-.00333	0.02781
SDev	.00001	.00588	.00828
%RSD	-.54447	-177.51	29.779
#1	0-.00134	0.00138	0.03569
#2	0-.00134	0-.00141	0.01917
#3	0-.00135	0-.00990	0.02858
Errors	QC Fail	QC Fail	QC Fail
Value	.00000	.00000	.00000
Range	10.000	10.000	10.000

IntStd	1	2	3	4	5	6	7
Mode	Time	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	---	---	---	---	---	---	---
WavLen	---	---	---	---	---	---	---
Avg	6000	---	---	---	---	---	---
SDev	.0000000	---	---	---	---	---	---
%RSD	.0000000	---	---	---	---	---	---
#1	6000	---	---	---	---	---	---
#2	6000	---	---	---	---	---	---
#3	6000	---	---	---	---	---	---

Std. Prepped Date: 2/19/93/8:30 IEA Laboratories Date: 2/19/93
 200 Monroe Turnpike
 Start Run Time : 9:35 Monroe, Connecticut 06468 page of
 (203) 261-4458

1612

FURNACE DATA SHEET

Element: As I.D. Wt. File: Z116 Instrument 500N Analyst J. Muehens

Cup	Sample ID	% Sol.	Wt.V/Vol	Dil Factor	Sample Recovery	% Recovery	Flags	Value ug/L, mg/kg
5	ICV				52.0	104.0		52.0
1	ICB				-0.2			1.0 U
2	CRA				10.0	100.0		10.0
37	CCV(50)				52.2	104.4		52.2
38	CCB				-0.6			1.0 U
6	Z11602	100.0	100/100		2.1			2.1 B
6	Z11602A	100.0	100/100		18.7	83.0	W	
7	Z11602D	100.0	100/100		-0.3			1.0 U
7	Z11602DA	100.0	100/100		19.4	97.0		
8	Z11602S	100.0	100/100		-0.4			1.0 U
8	Z11602SA	100.0	100/100		19.2	96.0		
9	Z11601	100.0	100/100		39.2			39.2 <i>sm 2/24</i>
9	Z11601A	100.0	100/100		56.1	84.5	MSA	
10	Z11604	100.0	100/100		-0.0			1.0 U
10	Z11604A	100.0	100/100		20.3	101.5		
37	CCV(50)				48.9	97.8		48.9
38	CCB				-0.1			1.0 U
11	Z11605	100.0	100/100		-0.3			1.0 U
11	Z11605A	100.0	100/100		19.6	98.0		
12	Z11607	100.0	100/100		0.5			1.0 U
12	Z11607A	100.0	100/100		19.9	99.5		
13	RINSE	100.0	100/100		-1.0			1.0 U
13	RINSEA	100.0	100/100		19.7			19.7
14	PBW	100.0	100/100		-0.7			1.0 U
14	PBWA	100.0	100/100		19.8	99.0		
15	LCSW	100.0	100/100		52.4	104.8		52.4
15	LCSWA	100.0	100/100		69.0	83.0		
37	CCV(50)				52.0	104.0		52.0
38	CCB				-0.6			1.0 U
16	Z14809	100.0	100/100		-0.3			1.0 U MW-45
16	Z14809A	100.0	100/100		20.2	101.0		
17	Z14809D	100.0	100/100		0.2			1.0 U MW-45
17	Z14809DA	100.0	100/100		19.1	95.5		
18	Z14809S	100.0	100/100		36.5	91.2		36.5 MW-45
18	Z14809SA	100.0	100/100		54.5	90.0	<i>sm 2/24</i>	
19	Z14810	100.0	100/100		5.0			5.0 B MHW-1
19	Z14810A	100.0	100/100		23.2	91.0		
20	Z14811	100.0	100/100		1.2			1.2 B MW-43
20	Z14811A	100.0	100/100		19.7	92.5		
37	CCV(50)				48.3	96.6		48.3

Std. Prepped Date: 2/19/93/8:30

IEA Laboratories
200 Monroe Turnpike
Monroe, Connecticut 06468
(203) 261-4458

Date: 2/19/93

Start Run Time : 9:35

page of

1613

FURNACE DATA SHEET

Element: As I.D. Wt. File: Z116 Instrument 5100N Analyst J. Mubins

Cup	Sample ID	% Sol.	Wt.V/Vol	Dil Factor	Sample Recovery	% Recovery	Flags	Value ug/L, mg/kg
38	CCB				-0.4			1.0 U

=====
Multi. File: ASSETLPE.HMU Analyst: SM
Date: 02/19/93 Time: 09:51
Data File: Z116.DAT ID/Wt File: Z116.IDW 1614
=====

Element File: ASAUTSPK.GEL Element: As Wavelength: 193.7
Date: 02/19/93 Time: 09:55 Slit: 0.70 L
Data File: Z116.DAT ID/Wt File: Z116.IDW Lamp Current: 0
Technique: HGA Calib. Type: Linear Energy: 51

~~~~~
As ID: Calib. Blank Seq. No.: 00001 A/S Pos.: 1 Date: 02/19/93

Replicate 1 Time: 09:55
Peak Area (A-s): -0.001 Peak Height (A): 0.015
Background Pk Area (A-s): 0.100 Background Pk Height (A): 0.043
Blank Corrected Pk Area (A-s): -0.001

Replicate 2 Time: 09:58
Peak Area (A-s): 0.002 Peak Height (A): 0.011
Background Pk Area (A-s): 0.105 Background Pk Height (A): 0.045
Blank Corrected Pk Area (A-s): 0.002

Mean Pk Area (A-s): 0.001 SD: 0.0018 RSD(%): 263.53

Auto-zero performed.

~~~~~
As ID: Standard 1 Seq. No.: 00002 A/S Pos.: 2 Date: 02/19/93

Replicate 1 Time: 10:01
Peak Area (A-s): 0.093 Peak Height (A): 0.110
Background Pk Area (A-s): 0.115 Background Pk Height (A): 0.049
Blank Corrected Pk Area (A-s): 0.092

Replicate 2 Time: 10:04
Peak Area (A-s): 0.094 Peak Height (A): 0.111
Background Pk Area (A-s): 0.120 Background Pk Height (A): 0.050
Blank Corrected Pk Area (A-s): 0.093

Mean Pk Area (A-s): 0.093 SD: 0.0006 RSD(%): 0.69

Standard number 1 applied. [10.0]
Correlation coefficient: 1.00000 Slope: 0.0093 Int: 0.000

~~~~~
As ID: Standard 2 Seq. No.: 00003 A/S Pos.: 3 Date: 02/19/93

Replicate 1 Time: 10:07
Peak Area (A-s): 0.464 Peak Height (A): 0.468
Background Pk Area (A-s): 0.115 Background Pk Height (A): 0.054
Blank Corrected Pk Area (A-s): 0.464
Concentration (ug/L ): 50.0

Replicate 2 Time: 10:10
Peak Area (A-s): 0.445 Peak Height (A): 0.482
Background Pk Area (A-s): 0.119 Background Pk Height (A): 0.051
Blank Corrected Pk Area (A-s): 0.444

Concentration (ug/L ): 47.9

Mean Conc (ug/L ): 48.9 *S50* SD: 1.47

RSD(%): 3.00  
1615

Standard number 2 applied. [50.0]

Correlation coefficient: 0.99999 Slope: 0.0091 Int: 0.001

~~~~~  
As ID: Standard 3 Seq. No.: 00004 A/S Pos.: 4 Date: 02/19/93

Replicate 1 *S100* Time: 10:13
Peak Area (A-s): 0.876 Peak Height (A): 0.927
Background Pk Area (A-s): 0.138 Background Pk Height (A): 0.068
Blank Corrected Pk Area (A-s): 0.875
Concentration (ug/L): 96.4

Replicate 2 Time: 10:16
Peak Area (A-s): 0.864 Peak Height (A): 0.950
Background Pk Area (A-s): 0.139 Background Pk Height (A): 0.075
Blank Corrected Pk Area (A-s): 0.863
Concentration (ug/L): 95.1

Mean Conc (ug/L): 95.8 SD: 0.96 RSD(%): 1.00

Standard number 3 applied. [100.0]

Correlation coefficient: 0.99973 Slope: 0.0087 Int: 0.006

~~~~~  
As ID: ICV Seq. No.: 00005 A/S Pos.: 5 Date: 02/19/93

Replicate 1 Time: 10:19  
Peak Area (A-s): 0.456 Peak Height (A): 0.467  
Background Pk Area (A-s): 0.119 Background Pk Height (A): 0.050  
Blank Corrected Pk Area (A-s): 0.456  
Concentration (ug/L ): 51.7

Replicate 2 Time: 10:22  
Peak Area (A-s): 0.461 Peak Height (A): 0.450  
Background Pk Area (A-s): 0.117 Background Pk Height (A): 0.048  
Blank Corrected Pk Area (A-s): 0.460  
Concentration (ug/L ): 52.2

Mean Conc (ug/L ): 52.0 SD: 0.37 RSD(%): 0.72

QC sample is within range 45.0 - 55.0

~~~~~  
As ID: ICB Seq. No.: 00006 A/S Pos.: 1 Date: 02/19/93

Replicate 1 Time: 10:25
Peak Area (A-s): 0.005 Peak Height (A): 0.014
Background Pk Area (A-s): 0.093 Background Pk Height (A): 0.037
Blank Corrected Pk Area (A-s): 0.004
Concentration (ug/L): -0.2

Replicate 2 Time: 10:28
Peak Area (A-s): 0.006 Peak Height (A): 0.016
Background Pk Area (A-s): 0.097 Background Pk Height (A): 0.044
Blank Corrected Pk Area (A-s): 0.005

Concentration (ug/L): -0.1

1616

Mean Conc (ug/L): -0.2

SD: 0.10

RSD(%): 53.90

QC sample is within range

ICB

As ID: CRA

Seq. No.: 00007

A/S Pos.: 2

Date: 02/19/93

Replicate 1

Time: 10:31

Peak Area (A-s): 0.090

Peak Height (A): 0.092

Background Pk Area (A-s): 0.100

Background Pk Height (A): 0.041

Blank Corrected Pk Area (A-s): 0.090

Concentration (ug/L): 9.6

Replicate 2

Time: 10:34

Peak Area (A-s): 0.097

Peak Height (A): 0.091

Background Pk Area (A-s): 0.100

Background Pk Height (A): 0.039

Blank Corrected Pk Area (A-s): 0.097

Concentration (ug/L): 10.4

Mean Conc (ug/L): 10.0

SD: 0.58

RSD(%): 5.83

QC sample is within range

As ID: CCV(50)

Seq. No.: 00008

A/S Pos.: 37

Date: 02/19/93

Replicate 1

Time: 10:37

Peak Area (A-s): 0.458

Peak Height (A): 0.445

Background Pk Area (A-s): 0.120

Background Pk Height (A): 0.049

Blank Corrected Pk Area (A-s): 0.457

Concentration (ug/L): 51.9

Replicate 2

Time: 10:40

Peak Area (A-s): 0.463

Peak Height (A): 0.437

Background Pk Area (A-s): 0.118

Background Pk Height (A): 0.048

Blank Corrected Pk Area (A-s): 0.463

Concentration (ug/L): 52.5

Mean Conc (ug/L): 52.2

SD: 0.44

RSD(%): 0.85

QC sample is within range 45.0 - 55.0

As ID: CCB

Seq. No.: 00009

A/S Pos.: 38

Date: 02/19/93

Replicate 1

Time: 10:43

Peak Area (A-s): 0.003

Peak Height (A): 0.016

Background Pk Area (A-s): 0.093

Background Pk Height (A): 0.039

Blank Corrected Pk Area (A-s): 0.002

Concentration (ug/L): -0.5

Replicate 2

Time: 10:46

Peak Area (A-s): 0.001

Peak Height (A): 0.015

Background Pk Area (A-s): 0.094

Background Pk Height (A): 0.042

Blank Corrected Pk Area (A-s): 0.001

Concentration (ug/L): -0.6

Mean Conc (ug/L): -0.6 SD: 0.12 RSD(%): 20.82

QC sample is within range

CCB

1617

As ID: Z11602 Seq. No.: 00010 A/S Pos.: 6 Date: 02/19/93

Replicate 1 Time: 10:49
Peak Area (A-s): 0.025 Peak Height (A): 0.033
Background Pk Area (A-s): 0.385 Background Pk Height (A): 0.226
Blank Corrected Pk Area (A-s): 0.024
Concentration (ug/L): 2.0

Replicate 2 Time: 10:52
Peak Area (A-s): 0.025 Peak Height (A): 0.038
Background Pk Area (A-s): 0.386 Background Pk Height (A): 0.223
Blank Corrected Pk Area (A-s): 0.024
Concentration (ug/L): 2.1

Mean Conc (ug/L): 2.1 SD: 0.03 RSD(%): 1.53

As ID: Z11602 A Seq. No.: 00011 A/S Pos.: 6 Date: 02/19/93

Replicate 1 Time: 10:55
Peak Area (A-s): 0.174 Peak Height (A): 0.184
Background Pk Area (A-s): 0.408 Background Pk Height (A): 0.274
Blank Corrected Pk Area (A-s): 0.173
Concentration (ug/L): 19.2

3/3

Replicate 2 Time: 10:59
Peak Area (A-s): 0.166 Peak Height (A): 0.170
Background Pk Area (A-s): 0.372 Background Pk Height (A): 0.263
Blank Corrected Pk Area (A-s): 0.165
Concentration (ug/L): 18.3

Mean Conc (ug/L): 18.7 SD: 0.67 RSD(%): 3.55

Recovery is 83.4% (outside of specified limits)

As ID: Z11602D Seq. No.: 00012 A/S Pos.: 7 Date: 02/19/93

Replicate 1 Time: 11:02
Peak Area (A-s): 0.002 Peak Height (A): 0.013
Background Pk Area (A-s): 0.159 Background Pk Height (A): 0.048
Blank Corrected Pk Area (A-s): 0.001
Concentration (ug/L): -0.6

Replicate 2 Time: 11:05
Peak Area (A-s): 0.007 Peak Height (A): 0.014
Background Pk Area (A-s): 0.128 Background Pk Height (A): 0.044
Blank Corrected Pk Area (A-s): 0.006
Concentration (ug/L): 0.0

Mean Conc (ug/L): -0.3 SD: 0.44 RSD(%): 152.70

As ID: Z11602D *A* Seq. No.: 00013 A/S Pos.: 7 Date: 02/19/93
Time: 11:08 1618
Replicate 1
Peak Area (A-s): 0.175 Peak Height (A): 0.181
Background Pk Area (A-s): 0.138 Background Pk Height (A): 0.046
Blank Corrected Pk Area (A-s): 0.174
Concentration (ug/L): 19.3
Replicate 2
Peak Area (A-s): 0.176 Peak Height (A): 0.173
Background Pk Area (A-s): 0.141 Background Pk Height (A): 0.047
Blank Corrected Pk Area (A-s): 0.176
Concentration (ug/L): 19.5
Mean Conc (ug/L): 19.4 SD: 0.11 RSD(%): 0.55
Recovery is 98.5%

As ID: Z11602S Seq. No.: 00014 *2/15* A/S Pos.: 8 Date: 02/19/93
Time: 11:15
Replicate 1
Peak Area (A-s): 0.002 Peak Height (A): 0.011
Background Pk Area (A-s): 0.131 Background Pk Height (A): 0.041
Blank Corrected Pk Area (A-s): 0.002
Concentration (ug/L): -0.5
Replicate 2
Peak Area (A-s): 0.005 Peak Height (A): 0.011
Background Pk Area (A-s): 0.128 Background Pk Height (A): 0.045
Blank Corrected Pk Area (A-s): 0.004
Concentration (ug/L): -0.2
Mean Conc (ug/L): -0.4 SD: 0.21 RSD(%): 58.80

As ID: Z11602S Seq. No.: 00015 A/S Pos.: 8 Date: 02/19/93
Time: 11:22
Replicate 1
Peak Area (A-s): 0.176 Peak Height (A): 0.172
Background Pk Area (A-s): 0.137 Background Pk Height (A): 0.045
Blank Corrected Pk Area (A-s): 0.175
Concentration (ug/L): 19.4
Replicate 2
Peak Area (A-s): 0.172 Peak Height (A): 0.190
Background Pk Area (A-s): 0.171 Background Pk Height (A): 0.056
Blank Corrected Pk Area (A-s): 0.172
Concentration (ug/L): 19.0
Mean Conc (ug/L): 19.2 SD: 0.27 RSD(%): 1.42
Recovery is 97.9%

As ID: Z11601 Seq. No.: 00016 A/S Pos.: 9 Date: 02/19/93
Time: 11:28
Replicate 1

Peak Area (A-s): 0.346
Background Pk Area (A-s): 0.147 *Z11601*
Blank Corrected Pk Area (A-s): 0.346
Concentration (ug/L): 39.0

Peak Height (A): 0.286
Background Pk Height (A): 0.054

1619

Replicate 2
Peak Area (A-s): 0.349
Background Pk Area (A-s): 0.152
Blank Corrected Pk Area (A-s): 0.348
Concentration (ug/L): 39.3

Time: 11:31
Peak Height (A): 0.289
Background Pk Height (A): 0.054

Mean Conc (ug/L): 39.2

SD: 0.18

RSD(%): 0.45

As ID: Z11601A Seq. No.: 00017 A/S Pos.: 9 Date: 02/19/93

Replicate 1
Peak Area (A-s): 0.494
Background Pk Area (A-s): 0.160
Blank Corrected Pk Area (A-s): 0.493
Concentration (ug/L): 56.0

Time: 11:35
Peak Height (A): 0.454
Background Pk Height (A): 0.062

Replicate 2
Peak Area (A-s): 0.496
Background Pk Area (A-s): 0.188
Blank Corrected Pk Area (A-s): 0.495
Concentration (ug/L): 56.2

Time: 11:38
Peak Height (A): 0.525
Background Pk Height (A): 0.070

3/3

Mean Conc (ug/L): 56.1

SD: 0.15

RSD(%): 0.27

Recovery is 84.8% (outside of specified limits)

As ID: Z11604 Seq. No.: 00018 A/S Pos.: 10 Date: 02/19/93

Replicate 1
Peak Area (A-s): 0.011
Background Pk Area (A-s): 0.123
Blank Corrected Pk Area (A-s): 0.010
Concentration (ug/L): 0.4

Time: 11:41
Peak Height (A): 0.015
Background Pk Height (A): 0.042

Replicate 2
Peak Area (A-s): 0.004
Background Pk Area (A-s): 0.123
Blank Corrected Pk Area (A-s): 0.003
Concentration (ug/L): -0.4

Time: 11:44
Peak Height (A): 0.016
Background Pk Height (A): 0.042

Mean Conc (ug/L): 0.0

SD: 0.55

RSD(%): 2200.76

As ID: Z11604A Seq. No.: 00019 A/S Pos.: 10 Date: 02/19/93

Replicate 1
Peak Area (A-s): 0.185
Background Pk Area (A-s): 0.134
Blank Corrected Pk Area (A-s): 0.184
Concentration (ug/L): 20.5

Time: 11:48
Peak Height (A): 0.172
Background Pk Height (A): 0.049

Replicate 2

Time: 11:52

Peak Area (A-s): 0.183
Background Pk Area (A-s): 0.168
Blank Corrected Pk Area (A-s): 0.182
Concentration (ug/L): 20.2

Peak Height (A): 0.190
Background Pk Height (A): 0.057

Mean Conc (ug/L): 20.3

SD: 0.18

1620

RSD(%): 0.90

Recovery is 101.5%

~~2 N604A~~

As ID: CCV(50) Seq. No.: 00020 A/S Pos.: 37 Date: 02/19/93

Replicate 1
Peak Area (A-s): 0.414
Background Pk Area (A-s): 0.107
Blank Corrected Pk Area (A-s): 0.413
Concentration (ug/L): 46.8

Time: 11:55
Peak Height (A): 0.352
Background Pk Height (A): 0.041

Replicate 2
Peak Area (A-s): 0.450
Background Pk Area (A-s): 0.115
Blank Corrected Pk Area (A-s): 0.449
Concentration (ug/L): 51.0

Time: 11:58
Peak Height (A): 0.414
Background Pk Height (A): 0.045

Mean Conc (ug/L): 48.9

SD: 2.91

RSD(%): 5.95

QC sample is within range 45.0 - 55.0

As ID: CCB Seq. No.: 00021 A/S Pos.: 38 Date: 02/19/93

Replicate 1
Peak Area (A-s): 0.007
Background Pk Area (A-s): 0.090
Blank Corrected Pk Area (A-s): 0.007
Concentration (ug/L): 0.0

Time: 12:01
Peak Height (A): 0.015
Background Pk Height (A): 0.035

Replicate 2
Peak Area (A-s): 0.006
Background Pk Area (A-s): 0.090
Blank Corrected Pk Area (A-s): 0.005
Concentration (ug/L): -0.2

Time: 12:04
Peak Height (A): 0.013
Background Pk Height (A): 0.036

Mean Conc (ug/L): -0.1

SD: 0.14

RSD(%): 269.46

QC sample is within range

As ID: Z11605 Seq. No.: 00022 A/S Pos.: 11 Date: 02/19/93

Replicate 1
Peak Area (A-s): 0.004
Background Pk Area (A-s): 0.124
Blank Corrected Pk Area (A-s): 0.003
Concentration (ug/L): -0.4

Time: 12:07
Peak Height (A): 0.016
Background Pk Height (A): 0.048

Replicate 2
Peak Area (A-s): 0.005
Background Pk Area (A-s): 0.120

Time: 12:10
Peak Height (A): 0.015
Background Pk Height (A): 0.043

~~2 N604A~~

Z11605

Blank Corrected Pk Area (A-s): 0.004
Concentration (ug/L): -0.2

Mean Conc (ug/L): -0.3 SD: 0.11 RSD(%): 38.70

As ID: Z11605 A Seq. No.: 00023 A/S Pos.: 11 Date: 02/19/93

Replicate 1
Peak Area (A-s): 0.178
Background Pk Area (A-s): 0.141
Blank Corrected Pk Area (A-s): 0.177
Concentration (ug/L): 19.6
Time: 12:13
Peak Height (A): 0.182
Background Pk Height (A): 0.051

Replicate 2
Peak Area (A-s): 0.177
Background Pk Area (A-s): 0.132
Blank Corrected Pk Area (A-s): 0.177
Concentration (ug/L): 19.6
Time: 12:17
Peak Height (A): 0.176
Background Pk Height (A): 0.045

Mean Conc (ug/L): 19.6 SD: 0.02 RSD(%): 0.09

Recovery is 99.6%

As ID: Z11607 Seq. No.: 00024 A/S Pos.: 12 Date: 02/19/93

Replicate 1
Peak Area (A-s): 0.012
Background Pk Area (A-s): 0.132
Blank Corrected Pk Area (A-s): 0.012
Concentration (ug/L): 0.6
Time: 12:20
Peak Height (A): 0.018
Background Pk Height (A): 0.045

Z11607

Replicate 2
Peak Area (A-s): 0.010
Background Pk Area (A-s): 0.154
Blank Corrected Pk Area (A-s): 0.009
Concentration (ug/L): 0.3
Time: 12:23
Peak Height (A): 0.021
Background Pk Height (A): 0.055

Mean Conc (ug/L): 0.5 SD: 0.21 RSD(%): 47.29

As ID: Z11607 A Seq. No.: 00025 A/S Pos.: 12 Date: 02/19/93

Replicate 1
Peak Area (A-s): 0.180
Background Pk Area (A-s): 0.158
Blank Corrected Pk Area (A-s): 0.179
Concentration (ug/L): 19.9
Time: 12:26
Peak Height (A): 0.189
Background Pk Height (A): 0.061

Replicate 2
Peak Area (A-s): 0.180
Background Pk Area (A-s): 0.156
Blank Corrected Pk Area (A-s): 0.180
Concentration (ug/L): 19.9
Time: 12:30
Peak Height (A): 0.208
Background Pk Height (A): 0.059

Mean Conc (ug/L): 19.9 SD: 0.02 RSD(%): 0.09

Recovery is 97.3%

As ID: RINSE Seq. No.: 00026 A/S Pos.: 13 Date: 02/19/93

Replicate 1 Time: 12:33
 Peak Area (A-s): -0.003 Peak Height (A): 0.013
 Background Pk Area (A-s): 0.092 Background Pk Height (A): 0.036
 Blank Corrected Pk Area (A-s): -0.003
 Concentration (ug/L): -1.1

Replicate 2 Time: 12:36
 Peak Area (A-s): -0.001 Peak Height (A): 0.012
 Background Pk Area (A-s): 0.091 Background Pk Height (A): 0.037
 Blank Corrected Pk Area (A-s): -0.002
 Concentration (ug/L): -0.9

Mean Conc (ug/L): -1.0 SD: 0.15 RSD(%): 15.39

As ID: RINSE Seq. No.: 00027 A/S Pos.: 13 Date: 02/19/93

Replicate 1 Time: 12:39
 Peak Area (A-s): 0.175 Peak Height (A): 0.193
 Background Pk Area (A-s): 0.098 Background Pk Height (A): 0.034
 Blank Corrected Pk Area (A-s): 0.175
 Concentration (ug/L): 19.4

Replicate 2 Time: 12:43
 Peak Area (A-s): 0.182 Peak Height (A): 0.202
 Background Pk Area (A-s): 0.100 Background Pk Height (A): 0.038
 Blank Corrected Pk Area (A-s): 0.181
 Concentration (ug/L): 20.1

Mean Conc (ug/L): 19.7 SD: 0.52 RSD(%): 2.65

Recovery is 103.6%

As ID: PBW Seq. No.: 00028 A/S Pos.: 14 Date: 02/19/93

Replicate 1 Time: 12:46
 Peak Area (A-s): 0.002 Peak Height (A): 0.011
 Background Pk Area (A-s): 0.096 Background Pk Height (A): 0.037
 Blank Corrected Pk Area (A-s): 0.002
 Concentration (ug/L): -0.5

Replicate 2 Time: 12:49
 Peak Area (A-s): -0.000 Peak Height (A): 0.013
 Background Pk Area (A-s): 0.099 Background Pk Height (A): 0.038
 Blank Corrected Pk Area (A-s): -0.001
 Concentration (ug/L): -0.8

Mean Conc (ug/L): -0.7 SD: 0.21 RSD(%): 31.42

As ID: PBW Seq. No.: 00029 A/S Pos.: 14 Date: 02/19/93

Replicate 1 Time: 12:52
 Peak Area (A-s): 0.180 Peak Height (A): 0.194
 Background Pk Area (A-s): 0.113 Background Pk Height (A): 0.041

Blank Corrected Pk Area (A-s): 0.180
Concentration (ug/L): 19.9

PBWA

Replicate 2
Peak Area (A-s): 0.178
Background Pk Area (A-s): 0.113
Blank Corrected Pk Area (A-s): 0.177
Concentration (ug/L): 19.6

Time: 12:56
Peak Height (A): 0.198
Background Pk Height (A): 0.044

1623

Mean Conc (ug/L): 19.8 SD: 0.21 RSD(%): 1.05

Recovery is 102.2%

~~~~~  
As ID: LCSW Seq. No.: 00030 A/S Pos.: 15 Date: 02/19/93

Replicate 1  
Peak Area (A-s): 0.464  
Background Pk Area (A-s): 0.130  
Blank Corrected Pk Area (A-s): 0.464  
Concentration (ug/L ): 52.6

Time: 12:59  
Peak Height (A): 0.438  
Background Pk Height (A): 0.057

Replicate 2  
Peak Area (A-s): 0.461  
Background Pk Area (A-s): 0.133  
Blank Corrected Pk Area (A-s): 0.460  
Concentration (ug/L ): 52.2

Time: 13:02  
Peak Height (A): 0.455  
Background Pk Height (A): 0.054

Mean Conc (ug/L ): 52.4 SD: 0.28 RSD(%): 0.53

~~~~~  
is ID: LCSW A Seq. No.: 00031 A/S Pos.: 15 Date: 02/19/93

Replicate 1
Peak Area (A-s): 0.618
Background Pk Area (A-s): 0.138
Blank Corrected Pk Area (A-s): 0.617
Concentration (ug/L): 70.3

Time: 13:05
Peak Height (A): 0.638
Background Pk Height (A): 0.060

Replicate 2
Peak Area (A-s): 0.596
Background Pk Area (A-s): 0.144
Blank Corrected Pk Area (A-s): 0.596
Concentration (ug/L): 67.8

Time: 13:09
Peak Height (A): 0.639
Background Pk Height (A): 0.065

Mean Conc (ug/L): 69.0 SD: 1.77 RSD(%): 2.56

Recovery is 63.0% (outside of specified limits)

~~~~~  
As ID: CCV(50) Seq. No.: 00032 A/S Pos.: 37 Date: 02/19/93

Replicate 1  
Peak Area (A-s): 0.451  
Background Pk Area (A-s): 0.130  
Blank Corrected Pk Area (A-s): 0.450  
Concentration (ug/L ): 51.0

Time: 13:12  
Peak Height (A): 0.397  
Background Pk Height (A): 0.050

Replicate 2 Time: 13:15

Peak Area (A-s): 0.468  
Background Pk Area (A-s): 0.148  
Blank Corrected Pk Area (A-s): 0.467  
Concentration (ug/L ): 53.0

Peak Height (A): 0.496  
Background Pk Height (A): 0.055

1624

CCV(50)

Mean Conc (ug/L ): 52.0

SD: 1.38

RSD(%): 2.66

QC sample is within range 45.0 - 55.0

As ID: CCB Seq. No.: 00033 A/S Pos.: 38 Date: 02/19/93

Replicate 1  
Peak Area (A-s): 0.001  
Background Pk Area (A-s): 0.112  
Blank Corrected Pk Area (A-s): 0.000  
Concentration (ug/L ): -0.7

Time: 13:18  
Peak Height (A): 0.012  
Background Pk Height (A): 0.047

Replicate 2  
Peak Area (A-s): 0.002  
Background Pk Area (A-s): 0.106  
Blank Corrected Pk Area (A-s): 0.001  
Concentration (ug/L ): -0.6

Time: 13:21  
Peak Height (A): 0.013  
Background Pk Height (A): 0.043

Mean Conc (ug/L ): -0.6

SD: 0.09

RSD(%): 14.36

QC sample is within range

As ID: Z14809 Seq. No.: 00034 A/S Pos.: 16 Date: 02/19/93

Replicate 1  
Peak Area (A-s): 0.002  
Background Pk Area (A-s): 0.148  
Blank Corrected Pk Area (A-s): 0.001  
Concentration (ug/L ): -0.6

Time: 13:24  
Peak Height (A): 0.016  
Background Pk Height (A): 0.054

Replicate 2  
Peak Area (A-s): 0.007  
Background Pk Area (A-s): 0.143  
Blank Corrected Pk Area (A-s): 0.006  
Concentration (ug/L ): -0.0

Time: 13:27  
Peak Height (A): 0.017  
Background Pk Height (A): 0.050

Mean Conc (ug/L ): -0.3

SD: 0.41

RSD(%): 139.80

As ID: Z14809 A Seq. No.: 00035 A/S Pos.: 16 Date: 02/19/93

Replicate 1  
Peak Area (A-s): 0.181  
Background Pk Area (A-s): 0.158  
Blank Corrected Pk Area (A-s): 0.181  
Concentration (ug/L ): 20.0

Time: 13:31  
Peak Height (A): 0.199  
Background Pk Height (A): 0.060

Replicate 2  
Peak Area (A-s): 0.184  
Background Pk Area (A-s): 0.155  
Blank Corrected Pk Area (A-s): 0.183  
Concentration (ug/L ): 20.4

Time: 13:34  
Peak Height (A): 0.191  
Background Pk Height (A): 0.062

Mean Conc (ug/L ): 20.2 SD: 0.22 RSD(%): 1.08

Recovery is 102.5%

1625

≈ 14809 A

As ID: Z14809D *A* *3/2/24* Seq. No.: 00036 A/S Pos.: 17 Date: 02/19/

Replicate 1 Time: 13:37  
Peak Area (A-s): 0.007 *MW-45* Peak Height (A): 0.019  
Background Pk Area (A-s): 0.146 Background Pk Height (A): 0.057  
Blank Corrected Pk Area (A-s): 0.006  
Concentration (ug/L ): 0.0

Replicate 2 Time: 13:40  
Peak Area (A-s): 0.010 Peak Height (A): 0.021  
Background Pk Area (A-s): 0.149 Background Pk Height (A): 0.055  
Blank Corrected Pk Area (A-s): 0.009  
Concentration (ug/L ): 0.4

Mean Conc (ug/L ): 0.2 SD: 0.25 RSD(%): 128.3

As ID: Z14809D *A* Seq. No.: 00037 A/S Pos.: 17 Date: 02/19/

Replicate 1 Time: 13:44  
Peak Area (A-s): 0.177 Peak Height (A): 0.235  
Background Pk Area (A-s): 0.185 Background Pk Height (A): 0.069  
Blank Corrected Pk Area (A-s): 0.177  
Concentration (ug/L ): 19.6

Replicate 2 Time: 13:47  
Peak Area (A-s): 0.168 Peak Height (A): 0.208  
Background Pk Area (A-s): 0.172 Background Pk Height (A): 0.067  
Blank Corrected Pk Area (A-s): 0.167  
Concentration (ug/L ): 18.5

Mean Conc (ug/L ): 19.1 SD: 0.76 RSD(%): 3.97

Recovery is 94.4%

As ID: Z14809S Seq. No.: 00038 A/S Pos.: 18 Date: 02/19/

Replicate 1 Time: 13:50  
Peak Area (A-s): 0.321 *MW-45* Peak Height (A): 0.355  
Background Pk Area (A-s): 0.154 Background Pk Height (A): 0.071  
Blank Corrected Pk Area (A-s): 0.321  
Concentration (ug/L ): 36.2

Replicate 2 Time: 13:53  
Peak Area (A-s): 0.327 Peak Height (A): 0.339  
Background Pk Area (A-s): 0.135 Background Pk Height (A): 0.059  
Blank Corrected Pk Area (A-s): 0.326  
Concentration (ug/L ): 36.8

Mean Conc (ug/L ): 36.5 SD: 0.44 RSD(%): 1.21

~~~~~  
As ID: Z14809S Seq. No.: 00039 A/S Pos.: 18 Date: 02/19/1626
Replicate 1 Time: 13:56
Peak Area (A-s): 0.495 Peak Height (A): 0.561
Background Pk Area (A-s): 0.196 Background Pk Height (A): 0.085
Blank Corrected Pk Area (A-s): 0.495
Concentration (ug/L): 56.2
Replicate 2 Time: 14:00
Peak Area (A-s): 0.466 Peak Height (A): 0.530
Background Pk Area (A-s): 0.156 *2/24* Background Pk Height (A): 0.069
Blank Corrected Pk Area (A-s): 0.465
Concentration (ug/L): 52.8
Mean Conc (ug/L): 54.5 SD: 2.42 RSD(%): 4.44
Recovery is 90.1%

~~~~~  
As ID: Z14810 Seq. No.: 00040 A/S Pos.: 19 Date: 02/19/  
*MHW-1*  
Replicate 1 Time: 14:03  
Peak Area (A-s): 0.051 Peak Height (A): 0.049  
Background Pk Area (A-s): 0.180 Background Pk Height (A): 0.052  
Blank Corrected Pk Area (A-s): 0.050  
Concentration (ug/L ): 5.1  
Replicate 2 Time: 14:06  
Peak Area (A-s): 0.050 Peak Height (A): 0.047  
Background Pk Area (A-s): 0.178 Background Pk Height (A): 0.053  
Blank Corrected Pk Area (A-s): 0.049  
Concentration (ug/L ): 5.0  
Mean Conc (ug/L ): 5.0 SD: 0.07 RSD(%): 1.32

~~~~~  
As ID: Z14810 *A* Seq. No.: 00041 A/S Pos.: 19 Date: 02/19/
Replicate 1 Time: 14:09
Peak Area (A-s): 0.212 Peak Height (A): 0.212
Background Pk Area (A-s): 0.198 Background Pk Height (A): 0.070
Blank Corrected Pk Area (A-s): 0.211
Concentration (ug/L): 23.6
Replicate 2 Time: 14:13
Peak Area (A-s): 0.205 Peak Height (A): 0.200
Background Pk Area (A-s): 0.153 Background Pk Height (A): 0.060
Blank Corrected Pk Area (A-s): 0.205
Concentration (ug/L): 22.8
Mean Conc (ug/L): 23.2 SD: 0.55 RSD(%): 2.37
Recovery is 91.0%

~~~~~  
As ID: Z14811 Seq. No.: 00042 A/S Pos.: 20 Date: 02/19/  
Replicate 1 *MW-43* Time: 14:16

Peak Area (A-s): 0.018  
Background Pk Area (A-s): 0.230  
Blank Corrected Pk Area (A-s): 0.018  
Concentration (ug/L ): 1.3

Peak Height (A): 0.024  
Background Pk Height (A): 0.142

1627

Z14811 MW-43

Replicate 2  
Peak Area (A-s): 0.016  
Background Pk Area (A-s): 0.234  
Blank Corrected Pk Area (A-s): 0.015  
Concentration (ug/L ): 1.0

Time: 14:19  
Peak Height (A): 0.027  
Background Pk Height (A): 0.129

Mean Conc (ug/L ): 1.2 SD: 0.22 RSD(%): 18.4%

As ID: Z14811 A Seq. No.: 00043 A/S Pos.: 20 Date: 02/19/

Replicate 1  
Peak Area (A-s): 0.175  
Background Pk Area (A-s): 0.251  
Blank Corrected Pk Area (A-s): 0.175  
Concentration (ug/L ): 19.4

Time: 14:22  
Peak Height (A): 0.202  
Background Pk Height (A): 0.137

Replicate 2  
Peak Area (A-s): 0.180  
Background Pk Area (A-s): 0.248  
Blank Corrected Pk Area (A-s): 0.179  
Concentration (ug/L ): 19.9

Time: 14:26  
Peak Height (A): 0.201  
Background Pk Height (A): 0.128

Mean Conc (ug/L ): 19.7 SD: 0.38 RSD(%): 1.92

Recovery is 92.4%

As ID: CCV(50) Seq. No.: 00044 A/S Pos.: 37 Date: 02/19/

Replicate 1  
Peak Area (A-s): 0.420  
Background Pk Area (A-s): 0.147  
Blank Corrected Pk Area (A-s): 0.419  
Concentration (ug/L ): 47.5

Time: 14:29  
Peak Height (A): 0.396  
Background Pk Height (A): 0.051

Replicate 2  
Peak Area (A-s): 0.434  
Background Pk Area (A-s): 0.134  
Blank Corrected Pk Area (A-s): 0.434  
Concentration (ug/L ): 49.1

Time: 14:32  
Peak Height (A): 0.449  
Background Pk Height (A): 0.053

Mean Conc (ug/L ): 48.3 SD: 1.20 RSD(%): 2.47

QC sample is within range 45.0 - 55.0

As ID: CCB Seq. No.: 00045 A/S Pos.: 38 Date: 02/19/

Replicate 1  
Peak Area (A-s): 0.002  
Background Pk Area (A-s): 0.132  
Blank Corrected Pk Area (A-s): 0.002  
Concentration (ug/L ): -0.5

Time: 14:35  
Peak Height (A): 0.018  
Background Pk Height (A): 0.043



Replicate 2  
Peak Area (A-s): 0.005  
Background Pk Area (A-s): 0.130  
Blank Corrected Pk Area (A-s): 0.004  
Concentration (ug/L ): -0.2

Time: 14:38  
Peak Height (A): 0.014  
Background Pk Height (A): 0.049

1023

Mean Conc (ug/L ): -0.4

SD: 0.21

RSD(%): 54.87

QC sample is within range

CCB

2 19 93/0830

2 19 93

1001

( )

1629

Sample No.

D. No. File: Z148

Instrument: 5100

Analyst: JFF/Moe

| Sample ID | % Sol. | Wt./V | Vol | Factor | Recovery | X | Recovery | Flags |
|-----------|--------|-------|-----|--------|----------|---|----------|-------|
|-----------|--------|-------|-----|--------|----------|---|----------|-------|

|               |                    |                  |                    |  |  |                 |                 |                  |
|---------------|--------------------|------------------|--------------------|--|--|-----------------|-----------------|------------------|
| 1             | 100                |                  |                    |  |  | 54.2            | 105.4           | 54.2             |
| 1             | 100                |                  |                    |  |  | 1.3             |                 | 1.3 B            |
| 2             | 100A               |                  |                    |  |  | 10.8            | 108.0           | 10.8             |
| 37            | CCV(50)            |                  |                    |  |  | 52.8            | 105.6           | 52.8             |
| 38            | CCB                |                  |                    |  |  | 0.9             |                 | 1.0 U            |
| 6             | Z14812 MW-44       | 100.0            | 100/100            |  |  | 2.0             |                 | 2.0 B            |
| 6             | Z14812A            | 100.0            | 100/100            |  |  | 18.4            | 82.0            | W                |
| 7             | Z14813 MW-46       | 100.0            | 100/100            |  |  | 10.9            |                 | 10.9             |
| 7             | Z14813A            | 100.0            | 100/100            |  |  | 29.6            | 93.5            |                  |
| 8             | Z14814 MW-35       | 100.0            | 100/100            |  |  | 14.4            |                 | <del>14.4</del>  |
| 8             | Z14814A            | 100.0            | 100/100            |  |  | 30.1            | 78.5            | MSA              |
| 9             | Z14816 MHW-2       | 100.0            | 100/100            |  |  | 2.8             |                 | 2.8 B            |
| 9             | Z14816A            | 100.0            | 100/100            |  |  | 22.7            | 99.5            |                  |
| 10            | Z14817 REPLICATE   | 100.0            | 100/100            |  |  | 1.2             |                 | 1.2 B            |
| 10            | Z14817A            | 100.0            | 100/100            |  |  | 20.6            | 97.0            |                  |
| 37            | CCV(50)            |                  |                    |  |  | 50.3            | 100.6           | 50.3             |
| 38            | CCB                |                  |                    |  |  | 1.3             |                 | 1.3 B            |
| 11            | Z14818 MW-1        | 100.0            | 100/100            |  |  | 2.7             |                 | 2.7 B            |
| 11            | Z14818A            | 100.0            | 100/100            |  |  | 21.0            | 91.5            |                  |
| 12            | Z14820 MW-47       | 100.0            | 100/100            |  |  | 2.1             |                 | 2.1 B            |
| 12            | Z14820A            | 100.0            | 100/100            |  |  | 18.6            | 82.5            | W                |
| <del>13</del> | <del>Z14821</del>  | <del>100.0</del> | <del>100/100</del> |  |  | <del>3.6</del>  |                 | <del>3.6 B</del> |
| 13            | Z14821A            | 100.0            | 100/100            |  |  | 20.7            | 85.5            |                  |
| 14            | Z14822             | 100.0            | 100/100            |  |  | 1.2             |                 | 1.2 B            |
| 14            | Z14822A            | 100.0            | 100/100            |  |  | 19.6            | 92.0            |                  |
| 15            | Z14823             | 100.0            | 100/100            |  |  | 0.4             |                 | 1.0 U            |
| <del>15</del> | <del>Z14823A</del> | <del>100.0</del> | <del>100/100</del> |  |  | <del>18.7</del> | <del>93.5</del> |                  |
| 37            | CCV(50)            |                  |                    |  |  | 51.1            | 102.2           | 51.1             |
| 38            | CCB                |                  |                    |  |  | 1.0             |                 | 1.0 B            |
| <del>16</del> | <del>Z14827</del>  | <del>100.0</del> | <del>100/100</del> |  |  | <del>5.4</del>  |                 | <del>5.4 B</del> |
| 16            | Z14827A            | 100.0            | 100/100            |  |  | 26.2            | 104.0           |                  |
| 37            | CCV(50)            |                  |                    |  |  | 49.8            | 99.6            | 49.8             |
| <del>38</del> | <del>CCB</del>     |                  |                    |  |  | <del>0.7</del>  |                 | <del>1.0 U</del> |

W 3/3

W 3/3

=====  
Multi. File: ASSETLPB.HMU      Analyst: J.N.      1630  
Date: 02/19/93      Time: 09:57  
Data File: Z148.DAT      ID/Wt File: Z148.IDW  
=====

-----  
Element File: ASAUTSPK.GEL      Element: As      Wavelength: 193.7  
Date: 02/19/93      Time: 10:01      Slit: 0.70 L  
Data File: Z148.DAT      ID/Wt File: Z148.IDW      Lamp Current: 0  
Technique: HGA      Calib. Type: Linear      Energy: 54  
-----

~~~~~  
As ID: Calib. Blank Seq. No.: 00001 A/S Pos.: 1 Date: 02/19/93

Replicate 1 *SO* Time: 10:01
Peak Area (A-s): -0.002 Peak Height (A): 0.011
Background Pk Area (A-s): 0.101 Background Pk Height (A): 0.067
Blank Corrected Pk Area (A-s): -0.002

Replicate 2 Time: 10:04
Peak Area (A-s): -0.001 Peak Height (A): 0.009
Background Pk Area (A-s): 0.116 Background Pk Height (A): 0.060
Blank Corrected Pk Area (A-s): -0.001

Mean Pk Area (A-s): -0.001 SD: 0.0004 RSD(%): 32.11

Auto-zero performed.

~~~~~  
As      ID: Standard 1      Seq. No.: 00002      A/S Pos.: 2      Date: 02/19/93

Replicate 1      *S10*      Time: 10:07  
Peak Area (A-s): 0.068      Peak Height (A): 0.099  
Background Pk Area (A-s): 0.187      Background Pk Height (A): 0.082  
Blank Corrected Pk Area (A-s): 0.069  
  
Replicate 2      Time: 10:09  
Peak Area (A-s): 0.052      Peak Height (A): 0.081  
Background Pk Area (A-s): 0.141      Background Pk Height (A): 0.076  
Blank Corrected Pk Area (A-s): 0.053  
  
Mean Pk Area (A-s):      0.061      SD: 0.0113      RSD(%): 18.45

Standard number 1 applied. [10.0]  
Correlation coefficient: 1.00000      Slope: 0.0061      Int: -0.000

~~~~~  
As ID: Standard 2 Seq. No.: 00003 A/S Pos.: 3 Date: 02/19/93

Replicate 1 *S50* Time: 10:12
Peak Area (A-s): 0.269 Peak Height (A): 0.383
Background Pk Area (A-s): 0.175 Background Pk Height (A): 0.101
Blank Corrected Pk Area (A-s): 0.270
Concentration (ug/L): 44.3

Replicate 2 Time: 10:15
Peak Area (A-s): 0.325 Peak Height (A): 0.471
Background Pk Area (A-s): 0.227 Background Pk Height (A): 0.100
Blank Corrected Pk Area (A-s): 0.326

Concentration (ug/L): 53.4

S50

1631

Mean Conc (ug/L): 48.8

SD: 6.44

RSD(%): 13.19

Standard number 2 applied. [50.0]

Correlation coefficient: 0.99999

Slope: 0.0060

Int: 0.001

As ID: Standard 3

Seq. No.: 00004

A/S Pos.: 4

Date: 02/19/93

Replicate 1

S100

Time: 10:18

Peak Area (A-s): 0.614

Peak Height (A): 0.894

Background Pk Area (A-s): 0.246

Background Pk Height (A): 0.122

Blank Corrected Pk Area (A-s): 0.615

Concentration (ug/L): 103.2

Replicate 2

Time: 10:21

Peak Area (A-s): 0.622

Peak Height (A): 0.915

Background Pk Area (A-s): 0.230

Background Pk Height (A): 0.112

Blank Corrected Pk Area (A-s): 0.623

Concentration (ug/L): 104.6

Mean Conc (ug/L): 103.9

SD: 0.95

RSD(%): 0.92

Standard number 3 applied. [100.0]

Correlation coefficient: 0.99980

Slope: 0.0062

Int: -0.002

As ID: ICV

Seq. No.: 00005

A/S Pos.: 5

Date: 02/19/93

Replicate 1

Time: 10:24

Peak Area (A-s): 0.334

Peak Height (A): 0.471

Background Pk Area (A-s): 0.211

Background Pk Height (A): 0.093

Blank Corrected Pk Area (A-s): 0.335

Concentration (ug/L): 54.7

Replicate 2

Time: 10:27

Peak Area (A-s): 0.328

Peak Height (A): 0.455

Background Pk Area (A-s): 0.219

Background Pk Height (A): 0.092

Blank Corrected Pk Area (A-s): 0.329

Concentration (ug/L): 53.7

Mean Conc (ug/L): 54.2

SD: 0.68

RSD(%): 1.26

QC sample is within range 45.0 - 55.0

As ID: ICB

Seq. No.: 00006

A/S Pos.: 1

Date: 02/19/93

Replicate 1

Time: 10:30

Peak Area (A-s): 0.003

Peak Height (A): 0.012

Background Pk Area (A-s): 0.196

Background Pk Height (A): 0.083

Blank Corrected Pk Area (A-s): 0.004

Concentration (ug/L): 1.1

Replicate 2

Time: 10:32

Peak Area (A-s): 0.005

Peak Height (A): 0.013

Background Pk Area (A-s): 0.200

Background Pk Height (A): 0.083

Blank Corrected Pk Area (A-s): 0.006

Concentration (ug/L): 1.4 ICB

1632

Mean Conc (ug/L): 1.3 SD: 0.18 RSD(%): 14.45

sample is within range

As ID: CRA Seq. No.: 00007 A/S Pos.: 2 Date: 02/19/93

Replicate 1 Time: 10:35
Peak Area (A-s): 0.069 Peak Height (A): 0.103
Background Pk Area (A-s): 0.201 Background Pk Height (A): 0.081
Blank Corrected Pk Area (A-s): 0.070
Concentration (ug/L): 11.8

Replicate 2 Time: 10:38
Peak Area (A-s): 0.056 Peak Height (A): 0.083
Background Pk Area (A-s): 0.187 Background Pk Height (A): 0.084
Blank Corrected Pk Area (A-s): 0.058
Concentration (ug/L): 9.8

Mean Conc (ug/L): 10.8 SD: 1.42 RSD(%): 13.17

QC sample is within range

As ID: CCV(50) Seq. No.: 00008 A/S Pos.: 37 Date: 02/19/93

Replicate 1 Time: 10:41
Peak Area (A-s): 0.322 Peak Height (A): 0.459
Background Pk Area (A-s): 0.217 Background Pk Height (A): 0.098
Blank Corrected Pk Area (A-s): 0.324
Concentration (ug/L): 52.8

Replicate 2 Time: 10:44
Peak Area (A-s): 0.323 Peak Height (A): 0.474
Background Pk Area (A-s): 0.221 Background Pk Height (A): 0.096
Blank Corrected Pk Area (A-s): 0.324
Concentration (ug/L): 52.9

Mean Conc (ug/L): 52.8 SD: 0.07 RSD(%): 0.14

QC sample is within range 45.0 - 55.0

As ID: CCB Seq. No.: 00009 A/S Pos.: 38 Date: 02/19/93

Replicate 1 Time: 10:47
Peak Area (A-s): 0.002 Peak Height (A): 0.009
Background Pk Area (A-s): 0.196 Background Pk Height (A): 0.079
Blank Corrected Pk Area (A-s): 0.004
Concentration (ug/L): 1.0

Replicate 2 Time: 10:50
Peak Area (A-s): 0.002 Peak Height (A): 0.009
Background Pk Area (A-s): 0.211 Background Pk Height (A): 0.081
Blank Corrected Pk Area (A-s): 0.003
Concentration (ug/L): 0.9

Mean Conc (ug/L): 0.9 SD: 0.07 CCB RSD(%): 7.02

QC sample is within range

1633

As ID: Z14812 Seq. No.: 00010 A/S Pos.: 6 Date: 02/19/93

Replicate 1 *MW-44* Time: 10:53
Peak Area (A-s): 0.010 Peak Height (A): 0.017
Background Pk Area (A-s): 0.291 Background Pk Height (A): 0.112
Blank Corrected Pk Area (A-s): 0.011
Concentration (ug/L): 2.2

Replicate 2 Time: 10:56
Peak Area (A-s): 0.008 Peak Height (A): 0.016
Background Pk Area (A-s): 0.309 Background Pk Height (A): 0.128
Blank Corrected Pk Area (A-s): 0.009
Concentration (ug/L): 1.9

Mean Conc (ug/L): 2.0 SD: 0.19 RSD(%): 9.56

As ID: Z14812 *A* Seq. No.: 00011 A/S Pos.: 6 Date: 02/19/93

Replicate 1 Time: 10:59
Peak Area (A-s): 0.110 Peak Height (A): 0.135
Background Pk Area (A-s): 0.295 Background Pk Height (A): 0.119
Blank Corrected Pk Area (A-s): 0.111
Concentration (ug/L): 18.4

Replicate 2 Time: 11:02
Peak Area (A-s): 0.110 Peak Height (A): 0.137
Background Pk Area (A-s): 0.294 Background Pk Height (A): 0.125
Blank Corrected Pk Area (A-s): 0.111
Concentration (ug/L): 18.4

Mean Conc (ug/L): 18.4 SD: 0.06 RSD(%): 0.30

Recovery is 81.8% (outside of specified limits)

As ID: Z14813 *MW-46* Seq. No.: 00012 A/S Pos.: 7 Date: 02/19/93

Replicate 1 Time: 11:05
Peak Area (A-s): 0.062 Peak Height (A): 0.093
Background Pk Area (A-s): 1.132 Background Pk Height (A): 0.903
Blank Corrected Pk Area (A-s): 0.064
Concentration (ug/L): 10.7

Replicate 2 Time: 11:08
Peak Area (A-s): 0.064 Peak Height (A): 0.096
Background Pk Area (A-s): 1.167 Background Pk Height (A): 0.917
Blank Corrected Pk Area (A-s): 0.066
Concentration (ug/L): 11.0

Mean Conc (ug/L): 10.9 SD: 0.22 RSD(%): 2.02

As ID: Z14813A Seq. No.: 00013 A/S Pos.: 7 Date: 02/19/93
1634

Replicate 1 Time: 11:12
Peak Area (A-s): 0.180 Peak Height (A): 0.255
Background Pk Area (A-s): 1.147 Background Pk Height (A): 0.959
Blank Corrected Pk Area (A-s): 0.181
Concentration (ug/L): 29.8

Replicate 2 Time: 11:15
Peak Area (A-s): 0.178 Peak Height (A): 0.267
Background Pk Area (A-s): 1.143 Background Pk Height (A): 0.936
Blank Corrected Pk Area (A-s): 0.179
Concentration (ug/L): 29.4

Mean Conc (ug/L): 29.6 SD: 0.26 RSD(%): 0.86

Recovery is 93.5%

As ID: Z14814 Seq. No.: 00014 A/S Pos.: 8 Date: 02/19/93

MW-35
Replicate 1 Time: 11:18
Peak Area (A-s): 0.093 Peak Height (A): 0.140
Background Pk Area (A-s): 0.429 Background Pk Height (A): 0.254
Blank Corrected Pk Area (A-s): 0.095
Concentration (ug/L): 15.7

Replicate 2 Time: 11:21
Peak Area (A-s): 0.077 Peak Height (A): 0.120
Background Pk Area (A-s): 0.307 Background Pk Height (A): 0.188
Blank Corrected Pk Area (A-s): 0.078
Concentration (ug/L): 13.1

Mean Conc (ug/L): 14.4 SD: 1.89 RSD(%): 13.09

As ID: Z14814A Seq. No.: 00015 A/S Pos.: 8 Date: 02/19/93

Replicate 1 Time: 11:24
Peak Area (A-s): 0.187 Peak Height (A): 0.262
Background Pk Area (A-s): 0.363 Background Pk Height (A): 0.197
Blank Corrected Pk Area (A-s): 0.188
Concentration (ug/L): 30.8

Replicate 2 Time: 11:28
Peak Area (A-s): 0.177 Peak Height (A): 0.262
Background Pk Area (A-s): 0.314 Background Pk Height (A): 0.181
Blank Corrected Pk Area (A-s): 0.179
Concentration (ug/L): 29.3

Mean Conc (ug/L): 30.1 SD: 1.08 RSD(%): 3.59

Recovery is 78.3% (outside of specified limits)

As ID: Z14816 Seq. No.: 00016 A/S Pos.: 9 Date: 02/19/93

Replicate 1 *MHW-2* Time: 11:31

Peak Area (A-s): 0.012 **Z14816**
Background Pk Area (A-s): 0.251
Blank Corrected Pk Area (A-s): 0.014
Concentration (ug/L): 2.5

Peak Height (A): 0.025
Background Pk Height (A): 0.124

1635

MHW-2

Replicate 2
Peak Area (A-s): 0.015
Background Pk Area (A-s): 0.241
Blank Corrected Pk Area (A-s): 0.016
Concentration (ug/L): 3.0

Time: 11:34
Peak Height (A): 0.029
Background Pk Height (A): 0.119

Mean Conc (ug/L): 2.8 SD: 0.29 RSD(%): 10.13

As ID: Z14816A Seq. No.: 00017 A/S Pos.: 9 Date: 02/19/93

Replicate 1
Peak Area (A-s): 0.139
Background Pk Area (A-s): 0.253
Blank Corrected Pk Area (A-s): 0.140
Concentration (ug/L): 23.1

Time: 11:37
Peak Height (A): 0.226
Background Pk Height (A): 0.141

Replicate 2
Peak Area (A-s): 0.134
Background Pk Area (A-s): 0.254
Blank Corrected Pk Area (A-s): 0.136
Concentration (ug/L): 22.3

Time: 11:41
Peak Height (A): 0.206
Background Pk Height (A): 0.154

Mean Conc (ug/L): 22.7 SD: 0.55 RSD(%): 2.41

Recovery is 99.6%

As ID: Z14817 Seq. No.: 00018 A/S Pos.: 10 Date: 02/19/93

Replicate 1 **REPLICATE**
Peak Area (A-s): 0.002
Background Pk Area (A-s): 0.243
Blank Corrected Pk Area (A-s): 0.004
Concentration (ug/L): 1.0

Time: 11:44
Peak Height (A): 0.015
Background Pk Height (A): 0.101

Replicate 2
Peak Area (A-s): 0.005
Background Pk Area (A-s): 0.244
Blank Corrected Pk Area (A-s): 0.006
Concentration (ug/L): 1.4

Time: 11:46
Peak Height (A): 0.018
Background Pk Height (A): 0.095

Mean Conc (ug/L): 1.2 SD: 0.26 RSD(%): 21.64

As ID: Z14817A Seq. No.: 00019 A/S Pos.: 10 Date: 02/19/93

Replicate 1
Peak Area (A-s): 0.125
Background Pk Area (A-s): 0.269
Blank Corrected Pk Area (A-s): 0.126
Concentration (ug/L): 20.8

Time: 11:50
Peak Height (A): 0.180
Background Pk Height (A): 0.127

Replicate 2 Time: 11:53

Peak Area (A-s): 0.122 **Z14817A**
Background Pk Area (A-s): 0.276
Blank Corrected Pk Area (A-s): 0.124
Concentration (ug/L): 20.4

Peak Height (A): 0.181
Background Pk Height (A): 0.135

Mean Conc (ug/L): 20.6 SD: 0.30 RSD(%): 1.48

Recovery is 97.2%

As ID: CCV(50) Seq. No.: 00020 A/S Pos.: 37 Date: 02/19/93

Replicate 1
Peak Area (A-s): 0.303
Background Pk Area (A-s): 0.254
Blank Corrected Pk Area (A-s): 0.305
Concentration (ug/L): 49.7

Time: 11:56
Peak Height (A): 0.487
Background Pk Height (A): 0.140

Replicate 2
Peak Area (A-s): 0.310
Background Pk Area (A-s): 0.254
Blank Corrected Pk Area (A-s): 0.312
Concentration (ug/L): 50.8

Time: 11:59
Peak Height (A): 0.487
Background Pk Height (A): 0.147

Mean Conc (ug/L): 50.3 SD: 0.79 RSD(%): 1.57

QC sample is within range 45.0 - 55.0

As ID: CCB Seq. No.: 00021 A/S Pos.: 38 Date: 02/19/93

Replicate 1
Peak Area (A-s): 0.005
Background Pk Area (A-s): 0.235
Blank Corrected Pk Area (A-s): 0.006
Concentration (ug/L): 1.4

Time: 12:02
Peak Height (A): 0.010
Background Pk Height (A): 0.109

Replicate 2
Peak Area (A-s): 0.004
Background Pk Area (A-s): 0.239
Blank Corrected Pk Area (A-s): 0.005
Concentration (ug/L): 1.3

Time: 12:05
Peak Height (A): 0.012
Background Pk Height (A): 0.110

Mean Conc (ug/L): 1.3 SD: 0.10 RSD(%): 7.20

QC sample is within range

As ID: Z14818 *MW-1* Seq. No.: 00022 A/S Pos.: 11 Date: 02/19/93

Replicate 1
Peak Area (A-s): 0.012
Background Pk Area (A-s): 0.412
Blank Corrected Pk Area (A-s): 0.014
Concentration (ug/L): 2.6

Time: 12:08
Peak Height (A): 0.022
Background Pk Height (A): 0.241

Replicate 2
Peak Area (A-s): 0.014
Background Pk Area (A-s): 0.419

Time: 12:11
Peak Height (A): 0.024
Background Pk Height (A): 0.234

Blank Corrected Pk Area (A-s): 0.018
Concentration (ug/L): 2.9

Z14818

MW-1

1637

Mean Conc (ug/L): 2.7 SD: 0.18 RSD(%): 6.68

As ID: Z14818 A Seq. No.: 00023 A/S Pos.: 11 Date: 02/19/93

Replicate 1 Time: 12:14
Peak Area (A-s): 0.124 Peak Height (A): 0.175
Background Pk Area (A-s): 0.437 Background Pk Height (A): 0.258
Blank Corrected Pk Area (A-s): 0.125
Concentration (ug/L): 20.6

Replicate 2 Time: 12:18
Peak Area (A-s): 0.129 Peak Height (A): 0.177
Background Pk Area (A-s): 0.454 Background Pk Height (A): 0.259
Blank Corrected Pk Area (A-s): 0.130
Concentration (ug/L): 21.5

Mean Conc (ug/L): 21.0 SD: 0.60 RSD(%): 2.87

Recovery is 91.6%

As ID: Z14820 Seq. No.: 00024 A/S Pos.: 12 Date: 02/19/93

Replicate 1 Time: 12:21
Peak Area (A-s): 0.009 Peak Height (A): 0.016
Background Pk Area (A-s): 0.358 Background Pk Height (A): 0.171
Blank Corrected Pk Area (A-s): 0.010
Concentration (ug/L): 2.0

MW-47

Replicate 2 Time: 12:24
Peak Area (A-s): 0.009 Peak Height (A): 0.020
Background Pk Area (A-s): 0.356 Background Pk Height (A): 0.168
Blank Corrected Pk Area (A-s): 0.010
Concentration (ug/L): 2.1

Mean Conc (ug/L): 2.1 SD: 0.03 RSD(%): 1.57

As ID: Z14820 A Seq. No.: 00025 A/S Pos.: 12 Date: 02/19/93

Replicate 1 Time: 12:27
Peak Area (A-s): 0.111 Peak Height (A): 0.147
Background Pk Area (A-s): 0.372 Background Pk Height (A): 0.177
Blank Corrected Pk Area (A-s): 0.112
Concentration (ug/L): 18.6

Replicate 2 Time: 12:30
Peak Area (A-s): 0.111 Peak Height (A): 0.155
Background Pk Area (A-s): 0.376 Background Pk Height (A): 0.175
Blank Corrected Pk Area (A-s): 0.112
Concentration (ug/L): 18.6

Mean Conc (ug/L): 18.6 SD: 0.00 RSD(%): 0.02

Recovery is 82.5% (outside of specified limits)

As ID: Z14821 Seq. No.: 00026 A/S Pos.: 13 Date: 02/19/93

Replicate 1
Peak Area (A-s): 0.017
Background Pk Area (A-s): 0.432
Blank Corrected Pk Area (A-s): 0.019
Concentration (ug/L): 3.4

Time: 12:33
Peak Height (A): 0.031
Background Pk Height (A): 0.230

1638

Replicate 2
Peak Area (A-s): 0.020
Background Pk Area (A-s): 0.440
Blank Corrected Pk Area (A-s): 0.021
Concentration (ug/L): 3.8

Time: 12:36
Peak Height (A): 0.032
Background Pk Height (A): 0.236

Mean Conc (ug/L): 3.6 SD: 0.27 RSD(%): 7.58

As ID: Z14821A Seq. No.: 00027 A/S Pos.: 13 Date: 02/19/93

Replicate 1
Peak Area (A-s): 0.127
Background Pk Area (A-s): 0.404
Blank Corrected Pk Area (A-s): 0.128
Concentration (ug/L): 21.1

Time: 12:40
Peak Height (A): 0.151
Background Pk Height (A): 0.217

Replicate 2
Peak Area (A-s): 0.121
Background Pk Area (A-s): 0.366
Blank Corrected Pk Area (A-s): 0.123
Concentration (ug/L): 20.3

Time: 12:43
Peak Height (A): 0.156
Background Pk Height (A): 0.208

Mean Conc (ug/L): 20.7 SD: 0.61 RSD(%): 2.94

Recovery is 85.3%

EW 3/3

As ID: Z14822 Seq. No.: 00028 A/S Pos.: 14 Date: 02/19/93

Replicate 1
Peak Area (A-s): 0.007
Background Pk Area (A-s): 0.282
Blank Corrected Pk Area (A-s): 0.008
Concentration (ug/L): 1.7

Time: 12:46
Peak Height (A): 0.013
Background Pk Height (A): 0.116

Replicate 2
Peak Area (A-s): 0.000
Background Pk Area (A-s): 0.263
Blank Corrected Pk Area (A-s): 0.001
Concentration (ug/L): 0.6

Time: 12:49
Peak Height (A): 0.012
Background Pk Height (A): 0.110

Mean Conc (ug/L): 1.2 SD: 0.74 RSD(%): 63.38

As ID: Z14822 A Seq. No.: 00029 A/S Pos.: 14 Date: 02/19/93

Replicate 1
Peak Area (A-s): 0.107
Background Pk Area (A-s): 0.195

Time: 12:52
Peak Height (A): 0.153
Background Pk Height (A): 0.110

Blank Corrected Pk Area (A-s): 0.108 **Z14822A**
Concentration (ug/L): 18.0

1639

Replicate 2
Peak Area (A-s): 0.127
Background Pk Area (A-s): 0.291
Blank Corrected Pk Area (A-s): 0.129
Concentration (ug/L): 21.2

Time: 12:56
Peak Height (A): 0.185
Background Pk Height (A): 0.148

Mean Conc (ug/L): 19.6

SD: 2.30

RSD(%): 11.76

Recovery is 92.1%

As ID: Z14823 Seq. No.: 00030 A/S Pos.: 15 Date: 02/19/93

Replicate 1
Peak Area (A-s): -0.003
Background Pk Area (A-s): 0.180
Blank Corrected Pk Area (A-s): -0.001
Concentration (ug/L): 0.2

Time: 12:59
Peak Height (A): 0.011
Background Pk Height (A): 0.092

Replicate 2
Peak Area (A-s): 0.000
Background Pk Area (A-s): 0.160
Blank Corrected Pk Area (A-s): 0.002
Concentration (ug/L): 0.7

6/3/3
Time: 13:01
Peak Height (A): 0.008
Background Pk Height (A): 0.091

Mean Conc (ug/L): 0.4

SD: 0.35

RSD(%): 80.10

As ID: Z14823 **A** Seq. No.: 00031 A/S Pos.: 15 Date: 02/19/93

Replicate 1
Peak Area (A-s): 0.113
Background Pk Area (A-s): 0.185
Blank Corrected Pk Area (A-s): 0.115
Concentration (ug/L): 19.0

Time: 13:05
Peak Height (A): 0.130
Background Pk Height (A): 0.097

Replicate 2
Peak Area (A-s): 0.110
Background Pk Area (A-s): 0.183
Blank Corrected Pk Area (A-s): 0.112
Concentration (ug/L): 18.4

Time: 13:08
Peak Height (A): 0.134
Background Pk Height (A): 0.100

Mean Conc (ug/L): 18.7

SD: 0.38

RSD(%): 2.03

Recovery is 91.4%

As ID: CCV(50) Seq. No.: 00032 A/S Pos.: 37 Date: 02/19/93

Replicate 1
Peak Area (A-s): 0.332
Background Pk Area (A-s): 0.250
Blank Corrected Pk Area (A-s): 0.334
Concentration (ug/L): 54.4

Time: 13:11
Peak Height (A): 0.418
Background Pk Height (A): 0.115

Replicate 2

Time: 13:14

Peak Area (A-s): 0.292 *ccv (50)* Peak Height (A): 0.326 *1640*
Background Pk Area (A-s): 0.162 Background Pk Height (A): 0.084
Blank Corrected Pk Area (A-s): 0.293
Concentration (ug/L): 47.8

Mean Conc (ug/L): 51.1 SD: 4.63 RSD(%): 9.07

QC sample is within range 45.0 - 55.0

~~~~~  
As ID: CCB Seq. No.: 00033 A/S Pos.: 38 Date: 02/19/93

Replicate 1 Time: 13:17  
Peak Area (A-s): 0.004 Peak Height (A): 0.010  
Background Pk Area (A-s): 0.170 Background Pk Height (A): 0.078  
Blank Corrected Pk Area (A-s): 0.005  
Concentration (ug/L ): 1.3

Replicate 2 Time: 13:20  
Peak Area (A-s): 0.001 Peak Height (A): 0.013  
Background Pk Area (A-s): 0.171 Background Pk Height (A): 0.078  
Blank Corrected Pk Area (A-s): 0.002  
Concentration (ug/L ): 0.8

Mean Conc (ug/L ): 1.0 SD: 0.34 RSD(%): 33.96

QC sample is within range

~~~~~  
As ID: Z14827 Seq. No.: 00034 A/S Pos.: 16 Date: 02/19/93

Replicate 1 Time: 13:23
Peak Area (A-s): 0.028 Peak Height (A): 0.041
Background Pk Area (A-s): 0.215 Background Pk Height (A): 0.088
Blank Corrected Pk Area (A-s): 0.029
Concentration (ug/L): 5.2

Replicate 2 Time: 13:26
Peak Area (A-s): 0.031 Peak Height (A): 0.040
Background Pk Area (A-s): 0.225 Background Pk Height (A): 0.090
Blank Corrected Pk Area (A-s): 0.033
Concentration (ug/L): 5.7

Mean Conc (ug/L): 5.4 SD: 0.37 *3/3* RSD(%): 6.83

~~~~~  
As ID: Z14827A Seq. No.: 00035 A/S Pos.: 16 Date: 02/19/93

Replicate 1 Time: 13:29  
Peak Area (A-s): 0.168 Peak Height (A): 0.192  
Background Pk Area (A-s): 0.316 Background Pk Height (A): 0.118  
Blank Corrected Pk Area (A-s): 0.169  
Concentration (ug/L ): 27.8

Replicate 2 Time: 13:32  
Peak Area (A-s): 0.148 Peak Height (A): 0.171  
Background Pk Area (A-s): 0.235 Background Pk Height (A): 0.096  
Blank Corrected Pk Area (A-s): 0.150  
Concentration (ug/L ): 24.6

Std. Prepped Date: 2/19/93 8:30 IEA Laboratories  
 200 Monroe Turnpike  
 Start Run Time : 14:42 Monroe, Connecticut 06468  
 (203) 261-4458

Date: 2/19/93  
 page \_\_ of \_\_

1641

FURNACE DATA SHEET

Element: Se I.D. Wt. File: Z116 Instrument 5100N Analyst D. Mickens

| Cup           | Sample ID         | % Sol.           | Wt.V/Vol           | Dil Factor | Sample Recovery | Value ug/L, mg/kg | Flags            |
|---------------|-------------------|------------------|--------------------|------------|-----------------|-------------------|------------------|
| 5             | ICV               |                  |                    |            | 52.1            | 104.2             | 52.1             |
| 1             | ICB               |                  |                    |            | -0.2            |                   | 2.0 U            |
| 2             | CRA               |                  |                    |            | 5.6             | 112.0             | 5.6              |
| 37            | CCV(50)           |                  |                    |            | 50.9            | 101.8             | 50.9             |
| 38            | CCB               |                  |                    |            | -0.0            |                   | 2.0 U            |
| <del>6</del>  | <del>Z11602</del> | <del>100.0</del> | <del>100/100</del> |            | <del>-0.2</del> |                   | <del>2.0 U</del> |
| 6             | Z11602A           | 100.0            | 100/100            |            | 8.0             | 80.0              | W                |
| 7             | Z11602D           | 100.0            | 100/100            |            | -0.1            |                   | 2.0 U            |
| 7             | Z11602DA          | 100.0            | 100/100            |            | 7.9             | 79.0              | W                |
| 8             | Z11602S           | 100.0            | 100/100            |            | -0.4            | 20.0              | N                |
| 8             | Z11602SA          | 100.0            | 100/100            |            | 7.2             | 72.0              | N <i>sn 2/24</i> |
| 9             | Z11601            | 100.0            | 100/100            |            | 8.6             |                   | 8.6              |
| 9             | Z11601A           | 100.0            | 100/100            |            | 17.2            | 86.0              |                  |
| 10            | Z11604            | 100.0            | 100/100            |            | -0.6            |                   | 2.0 U            |
|               | Z11604A           | 100.0            | 100/100            |            | 8.7             | 87.0              |                  |
| 37            | CCV(50)           |                  |                    |            | 51.1            | 102.2             | 51.1             |
| 38            | CCB               |                  |                    |            | 0.5             |                   | 2.0 U            |
| <del>11</del> | <del>Z11605</del> | <del>100.0</del> | <del>100/100</del> |            | <del>0.2</del>  |                   | <del>2.0 U</del> |
| 11            | Z11605A           | 100.0            | 100/100            |            | 8.5             | 85.0              |                  |
| 12            | Z11607            | 100.0            | 100/100            |            | -0.3            |                   | 2.0 U            |
| 12            | Z11607A           | 100.0            | 100/100            |            | 7.6             | 76.0              | W                |
| 13            | RINSE             | 100.0            | 100/100            |            | 0.2             |                   | 2.0 U            |
| <del>13</del> | <del>RINSEA</del> | <del>100.0</del> | <del>100/100</del> |            | <del>10.1</del> |                   | <del>10.1</del>  |
| 14            | PBW               | 100.0            | 100/100            |            | -0.3            |                   | 2.0 U            |
| 14            | PBWA              | 100.0            | 100/100            |            | 9.6             | 96.0              |                  |
| 15            | LCSW              | 100.0            | 100/100            |            | 26.5            | 106.0             | 26.5             |
| 15            | LCSWA             | 100.0            | 100/100            |            | 35.1            | 86.0              |                  |
| 37            | CCV(50)           |                  |                    |            | 49.6            | 99.2              | 49.6             |
| 38            | CCB               |                  |                    |            | -0.0            |                   | 2.0 U            |
| 16            | Z14809            | 100.0            | 100/100            |            | 0.5             |                   | 2.0 U MW-45      |
| 16            | Z14809A           | 100.0            | 100/100            |            | 10.4            | 104.0             |                  |
| 17            | Z14809D           | 100.0            | 100/100            |            | 0.7             |                   | 2.0 U MW-45      |
| 17            | Z14809DA          | 100.0            | 100/100            |            | 10.4            | 104.0             |                  |
| 18            | Z14809S           | 100.0            | 100/100            |            | 10.1            | 101.0             | 10.1 MW-45       |
| 18            | Z14809SA          | 100.0            | 100/100            |            | 18.9            | 88.0              | <i>sn 2/24</i>   |
| 19            | Z14810            | 100.0            | 100/100            |            | 1.6             |                   | 2.0 U MHW-1      |
| 19            | Z14810A           | 100.0            | 100/100            |            | 10.0            | 100.0             |                  |
| 20            | Z14811            | 100.0            | 100/100            |            | 0.9             |                   | 2.0 U MW-48      |
| 20            | Z14811A           | 100.0            | 100/100            |            | 9.0             | 90.0              |                  |
| 37            | CCV(50)           |                  |                    |            | 53.5            | 107.0             | 53.5             |

Std. Prepped Date: 2/19/93 8:30

IEA Laboratories  
200 Monroe Turnpike  
Monroe, Connecticut 06468  
(203) 261-4458

Date: 2/19/93

1642

Start Run Time : 14:42

page    of   

FURNACE DATA SHEET

Element: Se I.D. Wt. File: 2116 Instrument 5100N Analyst J. Muckens

| Cup | Sample ID | % Sol. | Wt.V/Vol | Dil Factor | Sample Recovery | % Recovery | Flags | Value ug/L, mg/kg |
|-----|-----------|--------|----------|------------|-----------------|------------|-------|-------------------|
| 38  | CCB       |        |          |            | 0.2             |            |       | 2.0 U             |

-----  
Element File: SEAUTSPK.GEL      Element: Se      1643      Wavelength: 196.0  
Date: 02/19/93      Time: 14:42      Slit: 2.00 L  
Data File: Z116.DAT      ID/Wt File: Z116.IDW      Lamp Current: 0  
Technique: HGA      Calib. Type: Linear      Energy: 55  
-----

~~~~~  
Se ID: Calib. Blank Seq. No.: 00046 A/S Pos.: 1 Date: 02/19/

Replicate 1 *SO* Time: 14:42
Peak Area (A-s): 0.006 Peak Height (A): 0.014
Background Pk Area (A-s): 0.087 Background Pk Height (A): 0.040
Blank Corrected Pk Area (A-s): 0.006 .--

Replicate 2 Time: 14:45
Peak Area (A-s): 0.006 Peak Height (A): 0.014
Background Pk Area (A-s): 0.085 Background Pk Height (A): 0.039
Blank Corrected Pk Area (A-s): 0.006

Mean Pk Area (A-s): 0.006 SD: 0.0002 RSD(%): 3.88

Auto-zero performed.

~~~~~  
Se      ID: Standard 1      Seq. No.: 00047      A/S Pos.: 2      Date: 02/19/

Replicate 1      *S5*      Time: 14:48  
Peak Area (A-s): 0.026      Peak Height (A): 0.039  
Background Pk Area (A-s): 0.087      Background Pk Height (A): 0.039  
Blank Corrected Pk Area (A-s): 0.020

Replicate 2      Time: 14:51  
Peak Area (A-s): 0.024      Peak Height (A): 0.037  
Background Pk Area (A-s): 0.092      Background Pk Height (A): 0.037  
Blank Corrected Pk Area (A-s): 0.018

Mean Pk Area (A-s):      0.019      SD: 0.0016      RSD(%): 8.59

Standard number 1 applied. [5.0]  
Correlation coefficient: 1.00000      Slope: 0.0038      Int: 0.000

~~~~~  
Se ID: Standard 2 Seq. No.: 00048 A/S Pos.: 3 Date: 02/19/

Replicate 1 *S50* Time: 14:54
Peak Area (A-s): 0.206 Peak Height (A): 0.289
Background Pk Area (A-s): 0.122 Background Pk Height (A): 0.066
Blank Corrected Pk Area (A-s): 0.200
Concentration (ug/L): 52.6

Replicate 2 Time: 14:57
Peak Area (A-s): 0.217 Peak Height (A): 0.288
Background Pk Area (A-s): 0.125 Background Pk Height (A): 0.063
Blank Corrected Pk Area (A-s): 0.211
Concentration (ug/L): 55.5

Mean Conc (ug/L): 54.1 SD: 2.03 RSD(%): 3.76

Standard number 2 applied. [50.0]


```

~~~~~
Se      ID: CRA                      Seq. No.: 00052    A/S Pos.: 2    Date: 02/19/
                                           1645
Replicate 1                          Time: 15:18
Peak Area (A-s): 0.026                Peak Height (A): 0.040
Background Pk Area (A-s): 0.089       Background Pk Height (A): 0.037
Blank Corrected Pk Area (A-s): 0.020
Concentration (ug/L ): 4.9

Replicate 2                          Time: 15:21
Peak Area (A-s): 0.031                Peak Height (A): 0.039
Background Pk Area (A-s): 0.088       Background Pk Height (A): 0.037
Blank Corrected Pk Area (A-s): 0.025
Concentration (ug/L ): 6.2

Mean Conc (ug/L ):                    5.6          SD: 0.88          RSD(%): 15.78

QC sample is within range

```

```

~~~~~
Se      ID: CCV(50)                 Seq. No.: 00053    A/S Pos.: 37    Date: 02/19/
Replicate 1                          Time: 15:24
Peak Area (A-s): 0.215                Peak Height (A): 0.291
Background Pk Area (A-s): 0.124       Background Pk Height (A): 0.071
Blank Corrected Pk Area (A-s): 0.209
Concentration (ug/L ): 50.9

Replicate 2                          Time: 15:27
Peak Area (A-s): 0.215                Peak Height (A): 0.295
Background Pk Area (A-s): 0.126       Background Pk Height (A): 0.066
Blank Corrected Pk Area (A-s): 0.209
Concentration (ug/L ): 50.9

Mean Conc (ug/L ):                    50.9          SD: 0.02          RSD(%): 0.03

QC sample is within range 45 - 55

```

```

~~~~~
Se      ID: CCB                      Seq. No.: 00054    A/S Pos.: 38    Date: 02/19/
Replicate 1                          Time: 15:30
Peak Area (A-s): 0.004                Peak Height (A): 0.016
Background Pk Area (A-s): 0.083       Background Pk Height (A): 0.039
Blank Corrected Pk Area (A-s): -0.002
Concentration (ug/L ): -0.2

Replicate 2                          Time: 15:33
Peak Area (A-s): 0.006                Peak Height (A): 0.014
Background Pk Area (A-s): 0.081       Background Pk Height (A): 0.037
Blank Corrected Pk Area (A-s): -0.000
Concentration (ug/L ): 0.2

Mean Conc (ug/L ):                    -0.0          SD: 0.29          RSD(%): 1150.

QC sample is within range

```

Se ID: Z11602 Seq. No.: 00055 A/S Pos.: 6 Date: 02/19/93

Replicate 1 Time: 15:36
Peak Area (A-s): 0.005 Peak Height (A): 0.013 1646
Background Pk Area (A-s): 0.201 Background Pk Height (A): 0.074
Blank Corrected Pk Area (A-s): -0.001
Concentration (ug/L): 0.0

Replicate 2 Time: 15:39
Peak Area (A-s): 0.004 Peak Height (A): 0.012
Background Pk Area (A-s): 0.204 Background Pk Height (A): 0.073
Blank Corrected Pk Area (A-s): -0.002
Concentration (ug/L): -0.4

Mean Conc (ug/L): -0.2 SD: 0.30 RSD(%): 151.44

Se ID: Z11602 A Seq. No.: 00056 A/S Pos.: 6 Date: 02/19/93

Replicate 1 Time: 15:42
Peak Area (A-s): 0.038 Peak Height (A): 0.059
Background Pk Area (A-s): 0.223 Background Pk Height (A): 0.084
Blank Corrected Pk Area (A-s): 0.032
Concentration (ug/L): 8.0

Replicate 2 Time: 15:46
Peak Area (A-s): 0.038 Peak Height (A): 0.064
Background Pk Area (A-s): 0.226 Background Pk Height (A): 0.088
Blank Corrected Pk Area (A-s): 0.032
Concentration (ug/L): 8.0

Mean Conc (ug/L): 8.0 SD: 0.02 RSD(%): 0.28

Recovery is 81.7% (outside of specified limits)

Se ID: Z11602D Seq. No.: 00057 A/S Pos.: 7 Date: 02/19/93

Replicate 1 Time: 15:49
Peak Area (A-s): 0.005 Peak Height (A): 0.015
Background Pk Area (A-s): 0.131 Background Pk Height (A): 0.044
Blank Corrected Pk Area (A-s): -0.001
Concentration (ug/L): -0.2

Replicate 2 Time: 15:51
Peak Area (A-s): 0.005 Peak Height (A): 0.014
Background Pk Area (A-s): 0.130 Background Pk Height (A): 0.046
Blank Corrected Pk Area (A-s): -0.001
Concentration (ug/L): -0.1

Mean Conc (ug/L): -0.1 SD: 0.04 RSD(%): 27.95

Se ID: Z11602D A Seq. No.: 00058 A/S Pos.: 7 Date: 02/19/93

Replicate 1 Time: 15:55
Peak Area (A-s): 0.037 Peak Height (A): 0.070
Background Pk Area (A-s): 0.138 Background Pk Height (A): 0.047

Blank Corrected Pk Area (A-s): 0.031
Concentration (ug/L): 7.7

Z11602DA 1047

Replicate 2
Peak Area (A-s): 0.039
Background Pk Area (A-s): 0.141
Blank Corrected Pk Area (A-s): 0.033
Concentration (ug/L): 8.2

Time: 15:58
Peak Height (A): 0.072
Background Pk Height (A): 0.047

Mean Conc (ug/L): 7.9 SD: 0.37 RSD(%): 4.67

Recovery is 80.7% (outside of specified limits)

~~~~~  
Se ID: Z11602S Seq. No.: 00059 A/S Pos.: 8 Date: 02/19/93

Replicate 1  
Peak Area (A-s): 0.003  
Background Pk Area (A-s): 0.125  
Blank Corrected Pk Area (A-s): -0.003  
Concentration (ug/L ): -0.6

Time: 16:01  
Peak Height (A): 0.016  
Background Pk Height (A): 0.042

Replicate 2  
Peak Area (A-s): 0.005  
Background Pk Area (A-s): 0.116  
Blank Corrected Pk Area (A-s): -0.002  
Concentration (ug/L ): -0.2

Time: 16:04  
Peak Height (A): 0.012  
Background Pk Height (A): 0.043

Mean Conc (ug/L ): -0.4 SD: 0.25 RSD(%): 64.85

~~~~~  
Se ID: Z11602S Seq. No.: 00060 A/S Pos.: 8 Date: 02/19/93

Replicate 1
Peak Area (A-s): 0.035
Background Pk Area (A-s): 0.138
Blank Corrected Pk Area (A-s): 0.028
Concentration (ug/L): 7.1

Time: 16:07
Peak Height (A): 0.071
Background Pk Height (A): 0.046

Replicate 2
Peak Area (A-s): 0.035
Background Pk Area (A-s): 0.125
Blank Corrected Pk Area (A-s): 0.029
Concentration (ug/L): 7.3

Time: 16:10
Peak Height (A): 0.072
Background Pk Height (A): 0.043

Mean Conc (ug/L): 7.2 SD: 0.17 RSD(%): 2.32

Recovery is 75.6% (outside of specified limits)

~~~~~  
Se ID: Z11601 Seq. No.: 00061 A/S Pos.: 9 Date: 02/19/93

Replicate 1  
Peak Area (A-s): 0.041  
Background Pk Area (A-s): 0.141  
Blank Corrected Pk Area (A-s): 0.035  
Concentration (ug/L ): 8.6

Time: 16:13  
Peak Height (A): 0.076  
Background Pk Height (A): 0.047

Replicate 2  
Time: 16:16

Peak Area (A-s): 0.041  
Background Pk Area (A-s): 0.136  
Blank Corrected Pk Area (A-s): 0.035  
Concentration (ug/L ): 8.6

Peak Height (A): 0.073  
Background Pk Height (A): 0.048

211601

1648  
RSD(%): 0.23

Mean Conc (ug/L ): 8.6 SD: 0.02

Se ID: Z11601A Seq. No.: 00062 A/S Pos.: 9 Date: 02/19/93

Replicate 1  
Peak Area (A-s): 0.075  
Background Pk Area (A-s): 0.149  
Blank Corrected Pk Area (A-s): 0.068  
Concentration (ug/L ): 16.8

Time: 16:20  
Peak Height (A): 0.134  
Background Pk Height (A): 0.055

Replicate 2  
Peak Area (A-s): 0.078  
Background Pk Area (A-s): 0.145  
Blank Corrected Pk Area (A-s): 0.072  
Concentration (ug/L ): 17.6

Time: 16:23  
Peak Height (A): 0.138  
Background Pk Height (A): 0.052

Mean Conc (ug/L ): 17.2 SD: 0.61 RSD(%): 3.54

Recovery is 86.1%

33

Se ID: Z11604 Seq. No.: 00063 A/S Pos.: 10 Date: 02/19/93

Replicate 1  
Peak Area (A-s): 0.005  
Background Pk Area (A-s): 0.111  
Blank Corrected Pk Area (A-s): -0.002  
Concentration (ug/L ): -0.2

Time: 16:26  
Peak Height (A): 0.013  
Background Pk Height (A): 0.045

Replicate 2  
Peak Area (A-s): 0.001  
Background Pk Area (A-s): 0.096  
Blank Corrected Pk Area (A-s): -0.005  
Concentration (ug/L ): -1.0

Time: 16:29  
Peak Height (A): 0.012  
Background Pk Height (A): 0.041

Mean Conc (ug/L ): -0.6 SD: 0.58 RSD(%): 97.06

Se ID: Z11604A Seq. No.: 00064 A/S Pos.: 10 Date: 02/19/93

Replicate 1  
Peak Area (A-s): 0.041  
Background Pk Area (A-s): 0.121  
Blank Corrected Pk Area (A-s): 0.035  
Concentration (ug/L ): 8.7

Time: 16:32  
Peak Height (A): 0.068  
Background Pk Height (A): 0.043

Replicate 2  
Peak Area (A-s): 0.042  
Background Pk Area (A-s): 0.122  
Blank Corrected Pk Area (A-s): 0.035  
Concentration (ug/L ): 8.8

Time: 16:35  
Peak Height (A): 0.064  
Background Pk Height (A): 0.043

Mean Conc (ug/L ): 8.7 SD: 0.07 RSD(%): 0.78

Recovery is 93.2%

1649

Se ID: CCV(50) Seq. No.: 00065 A/S Pos.: 37 Date: 02/19/93

Replicate 1 Time: 16:38  
Peak Area (A-s): 0.212 Peak Height (A): 0.272  
Background Pk Area (A-s): 0.129 Background Pk Height (A): 0.062  
Blank Corrected Pk Area (A-s): 0.206  
Concentration (ug/L ): 50.2

Replicate 2 Time: 16:41  
Peak Area (A-s): 0.220 Peak Height (A): 0.281  
Background Pk Area (A-s): 0.128 Background Pk Height (A): 0.067  
Blank Corrected Pk Area (A-s): 0.213  
Concentration (ug/L ): 52.0

Mean Conc (ug/L ): 51.1 SD: 1.27 RSD(%): 2.49

QC sample is within range 45 - 55

Se ID: CCB Seq. No.: 00066 A/S Pos.: 38 Date: 02/19/93

Replicate 1 Time: 16:45  
Peak Area (A-s): 0.011 Peak Height (A): 0.015  
Background Pk Area (A-s): 0.087 Background Pk Height (A): 0.040  
Blank Corrected Pk Area (A-s): 0.005  
Concentration (ug/L ): 1.4

Replicate 2 Time: 16:48  
Peak Area (A-s): 0.004 Peak Height (A): 0.011  
Background Pk Area (A-s): 0.085 Background Pk Height (A): 0.038  
Blank Corrected Pk Area (A-s): -0.003  
Concentration (ug/L ): -0.5

Mean Conc (ug/L ): 0.5 SD: 1.34 RSD(%): 279.00

QC sample is within range

Se ID: Z11605 Seq. No.: 00067 A/S Pos.: 11 Date: 02/19/93

Replicate 1 Time: 16:51  
Peak Area (A-s): 0.008 Peak Height (A): 0.014  
Background Pk Area (A-s): 0.105 Background Pk Height (A): 0.043  
Blank Corrected Pk Area (A-s): 0.002  
Concentration (ug/L ): 0.7

Replicate 2 Time: 16:54  
Peak Area (A-s): 0.004 Peak Height (A): 0.014  
Background Pk Area (A-s): 0.105 Background Pk Height (A): 0.044  
Blank Corrected Pk Area (A-s): -0.002  
Concentration (ug/L ): -0.2

Mean Conc (ug/L ): 0.2 SD: 0.64 RSD(%): 305.45

W 3/3

~~~~~  
Se ID: Z11605 *A* Seq. No.: 00068 A/S Pos.: 11 Date: 02/19/93
Replicate 1 Time: 16:57
Peak Area (A-s): 0.040 Peak Height (A): 0.069 **1650**
Background Pk Area (A-s): 0.124 Background Pk Height (A): 0.042
Blank Corrected Pk Area (A-s): 0.034
Concentration (ug/L): 8.4
Replicate 2 Time: 17:00
Peak Area (A-s): 0.041 Peak Height (A): 0.071
Background Pk Area (A-s): 0.115 Background Pk Height (A): 0.042
Blank Corrected Pk Area (A-s): 0.034
Concentration (ug/L): 8.5
Mean Conc (ug/L): 8.5 SD: 0.09 RSD(%): 1.03
Recovery is 82.5% (outside of specified limits)
~~~~~

~~~~~  
Se ID: Z11607 Seq. No.: 00069 A/S Pos.: 12 Date: 02/19/93
Replicate 1 Time: 17:03
Peak Area (A-s): 0.006 Peak Height (A): 0.013
Background Pk Area (A-s): 0.106 Background Pk Height (A): 0.041
Blank Corrected Pk Area (A-s): -0.001
Concentration (ug/L): 0.0 *3/3*
Replicate 2 Time: 17:06
Peak Area (A-s): 0.003 Peak Height (A): 0.015
Background Pk Area (A-s): 0.106 Background Pk Height (A): 0.042
Blank Corrected Pk Area (A-s): -0.003
Concentration (ug/L): -0.6
Mean Conc (ug/L): -0.3 SD: 0.41 RSD(%): 151.63
~~~~~

~~~~~  
Se ID: Z11607 *A* Seq. No.: 00070 A/S Pos.: 12 Date: 02/19/93
Replicate 1 Time: 17:09
Peak Area (A-s): 0.036 Peak Height (A): 0.066
Background Pk Area (A-s): 0.117 Background Pk Height (A): 0.044
Blank Corrected Pk Area (A-s): 0.030
Concentration (ug/L): 7.4
Replicate 2 Time: 17:13
Peak Area (A-s): 0.038 Peak Height (A): 0.074
Background Pk Area (A-s): 0.112 Background Pk Height (A): 0.042
Blank Corrected Pk Area (A-s): 0.032
Concentration (ug/L): 7.9
Mean Conc (ug/L): 7.6 SD: 0.35 RSD(%): 4.61
Recovery is 79.0% (outside of specified limits)
~~~~~

~~~~~  
Se ID: RINSE Seq. No.: 00071 A/S Pos.: 13 Date: 02/19/93
Replicate 1 Time: 17:16
2/24

Peak Area (A-s): 0.008
Background Pk Area (A-s): 0.067
Blank Corrected Pk Area (A-s): 0.002
Concentration (ug/L): 0.6

RINSE

Peak Height (A): 0.012
Background Pk Height (A): 0.034

4/2/24

1651

Replicate 2
Peak Area (A-s): 0.005
Background Pk Area (A-s): 0.071
Blank Corrected Pk Area (A-s): -0.001
Concentration (ug/L): -0.1

Time: 17:19
Peak Height (A): 0.019
Background Pk Height (A): 0.033

Mean Conc (ug/L): 0.2 SD: 0.52 RSD(%): 232.25

~~~~~  
Se ID: RINSE Seq. No.: 00072 A/S Pos.: 13 Date: 02/19/93

Replicate 1  
Peak Area (A-s): 0.047  
Background Pk Area (A-s): 0.073  
Blank Corrected Pk Area (A-s): 0.041  
Concentration (ug/L ): 10.2

Time: 17:22  
Peak Height (A): 0.064  
Background Pk Height (A): 0.033

Replicate 2  
Peak Area (A-s): 0.046  
Background Pk Area (A-s): 0.077  
Blank Corrected Pk Area (A-s): 0.040  
Concentration (ug/L ): 10.0

Time: 17:25  
Peak Height (A): 0.069  
Background Pk Height (A): 0.034

Mean Conc (ug/L ): 10.1 SD: 0.18 RSD(%): 1.76

Recovery is 98.6%

~~~~~  
Se ID: PBW Seq. No.: 00073 A/S Pos.: 14 Date: 02/19/93

Replicate 1
Peak Area (A-s): 0.003
Background Pk Area (A-s): 0.068
Blank Corrected Pk Area (A-s): -0.003
Concentration (ug/L): -0.6

Time: 17:28
Peak Height (A): 0.015
Background Pk Height (A): 0.037

Replicate 2
Peak Area (A-s): 0.006
Background Pk Area (A-s): 0.083
Blank Corrected Pk Area (A-s): -0.000
Concentration (ug/L): 0.1

Time: 17:31
Peak Height (A): 0.016
Background Pk Height (A): 0.038

Mean Conc (ug/L): -0.3 SD: 0.51 RSD(%): 188.72

~~~~~  
Se ID: PBW A Seq. No.: 00074 A/S Pos.: 14 Date: 02/19/93

Replicate 1  
Peak Area (A-s): 0.046  
Background Pk Area (A-s): 0.092  
Blank Corrected Pk Area (A-s): 0.040  
Concentration (ug/L ): 9.9

Time: 17:34  
Peak Height (A): 0.070  
Background Pk Height (A): 0.038

Replicate 2 Time: 17:37



Peak Area (A-s): 0.044 Peak Height (A): 0.073  
Background Pk Area (A-s): 0.096 Background Pk Height (A): 0.038  
Blank Corrected Pk Area (A-s): 0.038  
Concentration (ug/L ): 9.3 *PBWA* 1652  
Mean Conc (ug/L ): 9.6 SD: 0.46 RSD(%): 4.73

Recovery is 99.0%

~~~~~  
Se ID: LCSW Seq. No.: 00075 A/S Pos.: 15 Date: 02/19/93

Replicate 1 Time: 17:40
Peak Area (A-s): 0.115 Peak Height (A): 0.154
Background Pk Area (A-s): 0.107 Background Pk Height (A): 0.041
Blank Corrected Pk Area (A-s): 0.109
Concentration (ug/L): 26.6

Replicate 2 Time: 17:43
Peak Area (A-s): 0.114 Peak Height (A): 0.157
Background Pk Area (A-s): 0.103 Background Pk Height (A): 0.042
Blank Corrected Pk Area (A-s): 0.108
Concentration (ug/L): 26.4

Mean Conc (ug/L): 26.5 SD: 0.13 RSD(%): 0.48

~~~~~  
Se ID: LCSW *A* Seq. No.: 00076 A/S Pos.: 15 Date: 02/19/93

Replicate 1 Time: 17:47  
Peak Area (A-s): 0.150 Peak Height (A): 0.221  
Background Pk Area (A-s): 0.118 Background Pk Height (A): 0.056  
Blank Corrected Pk Area (A-s): 0.144  
Concentration (ug/L ): 35.0

Replicate 2 Time: 17:50  
Peak Area (A-s): 0.150 Peak Height (A): 0.223  
Background Pk Area (A-s): 0.112 Background Pk Height (A): 0.055  
Blank Corrected Pk Area (A-s): 0.144  
Concentration (ug/L ): 35.2

Mean Conc (ug/L ): 35.1 SD: 0.13 RSD(%): 0.36

Recovery is 86.0%

~~~~~  
Se ID: CCV(50) Seq. No.: 00077 A/S Pos.: 37 Date: 02/19/93

Replicate 1 Time: 17:53
Peak Area (A-s): 0.200 Peak Height (A): 0.262
Background Pk Area (A-s): 0.109 Background Pk Height (A): 0.062
Blank Corrected Pk Area (A-s): 0.194
Concentration (ug/L): 47.3

Replicate 2 Time: 17:56
Peak Area (A-s): 0.219 Peak Height (A): 0.272
Background Pk Area (A-s): 0.111 Background Pk Height (A): 0.062
Blank Corrected Pk Area (A-s): 0.213
Concentration (ug/L): 51.9

Mean Conc (ug/L): 49.6 SD: 3.26 RSD(%): 6.58

QC sample is within range 45 - 55

1653

CCV(9)

~~~~~  
Se ID: CCB Seq. No.: 00078 A/S Pos.: 38 Date: 02/19/93

Replicate 1 Time: 17:59  
Peak Area (A-s): 0.005 Peak Height (A): 0.014  
Background Pk Area (A-s): 0.072 Background Pk Height (A): 0.034  
Blank Corrected Pk Area (A-s): -0.002  
Concentration (ug/L ): -0.2

Replicate 2 Time: 18:02  
Peak Area (A-s): 0.007 Peak Height (A): 0.015  
Background Pk Area (A-s): 0.071 Background Pk Height (A): 0.035  
Blank Corrected Pk Area (A-s): 0.000  
Concentration (ug/L ): 0.3

Mean Conc (ug/L ): 0.0 SD: 0.35 RSD(%): 860.83

QC sample is within range

~~~~~  
Se ID: Z14809 Seq. No.: 00079 A/S Pos.: 16 Date: 02/19/93

Replicate 1 *MW-45* Time: 18:05
Peak Area (A-s): 0.009 Peak Height (A): 0.020
Background Pk Area (A-s): 0.105 Background Pk Height (A): 0.040
Blank Corrected Pk Area (A-s): 0.003
Concentration (ug/L): 0.8

Replicate 2 Time: 18:08
Peak Area (A-s): 0.007 Peak Height (A): 0.018
Background Pk Area (A-s): 0.103 Background Pk Height (A): 0.040
Blank Corrected Pk Area (A-s): 0.000
Concentration (ug/L): 0.3

Mean Conc (ug/L): 0.5 SD: 0.38 RSD(%): 71.52

~~~~~  
Se ID: Z14809 *A* Seq. No.: 00080 A/S Pos.: 16 Date: 02/19/93

Replicate 1 Time: 18:11  
Peak Area (A-s): 0.047 Peak Height (A): 0.070  
Background Pk Area (A-s): 0.107 Background Pk Height (A): 0.040  
Blank Corrected Pk Area (A-s): 0.041  
Concentration (ug/L ): 10.1

Replicate 2 Time: 18:14  
Peak Area (A-s): 0.050 Peak Height (A): 0.074  
Background Pk Area (A-s): 0.107 Background Pk Height (A): 0.040  
Blank Corrected Pk Area (A-s): 0.043  
Concentration (ug/L ): 10.7

Mean Conc (ug/L ): 10.4 SD: 0.44 RSD(%): 4.23

Recovery is 98.9%

~~~~~  
Se ID: Z14809D Seq. No.: 00081 A/S Pos.: 17 Date: 02/19/93
Replicate 1 *MW-45* Time: 18:17 1654
Peak Area (A-s): 0.009 Peak Height (A): 0.023
Background Pk Area (A-s): 0.116 Background Pk Height (A): 0.043
Blank Corrected Pk Area (A-s): 0.003
Concentration (ug/L): 0.8
Replicate 2 Time: 18:20
Peak Area (A-s): 0.008 Peak Height (A): 0.020
Background Pk Area (A-s): 0.114 Background Pk Height (A): 0.147
Blank Corrected Pk Area (A-s): 0.001
Concentration (ug/L): 0.5
Mean Conc (ug/L): 0.7 SD: 0.23 RSD(%): 34.06
~~~~~

Se ID: Z14809D *A* Seq. No.: 00082 A/S Pos.: 17 Date: 02/19/93  
Replicate 1 Time: 18:23  
Peak Area (A-s): 0.047 Peak Height (A): 0.066  
Background Pk Area (A-s): 0.104 Background Pk Height (A): 0.039  
Blank Corrected Pk Area (A-s): 0.041  
Concentration (ug/L ): 10.1  
Replicate 2 Time: 18:27  
Peak Area (A-s): 0.050 Peak Height (A): 0.072  
Background Pk Area (A-s): 0.099 Background Pk Height (A): 0.038  
Blank Corrected Pk Area (A-s): 0.044  
Concentration (ug/L ): 10.8  
Mean Conc (ug/L ): 10.4 SD: 0.44 RSD(%): 4.23  
Recovery is 97.8%

~~~~~  
Se ID: Z14809S Seq. No.: 00083 A/S Pos.: 18 Date: 02/19/93
Replicate 1 *MW-45* Time: 18:30
Peak Area (A-s): 0.046 Peak Height (A): 0.066
Background Pk Area (A-s): 0.091 Background Pk Height (A): 0.034
Blank Corrected Pk Area (A-s): 0.040
Concentration (ug/L): 9.9
Replicate 2 Time: 18:33
Peak Area (A-s): 0.047 Peak Height (A): 0.061
Background Pk Area (A-s): 0.095 Background Pk Height (A): 0.038
Blank Corrected Pk Area (A-s): 0.041
Concentration (ug/L): 10.2
Mean Conc (ug/L): 10.1 SD: 0.16 RSD(%): 1.57
~~~~~

Se ID: Z14809S Seq. No.: 00084 A/S Pos.: 18 Date: 02/19/93  
Replicate 1 Time: 18:36  
Peak Area (A-s): 0.082 Peak Height (A): 0.111  
Background Pk Area (A-s): 0.104 Background Pk Height (A): 0.088  
*2/21*

Blank Corrected Pk Area (A-s): 0.076  
Concentration (ug/L ): 18.7

1655

*z 148095*

Replicate 2  
Peak Area (A-s): 0.085  
Background Pk Area (A-s): 0.107  
Blank Corrected Pk Area (A-s): 0.078  
Concentration (ug/L ): 19.2

Time: 18:39  
Peak Height (A): 0.105  
Background Pk Height (A): 0.041

*SM 2/24*

Mean Conc (ug/L ): 18.9 SD: 0.36 RSD(%): 1.92

Recovery is 88.8%

~~~~~  
Se ID: Z14810 Seq. No.: 00085 A/S Pos.: 19 Date: 02/19/93

MHW-1

Replicate 1
Peak Area (A-s): 0.011
Background Pk Area (A-s): 0.119
Blank Corrected Pk Area (A-s): 0.005
Concentration (ug/L): 1.4

Time: 18:42
Peak Height (A): 0.017
Background Pk Height (A): 0.047

Replicate 2
Peak Area (A-s): 0.013
Background Pk Area (A-s): 0.114
Blank Corrected Pk Area (A-s): 0.006
Concentration (ug/L): 1.7

Time: 18:45
Peak Height (A): 0.032
Background Pk Height (A): 0.042

Mean Conc (ug/L): 1.6 SD: 0.27 RSD(%): 17.49

~~~~~  
Se ID: Z14810 *A* Seq. No.: 00086 A/S Pos.: 19 Date: 02/19/93

Replicate 1  
Peak Area (A-s): 0.047  
Background Pk Area (A-s): 0.123  
Blank Corrected Pk Area (A-s): 0.040  
Concentration (ug/L ): 10.0

Time: 18:48  
Peak Height (A): 0.083  
Background Pk Height (A): 0.043

Replicate 2  
Peak Area (A-s): 0.047  
Background Pk Area (A-s): 0.124  
Blank Corrected Pk Area (A-s): 0.041  
Concentration (ug/L ): 10.0

Time: 18:51  
Peak Height (A): 0.075  
Background Pk Height (A): 0.105

Mean Conc (ug/L ): 10.0 SD: 0.03 RSD(%): 0.31

Recovery is 84.5% (outside of specified limits)

~~~~~  
Se ID: Z14811 Seq. No.: 00087 A/S Pos.: 20 Date: 02/19/93

MW-43

Replicate 1
Peak Area (A-s): 0.008
Background Pk Area (A-s): 0.098
Blank Corrected Pk Area (A-s): 0.002
Concentration (ug/L): 0.6

Time: 18:54
Peak Height (A): 0.014
Background Pk Height (A): 0.041

Replicate 2 Time: 18:57

Peak Area (A-s): 0.011
Background Pk Area (A-s): 0.085
Blank Corrected Pk Area (A-s): 0.004
Concentration (ug/L): 1.3

Peak Height (A): 0.014
Background Pk Height (A): 0.039

1656

2-14811 MW-43

Mean Conc (ug/L): 0.9

SD: 0.45

RSD(%): 47.70

~~~~~  
Se ID: Z14811 A Seq. No.: 00088 A/S Pos.: 20 Date: 02/19/93

Replicate 1  
Peak Area (A-s): 0.042  
Background Pk Area (A-s): 0.127  
Blank Corrected Pk Area (A-s): 0.035  
Concentration (ug/L ): 8.8

Time: 19:00  
Peak Height (A): 0.057  
Background Pk Height (A): 0.047

Replicate 2  
Peak Area (A-s): 0.043  
Background Pk Area (A-s): 0.131  
Blank Corrected Pk Area (A-s): 0.037  
Concentration (ug/L ): 9.2

Time: 19:03  
Peak Height (A): 0.072  
Background Pk Height (A): 0.189

Mean Conc (ug/L ): 9.0

SD: 0.32

RSD(%): 3.52

Recovery is 80.6% (outside of specified limits)

~~~~~  
Se ID: CCV(50) Seq. No.: 00089 A/S Pos.: 37 Date: 02/19/93

Replicate 1
Peak Area (A-s): 0.224
Background Pk Area (A-s): 0.088
Blank Corrected Pk Area (A-s): 0.218
Concentration (ug/L): 53.1

Time: 19:06
Peak Height (A): 0.239
Background Pk Height (A): 0.053

Replicate 2
Peak Area (A-s): 0.227
Background Pk Area (A-s): 0.091
Blank Corrected Pk Area (A-s): 0.221
Concentration (ug/L): 53.9

Time: 19:09
Peak Height (A): 0.250
Background Pk Height (A): 0.056

Mean Conc (ug/L): 53.5

SD: 0.55

RSD(%): 1.03

QC sample is within range 45 - 55

~~~~~  
Se ID: CCB Seq. No.: 00090 A/S Pos.: 38 Date: 02/19/93

Replicate 1  
Peak Area (A-s): 0.005  
Background Pk Area (A-s): 0.044  
Blank Corrected Pk Area (A-s): -0.001  
Concentration (ug/L ): -0.1

Time: 19:12  
Peak Height (A): 0.012  
Background Pk Height (A): 0.028

Replicate 2  
Peak Area (A-s): 0.007  
Background Pk Area (A-s): 0.044  
Blank Corrected Pk Area (A-s): 0.001  
Concentration (ug/L ): 0.4

Time: 19:15  
Peak Height (A): 0.015  
Background Pk Height (A): 0.023

Mean Conc (ug/L ):

0.2

SD: 0.40

RSD(%): 258.37

QC sample is within range

CCB

1657

Std. Prepped Date: 2/19/93/0830

IEA Laboratories

Date: 2/19/93

art Run Time : 1821

200 Monroe Turnpike  
 Monroe, Connecticut 06468  
 (203) 452-8200

page 1 of 1

1658

FURNACE DATA SHEET

Element: Se

I.D. Wt. File: Z148

Instrument 5100

Analyst J. Hoff

| Cup           | Sample ID          | % Sol.           | Wt. V/Vol          | Dil Factor | Sample Recovery | % Recovery       | Flags | Value ug/L<br>mg/kg |
|---------------|--------------------|------------------|--------------------|------------|-----------------|------------------|-------|---------------------|
| 5             | ICV                |                  |                    |            | 50.9            | 101.8            |       | 50.9                |
| 1             | ICB                |                  |                    |            | -0.8            |                  |       | 1.0 U               |
| 2             | CRA                |                  |                    |            | 5.6             | 112.0            |       | 5.6                 |
| 37            | CCV(50)            |                  |                    |            | 52.4            | 104.8            |       | 52.4                |
| 38            | CCB                |                  |                    |            | -1.0            |                  |       | -1.00 B             |
| 6             | Z14812 MW-44       | 100.0            | 100/100            |            | -0.2            |                  |       | 1.0 U               |
| 6             | Z14812A            | 100.0            | 100/100            |            | 8.4             | 84.0             | W     |                     |
| 7             | Z14813 MW-46       | 100.0            | 100/100            |            | -1.0            |                  |       | 1.0 U               |
| 7             | Z14813A            | 100.0            | 100/100            |            | 5.6             | 56.0             | W     |                     |
| 8             | Z14814 MW-35       | 100.0            | 100/100            |            | -0.0            |                  |       | 1.0 U               |
| 8             | Z14814A            | 100.0            | 100/100            |            | 7.3             | 73.0             | W     |                     |
| 9             | Z14816 MW-2        | 100.0            | 100/100            |            | -0.1            |                  |       | 1.0 U               |
|               | Z14816A            | 100.0            | 100/100            |            | 8.9             | 89.0             |       |                     |
| 10            | Z14817 REPLICATE   | 100.0            | 100/100            |            | 1.1             |                  |       | 1.1 B               |
| 10            | Z14817A            | 100.0            | 100/100            |            | 8.6             | 75.0             | W     |                     |
| 37            | CCV(50)            |                  |                    |            | 51.3            | 102.6            |       | 51.3                |
| 38            | CCB                |                  |                    |            | 0.5             |                  |       | 1.0 U               |
| 11            | Z14818 MW-1        | 100.0            | 100/100            |            | 0.8             |                  |       | 1.0 U               |
| 11            | Z14818A            | 100.0            | 100/100            |            | 9.0             | 90.0             |       |                     |
| 12            | Z14820 MW-47       | 100.0            | 100/100            |            | 1.9             |                  |       | 1.9 B               |
| 12            | Z14820A            | 100.0            | 100/100            |            | 9.0             | 71.0             | W     |                     |
| <del>13</del> | <del>Z14821</del>  | <del>100.0</del> | <del>100/100</del> |            | <del>0.8</del>  |                  |       | <del>1.0 U</del>    |
| 13            | Z14821A            | 100.0            | 100/100            |            | 8.5             | 85.0             |       |                     |
| 14            | Z14822             | 100.0            | 100/100            |            | 0.4             |                  |       | 1.0 U               |
| 14            | Z14822A            | 100.0            | 100/100            |            | 10.4            | 104.0            |       |                     |
| 15            | Z14823             | 100.0            | 100/100            |            | 0.7             |                  |       | 1.0 U               |
| <del>15</del> | <del>Z14823A</del> | <del>100.0</del> | <del>100/100</del> |            | <del>11.0</del> | <del>110.0</del> |       | <del></del>         |
| 37            | CCV(50)            |                  |                    |            | 53.6            | 107.2            |       | 53.6                |
| 38            | CCB                |                  |                    |            | 0.7             |                  |       | 1.0 U               |
| <del>16</del> | <del>Z14827</del>  | <del>100.0</del> | <del>100/100</del> |            | <del>0.7</del>  |                  |       | <del>1.0 U</del>    |
| 16            | Z14827A            | 100.0            | 100/100            |            | 10.1            | 101.0            |       |                     |
| 37            | CCV(50)            |                  |                    |            | 50.7            | 101.4            |       | 50.7                |
| <del>38</del> | <del>CCB</del>     |                  |                    |            | <del>0.8</del>  |                  |       | <del>1.0 U</del>    |

*Handwritten notes:*  
 6/3/3  
 6/3/3

Original File: ACSEILPB.HMU Analyst: J.N.  
Date: 02/19/93 Time: 18:17  
Data File: Z148.DAT ID/WT File: Z148.IDW

1655

Element File: SEAUTSPY.GEL Element: Se Wavelength: 196.0  
Data File: Z148.DAT ID/WT File: Z148.IDW Lamp Current: 0  
Technique: HGA Calib. Type: Linear Energy: 60

Se ID: Calib. Blank Seq. No.: 00081 A/S Pos.: 1 Date: 02/19/93

SO  
Replicate 1 Time: 18:21  
Peak Area (A-s): 0.003 Peak Height (A): 0.007  
Background Pk Area (A-s): 0.096 Background Pk Height (A): 0.035  
Blank Corrected Pk Area (A-s): 0.003

Replicate 2 Time: 18:24  
Peak Area (A-s): 0.010 Peak Height (A): 0.010  
Background Pk Area (A-s): 0.145 Background Pk Height (A): 0.040  
Blank Corrected Pk Area (A-s): 0.010

Mean Pk Area (A-s): 0.007 SD: 0.0045 RSD(%): 67.27

Auto-zero performed.

~~Se ID: Standard 1 Seq. No.: 00082 A/S Pos.: 2 Date: 02/19/93~~

~~Replicate 1 Time: 18:27  
Peak Area (A-s): 0.028 Peak Height (A): 0.026  
Background Pk Area (A-s): 0.242 Background Pk Height (A): 0.059  
Blank Corrected Pk Area (A-s): 0.022~~

~~Replicate 2 Time: 18:30  
Peak Area (A-s): 0.022 Peak Height (A): 0.024  
Background Pk Area (A-s): 0.117 Background Pk Height (A): 0.033  
Blank Corrected Pk Area (A-s): 0.015~~

~~Mean Pk Area (A-s): 0.018 SD: 0.0046 RSD(%): 24.89~~

High RSD  
1/11/93  
2/23/93

Se ID: Standard 1 Seq. No.: 00083 A/S Pos.: 2 Date: 02/19/93

Replicate 1 Time: 18:33  
Peak Area (A-s): 0.027 Peak Height (A): 0.026  
Background Pk Area (A-s): 0.229 Background Pk Height (A): 0.056  
Blank Corrected Pk Area (A-s): 0.020

Replicate 2 Time: 18:35  
Peak Area (A-s): 0.021 Peak Height (A): 0.023  
Background Pk Area (A-s): 0.073 Background Pk Height (A): 0.023  
Blank Corrected Pk Area (A-s): 0.014

~~Mean Pk Area (A-s): 0.017 SD: 0.0041 RSD(%): 23.97~~



~~~~~  
Se ID: Standard 1 Seq. No.: 00084 A/S Pos.: 2 Date: 02/19/93

Replicate 1 **S5** Time: 18:38 **1660**
Peak Area (A-s): 0.028
Background Pk Area (A-s): 0.200
Blank Corrected Pk Area (A-s): 0.021

Replicate 2 Time: 18:41
Peak Area (A-s): 0.030
Background Pk Area (A-s): 0.212
Blank Corrected Pk Area (A-s): 0.023

Mean Pk Area (A-s): 0.022 SD: 0.0014 RSD(%): 6.08

Standard number 1 applied. [5.0]
Correlation coefficient: 1.00000 Slope: 0.0045 Int: -0.000

~~~~~  
Se ID: Standard 2 Seq. No.: 00085 A/S Pos.: 3 Date: 02/19/93

Replicate 1 **S50** Time: 18:44  
Peak Area (A-s): 0.175  
Background Pk Area (A-s): 0.260  
Blank Corrected Pk Area (A-s): 0.169  
Concentration (ug/L ): 37.7

Replicate 2 Time: 18:47  
Peak Area (A-s): 0.172  
Background Pk Area (A-s): 0.164  
Blank Corrected Pk Area (A-s): 0.165  
Concentration (ug/L ): 36.9

Mean Conc (ug/L ): 37.3 SD: 0.53 RSD(%): 1.41

Standard number 2 applied. [50.0]  
Correlation coefficient: 0.99946 Slope: 0.0033 Int: 0.003

~~~~~  
Se ID: Standard 3 Seq. No.: 00086 A/S Pos.: 4 Date: 02/19/93

Replicate 1 **S100** Time: 18:50
Peak Area (A-s): 0.332
Background Pk Area (A-s): 0.294
Blank Corrected Pk Area (A-s): 0.326
Concentration (ug/L): 98.2

Replicate 2 Time: 18:53
Peak Area (A-s): 0.341
Background Pk Area (A-s): 0.237
Blank Corrected Pk Area (A-s): 0.335
Concentration (ug/L): 100.9

Mean Conc (ug/L): 99.6 SD: 1.89 RSD(%): 1.90

Standard number 3 applied. [100.0]
Correlation coefficient: 0.99987 Slope: 0.0033 Int: 0.003

Se ID: UCV(50) Seq. No.: 00090 A/S Pos.: 37 Date: 02/19/93

Replicate 1 Time: 19:13 1662
Peak Area (A-s): 0.181 Peak Height (A): 0.163
Background Pk Area (A-s): 0.216 Background Pk Height (A): 0.073
Blank Corrected Pk Area (A-s): 0.174
Concentration (ug/L): 52.3

Replicate 2 Time: 19:16
Peak Area (A-s): 0.182 Peak Height (A): 0.170
Background Pk Area (A-s): 0.271 Background Pk Height (A): 0.086
Blank Corrected Pk Area (A-s): 0.175
Concentration (ug/L): 52.6

Mean Conc (ug/L): 52.4 SD: 0.23 RSD(%): 0.43

QC sample is within range 45 - 55

Se ID: CCB Seq. No.: 00091 A/S Pos.: 38 Date: 02/19/93

Replicate 1 Time: 19:19
Peak Area (A-s): 0.009 Peak Height (A): 0.009
Background Pk Area (A-s): 0.208 Background Pk Height (A): 0.051
Blank Corrected Pk Area (A-s): 0.003
Concentration (ug/L): -0.0

Replicate 2 Time: 19:21
Peak Area (A-s): 0.003 Peak Height (A): 0.008
Background Pk Area (A-s): 0.058 Background Pk Height (A): 0.022
Blank Corrected Pk Area (A-s): -0.003
Concentration (ug/L): -1.9

Mean Conc (ug/L): -1.0 SD: 1.29 RSD(%): 134.28

QC sample is within range

Se ID: Z14812 Seq. No.: 00092 A/S Pos.: 6 Date: 02/19/93

Replicate 1 *MW-44* Time: 19:24
Peak Area (A-s): 0.006 Peak Height (A): 0.009
Background Pk Area (A-s): 0.241 Background Pk Height (A): 0.071
Blank Corrected Pk Area (A-s): -0.001
Concentration (ug/L): -1.1

Replicate 2 Time: 19:27
Peak Area (A-s): 0.012 Peak Height (A): 0.014
Background Pk Area (A-s): 0.328 Background Pk Height (A): 0.089
Blank Corrected Pk Area (A-s): 0.005
Concentration (ug/L): 0.6

Mean Conc (ug/L): -0.2 SD: 1.20 RSD(%): 515.43

Se ID: Z14812A Seq. No.: 00093 A/S Pos.: 6 Date: 02/19/93

Replicate 1 Time: 19:30

Peak Area (A-s): 0.038 *Z14812A*
Background Pk Area (A-s): 0.384
Blank Corrected Pk Area (A-s): 0.031
Concentration (ug/L): 8.6

Peak Height (A): 0.035
Background Pk Height (A): 0.101

1663

Replicate 2
Peak Area (A-s): 0.036
Background Pk Area (A-s): 0.319
Blank Corrected Pk Area (A-s): 0.030
Concentration (ug/L): 8.2

Time: 19:33
Peak Height (A): 0.039
Background Pk Height (A): 0.092

Mean Conc (ug/L): 8.4 SD: 0.30 RSD(%): 3.63

Recovery is 86.3%

~~~~~  
Se ID: Z14813 Seq. No.: 00094 A/S Pos.: 7 Date: 02/19/93

Replicate 1  
Peak Area (A-s): 0.008 *MW-46*  
Background Pk Area (A-s): 0.293  
Blank Corrected Pk Area (A-s): 0.001  
Concentration (ug/L ): -0.5

Time: 19:36  
Peak Height (A): 0.010  
Background Pk Height (A): 0.076

Replicate 2  
Peak Area (A-s): 0.005  
Background Pk Area (A-s): 0.242  
Blank Corrected Pk Area (A-s): -0.002  
Concentration (ug/L ): -1.4

Time: 19:39  
Peak Height (A): 0.008  
Background Pk Height (A): 0.067

Mean Conc (ug/L ): -1.0 SD: 0.63 RSD(%): 64.67

~~~~~  
Se ID: Z14813 *A* Seq. No.: 00095 A/S Pos.: 7 Date: 02/19/93

Replicate 1
Peak Area (A-s): 0.028
Background Pk Area (A-s): 0.304
Blank Corrected Pk Area (A-s): 0.022
Concentration (ug/L): 5.7

Time: 19:42
Peak Height (A): 0.029
Background Pk Height (A): 0.077

Replicate 2
Peak Area (A-s): 0.027
Background Pk Area (A-s): 0.216
Blank Corrected Pk Area (A-s): 0.021
Concentration (ug/L): 5.4

Time: 19:45
Peak Height (A): 0.027
Background Pk Height (A): 0.061

Mean Conc (ug/L): 5.6 SD: 0.17 RSD(%): 3.11

Recovery is 65.5% (outside of specified limits)

~~~~~  
Se ID: Z14814 Seq. No.: 00096 A/S Pos.: 8 Date: 02/19/93

Replicate 1  
Peak Area (A-s): 0.009 *MW-35*  
Background Pk Area (A-s): 0.272  
Blank Corrected Pk Area (A-s): 0.002  
Concentration (ug/L ): -0.2

Time: 19:48  
Peak Height (A): 0.011  
Background Pk Height (A): 0.068

Replicate 2  
Peak Area (A-s): 0.010  
Background Pk Area (A-s): 0.071  
Blank Corrected Pk Area (A-s): 0.003  
Concentration (ug/L ): 0.1

*Z14814*

Time: 19:51  
Peak Height (A): 0.011  
Background Pk Height (A): 0.069

1664

*MW-35*

Mean Conc (ug/L ): -0.0 SD: 0.24 RSD(%): 807.92

~~~~~  
Se ID: Z14814A Seq. No.: 00097 A/S Pos.: 8 Date: 02/19/93

Replicate 1
Peak Area (A-s): 0.033
Background Pk Area (A-s): 0.238
Blank Corrected Pk Area (A-s): 0.026
Concentration (ug/L): 7.1

Time: 19:54
Peak Height (A): 0.036
Background Pk Height (A): 0.061

Replicate 2
Peak Area (A-s): 0.034
Background Pk Area (A-s): 0.224
Blank Corrected Pk Area (A-s): 0.027
Concentration (ug/L): 7.4

Time: 19:57
Peak Height (A): 0.034
Background Pk Height (A): 0.060

Mean Conc (ug/L): 7.3 SD: 0.25 RSD(%): 3.47

Recovery is 72.9% (outside of specified limits)

~~~~~  
Se ID: Z14816 Seq. No.: 00098 A/S Pos.: 9 Date: 02/19/93

Replicate 1  
Peak Area (A-s): 0.010  
Background Pk Area (A-s): 0.228  
Blank Corrected Pk Area (A-s): 0.003  
Concentration (ug/L ): 0.2

*MHW-2*

Time: 20:00  
Peak Height (A): 0.012  
Background Pk Height (A): 0.067

Replicate 2  
Peak Area (A-s): 0.009  
Background Pk Area (A-s): 0.225  
Blank Corrected Pk Area (A-s): 0.002  
Concentration (ug/L ): -0.3

Time: 20:03  
Peak Height (A): 0.009  
Background Pk Height (A): 0.058

Mean Conc (ug/L ): -0.1 SD: 0.32 RSD(%): 473.21

~~~~~  
Se ID: Z14816A Seq. No.: 00099 A/S Pos.: 9 Date: 02/19/93

Replicate 1
Peak Area (A-s): 0.038
Background Pk Area (A-s): 0.239
Blank Corrected Pk Area (A-s): 0.032
Concentration (ug/L): 8.8

Time: 20:06
Peak Height (A): 0.036
Background Pk Height (A): 0.068

Replicate 2
Peak Area (A-s): 0.039
Background Pk Area (A-s): 0.241
Blank Corrected Pk Area (A-s): 0.033
Concentration (ug/L): 9.1

Time: 20:09
Peak Height (A): 0.038
Background Pk Height (A): 0.072

Mean Conc (ug/L): 8.9 SD: 0.26 RSD(%): 2.89

Recovery is 90.1%

Z14816A

1665

~~~~~  
ID: Z14817 Seq. No.: 00100 A/S Pos.: 10 Date: 02/19/93

Replicate 1 *REPLICATE* Time: 20:12  
Peak Area (A-s): 0.014 Peak Height (A): 0.013  
Background Pk Area (A-s): 0.246 Background Pk Height (A): 0.060  
Blank Corrected Pk Area (A-s): 0.007  
Concentration (ug/L ): 1.3

Replicate 2 Time: 20:15  
Peak Area (A-s): 0.012 Peak Height (A): 0.014  
Background Pk Area (A-s): 0.220 Background Pk Height (A): 0.055  
Blank Corrected Pk Area (A-s): 0.006  
Concentration (ug/L ): 0.8

Mean Conc (ug/L ): 1.1 SD: 0.36 RSD(%): 33.89

~~~~~  
Se ID: Z14817A Seq. No.: 00101 A/S Pos.: 10 Date: 02/19/93

Replicate 1 Time: 20:18
Peak Area (A-s): 0.037 Peak Height (A): 0.042
Background Pk Area (A-s): 0.252 Background Pk Height (A): 0.065
Blank Corrected Pk Area (A-s): 0.030
Concentration (ug/L): 8.3

Replicate 2 Time: 20:21
Peak Area (A-s): 0.039 Peak Height (A): 0.043
Background Pk Area (A-s): 0.244 Background Pk Height (A): 0.062
Blank Corrected Pk Area (A-s): 0.032
Concentration (ug/L): 8.9

Mean Conc (ug/L): 8.6 SD: 0.38 RSD(%): 4.39

Recovery is 75.5% (outside of specified limits)

~~~~~  
Se ID: CCV(50) Seq. No.: 00102 A/S Pos.: 37 Date: 02/19/93

Replicate 1 Time: 20:24  
Peak Area (A-s): 0.177 Peak Height (A): 0.167  
Background Pk Area (A-s): 0.223 Background Pk Height (A): 0.074  
Blank Corrected Pk Area (A-s): 0.170  
Concentration (ug/L ): 51.0

Replicate 2 Time: 20:27  
Peak Area (A-s): 0.178 Peak Height (A): 0.167  
Background Pk Area (A-s): 0.236 Background Pk Height (A): 0.076  
Blank Corrected Pk Area (A-s): 0.172  
Concentration (ug/L ): 51.5

Mean Conc (ug/L ): 51.3 SD: 0.32 RSD(%): 0.62

UC sample is within range 45 - 55

Se ID: CCB Seq. No.: 00103 A/S Pos.: 38 Date: 02/19/93

Replicate 1 Time: 20:30 1666  
Peak Area (A-s): 0.013 Peak Height (A): 0.012  
Background Pk Area (A-s): 0.206 Background Pk Height (A): 0.050  
Blank Corrected Pk Area (A-s): 0.007  
Concentration (ug/L ): 1.2

Replicate 2 Time: 20:33  
Peak Area (A-s): 0.009 Peak Height (A): 0.011  
Background Pk Area (A-s): 0.151 Background Pk Height (A): 0.039  
Blank Corrected Pk Area (A-s): 0.002  
Concentration (ug/L ): -0.1

Mean Conc (ug/L ): 0.5 SD: 0.93 RSD(%): 182.99

QC sample is within range

Se ID: Z14818 Seq. No.: 00104 A/S Pos.: 11 Date: 02/19/93

Replicate 1 *MW-1* Time: 20:36  
Peak Area (A-s): 0.013 Peak Height (A): 0.012  
Background Pk Area (A-s): 0.314 Background Pk Height (A): 0.079  
Blank Corrected Pk Area (A-s): 0.007  
Concentration (ug/L ): 1.1

Replicate 2 Time: 20:39  
Peak Area (A-s): 0.011 Peak Height (A): 0.013  
Background Pk Area (A-s): 0.282 Background Pk Height (A): 0.073  
Blank Corrected Pk Area (A-s): 0.005  
Concentration (ug/L ): 0.6

Mean Conc (ug/L ): 0.8 SD: 0.39 RSD(%): 46.95

Se ID: Z14818 A Seq. No.: 00105 A/S Pos.: 11 Date: 02/19/93

Replicate 1 Time: 20:42  
Peak Area (A-s): 0.040 Peak Height (A): 0.036  
Background Pk Area (A-s): 0.313 Background Pk Height (A): 0.083  
Blank Corrected Pk Area (A-s): 0.033  
Concentration (ug/L ): 9.3

Replicate 2 Time: 20:45  
Peak Area (A-s): 0.038 Peak Height (A): 0.037  
Background Pk Area (A-s): 0.294 Background Pk Height (A): 0.078  
Blank Corrected Pk Area (A-s): 0.031  
Concentration (ug/L ): 8.7

Mean Conc (ug/L ): 9.0 SD: 0.43 RSD(%): 4.76

Recovery is 81.7% (outside of specified limits)

ID: Z14820 Seq. No.: 00106 A/S Pos.: 12 Date: 02/19/93

Replicate 1 *MW-47* Time: 20:48

Peak Area (A-s): 0.013 **214820**  
Background Pk Area (A-s): 0.272  
Blank Corrected Pk Area (A-s): 0.007  
Concentration (ug/L ): 1.2

Peak Height (A): 0.013  
Background Pk Height (A): 0.076

1667

MW-47

Replicate 2  
Peak Area (A-s): 0.018  
Background Pk Area (A-s): 0.231  
Blank Corrected Pk Area (A-s): 0.011  
Concentration (ug/L ): 2.6

Time: 20:51  
Peak Height (A): 0.018  
Background Pk Height (A): 0.086

Mean Conc (ug/L ): 1.9 SD: 1.00 RSD(%): 53.26

~~~~~  
Se ID: Z14820 **A** Seq. No.: 00107 A/S Pos.: 12 Date: 02/19/93

Replicate 1
Peak Area (A-s): 0.039
Background Pk Area (A-s): 0.246
Blank Corrected Pk Area (A-s): 0.032
Concentration (ug/L): 8.9

Time: 20:54
Peak Height (A): 0.039
Background Pk Height (A): 0.071

Replicate 2
Peak Area (A-s): 0.039
Background Pk Area (A-s): 0.268
Blank Corrected Pk Area (A-s): 0.033
Concentration (ug/L): 9.0

Time: 20:57
Peak Height (A): 0.040
Background Pk Height (A): 0.076

Mean Conc (ug/L): 9.0 SD: 0.10 RSD(%): 1.12

recovery is 71.1% (outside of specified limits)

~~~~~  
Se ID: Z14821 Seq. No.: 00108 A/S Pos.: 13 Date: 02/19/93

Replicate 1  
Peak Area (A-s): 0.010  
Background Pk Area (A-s): 0.305  
Blank Corrected Pk Area (A-s): 0.003  
Concentration (ug/L ): 0.0

Time: 21:00  
Peak Height (A): 0.011  
Background Pk Height (A): 0.082

Replicate 2  
Peak Area (A-s): 0.015  
Background Pk Area (A-s): 0.357  
Blank Corrected Pk Area (A-s): 0.008  
Concentration (ug/L ): 1.5

3/3

Time: 21:03  
Peak Height (A): 0.015  
Background Pk Height (A): 0.097

Mean Conc (ug/L ): 0.8 SD: 1.04 RSD(%): 135.52

~~~~~  
Se ID: Z14821 **A** Seq. No.: 00109 A/S Pos.: 13 Date: 02/19/93

Replicate 1
Peak Area (A-s): 0.036
Background Pk Area (A-s): 0.311
Blank Corrected Pk Area (A-s): 0.030
Concentration (ug/L): 8.2

Time: 21:06
Peak Height (A): 0.035
Background Pk Height (A): 0.088

Replicate 2 Time: 21:09

Peak Area (A-s): 0.038
Background Pk Area (A-s): 0.315
Blank Corrected Pk Area (A-s): 0.032
Concentration (ug/L): 8.7

Z14821A

Peak Height (A): 0.032
Background Pk Height (A): 0.085

1668

Mean Conc (ug/L): 8.5 SD: 0.41 RSD(%): 4.84

Recovery is 76.8% (outside of specified limits)

Se ID: Z14822 Seq. No.: 00110 A/S Pos.: 14 Date: 02/19/93

Replicate 1
Peak Area (A-s): 0.010
Background Pk Area (A-s): 0.194
Blank Corrected Pk Area (A-s): 0.003
Concentration (ug/L): 0.1

Time: 21:12
Peak Height (A): 0.009
Background Pk Height (A): 0.051

Replicate 2
Peak Area (A-s): 0.012
Background Pk Area (A-s): 0.221
Blank Corrected Pk Area (A-s): 0.005
Concentration (ug/L): 0.7

Time: 21:15
Peak Height (A): 0.012
Background Pk Height (A): 0.057

Mean Conc (ug/L): 0.4 SD: 0.43 RSD(%): 118.66

3/3

Se ID: Z14822 A Seq. No.: 00111 A/S Pos.: 14 Date: 02/19/93

Replicate 1
Peak Area (A-s): 0.042
Background Pk Area (A-s): 0.212
Blank Corrected Pk Area (A-s): 0.035
Concentration (ug/L): 9.9

Time: 21:18
Peak Height (A): 0.039
Background Pk Height (A): 0.053

Replicate 2
Peak Area (A-s): 0.046
Background Pk Area (A-s): 0.262
Blank Corrected Pk Area (A-s): 0.039
Concentration (ug/L): 11.0

Time: 21:21
Peak Height (A): 0.038
Background Pk Height (A): 0.062

Mean Conc (ug/L): 10.4 SD: 0.78 RSD(%): 7.43

Recovery is 100.8%

Se ID: Z14823 Seq. No.: 00112 A/S Pos.: 15 Date: 02/19/93

Replicate 1
Peak Area (A-s): 0.012
Background Pk Area (A-s): 0.247
Blank Corrected Pk Area (A-s): 0.005
Concentration (ug/L): 0.7

Time: 21:24
Peak Height (A): 0.016
Background Pk Height (A): 0.058

Replicate 2
Peak Area (A-s): 0.012
Background Pk Area (A-s): 0.230
Blank Corrected Pk Area (A-s): 0.005
Concentration (ug/L): 0.6

Time: 21:27
Peak Height (A): 0.012
Background Pk Height (A): 0.055

Mean Conc (ug/L): 10.7 SD: 0.09 **214823** RSD(%): 13.18

Se ID: Z14823 A Seq. No.: 00113 A/S Pos.: 15 Date: 02/19/93

replicate 1 Time: 21:30 **1669**
Peak Area (A-s): 0.045 Peak Height (A): 0.041
Background Pk Area (A-s): 0.244 Background Pk Height (A): 0.058
Blank Corrected Pk Area (A-s): 0.038
Concentration (ug/L): 10.8 **4/33**

Replicate 2 Time: 21:33
Peak Area (A-s): 0.047 Peak Height (A): 0.040
Background Pk Area (A-s): 0.236 Background Pk Height (A): 0.057
Blank Corrected Pk Area (A-s): 0.040
Concentration (ug/L): 11.3

Mean Conc (ug/L): 11.0 SD: 0.35 RSD(%): 3.19

Recovery is 103.6%

Se ID: CCV(50) Seq. No.: 00114 A/S Pos.: 37 Date: 02/19/93

Replicate 1 Time: 21:36
Peak Area (A-s): 0.183 Peak Height (A): 0.163
Background Pk Area (A-s): 0.261 Background Pk Height (A): 0.081
Blank Corrected Pk Area (A-s): 0.176
Concentration (ug/L): 52.9

Replicate 2 Time: 21:39
Peak Area (A-s): 0.187 Peak Height (A): 0.167
Background Pk Area (A-s): 0.287 Background Pk Height (A): 0.088
Blank Corrected Pk Area (A-s): 0.181
Concentration (ug/L): 54.2

Mean Conc (ug/L): 53.6 SD: 0.95 RSD(%): 1.78

QC sample is within range 45 - 55

Se ID: CCB Seq. No.: 00115 A/S Pos.: 38 Date: 02/19/93

Replicate 1 Time: 21:42
Peak Area (A-s): 0.013 Peak Height (A): 0.010
Background Pk Area (A-s): 0.230 Background Pk Height (A): 0.055
Blank Corrected Pk Area (A-s): 0.006
Concentration (ug/L): 1.0

Replicate 2 Time: 21:45
Peak Area (A-s): 0.011 Peak Height (A): 0.009
Background Pk Area (A-s): 0.222 Background Pk Height (A): 0.054
Blank Corrected Pk Area (A-s): 0.005
Concentration (ug/L): 0.5

Mean Conc (ug/L): 0.7 SD: 0.34 RSD(%): 47.72

QC sample is within range

Std. Prepped Date: 2/19/93 8:30 IEA Laboratories
 200 Monroe Turnpike
 Start Run Time : 19:24 Monroe, Connecticut 06468
 (203) 261-4458

Date: 2/19/93
 page ___ of ___

1670

FURNACE DATA SHEET

Element: TI I.D. Wt. File: Z116 Instrument 5100N Analyst A. Muckers

Cup	Sample ID	% Sol.	Wt. V/Vol	Dil Factor	Sample Recovery	% Recovery	Flags	Value ug/L, mg/kg
5	ICV				50.5	101.0		50.5
1	ICB				1.0			2.0 U
2	CRA				9.1	91.0		9.1
37	CCV(50)				46.5	93.0		46.5
38	CCB				-0.2			2.0 U
6	Z11602	100.0	100/100		1.3			2.0 U
6	Z11602A	100.0	100/100		16.0	80.0	W	2.0 U
7	Z11602D	100.0	100/100		-0.3			2.0 U
7	Z11602DA	100.0	100/100		16.5	82.5	W	2.0 U
8	Z11602S	100.0	100/100		-0.3	4.0	N	2.0 U
8	Z11602SA	100.0	100/100		15.8	79.0	W	42.7 <i>sm 2/24</i>
9	Z11601	100.0	100/100		42.7			42.7
9	Z11601A	100.0	100/100		61.9	96.0		2.0 U
10	Z11604	100.0	100/100		-0.5			2.0 U
1	11604A	100.0	100/100		16.7	83.5	W	2.0 U
37	CCV(50)				46.0	92.0		46.0
38	CCB				-0.3			2.0 U
11	Z11605	100.0	100/100		-0.3			2.0 U
11	Z11605A	100.0	100/100		16.5	82.5	W	2.0 U
12	Z11607	100.0	100/100		-0.4			2.0 U
12	Z11607A	100.0	100/100		16.1	80.5	W	2.0 U
13	RINSE	100.0	100/100		-0.5			2.0 U
13	RINSEA	100.0	100/100		16.2			16.2
14	PBW	100.0	100/100		0.1			2.0 U
14	PBWA	100.0	100/100		17.8	89.0		2.0 U
15	LCSW	100.0	100/100		48.1	96.2		48.1
15	LCSWA	100.0	100/100		68.2	100.5		2.0 U
37	CCV(50)				46.2	92.4		46.2
38	CCB				-0.1			2.0 U
16	Z14809	100.0	100/100		-0.2			2.0 U MW-45
16	Z14809A	100.0	100/100		16.2	81.0	W	2.0 U MW-45
17	Z14809D	100.0	100/100		-0.2			2.0 U MW-45
17	Z14809DA	100.0	100/100		16.4	82.0	W	2.0 U MW-45
18	Z14809S	100.0	100/100		43.3	86.6		43.3 MW-45
18	Z14809SA	100.0	100/100		62.2	94.5		2.0 U MW-45 <i>sm 2/24</i>
19	Z14810	100.0	100/100		-0.4			2.0 U MHW-1
19	Z14810A	100.0	100/100		15.2	76.0	W	2.0 U MW-43
20	Z14811	100.0	100/100		-0.1			2.0 U MW-43
20	Z14811A	100.0	100/100		15.2	76.0	W	2.0 U MW-43
37	CCV(50)				45.8	91.6		45.8

Std. Prepped Date: 2/19/93 18:30 IEA Laboratories
200 Monroe Turnpike
Start Run Time : 19:24 Monroe, Connecticut 06468
(203) 261-4458

Date: 2/19/93
page __ of __

1671

FURNACE DATA SHEET

Element: TI I.D. Wt. File: Z116 Instrument 5100N Analyst J. Mickens

Cup	Sample ID	% Sol.	Wt.V/Vol	Dil Factor	Sample Recovery	% Recovery	Flags	Value ug/L, mg/kg
38	CCB				-0.2			2.0 U

 Element File: TLAUTSPK.GEL Element: T1 Wavelength: 276.8
 Date: 02/19/93 Time: 19:24 Slit: 0.70 L
 Data File: Z116.DAT ID/Wt File: Z116.IDW Lamp Current: 7
 Technique: HGA Calib. Type: Nonlinear Energy: 55

~~~~~  
 T1      ID: Calib. Blank      Seq. No.: 00091      A/S Pos.: 1      Date: 02/19/93

Replicate 1      *SO*      Time: 19:24  
 Peak Area (A-s): 0.005      Peak Height (A): 0.009  
 Background Pk Area (A-s): 0.001      Background Pk Height (A): 0.008  
 Blank Corrected Pk Area (A-s): 0.005      ---

Replicate 2      Time: 19:26  
 Peak Area (A-s): 0.003      Peak Height (A): 0.010  
 Background Pk Area (A-s): 0.002      Background Pk Height (A): 0.014  
 Blank Corrected Pk Area (A-s): 0.003

Mean Pk Area (A-s):      0.004      SD: 0.0016      RSD(%): 37.85

Auto-zero performed.

~~~~~  
 T1 ID: Standard 1 Seq. No.: 00092 A/S Pos.: 2 Date: 02/19/93

Replicate 1 *S10* Time: 19:29
 Peak Area (A-s): 0.090 Peak Height (A): 0.144
 Background Pk Area (A-s): 0.058 Background Pk Height (A): 0.104
 Blank Corrected Pk Area (A-s): 0.086

Replicate 2 Time: 19:32
 Peak Area (A-s): 0.089 Peak Height (A): 0.149
 Background Pk Area (A-s): 0.060 Background Pk Height (A): 0.106
 Blank Corrected Pk Area (A-s): 0.085

Mean Pk Area (A-s): 0.086 SD: 0.0007 RSD(%): 0.78

Standard number 1 applied. [10.0]
 Correlation coefficient: 1.00000 Slope: 0.0086

~~~~~  
 T1      ID: Standard 2      Seq. No.: 00093      A/S Pos.: 3      Date: 02/19/93

Replicate 1      *S50*      Time: 19:35  
 Peak Area (A-s): 0.326      Peak Height (A): 0.475  
 Background Pk Area (A-s): 0.281      Background Pk Height (A): 0.474  
 Blank Corrected Pk Area (A-s): 0.322  
 Concentration (ug/L ): 37.6

Replicate 2      Time: 19:37  
 Peak Area (A-s): 0.328      Peak Height (A): 0.466  
 Background Pk Area (A-s): 0.278      Background Pk Height (A): 0.466  
 Blank Corrected Pk Area (A-s): 0.324  
 Concentration (ug/L ): 37.8

Mean Conc (ug/L ):      37.7      SD: 0.13      RSD(%): 0.34

Standard number 2 applied. [50.0]

Correlation coefficient: 1.00000

Slope: 0.0093

1673

~~~~~  
T1 ID: Standard 3 Seq. No.: 00094 A/S Pos.: 4 Date: 02/19/93

Replicate 1
Peak Area (A-s): 0.521
Background Pk Area (A-s): 0.515
Blank Corrected Pk Area (A-s): 0.517
Concentration (ug/L): 109.4

S100

Time: 19:40
Peak Height (A): 0.651
Background Pk Height (A): 0.817

Replicate 2
Peak Area (A-s): 0.527
Background Pk Area (A-s): 0.523
Blank Corrected Pk Area (A-s): 0.522
Concentration (ug/L): 111.5

Time: 19:43
Peak Height (A): 0.667
Background Pk Height (A): 0.818

Mean Conc (ug/L): 110.5 SD: 1.51 RSD(%): 1.36

Standard number 3 applied. [100.0]
Correlation coefficient: 1.00000

Slope: 0.0096

~~~~~  
T1 ID: ICV Seq. No.: 00095 A/S Pos.: 5 Date: 02/19/93

Replicate 1  
Peak Area (A-s): 0.327  
Background Pk Area (A-s): 0.284  
Blank Corrected Pk Area (A-s): 0.323  
Concentration (ug/L ): 50.0

Time: 19:46  
Peak Height (A): 0.467  
Background Pk Height (A): 0.462

Replicate 2  
Peak Area (A-s): 0.331  
Background Pk Area (A-s): 0.287  
Blank Corrected Pk Area (A-s): 0.327  
Concentration (ug/L ): 50.9

Time: 19:48  
Peak Height (A): 0.453  
Background Pk Height (A): 0.469

Mean Conc (ug/L ): 50.5 SD: 0.63 RSD(%): 1.24

QC sample is within range 45 - 55

~~~~~  
T1 ID: ICB Seq. No.: 00096 A/S Pos.: 1 Date: 02/19/93

Replicate 1
Peak Area (A-s): 0.011
Background Pk Area (A-s): 0.008
Blank Corrected Pk Area (A-s): 0.007
Concentration (ug/L): 0.8

Time: 19:51
Peak Height (A): 0.020
Background Pk Height (A): 0.011

Replicate 2
Peak Area (A-s): 0.015
Background Pk Area (A-s): 0.003
Blank Corrected Pk Area (A-s): 0.011
Concentration (ug/L): 1.2

Time: 19:54
Peak Height (A): 0.016
Background Pk Height (A): 0.010

Mean Conc (ug/L): 1.0 SD: 0.28 RSD(%): 29.72

QC sample is within range

~~~~~  
T1 ID: CRA Seq. No.: 00097 A/S Pos.: 2 Date: 02/19/93

Replicate 1 Time: 19:57 1674  
Peak Area (A-s): 0.085 Peak Height (A): 0.133  
Background Pk Area (A-s): 0.064 Background Pk Height (A): 0.100  
Blank Corrected Pk Area (A-s): 0.081  
Concentration (ug/L ): 9.4

Replicate 2 Time: 20:00  
Peak Area (A-s): 0.080 Peak Height (A): 0.127  
Background Pk Area (A-s): 0.066 Background Pk Height (A): 0.099  
Blank Corrected Pk Area (A-s): 0.076  
Concentration (ug/L ): 8.8

Mean Conc (ug/L ): 9.1 SD: 0.45 RSD(%): 4.91

QC sample is within range

~~~~~  
T1 ID: CCV(50) Seq. No.: 00098 A/S Pos.: 37 Date: 02/19/93

Replicate 1 Time: 20:02
Peak Area (A-s): 0.312 Peak Height (A): 0.420
Background Pk Area (A-s): 0.275 Background Pk Height (A): 0.426
Blank Corrected Pk Area (A-s): 0.307
Concentration (ug/L): 46.8

Replicate 2 Time: 20:05
Peak Area (A-s): 0.308 Peak Height (A): 0.422
Background Pk Area (A-s): 0.277 Background Pk Height (A): 0.414
Blank Corrected Pk Area (A-s): 0.304
Concentration (ug/L): 46.1

Mean Conc (ug/L): 46.5 SD: 0.47 RSD(%): 1.01

QC sample is within range 45 - 55

~~~~~  
T1 ID: CCB Seq. No.: 00099 A/S Pos.: 38 Date: 02/19/93

Replicate 1 Time: 20:08  
Peak Area (A-s): 0.001 Peak Height (A): 0.008  
Background Pk Area (A-s): 0.014 Background Pk Height (A): 0.017  
Blank Corrected Pk Area (A-s): -0.003  
Concentration (ug/L ): -0.3

Replicate 2 Time: 20:10  
Peak Area (A-s): 0.004 Peak Height (A): 0.143  
Background Pk Area (A-s): 0.033 Background Pk Height (A): 0.183  
Blank Corrected Pk Area (A-s): 0.000  
Concentration (ug/L ): 0.0

Mean Conc (ug/L ): -0.2 SD: 0.24 RSD(%): 150.62

QC sample is within range

~~~~~  
T1 ID: Z11602 Seq. No.: 00100 A/S Pos.: 6 Date: 02/19/93

Replicate 1 Time: 20:13
Peak Area (A-s): 0.029 Peak Height (A): 0.175 1675
Background Pk Area (A-s): 0.166 Background Pk Height (A): 0.178
Blank Corrected Pk Area (A-s): 0.025
Concentration (ug/L): 2.7

Replicate 2 Time: 20:16
Peak Area (A-s): 0.003 Peak Height (A): 0.010
Background Pk Area (A-s): 0.127 Background Pk Height (A): 0.184
Blank Corrected Pk Area (A-s): -0.001
Concentration (ug/L): -0.1

Mean Conc (ug/L): 1.3 SD: 1.99 RSD(%): 152.10

~~~~~  
T1 ID: Z11602 A Seq. No.: 00101 A/S Pos.: 6 Date: 02/19/93

Replicate 1 Time: 20:19  
Peak Area (A-s): 0.133 Peak Height (A): 0.200  
Background Pk Area (A-s): 0.229 Background Pk Height (A): 0.312  
Blank Corrected Pk Area (A-s): 0.129  
Concentration (ug/L ): 15.9

Replicate 2 Time: 20:22  
Peak Area (A-s): 0.134 Peak Height (A): 0.198  
Background Pk Area (A-s): 0.229 Background Pk Height (A): 0.312  
Blank Corrected Pk Area (A-s): 0.130  
Concentration (ug/L ): 16.0

Mean Conc (ug/L ): 16.0 SD: 0.07 RSD(%): 0.44

Recovery is 73.5% (outside of specified limits)

~~~~~  
T1 ID: Z11602D Seq. No.: 00102 A/S Pos.: 7 Date: 02/19/93

Replicate 1 Time: 20:25
Peak Area (A-s): 0.001 Peak Height (A): 0.010
Background Pk Area (A-s): 0.049 Background Pk Height (A): 0.091
Blank Corrected Pk Area (A-s): -0.003
Concentration (ug/L): -0.3

Replicate 2 Time: 20:28
Peak Area (A-s): 0.002 Peak Height (A): 0.012
Background Pk Area (A-s): 0.055 Background Pk Height (A): 0.095
Blank Corrected Pk Area (A-s): -0.002
Concentration (ug/L): -0.2

Mean Conc (ug/L): -0.3 SD: 0.10 RSD(%): 36.97

~~~~~  
T1 ID: Z11602D A Seq. No.: 00103 A/S Pos.: 7 Date: 02/19/93

Replicate 1 Time: 20:31  
Peak Area (A-s): 0.135 Peak Height (A): 0.167  
Background Pk Area (A-s): 0.158 Background Pk Height (A): 0.203



Blank Corrected Pk Area (A-s): 0.131  
Concentration (ug/L ): 16.3

2 11602D A

1678

Replicate 2  
Peak Area (A-s): 0.140  
Background Pk Area (A-s): 0.152  
Blank Corrected Pk Area (A-s): 0.136  
Concentration (ug/L ): 16.9

Time: 20:34  
Peak Height (A): 0.169  
Background Pk Height (A): 0.209

Mean Conc (ug/L ): 16.5 SD: 0.47 RSD(%): 2.83

Recovery is 84.0% (outside of specified limits)

~~~~~  
T1 ID: Z11602S Seq. No.: 00104 A/S Pos.: 8 Date: 02/19/93

Replicate 1
Peak Area (A-s): -0.000
Background Pk Area (A-s): 0.056
Blank Corrected Pk Area (A-s): -0.005
Concentration (ug/L): -0.5

Time: 20:37
Peak Height (A): 0.010
Background Pk Height (A): 0.086

Replicate 2
Peak Area (A-s): 0.003
Background Pk Area (A-s): 0.051
Blank Corrected Pk Area (A-s): -0.002
Concentration (ug/L): -0.2

Time: 20:39
Peak Height (A): 0.008
Background Pk Height (A): 0.082

Mean Conc (ug/L): -0.3 SD: 0.21 RSD(%): 63.42

~~~~~  
T1 ID: Z11602S Seq. No.: 00105 A/S Pos.: 8 Date: 02/19/93

Replicate 1  
Peak Area (A-s): 0.132  
Background Pk Area (A-s): 0.151  
Blank Corrected Pk Area (A-s): 0.128  
Concentration (ug/L ): 15.7

Time: 20:43  
Peak Height (A): 0.169  
Background Pk Height (A): 0.201

Replicate 2  
Peak Area (A-s): 0.134  
Background Pk Area (A-s): 0.152  
Blank Corrected Pk Area (A-s): 0.129  
Concentration (ug/L ): 16.0

Time: 20:46  
Peak Height (A): 0.174  
Background Pk Height (A): 0.200

Mean Conc (ug/L ): 15.8 SD: 0.17 RSD(%): 1.07

Recovery is 80.8% (outside of specified limits)

~~~~~  
T1 ID: Z11601 Seq. No.: 00106 A/S Pos.: 9 Date: 02/19/93

Replicate 1
Peak Area (A-s): 0.293
Background Pk Area (A-s): 0.302
Blank Corrected Pk Area (A-s): 0.288
Concentration (ug/L): 42.9

Time: 20:49
Peak Height (A): 0.329
Background Pk Height (A): 0.378

Replicate 2 Time: 20:51

Peak Area (A-s): 0.291 Peak Height (A): 0.327
Background Pk Area (A-s): 0.300 Background Pk Height (A): 0.379
Blank Corrected Pk Area (A-s): 0.286
Concentration (ug/L): 42.5 *Z 11601* 1077
Mean Conc (ug/L): 42.7 SD: 0.29 RSD(%): 0.67

~~~~~  
T1 ID: Z11601 *A* Seq. No.: 00107 A/S Pos.: 9 Date: 02/19/93

Replicate 1 Time: 20:54  
Peak Area (A-s): 0.378 Peak Height (A): 0.416  
Background Pk Area (A-s): 0.390 Background Pk Height (A): 0.489  
Blank Corrected Pk Area (A-s): 0.374  
Concentration (ug/L ): 61.4

Replicate 2 Time: 20:58  
Peak Area (A-s): 0.382 Peak Height (A): 0.422  
Background Pk Area (A-s): 0.386 Background Pk Height (A): 0.490  
Blank Corrected Pk Area (A-s): 0.378  
Concentration (ug/L ): 62.4

Mean Conc (ug/L ): 61.9 SD: 0.69 RSD(%): 1.11

Recovery is 95.6%

~~~~~ *W 11604*  
T1 ID: Z11604 Seq. No.: 00108 A/S Pos.: 10 Date: 02/19/93

Replicate 1 Time: 21:00
Peak Area (A-s): 0.001 Peak Height (A): 0.010
Background Pk Area (A-s): 0.044 Background Pk Height (A): 0.032
Blank Corrected Pk Area (A-s): -0.004
Concentration (ug/L): -0.4

Replicate 2 Time: 21:03
Peak Area (A-s): -0.002 Peak Height (A): 0.008
Background Pk Area (A-s): 0.045 Background Pk Height (A): 0.040
Blank Corrected Pk Area (A-s): -0.006
Concentration (ug/L): -0.6

Mean Conc (ug/L): -0.5 SD: 0.16 RSD(%): 32.47

~~~~~  
T1 ID: Z11604 *A* Seq. No.: 00109 A/S Pos.: 10 Date: 02/19/93

Replicate 1 Time: 21:06  
Peak Area (A-s): 0.135 Peak Height (A): 0.175  
Background Pk Area (A-s): 0.144 Background Pk Height (A): 0.162  
Blank Corrected Pk Area (A-s): 0.131  
Concentration (ug/L ): 16.1

Replicate 2 Time: 21:09  
Peak Area (A-s): 0.142 Peak Height (A): 0.173  
Background Pk Area (A-s): 0.149 Background Pk Height (A): 0.164  
Blank Corrected Pk Area (A-s): 0.138  
Concentration (ug/L ): 17.2

Mean Conc (ug/L ): 16.7 SD: 0.76 RSD(%): 4.54

Recovery is 85.8%

1678

~~~~~  
T1 ID: CCV(50) Seq. No.: 00110 A/S Pos.: 37 Date: 02/19/93

Replicate 1 Time: 21:12
Peak Area (A-s): 0.306 Peak Height (A): 0.414
Background Pk Area (A-s): 0.262 Background Pk Height (A): 0.412
Blank Corrected Pk Area (A-s): 0.302
Concentration (ug/L): 45.7

Replicate 2 Time: 21:15
Peak Area (A-s): 0.309 Peak Height (A): 0.410
Background Pk Area (A-s): 0.266 Background Pk Height (A): 0.409
Blank Corrected Pk Area (A-s): 0.305
Concentration (ug/L): 46.3

Mean Conc (ug/L): 46.0 SD: 0.42 RSD(%): 0.91

QC sample is within range 45 - 55

~~~~~  
T1 ID: CCB Seq. No.: 00111 A/S Pos.: 38 Date: 02/19/93

Replicate 1 Time: 21:17  
Peak Area (A-s): 0.001 Peak Height (A): 0.011  
Background Pk Area (A-s): 0.002 Background Pk Height (A): 0.012  
Blank Corrected Pk Area (A-s): -0.003  
Concentration (ug/L ): -0.3

Replicate 2 Time: 21:20  
Peak Area (A-s): 0.001 Peak Height (A): 0.008  
Background Pk Area (A-s): 0.005 Background Pk Height (A): 0.012  
Blank Corrected Pk Area (A-s): -0.003  
Concentration (ug/L ): -0.4

Mean Conc (ug/L ): -0.3 SD: 0.03 RSD(%): 9.42

QC sample is within range

~~~~~  
T1 ID: Z11605 Seq. No.: 00112 A/S Pos.: 11 Date: 02/19/93

Replicate 1 Time: 21:23
Peak Area (A-s): 0.001 Peak Height (A): 0.020
Background Pk Area (A-s): 0.035 Background Pk Height (A): 0.038
Blank Corrected Pk Area (A-s): -0.003
Concentration (ug/L): -0.3

Replicate 2 Time: 21:25
Peak Area (A-s): 0.001 Peak Height (A): 0.021
Background Pk Area (A-s): 0.021 Background Pk Height (A): 0.031
Blank Corrected Pk Area (A-s): -0.003
Concentration (ug/L): -0.3

Mean Conc (ug/L): -0.3 SD: 0.03 RSD(%): 9.46

~~~~~  
T1 ID: Z11605 A Seq. No.: 00113 A/S Pos.: 11 Date: 02/19/93

Replicate 1 Time: 21:28  
Peak Area (A-s): 0.139 Peak Height (A): 0.184 1679  
Background Pk Area (A-s): 0.121 Background Pk Height (A): 0.152  
Blank Corrected Pk Area (A-s): 0.134  
Concentration (ug/L ): 16.7

Replicate 2 Time: 21:32  
Peak Area (A-s): 0.137 Peak Height (A): 0.176  
Background Pk Area (A-s): 0.125 Background Pk Height (A): 0.156  
Blank Corrected Pk Area (A-s): 0.133  
Concentration (ug/L ): 16.4

Mean Conc (ug/L ): 16.5 SD: 0.19 RSD(%): 1.13

Recovery is 84.3% (outside of specified limits)

~~~~~  
T1 ID: Z11607 Seq. No.: 00114 A/S Pos.: 12 Date: 02/19/93

Replicate 1 Time: 21:34
Peak Area (A-s): 0.002 Peak Height (A): 0.009
Background Pk Area (A-s): 0.044 Background Pk Height (A): 0.081
Blank Corrected Pk Area (A-s): -0.002
Concentration (ug/L): -0.2

Replicate 2 Time: 21:37
Peak Area (A-s): -0.001 Peak Height (A): 0.009
Background Pk Area (A-s): 0.044 Background Pk Height (A): 0.077
Blank Corrected Pk Area (A-s): -0.005
Concentration (ug/L): -0.5

Mean Conc (ug/L): -0.4 SD: 0.21 RSD(%): 55.37

~~~~~  
T1 ID: Z11607 A Seq. No.: 00115 A/S Pos.: 12 Date: 02/19/93

Replicate 1 Time: 21:40  
Peak Area (A-s): 0.136 Peak Height (A): 0.183  
Background Pk Area (A-s): 0.137 Background Pk Height (A): 0.212  
Blank Corrected Pk Area (A-s): 0.132  
Concentration (ug/L ): 16.3

Replicate 2 Time: 21:43  
Peak Area (A-s): 0.132 Peak Height (A): 0.190  
Background Pk Area (A-s): 0.143 Background Pk Height (A): 0.211  
Blank Corrected Pk Area (A-s): 0.128  
Concentration (ug/L ): 15.8

Mean Conc (ug/L ): 16.1 SD: 0.39 RSD(%): 2.45

Recovery is 82.2% (outside of specified limits)

~~~~~  
T1 ID: RINSE Seq. No.: 00116 A/S Pos.: 13 Date: 02/19/93

Replicate 1 Time: 21:46

Peak Area (A-s): -0.002
Background Pk Area (A-s): -0.001
Blank Corrected Pk Area (A-s): -0.006
Concentration (ug/L): -0.6

Peak Height (A): 0.007
Background Pk Height (A): 0.010

1680

RINSE

Replicate 2
Peak Area (A-s): -0.000
Background Pk Area (A-s): 0.006
Blank Corrected Pk Area (A-s): -0.004
Concentration (ug/L): -0.5

Time: 21:48
Peak Height (A): 0.008
Background Pk Height (A): 0.012

Mean Conc (ug/L): -0.5

SD: 0.11

RSD(%): 20.22

~~~~~  
T1 ID: RINSE

Seq. No.: 00117

A/S Pos.: 13

Date: 02/19/93

Replicate 1  
Peak Area (A-s): 0.133  
Background Pk Area (A-s): 0.103  
Blank Corrected Pk Area (A-s): 0.129  
Concentration (ug/L ): 15.9

Time: 21:51  
Peak Height (A): 0.211  
Background Pk Height (A): 0.166

W 2/24

Replicate 2  
Peak Area (A-s): 0.137  
Background Pk Area (A-s): 0.102  
Blank Corrected Pk Area (A-s): 0.133  
Concentration (ug/L ): 16.4

Time: 21:55  
Peak Height (A): 0.205  
Background Pk Height (A): 0.176

Mean Conc (ug/L ): 16.2

SD: 0.40

RSD(%): 2.46

Recovery is 83.5% (outside of specified limits)

~~~~~  
T1 ID: PBW

Seq. No.: 00118

A/S Pos.: 14

Date: 02/19/93

Replicate 1
Peak Area (A-s): 0.007
Background Pk Area (A-s): 0.007
Blank Corrected Pk Area (A-s): 0.002
Concentration (ug/L): 0.2

Time: 21:57
Peak Height (A): 0.036
Background Pk Height (A): 0.014

Replicate 2
Peak Area (A-s): 0.004
Background Pk Area (A-s): 0.005
Blank Corrected Pk Area (A-s): -0.000
Concentration (ug/L): -0.0

Time: 22:00
Peak Height (A): 0.044
Background Pk Height (A): 0.015

Mean Conc (ug/L): 0.1

SD: 0.20

RSD(%): 191.53

~~~~~  
T1 ID: PBW A

Seq. No.: 00119

A/S Pos.: 14

Date: 02/19/93

Replicate 1  
Peak Area (A-s): 0.142  
Background Pk Area (A-s): 0.108  
Blank Corrected Pk Area (A-s): 0.138  
Concentration (ug/L ): 17.2

Time: 22:03  
Peak Height (A): 0.213  
Background Pk Height (A): 0.172

Replicate 2

Time: 22:06

Peak Area (A-s): 0.151  
Background Pk Area (A-s): 0.117  
Blank Corrected Pk Area (A-s): 0.146  
Concentration (ug/L ): 18.4

Peak Height (A): 0.204  
Background Pk Height (A): 0.167

1681

Mean Conc (ug/L ): 17.8

PBWA

SD: 0.88

RSD(%): 4.93

Recovery is 88.5%

~~~~~  
T1 ID: LCSW Seq. No.: 00120 A/S Pos.: 15 Date: 02/19/93

Replicate 1
Peak Area (A-s): 0.318
Background Pk Area (A-s): 0.275
Blank Corrected Pk Area (A-s): 0.314
Concentration (ug/L): 48.2

Time: 22:09
Peak Height (A): 0.414
Background Pk Height (A): 0.410

Replicate 2
Peak Area (A-s): 0.317
Background Pk Area (A-s): 0.278
Blank Corrected Pk Area (A-s): 0.313
Concentration (ug/L): 47.9

Time: 22:11
Peak Height (A): 0.408
Background Pk Height (A): 0.404

Mean Conc (ug/L): 48.1

SD: 0.21

RSD(%): 0.44

~~~~~  
T1 ID: LCSW *A* Seq. No.: 00121 A/S Pos.: 15 Date: 02/19/93

Replicate 1  
Peak Area (A-s): 0.406  
Background Pk Area (A-s): 0.376  
Blank Corrected Pk Area (A-s): 0.402  
Concentration (ug/L ): 67.9

Time: 22:15  
Peak Height (A): 0.498  
Background Pk Height (A): 0.528

Replicate 2  
Peak Area (A-s): 0.408  
Background Pk Area (A-s): 0.377  
Blank Corrected Pk Area (A-s): 0.404  
Concentration (ug/L ): 68.5

Time: 22:18  
Peak Height (A): 0.504  
Background Pk Height (A): 0.536

Mean Conc (ug/L ): 68.2

SD: 0.39

RSD(%): 0.58

Recovery is 100.8%

~~~~~  
T1 ID: CCV(50) Seq. No.: 00122 A/S Pos.: 37 Date: 02/19/93

Replicate 1
Peak Area (A-s): 0.308
Background Pk Area (A-s): 0.281
Blank Corrected Pk Area (A-s): 0.303
Concentration (ug/L): 46.0

Time: 22:21
Peak Height (A): 0.398
Background Pk Height (A): 0.397

Replicate 2
Peak Area (A-s): 0.309
Background Pk Area (A-s): 0.289
Blank Corrected Pk Area (A-s): 0.305
Concentration (ug/L): 46.3

Time: 22:23
Peak Height (A): 0.403
Background Pk Height (A): 0.389

Mean Conc (ug/L): 46.2 SD: 0.23 RSD(%): 0.50

QC sample is within range 45 - 55

CCV(50)

1682

~~~~~  
T1 ID: CCB Seq. No.: 00123 A/S Pos.: 38 Date: 02/19/93

Replicate 1 Time: 22:26  
Peak Area (A-s): 0.003 Peak Height (A): 0.008  
Background Pk Area (A-s): 0.010 Background Pk Height (A): 0.020  
Blank Corrected Pk Area (A-s): -0.001  
Concentration (ug/L ): -0.1

Replicate 2 Time: 22:29  
Peak Area (A-s): 0.003 Peak Height (A): 0.024  
Background Pk Area (A-s): 0.024 Background Pk Height (A): 0.026  
Blank Corrected Pk Area (A-s): -0.001  
Concentration (ug/L ): -0.2

Mean Conc (ug/L ): -0.1 SD: 0.04 RSD(%): 30.20

QC sample is within range

~~~~~  
T1 ID: Z14809 Seq. No.: 00124 A/S Pos.: 16 Date: 02/19/93

MW-45
Replicate 1 Time: 22:31
Peak Area (A-s): 0.001 Peak Height (A): 0.014
Background Pk Area (A-s): 0.070 Background Pk Height (A): 0.057
Blank Corrected Pk Area (A-s): -0.003
Concentration (ug/L): -0.3

Replicate 2 Time: 22:34
Peak Area (A-s): 0.004 Peak Height (A): 0.010
Background Pk Area (A-s): 0.046 Background Pk Height (A): 0.051
Blank Corrected Pk Area (A-s): -0.000
Concentration (ug/L): -0.0

Mean Conc (ug/L): -0.2 SD: 0.19 RSD(%): 107.14

~~~~~  
T1 ID: Z14809 *A* Seq. No.: 00125 A/S Pos.: 16 Date: 02/19/93

Replicate 1 Time: 22:37  
Peak Area (A-s): 0.137 Peak Height (A): 0.173  
Background Pk Area (A-s): 0.135 Background Pk Height (A): 0.168  
Blank Corrected Pk Area (A-s): 0.133  
Concentration (ug/L ): 16.4

Replicate 2 Time: 22:40  
Peak Area (A-s): 0.134 Peak Height (A): 0.171  
Background Pk Area (A-s): 0.142 Background Pk Height (A): 0.170  
Blank Corrected Pk Area (A-s): 0.129  
Concentration (ug/L ): 16.0

Mean Conc (ug/L ): 16.2 SD: 0.35 RSD(%): 2.17

Recovery is 81.9% (outside of specified limits)

~~~~~  
T1 ID: Z14809D Seq. No.: 00126 A/S Pos.: 17 Date: 02/19/93

Replicate 1 *MW-45* Time: 22:43 1683
Peak Area (A-s): 0.001 Peak Height (A): 0.009
Background Pk Area (A-s): 0.050 Background Pk Height (A): 0.058
Blank Corrected Pk Area (A-s): -0.004
Concentration (ug/L): -0.4

Replicate 2 Time: 22:46
Peak Area (A-s): 0.005 Peak Height (A): 0.009
Background Pk Area (A-s): 0.051 Background Pk Height (A): 0.063
Blank Corrected Pk Area (A-s): 0.000 ---
Concentration (ug/L): 0.0

Mean Conc (ug/L): -0.2 SD: 0.29 RSD(%): 166.98

~~~~~  
T1 ID: Z14809D *A* Seq. No.: 00127 A/S Pos.: 17 Date: 02/19/93

Replicate 1 Time: 22:49  
Peak Area (A-s): 0.139 Peak Height (A): 0.174  
Background Pk Area (A-s): 0.144 Background Pk Height (A): 0.182  
Blank Corrected Pk Area (A-s): 0.135  
Concentration (ug/L ): 16.7

Replicate 2 Time: 22:52  
Peak Area (A-s): 0.135 Peak Height (A): 0.171  
Background Pk Area (A-s): 0.147 Background Pk Height (A): 0.180  
Blank Corrected Pk Area (A-s): 0.131  
Concentration (ug/L ): 16.1

Mean Conc (ug/L ): 16.4 SD: 0.41 RSD(%): 2.53

Recovery is 82.9% (outside of specified limits)

~~~~~  
T1 ID: Z14809S Seq. No.: 00128 A/S Pos.: 18 Date: 02/19/93

Replicate 1 *MW-45* Time: 22:55
Peak Area (A-s): 0.294 Peak Height (A): 0.341
Background Pk Area (A-s): 0.278 Background Pk Height (A): 0.337
Blank Corrected Pk Area (A-s): 0.290
Concentration (ug/L): 43.3

Replicate 2 Time: 22:57
Peak Area (A-s): 0.294 Peak Height (A): 0.340
Background Pk Area (A-s): 0.277 Background Pk Height (A): 0.342
Blank Corrected Pk Area (A-s): 0.290
Concentration (ug/L): 43.3

Mean Conc (ug/L): 43.3 SD: 0.02 RSD(%): 0.05

~~~~~  
T1 ID: Z14809S Seq. No.: 00129 A/S Pos.: 18 Date: 02/19/93

Replicate 1 *MW-45* Time: 23:00  
Peak Area (A-s): 0.382 Peak Height (A): 0.427  
Background Pk Area (A-s): 0.365 Background Pk Height (A): 0.447



Blank Corrected Pk Area (A-s): 0.378  
Concentration (ug/L ): 62.3

2148095

1684

Replicate 2  
Peak Area (A-s): 0.381  
Background Pk Area (A-s): 0.361  
Blank Corrected Pk Area (A-s): 0.377  
Concentration (ug/L ): 62.1

Time: 23:03  
Peak Height (A): 0.425  
Background Pk Height (A): 0.446

Mean Conc (ug/L ): 62.2

SD: 0.14

RSD(%): 0.23

Recovery is 94.4%

*cm 2/24*

~~~~~  
T1 ID: Z14810 Seq. No.: 00130 A/S Pos.: 19 Date: 02/19/93

Replicate 1
Peak Area (A-s): 0.002
Background Pk Area (A-s): 0.193
Blank Corrected Pk Area (A-s): -0.002
Concentration (ug/L): -0.3

MHW-1

Time: 23:06
Peak Height (A): 0.009
Background Pk Height (A): 0.090

Replicate 2
Peak Area (A-s): -0.001
Background Pk Area (A-s): 0.192
Blank Corrected Pk Area (A-s): -0.005
Concentration (ug/L): -0.6

Time: 23:09
Peak Height (A): 0.011
Background Pk Height (A): 0.092

Mean Conc (ug/L): -0.4

SD: 0.21

RSD(%): 51.64

~~~~~  
T1 ID: Z14810 *A* Seq. No.: 00131 A/S Pos.: 19 Date: 02/19/93

Replicate 1  
Peak Area (A-s): 0.127  
Background Pk Area (A-s): 0.285  
Blank Corrected Pk Area (A-s): 0.123  
Concentration (ug/L ): 15.0

Time: 23:12  
Peak Height (A): 0.138  
Background Pk Height (A): 0.172

Replicate 2  
Peak Area (A-s): 0.130  
Background Pk Area (A-s): 0.282  
Blank Corrected Pk Area (A-s): 0.126  
Concentration (ug/L ): 15.4

Time: 23:15  
Peak Height (A): 0.137  
Background Pk Height (A): 0.174

Mean Conc (ug/L ): 15.2

SD: 0.27

RSD(%): 1.79

Recovery is 78.2% (outside of specified limits)

~~~~~  
T1 ID: Z14811 Seq. No.: 00132 A/S Pos.: 20 Date: 02/19/93

Replicate 1
Peak Area (A-s): 0.002
Background Pk Area (A-s): 0.250
Blank Corrected Pk Area (A-s): -0.002
Concentration (ug/L): -0.2

MW-43

Time: 23:18
Peak Height (A): 0.008
Background Pk Height (A): 0.104

Replicate 2

Time: 23:21

Peak Area (A-s): 0.004 Peak Height (A): 0.008
Background Pk Area (A-s): 0.249 Background Pk Height (A): 0.103
Blank Corrected Pk Area (A-s): -0.000
Concentration (ug/L): -0.0 *MW-43* *≥ 14811* 1685
Mean Conc (ug/L): -0.1 SD: 0.14 RSD(%): 99.59

~~~~~  
T1 ID: Z14811 *A* Seq. No.: 00133 A/S Pos.: 20 Date: 02/19/93

Replicate 1 Time: 23:24  
Peak Area (A-s): 0.127 Peak Height (A): 0.134  
Background Pk Area (A-s): 0.350 Background Pk Height (A): 0.159  
Blank Corrected Pk Area (A-s): 0.123  
Concentration (ug/L ): 15.0

Replicate 2 Time: 23:27  
Peak Area (A-s): 0.130 Peak Height (A): 0.142  
Background Pk Area (A-s): 0.350 Background Pk Height (A): 0.163  
Blank Corrected Pk Area (A-s): 0.125  
Concentration (ug/L ): 15.4

Mean Conc (ug/L ): 15.2 SD: 0.25 RSD(%): 1.61

Recovery is 76.8% (outside of specified limits)

~~~~~  
T1 ID: CCV(50) Seq. No.: 00134 A/S Pos.: 37 Date: 02/19/93

Replicate 1 Time: 23:30
Peak Area (A-s): 0.306 Peak Height (A): 0.388
Background Pk Area (A-s): 0.259 Background Pk Height (A): 0.372
Blank Corrected Pk Area (A-s): 0.302
Concentration (ug/L): 45.7

Replicate 2 Time: 23:33
Peak Area (A-s): 0.308 Peak Height (A): 0.409
Background Pk Area (A-s): 0.263 Background Pk Height (A): 0.387
Blank Corrected Pk Area (A-s): 0.303
Concentration (ug/L): 45.9

Mean Conc (ug/L): 45.8 SD: 0.20 RSD(%): 0.43

QC sample is within range 45 - 55

~~~~~  
T1 ID: CCB Seq. No.: 00135 A/S Pos.: 38 Date: 02/19/93

Replicate 1 Time: 23:35  
Peak Area (A-s): 0.002 Peak Height (A): 0.008  
Background Pk Area (A-s): 0.014 Background Pk Height (A): 0.017  
Blank Corrected Pk Area (A-s): -0.002  
Concentration (ug/L ): -0.2

Replicate 2 Time: 23:38  
Peak Area (A-s): 0.002 Peak Height (A): 0.007  
Background Pk Area (A-s): 0.012 Background Pk Height (A): 0.017  
Blank Corrected Pk Area (A-s): -0.002  
Concentration (ug/L ): -0.2

Mean Conc (ug/L ):

-0.2

SD: 0.00

RSD(%): 0.94

QC sample is within range

CCB

1086

Site: Prepper Date: 2 19 93/0830

ISA LABORATORIES

Date: 2 19 93

200 Monroe Turnpike

Lot No: 2216

Monroe, Connecticut 06468

page 1 of 1

(203) 452-8200

1687

FURNACE DATA SHEET

Element: TI

I.D. Wt. File: Z148

Instrument 5100

Analyst Jeff Noe

Cup	Sample ID	% Sol.	Wt. V/Vol	Dil	Sample	Factor	Recovery	% Recovery	Flags	Value ug/L, mg/kg
5	ICV				52.0		104.0			52.0
1	ICB				-1.0					2.0 U
2	CRA				10.4		104.0			10.4
37	CCV(50)				51.3		102.6			51.3
38	CCB				-1.3					2.0 U
6	Z14812 MW-44	100.0	100/100		-1.1					2.0 U
6	Z14812A	100.0	100/100		20.5		102.5			2.0 U
7	Z14813 MW-46	100.0	100/100		0.8					2.0 U
7	Z14813A	100.0	100/100		21.8		109.0			2.0 U
8	Z14814 MW-35	100.0	100/100		0.3					2.0 U
8	Z14814A	100.0	100/100		20.3		101.5			2.0 U
9	Z14816 MW-2	100.0	100/100		-0.1					2.0 U
9	Z14816A	100.0	100/100		19.7		98.5			2.0 U
10	Z14817 REPLICATE	100.0	100/100		-1.6					2.0 U
10	Z14817A	100.0	100/100		20.7		103.5			2.0 U
37	CCV(50)				52.8		105.6			52.8
38	CCB				-1.9					2.0 U
11	Z14818 MW-1	100.0	100/100		-1.1					2.0 U
11	Z14818A	100.0	100/100		21.2		106.0			2.0 U
12	Z14820 MW-47	100.0	100/100		-1.5					2.0 U
12	Z14820A	100.0	100/100		19.6		98.0			2.0 U
<del>13</del>	<del>Z14821</del>	<del>100.0</del>	<del>100/100</del>		<del>6.7</del>					<del>2.0 U</del>
13	Z14821A	100.0	100/100		19.4		97.0			2.0 U
14	Z14822	100.0	100/100		-1.2					2.0 U
14	Z14822A	100.0	100/100		20.8		104.0			2.0 U
15	Z14823	100.0	100/100		-1.0					2.0 U
<del>15</del>	<del>Z14823A</del>	<del>100.0</del>	<del>100/100</del>		<del>20.8</del>		<del>104.0</del>			<del>2.0 U</del>
37	CCV(50)				51.2		102.4			51.2
38	CCB				-0.7					2.0 U
<del>16</del>	<del>Z14827</del>	<del>100.0</del>	<del>100/100</del>		<del>1.0</del>					<del>2.0 U</del>
16	Z14827A	100.0	100/100		19.2		96.0			2.0 U
37	CCV(50)				53.2		106.4			53.2
<del>38</del>	<del>CCB</del>				<del>0.8</del>					<del>2.0 U</del>

*Handwritten:* 3/3

*Handwritten:* 3/3

-----  
Element File: TLAUTSPK.GEL      Element: T1      Wavelength: 276.8  
Date: 02/19/93      Time: 22:16      Slit: 0.70 L  
Data File: Z148.DAT      ID/Wt File: Z148.IDW      Lamp Current: 7  
Technique: HGA      Calib. Type: Nonlinear      Energy: 55      1686  
-----

~~~~~  
T1 ID: Calib. Blank Seq. No.: 00120 A/S Pos.: 1 Date: 02/19/93

Replicate 1 *SO* Time: 22:16
Peak Area (A-s): 0.015 Peak Height (A): 0.012
Background Pk Area (A-s): 0.127 Background Pk Height (A): 0.046
Blank Corrected Pk Area (A-s): 0.015

Replicate 2 Time: 22:19
Peak Area (A-s): 0.018 Peak Height (A): 0.013
Background Pk Area (A-s): 0.291 Background Pk Height (A): 0.079
Blank Corrected Pk Area (A-s): 0.018

Mean Pk Area (A-s): 0.016 SD: 0.0021 RSD(%): 12.77

Auto-zero performed.

~~~~~  
T1      ID: Standard 1      Seq. No.: 00121      A/S Pos.: 2      Date: 02/19/93

Replicate 1      *S10*      Time: 22:21  
Peak Area (A-s): 0.063      Peak Height (A): 0.095  
Background Pk Area (A-s): 0.182      Background Pk Height (A): 0.119  
Blank Corrected Pk Area (A-s): 0.047

Replicate 2      Time: 22:24  
Peak Area (A-s): 0.063      Peak Height (A): 0.100  
Background Pk Area (A-s): 0.183      Background Pk Height (A): 0.123  
Blank Corrected Pk Area (A-s): 0.047

Mean Pk Area (A-s):      0.047      SD: 0.0002      RSD(%): 0.33

Standard number 1 applied. [10.0]  
Correlation coefficient: 1.00000      Slope: 0.0047

~~~~~  
T1 ID: Standard 2 Seq. No.: 00122 A/S Pos.: 3 Date: 02/19/93

Replicate 1 *S50* Time: 22:27
Peak Area (A-s): 0.238 Peak Height (A): 0.343
Background Pk Area (A-s): 0.343 Background Pk Height (A): 0.390
Blank Corrected Pk Area (A-s): 0.222
Concentration (ug/L): 47.4

Replicate 2 Time: 22:29
Peak Area (A-s): 0.230 Peak Height (A): 0.338
Background Pk Area (A-s): 0.328 Background Pk Height (A): 0.386
Blank Corrected Pk Area (A-s): 0.213
Concentration (ug/L): 45.6

Mean Conc (ug/L): 46.5 SD: 1.27 RSD(%): 2.73

Standard number 2 applied. [50.0]

Correlation coefficient: 1.00000

Slope: 0.0048

1689

~~~~~  
T1 ID: Standard 3 Seq. No.: 00101 A/S Pos.: 4 Date: 02/19/93

Replicate 1 **S100** Time: 22:32  
Peak Area (A-s): 0.384 Peak Height (A): 0.497  
Background Pk Area (A-s): 0.502 Background Pk Height (A): 0.670  
Blank Corrected Pk Area (A-s): 0.368  
Concentration (ug/L ): 90.8

Replicate 2 Time: 22:35  
Peak Area (A-s): 0.391 Peak Height (A): 0.514  
Background Pk Area (A-s): 0.499 Background Pk Height (A): 0.664  
Blank Corrected Pk Area (A-s): 0.375  
Concentration (ug/L ): 92.7

Mean Conc (ug/L ): 91.6 SD: 1.54 RSD(%): 1.68

Standard number 3 applied. [100.0]  
Correlation coefficient: 1.00000 Slope: 0.0047

~~~~~  
T1 ID: ICV Seq. No.: 00124 A/S Pos.: 5 Date: 02/19/93

Replicate 1 Time: 22:37
Peak Area (A-s): 0.243 Peak Height (A): 0.350
Background Pk Area (A-s): 0.323 Background Pk Height (A): 0.400
Blank Corrected Pk Area (A-s): 0.227
Concentration (ug/L): 52.5

Replicate 2 Time: 22:40
Peak Area (A-s): 0.239 Peak Height (A): 0.335
Background Pk Area (A-s): 0.319 Background Pk Height (A): 0.387
Blank Corrected Pk Area (A-s): 0.223
Concentration (ug/L): 51.5

Mean Conc (ug/L): 52.0 SD: 0.72 RSD(%): 1.39

QC sample is within range 45 - 55

~~~~~  
T1 ID: ICB Seq. No.: 00125 A/S Pos.: 1 Date: 02/19/93

Replicate 1 Time: 22:42  
Peak Area (A-s): 0.012 Peak Height (A): 0.012  
Background Pk Area (A-s): 0.115 Background Pk Height (A): 0.049  
Blank Corrected Pk Area (A-s): -0.005  
Concentration (ug/L ): -1.0

Replicate 2 Time: 22:45  
Peak Area (A-s): 0.011 Peak Height (A): 0.011  
Background Pk Area (A-s): 0.116 Background Pk Height (A): 0.049  
Blank Corrected Pk Area (A-s): -0.005  
Concentration (ug/L ): -1.1

Mean Conc (ug/L ): -1.0 SD: 0.10 RSD(%): 9.67

QC sample is within range

~~~~~  
T1 ID: DRA Seq. No.: 00126 A/S Pos.: 2 Date: 02/19/93

Replicate 1 Time: 22:48
Peak Area (A-s): 0.065 Peak Height (A): 0.095
Background Pk Area (A-s): 0.155 Background Pk Height (A): 0.113
Blank Corrected Pk Area (A-s): 0.048
Concentration (ug/L): 10.4

Replicate 2 Time: 22:50
Peak Area (A-s): 0.065 Peak Height (A): 0.097
Background Pk Area (A-s): 0.162 Background Pk Height (A): 0.116
Blank Corrected Pk Area (A-s): 0.049
Concentration (ug/L): 10.4

Mean Conc (ug/L): 10.4 SD: 0.05 RSD(%): 0.49

QC sample is within range

~~~~~  
T1 ID: CCV(50) Seq. No.: 00127 A/S Pos.: 37 Date: 02/19/93

Replicate 1 Time: 22:53  
Peak Area (A-s): 0.238 Peak Height (A): 0.349  
Background Pk Area (A-s): 0.341 Background Pk Height (A): 0.390  
Blank Corrected Pk Area (A-s): 0.222  
Concentration (ug/L ): 51.1

Replicate 2 Time: 22:56  
Peak Area (A-s): 0.240 Peak Height (A): 0.343  
Background Pk Area (A-s): 0.340 Background Pk Height (A): 0.389  
Blank Corrected Pk Area (A-s): 0.223  
Concentration (ug/L ): 51.5

Mean Conc (ug/L ): 51.3 SD: 0.28 RSD(%): 0.55

QC sample is within range 45 - 55

~~~~~  
T1 ID: CCB Seq. No.: 00128 A/S Pos.: 38 Date: 02/19/93

Replicate 1 Time: 22:58
Peak Area (A-s): 0.010 Peak Height (A): 0.010
Background Pk Area (A-s): 0.129 Background Pk Height (A): 0.048
Blank Corrected Pk Area (A-s): -0.007
Concentration (ug/L): -1.4

Replicate 2 Time: 23:01
Peak Area (A-s): 0.010 Peak Height (A): 0.011
Background Pk Area (A-s): 0.124 Background Pk Height (A): 0.050
Blank Corrected Pk Area (A-s): -0.006
Concentration (ug/L): -1.3

Mean Conc (ug/L): -1.3 SD: 0.11 RSD(%): 8.47

QC sample is within range

~~~~~  
T1 ID: Z14812 Seq. No.: 00129 A/S Pos.: 6 Date: 02/19/93

Replicate 1 *MW-44* Time: 23:03 1691  
Peak Area (A-s): 0.011 Peak Height (A): 0.012  
Background Pk Area (A-s): 0.270 Background Pk Height (A): 0.157  
Blank Corrected Pk Area (A-s): -0.005  
Concentration (ug/L ): -1.1

Replicate 2 Time: 23:06  
Peak Area (A-s): 0.011 Peak Height (A): 0.010  
Background Pk Area (A-s): 0.248 Background Pk Height (A): 0.118  
Blank Corrected Pk Area (A-s): -0.005  
Concentration (ug/L ): -1.1

Mean Conc (ug/L ): -1.1 SD: 0.00 RSD(%): 0.00

~~~~~  
T1 ID: Z14812 *A* Seq. No.: 00130 A/S Pos.: 6 Date: 02/19/93

Replicate 1 Time: 23:09
Peak Area (A-s): 0.111 Peak Height (A): 0.133
Background Pk Area (A-s): 0.431 Background Pk Height (A): 0.223
Blank Corrected Pk Area (A-s): 0.094
Concentration (ug/L): 20.5

Replicate 2 Time: 23:12
Peak Area (A-s): 0.111 Peak Height (A): 0.132
Background Pk Area (A-s): 0.453 Background Pk Height (A): 0.225
Blank Corrected Pk Area (A-s): 0.095
Concentration (ug/L): 20.5

Mean Conc (ug/L): 20.5 SD: 0.05 RSD(%): 0.24

Recovery is 107.8%

~~~~~  
T1 ID: Z14813 Seq. No.: 00131 A/S Pos.: 7 Date: 02/19/93

Replicate 1 *MW-46* Time: 23:15  
Peak Area (A-s): 0.020 Peak Height (A): 0.017  
Background Pk Area (A-s): 0.462 Background Pk Height (A): 0.161  
Blank Corrected Pk Area (A-s): 0.004  
Concentration (ug/L ): 0.9

Replicate 2 Time: 23:17  
Peak Area (A-s): 0.020 Peak Height (A): 0.018  
Background Pk Area (A-s): 0.484 Background Pk Height (A): 0.165  
Blank Corrected Pk Area (A-s): 0.004  
Concentration (ug/L ): 0.8

Mean Conc (ug/L ): 0.8 SD: 0.06 RSD(%): 6.89

~~~~~  
T1 ID: Z14813 *A* Seq. No.: 00132 A/S Pos.: 7 Date: 02/19/93

Replicate 1 Time: 23:20
Peak Area (A-s): 0.119 Peak Height (A): 0.171
Background Pk Area (A-s): 0.557 Background Pk Height (A): 0.224

Blank Corrected Pk Area (A-s): 0.103
Concentration (ug/L): 22.4

Z14813A

1692

Replicate 2
Peak Area (A-s): 0.114
Background Pk Area (A-s): 0.551
Blank Corrected Pk Area (A-s): 0.098
Concentration (ug/L): 21.3

Time: 23:24
Peak Height (A): 0.101
Background Pk Height (A): 0.258

Mean Conc (ug/L): 21.8 SD: 0.78 RSD(%): 3.57

Recovery is 104.9%

~~~~~  
T1 ID: Z14814 Seq. No.: 00133 A/S Pos.: 8 Date: 02/19/93

Replicate 1 *MW-35*  
Peak Area (A-s): 0.015  
Background Pk Area (A-s): 0.313  
Blank Corrected Pk Area (A-s): -0.002  
Concentration (ug/L ): -0.3

Time: 23:26  
Peak Height (A): 0.014  
Background Pk Height (A): 0.129

Replicate 2  
Peak Area (A-s): 0.021  
Background Pk Area (A-s): 0.509  
Blank Corrected Pk Area (A-s): 0.004  
Concentration (ug/L ): 0.9

Time: 23:29  
Peak Height (A): 0.015  
Background Pk Height (A): 0.179

Mean Conc (ug/L ): 0.3 SD: 0.89 RSD(%): 302.25

~~~~~  
T1 ID: Z14814A Seq. No.: 00134 A/S Pos.: 8 Date: 02/19/93

Replicate 1
Peak Area (A-s): 0.110
Background Pk Area (A-s): 0.502
Blank Corrected Pk Area (A-s): 0.094
Concentration (ug/L): 20.3

Time: 23:32
Peak Height (A): 0.131
Background Pk Height (A): 0.186

Replicate 2
Peak Area (A-s): 0.110
Background Pk Area (A-s): 0.514
Blank Corrected Pk Area (A-s): 0.094
Concentration (ug/L): 20.3

Time: 23:35
Peak Height (A): 0.134
Background Pk Height (A): 0.189

Mean Conc (ug/L): 20.3 SD: 0.04 RSD(%): 0.17

Recovery is 100.1%

~~~~~  
T1 ID: Z14816 Seq. No.: 00135 A/S Pos.: 9 Date: 02/19/93

Replicate 1 *MHW-2*  
Peak Area (A-s): 0.014  
Background Pk Area (A-s): 0.263  
Blank Corrected Pk Area (A-s): -0.002  
Concentration (ug/L ): -0.4

Time: 23:37  
Peak Height (A): 0.012  
Background Pk Height (A): 0.075

Replicate 2 Time: 23:40

Peak Area (A-s): 0.017 **Z14816**  
Background Pk Area (A-s): 0.293  
Blank Corrected Pk Area (A-s): 0.001  
Concentration (ug/L ): 0.2

Peak Height (A): 0.012  
Background Pk Height (A): 0.078

1693

*MHW-2*

Mean Conc (ug/L ): -0.1 SD: 0.42 RSD(%): 362.59

~~~~~  
T1 ID: Z14816 **A** Seq. No.: 00136 A/S Pos.: 9 Date: 02/19/93

Replicate 1
Peak Area (A-s): 0.109
Background Pk Area (A-s): 0.350
Blank Corrected Pk Area (A-s): 0.093
Concentration (ug/L): 20.2

Time: 23:43
Peak Height (A): 0.139
Background Pk Height (A): 0.191

Replicate 2
Peak Area (A-s): 0.106
Background Pk Area (A-s): 0.177
Blank Corrected Pk Area (A-s): 0.089
Concentration (ug/L): 19.3

Time: 23:46
Peak Height (A): 0.143
Background Pk Height (A): 0.155

Mean Conc (ug/L): 19.7 SD: 0.59 RSD(%): 2.98

Recovery is 99.3%

~~~~~  
T1 ID: Z14817 Seq. No.: 00137 A/S Pos.: 10 Date: 02/19/93

*REPLICATE*

Replicate 1  
Peak Area (A-s): 0.010  
Background Pk Area (A-s): 0.115  
Blank Corrected Pk Area (A-s): -0.006  
Concentration (ug/L ): -1.2

Time: 23:49  
Peak Height (A): 0.012  
Background Pk Height (A): 0.050

Replicate 2  
Peak Area (A-s): 0.007  
Background Pk Area (A-s): 0.136  
Blank Corrected Pk Area (A-s): -0.009  
Concentration (ug/L ): -1.9

Time: 23:51  
Peak Height (A): 0.012  
Background Pk Height (A): 0.054

Mean Conc (ug/L ): -1.6 SD: 0.46 RSD(%): 29.26

~~~~~  
T1 ID: Z14817 **A** Seq. No.: 00138 A/S Pos.: 10 Date: 02/19/93

Replicate 1
Peak Area (A-s): 0.115
Background Pk Area (A-s): 0.272
Blank Corrected Pk Area (A-s): 0.098
Concentration (ug/L): 21.4

Time: 23:54
Peak Height (A): 0.138
Background Pk Height (A): 0.189

Replicate 2
Peak Area (A-s): 0.109
Background Pk Area (A-s): 0.207
Blank Corrected Pk Area (A-s): 0.093
Concentration (ug/L): 20.1

Time: 23:57
Peak Height (A): 0.143
Background Pk Height (A): 0.174

Mean Conc (ug/L): 20.7 SD: 0.86 RSD(%): 4.17

Recovery is 111.6% *Z148/7A*

1694

~~~~~  
ID: CCV(50)                      Seq. No.: 00139      A/S Pos.: 37      Date: 02/19/93

Replicate 1  
Peak Area (A-s): 0.246  
Background Pk Area (A-s): 0.415  
Blank Corrected Pk Area (A-s): 0.230  
Concentration (ug/L ): 53.2

Time: 00:00  
Peak Height (A): 0.362  
Background Pk Height (A): 0.437

Replicate 2  
Peak Area (A-s): 0.243  
Background Pk Area (A-s): 0.325  
Blank Corrected Pk Area (A-s): 0.227  
Concentration (ug/L ): 52.5

Time: 00:03  
Peak Height (A): 0.343  
Background Pk Height (A): 0.387

Mean Conc (ug/L ):              52.8                      SD: 0.52                      RSD(%): 0.98

QC sample is within range 45 - 55

~~~~~  
T1 ID: CCB Seq. No.: 00140 A/S Pos.: 38 Date: 02/20/93

Replicate 1
Peak Area (A-s): 0.006
Background Pk Area (A-s): 0.119
Blank Corrected Pk Area (A-s): -0.010
Concentration (ug/L): -2.1

Time: 00:05
Peak Height (A): 0.013
Background Pk Height (A): 0.050

Replicate 2
Peak Area (A-s): 0.009
Background Pk Area (A-s): 0.109
Blank Corrected Pk Area (A-s): -0.008
Concentration (ug/L): -1.6

Time: 00:08
Peak Height (A): 0.010
Background Pk Height (A): 0.049

Mean Conc (ug/L): -1.9 SD: 0.34 RSD(%): 18.18

QC sample is within range

~~~~~  
T1      ID: Z14818                      Seq. No.: 00141      A/S Pos.: 11      Date: 02/20/93

Replicate 1  
Peak Area (A-s): 0.012  
Background Pk Area (A-s): 0.186  
Blank Corrected Pk Area (A-s): -0.005  
Concentration (ug/L ): -1.0

Time: 00:10  
Peak Height (A): 0.013  
Background Pk Height (A): 0.087

Replicate 2  
Peak Area (A-s): 0.010  
Background Pk Area (A-s): 0.188  
Blank Corrected Pk Area (A-s): -0.006  
Concentration (ug/L ): -1.3

Time: 00:13  
Peak Height (A): 0.010  
Background Pk Height (A): 0.086

Mean Conc (ug/L ):              -1.1                      SD: 0.25                      RSD(%): 22.02

~~~~~  
T1 ID: Z14818 **A** Seq. No.: 00142 A/S Pos.: 11 Date: 1695/02/20/93

Replicate 1 Time: 00:16
Peak Area (A-s): 0.114 Peak Height (A): 0.153
Background Pk Area (A-s): 0.251 Background Pk Height (A): 0.198
Blank Corrected Pk Area (A-s): 0.098
Concentration (ug/L): 21.3

Replicate 2 Time: 00:19
Peak Area (A-s): 0.113 Peak Height (A): 0.154
Background Pk Area (A-s): 0.259 Background Pk Height (A): 0.190
Blank Corrected Pk Area (A-s): 0.097
Concentration (ug/L): 21.0

Mean Conc (ug/L): 21.2 SD: 0.19 RSD(%): 0.88

Recovery is 111.5%

~~~~~  
T1 ID: Z14820 Seq. No.: 00143 A/S Pos.: 12 Date: 02/20/93

*MW-47*  
Replicate 1 Time: 00:21  
Peak Area (A-s): 0.009 Peak Height (A): 0.012  
Background Pk Area (A-s): 0.197 Background Pk Height (A): 0.096  
Blank Corrected Pk Area (A-s): -0.007  
Concentration (ug/L ): -1.4

Replicate 2 Time: 00:24  
Peak Area (A-s): 0.009 Peak Height (A): 0.012  
Background Pk Area (A-s): 0.198 Background Pk Height (A): 0.093  
Blank Corrected Pk Area (A-s): -0.008  
Concentration (ug/L ): -1.6

Mean Conc (ug/L ): -1.5 SD: 0.13 RSD(%): 8.68

~~~~~  
T1 ID: Z14820 **A** Seq. No.: 00144 A/S Pos.: 12 Date: 02/20/93

Replicate 1 Time: 00:27
Peak Area (A-s): 0.105 Peak Height (A): 0.132
Background Pk Area (A-s): 0.272 Background Pk Height (A): 0.187
Blank Corrected Pk Area (A-s): 0.088
Concentration (ug/L): 19.1

Replicate 2 Time: 00:30
Peak Area (A-s): 0.108 Peak Height (A): 0.133
Background Pk Area (A-s): 0.272 Background Pk Height (A): 0.181
Blank Corrected Pk Area (A-s): 0.092
Concentration (ug/L): 20.0

Mean Conc (ug/L): 19.6 SD: 0.59 RSD(%): 3.02

Recovery is 105.5%

~~~~~  
ID: Z14821 Seq. No.: 00145 A/S Pos.: 13 Date: 02/20/93

Replicate 1 Time: 00:33

*3/3*

Peak Area (A-s): 0.013  
Background Pk Area (A-s): 0.339  
Blank Corrected Pk Area (A-s): -0.004  
Concentration (ug/L ): -0.6

Z14821

Peak Height (A): 0.012  
Background Pk Height (A): 0.112 1696

Replicate 2  
Peak Area (A-s): 0.014  
Background Pk Area (A-s): 0.356  
Blank Corrected Pk Area (A-s): -0.003  
Concentration (ug/L ): -0.6

Time: 00:35  
Peak Height (A): 0.010  
Background Pk Height (A): 0.106

Mean Conc (ug/L ): -0.7 SD: 0.17 RSD(%): 24.91

~~~~~  
T1 ID: Z14821A Seq. No.: 00146 A/S Pos.: 13 Date: 02/20/93

Replicate 1
Peak Area (A-s): 0.109
Background Pk Area (A-s): 0.419
Blank Corrected Pk Area (A-s): 0.092
Concentration (ug/L): 20.0

Time: 00:38
Peak Height (A): 0.134
Background Pk Height (A): 0.175

Replicate 2
Peak Area (A-s): 0.103
Background Pk Area (A-s): 0.417
Blank Corrected Pk Area (A-s): 0.087
Concentration (ug/L): 18.8

Time: 00:41
Peak Height (A): 0.129
Background Pk Height (A): 0.165

Mean Conc (ug/L): 19.4 SD: 0.84 RSD(%): 4.31

covery is 100.6%

~~~~~  
T1 ID: Z14822 Seq. No.: 00147 A/S Pos.: 14 Date: 02/20/93

Replicate 1  
Peak Area (A-s): 0.012  
Background Pk Area (A-s): 0.110  
Blank Corrected Pk Area (A-s): -0.004  
Concentration (ug/L ): -0.9

Time: 00:44  
Peak Height (A): 0.013  
Background Pk Height (A): 0.048

Replicate 2  
Peak Area (A-s): 0.009  
Background Pk Area (A-s): 0.113  
Blank Corrected Pk Area (A-s): -0.007  
Concentration (ug/L ): -1.5

Time: 00:46  
Peak Height (A): 0.009  
Background Pk Height (A): 0.051

Mean Conc (ug/L ): -1.2 SD: 0.46 RSD(%): 38.00

~~~~~  
T1 ID: Z14822A Seq. No.: 00148 A/S Pos.: 14 Date: 02/20/93

Replicate 1
Peak Area (A-s): 0.113
Background Pk Area (A-s): 0.193
Blank Corrected Pk Area (A-s): 0.097
Concentration (ug/L): 21.1

Time: 00:49
Peak Height (A): 0.176
Background Pk Height (A): 0.181

Replicate 2 Time: 00:52

Peak Area (A-s): 0.111
Background Pk Area (A-s): 0.195
Blank Corrected Pk Area (A-s): 0.094
Concentration (ug/L): 20.8

Z14822A

Peak Height (A): 0.174
Background Pk Height (A): 0.188

1697

Mean Conc (ug/L): 20.8 SD: 0.42 RSD(%): 2.03

Recovery is 109.8%

~~~~~  
T1 ID: 714823 Seq. No.: 00149 A/S Pos.: 15 Date: 02/20/93

Replicate 1  
Peak Area (A-s): 0.014  
Background Pk Area (A-s): 0.121  
Blank Corrected Pk Area (A-s): -0.002  
Concentration (ug/L ): -0.5

Time: 00:55  
Peak Height (A): 0.011  
Background Pk Height (A): 0.053

Replicate 2  
Peak Area (A-s): 0.009  
Background Pk Area (A-s): 0.126  
Blank Corrected Pk Area (A-s): -0.007  
Concentration (ug/L ): -1.5

Time: 00:57  
Peak Height (A): 0.009  
Background Pk Height (A): 0.054

Mean Conc (ug/L ): -1.0

SD: 0.73 RSD(%): 71.43

~~~~~  
T1 ID: Z14823A Seq. No.: 00150 A/S Pos.: 15 Date: 02/20/93

Replicate 1
Peak Area (A-s): 0.110
Background Pk Area (A-s): 0.209
Blank Corrected Pk Area (A-s): 0.094
Concentration (ug/L): 20.3

Time: 01:00
Peak Height (A): 0.185
Background Pk Height (A): 0.189

Replicate 2
Peak Area (A-s): 0.114
Background Pk Area (A-s): 0.204
Blank Corrected Pk Area (A-s): 0.098
Concentration (ug/L): 21.3

Time: 01:03
Peak Height (A): 0.179
Background Pk Height (A): 0.192

Mean Conc (ug/L): 20.8

SD: 0.67 RSD(%): 3.21

Recovery is 109.0%

~~~~~  
T1 ID: CCV(50) Seq. No.: 00151 A/S Pos.: 37 Date: 02/20/93

Replicate 1  
Peak Area (A-s): 0.239  
Background Pk Area (A-s): 0.335  
Blank Corrected Pk Area (A-s): 0.223  
Concentration (ug/L ): 51.3

Time: 01:06  
Peak Height (A): 0.352  
Background Pk Height (A): 0.393

Replicate 2  
Peak Area (A-s): 0.238  
Background Pk Area (A-s): 0.337  
Blank Corrected Pk Area (A-s): 0.222  
Concentration (ug/L ): 51.1

Time: 01:09  
Peak Height (A): 0.349  
Background Pk Height (A): 0.393

Mean Conc (ug/L ): 51.2 SD: 0.17 *CCV(50)* RSD(%): 0.32

QC sample is within range 45 - 55

1698

1 ID: CCB Seq. No.: 00152 A/S Pos.: 38 Date: 02/20/93

Replicate 1 Time: 01:11  
Peak Area (A-s): 0.010 Peak Height (A): 0.009  
Background Pk Area (A-s): 0.132 Background Pk Height (A): 0.051  
Blank Corrected Pk Area (A-s): -0.003  
Concentration (ug/L ): -0.7

Replicate 2 Time: 01:14  
Peak Area (A-s): 0.013 Peak Height (A): 0.011  
Background Pk Area (A-s): 0.123 Background Pk Height (A): 0.054  
Blank Corrected Pk Area (A-s): -0.003  
Concentration (ug/L ): -0.7

Mean Conc (ug/L ): -0.7 SD: 0.02 RSD(%): 3.48

QC sample is within range

T1 ID: 214827 Seq. No.: 00153 A/S Pos.: 16 Date: 02/20/93

Replicate 1 Time: 01:16  
Peak Area (A-s): 0.011 Peak Height (A): 0.009  
Background Pk Area (A-s): 0.311 Background Pk Height (A): 0.119  
Blank Corrected Pk Area (A-s): -0.006  
Concentration (ug/L ): -1.2

Replicate 2 Time: 01:19  
Peak Area (A-s): 0.012 Peak Height (A): 0.013  
Background Pk Area (A-s): 0.313 Background Pk Height (A): 0.104  
Blank Corrected Pk Area (A-s): -0.004  
Concentration (ug/L ): -0.9

Mean Conc (ug/L ): -1.0 SD: 0.18 RSD(%): 17.28

T1 ID: 214827 *A* Seq. No.: 00154 A/S Pos.: 16 Date: 02/20/93

Replicate 1 Time: 01:22  
Peak Area (A-s): 0.104 Peak Height (A): 0.136  
Background Pk Area (A-s): 0.395 Background Pk Height (A): 0.178  
Blank Corrected Pk Area (A-s): 0.087  
Concentration (ug/L ): 18.9

Replicate 2 Time: 01:25  
Peak Area (A-s): 0.106 Peak Height (A): 0.134  
Background Pk Area (A-s): 0.408 Background Pk Height (A): 0.183  
Blank Corrected Pk Area (A-s): 0.090  
Concentration (ug/L ): 19.5

Mean Conc (ug/L ): 19.2 SD: 0.40 RSD(%): 2.10

Recovery is 101.2%

*3/3*

Std. Prepped Date: 2/19/93/8:30 IEA Laboratories  
 200 Monroe Turnpike  
 Start Run Time : 23:46 Monroe, Connecticut 06468  
 (203) 261-4458

Date: 2/19/93  
 page \_\_ of \_\_

1699

FURNACE DATA SHEET

Element: Pb I.D. Wt. File: 2116 Instrument 5100N Analyst J. Mackens

Cup	Sample ID	% Sol.	Wt.V/Vol	Dil Factor	Sample Recovery	% Recovery	Flags	Value ug/L, mg/kg
5	ICV				51.4	102.8		51.4
1	ICB				0.2			1.0 U
2	CRA				3.1	103.3		3.1
37	CCV(50)				50.0	100.0		50.0
38	CCB				-0.0			1.0 U
<del>6</del>	<del>Z11602</del>	<del>100.0</del>	<del>100/100</del>		<del>7.9</del>			<del>7.9</del>
6	Z11602A	100.0	100/100		27.6	98.5		
7	Z11602D	100.0	100/100		1.7			1.7 B
7	Z11602DA	100.0	100/100		22.1	102.0		
8	Z11602S	100.0	100/100		1.9			1.9 B
8	Z11602SA	100.0	100/100		22.8	104.5		
9	Z11601	100.0	100/100		22.5			22.5
9	Z11601A	100.0	100/100		44.5	110.0		
10	Z11604	100.0	100/100		21.1			21.1
<del>1</del>	<del>11604A</del>	<del>100.0</del>	<del>100/100</del>		<del>41.7</del>	<del>109.0</del>		<del></del>
37	CCV(50)				53.5	107.0		53.5
38	CCB				0.3			1.0 U
<del>11</del>	<del>Z11605</del>	<del>100.0</del>	<del>100/100</del>		<del>0.9</del>			<del>1.0 U</del>
11	Z11605A	100.0	100/100		21.8	109.0		
12	Z11607	100.0	100/100		2.0			2.0 B
12	Z11607A	100.0	100/100		23.5	107.5		
13	RINSE	100.0	100/100		0.5			1.0 U
<del>13</del>	<del>RINSEA</del>	<del>100.0</del>	<del>100/100</del>		<del>21.7</del>			<del>21.7</del>
14	PBW	100.0	100/100		0.8			1.0 U
14	PBWA	100.0	100/100		21.9	109.5		
15	LCSW	100.0	100/100		54.7	109.4		54.7
15	LCSWA	100.0	100/100		73.3	93.0		
37	CCV(50)				53.7	107.4		53.7
38	CCB				0.3			1.0 U
16	Z14809	100.0	100/100		2.2			2.2 B MW-45
16	Z14809A	100.0	100/100		23.7	107.5		
17	Z14809D	100.0	100/100		2.7			2.7 B MW-45
17	Z14809DA	100.0	100/100		24.6	109.5		
18	Z14809S	100.0	100/100		23.7	107.5		23.7 MW-45
18	Z14809SA	100.0	100/100		45.0	106.5		45.0 MW-45
19	Z14810	100.0	100/100		15.1			15.1 MW-1
19	Z14810A	100.0	100/100		36.2	105.5		
20	Z14811	100.0	100/100		5.4			5.4 MW-43
20	Z14811A	100.0	100/100		27.6	111.0		
37	CCV(50)				54.6	109.2		54.6



Std. Prepped Date: 2/19/93/8:30 IEA Laboratories  
200 Monroe Turnpike  
Start Run Time : 23:46 Monroe, Connecticut 06468  
(203) 261-4458

Date: 2/19/93  
page \_\_\_ of \_\_\_

1700

FURNACE DATA SHEET  
-----

Element: Pb I.D. Wt. File: Z116 Instrument 5100N Analyst A. Mickens

Cup	Sample ID	% Sol.	Wt. V/Vol	Dil Factor	Sample Recovery	% Recovery	Flags	Value ug/L, mg/kg
38	CCB				-0.0			1.0 U

-----

Element File: PBAUTSPK.GEL	Element: Pb	Wavelength: 283.3
Date: 02/19/93	Time: 23:46	Slit: 0.70 L
Data File: Z116.DAT	ID/Wt File: Z116.IDW	Lamp Current: 10
Technique: HGA	Calib. Type: Nonlinear	Energy: 60

-----

~~~~~

Pb ID: Calib. Blank Seq. No.: 00136 A/S Pos.: 1 Date: 02/19/93

Replicate 1 SO Time: 23:46
 Peak Area (A-s): -0.004 Peak Height (A): 0.005
 Background Pk Area (A-s): 0.016 Background Pk Height (A): 0.026
 Blank Corrected Pk Area (A-s): -0.004

Replicate 2 Time: 23:49
 Peak Area (A-s): -0.002 Peak Height (A): 0.006
 Background Pk Area (A-s): 0.015 Background Pk Height (A): 0.027
 Blank Corrected Pk Area (A-s): -0.002

Mean Pk Area (A-s): -0.003 SD: 0.0013 RSD(%): 45.77

Auto-zero performed.

~~~~~

Pb ID: Standard 1 Seq. No.: 00137 A/S Pos.: 2 Date: 02/19/93

Replicate 1 SB Time: 23:51  
 Peak Area (A-s): 0.025 Peak Height (A): 0.046  
 Background Pk Area (A-s): 0.027 Background Pk Height (A): 0.040  
 Blank Corrected Pk Area (A-s): 0.028

Replicate 2 Time: 23:54  
 Peak Area (A-s): 0.025 Peak Height (A): 0.047  
 Background Pk Area (A-s): 0.028 Background Pk Height (A): 0.040  
 Blank Corrected Pk Area (A-s): 0.028

Mean Pk Area (A-s): 0.028 SD: 0.0004 RSD(%): 1.54

Standard number 1 applied. [3.0]  
 Correlation coefficient: 1.00000 Slope: 0.0093

~~~~~

Pb ID: Standard 2 Seq. No.: 00138 A/S Pos.: 3 Date: 02/19/93

Replicate 1 SSO Time: 23:57
 Peak Area (A-s): 0.388 Peak Height (A): 0.562
 Background Pk Area (A-s): 0.136 Background Pk Height (A): 0.178
 Blank Corrected Pk Area (A-s): 0.391
 Concentration (ug/L): 41.9

Replicate 2 Time: 00:00
 Peak Area (A-s): 0.391 Peak Height (A): 0.570
 Background Pk Area (A-s): 0.138 Background Pk Height (A): 0.183
 Blank Corrected Pk Area (A-s): 0.394
 Concentration (ug/L): 42.3

Mean Conc (ug/L): 42.1 SD: 0.28 RSD(%): 0.65

Standard number 2 applied. [50.0]

Correlation coefficient: 1.00000

Slope: 0.0094

1702

~~~~~  
Pb ID: Standard 3 Seq. No.: 00139 A/S Pos.: 4 Date: 02/20/93

Replicate 1  
Peak Area (A-s): 0.657  
Background Pk Area (A-s): 0.244  
Blank Corrected Pk Area (A-s): 0.660  
Concentration (ug/L ): 97.4

*S100*

Time: 00:02  
Peak Height (A): 0.885  
Background Pk Height (A): 0.350

Replicate 2  
Peak Area (A-s): 0.661  
Background Pk Area (A-s): 0.244  
Blank Corrected Pk Area (A-s): 0.664  
Concentration (ug/L ): 98.4

Time: 00:05  
Peak Height (A): 0.875  
Background Pk Height (A): 0.348

Mean Conc (ug/L ): 97.9 SD: 0.65 RSD(%): 0.66

Standard number 3 applied. [100.0]  
Correlation coefficient: 1.00000 Slope: 0.0094

~~~~~  
Pb ID: ICV Seq. No.: 00140 A/S Pos.: 5 Date: 02/20/93

Replicate 1
Peak Area (A-s): 0.398
Background Pk Area (A-s): 0.138
Blank Corrected Pk Area (A-s): 0.401
Concentration (ug/L): 51.3

Time: 00:08
Peak Height (A): 0.595
Background Pk Height (A): 0.196

Replicate 2
Peak Area (A-s): 0.399
Background Pk Area (A-s): 0.141
Blank Corrected Pk Area (A-s): 0.402
Concentration (ug/L): 51.5

Time: 00:11
Peak Height (A): 0.604
Background Pk Height (A): 0.195

Mean Conc (ug/L): 51.4 SD: 0.13 RSD(%): 0.25

QC sample is within range 45 - 55

~~~~~  
Pb ID: ICB Seq. No.: 00141 A/S Pos.: 1 Date: 02/20/93

Replicate 1  
Peak Area (A-s): 0.001  
Background Pk Area (A-s): 0.019  
Blank Corrected Pk Area (A-s): 0.004  
Concentration (ug/L ): 0.4

Time: 00:13  
Peak Height (A): 0.007  
Background Pk Height (A): 0.028

Replicate 2  
Peak Area (A-s): -0.003  
Background Pk Area (A-s): 0.021  
Blank Corrected Pk Area (A-s): -0.000  
Concentration (ug/L ): -0.0

Time: 00:16  
Peak Height (A): 0.006  
Background Pk Height (A): 0.024

Mean Conc (ug/L ): 0.2 SD: 0.34 RSD(%): 166.32

QC sample is within range

~~~~~  
Pb ID: CRA Seq. No.: 00142 A/S Pos.: 2 Date: 02/20/93

Replicate 1 Time: 00:19 1703
Peak Area (A-s): 0.026 Peak Height (A): 0.049
Background Pk Area (A-s): 0.027 Background Pk Height (A): 0.031
Blank Corrected Pk Area (A-s): 0.028
Concentration (ug/L): 3.1

Replicate 2 Time: 00:21
Peak Area (A-s): 0.027 Peak Height (A): 0.048
Background Pk Area (A-s): 0.026 Background Pk Height (A): 0.028
Blank Corrected Pk Area (A-s): 0.029 ---
Concentration (ug/L): 3.2

Mean Conc (ug/L): 3.1 SD: 0.08 RSD(%): 2.46

QC sample is within range

~~~~~  
Pb ID: CCV(50) Seq. No.: 00143 A/S Pos.: 37 Date: 02/20/93

Replicate 1 Time: 00:24  
Peak Area (A-s): 0.391 Peak Height (A): 0.586  
Background Pk Area (A-s): 0.137 Background Pk Height (A): 0.192  
Blank Corrected Pk Area (A-s): 0.394  
Concentration (ug/L ): 50.2

Replicate 2 Time: 00:27  
Peak Area (A-s): 0.387 Peak Height (A): 0.566  
Background Pk Area (A-s): 0.136 Background Pk Height (A): 0.180  
Blank Corrected Pk Area (A-s): 0.390  
Concentration (ug/L ): 49.7

Mean Conc (ug/L ): 50.0 SD: 0.37 RSD(%): 0.74

QC sample is within range 45 - 55

~~~~~  
Pb ID: CCB Seq. No.: 00144 A/S Pos.: 38 Date: 02/20/93

Replicate 1 Time: 00:30
Peak Area (A-s): -0.001 Peak Height (A): 0.005
Background Pk Area (A-s): 0.020 Background Pk Height (A): 0.030
Blank Corrected Pk Area (A-s): 0.002
Concentration (ug/L): 0.2

Replicate 2 Time: 00:32
Peak Area (A-s): -0.005 Peak Height (A): 0.005
Background Pk Area (A-s): 0.022 Background Pk Height (A): 0.034
Blank Corrected Pk Area (A-s): -0.002
Concentration (ug/L): -0.2

Mean Conc (ug/L): -0.0 SD: 0.25 RSD(%): 1529.90

QC sample is within range

~~~~~  
Pb ID: Z11602 Seq. No.: 00145 A/S Pos.: 6 Date: 02/20/93

Replicate 1 Time: 00:35  
Peak Area (A-s): 0.069 Peak Height (A): 0.114  
Background Pk Area (A-s): 0.234 Background Pk Height (A): 0.141  
Blank Corrected Pk Area (A-s): 0.072  
Concentration (ug/L ): 7.8 1704

Replicate 2 Time: 00:38  
Peak Area (A-s): 0.069 Peak Height (A): 0.116  
Background Pk Area (A-s): 0.233 Background Pk Height (A): 0.125  
Blank Corrected Pk Area (A-s): 0.072  
Concentration (ug/L ): 7.9

Mean Conc (ug/L ): 7.9 SD: 0.04 RSD(%): 0.47

~~~~~  
Pb ID: Z11602 A Seq. No.: 00146 A/S Pos.: 6 Date: 02/20/93

Replicate 1 Time: 00:41
Peak Area (A-s): 0.233 Peak Height (A): 0.361
Background Pk Area (A-s): 0.279 Background Pk Height (A): 0.165
Blank Corrected Pk Area (A-s): 0.236
Concentration (ug/L): 27.7

Replicate 2 Time: 00:44
Peak Area (A-s): 0.230 Peak Height (A): 0.364
Background Pk Area (A-s): 0.277 Background Pk Height (A): 0.162
Blank Corrected Pk Area (A-s): 0.233
Concentration (ug/L): 27.4

Handwritten signature
2/24

Mean Conc (ug/L): 27.6 SD: 0.26 RSD(%): 0.94

Recovery is 98.5%

~~~~~  
Pb ID: Z11602D Seq. No.: 00147 A/S Pos.: 7 Date: 02/20/93

Replicate 1 Time: 00:47  
Peak Area (A-s): 0.013 Peak Height (A): 0.023  
Background Pk Area (A-s): 0.093 Background Pk Height (A): 0.055  
Blank Corrected Pk Area (A-s): 0.016  
Concentration (ug/L ): 1.7

Replicate 2 Time: 00:50  
Peak Area (A-s): 0.013 Peak Height (A): 0.024  
Background Pk Area (A-s): 0.095 Background Pk Height (A): 0.053  
Blank Corrected Pk Area (A-s): 0.016  
Concentration (ug/L ): 1.7

Mean Conc (ug/L ): 1.7 SD: 0.02 RSD(%): 0.89

~~~~~  
Pb ID: Z11602D A Seq. No.: 00148 A/S Pos.: 7 Date: 02/20/93

Replicate 1 Time: 00:53
Peak Area (A-s): 0.190 Peak Height (A): 0.273
Background Pk Area (A-s): 0.136 Background Pk Height (A): 0.100

Blank Corrected Pk Area (A-s): 0.193
Concentration (ug/L): 22.2

1705

Z11602DA

Replicate 2
Peak Area (A-s): 0.189
Background Pk Area (A-s): 0.135
Blank Corrected Pk Area (A-s): 0.191
Concentration (ug/L): 22.0

Time: 00:56
Peak Height (A): 0.293
Background Pk Height (A): 0.103

Mean Conc (ug/L): 22.1 SD: 0.13 RSD(%): 0.60

Recovery is 102.2%

~~~~~  
Pb ID: Z11602S Seq. No.: 00149 A/S Pos.: 8 Date: 02/20/93

Replicate 1  
Peak Area (A-s): 0.015  
Background Pk Area (A-s): 0.084  
Blank Corrected Pk Area (A-s): 0.018  
Concentration (ug/L ): 1.9

Time: 00:59  
Peak Height (A): 0.027  
Background Pk Height (A): 0.051

Replicate 2  
Peak Area (A-s): 0.015  
Background Pk Area (A-s): 0.087  
Blank Corrected Pk Area (A-s): 0.018  
Concentration (ug/L ): 2.0

Time: 01:02  
Peak Height (A): 0.028  
Background Pk Height (A): 0.047

Mean Conc (ug/L ): 1.9 SD: 0.04 *W 2/24* RSD(%): 1.96

~~~~~  
Pb ID: Z11602S Seq. No.: 00150 A/S Pos.: 8 Date: 02/20/93

Replicate 1
Peak Area (A-s): 0.194
Background Pk Area (A-s): 0.134
Blank Corrected Pk Area (A-s): 0.197
Concentration (ug/L): 22.7

Time: 01:05
Peak Height (A): 0.300
Background Pk Height (A): 0.108

Replicate 2
Peak Area (A-s): 0.195
Background Pk Area (A-s): 0.136
Blank Corrected Pk Area (A-s): 0.198
Concentration (ug/L): 22.8

W 2/24
Time: 01:08
Peak Height (A): 0.309
Background Pk Height (A): 0.108

Mean Conc (ug/L): 22.8 SD: 0.08 RSD(%): 0.36

Recovery is 104.2%

~~~~~  
Pb ID: Z11601 Seq. No.: 00151 A/S Pos.: 9 Date: 02/20/93

Replicate 1  
Peak Area (A-s): 0.193  
Background Pk Area (A-s): 0.154  
Blank Corrected Pk Area (A-s): 0.196  
Concentration (ug/L ): 22.6

Time: 01:11  
Peak Height (A): 0.289  
Background Pk Height (A): 0.111

Replicate 2 Time: 01:14

Peak Area (A-s): 0.192  
Background Pk Area (A-s): 0.159  
Blank Corrected Pk Area (A-s): 0.195  
Concentration (ug/L ): 22.5

Peak Height (A): 0.300  
Background Pk Height (A): 0.119

211601

1706

Mean Conc (ug/L ): 22.5

SD: 0.08

RSD(%): 0.34

Pb ID: Z11601

Seq. No.: 00152

A/S Pos.: 9

Date: 02/20/93

Replicate 1  
Peak Area (A-s): 0.354  
Background Pk Area (A-s): 0.206  
Blank Corrected Pk Area (A-s): 0.357  
Concentration (ug/L ): 44.7

Time: 01:17  
Peak Height (A): 0.520  
Background Pk Height (A): 0.184

Replicate 2  
Peak Area (A-s): 0.352  
Background Pk Area (A-s): 0.204  
Blank Corrected Pk Area (A-s): 0.355  
Concentration (ug/L ): 44.4

Time: 01:20  
Peak Height (A): 0.526  
Background Pk Height (A): 0.190

Mean Conc (ug/L ): 44.5

SD: 0.20

RSD(%): 0.46

Recovery is 110.1%

Pb ID: Z11604

Seq. No.: 00153

A/S Pos.: 10

Date: 02/20/93

Replicate 1  
Peak Area (A-s): 0.180  
Background Pk Area (A-s): 0.108  
Blank Corrected Pk Area (A-s): 0.183  
Concentration (ug/L ): 21.0

Time: 01:23  
Peak Height (A): 0.296  
Background Pk Height (A): 0.115

Replicate 2  
Peak Area (A-s): 0.181  
Background Pk Area (A-s): 0.109  
Blank Corrected Pk Area (A-s): 0.184  
Concentration (ug/L ): 21.1

Time: 01:25  
Peak Height (A): 0.285  
Background Pk Height (A): 0.117

Mean Conc (ug/L ): 21.1

SD: 0.06

RSD(%): 0.30

Pb ID: Z11604

Seq. No.: 00154

A/S Pos.: 10

Date: 02/20/93

Replicate 1  
Peak Area (A-s): 0.333  
Background Pk Area (A-s): 0.167  
Blank Corrected Pk Area (A-s): 0.336  
Concentration (ug/L ): 41.5

Time: 01:29  
Peak Height (A): 0.544  
Background Pk Height (A): 0.207

Replicate 2  
Peak Area (A-s): 0.336  
Background Pk Area (A-s): 0.160  
Blank Corrected Pk Area (A-s): 0.339  
Concentration (ug/L ): 41.9

Time: 01:32  
Peak Height (A): 0.551  
Background Pk Height (A): 0.206

Mean Conc (ug/L ): 41.7

SD: 0.30

RSD(%): 0.72

Recovery is 103.1%

1707

Pb ID: CCV(50) Seq. No.: 00155 A/S Pos.: 37 Date: 02/20/93

Replicate 1 Time: 01:35  
Peak Area (A-s): 0.413 Peak Height (A): 0.615  
Background Pk Area (A-s): 0.146 Background Pk Height (A): 0.205  
Blank Corrected Pk Area (A-s): 0.415  
Concentration (ug/L ): 53.6

Replicate 2 Time: 01:37  
Peak Area (A-s): 0.411 Peak Height (A): 0.612  
Background Pk Area (A-s): 0.146 Background Pk Height (A): 0.204  
Blank Corrected Pk Area (A-s): 0.414  
Concentration (ug/L ): 53.4

Mean Conc (ug/L ): 53.5 SD: 0.19 RSD(%): 0.36

QC sample is within range 45 - 55

Pb ID: CCB Seq. No.: 00156 A/S Pos.: 38 Date: 02/20/93

Replicate 1 Time: 01:40  
Peak Area (A-s): -0.000 Peak Height (A): 0.006  
Background Pk Area (A-s): 0.020 Background Pk Height (A): 0.021  
Blank Corrected Pk Area (A-s): 0.003  
Concentration (ug/L ): 0.3

Replicate 2 Time: 01:43  
Peak Area (A-s): 0.000 Peak Height (A): 0.006  
Background Pk Area (A-s): 0.019 Background Pk Height (A): 0.027  
Blank Corrected Pk Area (A-s): 0.003  
Concentration (ug/L ): 0.3

Mean Conc (ug/L ): 0.3 SD: 0.03 RSD(%): 11.53

QC sample is within range

Pb ID: Z11605 Seq. No.: 00157 A/S Pos.: 11 Date: 02/20/93

Replicate 1 Time: 01:46  
Peak Area (A-s): 0.007 Peak Height (A): 0.014  
Background Pk Area (A-s): 0.069 Background Pk Height (A): 0.049  
Blank Corrected Pk Area (A-s): 0.010  
Concentration (ug/L ): 1.1

Replicate 2 Time: 01:48  
Peak Area (A-s): 0.004 Peak Height (A): 0.014  
Background Pk Area (A-s): 0.073 Background Pk Height (A): 0.049  
Blank Corrected Pk Area (A-s): 0.007  
Concentration (ug/L ): 0.7

Mean Conc (ug/L ): 0.9 SD: 0.28 RSD(%): 30.88

*Handwritten signature and date: 2/24*



~~~~~  
Pb ID: Z11605 Seq. No.: 00158 A/S Pos.: 11 Date: 02/20/93

Replicate 1 Time: 01:51 1708
Peak Area (A-s): 0.185 Peak Height (A): 0.305
Background Pk Area (A-s): 0.115 Background Pk Height (A): 0.096
Blank Corrected Pk Area (A-s): 0.188
Concentration (ug/L): 21.7

Replicate 2 Time: 01:55
Peak Area (A-s): 0.188 Peak Height (A): 0.298
Background Pk Area (A-s): 0.120 Background Pk Height (A): 0.096
Blank Corrected Pk Area (A-s): 0.191
Concentration (ug/L): 22.0

Mean Conc (ug/L): 21.8 SD: 0.26 RSD(%): 1.19

Recovery is 104.8%

~~~~~  
Pb ID: Z11607 Seq. No.: 00159 A/S Pos.: 12 Date: 02/20/93

Replicate 1 Time: 01:57  
Peak Area (A-s): 0.016 Peak Height (A): 0.028  
Background Pk Area (A-s): 0.110 Background Pk Height (A): 0.067  
Blank Corrected Pk Area (A-s): 0.019  
Concentration (ug/L ): 2.0

Replicate 2 Time: 02:00  
Peak Area (A-s): 0.016 Peak Height (A): 0.030  
Background Pk Area (A-s): 0.113 Background Pk Height (A): 0.066  
Blank Corrected Pk Area (A-s): 0.019  
Concentration (ug/L ): 2.1

Mean Conc (ug/L ): 2.0 SD: 0.05 RSD(%): 2.61

~~~~~  
Pb ID: Z11607 Seq. No.: 00160 A/S Pos.: 12 Date: 02/20/93

Replicate 1 Time: 02:03
Peak Area (A-s): 0.197 Peak Height (A): 0.293
Background Pk Area (A-s): 0.166 Background Pk Height (A): 0.099
Blank Corrected Pk Area (A-s): 0.200
Concentration (ug/L): 23.1

Replicate 2 Time: 02:06
Peak Area (A-s): 0.203 Peak Height (A): 0.273
Background Pk Area (A-s): 0.158 Background Pk Height (A): 0.093
Blank Corrected Pk Area (A-s): 0.206
Concentration (ug/L): 23.9

Mean Conc (ug/L): 23.5 SD: 0.57 RSD(%): 2.41

Recovery is 107.4%

~~~~~  
Pb ID: RINSE Seq. No.: 00161 A/S Pos.: 13 Date: 02/20/93

Replicate 1 Time: 02:09

Peak Area (A-s): 0.001  
Background Pk Area (A-s): 0.019  
Blank Corrected Pk Area (A-s): 0.004  
Concentration (ug/L ): 0.4

Peak Height (A): 0.007  
Background Pk Height (A): 0.021

1709

Replicate 2  
Peak Area (A-s): 0.002  
Background Pk Area (A-s): 0.016  
Blank Corrected Pk Area (A-s): 0.005  
Concentration (ug/L ): 0.5

Time: 02:12  
Peak Height (A): 0.007  
Background Pk Height (A): 0.018

Mean Conc (ug/L ): 0.5 SD: 0.06 RSD(%): 12.61

~~~~~  
Pb ID: RINSE Seq. No.: 00162 A/S Pos.: 13 Date: 02/20/93

Replicate 1
Peak Area (A-s): 0.188
Background Pk Area (A-s): 0.067
Blank Corrected Pk Area (A-s): 0.191
Concentration (ug/L): 22.0

Time: 02:15
Peak Height (A): 0.318
Background Pk Height (A): 0.090

Replicate 2
Peak Area (A-s): 0.184
Background Pk Area (A-s): 0.073
Blank Corrected Pk Area (A-s): 0.187
Concentration (ug/L): 21.5

Time: 02:18
Peak Height (A): 0.309
Background Pk Height (A): 0.092

Mean Conc (ug/L): 21.7 SD: 0.32 RSD(%): 1.49

Recovery is 106.4%

~~~~~  
Pb ID: FBW Seq. No.: 00163 A/S Pos.: 14 Date: 02/20/93

Replicate 1  
Peak Area (A-s): 0.004  
Background Pk Area (A-s): 0.016  
Blank Corrected Pk Area (A-s): 0.007  
Concentration (ug/L ): 0.7

Time: 02:21  
Peak Height (A): 0.008  
Background Pk Height (A): 0.020

Replicate 2  
Peak Area (A-s): 0.006  
Background Pk Area (A-s): 0.018  
Blank Corrected Pk Area (A-s): 0.009  
Concentration (ug/L ): 0.9

Time: 02:23  
Peak Height (A): 0.009  
Background Pk Height (A): 0.026

Mean Conc (ug/L ): 0.8 SD: 0.13 RSD(%): 16.04

~~~~~  
Pb ID: FBW A Seq. No.: 00164 A/S Pos.: 14 Date: 02/20/93

Replicate 1
Peak Area (A-s): 0.186
Background Pk Area (A-s): 0.072
Blank Corrected Pk Area (A-s): 0.189
Concentration (ug/L): 21.7

Time: 02:26
Peak Height (A): 0.311
Background Pk Height (A): 0.090

Replicate 2 Time: 02:29

Peak Area (A-s): 0.189 Peak Height (A): 0.320
Background Pk Area (A-s): 0.069 Background Pk Height (A): 0.094
Blank Corrected Pk Area (A-s): 0.192
Concentration (ug/L): 22.1 *PSWA* 1710
Mean Conc (ug/L): 21.9 SD: 0.25 RSD(%): 1.15

Recovery is 105.5%

~~~~~  
Pb ID: LCSW Seq. No.: 00165 A/S Pos.: 15 Date: 02/20/93

Replicate 1 Time: 02:32  
Peak Area (A-s): 0.418 Peak Height (A): 0.641  
Background Pk Area (A-s): 0.149 Background Pk Height (A): 0.220  
Blank Corrected Pk Area (A-s): 0.421  
Concentration (ug/L ): 54.5

Replicate 2 Time: 02:35  
Peak Area (A-s): 0.420 Peak Height (A): 0.678  
Background Pk Area (A-s): 0.149 Background Pk Height (A): 0.234  
Blank Corrected Pk Area (A-s): 0.423  
Concentration (ug/L ): 54.9

Mean Conc (ug/L ): 54.7 SD: 0.30 RSD(%): 0.54

~~~~~  
Pb ID: LCSW *A* Seq. No.: 00166 A/S Pos.: 15 Date: 02/20/93

Replicate 1 Time: 02:38
Peak Area (A-s): 0.528 Peak Height (A): 0.837
Background Pk Area (A-s): 0.194 Background Pk Height (A): 0.332
Blank Corrected Pk Area (A-s): 0.531
Concentration (ug/L): 73.5

Replicate 2 Time: 02:41
Peak Area (A-s): 0.527 Peak Height (A): 0.848
Background Pk Area (A-s): 0.192 Background Pk Height (A): 0.340
Blank Corrected Pk Area (A-s): 0.530
Concentration (ug/L): 73.2

Mean Conc (ug/L): 73.3 SD: 0.19 RSD(%): 0.25

Recovery is 93.4%

~~~~~  
Pb ID: CCV(50) Seq. No.: 00167 A/S Pos.: 37 Date: 02/20/93

Replicate 1 Time: 02:44  
Peak Area (A-s): 0.413 Peak Height (A): 0.628  
Background Pk Area (A-s): 0.150 Background Pk Height (A): 0.214  
Blank Corrected Pk Area (A-s): 0.415  
Concentration (ug/L ): 53.6

Replicate 2 Time: 02:46  
Peak Area (A-s): 0.413 Peak Height (A): 0.629  
Background Pk Area (A-s): 0.147 Background Pk Height (A): 0.210  
Blank Corrected Pk Area (A-s): 0.416  
Concentration (ug/L ): 53.7

Mean Conc (ug/L ): 53.7 SD: 0.07 RSD(%): 0.13

QC sample is within range 45 - 55

*CCV(50)*

1711

~~~~~  
Pb ID: CCB Seq. No.: 00168 A/S Pos.: 38 Date: 02/20/93

Replicate 1 Time: 02:49
Peak Area (A-s): 0.002 Peak Height (A): 0.007
Background Pk Area (A-s): 0.020 Background Pk Height (A): 0.030
Blank Corrected Pk Area (A-s): 0.004
Concentration (ug/L): 0.5

Replicate 2 Time: 02:52
Peak Area (A-s): -0.002 Peak Height (A): 0.006
Background Pk Area (A-s): 0.024 Background Pk Height (A): 0.029
Blank Corrected Pk Area (A-s): 0.001
Concentration (ug/L): 0.1

Mean Conc (ug/L): 0.3 SD: 0.25 RSD(%): 84.33

QC sample is within range

~~~~~  
Pb ID: Z14809 Seq. No.: 00169 A/S Pos.: 16 Date: 02/20/93

*MW-45*  
Replicate 1 Time: 02:54  
Peak Area (A-s): 0.016 Peak Height (A): 0.036  
Background Pk Area (A-s): 0.087 Background Pk Height (A): 0.053  
Blank Corrected Pk Area (A-s): 0.019  
Concentration (ug/L ): 2.0

Replicate 2 Time: 02:57  
Peak Area (A-s): 0.019 Peak Height (A): 0.034  
Background Pk Area (A-s): 0.090 Background Pk Height (A): 0.059  
Blank Corrected Pk Area (A-s): 0.022  
Concentration (ug/L ): 2.4

Mean Conc (ug/L ): 2.2 SD: 0.24 RSD(%): 10.68

~~~~~  
Pb ID: Z14809 *A* Seq. No.: 00170 A/S Pos.: 16 Date: 02/20/93

Replicate 1 Time: 03:00
Peak Area (A-s): 0.202 Peak Height (A): 0.356
Background Pk Area (A-s): 0.140 Background Pk Height (A): 0.123
Blank Corrected Pk Area (A-s): 0.204
Concentration (ug/L): 23.7

Replicate 2 Time: 03:03
Peak Area (A-s): 0.202 Peak Height (A): 0.349
Background Pk Area (A-s): 0.135 Background Pk Height (A): 0.119
Blank Corrected Pk Area (A-s): 0.205
Concentration (ug/L): 23.7

Mean Conc (ug/L): 23.7 SD: 0.02 RSD(%): 0.08

Recovery is 107.5%

~~~~~  
Pb ID: Z14809D Seq. No.: 00171 A/S Pos.: 17 Date: 02/20/93

Replicate 1 *MW-45* Time: 03:06  
Peak Area (A-s): 0.022 Peak Height (A): 0.044  
Background Pk Area (A-s): 0.104 Background Pk Height (A): 0.071  
Blank Corrected Pk Area (A-s): 0.025  
Concentration (ug/L ): 2.7

1712

Replicate 2 Time: 03:08  
Peak Area (A-s): 0.022 Peak Height (A): 0.044  
Background Pk Area (A-s): 0.108 Background Pk Height (A): 0.071  
Blank Corrected Pk Area (A-s): 0.025  
Concentration (ug/L ): 2.7

Mean Conc (ug/L ): 2.7 SD: 0.00 RSD(%): 0.08

~~~~~  
Pb ID: Z14809D *A* Seq. No.: 00172 A/S Pos.: 17 Date: 02/20/93

Replicate 1 Time: 03:11
Peak Area (A-s): 0.210 Peak Height (A): 0.394
Background Pk Area (A-s): 0.155 Background Pk Height (A): 0.141
Blank Corrected Pk Area (A-s): 0.213
Concentration (ug/L): 24.8

Replicate 2 Time: 03:15
Peak Area (A-s): 0.207 Peak Height (A): 0.382
Background Pk Area (A-s): 0.155 Background Pk Height (A): 0.138
Blank Corrected Pk Area (A-s): 0.210
Concentration (ug/L): 24.4

Mean Conc (ug/L): 24.6 SD: 0.29 RSD(%): 1.18

Recovery is 109.4%

~~~~~  
Pb ID: Z14809S Seq. No.: 00173 A/S Pos.: 18 Date: 02/20/93

Replicate 1 *MW-45* Time: 03:17  
Peak Area (A-s): 0.201 Peak Height (A): 0.328  
Background Pk Area (A-s): 0.143 Background Pk Height (A): 0.118  
Blank Corrected Pk Area (A-s): 0.204  
Concentration (ug/L ): 23.6

Replicate 2 Time: 03:20  
Peak Area (A-s): 0.202 Peak Height (A): 0.334  
Background Pk Area (A-s): 0.143 Background Pk Height (A): 0.113  
Blank Corrected Pk Area (A-s): 0.205  
Concentration (ug/L ): 23.8

Mean Conc (ug/L ): 23.7 SD: 0.13 RSD(%): 0.55

~~~~~  
Pb ID: Z14809S Seq. No.: 00174 A/S Pos.: 18 Date: 02/20/93

Replicate 1 Time: 03:23
Peak Area (A-s): 0.355 Peak Height (A): 0.612
Background Pk Area (A-s): 0.193 Background Pk Height (A): 0.224

2/21

Blank Corrected Pk Area (A-s): 0.358
Concentration (ug/L): 44.7

Replicate 2
Peak Area (A-s): 0.358
Background Pk Area (A-s): 0.194
Blank Corrected Pk Area (A-s): 0.361
Concentration (ug/L): 45.2

Time: 03:26
Peak Height (A): 0.587
Background Pk Height (A): 0.215

Mean Conc (ug/L): 45.0

SD: 0.035

RSD(%): 0.78

Recovery is 106.6%

2148095

6/1/24

Pb ID: Z14810 Seq. No.: 00175 A/S Pos.: 19 Date: 02/20/93

Replicate 1
Peak Area (A-s): 0.131
Background Pk Area (A-s): 0.279
Blank Corrected Pk Area (A-s): 0.134
Concentration (ug/L): 15.0

Time: 03:29
Peak Height (A): 0.254
Background Pk Height (A): 0.208

Replicate 2
Peak Area (A-s): 0.132
Background Pk Area (A-s): 0.285
Blank Corrected Pk Area (A-s): 0.135
Concentration (ug/L): 15.1

Time: 03:31
Peak Height (A): 0.256
Background Pk Height (A): 0.215

Mean Conc (ug/L): 15.1

SD: 0.07

RSD(%): 0.44

Pb ID: Z14810 A Seq. No.: 00176 A/S Pos.: 19 Date: 02/20/93

Replicate 1
Peak Area (A-s): 0.297
Background Pk Area (A-s): 0.325
Blank Corrected Pk Area (A-s): 0.300
Concentration (ug/L): 36.5

Time: 03:34
Peak Height (A): 0.549
Background Pk Height (A): 0.307

Replicate 2
Peak Area (A-s): 0.294
Background Pk Area (A-s): 0.326
Blank Corrected Pk Area (A-s): 0.296
Concentration (ug/L): 35.9

Time: 03:37
Peak Height (A): 0.559
Background Pk Height (A): 0.318

Mean Conc (ug/L): 36.2

SD: 0.38

RSD(%): 1.05

Recovery is 105.6%

Pb ID: Z14811 Seq. No.: 00177 A/S Pos.: 20 Date: 02/20/93

Replicate 1
Peak Area (A-s): 0.046
Background Pk Area (A-s): 0.340
Blank Corrected Pk Area (A-s): 0.049
Concentration (ug/L): 5.3

Time: 03:40
Peak Height (A): 0.077
Background Pk Height (A): 0.177

Replicate 2

Time: 03:43

MHW-1

MW-43

Peak Area (A-s): 0.048 Peak Height (A): 0.079
Background Pk Area (A-s): 0.356 Background Pk Height (A): 0.212
Blank Corrected Pk Area (A-s): 0.050
Concentration (ug/L): 5.5 *MW-43* *214811* 1714
Mean Conc (ug/L): 5.4 SD: 0.09 RSD(%): 1.59

~~~~~  
Pb ID: Z14811 *A* Seq. No.: 00178 A/S Pos.: 20 Date: 02/20/93

Replicate 1 Time: 03:46  
Peak Area (A-s): 0.231 Peak Height (A): 0.372  
Background Pk Area (A-s): 0.384 Background Pk Height (A): 0.267  
Blank Corrected Pk Area (A-s): 0.234  
Concentration (ug/L ): 27.5

Replicate 2 Time: 03:49  
Peak Area (A-s): 0.232 Peak Height (A): 0.381  
Background Pk Area (A-s): 0.382 Background Pk Height (A): 0.266  
Blank Corrected Pk Area (A-s): 0.235  
Concentration (ug/L ): 27.7

Mean Conc (ug/L ): 27.6 SD: 0.10 RSD(%): 0.37

Recovery is 110.9%

~~~~~  
Pb ID: CCV(50) Seq. No.: 00179 A/S Pos.: 37 Date: 02/20/93

Replicate 1 Time: 03:51
Peak Area (A-s): 0.418 Peak Height (A): 0.627
Background Pk Area (A-s): 0.160 Background Pk Height (A): 0.212
Blank Corrected Pk Area (A-s): 0.420
Concentration (ug/L): 54.4

Replicate 2 Time: 03:54
Peak Area (A-s): 0.420 Peak Height (A): 0.601
Background Pk Area (A-s): 0.158 Background Pk Height (A): 0.198
Blank Corrected Pk Area (A-s): 0.423
Concentration (ug/L): 54.8

Mean Conc (ug/L): 54.6 SD: 0.24 RSD(%): 0.44

QC sample is within range 45 - 55

~~~~~  
Pb ID: CCB Seq. No.: 00180 A/S Pos.: 38 Date: 02/20/93

Replicate 1 Time: 03:57  
Peak Area (A-s): -0.003 Peak Height (A): 0.006  
Background Pk Area (A-s): 0.027 Background Pk Height (A): 0.030  
Blank Corrected Pk Area (A-s): 0.000  
Concentration (ug/L ): 0.0

Replicate 2 Time: 04:00  
Peak Area (A-s): -0.004 Peak Height (A): 0.008  
Background Pk Area (A-s): 0.026 Background Pk Height (A): 0.024  
Blank Corrected Pk Area (A-s): -0.001  
Concentration (ug/L ): -0.1

Mean Conc (ug/L ): -0.0

SD: 0.09

RSD(%): 372.24

QC sample is within range

CCB

1715



Std. Prepped Date: 2/19/93/0830

IEA Laboratories  
200 Monroe Turnpike

Date: 2/20/93

Lab Run Time : 0143

Monroe, Connecticut 06468  
(203) 452-8200

page 1 of 1

FURNACE DATA SHEET

1716

Element: Pb I.D. Wt. File: Z148 Instrument 5100 Analyst JH/Noe

Cup	Sample ID	% Sol.	Wt. V/Vol	Dil Factor	Sample Recovery	% Recovery	Flags	Value ug/L, mg/kg
5	ICV				51.6	103.2		51.6
1	ICB				0.4			1.0 U
2	ICRA				3.6	120.0		3.6
37	CCV(50)				51.2	102.4		51.2
38	CCB				0.6			1.0 U
6	Z14812 MW-44	100.0	100/100		5.7			5.7
6	Z14812A	100.0	100/100		24.5	94.0		
7	Z14813 MW-46	100.0	100/100		189.7			O/C 1/10 Dil'n
7	Z14813A	100.0	100/100		203.0	66.5		O/C
8	Z14814 MW-35	100.0	100/100		242.3			O/C 1/10 Dil'n 1/10
8	Z14814A	100.0	100/100		233.1			O/C 1/10 2/23/93
9	Z14816 MHW 2	100.0	100/100		23.7			23.7
	Z14816A	100.0	100/100		40.4	83.5	MSA	
10	Z14817 REPLICATE	100.0	100/100		2.2			2.2 B
10	Z14817A	100.0	100/100		21.9	98.5		
37	CCV(50)				50.8	101.6		50.8
38	CCB				0.1			1.0 U
11	Z14818 MW-1	100.0	100/100		17.2			17.2
11	Z14818A	100.0	100/100		36.5	96.5		
12	Z14820 MW-47	100.0	100/100		10.8			10.8
12	Z14820A	100.0	100/100		30.3	97.5		
<del>13</del>	<del>Z14821</del>	<del>100.0</del>	<del>100/100</del>		<del>17.0</del>			<del>17.0</del>
13	Z14821A	100.0	100/100		37.8	94.0		
14	Z14822	100.0	100/100		0.9			1.0 U
14	Z14822A	100.0	100/100	W 3/3	21.8	109.0		
15	Z14823	100.0	100/100		0.2			1.0 U
<del>15</del>	<del>Z14823A</del>	<del>100.0</del>	<del>100/100</del>		<del>21.2</del>	<del>106.0</del>		<del>17.0</del>
37	CCV(50)				50.9	101.8		50.9
38	CCB				0.3			1.0 U
<del>16</del>	<del>Z14827</del>	<del>100.0</del>	<del>100/100</del>		<del>43.7</del>			<del>43.7</del>
16	Z14827A	100.0	100/100	W 3/3	61.9	91.0		
37	CCV(50)				50.2	100.4		50.2
38	CCB				0.1			1.0 U

-----  
Element File: PBAUTSPK.GEL      Element: Pb      Wavelength: 283.3  
Date: 02/20/93      Time: 01:43      Slit: 0.70  
Data File: Z148.DAT      ID/Wt File: Z148.1DW      Lamp Current: 1717  
Technique: HGA      Calib. Type: Nonlinear      Energy: 50  
-----

~~~~~  
Pb ID: Calib. Blank Seq. No.: 00157 A/S Pos.: 1 Date: 02/20/93

Replicate 1 **SO** Time: 01:43
Peak Area (A-s): 0.008 Peak Height (A): 0.009
Background Pk Area (A-s): 0.064 Background Pk Height (A): 0.057
Blank Corrected Pk Area (A-s): 0.008

Replicate 2 Time: 01:45
Peak Area (A-s): 0.011 Peak Height (A): 0.010
Background Pk Area (A-s): 0.123 Background Pk Height (A): 0.047
Blank Corrected Pk Area (A-s): 0.011

Mean Pk Area (A-s): 0.009 SD: 0.0023 RSD(%): 24.75

Auto-zero performed.

~~~~~  
Pb    ID: Standard 1      Seq. No.: 00158      A/S Pos.: 2      Date: 02/20/93

Replicate 1      **S3**      Time: 01:48  
Peak Area (A-s): 0.034      Peak Height (A): 0.043  
Background Pk Area (A-s): 0.087      Background Pk Height (A): 0.056  
Blank Corrected Pk Area (A-s): 0.025

Replicate 2      Time: 01:51  
Peak Area (A-s): 0.033      Peak Height (A): 0.046  
Background Pk Area (A-s): 0.122      Background Pk Height (A): 0.061  
Blank Corrected Pk Area (A-s): 0.024

Mean Pk Area (A-s):      0.025      SD: 0.0006      RSD(%): 2.58

Standard number 1 applied. [3.0]  
Correlation coefficient: 1.00000      Slope: 0.0082

~~~~~  
Pb ID: Standard 2 Seq. No.: 00159 A/S Pos.: 3 Date: 02/20/93

Replicate 1 **S50** Time: 01:53
Peak Area (A-s): 0.363 Peak Height (A): 0.556
Background Pk Area (A-s): 0.218 Background Pk Height (A): 0.195
Blank Corrected Pk Area (A-s): 0.354
Concentration (ug/L): 43.0

Replicate 2 Time: 01:56
Peak Area (A-s): 0.359 Peak Height (A): 0.557
Background Pk Area (A-s): 0.183 Background Pk Height (A): 0.189
Blank Corrected Pk Area (A-s): 0.350
Concentration (ug/L): 42.5

Mean Conc (ug/L): 42.8 SD: 0.30 RSD(%): 0.70

Standard number 2 applied. [50.0]

Correlation coefficient: 1.00000 Slope: 0.0083 S 50 1718

Pb ID: Standard 1 Seq. No.: 00160 A/S Pos.: 4 Date: 02/20/93

Replicate 1 S100 Time: 01:58
Peak Area (A-s): 0.618 Peak Height (A): 0.859
Background Pk Area (A-s): 0.335 Background Pk Height (A): 0.349
Blank Corrected Pk Area (A-s): 0.609
Concentration (ug/L): 100.0

Replicate 2 Time: 02:01
Peak Area (A-s): 0.609 Peak Height (A): 0.862
Background Pk Area (A-s): 0.348 Background Pk Height (A): 0.364
Blank Corrected Pk Area (A-s): 0.599
Concentration (ug/L): 97.7

Mean Conc (ug/L): 98.8 SD: 1.58 RSD(%): 1.59

Standard number 3 applied. [100.0]
Correlation coefficient: 1.00000 Slope: 0.0083

Pb ID: ICV Seq. No.: 00161 A/S Pos.: 5 Date: 02/20/93

Replicate 1 Time: 02:04
Peak Area (A-s): 0.371 Peak Height (A): 0.580
Background Pk Area (A-s): 0.268 Background Pk Height (A): 0.216
Blank Corrected Pk Area (A-s): 0.362
Concentration (ug/L): 51.7

Replicate 2 Time: 02:06
Peak Area (A-s): 0.370 Peak Height (A): 0.575
Background Pk Area (A-s): 0.273 Background Pk Height (A): 0.217
Blank Corrected Pk Area (A-s): 0.361
Concentration (ug/L): 51.5

Mean Conc (ug/L): 51.6 SD: 0.12 RSD(%): 0.23

QC sample is within range 45 - 55

Pb ID: ICB Seq. No.: 00162 A/S Pos.: 1 Date: 02/20/93

Replicate 1 Time: 02:09
Peak Area (A-s): 0.013 Peak Height (A): 0.008
Background Pk Area (A-s): 0.184 Background Pk Height (A): 0.070
Blank Corrected Pk Area (A-s): 0.004
Concentration (ug/L): 0.5

Replicate 2 Time: 02:11
Peak Area (A-s): 0.012 Peak Height (A): 0.008
Background Pk Area (A-s): 0.193 Background Pk Height (A): 0.070
Blank Corrected Pk Area (A-s): 0.003
Concentration (ug/L): 0.3

Mean Conc (ug/L): 0.4 SD: 0.12 RSD(%): 28.82

QC sample is within range

~~~~~  
Pb ID: CRA Seq. No.: 00163 A/S Pos.: 2 Date: 02/20/93

Replicate 1 Time: 02:14  
Peak Area (A-s): 0.039 Peak Height (A): 0.050 1719  
Background Pk Area (A-s): 0.210 Background Pk Height (A): 0.081  
Blank Corrected Pk Area (A-s): 0.030  
Concentration (ug/L ): 3.6

Replicate 2 Time: 02:17  
Peak Area (A-s): 0.039 Peak Height (A): 0.049  
Background Pk Area (A-s): 0.217 Background Pk Height (A): 0.080  
Blank Corrected Pk Area (A-s): 0.030  
Concentration (ug/L ): 3.7

Mean Conc (ug/L ): 3.6 SD: 0.01 RSD(%): 0.15

QC sample is within range

~~~~~  
Pb ID: CCV(50) Seq. No.: 00164 A/S Pos.: 37 Date: 02/20/93

Replicate 1 Time: 02:19
Peak Area (A-s): 0.367 Peak Height (A): 0.580
Background Pk Area (A-s): 0.317 Background Pk Height (A): 0.225
Blank Corrected Pk Area (A-s): 0.358
Concentration (ug/L): 51.1

Replicate 2 Time: 02:22
Peak Area (A-s): 0.369 Peak Height (A): 0.582
Background Pk Area (A-s): 0.318 Background Pk Height (A): 0.221
Blank Corrected Pk Area (A-s): 0.360
Concentration (ug/L): 51.3

Mean Conc (ug/L): 51.2 SD: 0.15 RSD(%): 0.29

QC sample is within range 45 - 55

~~~~~  
Pb ID: CCB Seq. No.: 00165 A/S Pos.: 38 Date: 02/20/93

Replicate 1 Time: 02:24  
Peak Area (A-s): 0.014 Peak Height (A): 0.010  
Background Pk Area (A-s): 0.212 Background Pk Height (A): 0.075  
Blank Corrected Pk Area (A-s): 0.005  
Concentration (ug/L ): 0.6

Replicate 2 Time: 02:27  
Peak Area (A-s): 0.014 Peak Height (A): 0.009  
Background Pk Area (A-s): 0.211 Background Pk Height (A): 0.082  
Blank Corrected Pk Area (A-s): 0.004  
Concentration (ug/L ): 0.5

Mean Conc (ug/L ): 0.6 SD: 0.06 RSD(%): 10.40

QC sample is within range

~~~~~  
Pb ID: Z14812 Seq. No.: 00166 A/S Pos.: 6 Date: 02/20/93

Replicate 1 *MW-44* Time: 02:30
Peak Area (A-s): 0.054 Peak Height (A): 0.100 1720
Background Pk Area (A-s): 0.425 Background Pk Height (A): 0.275
Blank Corrected Pk Area (A-s): 0.045
Concentration (ug/L): 5.5

Replicate 2 Time: 02:32
Peak Area (A-s): 0.056 Peak Height (A): 0.098
Background Pk Area (A-s): 0.428 Background Pk Height (A): 0.281
Blank Corrected Pk Area (A-s): 0.047
Concentration (ug/L): 5.8

Mean Conc (ug/L): 5.7 SD: 0.19 RSD(%): 3.36

~~~~~  
Pb ID: Z14812 **A**                      Seq. No.: 00167      A/S Pos.: 6      Date: 02/20/93

Replicate 1                      Time: 02:36  
Peak Area (A-s): 0.196                      Peak Height (A): 0.394  
Background Pk Area (A-s): 0.477                      Background Pk Height (A): 0.316  
Blank Corrected Pk Area (A-s): 0.187  
Concentration (ug/L ): 24.5

Replicate 2                      Time: 02:39  
Peak Area (A-s): 0.197                      Peak Height (A): 0.394  
Background Pk Area (A-s): 0.467                      Background Pk Height (A): 0.313  
Blank Corrected Pk Area (A-s): 0.188  
Concentration (ug/L ): 24.6

Mean Conc (ug/L ):                      24.5                      SD: 0.07                      RSD(%): 0.30

Recovery is 94.3%

~~~~~  
Pb ID: Z14813 Seq. No.: 00168 A/S Pos.: 7 Date: 02/20/93

MW-46
Sample abs. is greater than that of the largest standard.
Replicate 1 Time: 02:41
Peak Area (A-s): 0.920 Peak Height (A): 1.131
Background Pk Area (A-s): 0.772 Background Pk Height (A): 0.660
Blank Corrected Pk Area (A-s): 0.911
Concentration (ug/L): 192.0

Sample abs. is greater than that of the largest standard.
Replicate 2 Time: 02:44
Peak Area (A-s): 0.909 Peak Height (A): 1.141
Background Pk Area (A-s): 0.763 Background Pk Height (A): 0.704
Blank Corrected Pk Area (A-s): 0.899
Concentration (ug/L): 187.5

Sample abs. is greater than that of the largest standard.
Mean Conc (ug/L): 189.7 SD: 3.22 RSD(%): 1.70

~~~~~  
Pb ID: Z14813 **A**                      Seq. No.: 00169      A/S Pos.: 7      Date: 02/20/93

Sample abs. is greater than that of the largest standard. Z14813A  
Replicate 1 Time: 02:47  
Peak Area (A-s): 0.948 Peak Height (A): 1.172  
Background Pk Area (A-s): 0.787 Background Pk Height (A): 0.700 1721  
Blank Corrected Pk Area (A-s): 0.939  
Concentration (ug/L ): 203.1

Sample abs. is greater than that of the largest standard.  
Replicate 2 Time: 02:50  
Peak Area (A-s): 0.948 Peak Height (A): 1.168  
Background Pk Area (A-s): 0.783 Background Pk Height (A): 0.716  
Blank Corrected Pk Area (A-s): 0.939  
Concentration (ug/L ): 203.0

Sample abs. is greater than that of the largest standard.  
Mean Conc (ug/L ): 203.0 SD: 0.09 RSD(%): 0.04

Recovery is 66.5% (outside of specified limits)

~~~~~  
Pb ID: Z14814 *MW-35* Seq. No.: 00170 A/S Pos.: 8 Date: 02/20/93

Sample abs. is greater than that of the largest standard.
Replicate 1 Time: 02:53
Peak Area (A-s): 1.027 Peak Height (A): 1.312
Background Pk Area (A-s): 0.869 Background Pk Height (A): 0.992
Blank Corrected Pk Area (A-s): 1.018
Concentration (ug/L): 238.6

Sample abs. is greater than that of the largest standard.
Replicate 2 Time: 02:56
Peak Area (A-s): 1.042 Peak Height (A): 1.302
Background Pk Area (A-s): 0.871 Background Pk Height (A): 0.974
Blank Corrected Pk Area (A-s): 1.033
Concentration (ug/L): 245.9

Sample abs. is greater than that of the largest standard.
Mean Conc (ug/L): 242.3 SD: 5.16 RSD(%): 2.13

~~~~~  
Pb ID: Z14814 **A** Seq. No.: 00171 A/S Pos.: 8 Date: 02/20/93

Sample abs. is greater than that of the largest standard.  
Replicate 1 Time: 02:59  
Peak Area (A-s): 1.030 Peak Height (A): 1.278  
Background Pk Area (A-s): 0.860 Background Pk Height (A): 1.034  
Blank Corrected Pk Area (A-s): 1.020  
Concentration (ug/L ): 239.8

Sample abs. is greater than that of the largest standard.  
Replicate 2 Time: 03:02  
Peak Area (A-s): 1.002 Peak Height (A): 1.272  
Background Pk Area (A-s): 0.842 Background Pk Height (A): 1.029  
Blank Corrected Pk Area (A-s): 0.993  
Concentration (ug/L ): 226.7

Sample abs. is greater than that of the largest standard.  
Mean Conc (ug/L ): 233.1 SD: 9.29 RSD(%): 3.98

Recovery is -45.6% (outside of specified limits)

Z14814A

1722

Pb ID: Z14816 Seq. No.: 00172 A/S Pos.: 7 Date: 02/20/93

Replicate 1  
Peak Area (A-s): 0.191  
Background Pk Area (A-s): 0.246  
Blank Corrected Pk Area (A-s): 0.182  
Concentration (ug/L ): 23.7

MHW-2

Time: 03:04  
Peak Height (A): 0.374  
Background Pk Height (A): 0.160

Replicate 2  
Peak Area (A-s): 0.192  
Background Pk Area (A-s): 0.241  
Blank Corrected Pk Area (A-s): 0.182  
Concentration (ug/L ): 23.8

Time: 03:07  
Peak Height (A): 0.381  
Background Pk Height (A): 0.160

Mean Conc (ug/L ): 23.7 SD: 0.07 RSD(%): 0.31

Pb ID: Z14816 A Seq. No.: 00173 A/S Pos.: 9 Date: 02/20/93

Replicate 1  
Peak Area (A-s): 0.298  
Background Pk Area (A-s): 0.263  
Blank Corrected Pk Area (A-s): 0.289  
Concentration (ug/L ): 39.7

Time: 03:10  
Peak Height (A): 0.583  
Background Pk Height (A): 0.240

Replicate 2  
Peak Area (A-s): 0.306  
Background Pk Area (A-s): 0.268  
Blank Corrected Pk Area (A-s): 0.297  
Concentration (ug/L ): 41.0

Time: 03:13  
Peak Height (A): 0.587  
Background Pk Height (A): 0.245

Mean Conc (ug/L ): 40.4 SD: 0.88 RSD(%): 2.19

Recovery is 83.2% (outside of specified limits)

Pb ID: Z14817 Seq. No.: 00174 A/S Pos.: 10 Date: 02/20/93

Replicate 1  
Peak Area (A-s): 0.026  
Background Pk Area (A-s): 0.215  
Blank Corrected Pk Area (A-s): 0.017  
Concentration (ug/L ): 2.1

REPLICATE

Time: 03:16  
Peak Height (A): 0.039  
Background Pk Height (A): 0.131

Replicate 2  
Peak Area (A-s): 0.028  
Background Pk Area (A-s): 0.212  
Blank Corrected Pk Area (A-s): 0.019  
Concentration (ug/L ): 2.3

Time: 03:18  
Peak Height (A): 0.040  
Background Pk Height (A): 0.134

Mean Conc (ug/L ): 2.2 SD: 0.17 RSD(%): 7.71

ID: Z14817 A Seq. No.: 00175 A/S Pos.: 10 Date: 02/20/93

Replicate 1 Time: 03:22

Peak Area (A-s): 0.170 **Z14817A**  
Background Pk Area (A-s): 0.232  
Blank Corrected Pk Area (A-s): 0.149  
Concentration (ug/L ): 21.9

Peak Height (A): 0.360  
Background Pk Height (A): 0.167

1723

Replicate 2  
Peak Area (A-s): 0.175  
Background Pk Area (A-s): 0.232  
Blank Corrected Pk Area (A-s): 0.149  
Concentration (ug/L ): 21.9

Time: 03:25  
Peak Height (A): 0.359  
Background Pk Height (A): 0.167

Mean Conc (ug/L ): 21.9 SD: 0.03 RSD(%): 0.14

Recovery is 98.4%

~~~~~  
Pb ID: CCV(50) Seq. No.: 00176 A/S Pos.: 37 Date: 02/20/93

Replicate 1
Peak Area (A-s): 0.368
Background Pk Area (A-s): 0.262
Blank Corrected Pk Area (A-s): 0.359
Concentration (ug/L): 51.1

Time: 03:27
Peak Height (A): 0.634
Background Pk Height (A): 0.238

Replicate 2
Peak Area (A-s): 0.364
Background Pk Area (A-s): 0.269
Blank Corrected Pk Area (A-s): 0.354
Concentration (ug/L): 50.4

Time: 03:30
Peak Height (A): 0.636
Background Pk Height (A): 0.242

Mean Conc (ug/L): 50.8 SD: 0.49 RSD(%): 0.97

QC sample is within range 45 - 55

~~~~~  
Pb ID: CCB Seq. No.: 00177 A/S Pos.: 38 Date: 02/20/93

Replicate 1  
Peak Area (A-s): 0.011  
Background Pk Area (A-s): 0.153  
Blank Corrected Pk Area (A-s): 0.002  
Concentration (ug/L ): 0.3

Time: 03:33  
Peak Height (A): 0.010  
Background Pk Height (A): 0.071

Replicate 2  
Peak Area (A-s): 0.009  
Background Pk Area (A-s): 0.152  
Blank Corrected Pk Area (A-s): 0.000  
Concentration (ug/L ): 0.0

Time: 03:35  
Peak Height (A): 0.008  
Background Pk Height (A): 0.067

Mean Conc (ug/L ): 0.1 SD: 0.18 RSD(%): 134.47

QC sample is within range

~~~~~  
Pb ID: Z14818 Seq. No.: 00178 A/S Pos.: 11 Date: 02/20/93

Replicate 1
Peak Area (A-s): 0.144
Background Pk Area (A-s): 0.335

MW-1

Time: 03:38
Peak Height (A): 0.259
Background Pk Height (A): 0.237

Blank Corrected Pk Area (A-s): 0.135
Concentration (ug/L): 17.2

Z14818

MW-1

1724

Replicate 1
Peak Area (A-s): 0.144
Background Pk Area (A-s): 0.338
Blank Corrected Pk Area (A-s): 0.135
Concentration (ug/L): 17.2

Time: 03:40
Peak Height (A): 1.257
Background Pk Height (A): 0.234

Mean Conc (ug/L): 17.2 SD: 0.01 RSD(%): 0.08

~~~~~  
Pb ID: Z14818A Seq. No.: 00179 A/S Pos.: 11 Date: 02/20/93

Replicate 1  
Peak Area (A-s): 0.278  
Background Pk Area (A-s): 0.376  
Blank Corrected Pk Area (A-s): 0.269  
Concentration (ug/L ): 36.6

Time: 03:43  
Peak Height (A): 0.481  
Background Pk Height (A): 0.240

Replicate 2  
Peak Area (A-s): 0.277  
Background Pk Area (A-s): 0.382  
Blank Corrected Pk Area (A-s): 0.268  
Concentration (ug/L ): 36.4

Time: 03:47  
Peak Height (A): 0.484  
Background Pk Height (A): 0.251

Mean Conc (ug/L ): 36.5 SD: 0.17 RSD(%): 0.47

Recovery is 96.5%

~~~~~  
Pb ID: Z14820 Seq. No.: 00180 A/S Pos.: 12 Date: 02/20/93

Replicate 1
Peak Area (A-s): 0.096
Background Pk Area (A-s): 0.307
Blank Corrected Pk Area (A-s): 0.087
Concentration (ug/L): 10.8

MW-47

Time: 03:49
Peak Height (A): 0.192
Background Pk Height (A): 0.193

Replicate 2
Peak Area (A-s): 0.095
Background Pk Area (A-s): 0.311
Blank Corrected Pk Area (A-s): 0.086
Concentration (ug/L): 10.8

Time: 03:52
Peak Height (A): 0.189
Background Pk Height (A): 0.193

Mean Conc (ug/L): 10.8 SD: 0.02 RSD(%): 0.18

~~~~~  
Pb ID: Z14820A Seq. No.: 00181 A/S Pos.: 12 Date: 02/20/93

Replicate 1  
Peak Area (A-s): 0.237  
Background Pk Area (A-s): 0.338  
Blank Corrected Pk Area (A-s): 0.228  
Concentration (ug/L ): 30.4

Time: 03:55  
Peak Height (A): 0.462  
Background Pk Height (A): 0.232

Replicate 2  
Peak Area (A-s): 0.236  
Background Pk Area (A-s): 0.336

Time: 03:58  
Peak Height (A): 0.462  
Background Pk Height (A): 0.231

Blank Corrected Pk Area (A-s): 0.227  
Concentration (ug/L ): 30.2

Z14820A

1725

Mean Conc (ug/L ): 30.2 SD: 0.14 RSD(%): 0.43

Recovery is 97.7%

Pb ID: Z14821 Seq. No.: 00182 A/S Pos.: 12 Date: 02/20/93

Replicate 1 Time: 04:00  
Peak Area (A-s): 0.158 Peak Height (A): 0.268  
Background Pk Area (A-s): 0.529 Background Pk Height (A): 0.263  
Blank Corrected Pk Area (A-s): 0.149  
Concentration (ug/L ): 19.1

Replicate 2 Time: 04:03  
Peak Area (A-s): 0.157 Peak Height (A): 0.272  
Background Pk Area (A-s): 0.526 Background Pk Height (A): 0.265  
Blank Corrected Pk Area (A-s): 0.148  
Concentration (ug/L ): 18.9

Mean Conc (ug/L ): 19.0 SD: 0.08 RSD(%): 0.44

*W 3/3*

Pb ID: Z14821A Seq. No.: 00183 A/S Pos.: 13 Date: 02/20/93

Replicate 1 Time: 04:06  
Peak Area (A-s): 0.286 Peak Height (A): 0.490  
Background Pk Area (A-s): 0.530 Background Pk Height (A): 0.339  
Blank Corrected Pk Area (A-s): 0.276  
Concentration (ug/L ): 37.8

Replicate 2 Time: 04:09  
Peak Area (A-s): 0.286 Peak Height (A): 0.492  
Background Pk Area (A-s): 0.528 Background Pk Height (A): 0.333  
Blank Corrected Pk Area (A-s): 0.277  
Concentration (ug/L ): 37.9

Mean Conc (ug/L ): 37.8 SD: 0.06 RSD(%): 0.16

Recovery is 94.0%

Pb ID: Z14822 Seq. No.: 00184 A/S Pos.: 14 Date: 02/20/93

Replicate 1 Time: 04:11  
Peak Area (A-s): 0.014 Peak Height (A): 0.020  
Background Pk Area (A-s): 0.151 Background Pk Height (A): 0.075  
Blank Corrected Pk Area (A-s): 0.005  
Concentration (ug/L ): 0.6

Replicate 2 Time: 04:14  
Peak Area (A-s): 0.019 Peak Height (A): 0.020  
Background Pk Area (A-s): 0.147 Background Pk Height (A): 0.073  
Blank Corrected Pk Area (A-s): 0.010  
Concentration (ug/L ): 1.2

Mean Conc (ug/L ): 0.9 SD: 0.40 RSD(%): 44.87

ID: Z14872 A

Seq. No.: 00185

A/S Pos.: 14

Date: 02/20/93

1726

Replicate 1  
Peak Area (A-s): 0.175  
Background Pk Area (A-s): 0.183  
Blank Corrected Pk Area (A-s): 0.166  
Concentration (ug/L ): 21.5

Time: 04:17  
Peak Height (A): 0.322  
Background Pk Height (A): 0.119

Replicate 2  
Peak Area (A-s): 0.179  
Background Pk Area (A-s): 0.184  
Blank Corrected Pk Area (A-s): 0.170  
Concentration (ug/L ): 22.1

Time: 04:20  
Peak Height (A): 0.321  
Background Pk Height (A): 0.120

Mean Conc (ug/L ): 21.8 SD: 0.42 RSD(%): 1.93

Recovery is 104.4%

Pb ID: Z14823

Seq. No.: 00186

A/S Pos.: 15

Date: 02/20/93

Replicate 1  
Peak Area (A-s): 0.011  
Background Pk Area (A-s): 0.142  
Blank Corrected Pk Area (A-s): 0.002  
Concentration (ug/L ): 0.3

Time: 04:22  
Peak Height (A): 0.011  
Background Pk Height (A): 0.075

Replicate 2  
Peak Area (A-s): 0.011  
Background Pk Area (A-s): 0.139  
Blank Corrected Pk Area (A-s): 0.002  
Concentration (ug/L ): 0.2

Time: 04:25  
Peak Height (A): 0.011  
Background Pk Height (A): 0.074

Mean Conc (ug/L ): 0.2 SD: 0.05 RSD(%): 20.31

Pb ID: Z14823 A

Seq. No.: 00187

A/S Pos.: 15

Date: 02/20/93

Replicate 1  
Peak Area (A-s): 0.172  
Background Pk Area (A-s): 0.183  
Blank Corrected Pk Area (A-s): 0.163  
Concentration (ug/L ): 21.1

Time: 04:28  
Peak Height (A): 0.326  
Background Pk Height (A): 0.123

Replicate 2  
Peak Area (A-s): 0.174  
Background Pk Area (A-s): 0.174  
Blank Corrected Pk Area (A-s): 0.165  
Concentration (ug/L ): 21.3

Time: 04:31  
Peak Height (A): 0.326  
Background Pk Height (A): 0.115

Mean Conc (ug/L ): 21.2 SD: 0.14 RSD(%): 0.66

Recovery is 104.8%

ID: CCV(50)

Seq. No.: 00188

A/S Pos.: 37

Date: 02/20/93

Replicate 1

Time: 04:34

Peak Area (A-s): 0.368 *CCV (50)*  
Background Pk Area (A-s): 0.244  
Blank Corrected Pk Area (A-s): 0.359  
Concentration (ug/L ): 51.2

Peak Height (A): 0.648  
Background Pk Height (A): 0.241

1727

Replicate 2  
Peak Area (A-s): 0.364  
Background Pk Area (A-s): 0.242  
Blank Corrected Pk Area (A-s): 0.355  
Concentration (ug/L ): 50.6

Time: 04:36  
Peak Height (A): 0.645  
Background Pk Height (A): 0.243

Mean Conc (ug/L ): 50.9 SD: 0.44 RSD(%): 0.86

QC sample is within range 45 - 55

~~~~~  
Pb ID: CCB Seq. No.: 00189 A/S Pos.: 38 Date: 02/20/93

Replicate 1
Peak Area (A-s): 0.009
Background Pk Area (A-s): 0.133
Blank Corrected Pk Area (A-s): 0.000
Concentration (ug/L): 0.0

Time: 04:39
Peak Height (A): 0.008
Background Pk Height (A): 0.065

Replicate 2
Peak Area (A-s): 0.014
Background Pk Area (A-s): 0.129
Blank Corrected Pk Area (A-s): 0.005
Concentration (ug/L): 0.6

Time: 04:41
Peak Height (A): 0.010
Background Pk Height (A): 0.070

Mean Conc (ug/L): 0.3 SD: 0.42 RSD(%): 140.75

QC sample is within range

~~~~~  
Pb ID: Z14827 Seq. No.: 00190 A/S Pos.: 16 Date: 02/20/93

Replicate 1  
Peak Area (A-s): 0.322  
Background Pk Area (A-s): 0.429  
Blank Corrected Pk Area (A-s): 0.313  
Concentration (ug/L ): 43.6

Time: 04:44  
Peak Height (A): 0.522  
Background Pk Height (A): 0.293

Replicate 2  
Peak Area (A-s): 0.324  
Background Pk Area (A-s): 0.429  
Blank Corrected Pk Area (A-s): 0.315  
Concentration (ug/L ): 43.8

Time: 04:46  
Peak Height (A): 0.519  
Background Pk Height (A): 0.292

Mean Conc (ug/L ): 43.7 SD: 0.18 RSD(%): 0.41

~~~~~  
Pb ID: Z14827A Seq. No.: 00191 A/S Pos.: 16 Date: 02/20/93

Replicate 1
Peak Area (A-s): 0.436
Background Pk Area (A-s): 0.459
Blank Corrected Pk Area (A-s): 0.427
Concentration (ug/L): 63.2

Time: 04:49
Peak Height (A): 0.673
Background Pk Height (A): 0.348

3/3

Std Prepped Date: 2/22/93/0830
Start Run Time: 1000

Date: 2/22/93

FURNACE DATA SHEET

Element: Pb

I.D. Wt. File: _____

Instrument: 3030

Analyst: Joff Roe

| Cup | Element | Sample ID | % Solids | Wt. Vol/ Vol | Dil. Factor | Sample Recovery | % Recovery | Flags | Value ug/L, mg/Kg |
|-----|---------|--------------|----------|--------------|-------------|-----------------|------------|-------|-------------------|
| 5 | Pb | ICV | | | | 48.0 | 96.0 | | |
| 6 | | ICB | | | | 0.4 | | | 1.04 |
| 7 | | CRA | | | | 2.9 | 96.7 | | |
| 8 | | CCV(5) | | | | 48.3 | 96.6 | | |
| 9 | | CCB | | | | 0.6 | | | 1.04 |
| 10 | | Z14813 MW-46 | | 100/100 | X10 | 16.5 | | | 165 |
| 11 | | 13A | | | | 35.0 | 92.5 | | |
| 12 | | Z14814 MW-35 | | | X10 | 20.7 | | | 207 |
| 13 | | 14A | | | | 40.3 | 96.0 | | |
| 14 | MSA | Z14816 0 | Blank | MW | 2 | 8.6 | 0.056 | | $y=0.0578$ (21.6) |
| 15 | Pb | 1 | 5ppb | | | 13.7 | 0.086 | | $S=0.00536$ S |
| 16 | | 2 | 10ppb | | | 18.5 | 0.114 | | $R=0.997669124$ |
| 17 | | 3 | 15ppb | | | 22.2 | 0.136 | | $Y/SX2=21.56716$ |
| 18 | | 7067 69 | | | X10 | 14.1 | | | 141 |
| 19 | | 69A | | | | 33.4 | 96.5 | | |
| 20 | | CCV(5) | | | | 49.1 | 98.2 | | |
| 21 | | CCB | | | | 0.5 | | | 1.04 |
| 22 | | 7067 70 | | | X10 | 14.4 | | | 144 |
| 23 | | 70A | | | | 34.0 | 98.0 | | |
| 24 | | 7067 75 | | | X4 | 19.4 | | | 77.6 |
| 25 | | 75A | | | | 41.3 | 107.5 | | |
| 26 | | 7067 Z15502 | | | X2 | 7.9 | | | 15.8 |
| 27 | | 02A | | | | 22.6 | 93.5 | | 15.8 |
| 28 | | CCV(5) | | | | 53.9 | 107.8 | | dil 1:4 |
| 29 | | CCB | | | | 0.1 | | | 1.04 |

PEAK HEIGHT (ABSORBANCE) 0.042
PEAK AREA (ABS-SECONDS) 0.060
AA ZAA BC
0.006 0.002 0.042 1729

READ: 0.002

T=10:00

PEAK HEIGHT (ABSORBANCE) 0.058
PEAK AREA (ABS-SECONDS) 0.100
AA ZAA BC
0.006 0.001 0.057 0.099

READ: 0.001

MEAN= 0.001 STD. DEV. = 0.000 COEF. VAR. = 30.45%

0.000 AUTOZERO

PEAK HEIGHT (ABSORBANCE) 0.080
PEAK AREA (ABS-SECONDS) 0.170
AA ZAA BC
0.034 0.077 0.150

READ: 0.019

1005

PEAK HEIGHT (ABSORBANCE) 0.098
PEAK AREA (ABS-SECONDS) 0.217
AA ZAA BC
0.029 0.098 0.198

READ: 0.020

MEAN= 0.020 STD. DEV. = 0.000 COEF. VAR. = 0.89%

0.0 STANDARD 1

PEAK HEIGHT (ABSORBANCE) 0.556
PEAK AREA (ABS-SECONDS) 0.533
AA ZAA BC
0.408 0.152 0.251

READ: 43.2

1010

PEAK HEIGHT (ABSORBANCE) 0.447
PEAK AREA (ABS-SECONDS) 0.592
AA ZAA BC
0.324 0.128 0.318

READ: 42.0

MEAN= 42.6 STD. DEV. = 0.8 COEF. VAR. = 1.98%

42.6
E-50: READING GREATER THAN HIGHEST STANDARD

50.0 STANDARD 2

PEAK HEIGHT (ABSORBANCE) 0.811
PEAK AREA (ABS-SECONDS) 0.895
AA ZAA BC
0.578 0.234 0.401

READ: 104.1

1730

1015

S100

(CONTINUED)

| | | | |
|--------------------------|-------|-------|-------|
| | AA | ZAA | EG |
| PEAK HEIGHT (ABSORBANCE) | 0.799 | 0.570 | 0.282 |
| PEAK AREA (ABS-SECONDS) | 0.904 | 0.496 | 0.408 |

READ: 104.8

MEAN= 104.5 STD.DEV.= 0.6 COEF.VAR.= 0.52 %

104.5

E-50: READING GREATER THAN HIGHEST STANDARD

100.0 STANDARD 3

PE 0005 ICV

| | | | |
|--------------------------|-------|-------|-------|
| | AA | ZAA | EG |
| PEAK HEIGHT (ABSORBANCE) | 0.490 | 0.356 | 0.182 |
| PEAK AREA (ABS-SECONDS) | 0.722 | 0.271 | 0.451 |

READ: 48.5

1020

| | | | |
|--------------------------|-------|-------|-------|
| | AA | ZAA | EG |
| PEAK HEIGHT (ABSORBANCE) | 0.445 | 0.324 | 0.161 |
| PEAK AREA (ABS-SECONDS) | 0.688 | 0.257 | 0.415 |

READ: 47.5

MEAN= 48.0 STD.DEV.= 0.7 COEF.VAR.= 1.56 %

PE 0006 ICB

| | | | |
|--------------------------|-------|-------|-------|
| | AA | ZAA | EG |
| PEAK HEIGHT (ABSORBANCE) | 0.112 | 0.007 | 0.108 |
| PEAK AREA (ABS-SECONDS) | 0.212 | 0.002 | 0.209 |

READ: 0.2

1025

| | | | |
|--------------------------|-------|-------|-------|
| | AA | ZAA | EG |
| PEAK HEIGHT (ABSORBANCE) | 0.122 | 0.008 | 0.121 |
| PEAK AREA (ABS-SECONDS) | 0.255 | 0.005 | 0.250 |

READ: 0.6

MEAN= 0.4 STD.DEV.= 0.3 COEF.VAR.= 75.84 %

PE 0007 CRA

| | | | |
|--------------------------|-------|-------|-------|
| | AA | ZAA | EG |
| PEAK HEIGHT (ABSORBANCE) | 0.147 | 0.026 | 0.144 |
| PEAK AREA (ABS-SECONDS) | 0.325 | 0.021 | 0.305 |

READ: 3.0

1030

| | | | |
|--------------------------|-------|-------|-------|
| | AA | ZAA | EG |
| PEAK HEIGHT (ABSORBANCE) | 0.150 | 0.029 | 0.150 |
| PEAK AREA (ABS-SECONDS) | 0.318 | 0.020 | 0.299 |

READ: 2.8

CRA

1731

MEAN= 2.8 STD. DEV. = 0.1 COEF. VAR. = 3.90 %

PE 0008 CCV (50)

| | AA | ZAA | EG |
|--------------------------|-------|-------|-------|
| PEAK HEIGHT (ABSORBANCE) | 0.459 | 0.338 | 0.125 |
| PEAK AREA (ABS-SECONDS) | 0.580 | 0.269 | 0.311 |

READ: 48.0

1035

| | AA | ZAA | EG |
|--------------------------|-------|-------|-------|
| PEAK HEIGHT (ABSORBANCE) | 0.462 | 0.345 | 0.132 |
| PEAK AREA (ABS-SECONDS) | 0.572 | 0.272 | 0.300 |

READ: 48.6

MEAN= 48.6 STD. DEV. = 0.4 COEF. VAR. = 0.88 %

PE 0009 CCB

| | AA | ZAA | EG |
|--------------------------|-------|-------|-------|
| PEAK HEIGHT (ABSORBANCE) | 0.143 | 0.009 | 0.139 |
| PEAK AREA (ABS-SECONDS) | 0.263 | 0.007 | 0.255 |

READ: 0.9

1040

| | AA | ZAA | EG |
|--------------------------|-------|-------|-------|
| PEAK HEIGHT (ABSORBANCE) | 0.128 | 0.007 | 0.127 |
| PEAK AREA (ABS-SECONDS) | 0.239 | 0.004 | 0.236 |

READ: 0.3

MEAN= 0.6 STD. DEV. = 0.4 COEF. VAR. = 67.29 %

PE 0010 Z14813 x10 MW-46

| | AA | ZAA | EG |
|--------------------------|-------|-------|-------|
| PEAK HEIGHT (ABSORBANCE) | 0.196 | 0.120 | 0.192 |
| PEAK AREA (ABS-SECONDS) | 0.490 | 0.104 | 0.386 |

READ: 16.7

1045

| | AA | ZAA | EG |
|--------------------------|-------|-------|-------|
| PEAK HEIGHT (ABSORBANCE) | 0.182 | 0.121 | 0.184 |
| PEAK AREA (ABS-SECONDS) | 0.470 | 0.102 | 0.368 |

READ: 16.4

MEAN= 16.5 STD. DEV. = 0.2 COEF. VAR. = 1.18 %

E 0011 Z14813A x10

| | AA | ZAA | EG |
|--------------------------|-------|-------|-------|
| PEAK HEIGHT (ABSORBANCE) | 0.364 | 0.251 | 0.208 |

PEAK AREA (ABS-SECONDS) 0.689 0.201 0.497

READ: 34.5 Z14813A x10 1732 1050

PEAK HEIGHT (ABSORBANCE) AA 0.368 ZAA 0.260 EG 0.192
PEAK AREA (ABS-SECONDS) 0.651 0.208 0.444

READ: 35.5

MEAN= 35.0 STD. DEV. = 0.7 COEF. VAR. = 2.18 %

PE 0012 Z14814 x10 MW-35

PEAK HEIGHT (ABSORBANCE) AA 0.272 ZAA 0.182 EG 0.186
PEAK AREA (ABS-SECONDS) 0.548 0.127 0.421

READ: 20.7

PEAK HEIGHT (ABSORBANCE) AA 0.254 ZAA 0.176 EG 0.182
PEAK AREA (ABS-SECONDS) 0.530 0.127 0.402

READ: 20.7

MEAN= 20.7 STD. DEV. = 0.0 COEF. VAR. = 0.18 %

PE 0013 Z14814A x10

PEAK HEIGHT (ABSORBANCE) AA 0.442 ZAA 0.314 EG 0.180
PEAK AREA (ABS-SECONDS) 0.667 0.232 0.435

READ: 40.5

PEAK HEIGHT (ABSORBANCE) AA 0.445 ZAA 0.315 EG 0.163
PEAK AREA (ABS-SECONDS) 0.625 0.230 0.396

READ: 40.1

MEAN= 40.3 STD. DEV. = 0.3 COEF. VAR. = 0.78 %

PE 0014 Z148160 MSA x2 MHW-2

PEAK HEIGHT (ABSORBANCE) AA 0.208 ZAA 0.090 EG 0.207
PEAK AREA (ABS-SECONDS) 0.478 0.057 0.422

READ: 8.7

PEAK HEIGHT (ABSORBANCE) AA 0.199 ZAA 0.087 EG 0.197
PEAK AREA (ABS-SECONDS) 0.438 0.055 0.383

READ: 8.5

1733

MHW=2

MEAN= 8.6 STD.DEV.= 0.1 COEF.VAR.= 1.52 %

PE 0015 Z148161 MSA x2

AA ZAA BC
PEAK HEIGHT (ABSORBANCE) 0.202 0.129 0.199
PEAK AREA (ABS-SECONDS) 0.493 0.089 0.404

READ: 14.1 110

AA ZAA BC
PEAK HEIGHT (ABSORBANCE) 0.194 0.126 0.190
PEAK AREA (ABS-SECONDS) 0.461 0.034 0.377

READ: 13.3

MEAN= 13.7 STD.DEV.= 0.6 COEF.VAR.= 4.17 %

PE 0016 Z148162 MSA x2

AA ZAA BC
PEAK HEIGHT (ABSORBANCE) 0.240 0.166 0.206
PEAK AREA (ABS-SECONDS) 0.523 0.113 0.410

READ: 18.3 115

AA ZAA BC
PEAK HEIGHT (ABSORBANCE) 0.226 0.161 0.188
PEAK AREA (ABS-SECONDS) 0.495 0.116 0.379

READ: 18.7

MEAN= 18.5 STD.DEV.= 0.3 COEF.VAR.= 1.74 %

PE 0017 Z148163 MSA x2

AA ZAA BC
PEAK HEIGHT (ABSORBANCE) 0.289 0.157 0.199
PEAK AREA (ABS-SECONDS) 0.541 0.136 0.405

READ: 22.3 1120

AA ZAA BC
PEAK HEIGHT (ABSORBANCE) 0.287 0.198 0.194
PEAK AREA (ABS-SECONDS) 0.525 0.135 0.390

READ: 22.1

MEAN= 22.2 STD.DEV.= 0.2 COEF.VAR.= 0.72 %

PE 0018 T06769 x10

AA ZAA BC
PEAK HEIGHT (ABSORBANCE) 0.212 0.101 0.209
PEAK AREA (ABS-SECONDS) 0.500 0.088 0.412

READ: 13.9 3/3

PEAK HEIGHT (ABSORBANCE) AA ZAA BC *1125*
0.214 0.124 0.210
PEAK AREA (ABS-SECONDS) 0.481 0.090 0.891
READ: 14.3 *T06769 x10* 1734

MEAN= 14.1 STD. DEV. = 0.3 COEF. VAR. = 2.29 %

PE 0019 *T06769A x10*

PEAK HEIGHT (ABSORBANCE) AA ZAA BC
0.329 0.227 0.200
PEAK AREA (ABS-SECONDS) 0.630 0.195 0.485

READ: 38.2

PEAK HEIGHT (ABSORBANCE) AA ZAA BC *1130*
0.347 0.241 0.205
PEAK AREA (ABS-SECONDS) 0.635 0.197 0.489

READ: 38.7

MEAN= 38.4 STD. DEV. = 0.4 COEF. VAR. = 1.08 %

PE 0020 *CCV (50)*

PEAK HEIGHT (ABSORBANCE) AA ZAA BC
0.481 0.359 0.188
PEAK AREA (ABS-SECONDS) 0.585 0.278 0.312

READ: 49.0

PEAK HEIGHT (ABSORBANCE) AA ZAA BC *1135*
0.510 0.370 0.146
PEAK AREA (ABS-SECONDS) 0.577 0.274 0.302

READ: 49.2

MEAN= 49.1 STD. DEV. = 0.2 COEF. VAR. = 0.33 %

PE 0021 *CCB*

PEAK HEIGHT (ABSORBANCE) AA ZAA BC
0.111 0.011 0.112
PEAK AREA (ABS-SECONDS) 0.203 0.004 0.199

READ: 0.4

PEAK HEIGHT (ABSORBANCE) AA ZAA BC *1140*
0.110 0.013 0.109
PEAK AREA (ABS-SECONDS) 0.190 0.005 0.184

READ: 0.6

MEAN= 0.5 STD. DEV. = 0.1 COEF. VAR. = 26.40 %

Std. Prepped Date: 2/22/93 8:30

IEA Laboratories
200 Monroe Turnpike
Monroe, Connecticut 06468
(203) 452-8200

Date: 2/22/93

art Run Time : 11:16

page ___ of ___

FURNACE DATA SHEET

1735

Element: As

I.D. Wt. File: AS022293

Instrument 5100

Analyst J. Mickelson

| Cup | Sample ID | % Sol. | Wt. V | Dil | Sample | Recovery | % Recovery | Flags | Value ug/L, mg/kg |
|---------------|------------------------|------------------|--------------------|----------------|-----------------|------------------|------------|------------------|----------------------------|
| 5 | ICV | | | | 52.2 | | 104.4 | | 52.2 |
| 1 | ICB | | | | -0.2 | | | | 1.0 U |
| 2 | ICRA | | | | 9.7 | | 97.0 | | 9.7 |
| 37 | CCV(50) | | | | 47.3 | | 94.6 | | 47.3 |
| 38 | CCB | | | | -0.6 | | | | 1.0 U |
| 6 | Z148140 MSA | 100.0 | 100/100 | 2.0 | 7.6 | 0.036 | | Blank | 15.2 B $y=0.035^0$ |
| 7 | Z148141 MSA | 100.0 | 100/100 | 2.0 | 11.0 | 0.052 | | 4ppb | 22.05 $=0.00425$ |
| 8 | Z148142 MSA | 100.0 | 100/100 | 2.0 | 14.2 | 0.066 | | 8ppb | 28.4 R $=0.9957906$ |
| 9 | Z148143 MSA | 100.0 | 100/100 | 2.0 | 19.0 | 0.088 | | 12ppb | 38.0 $1/5 \times 2 = 16.5$ |
| 10 | Z116010 MSA | 100.0 | 100/100 | 2.0 | 1.0 | 0.007 | | Blank | 2.0 B |
| 11 | Z116011 MSA | 100.0 | 100/100 | 2.0 | 10.4 | 0.049 | | 10ppb | 20.8 |
| 12 | Z116012 MSA | 100.0 | 100/100 | 2.0 | 18.6 | 0.086 | | 20ppb | 37.2 |
| 3 | Z116013 MSA | 100.0 | 100/100 | 2.0 | 27.6 | 0.126 | | 30ppb | 55.2 |
| 37 | CCV(50) | | | | 46.2 | | 92.4 | | 46.2 |
| 38 | CCB | | | | -1.6 | | | | -1.60 B |

MW-35

2.024

Correlation coefficient: 1.00000 Slope: 0.0046 Int: 0.000

~~~~~  
ID: Standard 3      Seq. No.: 00004      A/S Pos.: 4      Date: 02/22/93

Replicate 1      *5100*      Time: 11:33      1737  
Peak Area (A-s): 0.443  
Background Pk Area (A-s): 0.157      Peak Height (A): 0.637  
Blank Corrected Pk Area (A-s): 0.443      Background Pk Height (A): 0.077  
Concentration (ug/L ): 95.3

Replicate 2      Time: 11:36  
Peak Area (A-s): 0.451      Peak Height (A): 0.639  
Background Pk Area (A-s): 0.164      Background Pk Height (A): 0.079  
Blank Corrected Pk Area (A-s): 0.451  
Concentration (ug/L ): 97.0

Mean Conc (ug/L ):      96.2      SD: 1.22      RSD(%): 1.27

Standard number 3 applied. [100.0]  
Correlation coefficient: 0.99978      Slope: 0.0045      Int: 0.003

~~~~~  
As ID: ICV Seq. No.: 00005 A/S Pos.: 5 Date: 02/22/93

Replicate 1 Time: 11:39
Peak Area (A-s): 0.238 Peak Height (A): 0.302
Background Pk Area (A-s): 0.149 Background Pk Height (A): 0.069
Blank Corrected Pk Area (A-s): 0.238
Concentration (ug/L): 52.6

Replicate 2 Time: 11:41
Peak Area (A-s): 0.234 Peak Height (A): 0.314
Background Pk Area (A-s): 0.137 Background Pk Height (A): 0.070
Blank Corrected Pk Area (A-s): 0.234
Concentration (ug/L): 51.8

Mean Conc (ug/L): 52.2 SD: 0.62 RSD(%): 1.18

QC sample is within range

~~~~~  
As ID: ICB      Seq. No.: 00006      A/S Pos.: 1      Date: 02/22/93

Replicate 1      Time: 11:44  
Peak Area (A-s): 0.002      Peak Height (A): 0.009  
Background Pk Area (A-s): 0.134      Background Pk Height (A): 0.063  
Blank Corrected Pk Area (A-s): 0.002  
Concentration (ug/L ): -0.1

Replicate 2      Time: 11:47  
Peak Area (A-s): 0.002      Peak Height (A): 0.009  
Background Pk Area (A-s): 0.134      Background Pk Height (A): 0.059  
Blank Corrected Pk Area (A-s): 0.002  
Concentration (ug/L ): -0.2

Mean Conc (ug/L ):      -0.2      SD: 0.04      RSD(%): 27.85

QC sample is within range

As ID: CRA Seq. No.: 00007 A/S Pos.: 2 Date: 02/22/93

Replicate 1 Time: 11:50  
Peak Area (A-s): 0.046 Peak Height (A): 0.068 1738  
Background Pk Area (A-s): 0.138 Background Pk Height (A): 0.066  
Blank Corrected Pk Area (A-s): 0.045  
Concentration (ug/L ): 9.6

Replicate 2 Time: 11:53  
Peak Area (A-s): 0.047 Peak Height (A): 0.072  
Background Pk Area (A-s): 0.142 Background Pk Height (A): 0.063  
Blank Corrected Pk Area (A-s): 0.046  
Concentration (ug/L ): 9.8

Mean Conc (ug/L ): 9.7 SD: 0.16 RSD(%): 1.68

QC sample is within range

As ID: CCV(50) Seq. No.: 00008 A/S Pos.: 37 Date: 02/22/93

Replicate 1 Time: 11:55  
Peak Area (A-s): 0.216 Peak Height (A): 0.312  
Background Pk Area (A-s): 0.141 Background Pk Height (A): 0.065  
Blank Corrected Pk Area (A-s): 0.215  
Concentration (ug/L ): 47.6

Replicate 2 Time: 11:56  
Peak Area (A-s): 0.214 Peak Height (A): 0.308  
Background Pk Area (A-s): 0.143 Background Pk Height (A): 0.064  
Blank Corrected Pk Area (A-s): 0.213  
Concentration (ug/L ): 47.1

Mean Conc (ug/L ): 47.3 SD: 0.35 RSD(%): 0.74

QC sample is within range 45.0 - 55.0

As ID: CCB Seq. No.: 00009 A/S Pos.: 38 Date: 02/22/93

Replicate 1 Time: 12:01  
Peak Area (A-s): 0.001 Peak Height (A): 0.008  
Background Pk Area (A-s): 0.128 Background Pk Height (A): 0.055  
Blank Corrected Pk Area (A-s): 0.001  
Concentration (ug/L ): -0.3

Replicate 2 Time: 12:04  
Peak Area (A-s): -0.001 Peak Height (A): 0.007  
Background Pk Area (A-s): 0.085 Background Pk Height (A): 0.035  
Blank Corrected Pk Area (A-s): -0.001  
Concentration (ug/L ): -0.8

Mean Conc (ug/L ): -0.6 SD: 0.37 RSD(%): 62.91

sample is within range

~~~~~  
As ID: Z148140 MSA X2 Seq. No.: 00010 A/S Pos.: 6 Date: 02/22/93
Time: 12:07 1739
Peak Area (A-s): 0.035 MW-35 Peak Height (A): 0.043
Background Pk Area (A-s): 0.198 Background Pk Height (A): 0.080
Blank Corrected Pk Area (A-s): 0.035
Concentration (ug/L): 7.3
Replicate 2 Time: 12:09
Peak Area (A-s): 0.038 Peak Height (A): 0.050
Background Pk Area (A-s): 0.217 Background Pk Height (A): 0.088
Blank Corrected Pk Area (A-s): 0.038
Concentration (ug/L): 7.8
Mean Conc (ug/L): 7.6 SD: 0.39 RSD(%): 5.10
~~~~~

As ID: Z148141 MSA X2 Seq. No.: 00011 A/S Pos.: 7 Date: 02/22/93  
Time: 12:12  
Peak Area (A-s): 0.051 Peak Height (A): 0.069  
Background Pk Area (A-s): 0.207 Background Pk Height (A): 0.085  
Blank Corrected Pk Area (A-s): 0.051  
Concentration (ug/L ): 10.8  
Replicate 2 Time: 12:15  
Peak Area (A-s): 0.052 Peak Height (A): 0.071  
Background Pk Area (A-s): 0.220 Background Pk Height (A): 0.088  
Blank Corrected Pk Area (A-s): 0.052  
Concentration (ug/L ): 11.1  
Mean Conc (ug/L ): 11.0 SD: 0.18 RSD(%): 1.62  
~~~~~

As ID: Z148142 MSA X2 Seq. No.: 00012 A/S Pos.: 8 Date: 02/22/93
Time: 12:18
Peak Area (A-s): 0.067 Peak Height (A): 0.083
Background Pk Area (A-s): 0.153 Background Pk Height (A): 0.070
Blank Corrected Pk Area (A-s): 0.066
Concentration (ug/L): 14.3
Replicate 2 Time: 12:21
Peak Area (A-s): 0.066 Peak Height (A): 0.087
Background Pk Area (A-s): 0.209 Background Pk Height (A): 0.082
Blank Corrected Pk Area (A-s): 0.065
Concentration (ug/L): 14.0
Mean Conc (ug/L): 14.2 SD: 0.17 RSD(%): 1.24
~~~~~

As ID: Z148143 MSA X2 Seq. No.: 00013 A/S Pos.: 9 Date: 02/22/93  
Time: 12:23  
Peak Area (A-s): 0.088 Peak Height (A): 0.111  
Background Pk Area (A-s): 0.207 Background Pk Height (A): 0.082  
Blank Corrected Pk Area (A-s): 0.087  
Concentration (ug/L ): 19.0



2148143 MSA X2

Replicate 2  
Peak Area (A-s): 0.088  
Background Pk Area (A-s): 0.219  
Blank Corrected Pk Area (A-s): 0.088  
Concentration (ug/L ): 19.0

Time: 12:26  
Peak Height (A): 0.107  
Background Pk Height (A): 0.086

1740

Mean Conc (ug/L ): 19.0 SD: 0.07 RSD(%): 0.35

As ID: Z116010 MSA Seq. No.: 00014 A/S Pos.: 10 Date: 02/22/93

Replicate 1  
Peak Area (A-s): 0.008  
Background Pk Area (A-s): 0.219  
Blank Corrected Pk Area (A-s): 0.007  
Concentration (ug/L ): 1.1

Time: 12:29  
Peak Height (A): 0.014  
Background Pk Height (A): 0.095

Replicate 2  
Peak Area (A-s): 0.007  
Background Pk Area (A-s): 0.191  
Blank Corrected Pk Area (A-s): 0.007  
Concentration (ug/L ): 1.0

Time: 12:32  
Peak Height (A): 0.015  
Background Pk Height (A): 0.079

Mean Conc (ug/L ): 1.0 SD: 0.06 RSD(%): 5.75

As ID: Z116011 MSA Seq. No.: 00015 A/S Pos.: 11 Date: 02/22/93

Replicate 1  
Peak Area (A-s): 0.048  
Background Pk Area (A-s): 0.209  
Blank Corrected Pk Area (A-s): 0.048  
Concentration (ug/L ): 10.1

Time: 12:35  
Peak Height (A): 0.057  
Background Pk Height (A): 0.089

*Handwritten signature*

Replicate 2  
Peak Area (A-s): 0.050  
Background Pk Area (A-s): 0.222  
Blank Corrected Pk Area (A-s): 0.050  
Concentration (ug/L ): 10.7

Time: 12:37  
Peak Height (A): 0.062  
Background Pk Height (A): 0.092

Mean Conc (ug/L ): 10.4 SD: 0.41 RSD(%): 3.98

As ID: Z116012 MSA Seq. No.: 00016 A/S Pos.: 12 Date: 02/22/93

Replicate 1  
Peak Area (A-s): 0.091  
Background Pk Area (A-s): 0.228  
Blank Corrected Pk Area (A-s): 0.091  
Concentration (ug/L ): 19.8

Time: 12:40  
Peak Height (A): 0.122  
Background Pk Height (A): 0.106

Replicate 2  
Peak Area (A-s): 0.081  
Background Pk Area (A-s): 0.182  
Blank Corrected Pk Area (A-s): 0.081  
Concentration (ug/L ): 17.4

Time: 12:43  
Peak Height (A): 0.100  
Background Pk Height (A): 0.090

Mean Conc (ug/L ): 18.6 SD: 1.68 RSD(%): 9.02

As ID: Z116013 MSA Seq. No.: 00017 A/S Pos.: 13 Date: 02/22/93

Replicate 1 Time: 12:46  
Peak Area (A-s): 0.118 Peak Height (A): 0.140 1741  
Background Pk Area (A-s): 0.141 Background Pk Height (A): 0.072  
Blank Corrected Pk Area (A-s): 0.118  
Concentration (ug/L ): 25.8

2/24

Replicate 2 Time: 12:48  
Peak Area (A-s): 0.134 Peak Height (A): 0.161  
Background Pk Area (A-s): 0.241 Background Pk Height (A): 0.101  
Blank Corrected Pk Area (A-s): 0.134  
Concentration (ug/L ): 29.4

Mean Conc (ug/L ): 27.6 SD: 2.55 RSD(%): 9.25

As ID: CCV(50) Seq. No.: 00018 A/S Pos.: 37 Date: 02/22/93

Replicate 1 Time: 12:51  
Peak Area (A-s): 0.199 Peak Height (A): 0.245  
Background Pk Area (A-s): 0.055 Background Pk Height (A): 0.029  
Blank Corrected Pk Area (A-s): 0.199  
Concentration (ug/L ): 43.9

Replicate 2 Time: 12:54  
Peak Area (A-s): 0.220 Peak Height (A): 0.303  
Background Pk Area (A-s): 0.163 Background Pk Height (A): 0.055  
Blank Corrected Pk Area (A-s): 0.220  
Concentration (ug/L ): 48.6

Mean Conc (ug/L ): 46.2 SD: 3.36 RSD(%): 7.26

QC sample is within range 45.0 - 55.0

As ID: CCB Seq. No.: 00019 A/S Pos.: 38 Date: 02/22/93

Replicate 1 Time: 12:57  
Peak Area (A-s): -0.007 Peak Height (A): 0.006  
Background Pk Area (A-s): 0.068 Background Pk Height (A): 0.044  
Blank Corrected Pk Area (A-s): -0.007  
Concentration (ug/L ): -2.2

Replicate 2 Time: 13:00  
Peak Area (A-s): -0.001 Peak Height (A): 0.007  
Background Pk Area (A-s): 0.140 Background Pk Height (A): 0.050  
Blank Corrected Pk Area (A-s): -0.002  
Concentration (ug/L ): -1.0

Mean Conc (ug/L ): -1.6 SD: 0.85 RSD(%): 54.87

QC sample is within range

IEA  
 200 HAVSBY TURNPIKE  
 NORWICH, CONNECTICUT 06468  
 (203) 261-4458

1742

PARAMETER: Mercury

MATRIX: WATER

003 016.0 0124012 (01270170) 0160177.0.45

Sample/Standard	Pk.Ht. (in ml)	Cal'd C (ug/l)	Initial Vol(ml)	Final Vol(ml)	Value Reported (ug/l)	QA Concent/Etion units (ug/l)
80	0.0		100	100		Sample Number 0124012
80.5	7.5		100	100		Sample Conc. 0.20U
81.0	14.0		100	100		Duo Conc. 0.20U
82.0	24.5		100	100		RFB NC
85.0	52.5		100	100		
810.0	84.5		100	100		Spike
ICV	52.0	4.88	100	100	97.6%	True Conc.
ICB	0.0	-0.08	100	100	0.20U	Found Conc.
CCV1	51.0	4.74	100	100	95.2%	Percent Recovery
CCB1	0.0	-0.08	100	100	0.20U	
<del>9021-HG, 157</del>						
<del>170, 176</del>						
P64	0.0	-0.08	100	100	0.20U	
9021-CLP M						
0124012	0.0	-0.08	100	100	0.20U	ICV
9021-CLP M						
0124012D	0.0	-0.08	100	100	0.20U	True Conc. 5.00
9022-CLP M						
0124013	0.0	-0.08	100	100	0.20U	Found Conc. 4.88
9022-CLP M						
0124013D	0.0	-0.08	100	100	0.20U	Percent Recovery 97.6%
9021-HG						
0124014	48.5	4.47	100	100	4.47	
9021-HGD						
0124014D	48.5	4.47	100	100	4.47	
9020-HG						
0124015	72.5	7.70	100	100	7.70	C of C 0.9998687
9022-HGD						
0124015D	73.0	7.73	100	100	7.73	Analyst J. NBE
Field Blank						Date Prepped 02/25/93
0124016	0.0	-0.08	100	100	0.20U	Date Analyzed 02/26/93
CCV2	51.5	4.82	100	100	96.4%	Reviewed By: <i>J. NBE</i>
CCB2	0.0	-0.08	100	100	0.20U	Date Reviewed: 3/2/93
0124017	0.0	-0.08	100	100	0.20U	Page 1 of 6

1EA  
 200 MONROE TURNPIKE  
 MONROE, LOUISIANA 70646  
 (203) 241-4433

1743

PARAMETER: Mercury

MATRIX: WATER

JOB #s: 0124,0142,0157,0170,0175,0177,0143

Sample/Standard	Pk.Ht. (in mm)	Calc'd (ug/l)	Initial Vol(ml)	Final Vol(ml)	Value Reported (ug/l)	QA Concentration units (ug/l)
<del>T0157002</del>	0.0	-0.08	100	100	0.200	Sample Number 0124013
T0157005	0.0	-0.08	100	100	0.200	Sample Conc. 0.200
T0157005B	0.0	-0.08	100	100	0.200	Dup Conc. 0.200
T0157005S	13.5	1.04	100	100	103.6%	RPD NC
F0157001	0.0	-0.08	100	100	0.200	
F0157002	0.0	-0.08	100	100	0.200	Spike
F0157005	0.0	-0.08	100	100	0.200	True Conc. 1.00
T0170001	0.0	-0.08	100	100	0.200	Found Conc. 1.04
T0170002	0.0	-0.08	100	100	0.200	Percent Recovery 103.6%
CCV3	51.0	4.76	100	100	95.2%	
CCB3	0.0	-0.08	100	100	0.200	
<del>F0170001</del>	0.0	-0.08	100	100	0.200	10V
F0170002	0.0	-0.08	100	100	0.200	True Conc.
<del>0170001</del>	2.0	0.08	100	100	0.200	Found Conc.
J# 177, 1487 PBW 124 148A	0.0	-0.08	100	100	0.200	Percent Recovery
<del>0177001</del>	3.0	0.16	100	100	0.200	
MW-45						
0148009	0.0	-0.08	100	100	0.200	
MW-45 (D)						
0148009D	0.0	-0.08	100	100	0.200	C of C 0.9998687
MW-45 (S)						
0148009S	13.0	0.99	100	100	99.3%	Analyst J. NGE Date Prepped 02/25/93 Date Analyzed 02/26/93
MHW-1						
0148010	12.5	0.95	100	100	Peran 3/3/93 0.95	
MW-43						
0148011	0.0	-0.08	100	100	0.200	Reviewed By: J. NGE
CCV4	51.5	4.82	100	100	95.4%	Date Reviewed: 3/2/93
CCB4	0.0	-0.08	100	100	0.200	Page 2 of 6

189  
 200 ROAD TURNPIKE  
 MONROE, CONNECTICUT 06468  
 (203) 261-4488

1744

PARAMETER: Mercury

MATRIX: WATER

QCS # (s): 0124, 0142, 0157, 0170, 0176, 0, 77, 0148

Sample/Standard	Pk.Ht. (in mm)	Calc'd (ug/l)	Initial Vol(mi)	Final Vol(mi)	Value Reported (ug/l)	QA Concentration units (ug/l)
MW-44						
0148012	0.0	-0.05	100	100	0.200	Sample Number 0124014 <b>0148009</b>
MW-46						
0148013	6.0	0.40	100	100	0.40	Sample Conc. 4.47 <b>0.20U</b>
MW-35						
0148014	7.0	0.49	100	100	0.49	Dup Conc. 4.47 <b>0.20U</b>
MHW-2						
0148016	24.0	1.97	100	100	1.97	RFD 0.0% <b>NC</b>
REPLICATE						
0148017	0.0	-0.08	100	100	0.200	
MW-1						
0148018	1.5	0.04	100	100	0.200	Spike
MW-47						
0148020	1.0	0.00	100	100	0.200	True Conc. <b>1.00</b>
MW-48						
<del>0148021</del>	0.0	-0.08	100	100	0.200	Found Conc. <b>0.99</b>
IS 2/9/93						
<del>0148022</del>	21.5	1.74	100	100	1.74	Percent Recovery <b>99.3%</b>
FBW 2/9/93						
0148023	0.0	-0.08	100	100	0.200	
CCV5	51.5	4.82	100	100	96.4%	
CCB5	0.0	-0.08	100	100	0.200	ICV
MW-29						
<del>0148027</del>	1.5	0.04	100	100	0.200	True Conc.
9021-HG						
7124014	12.0	0.91	20	100	4.54	Found Conc.
9021-HG						
<del>0148028</del>	19.5	1.56	20	100	7.81	Percent Recovery
<del>0148029</del>	49.0	4.53	100	100	90.6%	
CCP5	0.0	-0.08	100	100	0.200	
C of C 0.9998687						
Analyst J. NOE <i>J. Noe</i>						
Date Prepped 02/25/93						
Date Analyzed 02/26/93						
Reviewed By: <i>J. Noe</i>						
Date Reviewed: 2/2/93						
Page 3 of 6						

0142001 Field BLANK

1745

13.0 0124015D 9022-HG (D)

12.5 0124015 9022-HG

48.5 0124014D 9021-HG (D)

48.5 0124014 9021-HG

0124013D 9022-CLP M

0124013 9022-CLP M

0124012D 9021-CLP M

0124012 9021-CLP M

PBWJ# 124, 142, 157, 170, 176

CCBI

51.0 CCV I

ICB

52.0 ICV

84.5 ST0.0

52.5 S5.0

24.5 S2.0 40 50 60 70 80 90  
100 80 70 60 50 40 30 20 10

14.0 S1.0

7.5 S0.5

0 S0.0

Run started 1205 2/26/93 J. Mc  
standards and samples Prepped 2/25/93

CHART NO. KZXIR-9

100 90 80 70 60 50 40 30 20 10

0 0148011 MW-H3 1746

12.5 0148010 MHW-1

13.0 0148009S MW-45(S)

0 0148009D MW-45(D)

0 0148009 MW-45

3.0  
2.5  
1.5  
0 0177001

0 PBW J# 177, 148, 124

2.0 0176001

0 F0170002

100 90 80 70 60 50 40 30 20 10  
30 40 50 60 70 80 90

0 F0170001

0 CCB3

5.1.0 0 CCV3

0 T0170002

0 T0170001

0 F0157005

0 F0157002

0 F0157001

13.5 0 T0157005S

0 T0157005D

0 T0157005

0 T0157002

0 T0157001

100 90 80 70 60 50 40 30 20 10  
70 80 90

0 CCB2

5.1.5 0 CCV2

0 0142001 Field BLANK

CHART NO. KZXR-B

CCB6 Run Completed 1307 2/26/93 *JH Mac*

1747

49.0 CCB6

19.5 0124015 1/5 9022-HG

12.0 0124014 1/5 9021-HG

1.5 0148027 MW-29

0 CCB5

51.5 CCB5

0 0148023 FBW 2/19/93

21.5 0148022 FBS 2/19/93

0 0148021 MW-48

1.0 0148020 MW-47

1.5 0148018 MW-1

0 0148017 Replicate

24.0 0148016 MHW-2

7.0 0148014 MW-35

6.0 0148013 MW-46

0 0148012 MW-44

0 CCB4

51.5 CCB4

0 0148011 MW-42



IEA  
200 MONROE TURNPIKE  
MONROE, CONNECTICUT 06468  
(203) 261-4458

PARAMETER: Mercury

MATRIX: WATER

JOB #(s): 160,057A,210,199,187,(158,163,TCLP),148

Sample/Standard	Pk.Ht. (in mm)	Calc'd (ug/l)	Initial Vol(ml)	Final Vol(ml)	Value Reported (ug/l)	QA Concentration units (ug/l)
S0	0.0		100	100		Sample Number 0160013
S0.5	7.5		100	100		Sample Conc. 4.52
S1.0	14.0		100	100		Dup Conc. 4.52
S2.0	26.5		100	100		RPD 0.0%
S5.0	55.0		100	100		
S10.0	87.5		100	100		Spike
ICV	55.5	4.97	100	100	99.4%	True Conc. 1.00
ICB	1.0	0.01	100	100	0.20U	Found Conc. 0.98
CCV1	54.5	4.86	100	100	97.2%	Percent Recovery 98.4%
CCB1	0.0	-0.06	100	100	0.20U	
<del>J#160,199,057A,148</del>						
<del>210,187,158TCLP</del>						
<del>#PB# 163 TCLP</del>	0.0	-0.06	100	100	0.20U	
<del>TRACE METALS</del>						
<del>0160013</del>	51.5	4.52	100	100	4.52	ICV
<del>TRACE METALS (D)</del>						
<del>0160013D</del>	51.5	4.52	100	100	4.52	True Conc. 5.00
<del>TRACE METALS (S)</del>						
<del>0160013S</del>	60.0	5.51	100	100	98.4%	Found Conc. 4.97
<del>ILF-AQ</del>						
<del>T0057020</del>	0.0	-0.06	100	100	0.20U	Percent Recovery 99.4%
<del>ILF-AQ-02</del>						
<del>T0057022</del>	0.0	-0.06	100	100	0.20U	
<del>T0210001</del>	2.0	0.09	100	100	0.20U	
<del>T0210002</del>	0.0	-0.06	100	100	0.20U	C of C 0.9998859
<del>ILF-AQ</del>						Analyst JEFF NOE
<del>F0057020</del>	0.0	-0.06	100	100	0.20U	Date Prepped 03/02/93
<del>ILF-AQ-02</del>						Date Analyzed 03/03/93
<del>F0057022</del>	0.0	-0.06	100	100	0.20U	Reviewed By: <i>J. Noe</i>
CCV2	54.5	4.86	100	100	97.2%	Date Reviewed: 2/2/93
CCB2	0.0	-0.06	100	100	0.20U	
F0210001	0.0	-0.06	100	100	0.20U	Page 1 of 3

IEA  
 200 MONROE TURNPIKE  
 MONROE, CONNECTICUT 06468  
 (203) 261-4458

1749

PARAMETER: Mercury

MATRIX: WATER

JOB #(s): 160,057A,210,199,187,(158,163,TCLP),148

Sample/Standard	Pk.Ht. (in mm)	Calc'd (ug/l)	Initial Vol(ml)	Final Vol(ml)	Value Reported (ug/l)	QA Concentration units (ug/l)
<del>F02100010</del>	0.0	-0.06	100	100	0.20U	Sample Number F0210001
F02100015	14.5	1.07	100	100	106.8%	Sample Conc. 0.20U
F0210002	0.0	-0.06	100	100	0.20U	Dup Conc. 0.20U
CRYSTAL ROCK 0199001	0.0	-0.06	100	100	0.20U	RPD NC
0187001	1.0	0.01	100	100	0.20U	
0187002	1.5	0.05	100	100	0.20U	Spike
0187003	1.5	0.05	100	100	0.20U	True Conc. 1.00
<del>0187004</del>	0.0	-0.06	100	100	0.20U	Found Conc. 1.07
CCV3	55.5	4.97	100	100	99.4%	Percent Recovery 106.8%
CCB3	0.0	-0.06	100	100	0.20U	
<del>01630016 TCLP</del>	0.0	-0.06	10	100	2.00U	
J#0163 BLANKDLP	0.0	-0.06	10	100	2.00U	ICV
SPCR-DS 0163001 TCLP	0.0	-0.06	10	100	2.00U	True Conc. _____
SPCR-DS(S) <del>01630013 TCLP</del>	56.0	5.03	10	100	100.6% <del>507.0%</del>	Found Conc. _____
MHW-1 0148010	21.5	1.65	100	100	1.65	Percent Recovery _____
CCV4	54.5	4.86	100	100	97.2%	
CCB4	0.0	-0.06	100	100	0.20U	
C of C 0.9998859						
Analyst JEFF NOE						
Date Prepped 03/02/93						
Date Analyzed 03/03/93						
Reviewed By: <i>[Signature]</i>						
Date Reviewed: 2/2/93						
Page 2 of 3						

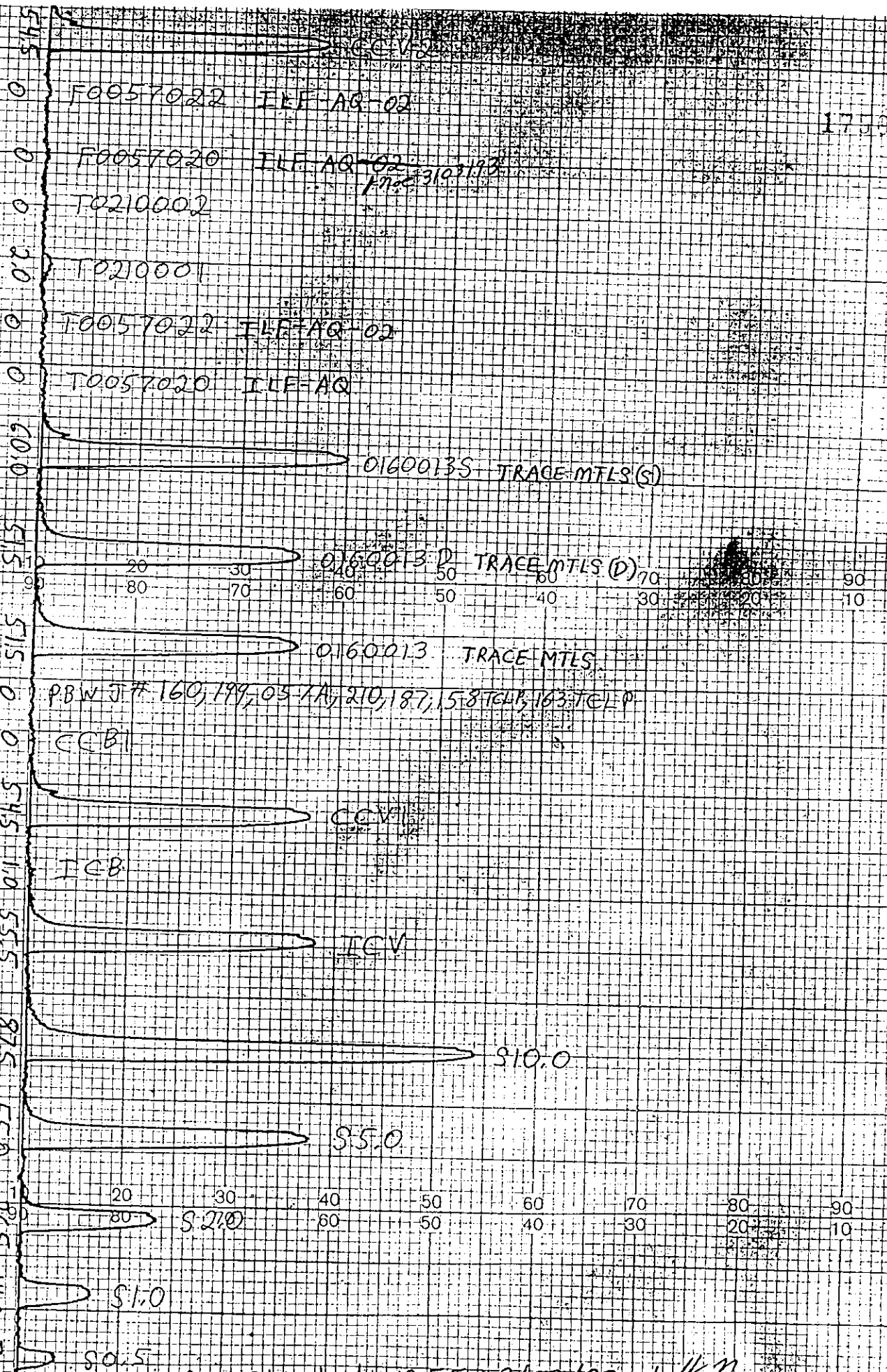
0163001 TCLP  
 2.0U  
 5.00  
 5.03  
 100.6%

*Jeff Noe*

*[Signature]*

1750

CHART NO: KZXR-9



Run started: 12:55 3/03/93 P/M

Standards and Samples prepared 3/02/93 P/M

1751

Run completed 1332 3/03/93 Jeff Noe  
1334

CCB4

CCV4

0148010 MHW-1

0163001S TCLP SPCR-DS(S)

0163001 TCLP SPCR-DS

BLANK TCLP J# 0163

0158016 TCLP

CCB3

CCV3

0187004

0187003

0187002

0187001

0199001 CRYSTAL ROCK

F0210002

F0210001S

F0210001D

F0210001

CCB2

CCV2

CHART NO. KZXR-B

0 100 100 80 70 60 50 40 30 20 10

0 100 100 80 70 60 50 40 30 20 10



an environmental testing company

200 Monroe Turnpike  
Monroe, Connecticut 06468  
(203) 261-4458  
FAX (203) 268-5346

1862

1752

METALS SAMPLE PREP LOG WATER

Calibration of eppendorf		Low/Med/Std		SDG #:		
Case/SAS 1.0ml = 1.00g		<u>ICAP</u> Furnace				
IEA ID	IFB ID	Vol i (ml)	Vol f (ml)	Phys: Desc.* before/after		Color Key*
0148009		100	100	1-CIC	2-CIC	R - red
010				1-YIY	2-CIC	B - blue
011				1-YIY	2-CIC	Y - yellow
012				1-YIC	2-CIC	G - green
013				1-OIY	2-OIC	O - orange
014				1-BnIY	2-CIC	V - violet
016				1-CIY	2-CIC	C - colorless
017				1-CIC	2-CIC	Bn - brown
018				1-bnIY	2-CIC	Gy - gray
020				1-bnIY	2-CIC	Bl - black
021				1-bnIY	2-OIC	Clarity*
022				1-CIC	2-CIC	CL - clear
023		↓	↓	1-CIC	2-CIC	C - cloudy
027		100	100	1-YIY	2-CIC	O - opaque
				1- /	2- /	
				1- /	2- /	
				1- /	2- /	
				1- /	2- /	
				1- /	2- /	
				1- /	2- /	

\*Each physical description involves 1-Color and 2-Clarity both before and after

QA/QC

IEA ID	IFB ID	Volume i (ml)	Volume f (ml)	QC Addition
PB		100	100	
LCS		↓	↓	MTL-W-1023 5.0ml
0148009	D	↓	↓	
0148009	S	100	100	MTL-W-1036 2.5ml

Prepared by: B. Cuthbert Supervisor: J. H. [Signature]  
 Date: 2-17-93 Date: 2/19/93  
 Accepted by: Diamante Date: 2/19/93  
 ICP: HNO<sub>3</sub> 973 HCl 1153 H<sub>2</sub>O<sub>2</sub> 4 Furnace: HNO<sub>3</sub> H<sub>2</sub>O<sub>2</sub>



an environmental testing company

200 Monroe Turnpike  
Monroe, Connecticut 06468  
(203) 261-4458  
FAX (203) 268-5346

1863

1753

METALS SAMPLE PREP LOG WATER

Calibration of eppendorf		Low/Med/Std ICAP/Furnace		SDG #:	
IEA ID	IFB ID	Vol i (ml)	Vol f (ml)	Phys. Desc.* before/after	Color. Key*
0148009		100	100	1-CIC 2-CIC	R - red
010				1-YIC 2-CIC	B - blue
011				1-YIC 2-CIC	Y - yellow
012				1-YIC 2-CIC	G - green
013				1-OIC 2-OIC	O - orange
014				1-BnC 2-CIC	V - violet
016				1-CIC 2-CIC	C - colorless
017				1-CIC 2-CIC	Bn - brown
018				1-Bn/Y 2-CIC	Gy - gray
020				1-Bn/C 2-CIC	Bl - black
021				1-Bn/Y 2-OIC	Clarity*
022				1-CIC 2-CIC	CL - clear
023				1-CIC 2-CIC	C - cloudy
027		100	100	1-YIC 2-CIC	O - opaque
				1- / 2- /	
				1- / 2- /	
				1- / 2- /	
				1- / 2- /	
				1- / 2- /	

\*Each physical description involves 1-Color and 2-Clarity both before and after

QA/QC

IEA ID	IFB ID	Volume i (ml)	Volume f (ml)	QC Addition
PB		100	100	
LCS				MTL-W-1022 1.0ml
0148009	D			
0148009	S	100	100	MTL-W-1025 2.0ml

Prepared by: B. Crullin Supervisor: D. Nuff  
 Date: 2-17-93 Date: 2/18/93  
 Accepted by: Jeff Noe Date: 2/18/93  
 ICP: HNO<sub>3</sub> HCl H<sub>2</sub>O<sub>2</sub> Furnace: HNO<sub>3</sub> 875 H<sub>2</sub>O<sub>2</sub> 4L  
 Page 1 of 1

Mercury Preparation and Analysis Runlog  
Instrument-SP-HG4

1754

Preparation Date	2/25/93	SDG Number		Computer File Name	
Preparation Analyst	J. H. Nee	Instrumental Analysis Date	2/26/93	Correlation	
Waterbath Temperature	Autoclave 140°	Instrumental Analyst	J. H. Nee	Reagent QC Page Number	
Batch Number	002,003	Lamp Energy		Spike Id.---	MTL-W-1054

Sample ID#	Sample Weight/Volume	Dilution Factor	Absorbance Bottle ID	Time	Std B Curve Value (ug/L)	Reported Value	Recovery	Comments client ID
<del>EE87</del> S0.0	100		19	1205	—			
S0.5			20	1206	0.5 ml B			
S1.0			21	1207	1.0 ml B			
S2.0			22	1208	2.0 ml B			
S5.0			23	1209	5.0 ml B			
S10.0			24	1210	10.0 ml B			
ICV			25	1211	5.0 ml B			
ICB			26	1212	—			
CCV1			27	1213	5.0 ml B			
CCB1			28	1214	—			
PBW <sup>124,142,157</sup> 170,176			29	1215	—			
0124012			30	1216	—			9021-CLP M
012D			31	1217	—			9021-CLP M
013			32	1218	—			9022-CLP M
013D			33	1219	—			9022-CLP M
014			34	1220	—			9021-HG
014D			35	1221	—			9021-HG (D)
015			36	1222	—			9022-HG
015D			37	1223	—			9022-HG (D)
0142001	↓		38	1224	—			FIELD BLANK
CCV2	100		81	1225	5.0 ml B			

171c  
2/25/93

Secondary Review By: J. H. Nee Date: 2/24/93

P1058

Mercury Preparation and Analysis Runlog  
Instrument-SP-HG4

1788

Preparation Date	2/25/93	SDG Number		Computer File Name	
Preparation Analyst	Jeff Roe	Instrumental Analysis Date	2/26/93	Correlation	
Waterbath Temperature	Autoclave 140°	Instrumental Analyst	Jeff Roe	Reagent QC Page Number	
Batch Number	002, 003	Lamp Energy		Spike Id.	MTL-W-1054

Sample ID#	Sample Weight/Volume	Dilution Factor	Absorbance BODID	Time	Std B Curve Value (ug/l)	Reported Value	Recovery	Comments
CCB2	100		91	1226	—			
T0157001			39	1227	—			
002			40	1228	—			
005			41	1229	—			
005D			42	1230	—			
005S			43	1231	1.0ml B			
F0157001			44	1232	—			
002			45	1233	—			
005			46	1234	—			
T0170001			47	1235	—			
002			48	1236	—			
CCV3			82	1237	5.0ml B			
CCB3			92	1238	—			
F0170001			49	1239	—			
002			50	1240	—			
0176001			51	1241	—			
PBW <sup>3077</sup> 148,124			52	1242	—			
0177001			53	1243	—			
0148009			54	1244	—			MW-45
009D	↓		55	1245	—			MW-45 (D)
009S	100		56	1246	1.0ml B			MW-45 (S)

Secondary Review By J. H. P. Date: 2/2/93

P 2058



Mercury Preparation and Analysis Runlog  
Instrument-SP-HG4

1750

Preparation Date	2/25/93	SDG Number		Computer File Name	
Preparation Analyst	<i>J. H. Mac</i>	Instrumental Analysis Date	2/26/93	Correlation	
Waterbath Temperature	Autoclave 140°	Instrumental Analyst	<i>J. H. Mac</i>	Reagent QC Page Number	
Batch Number	002,003	Lamp Energy		Spike Id.	MTL-W-1054

Sample ID#	Sample Weight/Volume	Dilution Factor	Absorbance BOD ID	Time	std B Curve Value (ug/l)	Reported Value	Recovery	Comments
0148010	100		57	1247	—			MHW-1
011			58	1248	—			MW-43
CCV4			83	1249	5.0ml B			
CCB4			93	1250	—			
0148012			59	1251	—			MW-44
013			60	1252	—			MW-46
014			61	1253	—			MW-35
016			62	1254	—			MHW-2
017			63	1255	—			REPLICATE
018			64	1256	—			MW-1
020			65	1257	—			MW-47
021			66	1258	—			MW-48
022			67	1259	—			FBS 2/9/93
023			68	1300	—			FBW 2/9/93
CCV5			84	1301	5.0ml B			
CCB5	↓		94	1302	—			
0148027	100		69	1303	—			MW-29
<del>0124012</del>		<del>5</del>	<del>70</del>					
<del>013</del>		<del>5</del>	<del>71</del>					
014	100	5	72	1304	—			9021-HG
015	100	5	73	1305	—			9022-HG

*J. H. Mac*  
125193  
010

Secondary Review By: *J. H. Mac* Date: 2/2/93

P 3 of 4



Mercury Preparation and Analysis Runlog  
Instrument-SP-HG4

1758

Preparation Date	3/02/93	SDG Number		Computer File Name	
Preparation Analyst	Jeff Noe	Instrumental Analysis Date	3/03/93	Correlation	
Waterbath Temperature	Autoclave 240°	Instrumental Analyst	Jeff Noe	Reagent QC Page Number	
Batch Number	001	Lamp Energy		Spike Id.	MTL-W-1059

Sample ID#	Sample Weight/Volume	Dilution Factor	Absorbance BOD ID	Time	Std B Curve Value (ug/l)	Reported Value	Recovery	Comments client ID
S0.0	100		1	1255	—			
S0.5			2	1256	0.5ml B			
S1.0			3	1257	1.0ml B			
S2.0			4	1258	2.0ml B			
S5.0			5	1259	5.0ml B			
S10.0			6	1300	10.0ml B			
ICV			7	1301	5.0ml B			
ICB			8	1302	—			
CCV1			9	1303	5.0ml B			
CCB1	100		10	1304	—			
0199, 0160, T206 PBW 0057A, 0210, 312/13 0187, 0158, 0163	100		11	1305	—			
0160013	100		12	1306	—			TRACE MTLs
013D			13	1307	—			TRACE MTLs (D)
013S			14	1308	1.0ml B			TRACE MTLs (S)
T0057020			15	1309	—			ILF-AQ
T0057022			16	1310	—			ILF-AQ -02
T0210001			17	1311	—			
T0210002			18	1312	—			
F0057020			19	1313	—			ILF-AQ
022			20	1314	—			ILF-AQ -02
CCV2	100		80	1315	5.0ml B			

Secondary Review By: J. Helf Date: 3/03/93

Mercury Preparation and Analysis Runlog  
Instrument-SP-HG4

1759

Preparation Date	3/02/93	SDG Number		Computer File Name	
Preparation Analyst	Jeff Nae	Instrumental Analysis Date	3/03/93	Correlation	
Waterbath Temperature	240°	Instrumental Analyst	Jeff Nae	Reagent QC Page Number	
Batch Number	001	Lamp Energy		Spike Id.	MTL-W-1059

Sample ID#	Sample Weight/Volume	Dilution Factor	Absorbance-BOD ID	Time	Std B Curve Value (ug/l)	Reported Value	Recovery	Client ID Comments
CCB2	100		90	1316	—			
F0210001			21	1317	—			
001D			22	1318	—			
001S			23	1319	1.0ml B			
002			24	1320	—			
0199 001			25	1321	—			CRYSTAL ROCK
0187 001			26	1322	—			
002			27	1323	—			
003			28	1324	—			
004			29	1325	—			
CCV 3			81	1326	5.0ml B			
CCB3			91	1327	—			
0158016 TCLP	10/		30	1328	—			
BLANK TCLP #0163	10/		31	1329	—			
0163 001 TCLP	10/		32	1330	—			SPCR-DS
001S TCLP	10/		33	1331	5.0ml B			SPCR-DS(S)
CCV 4	↓		82	1333	5.0ml B			
CCB4	100		92	1334	—			
0148010	100		34	1332	—			MHW-1

me  
3/2/93

Secondary Review By: [Signature] Date: 3/03/93

